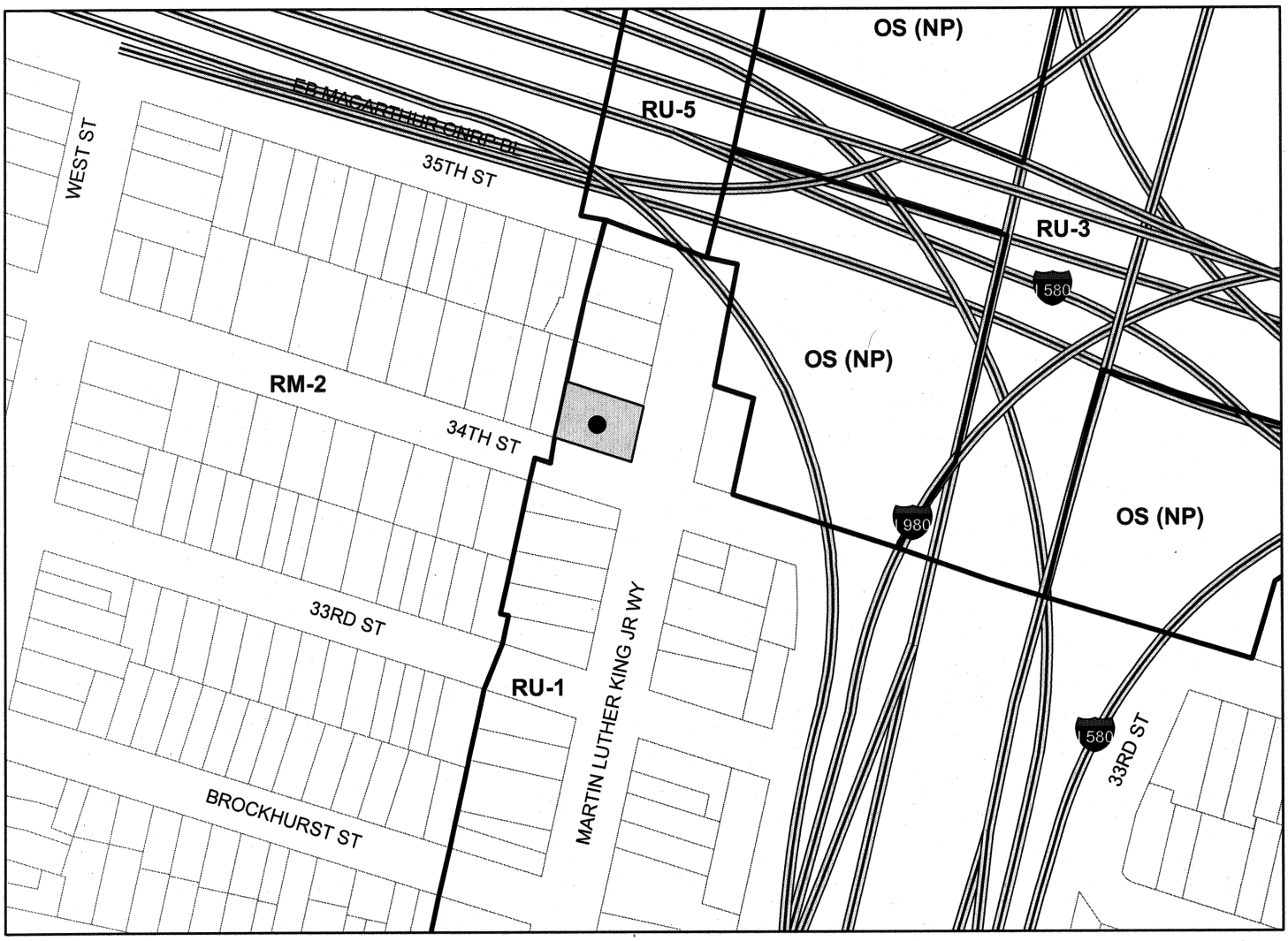
Location:	**650 34th Street**
Assessor's Parcel Number:	**009 -0738-004-00**
Proposal:	Request for a Major Conditional Use Permit and Design Review for the modification to an existing unmanned macro telecommunications facility. Project will remove four antennas from building façade and replace with two new antennas inside a new FRP screen on the roof top of a three-story multi-family building (total of 14 antennas on site).
Contact Person/ Phone Number:	Michelle Weller for Sprint (510) 997-1312
Owner:	Solnordal B.M. & Jeanne M.
Planning Permits Required:	Major Conditional Use Permit to modify a Macro wireless telecommunications facility located within 100-feet of a residential zone (OMC Sec. 17.33.040(A), 17.134.020(A)(3)(i); Regular Design Review (non-residential) to modify a Macro facility also requiring a conditional use permit (OMC Sec. 17.33.040(A), 17.136.050(B)(2); Additional findings for a Macro facility (OMC Sec. 17.128.070 (B), (C).
General Plan:	Urban Residential
Zoning:	RU-1 Urban Residential 1 Zone
Environmental Determination:	Exempt, Section 15303 of the State CEQA Guidelines: Small Structures, Section 15301 existing facilities' Section 15183 of the State CEQA Guidelines: Projects consistent with a community plan, general plan or zoning
Historic Status:	Not A Potentially Designated Historic Property OCHS Survey Rating: D2-
Service Delivery District:	1
City Council District:	3
Date Filed:	2/21/13
Staff Recommendation:	Approve with the attached conditions
Finality of Decision:	*Appealable to City Council within 10 days*
For Further Information:	Contact case planner **Jose M. Herrera-Preza, Planner I** at **(510) 238-3808** or jherrera@oaklandnet.com

SUMMARY

This project would provide for the modification of an existing unmanned Telecommunications Facility on a multi-family apartment building. The changes include the removal of four (4) unscreened panel antennas from the exterior building façade, addition of two new panel antennas into RF screen enclosures on the roof of the building and upgrading equipment to a previously approved telecommunications "Macro" facility located along the rooftop of a multi-family apartment building. The new antennas will be sited inside RF screens located on the rooftop of the building to visually screen the antennas from neighboring properties and reduce the number of façade mounted antennas on the building. The subject property is entirely located within a residential zone. The scope of work entails the removal of four existing antennas and installation of two new wall panel antennas, resulting in a total of 14 on-site.

A Major Conditional Use Permit and Design Review are required for modifications to a Macro Telecommunications Facilities located in a residential zone. As detailed below, the project meets all of the required findings for approval. Therefore, staff recommends approval of the project subject to the attached conditions of approval.

CITY OF OAKLAND PLANNING COMMISSION



Case File: CMD13-071
Applicant: Michelle Weller for Sprint
Address: 650 34th Street
Zone: RU-1

PROJECT DESCRIPTION

The proposal involves modifications to an existing unmanned telecommunications facility consisting of removing four existing panel antennas, installation of two new antennas and upgrading equipment. The proposed antennas will be mounted inside new RF screen enclosures along the rooftop of the building and will be painted and textured to match the building to further mitigate any visual impacts from neighboring properties and the public right of way. **(See Attachment A)**

BACKGROUND

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

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

Under Section 253 of the TCA, no state or local regulation or other legal requirement can prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.

Further, Section 704 of the TCA imposes limitations on what local and state governments can do. Section 704 prohibits any state and local government action which unreasonably discriminates among personal wireless providers. Local governments must ensure that its wireless ordinance does not contain requirements in the form of regulatory terms or fees which may have the "effect" of prohibiting the placement, construction, or modification of personal wireless services.

Section 704 also preempts any local zoning regulation purporting to regulate the placement, construction and modification of personal wireless service facilities on the basis, either directly or indirectly, on the environmental effects of radio frequency emissions (RF) of such facilities, which otherwise comply with FCC standards in this regard. See, 47 U.S.C. 332(c)(7)(B)(iv) (1996). This means that local authorities may not regulate the siting or construction of personal wireless facilities based on RF standards that are more stringent than those promulgated by the FCC.

Section 704 mandates that local governments act upon personal wireless service facility siting applications to place, construct, or modify a facility within a reasonable time. 47 U.S.C.332(c)(7)(B)(ii). See FCC Shot Clock ruling setting forth "reasonable time" standards for applications deemed complete.

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

For more information on the FCC's jurisdiction in this area, contact Steve Markendorff, Chief of the Broadband Branch, Commercial Wireless Division, Wireless Telecommunications Bureau, at (202) 418-0640 or e-mail "smarkend@fcc.gov".

PROPERTY DESCRIPTION

The subject property is approximately 7,000 square feet, located on the 3000 block of Martin Luther King Jr. Way in between 34th and 35th Street. The subject lot is larger in size than neighboring residential but is consistent with the commercial property across the street in shape and size. The property is adjacent to similarly sized commercial parcels, consisting of mostly smaller scale residential and multi-family uses. The subject property contains a 3.5 story 18-unit residential building. The property was first developed post 1922 (based on Alameda County Assessors Data) with a three-story residential building. The site currently hosts four other telecommunication facilities.

GENERAL PLAN ANALYSIS

The property is located in a Urban Residential area under the General Plan's Land use & Transportation Element (LUTE). The intent of the area is: *"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 modification to an unmanned wireless telecommunications facility will not adversely affect or detract from the residential and commercial characteristics of the neighborhood. The proposal to modify a telecommunications facility through the relocation and co-location of antennas and equipment to an existing building would enhance an essential service in a residential district adjacent to the Fruitvale Avenue corridor, while ensuring the facility is reasonably concealed from both. The project therefore conforms to the area's intent and the following objectives of the LUTE;

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

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

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

ZONING ANALYSIS

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

The property is located in the RU-1 Urban Residential 1 Zone. The intent of the RU-1 Zone is: *"The intent is to create, maintain, and enhance areas of the City that are appropriate for multi-unit, low-rise residential structures and neighborhood businesses where appropriate in locations with good access to transportation and other services".*

The proposal meets the telecommunications Regulations regarding Site Location and Design Preferences and co-locating on a building with an existing wireless telecommunications facility; therefore, site alternatives and design analyses are not required. The project requires a 1:1 height to setback ratio for rooftop facilities and the applicant has redesigned the project to meet this requirement but still provides all the necessary concealment. The existing antennas were approved in 2001 when the screening and 1:1 requirement was not in effect. The proposal should act to reduce the view of the antennas in the surrounding residential district and the new RFP screen will further conceal the antennas.

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

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines categorically exempts specific types of projects from environmental review. Section 15301(e) of the State CEQA Guidelines exempts project involving additions to existing facilities or structures. The proposal to remove four antennas and install two new antennas on a rooftop at an existing wireless telecommunications facility meets this description: the project would constitute a minor modification. The project is therefore exempt from further environmental review.

KEY ISSUES AND IMPACTS

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

1. Conditional Use Permit

Section 17.33.040 of the City of Oakland Planning Code requires a Conditional Use Permit to modify a Macro Telecommunication Facility in the RU-1 Zone and requires a Major Conditional use permit if located within 100 feet of a residential zone. The RM-2 Mixed Housing Type Residential 2 Zone abuts the rear of the property. The required findings for a major conditional use permit are attached and included in staff's evaluation as part of this report.

2. Project Site

Section 17.128.110 of the City of Oakland Telecommunication Regulations requires that wireless facilities shall generally be located on designated properties or facilities in the following order of preference:

A. Co-located on an existing structure or facility with existing wireless antennas.
B. City owned properties or other public or quasi-public facilities.
C. Existing commercial or industrial structures in non-residential zones.
D. Existing commercial or industrial structures in residential zones.
E. Other non-residential uses in residential zones.
F. Residential uses in non-residential zones.
G. Residential uses in residential zones.

