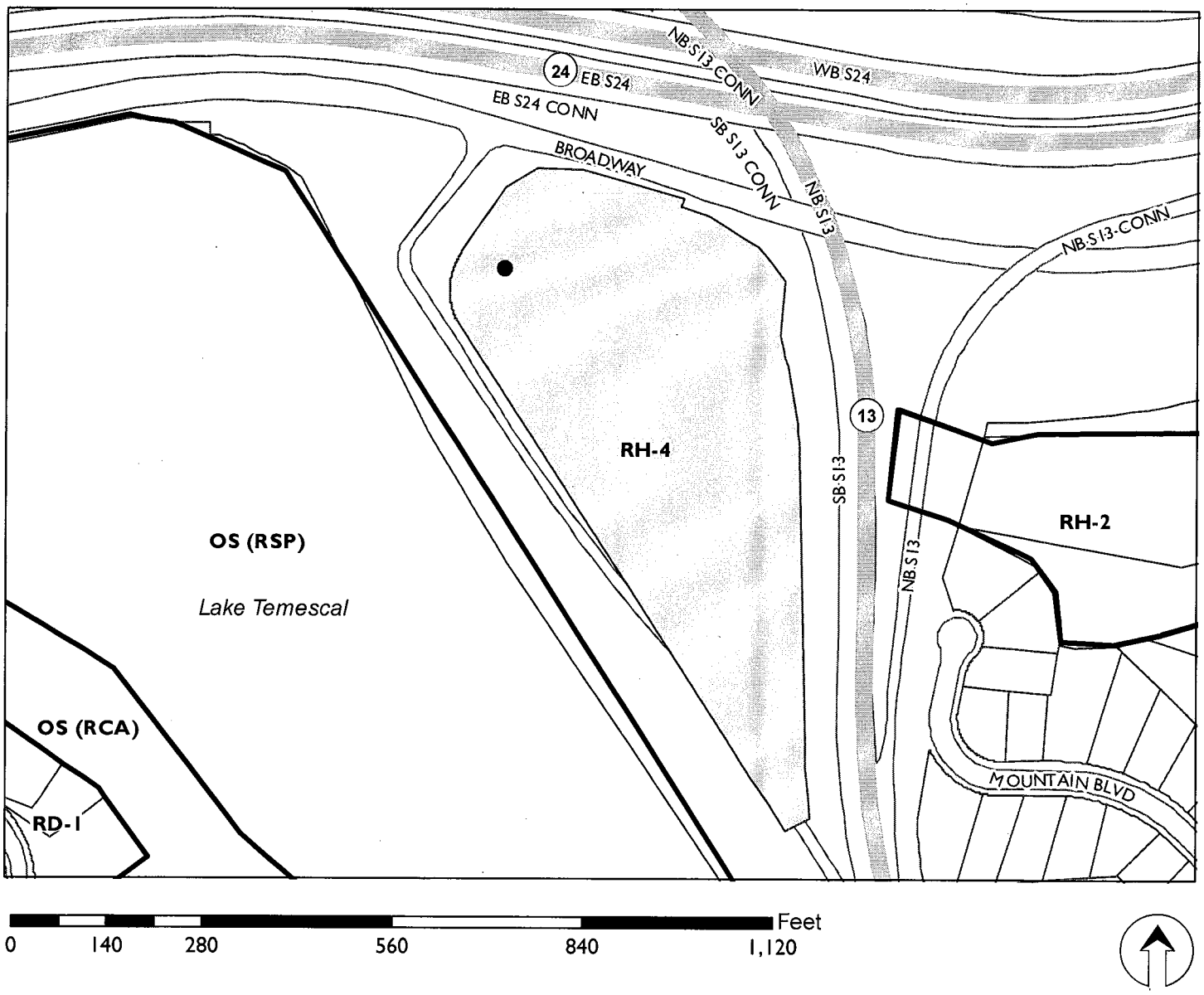
Location:	**6650 Broadway (See map on reverse)**
Assessors Parcel Numbers:	**(048-6845-006-01)**
Proposal:	To relocate two (2) telecommunication antennas and three (3) remote radio units (RRU's) and associated equipment on the wall of an existing PG&E substation building to a new wood utility replacement pole (Monopole) at a site with a total of six (6) existing Sprint telecommunication antennas.
Applicant:	Quantum Contracting NorthWest for Sprint
Contact Person/ Phone Number:	Jeremy Jordan (916)918-9322
Owner:	Pacific Gas & Electric (PG&E)
Case File Number:	PLN15170
Planning Permits Required:	Regular Design Review to relocate two (2) telecommunication antennas and three (3) remote radio units (RRU's) and associated equipment on the wall of an existing PG&E substation building to a new wood utility replacement pole (Monopole) at a site with a total of six (6) existing Sprint telecommunication antennas. Major Conditional Use Permit for a new Monopole telecommunication facility within 100 feet of a residential zone (RH-4 zone.)
General Plan:	Urban Park and Open Space
Zoning:	RH-4 Hillside Residential-4 Zone
Environmental Determination:	Exempt, Section 15303 of the State CEQA Guidelines; New construction of small structures. Section 15183 of the State CEQA Guidelines; projects consistent with a community plan, General Plan or zoning.
Historic Status:	No Historic Record
Service Delivery District:	2
City Council District:	1
Date Filed:	5/26/15
Finality of Decision:	Appealable to City Council within 10 days
For Further Information:	Contact case planner **Michael Bradley** at **(510) 238-6935** or mbradley@oaklandnet.com

SUMMARY

The following staff report addresses the proposal for a co-location to relocate two (2) telecommunication antennas and three (3) remote radio units (RRU's) and associated equipment on the wall of an existing PG&E substation building to a new wood utility replacement pole (Monopole) at a site with a total of six (6) existing Sprint telecommunication antennas. . Given the type of structure, this would be considered a "Monopole" Telecommunications Facility. The site is located within an open space area, on a Pacific Gas and Electric (PG&E) site that contains

CITY OF OAKLAND PLANNING COMMISSION



Case File: PLN15170
Applicant: Quantum Contracting NorthWest for Sprint
Address: 6650 Broadway
Zone: RH-4

multiple utility facilities including power lines and monopoles. The site is located in the RH-4 Hillside Residential Zone. The General Plan designation for the site is Urban Park and Open Space.

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.

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 FCC standards in this regard. See, 47 U.S.C. 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. 47 U.S.C.332(c)(7)(B)(ii). See 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, contact Steve Markendorff, Chief of the Broadband Branch, Commercial Wireless Division, Wireless Telecommunications Bureau, at (202) 418-0640 or e-mail "smarkend@fcc.gov".

PROJECT DESCRIPTION

The applicant (Sprint) is proposing to relocate two (2) telecommunication antennas and three (3) remote radio units (RRU's) and associated equipment on the wall of an existing PG&E

substation building to a new wood utility replacement pole (Monopole) at a site with a total of six (6) existing Sprint telecommunication antennas. The equipment shelter is to contain the equipment cabinets on the ground near to the monopole within a fenced and locked area. All proposed antennas and associated equipment will not be accessible to the public and the entire site is fenced and locked.
(See Attachment A)

PROPERTY DESCRIPTION

The subject property is a large PG&E substation approximately 6.42 acres, with frontage on Broadway and surrounded by Highway 24, Highway 13 and Lake Temescal. The subject property has a fully functioning PG&E substation on the site with multiple power line towers, buildings, and other telecommunication facilities.

GENERAL PLAN ANALYSIS

The subject property is located within the Urban Park and Open Space General Plan designation due to the site being adjacent to Lake Temescal Regional Recreational Area. The Urban Park and Open Space Land Use Classification is intended "to identify, enhance and maintain land for parks and open space. The proposed unmanned wireless telecommunication facility with co-location to a site adjacent to park land and major highways will not adversely affect and detract from the civic, commercial or residential characteristics of the area, because the antennas will be mounted on a monopole telecommunication facility located in an unpopulated area of an existing PG&E substation site. Therefore, the proposed unmanned wireless telecommunication facility will not adversely affect or detract from the open space characteristics of the area while providing and preserving a convenient and functional working and living environment.

ZONING ANALYSIS

The subject property is located in the RH-4 Hillside Residential Zone. The intent of the RH-4 Zone is to create, maintain, and enhance areas for single-family dwellings on lots of six thousand five hundred (6,500) to eight thousand (8,000) square feet and is typically appropriate in already developed areas of the Oakland Hills.

The proposal is to relocate two (2) telecommunication antennas and three (3) remote radio units (RRU's) and associated equipment on the wall of an existing PG&E substation building to a new wood utility replacement pole (Monopole) at a site with a total of six (6) existing Sprint telecommunication antennas and requires a Major Conditional Use Permit since the project is a new monopole within one hundred (100) feet of a residential zone, and Design Review to install a new Monopole telecommunication facility. Staff finds that the proposed application meets applicable RH-4 zoning and City of Oakland Telecommunication regulations.

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines lists the projects that qualify as categorical exemptions from environmental review. The proposed project is categorically exempt from the environmental review requirements pursuant to Section 15303, new

construction of small structures, and 15183, projects consistent with a community plan, general plan or zoning.

KEY ISSUES AND IMPACTS

1. Conditional Use Permit

Section 17.13.040 of the City of Oakland Planning Code requires a conditional use permit to install a Monopole Telecommunication facility in the RH-4 zone. Furthermore, Section 17.134.020 defines a major and minor conditional use permit. Subsections (A)(3)(e and h) lists a major conditional use permit: "Monopole Telecommunications Facilities in, or within three hundred (300) feet of the boundary of, any Residential or HBX Zone (e); and Any telecommunication facility in or within one hundred (100) feet of the boundary of any residential zone (h)." The required findings for a major and minor conditional use permit are listed and included in staff's evaluation as part of this report.

2. Project Site

Section 17.128.110 of the City of Oakland Telecommunication Regulations indicate that new wireless facilities shall generally be located on designated properties or facilities in the following 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 non-residential zones.
D. Existing commercial or industrial structures in residential zones.
E. Other non-residential uses in residential zones.
F. Residential uses in non-residential zones.
G. Residential uses in residential zones.

*Facilities locating on an A, B or C ranked preference do not require a site alternatives analysis.

Since the proposed project involves locating the installation of a new monopole facility with new antennas and associated equipment cabinets on a site, the proposed project meets (B) City owned properties or other public or quasi-public facilities.

3. Project Design

Section 17.128.120 of the City of Oakland Telecommunications Regulations indicates that 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 higher preference design alternative can not 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).

City of Oakland Planning staff has reviewed and determined that the site selected is conforming to all other telecommunication regulation requirements. The project location is appropriate because the monopole installation will be on a replacement pole in the exact location and height at 37' which is lower than the roofline of the adjacent building. Further, the proposal is to co-locate the monopole at a site with several other telecommunication facilities on a quasi-public facility owned by PG&E, which is an appropriate location for the antennas to provide service to the adjacent residential zone without being constructed within the residential neighborhood, as well as provide service to the on-site PG&E facility and the major highways of 13 and 24 adjacent to the site. The applicant has looked at other sites and based on the residential neighborhood and the public utility nature of the site, this is the most suitable site for the proposed antennas.
(See Attachment C)

4. Project Radio Frequency Emissions Standards
Section 17.128.130 of the City of Oakland Telecommunication Regulations require that the applicant submit the following verifications including requests for modifications to existing facilities:

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.

The applicant states that the proposed project meets the radio frequency (RF) emissions standards as required by the regulatory agency. Submitted with the initial application was a RF emissions report, prepared by Site Safe RF Compliance Experts, (**attachment B**). The report states that the proposed project will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not cause a significant impact on the

environment. Additionally, staff recommends that prior to the final building permit sign off; the applicant submits certified RF emissions report stating that the facility is operating within acceptable thresholds established by the regulatory federal agency.

CONCLUSION

City of Oakland planning staff believes that the proposed project and subject property can be developed to meet the established zoning and telecommunication regulations that were created and adopted to set certain criteria minimums and maximums for similar types of developments. Staff believes that the findings for approval can be made to support the Major and Design Review.

RECOMMENDATIONS:

1. Affirm staff's environmental determination

2. Approve Major Conditional Use Permit, and Design Review application PLN15170 subject to the attached findings and conditions of approval.

Prepared by:

Michael Bradley
Planner I

Approved by:

Scott Miller
Zoning Manager

Approved for forwarding to the
City Planning Commission

Darin Ranelletti, Deputy Director
Bureau of Planning

ATTACHMENTS:

A. Project Plans & Photo simulations
B. Site Safe RE Compliance Experts RF Emissions Report
C. Site Alternative Analysis and Cover Letter

FINDINGS FOR APPROVAL

FINDINGS FOR APPROVAL:
This proposal meets all the required findings under Section 17.134.050, of the General Use Permit criteria; all the required findings under Section 17.136.050.(B), of the Non-Residential Design Review criteria; all the required findings under Section 17.128.080(B), of the telecommunication facilities (Monopole) Design Review criteria; and all the required findings under Section 17.128.080.(C), of the telecommunication facilities (Monopole) Conditional Use Permit criteria; and Section 17.13.40 RH-4 Limitations on Table 17.13.01; and as set forth below and which are required to approve your application. Required findings are shown in **bold** type; reasons your proposal satisfies them are shown in normal type.

SECTION 17.134.050 – GENERAL USE PERMIT FINDINGS:

A. That the location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development.

The location, size, design and operational characteristics of the proposal will not adversely affect the livability or appropriate development of abutting properties and the surrounding area. Consideration was given to the harmony in scale, bulk, and coverage; to the availability of civic facilities and utilities; to harmful effect, if any, upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development. The proposal for the telecommunications antennas is to relocate two (2) telecommunication antennas and three (3) remote radio units (RRU's) and associated equipment on the wall of an existing PG&E substation building to a new wood utility replacement pole (Monopole) at a site with a total of six (6) existing Sprint telecommunication antennas. The facility will be unmanned and will not create additional vehicular traffic in the area.

B. That the location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant.

The location, design and site planning of the proposed development will provide a convenient and functional working and civic environment, and will attempt to preserve the attractive nature of the use and its location and setting warrant. The proposal will preserve a convenient and functional working and living environment; therefore it would not affect the general quality and character of the PG&E substation.

C. That the proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region.

The proposed development will enhance the successful operation of the surrounding area in its basic community function and will provide an essential service to the community or region. This will be achieved by improving the functional use of the site by providing a regional telecommunication facility for the community and will be available to police, fire, public safety organizations and the general public.

D. That the proposal conforms to all applicable design review criteria set forth in the DESIGN REVIEW PROCEDURE of Chapter 17.136 of the Oakland Planning Code.

The proposal conforms with all significant aspects of the design review criteria set forth in Chapter 17.136 of the Oakland Planning Code, as outlined below.

E. That the proposal conforms in all significant respects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council.

The proposal conforms in all significant aspects with the Oakland General Plan and with any other applicable plan or zoning maps adopted by the City of Oakland. The proposed monopole telecommunication facility modification in the Urban Parks and Open Space General Plan designation will enhance and improve communication service for a mixture of civic, commercial, residential and institutional uses in the area.

17.136.050(B) – NONRESIDENTIAL DESIGN REVIEW CRITERIA:

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 proposal is to relocate two (2) telecommunication antennas and three (3) remote radio units (RRU's) and associated equipment on the wall of an existing PG&E substation building to a new wood utility replacement pole (Monopole) at a site with a total of six (6) existing Sprint telecommunication antennas, which is located in an unpopulated area of an existing PG&E substation and therefore is consistent and well related to the surrounding area in scale, bulk, height, materials, and textures. Through the design the existing wood pole will simply be replaced with a new sufficient pole in the exact same location and height thus by adding two (2) telecom antennas it will become a monopole. The height of the pole is less than the height of the existing adjacent utility building with large trees along the perimeter of the property and will have very little visibility from the street or freeways.

