## Oakland City Planning Commission

STAFF REPORT

Case File Number: PLN18232

February 6, 2019

Location: Utility pole in public right-of-way (sidewalk) adjacent to:

4700 Lincoln Avenue (Greek Orthodox Church parking

garage, located across from 4511 Lincoln Ave)

Assessor's Parcel Number: Adjacent to: 029 1009-011-02

Proposal: To establish a single wireless "small cell site" Macro

Telecommunication Facilities on an existing utility guy pole

located in the public right-of-way

Applicant: Mr. Jay Gruendle / On Air (for Verizon)

(707) 477-2782

Owner: Verizon Wireless, et al.

Permits Required: Regular Design Review for Macro Telecommunication Facility in

Residential Zone

Environmental Determination: Exempt, Section 15301 of the State CEQA Guidelines:

Existing Facilities;

Exempt, Section 15302: Replacement or Reconstruction; Exempt, Section 15303: New Construction of Small Structures; Section 15183: Projects Consistent with a Community Plan, General

Plan or Zoning

Historic Status: Non-historic property

Date(s) Filed: May 30, 2018

Action to be Taken: Approve with Conditions

Finality of Decision: Appealable to City Council within 10 days

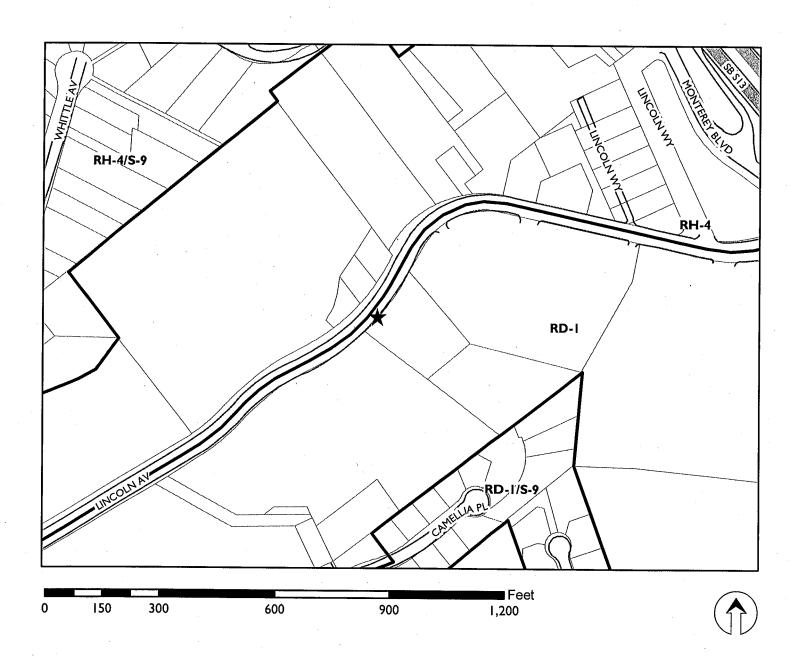
For further information: Contact case planner Moe Hackett at (510) 238-3973 or by email:

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#### **EXECUTIVE SUMMARY**

The applicant requests Planning Commission approval of a Regular Design Review Permit to establish a small cell wireless telecommunication "Macro" facility on an existing utility guy pole located in the public right-of-way in a residential neighborhood near civic facilities. The project involves attaching shrouded antenna and equipment to the pole, as described in this report and attached plans, in order to enhance wireless services in those areas.

# CITY OF OAKLAND PLANNING COMMISSION



Case File:

PLN 18232

Applicant:

Jay Gruendel/On Air LLC (for Verizon)

Address:

Utility pole in public right-of-way

across street from 4511 Lincoln Ave

Zone:

RH-4

Telecommunication Facilities attached to utility poles are classified as "Macro." Regular Design Review is required for the installation of a new Macro Telecommunications Facility (free-standing "monopoles" require additional permits). In residential zones, this Design Review is decided by the Planning Commission. The antenna shroud will extend above the top of an extension, and is not projecting into any protected views from a residence, or, located close to a primary living space window. Other similar projects have been reviewed throughout the City. The proposed telecommunication facility is deemed to be an appropriate location that would not negatively impact nearby residences.

#### **BACKGROUND**

In 2018, the applicant held a community meeting for a roll-out of utility pole sites throughout the neighborhood at Head Royce School with staff in attendance. Neighbors subsequently held a follow-up meeting at the same location. Another neighborhood meeting was then held at a resident's home, without the applicant in attendance. At these meetings, the project was described, neighbors were able to express concerns, and staff was on hand to answer permitting questions. Neighbors have also visited the Planning Bureau and attended various public hearings which is always welcome and encouraged.

#### TELECOMMUNICATIONS BACKGROUND

#### Limitations on Local Government Zoning Authority under the Telecommunications Act of 1996

Section 704 of the Telecommunications Act of 1996 (TCA) provides federal standards for the siting of "Personal Wireless Services Facilities." "Personal Wireless Services" include all commercial mobile services (including personal communications services (PCS), cellular radio mobile services, and paging); unlicensed wireless services; and common carrier wireless exchange access services. Under Section 704, local zoning authority over personal wireless services is preserved such that the FCC is prevented from preempting local land use decisions; however, local government zoning decisions are still restricted by several provisions of federal law. Specifically:

- Under Section 253 of the TCA, no state or local regulation or other legal requirement can prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.
- Further, Section 704 of the TCA imposes limitations on what local and state governments can do. Section 704 prohibits any state and local government action which unreasonably discriminates among personal wireless providers. Local governments must ensure that its wireless ordinance does not contain requirements in the form of regulatory terms or fees which may have the "effect" of prohibiting the placement, construction, or modification of personal wireless services.
- Section 704 also preempts any local zoning regulation purporting to regulate the placement, construction and modification of personal wireless service facilities on the basis, either directly or indirectly, on the environmental effects of radio frequency emissions (RF) of such facilities, which otherwise comply with Federal Communications Commission (FCC) standards in this regard. (See 47 U.S.C. Section 332(c)(7)(B)(iv) (1996)). This means that local authorities may not regulate the siting or construction of personal wireless facilities based on RF standards that are more stringent than those promulgated by the FCC.
- Section 704 mandates that local governments act upon personal wireless service facility siting applications to place, construct, or modify a facility within a reasonable time (See 47 U.S.C.332(c)(7)(B)(ii) and FCC Shot Clock ruling setting forth "reasonable time" standards for applications deemed complete).

Section 704 also mandates that the FCC provide technical support to local governments in order to
encourage them to make property, rights-of-way, and easements under their jurisdiction available
for the placement of new spectrum-based telecommunications services. This proceeding is
currently at the comment stage.

For more information on the FCC's jurisdiction in this area, consult the following: Competition & Infrastructure Policy Division (CIPD) of the Wireless Telecommunications Bureau, main division number: (202)418-1310. <a href="https://www.fcc.gov/general/competition-infrastructure-policy-division-wireless-telecommunications-bureau">https://www.fcc.gov/general/competition-infrastructure-policy-division-wireless-telecommunications-bureau</a>

#### PROPERTY DESCRIPTION

The existing 27-foot tall wooden utility pole is located in the 50-foot wide public right-of-way (side walk, behind the curb) in front of 4700 Lincoln Avenue (Greek Orthodox Church parking garage). The neighborhood consists of schools, churches, and some single-family residences. A guy pole is a utility pole that supports other poles that in turn host wires; both poles types are treated the same in terms of Zoning Permit review. This guy pole serves a utility pole across the street at 4511 Lincoln. The applicant submitted the plans, relating to the utility pole adjacent 4511 Lincoln Avenue, when in fact the guy pole site is adjacent to 4700 Lincoln Avenue.

#### PROJECT DESCRIPTION

The applicant proposes to:

- Install a 7-foot tall extension and 4'-11" tall shrouded antenna on top of the pole to total 39'-3" in height.
- Install an (approximately) 8-foot vertical mounted partly shrouded equipment mounted on a stand-off bracket (the bracket mount is located 8-feet above ground level).

No portion of the telecommunication facilities would be located on the ground. The proposed antenna and associated equipment will not be accessible to the public. Records show that the Planning Commission has approved numerous Macro Telecommunications Facilities requiring Design Review throughout the City since 2016.

#### KEY ISSUSES

This proposal has been reviewed by staff and was initially deemed to be unacceptable based on the design of the pole mounted equipment which was largely unshrouded. The previous design contained multiple unscreened equipment cabinets which extended 10-feet up the pole from the 7-foot level. Staff requested and received revisions which conceal some, but not all, of the equipment which the city considers to be an improvement. The applicant has stated that there is no other equipment configuration available to them. Staff would point out to the Commission that other J-Pole mounted telecommunication facilities have been approved throughout the city by other carriers with alternative designs, although the carrier maintains that is due to technological differences in their equipment. Staff believes further conversation may be helpful.

#### GENERAL PLAN ANALYSIS

The site is in the Detached Unit Residential area of the General Plan's Land Use and Transportation Element (LUTE). The intent of the area is: "to create, maintain, and enhance residential areas characterized by detached, single unit structures." The proposed telecommunication facilities will be mounted on existing utility guy pole within the City of Oakland public right-of-way. The proposed unmanned wireless Telecommunication Facility would not adversely affect and detract from the characteristics of the neighborhood.

#### **ZONING ANALYSIS**

The proposed Telecommunication Facility is in a residential zone. Section 17.136.040 and 17.128.070 of the City of Oakland Planning Code requires a Regular Design Review permit for Macro Telecommunication facilities that are attached to utility poles in these zones or that are located within one hundred (300) feet of the boundary of any residential zone and are not fully concealed. Special findings are also required for Design Review approval to ensure that the facility is concealed to the greatest extent possible. The project design is discussed, and the required findings for Regular Design Review are listed and included in staff's evaluation, later in this report.

#### ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines list the projects that qualify as categorical exemptions from environmental review. The proposed project is categorically exempt from further environmental pursuant to Section 15301, Existing Facilities; Section 15302, Replacement or Reconstruction; and Section 15303, New Construction of Small Structures, and is also subject to Section 15183, Projects Consistent with a General Plan or Zoning.

#### KEY ISSUES AND IMPACTS

The proposal to establish a Macro Telecommunications Facilities is subject to the following Planning Code development standards, which are followed by staff's analysis in relation to this application:

#### 17.128.070 Macro Telecommunications Facilities.

## A. General Development Standards for Macro Telecommunications Facilities.

1. The Macro Facilities shall be located on existing buildings, poles or other existing support structures, or shall be post mounted.

The projects involve attachment to existing utility guy pole hosting support facilities (guy wires) for the adjacent power lines across the street.

2. The equipment shelter or cabinet must be concealed from public view or made compatible with the architecture of the surrounding structures or placed underground. The shelter or cabinet must be regularly maintained.

Recommended conditions of approval require painting and texturing the antennas and all components to match the appearance of the utility poles and power line posts.

3. Macro Facilities may exceed the height limitation specified for all zones but may not exceed fifteen (15) feet above the roof line or parapet. Placement of an antenna on a nonconforming structure shall not be considered to be an expansion of the nonconforming structure.

This standard is inapplicable because the proposal does not involve attachment to a roofed structure.

4. Ground post mounted Macro Facilities must not exceed seventeen (17) feet to the top of the antenna.

This standard is inapplicable because the proposal does not involve ground post mounting.

5. The applicant shall submit written documentation demonstrating that the emissions from the proposed project are within the limits set by the Federal Communications Commission.

This standard is met by the proposal; a satisfactory emissions report has been submitted and is attached to this report (Attachment F).

#### 17.128.110 Site location preferences.

New wireless facilities shall generally be located on the following properties or facilities in order of preference:

- A. Co-located on an existing structure or facility with existing wireless antennas.
- B. City-owned properties or other public or quasi-public facilities.
- C. Existing commercial or industrial structures in Nonresidential Zones (excluding all HBX Zones and the D-CE-3 and D-CE-4 Zones).
- D. Existing commercial or industrial structures in Residential Zones, HBX Zones, or the DCE-3 or D-CE-4 Zones.
- E. Other Nonresidential uses in Residential Zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.
- F. Residential uses in Nonresidential Zones (excluding all HBX Zones and the D-CE-3 and D-CE-4 Zones).
- G. Residential uses in Residential Zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.

A site alternatives analysis is not required because the proposal conforms to 'B' as it would be located on a quasi-public facility (utility guy pole serving utility poles with power lines). Nonetheless, the applicant has submitted an analysis which is attached to this report (Attachment E). The project applicant considered alternative sites on other utility poles in this area but none of these sites are as desirable from a service coverage perspective or from an aesthetics perspective to minimize visual impacts. The proposed project is in an underserved area. Staff has reviewed the applicant's alternative sites analysis and determined that the site selected conforms to the telecommunication regulation requirements. In addition, staff agrees that no other available sites are more suitable.

#### 17.128.120 Site design preferences.

New wireless facilities shall generally be designed in the following order of preference:

- A. Building or structure mounted antennas completely concealed from view.
- B. Building or structure mounted antennas set back from roof edge, not visible from public right-of way.
- C. Building or structure mounted antennas below roof line (facade mount, pole mount) visible from public right-of-way, painted to match existing structure.
- D. Building or structure mounted antennas above roof line visible from public right-of-way.
- E. Monopoles.
- F. Towers.

Facilities designed to meet an A or B ranked preference do not require a site design alternatives analysis. Facilities designed to meet a C through F ranked preference, inclusive, must submit a site design alternatives analysis as part of the required application materials. A site design alternatives analysis shall, at a minimum, consist of: a. Written evidence indicating why each such higher preference design alternative cannot be used. Such evidence shall be in sufficient detail that independent verification could be obtained if required by the City of Oakland Zoning Manager. Evidence should indicate if the reason an alternative was rejected was technical (e.g. incorrect height, interference from existing RF sources, inability to cover required area) or for other concerns (e.g. inability to provide utilities, construction or structural impediments).

The proposal most closely conforms to 'C' (Building or structure mounted antennas below roof line (facade mount, pole mount) visible from public right-of-way, painted to match existing structure), and the applicant has submitted a satisfactory site design alternatives analysis (Attachment E).

#### 17.128.130 Radio frequency emissions standards.

The applicant for all wireless facilities, including requests for modifications to existing facilities, shall submit the following verifications:

- a. With the initial application, a RF emissions report, prepared by a licensed professional engineer or other expert, indicating that the proposed site will operate within the current acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.
- b. Prior to commencement of construction, a RF emissions report indicating the baseline RF emissions condition at the proposed site.
- c. Prior to final building permit sign off, an RF emissions report indicating that the site is actually operating within the acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.

In the analysis prepared (Attachment F), the proposed project was evaluated for compliance with appropriate guidelines limiting human exposure to radio frequency electromagnetic fields. According to the report, the project will comply with the prevailing standards for limiting public exposure to radio frequency energy, and therefore, the proposed site will operate within the current acceptable thresholds as established by the Federal government or any such agency that may be subsequently authorized to establish such standards. The RF emissions report, states that the proposed project will not cause a significant impact on the environment.

#### CONCLUSION

The proposed site design would not be situated on a historic pole or structure, create a view obstruction, or be directly adjacent to a primary living space such as a living room or bedroom window. The project meet all the required findings for approval and will provide an essential telecommunication service to the community and the City of Oakland at large. It will also be available to emergency services such as police, fire department and emergency response teams. Staff believes that the proposal is designed to meet the established zoning and telecommunication regulations and recommends supporting the Regular Design Review application.

#### **RECOMMENDATIONS:** 1. Affirm staff's environmental determination.

2. Approve the Regular Design Review subject to the attached Findings and Conditions of Approval.

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Prepared by:

MOE HACKETT

Planner II

Reviewed by:

KOBERT D. MERKAMP

Zoning Manager

Approved for forwarding to the Planning Commission:

ED MANASSE, Interim Deputy Director

Planning Bureau

#### **ATTACHMENTS:**

- A. Findings
- B. Conditions of Approval
- C. Plans, Current
- D. Plans, Original
- E. Photo-Simulations
- F. Site Alternatives Analysis/Site Design Alternatives Analysis
- G. RF Emissions Report
- H. CPUC Compliance Letter
- I. Applicant's Proof of Public Notification Posting

#### ATTACHMENT A: FINDINGS

This proposal meets the required findings under <u>Regular Design Review Criteria for Nonresidential Facilities (OMC Sec. 17.136.050(B))</u> and <u>Telecommunications Regulations/Design Review Criteria for Macro Telecommunications Facilities (OMC Sec. 17.128.070(B))</u>, as set forth below. Required findings are shown in **bold** type; explanations as to why these findings can be made are in normal type.

# REGULAR DESIGN REVIEW CRITERIA FOR NON-RESIDENTIAL FACILITIES (OMC SEC. 17.136.050(B))

1. That the proposal will help achieve or maintain a group of facilities which are well related to one another and which, when taken together, will result in a well-composed design, with consideration given to site, landscape, bulk, height, arrangement, texture, materials, colors, and appurtenances; the relation of these factors to other facilities in the vicinity; and the relation of the proposal to the total setting as seen from key points in the surrounding area. Only elements of design which have some significant relationship to outside appearance shall be considered, except as otherwise provided in Section 17.136.060;

The attachment of one antenna and equipment to utility guy pole, painted and texturized to match the poles and guy wire appurtenances in appearance for camouflaging, will be the least intrusive design. The proposal would not create a view obstruction, be directly adjacent to a primary living space such as a living room or bedroom window, or be located on an historic structure. The proposal will enhance essential services in an urbanized neighborhood.

2. That the proposed design will be of a quality and character which harmonizes with, and serves to protect the value of, private and public investments in the area;

The attachment of one antenna and equipment to utility guy pole, painted and texturized to match the poles and guy wire appurtenances in appearance for camouflaging, will be the least intrusive design. The proposal would not create a view obstruction, be directly adjacent to a primary living space such as a living room or bedroom window, or be located on an historic structure. The proposal will enhance essential services in an urbanized neighborhood.

3. That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.

The site is in the Detached Unit Residential area of the General Plan's Land Use and Transportation Element (LUTE). The intent of the area is: "to create, maintain, and enhance residential areas characterized by detached, single unit structures." The proposed telecommunication facilities will be mounted on existing utility guy pole within the City of Oakland public right-of-way. The proposed unmanned wireless Telecommunication Facility would not adversely affect and detract from the characteristics of the neighborhood.

# TELECOMMUNICATIONS REGULATIONS/DESIGN REVIEW CRITERIA FOR MACRO TELECOMMUNICATIONS FACILITIES (OMC SEC. 17.128.070(B))

1. Antennas should be painted and/or textured to match the existing structure.

The antenna will be painted and texturized to match the poles in appearance for camouflaging will be the least intrusive design, as required by conditions of approval.

2. Antennas mounted on architecturally significant structures or significant architectural detail of the building should be covered by appropriate casings which are manufactured to match existing architectural features found on the building.

This finding is inapplicable because the antenna will not be mounted onto an architecturally significant structure but to a wooden utility guy pole.

3. Where feasible, antennas can be placed directly above, below or incorporated with vertical design elements of a building to help in camouflaging.

The antenna will be located on top of the pole.

4. Equipment shelters or cabinets shall be screened from the public view by using landscaping, or materials and colors consistent with surrounding backdrop or placed underground or inside existing facilities or behind screening fences.

Conditions of approval require painting and texturing to match the pole in appearance for camouflaging.

5. Equipment shelters or cabinets shall be consistent with the general character of the area.

Equipment will be attached to the utility pole with an unobtrusive design.

6. For antennas attached to the roof, maintain a 1:1 ratio (example: ten (10) feet high antenna requires ten (10) feet setback from facade) for equipment setback; screen the antennas to match existing air conditioning units, stairs, or elevator towers; avoid placing roof mounted antennas in direct line with significant view corridors.

This finding is inapplicable because the antennas would be attached to a pole and not to a roofed structure.

7. That all reasonable means of reducing public access to the antennas and equipment has been made, including, but not limited to, placement in or on buildings or structures, fencing, anti-climbing measures and anti-tampering devices.

The minimal clearance to the facility will be approximately 8-feet.

#### Attachment B: Conditions of Approval

#### **Approved Use**

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, staff report and the approved revised plans dated January 3, 2019 for the application originally submitted May 30, 2018 as amended by the following conditions of approval and mitigation measures, if applicable ("Conditions of Approval" or "Conditions").

Regular Design Review with additional findings for Macro Telecommunications Facility under Case Number PLN18232 on utility guy pole in public right-of-way adjacent to 4700 Lincoln Avenue

#### 2. Effective Date, Expiration, Extensions and Extinguishment

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **two calendar years** from the Approval date, or from the date of the final decision in the event of an appeal, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this Approval, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation.

#### 3. Compliance with Other Requirements

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition #4.

#### 4. Minor and Major Changes

- a. Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning.
- b. Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

#### 5. Compliance with Conditions of Approval

a. The project applicant and property owner, including successors, (collectively referred to hereafter as the "project applicant" or "applicant") shall be responsible for compliance with all the Conditions of Approval and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.