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

Since the proposed project involves the relocation and co-location of new antennas on an existing structure with an existing wireless facility, the proposed development meets the (A) co-located on an existing structure or facility with existing wireless antennas, therefore a site alternatives analysis is not required.

3. Project Design

Section 17.128.120 of the City of Oakland Telecommunications Regulations indicates that new wireless facilities shall generally be designed in the following order of preference:

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

* Facilities designed to meet an A or B ranked preference do not require site design alternatives analysis. Facilities designed to meet a C through F ranked preference, inclusive, must submit a site design alternatives analysis as part of the required application materials. A site design alternatives analysis shall, at a minimum, consist of:

The project meets design criteria (A) & (B) since all the existing and proposed antennas will be mounted inside new rooftop RF screen intended to look like an architectural element along the roof of the building. Furthermore, to mitigate visual impacts, the antennas will be mounted at least 48' above the public right of way. The associated equipment will be located inside the building and will have no visual impact. In its entirety, the project will be reasonably concealing these carriers' antennas from the right of way and neighbors and bring the site closer into conformity with current telecommunications regulations.

4. Project Radio Frequency Emissions Standards

Section 17.128.130 of the City of Oakland Telecommunication Regulations require that the applicant submit the following verifications including requests for modifications to existing facilities:

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

RF-EME Electromagnetic Energy Compliance Report, prepared by Lindsey Dutton, A professional of EnviroBusiness Inc., indicates that the proposed project meets the radio frequency (RF) emissions

standards as required by the regulatory agency. The report states that the proposed project will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not cause a significant impact on the environment. Additionally, staff recommends as a condition of approval that, prior to the issuance of a final building permit, the applicant submits a certified RF emissions report stating that the facility is operating within acceptable thresholds established by the regulatory federal agency.

CONCLUSION

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

RECOMMENDATIONS:

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

Prepared by:

Jose M. Herrera-Preza
Planner I

Approved by:

Scott Miller
Zoning Manager

Approved for forwarding to the
City Planning Commission:

Rachel Flynn, Director
Department of Planning and Building

ATTACHMENTS:

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

Findings for Approval

This proposal meets the required findings under Section 17.134.050, General Use Permit Criteria; Section 17.128.070(C), Conditional Use Permit Criteria for Macro Facilities; Section 17.136.050(B), Regular Design Review; and Section 17.128.070(B), Design Review Criteria for Mini Facilities, as set forth below. Required findings are shown in bold type; explanations as to why these findings can be made are in normal type.

SECTION 17.134.050 – GENERAL USE PERMIT CRITERIA:

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

The purpose of the project is to enhance wireless telecommunications in the area while improving the current site conditions and bring the site as a whole closer to conformity with current regulations. New antennas will be completely concealed behind new RF screens intended to appear like rooftop appurtenances, so antennas will not be visible from the public right of way within the residential district. The antennas and related equipment, including attachment posts and coaxials (cables), will be painted to match the color of the building along the roofline.

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

The proposed modifications to the unmanned telecommunications facility will result in an improvement to the exterior appearance of the building by removing existing non-conforming panel antennas from the exterior building façade. The modification will improve the existing functional working and living environment by expanding telecommunications service in the area and would maintain the attractive nature of the existing building.

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 and region. This will be achieved by the functional use of the site by providing a regional telecommunication facility for the community and will be available to police, fire, public safety organizations and the general public.

D. That the proposal conforms to all applicable design review criteria set forth in the design review procedure at Section 17.136.070.

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

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

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

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

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

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

2. The proposed project must not disrupt the overall community character.
The proposal will relocate three existing antennas from the building façade and onto the roof top of an existing building and will have no affect on the overall community character of Martin Luther King Jr. Way.

SECTION 17.136.050.A - REGULAR DESIGN REVIEW CRITERIA:

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

The proposal would modify an existing unmanned telecommunications facility through the removal of four antennas, addition of two new antennas and create a new 6' extension for a new RF screen above the roofline but below the penthouse of the existing building. The screen will extend 6' above the roofline at its highest point. The removal and addition of antennas will not create an increase in height or size of the facilities. The FR screen will match the existing building in their color, texture and finish materials. The new antennas will be fully concealed behind an RF friendly screen and maintains the allowed projection above the height limit. The project will not change the scale or location of the facility and therefore is consistent and well related to the surrounding area.

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

The proposal protects and preserves the surrounding neighborhood context by removing non-conforming antennas located along the exterior of the building façade and reasonably concealing the new antennas while co-locating additional wireless telecommunications microwave dishes with an existing facility. The antennas will be fully concealed behind an FR screen that is painted and textured to match the building. The antennas will be mounted 48 feet above the public right of way thus visually mitigating any impact to the surrounding neighborhood. The equipment cabinet will be located inside the building in a dedicated

equipment room.

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

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

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

This criterion is not applicable to this proposal.

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

The proposal conforms with the city of Oakland Comprehensive General Plan meeting specific General Plan policies and the Supplemental Report and Recommendations on Revision to the Citywide Telecommunications Regulations. The proposal will conform to performance standards for noise set forth in Section 17.143.020(j) and (k) for decibel levels in residential areas for both day and nighttime use. The project conforms to all mini-facility definitions set forth in Section 17.128.050 and meets all design review criteria to minimize impacts throughout the neighborhood.

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

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

2. Antennas mounted on architecturally significant structures or significant architectural details of the building should be covered by appropriate casings which are manufactured to match existing architectural features found on the building.
The antennas will be rooftop mounted and project 6 feet above the roofline behind an existing FR screen made to look a rooftop appurtenance.

3. Where feasible, antennas can be placed directly above, below or incorporated with vertical design elements of a building to help in camouflaging.
The project features an existing rooftop penthouse screen that incorporates the vertical design elements of the building. The treatment is intended to screen antennas from public view and utilize the penthouse as a new staging area for replacement antennas to further relocate the non-conforming antennas from other carriers.

4. Equipment shelters or cabinets shall be screened from the public view by using landscaping, or

materials and colors consistent with surrounding backdrop or placed underground or inside existing facilities or behind screening fences.
The equipment cabinets are located inside the building in a dedicated equipment room thus will be concealed from public view.

5. Equipment shelters or cabinets shall be consistent with the general character of the area.
The equipment shelters will remain consistent with the general character of the area since all cabinets and equipments are inside the building in a dedicated equipment room.

6. For antennas attached to the roof, maintain a 1:1 ratio (example: ten feet high antenna requires ten feet setback from facade) for equipment setback unless an alternative placement would reduce visual impact; treat or screen the antennas to match existing air conditioning units, stairs, elevator towers, or other background; avoid placing roof mounted antennas in direct line with significant view corridors.
The proposed rooftop antennas will project 10' above the roof line and will meet the establish 1:1 setback ratio for new screen enclosure along the rooftop however, due to the existing screen along the edge of the roofline any antenna mounted behind the screen will adequately reduce any visual impact. The associated equipment will be located inside a secured room inside the 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.
Antennas will be located on a rooftop not accessible to the public and equipment cabinets will be located in a secured room inside the building.

CONDITIONS OF APPROVAL
CMDV13-071

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, **CMD13-071**, and the plans dated **February 21st, 2013** and submitted on **February 21st, 2013** 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 modification of an existing unmanned macro telecommunications facility located along the rooftop of an existing building, under Oakland Planning Code 17.128**

2. **Effective Date, Expiration, Extensions and Extinguishment**
   Ongoing
   Unless a different termination date is prescribed, this Approval shall expire **two calendar years** from the approval date, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired.

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

4. **Conformance with other Requirements**
   Prior to issuance of a demolition, grading, P-job, or other construction related permit
   a) The project applicant shall comply with all other applicable federal, state, regional and/or local codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the City's Public Works Agency.

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

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

Ongoing

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

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

c) Violation of any term, conditions or project description relating to the Approvals is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approvals or alter these conditions if it is found that there is violation of any of the conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions.

6. Signed Copy of the Conditions

With submittal of a demolition, grading, and building permit

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

7. Indemnification

Ongoing

a) To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (hereafter collectively called City) from any liability, damages, claim, judgment, loss (direct or indirect)action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to participate in the defense of said Action and the applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.

b) Within ten (10) calendar days of the filing of any Action as specified in subsection A above, the applicant shall execute a Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Letter of Agreement shall survive termination, extinguishment or invalidation of the approval. Failure to

timely execute the Letter Agreement does not relieve the applicant of any of the obligations contained in this condition or other requirements or conditions of approval that may be imposed by the City.

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

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

10. **Job Site Plans**
Ongoing throughout demolition, grading, and/or construction
At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval, shall be available for review at the job site at all times.

11. **Special Inspector/Inspections, Independent Technical Review, Project Coordination and Management**
Prior to issuance of a demolition, grading, and/or construction permit
The project applicant may be required to pay for on-call special inspector(s)/inspections as needed during the times of extensive or specialized plancheck review, or construction. The project applicant may also be required to cover the full costs of independent technical and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval. The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

PROJECT SPECIFIC CONDTIONS:

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

13. Operational

Ongoing.

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

14. Compliance with Title 24

Prior to issuance of certificate of occupancy.

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

APPROVED BY:

City Planning Commission:_____(July 17, 2013)_____(vote)

Sprint

SITE NAME: MACARTHUR INTERCHANGE

SITE NUMBER: SF35XC008-A
MARKET NAME: SF BAY
NETWORK VISION MM LAUNCH

SITE ADDRESS: 650 34TH STREET
OAKLAND, CA 94609
ALAMEDA COUNTY

SITE TYPE: BASEMENT EQUIPMENT
ROOFTOP ANTENNAS

SITE INFORMATION

SITE ADDRESS:
650 34TH STREET
OAKLAND, CA 94609

PROPERTY OWNER:
B. MARTIN SOLNORDAL
25 LA SALLE AVE
PIEDMONT, CA 94611
PHONE: (510) 919-0999

APPLICANT REPRESENTATIVE:
MICHELLE WELLER
CORTEL, LLC
EMAIL: michelle.weller@cortel-llc.com
PHONE: (925) 997-1312

CONSTRUCTION MANAGER:
EARLE EARLEY
OVERLAND CONTRACTING
2999 OAK ROAD SUITE 490
WALNUT CREEK, CA 94597
EARLEY@OVERLANDCONTRACTING.COM
PHONE: (408) 636-3717

EQUIPMENT SUPPLIER:
SAMSUNG TELECOMMUNICATIONS AMERICA (STA)
1301 EAST LOOKOUT DRIVE
RICHARDSON, TX 75082-4124
PHONE: (972) 761-7000

COUNTY:
ALAMEDA

APN
009-0738-004

ZONING
R-50

ELEVATION:
±55' A.M.S.L.

