COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: October 6, 2022

TO: Zoning Hearing Officer

FROM: Planning Staff

SUBJECT: Consideration of a Use Permit Renewal, pursuant to Section 6512.6 of the Zoning Regulation, to allow the continued operation of an existing wireless telecommunications facility operated by AT&T Mobility. The project site is located on the roof of a commercial building located at 333 O'Neill Avenue in the unincorporated Harbor Industrial area of San Mateo County.

County File Number: PLN 2011-00077 (AT&T)

PROPOSAL

The project applicant, Kathryn Leal of Epic Wireless, proposes on behalf of AT&T to renew an existing Use Permit (PLN 2011-0007) to allow the continued operation of a wireless telecommunication facility located on the roof of the Public Storage building located at 333 O'Neill Avenue. The existing facility consists of a commercial storage building with telecommunication facilities.

RECOMMENDATION

1. That the Zoning Hearing Officer approve the Use Permit Renewal, County File No. PLN 2011-00077 by making the required findings and adopting the conditions of approval listed in Attachment A.

BACKGROUND

Report Prepared By: Tiare Peña, Project Planner; Tpena@smcgov.org

Applicant: Kathryn Leal of Epic Wireless for AT&T Mobility

Owner: PSA Institutional Partners, LP

Public Notification: Ten (10) day advanced notification for the hearing was mailed to property owners within 300 feet of the project parcel and a notice for the hearing posted in a newspaper San Mateo Times.

Location: 333 O'Neill Avenue, Harbor Industrial District

APN(s): 046-010-100

Size: 1.02 acres

Existing Zoning: M-1 (Light Industrial District)

General Plan Designation: General Industrial

Sphere-of-Influence: City of Belmont

Existing Land Use: Commercial storage building with telecommunication facilities.

Water Supply: Mid-Peninsula Water District

Sewage Disposal: Harbor Industrial Sewer Maintenance District

Flood Zone: FEMA Flood Insurance Rate Map designation indicates parcel as Zone X, Community Panel No. 06081C0169F, dated July 16, 2015.

Environmental Evaluation: The project is categorically exempt pursuant to Section 15301, Class 1, of the California Environmental Quality Act (CEQA) Guidelines for the continued operation of existing public or private facilities involving no physical changes or expansion of use.

Setting: The subject parcel is located at the northern edge of the unincorporated Harbor Industrial District and is surrounded by a wide variety of industrial land uses. The City of Belmont borders O'Neill Avenue to the north and the Belmont Trailer Park is located 170 feet east of the property.

Chronology:

Date		Action
September 1, 2011	-	Use Permit approved for rooftop telecommunications facility.
February 2, 2016	-	Minor modification to replace three antennas and install other associated equipment within the equipment shelter.
March 27, 2019	-	Major amendment submitted for the installation of the diesel generator.
June 6, 2019	-	Major amendment approved at Zoning Hearing Officer public hearing.
November 1, 2021	-	Application received for use permit renewal for planning application number PLN 2011-00077 (AT&T)

December 1, 2021 - Application deemed complete

October 6, 2022 - Zoning Hearing Officer public hearing

DISCUSSION

A. KEY ISSUES

1. Conformance with the San Mateo County General Plan

The proposal has been reviewed against and found to be consistent with all applicable General Plan (GP) Policies. The applicable GP policies are listed and discussed below.

a. Visual Quality Policies. The project is consistent with GP Policies 4.14. (*Appearance of Development*), 4.20 (*Utility Structures*), and 4.35 (*Urban Area Design Concept*) because it minimized the visual impact of the antenna facilities by installing them on an existing building (rather than constructing a new free-standing tower structure) and utilizing FRP screens that are painted to match the building to which they are affixed. The maximum height of the FRP screens is 58 feet above grade, which is below the 75-foot maximum stipulated by the M-1 Zoning District.

b. Urban Land Use Policies. The proposed project complies with GP Policies 8.15 and 8.23 (*Land Use Compatibility*) because the antenna facility does not generate any significant visual, noise, light, or odor impacts to the surrounding neighborhood. The project continues to comply with GP Policies 8.34 (*Zoning Regulations*), 8.35 (*Uses*), and 8.38 (*Height, Bulk, and Setbacks)* and is consistent with the industrial and commercial land uses allowed by the M-1 District, and the project meets all M-1 District development standards (as discussed in greater detail below in Section 2 of this report).

2. Conformance with Zoning Regulations

The subject Public Storage building was constructed in 1999, and the building permit (BLD 97-1681) received final approval in October 1999. The use of the building as a commercial storage facility is consistent with uses permitted in the M-1 (Light Industrial) Zoning District. Specifically, the use is consistent with those permitted by Zoning Regulations §6271.149, which allows storage warehouses in the M-1 District. The rooftop telecommunications facility may be permitted in the M-1 District subject to the issuance of a Use Permit, which is discussed in detail below in Section 3 of this report.

