

Case File Number: CMD11-057

July 6, 2011

<b>Location:</b>	<b>6929 Foothill Blvd. (Eastmont Town Center (See map on reverse)</b>
<b>Assessors Parcel Numbers:</b>	<b>(039-3291-019-00)</b>
<b>Proposal:</b>	To install three (3) telecommunication antennas, six (6) RRU's, and three equipment cabinets at a site with existing antennas.
<b>Applicant:</b>	AT&T c/o Jonathan Fong of the Lyle Company
<b>Contact Person/ Phone Number:</b>	Jonathan Fong (916)868-6673
<b>Owner:</b>	Eastmont Oakland Associates, LLC
<b>Case File Number:</b>	<b>CMD11-057</b>
<b>Planning Permits Required:</b>	Regular Design Review to install three (3) telecommunication antennas, six (6) RRU's, and three equipment cabinets. Major Conditional Use Permit for the expansion of a Macro telecommunication facility within 100 feet of a residential zone.
<b>General Plan:</b>	Community Commercial
<b>Zoning:</b>	CC-1 Community Commercial Zone -1
<b>Environmental Determination:</b>	Exempt, Section 15301 of the State CEQA Guidelines; minor alterations to an existing facility Section 15183 of the State CEQA Guidelines; projects consistent with a community plan, general Plan or zoning.
<b>Historic Status:</b>	Not A Potential Designated Historic Property; Survey rating: X
<b>Service Delivery District:</b>	5
<b>City Council District:</b>	6
<b>Date Filed:</b>	3/29/11
<b>Finality of Decision:</b>	Appealable to City Council within 10 days
<b>For Further Information:</b>	Contact case planner <b>Michael Bradley</b> at <b>(510) 238-36935</b> or <b>mbradley@oaklandnet.com</b>

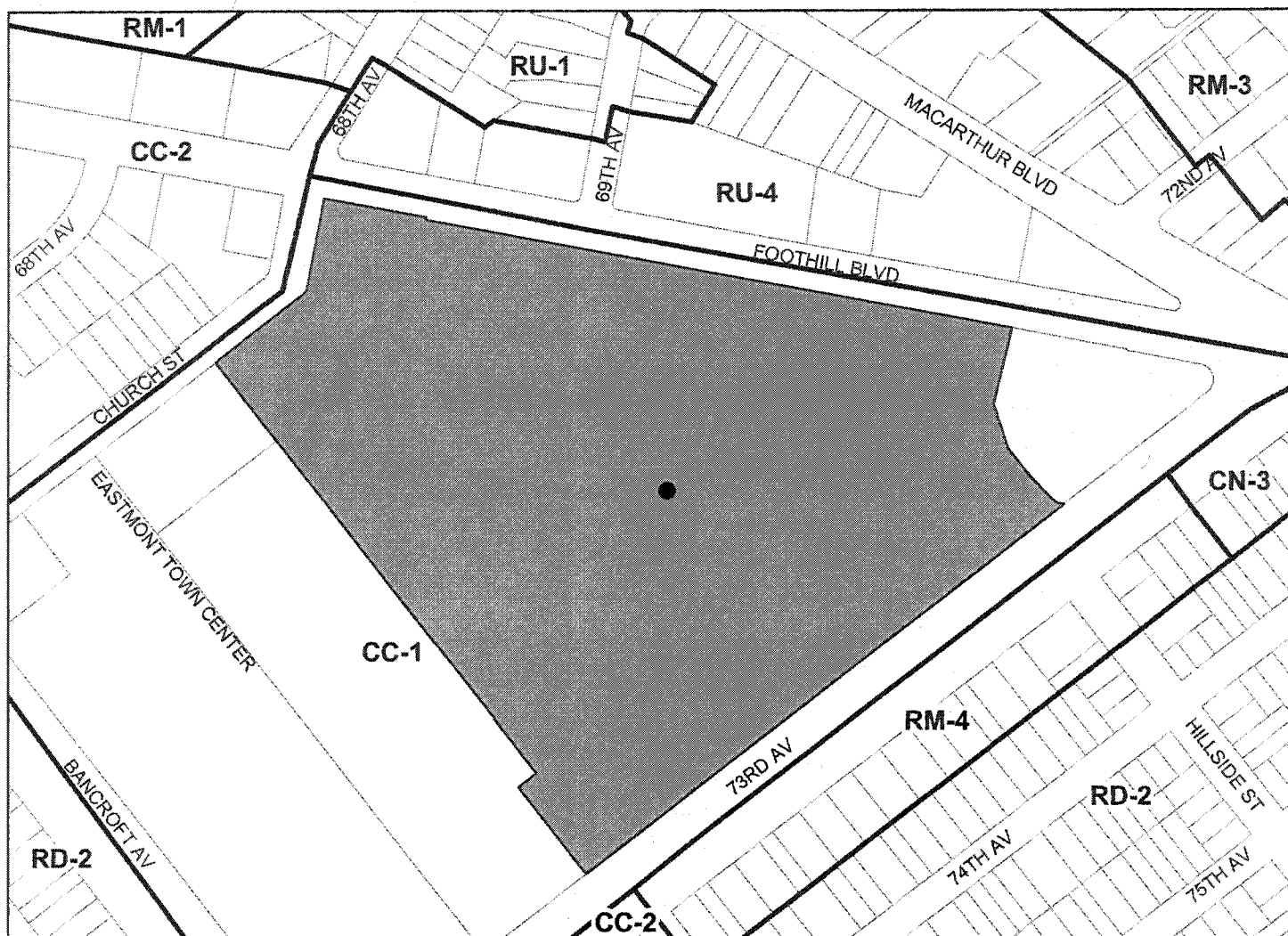
## SUMMARY

The following staff report addresses the proposal for additional unmanned wireless telecommunication facility located on the roof of an existing Shopping Mall (Eastmont Town Center) with associated equipment cabinets located on the roof of the building. The project site already consists of 12 telecom antennas and associated equipment cabinets. Given the number of antennas and the type of structure, this would be considered a "Macro" Telecommunications Facility. The site is located within a commercial district along Foothill Boulevard. The site is in the CC-1 Community Commercial Zone and the General Plan designation for the site is Community Commercial.

## PROJECT DESCRIPTION

The applicant (AT&T) is proposing to install three (3) wireless telecommunication panel antennas mounted to the wall of an existing building at the roof line with paint and texture to

# CITY OF OAKLAND PLANNING COMMISSION



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Address: 6929 Foothill Boulevard  
Zone: CC-1

match the existing building. The proposal for the equipment cabinets is to locate the cabinets behind an existing enclosed area and adjacent to the other existing telecommunication providers equipment cabinets on the roof of the building. All proposed antennas and associated equipment will not be accessible to the public. (See Attachment A).

### **PROPERTY DESCRIPTION**

The subject property is approximately 720,100 square feet, located in the 6900 block of Foothill Boulevard between 73<sup>rd</sup> Avenue, Church Street, and Bancroft Avenue. The subject property has a fully functioning multi-tenant shopping mall on the site. The property was first developed in 1970 (based on Alameda County Assessors Data). Currently there is a macro telecommunication facility with two separate telecommunication providers on the property including 12 antennas and two equipment cabinet areas on the roof of the building.

### **GENERAL PLAN ANALYSIS**

The subject property is located within the Community Commercial General Plan designation. The Community Commercial land use classification is intended to identify, create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. The proposed unmanned wireless telecommunication facility will not adversely affect and/or detract from the commercial or residential characteristics of the neighborhood. The antennas will be mounted on the existing building and visual impacts will be mitigated since the antennas will be painted and textured to match the existing building. General Plan Policy N9.9 states that the City encourages rehabilitation efforts which respect the architectural integrity of a building's original style. The proposed project will have very minimal effect on the existing building and the architectural additions to the building will match the existing materials and character that is present.

### **ZONING ANALYSIS**

The subject property is located within the CC-1 Community Commercial Zone. The CC-1 zone is intended to create, maintain, and enhance shopping centers and malls with a wide range of consumer businesses. The proposal is for additional unmanned wireless telecommunication equipment to be mounted to the wall of an existing building and requires a major conditional use permit since the project is within one hundred feet of the boundary of a residential zone. Staff finds that the proposed application meets applicable CC-1 zoning and the 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 15301, alterations to existing facilities, and 15183, projects consistent with a community plan, general plan or zoning.

## **KEY ISSUES AND IMPACTS**

### **1. Conditional Use Permit**

Section 17.35.040 of the City of Oakland Planning Code requires a conditional use permit to install a Macro Telecommunication facility in the CC-1 zone. Furthermore, Section 17.134.020 defines a major and minor conditional use permits. Subsections (A)(3)(i) lists a major conditional use permit: "Any telecommunication facility in or within one hundred (100) feet of the boundary of any residential zone. The required findings for a major 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 co-locating the installation of new antennas and associated equipment cabinets on a facility, the proposed project meets (A) co-locating on an existing structure or facility with existing wireless antennas.