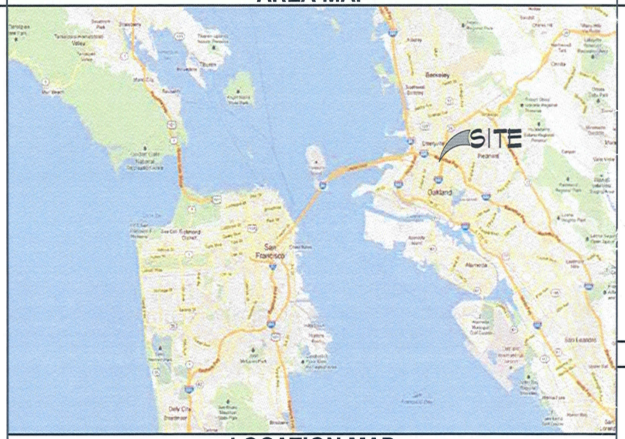
LATITUDE (NAD83):
37° 49' 25.05" N
37.823626

LONGITUDE (NAD83):
122° 16' 12.59" W
-122.270163

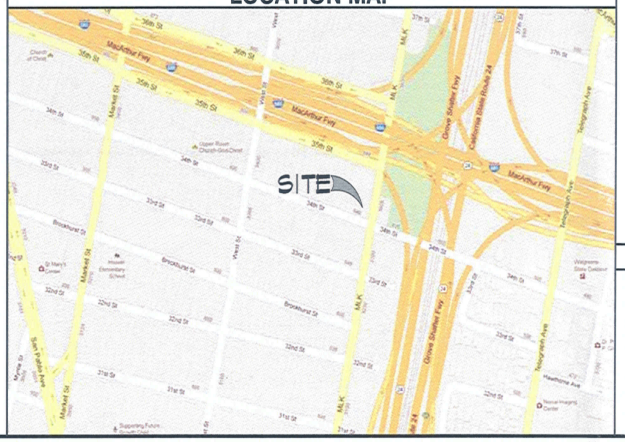
POWER COMPANY:
PG&E

TELCO COMPANY:
AT&T

AREA MAP



LOCATION MAP



APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

2010 CALIFORNIA BUILDING CODE

2010 CALIFORNIA MECHANICAL CODE

2010 CALIFORNIA PLUMBING CODE

2010 CALIFORNIA ELECTRICAL CODE

IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL

PROJECT DESCRIPTION

THE PROPOSED PROJECT SHALL INCLUDE:

REMOVAL AND ADDITION OF EQUIPMENT WITHIN THE EXISTING EQUIPMENT AREA:

REMOVE (2) EXISTING EQUIPMENT CABINETS & EXISTING (1) GPS ANTENNA
INSTALL (2) NEW EQUIPMENT CABINETS & (1) NEW GPS ANTENNA

REMOVAL AND ADDITIONAL INSTALLATION OF ANTENNAS ON THE EXISTING BUILDING ROOFTOP:

REMOVE (4) EXISTING ANTENNAS
INSTALL (2) NEW SPRINT PANEL ANTENNAS

INSTALLATION OF ASSOCIATED EQUIPMENT/CABLING ON THE EXISTING ROOFTOP AND PROPOSED ANTENNA ARRAY:

INSTALL (4) NEW RRUS
INSTALL (2) NEW FILTERS
INSTALL (2) NEW RF TANSPARENT ANTENNA SCREENS

INSTALL NEW HYBRID CABLING WINTHIN NEW CONDUITS FROM NEW EQUIPMENT TO THE ANTENNAS ALONG THE EXISTING ANTENNA CABLING PATH

INSTALL NEW FIBER & FTP/NID EQUIPMENT

DRAWING INDEX

T-1	TITLE SHEET
A-1	SITE PLAN
A-2	EXISTING ROOF / DEMO PLAN
A-3	PROPOSED ROOF PLAN
A-4	EQUIPMENT LAYOUT PLANS
A-5	ANTENNA LAYOUT & SCHEDULE
A-6	ELEVATIONS
F-1	FIBER PLAN & ENLARGED FIBER PLAN

ENGINEER OF RECORD

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. STE 200
IRVINE, CA 92612
ENGINEER: WISSAM ZALZALI (P.E.# C71655)
PHONE: (949) 609-9559
PM: DEAN WALKER
PHONE: (714) 230-5714
www.zalzali.com

DRIVING DIRECTIONS FROM NEAREST AIRPORT

FROM SFO AIRPORT:

TAKE THE RAMP TO US-101 N. KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR US-101 N/SAN FRANCISCO AND MERGE ONTO US-101 N. SLIGHT RIGHT ONTO I-80 E (SIGNS FOR BAY BRIDGE/OAKLAND). TAKE EXIT 8B TO MERGE ONTO I-580 E TOWARD CA-24/HAYWARD/STOCKTON. EXIT ON THE LEFT ONTO W MACARTHUR BLVD. TURN RIGHT ONTO MARTIN LUTHER KING JR WAY/MLK. TURN RIGHT ONTO 34TH ST. SITE WILL BE ON THE RIGHT.

*650 34TH STREET OAKLAND, CA 94609

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BLACK & VEATCH

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

PROJECT NO:	-
DRAWN BY:	SS
CHECKED BY:	DW

REV	DATE	DESCRIPTION
0	09/08/2013	100% ZD'S FOR ZAP
B	12/03/2012	100% ZD'S FOR REDLINE
A	10/23/2012	90% ZD'S FOR REDLINE

NOT TO BE USED FOR CONSTRUCTION

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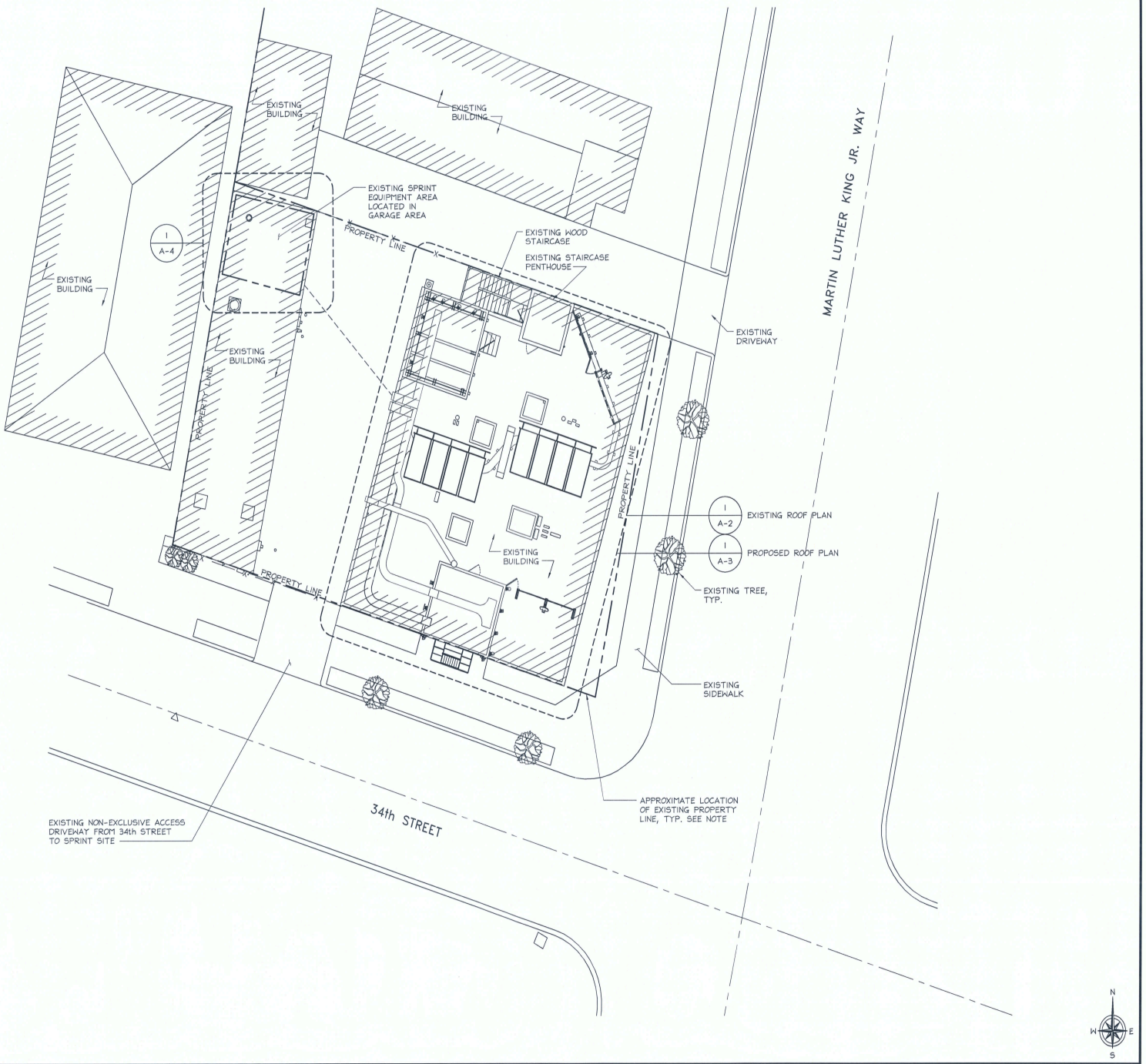
OAKLAND, CA 94609

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

NOTE:

PROPERTY LINES SHOWN ARE PRELIMINARY AND DONE WITHOUT THE BENEFIT OF A SITE SURVEY



SITE PLAN

24"x36" SCALE: 3/32" = 1'-0"
11"x17" SCALE: 3/64" = 1'-0"
8' 4' 0" 8'

1

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2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

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CHECKED BY:	DW

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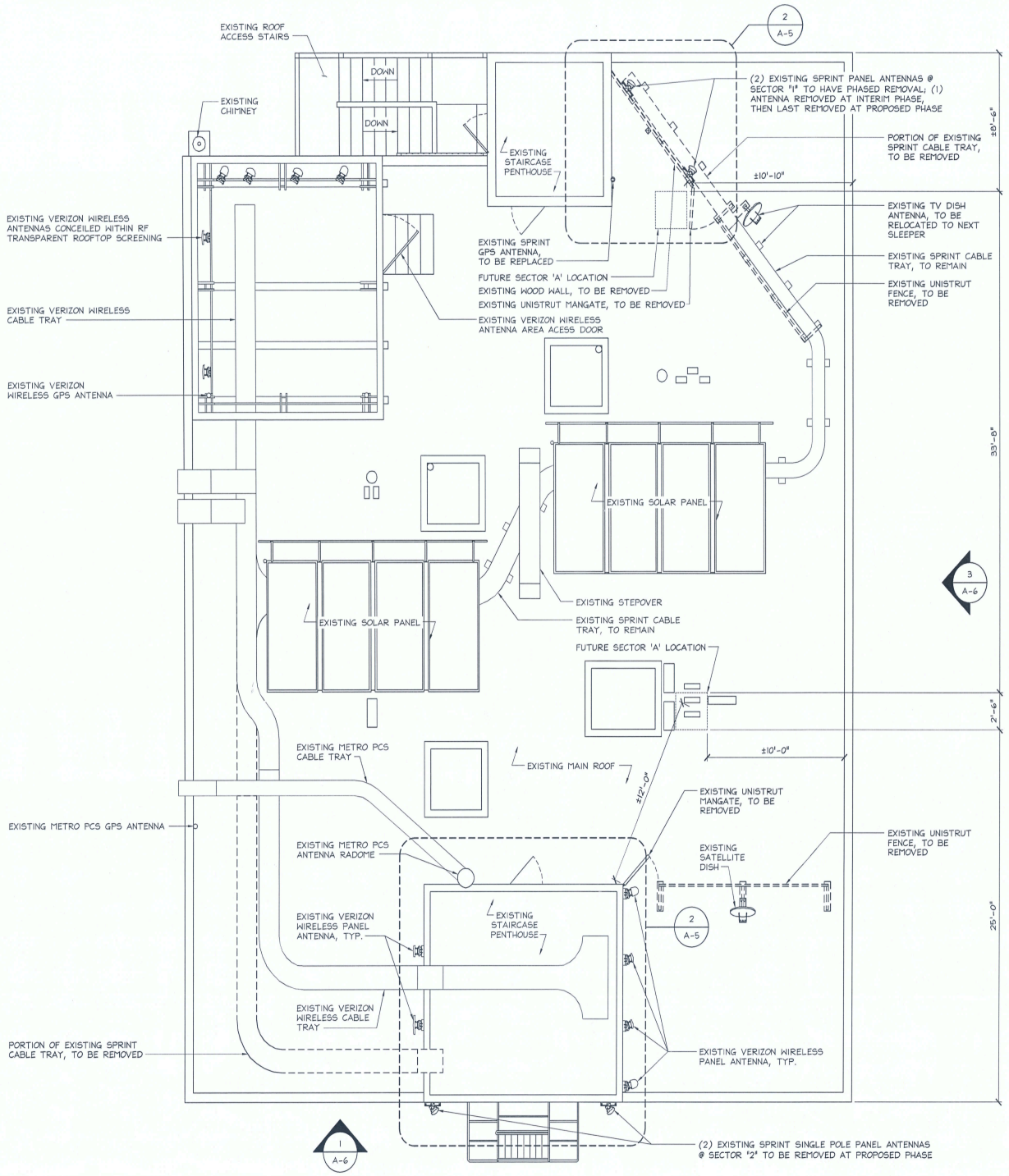
MACARTHUR INTERCHANGE
650 34TH STREET
OAKLAND, CA 94609