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 design will be appropriate and compatible with current zoning and general plan land use designations. The antennas will be located on a monopole among a massive amount of utility structures and facilities and will not have any visual impact on the adjacent properties.

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 proposal conforms with the City of Oakland Comprehensive General Plan meeting specific General Plan policies and the Supplemental Report and Recommendations on Revisions to the Citywide Telecommunications Regulations. The proposal will conform to performance standards for noise set forth in Section 17.120.050 for decibels levels in residential areas for both day and nighttime use. The Project conforms to all monopole-facility definitions set forth in Section 17.128.080 and meets all design review criteria to minimize all impacts throughout the surrounding area.

17.128.080(B) DESIGN REVIEW CRITERIA FOR MONOPOLE FACILITIES

1. Collocation is to be encouraged when it will decrease visual impact and collocation is to be discouraged when it will increase negative visual impact:

The proposed project entails a new monopole (replacement of an existing wood utility pole) among a massive amount of utility structures and facilities and will not have any visual impact on the adjacent properties. Although, the current proposal is not a collocation, there is the possibility for future telecommunication providers to collocate on the monopole and the site has other existing telecommunication antennas and PG&E equipment.

2. Monopoles should not be sited to create visual clutter or negatively affect specific views:

The proposed antennas will be mounted to a monopole which will be located among a massive amount of utility structures and facilities. Based on the location the monopole within an area with other utility structures, no specific views will be impacted and visual clutter will not occur.

3. Monopoles shall be screened from the public view wherever possible:

The proposed antennas will be among a massive amount of utility structures and facilities. Due to the design and site placement, the monopole will be screened from public view.

4. 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:

The associated equipment will located on the with other equipment and utility structures. The equipment will be placed where it will not be accessed by the public.

5. Site location and development shall preserve the preexisting character of the surrounding buildings and land uses and the zone district as much as possible. Wireless communication towers shall be integrated through location and design to blend in with the existing characteristics of the site to the extent practical. Existing on-site vegetation shall be preserved or improved, and disturbance of the existing topography shall be minimized, unless such disturbance would result in less visual impact of the site to the surrounding area:

The proposed antennas will be mounted to a monopole which will be located among a massive amount of utility structures and facilities. Based on the size of the site and the numerous utility structures, the monopole proposal will not result in a visual impact and will blend in with the existing characteristics of the site.

6. 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 antennas will be mounted to a monopole and will not be accessible to the public due to its location. The monopole is located behind a fenced in area with no public access. The equipment cabinet will be located in a service area which is only accessible to maintenance workers and not to the public.

Section 17.128.080(C) CONDITIONAL USE PERMIT (CUP) FINDINGS FOR MONOPOLE FACILITIES

1. The project must meet the special design review criteria listed in subsection B of this section (17.128.080C):

The proposed project meets the special design review criteria listed in section 17.128.080B.

2. Monopoles should not be located any closer than one thousand five hundred (1,500) feet from existing monopoles unless technologically required or visually preferable:

The site is appropriate because the proposed antennas will be located on a monopole in an unpopulated area of an existing PG&E substation site and will serve the nearby residential neighborhood without actually being located on a residential property. Due to the fact that this is an existing pole and that there are multiple on-site utilities and equipment this site is suitable for this additional monopole.

3. The proposed project must not disrupt the overall community character:

The site is appropriate because the proposed antennas will be mounted to a monopole which will be located among a massive amount of utility structures and facilities, thus it will not disrupt the overall community character of the site.

4. *If a Major Conditional Use Permit is required*, the Planning Director or the Planning Commission may request independent expert review regarding site location, collocation

and facility configuration. Any party may request that the Planning Commission consider making such request for independent expert review.
a. If there is any objection to the appointment of an independent expert engineer, the applicant must notify the Planning Director within ten days of the Commission request. The Commission will hear arguments regarding the need for the independent expert and the applicant's objection to having one appointed. The Commission will rule as to whether an independent expert should be appointed.
b. Should the Commission appoint an independent expert, the Commission will direct the Planning Director to pick an expert from a panel of licensed engineers, a list of which will be compiled, updated and maintained by the Planning Department.
c. No expert on the panel will be allowed to review any materials or investigate any application without first signing an agreement under penalty of perjury that the expert will keep confidential any and all information learned during the investigation of the application. No personnel currently employed by a telecommunication company are eligible for inclusion on the list.
d. An applicant may elect to keep confidential any proprietary information during the expert's investigation. However, if an applicant does so elect to keep confidential various items of proprietary information, that applicant may not introduce the confidential proprietary information for the first time before the Commission in support of the application.
e. The Commission shall require that the independent expert prepare the report in a timely fashion so that it will be available to the public prior to any public hearing on the application.
f. Should the Commission appoint an independent expert, the expert's fees will be paid by the applicant through the application fee, imposed by the city.

Section 17.13.40 RH-4 Limitations on Table 17.13.01:
L1. Monopole Telecommunication Facilities are only permitted upon the granting of a Conditional Use Permit (see Chapter 17.134 for the CUP procedure). In addition to the CUP criteria contained in Section 17.134.050, the proposal must meet the following use permit criterion:

1. There is no existing structure that can accommodate the proposed antenna.
To meet this criterion, the applicant must provide a site alternative plan that demonstrates that there is no existing structure that can accommodate the antenna.

The site has an existing 37' high wood utility pole, which would be replaced with a new 37' wood utility pole to accommodate two antennas and the associated equipment. The actual visual look of the pole will be almost identical with two new antennas attached to it. Based on the size of the site and the numerous utility structures, the monopole proposal will not result in a visual impact and will blend in with the existing characteristics of the site, thus this is the most suitable location for the antennas to be installed. The submitted site alternative analysis and project plans by the applicant demonstrates the appropriateness of the selected location and design.

CONDITIONS OF APPROVAL
PLN15170

STANDARD CONDITIONS:

1. Approved Use
Ongoing

a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, **PLN15170**, and the plans dated **May 21, 2015** and submitted on **May 26, 2015** and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans, will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall required prior written approval from the Director of City Planning or designee.

b) This action by the City Planning Commission ("this Approval") includes the approvals set forth below. This Approval includes: **Design Review and a Major Conditional Use Permit to relocate two (2) telecommunication antennas and three (3) remote radio units (RRU's) and associated equipment on the wall of an existing PG&E substation building to a new wood utility replacement pole (Monopole) at a site with a total of six (6) existing Sprint telecommunication antennas at 6650 Broadway. (APN: 048H-7591-004-06), under Oakland Municipal Code 17.128, 17.136, and 17.134.**

2. Effective Date, Expiration, Extensions and Extinguishment
Ongoing

Unless a different termination date is prescribed, this Approval shall expire **two calendar years** from the approval date, 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 permit, 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 for this project may invalidate this Approval if the said extension period has also expired.

3. Scope of This Approval; Major and Minor Changes
Ongoing

The project is approved pursuant to the **Oakland Planning Code** only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

4. Conformance with other Requirements
Prior to issuance of a demolition, grading, P-job, or other construction related permit

a) The project applicant shall comply with all other applicable federal, state, regional and/or local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the

City's Public Works Agency. 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 of Approval 3.

b) The applicant shall submit approved building plans for project-specific needs related to fire protection to the Fire Services Division for review and approval, including, but not limited to automatic extinguishing systems, water supply improvements and hydrants, fire department access, and vegetation management for preventing fires and soil erosion.

5. Conformance to Approved Plans; Modification of Conditions or Revocation

Ongoing

a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of approval, unless an earlier date is specified elsewhere.

b) The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved plans may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension or other corrective action.

c) Violation of any term, conditions or project description relating to the Approvals 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 Approvals 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.

6. Signed Copy of the Conditions

With submittal of a demolition, grading, and building permit

A copy of the approval letter and conditions shall be signed by the property owner, notarized, and submitted with each set of permit plans to the appropriate City agency for this project.

7. Indemnification

Ongoing

a) To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (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, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to

participate in the defense of said Action and the 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 applicant shall execute a Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Letter of Agreement shall survive termination, extinguishment or invalidation of the approval. Failure to timely execute the Letter Agreement does not relieve the applicant of any of the obligations contained in this condition or other requirements or conditions of approval that may be imposed by the City.

8. Compliance with Conditions of Approval
Ongoing
The project applicant shall be responsible for compliance with the recommendations in any submitted and approved technical report and all the Conditions of Approval set forth below at its sole cost and expense, and subject to review and approval of the City of Oakland.

9. Severability
Ongoing
Approval of the project would not have been granted but for the applicability and validity of each and every one of the specified conditions, and if any 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 Management
Prior to issuance of a demolition, grading, and/or construction permit
The project applicant may be required to pay for on-call special inspector(s)/inspections as needed during the times of extensive or specialized plancheck review, or construction. The project applicant may also be required to cover the full costs of independent technical and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval. The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

12. Days/Hours of Construction Operation
Ongoing throughout demolition, grading, and/or construction
The project applicant shall require construction contractors to limit standard construction activities as follows:

a) Construction activities are limited to between 7:00 AM and 7:00 PM Monday through Friday, except that pile driving 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. Monday through Friday.

b) Any construction activity proposed to occur outside of the standard hours of 7:00 am to 7:00 pm Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.

c) Construction activity shall not occur on Saturdays, with the following possible exceptions:

i. Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.

ii. After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.

d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.

e) No construction activity shall take place on Sundays or Federal holidays.

f) 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.

13. Operational Noise-General

Ongoing

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.

PROJECT SPECIFIC CONDTIONS:

14. Radio Frequency Emissions

Prior to the final building permit sign off

The applicant shall submit a certified RF emissions report stating the facility is operating within the acceptable standards established by the regulatory Federal Communications Commission.

Call Before you Dig
1-800-422-4133

THIS IS AN EXISTING SPRINT WIRELESS TELECOMMUNICATION FACILITY EQUIPMENT UPGRADE

SECTOR RELOCATION
OAKLAND
FN03XC022

6650 BROADWAY
OAKLAND, CA 94603
ALAMEDA
LATITUDE: N 37.847989 / N 37° 50' 52.76" (NAD 83)
LONGITUDE: W 122.229508 / W 122° 13' 46.23" (NAD 83)

CODE BLOCK

CALIFORNIA STATE CODE COMPLIANCE:

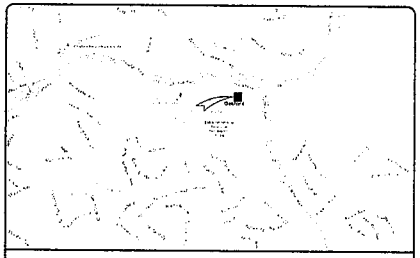
ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- 2013 CALIFORNIA ADMINISTRATIVE CODE, (INCL. TITLES 24 & 25)
- 2013 CALIFORNIA BUILDING CODE, STANDARDS AND AMENDMENTS
- 2013 CALIFORNIA GREEN BUILDING CODEMC, STANDARDS AND AMENDMENTS
- 2013 CALIFORNIA ELECTRICAL CODE
- 2013 CALIFORNIA PLUMBING CODE, STANDARDS AND AMENDMENTS
- 2013 CALIFORNIA MECHANICAL CODE, STANDARDS AND AMENDMENTS
- 2013 CALIFORNIA FIRE CODE, STANDARDS AND AMENDMENTS

ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2013 CBC BUILDING CODE.

AREA MAP

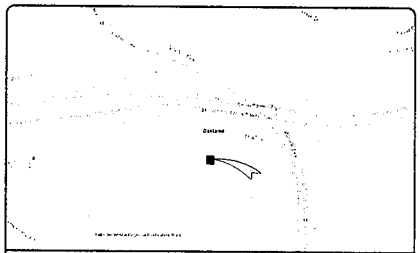


PROJECT DESCRIPTION

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY.

- RELOCATE (2) EXISTING PANEL ANTENNAS (3) RRH'S, AND ASSOCIATED CABLES FROM THEIR CURRENT WALL MOUNT POSITION TO A NEW PG&E WOOD POLE. THE NEW WOOD POLE WILL REPLACE AND EXISTING POLE OF THE SAME HEIGHT.

VICINITY MAP



SIGNATURE BLOCK

APPROVAL	SIGNATURE	DATE
SITE ACQUISITION MANAGER		
CONSTRUCTION MANAGER		
A&E MANAGER		
PLANNING CONSULTANT		
RF MANAGER		
RF ENGINEER		
PROPERTY OWNER		
SPRINT REPRESENTATIVE		
AAV MANAGER		

DRIVING DIRECTIONS

FROM SPRINT OFFICE IN: 310 COMMERCE DRIVE, IRVINE CA 92602

DEPART 310 COMMERCE, IRVINE, CA 92602 [310 COMMERCE, IRVINE, CA 92602] ON EL CAMINO REAL (NORTH-WEST)
TURN LEFT (SOUTH-WEST) ONTO JAMBOREE RD
TAKE RAMP (RIGHT) ONTO I-5 [SANTA ANA FWY] I-5 N
MERGE ONTO I-10 [I-5]
KEEP STRAIGHT ONTO I-5 [GOLDEN STATE FWY] I-5 N / SACRAMENTO
KEEP LEFT ONTO I-580 I-580 / TRACY / SAN FRANCISCO
AT EXIT 26A, TAKE RAMP ONTO CA-13 [WARREN FWY] CA-13 / WARREN FWY / BERKELEY
AT EXIT 5C, TAKE RAMP (RIGHT) ONTO CA-24 [GROVE SHAFTER FWY] CA-24 E / WALNUT CREEK / CONCORD
KEEP STRAIGHT ONTO RAMP OLD TUNNEL ROAD
TURN RIGHT TO STAY ON RAMP EAST OAKLAND / BERKELEY / TUNNEL RD
BEAR RIGHT (SOUTH-WEST) ONTO BROADWAY
TURN LEFT (SOUTH) ONTO LOCAL ROAD(S)
ARRIVE 37.84799°N 122.22955°W

SHEET INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET
N-1	GENERAL NOTES
A-1	OVERALL SITE PLAN
A-2	ENLARGED EQUIPMENT PLAN AND ANTENNA LAYOUT
A-3.0	ELEVATIONS
A-3.1	ELEVATIONS
A-4	DETAILS
A-5	DETAILS
E-1	ANTENNA GROUNDING PLAN
E-2	ANTENNA GROUNDING DETAILS

PROJECT SUMMARY

APPLICANT:
SPRINT
12657 ALCOSTA BLVD., SUITE 300
BISHOP RANCH 15
SAN RAMON, CA 94583

PROPERTY INFORMATION:
PROPERTY OWNER: PG&E
ADDRESS: 245 MARKET STREET, MAIL CODE N 10D
SAN FRANCISCO, CA 94105
CONTACT: DAVID MEY
PH: (415) 961 7042
TOWER OWNER PG&F
SITE ID: 1BD

ZONING CLASSIFICATION: IBD
CONSTRUCTION TYPE: IB
OCCUPANCY: UNOCCUPIED TELECOMMUNICATIONS EQUIPMENT
JURISDICTION: CITY OF OAKLAND
CURRENT USE: UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY
NEW USE: UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY

