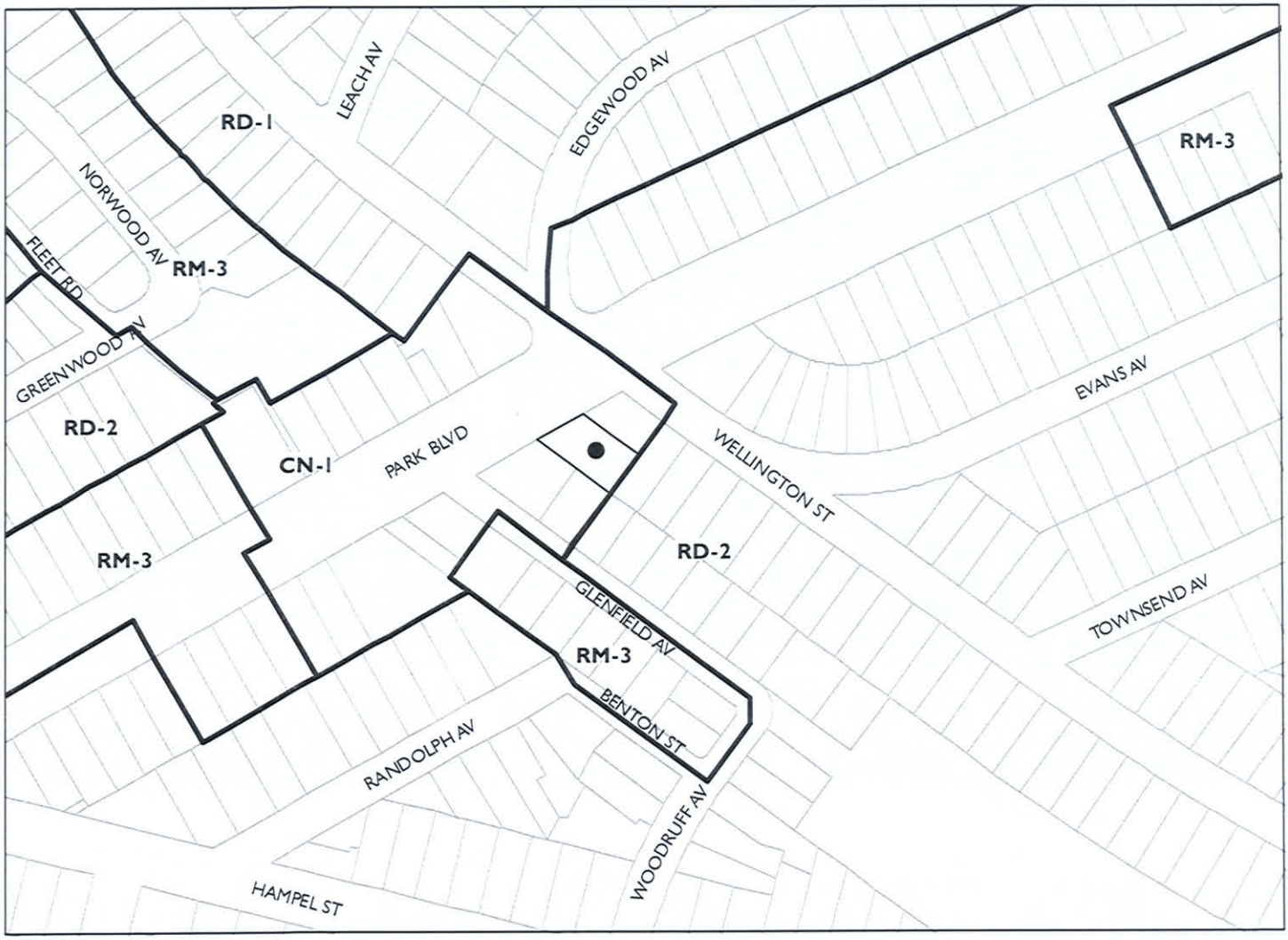
Location:	**4226 Park Blvd.**
Assessor's Parcel Number:	**024 -0539-045-00**
Proposal:	Request for a Major Conditional Use Permit and Design Review to establish a new unmanned macro telecommunications facility on the rooftop of an existing commercial building. Project calls for 12 panel antennas, 2 GPS units, 18 RRU's concealed inside a new FRP Cupola. All proposed antennas and equipment will be fully screened from public view.
Contact Person/ Phone Number:	Tawni Parr / New Cingular Wireless for AT&T (916) 508-8718
Owner:	James & Christine Heldman c/o John Moyer
Planning Permits Required:	Major Conditional Use Permit to establish a new Macro wireless telecommunications facility located within 100-feet of a residential zone (OMC Sec. 17.50.105(A), 17.134.020(A)(3)(h)); Regular Design Review (non-residential) to establish a Macro facility also requiring a conditional use permit (OMC Sec. 17.50.040, 17.136.040(a)(2)); Additional findings for a Macro facility (OMC Sec. 17.128.070 (B), (C)).
General Plan:	Neighborhood Center Mixed Use
Zoning:	CN-1 Neighborhood Center Mixed Use 1 Zone
Environmental Determination:	Exempt, Section 15303 of the State CEQA Guidelines: Small Structures, Section 15183 of the State CEQA Guidelines: Projects consistent with a community plan, general plan or zoning
Historic Status:	Potentially Designated Historic Property. OCHS Survey Rating: C2+
Service Delivery District:	3
City Council District:	5
Date Filed:	6/27/14
Staff Recommendation:	Approve with the attached conditions
Finality of Decision:	*Appealable to City Council within 10 days*
For Further Information:	Contact case planner **Jose M. Herrera-Preza, Planner I** at **(510) 238-3808** or jherrera@oaklandnet.com

SUMMARY

This project would provide for the creation of a new unmanned macro telecommunications facility on the roof top of a two story commercial building. The proposal would install twelve (12) panel antennas, two (2) GPS units; eighteen (18) RRU's and associated equipment cabinets. The proposed facility will be sited within an architecturally compatible cupola on the rooftop of the building to visually screen the antennas from neighboring properties. The associated equipment cabinets are proposed to be located within an existing equipment room that is in the building. Two other carriers (Sprint & T-Mobile) maintain facilities at this site. The total antenna count on this will be thirty (30).

A Major Conditional Use Permit and Design Review are required for the establishment of a new macro Telecommunications Facilities located with 100' feet of a residential zone. As detailed below, the project meets all of the required findings for approval. Therefore, staff recommends approval of the project subject to the attached conditions of approval.

CITY OF OAKLAND PLANNING COMMISSION



Case File: PLN14202
Applicant: Tawni Parr for New Cingular Wireless for AT&T
Address: 4226 Park Boulevard
Zone: CN-1

PROJECT DESCRIPTION

The proposal involves the creation of a new unmanned macro telecommunications facility consisting of twelve (12) panel antennas , two (2) GPS units, and associated equipment cabinets inside an existing equipment room within the building. The proposed antennas will be mounted directly inside an architectural compatible rooftop cupola that will be painted and textured to match the building to further mitigate any visual impacts from neighboring properties and the public right of way. **(See Attachment A)**

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".

PROPERTY DESCRIPTION

The subject property is approximately 5,500 square feet, located on the 4200 block of Park Blvd.in between Wellington Street and Glenfield Avenue. The subject property is an interior parcel surrounded commercial building along Park Blvd. and a residentially oriented neighborhood to the rear. The subject property is located on lot that is consistent with neighboring commercial and residential lots in shape and size. The property is adjacent to a similarly sized commercial parcel, consisting of limited service café and restaurant. The subject property contains a two-story commercial building. The property was first developed pre-1925 (based on Alameda County Assessors Data) with a two-story commercial building. The subject property currently hosts two un-manned telecommunication facilities on this property (Sprint, & T-Mobile).

GENERAL PLAN ANALYSIS

The property is located in a Neighborhood Center Mixed Use area under the General Plan's Land use & Transportation Element (LUTE). The intent of the area is: *"to maintain and enhance vibrant commercial districts with a wide range of retail establishments serving both short and long term needs in attractive settings oriented to pedestrian comparison shopping."* The proposed establishment of an unmanned wireless telecommunications facility will not adversely affect and detract from the commercial and residential characteristics of the neighborhood. The proposal to co-locate a telecommunications facility through the incorporation of antennas and equipment to an existing building would enhance an essential service in a residential district adjacent to the Park Boulevard corridor, while ensuring the facility is reasonably concealed from both. The project therefore conforms to the area's intent and the following objective of the LUTE.

Sense of Community
Objective N9.9
City encourages that new development respects the architectural integrity of a building's original style. The proposed development will have no effect on the existing buildings on site.

Civic and Institutional uses
Objective N2
Encourage adequate civic, institutional and educational facilities located within Oakland, appropriately designed and sited to serve the community.

Staff finds the proposal to be in conformance with the objectives of the General Plan.

ZONING ANALYSIS

The project requires a Major Conditional Use Permit and Regular Design Review (non-residential) each with additional telecommunications findings because it features the establishment of an unmanned wireless telecommunications facility located within 100-feet of a residential zone. The review ensures the expanded facility will not generate negative aesthetic impacts to the adjacent neighborhoods.

The property is located in the CN-1 Neighborhood Center Mixed Use 1 Zone. The intent of the CN-1 Zone is: *"The intent of the CN-1 zone is to maintain and enhance vibrant commercial districts with a wide range of retail establishments serving both short and long term needs in attractive settings oriented to pedestrian comparison shopping."*

The proposal meets the telecommunications Regulations regarding Site Location and Design Preferences and co-locating on a building with an existing wireless telecommunications facility; therefore site alternatives are not required. As part of the review a design analyses was completed which identified three other alternatives and the least intrusive alternative was identified. The existing antennas were approved in 2008 when the screening and 1:1 requirement was not in effect. The proposal should act to reduce the view of the antennas in the surrounding residential district and the new RFP cupola screen will further conceal the antennas.

Staff finds the proposal to be consistent with the Planning Code.

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines categorically exempts specific types of projects from environmental review. Section 15301(e) of the State CEQA Guidelines exempts project involving additions to existing facilities or structures and also section 15303 (small structures). The proposal to relocate three antennas and install three new antennas on a rooftop and install one new equipment cabinet in a detached garage at an existing wireless telecommunications facility meets this description: the project would constitute a minor addition, only. The project is therefore exempt from further environmental review.

KEY ISSUES AND IMPACTS

In addition to ensuring this type of request meets required legal findings, proposed wireless telecommunications facilities must meet specific development standards, and site location and design preferences, and possesses a satisfactory radio frequency emissions report.

1. Conditional Use Permit

Section 17.16.070 of the City of Oakland Planning Code requires a conditional use permit to modify a Mini Telecommunication facility in the RM-3 Zone and requires a Major Conditional use permit if located within 100 feet of a residential zone. The RD-2 Detached Unit Residential 2 Zone abuts the rear of the property. The required findings for a major conditional use permit are attached 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 requires that 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 the co-location of a new antennas on an existing structure with an existing wireless facility, the proposed development meets the (A) co-located on an existing structure or facility with existing wireless antennas, therefore a site alternatives analysis is not required.

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 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:

The project meets design criteria (A) since all the proposed antennas will be mounted behind a new rooftop screen intended to look like an architectural element along the roof of the building that will be textured and finished to match the building. Furthermore, to mitigate visual impacts the antennas will be mounted at least 28' above the public right of way. The associated equipment will be located inside an existing equipment room and will have no visual impact. In its entirety, the project will be reasonably concealed from the right of way and neighbors behind and existing parapet wall and RF screen of the building.

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.

RF-EME Electromagnetic Energy Compliance Report, prepared by Hammett & Edison, indicates that the proposed project meets the radio frequency (RF) emissions standards as required by the regulatory

agency. 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 as a condition of approval that prior to the issuance of a final building permit, the applicant submits a certified RF emissions report stating that the facility is operating within acceptable thresholds established by the regulatory federal agency.

CONCLUSION

The proposed project meets all of the required findings for approval. Therefore, staff recommends approval of the project subject to the attached conditions.