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- b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant's expense that the as-built project conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.
- c. Violation of any term, Condition, or project description relating to the Approval is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approval or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

#### 6. Signed Copy of the Approval/Conditions

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

#### 7. Blight/Nuisances

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60 days of approval, unless an earlier date is specified elsewhere.

#### 8. Indemnification

- a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called "City") from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul this Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.
- b. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

#### 9. Severability

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

#### 10. Job Site Plans

Ongoing throughout demolition, grading, and/or construction

At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval, shall be available for review at the job site at all times.

# 11. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Monitoring

The project applicant may be required to cover the full costs of independent third-party technical review and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan-check review or construction, and inspections of potential violations of the Conditions of Approval. The project applicant shall establish a deposit with the Bureau of Building, if directed by the Building Official, Director of City Planning, or designee, prior to the issuance of a construction-related permit and on an ongoing as-needed basis.

#### 12. Public Improvements

The project applicant shall obtain all necessary permits/approvals, such as encroachment permits, obstruction permits, curb/gutter/sidewalk permits, and public improvement ("p-job") permits from the City for work in the public right-of-way, including but not limited to, streets, curbs, gutters, sidewalks, utilities, and fire hydrants. Prior to any work in the public right-of-way, the applicant shall submit plans for review and approval by the Bureau of Planning, the Bureau of Building, and other City departments as required. Public improvements shall be designed and installed to the satisfaction of the City.

#### 13. Construction Days/Hours

<u>Requirement</u>: The project applicant shall comply with the following restrictions concerning construction days and hours:

- a Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m.
- b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday.
- c. No construction is allowed on Sunday or federal holidays.

Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

#### PROJECT-SPECIFIC CONDITIONS

#### 14. Emissions Report

Requirement: A RF emissions report shall be submitted to the Planning Bureau indicating that the site is actually operating within the acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.

Requirement: Prior to a final inspection

When Required: Prior to final building permit inspection sign-off

Initial Approval: N/A

Monitoring/Inspection: N/A

#### 15. Camouflage

<u>Requirement</u>: The antenna shall be painted, texturized, and maintained matte brown (to match existing poles), and the equipment and any other accessory items including cables matte brown, to better camouflage the facility to the pole.

When Required: Prior to a final inspection

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

#### 16. Operational

Requirement: Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

#### 17. Possible Pole Removal

Requirement: Should the City light pole be permanently removed for any reason, telecommunications facility can only be re-established by applying for and receiving approval of a new application to the Oakland Planning Bureau as required by the regulations.

When Required: Ongoing Initial Approval: N/A

Monitoring/Inspection: N/A

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#### 18. Graffiti Control

#### Requirement:

- a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation:
- b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:
  - i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system.
  - ii. For galvanized poles, covering with new paint to match the color of the surrounding surface.
  - iii. Replace pole numbers.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

# SF OAKMORE 003



(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602

PSL# 428194

#### SITE INFORMATION

428194

PSI #: OWNER

PG&E CALIFORNIA JOINT POLE 870 N. MCCARTHY BLVD, SUITE 110 MILPITAS, CA 95035

APPLICANT

VERIZON WIRELESS

2785 MITCHELL DRIVE, SUITE 9 WALNUT CREEK, CA 94598

A GENT

ON AIR LLC 465 FIRST ST. WEST SUITE 101 SONOMA, CA 95476 TEL (707) 933-9633

APN ADJACENCY:

(IFO) 029-1009-011-02

SITE ADDRESS:

(NEAR) 4511 LINCOLN AVENUE

LAT:

37° 48' 34.75" (NAD 83) 122° 12' 06.85" (NAD 83)

LONG:

ALAMEDA COUNTY

COUNTY ZONING:

CITY OF OAKLAND

70NING JURISDICTION:

GROUND ELEVATION: 526.8'± AMSL

#### CODE COMPLIANCE

CONSTRUCTION WORKS AND MATERIALS MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY LOCAL JURISDICTION, INCLUDING BUT NOT LIMITED TO:

- CALIFORNIA CODE OF REGULATIONS
- 2016 CALIFORNIA BUILDING CODE 2016 CALIFORNIA MECHANICAL CODE
- 2016 CALIFORNIA PLUMBING CODE

- 2016 CALIFORNIA ELECTRIC CODE
  2016 CALIFORNIA ELECTRIC CODE
  2016 GREEN CODE
  2016 EDITION OF TITLE 24 ENERGY STANDARDS
  ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
- CITY / COUNTY ORDINANCES
- 2016 CALIFORNIA FIRE CODES WITH ALL LOCAL AMENDMENTS GO 95 REGULATIONS

# VICINITY MAP



#### DRIVING DIRECTIONS

#### DIRECTIONS FROM VERIZON WIRELESS RF MARKET OFFICE:

- Head south-west on Mitchell Dr towards N Wiget Ln
- Turn left onto N Wiget Ln Turn right onto Yanacio Valley Rd
- Ygnacio Valley Rd turns right and becomes Hillside Ave
- Turn right onto the 24 W slip road to Oakland
- Continue onto CA-24 W/Hwy 24 W
- Keep left at the fork to continue on CA-24 W Take exit 5A for Hayward towards CA-13 S
- Continue onto CA-13 S
  Take exit 2 for Joaquin Miller Rd/Lincoln Ave Turn left onto Monterey Blvd
- Turn right onto Lincoln Ave
- Pole will be left on Lincoln Ave

## **PROJECT TEAM**

#### ON AIR, LLC

ON AIR LLC 465 FIRST ST. WEST SONOMA, CA 95476

#### PROJECT MGR: JAY GRUENDLE

MOBILE: (707) 477-2782 (707) 933-9633 jgruendle@onairllc.com

#### CONSTRUCTION MANAGER: MOHAMMAD A. BASEER

MOBILE: (510) 414.7075

#### SITE ACQUISITION MGR: AARON SALARS

EMAIL: asalars@onairllc.com

#### ARCHITECT/ENGINEER

PROJECT MANAGER: RODNEY BARNES

MERIDIAN MANAGEMENT, INC. MOBILE: (707) 592-5924

**VERIZON WIRELESS** VERIZON WIRELESS 2785 MITCHELL DRIVE BUILDING 9 WALNUT CREEK, CA 94598

#### HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2, TITLE 24, CHAPTER 11B, SECTION 1103B



#### PROJECT DESCRIPTION

THIS IS AN UNMANNED TELECOMMUNICATIONS FACILITY FOR THE VERIZON WIRELESS NETWORK CONSISTING OF THE INSTALLATION AND OPERATION OF AN ANTENNA AND ASSOCIATED EQUIPMENT ON AN EXISTING WOOD POLE IN THE PUBLIC RIGHT-OF-WAY

- INSTALL NEW TELECOMMUNICATIONS EQUIPMENT BOXES ON AN EXISTING 27.0' PG&E WOOD UTILITY POLE.
  POLE-MOUNTED EQUIPMENT TO BE INSTALLED ON A GO95 COMPLIANT STANDOFF
- EQUIPMENT CONSISTS OF (1) SHROUDED CANTENNA ON TOP OF WOOD POLE EXTENSION, (1) RRU, (1) DIPLEXER, (1) FIBER DEMARC AND (1) POWER SUPPLY UNIT INSIDE OPERABLE 4' HT. VENTED SHROUD, (1) DISCONNECT SWITCH, (1) DISTRIBUTION BOX. AND (1) SMART METER ON STANDOFF BRACKET.
- INSTALL POLE STEPS AS REQUIRED
  ALL POLE EQUIPMENT TO BE PAINTED VALSPAR 'DEEP EARTH' COLOR.
- POWER SERVICE FROM OVERHEAD POC

### DRAWING INDEX

	SHEET NO:	SHEET TITLE		
Ī	T.1	TITLE SHEET		
Γ	C.1	SITE SURVEY		
Γ	C.2	SITE SURVEY		
Г	A.1	OVERALL SITE PLAN		
	A.2	POLE PLAN ENLARGEMENTS		
	A.3	ELEVATIONS		
	A.4	ELEVATIONS		
	A.5	EQUIPMENT DETAILS		
Г	A.6	EQUIPMENT DETAILS		
	A.7	EQUIPMENT DETAILS		
Г	A.8	PLUMBING DIAGRAM		
	E.1	SINGLE LINE DIAGRAM, BUSS DIAGRAM, PANEL SCHEDULE		
Г	E.2	POLE GROUNDING, ELECTRICAL DETAILS		
	TC.1	SITE SPECIFIC VEHICLE TRAFFIC CONTROL PLAN		
Γ				

#### ADMINISTRATIVE REQUIREMENTS

CONTRACTOR SHALL VERIFY ALL PLANS & (E) DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME IF USING 11"X17" PLOT, DRAWINGS WILL BE HALF SCALE

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Concord, CA 94518 707.592.5924

Project Architect:



100% Construction Drawings

Drawing Phase:

SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602 PSL #428194

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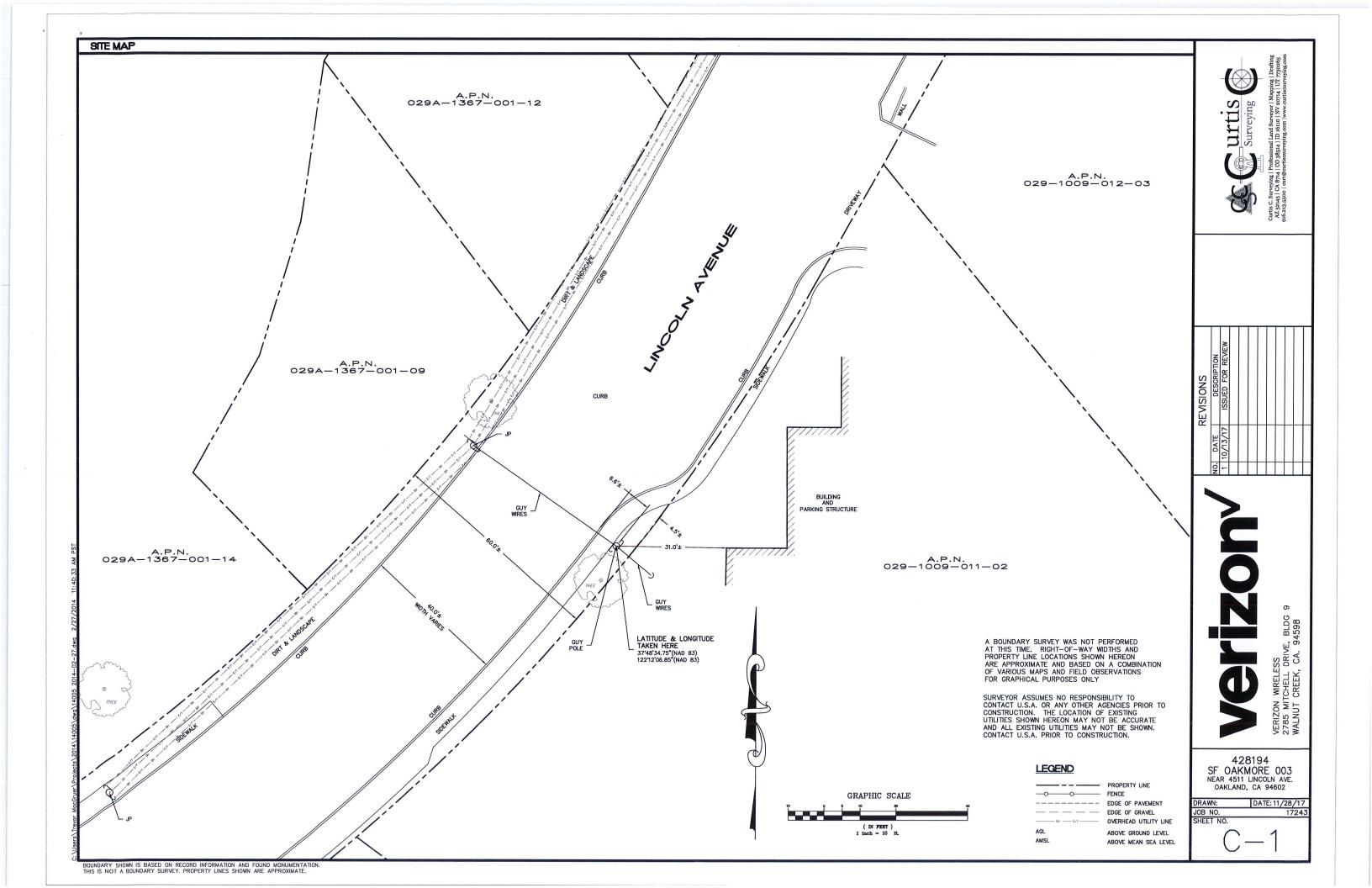
Date: 01/03/19

Scale: AS SHOWN CAD File: Designed By: JG Checked: RB

lob No.:

TITLE SHEET

Sheet Title:



POLE DETAIL TOP OF POLT \_ EL=553.8'± AMSL HT=27.0'± AGL

NOT TO SCALE



NO. DATE DESCRIPTION
1 10/13/17 ISSUED FOR REVIEW

Verizon

428194 SF OAKMORE 003 NEAR 4511 LINCOLN AVE. OAKLAND, CA 94602

DRAWN: JOB NO. SHEET NO.

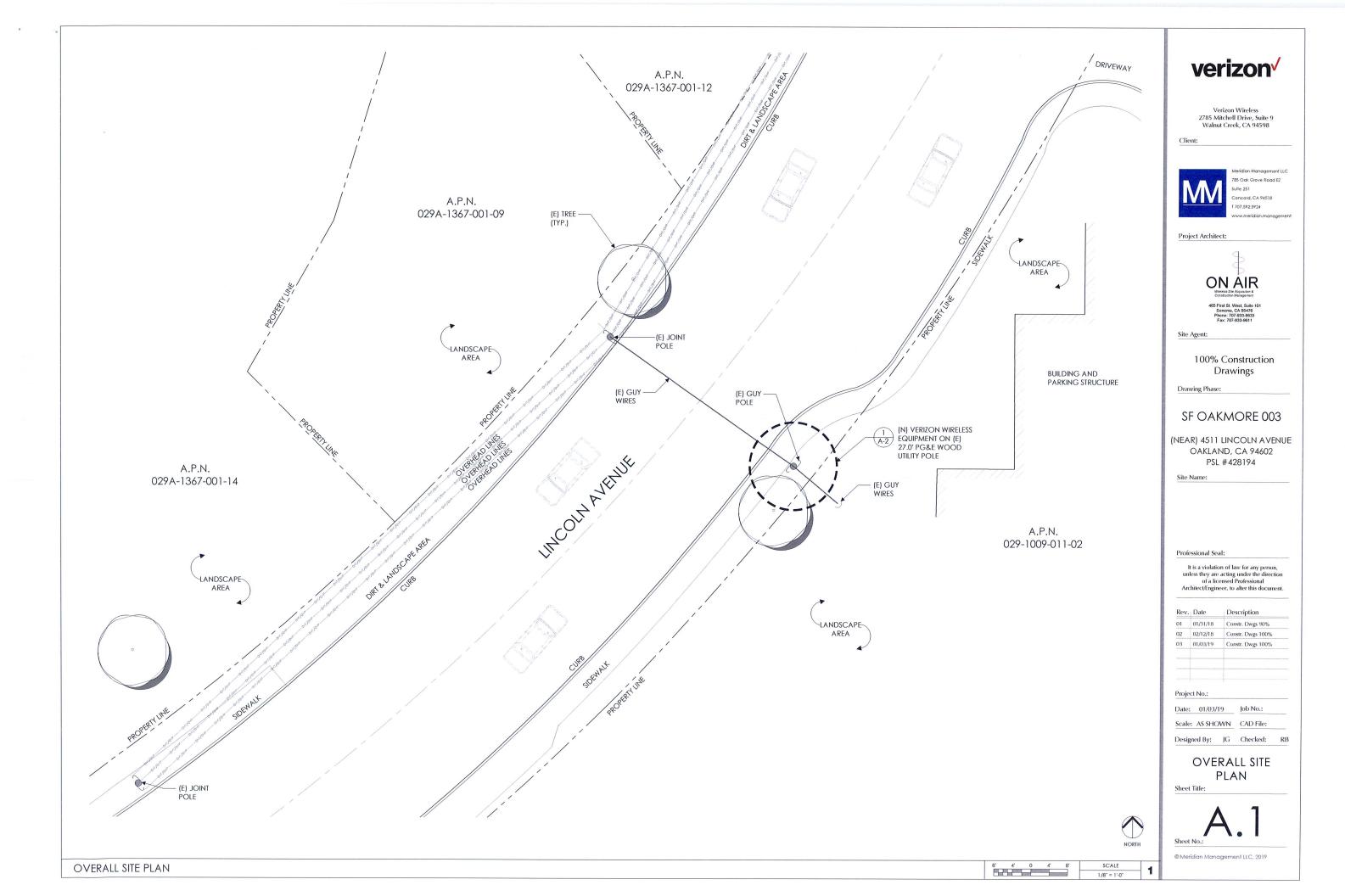
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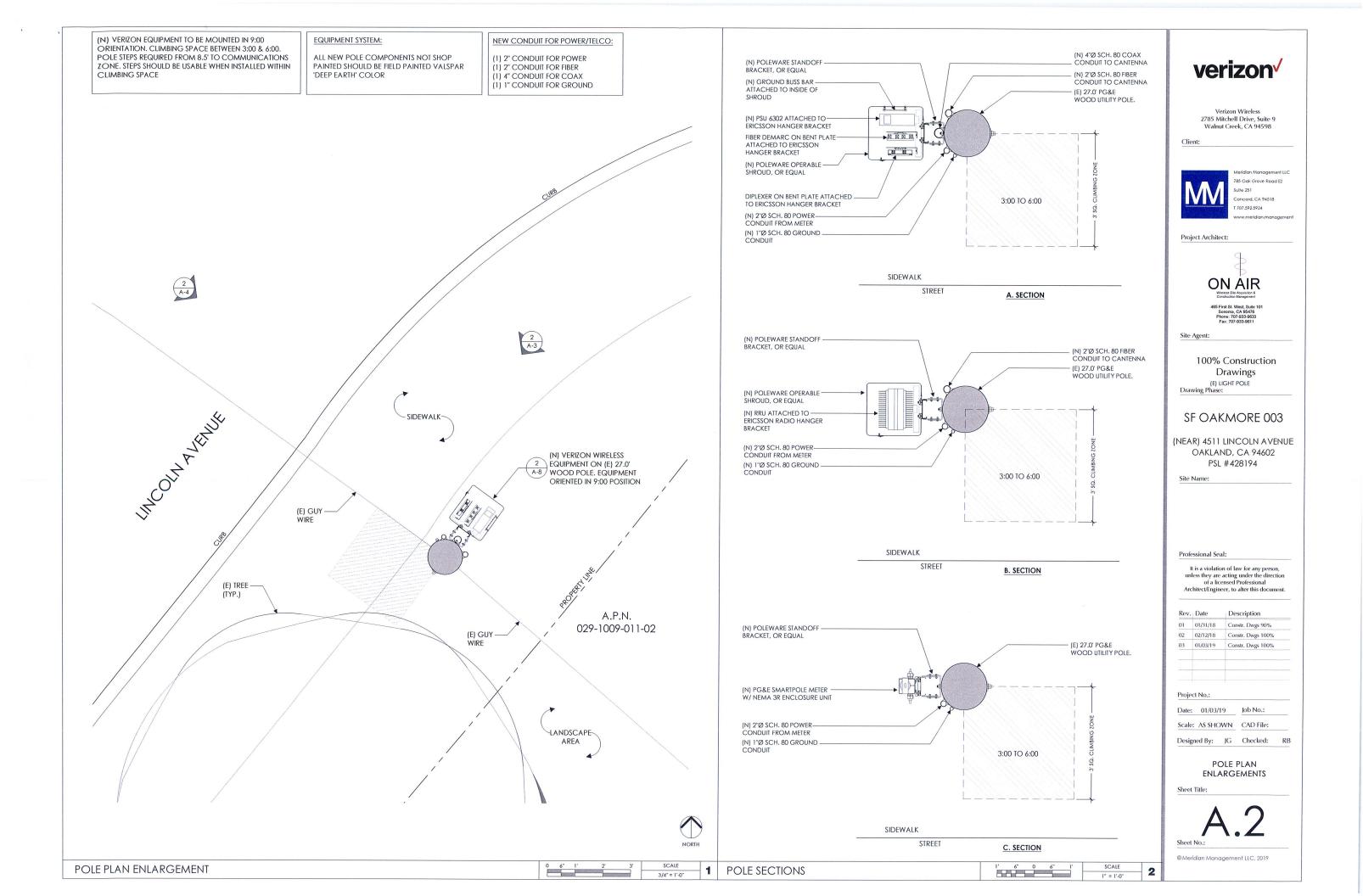
C-2