### **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 has met design criteria (B) since the antennas will be mounted on the existing penthouse structure atop the building roof and at least 400 feet from the nearest right-of-way. Furthermore, to mitigate visual impacts the antennas will be mounted approximately 73' above the public right of way. The associated equipment cabinets will have no visual impact since the equipment will be placed with other existing telecommunication equipment on the roof

#### **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 EBI Consulting, (**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 Conditional Use Permit and Design Review.

**RECOMMENDATIONS:**

1. Affirm staff's environmental determination
2. Approve Conditional Use Permit and Design Review application CMD11-057 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



Eric Angstadt, Deputy Director  
Community & Economic Development Agency

**ATTACHMENTS:**

- A. Project Plans & Photo simulation
- B. EBI Consulting RF Emissions Report

**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 17.128.070(B), of the telecommunication facilities (Macro) Design Review criteria; and all the required findings under Section 17.128.070.(C), of the telecommunication facilities (Macro) Conditional Use Permit criteria; 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 – MINOR CONDITIONAL 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 neighborhood. 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 proposed telecommunications antennas will be co-located with 12 existing antennas on the walls at the roof top of an existing building and will not adversely affect the operating characteristic or livability of the existing area. The antennas will be mounted to the wall and painted to match the existing texture and color of the building. 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 shopping 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 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 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 macro-telecommunication facility in the Community Commercial General Plan designation and will enhance and improve communication service for a mixture of civic, commercial 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 the addition to a macro telecommunications facility which includes the addition of three panel antennas mounted to the existing building and two equipments cabinets, located on the roof of the building. The proposed antennas will be painted and textured to match the existing texture and color of the existing materials and therefore is consistent and well related to the surrounding area in scale, bulk, height, materials, and textures.

**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 proposal protects and preserves the surrounding neighborhood context by adding additional wireless telecommunication antennas to a commercial and residential area. The antennas will be away from public view and will not have any visual impact on the neighborhood.



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

The 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 commercial and residential areas for both day and nighttime use. The Project conforms to all macro-facility definitions set forth in Section 17.128.070 and meets all design review criteria to minimize all impacts throughout the neighborhood

**17.128.070(B) DESIGN REVIEW CRITERIA FOR MACRO FACILITIES**

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

All new materials, texture and color will match the existing exterior building materials.

**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:**

All new materials, texture and color will match the existing exterior building materials.

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

The proposed antennas will be incorporated into the vertical design elements of the building to create a vertical addition on the existing walls with color and texture to match existing building materials and design.

**4. Equipment shelters or cabinets shall be screened from the public view by using landscaping, or materials and colors consistent with surrounding backdrop:**

The associated equipment shelters or cabinets will be co-located with the existing equipment cabinets and located on the roof of the building.

**5. Equipment shelters shall be consistent with the general character of the area:**

The equipment cabinets will be co-located in an area where there is no public access. The equipment cabinets will be located on the roof of the existing building.

**6. For antennas attached to the roof, maintain a 1:1 ratio for equipment setback; screen the antennas to match existing air conditioning units, stairs, or elevator towers; avoid placing roof mounted antennas in direct line with significant view corridors.**

The proposed equipment shelters will be co-located on the ground next to the existing building.

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

The antennas will be mounted on the walls at the roof and will not be accessible to the public due to its location. The equipment cabinets will be located with the existing equipment cabinets on the roof of the building.

**Section 17.128.070(C) CONDITIONAL USE PERMIT (CUP) FINDINGS FOR MACRO FACILITIES**

**1. The project must meet the special design review criteria listed in subsection B of this section (17.128.070B):**

The proposed project meets the special design review criteria listed in section 17.128.070B.

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

Due to the proposed project co-locating with other existing telecommunication antennas and equipment, it will not disrupt the overall community character of the site.

**CONDITIONS OF APPROVAL****CMD11-057****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, **CMD11-057**, and the plans dated **March 24, 2011** and submitted on **March 29, 2011** 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 addition to a macro telecommunications facility located on an existing building at 6929 Foothill Boulevard (APN: 039-3291-019-00), 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 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 of 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 of 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. Landscape Maintenance**

#### ***Ongoing***

All new landscaping shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements.

### **14. 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 CONDITONS:**

### **15. 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.

**16. 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 or 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.

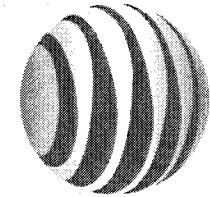
**17. Architectural Detailing and Painting**

***Prior to the final building permit sign off***

The applicant shall paint and texture all proposed antennas, dishes and other related equipment attached to the building to match the existing building materials and texture.

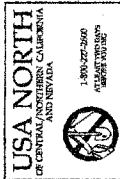






at&t

ATTACHMENT A



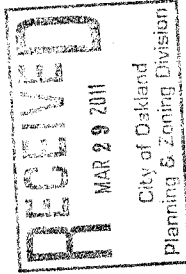
CNU4595/CNU4871

LTE SITE: CCO4595

FA. #: 10101846 USID: 47395

EASTMONT MALL

6929 FOOTHILL BLVD  
OAKLAND, CA 94605



#### CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE LOCAL ORDINANCES, NOTING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

1. CALIFORNIA CODE OF REGULATIONS
2. 2010 CALIFORNIA BUILDING CODE
3. 2010 CALIFORNIA PLUMBING CODE
4. 2010 CALIFORNIA ELECTRICAL CODE
5. ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
6. 2010 LIFE SAFETY CODE NFPA-101
7. CITY/COUNTY ORDINANCES
8. CITY/COUNTY ORDINANCES

HANDICAP REQUIREMENTS: FACILITY IS UNIMPAIRED AND NOT FOR HUMAN OCCUPANCY. IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE 11039.

#### PROJECT DESCRIPTION

THIS IS AN UNIMPAIRED TELECOMMUNICATIONS FACILITY FOR AIRTEL WIRELESS CONSISTING OF THE INSTALLATION OF THE FOLLOWING:

1. ONE (1) OUTDOOR CABINET (RRA2) AND TWO (2) PURGE CABINETS (RRA2) MOUNTED ON NEW EQUIPMENT PLATFORM ON BUILDING LOWER FLOOR.
2. NEW THREE (3) LTE ANTENNAS ON EXISTING BUILDING.
3. NEW SIX (6) RRU'S MOUNTED ON EXISTING BUILDING.
4. NEW ONE (1) 3" FIBER/POWER CONDUIT RUN FROM OUTDOOR CABINETS TO FIBER/POWER BOX.
5. NEW SIX (6) RET'S PER ANTENNA CONSTRUCTION, ONE (1) PER SECTOR.
6. NEW THREE (3) SURGE SUPPRESSION BOXES, ONE (1) PER SECTOR.
7. NEW ONE (1) FIBER/POWER BOX.

#### DRIVING DIRECTIONS

FROM AT&T OFFICE - PLEASANTON, CA

1. START OUT GOING SOUTHEAST ON ROSENWOOD DR TOWARD OLD SANTA RITA RD.
2. TURN LEFT ONTO OLD SANTA RITA RD.
3. TURN LEFT ONTO COUNTRY CIRCLE.
4. MERGE ONTO I-580 W TOWARD OAKLAND.
5. TURN LEFT ONTO I-580 W TOWARD OAKLAND.
6. TURN LEFT ONTO I-580 W TOWARD OAKLAND.
7. TURN LEFT ONTO 98TH AVENUE.
8. TURN LEFT ONTO 98TH AVENUE.
9. TURN LEFT ONTO 98TH AVENUE.
10. MAKE A RIGHT TURN ONTO FOOTHILL BLVD.
11. 6929 FOOTHILL BLVD IS ON THE RIGHT.

