



**COUNTY OF HUMBOLDT**  
**PLANNING AND BUILDING DEPARTMENT**  
**CURRENT PLANNING DIVISION**

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

Hearing Date: July 15, 2021

To: Humboldt County Zoning Administrator

From: Brian Millar, Contract Planner

Subject: **AT&T, Conditional Use Permit for New 150-Foot Tall Faux Mono-Pine Tower**  
Record Number PLN-2020-16854  
Assessor's Parcel Numbers (APN) 209-291-001, 209-291-017 & 209-351-022  
28101 Avenue of the Giants, Redcrest area

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Please contact Brian Millar by phone at (530) 902-9218 or by email, [brian@landlogistics.com](mailto:brian@landlogistics.com), if you have any questions about the scheduled public hearing item.

**AGENDA ITEM TRANSMITTAL**

Hearing Date July 15, 2021	Subject Conditional Use Permit for New 150-Foot Tall Faux Mono-Pine Tower	Contact Brian Millar, Contract Planner
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**Project Description:** The project is a Conditional Use Permit application proposing the construction of a new 150-foot tall faux mono-pine tower with ground-mounted equipment. The tower would be able to host up to four different wireless carriers.

**Project Location:** The project is located in the Redcrest area, on the north side of Avenue of the Giants, approximately 1,200 feet northwest from the intersection of Avenue of the Giants and Holmes Flat Road, on the property known as Assessor Parcel Numbers 209-291-001, 209-291-017 & 209-351-022.

**Present Plan Land Use Designation:** Agricultural Exclusive (AE), Density: Range is 20 to 60 acres per unit; Conservation Floodway (CF), Density: N/A; Commercial Recreation (CR), Density: N/A; Avenues Community Planning Area: Stafford-Redcrest (AVES), 2017 General Plan, Slope Stability: Low Instability (1) and Moderate Instability

**Present Zoning:** Agriculture Exclusive (AE), Flood Hazard Areas (F); Flood Plain (FP); Flood Plain (FP), Qualified (Q)

**Assessor Parcel Numbers:** 209-291-001, 209-291-017 & 209-351-022.

**Record Number:** PLN-2020-16854

**Applicant**

New Cingular Wireless PCS  
(At&T Mobility)  
Taylika Logan Banks  
5001 Executive Parkway,  
4W550E  
San Ramon, CA 94583

**Owners**

The Last Redwood Corp.  
c/o Dean Lewis  
1 Parkside Drive  
Fortuna, CA 95540

**Agent**

EPIC Wireless Group, LLC  
Carl Jones  
605 Coolidge Drive, Suite 100  
Folsom, CA 95630

**Environmental Review:** Categorical Exemption, Class 3

**Major Issues:** None.

**State Appeal Status:** Project is not appealable to the California Coastal Commission.

**AT&T, Conditional Use Permit**  
**Record Number: PLN-2020-16854**  
**Assessor's Parcel Numbers: 209-291-001, 209-291-017 & 209-351-022**

**Recommended Action**

1. Describe the application as part of the Consent Agenda;
2. Survey the audience for any person who would like to discuss the application;
3. If no one requests discussion, make the following motion to approve the application as part of the consent agenda:

Find that the Planning Commission has considered the Categorical Exception for the project as described by Section 15303 of the State CEQA Guidelines; make the required findings for approval of the Conditional Use Permit; and approve the New Cingular Wireless PCS Conditional Use Permit as recommended by staff and subject to the recommended conditions.

**Executive Summary:**

The proposed project consists of a Conditional Use Permit application for the construction of a new 150-foot tall, freestanding tower (faux tree "mono-pine"), to be located on a concrete foundation and with ground-mounted equipment. The mono-pine would be able to host up to four different wireless carriers. The facility would be located within a 40 x 40-ft fenced ground-lease area, located approximately 85 ft from the east property line, 20 ft from the north property line, and 540 ft from the south property line, north of the Avenue of the Giants (State Highway 254) frontage. No trees would be removed as part of the project, as the 40 x 40 ft project footprint would be located within a flat, previously-graded agricultural driveway area south of the entry access roadway (Homes Road). The current use of the site is agricultural and recreation (including the Ancient Redwoods RV Park, the "Immortal Tree" redwood tree, and gift shop, all located on the southwest portion of the project site). Access to the tower facility would be from a gated driveway connection to Holmes Road to the north. The mono-pine would be 150 feet in height, using a freestanding, faux pine tree design. The wireless facility would include antennas (4 groupings of 12 antennas, placed at the upper reaches of the tower, and capable of supporting 4 wireless providers). The 40 x 40-ft ground-lease area would be enclosed with a 6-ft tall chain link fence topped with barbed wire. The tower would be located in the fenced area, along with equipment cabinets and equipment pads, fuel tank and a standby future generator (will only run during routine testing or during an emergency loss of power). Noted is that the equipment shelter, fuel tank and generator are proposed to be placed atop a 15 ft-5 in tall steel platform that is 12 x 24 ft (288 sq ft) in size; the platform would allow for elevation of key equipment above the floodplain affecting the project site. The 8 x 8 ft equipment shelter would be approximately 9 ft tall, with the generator 7 ft- 6 in high and its exhaust pipes 12 ft above the platform.

Several key issues were analyzed in developing the staff recommendation for this project. This includes the application of federal rules governing mandatory timeframes for review and decision on a discretionary permit for new wireless communications facilities.

Issue #1: Tower Height, Aesthetics, and Coverage Objectives

The applicant submitted a coverage map showing the areas for which the proposed facility would improve in-building service for locations within the Redcrest area. The 150-foot tall tower would accommodate co-location involving up to four different wireless providers. The tower is not located within the view of a scenic highway; although no highways in the County are "officially designated"

as California State Scenic Highways, several state highways could be eligible for official designation, including Highway 101 and Highway 254. Highway 101 is located approximately 1,850 feet to the southwest, and Highway 254 approximately 830 feet to the south.

The closest off-site residence from the tower is located approximately 160 ft northeast from the proposed tower location, with another residence approximately 460 ft to the east. These locations would have views of the tower, with the closest residence only having partial screening of the tower by a tree along roadway edge. The Eel River lies approximately 1,000 ft to the north. The Ancient Redwoods RV Park and gift shop is located on the project site, across Chadd Creek and approximately 550 ft south of the proposed tower location.

The County has previously been supportive of both stealthed and un-stealthed facilities include several co-locators. The original project design called for a 150-ft lattice tower to be located on the west side of the project site. The applicant subsequently amended the application to provide for a faux mono-pine 150-ft tall tower near the east edge of the project site. Staff supports the proposed use of the faux mono-pole design, which is intended to better blend with the forested and agricultural setting, and to reduce visual intrusion to the residences to the north and east. Noted is that the mono-pole design would be located in an area that generally consists of open fields, with the closest redwood forested area located approximately 200 ft to the east.

The County's Telecommunications Element of the General Plan requires an alternative analysis shall be provided at the time of application that documents why the project as proposed is the best way to accomplish project alternatives while minimizing project impacts. In response, the applicant analyzed four potential alternative tower locations and a co-location site, west and east of the project site. Details of this analysis and area coverage maps are attached to this report. The applicant also states that, regarding coverage objectives and tower height, *"The location of a WCF to fill a significant gap in coverage is dependent upon topography, zoning, existing structures, collocation opportunities, available utilities, and access. Wireless communication is line-of-sight technology that requires WCFs to be in relatively close proximity to the wireless handsets to be served...AT&T investigated potential alternative sites for facilities to fill the identified coverage gap in this portion of Humboldt county. AT&T searched for, but did not find, feasible collocation opportunities and or existing structures in and around the coverage objective...The Proposed Facility is the best available design to minimize visual impacts in the area. The Proposed Facility is the least intrusive means to fill the significant gap of the alternatives investigated by AT&T."* Staff supports these findings, with the proposed tower helping to close the area's service coverage gap for the local community and surrounding area.

#### Issue #2: Compliance with FCC RF Exposure Limits

To evaluate possible significant impacts to public exposure from Radio Frequency- Electromagnetic Energy (RF-EME), the County has typically required that applicants show that RF-EME from the facility are within adopted Federal standards.

The applicant prepared a study, with summary findings noting the following:

*"Based on information provided by AT&T Mobility and predictive modeling, the (Redcrest) installation proposed by AT&T Mobility will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. RF alerting signage at the base of the (mono-pine) and restricting access to authorized climbers that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members*

*of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits."*

The Department prepared and circulated referrals to various agencies. All commenting agencies recommended approval or conditional approval. Planning staff has found that the project will not result in a significant impact on the environment as conditioned, and the applicant has provided sufficient evidence in support of making all of the required findings for approving the Conditional Use Permit. Noted is that on-site grading has occurred, under County permit, on lands immediately south of the proposed tower location; a proposed condition of approval addresses completion of the grading work prior to tower construction.

**RECOMMENDATION:**

Based upon the on-site inspection, a review of Planning Division reference sources, and comments from all involved referral agencies, Planning staff has found that the project is Categorical Exempt from CEQA review, and that the applicant has submitted evidence in support of making all of the required findings for approving the proposed 150-foot tall faux mono-pine tower Conditional Use Permit per the Recommended Planning Commission Action.

**Alternative:** The Planning Commission could recommend denial of the proposed Conditional Use Permit if the Planning Commission finds that the submitted evidence does not support making all of the required findings. However, based on this staff report, planning staff believes the submitted evidence does support making all of the required findings and does not recommend further consideration of this alternative.

**RESOLUTION OF THE PLANNING COMMISSION  
OF THE COUNTY OF HUMBOLDT  
Resolution Number 21-  
Record Number PLN-2020-16854  
Assessor Parcel Numbers: 209-291-001, 209-291-017 & 209-351-022**

**Resolution by the Planning Commission of the County of Humboldt certifying compliance with the California Environmental Quality Act and conditionally approving the AT&T Conditional Use Permit.**

**WHEREAS, AT&T** submitted an application and evidence in support of approving a Conditional Use Permit to allow for the construction of a new 150-foot tall freestanding faux mono-pine tower to be located with ground-mounted equipment, with the ability to support four wireless carriers; and

**WHEREAS,** the County Planning Division, the lead agency, has determined that the project is exempt from review pursuant to Section 15303 of the CEQA Guidelines (New Construction or Conversion of Small Structures); and

**WHEREAS,** the Humboldt County Planning Commission held a duly noticed public hearing on **July 15, 2021**; reviewed, considered, and discussed the application for a Conditional Use Permit; and reviewed and considered all evidence and testimony presented at the hearing.

**Now, THEREFORE BE IT RESOLVED,** that the Planning Commission makes all the following findings:

**1. FINDING:**

**Project Description:** The proposed project consists of a Conditional Use Permit application for the construction of a new 150-foot tall, freestanding tower (faux tree "mono-pine"), to be located on a concrete foundation and with ground-mounted equipment. The mono-pine would be able to host up to four different wireless carriers. The facility would be located within a 40 x 40-ft fenced ground-lease area, located approximately 85 ft from the east property line, 20 ft from the north property line, and 540 ft from the south property line, north of the Avenue of the Giants (State Highway 254) frontage. No trees would be removed as part of the project, as the 40 x 40 ft project footprint would be located within a flat, previously-graded agricultural driveway area south of the entry access roadway (Homes Flat Road). The current use of the site is agricultural and recreation (including the Ancient Redwoods RV Park, the "Immortal Tree" redwood tree, and gift shop). Access to the tower facility would be from a gated driveway connection to Holmes Road to the north. The mono-pine would be 150 feet in height, using a freestanding, faux pine tree design. The wireless facility would include antennas (4 groupings of 12 antennas, placed at the upper reaches of the tower, and capable of supporting 4 wireless providers). The 40 x 40-ft ground-lease area would be enclosed with a 6-ft tall chain link fence topped with barbed wire. The tower would be located in the fenced area, along with equipment cabinets and equipment pads, fuel tank and a standby future generator (will only run during routine testing or during an emergency loss of power). Noted is that the equipment shelter, fuel tank and generator are proposed to be

placed atop a 15 ft-5 in tall steel platform that is 12 x 24 ft (288 sq ft) in size; the platform would allow for elevation of key equipment above the floodplain affecting the project site. The 8 x 8 ft equipment shelter would be approximately 9 ft tall, with the generator 7 ft- 6 in high and its exhaust pipes 12 ft above the platform.

**EVIDENCE:** a) Project File: PLN-2020-16854

**2. FINDING:** **CEQA:** The requirements of the California Environmental Quality Act have been met.

**EVIDENCE:** a) The County Planning Division, the lead agency, has determined that the project is exempt from review pursuant to Section 15303 of the CEQA Guidelines (New Construction or Conversion of Small Structures) because the project is being undertaken by a regulated public utility with the purpose of increasing wireless coverage by filling gaps in the area's cellular network through construction of a new cellular tower (faux mono-pine). The tower will be of sufficient height to support co-location by up to four wireless carriers.

b) The proposed tower location 40 x 40 ft ground lease space and access driveway have been previously disturbed by grading and agricultural activities.

**3. FINDING:** The proposed development is in conformance with the County General Plan. Telecommunications Element provisions include:

**EVIDENCE:** a) §6.5 F: Design and Screening.  
1)Support structures shall be designed and painted to minimize visibility with a preference towards each of the following in the order so listed: 1) use of existing structures, 2) stealth designs for concealment, and 3) monopoles.

The proposed tower utilizes a stealth design, faux mono-pine tower, to better blend with the surrounding rural residential and agricultural area. The tower will be able to accommodate four wireless carriers.

2)Component parts, equipment cabinets, buildings and security fencing shall be designed to achieve a minimum profile through painting, screening, landscaping, and architectural compatibility with surrounding structures.

The proposed tower utilizes a stealth design (faux mono-pine).

3)Photo simulations or balloon tests with views from various vantage points shall be used to show visual impact of the proposed facility.

Photo simulations are furnished in the attachments.

§6.5 E., Location and siting:

1)Avoid siting along ridgelines unless screened from public view

2) Avoid siting within views of scenic highways, public parks, recreation or cultural facilities or other public lands and coastal scenic or view areas

3) Setbacks shall be required between telecommunication facilities and residential dwelling units, public or private schools, and child daycare facilities.

The proposed tower utilizes a stealth design, faux mono-pine, to better blend with the surrounding rural residential and agricultural area and to reduce visual intrusiveness of the tower from off-site residences. The project site is not near a designated scenic highway.

§6.5 A: Tiered Permitting: "Utilize permit processes that vary depending upon the physical characteristics of the facility, its location, and its compliance with specific development and performance standards"

The project would be subject to compliance with County development standards and Conditional Use Permit conditions of approval.

§6.5 B., Performance Standards: "Standards for siting design, visibility, construction impacts, on-going operation, and other characteristics that affect the compatibility and environmental and safety impacts of proposed facilities."

The project would be subject to compliance with conditions of approval, addressing project construction as well as on-going operations and maintenance.

- b) The project complies with the County's Housing Element as it will not add to nor subtract from the County Housing Inventory. No housing is located on the project site, which is in agricultural and recreational use.

**4. FINDING:**

The proposed development is consistent with the purposes of the existing zone in which the site is located, and the proposed development conforms to all applicable standards and requirements of these regulations.

**EVIDENCE:**

- a) Ordinance 2209, implementing Ordinance for the Avenue of the Giants Community Plan, identifies that any commercial or industrial operations may be permitted with Conditional Use Permit approval.
- b) The proposed tower would be located on lands designated FP-Q, which require a CUP prior to development of non-agricultural uses. Provisions of the Community Plan state, "*Considerations in issuing a Conditional Use Permit include minimizing impacts to adjacent agricultural lands and neighbors, and whether access to the area should be allowed off Holmes Flat Road or should be restricted to the south side of Chadd Creek, requiring a bridge.*"  
The applicant states that the new tower will help address existing gaps in wireless coverage for the area. The faux mono-pine



design will help blend the visibility of the tower with the forested surrounding area and reduce aesthetic intrusiveness of what otherwise could be a standard freestanding lattice tower or monopole design.

- c) The proposed tower location meets all required setbacks, including 20 ft from the front and side property lines, and 10 ft from the rear property lines. As proposed the equipment platform would be no closer to any property line than approximately 30 ft (from the north, entry driveway location), and with the tower footprint approximately 45 ft from the north property line.
- d) The proposed project is consistent with County policies and standards for new telecommunications facilities, including with respect to co-location of telecommunications facilities; facility design; ongoing operations; and consideration of alternative locations to provide necessary wireless coverage.

**5. FINDING:**

The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare; or materially injurious to property or improvements in the vicinity.

**EVIDENCE:**

- a) All referral agencies that have reviewed the project recommended approval or conditional approval of the proposed development. The proposed use is located in an FP-Q zone, and allows the use subject to approval of a Conditional Use Permit. The project would be subject to obtaining County approval of a building permit, and would include review of engineer-designed construction plans. The applicant will be required to design the ground-mounted equipment in compliance with the provisions of the Flood Damage Prevention Ordinance. The structural integrity of the tower will be monitored as required by the conditions of approval. The project will be required to comply with federally-mandated thresholds for human exposure to radio frequency emissions. The project, as proposed and pursuant to the Conditional Use Permit conditions of approval, will minimize aesthetic impacts through use of appropriate tower design (faux tree). A condition of approval also addresses the need for the applicant to finalize any remaining issues related to the grading of lands immediately south of the proposed tower location prior to tower construction.

**6. FINDING:**

The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

**EVIDENCE:**

- a) The project does not include any residential development. The site is zoned, planned for and in heavy industrial use.

## DECISION

**NOW, THEREFORE**, based on the above findings and evidence, the Humboldt County Zoning Administrator does hereby:

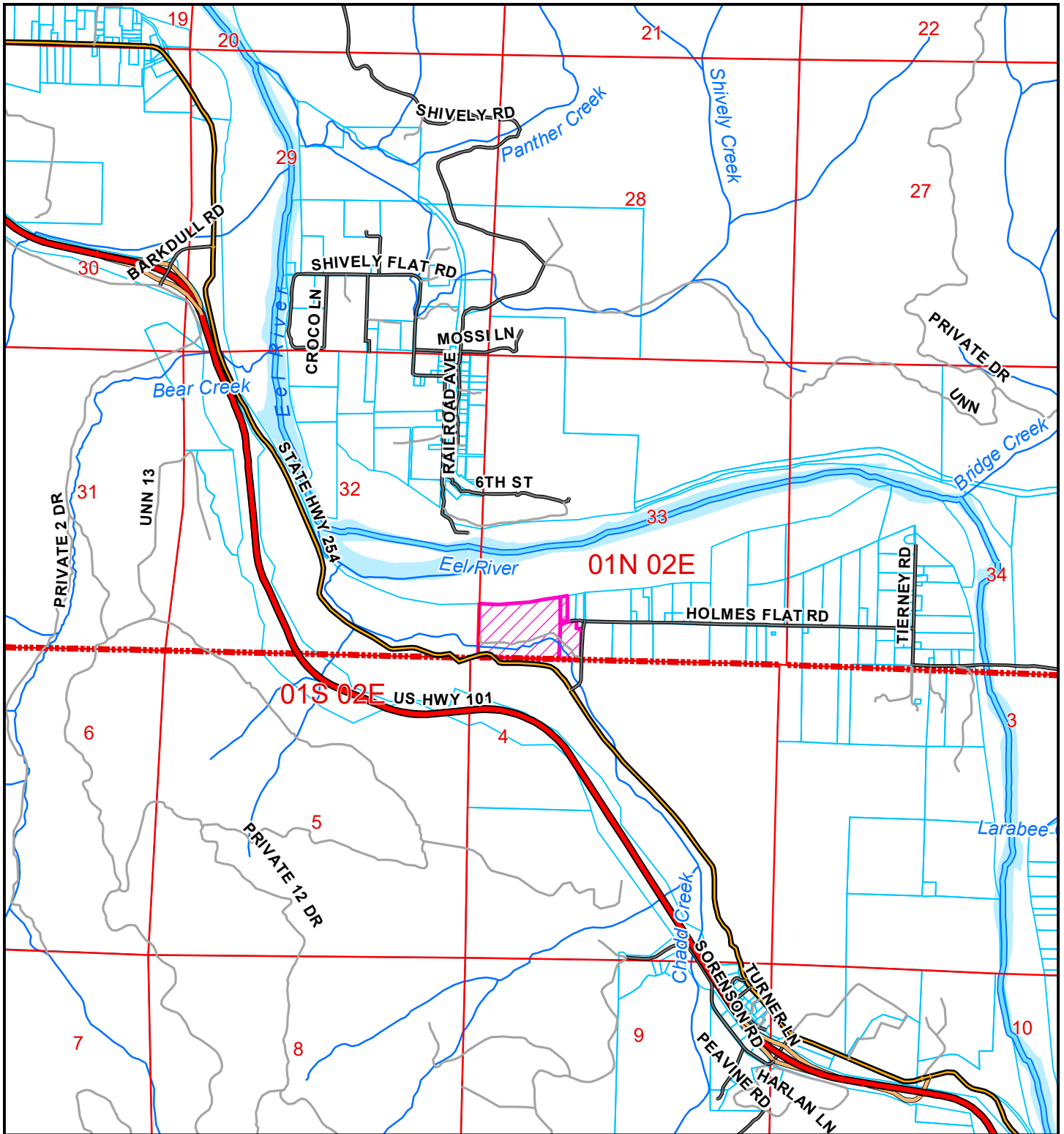
- Adopt the findings set forth in this resolution; and
- Conditionally approves the Conditional Use Permit, based upon the Findings and Evidence and subject to the conditions of approval attached hereto as Attachment 1 and incorporated herein by reference; and

Adopted after review and consideration of all the evidence on **July 15, 2021**.

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

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John H. Ford, Zoning Administrator,  
Planning and Building Department



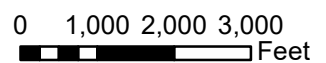
**LOCATION MAP**

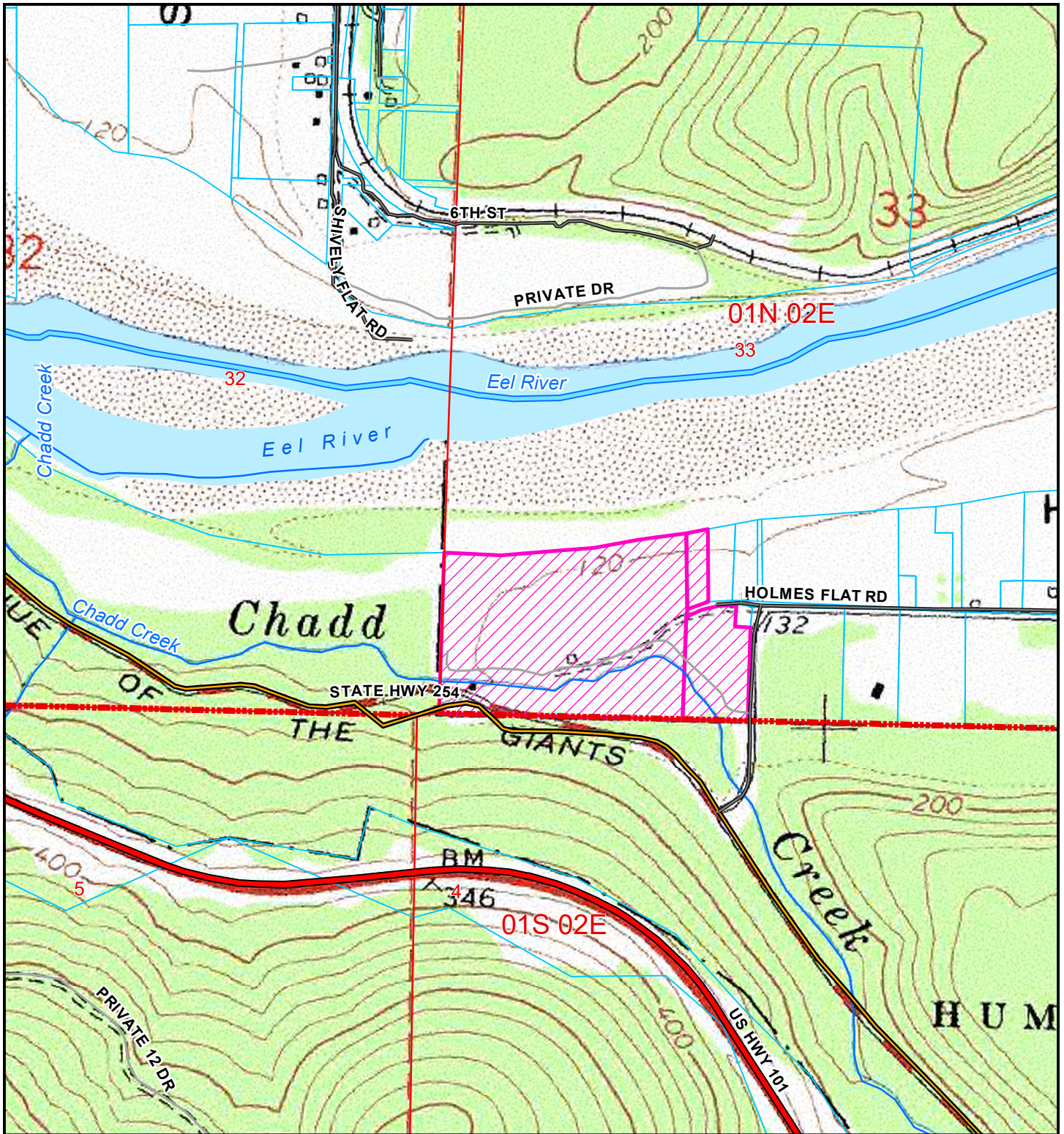
**PROPOSED NEW CINGULAR WIRELESS PCS  
CONDITIONAL USE PERMIT  
REDCREST AREA  
PLN-2020-16854**

**APN: 209-351-022, 209-291-001, & 209-291-017  
T01N R02E S33 HB&M (Redcrest)**

Project Area = 

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





**TOPO MAP**

**PROPOSED NEW CINGULAR WIRELESS PCS  
CONDITIONAL USE PERMIT**

**REDCREST AREA  
PLN-2020-16854**

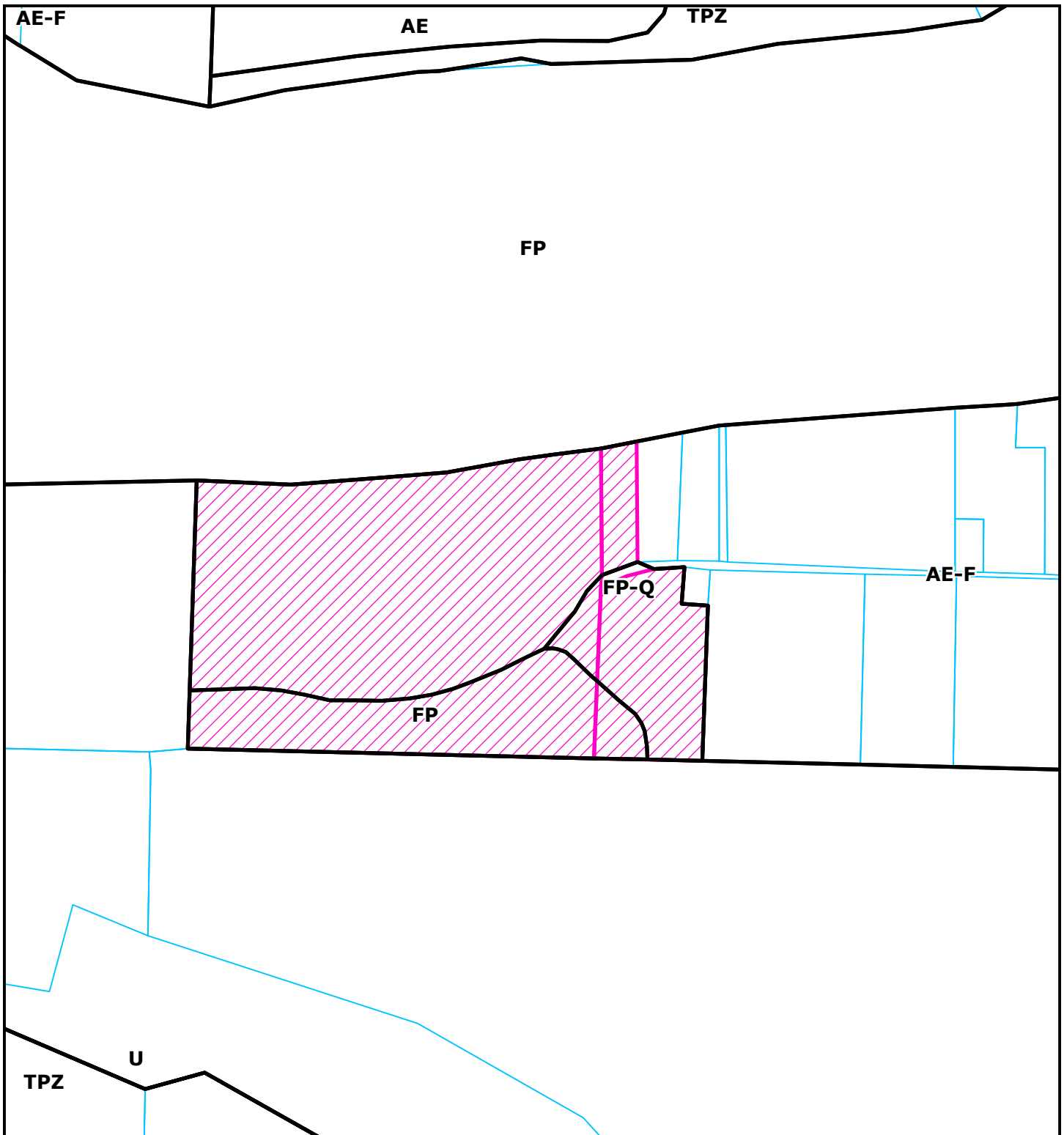
**APN: 209-351-022, 209-291-001, & 209-291-017  
T01N R02E S33 HB&M (Redcrest)**

Project Area = 

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0 250 500 750 1,000  
Feet



**ZONING MAP**

**PROPOSED NEW CINGULAR WIRELESS PCS  
CONDITIONAL USE PERMIT**

**REDCREST AREA  
PLN-2020-16854**

**APN: 209-351-022, 209-291-001, & 209-291-017  
T01N R02E S33 HB&M (Redcrest)**

**Project Area =** 

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**AERIAL MAP**


**PROPOSED NEW CINGULAR WIRELESS PCS  
CONDITIONAL USE PERMIT  
REDCREST AREA  
PLN-2020-16854**

**APN: 209-351-022, 209-291-001, & 209-291-017  
T01N R02E S33 HB&M (Redcrest)**

**Project Area =** 

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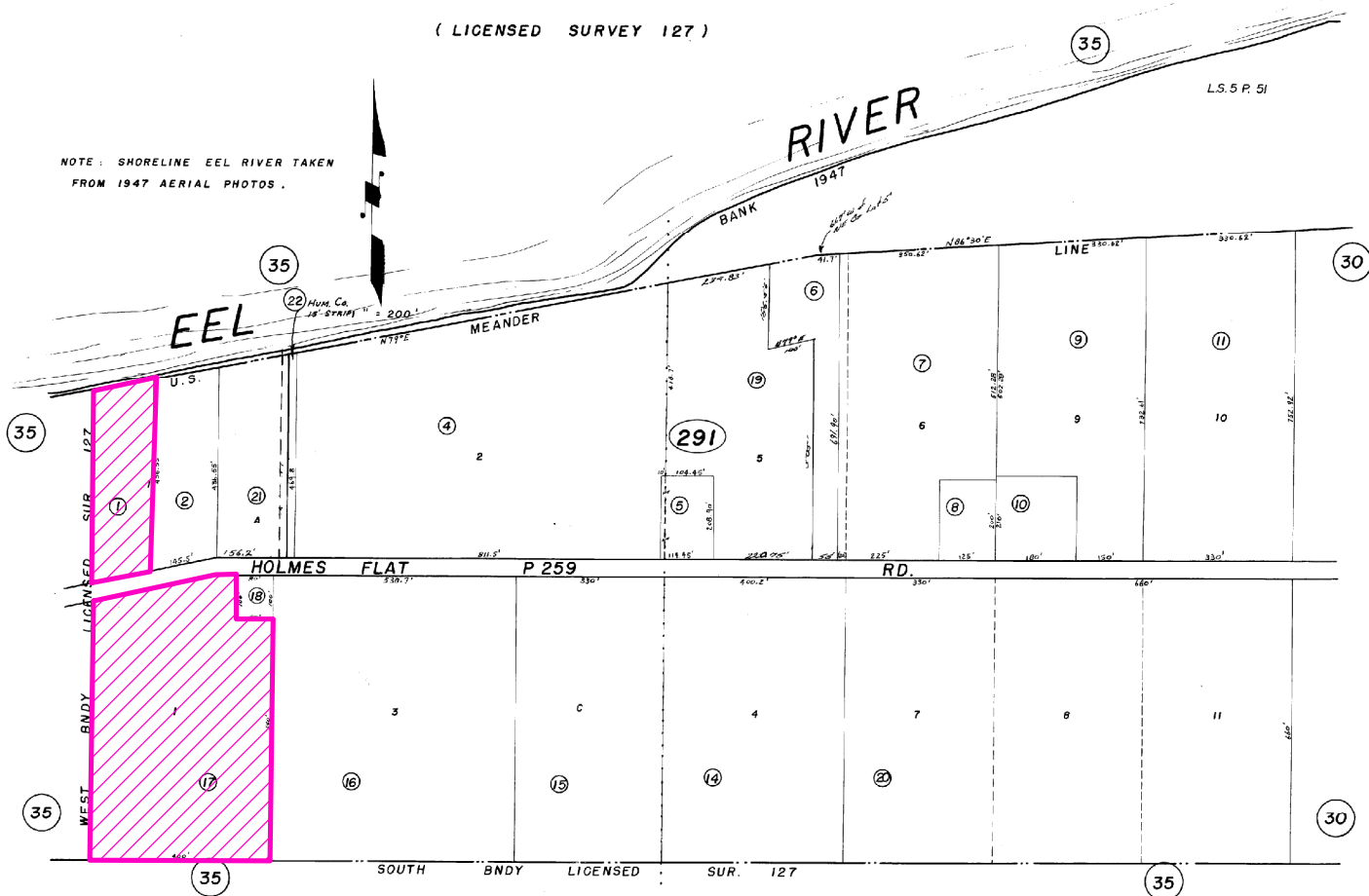
0 100 200 300  
 Feet

# HOLMES

( LICENSED SURVEY 127 )

209-29  
T.C.A. 136-000

NOTE: SHORELINE EEL RIVER TAKEN  
FROM 1947 AERIAL PHOTOS.



## ASSESSOR PARCEL MAP

PROPOSED NEW CINGULAR WIRELESS PCS  
CONDITIONAL USE PERMIT  
REDCREST AREA  
PLN-2020-16854

Project Area = 

APN: 209-351-022, 209-291-001, & 209-291-017  
T01N R02E S33 HB&M (Redcrest)

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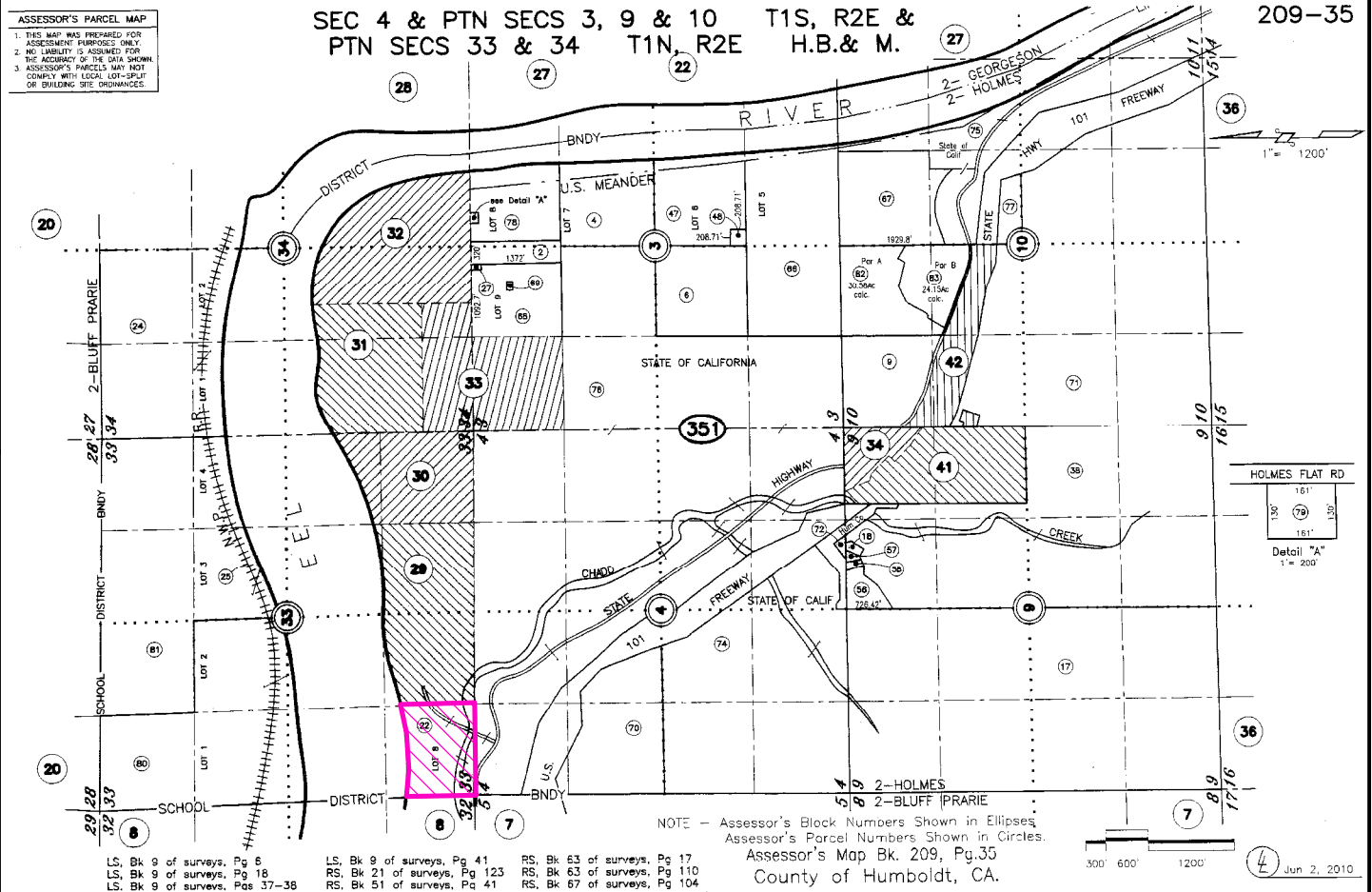
MAP NOT TO SCALE

**ASSESSOR'S PARCEL MAP**

1. THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY.
2. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN.
3. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL LOT-SPLIT OR BUILDING SITE ORDINANCES.

