

Case File Number: CMDV11-174

October 17, 2012

Location:	377 Lenox Avenue (See map on reverse)
Assessors Parcel Numbers:	(APN: 010-0771-017-02)
Proposal:	To install twelve (12) telecommunication antennas, twenty one (21) RRU's concealed on the roof of an existing multi-unit building with eleven (11) equipment cabinets (five of which are for future installation) in the basement of the building.
Applicant:	AT&T, Tom Johnson of Trillium Consulting
Contact Person/	Tom Johnson
Phone Number:	(714)206-2879
Owner:	Eastshore Properties LLC
Case File Number:	CMDV11-174
Planning Permits Required:	Regular Design Review to install twelve (12) telecommunication antennas, twenty one (21) RRU's concealed on the roof of an existing multi-unit building with eleven (11) equipment cabinets (five of which are for future installation) in the basement of the building. Major Conditional Use Permit for the installation of a Mini telecommunication facility within 100 feet of a residential zone. Minor Variance to mount the antennas approximately 10'-11" from the edge of the roof where 14'-11" is required (1':1' antenna setback from the edge of roof required).
General Plan:	Urban Residential
Zoning:	RU-2 Urban Residential-2 Zone S-12 Residential Parking Combining Zone
Environmental Determination:	Exempt, Section 15301 of the State CEQA Guidelines; minor additions and alterations to an existing facility Section 15183 of the State CEQA Guidelines; projects consistent with a community plan, General Plan or zoning.
Historic Status:	Potential Designated Historic Property; Survey Rating: C3
Service Delivery District:	3
City Council District:	3
Date Filed:	9/7/11
Finality of Decision:	<i>Appealable to City Council within 10 days</i>
For Further Information:	Contact case planner Michael Bradley at (510) 238-6935 or mbradley@oaklandnet.com

SUMMARY

The following staff report addresses the proposal for a new unmanned wireless telecommunication facility located on the rooftop of an existing multi-unit apartment building, with the associated equipment cabinets located in the basement of the building. The project is to install twelve (12) telecommunication antennas, twenty one (21) RRU's concealed on the roof of an existing multi-unit building with eleven (11) equipment cabinets (five of which

CITY OF OAKLAND PLANNING COMMISSION



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Zone: RU-2/S-12

are for future installation) in the basement of the building. Given the number of antennas and the type of installation, this would be considered a "Mini" Telecommunications Facility. The site is located within a residential area, on the roof of an existing five story multi-unit apartment building. The site is located in the RU-2 Urban Residential-2 Zone and S-12 Residential Parking Combining Zones. The General Plan designation for the site is Urban Residential.

PROJECT DESCRIPTION

The applicant (AT&T) is proposing to install twelve (12) telecommunication antennas, twenty one (21) RRU's concealed on the roof of an existing multi-unit building. The proposal for the equipment shelters is to locate the cabinets within the basement of the existing building. All proposed antennas and associated equipment will not be accessible to the public.
(See Attachment A)

PROPERTY DESCRIPTION

The subject property is a lot of approximately 14,912 square feet with a 30 unit apartment building. The lot has frontage on Lenox Avenue, one parcel in from Grand Avenue. The subject property has a fully functioning multi-unit apartment on the site. The property was first developed in 1925 (based on Alameda County Assessors Data). Currently there are no other telecommunication providers at the site.

GENERAL PLAN ANALYSIS

The subject property is located within the Urban Residential General Plan designation. The Urban Residential land use classification is intended to create, maintain, and enhance areas of the City that are appropriate for multi-unit, mid-rise or high-rise residential structures in locations with good access to transportation and other services. The proposed unmanned wireless telecommunication facility will not adversely affect and detract from the commercial or residential characteristics of the neighborhood. 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.

ZONING ANALYSIS

The subject property is located within the RU-2 Urban Residential-2 Zone and the S-12 Residential Parking Combining Zone. The intent of the RU-2 zone is to create, maintain, and enhance areas of the City that are appropriate for multi-unit, low-rise or mid-rise residential structures and neighborhood businesses where appropriate in locations with good access to transportation and other services. The S-12 zone is intended to create, preserve, and enhance areas with high concentrations of Residential Facilities, to ensure that adequate off-street parking is provided for those facilities, and to maximize the general availability of on-street parking, and is typically appropriate in high density residential neighborhoods, adjacent commercial areas, and other neighborhoods where high concentrations of Residential Facilities may contribute to on-street parking congestion. The proposal is for a new rooftop unmanned wireless telecommunication facility 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 RU-2, S-12 zoning and City of Oakland Telecommunication regulations.

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines lists the projects that qualify as categorical exemptions from environmental review. The proposed project is categorically exempt from the environmental review requirements pursuant to Section 15301, additions and 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 17.19.040 of the City of Oakland Planning Code requires a conditional use permit to install a Mini Telecommunication facility in the RU-2 zone. Furthermore, Section 17.134.020 defines a major and minor conditional use permit. 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 the installation of new antennas and associated equipment cabinets on an existing residential facility, the proposed project meets (G) Residential uses in residential zones. The applicant has submitted a Site Alternatives Analysis, stating why the subject site was selected and is the most appropriate location. **(See Attachment C)**

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 have reviewed and determined that the site selected is conforming to all other telecommunication regulation requirements. The project has met design criteria (A) since the antennas shall be mounted completely concealed behind an enclosure around the rooftop mechanical penthouse. Furthermore, to mitigate visual impacts the antennas will be mounted approximately 75 feet above the public right of way and will be setback from the edge of the building. The associated equipment shelters will have no visual impact since the equipment will be placed inside the electrical room of the existing 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.

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 Hammett & Edison, Inc., (**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.

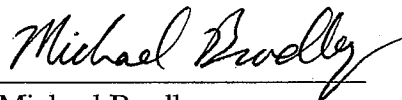
CONCLUSION

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, Minor Variance and Design Review.

RECOMMENDATIONS:

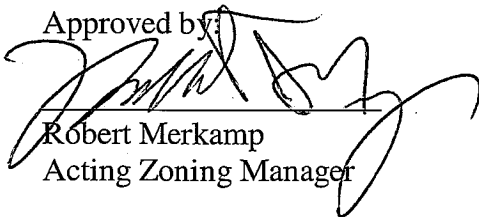
1. Affirm staff's environmental determination
2. Approve Conditional Use Permit, Minor Variance and Design Review application CMDV11-174 subject to the attached findings and conditions of approval.

Prepared by:



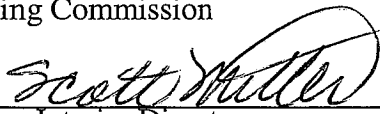
Michael Bradley
Planner I

Approved by:



Robert Merkamp
Acting Zoning Manager

Approved for forwarding to the
City Planning Commission



Scott Miller, Interim Director
Department of Planning, Building and Neighborhood Preservation

ATTACHMENTS:

- A. Project Plans & Photo simulations
- B. Hammett & Edison, Inc. RF Emissions Report
- C. Site Alternative Analysis and Coverage Maps

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.(A), of the Residential Design Review criteria; all the required findings under Section 17.148.050.(A), of the Minor Variance criteria; all the required findings under Section 17.128.060(B), of the telecommunication facilities (Mini) Design Review criteria; and all the required findings under Section 17.128.060.(C), of the telecommunication facilities (Mini) 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 – GENERAL USE PERMIT FINDINGS:

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

The location, size, design and operational characteristics of the proposal will not adversely affect the livability or appropriate development of abutting properties and the surrounding 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 enclosed and located in an extension of the mechanical penthouse on the roof of the existing building and will not adversely affect the operating characteristic or livability of the existing area. 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 mini telecommunication facility in the Urban Residential General Plan designation will enhance and improve communication service for a mixture of civic, commercial, residential and institutional uses in the area.

17.136.050(A) – RESIDENTIAL 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 is the installation of a mini telecommunications facility which includes 12 screened antennas mounted to the roof of the existing mechanical penthouse of an existing building and eleven equipment cabinets, located in the basement of the building. The proposed antennas will be placed within an enclosure and therefore is consistent and well related to the surrounding area in scale, bulk, height, materials, and textures. The antennas will also be located approximately 75 feet above the public right of way.

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

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 wireless telecommunication antennas to a residential area. The antennas will be concealed from public view and will not have any visual impact on the neighborhood.

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

The proposal does not disturb any of the existing landscaping and no new landscaping is proposed.

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

The site is a relatively flat lot.

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 Revisions to the Citywide Telecommunications Regulations. The proposal will conform to performance standards for noise set forth in Section 17.120.050 for decibels levels in residential areas for both day and nighttime use. The Project conforms to all mini-facility definitions set forth in Section 17.128.060 and meets all design review criteria to minimize all impacts throughout the neighborhood

17.148.050(A) – MINOR VARIANCE FINDINGS:

1. That strict compliance with the specified regulation would result in practical difficulty or unnecessary hardship inconsistent with the purposes of the Zoning Regulations, due to unique physical or topographical circumstances or conditions of design; or, as an alternative in the case of a Minor Variance, that such strict compliance would preclude an effective design solution improving the livability, operational efficiency, or appearance.

The subject property consists of a five-story, 30 unit apartment building. The proposed project entails the installation of 12 telecommunication antennas to the roof of an existing building. The minor variance is to mount the antennas approximately 10'-11" from the edge of the roof where 14'-11" is required (1':1' antenna setback from the edge of roof required).

Justification for this minor variance is based on the proposed project meeting the Design Review and Conditional Use Permit criteria and because strict compliance with the roof setback requirement would decrease the operational efficiency and preclude an effective design solution. In order to set the antennas back from the edge of the building thus to protect the historical character of the building the proposed location is the most appropriate on top of a roof top penthouse structure. Also, to further mitigate any visual impact by the proposed antennas they will be concealed inside an extension of the penthouse to match existing mechanical penthouse structure.

2. That strict compliance with the regulations would deprive the applicant of privileges enjoyed by owners of similarly zoned property; or, as an alternative in the case of a Minor Variance, that such strict compliance would preclude an effective design solution fulfilling the basic intent of the applicable regulation.

The strict compliance of the zoning regulations would preclude an effective design solution for the proposed unmanned telecommunications facility. In order to set the antennas back from the edge of the building thus to protect the historical character of the building the proposed location

is the most appropriate on top of a roof top penthouse structure. Based on the current pattern of development and the scope of the proposal the project will be compatible in size and scale and will fulfill the basic intent of the zoning and general plan regulations.

3. That the variance, if granted, will not adversely affect the character, livability, or appropriate development of abutting properties or the surrounding area, and will not be detrimental to the public welfare or contrary to adopted plans or development policy.

The proposed development will not affect the character or livability of the area since very minimal change is proposed to the existing apartment building and all related equipment will be located inside a mechanical room in the basement, and the roof the building is a secure area that is not accessible to the public. Based on the minimal visual changes to the building and the location of the equipment, the proposal will not adversely affect the character, livability, or appropriate development of abutting properties or the surrounding area.

4. That the variance will not constitute a grant of special privilege inconsistent with limitations imposed on similarly zoned properties or inconsistent with the purposes of the Zoning Regulations.

The Variance will not negatively impact the character of the neighborhood nor affect the appropriate development of abutting properties. The subject property is a large multi-story apartment building with the proposal for the antennas to be mounted approximately 75 feet above the ground and will little to no impact on the surrounding buildings.

5. That the elements of the proposal requiring the variance (e.g., elements such as buildings, walls, fences, driveways, garages and carports, etc.) conform with the regular design review criteria set forth in the design review procedure at Section 17.136.050;

The proposal conforms to all applicable design review criteria. Please see findings above.

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

The subject property is located within the Urban Residential General Plan designation. The Urban Residential land use classification is intended to create, maintain, and enhance areas of the City that are appropriate for multi-unit, mid-rise or high-rise residential structures in locations with good access to transportation and other services. The proposed unmanned wireless telecommunication facility will not adversely affect and detract from the commercial or residential characteristics of the neighborhood. 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.

7. For proposals involving one or two residential dwelling units on a lot:

That, if the variance would relax a regulation governing maximum height, minimum yards, maximum lot coverage or maximum floor area ratio, the proposal also conforms with at least one of the following additional criteria:

- a. The proposal when viewed in its entirety will not adversely impact abutting residences to the side, rear, or directly across the street with respect to solar access, view blockage and privacy to a degree greater than that which would be possible if the residence were built according to the applicable regulation and, for height variances, the proposal provides detailing, articulation or other design treatments that mitigate any bulk created by the additional height:

-OR-

- b. Over 60 percent of the lots in the immediate vicinity are already developed and the proposal does not exceed the corresponding as-built condition on these lots and, for height variances, the proposal provides detailing, articulation or other design treatments that mitigate any bulk created by the additional height. The immediate context shall consist of the five closest lots on each side of the project site, plus the ten closest lots on the opposite side of the street (see Illustration I-4b); however, the Director of City Planning may make an alternative determination of immediate context based on specific site conditions. Such determination shall be in writing and included as part of any decision on any variance

The proposal does not involve one or two residential units; therefore this finding does not apply.

17.128.060(B) DESIGN REVIEW CRITERIA FOR MINI FACILITIES

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

The proposed antennas will be mounted inside an enclosed extension of the existing mechanical penthouse located approximately 75 feet above the ground on the roof of an existing apartment 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 proposed antennas will be mounted inside an enclosed extension of the existing mechanical penthouse located approximately 75 feet above the ground on the roof of an existing apartment building with the size, placement, configuration, materials, texture, and color to be submitted to the Planning and Zoning division for review and approval prior to the issuance of a building permit.

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 mounted inside an enclosed extension of the existing mechanical penthouse located approximately 75 feet above the ground on the roof of an existing apartment building and will be setback from the edge of the building. The cable trays shall be painted to match the color of the building.

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 will be located inside the mechanical room in the basement of the existing building.

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.

The antennas will be mounted to the roof and will not be accessible to the public due to its location. The equipment cabinets will be located inside the mechanical room in the basement 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 antennas will be mounted inside an enclosed extension of the existing mechanical penthouse located approximately 75 feet above the ground on the roof of an existing apartment building. Based on the most effective design solution the application requests a variance for setback in which findings of approval have been made above.

Section 17.128.060(C) CONDITIONAL USE PERMIT (CUP) FINDINGS FOR MINI FACILITIES

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

The proposed project meets the special design review criteria listed above in section 17.128.060B.