SHEET TITLE
SITE PLAN

SHEET NUMBER
A-1



NOTES:

1. PROPERTY LINES SHOWN ARE PRELIMINARY AND DONE WITHOUT THE BENEFIT OF A SITE SURVEY
2. EXISTING SPRINT PANEL ANTENNAS HAVE BEEN PAINTED TO MATCH EXISTING BUILDING

EXISTING ROOF PLAN

24"x36" SCALE: 1/4" = 1'-0"
11"x17" SCALE: 1/8" = 1'-0"

4' 3' 2' 1' 0' 4'

1

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2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

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REV	DATE	DESCRIPTION
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NOT TO BE USED FOR CONSTRUCTION

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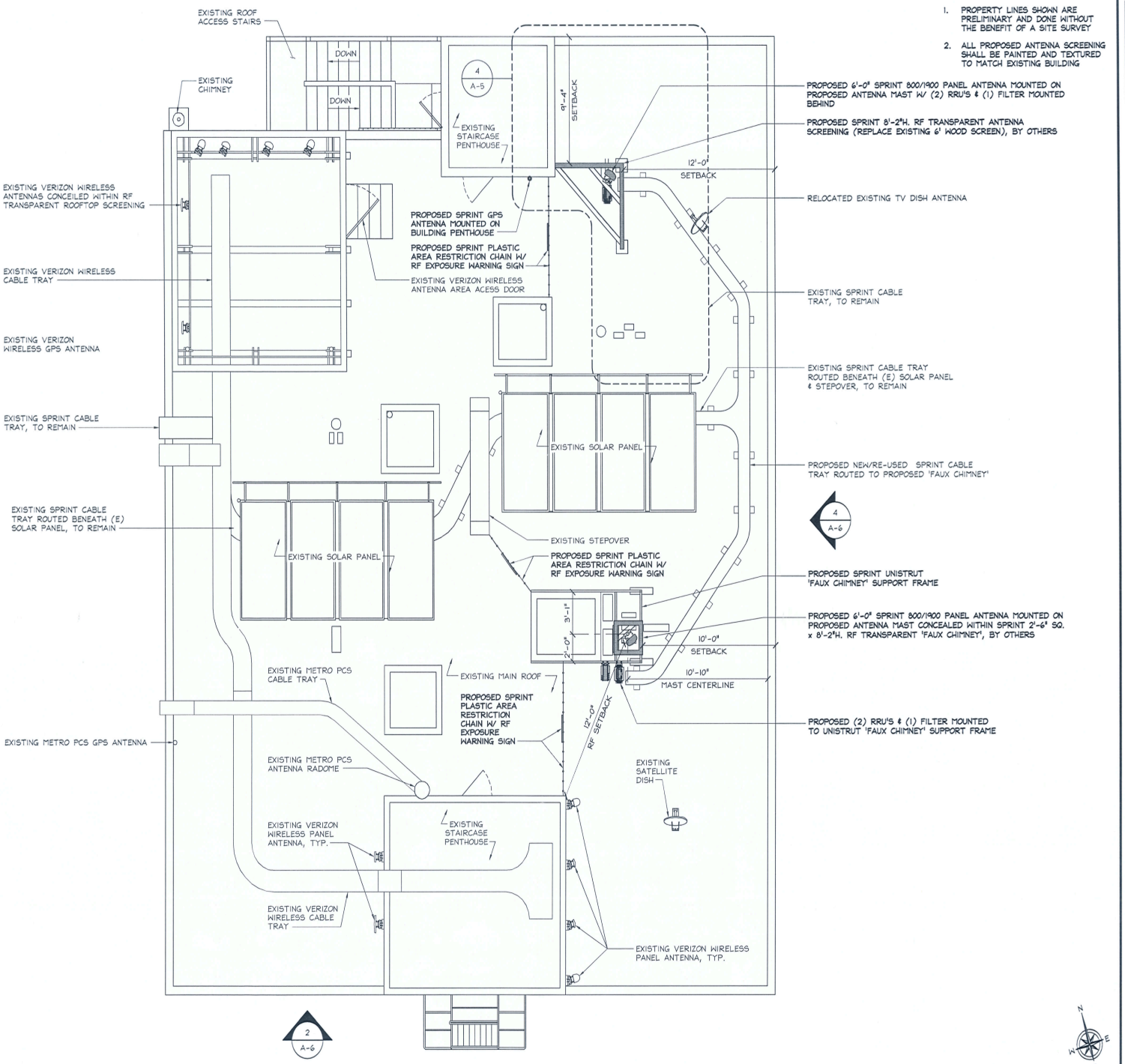
MACARTHUR INTERCHANGE
650 34TH STREET
OAKLAND, CA 94609

SHEET TITLE
EXISTING ROOF PLAN

SHEET NUMBER
A-2



NOTES:

1. PROPERTY LINES SHOWN ARE PRELIMINARY AND DONE WITHOUT THE BENEFIT OF A SITE SURVEY
2. ALL PROPOSED ANTENNA SCREENING SHALL BE PAINTED AND TEXTURED TO MATCH EXISTING BUILDING

PROPOSED ROOF PLAN

24"x36" SCALE: 1/4" = 1'-0"
11"x17" SCALE: 1/8" = 1'-0"
4' 3' 2' 1' 0" 4'

1

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SAMSUNG

BLACK & VEATCH

ZALZALI & ASSOCIATES INC.
2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

PROJECT NO:	-
DRAWN BY:	SS
CHECKED BY:	DW

REV	DATE	DESCRIPTION
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A	10/23/2012	90% ZD'S FOR REDLINE

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OAKLAND, CA 94609

SHEET TITLE
PROPOSED ROOF PLAN

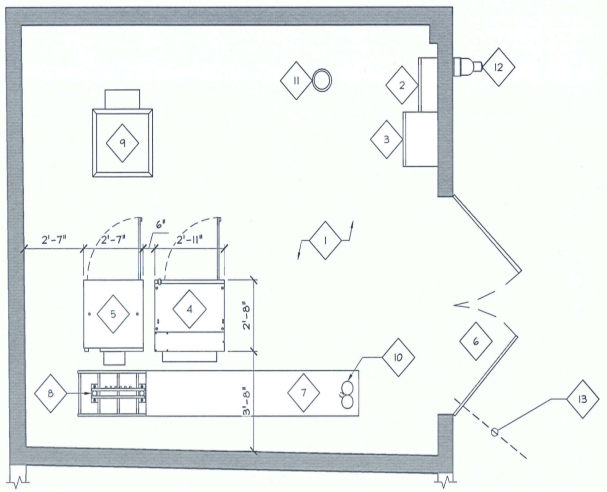
SHEET NUMBER
A-3

KEYNOTES:

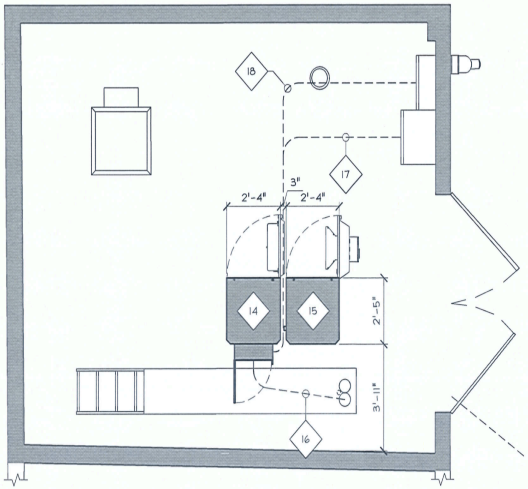
1. EXISTING SPRINT EQUIPMENT ROOM
2. EXISTING 200A SPRINT PPC CABINET
3. EXISTING SPRINT TELCO CABINET
4. EXISTING SPRINT CDMA EQUIPMENT CABINET, TO BE REMOVED
5. EXISTING SPRINT POWER EQUIPMENT CABINET, TO BE REMOVED
6. EXISTING SPRINT DUAL SWING ACCESS DOOR
7. EXISTING SPRINT CABLE TRAY @ GRADE
8. EXISTING SPRINT CABLE RISER, TO BE REMOVED
9. EXISTING SPARE SPRINT EQUIPMENT PLATFORM
10. EXISTING SPRINT 6'Ø CONDUIT STUB-UP, 2 TOTAL, 0 EMPTY
11. EXISTING SPRINT GROUND INSPECTION PORT
12. EXISTING SPRINT EMERGENCY GENERATOR RECEPTACLE
13. EXISTING SPRINT U.G. CONDUIT ROUTE
14. PROPOSED SPRINT MMBS EQUIPMENT CABINET MOUNTED ON EXISTING CONCRETE PAD
15. PROPOSED SPRINT BBU EQUIPMENT CABINET MOUNTED ON EXISTING CONCRETE PAD
16. PROPOSED CONDUITS W/ HYBRID CABLE FROM MMBS MUDROOM TO ANTENNAS ALONG EXISTING COAX ROUTE
17. PROPOSED (2) 2" SURFACE MOUNTED RGS CONDUITS W/ CAT 5 CABLE FROM TELCO CABINET TO MMBS MUDROOM (ROUTE VIF)
18. PROPOSED (1) 2" SURFACE MOUNTED RGS CONDUIT W/ (3) #2 AWG + (1) #2 AWG GROUND FROM MMBS CABINET TO PPC PANEL 'A'

NOTE:

1. FOR PROPOSED FIBER & EQUIPMENT, SEE SHEET F-1



EXISTING



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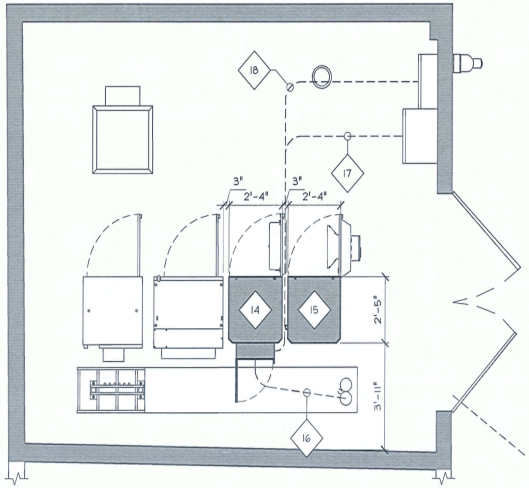