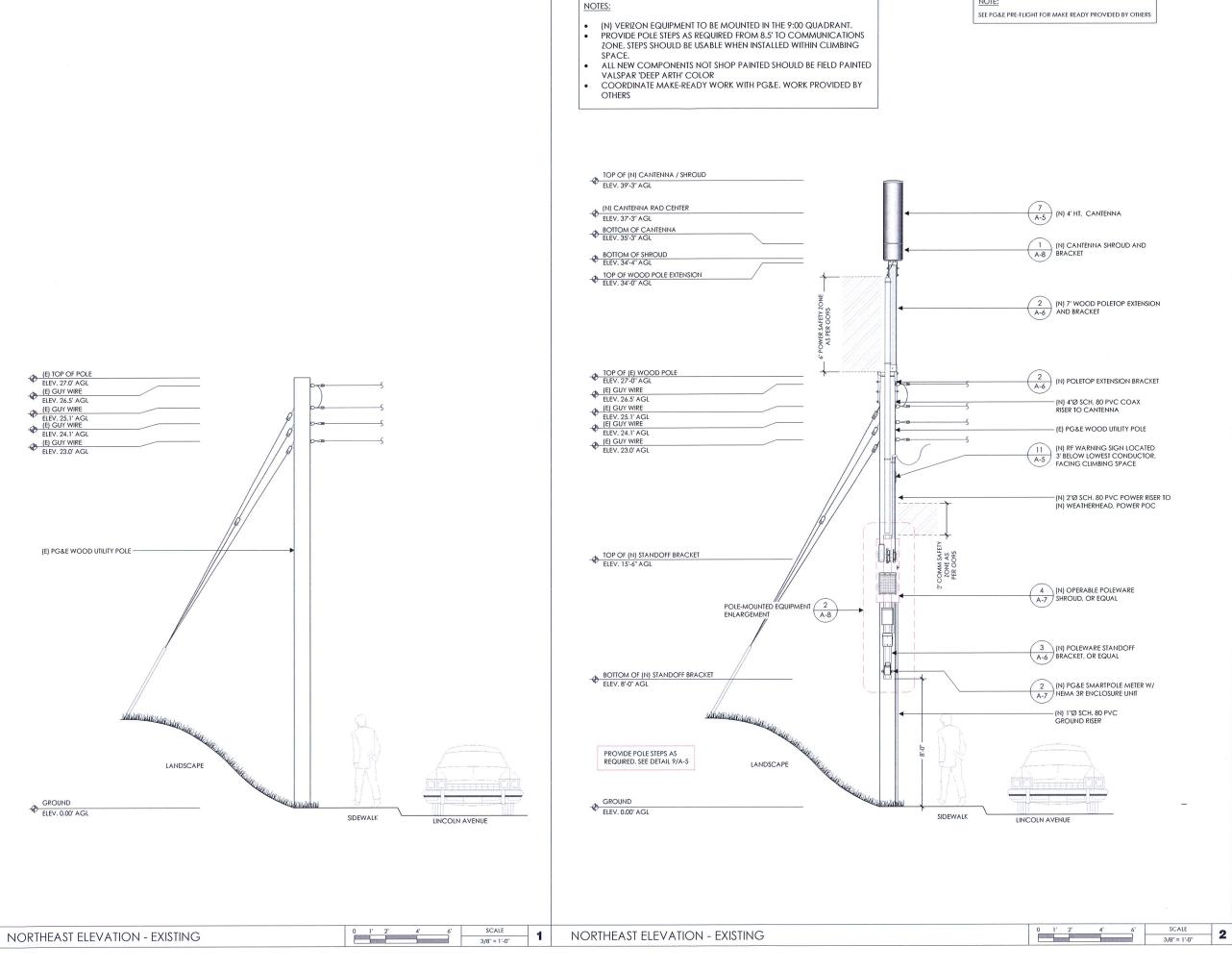
**LEGEND** 

AGL AMSL

ABOVE GROUND LEVEL
ABOVE MEAN SEA LEVEL









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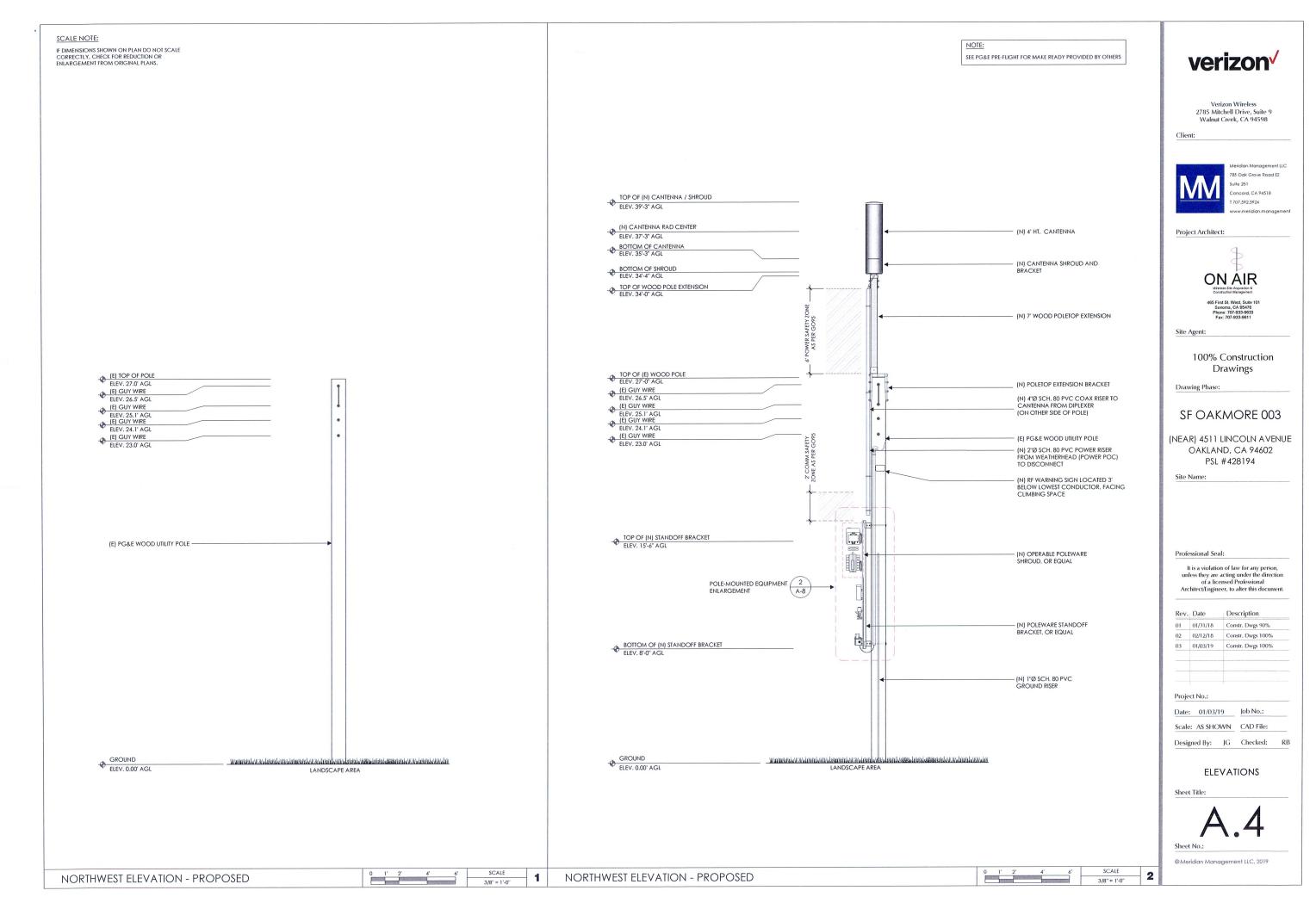
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**ELEVATIONS** 

Sheet Title:

Sheet No.:

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PULL BOX MINIMUM DIMENSION TABLE

**PULL BOX** 

HEIGHT: 8.31 INCHES

WIDTH: 2.48 INCHES

DEPTH: 7.0 INCHES

\* OR APPROVED EQUAL

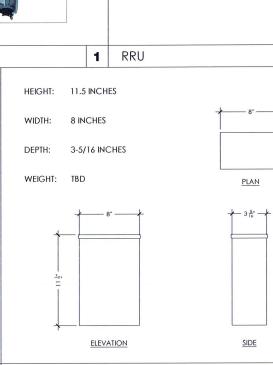
WEIGHT: 4.4 LBS

**DIPLEXER** 

FIBER TRANSPORT PULL BOX (IF REQ'D)

CONCRETE BOX COVER (PCC ONLY)

25-3/8" 13-1/4"



DISTRIBUTION PANEL

HEIGHT:

WIDTH:

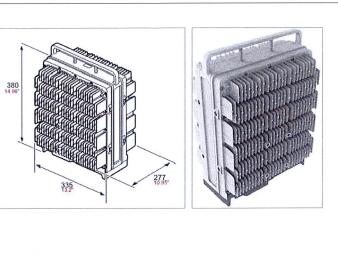
DEPTH:

WEIGHT: 75 LBS

15 INCHES

13.2 INCHES

11.0 INCHES



HEIGHT:

48.0 INCHES

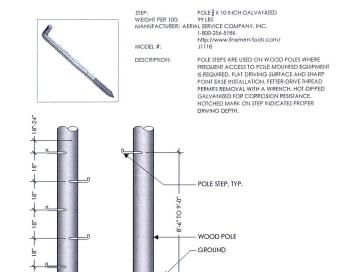
DIAMETER: 14.6 INCHES

CANTENNA

WEIGHT: 42.0 LBS (WITHOUT

MOUNTING BRACKET)





- .28 DIM

(3 HOLES)

ABC

KNOCKOUTS

KNOCKOUTS



ON AIR

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9

9.64

A.B.C

SCALE

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10

KNOCKOUTS

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01	01/31/18	Constr. Dwgs	

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**EQUIPMENT DETAILS** 

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CONTRACTOR NOTE: SITE ID WILL BE SITE ID, MARKET ID, NOTE: NEW PHENOLIC SIGN ATTACHED TO EXTERIOR PANEL NEMA 3R RAIN COVER OUTSIDE PANEL DOOR SHOWING DISCONNECT NORMAL SHUT-DOWN PROTOCOLS: 1. Call 800-264-6620 NOC 24 HRS prior to schedule a shutdown day and time. 2. Give NOC the Node number 3. On scheduled day of shutdown, pull the disconnect handle to the "OFF" position
4. Call NOC when work is completed. EMERGENCY SHUT-DOWN PROTOCOLS: 1. Call 800-264-6620 NOC immediately. 2. Give NOC the Node number
3. Pull the disconnect handle to the "OFF" position
4. Call NOC when work is completed.

DISC. OR PANEL DOOR WA LATCH-LOOP (LOCKABLE)

POLE STEPS

6.00

KNOCKOUTS

DISCONNECT SWITCH

3

**NOT USED** 

RF WARNING SIGNAGE

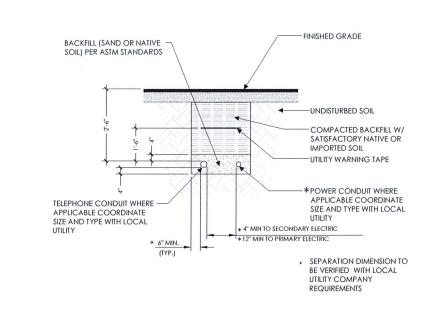
DISCONNECT SIGNAGE

ON WOOD POLES - SIGN ON ALUMINUM WITH SS SCREW TO THE POLE 3'

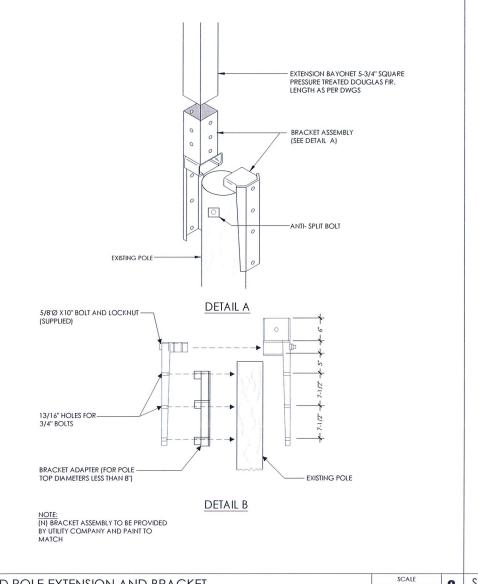
SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA (S) OR 3' BELOW LOWEST POWER WIRE

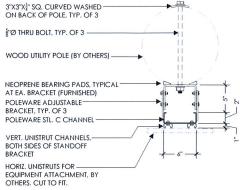
SIGN COLOR: YELLOW

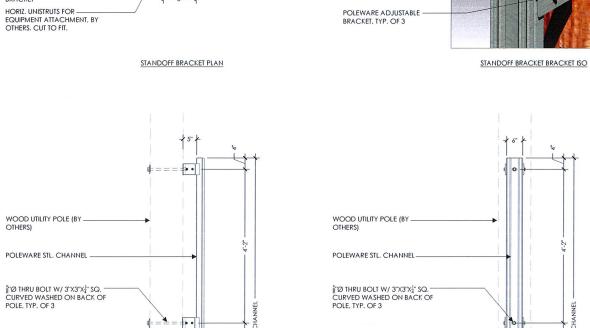
CONTRACTOR NOTE: SITE ID WILL BE SITE ID, MARKET ID, SITE #, AND SITE NAME



SCALE **UTILITY TRENCH** NOT TO SCALE







STANDOFF BRACKET SIDE ELEVATION

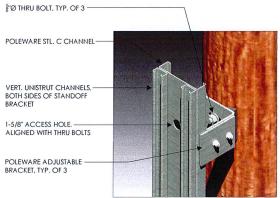
- STANDOFF BRACKET MODEL #PW-SOB-108L-WP-XX AS MFG. BY POLEWARE, LLC, (475) 215-5119, OR EQUAL
   CUSTOMER TO SPECIFY BRACKET FINISH AT TIME OF ORDERING
   LENGTH VARIES, CUSTOMER TO SPECIFY BRACKET LENGTH AT TIME OF ORDERING
- ORDERING

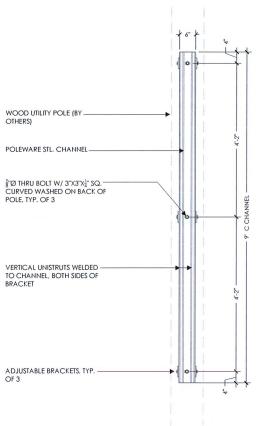
  4. UNISTRUIT COMPONENTS TO BE MFG BY UNISTRUIT CORPORATION, 1140
  W. THORNDALE AVE., ITASCA IL, 60143, (800) 468-9510.

  5. HORIZONTAL UNISTRUIS FOR EQUIPMENT INSTALLATION NOT INCLUDED

  6. NEOPRENE PADS AND ALL HARDWARE INCLUDED

  7. ALLOW 2-3 WEEKS FOR FABRICATION





STANDOFF BRACKET FRONT ELEVATION



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Date	01/05/1		

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NOTE:

VERTICAL UNISTRUTS WELDED TO CHANNEL, BOTH SIDES OF BRACKET

ADJUSTABLE BRACKETS, TYP.

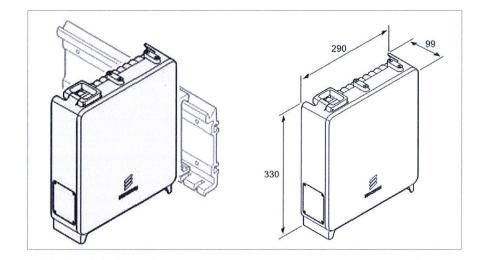
UNISTRUTS EXTENDING ABOVE AND BELOW STANDOFF BRACKET (FOR

APPLICATIONS REQUIRING 11' STANDOFF BRACKET LENGTH)

OTHERS)

8. PATENT PENDING

2



**ERICSSON POWER 6302** MODEL:

HEIGHT: 12.99 INCHES

WIDTH: 11.42 INCHES

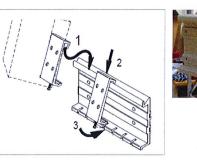
DEPTH: 3.90 INCHES

WEIGHT: 22.1 LBS

## ATTACHING THE RADIO TO RAIL

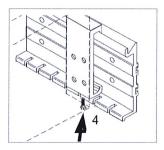


Hook the top flange on the radio bracket onto the rail upper flange and swing down so it is flush on the rail and the retaining bolt engages into the rail slot. Slide the radio to adjust spacing with adjacent radios as required (min 7mm no fan or no space with fan.





Tighten the retaining bolt with a deep 13mm socket to allow the nut to sit in the slot on the radio bracket. Torque the radio bracket bolt to 22 Nm.



13mm 22Nm

#### NOTES:

- 1. CUT TO FIT INSIDE SHROUD
- PROVIDE MOUNTING HOLES TO STANDOFF BRACKET

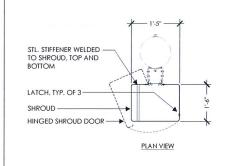
Ericsson Internal | 2016-08-23 | Page 45 (57)

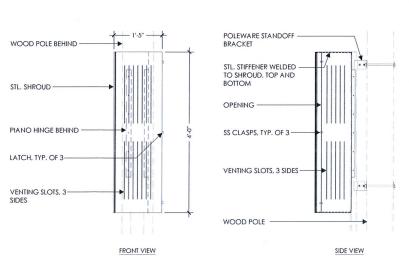
PROVIDE HANGER HOOKS FOR EACH CABINET

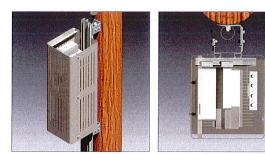
#### POWER SUPPLY UNIT AND BRACKET

PG&E SMART METER

#### ERICSSON RADIO HANGER BRACKET







#### NOTE:

- RRU SHROUD MODEL #PW-RRS-048L-SP-ST AS MFG. BY POLEWARE, LLC, (475) 215-5119, OR EQUAL
   ALL COMPONENTS TO BE SHOP PRIMED PAINTED
- UNISTRUT COMPONENTS TO BE MFG BY UNISTRUT CORPORATION, 1140 W. THORNDALE AVE., ITASCA IL, 60143, (800) 468-9510.
- CUSTOMER TO SPECIFY SHROUD HEIGHT AT TIME OF ORDERING.