SEC 4 & PTN SECS 3, 9 & 10 T1S, R2E &  
PTN SECS 33 & 34 T1N, R2E H.B.& M.

209-35



LS, Bk 9 of surveys, Pg 6  
LS, Bk 9 of surveys, Pg 18  
LS, Bk 9 of surveys, Pgs 37-38

LS, Bk 9 of surveys, Pg 41  
RS, Bk 21 of surveys, Pg 123  
RS, Bk 51 of surveys, Pg 41

RS, Bk 63 of surveys, Pg 17  
RS, Bk 63 of surveys, Pg 110  
RS, Bk 67 of surveys, Pg 104

NOTE - Assessor's Block Numbers Shown in Ellipses  
Assessor's Parcel Numbers Shown in Circles.  
Assessor's Map Bk. 209, Pg.35  
County of Humboldt, CA.

300' 600' 1200' Jun 2, 2010

**ASSESSOR PARCEL MAP**

**PROPOSED NEW CINGULAR WIRELESS PCS  
CONDITIONAL USE PERMIT**

**REDCREST AREA  
PLN-2020-16854**

**APN: 209-351-022, 209-291-001, & 209-291-017  
T01N R02E S33 HB&M (Redcrest)**

Project Area = 



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**MAP NOT TO SCALE**



## ATTACHMENT 1

### RECOMMENDED CONDITIONS OF APPROVAL

#### Conditions of Approval for the Conditional Use Permit

APPROVAL OF THE PERMITS IS CONDITIONED ON THE FOLLOWING TERMS AND REQUIREMENTS

#### Conditions of Approval:

1. The project shall be developed, operated and maintained in accordance with the approved Project Description, Site Plan, Operations Plan, and these Conditions of Approval. Changes to the project other than Minor Deviations as provided in §312-11.1 HCC shall require modification of this permit.
2. Applicant/Owner shall submit plans by a California-licensed engineer for the Building Permit. Building plans submitted shall be consistent with conditions of approval that have been approved by the Planning Commission. As part of permitting, the applicant will be required to design the ground-mounted equipment in compliance with the provisions of the Flood Damage Prevention Ordinance.
3. Prior to grading or building permit issuance for the proposed tower project, the applicant shall finalize any outstanding issues related to the County's previous issuance of the grading permit (pursuant to 2018 engineered plans) for the lands immediately south of the proposed tower location, including planting requirements.
4. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.
5. A Notice of Exemption (NOE) will be prepared and filed with the County Clerk for this project in accordance with the State CEQA Guidelines. **Within three days of the effective date of permit approval**, it is requested that the applicant submit a check or money order for the required filing fee in the amount of \$50 payable to the Humboldt County Clerk/Recorder. If this payment is not received within this time period, the Department will file the NOE and will charge this fee to the project.
6. The applicant is responsible for receiving all necessary permits and/or approvals from other federal, state and local agencies, including the Federal Aviation Administration.
7. All work subject to Construction and Demolition and Inert debris as provided in California Code of Regulations T14 Chapter 5, Articles 5.9 (Transfer/Processing) and 6.0 (Disposal) will be performed in compliance with those regulations.
5. Before the import of any Construction and Demolition and Inert debris (CDI) not generated by the demolition or construction on any parcel subject to this project, the applicant will consult with DEH Solid Waste Local Enforcement Agency (LEA) program staff for regulatory parameters.

6. Before building permit final inspection and sign-off, the Applicant shall request an inspection by the Planning Department. The Review for Conformance with Conditions fee shall be paid upon request of the inspection. This fee is in accordance with the County's adopted Schedule of Fees and Charges.
7. The new faux mono-pine tower and appurtenances, as well as the equipment mounted on the elevated platform, shall be fabricated or painted in a dark green or similar color that generally blends with the surrounding forest lands so as to minimize the tower profile and visual impacts. The final color(s) used shall be approved by the Planning Director.
8. Prior to County issuance of a building permit for the project, the property owner shall designate an easement for provision of a pedestrian trail leading from the property frontage along Avenue of the Giants, along the west edge of the property, or from Holmes Flat Road northward to the Eel River, consistent with the provisions of the Avenue of the Giants Community Plan and subject to review and approval of the Planning Director.
9. The exterior of the anti-climb chain link fencing shall have informational signage posted with emergency contact information and for access to restricted areas. The fence at the ground level shall include a brown or green slated chain link fence.
10. Ground disturbing construction and grading shall employ fugitive dust control strategies (e.g., watering or similar methods) to prevent visible emissions from exceeding North Coast Air Quality Management District (NCAQMD) regulations and prevent public nuisance. Dust control practices during construction and grading shall achieve compliance with NCAQMD fugitive dust emission standards.
11. The Conditional Use Permit shall expire and become null and void at the expiration of two (2) years after all appeal periods have lapsed (see "Effective Date"); except where use in reliance on the permit has commenced prior to such anniversary date. The period within which use must be commenced may be extended as provided by Section 312-11.3 of the Humboldt County Code.

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

1. The tower (faux tree "mono-pine"), appurtenances and any future panel or microwave dish antennas, including radomes, shall be maintained for the life of the project. The design and color(s) used shall be approved by the Planning Director.
2. All new and existing outdoor lighting within the lease area shall be compatible with the existing setting and directed downward and within the property boundaries.
3. Work/construction hours are between 8:00 am - 5:00 pm, Monday - Friday.
4. Routine generator testing shall be conducted during daylight hours between 9 am and 4 pm, Monday through Friday.
5. Applicant shall ensure that noise generated by the operations shall not exceed 55 Ldn at all property lines.
6. Applicant shall submit a request for Agency Review for substantial conformance on any proposed changes of the operation, including but not limited to additional users (co-location), and change of antennas/microwave dishes. The fee for this request is listed on the County of Humboldt Fees

and Charges Worksheet, approved annually (typically December and implemented the next year) by the Board of Supervisors.

7. The applicant shall submit a report every five (5) years regarding the structural integrity of the tower to the satisfaction of the Building Inspection Division. The report shall be prepared and certified by a qualified licensed engineer. This condition will be administered by the Planning and Building Department - Building Inspection Division.
8. In the event the permitted use of the communication tower has been discontinued for a period of 90 consecutive days, the tower shall be deemed abandoned. After a tower has been considered abandoned, the owner/applicant shall have an additional 90 days to reactivate the permitted use of the tower; or transfer the tower to another owner/operator who makes actual use of the tower. If use has not been reactivated within the prescribed time period, all approvals shall automatically expire. Within 12 months of tower being deemed abandoned, the tower shall be dismantled and removed to an approved location along with all appurtenant structures. Dismantlement and removal shall be the responsibility of the applicant and property owner.
9. The applicant shall contact the local fire service provider (Rio Dell Fire Protection District) and furnish written documentation from that agency of the available emergency response and fire suppression services and any recommended project mitigation measures. Mitigation measures shall be incorporated into the project, if applicable. If emergency response and fire suppression services are not provided, the applicant shall cause to be recorded an "ACKNOWLEDGMENT OF NO AVAILABLE EMERGENCY RESPONSE AND FIRE SUPPRESSION SERVICES" for the parcel(s) on a form provided by the Humboldt County Planning Division. Document review fees as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors will be required.

#### **Informational Notes:**

1. If buried archaeological, cultural or historical resources are encountered during construction activities, the contractor on-site shall call all work in the immediate area to halt temporarily, and a qualified archaeologist is to be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, dietary bone, and human burials. If human burial is found during construction, state law requires that the County Coroner be contacted immediately. If the remains are found to be those of a Native American, the California Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains. The applicant is ultimately responsible for ensuring compliance with this condition.

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

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

## ATTACHMENT 2

### Applicant's Evidence in Support of the Required Findings

Attachment 2 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

- Application Form (in file)
- Map Set (**Attached**)
- Project Support Statement (**Attached**)
- Height Justification (**Attached**)
- Project Plans (**Attached**)
- Faux Mono-Pine Design (**Attached**)
- Photo-simulations (**Attached**)
- Alternative Sites Analysis (**Attached**)
- Competitive Coverage analysis (**Attached**)
- EME Radio Frequency study (**Attached**)
- Noise Assessment (**Attached**)

DATE: 11/19/2020

Humboldt County Planning Dept.  
3015 H Street  
Eureka, CA 95501

## **Project Statement**

Re: Proposed New AT&T Wireless Facility (cell site) Site Ref# CCL03946/ Larabee  
Located at: Ancient Redwoods RV Park 28101 Avenue of the Giants, Redcrest, CA 95569  
APN's: 209-291-017-000

## **Introduction**

Installation of a new AT&T unmanned wireless facility (cell tower). The proposed project consists of installing (1) New 150' (Co-locatable) stealth Monotree tower with (12) panel antennas, (1) microwave antenna and (18) (RRU's) remote radio units installed, and associated equipment mounted on the tower. Install (1) new 8.0' x 8.0' (WIC) walk in closet equipment shelter & backup generator inside a 40'x40' AT&T Lease Area.

## **Collaboration**

AT&T seeks to fill a significant gap in service coverage using the least intrusive means under the values expressed in the Humboldt County Municipal Code ("Code").

AT&T seeks to meet the Code requirements and provide the best available design by placing this WCF in a (FP-Q) Use zone at the minimum height needed to address the significant service coverage gap.

## **Visual and Noise Considerations**

AT&T'S engineering (Tower Manufacturer) have reviewed the proposed location to determine the appropriate type of tower, and in research suggest the proposed 150ft Monotree tower would have the least visual impact on the local area, blend best with the surroundings and provide the best camouflage and concealment for the proposed antennas.

### **Project Justification.**

AT&T Wireless is currently improving the existing wireless network in the area of Recrest, Humboldt county. The new proposed Lattice tower and installation of AT&T's telecommunication equipment will improve wireless and broadband internet coverage for the local area and provide First Net capability. The First Net program also known as First Responders Network <https://www.firstnet.gov/> is the country's first nationwide public safety communications platform dedicated to first responders. Being built with AT&T, in public-private partnership with the [First Responder Network Authority](#) AT&T seeks to engage and work with federal, state and local governmental agencies as part of FirstNet buildout to enhance coverage for first responders. Additionally, the improved network will provide an extremely valuable service to those who live, travel, and do business from home in the local area. It will give people the ability to call for emergency services in the event of an accident, the ability to communicate with employees or clients outside of the office, and the ability to communicate with family members when needed. The project engineer has indicated that the proposed location will provide the necessary coverage and capacity with the ability to hand off the wireless signal to the next telecommunications site. This will enable travelers and community members to have reliable and continuous wireless coverage.

- Operation of the project will occur 12 months a year, 7 days a week, 24 hours a day consistent with the continuous schedule of normal telephone company operations.
- The facility is "unmanned" and will be visited on an "as needed" basis only. No more than two technicians will attend the facility. Their schedule will be on a 24-hour basis. No more than two service vehicles, being either a van or a small pickup truck will visit the facility.
- The equipment located within AT&T's lease area will be used for telephone operations.
- There will be no supplies or materials stored on the site.
- There will be no noise, glare, dust or odors associated with the facility.
- The proposed on site 190 gallon diesel backup generator will ONLY run in the event of an emergency and for maintenance purposes approx. (1) time per month for approx. (20) to (30) mins. In the event of power outage, the generator has the capacity to power the site for up to (3) days before refueling is required.

### **Conclusion**

AT&T would like to apply for a Use Permit for the project. The Proposed Facility is the least intrusive means by which AT&T can close its significant service coverage gap in this portion of the County. Denial of AT&T's application would materially inhibit AT&T's ability to provide and improve service in this portion of Humboldt county.

Sincerely,



**Carl Jones**  
**Senior Project Manager**

**Epic Wireless Group LLC**

(916) 798-2275 [carl.jones@epicwireless.net](mailto:carl.jones@epicwireless.net)



on behalf of



DATE: 11/19/2020

Humboldt County Planning Dept.  
3015 H Street  
Eureka, CA 95501



Re: Proposed New AT&T Wireless Facility (cell site) Site Ref# CCL03946/ Larabee  
Located at: Ancient Redwoods RV Park 28101 Avenue of the Giants, Redcrest, CA 95569  
APN's: 209-291-001-000, 209-291-017-000 and 209-351-022-000

Height Justification Statement

AT&T is proposing to install a new wireless telecommunication facility at the above referenced property. The project consists of installing a new 150ft lattice tower to close a service coverage gap that is caused by inadequate wireless infrastructure in the area.

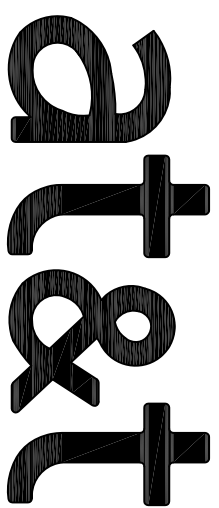
To meet AT&T's coverage objectives, AT&T needs to construct a new wireless communications facility. Wireless telecommunication is a line-of-sight technology, and AT&T's antennas need to be high enough to propagate an effective signal throughout the service gap area. To meet its coverage objectives for this gap area, AT&T proposes to build a 150-foot-tall tower with antennas installed at a centerline height of 146 feet above ground level. Denial of this proposed facility or a reduction in height would materially inhibit AT&T's ability to provide and improve wireless services in this portion of the county.

Due to the topography in this rural heavily forested area of the county the proposed tower height of 150ft is essential for this site in order to reach as many homes in the area as possible, and provide clear, consistent indoor outdoor wireless coverage and broadband internet service to those who live, travel, and do business from home in the local area.

If the proposed lattice tower was restricted in height it would significantly reduce the target coverage area, and fail to close the service coverage gap leading to limited wireless and broadband internet service for the local community and surrounding area as identified in the provided AT&T coverage/propagation maps. Additionally, a reduced tower height would limit space for colocation opportunity for other service providers increasing the need for more cell towers in this portion of the County.

Should you have any questions or comments please don't hesitate to reach to my office directly  
Kind Regards,

**Carl Jones** (AT&T Authorized Agent)  
Epic Wireless Group LLC  
605 Coolidge Drive, Suite 100, Folsom, CA 95630  
(916) 798-2275 [carl.jones@epicwireless.net](mailto:carl.jones@epicwireless.net)



**SITE NUMBER: CCL03946**  
**SITE NAME: LARABEE**

**28101 STATE HWY 254**  
**REDCREST, CA, 95569**  
**JURISDICTION: HUMBOLDT COUNTY**  
**APN: 209-291-017-000**

**SITE TYPE: MONOPINE**

**PROJECT DESCRIPTION**

AT&T WIRELESS PROPOSES TO CONSTRUCT AN UNMANNED TELECOMMUNICATIONS FACILITY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL (1) NEW 40'X40' FENCED LEASE AREA
- INSTALL (1) NEW AT&T POWER / TELCO / FIBER TO SITE LOCATION
- INSTALL (1) NEW 150'-0" TALL MONOPINE W/TOWER FOUNDATION AND ANTENNA MOUNTS
- INSTALL (1) NEW AT&T PRE-ASSEMBLED WALK IN CABINET (WIC)
- INSTALL (1) NEW AT&T RFRUS @ ANTENNA LEVEL
- INSTALL (1) NEW AT&T DC-SURGE SUPPRESSORS @ ANTENNA LEVEL
- INSTALL (1) NEW AT&T GPS UNIT MOUNTED TO FACADE OF NEW PRE-MANUFACTURED WALK IN CABINET (WIC)
- INSTALL (1) NEW AT&T 30KW DIESEL EMERGENCY BACKUP GENERATOR WITH 180 GAL. BELLY TANK
- INSTALL (3) NEW AT&T FIBER TRUNK, (1) PER DC-9
- INSTALL (9) NEW AT&T DC POWER TRUNK, (3) PER DC-9
- INSTALL (1) NEW AT&T DC/EA BOX MOUNTED ON NEW H-RFRAME
- INSTALL (1) NEW AT&T POWER PANEL MOUNTED ON NEW H-RFRAME
- INSTALL (1) NEW AT&T DC/EA BOX MOUNTED ON NEW H-RFRAME
- INSTALL (1) NEW AT&T GENERATOR ATMS MOUNTED ON NEW H-RFRAME

NOTE: RF EQUIPMENT IS SHOWN IN CHART ON A-5.

**PROJECT INFORMATION**

**SITE NAME:** LARABEE  
**SITE NUMBER:** CCL03946  
**SEARCH RING:** Larabee  
**FA#:** 13787552  
**SITE ADDRESS:** 28101 STATE HWY 254 REDCREST, CA 95569  
**ASSESSORS PARCEL NO.:** 209-291-017-000  
**NEW USE:** UNMANNED OUTDOOR TELECOMMUNICATIONS FACILITY  
**ZONING JURISDICTION:** HUMBOLDT COUNTY  
**LATITUDE:** 40° 26' 06.07" N (---)  
**LONGITUDE:** 123° 57' 42.25" W (---)  
**GROUND ELEVATION:** 4127.2'  
**ZONING CLASSIFICATION:** FP-Q  
**TYPE OF CONSTRUCTION:** 1B  
**OCCUPANCY GROUP:** U

RFDOS DATES: 08/27/2020 ISSUE: PRELIMINARY RFDOS REVISION: 200

**PROJECT TEAM**

**APPLICANT/LIENSEE:** M SQUARE DIVERSIFIED MOBILITY  
**5001 EXECUTIVE PARKWAY**  
**SAN RAMON, CALIFORNIA 94583**  
**CONTACT: MICHAEL MONTELEO**  
**PHONE: (949) 391-4824**  
**www.msquaredwireless.com**

**SITE ACQUISITION:** RE ENGINEER  
**5001 EXECUTIVE PARKWAY**  
**FOI SOUL, CA 94590**  
**CONTACT: CARL JONES**  
**EMAIL: carljones@epicwireless.net**  
**PHONE: (916) 798-2275**

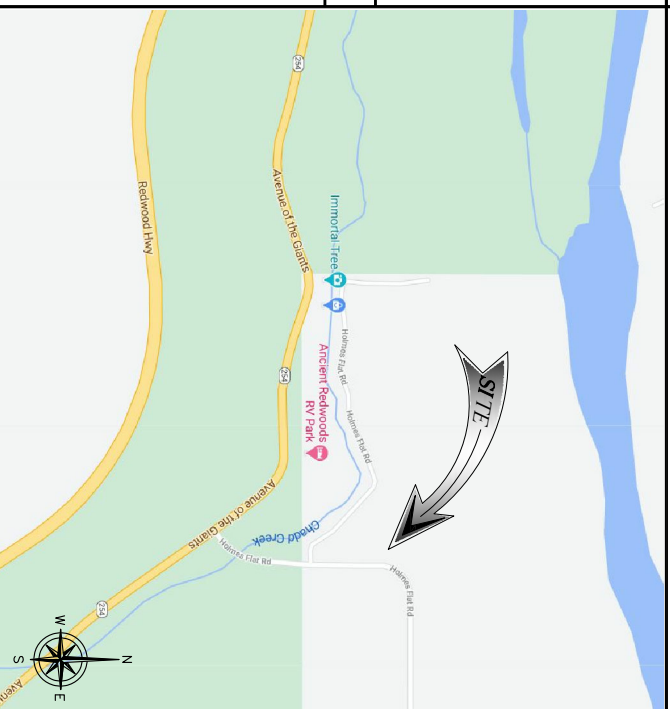
**ZONING CONTACT:** CIVIL VENDOR:  
**CARL JONES**  
**EMAIL: carljones@epicwireless.net**  
**PHONE: (916) 798-2275**

**CONSTRUCTION MANAGER:** BECHTEL  
**PETE MANAS**  
**pete.manas@epicwireless.net**  
**PHONE: (530) 385-5957**

**SHEET INDEX**

TITLE	REV
T-1 TITLE SHEET	B
C-1 SITE SURVEY	B
C-2 SITE SURVEY	B
1 OF 4 MITIGATION & MONITORING PLAN	B
2 OF 4 MITIGATION & MONITORING PLAN	B
3 OF 4 MITIGATION & MONITORING PLAN	B
4 OF 4 MITIGATION & MONITORING PLAN	B
A-0 SITE PLAN	B
A-1 ENLARGED SITE PLAN	B
A-2 LEASE AREA	B
A-3 ANTENNA PLAN AND SCHEDULE	B
A-4 ELEVATIONS	B
A-5 DIESEL GENERATOR SPECIFICATION	B
D-1 DETAILS	B
D-2 ELECTRICAL NOTES & LEGEND	B
E-1 UTILITY ROUTE PLAN	B
E-2 SINGLE LINE DIAGRAM & PANEL SCHEDULE	B
E-3 GROUNDING PLAN	B
E-4 ELECTRICAL & GROUNDING DETAILS	B
E-5	B

**VICINITY MAP**



**DIRECTIONS**

- DIRECTIONS FROM AT&T OFFICE AT 5001 EXECUTIVE PARKWAY, SAN RAMON, CA:
1. START OUT GOING NORTH
  2. TURN LEFT
  3. TAKE THE 1ST RIGHT
  4. TURN RIGHT
  5. TAKE THE 1ST RIGHT ONTO EXECUTIVE PKWY.
  6. TURN LEFT ONTO CAMINO RAMON
  7. TURN LEFT ONTO CROW CANYON RD
  8. MERGE ONTO 4880 N TOWARD SACRAMENTO
  9. MERGE ONTO CA-24 W VIA EXIT 46A TOWARD OAKLAND/FAVETTE
  10. MERGE ONTO 4580 W VIA EXIT 78 (PORTIONS TOLL)
  11. STAY STRAIGHT TO GO ONTO US-101 N.
  12. TAKE EXIT 667 TOWARD HOLMES/REDCREST
  13. TURN RIGHT ONTO SORENSEN RD
  14. TAKE THE 1ST LEFT ONTO STATE HIGHWAY 254/CA-294.

**CODE COMPLIANCE**

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES:

- CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLE 24 & 25)
- 2019 CALIFORNIA BUILDING CODE (CBC)
- CITY/COUNTY ORDINANCES
- BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA)
- 2019 CALIFORNIA FIRE CODE (CFC)
- 2019 CALIFORNIA BUILDING CODE (2015 IBC)
- 2019 CALIFORNIA RESIDENTIAL CODE (CRC)
- 2019 CALIFORNIA MECHANICAL CODE (CMC)
- 2019 CALIFORNIA PLUMBING CODE (CPC)
- 2019 CALIFORNIA ENERGY CODE
- 2019 CALIFORNIA GREEN BUILDING CODE

**APPROVALS**

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS & AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT & MAY IMPOSE CHANGES OR MODIFICATIONS.

AT&T RF ENGINEER: \_\_\_\_\_ DATE: \_\_\_\_\_

AT&T OPERATIONS: \_\_\_\_\_ DATE: \_\_\_\_\_

SITE ACQUISITION: \_\_\_\_\_ DATE: \_\_\_\_\_

CONSTRUCTION MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_

PROPERTY OWNER: \_\_\_\_\_ DATE: \_\_\_\_\_

ZONING: \_\_\_\_\_ DATE: \_\_\_\_\_

PROJECT MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_

**SPECIAL INSPECTIONS**

**DO NOT SCALE DRAWINGS**

THESE DRAWINGS ARE SCALED TO FULL SIZE AT 7/32"X3/4" AND HALF SIZE AT 1/4"X1/2". CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE DRAWING. ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME. CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICE TO PREVENT STORM WATER POLLUTION DURING CONSTRUCTION.



ISSUED FOR:  
**LARABEE**  
 28101 STATE HWY 254  
 REDCREST, CA, 95569

5001 EXECUTIVE PARKWAY  
 SAN RAMON, CALIFORNIA 94583

**EPIC**  
 WIRELESS GROUP LLC  
 Connecting a Wireless World

**M SQUARE**  
 WIRELESS  
 1387 CALLE AVANZADO  
 SAN CLEMENTE CA 92673 (949) 391-4824

AT&T SITE NO: CCL03946  
 PROJECT NO: 13787552  
 DRAWN BY: SD-3  
 CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 2015 REVISED	SD
A	02/05/2021	100% 2015	SD

LICENSOR:  
 SHEET TITLE  
 TITLE SHEET  
 SHEET NUMBER  
**T-1**

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

PLN-2020-16854-A-1 150 Ft Tall Tower



EEL

RIVER

LANDS OF THE LAST REDWOOD CORPORATION

DOC. 2000-15680-4, H.C.R. (SEPARATE PARCELS DESCRIBED THEREIN ARE EXTINGUISHED PER NOTICE OF MERGER FILED UNDER DOC. 2000-2757-5, H.C.R.)

WESTERLY BOUNDARY OF AREA SUBJECT TO TERMS OF A SUBSEQUENT EASEMENT WITH THE COUNTY OF HUMBOLDT DOC. 2007-20168-5, H.C.R.

HOLMES ROAD (40' WIDE PUBLIC RIGHT-OF-WAY) BK. 5 OF SURVEYS PG. 51, H.C.R.

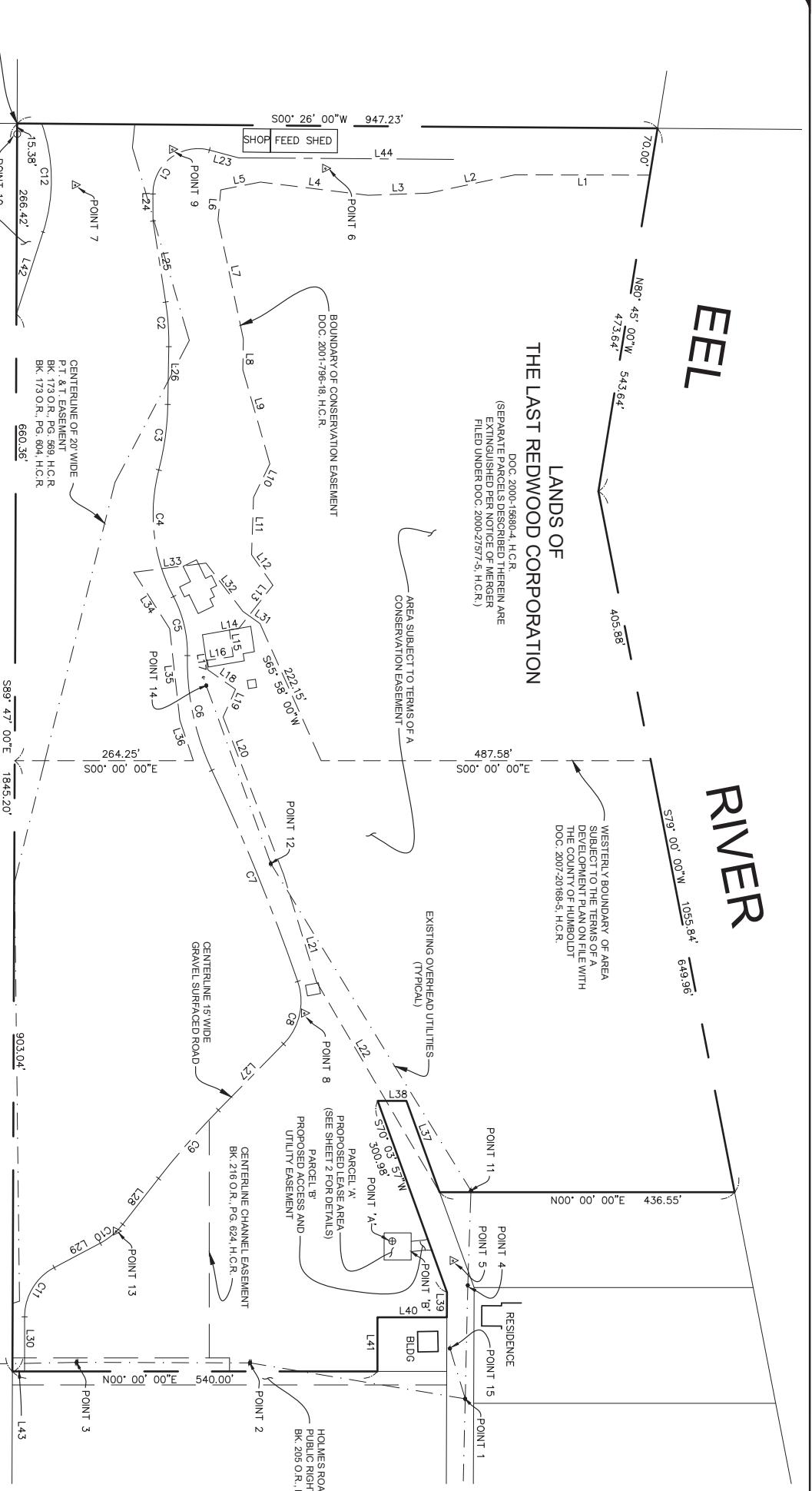
HOLMES ROAD PUBLIC RIGHT-OF-WAY BK. 200 O.R.L., PG. 282, H.C.R.

PROPOSED LEASE AREA (SEE SHEET 2 FOR DETAILS) PARCEL 'A' PARCEL 'B' PROPOSED ACCESS AND UTILITY EASEMENT

EXISTING OVERHEAD UTILITIES (TYPICAL)

CENTRALINE ISWIDE GRAVEL SURFACED ROAD

CENTRALINE CHANNEL EASEMENT BK. 210 O.R.L., PG. 624, H.C.R.



SOUTHWEST CORNER OF T. 1N., R. 2E., HB & M. (POINT 'C')

STATE OF CALIFORNIA (HWY 254 RIGHT-OF-WAY) BK. 130 DEEDS, PG. 13, H.C.M.

CENTRALINE OF 20' WIDE PT. 1 & T. EASEMENT BK. 173 O.R.L., PG. 589, H.C.R. BK. 173 O.R.L., PG. 604, H.C.R.

Line #	Length	Direction
L1	200.00	S00° 06' 00"W
L2	130.00	N12° 00' 00"W
L3	90.00	N02° 00' 00"W
L4	160.00	N07° 00' 00"W
L5	60.00	N11° 00' 00"W
L6	45.00	N85° 00' 00"W
L7	180.00	N78° 00' 00"E
L8	45.00	S89° 00' 00"E
L9	145.00	N74° 00' 00"E
L10	55.00	S64° 00' 00"E
L11	85.00	S88° 00' 00"E
L12	55.00	N55° 00' 00"E
L13	81.45	S51° 39' 35"E
L14	14.00	S08° 15' 00"E
L15	40.00	N81° 45' 00"E
L16	40.00	S08° 15' 00"E
L17	14.00	N81° 45' 00"E
L18	50.00	N35° 00' 00"E
L19	45.00	S66° 00' 00"E
L20	250.00	N69° 00' 00"E

Line #	Length	Direction
L21	165.00	N73° 00' 00"E
L22	360.77	N59° 40' 23"E
L23	44.71	S14° 43' 19"W
L24	39.98	S89° 41' 32"W
L25	121.30	N81° 08' 49"E
L26	85.36	S89° 02' 07"E
L27	137.29	N45° 26' 12"W
L28	86.12	N52° 01' 24"W
L29	77.15	N27° 56' 15"W
L30	80.71	S90° 00' 00"W
L31	31.07	S90° 00' 00"W
L32	89.76	S52° 36' 20"W
L33	107.67	S07° 13' 30"E
L34	99.09	N57° 33' 30"E
L35	135.83	N83° 39' 30"E
L36	63.24	N71° 34' 00"E
L37	143.59	N70° 03' 57"E
L38	42.55	N00° 00' 00"E
L39	37.05	N89° 47' 00"W
L40	102.68	N00° 00' 02"E

Line #	Length	Direction
L41	80.00	N90° 00' 00"W
L42	127.60	N72° 02' 00"W
L43	18.01	N00° 00' 00"W
L44	318.05	S00° 26' 00"W

Curve #	Length	Radius	Delta
C1	122.13	66.63	105° 01' 47"
C2	66.24	336.59	009° 49' 04"
C3	98.06	410.69	013° 40' 51"
C4	192.87	260.00	042° 30' 11"
C5	90.59	178.59	029° 03' 50"
C6	175.07	390.00	026° 23' 51"
C7	337.07	3171.63	006° 05' 21"
C8	100.01	90.00	063° 39' 55"
C9	134.37	1168.89	006° 35' 11"
C10	43.52	103.53	024° 05' 08"
C11	89.35	82.49	062° 03' 45"
C12	163.48	250.00	037° 28' 00"

POINT	NORTH	EAST	ELEVATION	DESCRIPTION
A	2041798.62	6015518.17	127.20	CENTER TOWER
B	2041826.55	6015535.44	N/A	DIMENSION PT.
1	2041906.52	6015751.44	N/A	UTILITY POLE
2	2041588.29	6015698.24	N/A	UTILITY POLE
3	2041331.87	6015697.51	N/A	UTILITY POLE
4	2041910.34	6015583.65	N/A	UTILITY POLE
5	2041888.29	6015546.42	128.82	P.K. NAIL
6	2041699.66	6013933.00	128.95	60D NAIL
7	2041329.46	6013956.59	128.67	P.K. NAIL
8	2041668.48	6015182.04	132.88	60D NAIL
9	2041473.35	6013904.18	127.82	60D NAIL
10	2041243.74	6013881.08	126.75	RAIL SPIKE
11	2041915.01	6015443.77	N/A	UTILITY POLE
12	2041619.13	6014980.20	N/A	UTILITY POLE
13	2041389.99	6015504.41	134.89	P.K. NAIL
14	2041523.53	6014696.77	N/A	UTILITY POLE
15	2041884.01	601567.87	N/A	SERVICE POLE



NOTES

ALL DISTANCES AND DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF. CONTIGUOUS INTERVAL IS ONE FOOT. THE BOUNDARY SHOWN HEREON IS PREDICATED ON PUBLIC RECORDS FOUND DOC. 2000-1688-4, 2000-2757-5, BK. 5 SURVEYS, PG. 51, BK. 9 SURVEYS, PG. 37, BK. 9 SURVEYS, PG. 38, BK. 44 SURVEYS, PG. 44 AND BK. 82 SURVEYS, PG. 102. ALL FILED IN THE OFFICE OF THE HUMBOLDT COUNTY RECORDER. ALL MEASUREMENTS AND DIMENSIONS ARE IN SUBSTANTIAL AGREEMENT WITH THE PUBLIC RECORD UNLESS OTHERWISE NOTED. HORIZONTAL DATUM: N. 2 041 243.80' AND E. 6 013 865.69' (GCS ZONE 1, NAD 83 (2011)) AT THE SOUTHWEST CORNER OF SECTION 33, T. 1 N., R. 2 W., H. B. & M., CALCULATED FROM SURVEY OBSERVATION ON NATIONAL GEODETIC SURVEY PID D48637. BASIS OF BEARINGS: THE SOUTHWEST QUARTER OF SECTION 33, T. 1N., R. 2W., H. B. & M., IS TAKEN AS SOUTH 89°47'00" EAST, AS SHOWN ON SURVEYS FILED IN BK. 9 SURVEYS, PG. 37 AND AS DESCRIBED IN DOC. 2000-1688-4, H.C.R. BENCH MARK: HUMBOLDT COUNTY SURVEY MARK NO. 725, ELEV. 138.64 (NAV/D89) THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE A27, WITH A BASE FLOOD ELEVATION OF 143.2'. SEE FEMA, N.F.I.P. PANEL 06023C1466F, DATED 11/4/2016. NORTH LATITUDE 40° 28' 06.07" WEST LONGITUDE 123° 57' 42.25" ELEVATION 127.2' AT CENTER BASE OF PROPOSED TOWER

SURVEYOR'S STATEMENT

THIS SURVEY HAS BEEN PREPARED BY ME OR UNDER MY DIRECTION AT THE REQUEST OF EPIC WIRELESS GROUP, LLC.