PARCEL NUMBER(S)
048H-7591-004-06

LEASE AREA:
UNKNOWN

PROJECT TEAM

ARCHITECT & ELECTRICAL ENGINEER
CAMP & ASSOCIATES
19401 40TH AVE W, SUITE 304
LYNNWOOD, WA 98036
CONTACT: ERIC CAMP
PH: (425) 740-6390
EMAIL: eric.camp@camppassoc.com

STRUCTURAL ENGINEER
CAMP & ASSOCIATES
19401 40TH AVE W, SUITE 304
LYNNWOOD, WA 98036
CONTACT: ERIC CAMP
PH: (425) 740-6391
EMAIL: eric.camp@camppassoc.com

APPLICANT AGENT
QUANTUM CONTRACTING, N.W.
915 HIGHLAND POINT DRIVE, SUITE 250
ROSEVILLE, CA 95747
CONTACT: JEREMY JORDAN
PHONE (916) 918-3122
EMAIL: JEREMY@QUANTUMCONTRACTINGNW.COM

Sprint

QUANTUM

CAMP & ASSOCIATES

PROJECT INFORMATION:
SECTOR RELOCATION
OAKLAND
FN03XC022
WARREN PARKWAY & BROADWAY
OAKLAND, CA 94603

ISSUE DATE: 5/21/15

ISSUED FOR: PRELIM PERMIT

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	3/18/15	ISSUED FOR PRELIM PERMIT	AJO
B	4/10/15	ISSUED FOR PRELIM PERMIT	AJO
C	5/20/15	ISSUED FOR PRELIM PERMIT	AJO
D	5/20/15	ISSUED FOR PERMIT	AJO

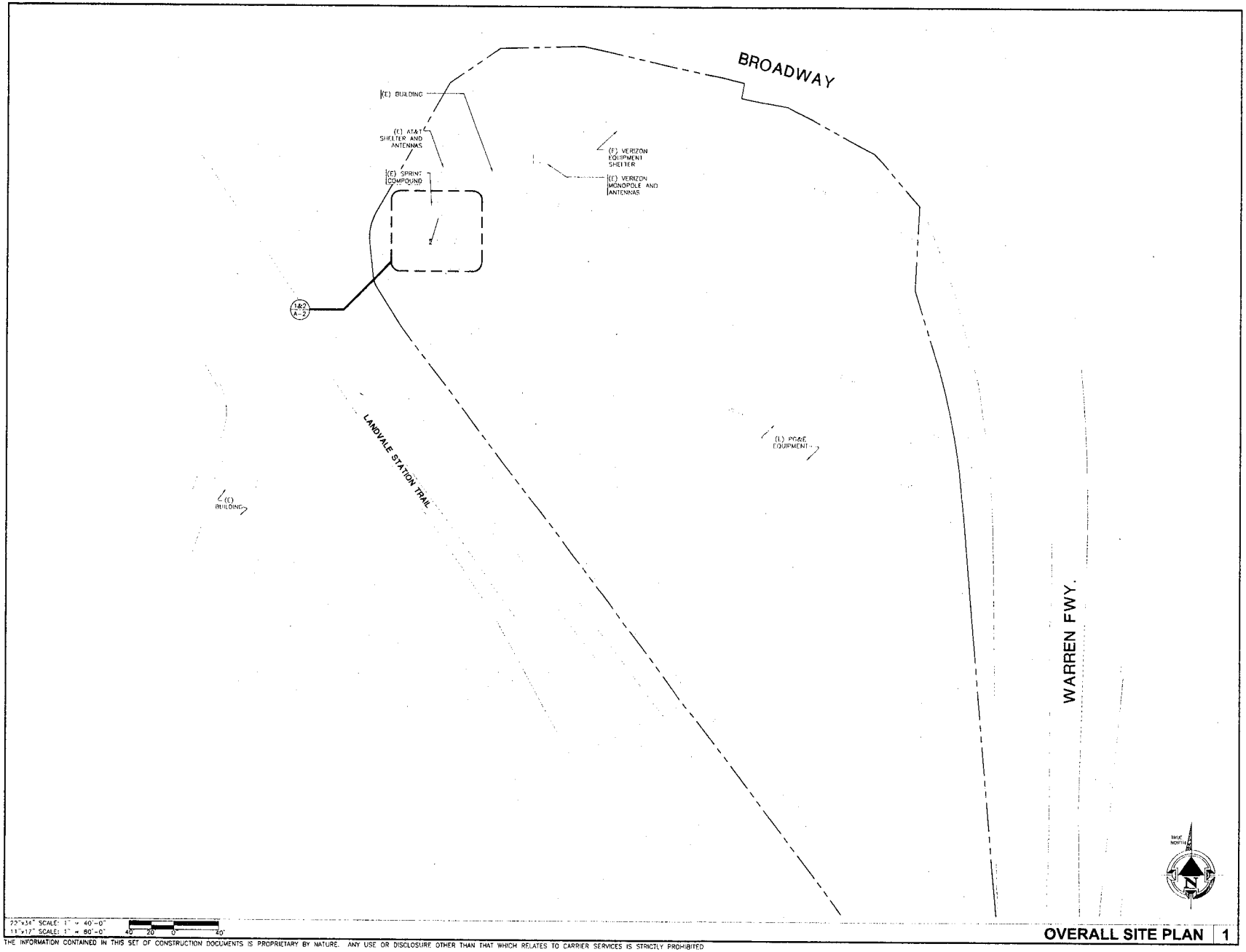
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:

SHEET TITLE: TITLE SI

SHEET NUMBER: **T-1**

ATTACHMENT A



OVERALL SITE PLAN | 1

Sprint

QUANTUM

CAMP ASSOCIATES

PROJECT INFORMATION:

SECTOR RELOCATION

OAKLAND

FN03XC022
WARREN PARKWAY & BROADWAY
OAKLAND, CA 94603

ISSUE DATE: 5/21/15

ISSUED FOR: PRELIM PERMIT

REVISIONS:

REV.	DATE	DESCRIPTION	INITIALS
A	3/18/15	ISSUED FOR PRELIM PERMIT	AIO
B	4/10/15	ISSUED FOR PRELIM PERMIT	AIO
C	5/20/15	ISSUED FOR PRELIM PERMIT	AIO
D	5/20/15	ISSUED FOR PERMIT	AIO

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:

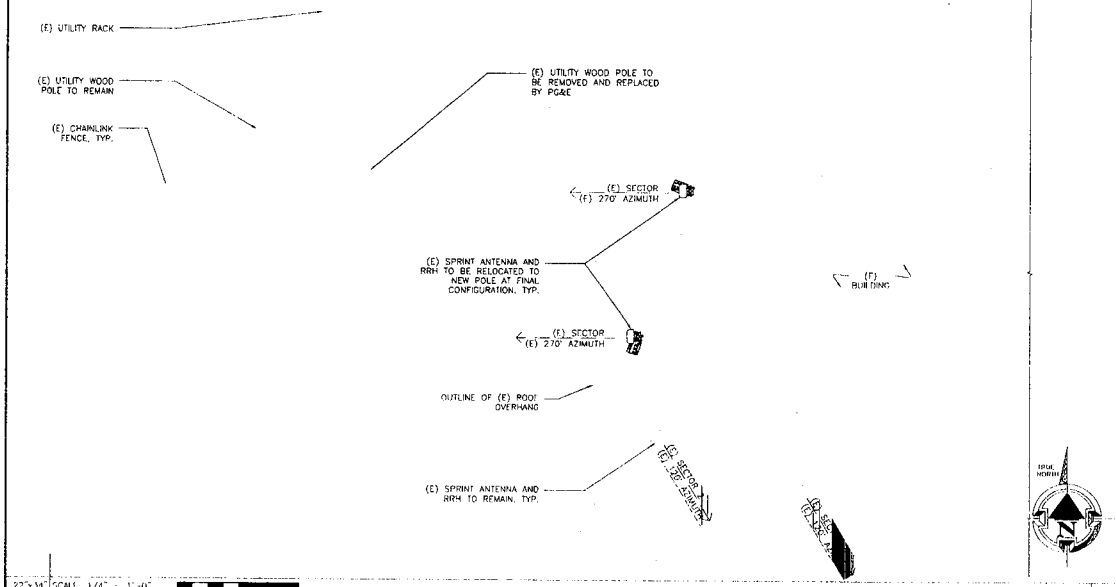
SHEET TITLE:

OVERALL SITE PLAN

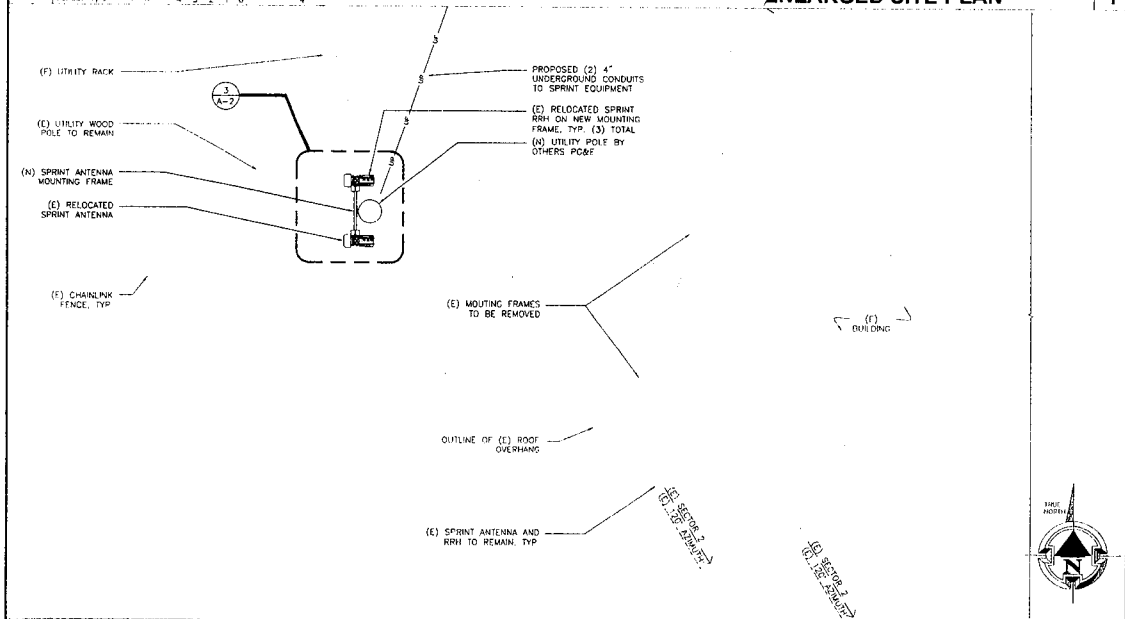
SHEET NUMBER: **A-1**

REVISION: D

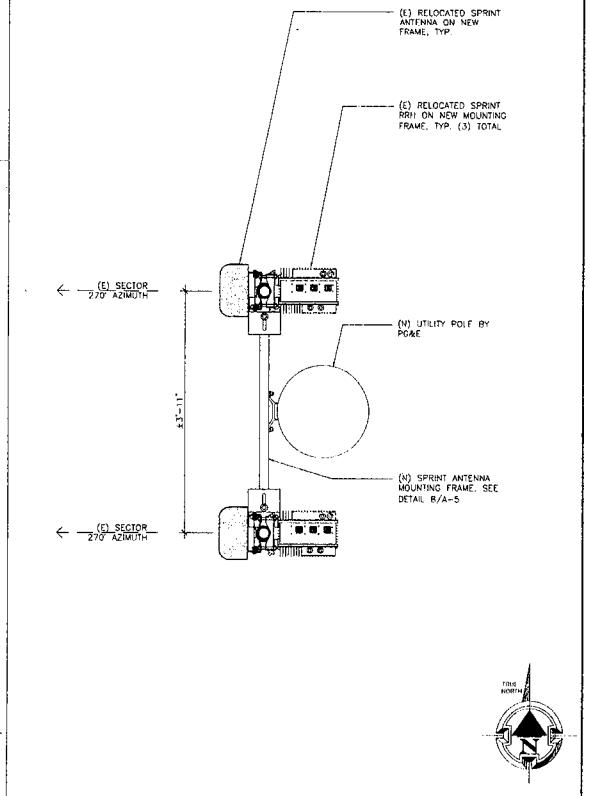
FN03XC022



ENLARGED SITE PLAN | 1



ENLARGED SITE PLAN | 2



NEW ANTENNA LAYOUT | 3

Sprint

QUANTUM

CAMP ASSOCIATES

PROJECT INFORMATION:

SECTOR RELOCATION

OAKLAND

FN03XC022

WARREN PARKWAY & BROADWAY
OAKLAND, CA 94603

ISSUE DATE: 5/21/15

ISSUED FOR: PRELIM PERMIT

REVISIONS

REV	DATE	DESCRIPTION	INITIALS
A	3/18/15	ISSUED FOR PRELIM PERMIT	AIO
B	4/10/15	ISSUED FOR PRELIM PERMIT	AIO
C	5/20/15	ISSUED FOR PRELIM PERMIT	AIO
D	5/20/15	ISSUED FOR PERMIT	AIO

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:

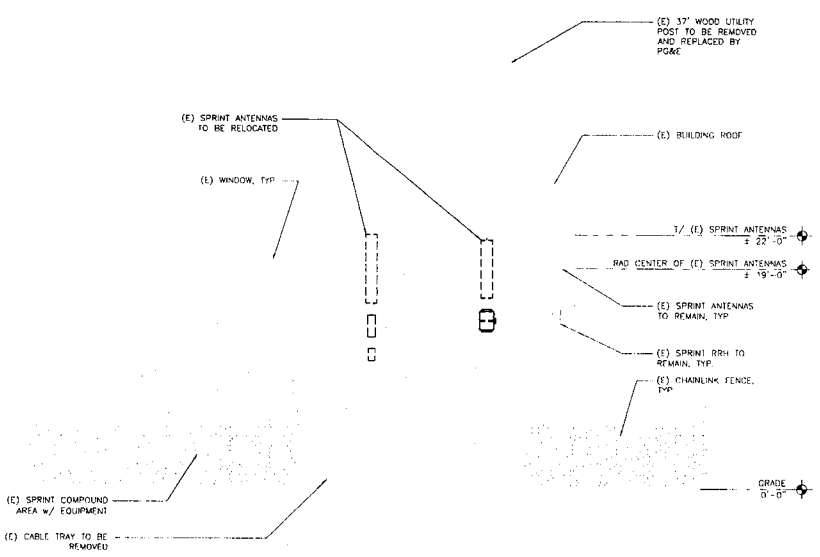
SHEET TITLE:

ENLARGED EQUIPMENT AND ANTENNA LAYOUT

SHEET NUMBER: **A-2**

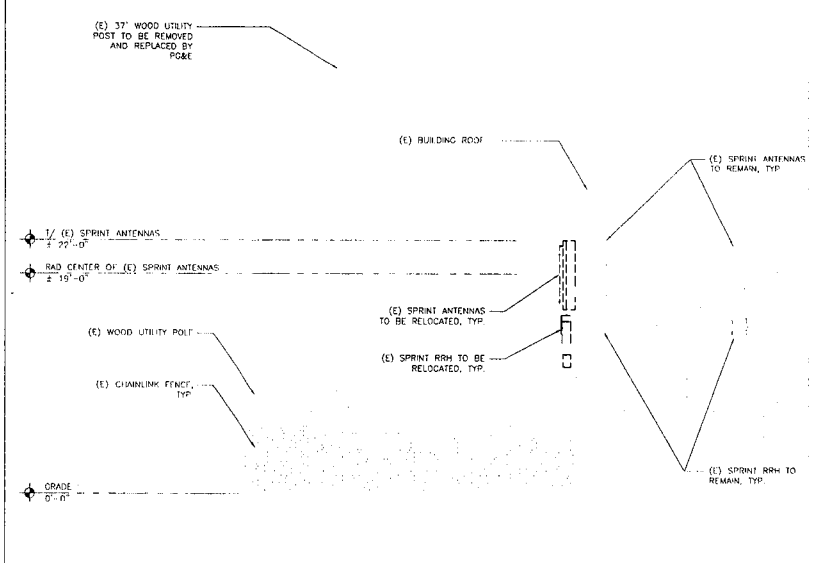
REVISION: D

FN03XC022



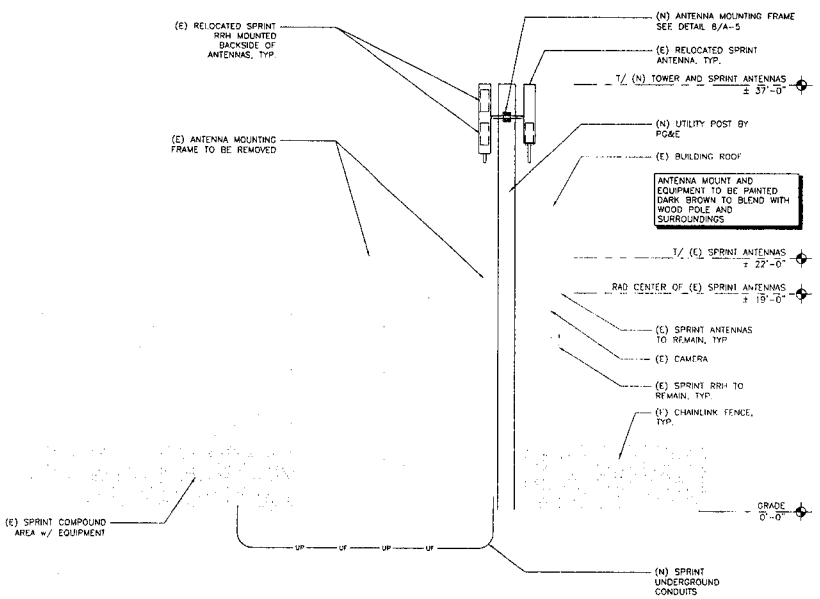
22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"

EXISTING WEST ELEVATION 1



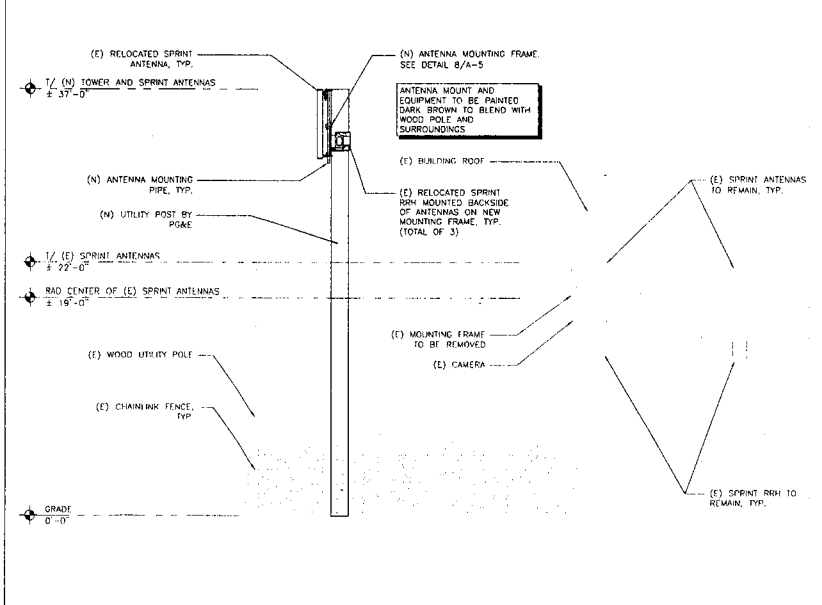
22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"

EXISTING SOUTH ELEVATION 2



22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"

NEW WEST ELEVATION 3



22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"

NEW SOUTH ELEVATION 4

Sprint

QUANTUM

CAMP ASSOCIATES

PROJECT INFORMATION

SECTOR RELOCATION

OAKLAND

FN03XC022
WARREN PARKWAY & BROADWAY
OAKLAND, CA 94603

ISSUE DATE: 5/21/15

ISSUED FOR: PRELIM PERMIT

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	5/18/15	ISSUED FOR PRELIM PERMIT	AJO
B	5/19/15	ISSUED FOR PRELIM PERMIT	AJO
C	5/20/15	ISSUED FOR PRELIM PERMIT	AJO
D	5/20/15	ISSUED FOR PERMIT	AJO

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE

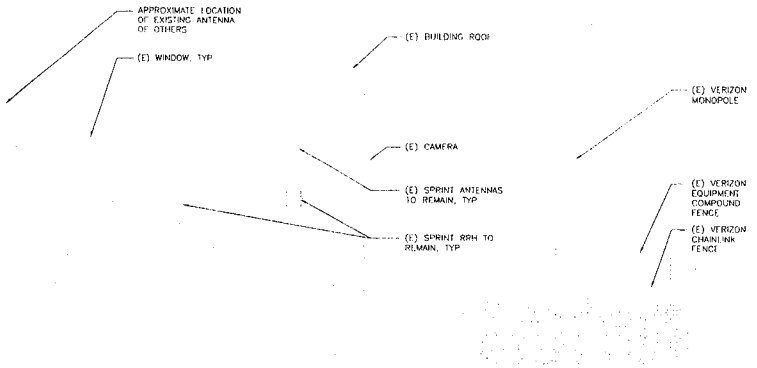
SHEET TITLE:

ELEVATIONS

SHEET NUMBER: **A-3.0**

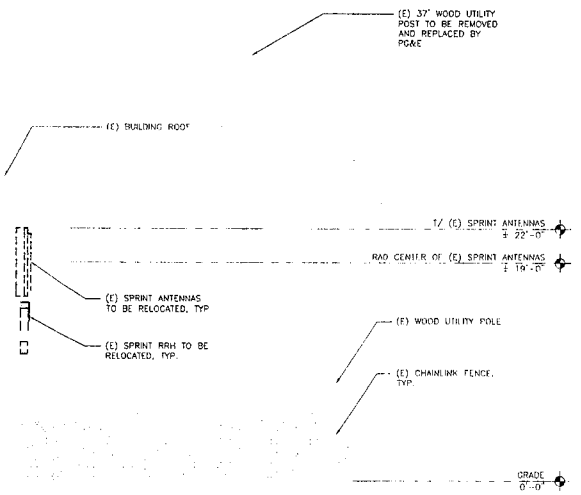
REVISION: D

FN03XC022



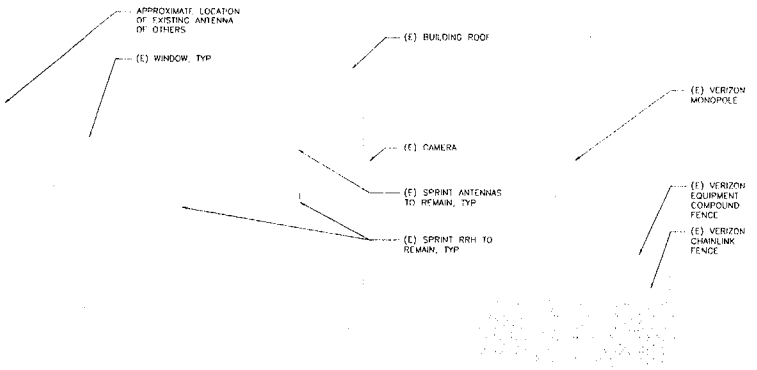
22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"

EXISTING EAST ELEVATION | 1



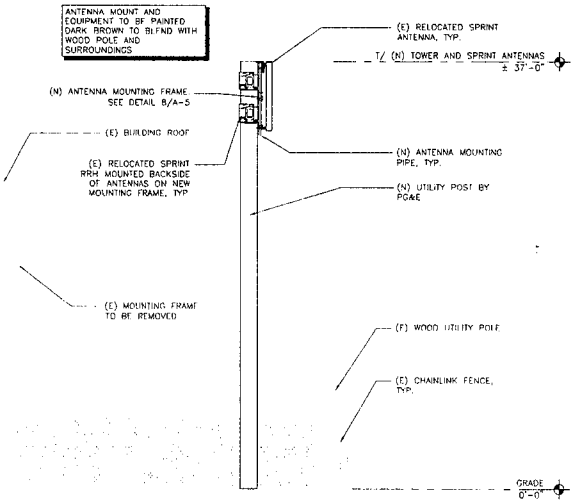
22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"

EXISTING NORTH ELEVATION | 2



22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"

NEW EAST ELEVATION | 3



22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"

NEW NORTH ELEVATION | 4

Sprint

QUANTUM

CAMP ASSOCIATES

PROJECT INFORMATION

SECTOR RELOCATION

OAKLAND

FN03XC022

WARREN PARKWAY & BROADWAY

OAKLAND, CA 94603

ISSUE DATE: 5/21/15

ISSUED FOR: PRELIM PERMIT

REVISIONS

REV	DATE	DESCRIPTION	INITIALS
A	3/18/15	ISSUED FOR PRELIM PERMIT	AIO
B	4/10/15	ISSUED FOR PRELIM PERMIT	AIO
C	5/20/15	ISSUED FOR PRELIM PERMIT	AIO
D	5/20/15	ISSUED FOR PERMIT	AIO

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:

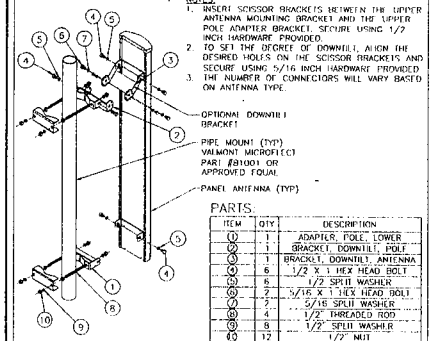
SHEET TITLE:

ELEVATIONS

SHEET NUMBER: **A-3.1**

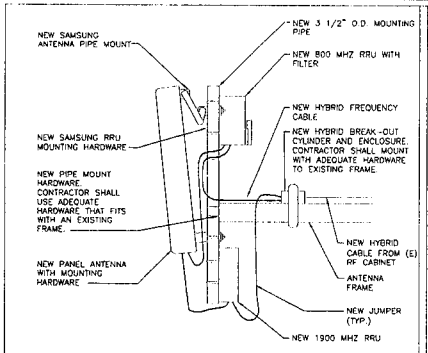
REVISION: D

FN03XC022

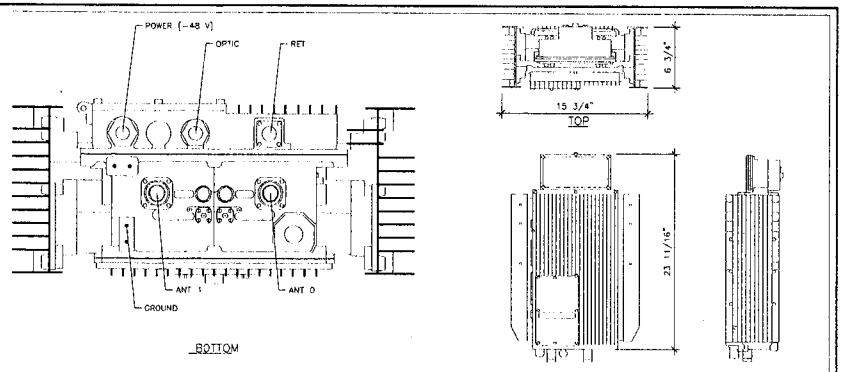


ITEM	QTY.	DESCRIPTION
1	1	ADAPTER, POLE, LOWER
2	1	BRACKET, DOWNTILT, POLE
3	1	BRACKET, DOWNTILT, ANTENNA
4	6	1/2 X 1 HEX HEAD BOLT
5	6	1/2 SPLIT WASHER
6	2	5/16 X 1 HEX HEAD BOLT
7	2	5/16 SPLIT WASHER
8	4	1/2" THREADED ROD
9	8	1/2" SPLIT WASHER
10	12	1/2" NUT

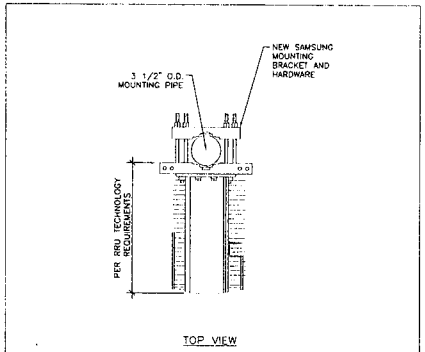
NOT TO SCALE **ANTENNA MOUNTING DETAIL 1**

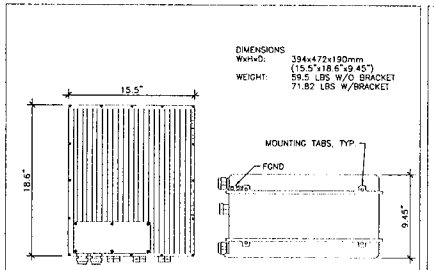


NOT TO SCALE **ANT. and HYBRID CABLE DET. 2**

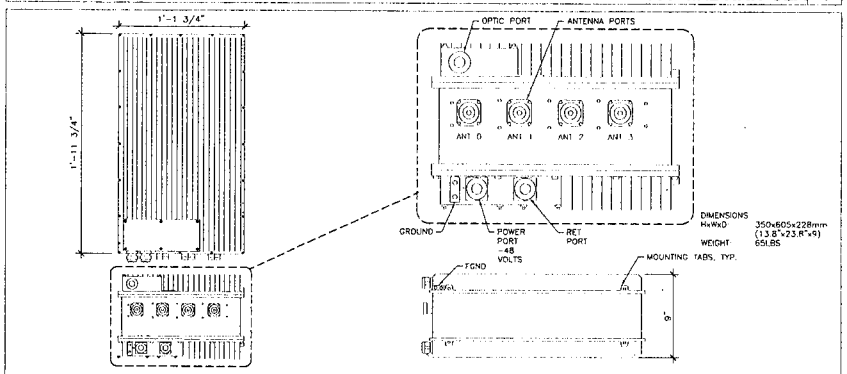


NOT TO SCALE **800 MHz RRH-C2A 4**

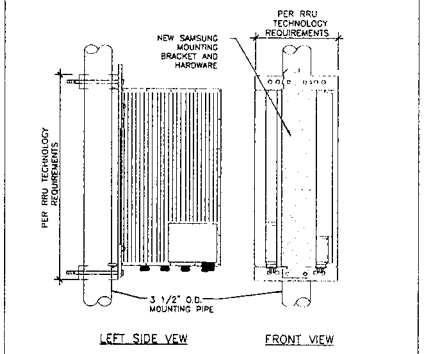




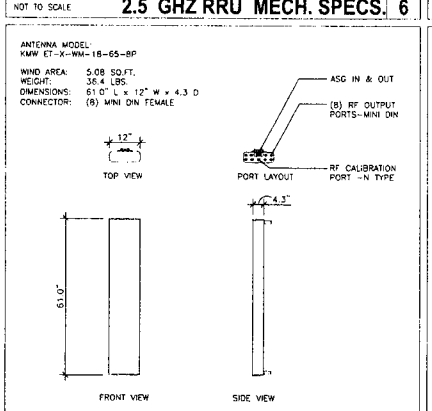
NOT TO SCALE **2.5 GHZ RRU MECH. SPECS. 6**