RECOMMENDATIONS:

1. Affirm staff's environmental determination.
2. Approve the Major Conditional Use Permit and Regular Design Review subject to the attached Findings and Conditions.

Prepared by:

Jose M. Herrera-Preza
Planner I

Approved by:

Scott Miller
Zoning Manager

Approved for forwarding to the
City Planning Commission:

Darin Ranelletti
Deputy Director
Bureau of Planning & Building

ATTACHMENTS:

A. Project Plans & Photo Simulations
B. RF-EME Electromagnetic Energy Compliance Report

Findings for Approval

This proposal meets the required findings under Section 17.134.050, General Use Permit Criteria; Section 17.128.060(C), Conditional Use Permit Criteria for Mini Facilities; Section 17.136.040(A), Regular Design Review; and Section 17.128.060(B), Design Review Criteria for Mini Facilities, as set forth below. Required findings are shown in bold type; explanations as to why these findings can be made are in normal type.

SECTION 17.134.050 – GENERAL USE PERMIT CRITERIA:

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 proposal is to establish a new macro wireless telecommunications facility consisting of twelve (12) antennas located on the rooftop of an existing two-story commercial building inside an new RF cupola screen with the equipment cabinets located inside a dedicated equipment room. The project will allow for the inclusion of a new carrier onto the site while being completely screened. New antennas will be completely concealed behind a new RF screen intended to appear like an architectural element of the building, so antennas will not be visible from the public right of way along Park Blvd or within the residential district to the rear. The antennas and related equipment including attachment posts and coaxials (cables) will be painted to match the color of the building along the roofline.

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 proposed unmanned telecommunications facility will result in no change in the exterior appearance of the building. The modification will maintain existing functional working and living environment by improving telecommunications in the area. The project would also maintain the attractive nature of the existing building therefore it would not affect the general quality and character of the neighborhood.

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 at Section 17.136.070.

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 Comprehensive Plan and with any other applicable plan or development control map which has been adopted by the City Council.

The project is consistent with the following Policy of the Oakland General Plan's Land Use & Transportation Element (adopted 1998):

> ***Policy N9.9 Respecting Architectural Integrity***
> *City encourages that new development respects the architectural integrity of a building's original style. The proposed development will have no effect on the existing buildings on site.*

17.128.060(C), Conditional Use Permit Criteria for Macro Facilities

1. The project must meet the special design review criteria listed in subsection B of this section.
The project meets all required design review criteria.

2. The proposed project must not disrupt the overall community character.
The proposal will allow for additional antennas on the roof top of an existing building and will have no affect on the overall community character of Park Boulevard or the residential neighborhood to the rear.

SECTION 17.136.050.A - REGULAR DESIGN REVIEW CRITERIA:
1. That the proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and textures:

The proposal would allow for a new telecommunications facility through the addition of a new 13'x18' area on the rooftop of the existing building. The proposed screen will extend 10' above the roofline at its highest point. The proposed FR screen will match the existing building in their color, texture and finish materials. The new antennas will be fully concealed behind an RF screen and maintains the allowed projection above the height limit. The project will not change the scale or location of the facility and therefore is consistent and well related to the surrounding area.

2. That the proposed design will protect, preserve, or enhance desirable neighborhood characteristics;

The proposed design meets the intent of the current zoning and general plan land use designations. The proposal protects and preserves the surrounding neighborhood context by co-locating additional wireless telecommunications antennas to an existing facility. The antennas will be fully concealed behind an RF

screen that is painted and textured to match the building. The antennas will be mounted 28' above the public right of way thus visually mitigating any impact to the surrounding neighborhood. The equipment cabinet will be located inside a dedicated equipment room inside the building.

3. That the proposed design will be sensitive to the topography and landscape.

The proposed project involves modification to an existing telecommunications facility. This finding is not applicable.

4. That, if situated on a hill, the design and massing of the proposed building relates to the grade of the hill.

This criterion is not applicable to this proposal.

5. 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 Revision to the Citywide Telecommunications Regulations. The proposal will conform to performance standards for noise set forth in Section 17.143.020(j) and (k) for decibel levels in residential areas for both day and nighttime use. The project conforms to all mini-facility definitions set forth in Section 17.128.050 and meets all design review criteria to minimize impacts throughout the neighborhood.

Design Review Criteria for Macro Facilities.
Chapter 17.136, the following specific additional criteria must be met when design review is required Before an application can be granted:

1. Antennas should be painted and/or textured to match the existing structure.
The proposed antennas will be located within an existing rooftop screen which will be painted and textured to match the building.

2. Antennas mounted on architecturally significant structures or significant architectural details of the building should be covered by appropriate casings which are manufactured to match existing architectural features found on the building.
The antennas will be rooftop mounted and project 10' above the roofline behind a new FR screen made to look an architectural element of the building.

3. Where feasible, antennas can be placed directly above, below or incorporated with vertical design elements of a building to help in camouflaging.
The project features a new rooftop cupola screen that incorporates the vertical design elements of the building intended to screen antennas from public view.

4. Equipment cabinets shall be concealed from view or placed underground.

The equipment cabinets are located inside a dedicated equipment room within the second story of the building thus will be concealed from public view.

5. 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.
Antennas will be located on a rooftop not accessible to the public and equipment cabinets will be located in a secured equipment room/

6. For antennas attached to the roof, maintain a 1:1 ratio (example: ten feet high antenna requires ten feet setback from facade) for equipment setback unless an alternative placement would reduce visual impact; treat or screen the antennas to match existing air conditioning units, stairs, elevator towers, or other background; avoid placing roof mounted antennas in direct line with significant view corridors.
The proposed rooftop antennas will project 10' above the roof line and meet the 1:1 setback ratio from any building wall. The proposal took into consideration visual impacts and setback the cupola 20+ from the residential neighborhood to the rear and 35'+ feet from the Park Blvd frontage. The associated equipment will be located inside a secured equipment room within the building.

CONDITIONS OF APPROVAL
PLN14202

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, **PLN14202**, and the plans dated **June 23th, 2014** and submitted on **June 27th, 2014** 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: **The establishment of a new unmanned macro telecommunications facility located along the rooftop of an existing building, under Oakland Planning Code 17.128**

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 Telecommunications Regulations** 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 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.

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.

PROJECT SPECIFIC CONDTIONS:

12. **Radio Frequency Emissions**
    Prior to issuance of building permit
    The applicant shall submit a certified RF emissions report to the City of Oakland stating that the proposed facility will operate within the established RF standards set by the Federal Communications Commission.
    Prior to the issuance of a 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.

13. **Sinking Fund for Facility Removal or Abandonment.**

Prior to issuance of a building permit

The applicant shall provide proof of the establishment of a sinking fund to cover the cost of removing the facility if it is abandoned within a prescribed period. The word "abandoned" shall mean a facility that has not been operational for a six (6) month period, except where non-operation is the result of maintenance of renovation activity pursuant to valid City permits. The sinking fund shall be established to cover a two year period, at a financial institution approved by the City's Office of Budget and Finance. The sinking fund payment shall be adequate to determined by the office of Budget and Finance and shall be adequate to defray expenses associated with the removal of the telecommunication facility.

14. Operational

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.

15. Compliance with Title 24

Prior to issuance of certificate of occupancy.

The applicant shall implement acoustical techniques in compliance with Title 24 to ensure that noise levels in interior spaces remain at or below 45 CNEL with all doors and windows closed.

APPROVED BY:

City Planning Commission:_____(October 15, 2014)_____(vote)

Version Date: August 28, 2014

Photosimulation of the view looking south from directly across Park Blvd at Wellington.

Midcrest & Sunnyhill
4226 Park Boulevard
Oakland, CA 94601
CCU1237

at&t

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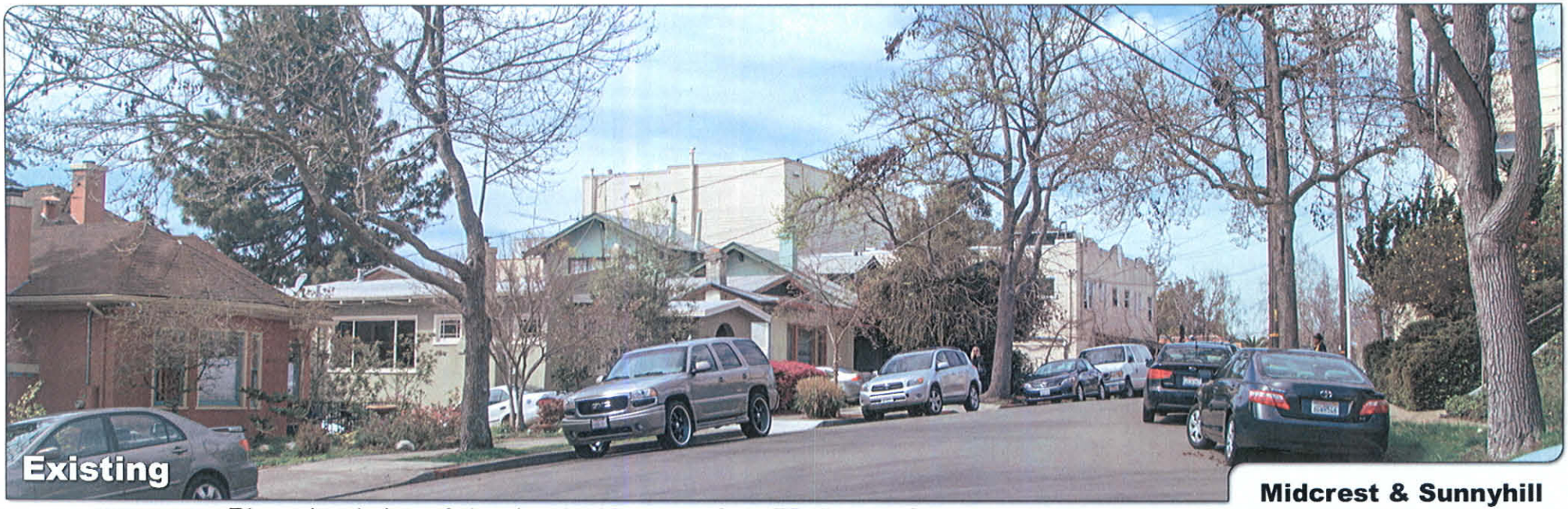
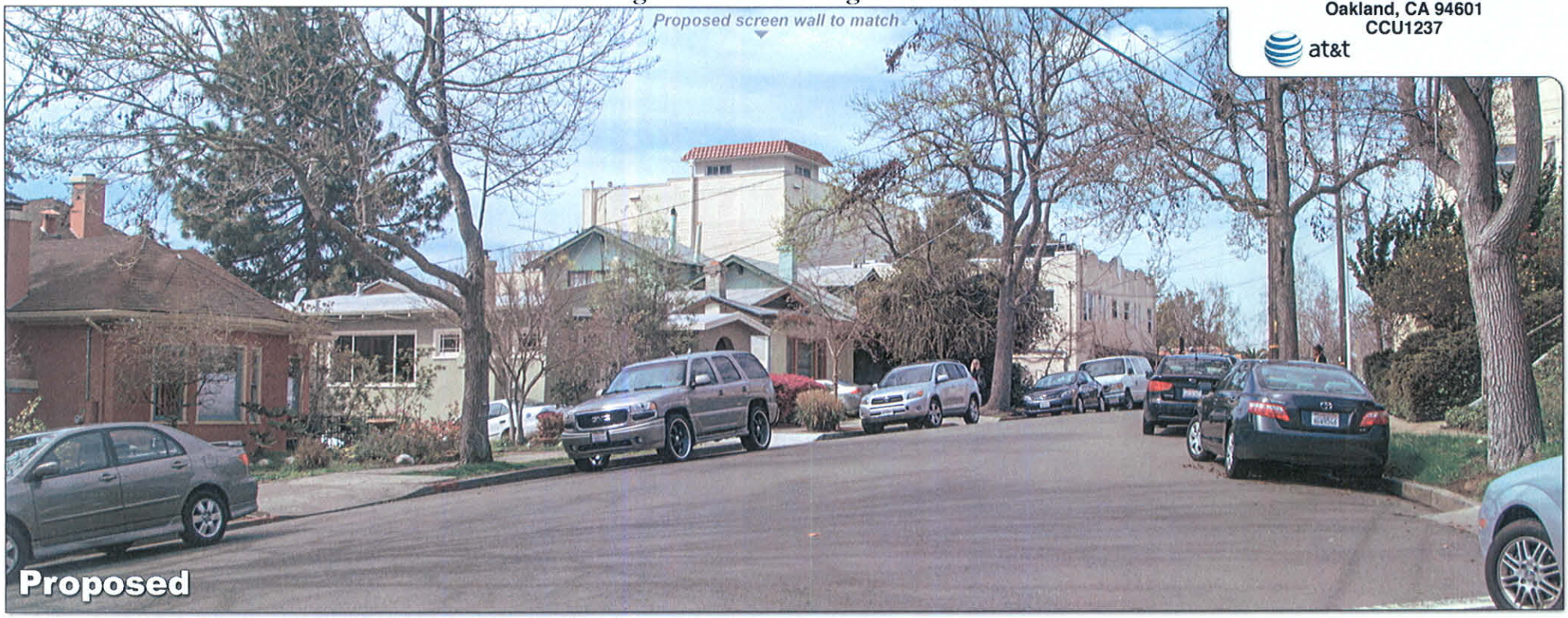
Version Date: March 31, 2014



Photosimulation of the view looking west from Wellington Street.