JANUARY 21, 2021

DATE



MARK E. KILLOPS  
P.L.S. 5927  
LICENSE EXPIRES: 12/31/22

DATE	DESCRIPTION	REV.
10/18/2020	ISSUE	
01/21/2021	SITE RELOCATION	

ISSUE STATUS  
LARABEE  
CCL03946  
28101 STATE HWY 254  
REDCREST, CA 95569



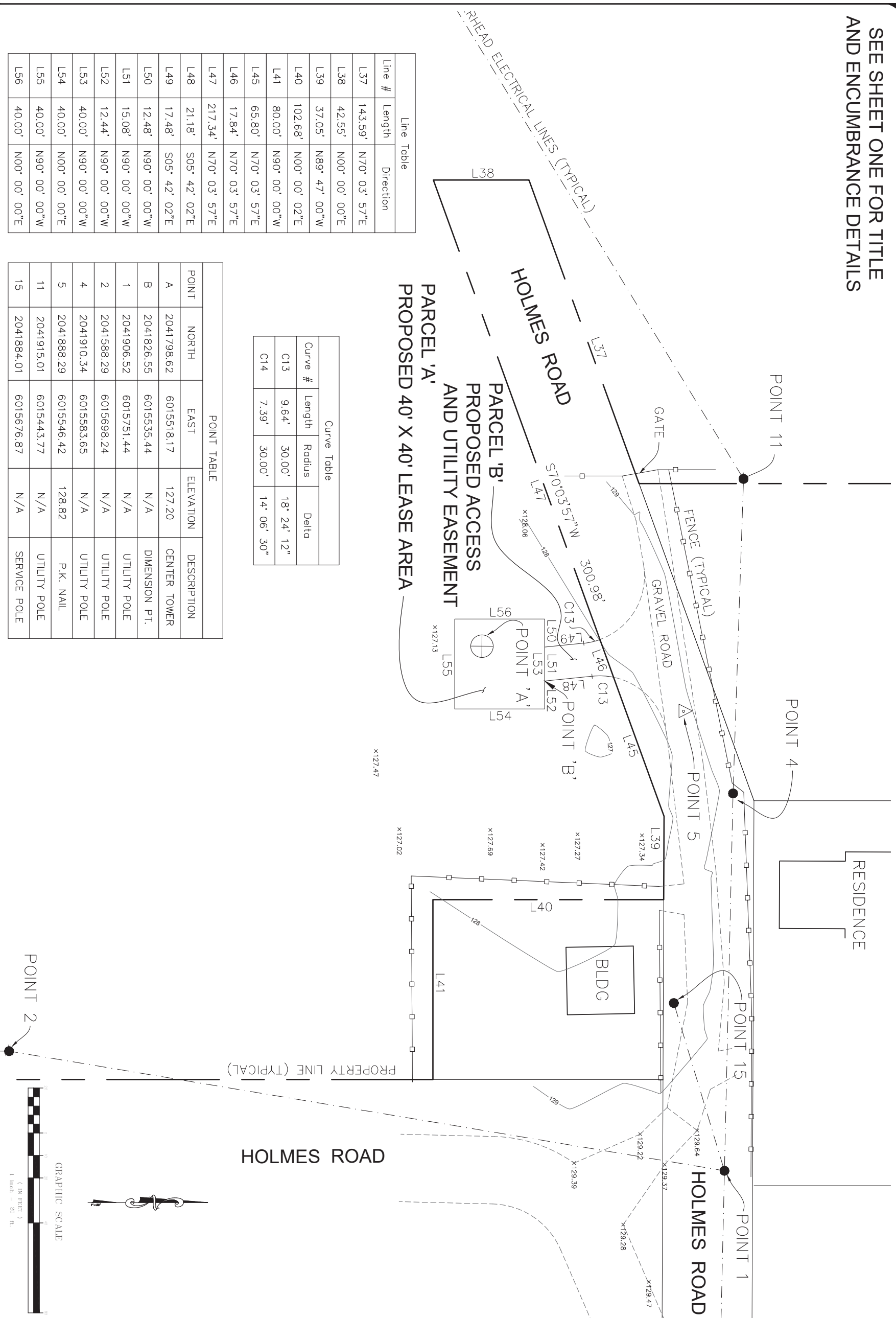
AT&T

KILLOPS LAND SURVEYING  
SMITH RIVER CALIFORNIA  
"Know Your Boundaries"

TOPOGRAPHIC SURVEY

SHEET 1 OF 2 SHEETS

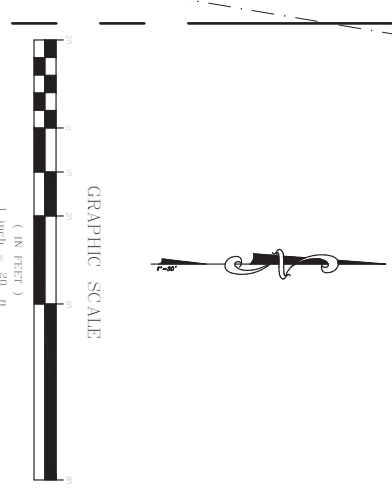
SEE SHEET ONE FOR TITLE  
AND ENCUMBRANCE DETAILS



Line #	Length	Direction
L37	143.59'	N70° 03' 57"E
L38	42.55'	N00° 00' 00"E
L39	37.05'	N89° 47' 00"W
L40	102.68'	N00° 00' 02"E
L41	80.00'	N90° 00' 00"W
L45	65.80'	N70° 03' 57"E
L46	17.84'	N70° 03' 57"E
L47	217.34'	N70° 03' 57"E
L48	21.18'	S05° 42' 02"E
L49	17.48'	S05° 42' 02"E
L50	12.48'	N90° 00' 00"W
L51	15.08'	N90° 00' 00"W
L52	12.44'	N90° 00' 00"W
L53	40.00'	N90° 00' 00"W
L54	40.00'	N00° 00' 00"E
L55	40.00'	N90° 00' 00"W
L56	40.00'	N00° 00' 00"E

Curve #	Length	Radius	Delta
C13	9.64'	30.00'	18° 24' 12"
C14	7.39'	30.00'	14° 06' 30"

POINT	NORTH	EAST	ELEVATION	DESCRIPTION
A	2041798.62	6015518.17	127.20	CENTER TOWER
B	2041826.55	6015535.44	N/A	DIMENSION PT.
1	2041906.52	6015751.44	N/A	UTILITY POLE
2	2041588.29	6015698.24	N/A	UTILITY POLE
4	2041910.34	6015583.65	N/A	UTILITY POLE
5	2041888.29	6015546.42	128.82	P.K. NAIL
11	2041915.01	6015443.77	N/A	UTILITY POLE
15	2041884.01	6015676.87	N/A	SERVICE POLE



DATE	DESCRIPTION	ISSUE	REV
10/18/2020	ISSUE		
07/12/2021	SITE RELOCATION		

**LARABEE**  
CCL03946  
28101 STATE HWY 254  
REDCREST, CA 95569



**KILLOPS LAND SURVEYING**  
SMITH RIVER CALIFORNIA  
*"Know Your Boundaries"*

TOPOGRAPHIC SURVEY  
SHEET 2 OF 2 SHEETS



VICINITY MAP  
NO SCALE

**PROJECT DATA SHEET INDEX**

PROJECT ADDRESS: 28101 AVENUE OF THE GIANTS, REDCREST  
 PROJECT APN: 209-291-017  
 OWNER/APPLICANT: THE LAST REDWOOD CORPORATION  
 28101 AVENUE OF THE GIANTS  
 REDCREST, CA 95589  
 ENGINEER/CONSULTANT: WHITCHURCH ENGINEERING INC  
 610 9th STREET  
 FORTUNA, CA 95540

SCOPE OF PROJECT: CLOSE OUT GRADING, EROSION CONTROL, AND SSM ENHANCEMENT PERMITTED UNDER BUILDING PERMIT #07-089224

BUILDING DEPARTMENT: COUNTY OF HUMBOLDT

**SHEET INDEX**

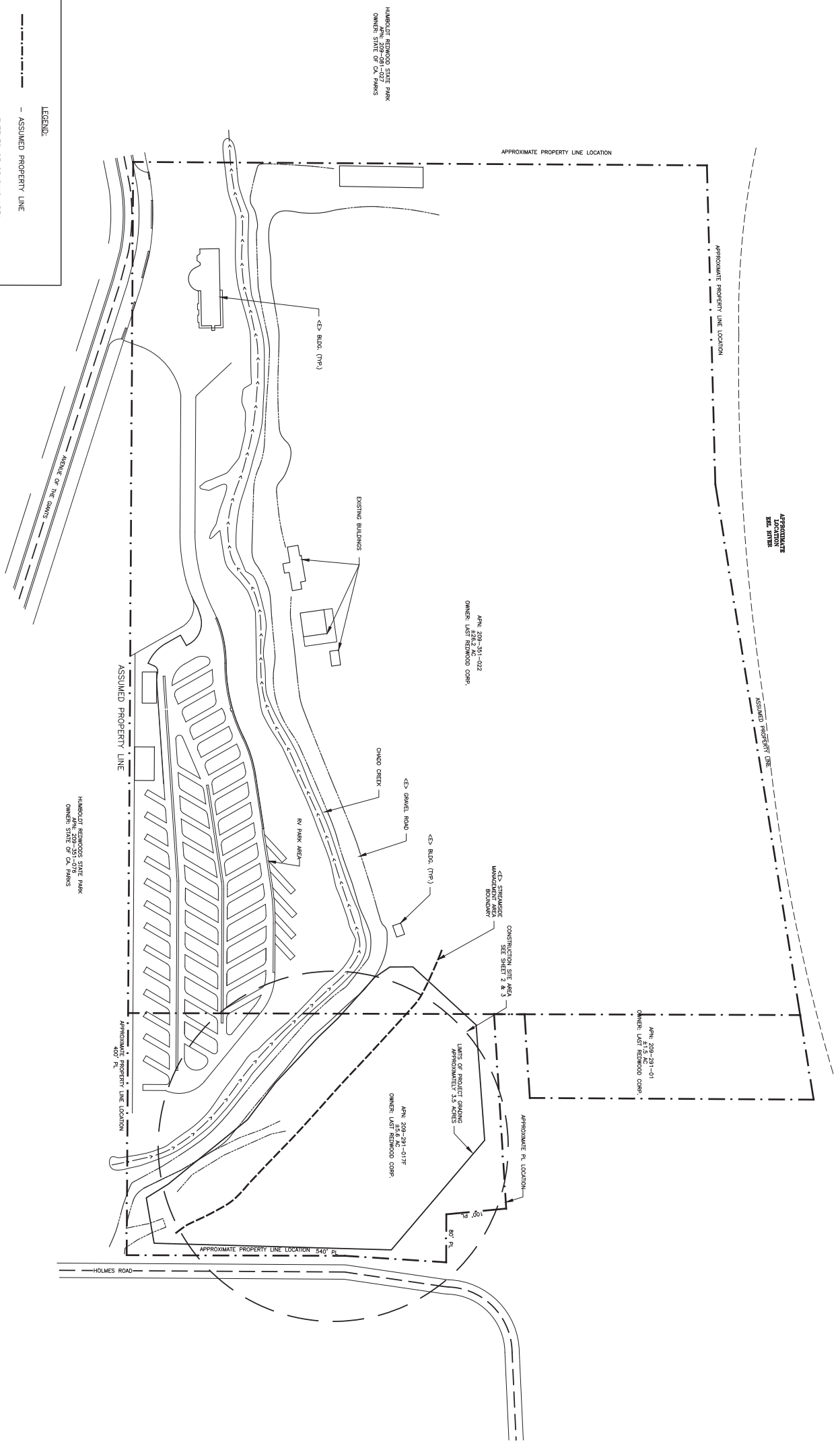
1. OVERALL SITE PLAN
2. AS-BUILT GRADING PLAN AND FUTURE ENHANCEMENT WORK
3. EROSION AND SEDIMENT CONTROL PLAN
4. EROSION AND SEDIMENT CONTROL DETAILS

**GRADING/PERMITTING NOTES**

- PLACEMENT OF 31,000 CU YD OF FILL WAS PERMITTED UNDER BUILDING PERMIT #07-089224
- APPROXIMATELY 30,983 CU YD (AFTER COMPACTION) OF ENGINEERED FILL HAVE BEEN PLACED BASED ON COMPARING A TOPOGRAPHIC SURVEY CONDUCTED IN APRIL 2019 TO ANOTHER TOPOGRAPHIC SURVEY CONDUCTED IN MAY OF 2019.
- THE QUANTITY OF FILL IMPORTED (PRIOR TO COMPACTION), BASED ON DETAILED RECORDS, IS APPROXIMATELY 43,000 CU YD

**LEGEND:**

---	ASSUMED PROPERTY LINE
---	EXTENTS OF GRADING AREA
---	EXISTING BUILDING
---	PROJECT LOCATION
---	EXISTING ROADWAY



**OVERALL SITE PLAN**

SCALE: 1"=100'



REVISIONS	BY



**WHITCHURCH ENGINEERING INC.**  
 610 9th Street Fortuna, California 95540  
 Phone (707) 725-6926

**ANCIENT REDWOODS GRADING PERMIT**  
 28101 AVENUE OF THE GIANTS REDCREST, CA 95569 APN:209-291-017F  
**OVERALL SITE PLAN**  
 For: LAST REDWOOD CORPORATION L.L.C. (707) 722-4396

Date	JULY 12, '19
Scale	AS NOTED
Design	FMT
Drawn	FMT
Job	LEW1701
Sheet	1

**GRADING NOTES:**

- 1. ALL GRADING PERFORMED UNDER WDD: 1-120005677
- 2. GRADING CONDUCTED UNDER BUILDING PERMIT 07-89224
- 3. TOTAL VOLUME OF FILL IMPORTED UNDER THIS PERMIT IS APPROXIMATELY 43,000 C.Y.
- 4. ESTIMATED QUANTITY OF FILL AFTER COMPACTION IS APPROXIMATELY 30,983
- 5. PROPERTY OWNER HAS MAINTAINED RECORDS OF FILL MATERIAL VOLUMES DELIVERED TO SITE
- 6. SEE GRADING VOLUME RECORDS LETTER, PREPARED BY WHITCHURCH ENGINEERING, INC., DATED 1/16/19, FOR SUMMARY OF INSPECTIONS.
- 7. ALL GRADING PROGRESS INSPECTIONS AND EROSION CONTROL BMP INSPECTIONS WERE PERFORMED BY WHITCHURCH ENGINEERING, INC.
- 8. MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 3 FEET WITH STRUCTURES FOR A MINIMUM HORIZONTAL DISTANCE OF 5 FEET WITH FOUNDATIONS AND FOOTINGS TO APPROVED GRAVEL FROM FILL MATERIALS.
- 9. FILL BANKS AND CUT BANKS SHOULD NOT EXCEED A 2:1 SLOPE.
- 10. ALL EXISTING AND PROPOSED CUT SLOPES SHOULD BE RE-VEGETATED TO PREVENT EROSION FROM RAINFALL. PROTECTION OF SLOPES SHOULD BE INSTALLED IMMEDIATELY AFTER SLOPES ARE DISTURBED.
- 11. ALL AREAS TO RECEIVE FILL SHOULD BE CLEARED OF ALL ORGANIC TOP SOIL, TRASH MATERIAL, AND NON-VANING STICKS. THE AREAS TO RECEIVE FILL SHOULD BE CLEARED TO A MINIMUM OF LESS THAN 2% EXPOSED SOIL. FILL SHOULD BE SPANGLED A MINIMUM OF 4 FEET PRIOR TO PLACEMENT OF THE FIRST FILL LIFT. ALL AREAS TO RECEIVE FILL SHOULD BE OBSERVED BY A REGISTERED PROFESSIONAL ENGINEER. ALL FILL MATERIALS SHOULD BE USED AS FILL MATERIAL. ENGINEERED FILL SHOULD BE PLACED IN THIN LIFTS AND

**SURVEY NOTES**

- 1. POST-GRADING CONTOURS ARE DEVELOPED FROM A TOPOGRAPHIC FIELD SURVEY CONDUCTED BY WHITCHURCH ENGINEERING ON MAY 13, 2019
- 2. PRE-GRADING CONTOURS ARE DEVELOPED FROM A TOPOGRAPHIC FIELD SURVEY CONDUCTED BY WHITCHURCH ENGINEERING IN JANUARY OF 2000

COMPACTED TO 90% MINIMUM RELATIVE COMPACTION AS PER ASTM TEST METHOD D 1557. ANY FILL PLACED UNDER A DRIVEWAY SHOULD BE COMPACTED TO 95% RELATIVE COMPACTION. COMPACTION TESTING SHOULD OCCUR EVERY THREE VERTICAL FEET.

FILL AREAS - A REPRESENTATIVE FROM WHITCHURCH ENGINEERING SHOULD BE PRESENT TO OBSERVE STRIPPING, GRADING, AND PLACEMENT OF APPROVED FILL MATERIALS. FILL MATERIALS ENCOUNTERED IN THE CONSTRUCTION AREA AS INDICATED IN THE GEOTECHNICAL REPORT PREPARED BY WHITCHURCH ENGINEERING (JUNE 20, 2005).

BACKFILL - STRUCTURAL FILL MATERIALS MAY BE SUITABLE NATIVE MATERIAL, WELL-GRADED RIVER-RUN GRAVELS, OR WELL-GRADED CRUSHED QUARRY ROCK (100% PASSING A #30 SIEVE) AND SHOULD BE PLACED IN 4" LIFTS. FILL MATERIALS SHALL BE IN LIFTS NOT EXCEEDING 8" IN THICKNESS AND COMPACTED TO 95% IN BUILDING AND PARKING LOT/DRIVEWAY AREAS AT A UNIFORM RATE. ALL UTILITY LINES SHOULD BE PLACED IN THE FILL. FILL HAS BEEN PLACED AND AGAIN AT THE TOP OF THE FILL. SOIL EVERY 30 INCHES IN HEIGHT, WHICHEVER IS MORE STRINGENT.

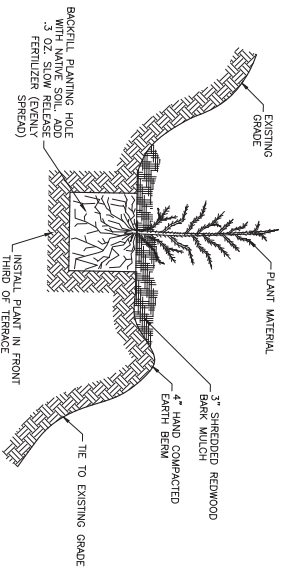
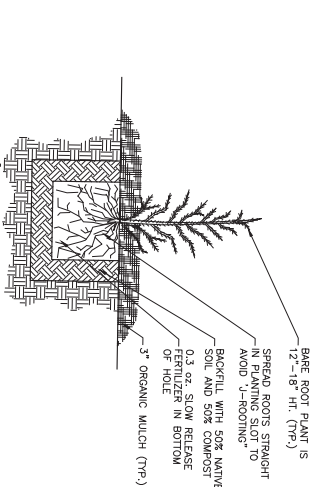
ALL UTILITY LINES SHOULD BE LOCATED. THOSE UTILITY LINES NOT EXPOSED TO BE USED AFTER CONSTRUCTION SHOULD BE CLEANED AND REMOVED. UTILITY LINES SHOULD NOT BE CRUSHED OR DAMAGED. UTILITY LINES SHOULD BE CLEANED AND REMOVED OF ALL LOOSE OR ORGANIC MATERIAL.

**PLANT SCHEDULE**

COMMON NAME	BOTANICAL NAME	SIZE	SPACING
Coast Redwood	<i>Sequoia sempervirens</i>	Seedling	6' o.c.
Big Leaf Maple	<i>Acer macrophyllum</i>	4'-6"	8'-12'
Red Alder	<i>Alnus rubra</i>	4'-6"	8'-12'
Willow	<i>Salix scouleriana</i>	4'-6"	8'-12'
Black Cottonwood	<i>Populus trichocarpa</i>	4'-6"	8'-12'

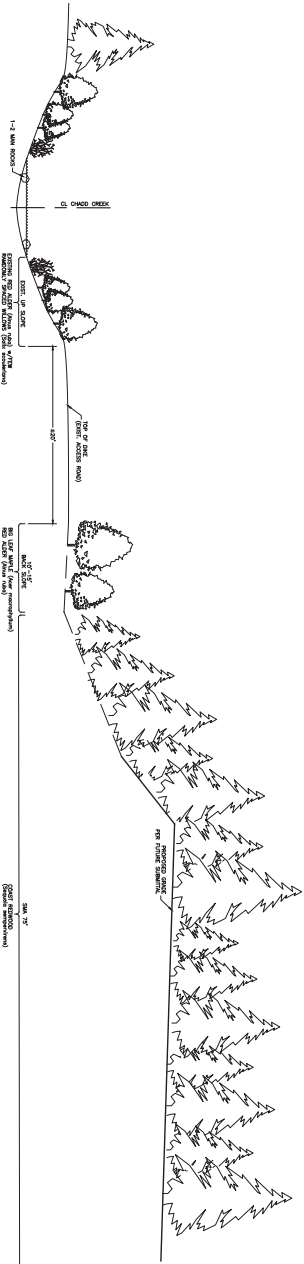
**PLANTING NOTES**

- 1. ALL PLANT MATERIAL, PLANTING TECHNIQUES AND SEEDING ACTIVITIES SHALL CONFORM TO TYPICAL LANDSCAPE INDUSTRY STANDARDS.
- 2. ALL PLANT MATERIALS TO BE USED WILL BE NATIVE TO THE PACIFIC NORTHWEST, AND GROWN IN HUMBOLDT COUNTY.
- 3. ALL NURSERY-GROWN PLANTS SHALL BE CONTAINERIZED OR BALLED AND BURGLAPPED OR BARE ROOT STOCK. PROVIDE ONLY SOUND, FULLY DEVELOPED PLANTS WITH WELL-DEVELOPED ROOT SYSTEMS. ALL PLANTS SHALL BE PLACED IN THE FIELD WITH CARE AND A LIST OF NURSERY NAMES KNOWN TO CARRY NAMED PLANTS. BARE ROOT STOCK IS A SEASONALLY DEPENDENT METHOD OF PROPAGATION.
- 4. BARE ROOT STOCK IS ACCEPTABLE ONLY IN THE NOVEMBER THROUGH MARCH PERIODS. PLANTS SHOULD BE PLANTED DURING THESE PERIODS. PLANT SIZE, AND HEIGHT CHARACTERISTICS, SHALL BE VERY CONFORMANT WITH THE PLANT SCHEDULE AND TO PLANT CHARACTERISTICS.
- 5. THE ENVIRONMENTAL DESIGNER RESERVES THE RIGHT TO REQUIRE REPLACEMENT OR SUBSTITUTION OF PLANTS THAT ARE DETERMINED TO BE UNDESIRABLE, OR IN THE CASE OF BARE ROOT PLANTS, ADDITIONAL SIMILAR HABIT CHARACTERISTICS AND SIZES OF CONTAINERIZED AND BALLED AND BURGLAPPED PLANTS.
- 6. DIG, PACK, TRANSPORT AND HANDLE ALL PLANTS WITH CARE TO ENSURE PROTECTION FROM INJURY. STORE PLANTS IN THE SHADE. PLANTS SHOULD BE PLANTED IMMEDIATELY AFTER DELIVERY. REPAIR DAMAGE TO PLANTS IN CASES WHERE NECESSARY TO KEEP THEM FROM DRYING OUT.
- 7. INSTALL PLANTS AS SHOWN ON THE PLANTING DETAILS. BACKFILL WITH PLANTING SOIL AND MEDIUM GRADE "BROUWER P-4" GRANULAR POLYMER PELLETS FOR ALL TREES AND SHRUBS. INSTALL POLYMER PELLETS AT THE RATE SPECIFIED BY THE MANUFACTURER.
- 8. PLANTING SOIL SHALL BE A MIXTURE OF 50% EXISTING NATIVE SOIL AND 50% PLANTING SOIL. THE CONTRACTOR SHALL SUBMIT A SAMPLE OF ANY PROPOSED SOIL.
- 9. CONTAINERIZED PLANTS SHALL BE PLANTED IMMEDIATELY.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS AND MATERIALS UNTIL THE FORMAL ACCEPTANCE OF THE PROJECT.
- 11. SOME INTERMINGLING OF NATIVE SPECIES EXPECTED.
- 12. DUE TO SEASONAL RESTRICTIONS, SMA ENHANCEMENT WORK WILL BE COMPLETED WINTER OF 2019-2020.

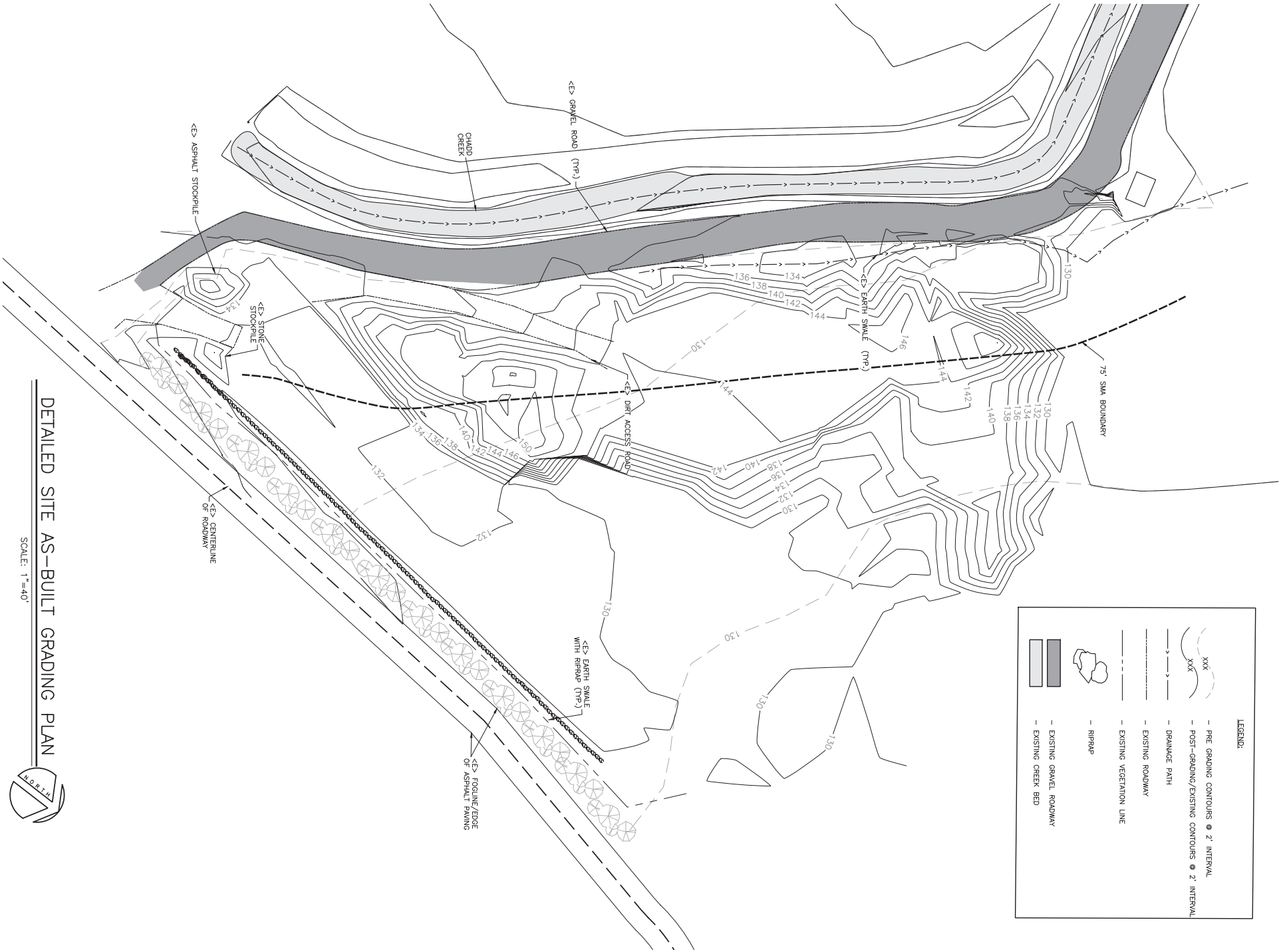


**1 PLANTING DETAIL**  
NO SCALE

**2 PLANTING DETAIL (ON SLOPE)**  
NO SCALE



**3 CROSS SECTION OF PROPOSED MITIGATION AREA PLANTING**  
NO SCALE



**DETAILED SITE AS-BUILT GRADING PLAN**

SCALE: 1"=40'

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<p><b>ANCIENT REDWOODS GRADING PERMIT</b></p> <p>28101 AVENUE OF THE GIANTS REDCREST, CA 95569 APN:209-291-017F</p> <p><b>AS-BUILT GRADING PLAN AND FUTURE ENHANCEMENT WORK</b></p> <p>For: LAST REDWOOD CORPORATION L.L.C. (707) 722-4396</p>	<p><b>WHITCHURCH ENGINEERING INC.</b></p> <p>610 9th Street Fortuna, California 95540 Phone (707) 725-6926</p>	<p>REVISIONS: BY</p> <table border="1" style="width: 100%;"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	DATE	BY												
NO.	DESCRIPTION	DATE	BY															
<p>Date: JULY 12, '19 Scale: AS NOTED Design: FMT Drawn: FMT Job: LEW1701 Sheet: 2 of 4</p>		<p>REGISTERED PROFESSIONAL ENGINEER EXPIRES 12/31/2020 NO. 68586 STATE OF CALIFORNIA</p>																

2:\shared\administration\2017\2019 E W\As-Built\LEW1701\Improvement\_Plan\_6.6.19\_REV\_63\_NeededForTake\_revised.dwg 7/11/2019

**EROSION AND SEDIMENT CONTROL NOTES**

**A. GENERAL**

1. THIS PLAN WAS PREPARED BY A QUALIFIED SWPPP DEVELOPER FROM WHITCHURCH ENGINEERING, DARRIN TULLY (OSD CERTIFICATE NUMBER 00614).
2. THIS PROJECT IS UNDER THE CALIFORNIA CONSTRUCTION GENERAL PERMIT. WDOI: 1 12C394837
3. THE SOURCE OF THE BMP'S USED IN THIS PLAN PREPARATION ARE FROM CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK AND STATE WATER RESOURCES CONTROL BOARD BEST MANAGEMENT PRACTICE CONSTRUCTION HANDBOOK.
4. THE IMPLEMENTATION OF BMP'S WILL OCCUR WITH THE ONSET OF CONSTRUCTION. IMMEDIATELY AFTER SOIL IS DISTURBED AT SITE, AS SHOWN ON SITE MAP A SILT FENCE WILL BE INSTALLED PARALLEL TO CONSTRUCTION SITE. OTHER EROSION CONTROL ACTIVITIES (HAY BALES, ETC) SHALL BE IMPLEMENTED AS DEEMED BY INSPECTOR.
5. A REPRESENTATIVE FROM WHITCHURCH ENGINEERING, INC SHALL INSPECT EROSION CONTROL MEASURES AFTER A SIGNIFICANT RAIN EVENT. A LETTER FOR EACH INSPECTION SHALL BE SUBMITTED TO THE JOB FILE. THE EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE ENGINEER AS NECESSARY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
7. THIS EROSION CONTROL PLAN, AND BMP'S DESCRIBED IS SUBJECT TO CHANGE UNDER THE DISCRETION OF THE OSD. AMENDMENTS WILL BE LISTED IN THE SWPPP DOCUMENT KEPT ON SITE.

**B. WATER COURSES**

1. EXISTING DRAINAGE PATTERNS ARE SHOWN ON ATTACHED PLAN.
2. CHANGES IN FLOW QUANTITIES AND VELOCITIES ARE NEGLIGIBLE. EXISTING SLOPES AND DRAINAGE CHANNELS ARE TO REMAIN UNALTERED. SURFACE WATER FLOW IS BY SHEET FLOW AND CONCENTRATED FLOW DIRECTED THROUGH DRAINAGE SWALES. SLOPE PROTECTION MEASURES SHALL CONSIST OF APPLYING A PROTECTIVE LAYER OF STRAW OR ANOTHER SUITABLE MATERIAL TO SOIL SURFACE AREA.
3. TEMPORARY SLOPE STABILIZATION MEASURES SHALL CONSIST OF STRAW MULCHING. APPLICATION OF THIS MEASURE SHALL COMMENCE WITH START OF CONSTRUCTION.
4. CHECK DAMS AND SEDIMENT ROLS SHALL BE USED WHEN NECESSARY, AS DETERMINED BY THE OSP, SO AS TO DECREASE EROSION AND PROMOTE SEDIMENTATION PRIOR TO OFF-SITE RUNOFF DISCHARGE. SEE DETAILS ON SHEET 4.
5. TEMPORARY CHANNEL TO CONTROL SURFACE WATER FLOW OVER CUT AND FILL SLOPES SHALL BE AN A.D.S. PLASTIC PIPE DIRECTED TO ESTABLISHED DRAINAGE.
6. EXISTING GRASS VEGETATED FIELD AREA WILL SERVE TO REDUCE DRAINAGE FLOW VELOCITIES.
7. A TEMPORARY SEDIMENT DETENTION BASIN IS NOT NECESSARY FOR THIS PROJECT.
8. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. ALL ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY.

**C. DISPOSAL OF EXCAVATED MATERIALS**

1. EXCAVATED MATERIALS SHALL BE HAULED OFF SITE OR USED AS FILL MATERIAL ONSITE.

**D. DUST CONTROL**

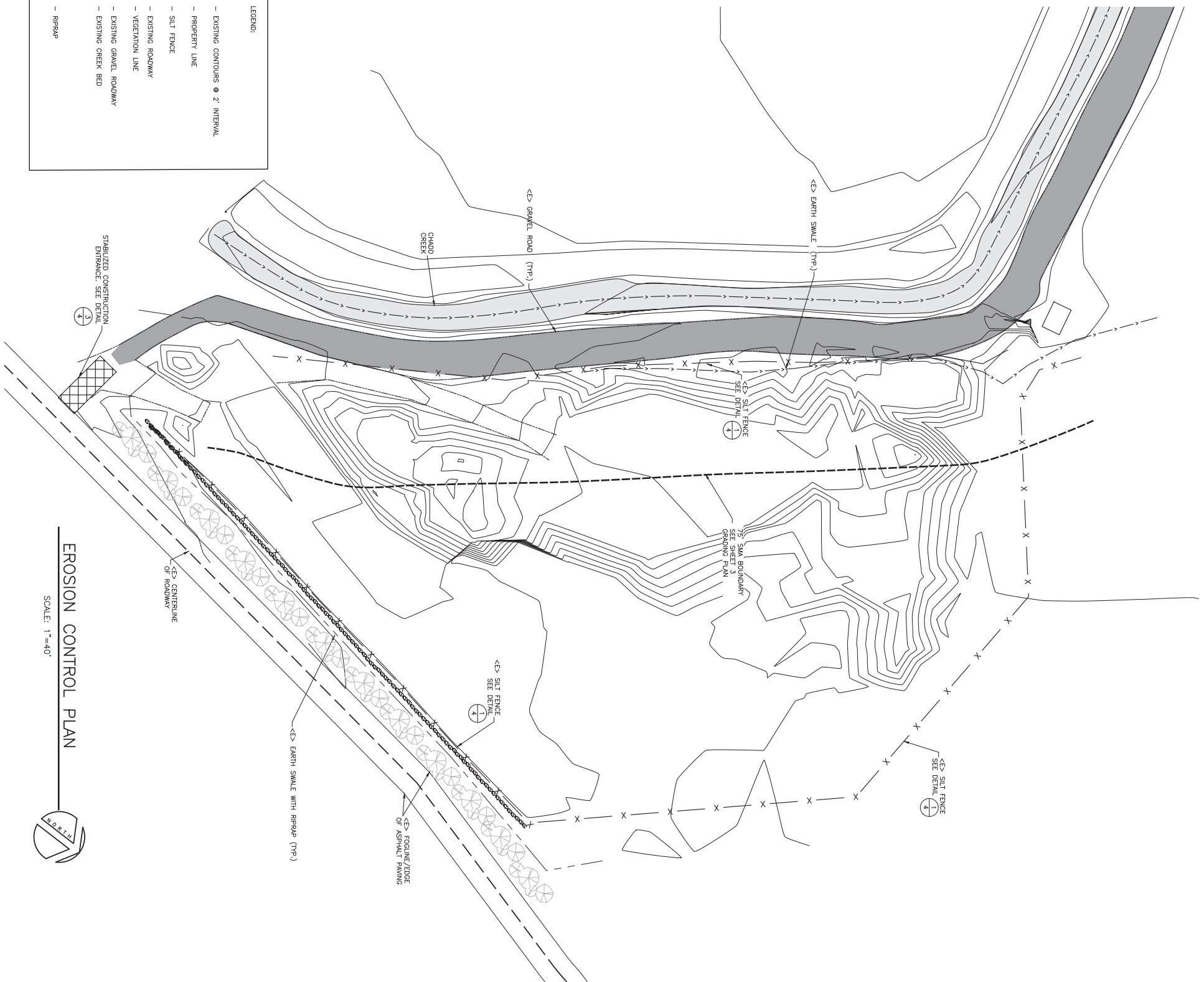
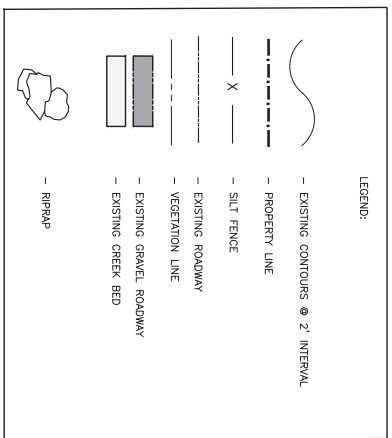
1. EXCESSIVE DUST SHALL BE CONTROLLED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR WHEN HE OR HIS SUBCONTRACTOR ARE OPERATING EQUIPMENT ON SITE, SHALL PREVENT THE FORMATION OF EXCESSIVE AIRBORNE NUISANCES BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONTROL DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN OPERATIONS.