INTERIM

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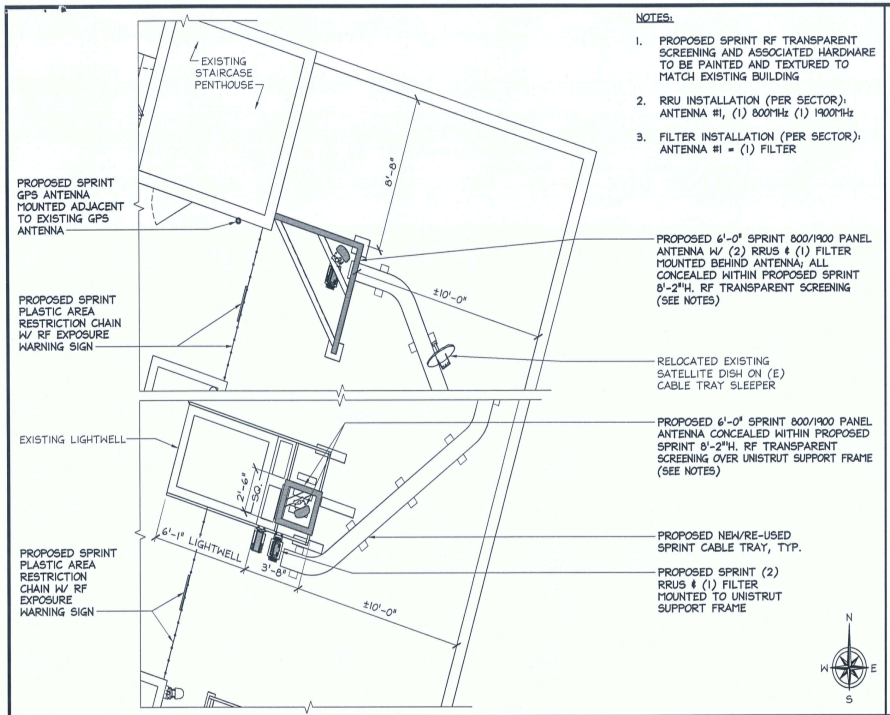
MACARTHUR INTERCHANGE
650 34TH STREET
OAKLAND, CA 94609

SHEET TITLE
EQUIPMENT LAYOUT PLANS

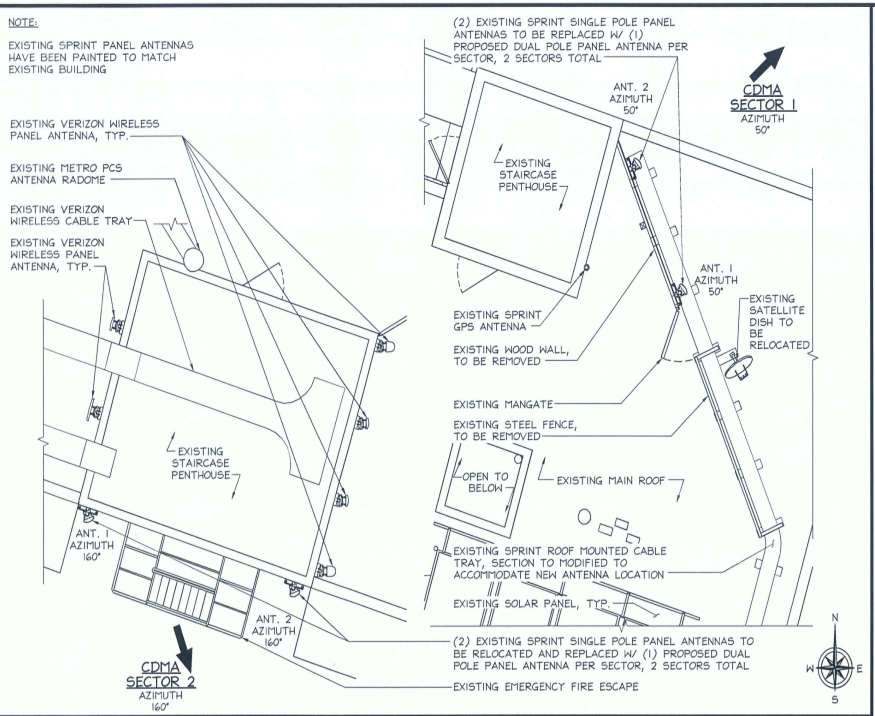
SHEET NUMBER
A-4



PROPOSED ANTENNA LAYOUT

24"x36" SCALE: 1/4" = 1'-0"
11"x17" SCALE: 1/8" = 1'-0"
4' 3' 2' 1' 0" 4'

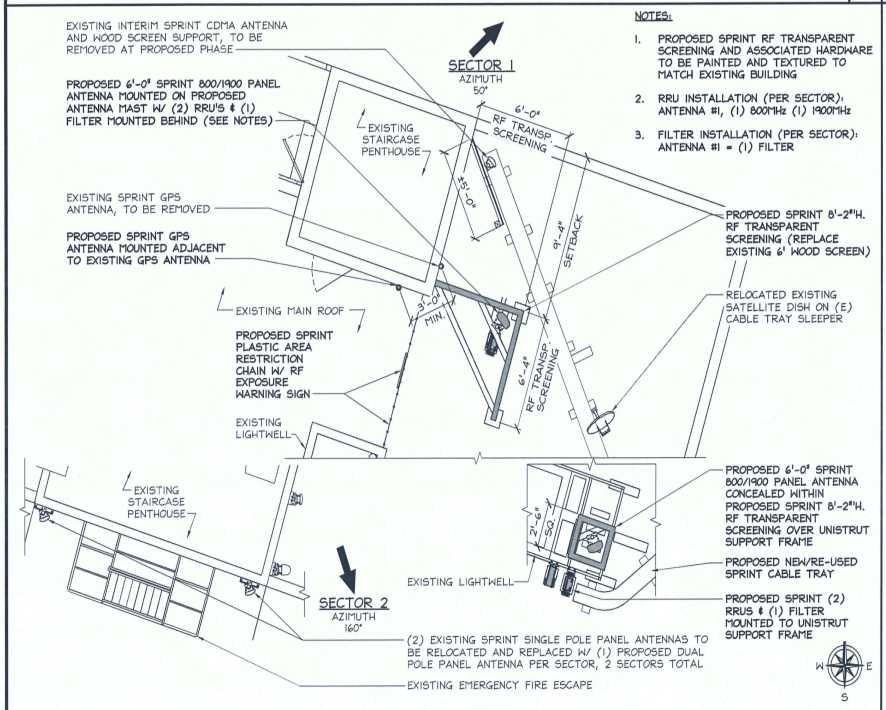
4



EXISTING ANTENNA LAYOUT

24"x36" SCALE: 1/4" = 1'-0"
11"x17" SCALE: 1/8" = 1'-0"
4' 3' 2' 1' 0" 4'

2



INTERIM ANTENNA LAYOUT

24"x36" SCALE: 1/4" = 1'-0"
11"x17" SCALE: 1/8" = 1'-0"
4' 3' 2' 1' 0" 4'

3

PROPOSED OPTIMAL ANTENNA AND TRANSMISSION CABLES REQUIREMENT (VERIFY WITH CURRENT EBTS)

	ANTENNA	PROPOSED TECHNOLOGY	ANTENNA MODEL		ANTENNA AZIMUTH		RAD CENTER	DOWN-TILT (RET*)	TRANSMISSION LINE		
			EXISTING	PROPOSED	EXISTING	PROPOSED			LENGTH	TYPE(S)	CONVEYANCE
SECTOR '1'	1	800/1900 MHz	FR90-16-00DP	P65-16-XLPP-RR	50°	50°	44'-0"	(800/1900) 6 / 5	±75'	FIBER & +48VDC	RGS OR SEALTITE FLEX
	2	-	FR90-16-00DP	-	-	-	-	-	-	-	-
SECTOR '2'	1	800/1900 MHz	RR33-20-00DPL4	P65-16-XLPP-RR	160°	160°	44'-0"	(800/1900) 6 / 4	±60'	FIBER & +48VDC	RGS OR SEALTITE FLEX
	2	-	RR33-20-00DPL4	-	-	-	-	-	-	-	-
GPS	-	GPS L1	-	GPS-TMG-HR-26N	-	-	-	-	±60'	1/2" COAX	RGS OR SEALTITE FLEX

NOTES:
1. EXISTING ANTENNAS ARE CDMA UNLESS NOTED OTHERWISE.
2. DIMENSIONS OF EXISTING ANTENNAS SPACING OR PLATFORMS ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY PRIOR TO START OF CONSTRUCTION (SEE GENERAL NOTES, SHEETS GN-1 AND GN-2).
3. PROPOSED SPRINT ANTENNAS INCLUDE RESPECTIVE RRU'S WHICH SHALL BE MOUNTED ON THE PIPE BEHIND THE ANTENNA SIMILAR TO THAT SHOWN IN RRU MOUNTING DETAILS ON SHEET D-2.
4. FIELD VERIFY EXISTING AZIMUTH BEFORE SLIDING THE ANTENNA. PRIOR APPROVAL FROM SPRINT MUST BE OBTAINED BEFORE MOVING ANY ANTENNAS.

ANTENNA MOUNTING NOTES

1. APPROXIMATE LENGTH OF (1) ANTENNA CABLE RUN = APPROX. LENGTH OF LATERAL DISTANCE + ANTENNA MOUNTING HEIGHT + 20'
2. CONTRACTOR SHALL VERIFY THE DOWNTILT OF EACH ANTENNA WITH A DIGITAL LEVEL.
3. CONTRACTOR TO CONFIRM ANTENNA CABLE COLOR CODING PRIOR TO CONSTRUCTION. (SEE SHEET RF-2)
4. COLOR BANDING SHALL BE 2" WIDE ON THE MAIN LINE (5 WRAP MIN.) SPACING TO BE 1" BETWEEN COLORS. COLOR BAND ON JUMPERS 1" WIDE WITH 1" SPACE START COLOR BANDS 2" BEYOND WEATHERPROOFING. START SECTOR COLOR NEXT TO END CONNECTOR. SEE SHEET RF-2 FOR HYBRID ANTENNA CABLE COLOR CODING.
5. COAX JUMPERS SHALL NOT EXCEED 15' IN LENGTH; CONFIRM SPECIFIC LENGTH PER SITE WITH CURRENT EBTS

ANTENNA SCHEDULE

24"x36" SCALE: NTS
11"x17" SCALE: NTS

1

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2070 BUSINESS CENTER DR. SUITE 200
IRVINE, CA 92612

PROJECT NO:	-
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CHECKED BY:	DW