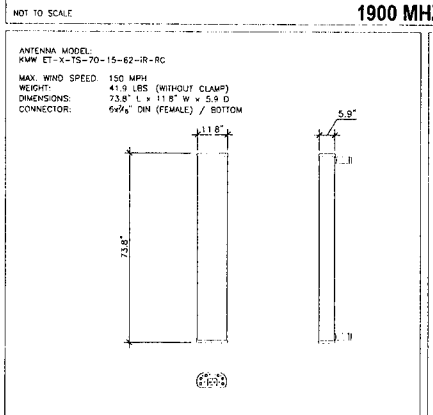
NOT TO SCALE **1900 MHZ RRH-P4 MECHANICAL SPECIFICATIONS 8**



NOT TO SCALE **RRU POLE INSTALLATION DET. 9**



NOT TO SCALE **ANTENNA DETAIL 10**



NOT TO SCALE **ANTENNA DETAIL 11**

NOT TO SCALE **NOT USED 12**

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

Sprint

QUANTUM

CALVP ASSOCIATES

PROJECT INFORMATION

SECTOR RELOCATION

OAKLAND

FN03XC022
WARREN PARKWAY & BROADWAY
OAKLAND, CA 94603

ISSUE DATE 5/21/15

ISSUED FOR: PRELIM PERMIT

REVISIONS

REV	DATE	DESCRIPTION	INITIALS
A	3/18/15	ISSUED FOR PRELIM PERMIT	AJD
B	4/10/15	ISSUED FOR PRELIM PERMIT	AJD
C	5/20/15	ISSUED FOR PRELIM PERMIT	AJD
D	5/20/15	ISSUED FOR PERMIT	AJD

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE

SHEET TITLE

DETAILS

SHEET NUMBER: **A-4**

REVISION: D

FN03XC022

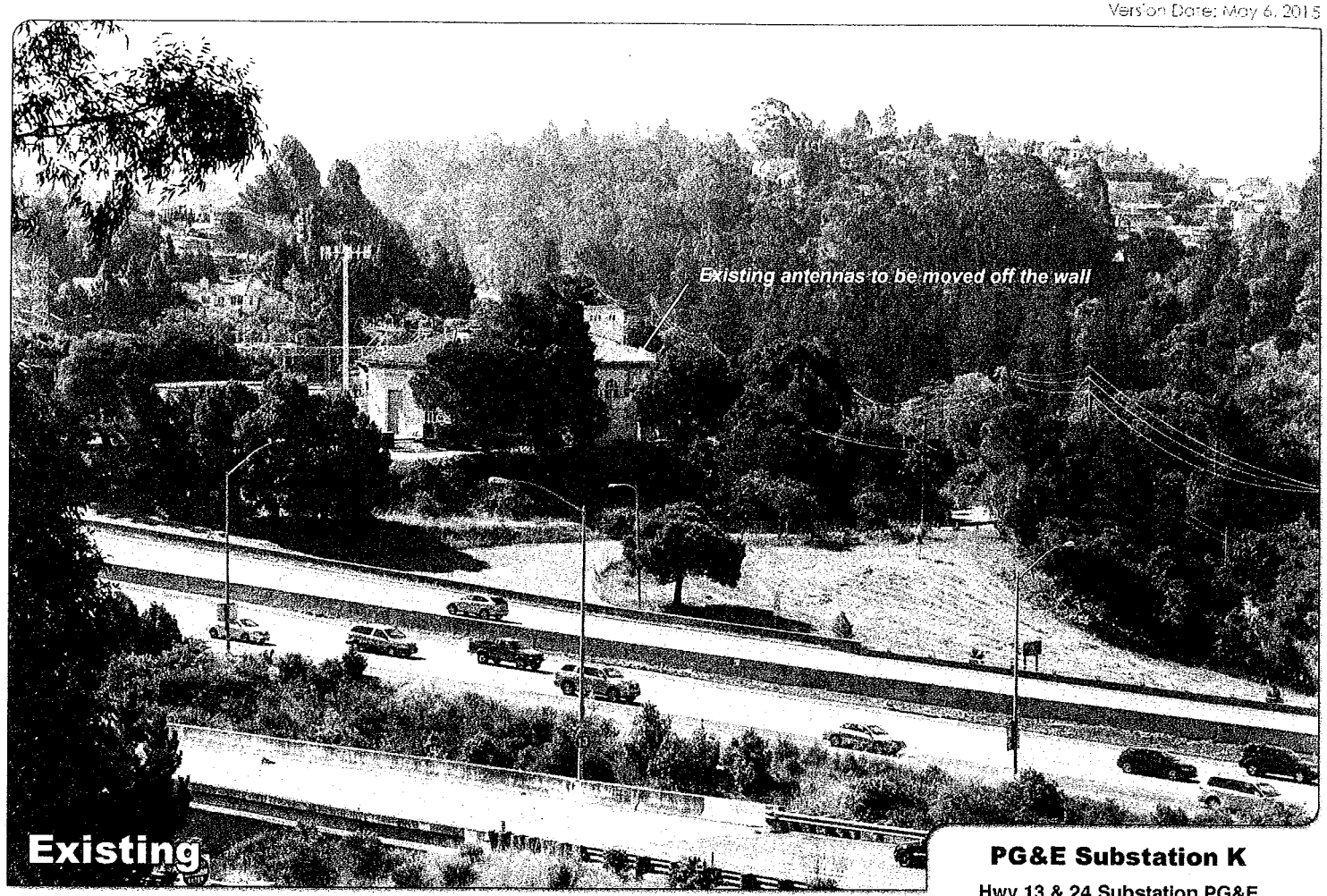
ATTACHMENT A

PG&E Substation K

Hwy 13 & 24 Substation PG&E Oakland CA

Sprint **FN03XC022**

Photosimulation of the view looking southeast from Broadway.



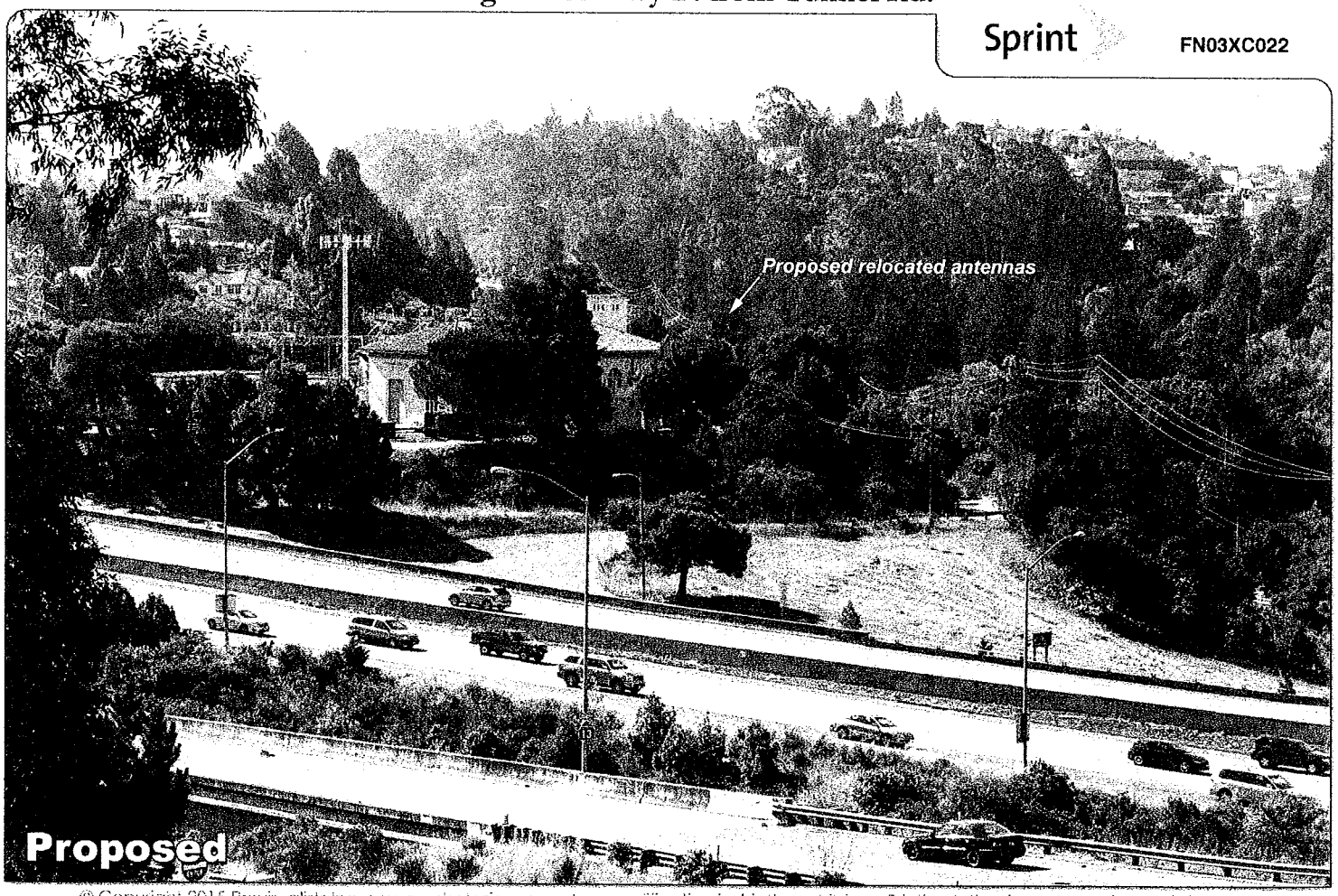
Photosimulation of the view looking across Hwy 24 from Tunnel Rd.

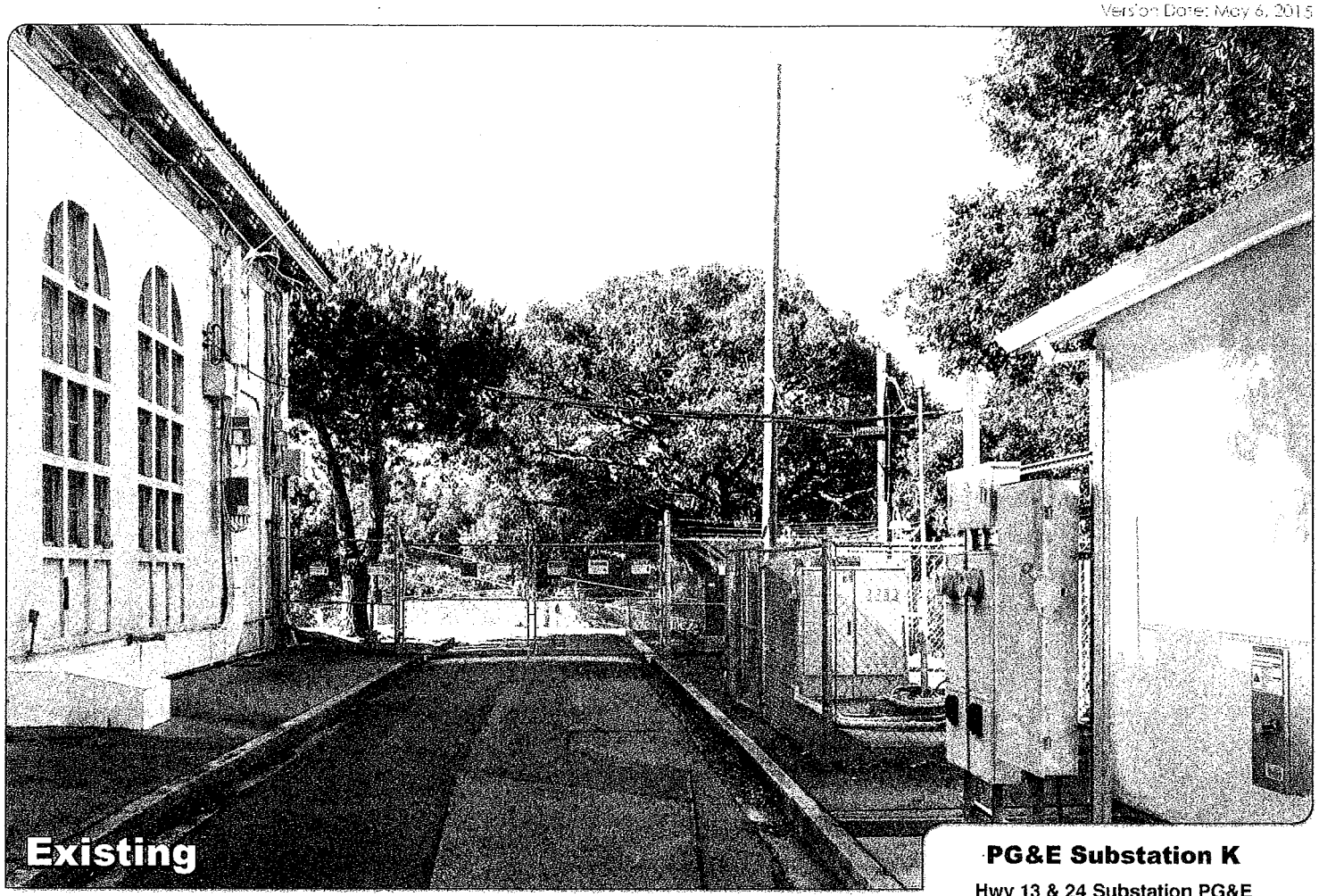
PG&E Substation K

Hwy 13 & 24 Substation PG&E
Oakland CA

Sprint

FN03XC022



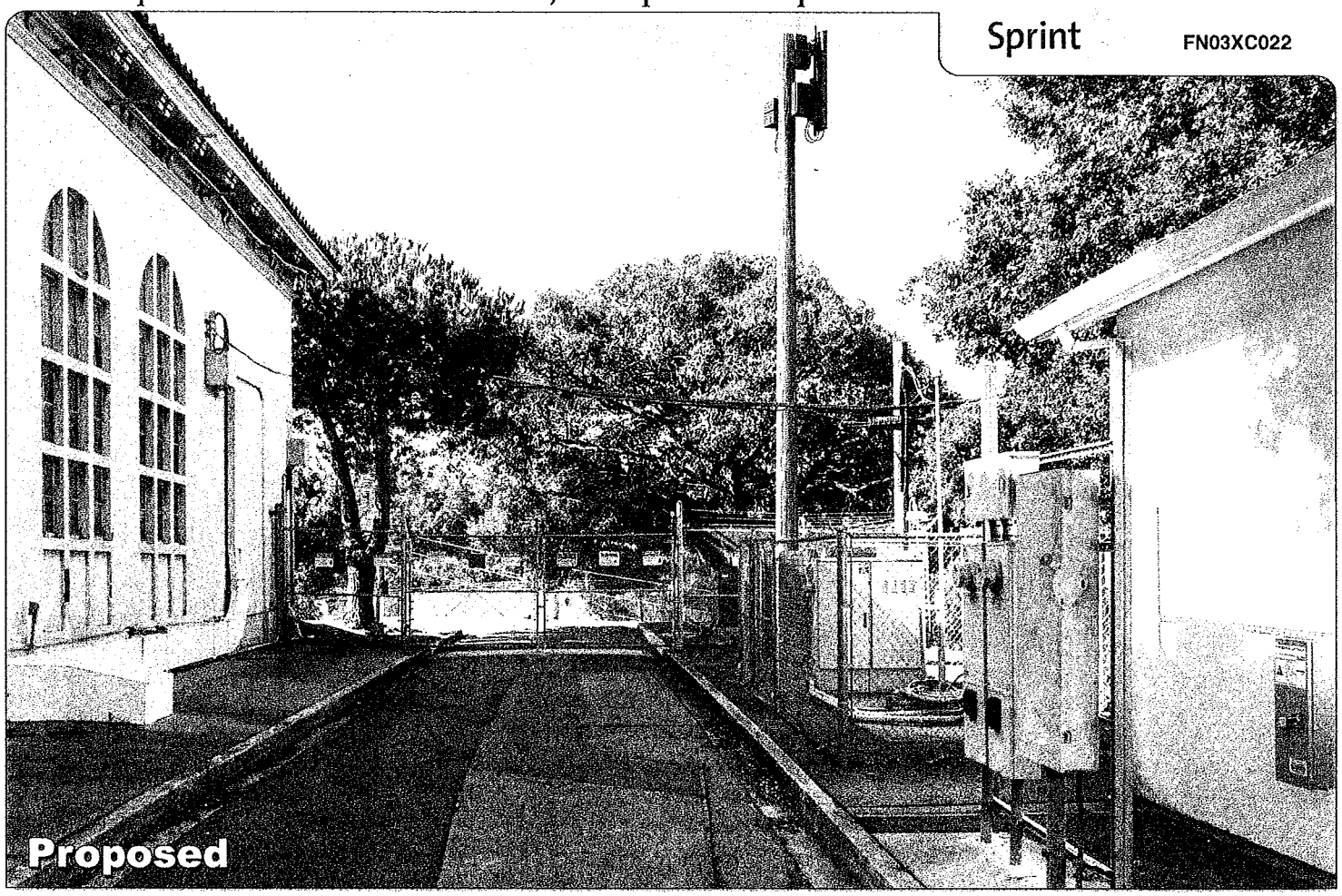


PG&E Substation K

Hwy 13 & 24 Substation PG&E
Oakland CA

An up close view of the installation, not a public viewpoint.