**E. REMOVAL OF VEGETATION AND REVEGETATION**

1. VEGETATION REMOVAL IS TO BE LIMITED TO AREA DIRECTLY UNDER PROPOSED CONSTRUCTION.

**F. ENHANCEMENT**

1. ENHANCEMENT WORK SHOWN ON SHEET 2 TO BE COMPLETED DURING THE WINTER OF 2019-2020 DUE TO SEASONAL CONSTRAINTS.



**EROSION CONTROL PLAN**  
SCALE: 1"=40'

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REVISIONS	BY



**WHITCHURCH ENGINEERING INC.**  
610 9th Street Fortuna, California 95540 Phone (707) 725-6926

**ANCIENT REDWOODS GRADING PERMIT**  
28101 AVENUE OF THE GIANTS REDCREST, CA 95569 APN:209-291-017F  
**AS-BUILT EROSION AND SEDIMENT CONTROL PLAN**  
For: LAST REDWOOD CORPORATION L.L.C. (707) 722-4396

Date JULY 12, '19  
Scale AS NOTED  
Design FMT  
Drawn FMT  
Job LEW1701  
Sheet 3 of 4

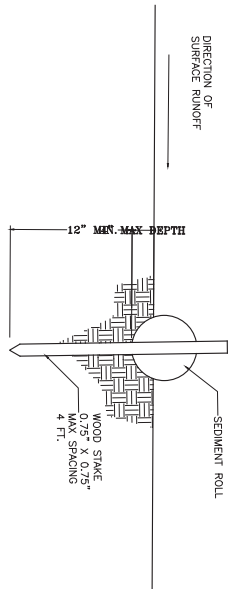
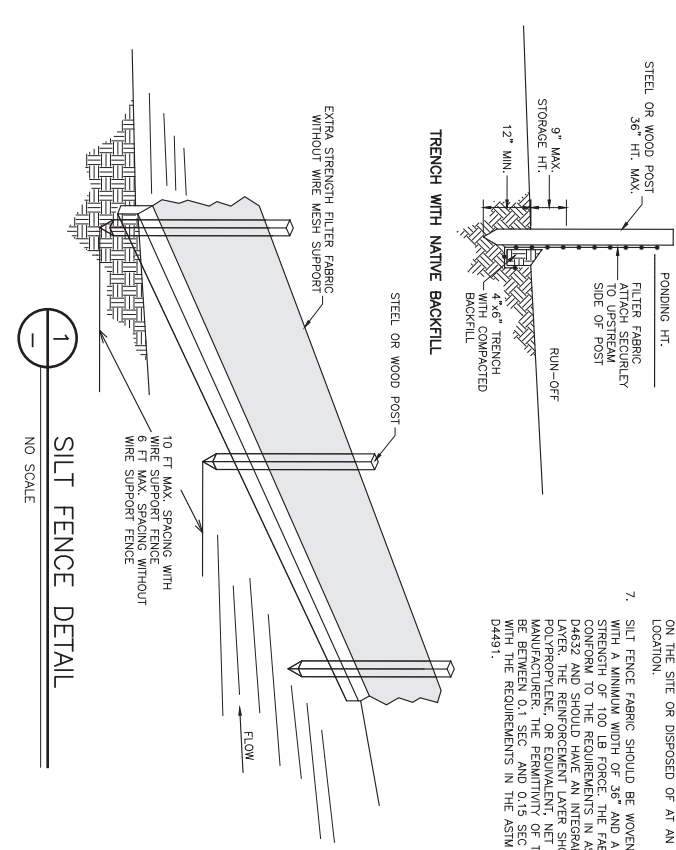


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 610 9th Street Fortuna, California 95540 Phone (707) 725-6926

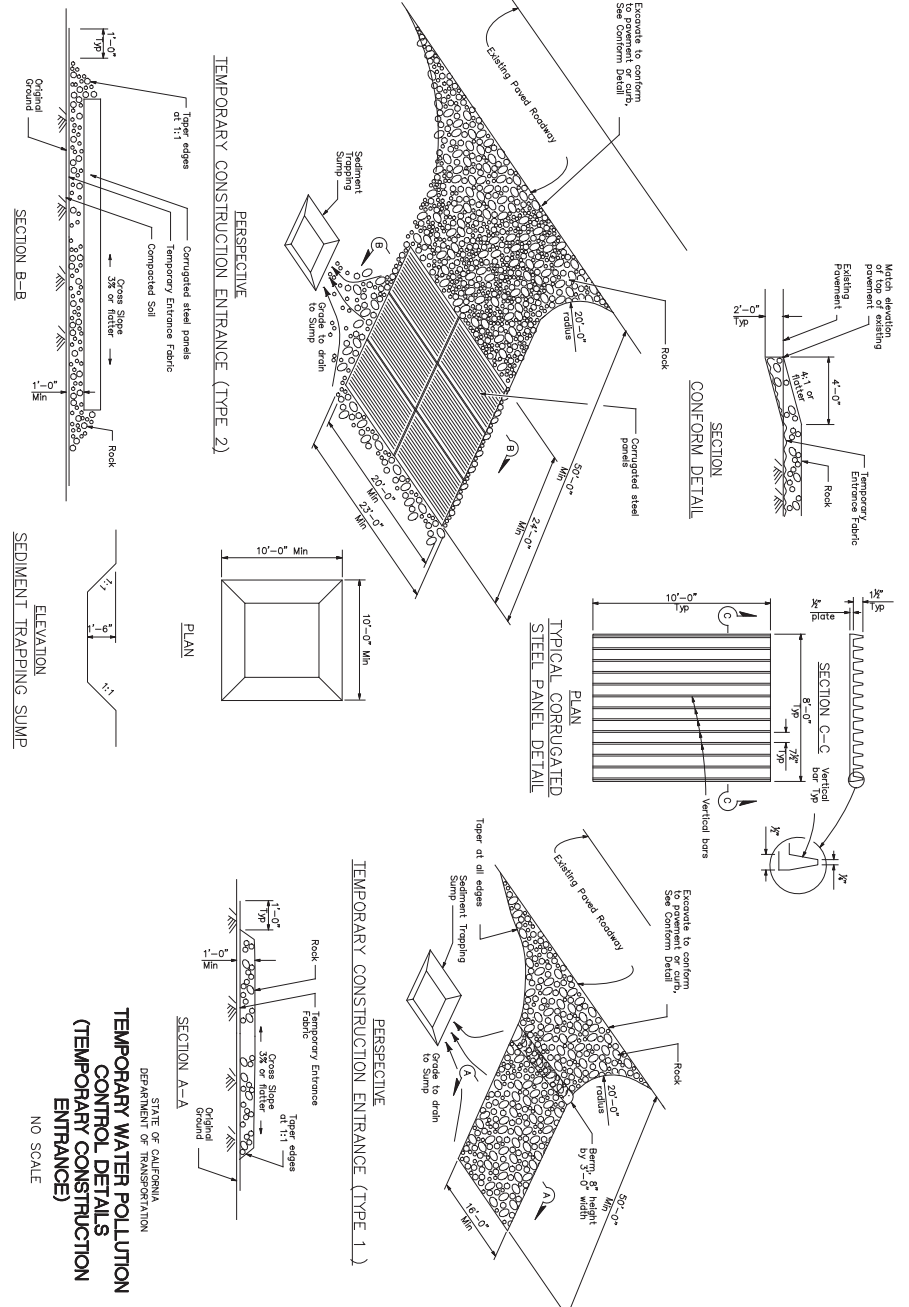
**ANCIENT REDWOODS GRADING PERMIT**  
 28101 AVENUE OF THE GIANTS REDCREST, CA 95569 APN:209-291-017F  
**EROSION AND SEDIMENT CONTROL DETAILS**  
 For: LAST REDWOOD CORPORATION L.L.C. (707) 722-4396

Date JULY 12, '19  
 Scale AS NOTED  
 Design FMT  
 Drawn FMT  
 Job LEW1701  
 Sheet 4 of 4

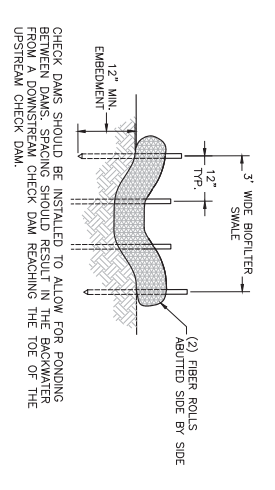
- NOTES:**
1. THE CONTRACTOR SHALL INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
  2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
  3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE FLOWING EFFICIENCY.
  4. WOOD STAKES SHOULD BE COMMERCIAL QUALITY LUMBER OF THE SIZE AND SHAPE SHOWN ON THE PLANS. EACH STAKE SHOULD BE FREE FROM DECAY, SPLITS OR CRACKS. STAKES SHOULD BE PLACED ON THE DOWNSTREAM SIDE OF THE FENCE TO PREVENT DEFECTS THAT WOULD WEAKEN THE STAKES AND CAUSE THE STAKES TO BE STRUCTURALLY UNSUITABLE.
  5. SILT FENCE SHALL BE LEFT IN PLACE, INSPECTED, AND STABILIZED UNTIL THE UPSTREAM AREA IS PERMANENTLY STABILIZED.
  6. SEDIMENT THAT ACCUMULATES IN THE SILT FENCE MUST BE PERIODICALLY REMOVED IN ORDER TO MAINTAIN FENCE EFFICIENCY. SEDIMENT SHOULD BE REMOVED WHEN SEDIMENT ACCUMULATION REACHED ON THIRD OF THE BARRIER HEIGHT. SEDIMENT REMOVED DURING MAINTENANCE MAY BE INCORPORATED INTO EARTHWORK ON THE SITE OR DISPOSED OF AT AN APPROPRIATE LOCATION.
  7. SILT FENCE FABRIC SHOULD BE WOVEN POLYPROPYLENE WITH A MINIMUM WIDTH OF 36" AND A MINIMUM TENSILE STRENGTH OF 100 LB FORCE. THE FABRIC SHOULD BE PERMANENTLY REINFORCED WITH AN INTEGRAL REINFORCEMENT LAYER. THE REINFORCEMENT LAYER SHOULD BE POLYPROPYLENE, OR EQUIVALENT, NET PROVIDED BY THE MANUFACTURER. THE PERMANENCY OF THE FABRIC SHOULD BE VERIFIED BY THE MANUFACTURER. THE FABRIC SHOULD MEET THE REQUIREMENTS IN THE ASTM DESIGNATION D4491.



**3 STABILIZED CONSTRUCTION ENTRANCE**  
 NO SCALE



**4 CHECK DAM DETAIL**  
 NO SCALE



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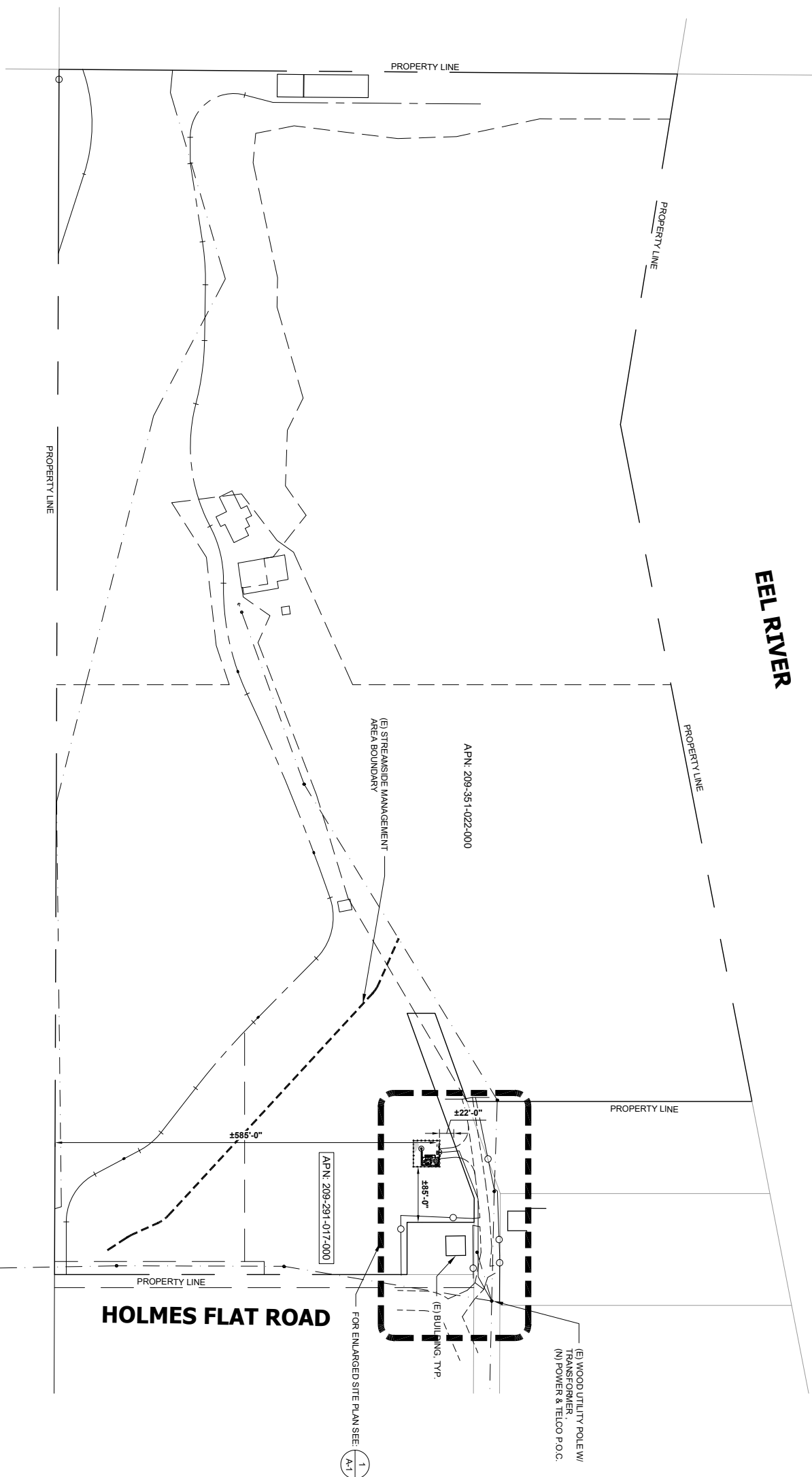
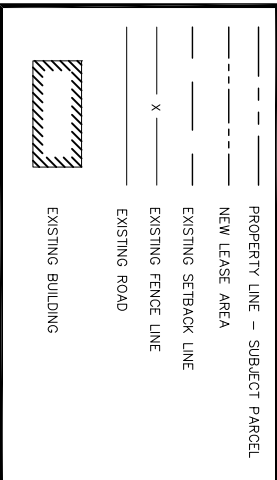
NOTES:

1. THE WIRELESS COMMUNICATION FACILITY COMPLIES WITH FEDERAL STANDARDS FOR RADIO FREQUENCY INTERFERENCE WITH THE TELECOMMUNICATION ACT OF 1996 AND SUBSEQUENT AMENDMENTS AND ANY OTHER REQUIREMENTS IMPOSED BY STATE OR FEDERAL REGULATORY AGENCIES.
2. NO EXISTING PARKING STALLS ARE BEING ADDED OR REMOVED AS PART OF THE NEW INSTALLATION.
3. THE BELOW GRADING INFORMATION IS AN ESTIMATE.
  - FINISH IS TO BE 3'-0" DEEP AND 16" WIDE - ALL SPOILS TO BE PLACED IN THE EXISTING DIRT DRIVE.
  - CONCRETE FOOTING IS TO BE 18" YARDS WITH A 5'-0" DIA. ABOVE GRADE. DIRT TO BE IMPACTED 5 YARDS UNDER.
  - ALL SPOILS TO BE REMOVED FROM PROJECT SITE.



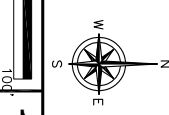
DISCLAIMER:  
THIS SET OF DRAWINGS WAS PREPARED UTILIZING INFORMATION OBTAINED FROM PUBLIC DOCUMENTS MADE AVAILABLE ON THE JURISDICTIONS WEBSITE. M SQUARED WIRELESS CANNOT GUARANTEE THE ACCURACY OF THE DATA AND INFORMATION DERIVED ON THE JURISDICTIONS WEBSITE AND DOES NOT WARRANT THE ACCURACY OF THE DATA OR THE TRUTH, VALIDITY, INVIOLABILITY, ACCURACY, INACCURACY OR ANY SAID DATA AND INFORMATION. THE PARCEL LINES ON MAPS ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT INTENDED TO BE USED AS A SURVEY PRODUCT. USER ACCEPTS RESPONSIBILITY FOR THE UNAUTHORIZED USE OR TRANSMISSION OF ANY SUCH DATA OR INFORMATION IN ITS ACTUAL OR ALTERED FORM.

LEGEND

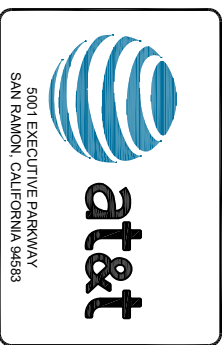


SITE PLAN

24"x36" SCALE: 1" = 100'-0"  
11"x17" SCALE: 1" = 200'-0"  
100' 50' 0' 100'



ISSUED FOR:  
**LARABEE**  
28101 STATE HWY 254  
REDCREST, CA, 95569



**M SQUARED WIRELESS**  
1387 CALLE AVANZADO  
SAN CLEMENTE CA 92073 (949) 391-8824

AT&T SITE NO: CCL03944C  
PROJECT NO: 13787502\_0  
DRAWN BY: SD-3  
CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 20'S REVISION	SD
A	02/05/2021	100% 20'S	SD

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

SHEET TITLE  
**SITE PLAN**  
SHEET NUMBER  
**A-0**

NOTES:

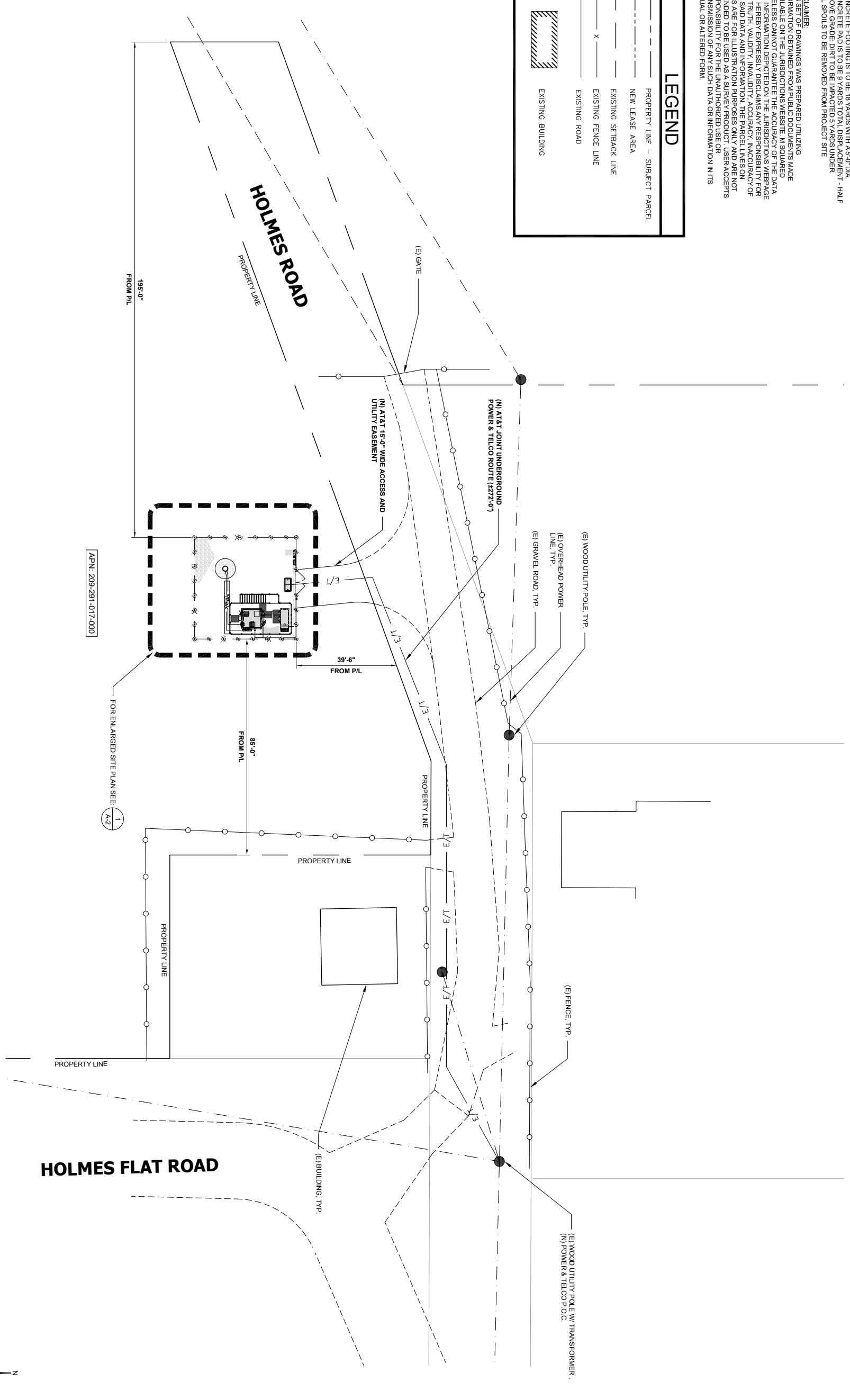
1. THE WIRELESS COMMUNICATION FACILITY COMPLIES WITH FEDERAL STANDARDS FOR RADIO FREQUENCY INTERFERENCE WITH THE TELECOMMUNICATION ACT OF 1996 AND SUBSEQUENT AMENDMENTS AND ANY OTHER REQUIREMENTS IMPOSED BY STATE OR FEDERAL REGULATORY AGENCIES.
2. NO EXISTING PARKING STALLS ARE BEING ADDED OR REMOVED AS PART OF THE NEW INSTALLATION.
3. THE BELOW GRADING INFORMATION IS AN ESTIMATE.
  - FINISH IS TO BE 3'-0" DEEP AND 16" WIDE - ALL SPOILS TO BE PLACED IN THE EXISTING DIRT DRIVE.
  - CONCRETE FOOTING IS TO BE 18" YARDS WITH A 5'-0" DIA. ABOVE GRADE. DIRT TO BE IMPACTED 5 YARDS UNDER.
  - ALL SPOILS TO BE REMOVED FROM PROJECT SITE.



**DISCLAIMER:**  
THIS SET OF DRAWINGS WAS PREPARED UTILIZING INFORMATION OBTAINED FROM PUBLIC DOCUMENTS MADE AVAILABLE ON THE JURISDICTIONS WEBSITE. M SQUARED WIRELESS CANNOT GUARANTEE THE ACCURACY OF THE DATA AND INFORMATION DERIVED ON THE JURISDICTIONS WEBSITE AND DOES NOT WARRANT THE ACCURACY OF THE DATA OR THE TRUTH, VALIDITY, INVAILDITY, ACCURACY, INACCURACY OR ANY SAID DATA AND INFORMATION. THE PARCEL LINES ON MAPS ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT INTENDED TO BE USED AS A SURVEY PRODUCT. USER ACCEPTS RESPONSIBILITY FOR THE UNAUTHORIZED USE OR TRANSMISSION OF ANY SUCH DATA OR INFORMATION IN ITS ACTUAL OR ALTERED FORM.

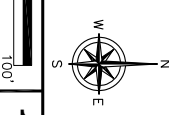
**LEGEND**

- PROPERTY LINE - SUBJECT PARCEL
- NEW LEASE AREA
- EXISTING SETBACK LINE
- X ——— EXISTING FENCE LINE
- EXISTING ROAD
- ▨ EXISTING BUILDING



ENLARGED SITE PLAN

24"x36" SCALE: 1" = 100'-0"  
11"x17" SCALE: 1" = 200'-0"



1

ISSUED FOR:  
**LARABEE**

28101 STATE HWY 254  
REDCREST, CA, 95569



5001 EXECUTIVE PARKWAY  
SAN RAMON, CALIFORNIA 94583



AT&T SITE NO: CCL0894K  
PROJECT NO: 13787582\_0  
DRAWN BY: SD-3  
CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 20'S REVISION	SD
A	02/05/2021	100% 20'S	SD

LICENSOR:  
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SHEET TITLE  
**ENLARGED SITE PLAN**

SHEET NUMBER  
**A-1**



ISSUED FOR:

LARABEE

28101 STATE HWY 254  
REDCREST, CA, 95569



5001 EXECUTIVE PARKWAY  
SAN RAMON, CALIFORNIA 94583



1987 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 391-8824

AT&T SITE NO: CCL03944C  
 PROJECT NO: 13787592\_0  
 DRAWN BY: SD-3  
 CHECKED BY: EF

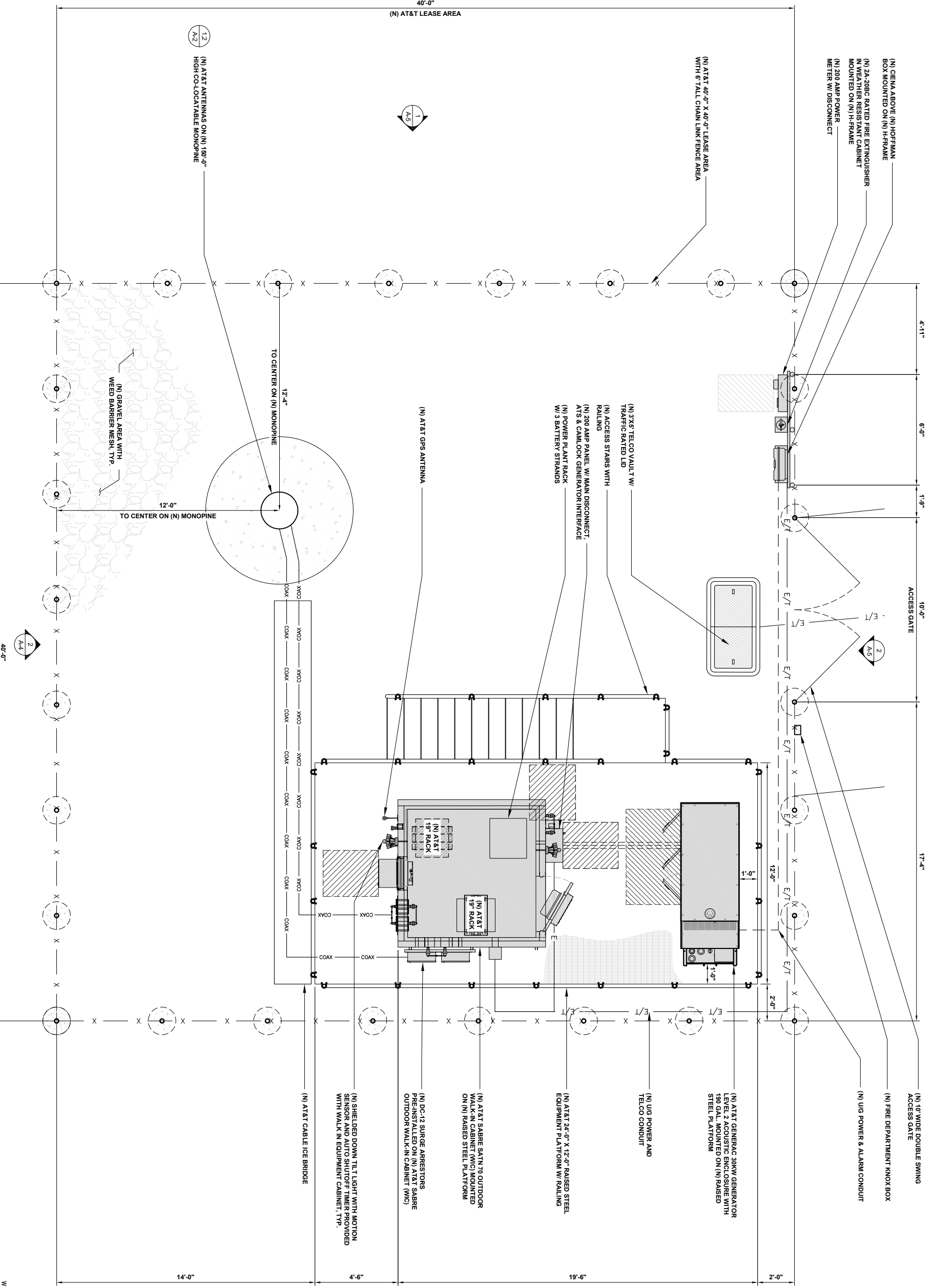
REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 20'S REVISION	SD
A	02/05/2021	100% 20'S	SD

LICENSOR:

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SHEET TITLE  
LEASE AREA

SHEET NUMBER  
A-2



LEASE AREA

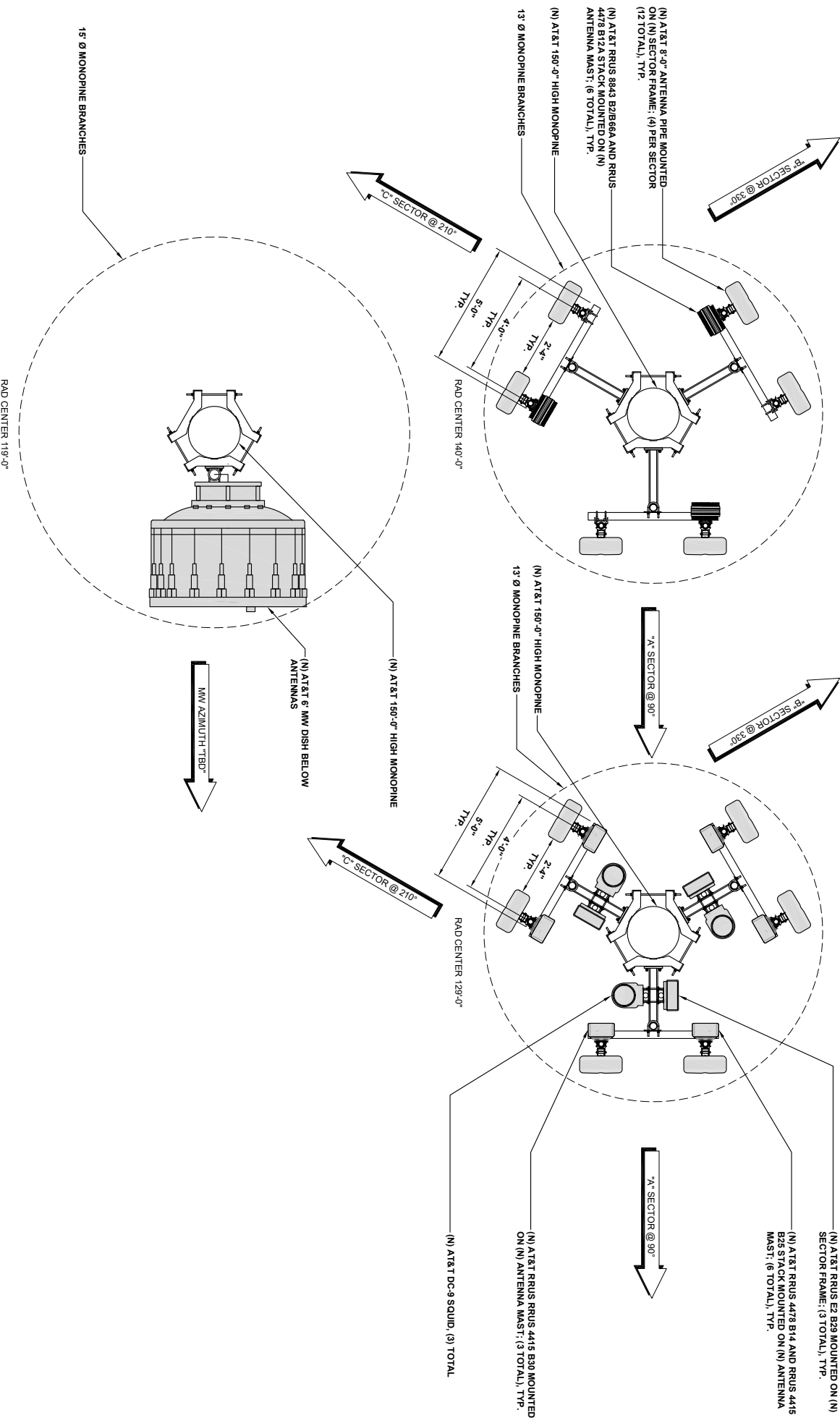
24"x36" SCALE: 3/8" = 1'-0"  
11"x17" SCALE: 3/16" = 1'-0"

2

NEW OPTIMAL ANTENNA AND TRANSMISSION CABLES REQUIREMENT (VERIFY WITH CURRENT RFDS)						NEW REMOTE RADIO UNITS, TOWER MOUNTED AMPLIFIERS AND ANTENNA FILTERS (VERIFY WITH CURRENT RFDS)					
ANTENNA TECHNOLOGY	ANTENNA MODEL	ANTENNA AZIMUTH	RAD CENTER	TRANSMISSION LINE LENGTH	TYPE	RRUS MODEL	RRUS COUNT	TMA ANTENNA FILTER & SURGE SUPPRESSOR	TMA FILTER COUNT	#DC FEEDS	TOTAL
A1	LTE 700 /1900 COMMSCOPE NNNH-65C-F4 (6-07)	90°	140'-0"	150'	FIBER	RRUS 4478 B12A & RRUS 8843 B2B66A	2	DC-9 SQUID SURGE SUPPRESSOR	1	3	
A2	LTE AWS COMMSCOPE NNNH-65C-F4 (6-07)	90°	140'-0"	150'	FIBER	-	-	-	-	-	
A3	LTE 700 /1900 COMMSCOPE NNNH-65C-F4 (6-07)	90°	129'-0"	150'	FIBER	RRUS 4478 B14 & RRUS 4415 B2S	2	-	-	-	
A4	LTE 700WCS COMMSCOPE NNNH-65C-F4 (6-07)	90°	129'-0"	150'	FIBER	RRUS E2 B28 & RRUS 4415 B30	2	-	-	-	
B1	LTE 700 /1900 COMMSCOPE NNNH-65C-F4 (6-07)	330°	140'-0"	150'	FIBER	RRUS 4478 B12A & RRUS 8843 B2B66A	2	DC-9 SQUID SURGE SUPPRESSOR	1	3	
B2	LTE AWS COMMSCOPE NNNH-65C-F4 (6-07)	330°	140'-0"	150'	FIBER	-	-	-	-	-	
B3	LTE 700 /1900 COMMSCOPE NNNH-65C-F4 (6-07)	330°	129'-0"	150'	FIBER	RRUS 4478 B14 & RRUS 4415 B2S	2	-	-	-	
B4	LTE 700WCS COMMSCOPE NNNH-65C-F4 (6-07)	330°	129'-0"	150'	FIBER	RRUS E2 B28 & RRUS 4415 B30	2	-	-	-	
C1	LTE 700 /1900 COMMSCOPE NNNH-65C-F4 (6-07)	210°	140'-0"	150'	FIBER	RRUS 4478 B12A & RRUS 8843 B2B66A	2	DC-9 SQUID SURGE SUPPRESSOR	1	3	
C2	LTE AWS COMMSCOPE NNNH-65C-F4 (6-07)	210°	140'-0"	150'	FIBER	-	-	-	-	-	
C3	LTE 700 /1900 COMMSCOPE NNNH-65C-F4 (6-07)	210°	129'-0"	150'	FIBER	RRUS 4478 B14 & RRUS 4415 B2S	2	-	-	-	
C4	LTE 700WCS COMMSCOPE NNNH-65C-F4 (6-07)	210°	129'-0"	150'	FIBER	RRUS E2 B28 & RRUS 4415 B30	2	-	-	-	
<b>TOTAL</b>						<b>TOTAL</b>					
						<b>18</b>				<b>3</b>	<b>9</b>

## ANTENNA & TOWER MOUNTED EQUIPMENT SCHEDULE

- NOTES TO CONTRACTOR:
- M SQUARED WIRELESS ACCEPTS NO LIABILITY FOR THE STRUCTURAL CAPACITY OF THE TOWER STRUCTURE, MOUNTS, ANTENNAS, CABLES OR ANY OTHER APPURTENANCE ON THE TOWER. THE CONTRACTOR AND SUBCONTRACTOR SHALL COORDINATE WITH AND COMPLY WITH THE PROVISIONS OF THE STRUCTURAL ANALYSIS PREPARED FOR THIS SITE AND PROJECT PRIOR TO THE INSTALLATION OF ANTENNAS AND CABLE ON THE TOWER. IMMEDIATELY REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND THE STRUCTURAL ANALYSIS TO AT&T. CONTRACTOR IS TO REFER TO AT&T'S MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION. CABLE LENGTHS WERE DETERMINED BASED ON VISUAL INSPECTION DURING SITE-WALK. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK. CONTRACTOR TO VERIFY PORTS HAVE SUFFICIENT ROOM.
  - 
  - 
  -



## NEW ANTENNA PLAN

24"x36" SCALE: 3/8" = 1'-0"  
11"x17" SCALE: 3/16" = 1'-0"



1

ISSUED FOR:  
**LARABEE**

28101 STATE HWY 254  
REDCREST, CA, 95569



5001 EXECUTIVE PARKWAY  
SAN RAMON, CALIFORNIA 94583



AT&T SITE NO: CCL0894K  
PROJECT NO: 13787592\_0  
DRAWN BY: SD-3  
CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 20'S REVISED	SD
A	02/05/2021	100% 20'S	SD

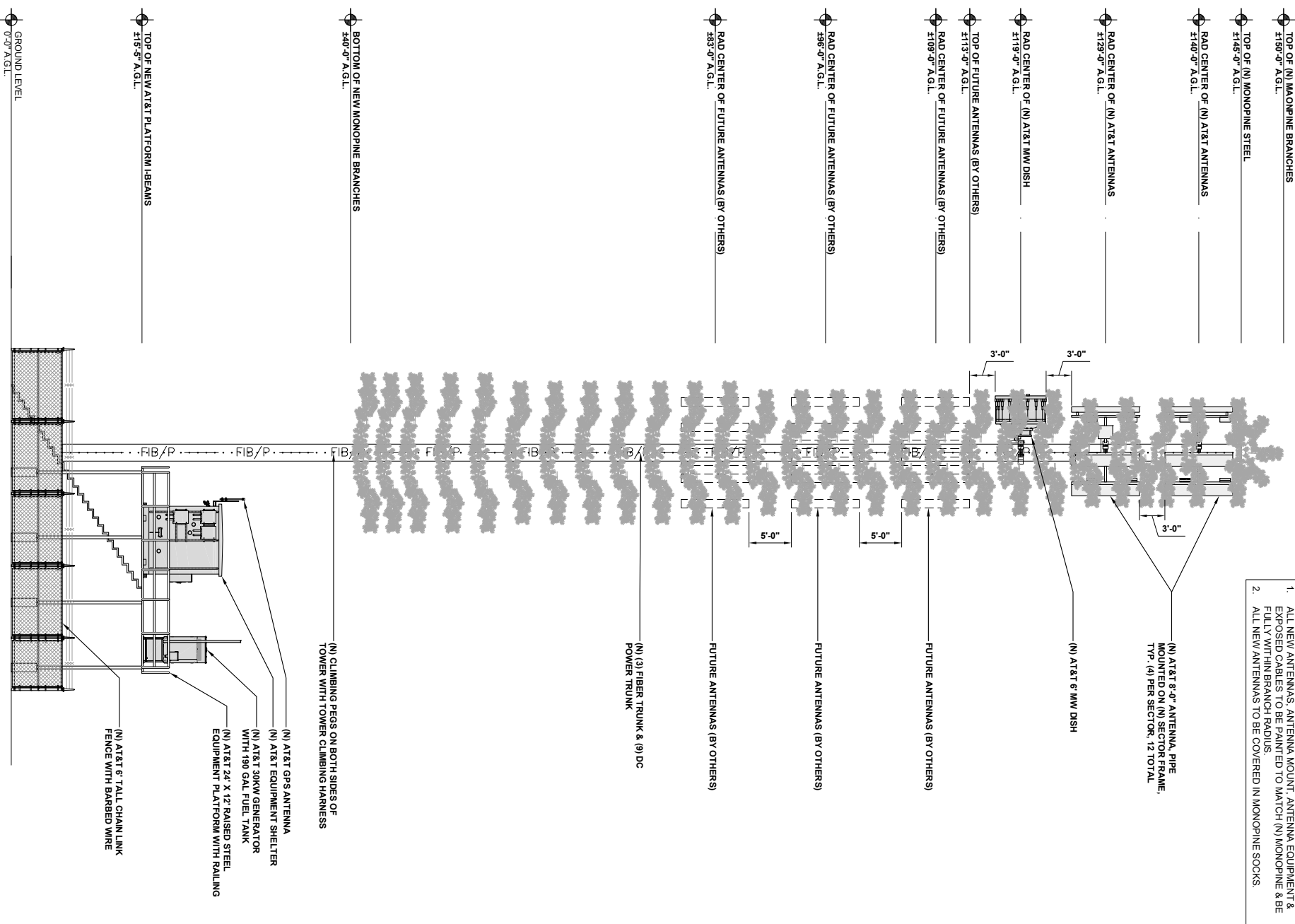
LICENSOR:

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SHEET TITLE  
**ANTENNA PLAN & SCHEDULE**

SHEET NUMBER  
**A-3**

- NOTE:
1. ALL NEW ANTENNAS, ANTENNA MOUNT, ANTENNA EQUIPMENT & EXPOSED CABLES TO BE PAINTED TO MATCH (N) MONOPINE & BE FULLY WITHIN BRANCH RADIUS.
  2. ALL NEW ANTENNAS TO BE COVERED IN MONOPINE SOCKS.