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

Due to the proposed project locating on the rooftop of an existing building within an extension of the existing penthouse, it will not disrupt the overall community character of the site.

3. In the residential RH, RD, RM, RU-1, or RU-2 zones, and in HBX zones, the project must not have any visual impact.

The project site is located in the RU-2 zone and will not have any visual impacts.

CONDITIONS OF APPROVAL
CMDV11-174

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, **CMDV11-174**, and the plans dated **July 24, 2012** and submitted on **August 8, 2012** 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: **To install twelve (12) telecommunication antennas, twenty one (21) RRU's concealed on the roof of an existing multi-unit building with eleven (11) equipment cabinets (five of which are for future installation) in the basement of the building at 377 Lenox Avenue (APN: 010-0771-017-02), under Oakland Municipal Code 17.128, 17.136, 17.148 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 CONDITIONS:

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.

A-10



PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PECK SITE-COM IS STRICTLY PROHIBITED.

CLIENT:



4430 ROSEWOOD DRIVE
BUILDING 3, 9TH FLOOR
PILLSBURY, CA 94588

PROJECT INFORMATION:

GRAND AVENUE & BELLEVUE AVE
377 LENOX AVE
OAKLAND, CA 94612

REV: DATE: DESCRIPTION: BY:

1	6-26-12	REV ZONING DOCS	DL
2	7-16-12	REV BOX ZONING DOCS	DL
3	7-23-12	REV BOX ZONING DOCS	AM
4	7-24-12	100% ZONING DOCS	AM

COORDINATING ENGINEER:

Peck Site-Com

12852 Enchanted Ave., Suite 101
Oakland, California 94602
Phone (530) 885-6160
E-Mail: info@pecksitecom.com



SEAL:



SITE F: DRAWN BY:

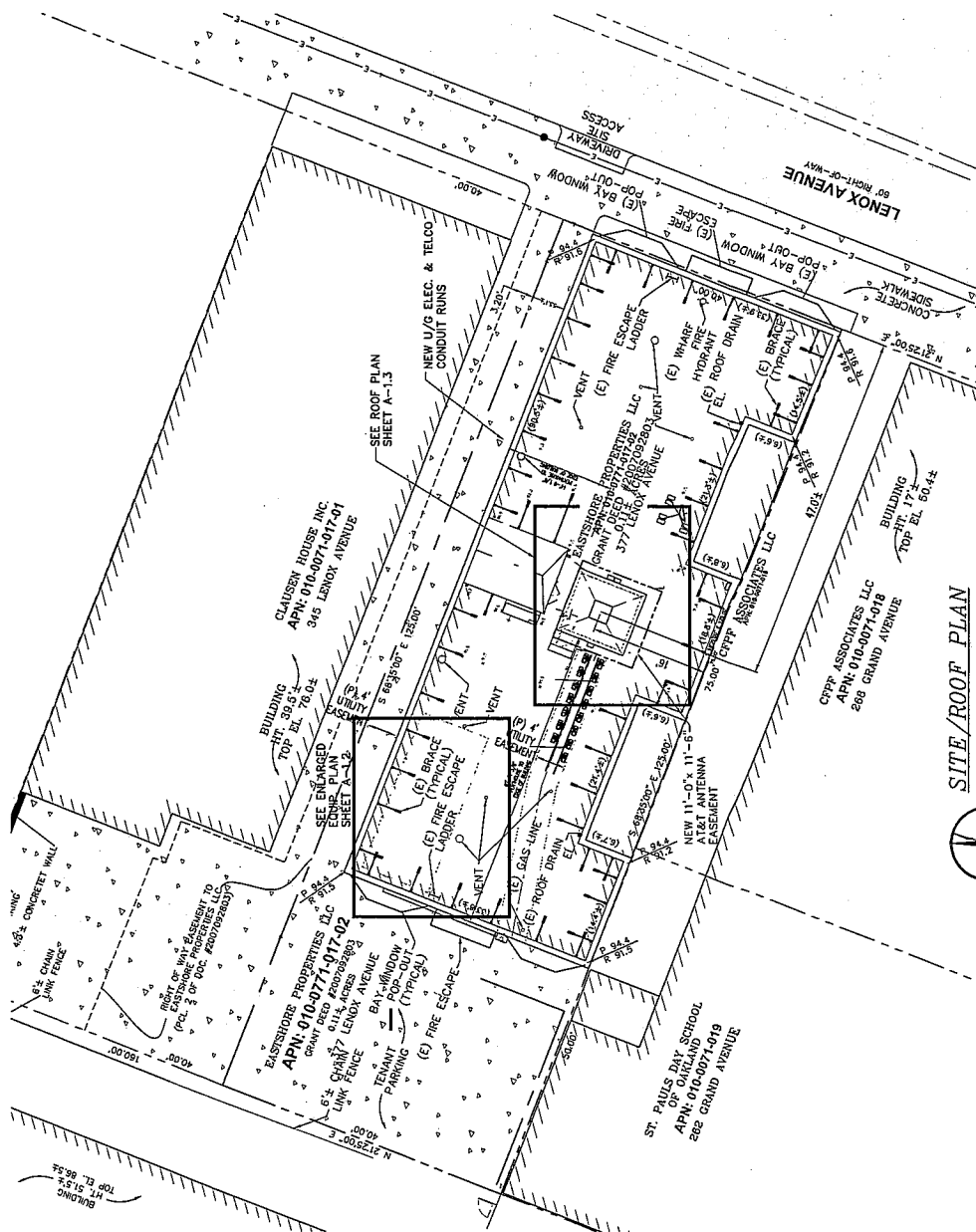
CC2258

SHEET TITLE:

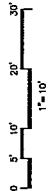
SITE/ROOF PLAN

SHEET NUMBER:

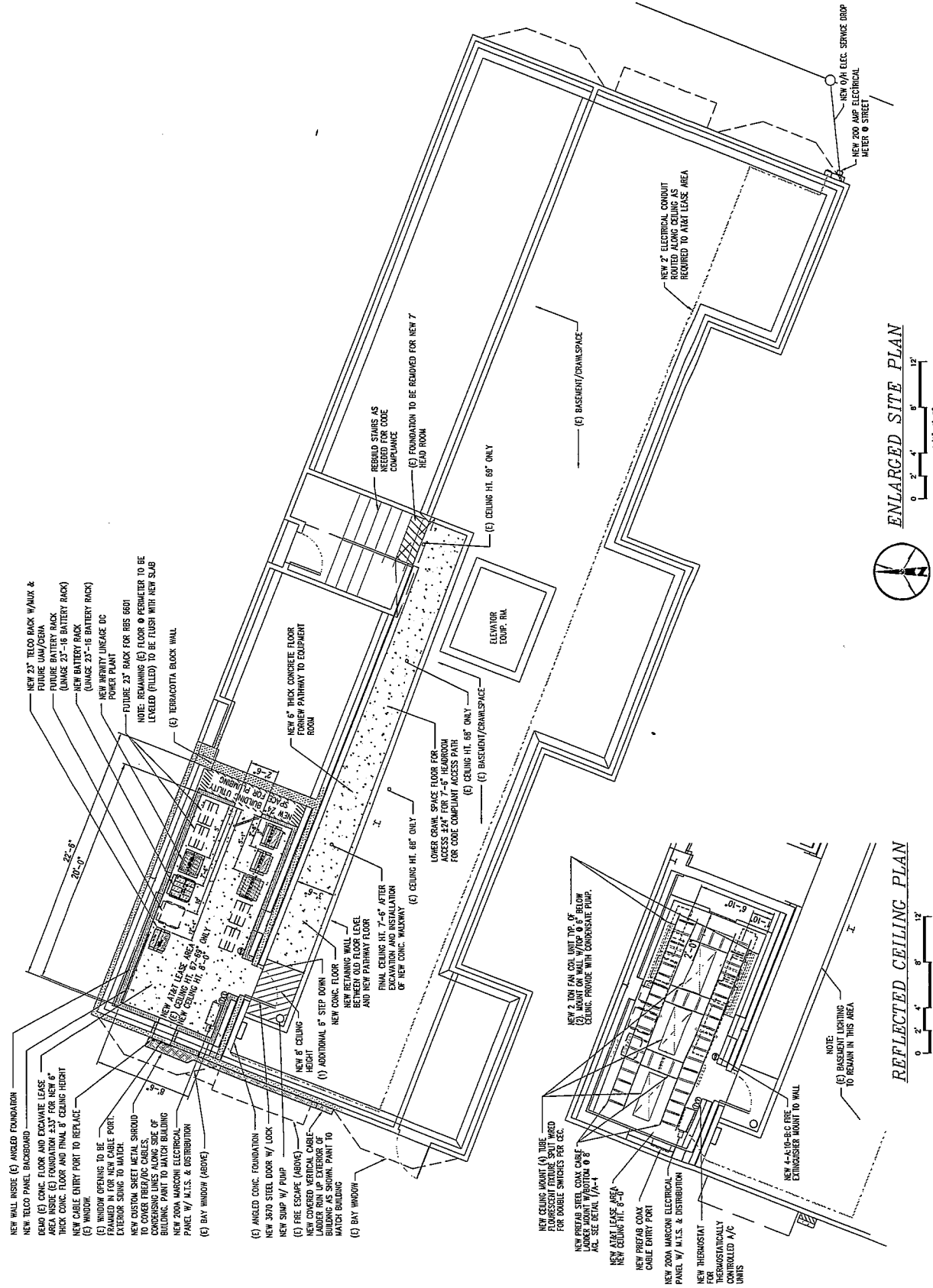
A-1.10



SITE/ROOF PLAN



A-1.20



PROPRIETARY INFORMATION
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4430 ROSEWOOD DRIVE
BUILDING 3, 6TH FLOOR
PLEASANTON, CA 94588

PROJECT INFORMATION:

GRAND AVENUE & BELLEVUE AVE
377 LEXEN AVE
OAKLAND, CA 94609

REV	DATE	DESCRIPTION	BY
1	6-26-12	REV ZONE DOCS	DL
2	7-16-12	REV BOX ZONE DOCS	DL
3	7-23-12	REV BOX ZONE DOCS	AR
4	7-24-12	REV ZONE DOCS	AR

COORDINATING ENGINEER:

Peek Site-Com
12859 E. 1st Ave, Suite 101
Oakland, California 94602
Phone (510) 885-6160
E-Mail info@peeksitecom.com

SEAL:



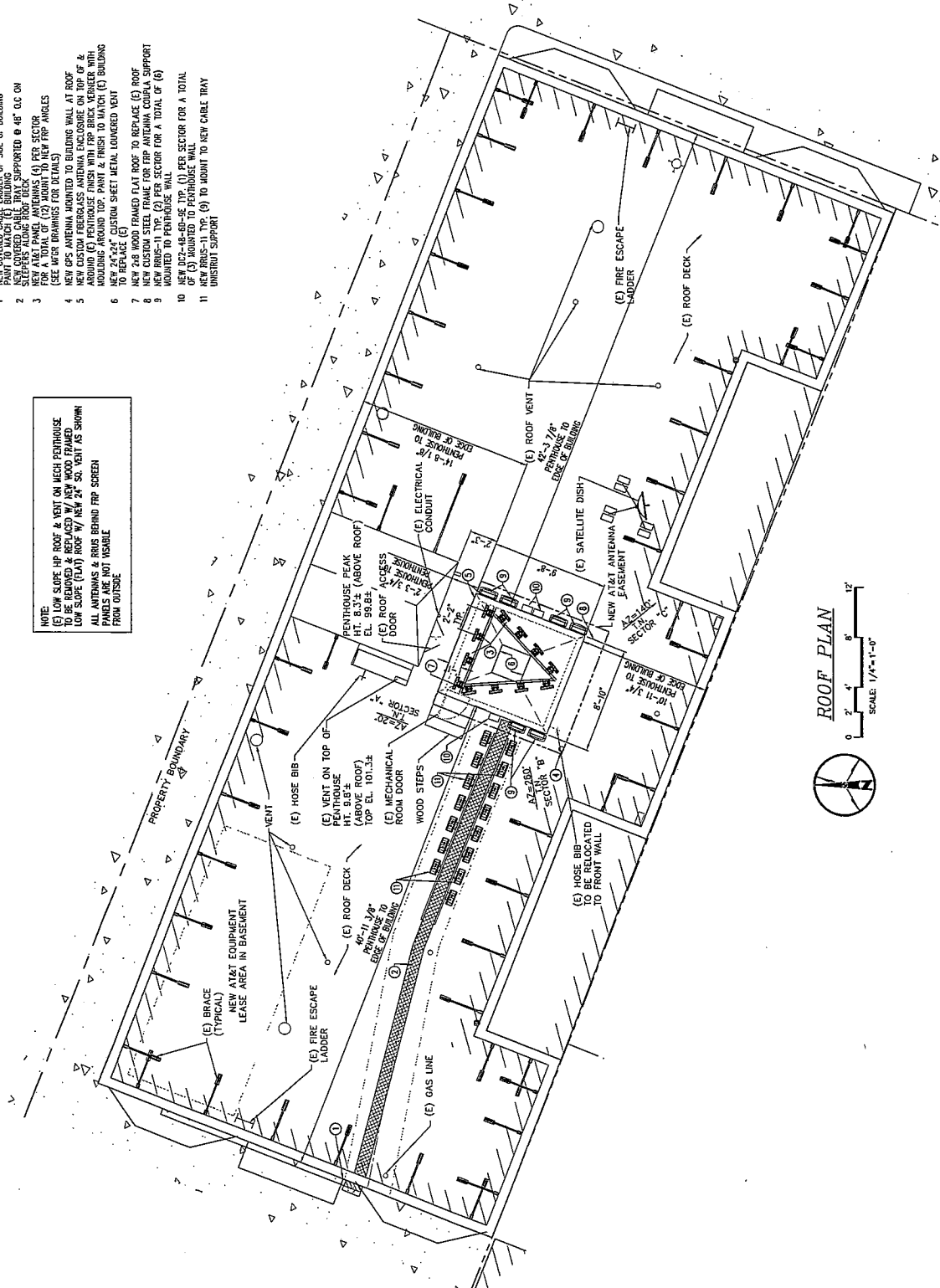
SITE: CC2258
SHEET TITLE: ENLARGED ANTENNA PLAN
DRAWN BY: DILL