Sprint **FN03XC022**



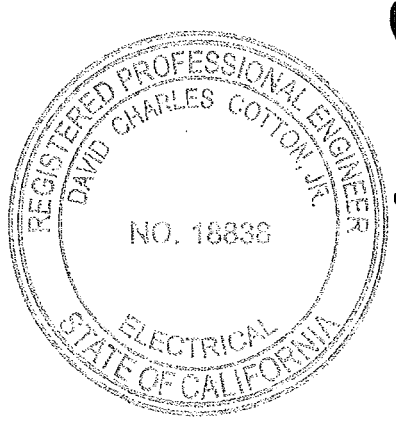
Precision Site Development, LLC on behalf of Sprint
Site ID – FN03XC022
Site Name – Oakland
Site Compliance Report

6650 Broadway
Oakland, CA 94603

Latitude: N37-50-52.76
Longitude: W122-13-46.23
Structure Type: Monopole

Report generated date: May 7, 2015
Report by: Tony DeMattia
Customer Contact: Jeremy Jordan

Sprint Will Be Compliant based on FCC Rules and Regulations.



David Charles Cotton, Jr.
Registered Professional Engineer (Electrical)
State of California, 18838
Date: 2015-May-07

Precision Site Development, LLC on behalf of Sprint
Oakland - FN03XC022
Radio Frequency (RF) Site Compliance Report

6650 Broadway, Oakland, CA 94603

200 N. Glebe Road • Suite 1000 • Arlington, VA 22203-3728
703.276.1100 • info@sitesafe.com

Table of Contents

1 Executive Summary

Precision Site Development, LLC on behalf of Sprint has contracted with Sitesafe, Inc. (Sitesafe), an independent Radio Frequency (RF) regulatory and engineering consulting firm, to determine whether the proposed communications site, FN03XC022 - Oakland, located at 6650 Broadway, Oakland, CA, is in compliance with Federal Communication Commission (FCC) Rules and Regulations for RF emissions.

This report contains a detailed summary of the RF environment at the site including:

- diagram of the site;
- inventory of the make / model of all antennas
- theoretical MPE based on modeling.

This report addresses exposure to radio frequency electromagnetic fields in accordance with the FCC Rules and Regulations for all individuals, classified in two groups, "Occupational or Controlled" and "General Public or Uncontrolled." This **site will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65.

This document and the conclusions herein are based on the information provided by Sprint.

If you have any questions regarding RF safety and regulatory compliance, please do not hesitate to contact Sitesafe's Customer Support Department at (703) 276-1100.

2 Regulatory Basis

2.1 FCC Rules and Regulations

In 1996, the Federal Communication Commission (FCC) adopted regulations for the evaluating of the effects of RF emissions in 47 CFR § 1.1307 and 1.1310. The guideline from the FCC Office of Engineering and Technology is Bulletin 65 ("OET Bulletin 65"), *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields*, Edition 97-01, published August 1997. Since 1996 the FCC periodically reviews these rules and regulations as per their congressional mandate.

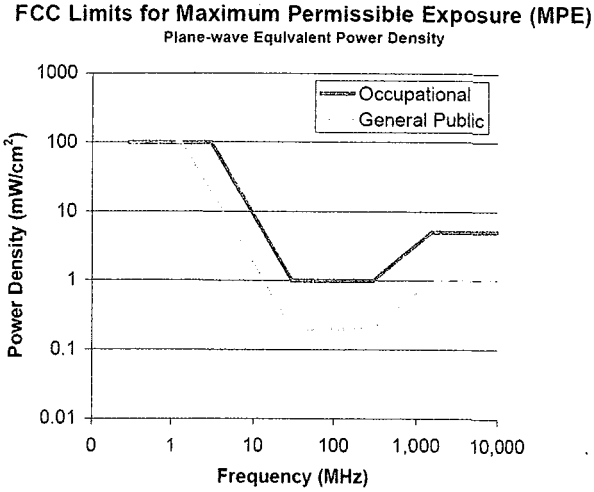
FCC regulations define two separate tiers of exposure limits: Occupational or "Controlled environment" and General Public or "Uncontrolled environment". The General Public limits are generally five times more conservative or restrictive than the Occupational limit. These limits apply to *accessible* areas where workers or the general public may be exposed to Radio Frequency (RF) electromagnetic fields.

Occupational or Controlled limits apply in situations in which persons are exposed as a consequence of their employment and where those persons exposed have been made fully aware of the potential for exposure and can exercise control over their exposure.

An area is considered a Controlled environment when access is limited to these aware personnel. Typical criteria are restricted access (i.e. locked or alarmed doors, barriers, etc.) to the areas where antennas are located coupled with proper RF warning signage. A site with Controlled environments is evaluated with Occupational limits.

All other areas are considered Uncontrolled environments. If a site has no access controls or no RF warning signage it is evaluated with General Public limits.

The theoretical modeling of the RF electromagnetic fields has been performed in accordance with OET Bulletin 65. The Maximum Permissible Exposure (MPE) limits utilized in this analysis are outlined in the following diagram:



Limits for Occupational/Controlled Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

Limits for General Population/Uncontrolled Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz *Plane-wave equivalent power density

2.2 OSHA Statement

The General Duty clause of the OSHA Act (Section 5) outlines the occupational safety and health responsibilities of the employer and employee. The General Duty clause in Section 5 states:

(a) Each employer –

(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;

(2) shall comply with occupational safety and health standards promulgated under this Act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

OSHA has defined Radiofrequency and Microwave Radiation safety standards for workers who may enter hazardous RF areas. Regulation Standards 29 CFR § 1910.147 identify a generic Lock Out Tag Out procedure aimed to control the unexpected energization or start up of machines when maintenance or service is being performed.

3 Site Compliance

3.1 Site Compliance Statement

Upon evaluation of the cumulative RF emission levels from all operators at this site, Sitesafe has determined that:

This **site will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65.

The compliance determination is based on theoretical modeling, RF signage placement recommendations, proposed antenna inventory and the level of restricted access to the antennas at the site. Any deviation from the Sprint's proposed deployment plan could result in the site being rendered non-compliant.

3.2 Actions for Site Compliance

Based on common industry practice and our understanding of FCC and OSHA requirements, this section provides a statement of recommendations for site compliance. RF alert signage recommendations have been proposed based on theoretical analysis of MPE levels. Barriers can consist of locked doors, fencing, railing, rope, chain, paint striping or tape, combined with RF alert signage.

This site will be compliant with the FCC rules and regulations.

Sitesafe found one or more issues that led to our determination. The site will be made compliant if the following changes are implemented:

- Posting RF signs that a person could read and understand the signs prior to accessing the site;

Site Access Location

No action required.

Sprint Proposed Alpha Sector Location

No action required.

Sprint Proposed Beta Sector Location

No action required.

Sprint Proposed Gamma Sector Location

Blue notice sign required just underneath the antenna mount on the monopole to properly warn any person access these antennas.

4 Safety Plan and Procedures

The following items are general safety recommendations that should be administered on a site by site basis as needed by the carrier.

General Maintenance Work: Any maintenance personnel required to work immediately in front of antennas and / or in areas indicated as above 100% of the Occupational MPE limits should coordinate with the wireless operators to disable transmitters during their work activities.

Training and Qualification Verification: All personnel accessing areas indicated as exceeding the General Population MPE limits should have a basic understanding of EME awareness and RF Safety procedures when working around transmitting antennas. Awareness training increases a workers understanding to potential RF exposure scenarios. Awareness can be achieved in a number of ways (e.g. videos, formal classroom lecture or internet based courses).

Physical Access Control: Access restrictions to transmitting antennas locations is the primary element in a site safety plan. Examples of access restrictions are as follows:

- Locked door or gate
- Alarmed door
- Locked ladder access
- Restrictive Barrier at antenna (e.g. Chain link with posted RF Sign)

RF Signage: Everyone should obey all posted signs at all times. RF signs play an important role in properly warning a worker prior to entering into a potential RF Exposure area.

Assume all antennas are active: Due to the nature of telecommunications transmissions, an antenna transmits intermittently. Always assume an antenna is transmitting. Never stop in front of an antenna. If you have to pass by an antenna, move through as quickly and safely as possible thereby reducing any exposure to a minimum.

Maintain a 3 foot clearance from all antennas: There is a direct correlation between the strength of an EME field and the distance from the transmitting antenna. The further away from an antenna, the lower the corresponding EME field is.

Site RF Emissions Diagram: Section 5 of this report contains an RF Diagram that outlines various theoretical Maximum Permissible Exposure (MPE) areas at the site. The modeling is a worst case scenario assuming a duty cycle of 100% for each transmitting antenna at full power. This analysis is based on one of two access control criteria: General Public criteria means the access to the site is uncontrolled and anyone can gain access. Occupational criteria means the access is restricted and only properly trained individuals can gain access to the antenna locations.

5 Analysis

5.1 RF Emissions Diagram

The RF diagram(s) below display theoretical spatially averaged percentage of the Maximum Permissible Exposure for all systems at the site unless otherwise noted. These diagrams use modeling as prescribed in OET Bulletin 65 and assumptions detailed in Appendix B.

The key at the bottom of each diagram indicates if percentages displayed are referenced to FCC General Population Maximum Permissible Exposure (MPE) limits. Color coding on the diagram is as follows:

- Gray represents areas predicted to be at 5% of the MPE limits, or below.
- Green represents areas predicted to be between 5% and 100% of the MPE limits.
- Blue represents areas predicted to be between 100% and 500% of the MPE limits.
- Yellow represents areas predicted to be between 500% and 5000% of the MPE limits.
- Red areas indicated predicted levels greater than 5000% of the MPE limits.

General Population diagrams are specified when an area is accessible to the public; i.e. personnel that do not meet Occupational or RF Safety trained criteria, could gain access.

If trained occupational personnel require access to areas that are delineated as Blue or above 100% of the limit, Sitesafe recommends that they utilize the proper personal protection equipment (RF monitors), coordinate with the carriers to reduce or shutdown power, or make real-time power density measurements with the appropriate power density meter to determine real-time MPE levels. This will allow the personnel to ensure that their work area is within exposure limits.

The key at the bottom also indicates the level or height of the modeling with respect to the main level. The origin is typically referenced to the main rooftop level, or ground level for a structure without access to the antenna level. For example:

Average from 0 feet above to 6 feet above origin

and

Average from 20 feet above to 26 feet above origin

The first indicates modeling at the main rooftop (or ground) level averaged over 6 feet. The second indicates modeling at a higher level (possibly a penthouse level) of 20 feet averaged over 6 feet.

Abbreviations used in the RF Emissions Diagrams

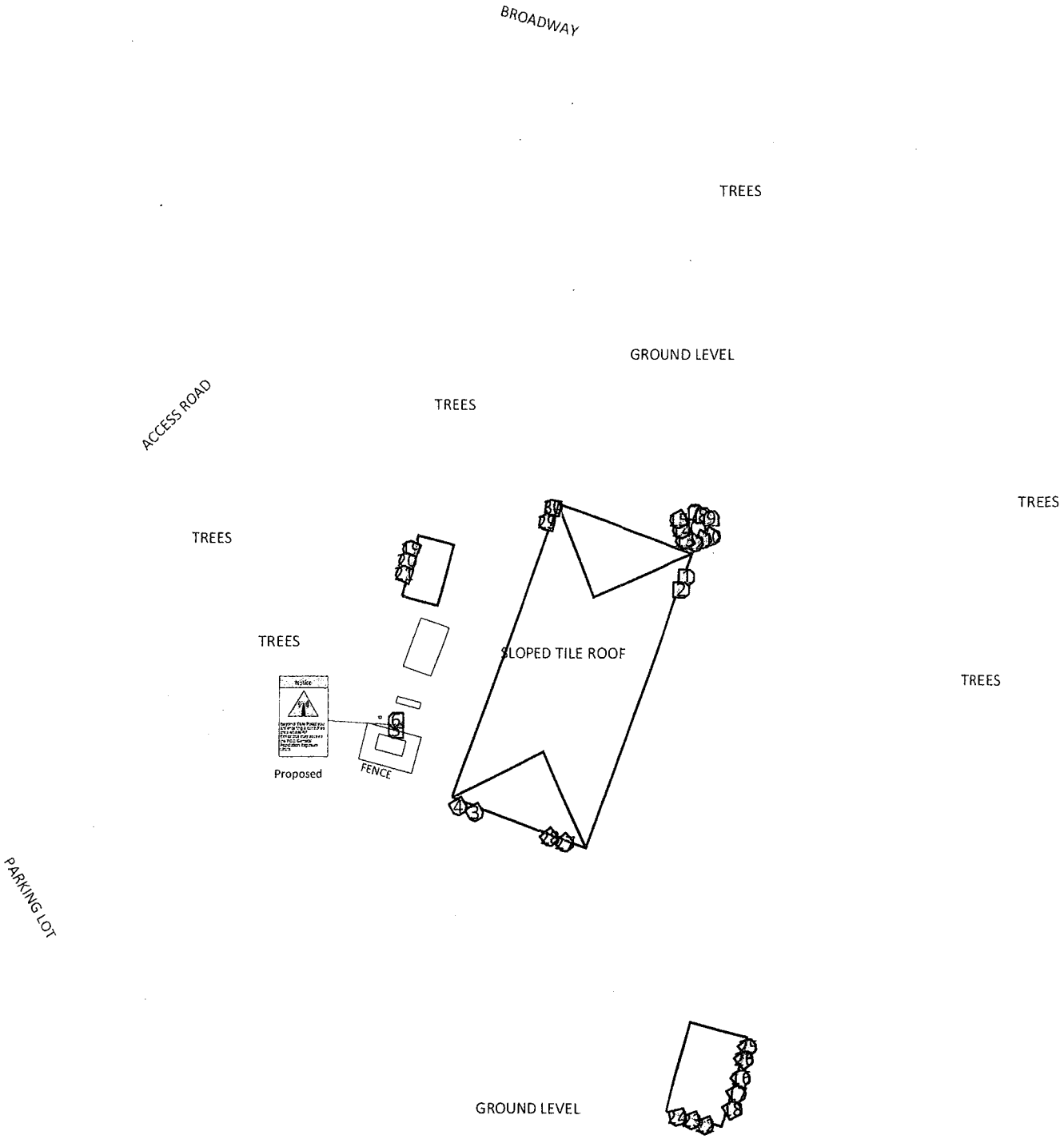
PH=##'	Penthouse at ## feet above main roof