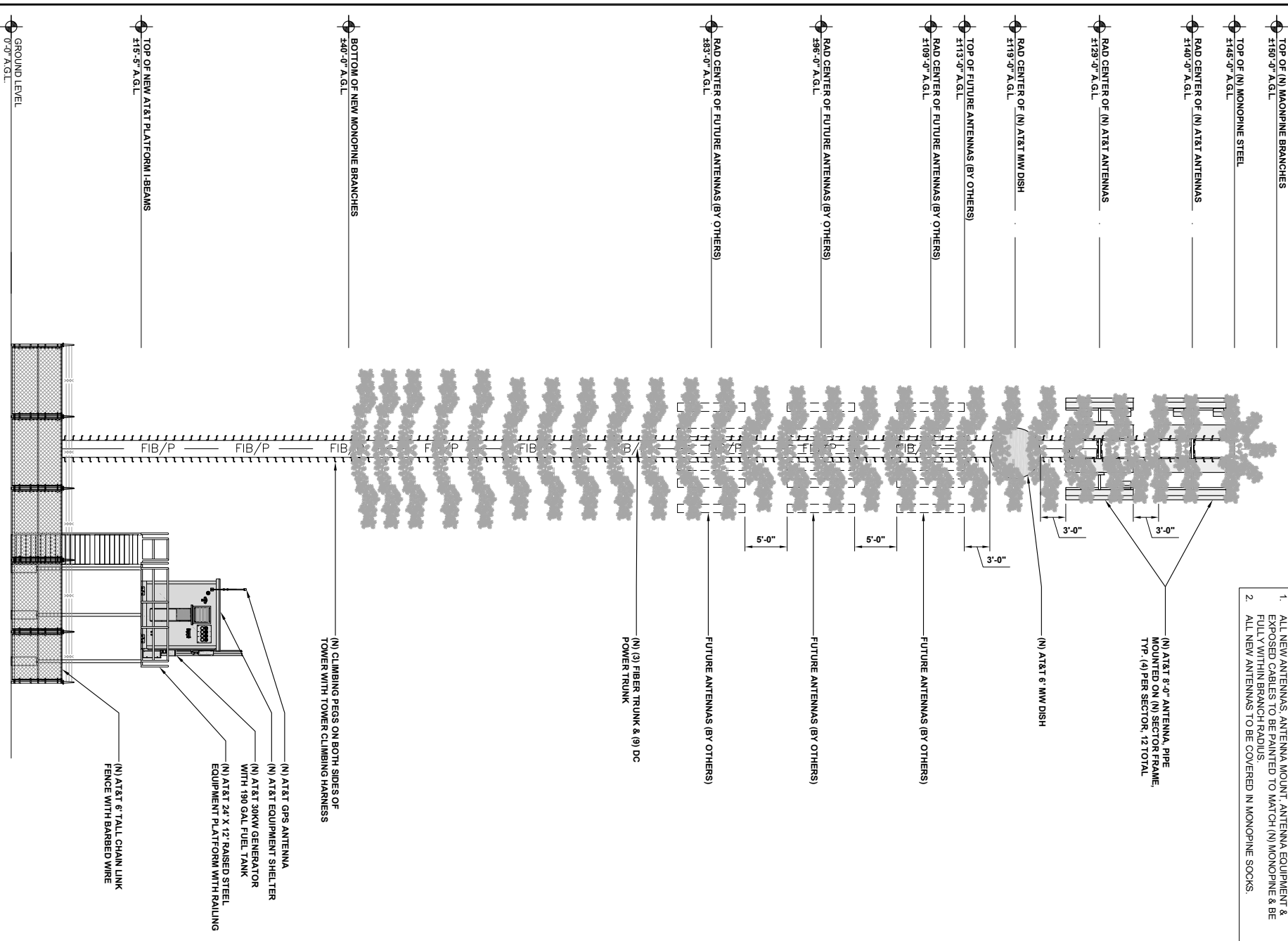


**EAST ELEVATION**

24"x36" SCALE: 3/16" = 1'-0"  
11"x17" SCALE: 3/32" = 1'-0"

**1 SOUTH ELEVATION**

- NOTE:
1. ALL NEW ANTENNAS, ANTENNA MOUNT, ANTENNA EQUIPMENT & EXPOSED CABLES TO BE PAINTED TO MATCH (N) MONOPINE & BE FULLY WITHIN BRANCH RADIUS.
  2. ALL NEW ANTENNAS TO BE COVERED IN MONOPINE SOCKS.



**2 SOUTH ELEVATION**

24"x36" SCALE: 3/16" = 1'-0"  
11"x17" SCALE: 3/32" = 1'-0"

ISSUED FOR:  
**LARABEE**

28101 STATE HWY 254  
REDCREST, CA, 95569



5001 EXECUTIVE PARKWAY  
SAN RAMON, CALIFORNIA 94583



AT&T SITE NO: CCL03944K  
PROJECT NO: 13787562\_0  
DRAWN BY: SD-3  
CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 2015 REVISION	SD
A	02/05/2021	100% 2015	SD

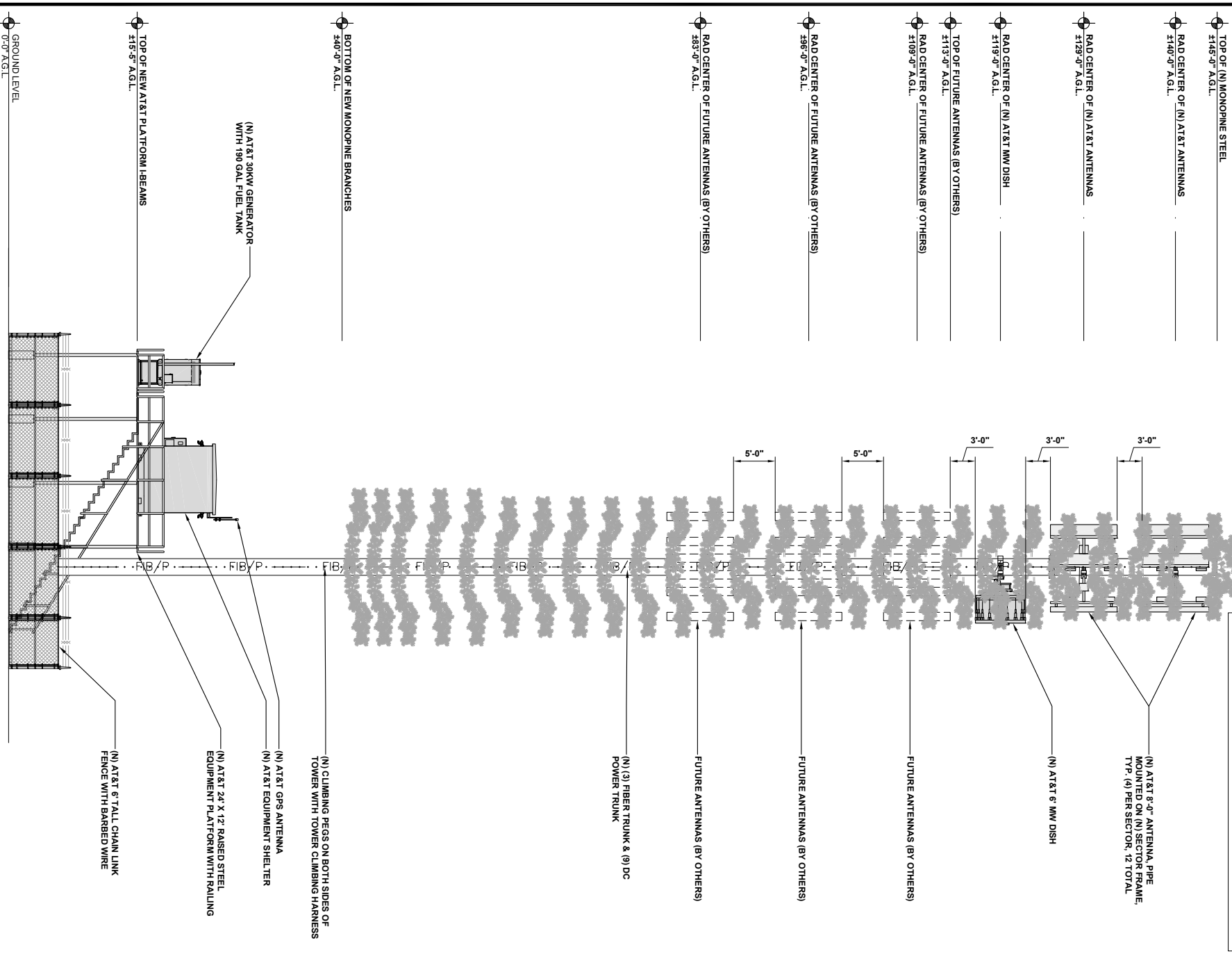
LICENSOR:

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SHEET TITLE  
**ELEVATIONS**

SHEET NUMBER  
**A-4**

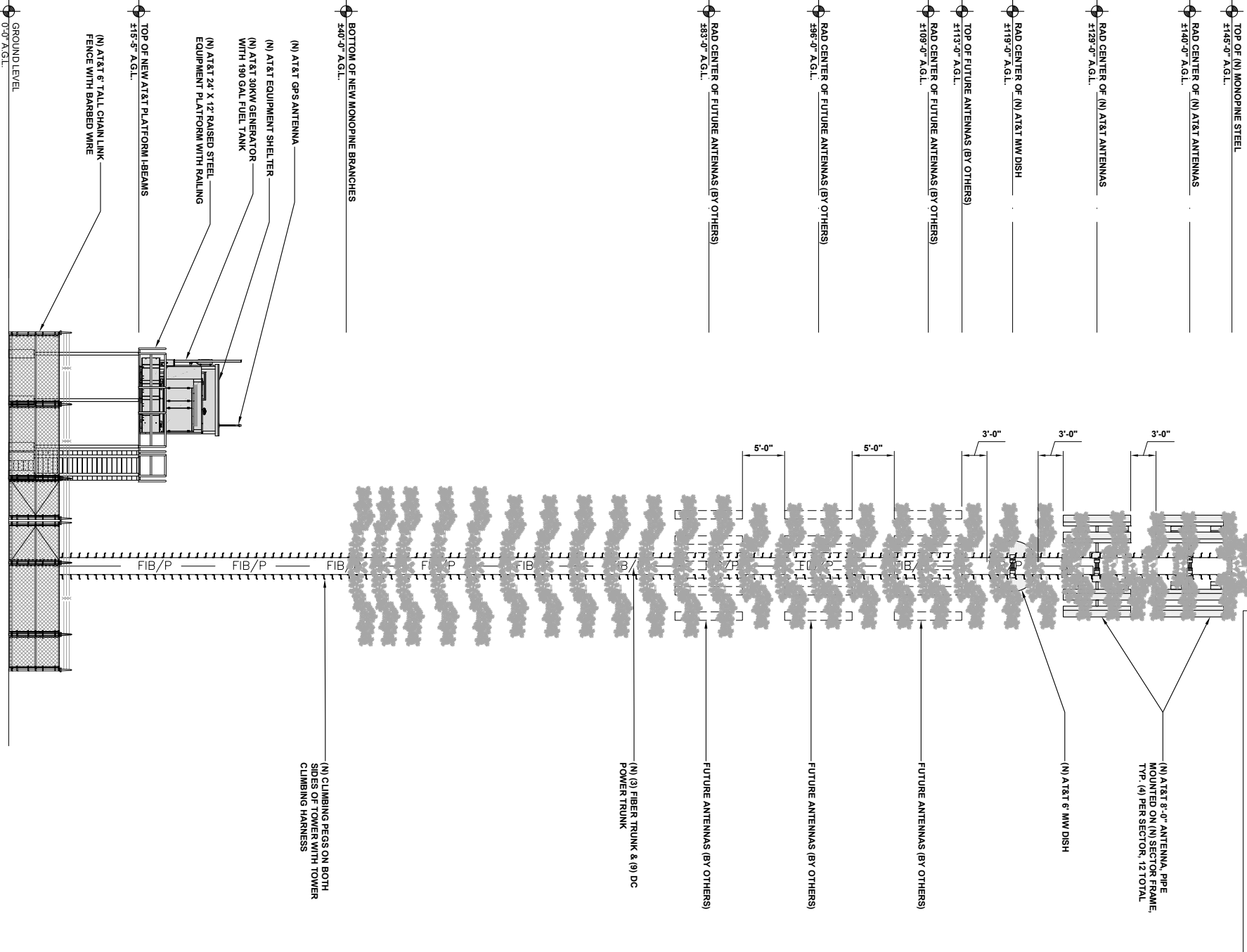
NOTE:  
 1. ALL NEW ANTENNAS, ANTENNA MOUNT, ANTENNA EQUIPMENT & EXPOSED CABLES TO BE PAINTED TO MATCH (N) MONOPINE & BE FULLY WITHIN BRANCH RADII.  
 2. ALL NEW ANTENNAS TO BE COVERED IN MONOPINE SOCKS.



**WEST ELEVATION**

24"x36" SCALE: 3/16" = 1'-0"  
 11"x17" SCALE: 3/32" = 1'-0"

NOTE:  
 1. ALL NEW ANTENNAS, ANTENNA MOUNT, ANTENNA EQUIPMENT & EXPOSED CABLES TO BE PAINTED TO MATCH (N) MONOPINE & BE FULLY WITHIN BRANCH RADII.  
 2. ALL NEW ANTENNAS TO BE COVERED IN MONOPINE SOCKS.



**NORTH ELEVATION**

24"x36" SCALE: 3/16" = 1'-0"  
 11"x17" SCALE: 3/32" = 1'-0"

ISSUED FOR:  
**LARABEE**

28101 STATE HWY 254  
 REDCREST, CA, 95569



5001 EXECUTIVE PARKWAY  
 SAN RAMON, CALIFORNIA 94583



AT&T SITE NO: CCL03944K  
 PROJECT NO: 13787502\_0  
 DRAWN BY: SD-3  
 CHECKED BY: EF

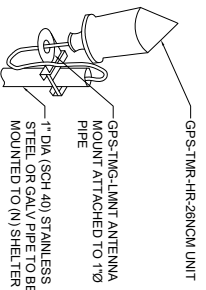
REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 2015 REVISION	SD
A	02/05/2021	100% 2015	SD

LICENSOR:  
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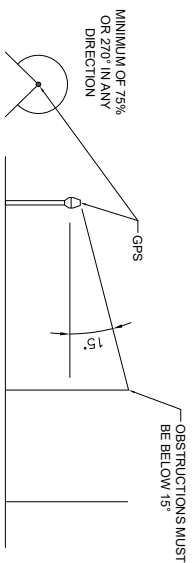
SHEET TITLE  
**ELEVATIONS**  
 SHEET NUMBER  
**A-5**



- NOTE:
- THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 1/2" SCH. 40 GALVANIZED S.S. STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. A HACK SAW SHALL NOT BE USED. THE CUT PIPE END SHALL BE DEBARRED.
  - IT IS CRITICAL THAT THE GPS ANTENNA IS MOUNTED SUCH THAT IT IS WITHIN 2 DEGREES OF VERTICAL AND THE BASE OF THE ANTENNA IS WITHIN 2" OF LEVEL.
  - DO NOT SWEEP TEST GPS ANTENNA.



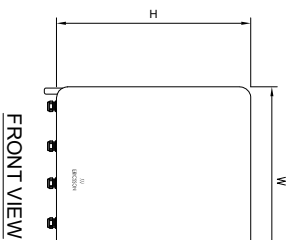
SPECIFICATIONS	
HEIGHT	5"
WIDTH	3.2"
WEIGHT	0.6 LBS



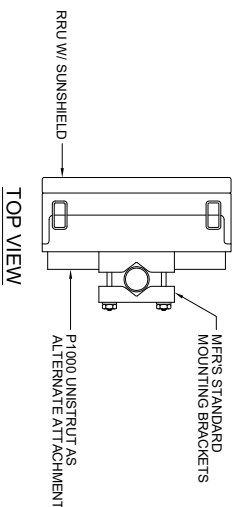
### (N) GPS ANTENNA

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

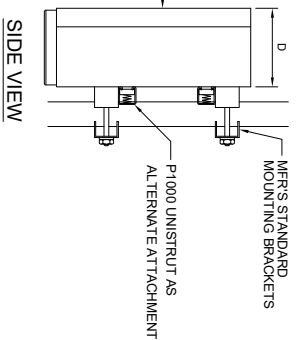
MANUFACTURER:	ERICSSON
MODEL NO.:	RRUS 4415 B25
DIMENSIONS:	TOTAL WEIGHT:
A	16.5"
B	13.4"
C	5.9"
46 LBS (21 kg)	



FRONT VIEW



TOP VIEW



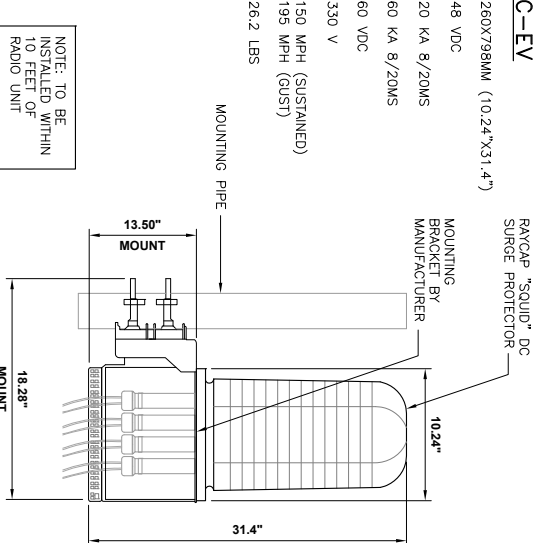
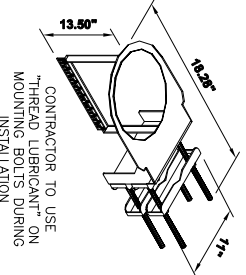
SIDE VIEW

### RRUS 4415 B25

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

### RAYCAP DC9-48-60-24-8C-EV

DIMENSIONS: WOXH: 260X798MM (10.24"x31.4")  
 NOMINAL OPERATING VOLTAGE: 48 VDC  
 NOMINAL DISCHARGE CURRENT: 20 KA 8/20MS  
 MAXIMUM DISCHARGE CURRENT: 60 KA 8/20MS  
 MAXIMUM CONTINUOUS OPERATING VOLTAGE: 60 VDC  
 VOLTAGE PROTECTION RATING: 330 V  
 WIND LOADING: 150 MPH (SUSTAINED)  
 195 MPH (GUST)  
 TOTAL WEIGHT: 26.2 LBS

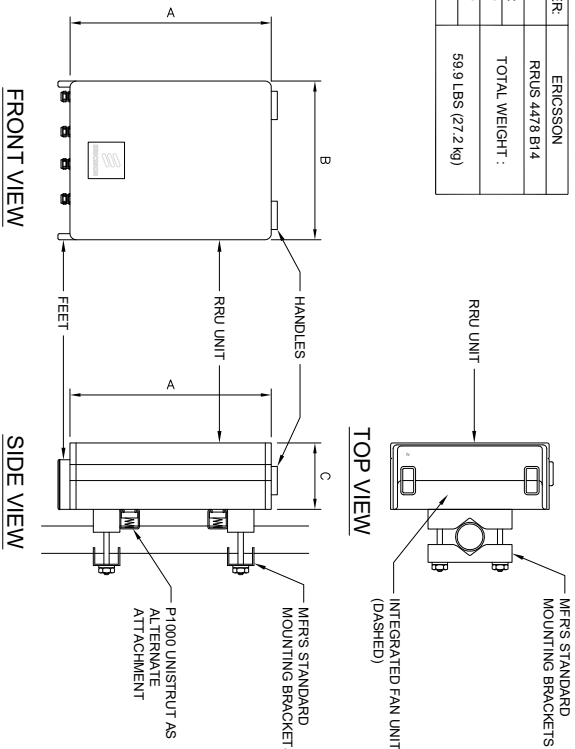


NOTE: TO BE INSTALLED WITHIN 10 FEET OF RADIO UNIT

### DC-9 "SQUID" SURGE SUPPRESSOR

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

MANUFACTURER:	ERICSSON
MODEL NO.:	RRUS 4478 B14
DIMENSIONS:	TOTAL WEIGHT:
A	16.5"
B	13.4"
C	7.7"
59.9 LBS (27.2 kg)	



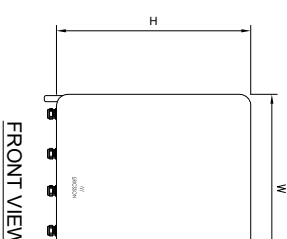
FRONT VIEW

SIDE VIEW

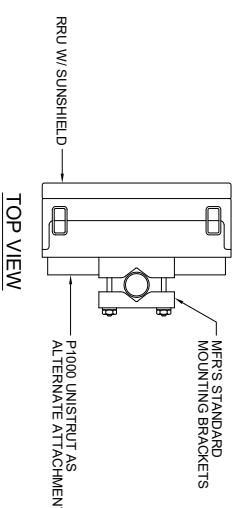
### ERICSSON RRU 4478 B14

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

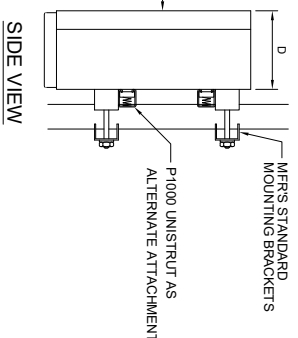
MANUFACTURER:	ERICSSON
MODEL NO.:	RRUS 4415 B30
DIMENSIONS:	TOTAL WEIGHT:
A	16.5"
B	13.4"
C	5.9"
46 LBS (21 kg)	



FRONT VIEW



TOP VIEW

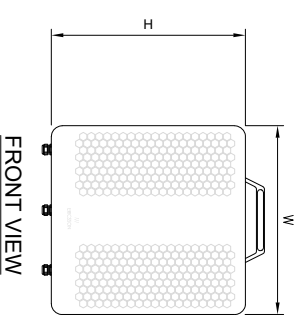


SIDE VIEW

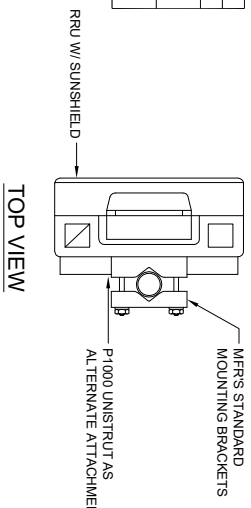
### RRUS 4415 B30

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

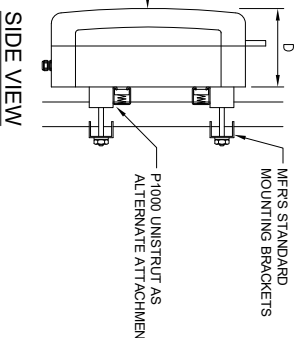
MANUFACTURER:	ERICSSON
MODEL NO.:	RRUS E2 B29
DIMENSIONS:	TOTAL WEIGHT:
HEIGHT (H)	20.4"
WIDTH (W)	18.5"
DEPTH (D)	7.5"
58 LBS (26.3 kg)	



FRONT VIEW



TOP VIEW

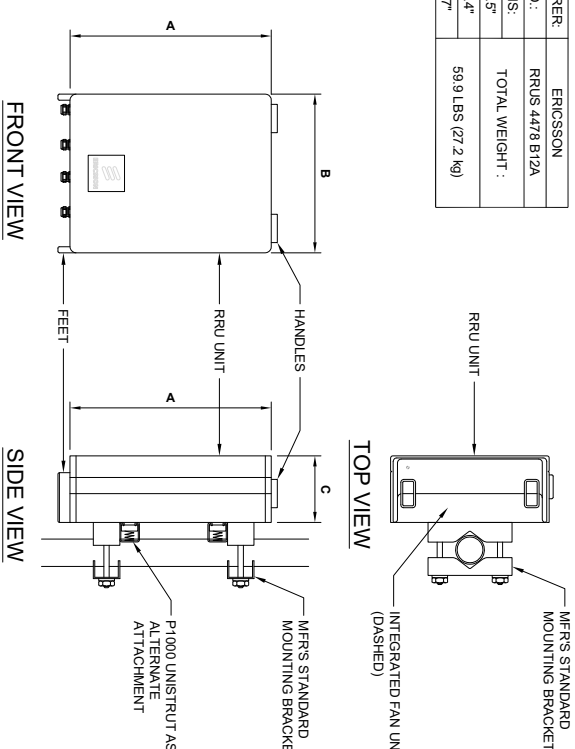


SIDE VIEW

### ERICSSON RRU E2 B29

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

MANUFACTURER:	ERICSSON
MODEL NO.:	RRUS 4478 B12A
DIMENSIONS:	TOTAL WEIGHT:
A	16.5"
B	13.4"
C	7.7"
59.9 LBS (27.2 kg)	



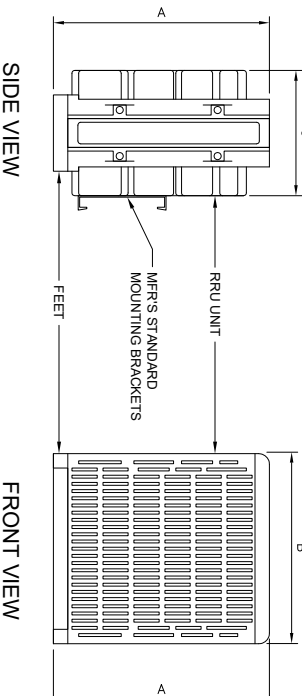
FRONT VIEW

SIDE VIEW

### ERICSSON RRU 4478 B12A

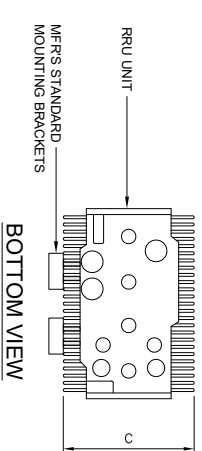
24"x36" SCALE: NTS  
11"x17" SCALE: NTS

MANUFACTURER:	ERICSSON
MODEL NO.:	RRUS 8843
DIMENSIONS:	TOTAL WEIGHT:
A	18"
B	13.2"
C	11.3"
75 LBS (34 kg)	



SIDE VIEW

FRONT VIEW

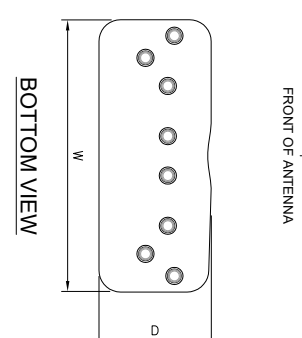


BOTTOM VIEW

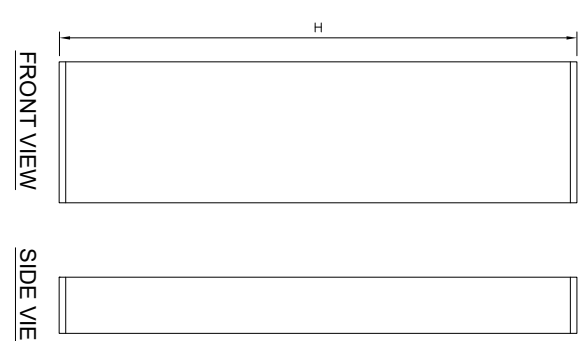
### ERICSSON RRU 8843

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

COMMSCOPE	
NNHH-68C-R4	
HEIGHT (H)	96.0"
WIDTH (W)	19.6"
DEPTH (D)	7.8"
WEIGHT	99.2 LBS
SURVIVAL WIND SPEED:	150.0 MPH
WIND LOADING, MAX:	854 N @ 150 km/h 331 N @ 150 km/h (8) 4.3-10 DIN FEMALE - BOTTOM
CONNECTOR:	2.4 - 4.5 INCHES



BOTTOM VIEW



FRONT VIEW

SIDE VIEW

### COMMSCOPE 8' PANEL ANTENNA

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

ISSUED FOR:  
**LARABEE**  
28101 STATE HWY 254  
REDCREST, CA, 95569



AT&T SITE NO: CCL08948  
 PROJECT NO: 13787502  
 DRAWN BY: SD-3  
 CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 2015 REVISION	SD
A	02/05/2021	100% 2015	SD

LICENSOR:

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SHEET TITLE  
**DETAILS**

SHEET NUMBER  
**D-2**

# GENERAL ELECTRICAL NOTES

- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL FIELD VERIFICATION AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ENGINEER AND OWNER LISTING ALL MALFUNCTIONS, FAULTY, EQUIPMENT, AND DISCREPANCIES.
- THESE PLANS ARE SCHEMATIC ONLY; CONTRACTOR SHALL FOLLOW AS CLOSELY AS POSSIBLE.
- ANTENNA MOUNTING HEIGHTS AND AZIMUTHS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE INDICATED. NOTE THAT CONTRACTOR SHALL SECURE ALL NECESSARY ELECTRICAL PERMITS, AND PAY ALL REQUIRED FEES.
- IF REQUIRED, CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOK-UP COSTS SHALL BE PAID BY THE CONTRACTOR.
- ALL MATERIALS AND EQUIPMENT SHALL BE PROPOSED AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. EXCEPTIONS TO THIS MAY BE PERMITTED IF PROPOSED REPLACEMENT BREAKERS OR SWITCHES ARE NOT AVAILABLE FOR ORIGINAL ELECTRICAL DISTRIBUTION EQUIPMENT -- ON THAT CASE RECONDITIONED EQUIPMENT MAY BE PERMISSIBLE IF IT CARRIES ONE (1) YEAR WARRANTY. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCK APPROVAL. Materials SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, AND NBFU.
- IF CONTRACTOR IS PROPOSING ALTERNATE MATERIALS OR CONSTRUCTION METHODS FROM WHAT IS SPECIFIED IN THE PLANS, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND/OR CATALOG CUT-SHEETS TO OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF THE WORK.
- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL CODES (NEC2014) AND ALL LOCAL AND STATE CODES (CEC 2016), LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.) REQUIREMENTS.
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE. UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- CLEAN WORK SITE DAILY, AND REMOVE ALL DEBRIS RESULTING FROM CONSTRUCTION. LEAVE JOB SITE IN A TIDY AND UNDAMAGED CONDITION.
- UPON COMPLETION OF WORK, PERFORM CONTINUITY, SHORT CIRCUIT, AND GROUNDING TEST. GROUNDING SYSTEM SHALL BE TESTED BY INDEPENDENT TESTING AGENCY, WITH WRITTEN REPORT SUBMITTED TO THE OWNER FOR REVIEW AND APPROVAL. AFTER APPROVAL, FURNISH ONE COPY OF REPORT TO ENGINEER.
- PROVIDE OWNER WITH ONE SET OF COMPLETE ELECTRICAL "AS BUILT" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL EQUIPMENT LOCATIONS, CONDUIT/CABLE ROUTING, PANEL SCHEDULE, AND OTHER DETAILS WITHIN 10 DAYS OF PROJECT COMPLETION. DATE OF JOB COMPLETION SHALL BE THE DATE ON THE CONTRACTORS' NOTICE OF COMPLETION SUBMITTED TO THE OWNER, AFTER SITE INSPECTION AND SIGNOFF BY OWNER.
- ALL BROCHURES, OPERATING MANUAL, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
- ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
- PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.