Midcrest & Sunnyhill
4226 Park Boulevard
Oakland, CA 94601
CCU1237
at&t



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AT&T Mobility • Proposed Base Station (Site No. CCU1237)
4226 Park Boulevard • Oakland, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T Mobility, a personal wireless telecommunications carrier, to evaluate the base station (Site No. CCU1237) proposed to be located at 4226 Park Boulevard in Oakland, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Executive Summary

AT&T proposes to install directional panel antennas above the commercial building located at 4226 Park Boulevard in Oakland. The proposed operation will, together with the existing base station at the site, comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

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

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5,000–80,000 MHz	5.00 mW/cm^2	1.00 mW/cm^2
BRS (Broadband Radio)	2,600	5.00	1.00
WCS (Wireless Communication)	2,300	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called "radios" or "channels") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables. A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the

antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

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

Site and Facility Description

Based upon information provided by AT&T, including zoning drawings by MST Architects, dated March 21, 2014, it is proposed to install twelve Andrew Model SBNHH-1D65B directional panel antennas within a view screen enclosure, configured to resemble a cupola, to be constructed above the center of the upper roof of the two-story commercial building located at 4226 Park Boulevard in Oakland. The antennas would be mounted with up to 8° downtilt at an effective height of about 46½ feet above ground, 6 feet above the upper roof, 15 feet above the main roof, and would be oriented in groups of four toward 60°T, 180°T, and 300°T, to provide service in all directions. The maximum effective radiated power in any direction would be 11,820 watts, representing simultaneous operation at 3,640 watts for WCS, 5,300 watts for PCS, 1,000 watts for cellular, and 1,880 watts for 700 MHz service.

Presently located on the sides of the penthouse are similar antennas believed to be for use by T-Mobile. Nextel reportedly at one time had antennas at the site; if they are still in place, it is believed that they are now inactive. For the limited purpose of this study, the transmitting facilities of T-Mobile are assumed to be as follows:

Service	Maximum ERP	Antenna Model	Downtilt	Height
AWS	4,400 watts	Ericsson AIR21	2°	35½ ft
PCS	2,200	Ericsson AIR21	2	35½

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed AT&T operation by itself is calculated to be 0.047 mW/cm^2, which is 4.8% of the applicable public exposure limit. The maximum calculated cumulative level at ground, for the simultaneous operation of both carriers, is 5.1% of the public exposure limit. The maximum calculated cumulative level at any nearby building would be 29% of the public limit. The maximum calculated cumulative level at the top floor of any nearby residence* is 25% of the public limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels. Levels are calculated to exceed the applicable public exposure limit on the upper roof.

Recommended Mitigation Measures

Due to their mounting location, requiring a ladder climb from the main roof, the AT&T antennas would not be accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of the information in Figure 3, be provided to all authorized personnel who have access to the roof of the penthouse, including employees and contractors of the wireless carriers as well as roofers and building maintenance staff. No access within 18 feet directly in front of the AT&T antennas themselves, such as might occur during maintenance work on the upper roof, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory signs† at the access ladder and on the enclosure in front of the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines. Similar measures should already be in place for T-Mobile; the applicable keep-back distance for that carrier has not been determined as part of this study.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the base station proposed by AT&T Mobility at 4226 Park Boulevard in Oakland, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow

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* Located at least 30 feet away, based on photographs from Google Maps.

† Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (*e.g.*, a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Training authorized personnel and posting explanatory signs is recommended to establish compliance with occupational exposure limitations.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2015. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

William F. Hammett, P.E.
707/996-5200

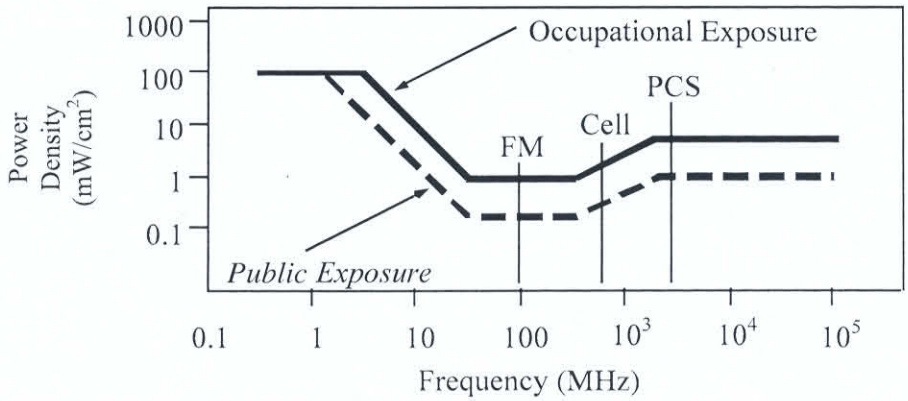
June 26, 2014

FCC Radio Frequency Protection Guide

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

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

Frequency	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range (MHz)	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm^2)	
0.3 – 1.34	614	*614*	1.63	*1.63*	100	*100*
1.34 – 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f^2*
3.0 – 30	1842/ f	*823.8/f*	4.89/ f	*2.19/f*	900/ f^2	*180/f^2*
30 – 300	61.4	*27.5*	0.163	*0.0729*	1.0	*0.2*
300 – 1,500	$3.54\sqrt{f}$	*$1.59\sqrt{f}$*	$\sqrt{f}/106$	*$\sqrt{f}/238$*	f/300	*f/1500*
1,500 – 100,000	137	*61.4*	0.364	*0.163*	5.0	*1.0*



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

RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

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

Near Field.

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

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

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

where θ_{BW} = half-power beamwidth of the antenna, in degrees, and
P_{net} = net power input to the antenna, in watts,
D = distance from antenna, in meters,
h = aperture height of the antenna, in meters, and
η = aperture efficiency (unitless, typically 0.5-0.8).

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

Far Field.

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

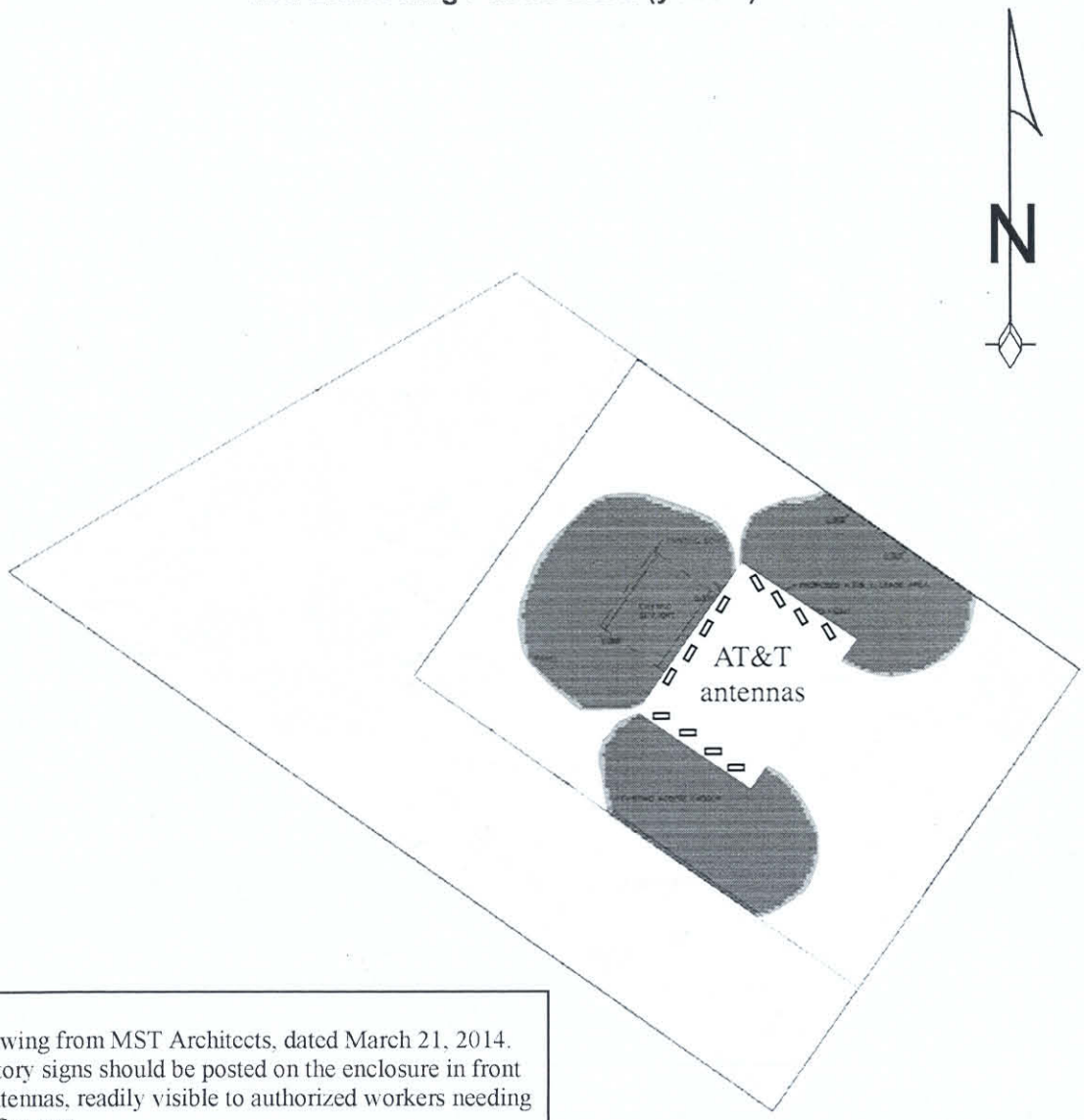
$$\text{power density } S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}, \text{ in } mW/cm^2,$$

where ERP = total ERP (all polarizations), in kilowatts,
RFF = relative field factor at the direction to the actual point of calculation, and
D = distance from the center of radiation to the point of calculation, in meters.

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

AT&T Mobility • Proposed Base Station No. CCU1237
4226 Park Boulevard • Oakland, California

Calculated Maximum RF Exposure Levels
for Areas Exceeding Occupational Limit (red)
and Exceeding Public Limit (yellow)



Notes:
Base drawing from MST Architects, dated March 21, 2014.
Explanatory signs should be posted on the enclosure in front of the antennas, readily visible to authorized workers needing access. See text.

Calculated exposure levels shown are based on contribution of AT&T antennas only. For clarity, antennas for other carrier(s) not shown.

FEET
10 0 10 20

Calculations performed according to OET Bulletin No. 65, August 1997.
Colors shown represent percent of applicable FCC public limit.