Additional Information in the RF Emissions Diagrams Key

The RF Emission Diagram provides indications of RF signage, barriers and locked doors. The table below lists the abbreviations used to indicate locked doors, signs and barriers:

Table 1: RF Signage and Barrier Key					
RF Signage			**Barriers**		
Type	**Existing Location**	**Recommended Location**	**Type**	**Existing Location**	**Recommended Location**
Notice	**NE**	**NR**	Locked Door	**LE**	**LR**
Caution	**CE**	**CR**	Fencing	**RE**	**RR**
Warning	**WE**	**WR**	Rope Chain		
Info Sign	**IE**		Paint Stripes		
NOC Information	**INOCE**	**INOCR**			
10 Step Guideline	**10SE**	**10SR**			

RF Emissions Simulation For: Oakland
Site Map



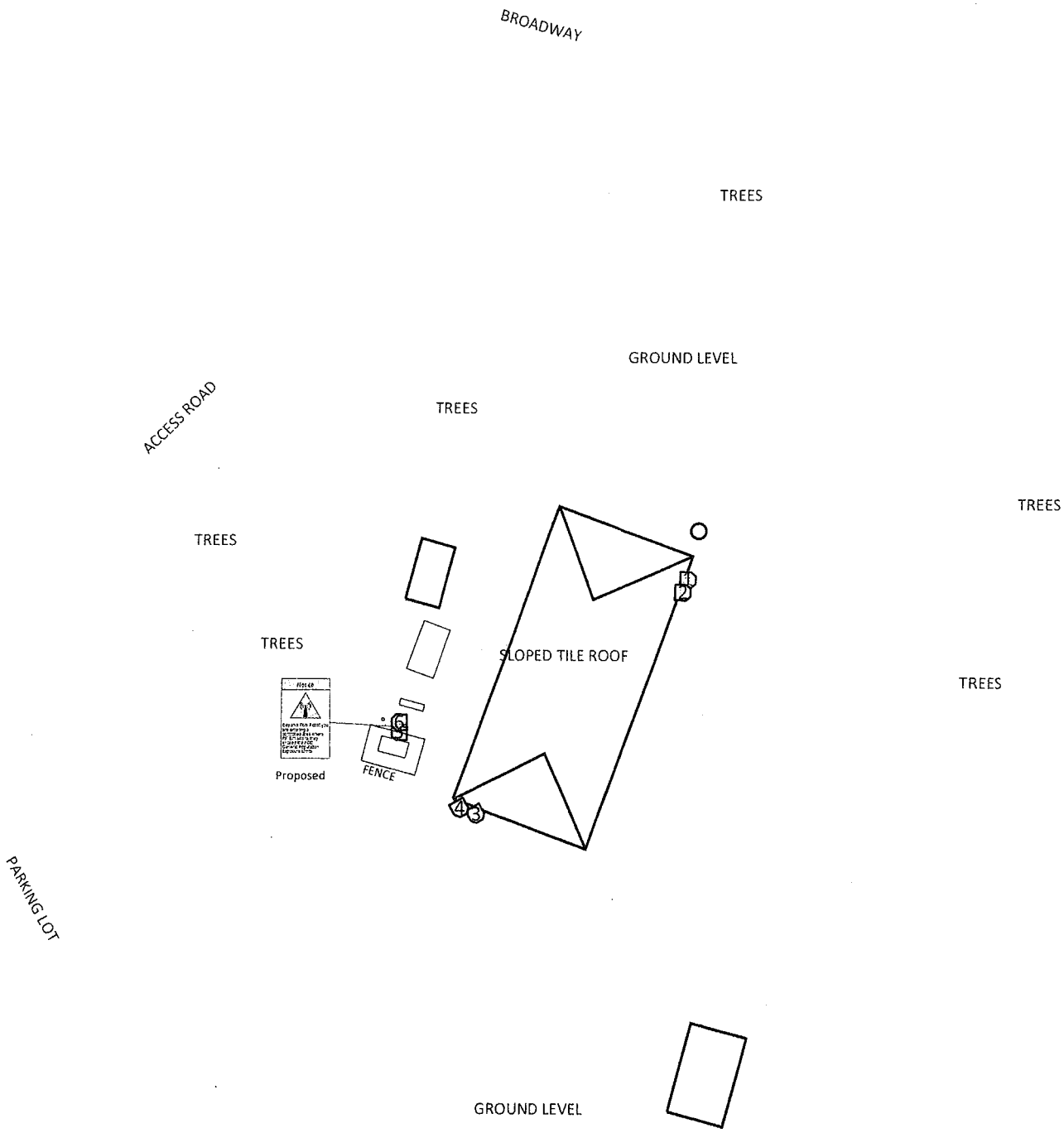
(Feet)

0 25 50

www.sitesafe.com
Site Name:Oakland

AT&T MOBILITY LLC	VERIZON WIRELESS	T-MOBILE	METROPCS	CRICKET COMMUNICATIONS	CLEARWIRE	SPRINT

RF Emissions Simulation For: Oakland
Sprint Contribution Ground Level



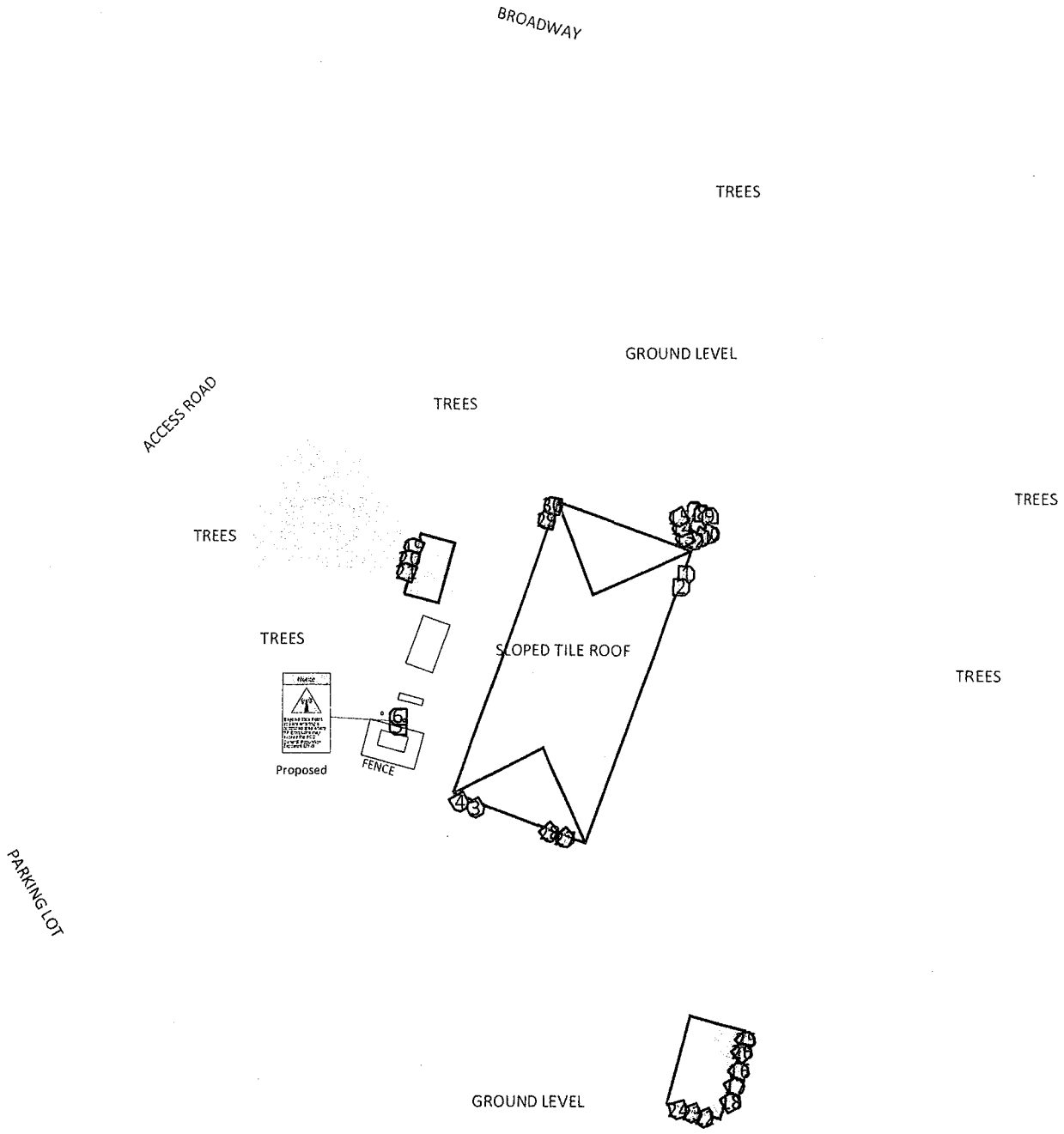
% of FCC Public Exposure Limit
Spatial average 0' - 6'

>= 5000 >= 500 >= 100 >= 5 < 5

(Feet)
0 25 50
www.sitesafe.com
Site Name:Oakland

AT&T MOBILITY LLC	VERIZON WIRELESS	T-MOBILE	METROPCS	CRICKET COMMUNICATIONS	CLEARWIRE	SPRINT

RF Emissions Simulation For: Oakland
Composite View Ground Level



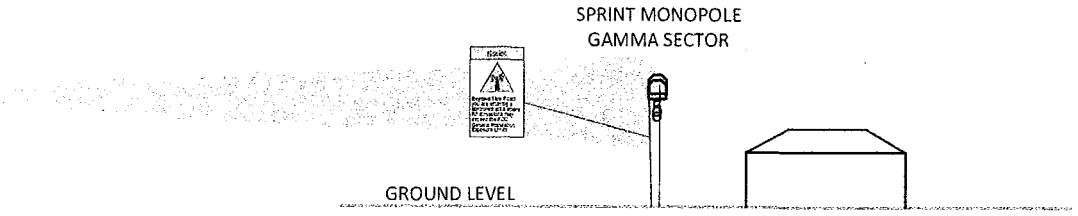
% of FCC Public Exposure Limit
Spatial average 0' - 6'

>= 5000 >= 500 >= 100 >= 5 < 5

(Feet)
0 27.5 55
www.sitesafe.com
Site Name:Oakland

AT&T MOBILITY LLC	VERIZON WIRELESS	T-MOBILE	METROPCS	CRICKET COMMUNICATIONS	CLEARWIRE	SPRINT

RF Emissions Simulation For: Oakland
Sprint Gamma Sector Side Elevation Detail View



% of FCC Public Exposure Limit
Spatial average 0' - 6'

>= 5000 >= 500 >= 100 >= 5 < 5

(Feet)
0 27.5 55

www.sitesafe.com
Site Name:Oakland

AT&T MOBILITY LLC	VERIZON WIRELESS	T-MOBILE	METROPCS	CRICKET COMMUNICATIONS	CLEARWIRE	SPRINT

6 Antenna Inventory

The Antenna Inventory shows all transmitting antennas at the site. This inventory was provided by the customer, and was utilized by Sitesafe to perform theoretical modeling of RF emissions.. The inventory coincides with the site diagrams in this report, identifying each antenna's location at FN03XC022 - Oakland. The antenna information collected includes the following information:

- Licensee or wireless operator name
- Frequency or frequency band
- Transmitter power – Effective Radiated Power ("ERP"), or Equivalent Isotropic Radiated Power ("EIRP") in Watts
- Antenna manufacturer make, model, and gain

For other carriers at this site, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.

The following antenna inventory, on this and the following page, were provided by the customer and were utilized to create the site model diagrams:

Table 3: Antenna Inventory

Ant #	Operated By	TX Freq (MHz)	ERP (Watts)	Antenna Gain (dBd)	Az (Deg)	Antenna Model	Ant Type	Len (ft)	Horizontal Half Power Beamwidth (Deg)	Location		
										X	Y	Z
1	SPRINT	2500	500	15.86	92	KMW ET-X-WM-18-65-8P	Panel	5.1	72	272.2'	321.6'	19'
2	SPRINT	862	1374.2	15.36	92	KMW AM-X-CD-17-65-00T	Panel	8	63	270.5'	317.5'	19'
2	SPRINT	1900	1312.4	15.16	92	KMW AM-X-CD-17-65-00T	Panel	8	68	270.5'	317.5'	19'
3	SPRINT	2500	500	15.86	150	KMW ET-X-WM-18-65-8P	Panel	5.1	72	204.3'	246.4'	19'
4	SPRINT	862	1374.2	15.36	150	KMW AM-X-CD-17-65-00T	Panel	8	63	199.1'	248.2'	19'
4	SPRINT	1900	1312.4	15.16	150	KMW AM-X-CD-17-65-00T	Panel	8	68	199.1'	248.2'	19'
5	SPRINT	2500	500	15.86	270	KMW ET-X-WM-18-65-8P **(Proposed)**	Panel	5.1	72	179.3'	272.4'	34.5'
6	SPRINT	862	1374.2	15.36	270	KMW AM-X-CD-17-65-00T **(Proposed)**	Panel	8	63	179.3'	275.5'	33'
6	SPRINT	1900	1312.4	15.16	270	KMW AM-X-CD-17-65-00T **(Proposed)**	Panel	8	68	179.3'	275.5'	33'
7	VERIZON WIRELESS	850	750	11.91	0	Andrew 731DG65V1EXM	Panel	4	65	274.8'	342.2'	90'
7	VERIZON WIRELESS	1900	1000	15.07	0	Andrew 731DG65V1EXM	Panel	4	65	274.8'	342.2'	90'
8	VERIZON WIRELESS	1900	1000	14.61	0	Andrew DB932DG90E-M	Panel	4.3	90	277.5'	341.2'	90'
9	VERIZON WIRELESS	850	750	10.01	0	RFS APL869014	Panel	7.7	92.4	280.1'	340.2'	90'
10	VERIZON WIRELESS	850	750	11.91	120	Andrew 731DG65V1EXM	Panel	4	65	280.1'	334.4'	90'
10	VERIZON WIRELESS	1900	1000	15.07	120	Andrew 731DG65V1EXM	Panel	4	65	280.1'	334.4'	90'
11	VERIZON WIRELESS	1900	1000	14.61	120	Andrew DB932DG90E-M	Panel	4.3	90	277.5'	333.4'	90'
12	VERIZON WIRELESS	850	750	10.01	120	RFS APL869014	Panel	7.7	92.4	274.8'	332.3'	90'
13	VERIZON WIRELESS	850	750	11.91	240	Andrew 731DG65V1EXM	Panel	4	65	271.5'	333.2'	90'
13	VERIZON WIRELESS	1900	1000	15.07	240	Andrew 731DG65V1EXM	Panel	4	65	271.5'	333.2'	90'
14	VERIZON WIRELESS	1900	1000	14.61	240	Andrew DB932DG90E-M	Panel	4.3	90	270.6'	336.5'	90'
15	VERIZON WIRELESS	850	750	10.01	240	RFS APL869014	Panel	7.7	92.4	269.6'	339.8'	90'
16	AT&T MOBILITY LLC	737	1718	12.56	45	Kathrein-Scala 800-10765	Panel	6.3	68	290'	162.7'	38'