## ABBREVIATIONS

AAV	ALTERNATE ACCESS VENDOR	GR	GROWTH (CABINET)	UADU	UNIVERSAL TYPE A DIGITAL UNIT
ACCA	ANTENNA CABLE ASSEMBLY	GRC	GALVANIZED RIGID (STEEL) CONDUIT	UG	UNDERGROUND
AFF	ABOVE FINISHED FLOOR	IGB	INTERNAL GROUND BAR	WP	WEATHERPROOF
AFG	ABOVE FINISHED GRADE	IGR	INTERIOR GROUND RING	WW	WIREFORM
AMS	ADVANCED WIRELESS SERVICES	IMC	INTERMEDIATE METALLIC CONDUIT	XFMR	TRANSFORMER
AVG	ABOVE GROUND	ISCW	INSULATED STRANDED COPPER WIRE		
AGB	ANTENNA GROUND BAR	LTE	LONG TERM EVOLUTION		
ATS	AUTOMATIC TRANSFER SWITCH	LTFC	LIQUID TIGHT FLEXIBLE CONDUIT		
AVG	AMERICAN WIRE GAUGE	MGB	MAIN (OR MASTER) GROUND BAR		
BBU	BASEBAND UNIT	MWBS	MULTI-MODE BASE STATION		
BCW	BARE COPPER WIRE	MTS	MANUAL TRANSFER SWITCH		
BSCW	BARE STRANDED COPPER WIRE	NEC	NATIONAL ELECTRIC CODE		
BTWC	BARE TINNED COPPER WIRE	NID	NETWORK INTERFACE DEVICE		
C	CONDUIT	NV	NETWORK VISION		
CAB	CABINET	O/H	OVERHEAD		
CE	CONCRETE ENCASED	PCS	PERSONAL COMMUNICATION SERVICES		
CGB	COLLECTOR GROUND BAR	PPC	POWER PROTECTION CABINET		
CKT	CIRCUIT	PRC	PRIMARY RADIO CABINET		
COVP	CAPACITOR OVERVOLTAGE PROTECTION	PVC	POLYVINYL CHLORIDE		
DB	DIRECT BURIED	PWR	POWER		
DEI	DIGITAL EXPANSION INTERFACE	RGS	RIGID GALVANIZED STEEL		
DISC	DISCONNECT	RRH	REMOTE RADIO HEAD		
EMT	ELECTRICAL METALLIC TUBING	RRU	REMOTE RADIO UNIT		
GFCI	GROUND FAULT CURRENT INTERRUPTER	SPD	SURGE PROTECTIVE DEVICE		
G	GROUND	S/S	STAINLESS STEEL		
GND	GROUND	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR		
GPS	GLOBAL POSITIONING SYSTEM	TPP	TYPICAL		

- IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES THOROUGH THE FLOOR OR WALLS FOR CONDUIT RUNS, PIPE RUNS, ETC., IT MUST CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT, OR DAMAGED UNDER ANY CIRCUMSTANCES.
- EXACT LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS, SUCH AS X-RAY EQUIPMENT OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
- ALL EXTERIOR WALL PENETRATIONS SHALL BE SEALED WITH SUITABLE WEATHERPROOF SEALANT. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH CURRENT LOCAL BUILDING CODES USING U.L. RATED MATERIALS.
- ALL CONDUCTORS SHALL BE COPPER, #12 AWG MINIMUM, UNLESS NOTED OTHERWISE. INSULATION SHALL BE 90°C RATED, AND DUAL RATED THHN/THWN-2. NO BX OR ROMEX CABLE IS PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.
- ALL CONDUIT ONLY (C.O.) RUNS SHALL HAVE A PULL WIRE OR ROPE, AND TRUE TAPE.
- GROUND THE ENTIRE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE NEC AND DRAWINGS. BELOW GRADE GROUND CONDUCTORS SHALL BE #2 AWG SOLID BARE TINNED COPPER, ABOVE GRADE, ALL CONDUCTORS SHALL BE STRANDED GREEN INSULATED COPPER, SIZED #2 AWG OR AS SHOWN IN THE DRAWINGS. GROUND CONDUCTOR SHALL HAVE A MINIMUM 24" BENDING RADIUS. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" ROUND AND 8' LONG. GROUNDING HARDWARE SHALL BE ERICO, STORM COPPER COMPONENTS, FUSHI COPPERWELD OR APPROVED EQUAL.
- GROUND ALL ANTENNA BASES, ENCLOSURES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO THE BUS BARS. FOLLOW EQUIPMENT MANUFACTURER'S RECOMMENDATIONS FOR GROUNDING. GROUND COAX SHIELD AT BOTH ENDS USING CABLE MANUFACTURER'S RECOMMENDATIONS.
- THE NUMBER OF GROUNDING BARS MAY VARY DEPENDING UPON THE SITE LAYOUT, ANTENNA LOCATION, AND OTHER FACTORS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING SUFFICIENT GROUNDING BARS AS REQUIRED, PROVIDING 50% SPARE CONNECTION POINTS.
- EXOTHERMIC WELDS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, CABLE TO GROUND RODS, GROUND ROD SPLICES AND OTHER SYSTEMS AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING, METAL, ETC.) SHALL BE INSTALLED PER MANUFACTURERS' RECOMMENDATIONS AND PROCEDURES. ALL EXOTHERMIC WELD CONNECTIONS ON GALVANIZED SURFACES SHALL BE CLEANED THOROUGHLY AND COLORED TO MATCH SURFACE WITH (2) TWO COATS OF GALVALIE (WHITE) PAINT OR SILVERBRINE (ALUMINIUM).
- ALL STRANDED COPPER WITH GREEN INSULATION TO BE ATTACHED WITH CRIMPED DOUBLE LUG, ATTACHED WITH NUTS, BOLTS AND STAR WASHERS TYPICAL. ALL MECHANICAL CONNECTIONS SHALL HAVE ANTI-OXIDANT GREASE (E.G. NO-OX) APPLIED BETWEEN LUG AND BUS BAR.
- ALL EXPOSED TINNED COPPER GROUNDINGS SHALL BE PROTECTED BY 1/2" PVC CONDUIT AND SECURED, WHERE SUBJECT TO MECHANICAL DAMAGE, OTHER GROUND LEADS SHALL ALSO BE ENCLOSED IN 1/2" OR 3/4" LTFC.
- COMPRESSION FITNESS TO BE USED ON ALL CONDUITS (NO SETSCREWS).
- PVC CONDUIT INSTALLED IN OUTDOOR LOCATIONS SUBJECT TO SUNLIGHT EXPOSURE SHALL BE UV RESISTANT. SURFACE-MOUNTED CONDUIT INSTALLED IN LOCATIONS SUBJECT TO FOOT TRAFFIC OR OTHER WEAR AND TEAR, SHALL BE PVC SCHEDULE 80, IMC, OR GRC. CONDUIT RUNS ALONG WALLS OR FLOORS SHALL BE SURFACE MOUNTED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. OTHER CONDUIT REQUIREMENTS:
  - INTERMEDIATE METALLIC CONDUIT (IMC) SHALL HAVE U.L. LABEL. FITTINGS SHALL BE WATER-TIGHT COMPRESSION TYPE. IMC SHALL BE USED FOR OUTDOOR RUNS. IMC IN CONTACT WITH EARTH SHALL BE 1/2" LAPPED WRAPPED WITH HUNT'S WRAP PROCESS NO. 3
  - ELECTRICAL METALLIC TUBING (EMT) SHALL HAVE U.L. LABEL. FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
  - FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
  - ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE.
- ALL PROPOSED ELECTRICAL ENCLOSURES (EXCEPT FOR JUNCTION OR SPLICE BOXES) SUCH AS PANELBOARDS AND DISCONNECT SWITCHES SHALL BE LABELED WITH PERMANENT ENGRAVED PHENOLIC NAMEPLATES, BLACK WITH WHITE LETTERING, AND ATTACHED WITH RIVETS.

## ELECTRICAL LEGEND

SYMBOLS:	NOTES:
<p>--- CONDUIT - CONCEALED</p> <p>--- CONDUIT - EXPOSED</p> <p>--- CONDUIT AND WIRE - FULL HASH MARK - CIRCUIT WIRE</p> <p>--- HALF HASH MARK - BOND WIRE (Ø)</p> <p>--- BRS-24 HOME RUN TO PANEL E.G. PANEL BRS CIRCUITS 2 &amp; 4.</p> <p>Ø 20 AMP 125V DUPLEX RECEPTACLE HUBBELL #5352 1</p> <p>Ø 20 AMP 125V OUTLET RECEPTACLE HUBBELL #5352 1</p> <p>Ø 20 AMP 125V DUPLEX GROUND FAULT INTERRUPT RECEPTACLE HUBBELL #5352 1</p> <p>⊞ FUSED DISCONNECT SWITCH</p> <p>⊞ WEATHERPROOF</p> <p>⊞ UNLESS OTHERWISE NOTED</p> <p>⊞ 20 AMP 120/277V SINGLE POLE SWITCH, HUBBELL #HBL 1221 1, +48"</p> <p>⊞ 2 = 2 POLES</p> <p>⊞ 2 = 2 POLES</p> <p>⊞ CURRENT CARRYING CAPACITY AND NO. OF POLES OF IDENTIFIED DEVICE. EXAMPLE 30 AMP 2 POLES</p> <p>⊞ LIGHTING SWITCH 20 AMP, 120/277V, SINGLE POLE, HUBBELL #HBL 1221, +48"</p> <p>⊞ OVERIDE OFF LIGHTING SWITCH</p>	<p>1. SMOKE DETECTOR TO SHUT DOWN A/C UNITS WHEN ACTIVATED</p> <p>2. ALL INTERIOR RECEPTACLES AND SWITCHES SHALL BE SURFACE MOUNTED</p> <p>3. LABEL ALL BOXES AND CIRCUITS AS REQUIRED BY A1&amp;T</p> <p>4. AC UNITS WILL NOT OPERATE AT THE SAME TIME</p>

ISSUED FOR:  
**LARABEE**

28101 STATE HWY 254  
REDCREST, CA, 95569



5001 EXECUTIVE PARKWAY  
SAN RAMON, CALIFORNIA 94583



1387 CALLE AVANZADO  
SAN CLEMENTE CA 92073 (949) 391-8824

AT&T SITE NO:	COL0894K
PROJECT NO:	13871552
DRAWN BY:	SD-3
CHECKED BY:	EF

REV	DATE	DESCRIPTION	BY
B	02/11/2021	100% 20% REVISION	SD
A	02/05/2021	100% 20%	SD

LICENSOR:

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SHEET TITLE  
**ELECTRICAL NOTES, ABBREVIATIONS & ELECTRICAL LEGEND**

SHEET NUMBER  
**E-1**

ISSUED FOR:

LARABEE

28101 STATE HWY 254  
REDCREST, CA, 95569



5001 EXECUTIVE PARKWAY  
SAN RAMON, CALIFORNIA 94583



1387 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 391-8824

AT&T SITE NO: CCL0394R  
PROJECT NO: 13787502\_0  
DRAWN BY: SD-3  
CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 20'S REVISION	SD
A	02/05/2021	100% 20'S	SD

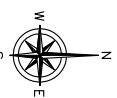
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SHEET TITLE  
UTILITY ROUTE PLAN

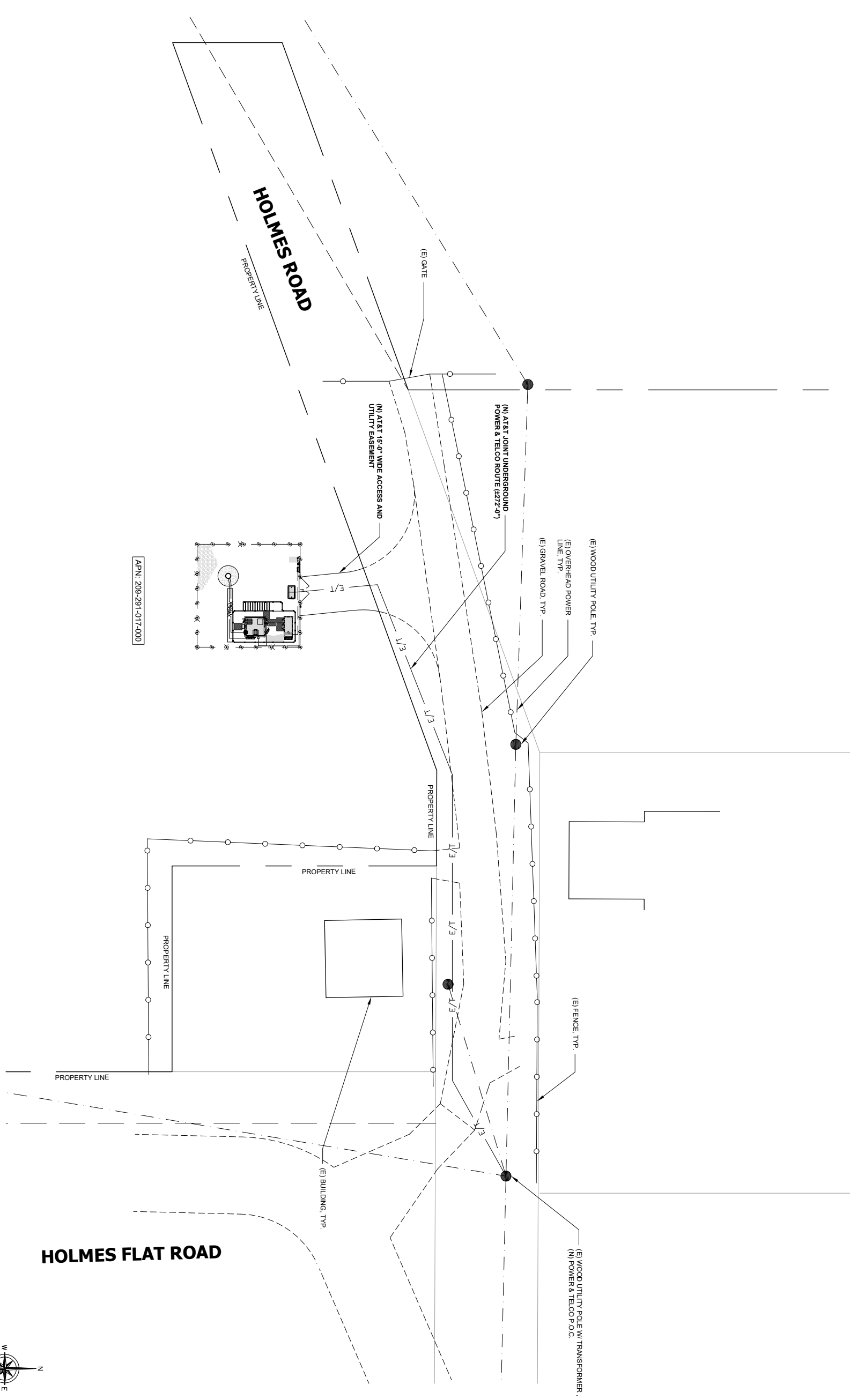
SHEET NUMBER

E-2



24"x36" SCALE: 1" = 50'-0"  
11"x17" SCALE: 1" = 100'-0"

1



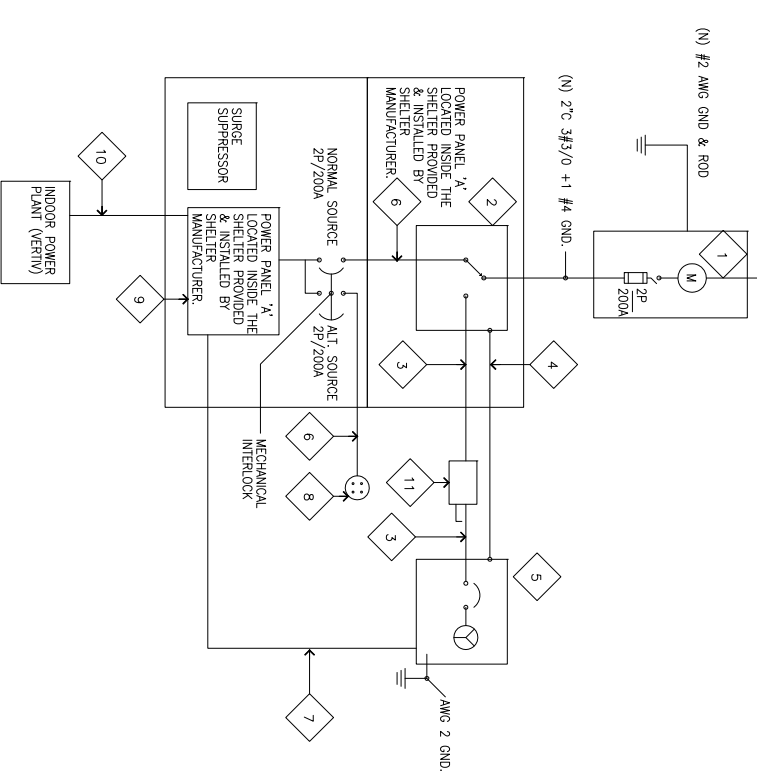
APN: 209-291-017-000

UTILITY SERVICE PLAN



(E) POLE WITH TRANSFORMER

(N) 2"(PVC) - SCH 40 3# 500KCMIL  
+1#3 GND APPROX. ±1275 FT



- KEY NOTES:**
- 1 (N) AT&T METER/MAIN, 120 240V, 1Ø, 3W, 200A, 22KAIC NEMA 3R
  - 2 AUTOMATIC TRANSFER SWITCH (A.T.S.) 240V, 2P/200A, 42 KAIC, NEMA 1 LOCATE INSIDE THE SHELTER.
  - 3 2"C (PVC/EWT) 3 #3/0 +1 #6 GND. APPROX. 10 FT.
  - 4 1"C (PVC/EWT) 1Ø #14 FOR ENGINE START & CONTROL. REFER TO A.I.S. AND GENERATOR SPECS. FOR WIRING CONNECTION.
  - 5 GENERATOR, 120/240V, 1Ø, 3Ø, KW, FURNISHED W/ OVERLOAD PROTECTION, 15Ø AMF/2 POLE OUTPUT BREAKER APPROX. 10 FT.
  - 6 2"C (EWT) 3 #3/0 +1 #6 GND APPROX. 10 FT.
  - 7 1"C (PVC/EWT) 4 #12 +2 #12 GND. FOR HEATER & BATTERY CHARGER.
  - 8 200A GENERATOR CAM-LOCK, NEMA 3R, MOUNTED ON SHELTER EXTERIOR WALL.
  - 9 PROVIDE 2X20 A/IP BREAKERS, GENERATOR HEATER AND BATTERY CHARGER
  - 10 1"C-4#10+1#10 GND, CU, THHN/THWN
  - 11 (N) AT&T GENERATOR NON-FUSED DISCONNECT SWITCH, 200AMP, 240 V, 2 POLE, NEMA 3R

### ELECTRICAL SINGLE LINE DIAGRAM

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

4 NOT USED

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

2

LOAD		VA		WIRE		RATING		SERIES		LOCATION	
PKT	BRKR	PKT	BRKR	PKT	BRKR	PKT	BRKR	PKT	BRKR	PKT	BRKR
PURCELL #1	2250	2250	2250	2	30	2	30	2	30	2	30
FLX16-2520	400	400	400	2	30	4	30	4	30	2	30
POWER FAN	400	400	400	2	30	5	30	5	30	2	30
MONITOR	400	400	400	2	30	7	30	7	30	2	30
RECEPTACLES/TELCO	400	400	400	2	30	9	30	9	30	2	30
NEW POWER RACK-1	2250	2250	2250	2	30	11	30	11	30	2	30
NETSURE 512	2250	2250	2250	2	30	13	30	13	30	2	30
SPACE	-	-	-	2	30	15	30	15	30	2	30
SPACE	-	-	-	2	30	17	30	17	30	2	30
SPACE	-	-	-	2	30	18	30	18	30	2	30
SPACE	-	-	-	2	30	19	30	19	30	2	30
SPACE	-	-	-	2	30	21	30	21	30	2	30
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SPACE	-	-	-	2	30	24	30	24	30	2	30
SPACE	-	-	-	2	30	26	30	26	30	2	30
SPACE	-	-	-	2	30	27	30	27	30	2	30
SPACE	-	-	-	2	30	28	30	28	30	2	30
SPACE	-	-	-	2	30	29	30	29	30	2	30
SPACE	-	-	-	2	30	30	30	30	30	2	30
SPACE	-	-	-	2	30	31	30	31	30	2	30
SPACE	-	-	-	2	30	32	30	32	30	2	30
SPACE	-	-	-	2	30	34	30	34	30	2	30
SPACE	-	-	-	2	30	36	30	36	30	2	30
SPACE	-	-	-	2	30	37	30	37	30	2	30
SPACE	-	-	-	2	30	38	30	38	30	2	30
SPACE	-	-	-	2	30	39	30	39	30	2	30
SPACE	-	-	-	2	30	40	30	40	30	2	30
VA SUB TOTALS	5300	4900	5900	5900	5500						

VOITS: 120/240 FEED: 200A MAIN: BREAKER LOCATION: INTERIOR EXISTING  
 PHASE: 1Ø BUSS: 200A RATING: 22,000 AIC PANEL: A  
 WIRE: 3 MOUNTING: SURFACE

### PANEL SCHEDULE

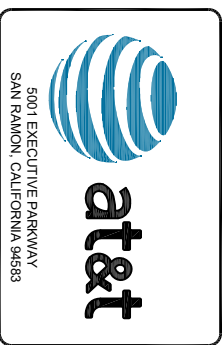
24"x36" SCALE: NTS  
11"x17" SCALE: NTS

3 NOT USED

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

1

ISSUED FOR:  
**LARABEE**  
28101 STATE HWY 254  
REDCREST, CA, 95569



**MSQUARE WIRELESS**  
1987 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 391-8824

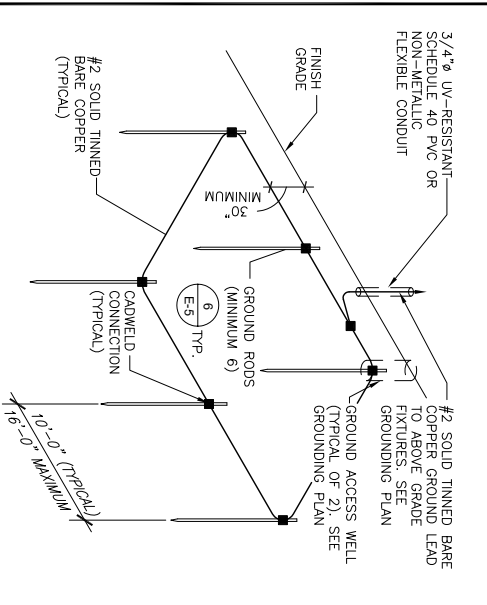
AT&T SITE NO: CCL0894R  
PROJECT NO: 13787502  
DRAWN BY: SD-3  
CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 2015 REVISED	SD
A	02/05/2021	100% 2015	SD

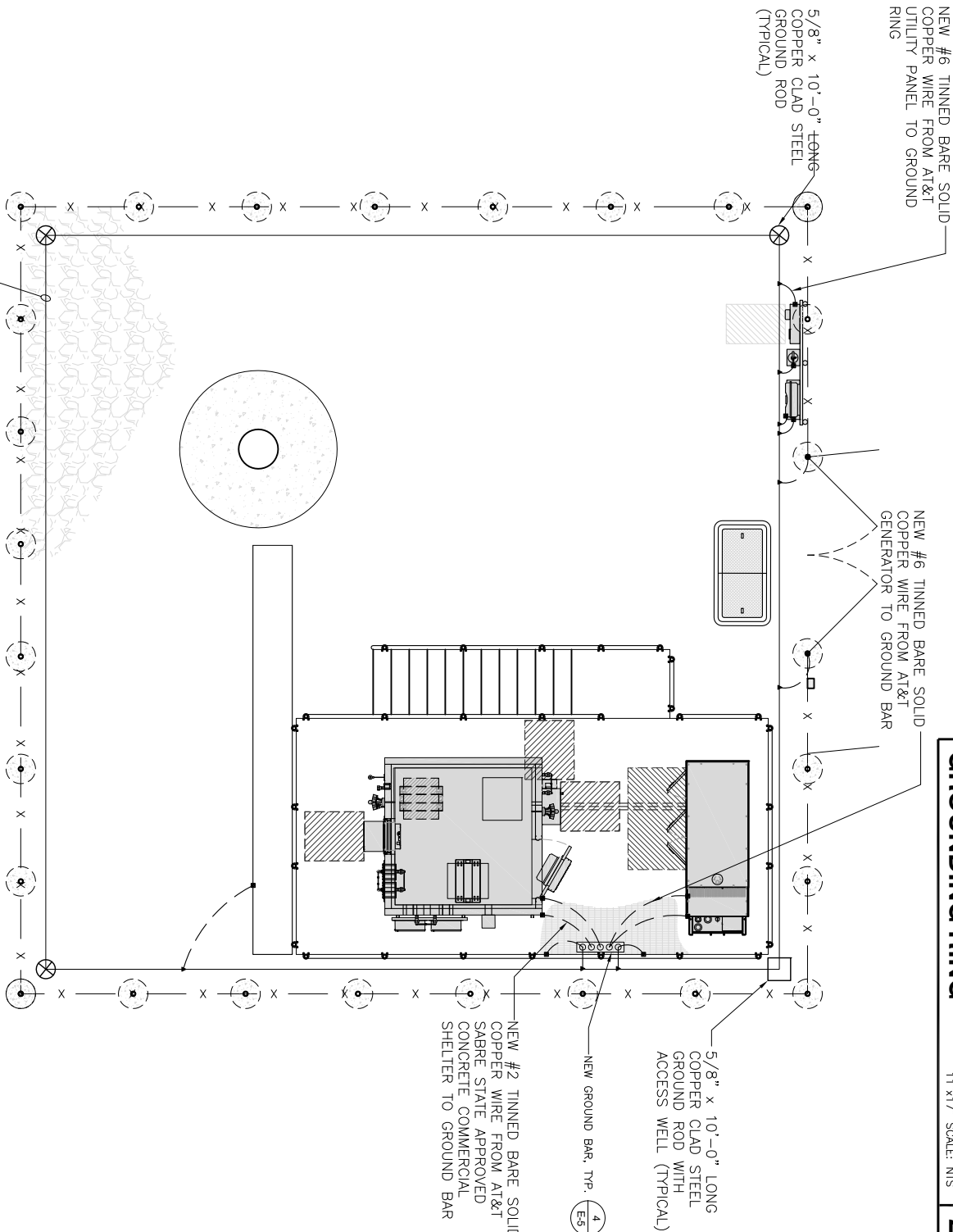
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SHEET TITLE  
SINGLE LINE DIAGRAM &  
PANEL SCHEDULE

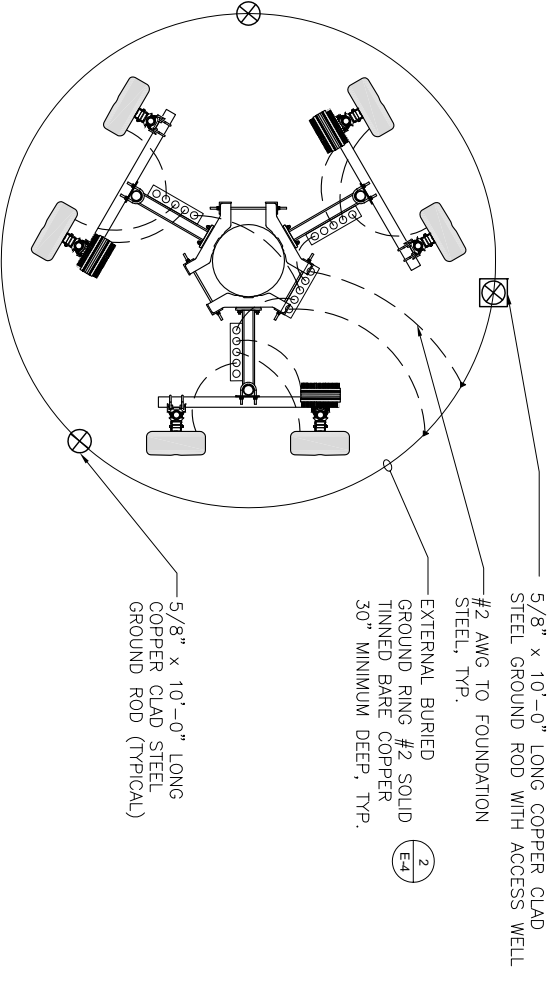
SHEET NUMBER  
**E-3**



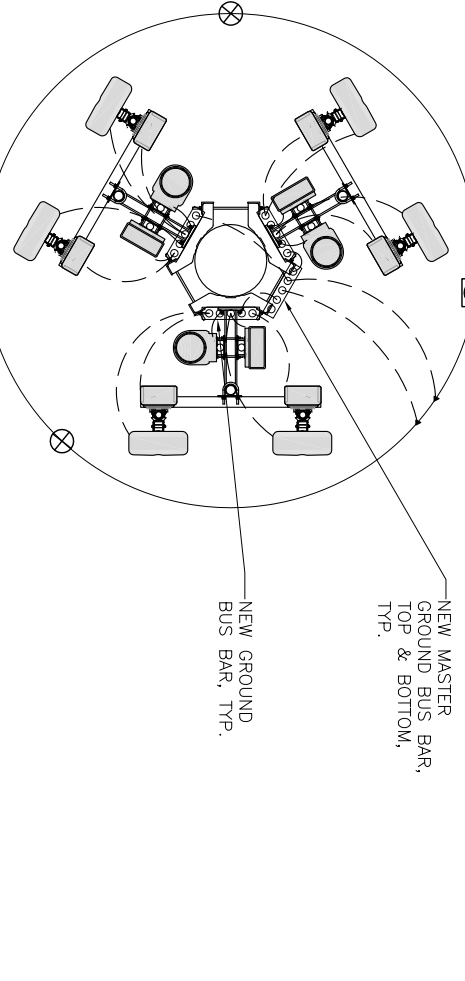
**2**  
GROUNDING RING  
24"x36" SCALE: NTS  
11'x17" SCALE: NTS



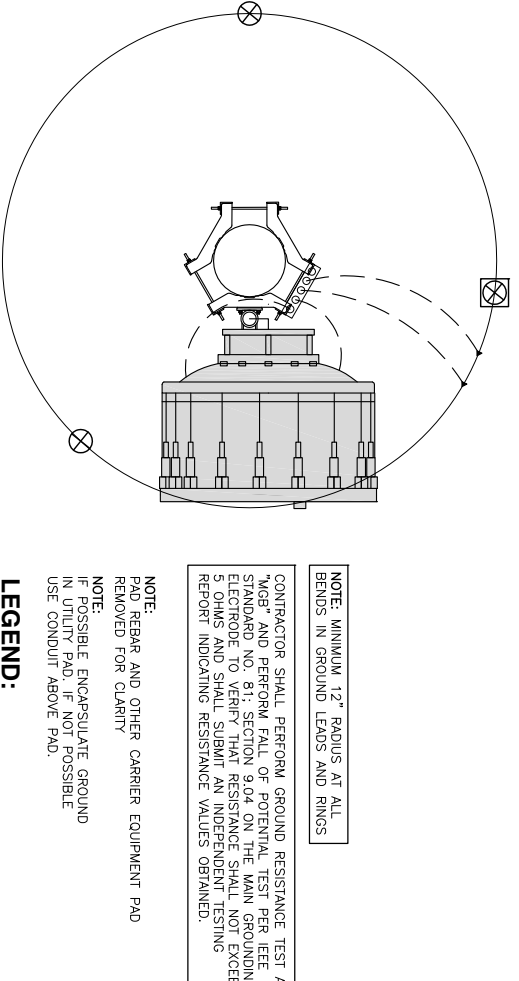
**1**  
EQUIPMENT GROUNDING PLAN  
24"x36" SCALE: 1/4" = 1'-0"  
11'x17" SCALE: 1/8" = 1'-0"



ANTENNA PLAN @140'-0"



ANTENNA PLAN @129'-0"



MICROWAVE PLAN @119'-0"

**3**  
ANTENNA GROUNDING PLAN  
24"x36" SCALE: 3/8" = 1'-0"  
11'x17" SCALE: 3/16" = 1'-0"

**NOTE:** MINIMUM 12" RADIUS AT ALL BENDS IN GROUND LEADS AND RINGS

**NOTE:** CONTRACTOR SHALL PERFORM GROUND RESISTANCE TEST AT "MGB" AND PERFORM FALL OF POTENTIAL TEST PER IEEE STANDARD NO. 81; SECTION 9.04 ON THE MAIN GROUNDING ELECTRODE TO VERIFY THAT RESISTANCE SHALL NOT EXCEED 5 OHMS AND SHALL SUBMIT AN INDEPENDENT TESTING REPORT INDICATING RESISTANCE VALUES OBTAINED.

**NOTE:** PAD REBAR AND OTHER CARRIER EQUIPMENT PAD REMOVED FOR CLARITY

**NOTE:** IF POSSIBLE ENCAPSULATE GROUND IN UTILITY PAD, IF NOT POSSIBLE USE CONDUIT ABOVE PAD.

**LEGEND:**

- ⊗ GROUND ROD
- MECHANICAL GROUND CONNECTION
- ▲ CADWELD
- ⊗ GROUND ACCESS WELL
- ⊗ CIRCULAR CONCRETE BOX, 9"ø x 12" HIGH WITH CONCRETE COVER - CAST LETTERS "GR ROD" IN COVER. (2 TOTAL)
- GROUND CONDUCTOR

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28101 STATE HWY 254  
REDCREST, CA, 95569



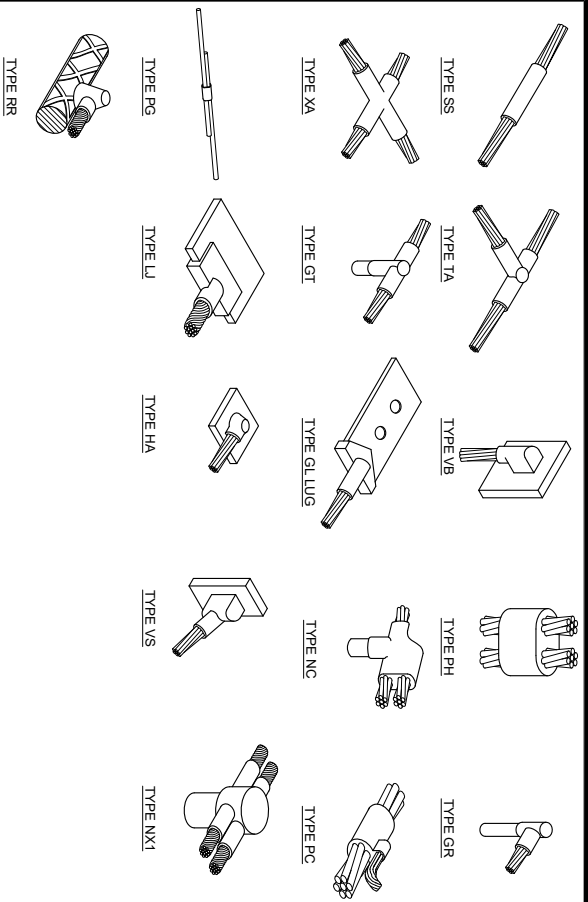
**MSQUARE WIRELESS**  
1387 CALLE AVANZADO  
SAN CLEMENTE CA 92073 (949) 391-8824

AT&T SITE NO: C0L03944C  
PROJECT NO: 13787552\_0  
DRAWN BY: SD-3  
CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
B	02/17/2021	100% 2015 REVISED	SD
A	02/05/2021	100% 2015	SD

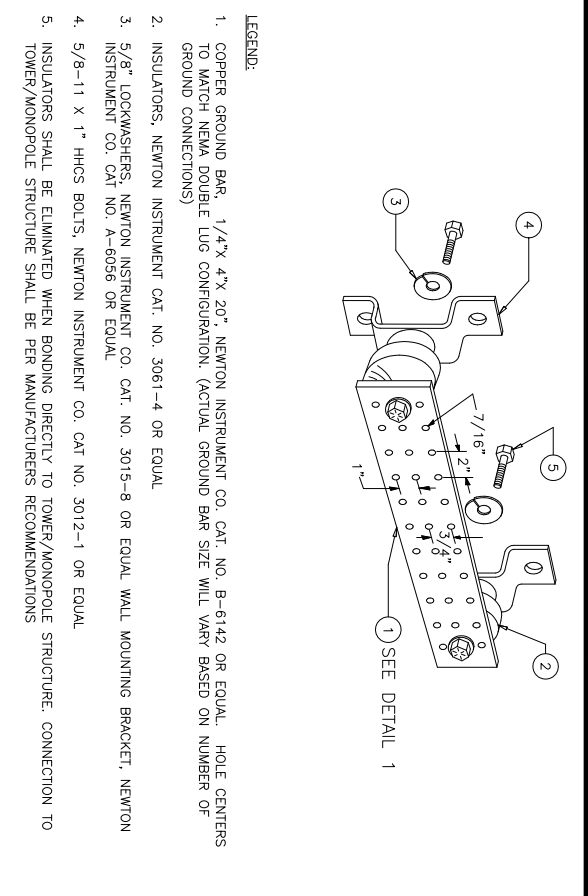
LICENSOR:  
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SHEET TITLE  
**GROUNDING PLAN**  
SHEET NUMBER  
**E-4**