[blank] <100% >100% >500%

HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

C3MG
Figure 3

SITE NUMBER: CCU1237
SITE NAME: MIDCREST RD. & SUNNYHILLS DR.

4226 PARK BOULEVARD
OAKLAND, CA 94601
JURISDICTION: CITY OF OAKLAND
APN: 024-0539-045

SITE TYPE: ROOFTOP

PROJECT DESCRIPTION

NEW SITE BUILD UNMANNED TELECOMMUNICATIONS FACILITY.

1. BRING POWER / TELCO / FIBER TO SITE LOCATION
2. PROPOSED 10'-0" TALL FRP CUPOLA WITHIN PROPOSED 13'-8"x18'-1" LEASE AREA .
3. INSTALL AT&T INTERIOR EQUIPMENT WITHIN EXISTING EQUIPMENT ROOM.
4. ADD (2) NEW GPS UNITS
5. ADD (12) ANTENNAS (4) PER SECTOR CONCEALED BEHIND FRP CUPOLA.
6. ADD (18) RRUS, (6) PER SECTOR, CONCEALED BEHIND FRP CUPOLA.
7. CUPOLA DESIGNED AND PAINTED TO MATCH EXISTING BUILDING.

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 CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1) 2010 CALIFORNIA ADMINISTRATIVE CODE, CHAPTER 10, PART 1, TITLE 24 CODE OF REGULATIONS- BEFORE JULY 1, 2014
2013 CALIFORNIA ADMINISTRATIVE CODE, CHAPTER 10, PART 1, TITLE 24 CODE OF REGULATIONS- AFTER JULY 1, 2014
2) 2013 CALIFORNIA BUILDING CODE (CBC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2012 IBC (PART 2, VOL 1-2)
3) 2013 CALIFORNIA RESIDENTIAL CODE (CRC) WITH APPENDIX H, PATIO COVERS, BASED ON THE 2012 IRC (PART 2.5)
4) 2010 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11) (AFFECTED ENERGY PROVISIONS ONLY)- BEFORE JULY 1, 2014
2013 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11) (AFFECTED ENERGY PROVISIONS ONLY)- AFTER JULY 1, 2014
5) 2013 CALIFORNIA FIRE CODE (CFC), BASED ON THE 2012 IFC, WITH CALIFORNIA AMENDMENTS (PART 9)
6) 2013 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2012 UMC (PART 4)
7) 2013 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2012 UPC (PART 5)
8) 2013 CALIFORNIA ELECTRICAL CODE (CEC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2011 NEC (PART 3)
9) 2010 CALIFORNIA ENERGY CODE (CEC)- BEFORE JULY 1, 2014 (PART 6)
2013 CALIFORNIA ENERGY CODE (CEC)- AFTER JULY 1, 2014 (PART 6)
10) ANSI / EIA-TIA-222-G
11) 2012 NFPA 101, LIFE SAFETY CODE
12) 2013 NFPA 72, NATIONAL FIRE ALARM CODE
13) 2013 NFPA 13, FIRE SPRINKLER CODE

OCCUPANCY AND CONSTRUCTION TYPE

OCCUPANCY : S-2 (UNMANNED TELECOMMUNICATIONS FACILITY), U (TOWER)

CONSTRUCTION TYPE: V-B

HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, ACCESSIBILITY ACCESS AND REQUIREMENTS ARE NOT REQUIRED, IN ACCORDANCE WITH CALIFORNIA STATE ADMINISTRATIVE CODE, PART 2, TITLE 24, SECTION 1103B.1, EXCEPTION 1 & SECTION 1134B.2.1, EXCEPTION 4.

PROJECT INFORMATION

PROPERTY INFORMATION:

SITE NAME: MIDCREST RD & SUNNYHILLS DR.

SITE NUMBER: CCU1237

SITE ADDRESS: 4226 PARK BOULEVARD
OAKLAND, CA 94601

A.P.N. NUMBER: 024-0539-045

CURRENT ZONING: CN-1

JURISDICTION: CITY OF OAKLAND

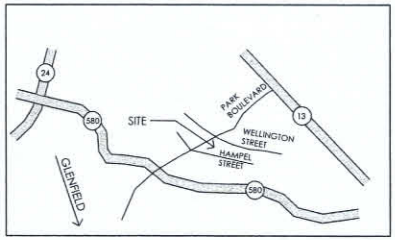
LATITUDE: N37° 48' 26.62" NAD 83

LONGEUDE: W122° 13' 17.94" NAD 83

GROUND ELEVATION: 268.4 FT. AMSL

PROPERTY OWNER:
JAMES & CHRISTINE HELDMAN
PO BOX 20800
OAKLAND, CA 94620

VICINITY MAP



PROJECT TEAM

APPLICANT / LESSEE:
AT&T
2600 CAMINO RAMON, 4W850 N
SAN RAMON, CA 94583

RF ENGINEER:
AT&T
2600 CAMINO RAMON, 4W850 N
SAN RAMON, CA 94583

CONSTRUCTION MANGER:
VINCULUMS
4620 NORTHGATE BLVD., SUITE 120
SACRAMENTO, CA 95834
CONTACT: ANDREW BUELL
EMAIL: abuell@vinculums.com
PH: (916) 599-9549

ARCHITECT / ENGINEER:
MST ARCHITECTS INC.
801 ALHAMBRA BLVD, SUITE 2
SACRAMENTO, CA 95816
CONTACT: MANUEL S. TSIHLAS
EMAIL: manuel@mstarchitects.com
PH: (916) 341-0405

ZONING MANAGER:
COMPLETE WIRELESS CONSULTING, INC.
2009 V STREET
SACRAMENTO, CA 95818
CONTACT: TAWNI PARR
EMAIL: tpar@completewireless.net
PH: (916) 508-8718

LEASING MANAGER:
COMPLETE WIRELESS CONSULTING, INC.
2009 V STREET
SACRAMENTO, CA 95818
CONTACT: JENNY HOMER
EMAIL: jhomer@completewireless.net
PH: (916) 217-7503

DIRECTIONS FROM AT&T

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

1. HEAD SOUTHEAST ON CAMINO RAMON TOWARD BISHOP DR	0.4 MI
2. TURN RIGHT ONTO BOLLINGER CANYON RD	0.5 MI
3. MERGE ONTO I-680 S VIA THE RAMP TO SAN JOSE	4.5 MI
4. TAKE THE EXIT ONTO I-580 W TOWARD DUBLIN BOULEVARD/OAKLAND	10.0 MI
5. KEEP RIGHT TO STAY ON I-580 W, FOLLOW SIGNS FOR OAKLAND/SAN FRANCISCO	11.5 MI
6. TAKE THE EXIT TOWARD 14H AVENUE/PARK BOULEVARD	0.2 MI
7. TURN RIGHT ONTO BEAUMONT AVE	0.3 MI
8. TURN RIGHT ONTO PARK BLVD	
DESTINATION WILL BE ON THE RIGHT	0.3 MI

APPROVALS

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

SHEET INDEX

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LICENSED ARCHITECT MANUEL S. TSIHLAS No. C-28021 Exp. 08-15 STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS

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

DIGALERT 800-227-2600 Call 2 Full Working Days in Advance

PREPARED FOR
at&t
2600 Camino Ramon, 4W850 N
San Ramon, California 94583

Vendor:
COMPLETE Wireless Consulting, Inc.

Architect:
MST ARCHITECTS
801 Alhambra Boulevard, Suite #2
Sacramento, California 95816

AT&T SITE NO:	CCU1237
PROJECT NO:	218.015
DRAWN BY:	JCE
CHECKED BY:	MST

REV	DATE	DESCRIPTION
	06/23/14	100% ZD REV 1
	05/14/14	100% ZD
	03/21/14	90% ZD REV 1
	02/24/14	90% ZD

Licensor:

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

Issued For:
MIDCREST RD. & SUNNYHILLS DR.
4226 PARK BOULEVARD
OAKLAND, CA 94601

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

GENERAL CONSTRUCTION NOTES:

1. PLANS ARE INTENDED TO BE DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
2. THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 227-2600, FOR UTILITY LOCATIONS, 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
4. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CBC / UBC'S REQUIREMENTS REGARDING EARTHQUAKE RESISTANCE, FOR, BUT NOT LIMITED TO, PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS, AND MECHANICAL EQUIPMENT. ALL WORK MUST COMPLY WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
6. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWINGS, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT / ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT / ENGINEER.
7. THE BUILDING DEPARTMENT ISSUING THE PERMITS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK, OR AS OTHERWISE STIPULATED BY THE CODE ENFORCEMENT OFFICIAL HAVING JURISDICTION.
8. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
9. ALL EXISTING UTILITIES, FACILITIES, CONDITIONS, AND THEIR DIMENSIONS SHOWN ON THE PLAN HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ARCHITECT / ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR THE ACCURACY OF THE INFORMATION SHOWN ON THE PLANS, OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTORS SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.
10. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, BOTH HORIZONTAL AND VERTICALLY, PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ARCHITECT / ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT / ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE.
11. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
12. ANY DRAIN AND/OR FIELD TILE ENCOUNTERED / DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO IT'S ORIGINAL CONDITION PRIOR TO COMPLETION OF WORK. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON "AS-BUILT" DRAWINGS BY GENERAL CONTRACTOR, AND ISSUED TO THE ARCHITECT / ENGINEER AT COMPLETION OF PROJECT.
13. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
14. INCLUDE MISC. ITEMS PER AT&T SPECIFICATIONS

APPLICABLE CODES, REGULATIONS AND STANDARDS:

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION.

THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRICAL EQUIPMENT.
-IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS TELCORDIA GR-63 NETWORK EQUIPMENT BUILDING SYSTEM (NEBS): PHYSICAL PROTECTION
TELCORDIA GR-347 CENTRAL OFFICE POWER WIRING
TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS
TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS

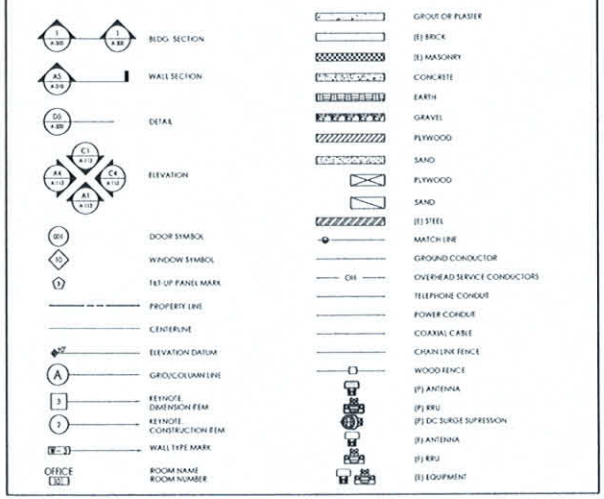
ANY AND ALL OTHER LOCAL & STATE LAWS AND REGULATIONS