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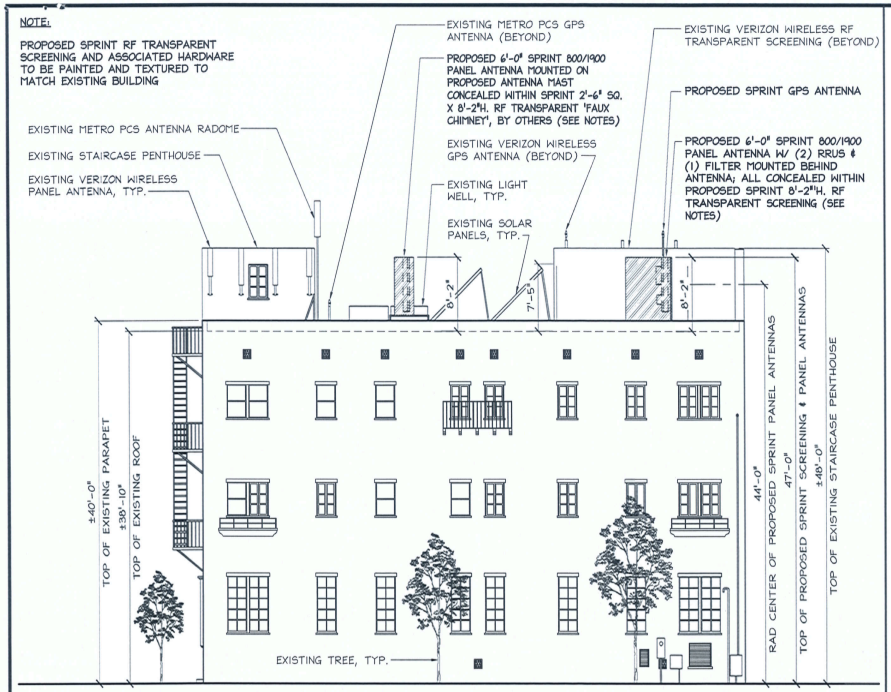
MACARTHUR INTERCHANGE
650 34TH STREET
OAKLAND, CA 94609

SHEET TITLE
ANTENNA LAYOUT & SCHEDULE

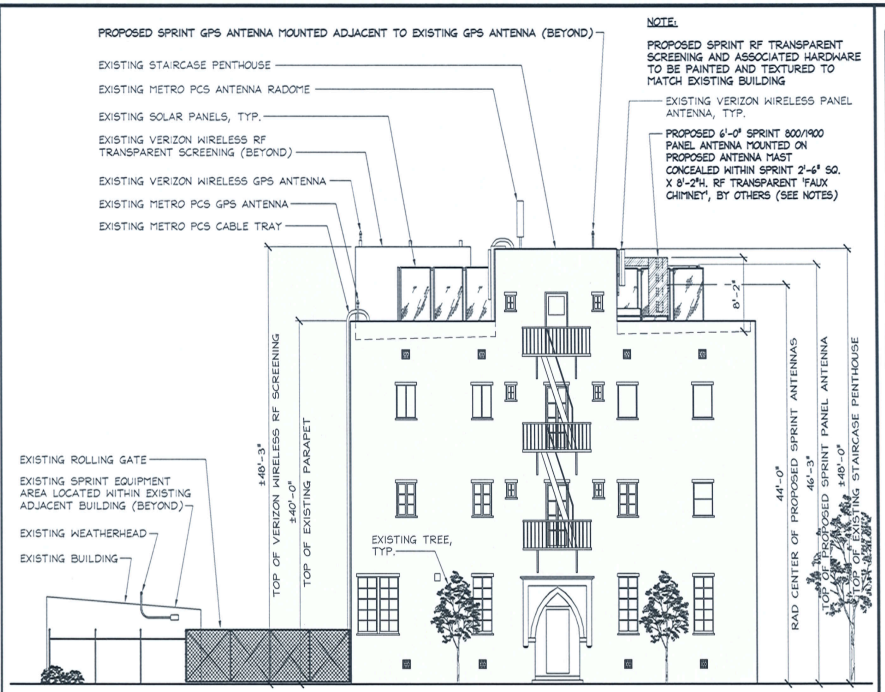
SHEET NUMBER
A-5



PROPOSED EAST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

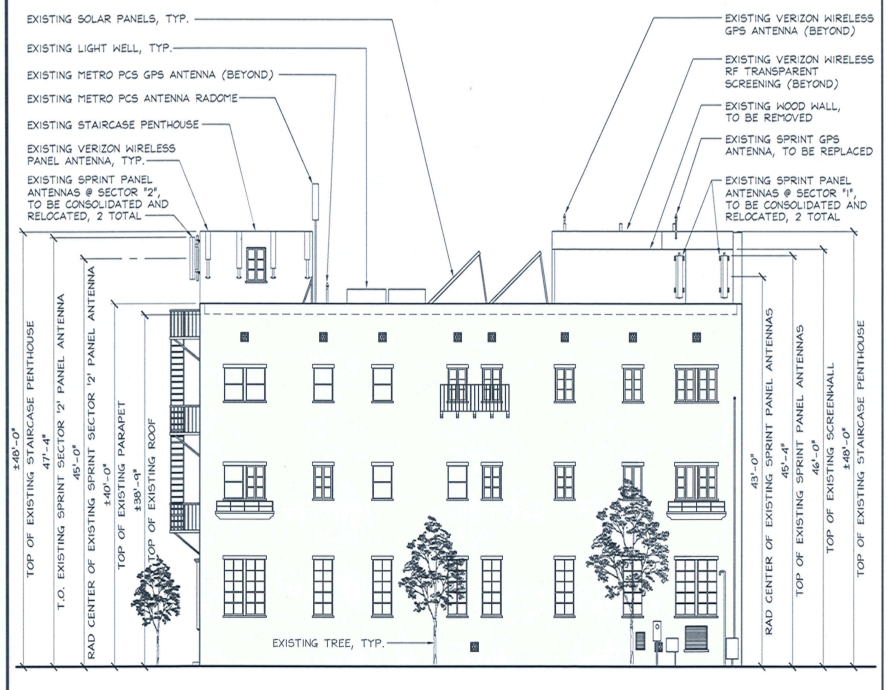
4



PROPOSED SOUTH ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

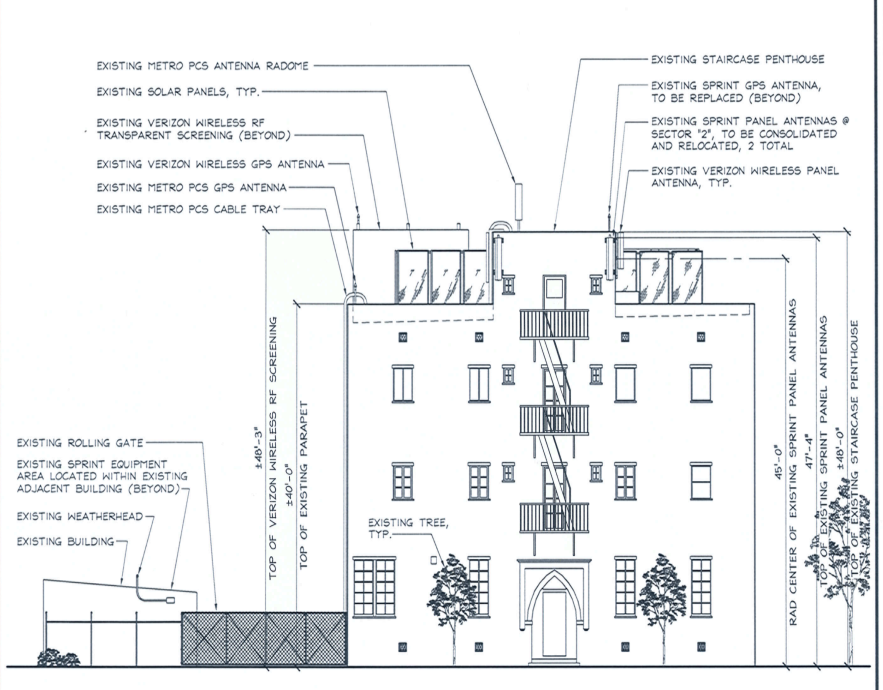
2



EXISTING EAST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

3



EXISTING SOUTH ELEVATION

24"x36" SCALE: 1/8" = 1'-0"
11"x17" SCALE: 1/16" = 1'-0"
8' 6' 4' 2' 0" 8'

1

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IRVINE, CA 92612

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SF35XC008-A
MACARTHUR INTERCHANGE
650 34TH STREET
OAKLAND, CA 94609

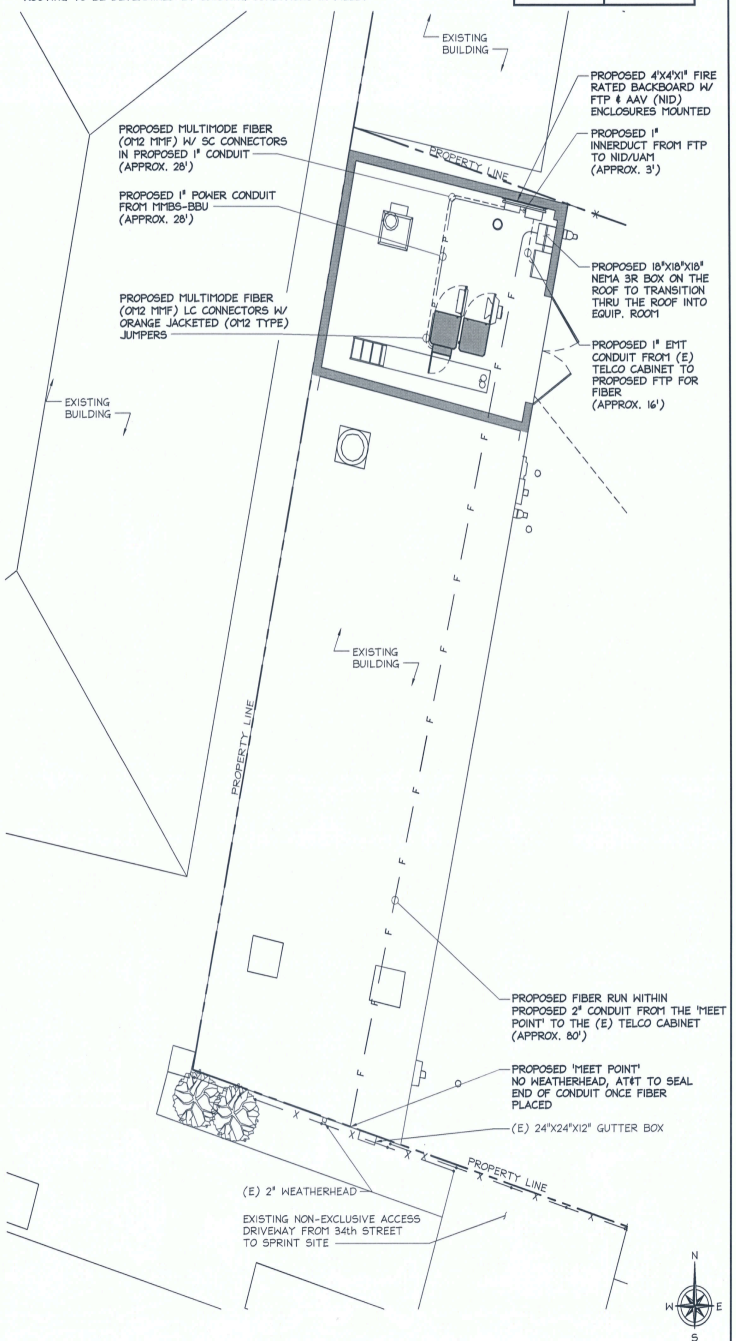
SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-6

NOTES:

1. EXISTING EQUIPMENT AND ANTENNAS SHOWN HERE FOR CLARITY. SEE A-2 AND A-3 FOR EXISTING AND PROPOSED EQUIPMENT AND ANTENNA LAYOUTS.
2. DRAWING IS DIAGRAMMATIC IN NATURE, EXACT CONDUIT ROUTING TO BE DETERMINED BY EXISTING CONDITIONS IN FIELD.