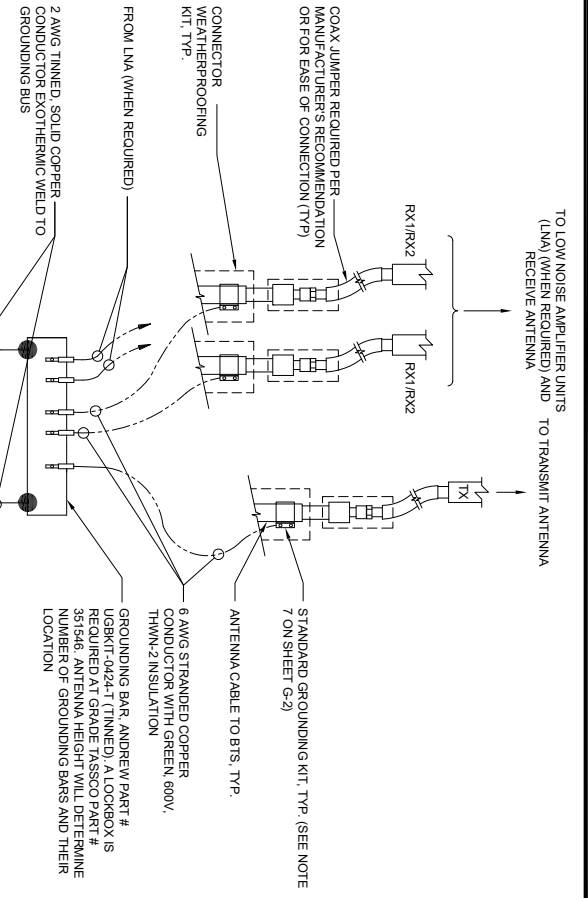
**TYPICAL CADWELD TYPES**

24"x36" SCALE: NTS  
11"x17" SCALE: NTS



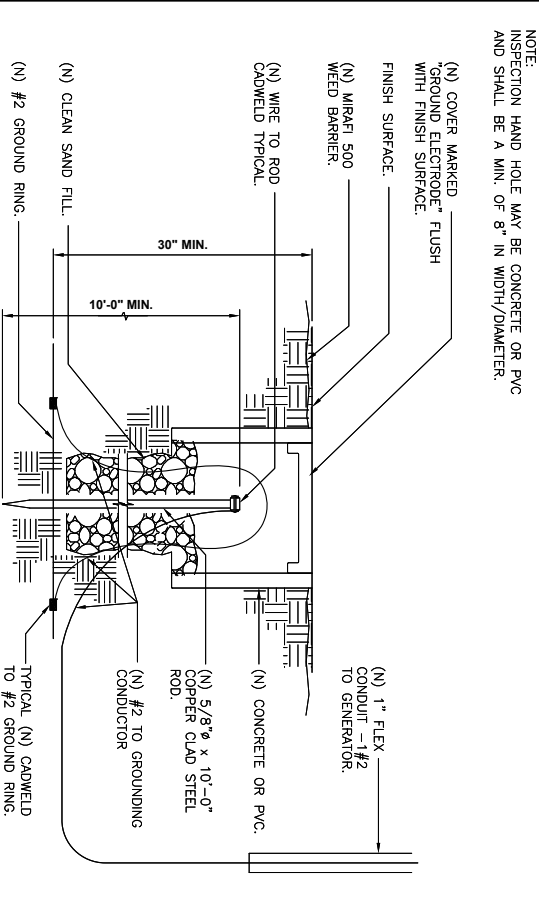
**NEW GROUNDING BAR DETAIL**

24"x36" SCALE: NTS  
11"x17" SCALE: NTS



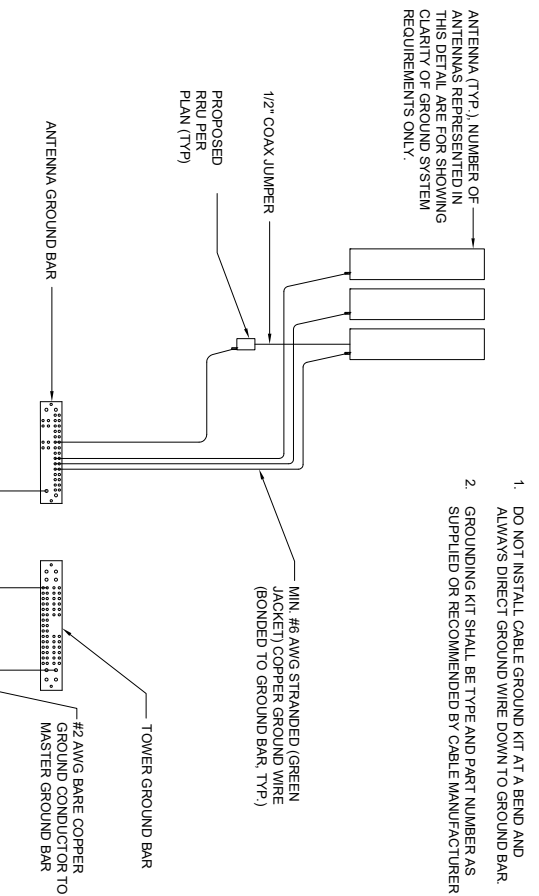
**GROUNDING BAR CONNECTION**

24"x36" SCALE: NTS  
11"x17" SCALE: NTS



**NEW MAIN GROUND TEST WELL**

24"x36" SCALE: NTS  
11"x17" SCALE: NTS



**ANTENNA GROUNDING PLAN**

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

ISSUED FOR:  
**LARABEE**

28101 STATE HWY 254  
REDCREST, CA, 95569

5001 EXECUTIVE PARKWAY  
SAN RAMON, CALIFORNIA 94583

**at&t**

WIRELESS GROUP LLC  
Connecting a Wireless World

**MSQUARE WIRELESS**  
1397 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 391-8824

AT&T SITE NO: C0103946  
PROJECT NO: 13787502  
DRAWN BY: SD-3  
CHECKED BY: EF

REV	DATE	DESCRIPTION	BY
A	02/05/2021	100% 20'S	SD
B	02/11/2021	100% 20'S REVISED	SD

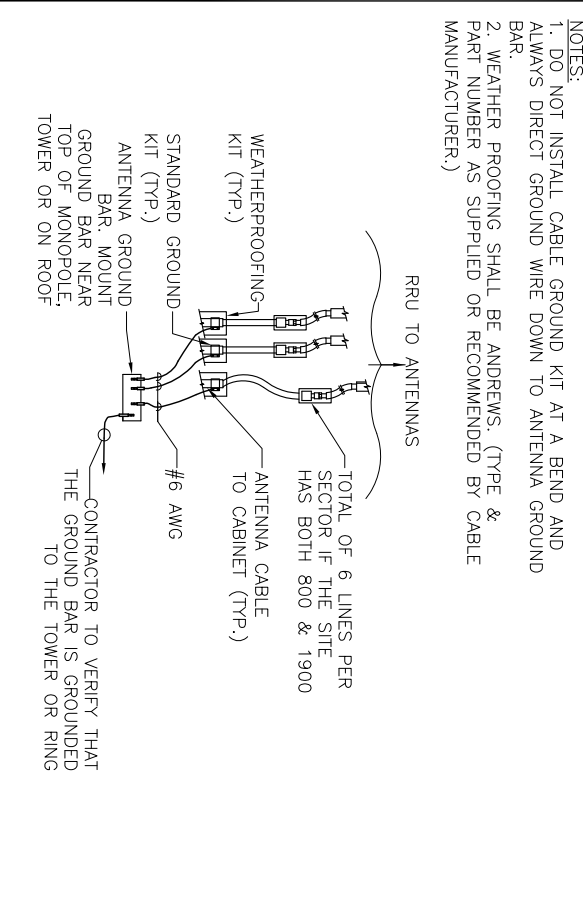
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SHEET TITLE  
**ELECTRICAL & GROUNDING DETAILS**

SHEET NUMBER  
**E-5**

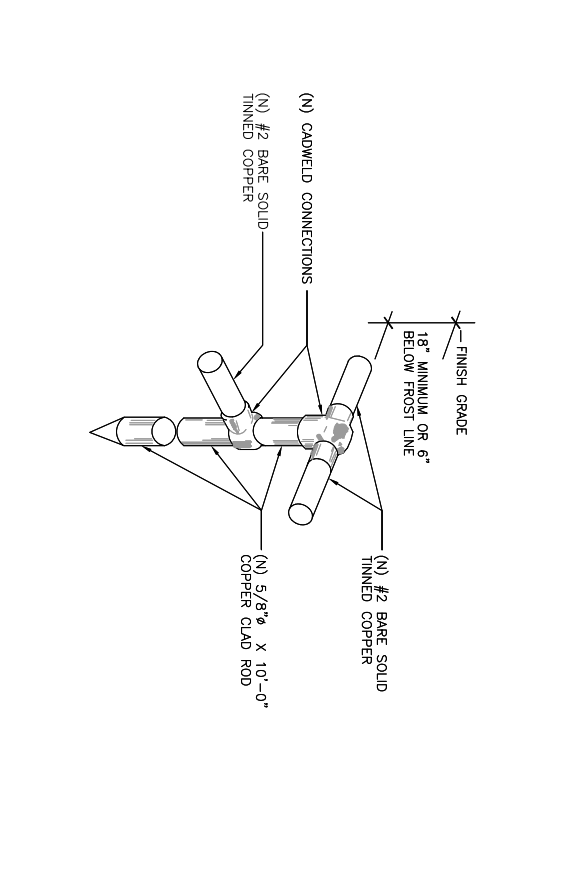
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PLN-2020-16854 A 150 Ft Tall Tower



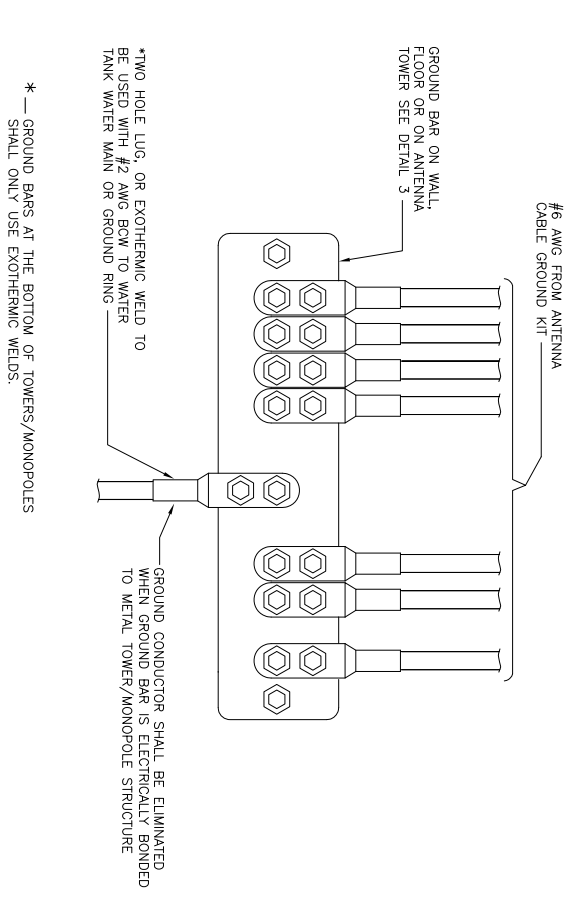
**TYPICAL COAX GROUNDING**

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11"x17" SCALE: NTS



**GROUND RING GROUND ROD**

24"x36" SCALE: NTS  
11"x17" SCALE: NTS



**(E) WIRE TO GROUND BAR CONNECTION**

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

LICENSOR:

SHEET TITLE  
**ELECTRICAL & GROUNDING DETAILS**

SHEET NUMBER  
**E-5**

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

PLN-2020-16854 A 150 Ft Tall Tower



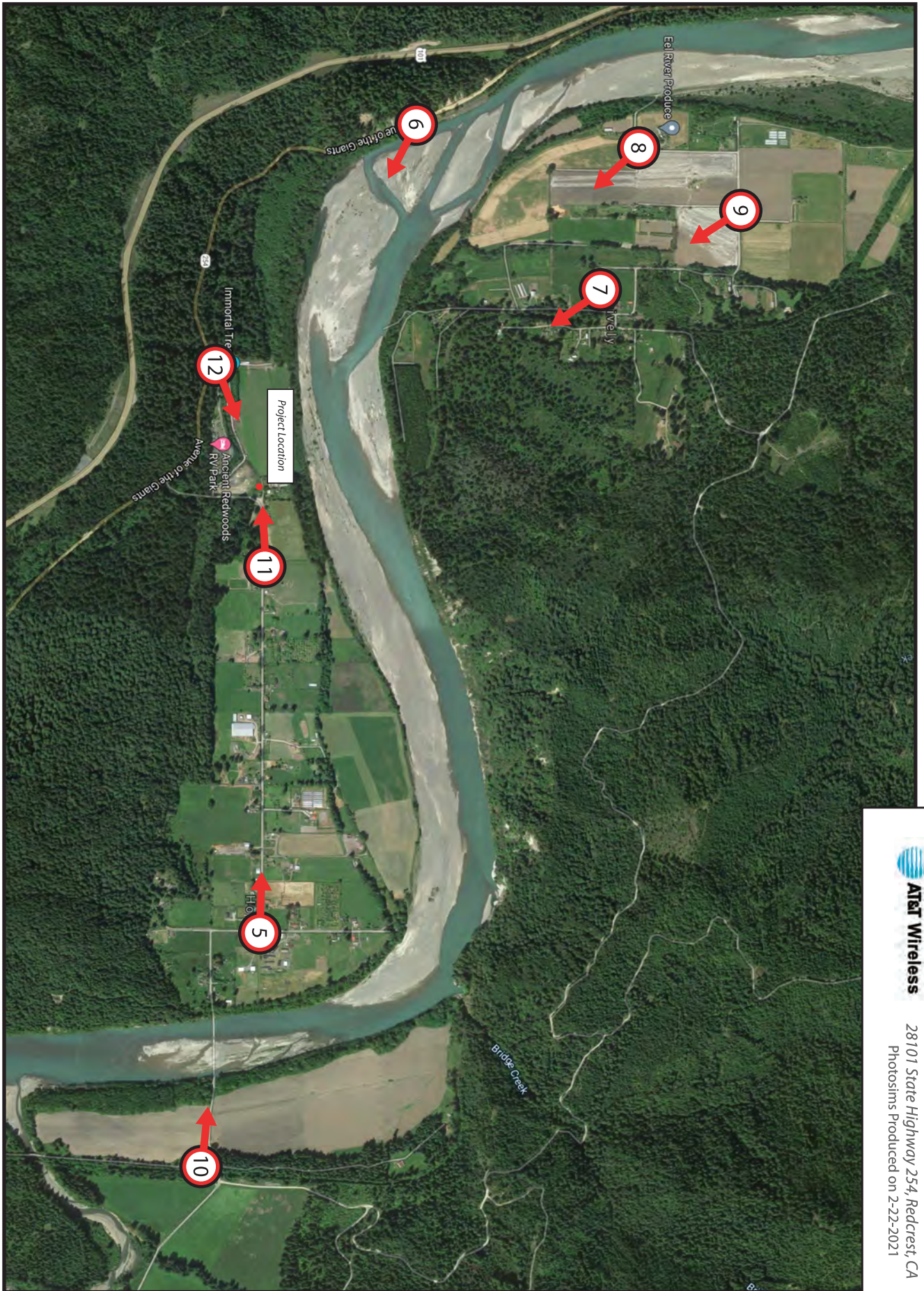
*Existing*



*Proposed*



*view from Tierney Road looking west at site*



CCL03946 Larabee  
 28101 State Highway 254, Redcrest, CA  
 Photosims Produced on 2-22-2021

**Advancesims**  
 Photo Simulation Solutions  
 Contact (925) 202-8507

Shot Point Map

*Existing*



*Proposed*

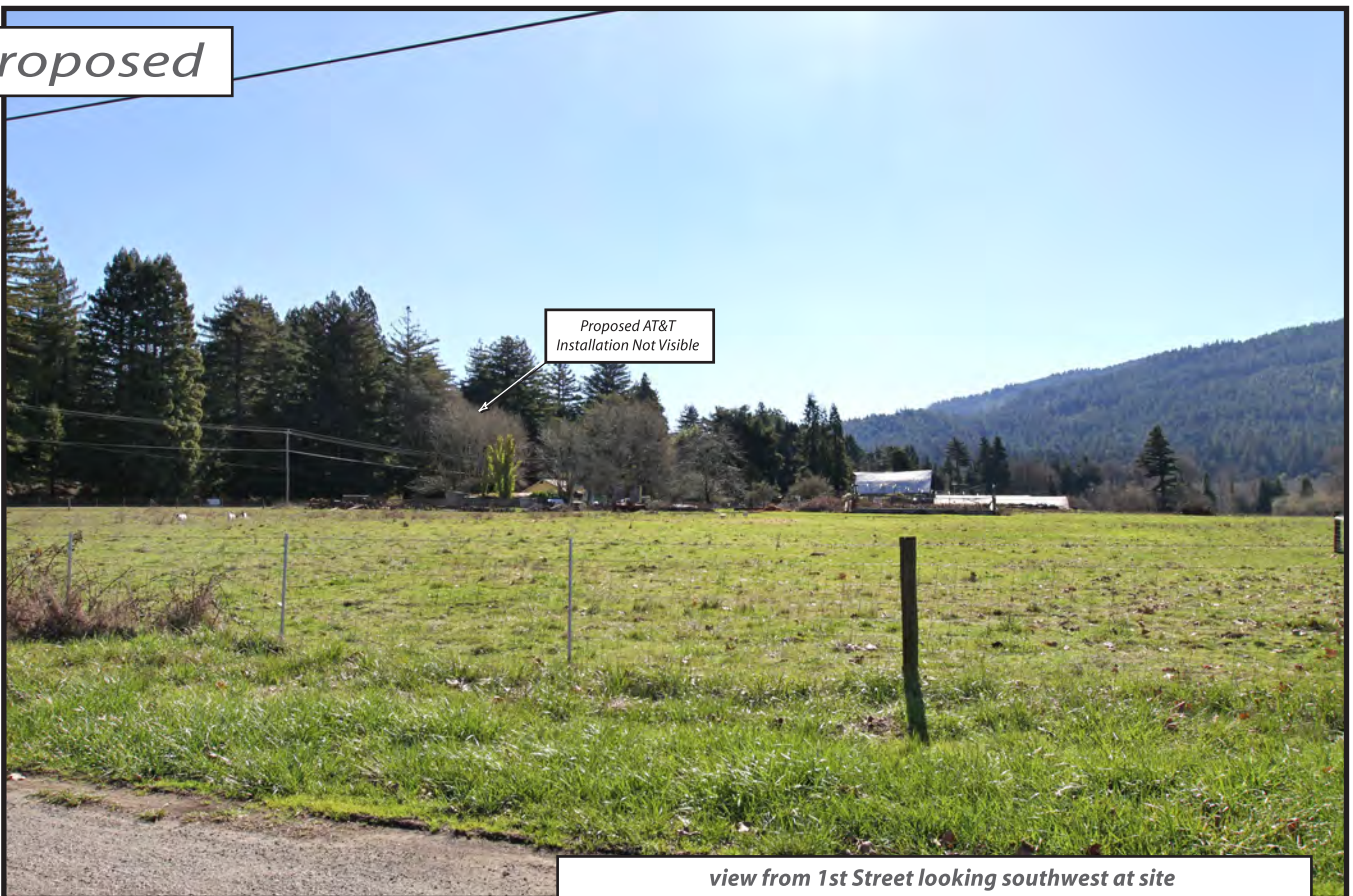


*view from Avenue of the Giants looking southeast at site*

*Existing*



*Proposed*



Proposed AT&T  
Installation Not Visible

view from 1st Street looking southwest at site




*Existing*



*Proposed*



*view from Shively Flat Road looking southwest at site*

 **AT&T Wireless**

CCL03946 Larabee  
28101 State Highway 254, Redcrest, CA  
Photosims Produced on 2-12-2021 Page 49

July 15, 2021

*Existing*



*Proposed*



*view from Shively Flat Road looking southwest at site*

 **AT&T Wireless**

July 15, 2021

CCL03946 Larabee  
28101 State Highway 254, Redcrest, CA  
Photosims Produced on 2-12-2021 Page 50

*Existing*




*Proposed*



Proposed AT&T  
Installation Not Visible

*view from Larabee Creek Road looking west at site*



CCL03946 Larabee  
28101 State Highway 254, Redcrest, CA  
Photosims Produced on 2-12-2022 Page 51

*Existing*



*Proposed*



*view from Avenue of the Giants looking northeast at site*

*Existing*

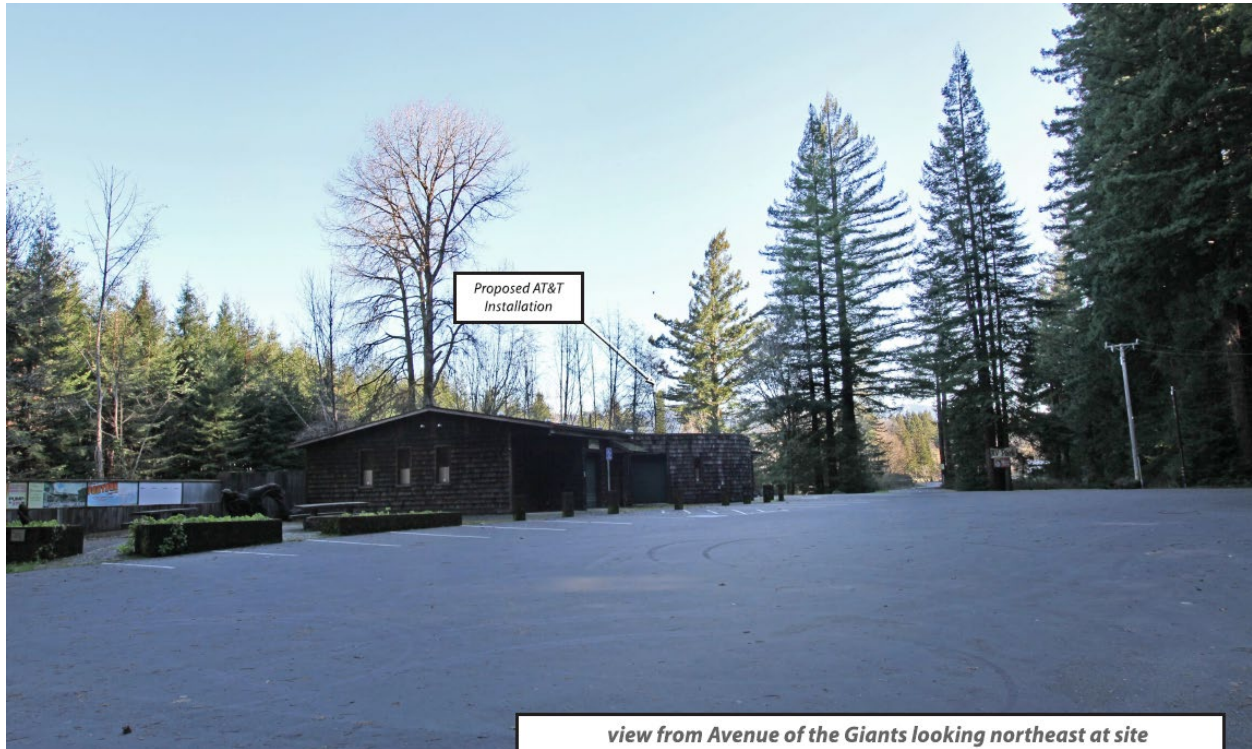


*Proposed*



*view from Holmes Flat Road looking west at site*

## Alternative Sites Analysis



## AT&T Mobility

Wireless Telecommunications Facility

At

Ancient Redwoods RV Park

28101 Avenue of the Giants,

Redcrest, CA

Site ID: CCL03946/Larabee

## **Introduction**

New Cingular Wireless PCS, LLC d/b/a AT&T Mobility (“AT&T”) has a significant gap in its service coverage in an area of Redcrest, Humboldt County. AT&T proposes to install a new 150-foot tall wireless communications facility (“WCF”) Monotree tower on the grounds of the privately owned property @ Ancient Redwoods RV Park located off state Hwy (254) Redcrest, Humboldt County CA (“Proposed Facility”) as a means to fill AT&T’s gap in coverage in this portion of the county. This property is zoned FP-Q. The Proposed Facility consists of twelve panel antennas (three sets of four antennas) and one microwave dish antenna mounted on a Monotree tower, with related equipment to be housed within a 80” x 80” equipment shelter adjacent to the tower. The Proposed Facility will be designed to minimize visual impacts and blend within the existing environment, The Proposed Facility is the least intrusive means to fill the significant gap of the alternatives investigated by AT&T as explained below.

## **Objective**

AT&T Mobility has identified a significant gap in its service coverage in Humboldt county, in an area roughly bordered by Shively road to the north. Redwood Hwy 101 to the east. Avenue of the Giants to the south and Larabee Creek road to the west. The Proposed Facility will improve coverage to many dozens of rural residential homes in several neighborhoods, (2) schools, numerous agricultural businesses, and other points of interest in the immediate vicinity. The service coverage in this portion of the County is described in the accompanying Radio Frequency propagation maps.

## **Methodology and Zoning Criteria**

The location of a WCF to fill a significant gap in coverage is dependent upon topography, zoning, existing structures, collocation opportunities, available utilities, and access. Wireless communication is line-of-sight technology that requires WCFs to be in relatively close proximity to the wireless handsets to be served.

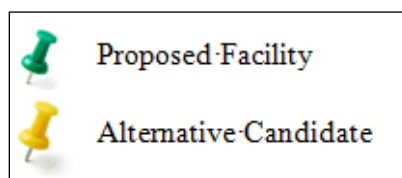
AT&T seeks to fill a significant gap in service coverage using the least intrusive means under the values expressed in the Humboldt County Municipal Code (“Code”).

AT&T seeks to meet the Code requirements and provide the best available design by placing this WCF in a (FP-Q) Use zone at the minimum height needed to address the significant service coverage gap.

## Analysis

AT&T investigated potential alternative sites for facilities to fill the identified coverage gap in this portion of Humboldt county. AT&T searched for, but did not find, feasible collocation opportunities and or existing structures in and around the coverage objective. Due to the need for antennas with a centerline height of 146 feet above ground level, AT&T proposed a WCF in the form of a Monotree tower. The following map shows the locations of the Proposed Facility and the alternative sites that AT&T investigated. The alternatives are discussed in the analysis which follows.

### Location of Candidate Sites





**Proposed Facility – Ancient Redwoods RV Park, state Hwy 254, Redcrest CA**



*Conclusion: Based upon location, a willing landlord and the superior coverage as shown in the proposed AT&T's Radio Frequency coverage service maps, the Proposed Facility is the least intrusive means for AT&T to meet its service coverage objective.*

This Rural property is located at 28101 state Hwy 254, Redcrest CA in a (FP-Q) zoning district. AT&T proposes to install a 150-foot stealth Monotree tower and an 80" x 80" (WIC) walk in closet equipment shelter at the rear of the Ancient Redwoods RV Park. The proposed 1,600 sq. ft AT&T lease area/compound will have easy access at the rear of the property, and the tower site will have a little to no visual impact on the aesthetic quality of its surroundings due to the numerous mature/tall trees located on the property. Effectively the existing trees will screen much of the facility from travelers along Hwy 254.

The Proposed Facility is the best available design to minimize visual impacts in the area. The Proposed Facility is the least intrusive means to fill the significant gap of the alternatives investigated by AT&T.

**Alternative 1 – HRC (1) Humboldt Redwood company, Jordan Rd. Scotia, CA**



*Conclusion: Not Feasible*

This rural forested property owned by HRC is located approximately 2.6 miles West from the Proposed Facility. Due to its location well to the West of AT&T's service objective, a WCF here would not close AT&T's significant service coverage gap.

**Alternative 2 – HRC (2) Humboldt Redwood company, Jordan Rd. Scotia, CA**



*Conclusion: Not Feasible*

This rural forested property is located approximately 1.84 miles West from the Proposed Facility. Due to its location well to the West of AT&T's service objective, a WCF here would not close AT&T's significant service coverage gap.

**Alternative 3 – HRC (3) Humboldt Redwood company, Larabee Ranch Rd. Redcrest**



*Conclusion: Not Feasible*

This rural forested property is located approximately 2.65 miles East from the Proposed Facility. Due to its location well to the East of AT&T's service objective, a WCF here would not close AT&T's significant service coverage gap.

## Alternative 4 – Existing SBA Tower, Englewood Ranch Rd, Redcrest CA



*Conclusion: Not Feasible*

This property is located approximately 1.74 miles southeast from the Proposed Facility. Due to its location well to the southeast of AT&T's service objective, a WCF here would not close AT&T's significant service coverage gap.

**Alternative 5 – Woody’s Hill, Johnson Ln, Redcrest, CA 95569**



*Conclusion: Not Feasible or Viable*

This property is located approximately 2.57 miles southeast from the Proposed Facility. It was discovered after extensive research that this property is **Not** viable due to access and easement issues /No access from a public right of way. Due to its location well to the southeast of AT&T’s service objective for this specific site, a WCF here would not close AT&T’s significant service coverage gap.

## Alternative 6 – Existing Lattice Tower, East of Weott, CA



*Conclusion: Not Feasible*

This property is located approximately **7.25** miles southeast from the Proposed Facility. Due to its location well to the southeast of AT&T's service objective, a WCF here would not close AT&T's significant service coverage gap.

### **Conclusion**

The Proposed Facility is the least intrusive means by which AT&T can close its significant service coverage gap in this portion of Humboldt County. Denial of AT&T's application would materially inhibit AT&T's ability to provide and improve service in this portion of the County.

# Competitive Coverage Analysis

December 30<sup>th</sup>, 2020

Syed Ahsan Mashhood

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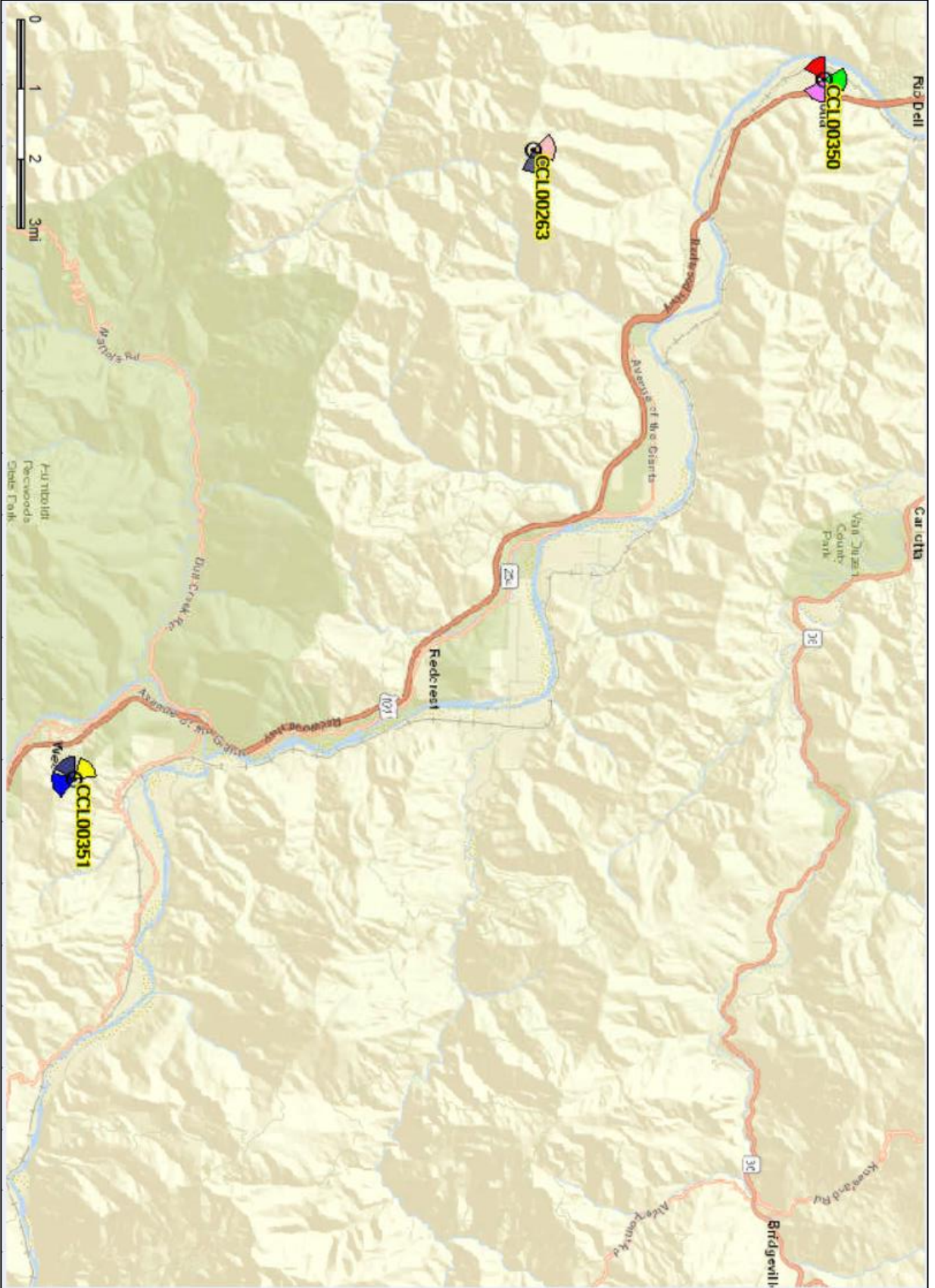


## NSB Objective

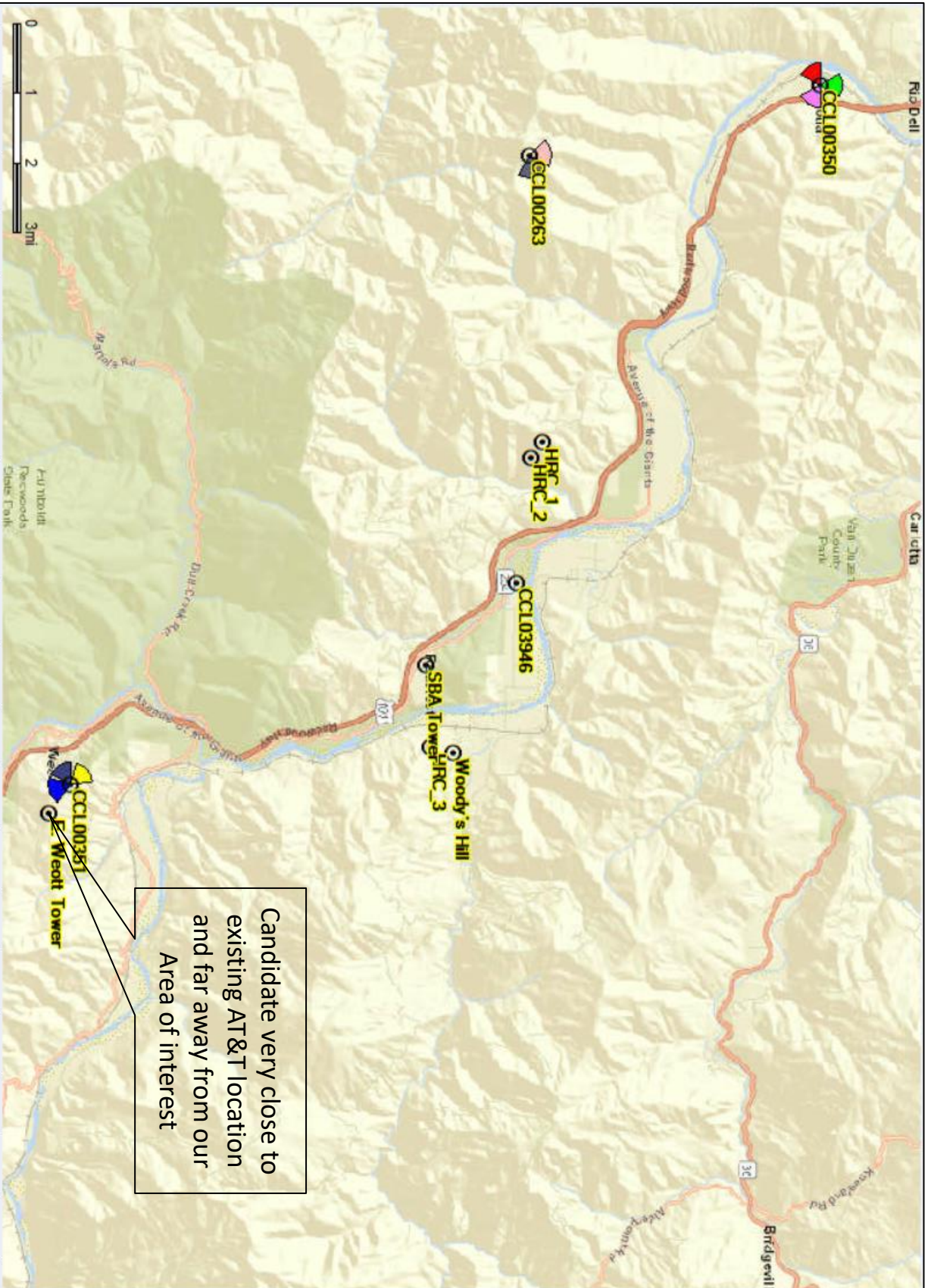
- To provide RF coverage to the residential homes in Shirley and Homes, Avenue of the Giants and HWY 101