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

A.B.	ANCHOR BOLT	IN (")	INCH(ES)
ABV.	ABOVE	INT.	INTERIOR
ACCA	ANTENNA CABLE COVER ASSEMBLY	LB (#)	POUND(S)
ADD'L	ADDITIONAL	L.B.	LAG BOLTS
A.F.F.	ABOVE FINISHED FLOOR	L.F.	LINEAR FEET (FOOT)
A.F.G.	ABOVE FINISHED GRADE	L.	LONG(ITUDINAL)
ALUM.	ALUMINUM	MAS.	MASONRY
ALT.	ALTERNATE	MAX.	MAXIMUM
ANT.	ANTENNA	M.B.	MACHINE BOLT
APPRX.	APPROXIMATE(LY)	MECH.	MECHANICAL
ARCH.	ARCHITECT(URAL)	MFR.	MANUFACTURER
AWG.	AMERICAN WIRE GAUGE	MIN.	MINIMUM
BLDG.	BUILDING	MISC.	MISCELLANEOUS
BLK.	BLOCK	MTL.	METAL
BLKG.	BLOCKING	(N)	NEW
BM.	BEAM	NO.(#)	NUMBER
B.N.	BOUNDARY NAILING	N.T.S.	NOT TO SCALE
BTCW.	BARE TINNED COPPER WIRE	O.C.	ON CENTER
B.O.F.	BOTTOM OF FOOTING	OPNG.	OPENING
B/U.	BACK UP CABINET	P/C.	PRECAST CONCRETE
CAB.	CABINET	PCS.	PERSONAL COMMUNICATION SERVICES
CANT.	CANTILEVER(ED)	PLY.	PLYWOOD
C.I.P.	CAST IN PLACE	PPC.	POWER PROTECTION CABINET
CLG.	CEILING	PRC.	PRIMARY RADIO CABINET
CLR.	CLEAR	P.S.F.	POUNDS PER SQUARE FOOT
COL.	COLUMN	P.S.I.	POUNDS PER SQUARE INCH
CONC.	CONCRETE	P.T.	PRESSURE TREATED
CONN.	CONNECTION(OR)	PWR.	POWER (CABINET)
CONST.	CONSTRUCTION	QTY.	QUANTITY
CONT.	CONTINUOUS	RAD.(R)	RADIUS
d	PENNY (NAILS)	REF.	REFERENCE
DBL.	DOUBLE	REINF.	REINFORCEMENT(ING)
DEPT.	DEPARTMENT	REQ'D	REQUIRED
D.F.	DOUGLAS FIR	RGS.	RIGID GALVANIZED STEEL
DIA.	DIAMETER	SCH.	SCHEDULE
DIAG.	DIAGONAL	SHT.	SHEET
DIM.	DIMENSION	SIM.	SIMILAR
DWG.	DRAWING(S)	SPEC.	SPECIFICATIONS
DWL.	DOWEL(ED)	SQ.	SQUARE
EA.	EACH	S.S.	STAINLESS STEEL
EL.	ELEVATION	STD.	STANDARD
ELEC.	ELECTRICAL	STL.	STEEL
ELEV.	ELEVATOR	STRUC.	STRUCTURAL
EMT.	ELECTRICAL METALLIC TUBING	TEMP.	TEMPORARY
E.N.	EDGE NAIL	THK.	THICK (NESS)
ENG.	ENGINEER	T.N.	TOE NAIL
EQ.	EQUAL	T.O.A.	TOP OF ANTENNA
EXP.	EXPANSION	T.O.C.	TOP OF CURB
EXST (E)	EXISTING	T.O.F.	TOP OF FOUNDATION
EXT.	EXTERIOR	T.O.P.	TOP OF PLATE (PARAPET)
FAB.	FABRICATION(OR)	T.O.S.	TOP OF STEEL
F.F.	FINISH FLOOR	T.O.W.	TOP OF WALL
F.G.	FINISH GRADE	TYP.	TYPICAL
FIN.	FINISH(ED)	U.G.	UNDER GROUND
FLR.	FLOOR	U.L.	UNDERWRITERS LABORATORY
FDN.	FOUNDATION	U.N.O.	UNLESS NOTED OTHERWISE
F.O.C.	FACE OF CONCRETE	V.I.F.	VERIFY IN FIELD
F.O.M.	FACE OF MASONRY	W.	WIDE (WIDTH)
F.O.S.	FACE OF STUD	w/	WITH
F.O.W.	FACE OF WALL	WD.	WOOD
F.S.	FINISH SURFACE	W.P.	WEATHERPROOF
FT. (')	FOOT (FEET)	WT.	WEIGHT
FTG.	FOOTING	℄	CENTERLINE
G.	GROWTH (CABINET)	℄	PLATE, PROPERTY LINE
GA.	GAUGE		
GI.	GALVANIZED		
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER		
GLB. (GLU LAM)	GLUE LAMINATED BEAM		
GPS.	GLOBAL POSITIONING SYSTEM		
GRND.	GROUND		
HDR.	HEADER		
HGR.	HANGER		
HT.	HEIGHT		
IGSB.	ISOLATED COPPER GROUND BUS		

SYMBOLS LEGEND



NOT FOR CONSTRUCTION

PREPARED FOR
at&t
2600 Camino Ramon, 4W850 N
San Ramon, California 94583

Vendor:
COMPLETE
Wireless Consulting, Inc.

Architect:
MST ARCHITECTS
801 Alhambra Boulevard, Suite #2
Sacramento, California 95816

AT&T SITE NO:	CCU1237
PROJECT NO.	218.015
DRAWN BY:	JCE
CHECKED BY:	MST

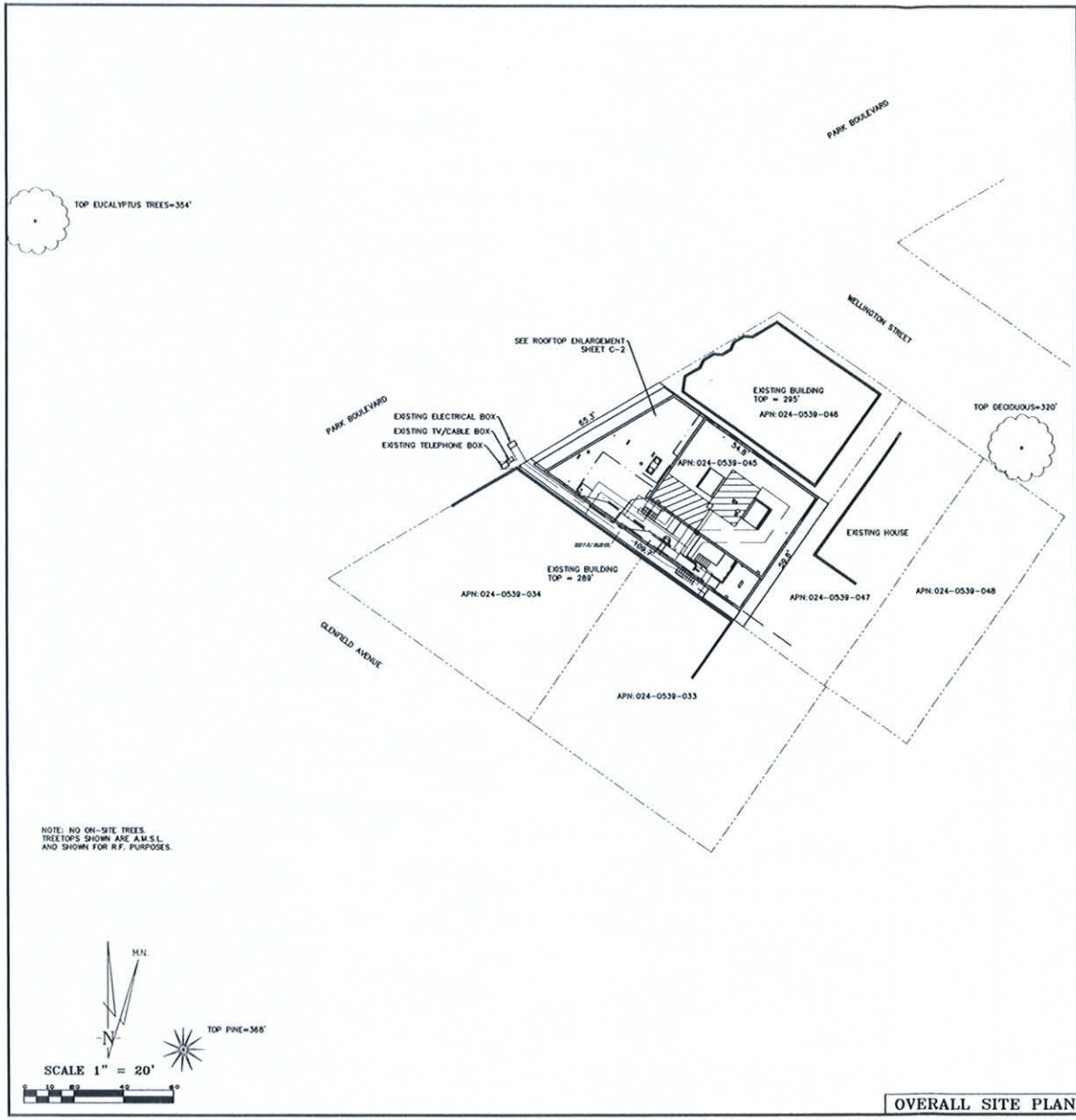
REV	DATE	DESCRIPTION
	06/23/14	100% ZD REV 1
	05/14/14	100% ZD
	03/21/14	90% ZD REV 1
	02/24/14	90% ZD

License:
LICENSED ARCHITECT
MICHAEL S. TSIHLAS
No. C-28021
Exp. 08-15
STATE OF CALIFORNIA

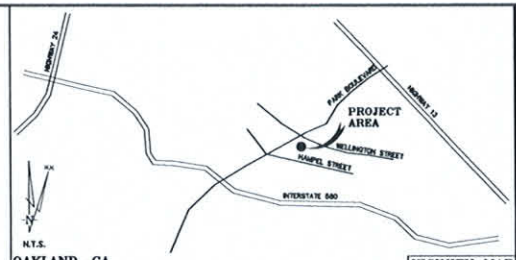
Issued For:
MIDCREST RD. & SUNNYHILLS DR.
4226 PARK BOULEVARD
OAKLAND, CA 94601

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
GN-1



OVERALL SITE PLAN



OAKLAND, CA — VICINITY MAP

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

DATE OF SURVEY: 02-13-14

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

LOCATED IN THE COUNTY OF ALAMEDA, STATE OF CALIFORNIA

CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF LEASE AREA PRIOR TO CONSTRUCTION.

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

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

N.G.V.D. 1929 CORRECTION: SUBTRACT 2.75' FROM ELEVATIONS SHOWN.

CONTOUR INTERVAL: N/A

ASSESSOR'S PARCEL NUMBER: 024-0539-045

LANDLORD(S): JAMES & CHRISTINE HELDMAN
PO BOX 20800
OAKLAND, CA 94620

SITE CONTACT: JENNY HOMER
916-217-7503

TITLE REPORT:
ORANGE COAST TITLE COMPANY
ORDER NO. 150-1568364-16
DATED AS OF: DECEMBER 13, 2013

Project Name/Number: Midcrest Rd. & Sunnyhills Dr. / CCU1237

Project Site Location: 4226 Park Boulevard
Oakland, CA 94601
Alameda County
APN: 024-0539-045

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

Type of Antenna Mount: Proposed Rooftop

Coordinates (GPS Point)
Latitude: N 37°48'26.62" (NAD83) N 37°48'26.88" (NAD27)
Longitude: W 122°13'17.94" (NAD83) W 122°13'14.06" (NAD27)

ELEVATION of Ground at Structure (NAVD88) 268.4' AMSL
STRUCTURE HEIGHT: (Top Parapet) 41.2' AGL
OVERALL HEIGHT: (Top Omni) 44.2' AGL

Lease Area Description

All that certain lease area being a portion of Lot 137 of the Map of Fourth Avenue Terrace Extension as is recorded at Book 24 of Maps at Page 3, Alameda County Records, being located in the City of Oakland, County of Alameda, State of California, being more particularly described as follows:

EQUIPMENT LEASE AREA:
A 12.00 foot wide by 22.00 foot long lease area located within the existing rooftop penthouse as is shown hereon.

ANTENNA LEASE AREA:
A 13.67 wide by 18.08 foot long lease area located on the roof of the existing rooftop penthouse as is shown hereon.

Together with a non-exclusive easement for utility purposes being three feet in width beginning at a point which bears North 54°48'20" West 1.50 feet from the most Southerly corner of the above described equipment lease area over, and across the underlying building and parcel South 35°11'40" West 13.12 feet; thence North 54°48'20" West 25.83 feet; thence South 35°11'40" West 5.21 feet; thence North 54°48'20" West 44.4 feet more or less to the public right of way and as is shown hereon.

Also together with an easement for ingress, egress and utility purposes being five feet in width from the above described lease areas and running over, across, in, and through the underlying building and property as is necessary and shown hereon to the public right of way.

PREPARED FOR
at&t
2600 Camino Ramon, 4W850N
San Ramon, California 94583

Vendor:
COMPLETE Wireless Consulting, Inc.