#### PROJECT TEAM

**ENGINEER:**  
AT&T  
1500 ROSENWOOD DR  
LIVERMORE, CA 94550  
CONTACT: PAUL PUELL  
PHONE: (925) 848-3666  
EMAIL: paul@atandt.com

**SITE ACQUISITION MANAGER:**  
ENICSSON  
1190 STONERIDGE MALL DR, SUITE 400  
FREMONT, CA 94538  
CONTACT: RICK RAMIREZ  
PHONE: (925) 737-5600  
EMAIL: rick@enicsson.com

**ZONING MANAGER:**  
LTL COMPANY  
3140 GOLD CAMP TOWNE, SUITE 30  
FREMONT, CA 94538  
CONTACT: JADATION TONG  
PHONE: (916) 350-7000  
EMAIL: jadation@ltl.com

**CONSTRUCTION MANAGER:**  
AT&T  
4430 ROSENWOOD DR  
6160 STONERIDGE MALL DR, SUITE 400  
FREMONT, CA 94538  
CONTACT: TON DADE  
PHONE: (925) 737-5600  
EMAIL: ton@atandt.com

#### PROJECT INFORMATION

**SITE ADDRESS:**  
6929 FOOTHILL BLVD  
OAKLAND, CA 94605

**APN:**  
38-28103200

**PROPERTY OWNER:**  
EASTMONT TOWN CENTER CO. LLC

**LATITUDE:**  
37.7694° N (NAD 83)

**LONGITUDE:**  
-121.7506° W (NAD 83)

**GROUND ELEVATION:**  
60' ASSL

**HEIGHT OF STRUCTURE:**  
27'-0"

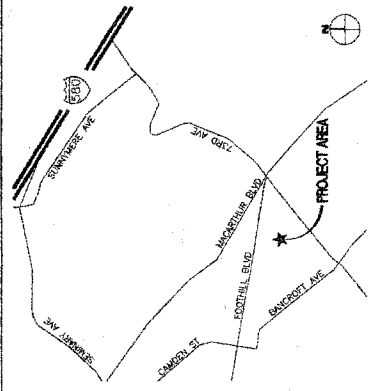
**ZONING:**  
C-20/25-4

**ADDRESS:**  
CITY OF OAKLAND

**TELEPHONE:**  
AIRTEL

**POWER:**  
POWE

#### VICINITY MAP



#### GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWING:  
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK ON BE RESPONSIBLE FOR SAME.

#### SHEET INDEX

SHEET	DESCRIPTION	REV
T-1	TITLE SHEET, SITE INFORMATION AND VICINITY MAP	1
T-2	GENERAL NOTES, LEGEND AND ABBREVIATIONS	1
A-1	SITE PLAN	1
A-2	PARTIAL ROOF PLAN	1
A-3	EQUIPMENT PLANS	1
A-4	ANTENNA PLANS	1
A-5	ELEVATIONS	1
A-6	ANTENNA AND EQUIPMENT DETAILS	1
A-7	ANTENNA AND EQUIPMENT DETAILS	1

#### APPROVALS

LANDLORD: \_\_\_\_\_  
CONSTRUCTION MANAGER: \_\_\_\_\_  
RF ENGINEER: \_\_\_\_\_  
SITE ACQUISITION MANAGER: \_\_\_\_\_  
ZONING MANAGER: \_\_\_\_\_  
UTILITY COORDINATOR: \_\_\_\_\_  
PROGRAM REGIONAL MANAGER: \_\_\_\_\_  
NETWORK OPERATIONS MANAGER: \_\_\_\_\_



PROJECT INFORMATION:  
CNU4595/CNU4871  
LTE SITE: CCO4595  
EASTMONT MALL  
6929 FOOTHILL BLVD  
OAKLAND, CA 94605

CURRENT ISSUE DATE: 03/24/11

ISSUED FOR: REV 1

EQUIPMENT RE-DESIGN

REV	DATE	DESCRIPTION	BY
A	12/10/10	POC CONSTRUCTION	HG
0	02/14/11	POC CONSTRUCTION	HT
1	03/24/11	EQUIPMENT RE-DESIGN	HG

PLANS PREPARED BY:



POC COORDINATION  
1000 DOWNSIDE BLVD  
SAN JOSE, CA 95128  
TEL: (408) 904-8888

CONSULTANT:



1000 DOWNSIDE BLVD  
SAN JOSE, CA 95128  
TEL: (408) 904-8888

DRAWN BY: CHK: APPV:

LICENSER: HG PP SAS

SHEET TITLE:  
TITLE SHEET,  
SITE INFORMATION  
AND VICINITY MAP

SHEET NUMBER:  
T-1

ATTACHMENT A



4



4430 ROSENWOOD DRIVE  
PLEASANTON, CA 94588

**CNU4593/CNU4871**  
LIE SITE/COLUMBIA  
**EASTMONT MALL**  
609 Foothill Blvd  
CANAAN, CA 94605

PROJECT INFORMATION:  
CURRENT ISSUE DATE: 03/24/11  
ISSUED FOR:

**REV 1**  
**EQUIPMENT RE-DESIGN**

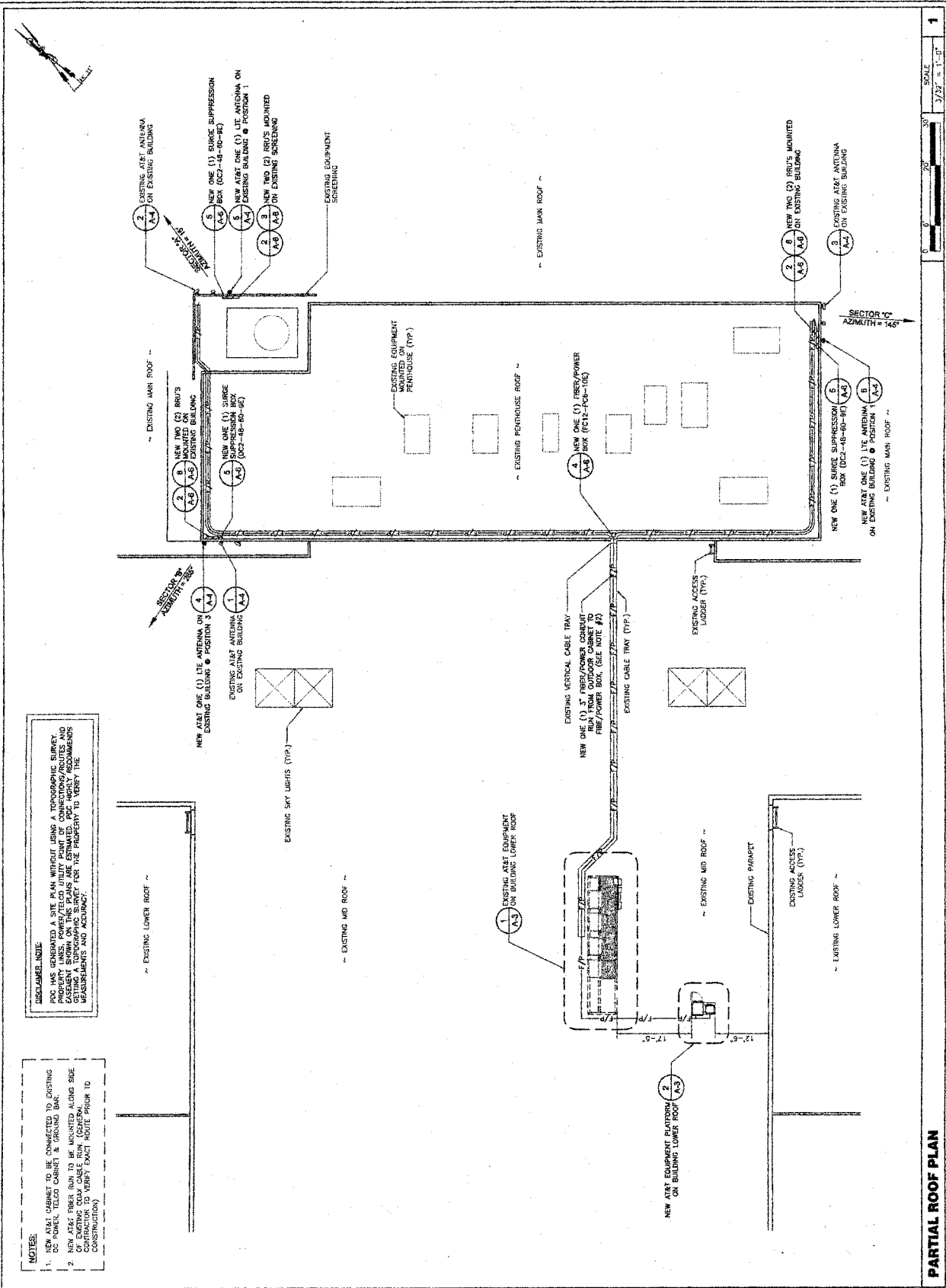
REV	DATE	DESCRIPTION	BY
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0	02/11/11	100% CONSTRUCTION	HT
1	03/24/11	EQUIPMENT RE-DESIGN	HC

PLANS PREPARED BY:  
  
PIP CORPORATION  
1000 CONCORD AVENUE  
RANCHO CORDOVA, CA 95070  
TEL: (925) 894-1000

CONSULTANT:  
  
LHL  
34500 CAMP RD, SUITE 30  
RANCHO CORDOVA, CA 95070  
PHONE BY: CHK: PP: SAS: APV:  
LICENSER:

SHEET TITLE:  
**PARTIAL ROOF PLAN**

SHEET NUMBER:  
**A-2**



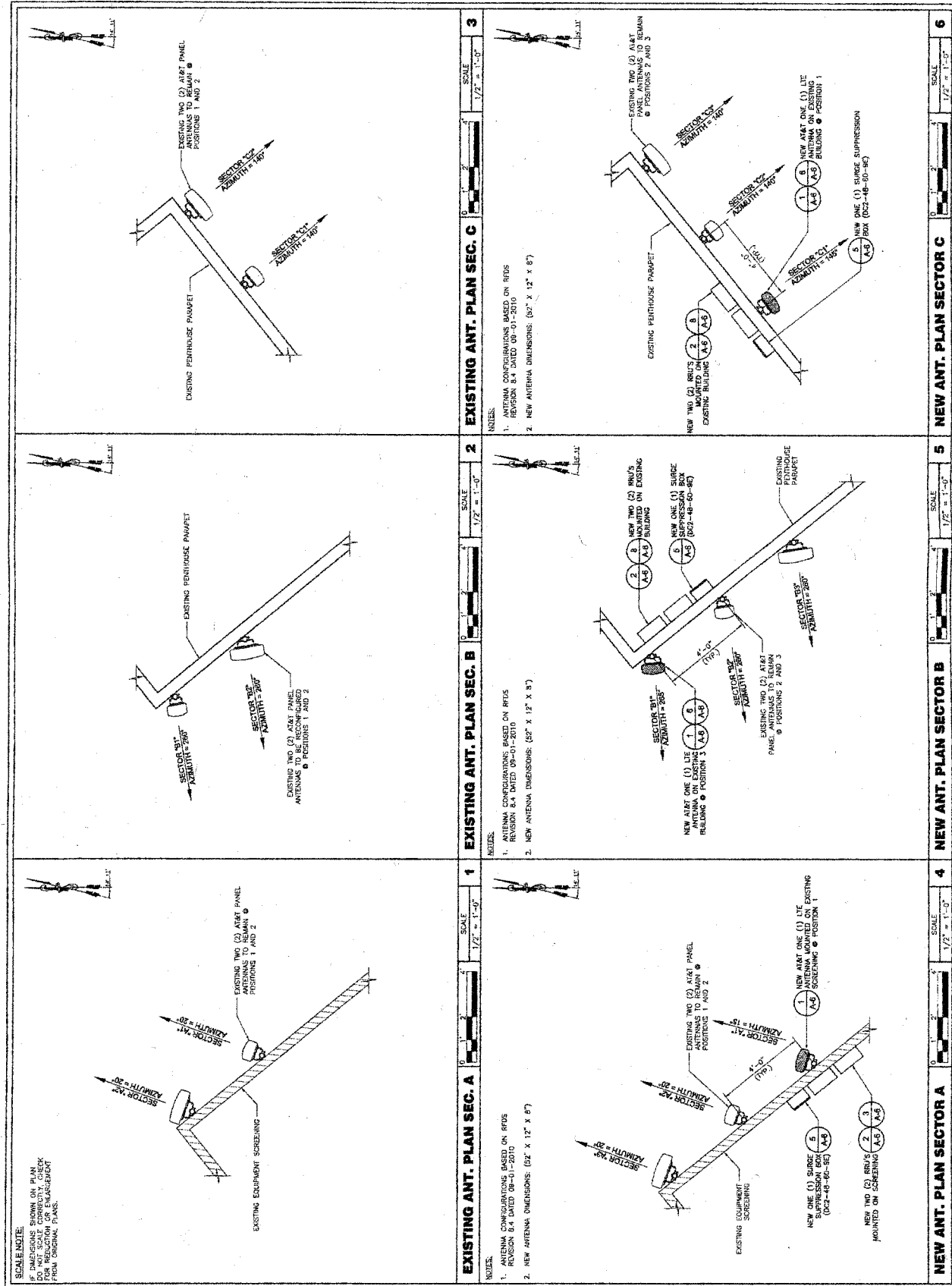
**NOTES:**


1. NEW ANTENNA CABINET TO BE CONNECTED TO EXISTING CABLE & POWER LINES & GROUND BARS.
2. NEW FIBER/POWER CABINET TO BE CONNECTED TO EXISTING CABLE & POWER LINES & GROUND BARS. CONTRACTOR TO VERIFY EXACT ROUTE PRIOR TO CONSTRUCTION.

**DISCLAIMER NOTE:**

PIP HAS GENERATED A SITE PLAN WITHOUT USING A TOPOGRAPHIC SURVEY. PROPERTY LINES, POWER/TELECOM UTILITY POINT OF CONNECTIONS/ROUTES AND ELEVATIONS ARE NOT VERIFIED. THE USER OF THIS PLAN SHALL BE RESPONSIBLE FOR OBTAINING A TOPOGRAPHIC SURVEY FOR THE PROPERTY TO VERIFY THE MEASUREMENTS AND ACCURACY.







4430 ROSEWOOD DRIVE  
PLEASANTON, CA 94588

**PROJECT INFORMATION:**


**CHU4585/CNU4871**  
 CHU4585/CNU4871  
 FA # 10181648 USID-47385  
**EASTMONT MALL**  
 8828 FOOTHILL BLVD  
 OAKLAND, CA 94605


**CURRENT ISSUE DATE:**  
03/24/11

**ISSUED FOR:**  
REV 1  
EQUIPMENT RE-DESIGN

**REV. DATE: DESCRIPTION: BY:**

REV	DATE	DESCRIPTION	BY
A	12/10/10	BOX CONSTRUCTION	HG
B	02/14/11	LOCK CONSTRUCTION	HT
C	02/24/11	EQUIPMENT RE-DESIGN	HG

**PLANS PREPARED BY:**  
  
 CJD CORPORATION  
 1055 CONSUMPTION BLVD.  
 SUITE 200  
 OAKLAND, CA 94612  
 TEL: (925) 864-5888

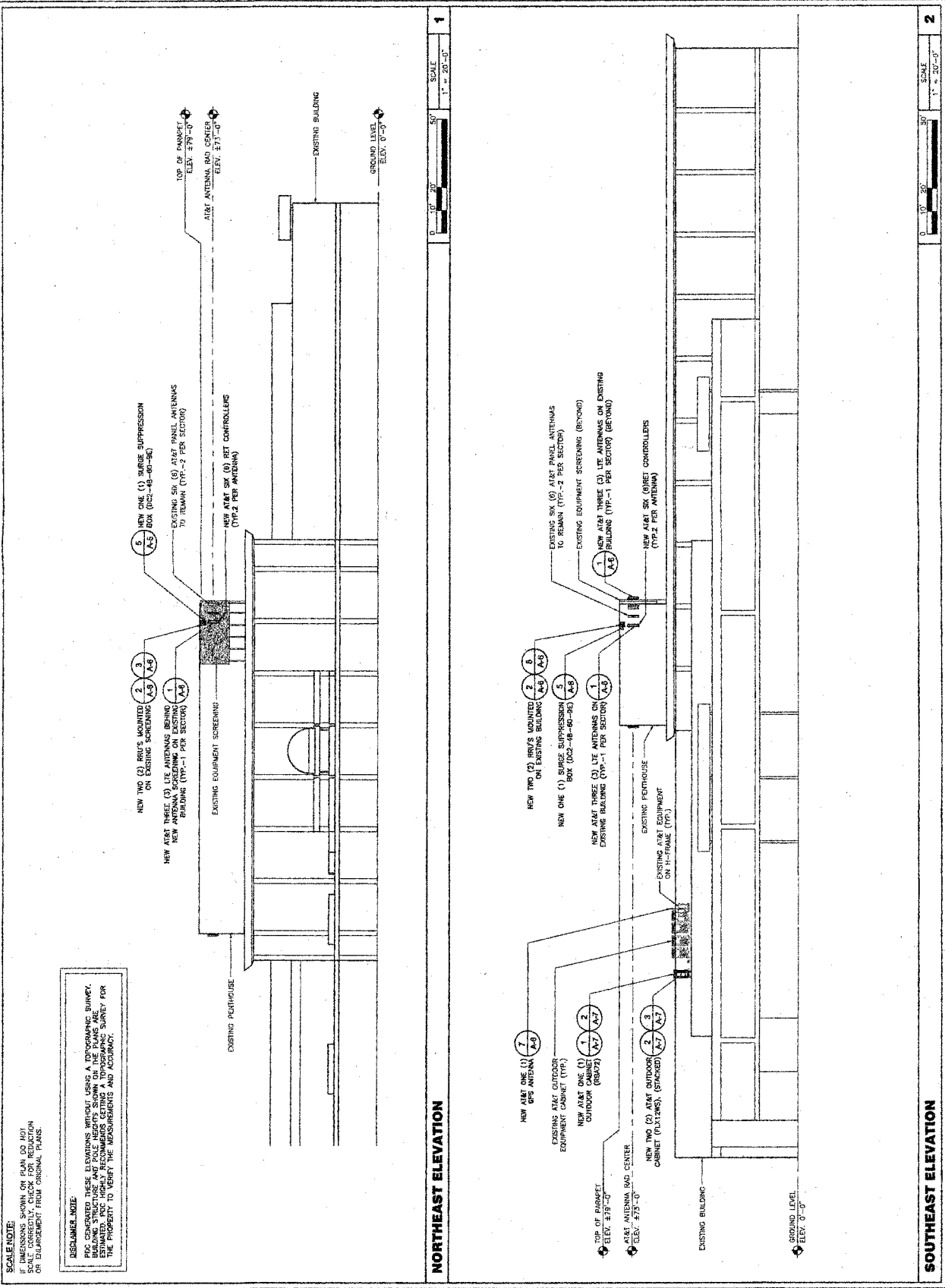
**CONSULTANT:**  
  
 LYLE  
 3140 GOLD CAMP DR, SUITE 30  
 PACIFIC CORRAL, CA 95120  
 TEL: (415) 951-1000

**DRAWN BY:** CHK: JPV  
 HG PP SAS  
**LICENSER:**

**SHEET TITLE:**

**ELEVATIONS**

**SHEET NUMBER:**  
**A-5**









PROJECT INFORMATION:  
CHU4595/CHU4871  
FLY SITE, COLORADO  
EASTMONT MALL  
6029 Foothill Blvd  
Oakland, CA 94669