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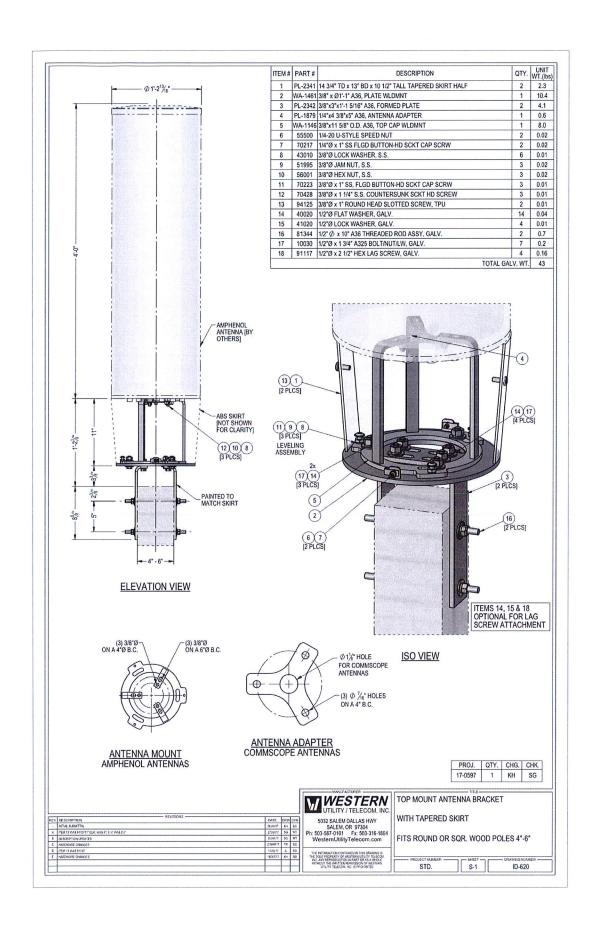
Scale: AS SHOWN CAD File:

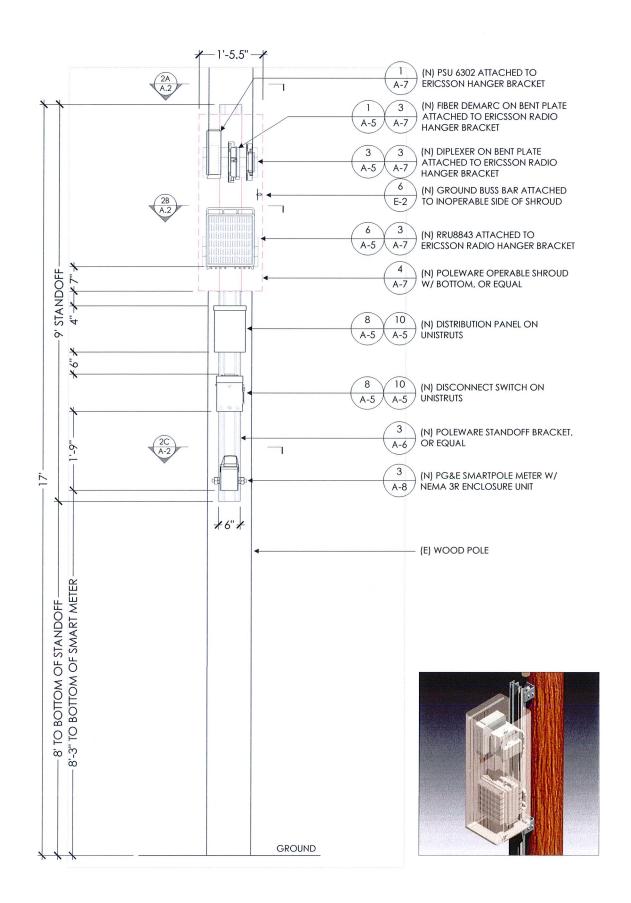
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4' HT. OPERABLE SHROUD







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EQUIPMENT

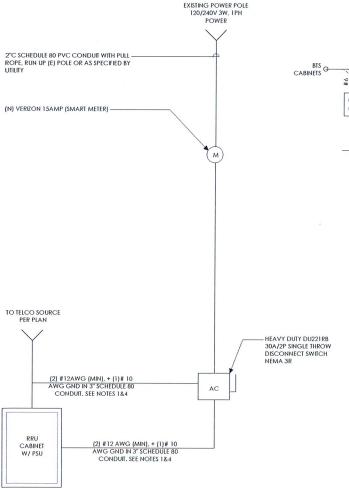
Job No.:

Sheet Title:

**8.A** 

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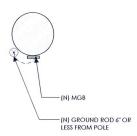


# CABINETS CABINETS ANTENNA MOUNTS OCOAX GND KITS VALMONT 2X10 GROUND BUSS #82980 OR EQUIVALENT WITH HOLE PATTEEN. STANDOFF

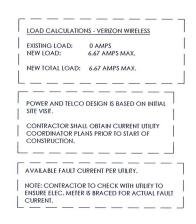
**BUSS DIAGRAM** 

CONDUCTORS, AND BRACKETS

#### SINGLE LINE DIAGRAM



**GROUNDING PLAN** 



#### POWER AND TELCO NOTES:

- . POWER AND TELCO POINTS OF CONNECTION AND ANY EASEMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE BY THE UTILITY COMPANIES.
- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY ENGINEERING PLANS AND SPECIFICATIONS ONLY WHERE APPLICABLE PER PROJECT SCOPE OF WORK.
- 3. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT, PULL WIRES, CABLE PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT, TRANSFORMER PAD, BARRIERS, POLE RISER TRENCHING, BACK FILL, AND UTILITY FEES, AND INCLUDE REQUIREMENTS IN SCOPE
- 4. CONTRACTOR SHALL LABEL ALL MAIN DISCONNECT SWITCHES AS REQUIRED BY CODE.

#### NOTES:

- SUBCONTRACTOR SHALL PROVIDE METER WITH DIST. PANEL AND BREAKERS FOR POWER TO THE BTS UNITS AND THE BTS/UTILITY CABINET.
- ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE REQUIREMENTS.
- 3. SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE ENTRANCE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
- 4. FIELD ROUTE CONDUIT TO CABINETS AS REQUIRED.
- 5. MAXIMUM ONE WAY CIRCUIT RUN NOT TO EXCEED 75 FEET.

#### GENERAL ELECTRICAL NOTES:

- PROVIDE ALL ELECTRICAL WORK & MATERIALS AS SHOWN ON THE DWGS, AS CALLED FOR HEREIN, & AS IS NECESSARY TO FURNISH A
  COMPLETE INSTALLATION.
- 2. THE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ADOPTED CALIFORNIA ELECTRICAL CODE, STATE OF CALIFORNIA TITLE24, ALL OTHER APPLICABLE CODES AND ORDINANCES & THE REQUIREMENTS OF THE FIRE MARSHALL. ALL EQUIPMENT & WIRING SHALL BEAR THE APPROVAL STAMP OF UNDERWRITERS LABORATORY (UL) OR AN APPROVED TESTING LABORATORY, PAYMENT FOR ALL INSPECTION FEES AND PERMITS ARE PART OF THIS CONTRACT.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS & EQUIPMENT FOR THE ENTIRE INSTALLATION & UNIT COMPLETION OF WORK, ERECT & MAINTAIN APPROVED & SUITABLE BARRIERS, PROTECTIVE DEVICES & WARNING SIGNS, BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSONS OR PROPERTY RESULTING FROM NEGLIGENCE AND/OR ENFORCEMENT OF ALL SAFETY PRECAUTIONS & WARNINGS.
- 4. COORDINATE THE ELECTRICAL INSTALLATION WITH ALL OTHER TRADES.
- 5. ALL SAW CUTTING, TRENCHING, BACK FILLING & PATCHING SHALL BE PART OF THIS CONTRACT.
- 6. FINALIZE ALL ELECTRICAL SERVICE ARRANGEMENTS, INCLUDING VERFICATION OF LOCATIONS, DETAILS, COORDINATION OF THE INSTALLATION & PAYMENT OF ACCRUED CHARGES WITH LOCAL POWER COMPANY, VERIFY LOCATION FOR FACILITIES & DETAILS WITH POWER UTILITY, IN ADDITION TO THE REQUIREMENTS SHOWN IN THE CONTRACT DOCUMENTS, WORK SHALL COMPLY WITH CONSTRUCTION STANDARDS & SERVICE REQUIREMENTS OF THE RESPECTIVE UTILITIES, INCLUDING ANY SUPPLEMENTAL DWGS ISSUED & SHALL BE SUBJECT TO A PPROVAL OF THESE UTILITIES.
- 7. ALL WIRING SHALL BE COPPER. INSULATION FOR BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE "THWN" CONDUCTORS LARGER AND #6 AWG MAY BE TYPE "THWN" OR "TWN".
- 8. PROVIDE CONDUIT SEALS FOR ALL CONDUITS PENETRATING WEATHERPROOFING OR WEATHERPROOF ENCLOSURE ENVELOPE. MASTIC SEAL ALL CONDUIT OPENING PENETRATIONS COMPLETELY WATERTIGHT.
- 9. UNLESS SHOWN OTHERWISE, FUSED DISCONNECT SWITCHES SHALL BE PROVIDED WITH LOW-PEAK, S\DUAL ELEMENT FUSES SIZED TO EQUIPMENT NAMEPLATE FUSE CURRENT RATING. MOTOR STARTERS SHALL BE PROVIDED WITH SIMILARLY SIZED FUSIBLE ELEMENTS, SWITCHES AND OTHER OUTDOOR EQUIPMENT SHALL BE RATED NEMA 3R AND/OR UL LISTED FOR WET ENVIRONMENT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE GROUNDING SYSTEM AND ENSURING A 5 OHM OR LESS GROUNDING PATH, ADDITIONAL GROUND RODS AND/OR CHEMICAL ROD SYSTEM SHALL BE USED TO ACHIEVE THIS REQUIREMENT IF THE GIVEN DESIGN CANNOT BE MADE TO ACHIEVE THIS REQUIREMENT.



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Site Name:

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03	01/03/19	Cor	str. Dwgs 100%
Proje	ct No.:		
Date:	01/03/1	9	Job No.:
Scale	: AS SHO	WN	CAD File:

SINGLE LINE DIAGRAM BUSS DIAGRAM PANEL SCHEDULE

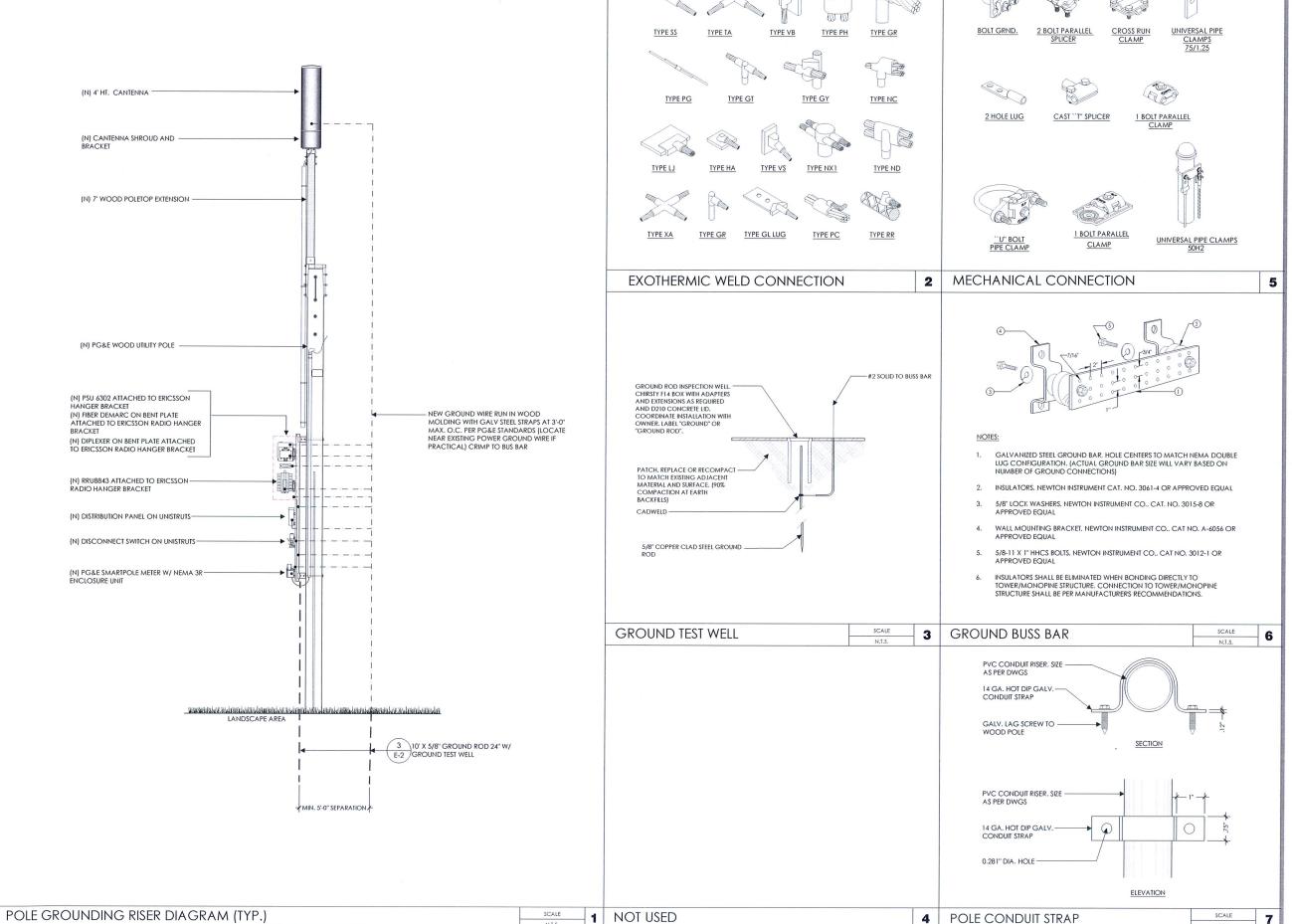
Designed By: JG Checked: RB

Sheet Title

Sheet No.:

E.1

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Concord, CA 94518 T 707,592,5924

Project Architect:



Site Agent:

100% Construction Drawings

Drawing Phase:

#### SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602 PSL #428194

Professional Seal:

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01 01/31/16 Constr. DW	gs 90%
02 02/12/18 Constr. Dw	gs 100%
03 01/03/19 Constr. Dw	gs 100%
03 01/03/19 Constr. Dw	gs 100%

Project No.:

Date: 01/03/19

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

**ELECTRICAL DETAILS** 

Job No.:

Meridian Management LLC, 2019

#### PLAN NOTES:

- 1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY VEHICULAR TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY, CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
- 2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
- 3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING. DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
- 4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
- 5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.

#### LEGEND

CHANNELIZING DEVICE

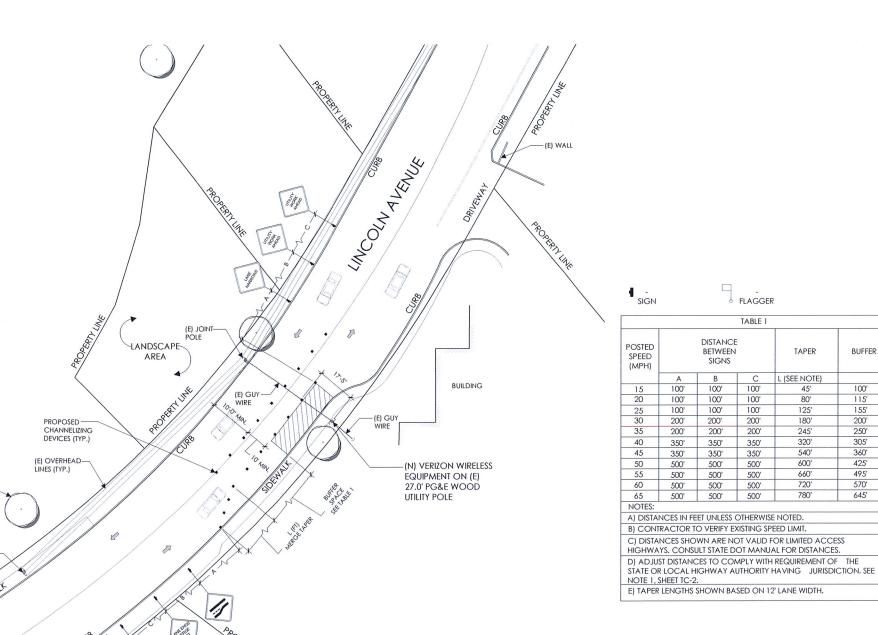
WORK SPACE FLAGGER

DIRECTION OF TRAFFIC

FLASHING ARROW SIGN (FAS)

(E) TREE

(E) JOINT-POLE



- 1. WHEN LANE CLOSURE IS REQUIRED, THE TRAFFIC CONTROL PLAN SHOULD BE PROVIDED AND NOTARIZED BY AN INDIVIDUAL/COMPANY THAT HAS
- 2. "BLUE-LIGHTS" (OFF-DUTY POLICE OFFICERS) WILL BE ON SITE FOR LANE CLOSURES AND IF REQUIRED.

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Project Architect:



100% Construction Drawings (E) LIGHT POLE
Drawing Phase:

SF OAKMORE 003

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Project No.:

Date: 01/03/19 Job No.:

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SITE SPECIFIC VEHICLE

TRAFFIC CONTROL PLAN

NORTH

-FLAGGER

DISTANCE

BETWEEN

SIGNS

100'

100'

200'

200'

350'

100'

100'

100'

100'

200'

350'

200'

TABLE 1

100'

100'

200'

350'

350'

100'

TAPER

L (SEE NOTE)

180'

320'

600'

720'

BUFFER

115'

155'

200'

250'

305' 360'

425'

495

570'

645'







verizon<sup>/</sup>

SF Oakmore 003 Site # 428194

Aerial Map



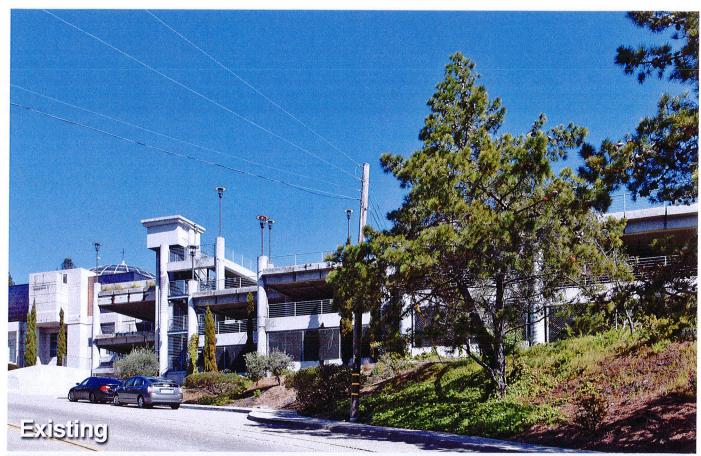


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SF Oakmore 003 Site # 428194

Looking Southwest from Lincoln Ave.

View #1





verizon /

SF Oakmore 003 Site # 428194

Looking Northeast from Lincoln Ave.

PSL #:

OWNER:

APPLICANT

AGENT:

APN ADJACENCY:

ZONING JURISDICTION:

GROUND ELEVATION:

SITE ADDRESS:

LONG:

COUNTY:

ZONING:



# SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602

PSL #428194

# PROJECT TEAM

#### ON AIR, LLC

465 FIRST ST. WEST SUITE 101 SONOMA, CA 95476

#### PROJECT MGR: JAY GRUENDLE

MOBILE: (707) 477-2782 (707) 933-9633 jgruendle@onairllc.com EMAIL:

CONSTRUCTION MANAGER: MOHAMMAD A. BASEER

MOBILE: (510) 414.7075

#### SITE ACQUISITION MGR: AARON SALARS

MOBILE: (707) 320-7248 OFFICE: (707) 933-9633 EMAIL: asalars@onairllc.com

#### ARCHITECT/ENGINEER

PROJECT MANAGER: RODNEY BARNES

MERIDIAN MANAGEMENT, INC. MOBILE: (707) 592-5924 EMAIL: rodney@meridian.managemen

#### VERIZON WIRELESS

VERIZON WIRELESS BUILDING 9 WALNUT CREEK, CA 94598



VICINITY MAP

#### CODE COMPLIANCE

SITE INFORMATION

MILPITAS, CA 95035

TEL (408) 635-8775

VERIZON WIRELESS

ON AIR LLC 465 FIRST ST. WEST

TEL (707) 933-9633

SONOMA, CA 95476

(IFO) 029-1009-011-02 (NEAR) 4511 LINCOLN AVENUE

OAKLAND, CA 94602

37° 48' 34.75" (NAD 83)

122° 12' 06.85" (NAD 83)

ALAMEDA COUNTY

PUBLIC ROW

SUITE 101

PG&E CALIFORNIA JOINT POLE

2785 MITCHELL DRIVE, SUITE 9

WALNUT CREEK, CA 94598

870 N. MCCARTHY BLVD, SUITE 110

NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY LOCAL JURISDICTION INCLUDING BUT NOT LIMITED TO:

- CALIFORNIA CODE OF REGULATIONS
- 2016 CALIFORNIA BUILDING CODE
  2016 CALIFORNIA MECHANICAL CODE
  2016 CALIFORNIA PLUMBING CODE
  2016 CALIFORNIA FLECTRIC CODE
- 2016 GREEN CODE 2016 EDITION OF TITLE 24 ENERGY STANDARDS

- ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
   CITY / COUNTY ORDINANCES
   2016 CALIFORNIA FIRE CODES WITH ALL LOCAL AMENDMENTS
   GO 95 REGULATIONS

#### DRIVING DIRECTIONS

#### DIRECTIONS FROM VERIZON WIRELESS RF MARKET OFFICE:

- Head south-west on Mitchell Dr towards N Wiget Ln
- Turn left onto N Wiget Ln
- Turn right onto Ygnacio Valley Rd
- Ygnacio Valley Rd turns right and becomes Hillside Ave Turn right onto the 24 W slip road to Oakland
- Continue onto CA-24 W/Hwy 24 W Keep left at the fork to continue on CA-24 W
- Take exit 5A for Hayward towards CA-13 S
- Continue onto CA-13 S
- Take exit 2 for Joaquin Miller Rd/Lincoln Ave
- Turn left onto Monterey Blvd
- Turn right onto Lincoln Ave Pole will be left on Lincoln Ave

#### HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2, TITLE 24, CHAPTER 11B, SECTION 1103B



# PROJECT DESCRIPTION

**APPROVALS** 

THIS IS AN UNMANNED TELECOMMUNICATIONS FACILITY FOR THE VERIZON WIRELESS NETWORK CONSISTING OF THE INSTALLATION AND OPERATION OF AN ANTENNA AND ASSOCIATED EQUIPMENT ON AN EXISTING WOOD POLE IN THE PUBLIC RIGHT-OF-WAY.