Surveyor:
GEIL ENGINEERING
ENGINEERING * SURVEYING * PLANNING
1300 HIGH STREET
AUBURN, CALIFORNIA 95603
phone: (530) 885-0480
fax: (530) 885-1909

AT&T SITE NO:	CCU1237
PROJECT NO:	218.015
DRAWN BY:	NR
CHECKED BY:	KG

REV	DATE	DESCRIPTION
	06-20-14	REDLINES
	05-21-14	REDLINES
	05-15-14	REDLINES
	02-17-14	DWG. SUBMIT.

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Issued for:
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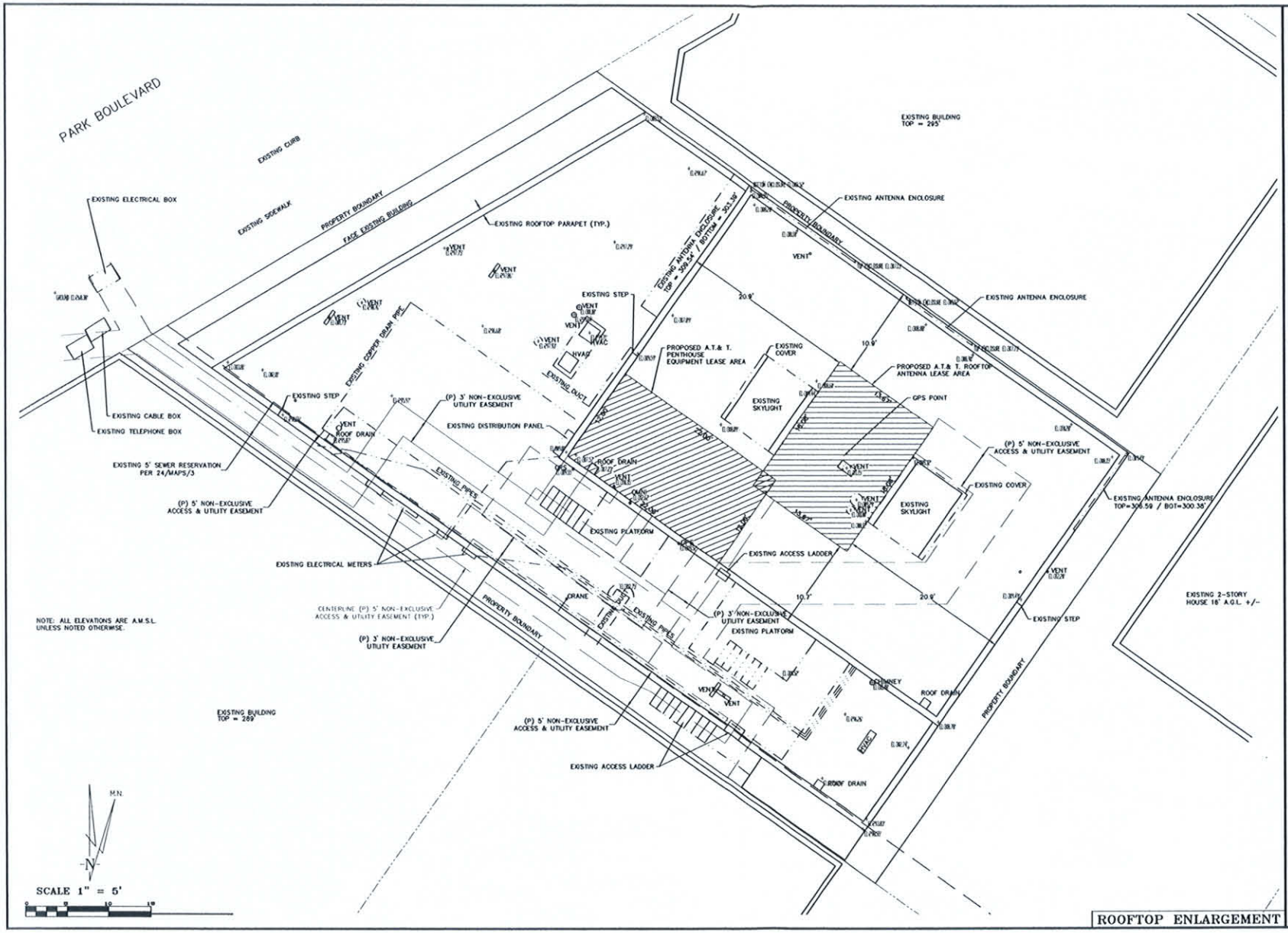
4226 Park Boulevard
Oakland, CA 94601
ALAMEDA COUNTY

SHEET TITLE:
SITE SURVEY

SHEET NUMBER:
C-1



PREPARED FOR

at&t

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

Vendor:

COMPLETE
Wireless Consulting, Inc.

Surveyor:

GEIL ENGINEERING

AT&T SITE NO:	CCU1237
PROJECT NO:	218.015
DRAWN BY:	NR
CHECKED BY:	RG

REV.	DATE	DESCRIPTION
	06-20-14	REDLINES
	05-21-14	REDLINES
	05-15-14	REDLINES
	02-17-14	DWG. SUBMT

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4226 Park Boulevard
Oakland, CA 94601

ALAMEDA COUNTY

SHEET TITLE:

SITE SURVEY

SHEET NUMBER:

C-2

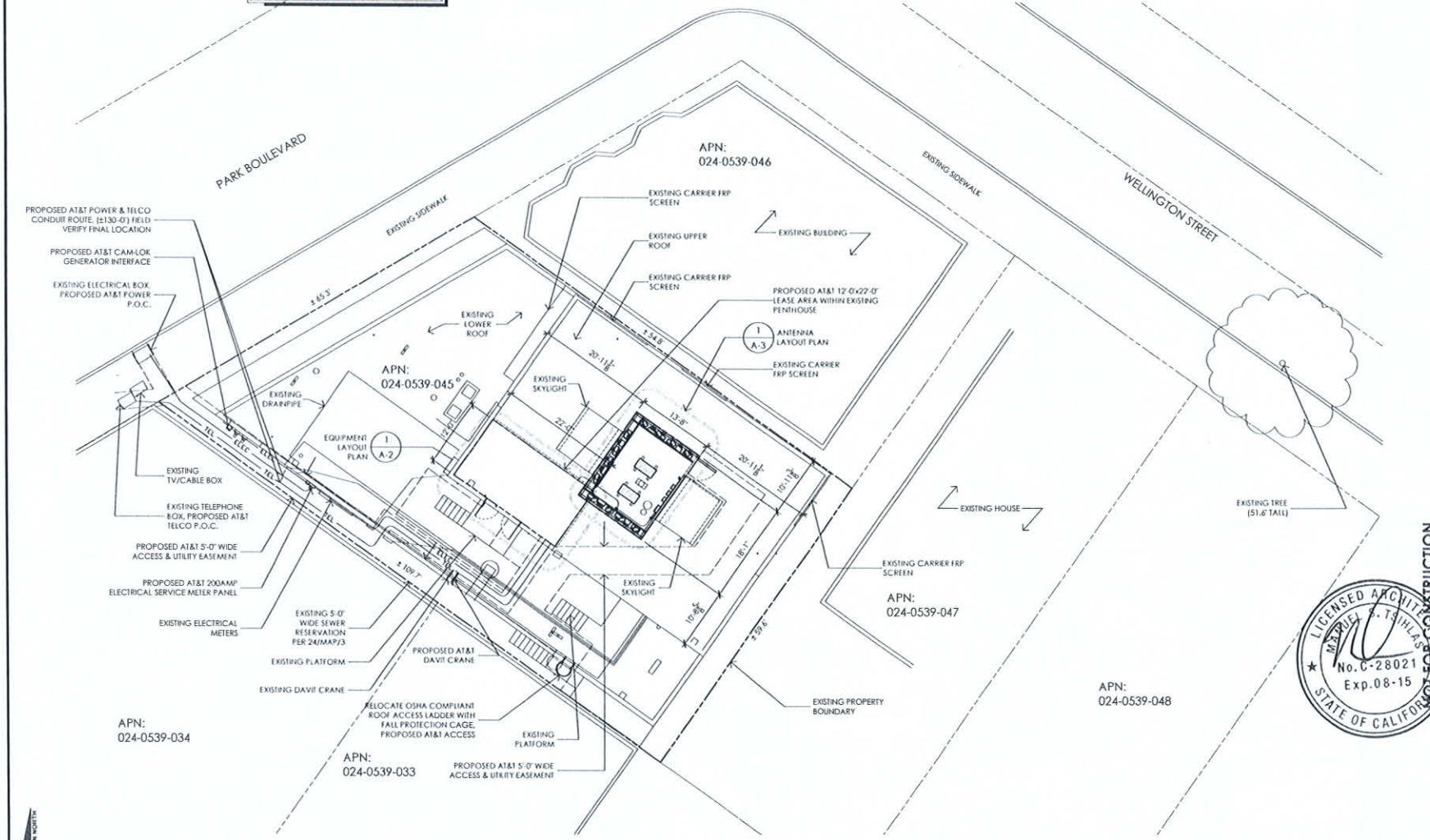
THIS IS NOT A SITE SURVEY

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

NOTES

1. NO GRADING OR PERMANENT CONSTRUCTION SHALL OCCUR WITHIN DRIP LINES OF TREES THAT ARE TO REMAIN WITHOUT ARBORIST APPROVAL.

2. PRIOR TO CONSTRUCTION, GENERAL CONTRACTOR TO CONTACT DIGALERT TO MARK OUT EXISTING UNDERGROUND UTILITIES. IN THE EVENT OF CONFLICTS, CONTRACTOR TO CONTACT PGE.



0' 2' 10' 20'
1/8" = 1'-0"

LICENSED ARCHITECT MANUEL S. TAHLAS No. C-28021 Exp. 08-15 STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

PREPARED FOR
at&t
2600 Camino Ramon, 4W850 N
San Ramon, California 94583

Vendor:
COMPLETE Wireless Consulting, Inc.

Architect:
MST ARCHITECTS
801 Alhambra Boulevard, Suite #2
Sacramento, California 95816