ENLARGED ANTENNA PLAN
SHEET NUMBER: A-1.3.0

KEY NOTES

- 1 NEW CONCRETE AND REINFORCED CONCRETE TO MATCH EXISTING BUILDING
- 2 NEW COVERED CABLE TRAY SUPPORTED @ 48" O.C. ON
- 3 NEW 1/2" PANGS ANTENNAS (4) PER SECTOR
- 4 NEW 24"x24" CUSTOM SHEET METAL LOUVERED VENT
- 5 NEW 24"x24" CUSTOM SHEET METAL LOUVERED VENT
- 6 NEW 24"x24" CUSTOM SHEET METAL LOUVERED VENT
- 7 NEW 24"x24" CUSTOM SHEET METAL LOUVERED VENT
- 8 NEW 24"x24" CUSTOM SHEET METAL LOUVERED VENT
- 9 NEW 24"x24" CUSTOM SHEET METAL LOUVERED VENT
- 10 NEW 24"x24" CUSTOM SHEET METAL LOUVERED VENT
- 11 NEW 24"x24" CUSTOM SHEET METAL LOUVERED VENT

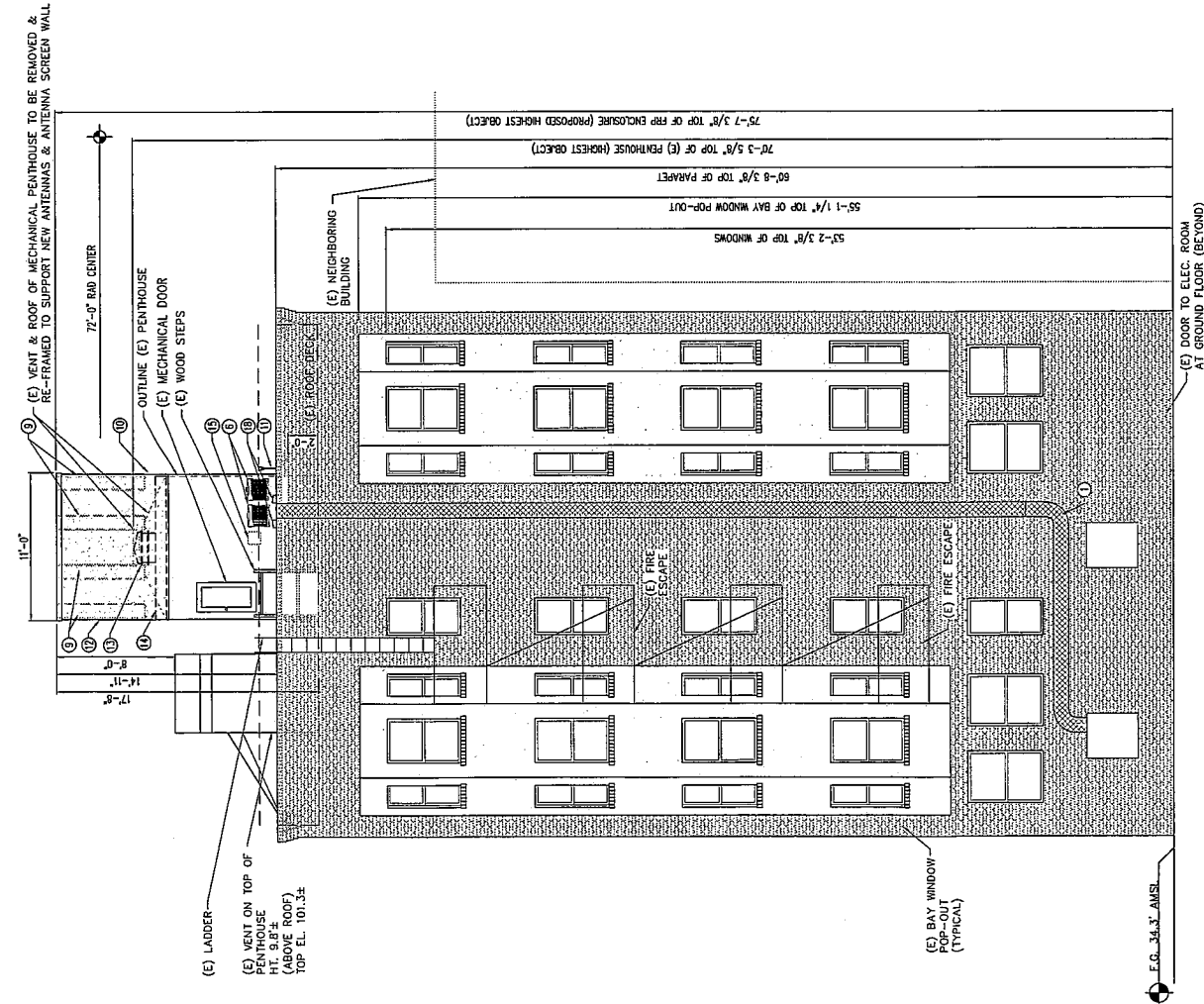
NOTE:
(E) LOW SLOPE HP ROOF & VENT ON MECH PENHOUSE
TO BE REMOVED & REPLACED W/ NEW WOOD FRAMED
LOW SLOPE (FLAT) ROOF W/ NEW 24" SQ. VENT AS SHOWN
ALL ANTENNAS & BRIS BEHIND TRP SCREEN
PANELS ARE NOT VISIBLE



NOTE:
ALL ANTENNAS & RISER BEHIND
PENHOUSE SHALL BE MADE
VISIBLE FROM OUTSIDE

KEY NOTES

1. NEW COVERED CABLE LADDER UP SIDE OF BUILDING
PAINT TO MATCH (E) BUILDING
2. NEW 1/2" CONC. SLOOP W/ 1/4 REBAR 12" OC EACH WAY
AT 1/2" SLOOP
3. NEW PRE-FAB 9'x20' (2-HOUR FIRE RATED) EQUIP. SHELTER
(PAINT TO MATCH (E) BUILDING)
4. NEW 200 AMP METER MAIN ON OUTSIDE OF SHELTER
5. NEW GENERATOR RECEPTACLE ON OUTSIDE OF SHELTER
6. NEW RUGS-11 UNITS TYP. (2) PER SECTOR FOR
A TOTAL OF (6) MOUNTED TO PENHOUSE WALL
7. NEW 1/2" CONC. RUN
8. NEW 6" PVC CONDUIT STUBBED UP IN CONC.
PENHOUSE WALL TO SUPPORT NEW CONCRETE CABLES
9. NEW 1/2" CONC. ANTENNAS (4) PER SECTOR
FOR A TOTAL OF (12) MOUNTED TO NEW FRP ANGLES
(SEE MFR DRAWINGS FOR DETAILS)
10. NEW CUSTOM STEEL FRAME FOR FRP ANTENNA COUPLER SUPPORT
11. NEW 6" ANTENNA MOUNTED (E) BUILDING WALL
12. NEW CUSTOM FIBERGLASS ANTENNA ENCLOSURE ON TOP OF &
WORKING AROUND TOP PAINT & FINISH TO MATCH (E) BUILDING
TO REPLACE (E)
13. NEW 24"x24" CUSTOM SHEET METAL LOWEDED VENT
TO REPLACE (E)
14. NEW FLAT ROOF
15. NEW 102'-48"-59'-48" TYP. (1) PER SECTOR
FOR A TOTAL OF (3) MOUNTED TO PENHOUSE WALL
16. NEW 4" CONC. FILLED STEEL BOLARDS TYP.
17. NEW A/C UNITS PROVIDED WITH SHELTER
18. NEW RISER TYP. (5) TO MOUNT TO NEW CABLE TRAY
UNISUBT SUPPORT



WEST ELEVATION
SCALE 1/4"=1'-0"

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS
SET OF DRAWINGS IS PROPRIETARY
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DISCLOSED TO ANY OTHER PARTY WITHOUT
THE WRITTEN PERMISSION OF AT&T
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AT&T MOBILITY IS STRICTLY PROHIBITED.

CURT



4430 ROSEWOOD DRIVE
BUILDING 3, 6TH FLOOR
PLEASANTON, CA 94588

PROJECT INFORMATION

GRAND AVENUE & BELLEVUE AVE

371 LOWE AVE
OAKLAND, CA 94612

COORDINATING ENGINEER

REV	DATE	DESCRIPTION	BY
1	6-26-12	SIX ZONING DOCS	DL
2	7-16-12	REV SIX ZONING DOCS	DL
3	7-23-12	REV SIX ZONING DOCS	AR
4	7-24-12	100% ZONING DOCS	AR

Peek Site-Cor
13852 Echorn Ave. Suite 101
Austin, TX 78748-9502
Phone (512) 885-6160
E-Mail info@peeksite.com



SHEET NO. CC2258
SHEET TITLE
CHK. DRL
DATE

ELEVATIONS

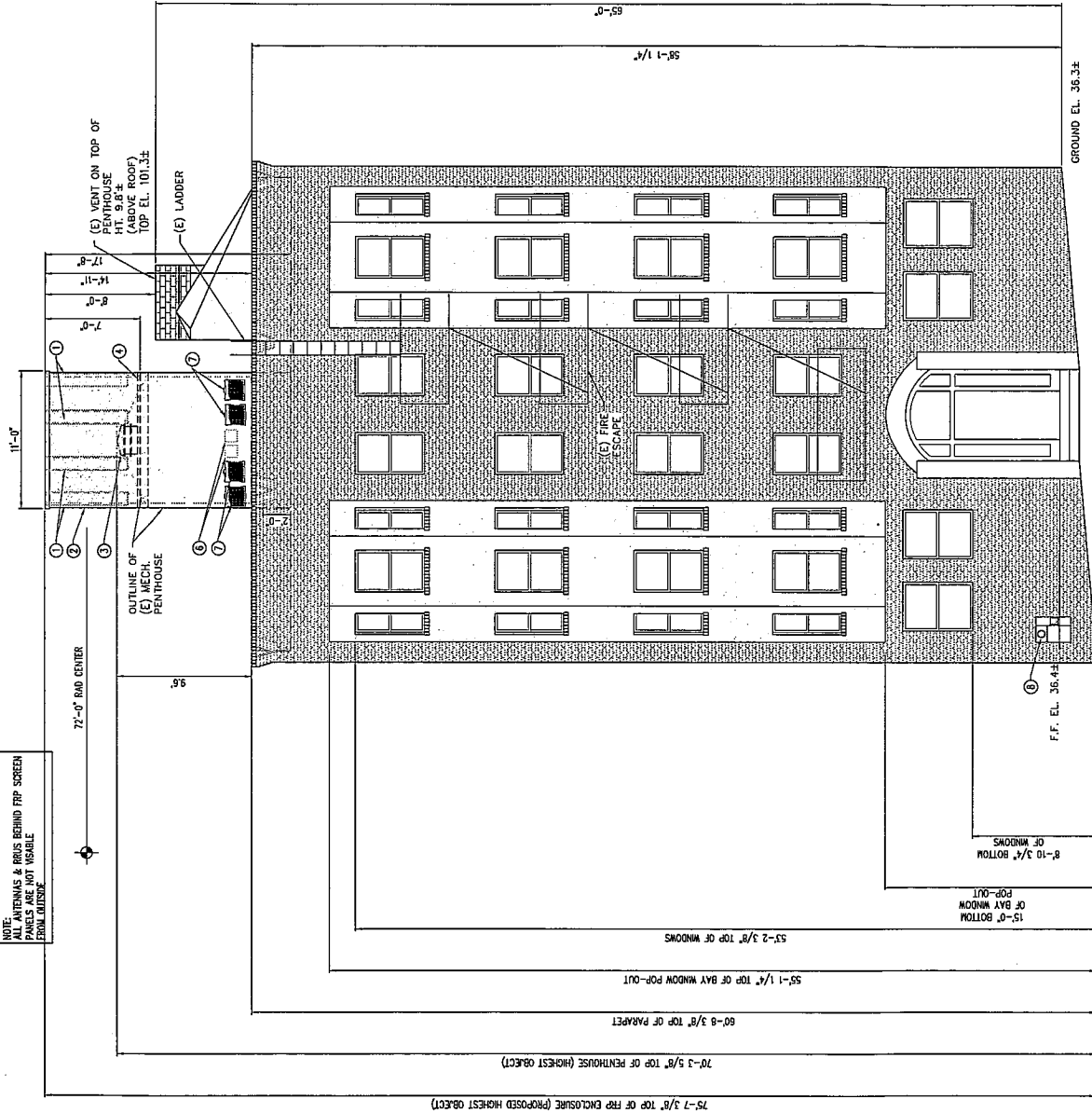
SHEET NUMBER

A-2 0

KEY NOTES

1. NEW 2X4 FIBER ANTENNAS (4) PER SECTOR FOR A TOTAL OF 12. MOUNT TO NEW FRP MOUNTS (SEE WIRE BRACKETS FOR DETAILS).
2. NEW CUSTOM FIBERGLASS ANTENNA ENCLOSURE ON TOP OF & AROUND (E) PENTHOUSE FINISH WITH FRP BRICK VENEER WITH MOLDING AROUND TOP. PAINT & FINISH TO MATCH (E) BUILDING.
3. NEW 2X4 FIBER CUSTOM SHEET METAL DOWNED VENT.
4. NEW 2X4 FIBER CUSTOM SHEET METAL DOWNED VENT.
5. NEW CUSTOM STEEL FRAME FOR FRP ANTENNA COWLA SUPPORT.
6. NEW 2X4 FIBER 48-60-96 TYP. (1) PER SECTOR FOR A TOTAL OF 3. MOUNTED TO PENTHOUSE WALL.
7. NEW 2X4 FIBER 11 UNITS TYP. (2) PER SECTOR FOR A TOTAL OF 22. MOUNTED TO PENTHOUSE WALL.
8. NEW 200 AMP ELECTRICAL METER W/ DISCONNECT ON FACE OF BUILDING @ STREET.

NOTE: ALL ANTENNAS & BRIS BEHIND FRP SCREEN. ANTENNAS ARE NOT VISIBLE FROM STREET.



EAST ELEVATION
SCALE: 1/4\"/>

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY TO PEAK SITE-COM. ANY USE OR DISCLOSURE OF THESE DRAWINGS RELATES TO PEAK SITE-COM IS STRICTLY PROHIBITED.