VERIZON CONSTRUCTION

**VERIZON - RF ENGINEE** 

ON AIR - CONSTRUCTION

**VERIZON - EQUIPMENT ENGINEER** 

SIGNATURE:

SIGNATURE: VERIZON REAL ESTATE

SIGNATURE. PROPERTY OWNER SIGNATURE

SIGNATURE: ON AIR - LEASING

ON AIR - ZONING

ON AIR - MANAGEMEN

OTHER (IF APPLICABLE) SIGNATURE:

- 1. INSTALL NEW TELECOMMUNICATIONS EQUIPMENT BOXES ON AN EXISTING 27.0' PG&E
- 2. POLE-MOUNTED EQUIPMENT TO BE INSTALLED ON A GO95 COMPLIANT STANDOFF
- BRACKET.
  EQUIPMENT CONSISTS OF (1) 4' HT. SHROUDED CANTENNA ON TOP OF WOOD POLE EXTENSION, (1) RRUS32, (1) RADIO 2212, (6) HYBRID COMBINERS INSIDE SHROUD, (1) DISCONNECT SWITCH, (1) FIBER DEMARC BOX, (2) POWER SUPPLY UNITS, 4" COAX RISER AND (1) POLE-MOUNTED POWER METER.
- INSTALL POLE STEPS AS REQUIRED
  ALL POLE EQUIPMENT TO BE PAINTED SHERWIN WILLIAMS MESA BROWN.
- POWER SERVICE FROM OVERHEAD POC

## DRAWING INDEX

SHEET NO:	SHEET TITLE		
T.1	TITLE SHEET		
C.1	SITE SURVEY		
C.2	SITE SURVEY		
A.1	OVERALL SITE PLAN		
A.2	POLE PLAN ENLARGEMENTS		
A.3	ELEVATIONS		
A.4	ELEVATIONS		
A.5	EQUIPMENT DETAILS		
A.6	EQUIPMENT DETAILS		
A.7	EQUIPMENT DETAILS		
A.8	PLUMBING DIAGRAM		
E.1	SINGLE LINE DIAGRAM, BUSS DIAGRAM, PANEL SCHEDULE		
E.2	POLE GROUNDING, ELECTRICAL DETAILS		
TC.1	SITE SPECIFIC VEHICLE TRAFFIC CONTROL PLAN		

#### ADMINISTRATIVE REQUIREMENTS

CONTRACTOR SHALL VERIFY ALL PLANS & (E) DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME IF USING 11"X17" PLOT, DRAWINGS WILL BE HALF SCALE

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Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



Project Architect



100% Construction Drawings

Drawing Phase:

SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602 PSL #428194

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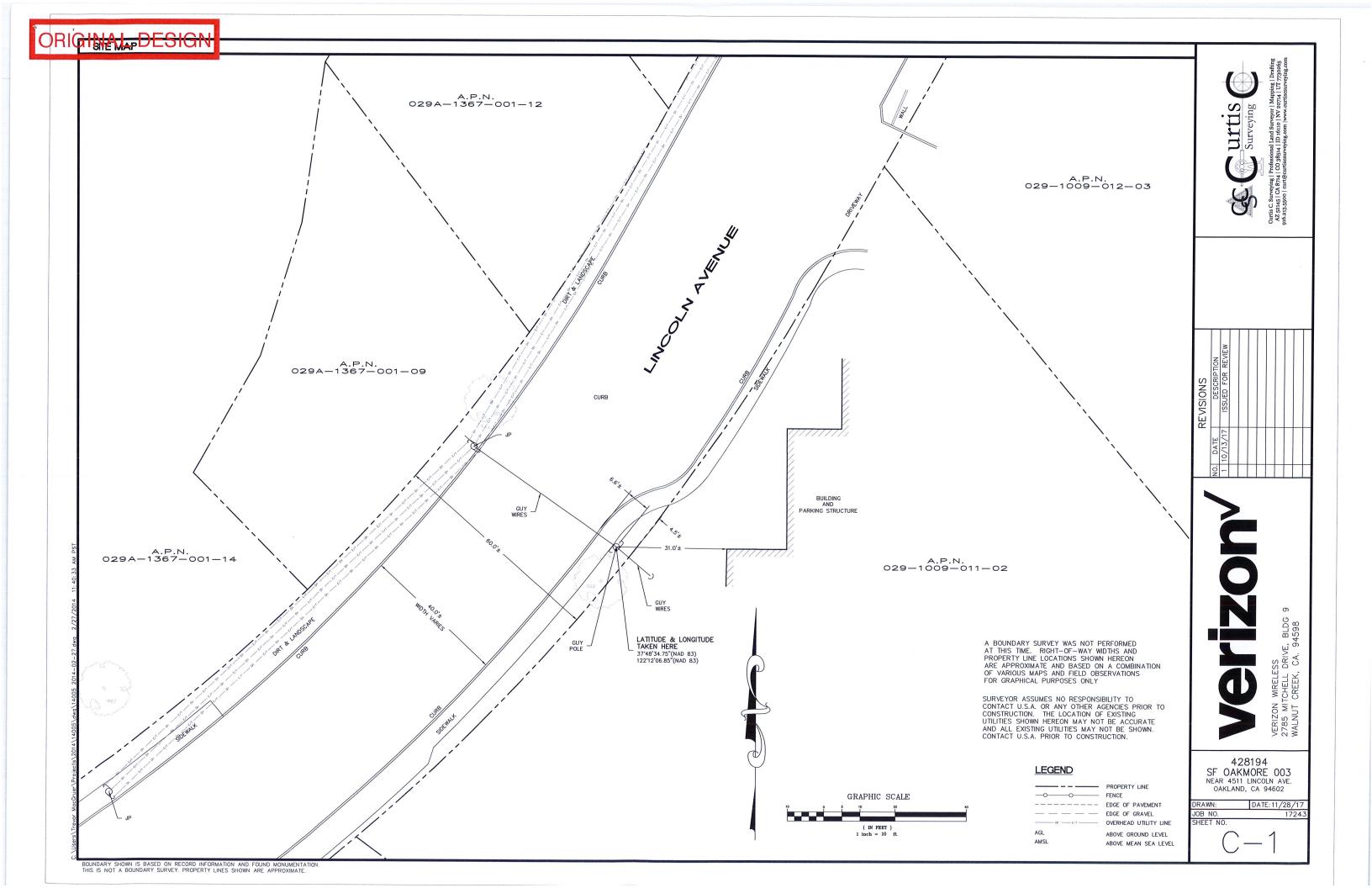
Project No.:

Date: 02/12/18 Job No.: Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

TITLE SHEET

Sheet Title





NO. DATE DESCRIPTION
1 10/13/17 ISSUED FOR REVIEW

FRIZON WIRELESS
7.785 MITCHELL DRIVE, BLDG 9
MALNUT CREEK, CA. 94598

428194 SF OAKMORE 003 NEAR 4511 LINCOLN AVE. OAKLAND, CA 94602

DRAWN: DATE: 11/28/17
JOB NO. 1724
SHEET NO.

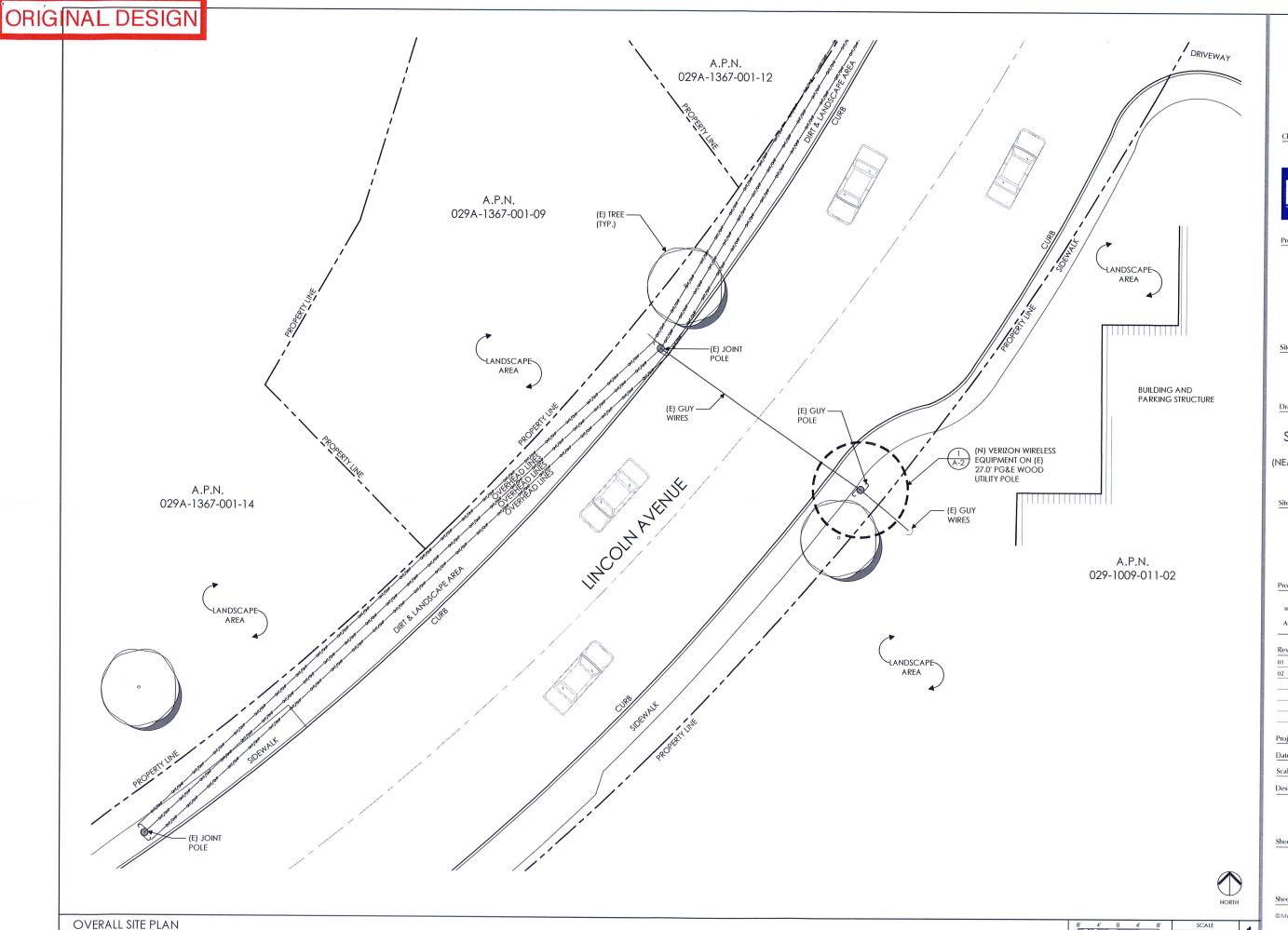
C-2



LEGEND

AGL AMSL

ABOVE GROUND LEVEL
ABOVE MEAN SEA LEVEL





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Concord, CA 94518

Project Architect:



100% Construction Drawings

Drawing Phase:

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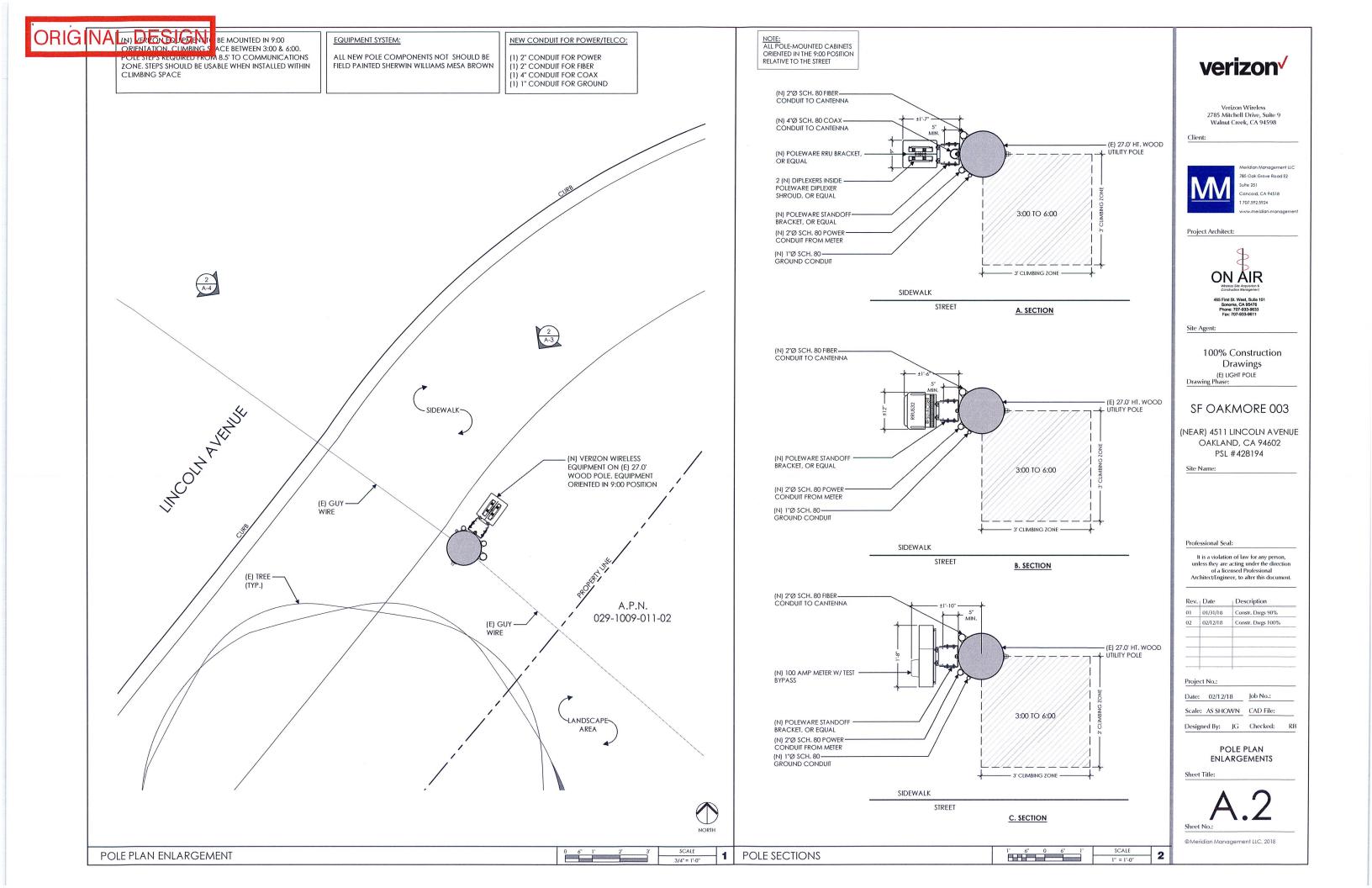
Date: 02/12/18 Job No.:

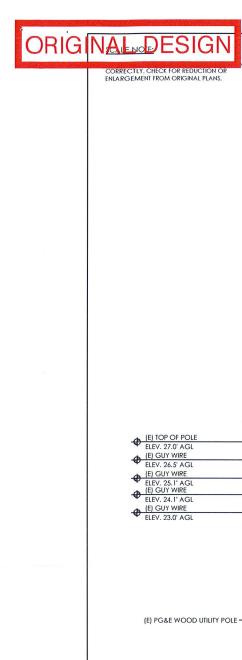
Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

**OVERALL SITE** PLAN

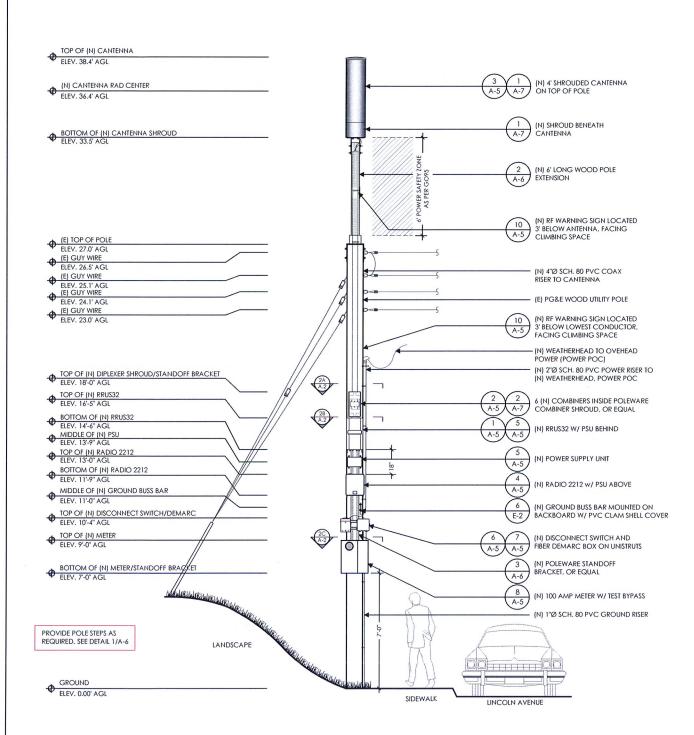
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GROUND ELEV. 0.00' AGL

- (N) VERIZON EQUIPMENT TO BE MOUNTED IN THE 9:00 QUADRANT.
- PROVIDE POLE STEPS AS REQUIRED FROM 8.5' TO COMMUNICATIONS ZONE. STEPS SHOULD BE USABLE WHEN INSTALLED WITHIN CLIMBING SPACE.
- ALL NEW COMPONENTS NOT SHOULD BE FIELD PAINTED SHERWIN WILLIAMS MESA BROWN
- COORDINATE MAKE-READY WORK WITH PG&E. WORK PROVIDED BY OTHERS





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Project Architect:



Site Agent:

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Drawing Phase:

### SF OAKMORE 003

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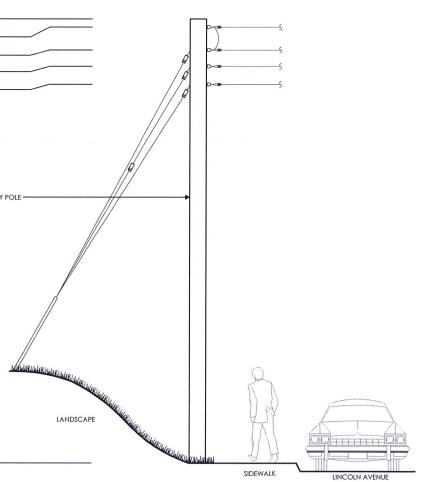
Date: 02/12/18

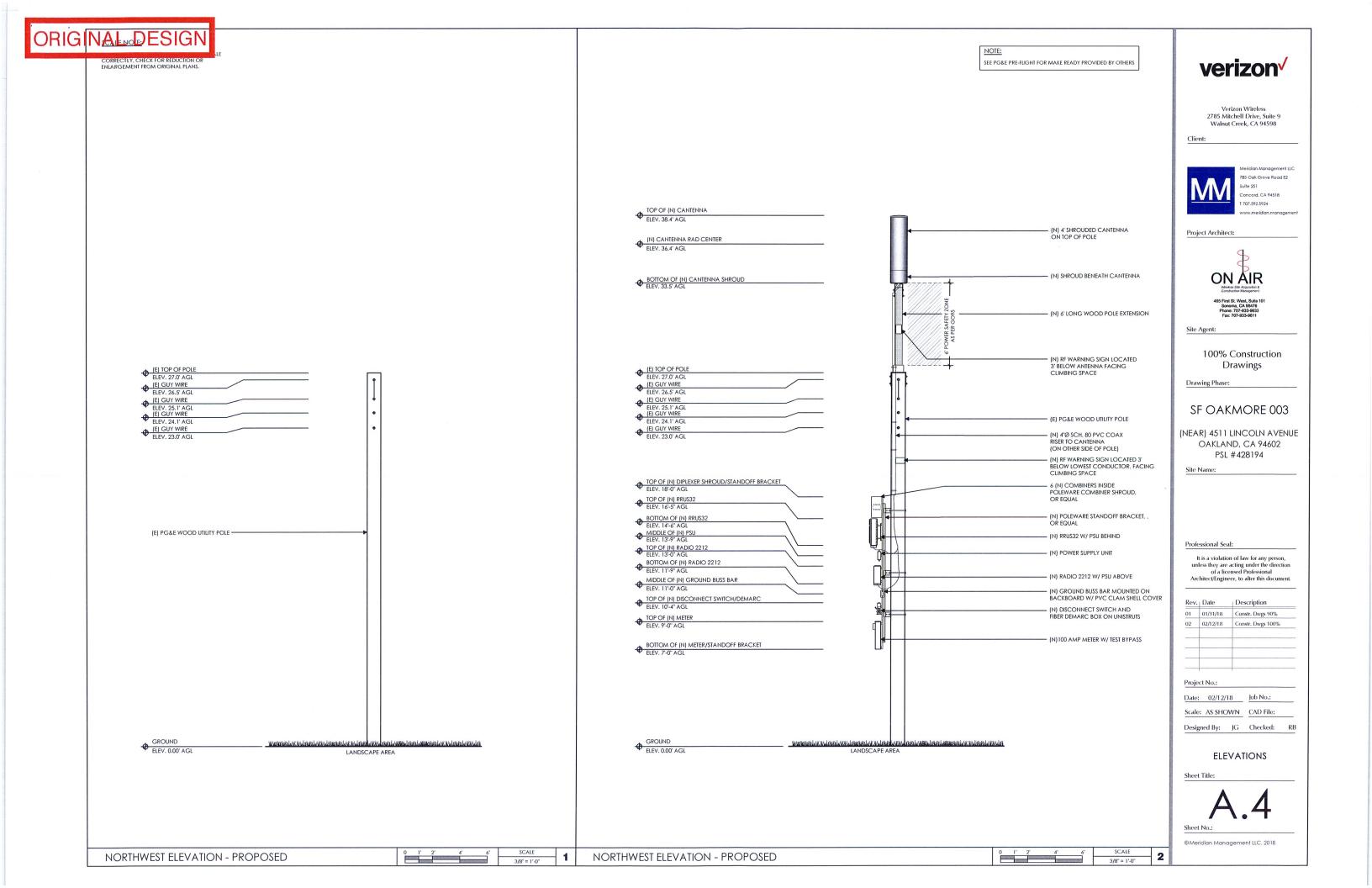
Job No.: Scale: AS SHOWN CAD File:

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**ELEVATIONS** 

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RRUS32

HEIGHT: 3.2 INCHES

WIDTH: 6.85 INCHES

DEPTH: 1.48 INCHES

WEIGHT: 2.4 LBS

ERICSSON RRU32 B2

HEIGHT: 27.2 INCHES

WIDTH: 12.1 INCHES

LENGTH: 7.0 INCHES

WEIGHT: 53 LBS (EXCLUDES MOUNTING HARDWARE)



ERICSSON RADIO 2212 B13/B5

16.54 INCHES HEIGHT:

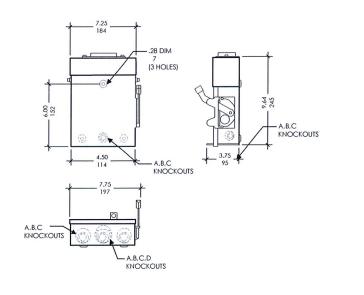
13.47 INCHES WIDTH:

DEPTH: 6.3 INCHES

WEIGHT: 47.4 LBS

(INCLUDES FAN UNIT)





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Site Agent:

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Drawing Phase:

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		-

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**EQUIPMENT** 

DETAILS

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**RADIO 2212** 

HEIGHT: 2.72 INCHES WIDTH: 10.79 INCHES

DEPTH: 7.0 INCHES

WEIGHT: 11.46 LBS

(USED FOR RRUS32)



100 AMP METER W/ TEST **BYPASS** 

DISCONNECT SWITCH

HEIGHT: 24 INCHES

WIDTH: 25 INCHES

DEPTH: 4-5/8 INCHES



HYBRID COMBINER

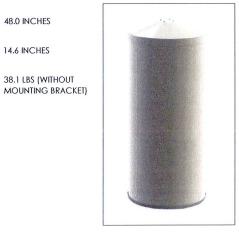
POWER SUPPLY UNIT (PSU AC 08)

ELECTRIC METER

HEIGHT: 48.0 INCHES

DIAMETER: 14.6 INCHES

38.1 LBS (WITHOUT



FIBER DEMARC **ENCLOSURE BOX** 

8.54 INCHES

10 INCHES

HEIGHT: WIDTH:

DEPTH: 2.88 INCHES



NOTE: NEW PHENOLIC SIGN ATTACHED

# NORMAL SHUT-DOWN PROTOCOLS:

1. Call 800-264-6620 NOC 24 HRS prior to schedule

a shutdown day and time. 2. Give NOC the Node number

On scheduled day of shutdown, pull the disconnect handle to the "OFF" position.

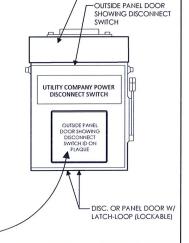
4. Call NOC when work is completed.

#### EMERGENCY SHUT-DOWN PROTOCOLS:

1. Call 800-264-6620 NOC immediately.

Give NOC the Node number \_\_\_\_\_.
 Pull the disconnect handle to the "OFF" position.

4. Call NOC when work is completed.



CONTRACTOR NOTE: SITE ID WILL BE SITE ID, MARKET ID,

- NEMA 3R RAIN COVER

SITE #, AND SITE NAME

ON WOOD POLES - SIGN ON ALUMINUM WITH SS SCREW TO THE POLE 3' BELOW ANTENNA SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA (S) OR

3' BELOW LOWEST POWER WIRE

SIGN COLOR: YELLOW

CONTRACTOR NOTE: SITE ID WILL BE SITE ID, MARKET ID, SITE #, AND SITE NAME

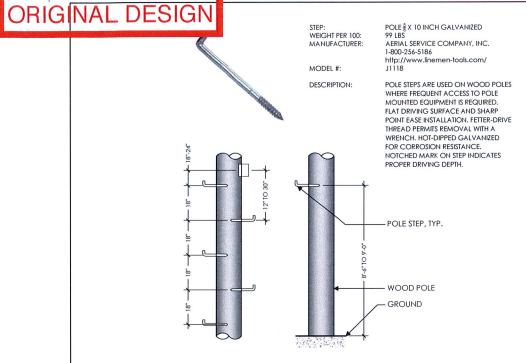
CANTENNA

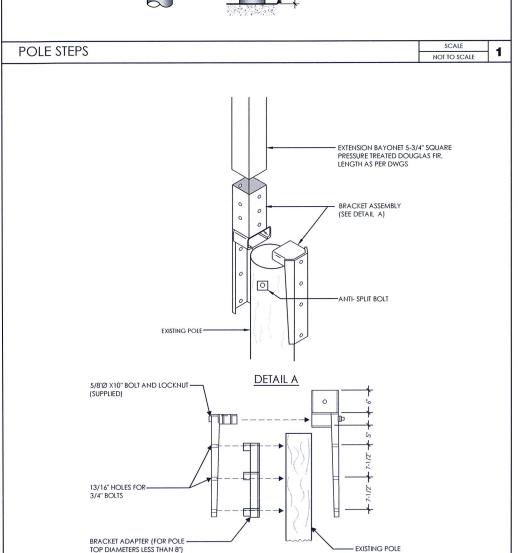
DISCONNECT SIGNAGE

RF WARNING SIGNAGE

FIBER DEMARC BOX

10



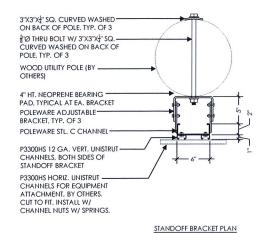


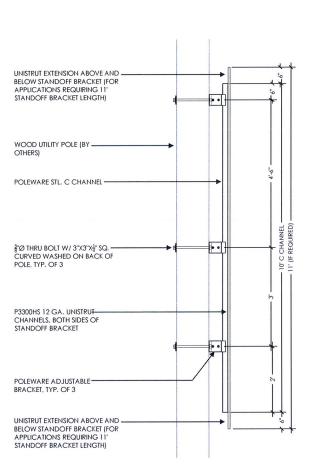
DETAIL B

NOTE:
(N) BRACKET ASSEMBLY TO BE PROVIDED BY UTILITY COMPANY AND PAINT TO

MATCH

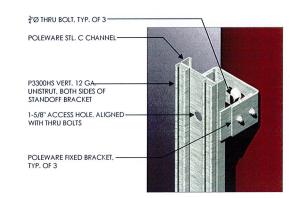
WOOD POLE EXTENSION



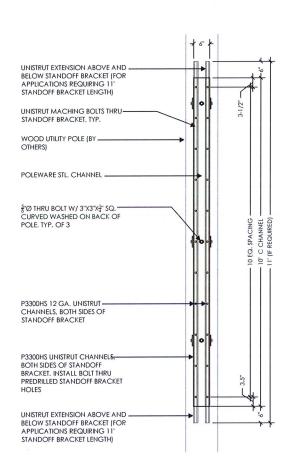




- INCLUDED



STANDOFF BRACKET BRACKET ISO



STANDOFF BRACKET FRONT ELEVATION

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Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



Project Architect:



100% Construction Drawings

SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602 PSL #428194

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Project No.:

Date: 02/12/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

**EQUIPMENT DETAILS** 

NOTE:

STANDOFF BRACKET MODEL #PW-SOB-10L-ADJ-SP AS MFG. BY POLEWARE, LLC. (475) 215-5119. OR EQUAL ALL COMPONENTS TO BE SHOP PRIMED PAINTED

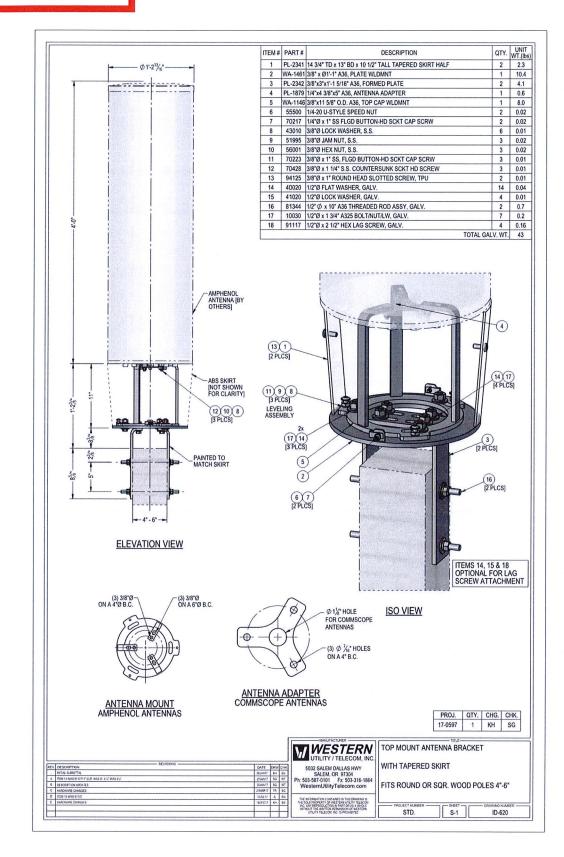
UNISTRUT COMPONENTS TO BE MFG BY UNISTRUT CORPORATION, 1140 W. THORNDALE AVE., TASCA IL, 60143, (800) 488-9510.
HORIZONTAL UNISTRUTS (P3300HS) FOR EQUIPMENT INSTALLATION NOT

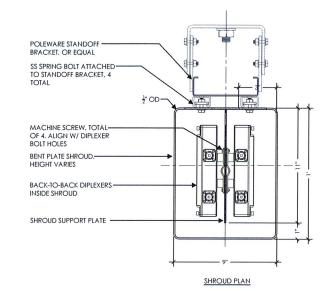
ADJUSTABLE BRACKETS FOR SLANTED POLES AVAILABLE BY SPECIAL ORDER

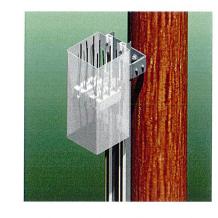
STANDOFF BRACKET 2

SCALE

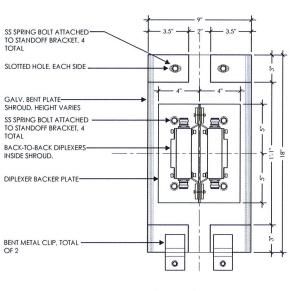
3

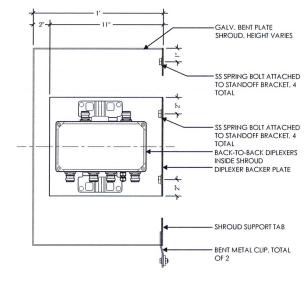






SHROUD ISO





SHROUD FRONT ELEVATION (CUT-AWAY VIEW)

SHROUD SIDE ELEVATION (CUT-AWAY VIEW)

- COMBINER SHROUD MODEL #PW-HCS-18L-000-SP AS MFG. BY
- POLEWARE, LLC, (475) 215-5119, OR EQUAL ALL COMPONENTS TO BE SHOP PRIMED PAINTED
- 3. UNISTRUT COMPONENTS TO BE MFG BY UNISTRUT CORPORATION, 1140

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Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



Project Architect:



Site Agent:

100% Construction Drawings

Drawing Phase:

#### SF OAKMORE 003

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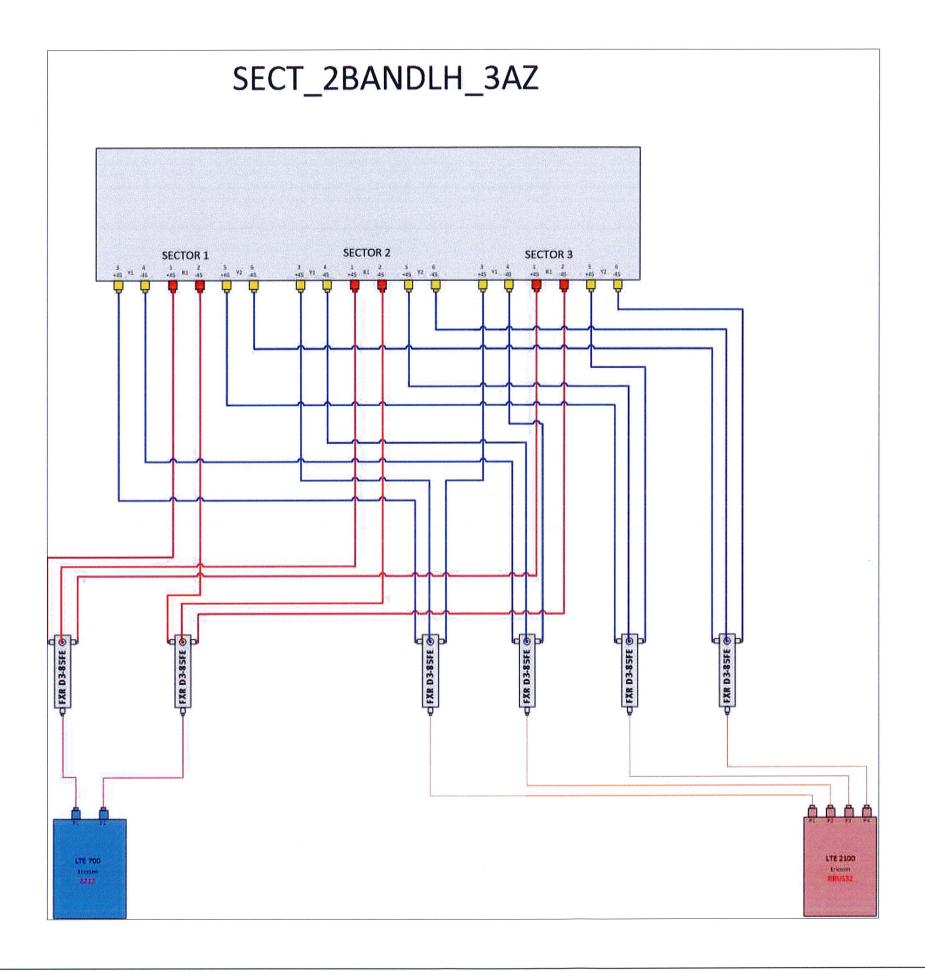
Designed By: JG Checked: RB

PLUMBING DIAGRAM

Sheet No.:

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- W. THORNDALE AVE., ITASCA IL, 60143, (800) 468-9510.
  4. CUSTOMER TO SPECIFY SHROUD HEIGHT AT TIME OF ORDERING.





Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client



Meridian Management LLC 785 Oak Grove Road E2 Suite 251 Concord, CA 94518 I 707.592.5924

Project Architect:



465 First St. West, Suite 101 Sonoma, CA 95476 Phone: 707-933-9633

Site Agen

100% Construction Drawings

Drawing Phas

SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602 PSL #428194

Site Name:

Professional Sea

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Designed By: JG Checked: RB

PLUMBING DIAGRAM

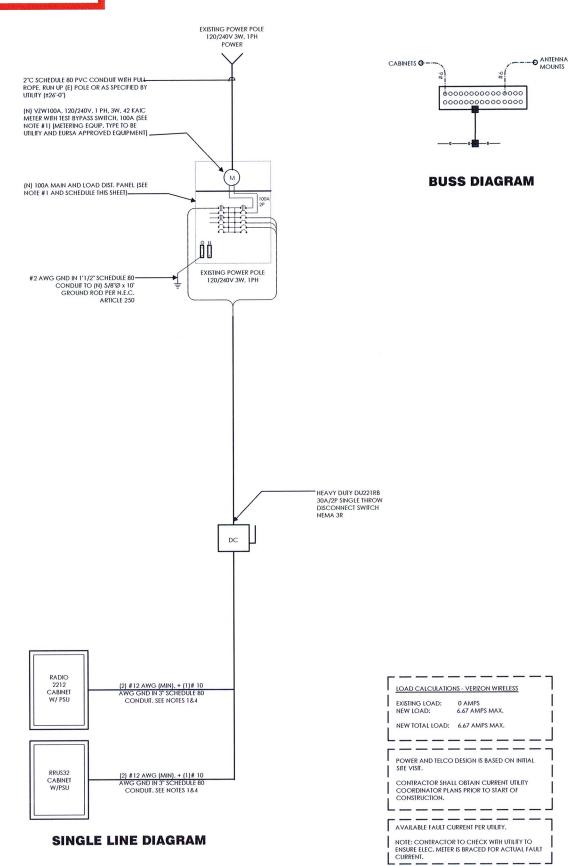
Sheet Ti

**A.8** 

Sheet

©Meridian Management LLC, 20

# ORIGINAL DESIGN



#### POWER AND TELCO NOTES:

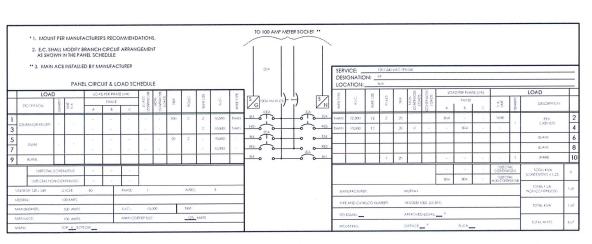
- POWER AND TELCO POINTS OF CONNECTION AND ANY EASEMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE BY THE UTILITY COMPANIES.
- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY ENGINEERING PLANS AND SPECIFICATIONS ONLY WHERE APPLICABLE PER PROJECT SCOPE OF WORK.
- CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT, PULL WIRES, CABLE PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT, TRANSFORMER PAD, BARRIERS, POLE RISER TRENCHING, BACK FILL, AND UTILITY FEES, AND INCLUDE REQUIREMENTS IN SCOPE.
- 4. CONTRACTOR SHALL LABEL ALL MAIN DISCONNECT SWITCHES AS REQUIRED BY CODE.

#### NOTE

- SUBCONTRACTOR SHALL PROVIDE DIST. PANEL AND BREAKERS FOR POWER TO THE BTS UNITS AND THE BTS/UTILITY CABINET.
- ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE REQUIREMENTS.
- SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE
   ENTRANCE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER
   THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
- 4. MAXIMUM ONE WAY CIRCUIT RUN NOT TO EXCEED 75 FEET.