LENGTH OF FIBER RUN AVV TO MMBS	
DISTANCE	28'±



ENLARGED FIBER PLAN

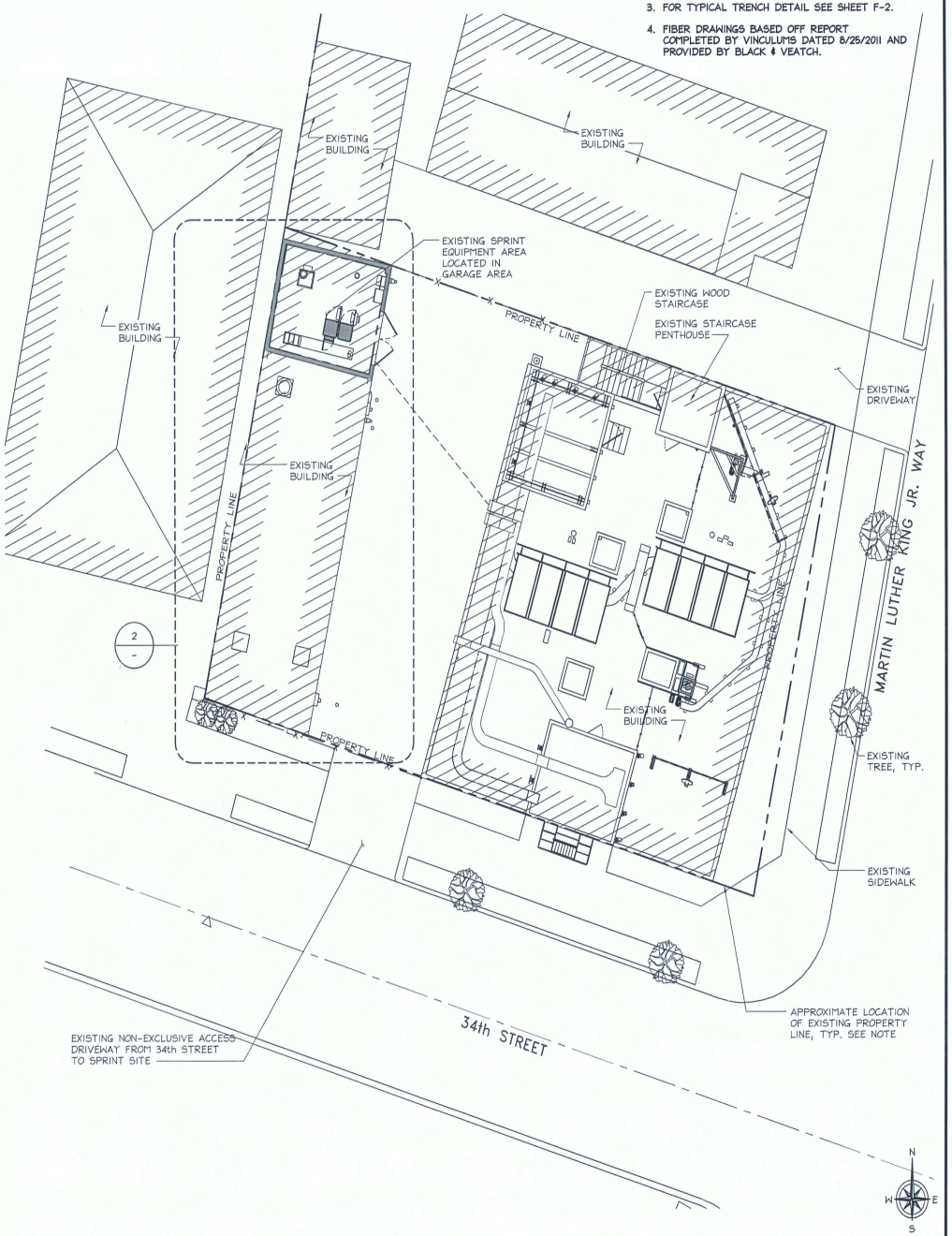
24"x36" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"
4' 2' 0" 4'

2

LENGTH OF FIBER RUN "MEET-ME POINT" TO AAV	
DISTANCE	108'±

NOTES:

1. PROPERTY LINES SHOWN ARE PRELIMINARY AND DONE WITHOUT THE BENEFIT OF A SITE SURVEY.
2. UTILITY AND ACCESS EASEMENTS SHOWN ARE APPROXIMATE LOCATION. CONTRACTOR TO VERIFY EXACT LOCATION.
3. FOR TYPICAL TRENCH DETAIL SEE SHEET F-2.
4. FIBER DRAWINGS BASED OFF REPORT COMPLETED BY VINCULUM DATED 8/25/2011 AND PROVIDED BY BLACK & VEATCH.



OVERALL FIBER PLAN

24"x36" SCALE: 1" = 10'-0"
11"x17" SCALE: 1" = 20'-0"
10' 5' 0" 10'

1

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OAKLAND, CA 94609

SHEET TITLE
FIBER PLAN & ENLARGED FIBER PLAN

SHEET NUMBER
F-1

SF35XC008-A

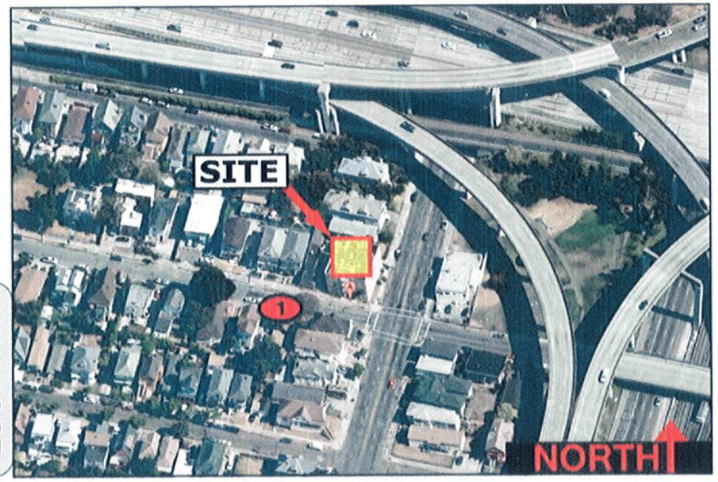
MACARTHUR INTERCHANGE
650 34TH STREET
OAKLAND, CA 94609

Sprint

VIEW #: 1

AUGUST 16, 2012

LOCATION



EXISTING

PROPOSED

The illustration above is a representation of the proposed project based on information provided by the client. Actual construction may vary dependent on approved construction plans and therefore the A&E firm will not be held responsible for any post production design changes.

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ZALZALI & ASSOCIATES, INC.
2070 BUSINESS CENTER DRIVE, SUITE 200
IRVINE, CA 92612
949.609.9559
949.606.7222 (FAX)

REV:
A

SF35XC008-A

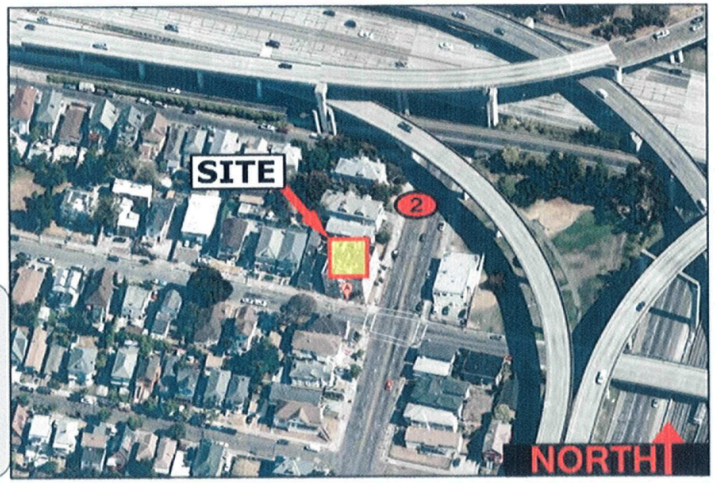
MACARTHUR INTERCHANGE
650 34TH STREET
OAKLAND, CA 94609

Sprint

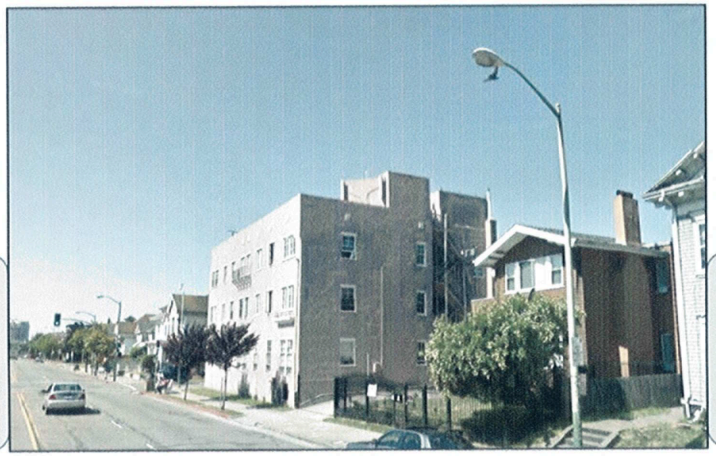
VIEW #: 2

AUGUST 16, 2012

LOCATION



EXISTING



PROPOSED

The illustration above is a representation of the proposed project based on information provided by the client. Actual construction may vary dependent on approved construction plans and therefore the A&E firm will not be held responsible for any post production design changes.

SPRINT
6580 SPRINT PARKWAY
OVERLAND PARK, KS 66251

ZALZALI & ASSOCIATES, INC.
2070 BUSINESS CENTER DRIVE, SUITE 200
IRVINE, CA 92612
949.609.9559
949.606.7222 (FAX)

REV:
A

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

Prepared for:
Sprint Nextel
c/o Black & Veatch Corporation
2999 Oak Rd. Suite 910
Walnut Creek,CA 94597

Site No. SF35XC008
MACARTHUR INTERCHANGE
650 34th Street
Oakland, California 94609
Alameda County
37.823626; -122.270163 NAD83
rooftop

EBI Project No. 62123642
February 14, 2013

EBI CONSULTING
Creating Value for Your Business

EXECUTIVE SUMMARY

Purpose of Report

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by Sprint Nextel to conduct radio frequency electromagnetic (RF-EME) modeling for Sprint Site SF35XC008 located at 650 34th Street in Oakland, California to determine RF-EME exposure levels from proposed Sprint wireless communications equipment at this site. As described in greater detail in Section 11.0 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.

This document addresses the compliance of Sprint's proposed transmitting facilities independently and in relation to all collocated facilities at the site.

1.0 Location of all Existing Antennas and Facilities and Existing RF Levels

This project involves the removal of four (4) existing antennas and replacing them with two (2) proposed Sprint wireless telecommunication antennas on a rooftop located at 650 34th Street in Oakland, California. There are two Sectors (A and B) proposed to be replaced at the site, with one (1) antenna to be re-installed per sector.

Based on drawings and aerial photography review, Verizon also has wireless antennas on the rooftop. These antennas were included in the modeling analysis.

2.0 Location or all Approved (but not installed) Antennas and Facilities and Expected RF Levels from the Approved Facilities

There are no antennas or facilities that are approved and not installed based on information provided to EBI and Sprint at the time of this report.

3.0 Number and Types of WTS within 100 Feet of the Proposed Site and Estimates of Cumulative EMR Emissions at the Proposed Site

With the exception of the antennas mentioned in Section 1.0, there are no other Wireless Telecommunication Service (WTS) sites observed within 100 feet of the proposed site.