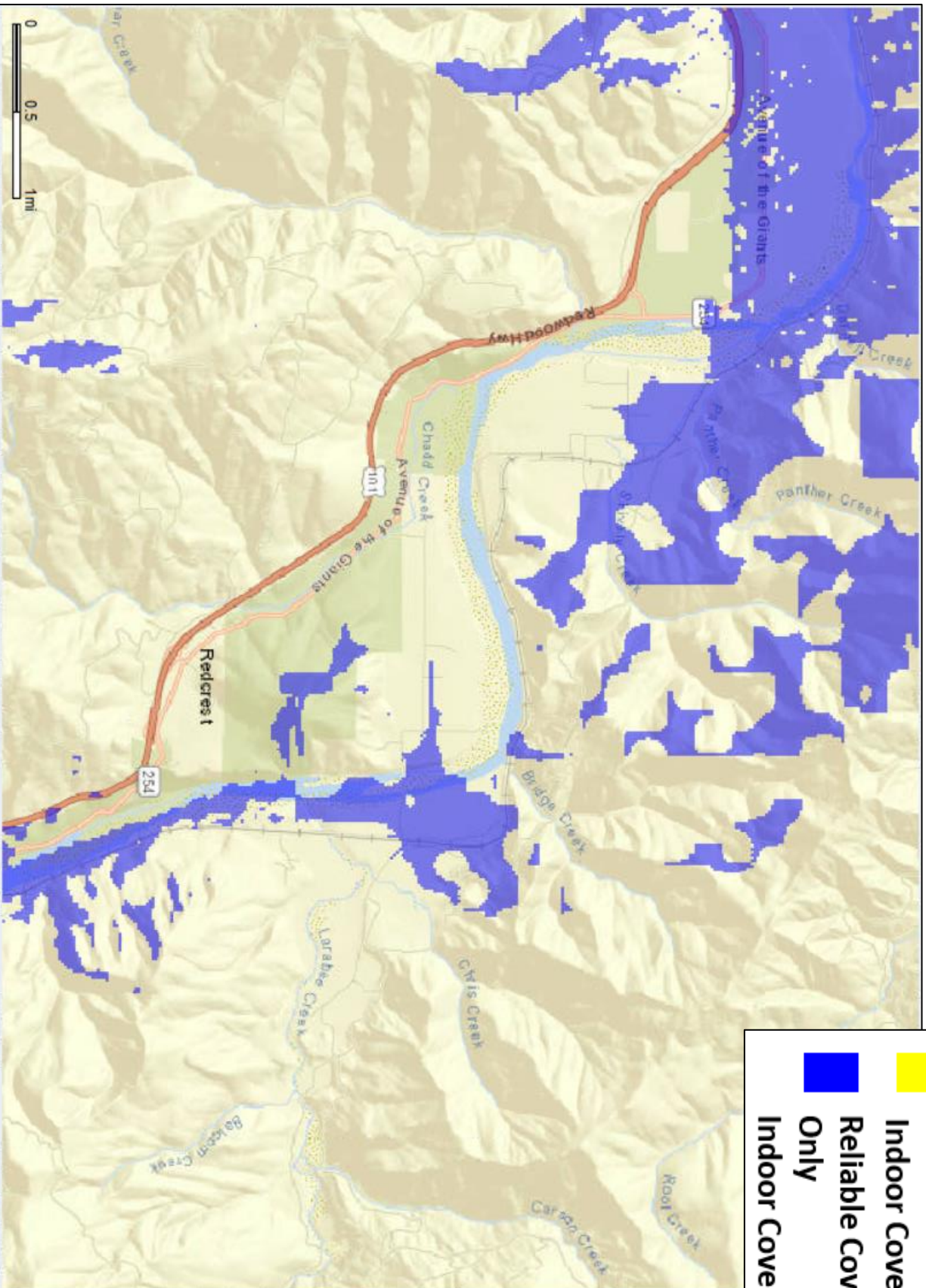
# Existing AT&T Network View



# Existing AT&T Network + Available Candidates



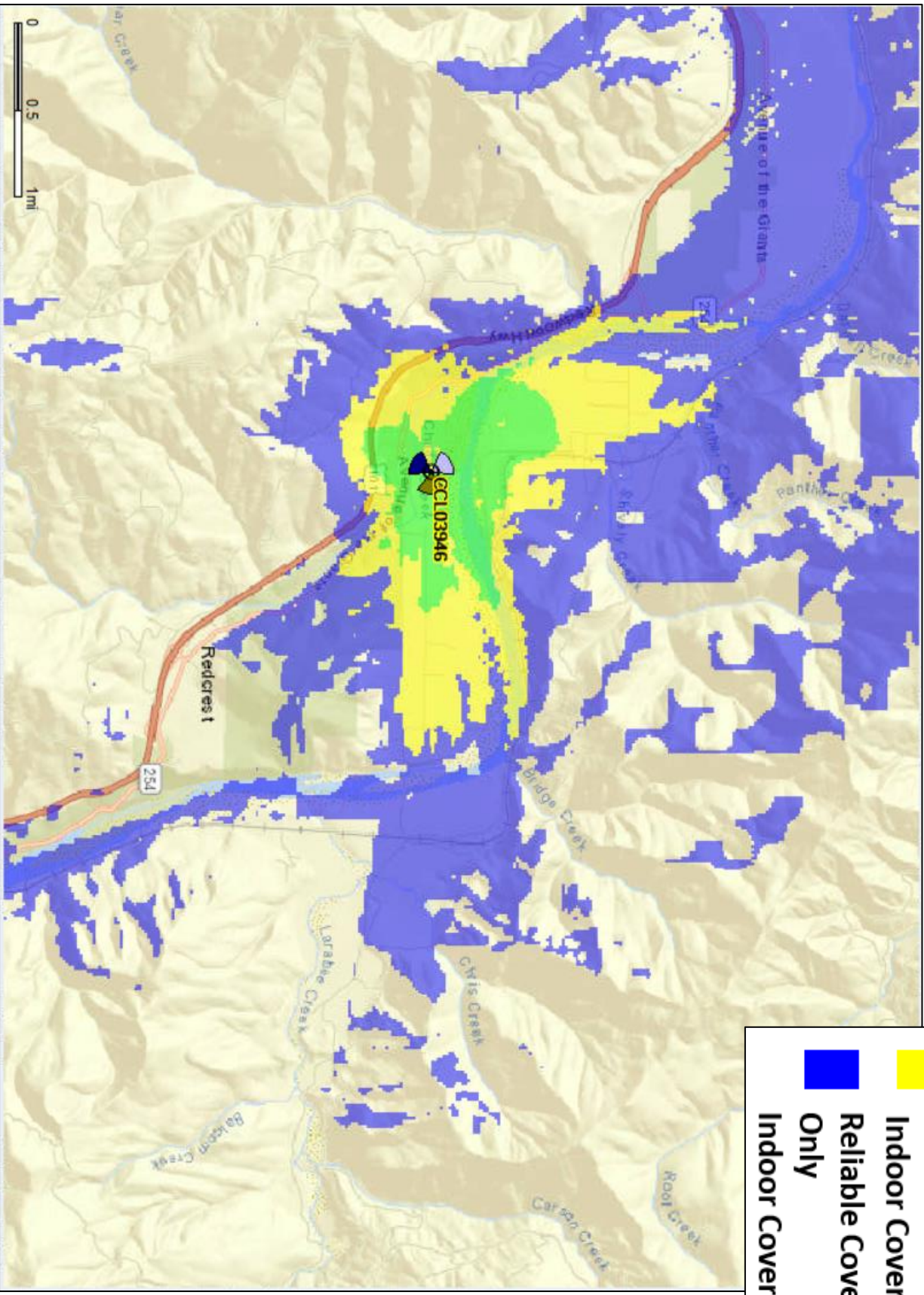
# Existing AT&T Network Coverage



- Reliable Service Indoors/Outdoors**
- Reliable Coverage in Transit**
- Indoor Coverage Less Reliable**
- Reliable Coverage Outdoors Only**
- Indoor Coverage Less Reliable**



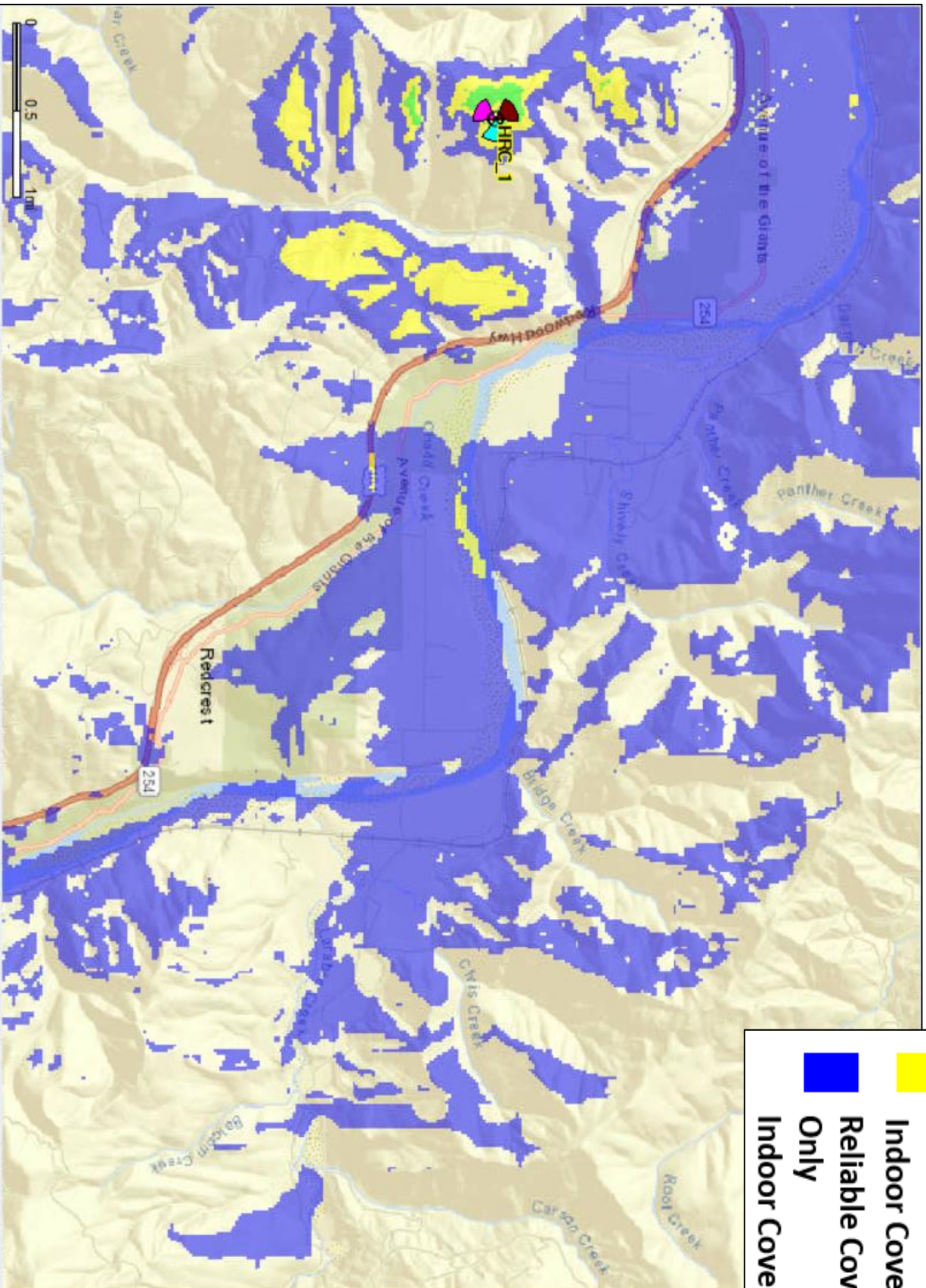
# Existing AT&T Network + Proposed Candidate Coverage



- **Reliable Service Indoors/Outdoors**
- **Reliable Coverage in Transit**
- **Reliable Coverage Less Reliable**
- **Indoor Coverage Less Reliable Only**



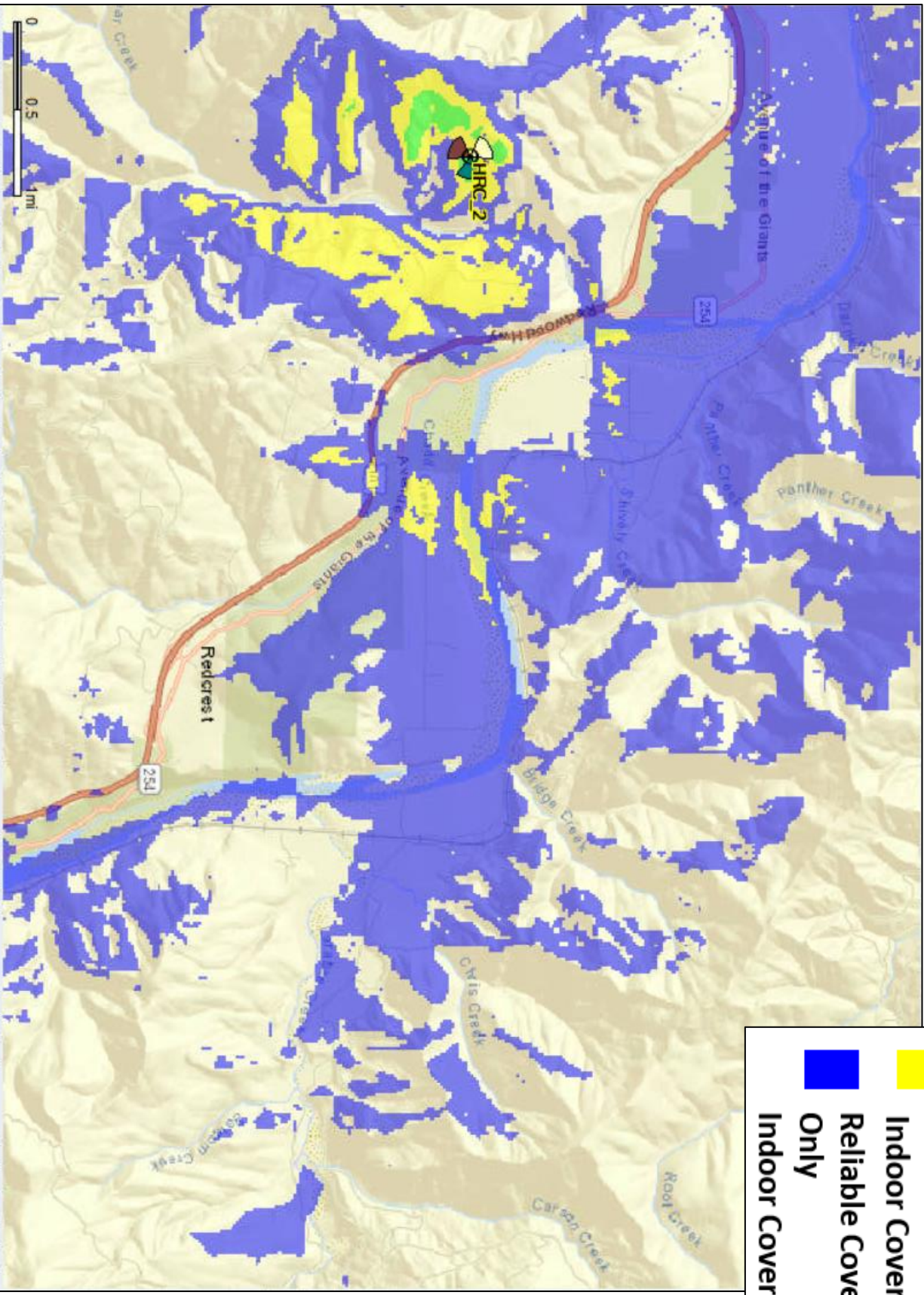
# Existing AT&T Network + HRC\_1 Candidate Coverage



- Reliable Service Indoors/Outdoors**
- Reliable Coverage in Transit**
- Reliable Coverage Less Reliable Only**
- Indoor Coverage Less Reliable**

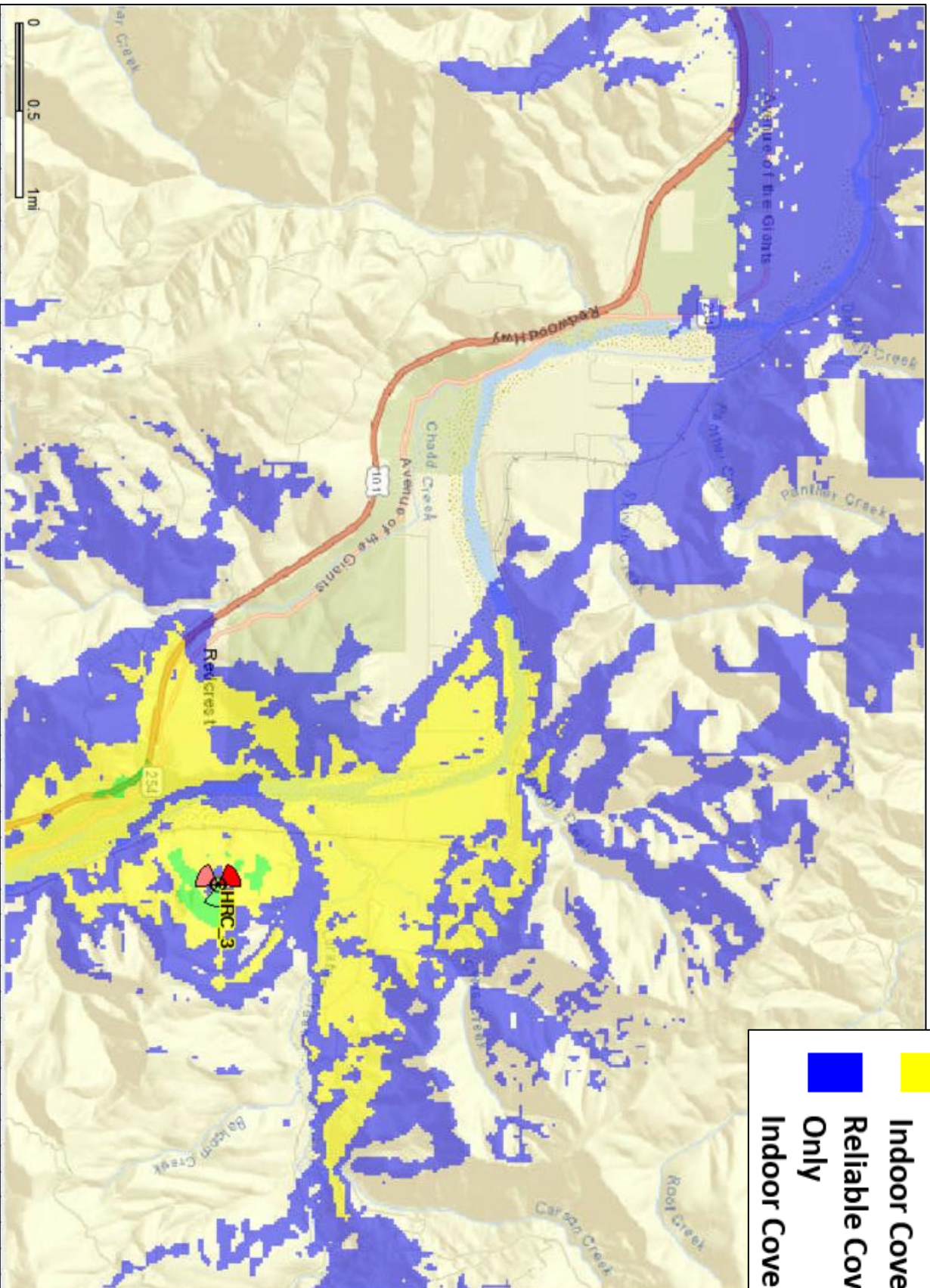






# Existing AT&T Network + HRC\_2 Candidate Coverage



- Reliable Service Indoors/Outdoors**
- Reliable Coverage in Transit**
- Reliable Coverage Less Reliable**
- Reliable Coverage Outdoors Only**
- Indoor Coverage Less Reliable**

# Existing AT&T Network + HRC\_3 Candidate Coverage

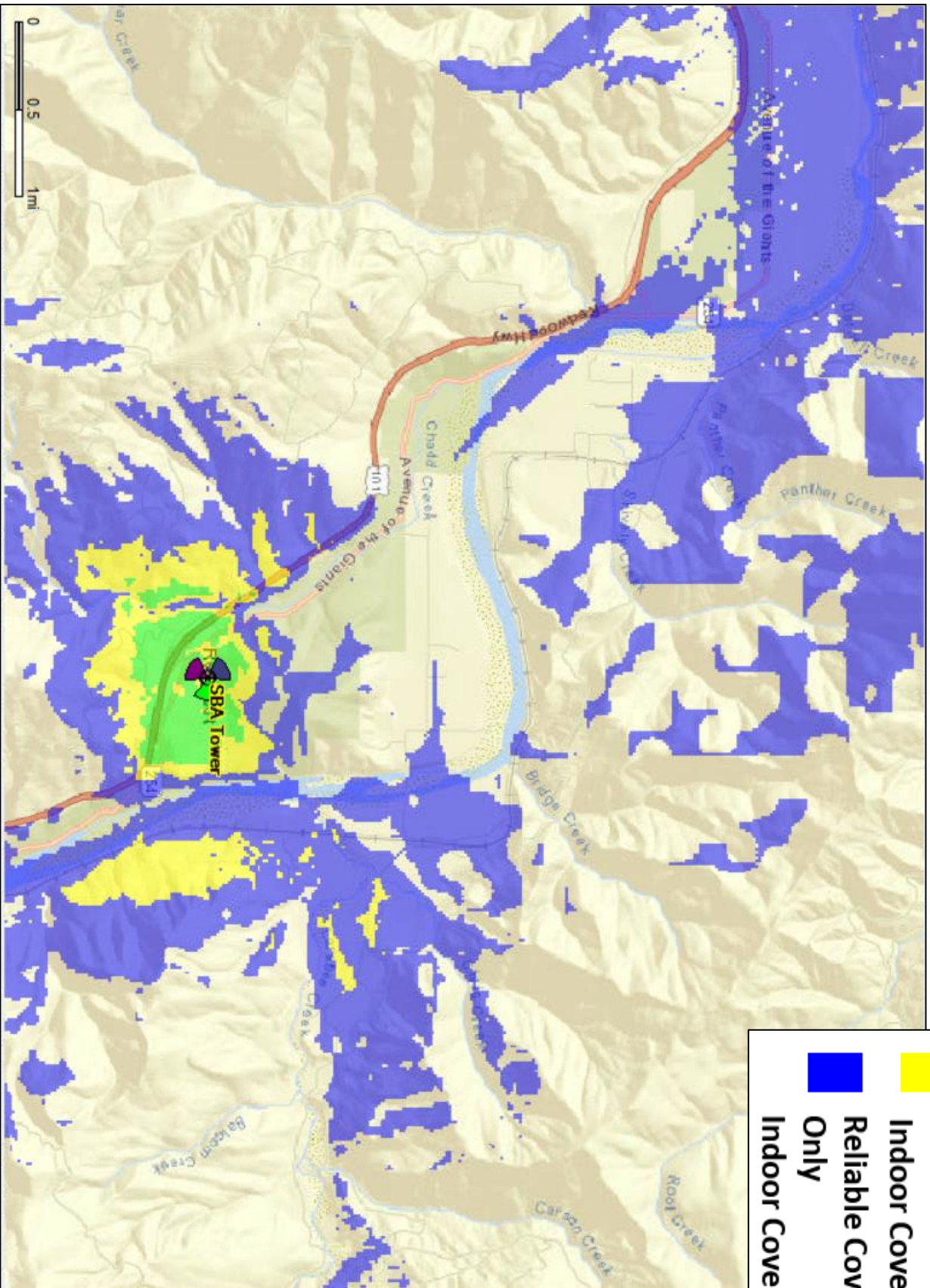


	<b>Reliable Service Indoors/Outdoors</b>
	<b>Reliable Coverage in Transit</b>
	<b>Reliable Coverage Less Reliable</b>
	<b>Indoor Coverage Only</b>



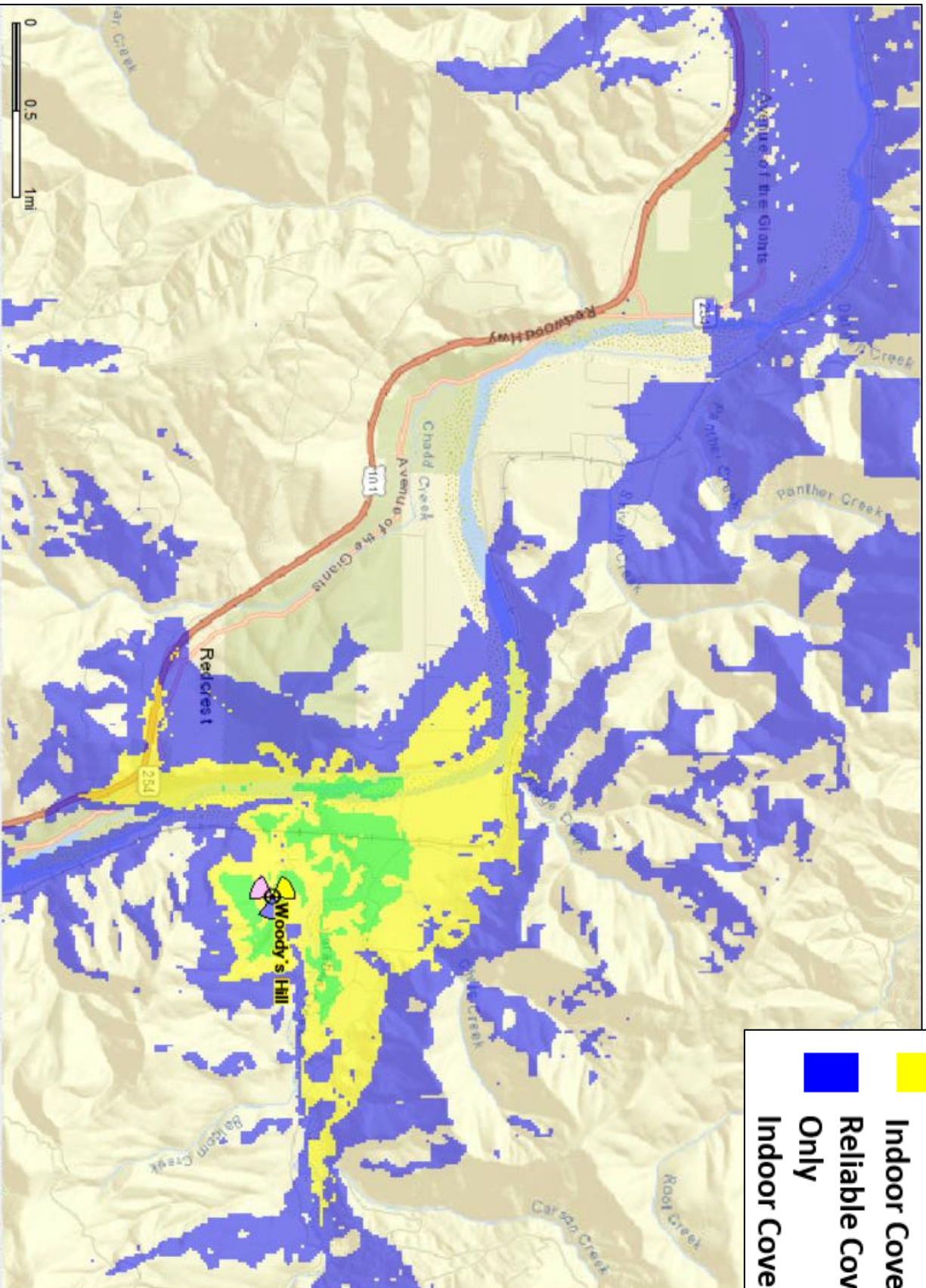





# Existing AT&T Network + SBA Candidate Coverage



- Reliable Service Indoors/Outdoors**
- Reliable Coverage in Transit**
- Reliable Coverage Less Reliable Indoors Only**
- Reliable Coverage Less Reliable Outdoor Coverage Only**

# Existing AT&T Network + Woody' Hill Candidate Coverage



	<b>Reliable Service Indoors/Outdoors</b>
	<b>Reliable Coverage in Transit</b>
	<b>Reliable Coverage Outdoors Only</b>
	<b>Indoor Coverage Less Reliable</b>



## Conclusion

- Based on the Predictive Study Analysis, it is recommended that we should proceed with the proposed candidate as it is covering the residences and providing improvement along HWY101.
- Alternate candidates are not improving the areas of interest due to terrain blockages.
- E.Weott Tower was not evaluated as it is far away from the area of interest and close to existing AT&T location.



AT&T



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## Radio Frequency Emissions Compliance Report For AT&T Mobility

<b>Site Name:</b>	<b>Larabee</b>	<b>Site Structure Type:</b>	<b>Monopole</b>
<b>Address:</b>	<b>28101 State Highway 254</b>	<b>Latitude:</b>	<b>40.418353</b>
	<b>Redcrest, CA</b>	<b>Longitude:</b>	<b>-123.961736</b>
<b>Report Date:</b>	<b>February 12, 2021</b>	<b>Project:</b>	<b>New Build</b>

---

### Compliance Statement

Based on information provided by AT&T Mobility and predictive modeling, the Larabee installation proposed by AT&T Mobility will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. RF alerting signage at the base of the Monopole and restricting access to authorized climbers that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

### Certification

I, David H. Kiser, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

### General Summary

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure. Based on the criteria for these classifications, the FCC General Population limit is considered to be a level that is safe for continuous exposure time. The FCC General Population limit is 5 times more restrictive than the Occupational limits.

Table 1: FCC Limits

Frequency (MHz)	Limits for General Population/ Uncontrolled Exposure		Limits for Occupational/ Controlled Exposure	
	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any location given the spatial orientation and operating parameters of multiple RF sources. The power density in the Far Field of an RF source is specified by OET-65 Equation 5 as follows:

$$S = \frac{EIRP}{4 \cdot \pi \cdot R^2} \text{ (mW/cm}^2\text{)}$$

where EIRP is the Effective Radiated Power relative to an isotropic antenna and R is the distance between the antenna and point of study. Additionally, consideration is given to the manufacturers' horizontal and vertical antenna patterns as well as radiation reflection. At any location, the predicted power density in the Far Field is the spatial average of points within a 0 to 6-foot vertical profile that a person would occupy. Near field power density is based on OET-65 Equation 20 stated as

$$S = \left( \frac{180}{\theta_{BW}} \right) \cdot \frac{100 \cdot P_{in}}{\pi \cdot R \cdot h} \text{ (mW/cm}^2\text{)}$$

where P<sub>in</sub> is the power input to the antenna, θ<sub>BW</sub> is the horizontal pattern beamwidth and h is the aperture length.

These theoretical results represent maximum-case predictions as all RF emitters are assumed to be operating at 100% duty cycle.

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

## Analysis

AT&T Mobility proposes the following installation at this location:

- Install 12 new AT&T panel antennas
- Install 18 new AT&T RRUs at antenna level

The antennas will be mounted on a 150-foot Monopole with centerlines 140 and 129 feet above ground level. Proposed antenna operating parameters are listed in Appendix A. Other appurtenances such as GPS antennas, RRUs and hybrid cable below the antennas are not sources of RF emissions. No other antennas are known to be operating in the vicinity of this site.



Figure 1: Antenna Locations

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serves to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.1466% of the FCC General Population limits. Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.1911% of the FCC General Population limits. The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or in adjacent buildings by 5% of the General Population limits.

Waterford Consultants, LLC recommends posting RF alerting signage with contact information (Caution 2B) at the base of the Monopole to inform authorized climbers of potential conditions near the antennas. These recommendations are depicted in Figure 2.

### Compliance Requirement Diagram (Access Location)

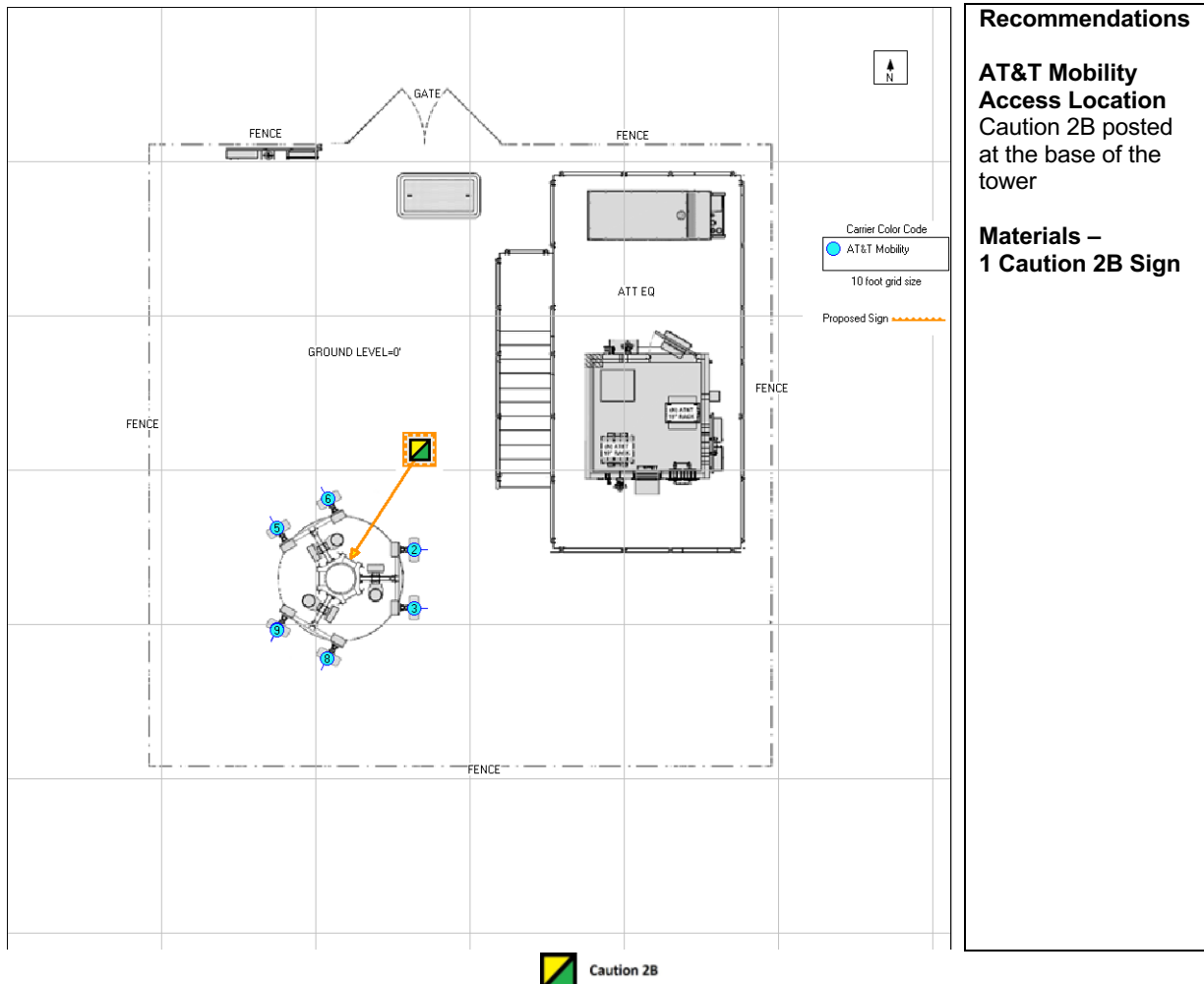


Figure 2: Mitigation Recommendations



**Appendix A: Operating Parameters Considered in this Analysis**

Antenna #:	Carrier:	Manufacturer	Pattern:	Band (MHz):	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBD):	ERP (W):	EIRP (W):	Rad Center (ft):
1	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	700	90		73	8	40	4	0	12.82	3063	5025	140
1	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	1900	90		59	8	40	4	0	16.1	6518	10694	140
2	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	2100	90		61	8	40	4	0	16.42	7016	11511	140
3	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	700	90		73	8	40	4	0	12.82	3063	5025	129
4	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	700	330		73	8	40	4	0	12.82	3063	5025	140
4	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	1900	330		59	8	40	4	0	16.1	6518	10694	140
5	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	2100	330		61	8	40	4	0	16.42	7016	11511	140
6	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	700	330		73	8	40	4	0	12.82	3063	5025	129
7	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	700	210		73	8	40	4	0	12.82	3063	5025	140
7	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	1900	210		59	8	40	4	0	16.1	6518	10694	140
8	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	2100	210		61	8	40	4	0	16.42	7016	11511	140
9	AT&T	COMMSCOPE	NNHH-65C-R4 02DT	700	210		73	8	40	4	0	12.82	3063	5025	129



March 1, 2021

Epic Wireless Group  
Ashley Smith

Re: **Noise Assessment Letter**  
AT&T Site CCL03946 - Larabee  
28101 State Highway 254  
Redcrest, CA 95569

Larabee is a proposed AT&T telecommunications macro site located in Humboldt County, CA. AT&T is proposing to add a walk in cabinet with wall mounted A/C units and a new emergency backup generator. Based on our review of the project drawings and technical specifications, the following is a summary of our noise assessment of the proposed equipment. It is our understanding that Humboldt County does NOT have an adopted noise ordinance. Following table out of Part 4, Chapter 13, Noise Elements, defines noise level performance standards as follows:

**Table 4.10-4—Short Term Noise Standards (Lmax)**

Zoning Classification	Day (maximum) 6:00 a.m. to 10:00 p.m. dBA	Night (maximum) 10:00 p.m. to 6:00 a.m. dBA
MG, MC, AE, TPZ, TC, AG, FP, FR, MH	80	70
CN, MB, ML, RRA, CG, CR, C-1, C-2, C-3	75	65
RM, R-3, R-4	65	60
RS, R-1, R-2, NR	65	60

Source: Humboldt County 2017

## NOISE ANALYSIS

Of the supporting equipment planned for this project, Table 1 presents the primary noise sources of concern.



**Table 1 – Supporting Equipment Noise Data**

Noise Source	Equipment Type	Make	Model	Size	Manufacturer's Published Noise Data (dBA)	Noise Data Reference Distance (ft)
A	AC Unit	Marvair	ECUA018ACA	18K BTUs	55	20
B	Generator	Generac	SD030	30 kW	66 <sup>[1]</sup>	23

[1] Sound pressure is based on Gen Set with Level 2 sound attenuated enclosure, full-load operating condition.

Our review of the package did not reveal any other significant noise sources, and ambient noise is not considered in this study.

To properly present this assessment, our noise modeling has assumed following scenarios: 1) the generator is operating in the full-load condition; 2) Marvair units are lead-lag and only one unit will run at any one time; 3) Ambient noise is not considered 4) other carriers on site are ignored and 5) despite the long setbacks to the adjacent property lines, our analysis does not include noise reduction factors such as air attenuation, vegetation, and ground effects, which become significant at large distances (+1,000 feet).

The site and its adjacent properties are located in unincorporated Humboldt County, and the telecommunications site sits within APN 209-291-017-000. The nearest adjacent property line with a residence on the property is located to the North East (APN 209-291-021-000) approximately **101 feet** from the equipment.

Generator is for emergency backup during power failure conditions. Generator is exercised once a week for one hour maximum during daytime hours only. A/C units run on lead lag and one at a time only. Unit will run during day and night time. Noise levels measurements per Table 1 calculated to the property line of the nearest residence is as follows:

Noise Source 'A' – Generator = 53 dBA

Noise Source 'B' – Wall Mount A/C Unit = 41 dBA

Combined Sources – Total of 53 dBA (will happen during daytime only)

Based on Humboldt County's recommendations, the maximum nighttime noise level at Residential regions is 60 dBA's at night and 65 dBA's during the day. The anticipated level of the wall mount A/C unit meets the nighttime standard. The anticipated noise level of the generator combined with the A/C unit meets the Daytime standard. As sound pressure levels attenuate with increasing distance from the sound source, noise levels due to the supporting equipment at all remaining surrounding property lines, are anticipated to be less than 60 dBA, meeting the noise standards outlined in this report.



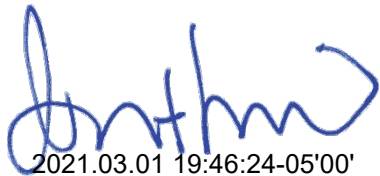
## CONCLUSION

Based on the project documentation, our noise assessment indicates that the proposed AT&T Telecommunications Facility complies with requirements intended by Humboldt County at all adjacent 'Residential' property lines for all hourly noise metrics outlined in Table 4.10-4 above.

To avoid any misunderstanding, I hereby state that to the best of my knowledge, belief and professional judgment, this report represents an accurate appraisal of AT&T's equipment, based upon careful evaluation of Manufacturer's data to the extent reasonably possible.

Please reach out if I can be of further assistance.

Respectfully Submitted  
For the Firm,



2021.03.01 19:46:24-05'00'

Robert J Lara,

### Attachment 3

#### Referral Agency Comments and Recommendations

<b>Referral Agency</b>	<b>Response</b>	<b>Recommendation</b>	<b>On File</b>	<b>Attached</b>
County Building Inspection Division				
County P/W, Land Use Division	✓	Approval	✓	
Division of Environmental Health	✓	Approval	✓	
Rio Dell Fire Protection District				
CalFire	✓	No Comment	✓	
California Department of Fish and Wildlife				
Bear River Band (Tribal)				
Sinkyone Wilderness Council (Tribal)				
Wiyot Tribe				
Northwest Information Center	✓	Contact local Tribes		