CURRENT ISSUE DATE:  
03/24/11

ISSUED FOR:  
REV 1  
EQUIPMENT RE-DESIGN

REV	DATE	DESCRIPTION
A	12/10/10	BOX CONSTRUCTION
0	02/14/11	LOCK CONSTRUCTION
1	03/24/11	EQUIPMENT RE-DESIGN

PLANS PREPARED BY:  
PDC CORPORATION

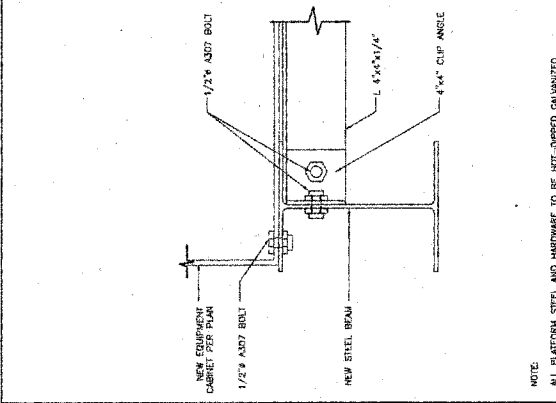


CONSULTANT:  
L L L

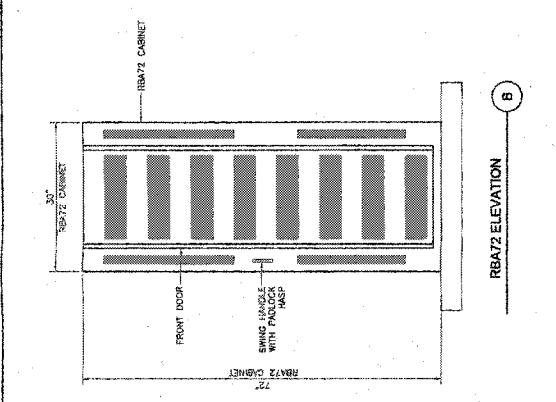
DOWN BY: CHK: PP: SAS  
LICENSER:

SHEET TITLE:  
EQUIPMENT AND ANCHORING DETAILS

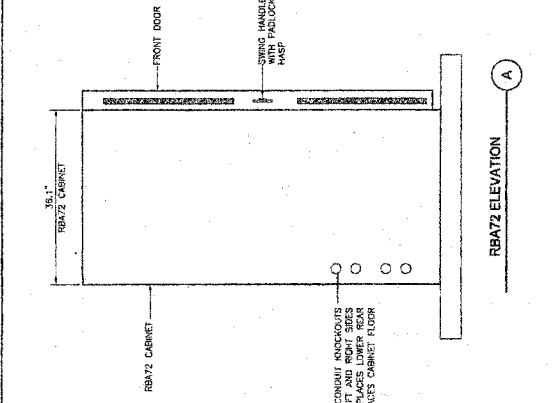
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A-7



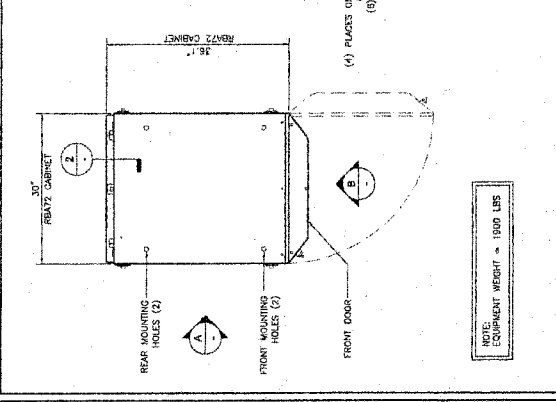
NOTE:  
ALL PLATFORM STEEL AND HARDWARE TO BE NOT-DIPPED GALVANIZED.



NOTE:  
ALL PLATFORM STEEL AND HARDWARE TO BE NOT-DIPPED GALVANIZED.



NOTE:  
ALL PLATFORM STEEL AND HARDWARE TO BE NOT-DIPPED GALVANIZED.



NOTE:  
ALL PLATFORM STEEL AND HARDWARE TO BE NOT-DIPPED GALVANIZED.

## 1 CABINET ANCHORAGE

## 2

## 3

## RBAT2 EQUIPMENT DETAILS AND SPECS

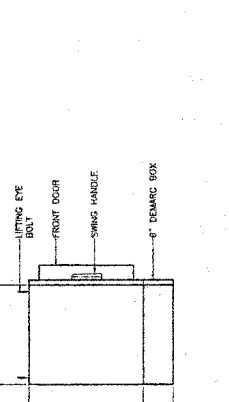


## 1 CABINET ANCHORAGE

## 2

## 3

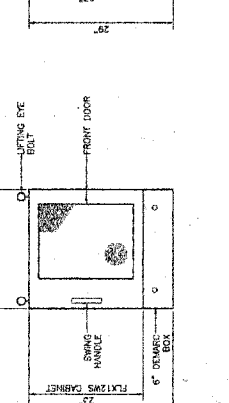
## RBAT2 EQUIPMENT DETAILS AND SPECS



## 1 CABINET ANCHORAGE

## 2

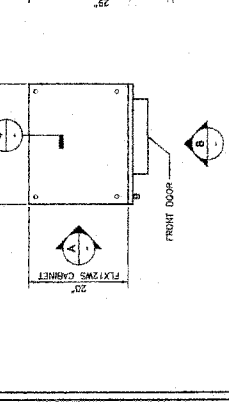
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## 1 CABINET ANCHORAGE

## 2

## 3



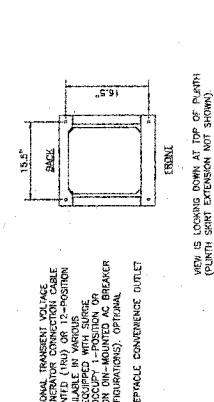
## 1 CABINET ANCHORAGE

## 2

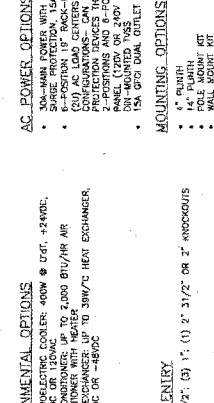
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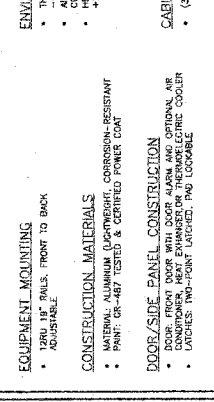
NOTE:  
ALL PLATFORM STEEL AND HARDWARE TO BE NOT-DIPPED GALVANIZED.



NOTE:  
ALL PLATFORM STEEL AND HARDWARE TO BE NOT-DIPPED GALVANIZED.



NOTE:  
ALL PLATFORM STEEL AND HARDWARE TO BE NOT-DIPPED GALVANIZED.



NOTE:  
ALL PLATFORM STEEL AND HARDWARE TO BE NOT-DIPPED GALVANIZED.