CLIENT:



4430 ROSEWOOD DRIVE
BUILDING 3, 6TH FLOOR
PLEASANTON, CA 94588

PROJECT INFORMATION:

GRAND AVENUE & BELLEVUE AVE
377 GRAND AVE
OAKLAND, CA 94612

REV: DATE: DESCRIPTION: BY:

1	6-26-12	REV 2000 DOCS	DA
2	7-16-12	REV 2000 DOCS	DLL
3	7-23-12	REV 2000 DOCS	AM
4	7-24-12	REV 2000 DOCS	AM

COORDINATING ENGINEER:

Peek Site-Com
12852 Earhart Ave, Suite 101
Auburn, California 95602
Phone (530) 885-0160
E-Mail info@peeksitecom.com

SEAL:



SITE: F. CHK. DRAWN BY: DLL
SHEET TITLE: CC2258

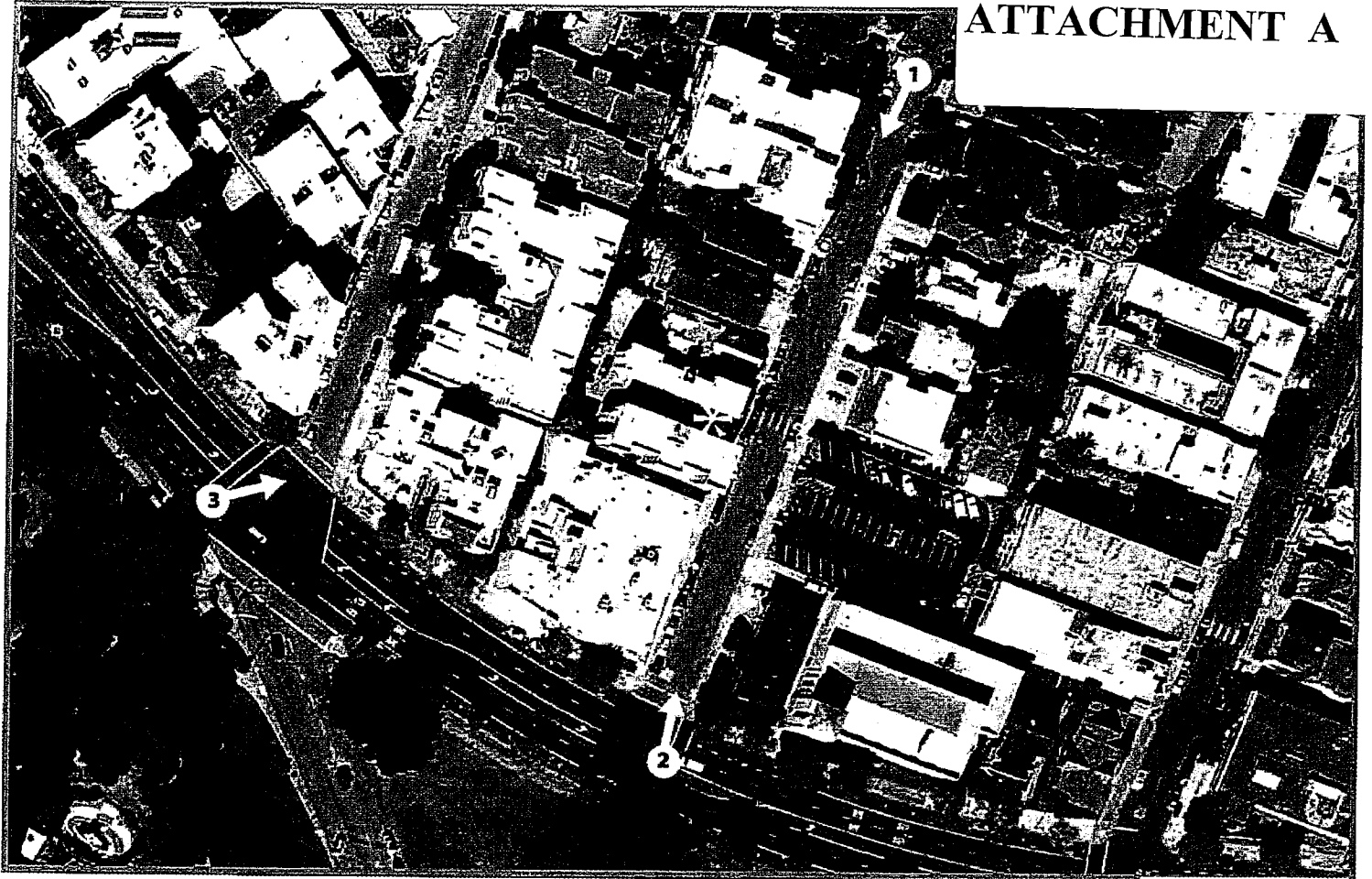
ELEVATIONS

SHEET NUMBER:

A-2.10

A-3
0

ATTACHMENT A



VIEWS 1-3

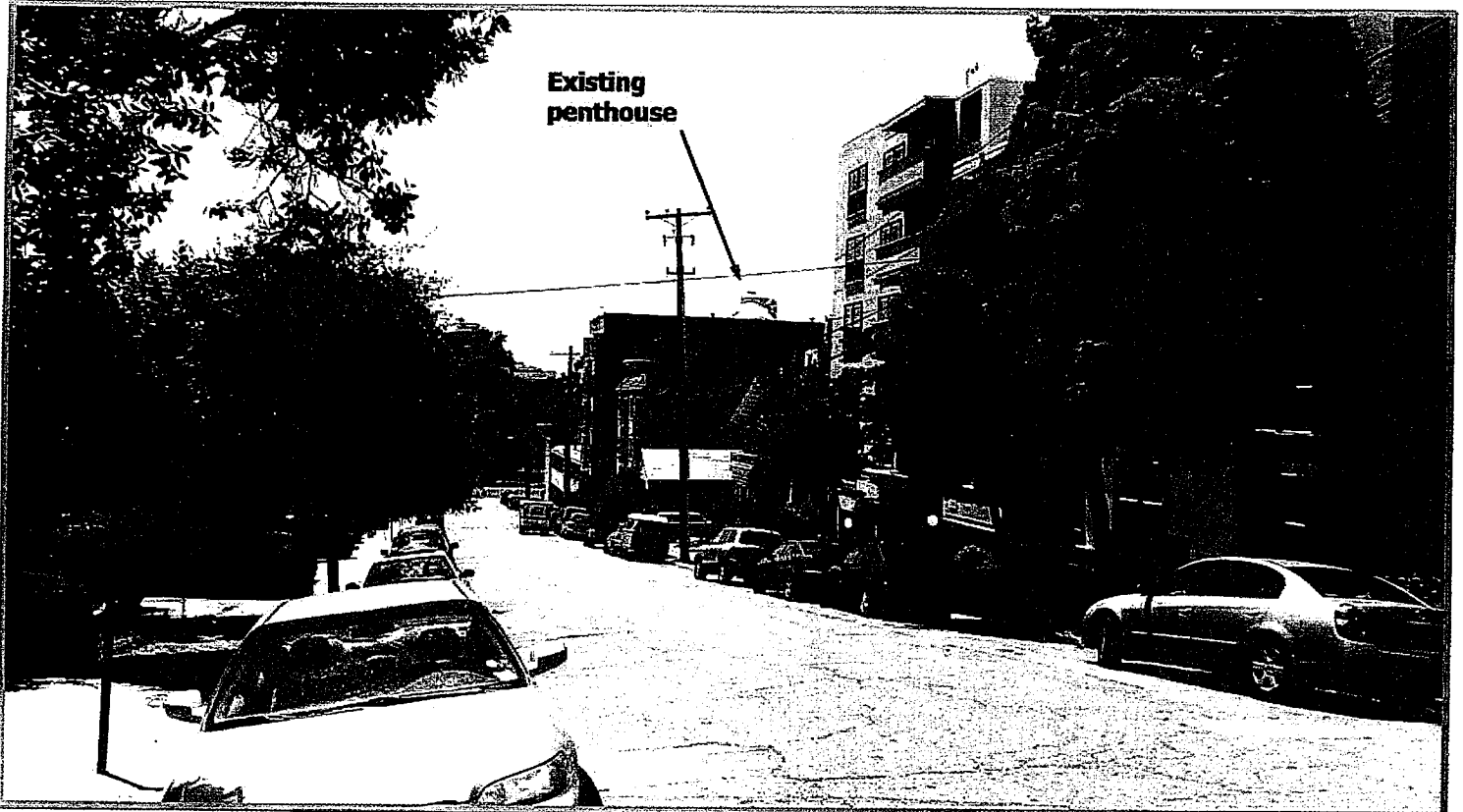
**CYPRESS
LAB**

350 Wayne Place #3
Oakland, CA 94606
www.thecypresslab.com
info@thecypresslab.com

View Chart

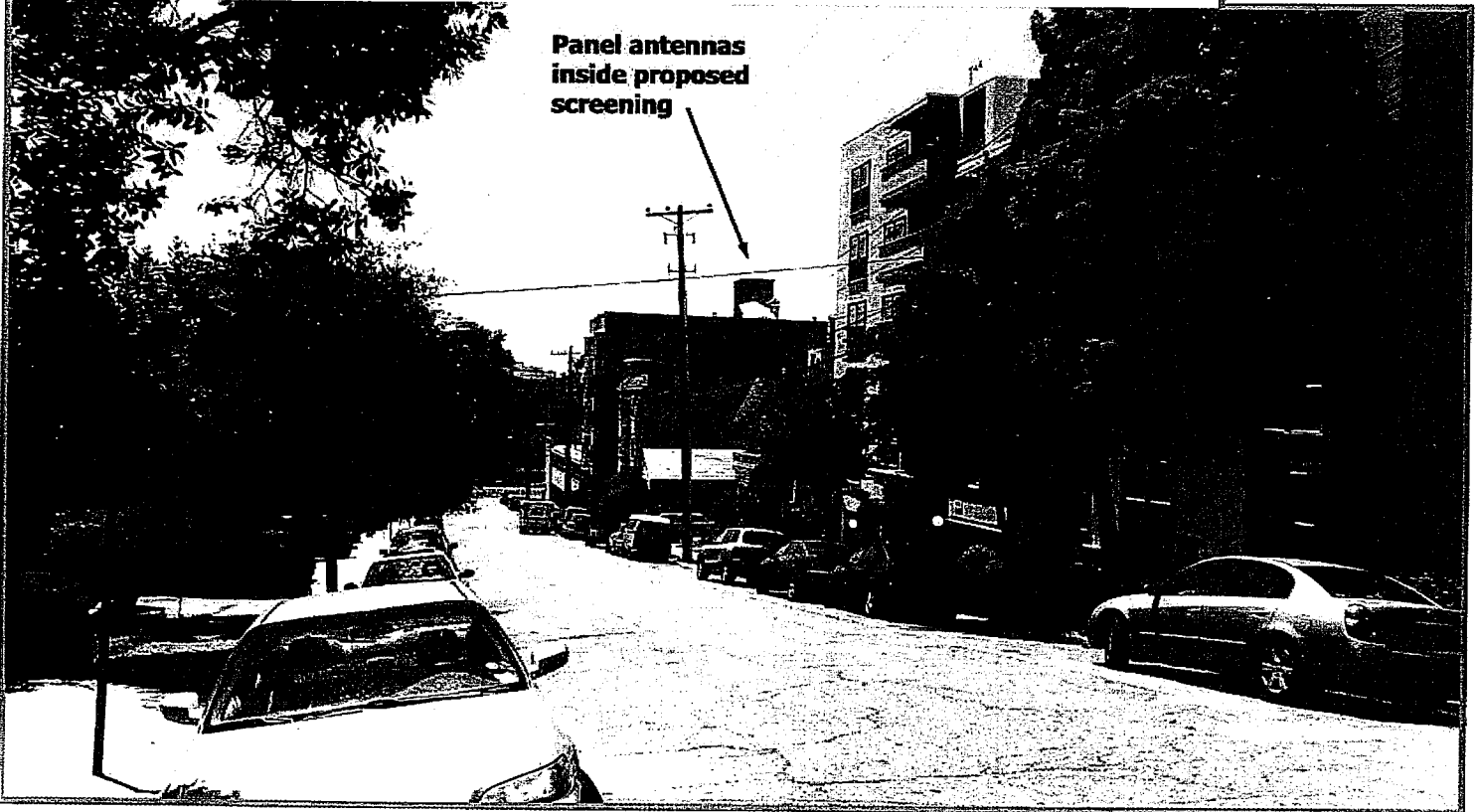


CC2258
337 Lenox Avenue
Oakland, CA 94610



EXISTING

PROPOSED: Addition of (12) panel antennas behind screening as seen facing south from Lenox Ave



**CYPRESS
LAB**

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Oakland, CA 94606
www.thecypresslab.com
info@thecypresslab.com