Table 3: Antenna Inventory

Ant #	Operated By	TX Freq (MHz)	ERP (Watts)	Antenna Gain (dBd)	Az (Deg)	Antenna Model	Ant Type	Len (ft)	Horizontal Half Power Beamwidth (Deg)	Location		
										X	Y	Z
17	AT&T MOBILITY LLC	850	87	12	60	Kathrein-Scala 742-264	Panel	4.3	68.4	288.7'	157.7'	38'
17	AT&T MOBILITY LLC	1900	111	15.03	60	Kathrein-Scala 742-264	Panel	4.3	59.9	288.7'	157.7'	38'
18	AT&T MOBILITY LLC	850	428	13.68	60	Kathrein-Scala 742-265	Panel	6.3	68.6	287.5'	152.7'	38'
18	AT&T MOBILITY LLC	1900	805	16.52	60	Kathrein-Scala 742-265	Panel	6.3	59.5	287.5'	152.7'	38'
19	AT&T MOBILITY LLC	737	1679	12.56	295	Kathrein-Scala 800-10765	Panel	6.3	68	184'	330'	15'
20	AT&T MOBILITY LLC	850	347	12	290	Kathrein-Scala 742-264	Panel	4.3	68.4	182.7'	326.2'	15'
20	AT&T MOBILITY LLC	1900	443	15.03	290	Kathrein-Scala 742-264	Panel	4.3	59.9	182.7'	326.2'	15'
21	AT&T MOBILITY LLC	850	310	13.68	290	Kathrein-Scala 742-265	Panel	6.3	68.6	181.8'	322'	15'
21	AT&T MOBILITY LLC	1900	618	16.52	290	Kathrein-Scala 742-265	Panel	6.3	59.5	181.8'	322'	15'
22	AT&T MOBILITY LLC	737	1799	12.56	160	Kathrein-Scala 800-10765	Panel	6.3	68	278.9'	147.6'	38'
23	AT&T MOBILITY LLC	850	520	12	160	Kathrein-Scala 742-264	Panel	4.3	68.4	274.6'	149.2'	38'
23	AT&T MOBILITY LLC	1900	584	15.03	160	Kathrein-Scala 742-264	Panel	4.3	59.9	274.6'	149.2'	38'
24	AT&T MOBILITY LLC	850	538	13.68	165	Kathrein-Scala 742-265	Panel	6.3	68.6	270'	150.3'	38'
24	AT&T MOBILITY LLC	1900	946	16.52	165	Kathrein-Scala 742-265	Panel	6.3	59.5	270'	150.3'	38'
25	METROPCS	1975	755	15.43	50	Generic 4 Ft./65 Deg.	Panel	4.6	65	292.1'	172.5'	30'
26	METROPCS	1975	755	15.43	50	Generic 4 Ft./65 Deg.	Panel	4.6	65	291'	168.6'	30'
27	METROPCS	1975	755	15.43	140	Generic 4 Ft./65 Deg.	Panel	4.6	65	233.4'	236.9'	21'
28	METROPCS	1975	755	15.43	140	Generic 4 Ft./65 Deg.	Panel	4.6	65	228.6'	238.6'	21'
29	METROPCS	1975	755	15.43	280	Generic 4 Ft./65 Deg.	Panel	4.6	65	227.3'	338.8'	21'
30	METROPCS	1975	755	15.43	280	Generic 4 Ft./65 Deg.	Panel	4.6	65	229.3'	343.5'	21'

NOTE: X, Y and Z indicate relative position of the antenna to the origin location on the site, displayed in the model results diagram. Specifically, the Z reference indicates antenna height above the main site level unless otherwise indicated. ERP values provided by the client and used in the modeling may be greater than are currently deployed. For other carriers at this site the use of "Generic" as an antenna model or "Unknown" for a wireless operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.

7 Engineer Certification

The professional engineer whose seal appears on the cover of this document hereby certifies and affirms that:

I am registered as a Professional Engineer in the jurisdiction indicated in the professional engineering stamp on the cover of this document; and

That I am an employee of Sitesafe, Inc., in Arlington, Virginia, at which place the staff and I provide RF compliance services to clients in the wireless communications industry; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission (FCC) as well as the regulations of the Occupational Safety and Health Administration (OSHA), both in general and specifically as they apply to the FCC Guidelines for Human Exposure to Radio-frequency Radiation; and

That I have thoroughly reviewed this Site Compliance Report and believe it to be true and accurate to the best of my knowledge as assembled by and attested to by Tony DeMattia.

May 7, 2015

Appendix A – Statement of Limiting Conditions

Sitesafe will not be responsible for matters of a legal nature that affect the site or property.

Due to the complexity of some wireless sites, Sitesafe performed this analysis and created this report utilizing best industry practices and due diligence. Sitesafe cannot be held accountable or responsible for anomalies or discrepancies due to actual site conditions (i.e., mislabeling of antennas or equipment, inaccessible cable runs, inaccessible antennas or equipment, etc.) or information or data supplied by Sprint, the site manager, or their affiliates, subcontractors or assigns.

Sitesafe has provided computer generated model(s) in this Site Compliance Report to show approximate dimensions of the site, and the model is included to assist the reader of the compliance report to visualize the site area, and to provide supporting documentation for Sitesafe's recommendations.

Sitesafe may note in the Site Compliance Report any adverse physical conditions, such as needed repairs, observed during the survey of the subject property or that Sitesafe became aware of during the normal research involved in performing this survey. Sitesafe will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because Sitesafe is not an expert in the field of mechanical engineering or building maintenance, the Site Compliance Report must not be considered a structural or physical engineering report.

Sitesafe obtained information used in this Site Compliance Report from sources that Sitesafe considers reliable and believes them to be true and correct. Sitesafe does not assume any responsibility for the accuracy of such items that were furnished by other parties. When conflicts in information occur between data provided by a second party and physical data collected by Sitesafe, the physical data will be used.

Appendix B – Assumptions and Definitions

General Model Assumptions

In this site compliance report, it is assumed that all antennas are operating at **full power at all times**. Software modeling was performed for all transmitting antennas located on the site. Sitesafe has further assumed a 100% duty cycle and maximum radiated power.

The site has been modeled with these assumptions to show the maximum RF energy density. Sitesafe believes this to be a *worst-case* analysis, based on best available data. Areas modeled to predict emissions greater than 100% of the applicable MPE level may not actually occur, but are shown as a *worst-case* prediction that could be realized real time. Sitesafe believes these areas to be safe for entry by occupationally trained personnel utilizing appropriate personal protective equipment (in most cases, a personal monitor).

Thus, at any time, if power density measurements were made, we believe the real-time measurements would indicate levels below those depicted in the RF emission diagram(s) in this report. By modeling in this way, Sitesafe has conservatively shown exclusion areas – areas that should not be entered without the use of a personal monitor, carriers reducing power, or performing real-time measurements to indicate real-time exposure levels.

Use of Generic Antennas

For the purposes of this report, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information about a carrier, their FCC license and/or antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use our industry specific knowledge of equipment, antenna models, and transmit power to model the site. If more specific information can be obtained for the unknown measurement criteria, Sitesafe recommends remodeling of the site utilizing the more complete and accurate data. Information about similar facilities is used when the service is identified and associated with a particular antenna. If no information is available regarding the transmitting service associated with an unidentified antenna, using the antenna manufacturer's published data regarding the antenna's physical characteristics makes more conservative assumptions.

Where the frequency is unknown, Sitesafe uses the closest frequency in the antenna's range that corresponds to the highest Maximum Permissible Exposure (MPE), resulting in a conservative analysis.

Definitions

5% Rule – The rules adopted by the FCC specify that, in general, at multiple transmitter sites actions necessary to bring the area into compliance with the guidelines are the shared responsibility of all licensees whose transmitters produce field strengths or power density levels at the area in question in excess of 5% of the exposure limits. In other words, any wireless operator that contributes 5% or greater of the MPE limit in an area that is identified to be greater than 100% of the MPE limit is responsible taking corrective actions to bring the site into compliance.

Compliance – The determination of whether a site is safe or not with regards to Human Exposure to Radio Frequency Radiation from transmitting antennas.

Decibel (dB) – A unit for measuring power or strength of a signal.

Duty Cycle – The percent of pulse duration to the pulse period of a periodic pulse train. Also, may be a measure of the temporal transmission characteristic of an intermittently transmitting RF source such as a paging antenna by dividing average transmission duration by the average period for transmission. A duty cycle of 100% corresponds to continuous operation.

Effective (or Equivalent) Isotropic Radiated Power (EIRP) – The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Effective Radiated Power (ERP) – In a given direction, the relative gain of a transmitting antenna with respect to the maximum directivity of a half wave dipole multiplied by the net power accepted by the antenna from the connecting transmitter.

Gain (of an antenna) – The ratio of the maximum intensity in a given direction to the maximum radiation in the same direction from an isotropic radiator. Gain is a measure of the relative efficiency of a directional antennas as compared to an omni directional antenna.

General Population/Uncontrolled Environment – Defined by the FCC, as an area where RFR exposure may occur to persons who are **unaware** of the potential for exposure and who have no control of their exposure. General Population is also referenced as General Public.

Generic Antenna – For the purposes of this report, the use of "Generic" as an antenna model means the antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use our industry specific knowledge of antenna models to select a worst case scenario antenna to model the site.

Isotropic Antenna – An antenna that is completely non-directional. In other words, an antenna that radiates energy equally in all directions.

Maximum Measurement – This measurement represents the single largest measurement recorded when performing a spatial average measurement.

Appendix C – Rules & Regulations

Explanation of Applicable Rules and Regulations

The FCC has set forth guidelines in OET Bulletin 65 for human exposure to radio frequency electromagnetic fields. Specific regulations regarding this topic are listed in Part 1, Subpart I, of Title 47 in the Code of Federal Regulations. Currently, there are two different levels of MPE - General Public MPE and Occupational MPE. An individual classified as Occupational can be defined as an individual who has received appropriate RF training and meets the conditions outlined below. General Public is defined as anyone who does not meet the conditions of being Occupational. FCC and OSHA Rules and Regulations define compliance in terms of total exposure to total RF energy, regardless of location of or proximity to the sources of energy.

It is the responsibility of all licensees to ensure these guidelines are maintained at all times. It is the ongoing responsibility of all licensees composing the site to maintain ongoing compliance with FCC rules and regulations. Individual licensees that contribute less than 5% MPE to any total area out of compliance are not responsible for corrective actions.

OSHA has adopted and enforces the FCC's exposure guidelines. A building owner or site manager can use this report as part of an overall RF Health and Safety Policy. It is important for building owners/site managers to identify areas in excess of the General Population MPE and ensure that only persons qualified as Occupational are granted access to those areas.

Occupational Environment Explained

The FCC definition of Occupational exposure limits apply to persons who:

- are exposed to RF energy as a consequence of their employment;
- have been made aware of the possibility of exposure; and
- can exercise control over their exposure.

OSHA guidelines go further to state that persons must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

In order to consider this site an Occupational Environment, the site must be controlled to prevent access by any individuals classified as the General Public. Compliance is also maintained when any non-occupational individuals (the General Public) are prevented from accessing areas indicated as Red or Yellow in the attached RF Emissions diagram. In addition, a person must be aware of the RF environment into which they are entering. This can be accomplished by an RF Safety Awareness class, and by appropriate written documentation such as this Site Compliance Report.

All Sprint employees who require access to this site must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

- Blue represents areas predicted to be between 100% and 500% of the General Public MPE limits. This level is safe for a worker to be in at any time.
- Yellow represents areas predicted to be between 500% and 5000% of the General Public MPE limits. This level is safe for a worker to be in.
- Red areas indicated predicted levels greater than 5000% of the General Public MPE limits. This level is not safe for the General Public to be in.

7. For an Occupational environment the four color levels identified in this analysis can be interpreted in the following manner:

- Areas indicated as Gray are at 5% of the Occupational MPE limits or below. This level is safe for a worker to be in at any time.
- Green represents areas predicted to be between 5% and 20% of the Occupational MPE limits. This level is safe for a worker to be in at any time.
- Yellow represents areas predicted to be between 20% and 100% of the Occupational MPE limits. Only individuals that have been properly trained in RF Health and Safety should be allowed to work in this area. This is not an area that is suitable for the General Public to be in.
- Red areas indicated predicted levels greater than 100% of the Occupational MPE limits. This level is not safe for the Occupational worker to be in for prolonged periods of time. Special procedures must be adhered to such as lock out tag out procedures to minimize the workers exposure to EME.

8. Use of a Personal Protective Monitor: When working around antennas, Sitesafe strong recommends the use of a Personal Protective Monitor (PPM). Wearing a PPM will properly forewarn the individual prior to entering an RF exposure area.

Keep a copy of this report available for all persons who must access the site. They should read this report and be aware of the potential hazards with regards to RF and MPE limits.

Additional Information

Additional RF information is available by visiting both www.Sitesafe.com and www.fcc.gov/oet/rfsafety. OSHA has additional information available at: http://www.osha-slc.gov/SLTC/radiofrequencyradiation.

ATTACHMENT C

Quantum Contracting NorthWest, L.L.C.
Main Office | 14940A NE 95th Street Redmond, WA 98052
CA Office | 915 Highland Pointe Drive, Suite 250 Roseville, CA 95678

May 26, 2015

To: City of Oakland Planning

RE: Sprint Site FN03XC022
6550 Broadway, Oakland CA

City of Oakland Small Project Design Review Application Project Description:

Sprint/Nextel ("Sprint") currently operates a wireless telecommunications facility at the PG&E Substation located near the intersection of the Warren Freeway and Broadway, in Oakland, APN-048H-7591-4-6.

Sprint is proposing to relocate (2) existing antennas, (3) Remote Radio Head units, (2) junction cylinders, and associated cabling from its current wall mount location, onto a PG&E wood pole approximately 20' from the current location. PG&E will be replacing the existing wood pole with a new wood pole for structural reasons. The new wood pole will be the same height as the existing wood pole, approximately 37'. The relocated antennas and RRH units will be painted brown to match the wood pole and blend with the existing surroundings. The Sprint facility will still have a total of six (6) panel antennas as previously approved for. The subject building is not readily visible to the general public.

The antenna relocation is needed in order to improve coverage on and around the Hwy. 24 and Hwy 13 interchange. The current coverage is limited due to the current mounting height and topography of the area. The current signal is also being blocked by utility lines and trees in front of the existing antennas.

On April 23, 2015 The City of Oakland approved a Small Project Design Review (Case File DS140145) for a Sprint modification to the same facility.

The existing and proposed modified Sprint telecommunications facility will operate 24 hours a day, seven days a week providing critical telecommunication services. This facility is unmanned, and is visited by a technician approximately once every 4-6 weeks.

Site Alternative Analysis:

Other alternatives to the above proposal were evaluated but not pursued as they would have required a New Site build in order to meet the coverage objectives. This proposal is being pursued because Sprint is able to modify an existing site by collocating one antenna sector onto an existing wood pole, while utilizing their existing ground mounted equipment cabinets. The wood pole is located on a PG&E substation property that currently has Sprint, Verizon, and AT&T Wireless facilities collocated.

Thank You,
Jeremy Jordan
916-918-9322