AT&T SITE NO:	CCU1237
PROJECT NO:	218.015
DRAWN BY:	JCE
CHECKED BY:	MST

REV.	DATE	DESCRIPTION
	06/23/14	100% ZD REV 1
	05/14/14	100% ZD
	03/21/14	90% ZD REV 1
	02/24/14	90% ZD

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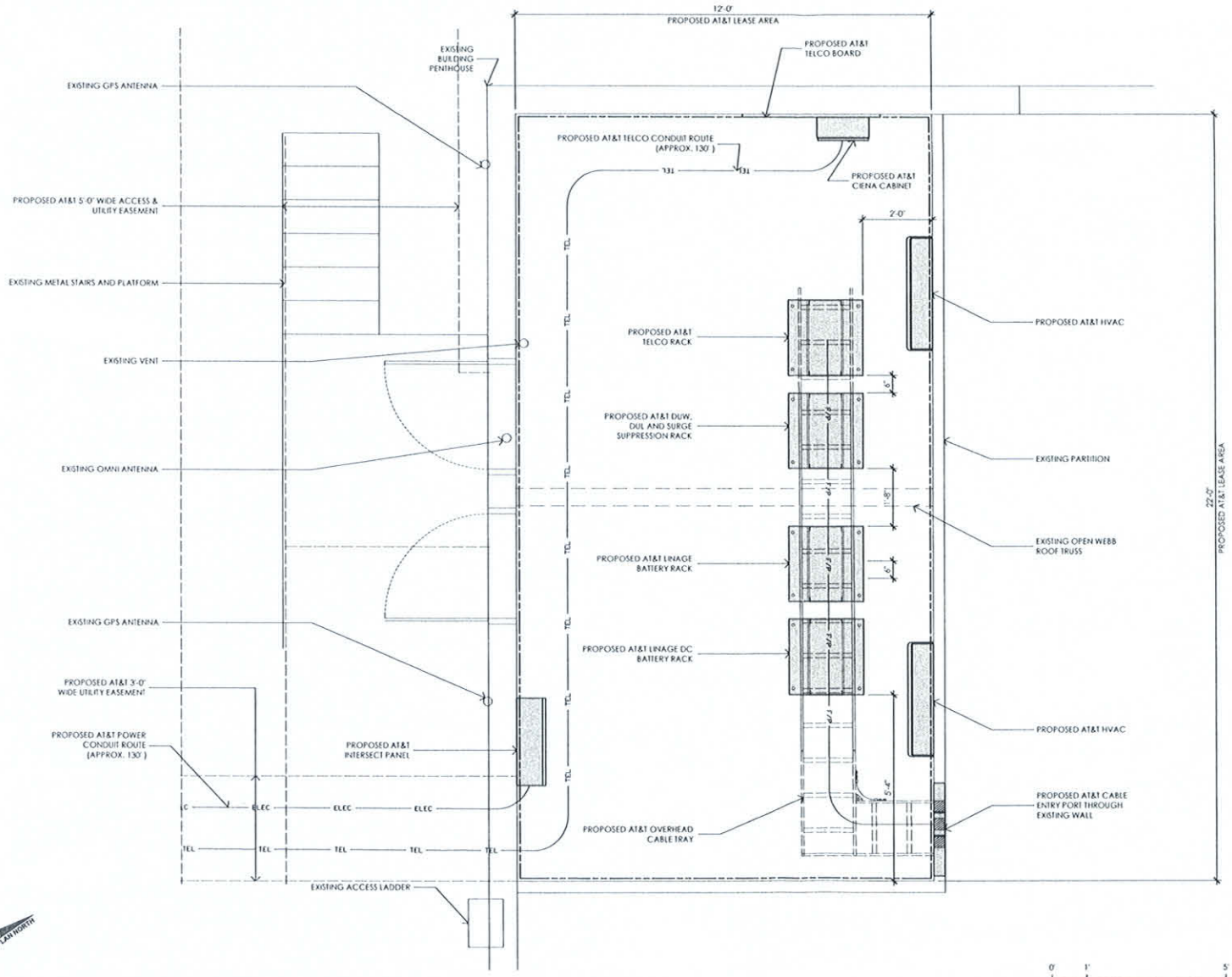
4226 PARK BOULEVARD
OAKLAND, CA 94601

SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
A-1



1 EQUIPMENT AREA PLAN
3/4" = 1'-0"

LICENSED ARCHITECT
MANUEL S. TSIHLAS
No. C-28021
Exp. 08-15
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

PREPARED FOR
at&t
2600 Camino Ramon, 4W850 N
San Ramon, California 94583

Vendor:
COMPLETE Wireless Consulting, Inc.

Architect:
MST ARCHITECTS
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Sacramento, California 95816

AT&T SITE NO:	CCU1237
PROJECT NO:	218.015
DRAWN BY:	JCE
CHECKED BY:	MST

REV	DATE	DESCRIPTION
	06/23/14	100% ZD REV 1
	05/14/14	100% ZD
	03/21/14	90% ZD REV 1
	02/24/14	90% ZD

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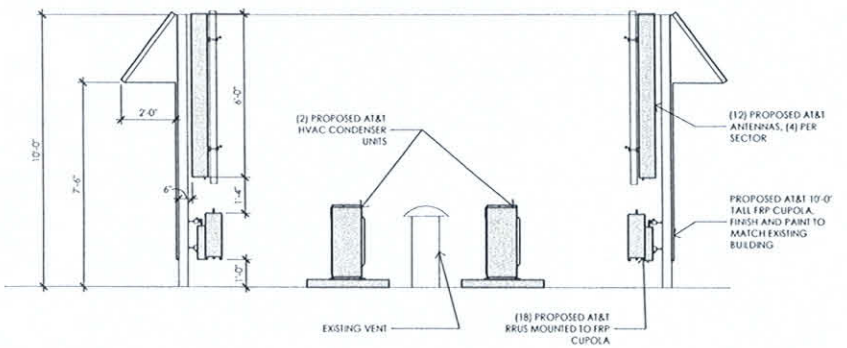
SHEET TITLE:
EQUIPMENT AREA PLAN

SHEET NUMBER:
A-2



5 SECTION @ FRP CUPOLA
1/2" = 1'-0"

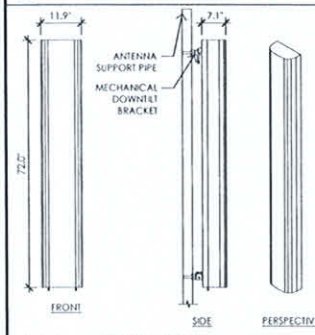
RF SCHEDULE

SECTOR		ANTENNA MODEL NO.	AZIMUTH	CENTERLINE	RRU	TMA	FIBER LENGTH	COAX LENGTH	COAX DIA.	NO.
ALPHA	A1	S8N8H-1D658	60°	± 46'-8"	(1) RRUS11, (1) RRUS11 W/ A2	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	A2	S8N8H-1D658	60°	± 46'-8"	(1) RRUS11	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	A3	S8N8H-1D658	60°	± 46'-8"	(1) RRUS11	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	A4	S8N8H-1D658	60°	± 46'-8"	(1) 700 LTE (DE) RRUS, (1) WCS RRUS-32	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
BETA	B1	S8N8H-1D658	300°	± 46'-8"	(1) RRUS11, (1) RRUS11 W/ A2	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	B2	S8N8H-1D658	300°	± 46'-8"	(1) RRUS11	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	B3	S8N8H-1D658	300°	± 46'-8"	(1) RRUS11	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	B4	S8N8H-1D658	300°	± 46'-8"	(1) 700 LTE (DE) RRUS, (1) WCS RRUS-32	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
GAMMA	C1	S8N8H-1D658	180°	± 46'-8"	(1) RRUS11, (1) RRUS11 W/ A2	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	C2	S8N8H-1D658	180°	± 46'-8"	(1) RRUS11	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	C3	S8N8H-1D658	180°	± 46'-8"	(1) RRUS11	N/A	± 50'-0"	± 15'-0"	1/2"	(2)
	C4	S8N8H-1D658	180°	± 46'-8"	(1) 700 LTE (DE) RRUS, (1) WCS RRUS-32	N/A	± 50'-0"	± 15'-0"	1/2"	(2)

EQUIPMENT IS PRELIMINARY AND SUBJECT TO CHANGE.

2 RF SCHEDULE
NO SCALE

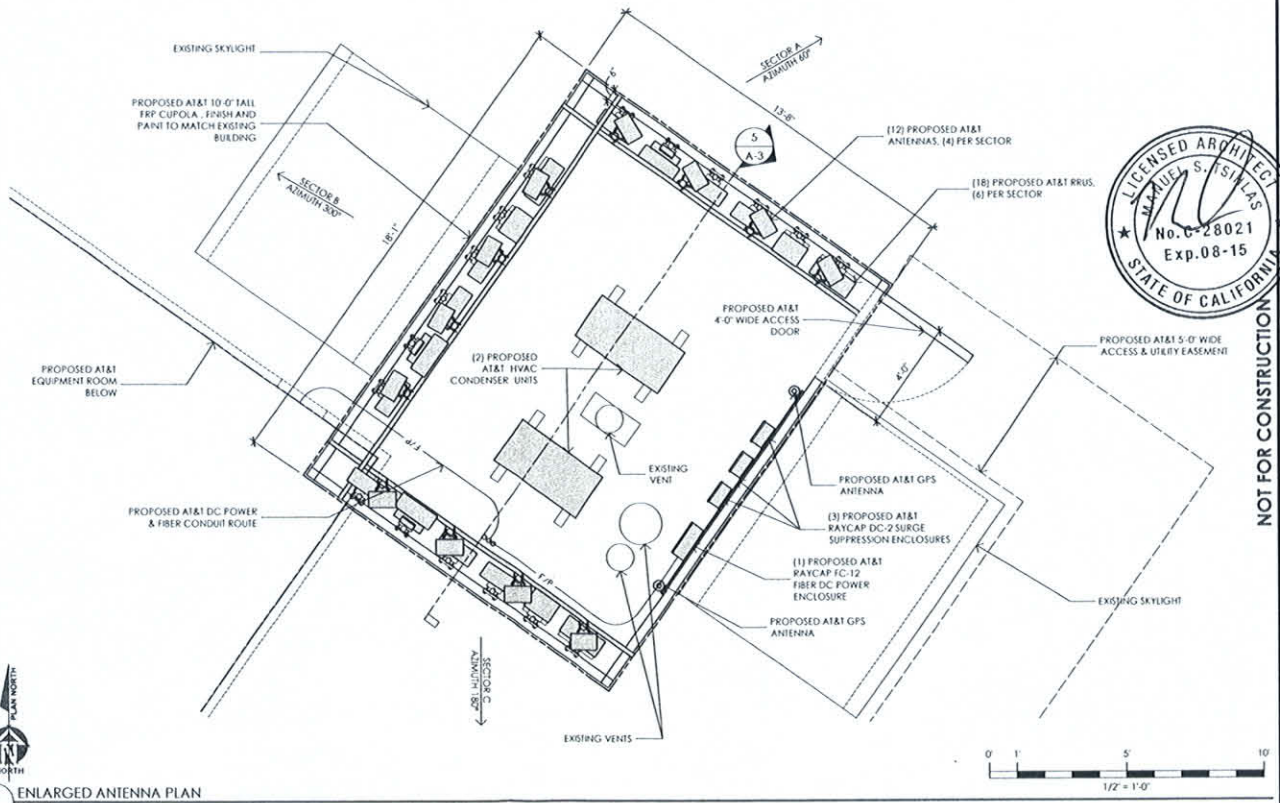
4 NOT USED
NOT TO SCALE



ANTENNA = ANDREW (S8N8H-1D658)
WEIGHT = 40.6 LBS
DIMENSIONS = 72.0" (H) x 11.9" (W) x 7.1" (D)

EQUIPMENT SUBJECT TO CHANGE

3 PROPOSED ANTENNA SPEC
3/4" = 1'-0"



1 ENLARGED ANTENNA PLAN
1/2" = 1'-0"

NOT FOR CONSTRUCTION

LICENSED ARCHITECT
MANUEL S. SILVAS
No. C-28021
Exp. 08-15
STATE OF CALIFORNIA

PREPARED FOR
at&t
2600 Camino Ramon, 4W850 N
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Vendor:
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	05/14/14	100% ZD
	03/21/14	90% ZD REV 1
	02/24/14	90% ZD

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4226 PARK BOULEVARD
OAKLAND, CA 94601

SHEET TITLE:
ANTENNA PLANS & DETAILS

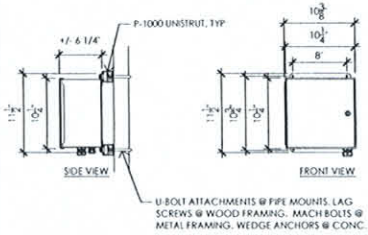
SHEET NUMBER:
A-3.1

RAYCAP DC2-48-60-0-9E SURGE SUPPRESSION SOLUTION

COLOR: LIGHT GRAY

DIMENSIONS: 10.25" WIDE X 10.25" TALL X 6.30" DEEP

WIEGHT: +/- 16 LBS. (INCLUDING MOUNTING HARDWARE)



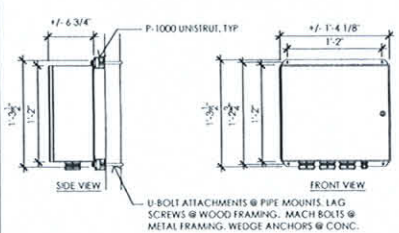
4 DC2 SURGE SUPRESSION
1-1/2" = 1'-0"

RAYCAP FC12-PC6-10E FIBER DC POWER CONNECTION

COLOR: LIGHT TAN

DIMENSIONS: 16.10" WIDE X 14.00" TALL X 6.65" DEEP

WIEGHT: +/- 24 LBS. (INCLUDING MOUNTING HARDWARE)