View 1 of 3

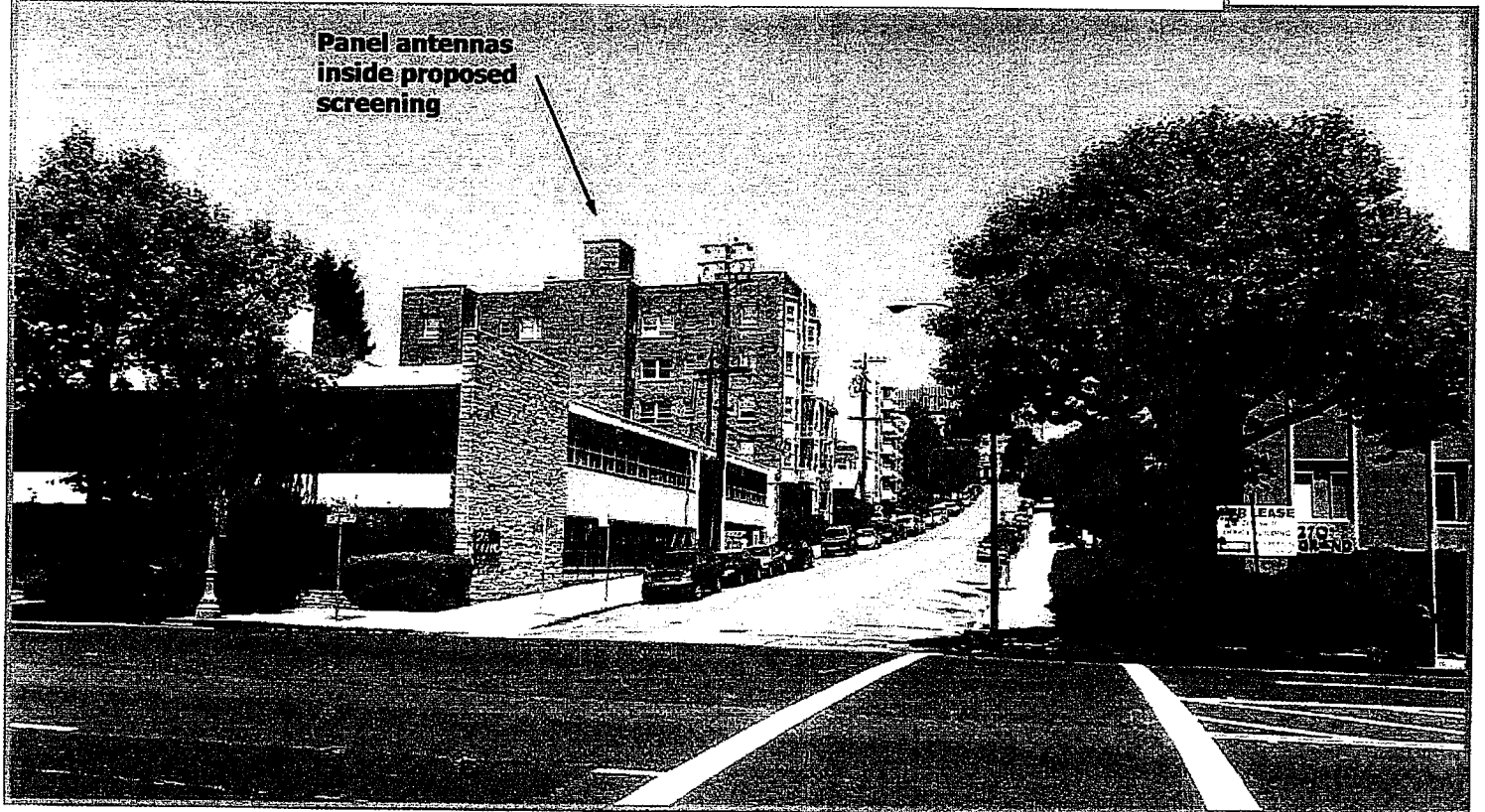


CC2258
337 Lenox Avenue
Oakland, CA 94610



EXISTING

PROPOSED: Addition of (12) panel antennas behind screening as seen facing north from Lenox and Grand



**CYPRESS
LAB**

350 Wayne Place #3
Oakland, CA 94606

www.thecypresslab.com
info@thecypresslab.com

View 2 of 3



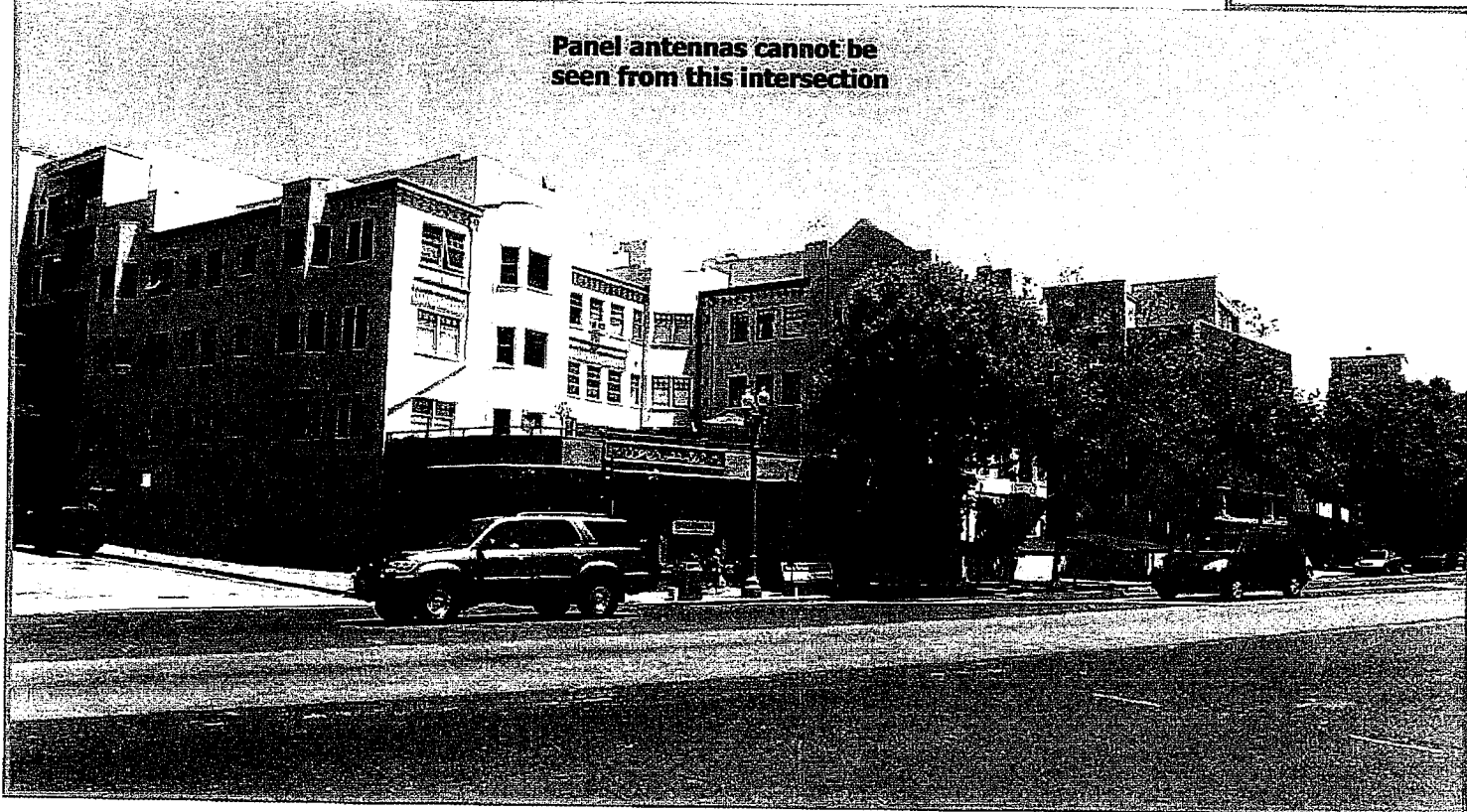
CC2258
337 Lenox Avenue
Oakland, CA 94610



EXISTING

PROPOSED: Addition of (12) panel antennas behind screening as seen facing east from Grand & Park View Ter

**Panel antennas cannot be
seen from this intersection**



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LAB**

350 Wayne Place #3
Oakland, CA 94606

www.thecypresslab.com
info@thecypresslab.com

View 3 of 3



CC2258
337 Lenox Avenue
Oakland, CA 94610

**AT&T Mobility • Proposed Base Station (Site No. CC2258)
377 Lenox Avenue • 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. CC2258) proposed to be located at 377 Lenox Avenue 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 roof of the five-story residential building located at 377 Lenox Avenue in Oakland. The proposed operation will 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)	5,000-30,000 MHz	5.00 mW/cm ²	1.00 mW/cm ²
BRS (Broadband Radio)	2,600	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	2.35	0.47
[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



**AT&T Mobility • Proposed Base Station (Site No. CC2258)
377 Lenox Avenue • Oakland, California**

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. Along with the low power of such facilities, 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 Peek Site-Com, Inc., dated July 11, 2011, it is proposed to install twelve Andrew Model DBXN11-6565B-R2M directional panel antennas within a view screen enclosure to be installed on top of the mechanical equipment penthouse above the roof of the five-story residential building located at 377 Lenox Avenue in Oakland. The antennas would be mounted with up to 6° downtilt at an effective height of about 73½ feet above ground, 15½ feet above the roof, and would be oriented in groups of four toward 20°T, 140°T, and 260°T, to provide service in all directions. The maximum effective radiated power in any direction would be 9,250 watts, representing simultaneous operation at 2,300 watts for AWS, 3,460 watts for PCS, 2,370 watts for cellular, and 1,120 watts for 700 MHz service. There are reported no other wireless telecommunications base stations at the site or nearby.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed AT&T operation is calculated to be 0.0063 mW/cm², which is 1.2% of the applicable public exposure limit. The maximum calculated level at any nearby building* is 14% of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operation.

* Located at least 25 feet away, based on photographs from Google Maps.



AT&T Mobility • Proposed Base Station (Site No. CC2258)
377 Lenox Avenue • Oakland, California

Recommended Mitigation Measures

Due to their mounting locations, 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, no access within 14 feet directly in front of the antennas themselves, such as might occur during maintenance work above the 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 warning signs[†] at the roof access door 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.

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 377 Lenox Avenue in Oakland, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. 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, 2013. 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
William F. Hammett, P.E.
707/996-5200

August 5, 2011

[†] Warning 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.



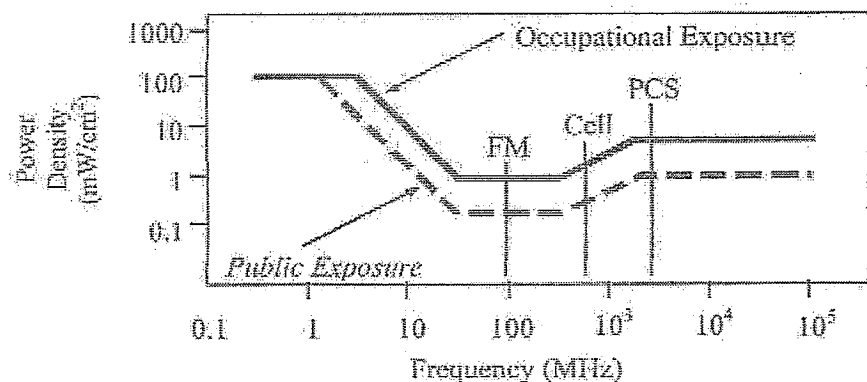
HAMMETT & EDSON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

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 Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm ²)	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f</i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f ²	<i>180/f</i>
30 – 300	614	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	0/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



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.



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

FCC Guidelines
Figure 1

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/cm²,

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/cm²,

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:

power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

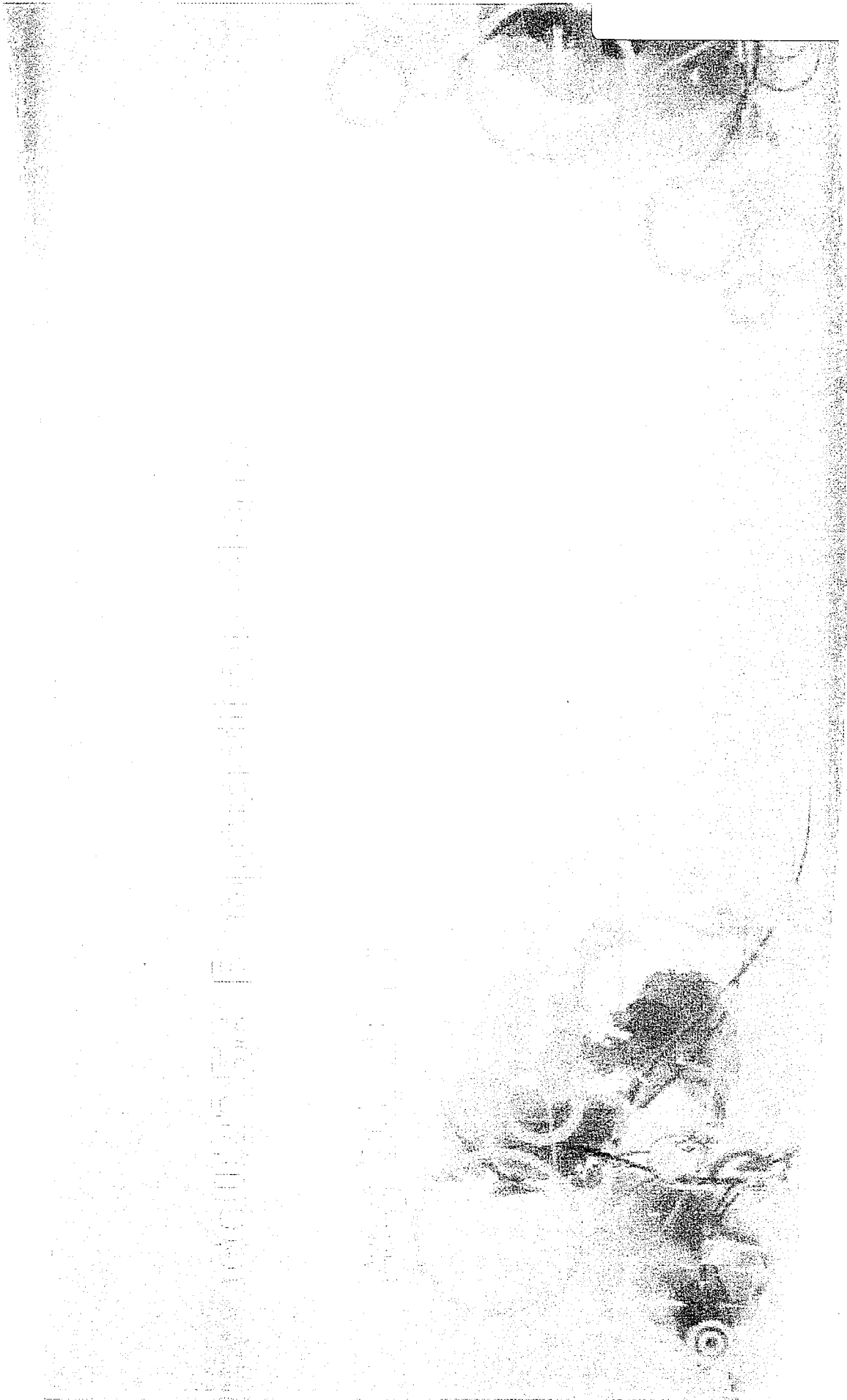
where ERP = total ERP (all polarizations), in kilowatts,