## 1 CABINET ANCHORAGE

## 2

## 3

## RBAT2 EQUIPMENT DETAILS AND SPECS



Existing

RECEIVED  
MAR 29 2011

City of Oakland  
Planning & Zoning Division

Existing AT&T  
Installation

close up view

Proposed

Proposed AT&T  
Installation

close up view

view from Foothill Blvd looking southeast at site

AdvanceSim  
Photo Simulation solutions  
Contact (925) 262-8507



AT&T Wireless

CNU4595 Eastmont Mall  
6929 Foothill Blvd, Oakland, CA

## Existing

Existing AT&T  
Installation

close up view

## Proposed

Proposed AT&T  
Installation

close up view

view from property looking east at site

**AdvanceSim**  
Photo Simulation Solutions  
Contact (925) 292-8907



**AT&T Wireless**

CNU4595 Eastmont Mall  
6929 Foothill Blvd, Oakland, CA

*Existing*

Existing AT&T  
Installation

close up view

*Proposed*

Proposed AT&T  
Installation

close up view

view from property looking west at site

**AdvanceSim**  
Photo Simulation Solutions  
Contact (925) 292-8507



**AT&T Wireless**

CNU4595 Eastmont Mall  
6929 Foothill Blvd, Oakland, CA





# Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report

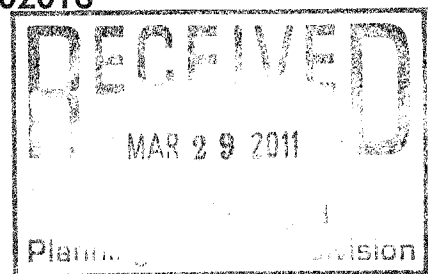
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Prepared for:  
AT&T Mobility, LLC  
c/o The Lyle Company  
3140 Gold Camp Drive Suite 30  
Rancho Cordova, CA 95670



USID# 47395  
Site No. CNU4595  
Eastmont Mall  
6929 Foothill Boulevard  
Oakland, California 94605  
Alameda County  
37.769440; -121.775880 NAD83

EBI Project No. 62102018  
December 20, 2010







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## APPENDICES

<b>Appendix A</b>	<b>Personnel Certifications</b>
<b>Appendix B</b>	<b>Antenna Inventory</b>
<b>Appendix C</b>	<b>RoofView® Export File</b>
<b>Appendix D</b>	<b>RoofView® Graphic</b>
<b>Appendix E</b>	<b>Compliance/Signage Plan</b>

## **EXECUTIVE SUMMARY**

### **Purpose of Report**

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by AT&T Mobility, LLC to conduct radio frequency electromagnetic (RF-EME) modeling for AT&T Site CNU4595 located at 6929 Foothill Boulevard in Oakland, California to determine RF-EME exposure levels from proposed AT&T wireless communications equipment at this site. As described in greater detail in Section 2.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

This report contains a detailed summary of the RF EME analysis for the site, including the following:

- Antenna Inventory
- Site Plan with antenna locations
- Antenna inventory with relevant parameters for theoretical modeling
- Graphical representation of theoretical MPE fields based on modeling
- Graphical representation of recommended signage and/or barriers

This document addresses the compliance of AT&T's transmitting facilities independently and in relation to all collocated facilities at the site.

### **Statement of Compliance**

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

Per AT&T's corporate policy, the FCC's general population limits are applicable to all rooftop sites, regardless of the level of access control. As presented in the sections below, based on worst-case predictive modeling, there are no modeled areas on any accessible rooftop-level walking/working surface related to the proposed antennas that exceed the FCC's occupational or general public exposure limits at this site.

### **AT&T Recommended Signage/Compliance Plan**

AT&T's RF Exposure Policy guidance, dated March 31, 2009, requires that:

1. All sites must be analyzed for RF exposure compliance;
2. All sites must have that analysis documented; and
3. All sites must have any necessary signage and barriers installed.

Site compliance recommendations have been developed based upon protocols presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009, additional guidance provided by AT&T, EBI's understanding of FCC and OSHA requirements, and common industry practice. Barrier locations have been identified (when required) based on guidance presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009. The following signage is recommended at this site:

- Green INFO I sign posted on or next to the roof access points.

The signage proposed for installation at this site complies with AT&T's RF Exposure Policy and therefore complies with FCC and OSHA requirements. No barriers are recommended for this site. More detailed information concerning site compliance recommendations is presented in Section 5.0 and Appendix E of this report.

## 1.0 SITE DESCRIPTION

This project involves the proposed installation of up to nine (9) wireless telecommunication antennas on a rooftop in Oakland, California. There are three Sectors (A, B, and C) proposed at the site, with three (3) antennas that may be installed per sector. For modeling purposes, it is assumed that there will be one (1) UMTS antenna in each sector transmitting in the 850 and two bands of 1900 MHz frequency ranges, one (1) LTE antenna in each sector transmitting in the 700 and 1710 MHz frequency ranges, and one (1) GSM antenna in each sector transmitting in the 850 and 1900 MHz frequency ranges. The Sector A antennas will be oriented 20° from true north. The Sector B antennas will be oriented 260° from true north. The Sector C antennas will be oriented 140° from true north. The bottoms of the GSM and UMTS antennas will be 12.75 feet above the main roof level. The bottoms of the LTE antennas will be 12.8 feet above the main roof level. Appendix B presents an antenna inventory for the site.

Access to this site is unknown. To be conservative, it is assumed that the general public is able to access the roof.

## 2.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

**Occupational/controlled exposure limits** apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general public/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

**General public/uncontrolled exposure limits** apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Table I and Figure I (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a particular facility and are "time-averaged" limits to reflect different durations resulting from controlled and uncontrolled exposures.

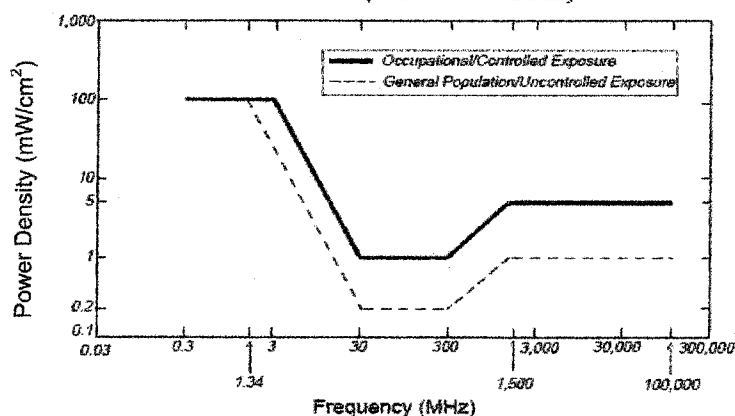
The FCC's MPEs are measured in terms of power (mW) over a unit surface area (cm<sup>2</sup>). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm<sup>2</sup>) and an uncontrolled MPE of 1 mW/cm<sup>2</sup> for equipment operating in the 1900 MHz frequency range. For the AT&T equipment operating at 850 MHz, the FCC's occupational MPE is 2.83 mW/cm<sup>2</sup> and an uncontrolled MPE of 0.57 mW/cm<sup>2</sup>. These limits are considered protective of these populations.

Table 1: Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)

\* Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)  
Plane-wave Equivalent Power Density



Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm <sup>2</sup>	1.00 mW/cm <sup>2</sup>
Cellular Telephone	870 MHz	2.90 mW/cm <sup>2</sup>	0.58 mW/cm <sup>2</sup>
Specialized Mobile Radio	855 MHz	2.85 mW/cm <sup>2</sup>	0.57 mW/cm <sup>2</sup>
Most Restrictive Freq. Range	30-300 MHz	1.00 mW/cm <sup>2</sup>	0.20 mW/cm <sup>2</sup>

MPE limits are designed to provide a substantial margin of safety. 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.

Personal Communication (PCS) facilities used by AT&T in this area operate within a frequency range of 850-1900 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

### 3.0 AT&T RF EXPOSURE POLICY REQUIREMENTS

AT&T's RF Exposure Policy guidance, dated March 31, 2009, requires that:

1. All sites must be analyzed for RF exposure compliance;
2. All sites must have that analysis documented; and
3. All sites must have any necessary signage and barriers installed.

Pursuant to this guidance, worst-case predictive modeling was performed for the site. This modeling is described below in Section 4.0. Lastly, based on the modeling and survey data, EBI has produced a Compliance Plan for this site that outlines the recommended signage and barriers. The recommended Compliance Plan for this site is described in Section 5.0.

### 4.0 WORST-CASE PREDICTIVE MODELING

In accordance with AT&T's RF Exposure policy, EBI performed theoretical modeling using RoofView® software to estimate the worst-case power density at the site rooftop-level resulting from operation of the antennas. RoofView® is a widely-used predictive modeling program that has been developed by Richard Tell Associates to predict both near field and far field RF power density values for roof-top and tower telecommunications sites produced by vertical collinear antennas that are typically used in the cellular, PCS, paging and other communications services. The models utilize several operational specifications for different types of antennas to produce a plot of spatially-averaged power densities that can be expressed as a percentage of the applicable exposure limit.

For this report, EBI utilized antenna and power data provided by AT&T, and compared the resultant worst-case MPE levels to the FCC's occupational/controlled exposure limits outlined in OET Bulletin 65. The assumptions used in the modeling are based upon information provided by AT&T, and information gathered from other sources. There are no other wireless carriers with equipment installed at this site.