#### GENERAL ELECTRICAL NOTES:

- 1. PROVIDE ALL ELECTRICAL WORK & MATERIALS AS SHOWN ON THE DWGS, AS CALLED FOR HEREIN, & AS IS NECESSARY TO FURNISH A COMPLETE INSTALLATION.
- THE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ADOPTED CALIFORNIA ELECTRICAL CODE, STATE OF
  CALIFORNIA TITLE24, ALL OTHER APPLICABLE CODES AND ORDINANCES & THE REQUIREMENTS OF THE FIRE MARSHALL, ALL EQUIPMENT
  & WIRING SHALL BEAR THE APPROVAL STAMP OF UNDERWRITERS LABORATORY (UL) OR AN APPROVED TESTING LABORATORY,
  PAYMENT FOR ALL INSPECTION FEES AND PERMITS ARE PART OF THIS CONTRACT.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS & EQUIPMENT FOR THE ENTIRE INSTALLATION & UNIT COMPLETION OF WORK, ERECT & MAINTAIN APPROVED & SUITABLE BARRIERS, PROTECTIVE DEVICES & WARNING SIGNS, BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSONS OR PROPERTY RESULTING FROM NEGLIGENCE AND/OR ENFORCEMENT OF ALL SAFETY PRECAUTIONS & WARNINGS.
- 4. COORDINATE THE ELECTRICAL INSTALLATION WITH ALL OTHER TRADES.
- 5. ALL SAW CUTTING, TRENCHING, BACK FILLING & PATCHING SHALL BE PART OF THIS CONTRACT.
- FINALIZE ALL ELECTRICAL SERVICE ARRANGEMENTS, INCLUDING VERIFICATION OF LOCATIONS, DETAILS, COORDINATION OF THE INSTALLATION & PAYMENT OF ACCRUED CHARGES WITH LOCAL POWER COMPANY, VERIFY LOCATION FOR FACILITIES & DETAILS WITH POWER UTILITY, IN ADDITION TO THE REQUIREMENTS SHOWN IN THE CONTRACT DOCUMENTS, WORK SHALL COMPLY WITH CONSTRUCTION STANDARDS & SERVICE REQUIREMENTS OF THE RESPECTIVE UTILITIES, INCLUDING ANY SUPPLEMENTAL DWGS ISSUED & SHALL BE SUBJECT TO APPROVAL OF THESE UTILITIES.
- 7. ALL WIRING SHALL BE COPPER. INSULATION FOR BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE "THWN" CONDUCTORS LARGER AND #6 AWG MAY BE TYPE "THWN" OR "TWN".
- 8. PROVIDE CONDUIT SEALS FOR ALL CONDUITS PENETRATING WEATHERPROOFING OR WEATHERPROOF ENCLOSURE ENVELOPE. MASTIC SEAL ALL CONDUIT OPENING PENETRATIONS COMPLETELY WATERTIGHT.
- UNLESS SHOWN OTHERWISE, FUSED DISCONNECT SWITCHES SHALL BE PROVIDED WITH LOW-PEAK, S\DUAL ELEMENT FUSES SIZED TO
  EQUIPMENT NAMEPLATE FUSE CURRENT RATING. MOTOR STARTERS SHALL BE PROVIDED WITH SIMILARLY SIZED PUSIBLE ELEMENTS.
  SWITCHES AND OTHER OUTDOOR EQUIPMENT SHALL BE RATED NEMA 3R AND/OR UL LISTED FOR WET ENVIRONMENT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE GROUNDING SYSTEM AND ENSURING A 5 OHM OR LESS GROUNDING PATH, ADDITIONAL GROUND RODS AND/OR CHEMICAL ROD SYSTEM SHALL BE USED TO ACHIEVE THIS REQUIREMENT IF THE GIVEN DESIGN CANNOT BE MADE TO ACHIEVE THIS REQUIREMENT.



PANEL SCHEDULE -- PANEL " PP "

# verizon√

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



785 Oak Grove Road E2 Sulte 251 Concord, CA 94518

Project Architect:



465 First St. West, Suite 10 Sonoma, CA 95476 Phone: 707-933-9633

Site Agent:

100% Construction Drawings

Drawing Phase:

SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602 PSL #428194

Site Name:

Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

Rev.	Date	Description
01	01/31/18	Constr. Dwgs 90%
02	02/12/18	Constr. Dwgs 100%

Project No.:

Date: 02/12/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

SINGLE LINE DIAGRAM
BUSS DIAGRAM
PANEL SCHEDULE

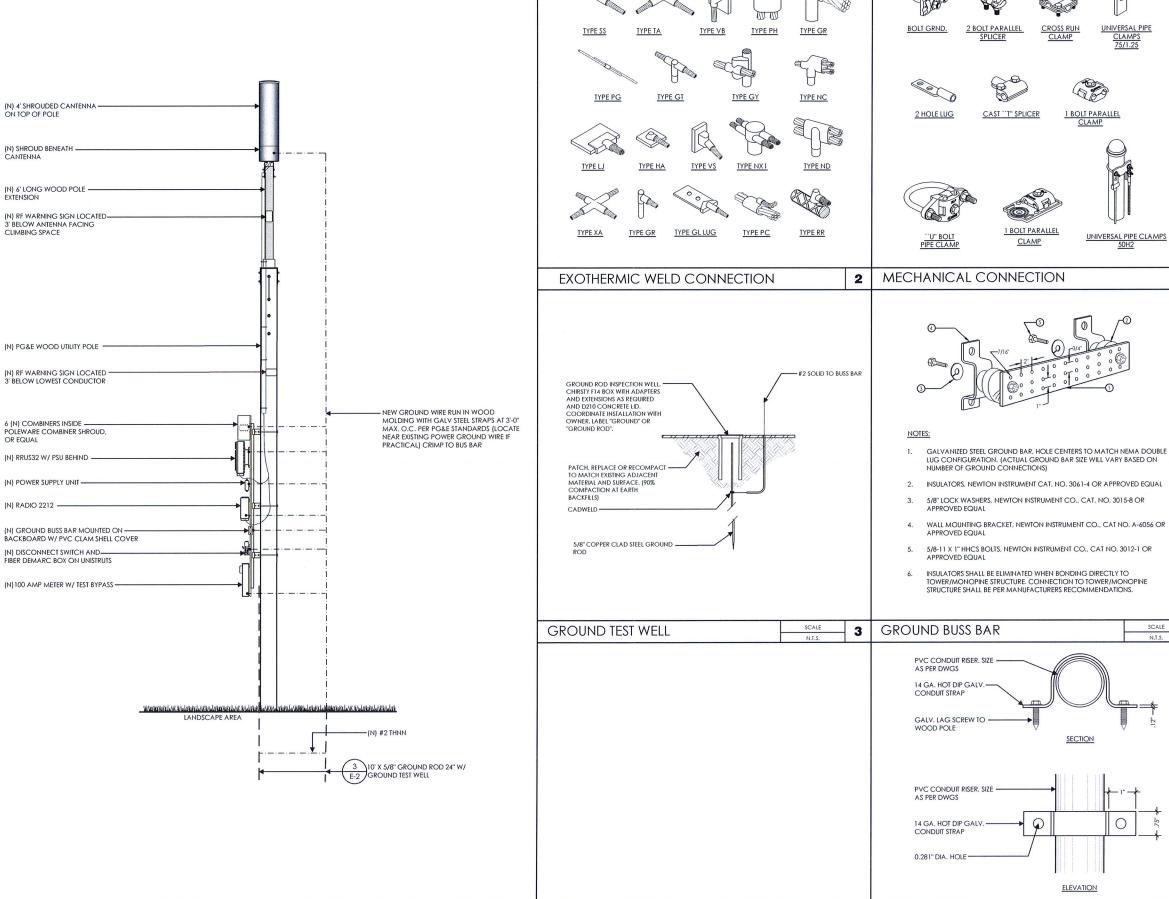
Sheet Title

Sheet No.:

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# ORIGINAL DESIGN

POLE GROUNDING RISER DIAGRAM (TYP.)





1 BOLT PARALLEL CLAMP

UNIVERSAL PIPE CLAMPS 50H2

1 BOLT PARALLEL

CLAMP

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



785 Oak Grove Road E2 Concord, CA 94518

Project Architect:



5

100% Construction Drawings

### SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602 PSL #428194

Site Name:

Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

01	01/31/18	Constr. Dwgs 90%
02	02/12/18	Constr. Dwgs 1009
		-
Proie	ct No.:	

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

**ELECTRICAL DETAILS** 

Sheet Title:

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**NOT USED** 

POLE CONDUIT STRAP

SCALE

7

SCALE

6

**ELEVATION** 

SECTION

**(** 

0

# ORIGINAL DESIGN

#### PLAN NOTES:

- PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY VEHICULAR TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TOP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION, IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
- 2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
- 3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING, DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION, NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
- 4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
- 5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.

## **LEGEND**

CHANNELIZING DEVICE

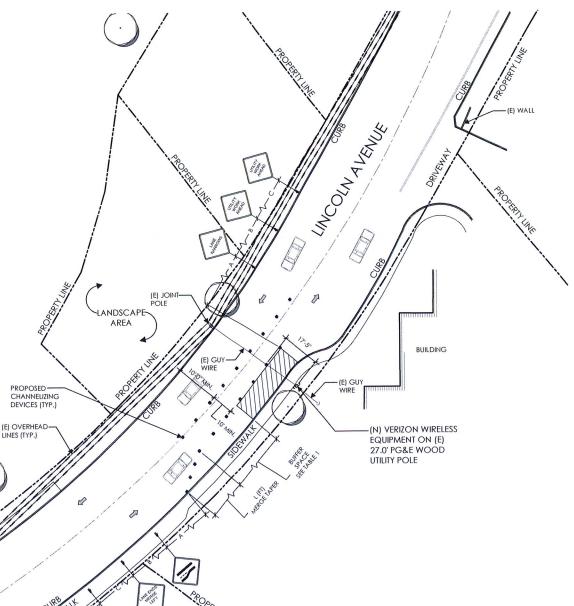
WORK SPACE

SIGN

FLAGGER

DIRECTION OF TRAFFIC

FLASHING ARROW SIGN (FAS)



DOT NOTES:

- WHEN LANE CLOSURE IS REQUIRED, THE TRAFFIC CONTROL PLAN SHOULD BE WHEN LANG CLOSURE IS REQUIRED, THE TRAFFIC CONTROL FLAN SHOT PROVIDED AND NOTARIZED BY AN INDIVIDUAL/COMPANY THAT HAS FLAGGER CONTROL TRAINING CERTIFICATION.
- 2. "BLUE-LIGHTS" (OFF-DUTY POLICE OFFICERS) WILL BE ON SITE FOR LANE CLOSURES AND IF REQUIRED.



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



85 Oak Grove Road E2 oncord, CA 94518 707.592.5924

Project Architect:



Site Agent:

100% Construction Drawings (E) LIGHT POLE
Drawing Phase:

### SF OAKMORE 003

(NEAR) 4511 LINCOLN AVENUE OAKLAND, CA 94602 PSL #428194

Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

Rev.	Date	Description
01	01/31/18	Constr. Dwgs 90%
02	02/12/18	Constr. Dwgs 100%

Project No.:

Date: 02/12/18 Job No.: Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

SITE SPECIFIC VEHICLE TRAFFIC CONTROL PLAN

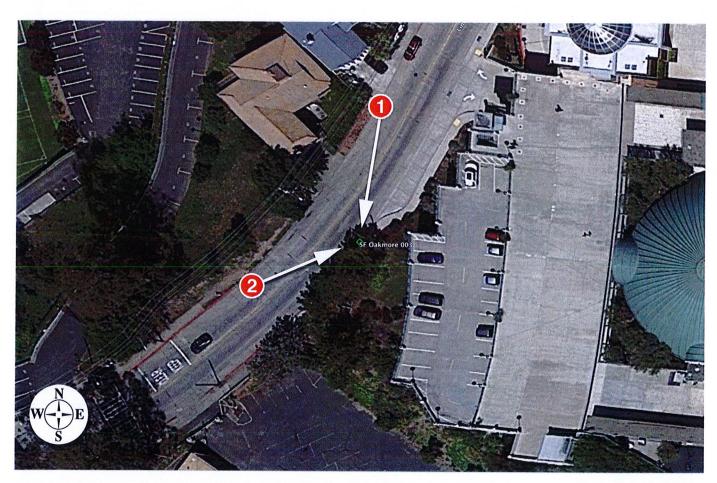
SIGN FLAGGER TABLE 1 DISTANCE POSTED **BUFFER** BETWEEN SPEED (MPH) 100' 100' 100' 100' 100' 100' 115' 100' 100' 100' 155' 200' 200' 200' 180' 200' 35 200' 200' 200' 245' 250' 320' 305' 350' 350' 350' 360' 540' 45 350' 350' 350' 
 50
 500'
 500'
 500'

 55
 500'
 500'
 500'
 600' 425' 660' 495' 60 500' 500' 500' 65 500' 500' 500' 720' 570' 780' 645' A) DISTANCES IN FEET UNLESS OTHERWISE NOTED. B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES. D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH.

1



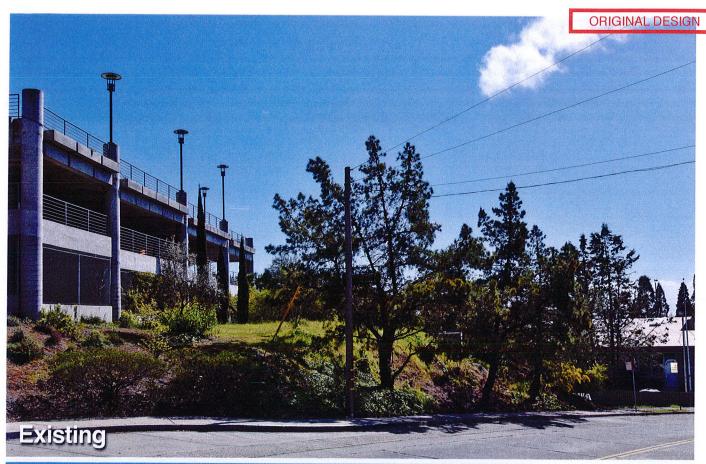




verizon<sup>/</sup>

SF Oakmore 003 Site # 428194

**Aerial Map** 

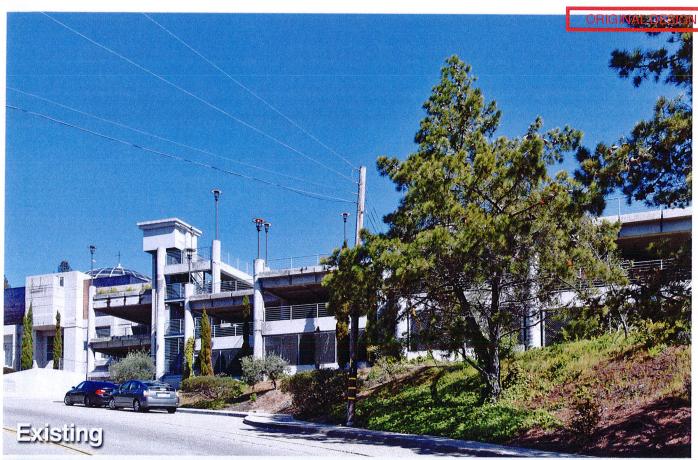


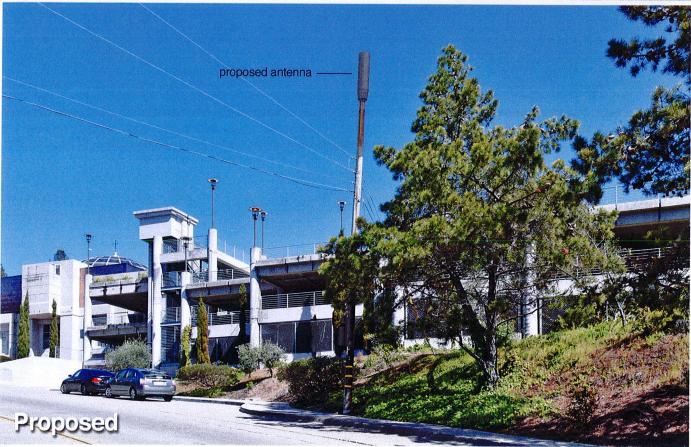


verizon<sup>/</sup>

SF Oakmore 003 Site # 428194

Looking Southwest from Lincoln Ave.





verizon<sup>/</sup>

SF Oakmore 003 Site # 428194

Looking Northeast from Lincoln Ave.



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# **Alternative Sites Analysis**

Verizon Wireless - "Oakmore 003" Across from 4511 Lincoln Ave, Oakland, CA 94602

The objective of this search ring is to find a site that will improve the coverage in and along the area where the Ascension Greek Orthodox Church is located in the upper area of the Oakmore neighborhood. There were a couple of sites reviewed before Verizon Wireless decided to develop this location. Through careful analysis we believe the subject site provides the least intrusive way to fill the significant coverage gap.

At the bottom of this page is an aerial view of the two (2) alternative sites discussed in this report. It is important to understand that these micro cell sites are lower powered and do not cover the area that a full macro site would. Due to that the Verizon Wireless Radio Frequency Engineer (RF Engineer) has little flexibility in location of this site. Also the RF Engineer has to make sure that the site will be located in a position that it works well with the other existing and proposed sites in the local vicinity.

In addition to the constraint from the RF engineer, Verizon has constraints on what they believe the county can legally require them to analyze as far as the type of technology Verizon should use. Verizon has chosen to use their microcell technology in the Right of Way (ROW) to cover the significant gap in coverage/capacity. Therefore this report reviews only the poles in the ROW. Furthermore, California courts have determined that local jurisdictions have a limited right to regulate aesthetics in the ROW for wireless facilities. As part of their aesthetic review, a local jurisdiction may evaluate alternate poles in the ROW that have less aesthetic impact. In our analysis we have found no pole in the ROW that would have less visual impact than the proposed location. The design would be identical to the subject design on the poles that are available and feasible to use.

# Aerial Map of the Alternatives



# 1) Alternate Site A

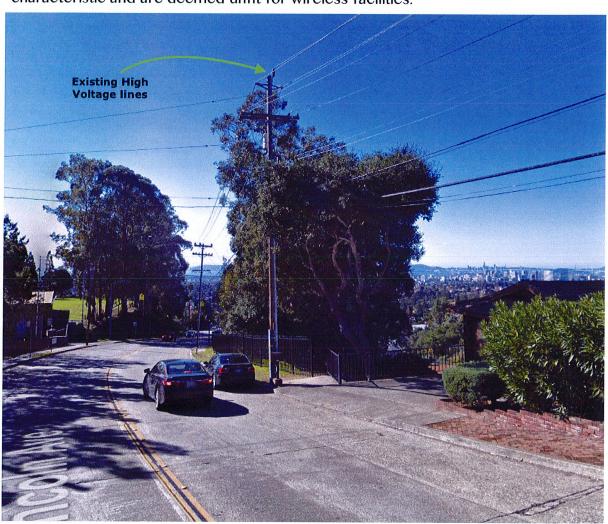
Address: Near 4511 Lincoln Ave

Lat: 37.809732°N

Long: -122.202007°W

Reason (s) did not work:

This location is a PG&E pole that is directly across Lincoln Ave from the subject pole. While this nearby pole was reviewed as a possible location, it was determined that it is not eligible for wireless colocation due to the fact that the pole has high voltage lines running at the very top of the pole. Due to this factor PG&E has deemed it to be unsafe and unfit for a wireless facility to be installed on these types of poles. Also recognize that all the poles that run on that line on the northern side of Lincoln Ave in the immediate vicinity have that same characteristic and are deemed unfit for wireless facilities.

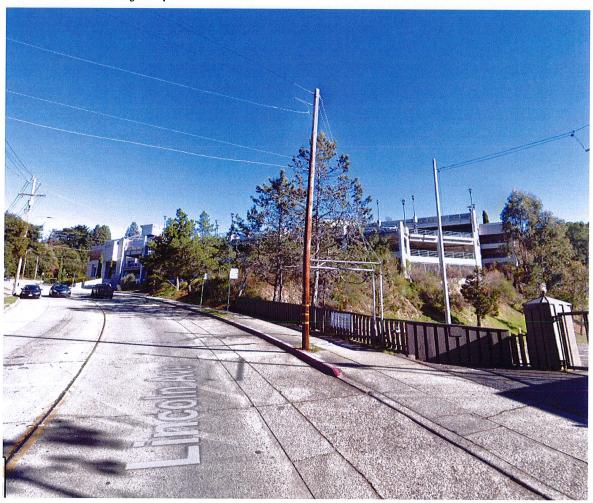


# 2) Alternate Site B

Address: Near 4500 Lincoln Ave

Lat: 37.809381°N

Long: -122.202274°W Reason (s) did not work: This location is just east of the subject pole on Whittle Ave. While this nearby pole was actually our first choice from Verizon Wireless Radio Frequency engineer as his best possible location, it was determined that it was a class 2 PG&E owned pole. PG&E prohibits wireless facilities on Class 1 or Class 2 poles. Therefore, we had no option but to find another eligible location, which turned out to be the subject pole.



<u>Summary</u>

There is relatively small vicinity that the Verizon Wireless Radio Frequency Engineer would allow the facility to be placed so that it would integrate into the existing and proposed site that make up the Verizon network in the local vicinity. There has been a thorough search and analysis of the poles in this area. Each alternative pole had its reasons as to why it was not a better fit than the selected pole. Thus, Verizon has concluded that the alternative poles, <u>could not</u> be determined that any of them would be less intrusive than the subject pole. Therefore Verizon believes that the subject site is the least intrusive means to fill the known coverage gap.

# Verizon Wireless • Proposed Small Cell (No. 428194 "SF Oakmore 003") 4511 Lincoln Avenue • Oakland, California

## Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate its small cell (No. 428194 "SF Oakmore 003") proposed to be sited in Oakland, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

# **Executive Summary**

Verizon proposes to install a cylindrical antenna on the utility pole sited in the public right-of-way located near 4511 Lincoln Avenue in Oakland. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

### **Prevailing Exposure Standard**

The U.S. Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. A summary of the FCC's human exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The FCC limit for exposures of unlimited duration to radio frequency energy for various wireless services are as follows:

Wireless Service Band	Transmit Frequency	"Uncontrolled" Public Limit	Occupational Limit (5 times Public)
Microwave (point-to-point)	1-80 GHz	1.0 mW/cm <sup>2</sup>	5.0 mW/cm <sup>2</sup>
Millimeter-wave	24-47	1.0	5.0
Part 15 (WiFi & other unlicensed)	2–6	1.0	5.0
BRS (Broadband Radio)	2,490 MHz	1.0	5.0
WCS (Wireless Communication)	2,305	1.0	5.0
AWS (Advanced Wireless)	2,110	1.0	5.0
PCS (Personal Communication)	1,930	1.0	5.0
Cellular	869	0.58	2.9
SMR (Specialized Mobile Radio)	854	0.57	2.85
700 MHz	716	0.48	2.4
[most restrictive frequency range]	30–300	0.20	1.0

Power line frequencies (60 Hz) are well below the applicable range of this standard, and there is considered to be no compounding effect from simultaneous exposure to power line and radio frequency fields.