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

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

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



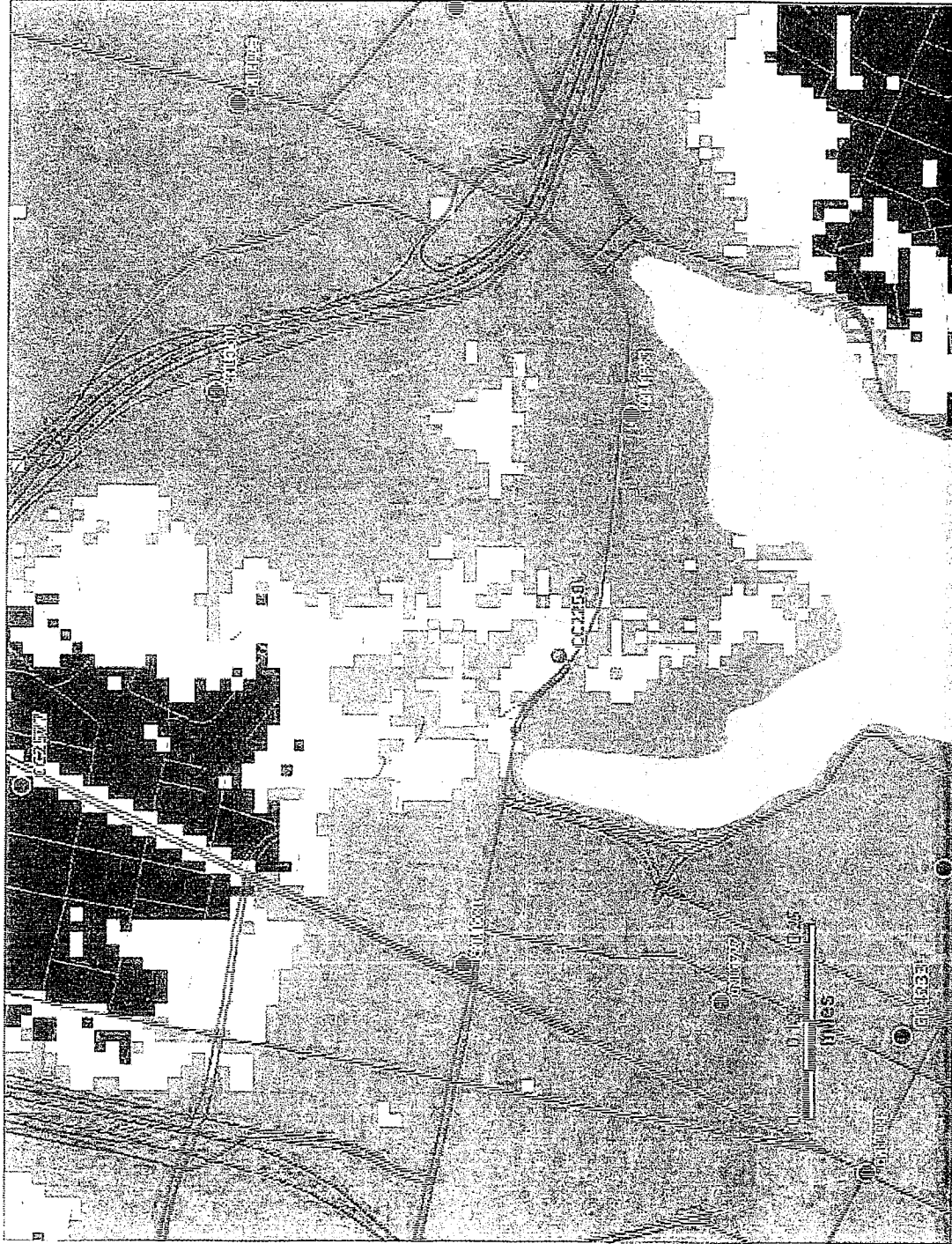


CCU2258 Existing Coverage

Aug 26, 2011

Legend

- In-Building Service
- In-Transit Service
- Outdoor Service
- Proposed Site
- Existing Site

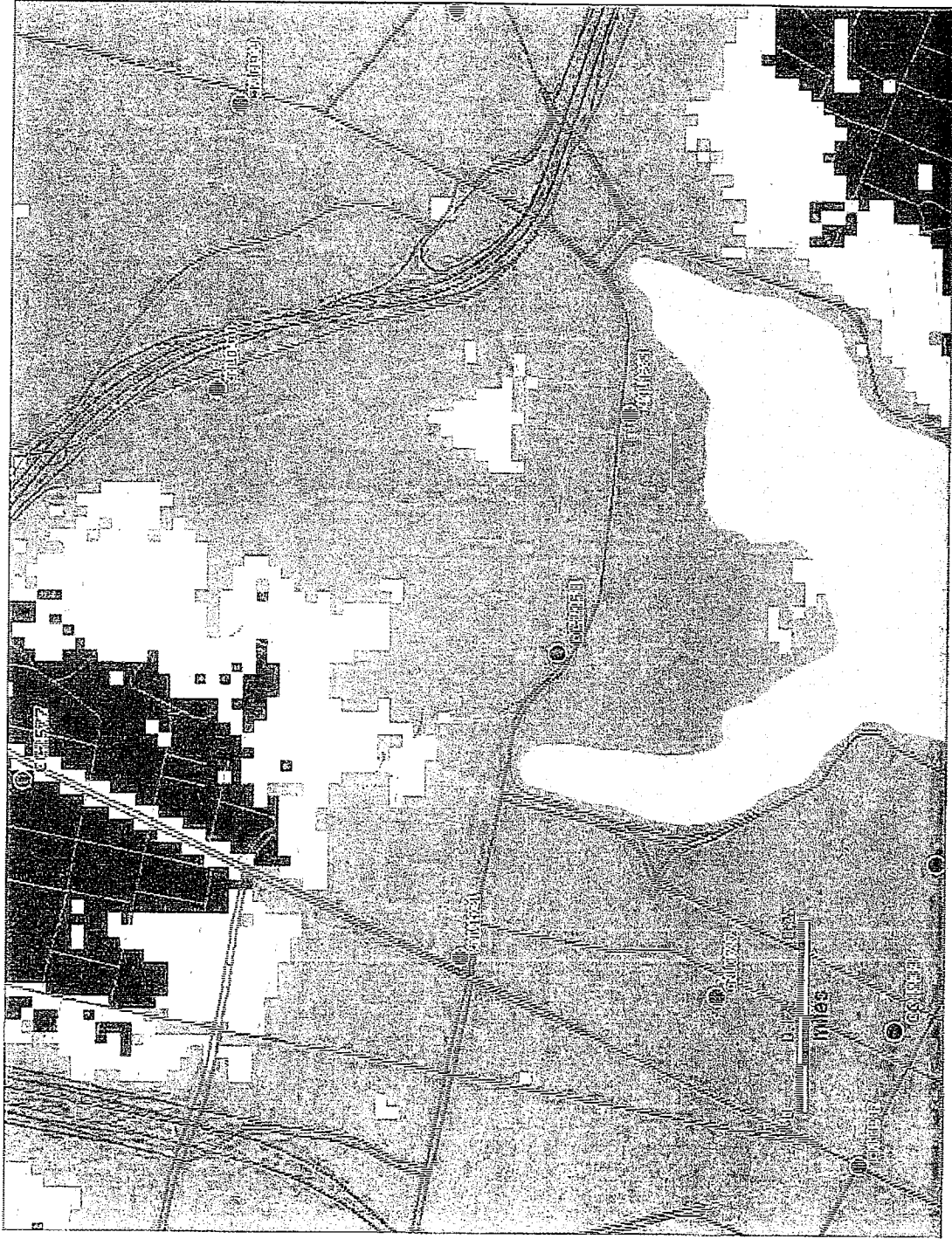


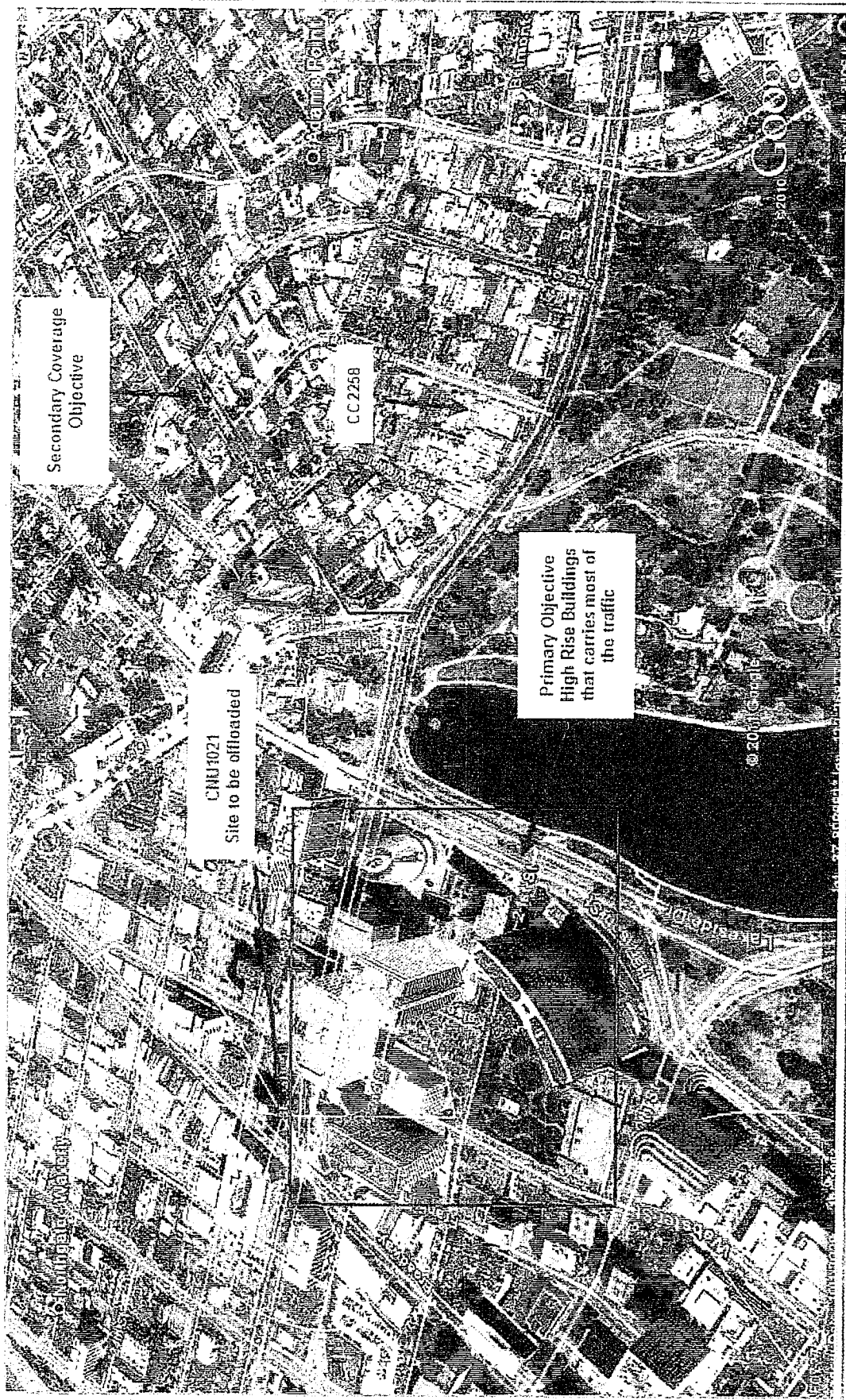
CCU2258 Existing Coverage

Aug 26, 2011

Legend

- In-Building Service
- In-Transit Service
- Outdoor Service
- Proposed Site
- Existing Site





Justification

Aug 26, 2011

The main objective of this ring is to offload traffic from CNU1021 located west of this ring. Most of the traffic is coming from the high rise buildings between the 2 sites. This is the best location to meet this objective, because it can cover or take the traffic east of the high rise buildings and CNU1021 will cover the west portion. This will balance the traffic between this 2 sites and will solve the congestion problem.

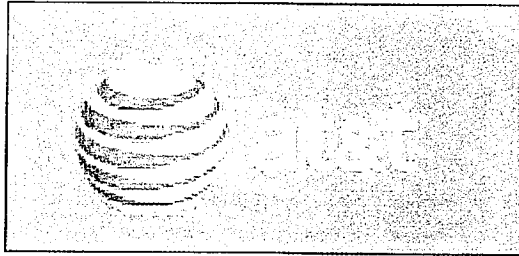
The secondary objective is to enhance coverage in the surrounding area which will give indoor coverage on nearby residences. This covers the perimeter of Grand ave, Montecito Ave. and Lee St.

This site has a good height to cover the objective and at the same time not too high to cause interference to the network.



ALTERNATIVES ANALYSIS

ALTERNATIVES ANALYSIS



AT&T Wireless Facility



377 Lenox Avenue, Oakland, CA

Table of Contents

Summary	3
Objective	3
Methodology and Zoning Criteria.....	5
Analysis of Alternatives.....	10
Conclusion.....	14

Summary

AT&T Mobility has identified capacity issues with its 3G service in the City of Oakland. By capacity issues, we mean that there is too much traffic on the existing network to provide adequate transfer of voice and data information to consumers in the area. AT&T Mobility proposes to install a wireless communications facility ("WCF") at 377 Lenox Avenue ("The Proposed Facility") as a means to resolve this capacity issue. The facility consists of twelve panel antennas (four antennas for each of the three sectors) inside an extension of an existing penthouse structure and up to seven equipment cabinets concealed from view between existing buildings. The Proposed Facility is one of the least intrusive means to resolve the capacity issue of the three alternatives investigated by AT&T Mobility as set forth below.

Objective

AT&T Mobility has identified a significant capacity issue in the downtown Oakland area in between several of its sites (SF1021, SFG018, SF0110) as identified on the search area map below (Fig. 1). In order to resolve this capacity issue, AT&T's RF engineers designated an area in which to locate a site which would offload traffic from adjacent sites in an attempt to cover the east sides of the high buildings to the west of the proposed site, and the west sides of high rise buildings to the east of the site (Figure 2). In addition, the proposed site would provide better in-building coverage to the neighborhood immediately surrounding the site, which currently does not have good in-building coverage. The search ring identified by a red circle on Figure 1 below indicates an area in which to locate a site that would resolve the capacity issue.