Per AT&T's corporate policy, the FCC's general population limits are applicable to all rooftop sites, regardless of the level of access control. Based on worst-case predictive modeling, there are no modeled areas on any accessible rooftop-level walking/working surface related to the proposed AT&T antennas that exceed the FCC's occupational or general public exposure limits at this site. At the nearest walking/working surfaces to the AT&T antennas, the maximum power density generated by the AT&T antennas is approximately 59.60 percent of the FCC's general public limit (11.92 percent of the FCC's occupational limit). The composite exposure level from all carriers on this site is approximately 59.60 percent of the FCC's general public limit (11.92 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna.



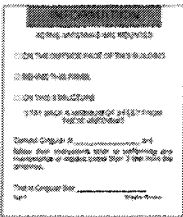




The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix D. It should be noted that RoofView is not suitable for modeling microwave dish antennas; however, these units are designed for point-to-point operations at the elevations of the installed equipment rather than ground level coverage.

## 5.0 RECOMMENDED SIGNAGE/COMPLIANCE PLAN

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. As presented in the AT&T guidance document, the signs must:

- Be posted at a conspicuous point;
- Be posted at the appropriate locations;
- Be readily visible; and
- Make the reader aware of the potential risks prior to entering the affected area.

The table below presents the signs that may be used for AT&T installations.

Informational Signs		Alerting Signs	
	INFO 1		NOTICE
	INFO 2		CAUTION
	INFO 3		WARNING
	INFO 4		

Based upon protocols presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009, and additional guidance provided by AT&T, the following signage is recommended on the site:



Recommended Signage:

- Green INFO I sign posted on or next to the roof access points.

No barriers are required for this site. Barriers may consist of rope, chain, fencing, or painted/taped stripes. The signage and any barriers are graphically represented in the Signage Plan presented in Appendix E.

## 6.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed AT&T telecommunications equipment at the site located at 6929 Foothill Boulevard in Oakland, California.

EBI has conducted theoretical modeling to estimate the worst-case power density from AT&T antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements, as well as AT&T's corporate RF safety policies. As presented in the preceding sections, based on worst-case predictive modeling, there are no modeled exposures on any accessible rooftop-level walking/working surface related to proposed equipment in the area that exceed the FCC's occupational and general public exposure limits at this site. As such, the proposed AT&T project is in compliance with FCC rules and regulations.

Signage is recommended at the site as presented in Section 5.0 and Appendix E. Posting of the signage brings the site into compliance with FCC rules and regulations and AT&T's corporate RF safety policies.

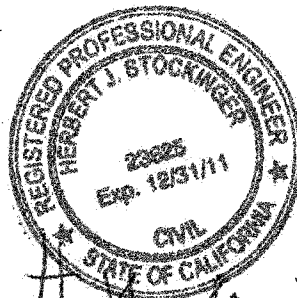
## 7.0 LIMITATIONS

This report was prepared for the use of AT&T Mobility, LLC. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

## **Appendix A**

### **Certifications**

Reviewed and Approved by:



*H. Stockinger*  
Herbert J. Stockinger, PE  
Senior Engineer

12-15-2010

Note that EBI's scope of work is limited to an evaluation of the Radio Frequency – Electromagnetic Energy (RF-EME) field generated by the antennas and broadcast equipment noted in this report. The engineering and design of the building and related structures, as well as the impact of the antennas and broadcast equipment on the structural integrity of the building, are specifically excluded from EBI's scope of work.

## Preparer Certification

I, Ryan McManus, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have been trained in on the procedures outlined in AT&T's RF Exposure Policy guidance (dated 3/31/09) and on RF-EME modeling using RoofView® modeling software.
- I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

*Ryan B McManus*

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## **Appendix B**

### **Antenna Inventory**

Antenna Number	Operator	Antenna Type	TX Freq (MHz)	ERP (Watts)	Gain (dBd)	Model	Azimuth (deg.)	Length (ft)	Horizontal Beamwidth (Deg.)	X	Y	Z
ATT A1	AT&T	Panel	LTE 700	247	11.3	Andrew DBXNH-6565A-R2M	20	4.2	68	69	153	12.8
ATT A1	AT&T	Panel	LTE 1710	516	14.5	Andrew DBXNH-6565A-R2M	20	4.2	65	69	153	12.8
ATT A2	AT&T	Panel	GSM 850	500	11.85	Kathrein 742-264	20	4.3	68	69	157	12.75
ATT A2	AT&T	Panel	GSM 1900	500	14.65	Kathrein 742-264	20	4.3	65	69	157	12.75
ATT A3	AT&T	Panel	UMTS 850	250	12.5	Decibel TBXLHB-6565A-VTM	20	4.3	72	69	161	12.75
ATT A3	AT&T	Panel	UMTS 1900	250	14.7	Decibel TBXLHB-6565A-VTM	20	4.3	65	69	161	12.75
ATT A3	AT&T	Panel	UMTS 1900	250	14.7	Decibel TBXLHB-6565A-VTM	20	4.3	65	69	161	12.75
ATT B1	AT&T	Panel	LTE 700	247	11.3	Andrew DBXNH-6565A-R2M	260	4.2	68	11	159	12.8
ATT B1	AT&T	Panel	LTE 1710	516	14.5	Andrew DBXNH-6565A-R2M	260	4.2	65	11	159	12.8
ATT B2	AT&T	Panel	GSM 850	500	11.85	Kathrein 742-264	260	4.3	68	11	155	12.75
ATT B2	AT&T	Panel	GSM 1900	500	14.65	Kathrein 742-264	260	4.3	65	11	155	12.75
ATT B3	AT&T	Panel	UMTS 850	250	12.5	Decibel TBXLHB-6565A-VTM	260	4.3	72	11	151	12.75
ATT B3	AT&T	Panel	UMTS 1900	250	14.7	Decibel TBXLHB-6565A-VTM	260	4.3	65	11	151	12.75
ATT B3	AT&T	Panel	UMTS 1900	250	14.7	Decibel TBXLHB-6565A-VTM	260	4.3	65	11	151	12.75

Antenna Number	Operator	Antenna Type	TX Freq (MHz)	ERP (Watts)	Gain (dBi)	Model	Azimuth (deg.)	Length (ft)	Horizontal Beamwidth (Deg.)	X	Y	Z
ATT C1	AT&T	Panel	LTE 700	247	11.3	Andrew DBXNH-6565A-R2M	140	4.2	68	58	15	12.8
ATT C1	AT&T	Panel	LTE 1710	516	14.5	Andrew DBXNH-6565A-R2M	140	4.2	65	58	15	12.8
ATT C2	AT&T	Panel	GSM 850	500	11.85	Kathrein 742-264	140	4.3	68	62	15	12.75
ATT C2	AT&T	Panel	GSM 1900	500	14.65	Kathrein 742-264	140	4.3	65	62	15	12.75
ATT C3	AT&T	Panel	UMTS 850	250	12.5	Decibel TBXLHB-6565A-VTM	140	4.3	72	66	15	12.75
ATT C3	AT&T	Panel	UMTS 1900	250	14.7	Decibel TBXLHB-6565A-VTM	140	4.3	65	66	15	12.75
ATT C3	AT&T	Panel	UMTS 1900	250	14.7	Decibel TBXLHB-6565A-VTM	140	4.3	65	66	15	12.75

I. Note that EBI uses an assumed set of antenna specifications and powers for unknown and other carrier antennas for modeling purposes.

## **Appendix C**

### **Roofview® Export File**

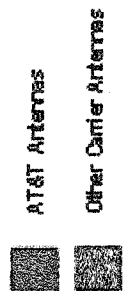
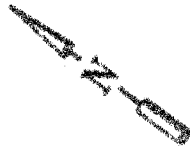
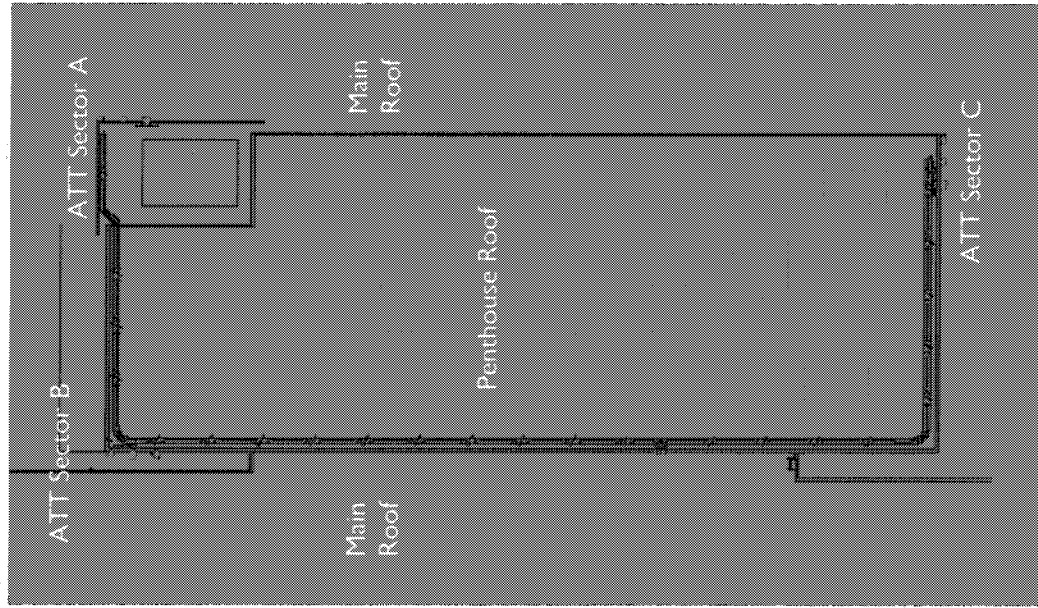
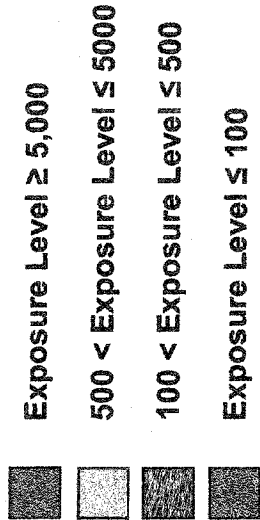