# **General Facility Requirements**

Small cells typically consist of two distinct parts: the electronic transceivers (also called "radios") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless



# Verizon Wireless • Proposed Small Cell (No. 428194 "SF Oakmore 003") 4511 Lincoln Avenue • Oakland, California

signals created by the radios out to be received by individual subscriber units. The transceivers are typically mounted on the support pole or placed in a cabinet at ground level. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically in front of the antennas.

## **Computer Modeling Method**

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

### **Site and Facility Description**

Based upon information provided by Verizon, including drawings by Meridian Management, Inc., dated January 3, 2019, it is proposed to install one Ericsson Model CUUT070X12F 4-foot tall, tridirectional\* cylindrical antenna on an extension above the top of the 27-foot utility pole sited in the public right-of-way on the southeast side of Lincoln Avenue in Oakland, opposite the residence at 4511 Lincoln Avenue. The antenna would employ no downtilt and would be mounted at an effective height of about 36½ feet above ground. The maximum effective radiated power in any direction would be 3,580 watts, representing simultaneous operation at 1,880 watts for AWS and 1,700 watts for PCS service. There are reported no other wireless telecommunications base stations at this site or nearby.

# **Study Results**

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.027 mW/cm<sup>2</sup>, which is 2.7% of the applicable public exposure limit. The maximum calculated level at the multi-story parking garage nearby for the Ascension Greek Orthodox Church is less than the applicable public limit. The maximum calculated level at the nearby residence is 0.40% of the public exposure limit. It should be noted that these results include several

Conservatively assured to be omnidirectional for the purpose of this study.



# Verizon Wireless • Proposed Small Cell (No. 428194 "SF Oakmore 003") 4511 Lincoln Avenue • Oakland, California

"worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operation.

### **Recommended Mitigation Measures**

Due to its mounting location and height, the Verizon antenna would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use, be provided to all authorized personnel who have access to the antenna. No access within 6 feet at the same height as the antenna, such as might occur during certain maintenance activities at the top of the pole, should be allowed while the small cell is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. It is recommended that an explanatory sign<sup>†</sup> be posted at the antenna and/or on the pole below the antenna, readily visible to persons who might need to work within that distance.

#### Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the small cell proposed by Verizon Wireless near 4511 Lincoln Avenue in Oakland, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating small cells. Training authorized personnel and posting explanatory signs are recommended to establish compliance with occupational exposure limits.

<sup>†</sup> Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required. Signage may also need to comply with the requirements of California Public Utilities Commission General Order No. 95.



# Verizon Wireless • Proposed Small Cell (No. 428194 "SF Oakmore 003") 4511 Lincoln Avenue • Oakland, California

### **Authorship**

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2019. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

Exp. 6-30-2019

William F. Hammett, P.E.

707/996-5200

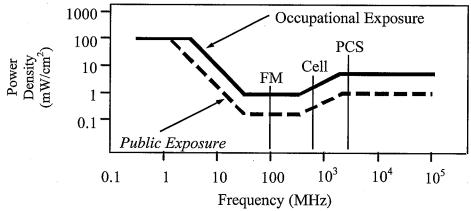
January 10, 2019

### **FCC Radio Frequency Protection Guide**

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

<u>Frequency</u>	Electromagnetic Fields (f is frequency of emission in MHz)						
Applicable Range (MHz)	Field S	ctric trength /m)	Field S	netic strength /m)	Equivalen Power l (mW	Density	
0.3 - 1.34	614	614	1.63	1.63	100	100	
1.34 - 3.0	614	823.8/f	1.63	2.19/f	100	$180/f^2$	
3.0 - 30	1842/ f	823.8/f	4.89/ f	2.19/f	900/ $f^2$	$180/f^{2}$	
30 - 300	61.4	27.5	0.163	0.0729	1.0	0.2	
300 - 1,500	3.54 <b>√</b> f	1.59 <b>√</b> f	$\sqrt{f}/106$	$\sqrt{f}/238$	f/300	f/1500	
1,500 - 100,000	137	61.4	0.364	0.163	5.0	1.0	



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



# RFR.CALC<sup>™</sup> Calculation Methodology

# Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

### Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density 
$$S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$$
, in mW/cm<sup>2</sup>,

and for an aperture antenna, maximum power density  $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$ , in mW/cm<sup>2</sup>,

where  $\theta_{BW}$  = half-power beamwidth of the antenna, in degrees, and

 $P_{net}$  = net power input to the antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of the antenna, in meters, and

 $\eta$  = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

#### Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density 
$$S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$$
, in mW/cm<sup>2</sup>,

where ERP = total ERP (all polarizations), in kilowatts,

RFF = relative field factor at the direction to the actual point of calculation, and

D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 ( $1.6 \times 1.6 = 2.56$ ). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.



### 8 of 8 DOCUMENTS

Application of GTE Mobilnet of California, Inc. for a certificate to resell cellular mobile telecommunications service

Decision No. 85-04-008, Application No. 85-02-021 (Filed February 5, 1985; amended March 12, 1985)

California Public Utilities Commission

1985 Cal. PUC LEXIS 157; 17 CPUC2d 492

April 3, 1985

### **PANEL**: [\*1]

Donald Vial, President; Victor Calvo, Priscilla C. Grew, William T. Bagley, Frederick R. Duda, Commissioners

#### **OPINION: OPINION**

Summary

GTE Mobilnet of California, Inc. (GTEM-California), a subsidiary of GTE Mobilnet (GTEM) is granted a certificate to resell cellular mobile radiotelephone service, subject to restrictions on separation of functions between applicant and its parent.

Background

Applicant's parent corporation, GTEM, was awarded a certificate to provide wireline cellular mobile radiotelephone service in the San Francisco-Oakland and San Jose Metropolitan areas. (GTE Mobilnet, Decision 84-11-029, November 7, 1984, Application 83-07-04.)

The decision established wholesale rates only and denied GTEM retail rates because of problems discussed in that decision. Ordering paragraph eight of that decision reads as follows:

"On or after the effective date of this decision, GTEM is authorized to apply for authority to conduct business as a reseller of cellular mobile radiotelephone service through a separate subsidiary."

This application is in response to that order. It should be well noted that this application requests for reseller authority throughout California and not just for [\*2] the San Francisco-Oakland and San Jose cellular geographic service area (CGSA). We have to date issued resellers statewide certificates, with the exception that we have not permitted a reseller which is an affiliate of a carrier to resell in the same CGSA when that carrier has its own retail department.

# Qualifications of Applicant

For the present, applicant proposes strictly a resale operation and has no present plans to construct its own communications facilities.

In its first amendment to the application, it estimates its year-end customers as 3,679 for the first year, increasing to 7,807 for the fifth year. It anticipates revenues from those customers of approximately \$ 294,000 for the first year, increasing to slightly in excess of \$ 1.4 million for the fifth year. Its total operating expenses are estimated at approximately \$ 415,000 for the first year, growing to in excess of \$ 1.3 million for the fifth year. Based upon those figures, it estimates its net loss as \$ 656,000 for the first year, and a net income of \$ 540,000 for the fifth year. The first year figures mentioned are for a partial year.

With the amended application, GTEM-California also furnished a pro forma [\*3] balance sheet estimating total liability and shareholders' equity remaining constant at \$ 19,000 for the first five years, with assets increasing from \$ 565,000 to \$ 1,493,000 by the fifth year. We note that \$ 1,235,000 of the fifth year projection is accounts receivable. This is a large percentage but is traceable to the fact that it would be normal for a reseller of telecommunications services to have a revolving amount of accounts receivable from its customers.

Applicant has demonstrated financial fitness and, by its affiliation with its parent, has the technical proficiency to operate the proposed business.

### Separation of Functions

In GTE Mobilnet, supra, we stated that there might possibly be certain exceptions to full separation. The decision noted that in General Telephone Company (D.84-07-108, July 18, 1984, A.83-07-02) we faced the problem of cost allocations for that company's customer premises equipment, and that after ordering structural separation, we allowed sharing of resources for:

- 1. Corporate officers, directors, and headquarters support staff.
- 2. Legal and accounting support for a period of two years.
- 3. Customer billing.

We did not specifically approve [\*4] those separations before the fact, and stated (GTE Mobilnet, mimeo p. 39):

"We are uncertain at this time whether such exceptions are equally appropriate for the standalone reseller business. We will make that decision when the reseller application is filed, but we wish full separation (physical and financial) for working level or operational activities, and if the applicant proposes any cost-sharing at the executive level or for specific support services, it will bear the task of showing that exemptions from full separation will not burden the Commission with exactly the kind of cost allocation and cross-subsidization issues which we are attempting to avoid."

### (Emphasis added.)

In this application, GTEM-California proposes sharing consisting of three categories. The first appears to be the same as the first item listed above. The second is legal and accounting support with no time limit. The third is customer service. The application contains the following language in support of this proposal:

"The GTE Mobilnet Incorporated headquarters staff, located in Houston, will support both the Applicant and the Partnerships, as it does its subsidiaries and partnerships in other markets [\*5] in which GTE Mobilnet Incorporated has a presence. This support is provided by the legal, regulatory, accounting, marketing support and customer service functions. Any headquarters costs directly incurred for a particular entity will be charged directly; the residual headquarters costs will

be allocated on a basis that reflects San Francisco-Oakland and San Jose activities relative to total activity levels. GTE Mobilnet Incorporated believes that such a sharing arrangement is essential in order to allow the Applicant to achieve economics of scale, to draw upon the significant level of expertise based in Houston and, most importantly, to compete effectively with other retailers of cellular mobile radio telecommunications service in California."

The first item (corporate headquarters, directors, and headquarters support staff) is an acceptable exception and essential to GTEM-California's functioning as a subsidiary rather than as an independent company, but in the regulatory context of which this application is a part, the remaining exceptions are not, and allowing them would make GTEM-California simply a branch of GTEM, rather than a separated subsidiary -- the very result the [\*6] language in GTE Mobilnet sought to avoid.

It is clear that the second item mentioned in General Telephone (legal and accounting) was transitional. Here, there is no purpose served by starting a new operation with transitional sharing. Further, it is not in the public interest because (1) a carrier and a separate reseller may at times have interests adverse to each other, and sharing legal support can cause conflicts of interest, and (2) sharing accounting support would commingle cost and revenue data of two entities which should not share it on such a day-to-day basis.

Regarding the third item, it can be readily seen that customer service is not the same as customer billing. Customer service should not be shared because it will lead to the problem of determining whether cross-subsidy exists in the use of personnel and equipment at the operational level. We believe the same is true for customer billing and, in any case, GTEM should not have operational-level access to GTEM-California's billing information, and vice-versa. nl

nl We are appreciative of applicant's concerns about economies of scale. If it chooses to do so, applicant may contract with outside companies specializing in billing and other functions, and the above discussion should not be construed as abridging management's discretion in this regard.

[\*7]

In making these determinations, we understand that corporate headquarters must function as a conduit for general, management-level information from both "sides," and such information may be commingled or integrated at that level. The Commission has no desire to prevent top management from acquiring data necessary to make intelligent corporate decisions. But below executive level there must be a real separation (see the emphasized language from GTE Mobilnet, supra) or our ruling in GTE Mobilnet, stemming from the problems discussed in that decision, will become meaningless.

Rates and Tariffs

GTEM-California proposes the following retail rates:

Monthly access charge \$45.00
Peak minute usage 0.45
Off-peak minute usage 0.20

These rates are, on their face, reasonable, and will be allowed to go into effect. Other competing resellers have proposed similar or identical rates. As we have stated in previous decisions, we consider the business of reselling cellular mobile communications service to be

competitive and look primarily to the marketplace for rate regulation. The fact that, at the outset, basic rates are identical or similar should not be taken as our adopting [\*8] a "model" rate structure.

In Decision (D.) 84-04-014, concerning the Los Angeles SMSA Limited Partnership (Partnership), we did review in detail retail tariff provisions, and, as we have stated in other decisions concerning resellers which we are today issuing along with this decision, it is our intent that such tariff provisions be used as a model for other resellers in California. Consequently, we will require the filing of retail tariffs generally similar to the retail provisions authorized by D.84-04-014 and filed by the Partnership.

We recognize that the tariffs as a whole may be somewhat abbreviated from those of the Partnership; however, they must include the usual Table of Contents, Preliminary Statement, Rate Schedules, List of Contracts and Deviations, Rules, and Sample Forms, as prescribed in Section II of General Order (GO) Series 96. We will permit an initial filing to contain only the Preliminary Statement, Table of Contents, and Rate Schedules, to be effective on five days' notice; the remaining material will be prepared promptly and transmitted to the Commission staff by advice letter for review and filing per GO SEries 96. We will authorize GTE-California to [\*9] deviate from the page numbering system prescribed by GO Series 96, Section II.C(1)(b), and to substitute the system generally employed by the major wireline exchange carriers at its election. n2

n2 The alternate system is described in Commission Resolutions U-275 (March 25, 1947) and T-4886 (February 26, 1962).

Applicant and other resellers of cellular services have asked that the Commission exempt them from requirements of GO Series 96, Sections IV, V, and VI.

There is merit to the arguments presented by resellers that the Commission consider some modifications of GO Series 96. The basic purpose of Sections IV, V, and VI of GO Series 96 is to provide an orderly procedure to control the rates and services of a monopoly utility. These rules are subject to revision where the Commission deems necessary.

In this case, we are not dealing with a monopoly situation. At this time, it appears that the cellular market will be a highly competitive one. The basic scheme established by the Federal Communications Commission allowing two major carriers, one wireline and one nonwireline, to operate in the same territory, coupled with the provisions for the wholesale marketing of this service, [\*10] is designed to promote vigorous competition in cellular markets.

Under these circumstances, our traditional tariff filing requirement of a 30-day review period should not be necessary. Indeed, in a new and dynamic market such as cellular telephone, this requirement could impede the provisions of rates and schedules which are responsive to customer needs. We will of course monitor the cellular market and if we find abusive or unfair practices by resellers, we will take corrective action aimed at eliminating such practices. Therefore, we will permit all resellers to make the requested tariff changes on 15 days' notice.

Copies of the application were served on potential competitors within California and no protests were received.

Upon certification by this Commission, GTEM-California will be subject to reporting requirements deemed appropriate by this Commission. One of these requirements is the manner in which records are kept.

The Commission is currently developing a Uniform System of Accounts for cellular communications companies. Until a uniform accounting system for cellular companies has been prescribed, the Commission will not issue detailed account instructions. Each [\*11] cellular communications company will, however, be expected to maintain its books in such detail that financial data relating to its operations can be assembled upon request:

- 1. Revenue and expenses of utility operations should be segregated from nonutility operations.
- 2. Charges from affiliates should be broken down so that each kind of charge can be identified.
- 3. Revenue accounts should be appropriately subdivided (access, peak, off-peak, service order charges, custom calling, directory listing, etc.).
- 4. Expense accounts should be grouped to provide a total for sales and marketing expense. This would include, in subaccounts, advertising, promotion and incentives, sales salaries and commissions, sales vehicle expense, etc.
- 5. General and administrative expenses should be subdivided to identify rent and lease expense, billing expense, salaries, insurance, and other appropriate subdivisions.
  - 6. Other significant costs, such as unsold numbers inventory, should be separately identified.

GTEM-California will be directed to file an annual report with the Commission, in a form prescribed by the Commission. Although GTEM-California will be expected to have detailed operating [\*12] information available in its records, for competitive reasons it may not be required to disclose such detail in its filed annual reports.

D.85-01-008 (January 3, 1985, A.84-03-92) granted resellers exemption from Public Utilities (PU) Code §§ 816-830 (issuance of stocks and bonds). We continued our regulation of acquisition of controlling interests under PU Code §§ 851-855, and further proceedings in that application will decide what regulation will apply to certain other transactions governed by §§ 851-855. This applicant will be treated the same as other resellers in this regard.

GTEM-California is subject to the fee system set forth in *PU Code §§ 401*, et seq. n3 By Resolution M-4735, the Commission set the fee level for telephone corporations at 0.10 of 1% (0.0010) of revenue subject to the fee, prescribed the method of remitting the fee, and directed the application of a billing surcharge of 0.10% to customer billings. Applicant will be ordered to provide in its tariff rules for the imposition of this surcharge.

n3 In D.84-04-014 in A.83-01-012, we determined that resellers of cellular service area telephone corporations under PU §§ 216(b), 233, and 234, and are subject to our jurisdiction. [\*13]

Findings of Fact

- 1. GTEM-California has the ability, experience, equipment, and financial resources to perform the proposed service.
  - 2. Public convenience and necessity require the service proposed by GTEM-California.
- 3. GTEM-California should file a set of tariffs similar in scope to the retail tariffs set forth in D.84-04-014 for the Partnership.

- 4. The time constraints of Sections IV, V, and VI of GO Series 96 are unduly restrictive at this time.
  - 5. At this time, it appears that the cellular market will be a highly competitive one.
- 6. GTEM-California's proposed operations will provide competition in the cellular radio service market which will benefit the public at large.
- 7. While it is reasonable to allow headquarters functions of GTEM and GTEM-California to be combined, it is unreasonable and not in the interest of equal competition among resellers to allow the combining of certain operational-level functions as proposed in the application.
- 8. It can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.
- 9. GTEM-California should keep its records in the detail described in the opinion [\*14] section of this decision.
  - 10. There are no protests and a public hearing is not necessary.

#### Conclusions of Law

- 1. The application should be granted as provided in the order which follows.
- 2. GTEM-California should be exempt from the provisions of Sections IV, V, and VI of this Commission's GO Series 96 and may file tariff revisions to become effective on 15 days' notice.
  - 3. GTEM-California is subject to the fee set forth in PU Code §§ 401, et seq.
  - 4. Applicant should be exempted from the requirements of PUCode §§ 816-830.
- 5. The appropriate surcharge pursuant to Conclusion of Law 3 is 0.1% for the fiscal year 1984-1985.
  - 6. Because of the immediate need for the service, the order should become effective today.

The certificate hereinafter granted is subject to the provision of law that the Commission shall have no power to authorize the capitalization of this CPC&N or the right to own, operate, or enjoy such CPC&N in excess of the amount (exclusive of any tax or annual charge) actually paid to the State as the consideration for the issuance of such CPC&N or right.

### **ORDER**

#### IT IS ORDERED that:

- 1. A certificate of public convenience and necessity is granted to GTE Mobilnet [\*15] of California, Inc. (GTEM-California) to operate as a reseller of cellular radio telecommunications services within California.
- 2. On or after the effective date of this order, GTEM-California is authorized to file tariff schedules for the resale of cellular mobile radiotelephone service in California. Service may not be offered until tariffs are on file. This filing shall comply with General Order (GO) Series 96, except that GTEM-California is authorized to employ the alternate method of page numbering described in Resolutions U-275 and T-4886 at its election. The initial filing shall contain at least the Preliminary Statement, Table of Contents, and Rate Schedules, the rates and charges to be those requested by GTEM-California in its application, together with the remaining retail rates and charges authorized

to the Los Angeles SMSA Limited Partnership by Decision 84-04-014, the filing to be effective on not less than five days' notice. GTEM-California shall file the remaining tariff schedules, to include rules and forms as prescribed by GO Series 96, no later than 10 days following the effective date of this order, to be effective on not less than five days' notice. The [\*16] tariff shall provide for a user fee surcharge of 0.10% for the fiscal year 1984-1985. Failure to file the tariff may result in revocation of the authority granted here.

- 3. GTEM-California shall keep its records as detailed on pages 7 and 8 of this decision.
- 4. GTEM-California shall maintain separate operational and working-level functions as discussed in the opinion.
  - 5. GTEM-California is granted exemption from the requirements of PU Code §§ 816-830.
- 6. The certificate of public convenience and necessity is granted as set forth above; GTEM-California is exempted, in part, from the provisions of Sections IV, V, and VI of GO Series 96. The certificate granted and the authority to render service under the rates, rules, and charges authorized will expire if not exercised within 12 months after the effective date of this order.
- 7. Within 10 days after this order is effective GTEM-California shall file a written acceptance of the certificate granted in this proceeding.
  - 8. The application is granted as set forth above, and otherwise denied.

This order is effective today.

Dated April 3, 1985, [\*17] at San Francisco, California.

## **Legal Topics:**

For related research and practice materials, see the following legal topics: Communications LawResale of ServicesCommunications LawTelephone ServicesCellular ServicesEnergy & Utilities LawUtility CompaniesGeneral Overview