Fig. 1 – Search Ring Identification Map

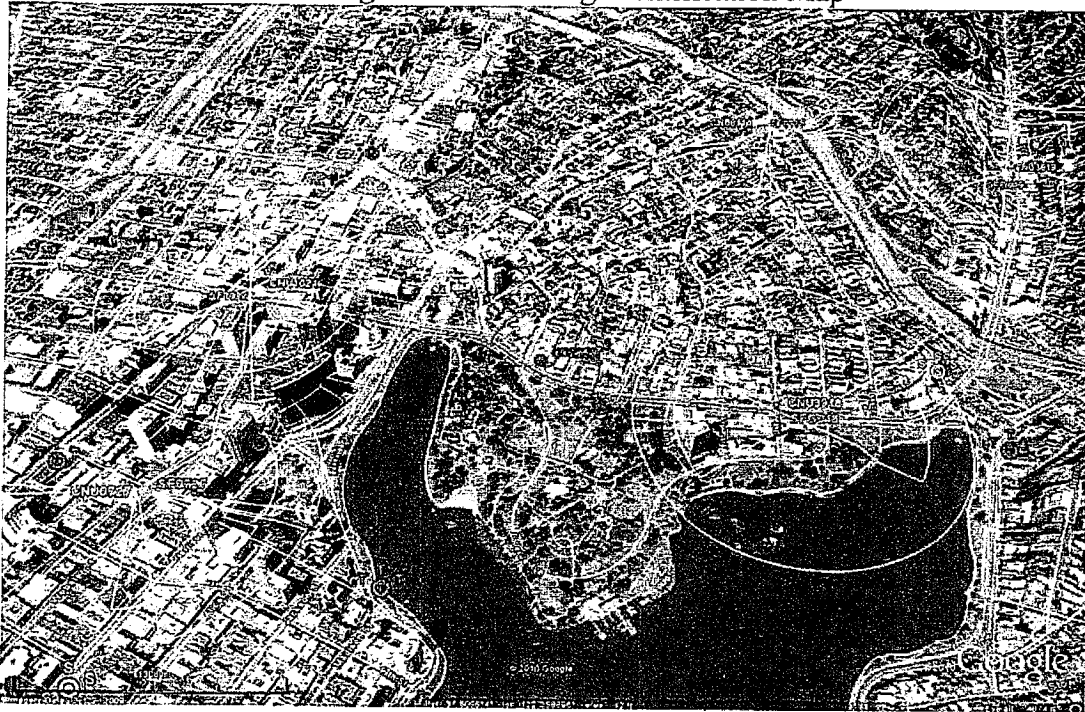
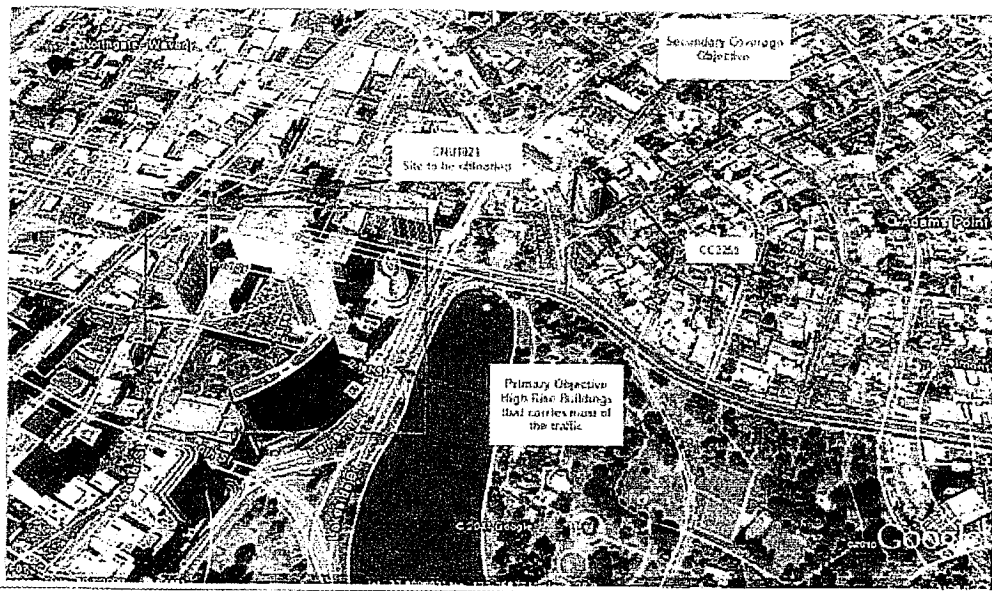


Fig. 2 – Search Ring Objectives

Google Earth

AUG 26, 2011



Description of Tools Used to Calculate Propagation Predictions

AT&T uses "RF" (radio frequency) Planning software, ATOLL, to analyze and predict its network's coverage, as well as performing other analysis such as interference and hand-over data.

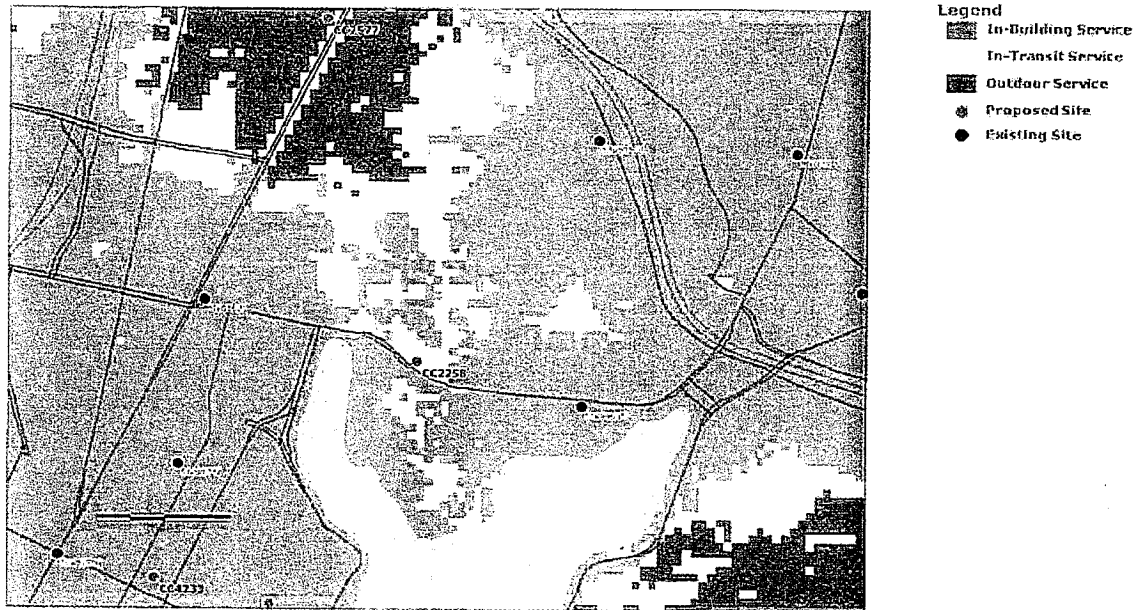
The prediction software is calibrated with network's live service coverage measurement data and is accurate to within the industry's standard deviation metric.

Typically, ATOLL's predicted coverage is color coded to represent the various service coverage conditions that wireless devices can reliably operate under. For example, green levels are suitable for wireless devices to be used reliably inside most buildings, yellow levels are suitable for wireless devices to be used reliably inside most vehicles (but not reliably in the majority of buildings), and blue levels are suitable for wireless devices to be used reliably outside (but not reliably in vehicles and in buildings).

Fig. 3 - Existing Network - AT&T Coverage in Oakland Area surrounding Coverage Objective

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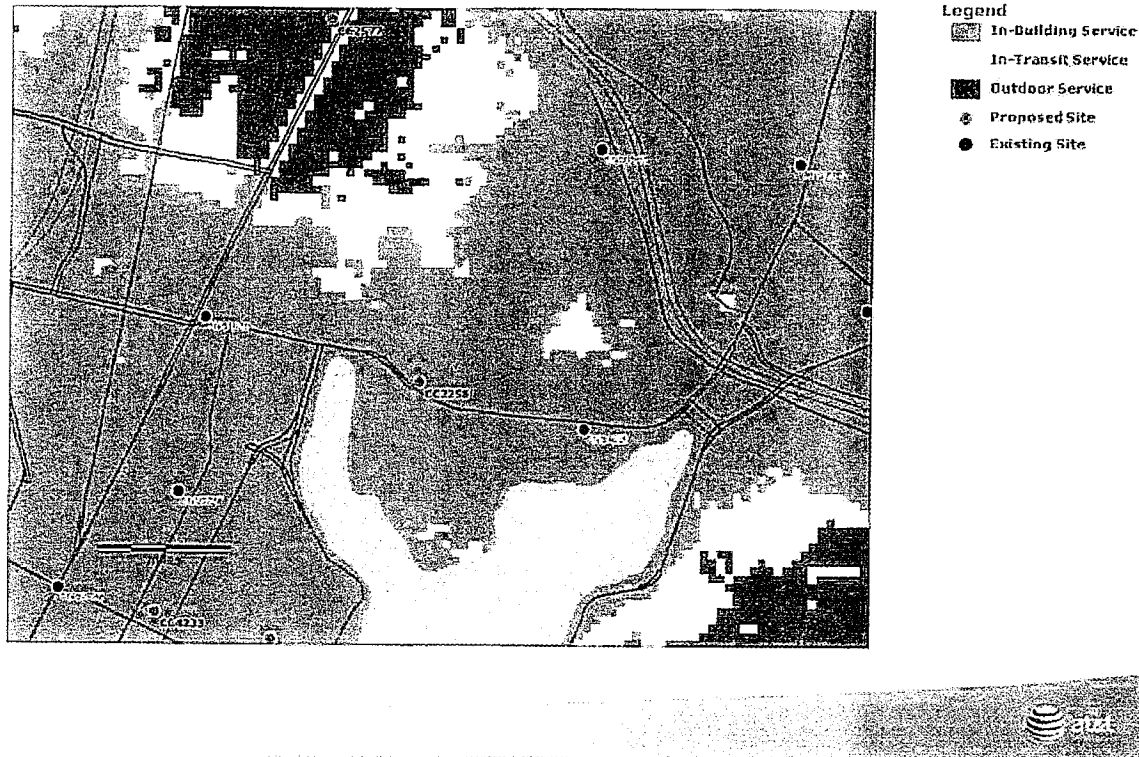


- . Indoor Coverage (Green): AT&T customers can make and receive calls on 3G service and transmit 3G data reliably indoors.
- . In Transit Coverage (Yellow) AT&T customers can make or receive calls and transmit data reliably on 3G service in a bus, vehicle or other above ground transportation, and unreliably indoors.
- .Outdoor Coverage (Blue): AT&T customers can make and receive calls on 3G service and transmit 3G data outdoors but not inside of a vehicle, public transportation or indoors reliably.
- . Existing AT&T Wireless communications facilities are marked with black circles

**Fig. 4 - Proposed with Existing Network - AT&T Coverage in Oakland Area
Surrounding Coverage Objective**

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Aug 26, 2011



Methodology and Zoning Criteria

The location of a WCF to resolve capacity issues is dependent upon topography, zoning, existing structures, collocations, opportunities, available utilities, access and a willing landlord. Wireless communications is line-of-sight technology which requires WCFs to be in relatively close proximity to the wireless handsets to be served. The large residential footprint and low commercial buildings within the service area has presented siting issues for AT&T with respect to resolving the capacity issue.

Search Ring Characteristics

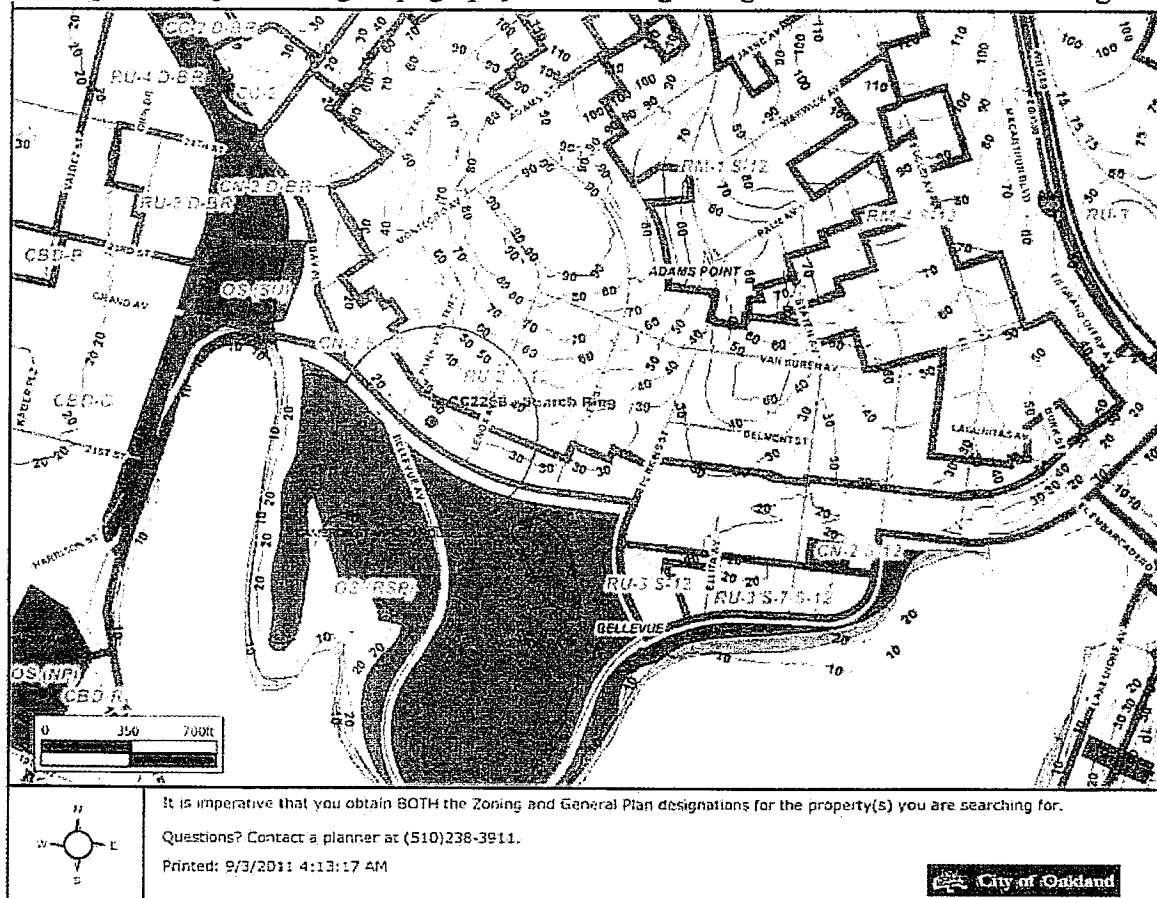
Topography – Topography ranges in elevation from 20'-30' above mean seal level (AMSL) along Grand Avenue to approximately 60' AMSL at the north end of the search ring (see Fig. 5). In order to prevent bleed over and network interference to site SFO110, it is necessary to contain the signal to the north, allowing for propagation to the east, west, and south, while still maintaining height to reach the downtown Oakland high-rise structures. Given that the topography to the north of the site reaches 90 feet AMSL and anywhere to 150 AMSL with building obstructions, it is safe to say that the best elevation for desired signal propagation would be in the 90-120' range. In order to obtain this

height, the multi-story residential buildings presented the most desirable option within the search ring, as commercial structures along Grand Avenue generally only achieve an elevation of 60'-70' AMSL.