## **Appendix D**

### **Roofview® Graphics**

# % of FCC Public Exposure Limit

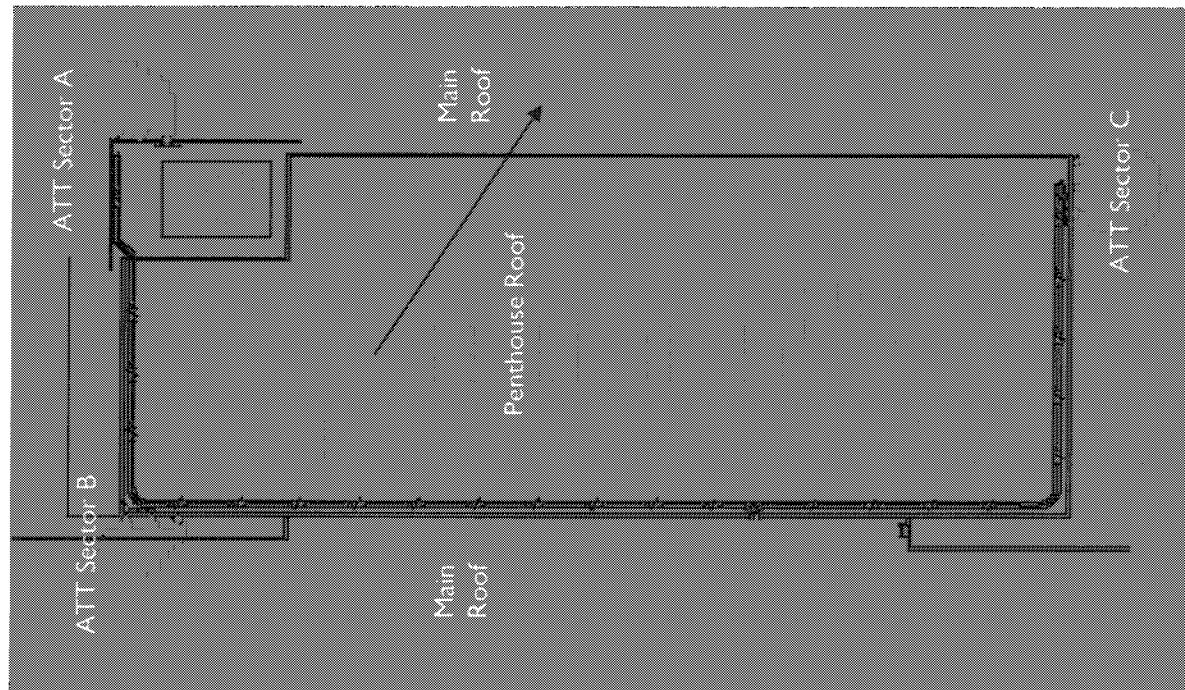


**Roofview: Composite Exposure Levels**  
 Facility Operator: AT&T Mobility  
 Site Name: Eastmont Mall  
 AT&T Site Number: CNU4595  
 USID Number: 47395  
 Report Date: 12-20-10



# % of FCC Public Exposure Limit

- Exposure Level >5
- Exposure Level ≤ 5



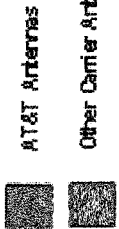
- AT&T Antennas
- Other Carrier Antennas

**Roofview: AT&T Exposure Levels**  
 Facility Operator: AT&T Mobility  
 Site Name: Eastmont Mall  
 AT&T Site Number: CNU4595  
 USID Number: 47395  
 Report Date: 12-20-10



## **Appendix E**

### **Compliance/Signage Plan**

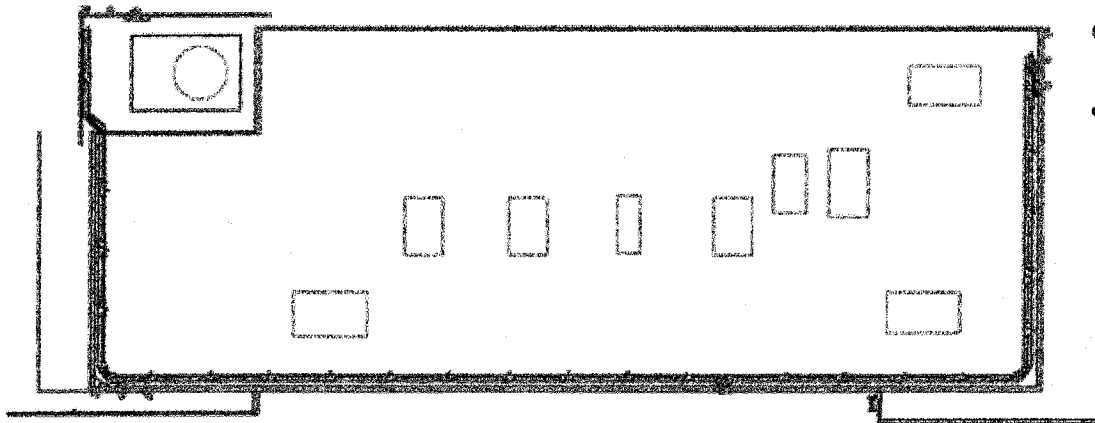


AT&T Antennas

Sector B

Sector A

Mounted at Roof Access



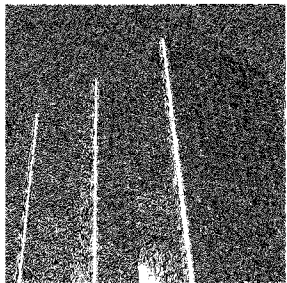
Sector C

Sign Identification Legend	
	Denotes AT&T International Sign 1
	Denotes AT&T International Sign 2
	Denotes AT&T International Sign 3
	Denotes AT&T International Sign 4
	Denotes AT&T NOTICE Sign
	Denotes AT&T CAUTION Sign
	Denotes AT&T WARNING Sign

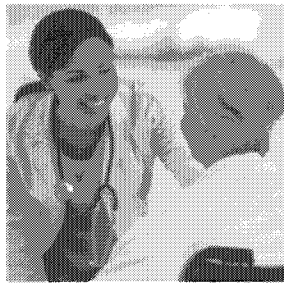
**Compliance/Signage Plan**  
 Facility Operator: AT&T Mobility  
 Site Name: Eastmont Mall  
 AT&T Site Number: CNU4595  
 USID Number: 47395  
 Report Date: 12-20-10



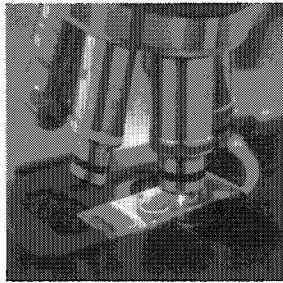




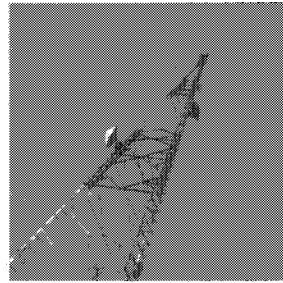
Real Estate



Healthcare



Life Sciences



Telecom



Industrial

Atlanta, GA  
Baltimore, MD  
Burlington, MA  
Chicago, IL  
Dallas, TX  
Denver, CO  
Houston, TX  
Los Angeles, CA  
New York, NY  
Phoenix, AZ  
Portland, OR  
San Francisco, CA  
Seattle, WA  
York, PA

A Bb .48 9m .48  
Acc Cd .36 90  
ACS NR .86  
ADCTH .65  
ADEQ .1  
AEP  
AP  
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