2 FC12 POWER CONNECTION
1-1/2" = 1'-0"

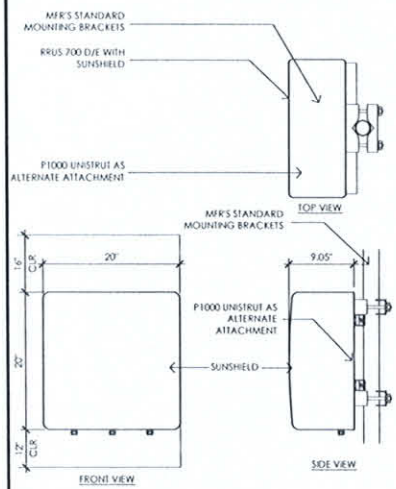
ERICSSON 700D/E RRH

MODEL: KRC161408/1

COLOR: WHITE

DIMENSIONS: 20" TALL X 20" WIDE X 9.05" DEEP (INCLUDING SUNSHIELD)

WEIGHT: +/- 71.5LBS. (INCLUDING MOUNTING HARDWARE)



6 ERICSSON 700 D/E REMOTE RADIO UNIT
1-1/2" = 1'-0"

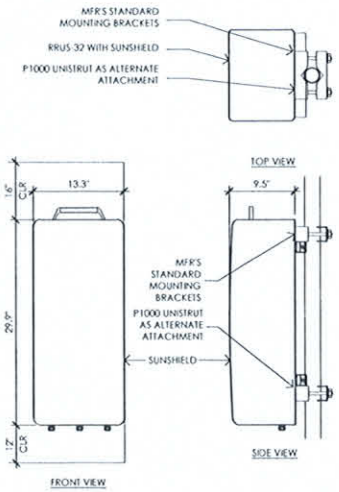
ERICSSON WCS RRU-32

MODEL: KRC161 423/1

COLOR: WHITE

DIMENSIONS: 29.9" TALL X 13.3" WIDE X 9.5" DEEP (INCLUDING SUNSHIELD)

WEIGHT: +/- 77LBS. (INCLUDING MOUNTING HARDWARE)



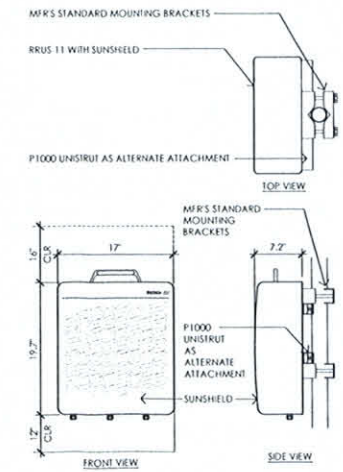
5 ERICSSON WCS RRUS-32 REMOTE RADIO UNIT
1-1/2" = 1'-0"

ERICSSON RRUS 11 REMOTE RADIO UNIT

COLOR: WHITE

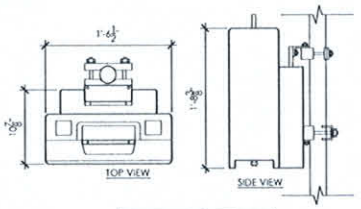
DIMENSIONS: 19.7" TALL X 17" WIDE X 7.2" DEEP (INCLUDING SUNSHIELD)

WEIGHT: +/- 50 LBS. (INCLUDING MOUNTING HARDWARE)

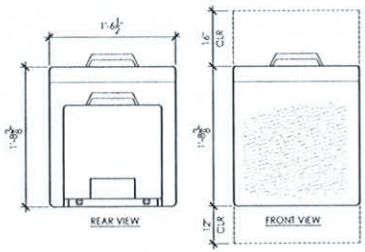


3 ERICSSON RRUS-11 REMOTE RADIO UNIT
1-1/2" = 1'-0"

PASSIVE CONVECTION FANLESS ENCLOSURE
UNIT WEIGHT: +/- 71.4 LBS



NOTE: MOUNTING BRACKETS & HARDWARE PROVIDED BY MFG.



RRUS12 W/RRUS A2 BACKPACK NOTES:

TO ENSURE ADEQUATE AIRFLOW BETWEEN UNITS:

- ALLOW A MINIMUM OF 15.75" VERTICAL SEPARATION BETWEEN RRU'S.
- ALLOW A MINIMUM OF 19.68" VERTICAL SEPARATION BETWEEN RRU AND ANTENNA.
- ALLOW A MINIMUM OF 7.87" HORIZONTAL SEPARATION BETWEEN RRU'S.
- THE MINIMUM DISTANCE FROM THE BOTTOM OF THE RRU TO THE FLOOR IS 11.8".

1 RRUS12 W/ A2 BACKPACK DETAIL
1-1/2" = 1'-0"

NOT FOR CONSTRUCTION

PREPARED FOR
at&t
2600 Camino Ramon, 4W850 N
San Ramon, California 94583

Vendor:
COMPLETE Wireless Consulting, Inc.

Architect:
MST ARCHITECTS
801 Alhambra Boulevard, Suite #2
Sacramento, California 95816

AT&T SITE NO:	CCU1237
PROJECT NO:	218.015
DRAWN BY:	JCE
CHECKED BY:	MST

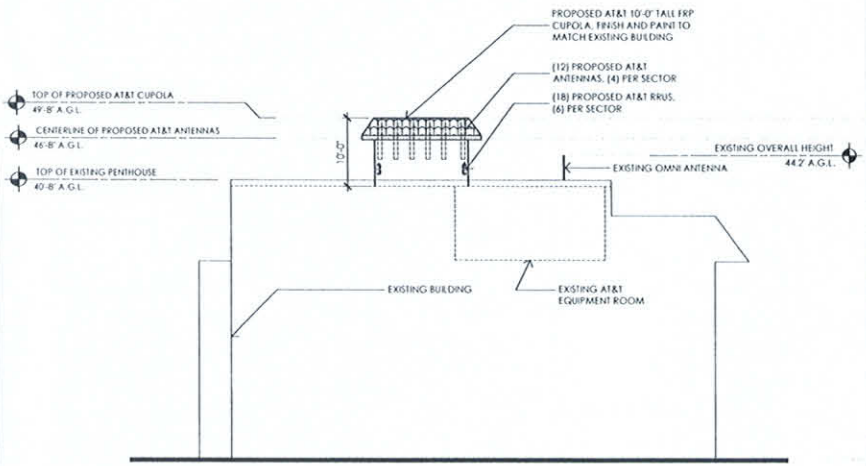
REV	DATE	DESCRIPTION
	06/23/14	100% ZD REV 1
	05/14/14	100% ZD
	03/21/14	90% ZD REV 1
	02/24/14	90% ZD

LICENSED ARCHITECT
MANUEL S. TAVILAS
No. C-28021
Exp. 08-15
STATE OF CALIFORNIA

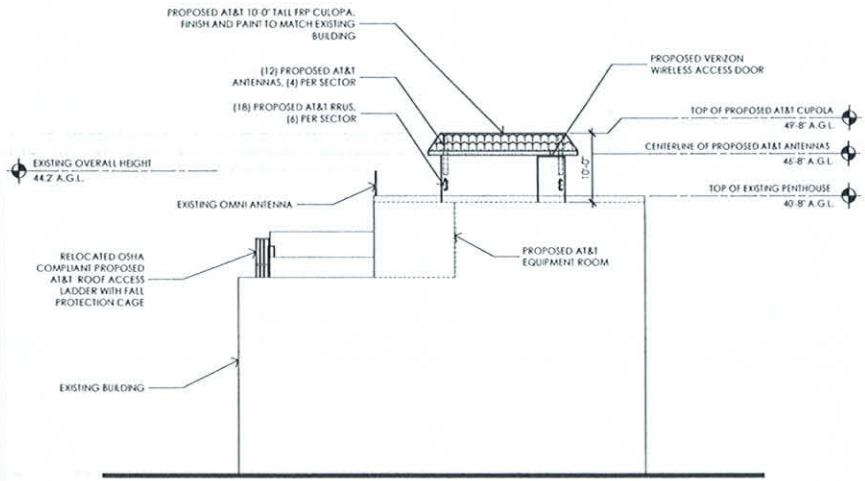
Issued For:
MIDCREST RD. & SUNNYHILLS DR.
4226 PARK BOULEVARD
OAKLAND, CA 94601

SHEET TITLE:
ANTENNA PLANS & DETAILS

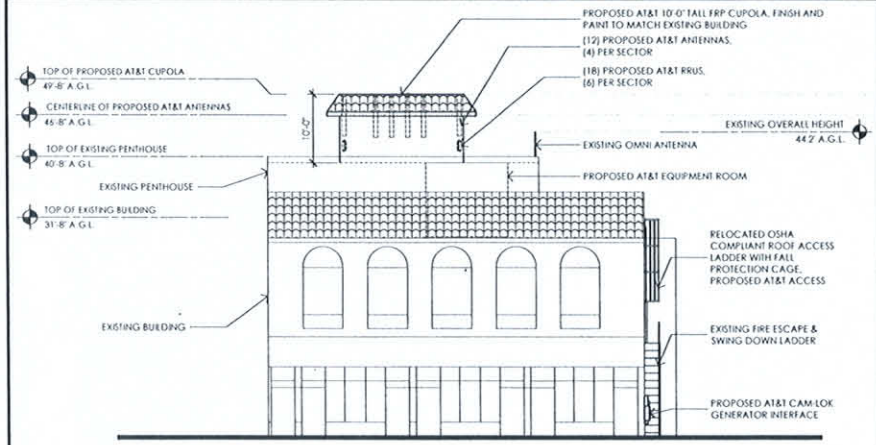
SHEET NUMBER:
A-3.2



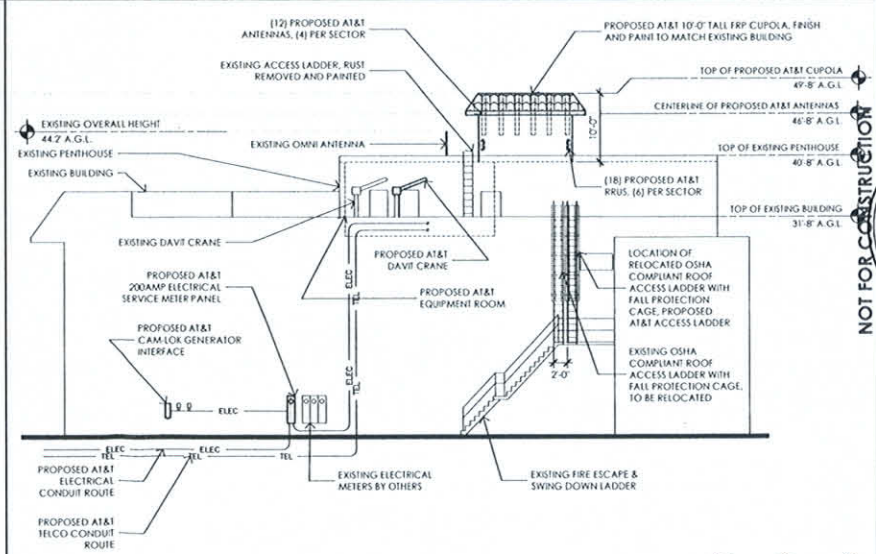
4 NORTHEAST ELEVATION
1/8" = 1'-0"



2 SOUTHEAST ELEVATION
1/8" = 1'-0"



3 NORTHWEST ELEVATION
1/8" = 1'-0"



1 SOUTHWEST ELEVATION
1/8" = 1'-0"

NOT FOR CONSTRUCTION

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	05/14/14	100% ZD
	03/21/14	90% ZD REV 1
	02/24/14	90% ZD

Licensed Architect
MANUEL G. SIMAS
No. C-28021
Exp. 08-15
STATE OF CALIFORNIA

Issued For:
MIDCREST RD. & SUNNYHILLS DR.
4226 PARK BOULEVARD
OAKLAND, CA 94601

SHEET TITLE:
PROPOSED ELEVATION

SHEET NUMBER:
A-4