Zoning – As illustrated on Fig. 5, zoning within the search area consists of open space (OS/RSP), neighborhood commercial (CN-3/S-12), and multi-family residential (RU-2/S-12). Both the OS and CN-3 zone districts have a ground elevation of approximately 20-30 feet, while the residential zoning achieves ground elevations up to 60 feet. The commercial zoning is located along the Grand Avenue corridor.

Structure Characteristics - The majority of the structures in the search ring are multi-story, multi-family residential buildings ranging in size from 1-2 stories all the way up to 6-8 stories. Many of these buildings are older structures, with existing elevator penthouses and other appurtenant structures on the rooftops. Commercial buildings along Grand Avenue are generally 1- 3 stories in height.

Fig. 5 – Map Showing Topography and Zoning Designations within Search Ring



AT&T Mobility seeks to resolve the capacity issue using the least intrusive means under the values expressed in the Oakland Municipal Code Chapter 17.128, Telecommunication Regulations.

The Telecommunications Regulations have a number of design and locational requirements which were addressed in the siting of a facility to meet the coverage objectives of this particular search ring. Specifically, Section 17.128.070, 17.128.110 & 17.128.120 provide direction for siting of facilities.

Section 17.128.070 sets forth development standards for macro facilities such as that proposed as follows:

A. General Development Standards for Macro Facilities

1. The macro facilities shall be located on existing buildings, poles or other support structures, or shall be post mounted. *The proposed facility is located on an existing building.*
2. The equipment shelter or cabinet must be concealed from public view. *Equipment is to be located at the rear of the building and will be screened with visibility slats within the fence. It is not visible to the general public.*
3. Macro facilities may exceed the height limitation specified for all zones but may not exceed 15 feet above the roof line or parapet. *The top of the proposed screen wall is 14'11" above the parapet.*
4. Ground post mounted Macro Facilities must not exceed 17 feet to the top of the antenna. *This proposal does not include ground post mounted facilities.*
5. The applicant shall submit written documentation demonstrating that the emissions from the proposed project are within the limits set by the FCC. *See EMF report submitted with the proposed project application.*
6. For antennas attached to the roof, maintain a 1:1 ratio (example: ten feet high antenna requires ten feet setback from façade) 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. *Antennas are not mounted directly to the roof but instead are mounted on an existing elevator penthouse structure.*
7. That all reasonable means of reducing public access to the antennas and equipment has been made, including, but not limited to, placement in or on buildings or structures, fencing, anti-climbing measures and anti-tampering devices. *The proposed antennas will be mounted on a secured rooftop, equipment will be enclosed within a fenced equipment compound, and cabinets are vandalism resistant.*

B. Design Review Criteria for Macro Facilities:

1. Antennas should be painted and/or textured to match the existing structure. *Antennas are to be mounted behind a faux brick wall and will not be visible.*
2. Antennas mounted on architecturally significant structures or significant architectural detail of the building should be covered by appropriate casings which are manufactured to match existing architectural features found on the building. *The penthouse structure is being extended and designed to match the brick architecture 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*

proposed project expands an existing vertical element of the building, a penthouse, to aid in camouflaging the facility.

Section 17.128.110 sets forth siting preferences for new wireless facilities as follows:

- A. Co-located on an existing structure or facility with existing wireless antennas. *Proposed facility does not meet this preference.*
- B. City owned properties or other public or quasi-public facilities. *Proposed facility does not meet this preference.*
- C. Existing commercial or industrial structures in non-residential zones (excluding all HBX zones). *Proposed facility does not meet this preference.*
- D. Existing commercial or industrial structures in residential or HBX zones. *Proposed facility does not meet this preference.*
- E. Other non-residential uses in residential or HBX zones. *Proposed facility does not meet this preference.*
- F. Residential uses in non-residential zones (excluding all HBX zones). *Proposed facility does not meet this preference.*
- G. Residential uses in residential or HBX zones. *Proposed facility falls under this category.*

Section 17.128.120 sets forth design preferences for new wireless facilities as follows:

- A. Building or structure mounted antennas concealed from view. *The proposed facility falls under this category, as antennas will not be visible behind faux brick penthouse.*
- B. Building or structure mounted antennas set back from roof edge, not visible from public right-of-way. *Not applicable.*
- C. Building or structure mounted antennas below roof line (façade mount, pole mount) visible from public right-of-way, painted to match existing structure. *Not applicable.*
- D. Building or structure mounted antennas above roof line visible from public right-of-way. *Not applicable.*
- E. Monopoles. *Not applicable.*
- F. Towers. *Not applicable.*

Based on the foregoing parameters, AT&T investigated available site locations that could resolve capacity issues, **seeking to locate a candidate that was a building mounted facility that would be well camouflaged and integrated into existing building architecture** that would provide appropriate elevation for propagation of RF signal over the coverage area without bleeding into other surrounding cells. The result of AT&T's Mobility's analysis is set forth below.

Analysis of Alternatives

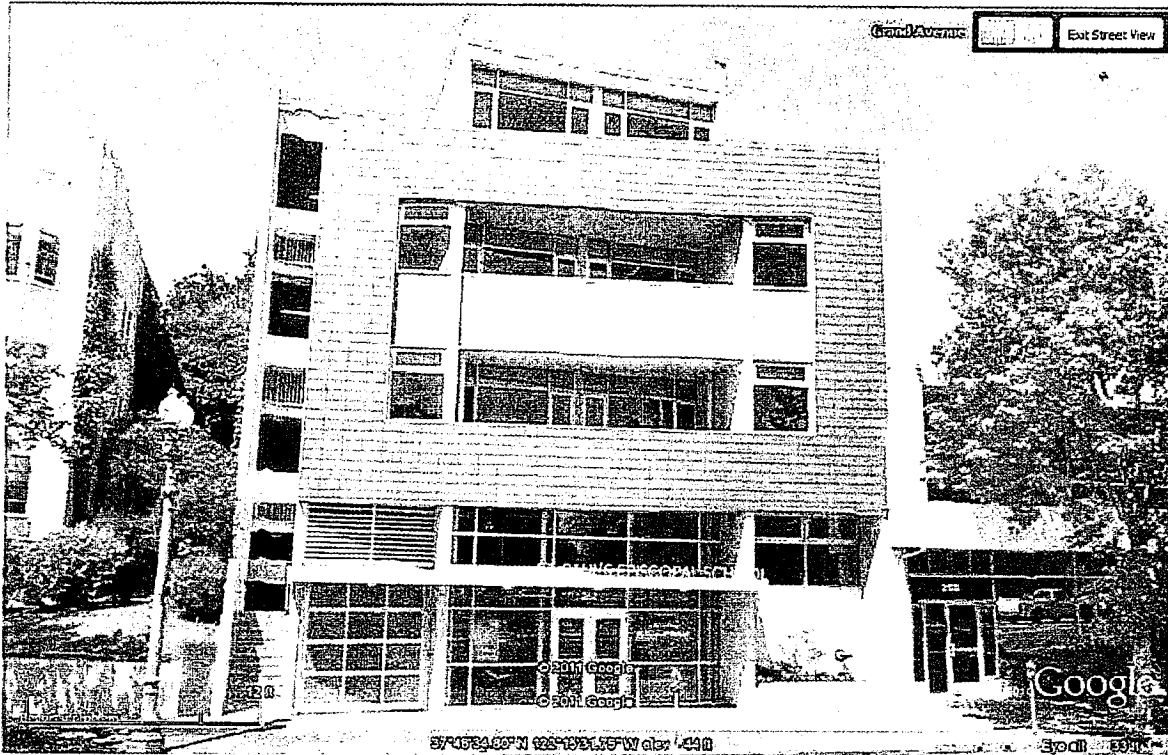
AT&T Mobility investigated three potential locations to fill the identified significant gap in the coverage objective in the City of Oakland. Following is a map showing the locations of all sites investigated.

Fig. 6 -Locations of Candidates



1. 262 Grand Avenue – St. Paul's Episcopal School

Conclusion: Structure is too low to meet RF coverage objective.



Leasing/Construction Considerations

This location was the project that was first considered by AT&T as it was suggested by the Planning Department. However, the School had significant concerns about parent and neighborhood opposition. A proposed project at this location would likely consist of a rooftop penthouse structure with equipment and antennas enclosed within.

Zoning Considerations

This location is located within the CN-3 zone district, and as such is considered to be preferential in terms of the City's siting preferences in the municipal code. However, given that the site is a school, perceived EMF concerns could create public controversy within the school and neighborhood. A roof mounted facility at this location would most likely meet with the City's preferred design criteria of having all the antennas screened.

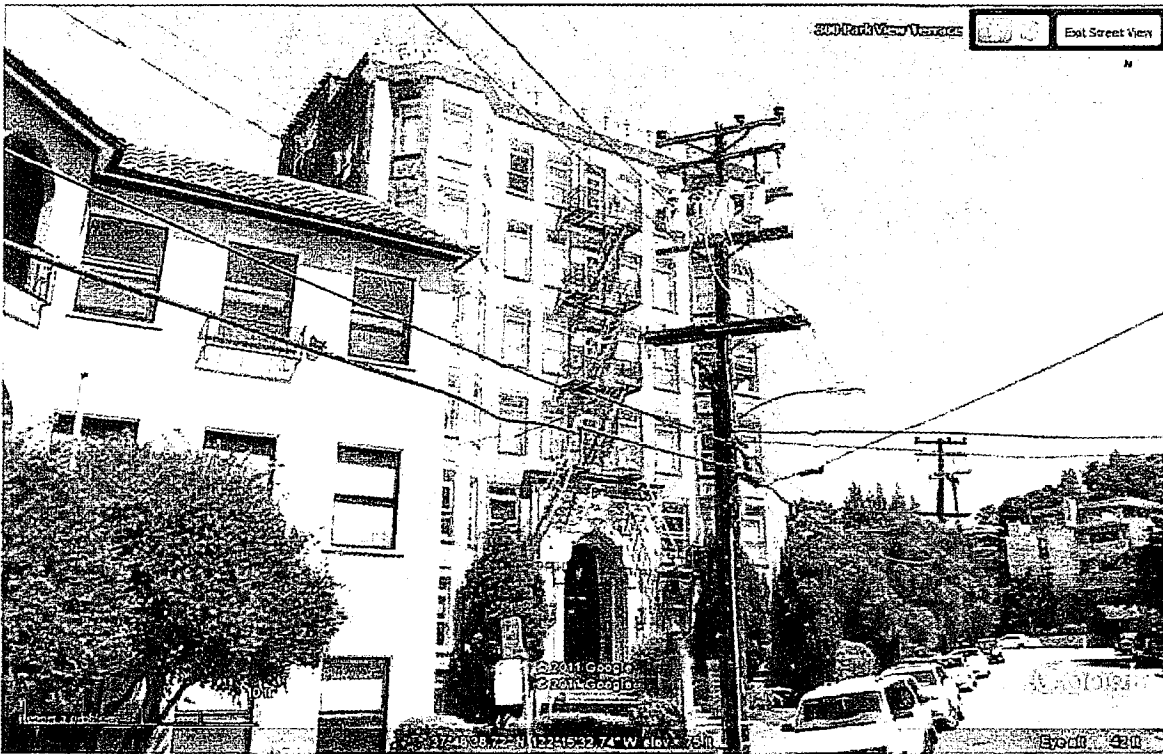
RF Considerations

This five-story building is located along Grand Avenue which has a ground elevation of approximately 25 feet. Any roof mounted facility would only be likely to achieve an antenna elevation of approximately 80 feet. The RF engineer considered this elevation to

be too low, as the signal would be blocked by the taller residential buildings to the north.

2. 315 Park View Terrace

Conclusion: Structure was too high for a roof mounted facility and would bleed over into ring to the north.



Leasing/Construction Considerations

The landlord was not made an offer due to RF's desire to locate on a similar structure on Lenox Avenue.

Zoning Considerations

A facility would most likely be a penthouse structure similar to that of the proposed project. The building is an older brick residential apartment building similar to that of the proposed location. Zoning is RU-2/S-12, multi-family residential. This is not a preferential zoning designation with respect to the municipal code as stated earlier in this document.

RF Considerations

Given that the existing building is approximately is located approximately 42 feet AMSL

and is six stories in height, overall rad center of the antennas with this installation would likely be in the neighborhood of 115-120 feet AMSL with a penthouse structure of approximately 15 feet in height. Because this is considered a capacity site and RF is attempting to limit signal propagation to a narrow area, they preferred a slightly lower candidate that would not have potential to bleed over into the cell to the north.

3. 377 Lenox Avenue – Proposed Project

Conclusion: Site meets RF's coverage objective which is intended to limit signal spread into other cells. LL is willing lessor.



Leasing/Construction Considerations

LL is a willing lessor. Construction considerations at this location include the structural capability of the roof to support equipment. For this reason the equipment has been placed on the ground at the rear of the building, hidden from public view.

Zoning Considerations

The proposed location is zoned RU-2/S-12, multi-family residential. AT&T realizes that