4.0 Location and Number of the Sprint Antennas and Back-up Facilities per Building and Number and Location of Other Telecommunication Facilities on the Property

Sprint proposes the removal of four (4) existing antennas and replacing them with two (2) proposed Sprint wireless telecommunication antennas on a rooftop located at 650 34th Street in Oakland, California. There are two Sectors (A and B) proposed to be replaced at the site, with one (1) antenna to be re-installed per sector. In each sector, there is proposed to be one antenna transmitting in the 800 MHz and the 1900 MHz frequency ranges. The Sector A antenna will be oriented 50° from true north. The Sector B antenna will be oriented 160° from true north. The bottoms of the antennas will be 2.25 feet above the main rooftop.

Based on drawings and aerial photography review, Verizon also has wireless antennas on the rooftop. These antennas were included in the modeling analysis.

5.0 Power Rating for all Existing and Proposed Backup Equipment Subject to the Application

The operating power for modeling purposes was assumed to be 20 Watts per transmitter for the 800 MHz antenna and there will be one (1) transmitter operating at this frequency. Additionally, for modeling purposes it was assumed to be 20 Watts per transmitter and seven (7) transmitters operating at the 1900 MHz frequency.

6.0 Total Number of Watts per Installation and the Total Number of Watts for all Installations on the Building

The effective radiated power (ERP) for the 800 MHz transmitters combined on site is 373 Watts. The ERP for the 1900 MHz transmitters combined on site is 4,532 Watts. The ERPs for other carriers on site was not provided.

7.0 Preferred Method of Attachment of Proposed Antenna with Plot or Roof Plan including: Directionality of Antennas, Height of Antennas above Nearest Walking Surface, Discuss Nearby Inhabited Buildings

Based on the information provided to EBI, the information indicates that the proposed antennas are to be pipe-mounted to proposed antenna masts on the rooftop, operating in the directions, frequencies, and heights mentioned in section 4.0 above. The antennas are to be mounted on a three-story residential building with 34th Street to the south and Martin Luther King Jr Way to the east. The surrounding properties are primarily residential with two residential buildings approximately 25 feet to the north and west.

8.0 Estimated Ambient Radio Frequency Fields for the Proposed Site

Based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 11 feet of Sprint proposed antennas at the main roof level. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 3 feet of Sprint proposed antennas at the main roof level. At the nearest walking/working surfaces to the proposed Sprint antennas, the maximum power density is 1,473.30 percent of the FCC's general public limit (294.66 percent of the FCC's occupational limit). The composite exposure level from all other carriers existing on this site combined with Sprint's proposed antennas is 1,473.30 percent of the FCC's general public limit (294.66 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna. Based on worst-case predictive modeling, there are no areas at ground level related to the proposed Sprint antennas that exceed the FCC's occupational or general public exposure limits at this site. At ground level, the maximum power density generated by the Sprint antennas combined with the existing other carriers antennas on site is 4.90 percent of the FCC's general public limit (0.98 percent of the FCC's occupational limit). The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix B.

There are no modeled areas on the rooftop that exceed the FCC's limits for general public or occupational exposure in front of the other carrier antennas.

9.0 Signage at the Facility Identifying all WTS Equipment and Safety Precautions for People Nearing the Equipment as may be Required by the Applicable FCC Adopted Standards (Discuss Signage for Those who Speak Languages Other than English)

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. It is recommended that signage be installed for the new antennas making people aware of the antennas locations. There are exposures above the FCC limits in front of the proposed antennas and therefore barriers are recommended.

Additionally, there are areas where workers elevated above the ground or rooftop may be exposed to power densities greater than the general population and occupational limits. Workers and the general public should be informed about the presence and locations of antennas and their associated fields.

Access to this site is accomplished via two stairwell penthouses located on the main roof. Both roof access doors are assumed to be unlocked and, as such, the general public is able to access the rooftop.

10.0 Statement on Who Produced This Report and Qualifications

Please see the certifications attached in Appendix A below.

11.0 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 1 and Figure 1 (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^2). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm^2) and an uncontrolled MPE of 1 $mW/cm2$ for equipment operating in the 1900 MHz frequency range. For the Sprint equipment operating at 800 MHz, the FCC's occupational MPE is 2.66 mW/cm^2 and an uncontrolled MPE of 0.53 mW/cm^2. These limits are considered protective of these populations.

Table 1: Limits for Maximum Permissible Exposure (MPE)

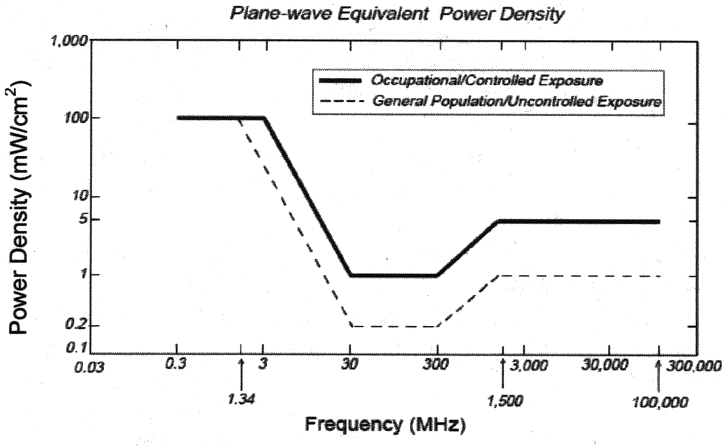
(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $[E]^2$, $[H]^2$, or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6

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^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
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^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	$(180/f^2)$*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	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)



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^2	1.00 mW/cm^2
Cellular Telephone	870 MHz	2.90 mW/cm^2	0.58 mW/cm^2
Specialized Mobile Radio	855 MHz	2.85 mW/cm^2	0.57 mW/cm^2
Most Restrictive Freq, Range	30-300 MHz	1.00 mW/cm^2	0.20 mW/cm^2

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 Sprint in this area operate within a frequency range of 800-1900 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.

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.

12.0 LIMITATIONS

This report was prepared for the use of Sprint Nextel. 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.

13.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed Sprint telecommunications equipment at the site located at 650 34th Street in Oakland, California.

EBI has conducted theoretical modeling to estimate the worst-case power density from Sprint antennas and the other carriers' existing antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements. As presented in the preceding sections, based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit within approximately 11 feet of Sprint proposed antennas at the main roof level. Modeling also indicates that the worst-case emitted power density may exceed the FCC's occupational limit within approximately 3 feet of Sprint proposed antennas at the main roof level.

Signage is recommended at the site as presented in Section 9.0. Posting of the signage and installation of the recommended barriers brings the site into compliance with FCC rules and regulations.

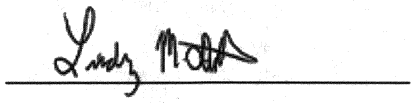
Appendix A

Certifications

Preparer Certification

I, Lindsey Dutton, 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 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.



Appendix B

Roofview® Export File

Map, Settings, Antenna, and Symbol Data Table .. Exported from workbook -> Roof View RF Template_ATT Composite.xls
Done on 9/8/2011 at 1:32:15 PM.
Use this format to prepare other data sets for the RoofView workbook file.
You may use as many rows in this TOP header as you wish.
The critical point are the cells in COLUMN ONE that read 'Start...' (eg. StartMapDefinition)
If used, these (4) headers are required to be spelled exactly, as one word (eg. StartMapDefinition)
The very next row will be considered the start of that data block.
The first row of the data block can be a header (as shown below), but this is optional.
When building a text file for import, Add the Map info first, then the Antenna data, followed by the symbol data.
All rows above the first marker line 'Start...' will be ignored, no matter how many there are.
This area is for you use for documentation.
End of help comments.

You can place as much text here as you wish as long as you don't place it below
the Start Map Definition row below the blue line.
You may insert more rows using the Insert menu.
Should you need additional lines to document your project, simply insert additional rows
by highlighting the row number adjacent to the blue line below and then clicking on the Insert menu
and selecting rows.

StartMapDefinition

Roof Max Y	Roof Max X	Map Max Y	Map Max X	Y Offset	X Offset	Number of envelope		List Of Area
170	160	180	170	10	10	1	$U$41:$FX $U$41:$FX$210	$U$41:$FX

StartSettingsData

Standard	Method	Uptime	Scale Facto	Low Thr	Low Color	Mid Thr	Mid Color	Hi Thr	Hi Color	Over Color	Ap Ht Mult	Ap Ht Method
4	2	3	1	100	1	500	4	5000	2	3	1.5	1

StartAntennaData It is advisable to provide an ID (ant 1) for all antennas

ID	Name	(MHz) Freq	Trans Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	Type	(ft) Aper	dBd Gain	BWdth Pt Dir	Uptime Profile	ON flag
SPT A1	Sprint	800	20	1	15	1/2 LDF	0.5		16.40703	Powerwave	P65-16-XLPP-RR	38	63	2.25		6	12.7	66;35		ON•
SPT A1	Sprint	1900	20	2	15	1/2 LDF	0.5		32.81406	Powerwave	P65-16-XLPP-RR	38	63	2.25		6	15.1	63;35		ON•
SPT A1	Sprint	1900	20	5	15	1/2 LDF	0.5		82.03515	Powerwave	P65-16-XLPP-RR	38	63	2.25		6	15.1	63;35		ON•
SPT B1	Sprint	800	20	1	15	1/2 LDF	0.5		16.40703	Powerwave	P65-16-XLPP-RR	47	55	2.25		6	12.7	66;145		ON•
SPT B1	Sprint	1900	20	2	15	1/2 LDF	0.5		32.81406	Powerwave	P65-16-XLPP-RR	47	55	2.25		6	15.1	63;145		ON•
SPT B1	Sprint	1900	20	5	15	1/2 LDF	0.5		82.03515	Powerwave	P65-16-XLPP-RR	47	55	2.25		6	15.1	63;145		ON•
VER A1	Verizon	850	25	1			3		12.52968	Unknown	Unknown	14	64	7		5	12	85;35		ON•
VER A2	Verizon	850	25	1			3		12.52968	Unknown	Unknown	11	64	7		5	12	85;35		ON•
VER A3	Verizon	850	25	1			3		12.52968	Unknown	Unknown	7	64	7		5	12	85;35		ON•
VER A4	Verizon	850	25	1			3		12.52968	Unknown	Unknown	5	64	7		5	12	85;35		ON•
VER B1	Verizon	850	25	1			3		12.52968	Unknown	Unknown	37	3	5.25		5	12	85;90		ON•
VER B2	Verizon	850	25	1			3		12.52968	Unknown	Unknown	37	7	5.25		5	12	85;90		ON•
VER B3	Verizon	850	25	1			3		12.52968	Unknown	Unknown	37	11	5.25		5	12	85;90		ON•
VER B4	Verizon	850	25	1			3		12.52968	Unknown	Unknown	37	16	5.25		5	12	85;90		ON•
VER C1	Verizon	850	25	1			3		12.52968	Unknown	Unknown	3	59	44		5	12	85;270		ON•
VER C2	Verizon	850	25	1			3		12.52968	Unknown	Unknown	3	50	44		5	12	85;270		ON•
VER C3	Verizon	850	25	1			3		12.52968	Unknown	Unknown	20	12	5.25		5	12	85;270		ON•
VER C4	Verizon	850	25	1			3		12.52968	Unknown	Unknown	20	7	5.25		5	12	85;270		ON•

StartSymbolData

Sym	Map Marke	Roof X	Roof Y	Map Label	Description (notes for this table only)
Sym		5	35	AC Unit	Sample symbols
Sym		14	5	Roof Access	
Sym		45	5	AC Unit	
Sym		45	20	Ladder	