The existing storage building is consistent with the development standards stipulated in Zoning Regulations §6273 (*Minimum Building Site*), §6274

(*Yards Required*), and §6275 (*Signage*). The telecommunications facility, and the FRP structures that screen said facilities, will reach a maximum height of 58 feet above grade, which is below the 75-foot maximum stipulated by Zoning Regulations §6272 (*Building Height Limit*). No additional physical changes are proposed.

3. Wireless Telecommunications Facilities Regulations

Effective January 9, 2009, the San Mateo County Board of Supervisors adopted a Wireless Telecommunication Facilities (WTF) Ordinance. Renewals of use permits approved after the effective date of the WTF Ordinance shall only be approved if all conditions of the original use permit have been satisfied and will continue to be met. Continued compliance with applicable standards is discussed below:

a. Development and Design Standards. The subject building is a commercial storage building located within the Harbor Industrial District, which supports a wide variety of industrial land uses. The existing AT&T facility at this location is consistent with §6512.2A and §6512.2B because the area does not contain any sensitive habitat and is not within a residentially zoned neighborhood. The applicant demonstrated, through the use of existing and proposed coverage maps, that there is a significant coverage gap in the unincorporated Harbor Industrial area and adjacent sections of the cities of San Carlos and Belmont. This facility greatly improves the coverage issues displayed in the coverage maps.

   The antenna facilities on the roof of the Public Storage building are screened within a series of FRP structures that are painted to match the existing building. The maximum height of the facility is 58 feet above grade, which is well below the 75-foot maximum allowed by the M-1 Zoning District.

b. Performance Standards. Based on the RF emissions analysis submitted with the renewal application and included as Attachment H of this report, composite exposure levels will be a maximum of 6.57% of the FCC's public exposure limit for a person at ground level. This estimate of RF emissions includes worst-case assumptions (all antennas operating at full power at the same time for all carriers) and actual exposure levels are often well below these maximum values. Based on the findings illustrated in this report, the facility generates exposure levels that are in compliance with the FCC's standards and do not pose any significant health risks.

   The facility is required to receive and maintain all necessary licenses and registrations from the Federal Communications Commission (FCC),

California Public Utilities Commission (CPUC), and any other applicable regulatory bodies. AT&T is also required to supply the Planning and Building Department with evidence of these licenses and registrations. If any license is ever revoked, AT&T is obligated to inform the Planning and Building Department of the revocation within 10 days of receiving such notice.

4. Use Permit Findings

In order to approve the use permit renewal to allow the continued operation of this facility, the Zoning Hearing Officer must make the following findings:

a. *That the establishment, maintenance and/or conducting of the proposed use will not, under the circumstances of this particular case, be detrimental to the public welfare or injurious to property or improvements in said neighborhood.*

The Radio Frequency Analysis (Attachment D) for this project indicates that the facility, coupled with the existing ambient conditions, will generate exposure levels that are 6.57% of the FCC's public exposure limit for a person at ground level. The antennas facilities are screened within FRP enclosures that are painted to match the existing building. The maximum height of the antennas and the FRP enclosures are 58 feet above grade, which is well below the 75-foot maximum stipulated by the M-1 Zoning District. The facility does not produce any significant noise, odor, or light impacts and, as such, is not detrimental to the public welfare or injurious to property or improvements in the neighborhood.

b. *That the use permit renewal I for this cellular telecommunication facility is necessary for the public health, safety, convenience or welfare of the community.*

The use is for personal telecommunication services. The FCC has established the desirability and need for mobile and wireless telephone service to facilitate communication between mobile units and the existing wire-dependent telephone system. The wireless network supported by this antenna facility provides greater mobility and accessibility than the landline networks can offer. The system is considered necessary for public health, safety, convenience and welfare.

5. Conformance with Conditions of last Permit Approval

Staff has reviewed the previous Use Permit conditions of approval for AT&T (PLN 2011-000770 last approved on September 1, 2011, and has determined that AT&T mobility is in compliance with all previous conditions, See attachment I. No additional physical changes are

proposed as part of the renewal. Previous conditions that remain relevant are included in Attachment A of this staff report.

B. ENVIRONMENTAL REVIEW

The proposed telecommunications facility is categorically exempt from the California Environmental Quality Act (CEQA) under provisions of §15301, Class 1 of the California Environmental Quality Act for the continued operation of existing public or private facilities involving no physical changes or expansion in use.

C. REVIEWING AGENCIES

1. Building Inspection Section
2. Department of Public Works

ATTACHMENTS

A. Recommend Findings and Conditions of Approval
B. Location Map
C. Site Plan/Antenna/Equipment Plan/Exterior Elevations/Equipment Details
D. Radio Frequency Analysis
E. PLN 2011-00077 Conditions from the 2011 Use Permit Approval

TGP:mda – TGPGG0312_WMU.DOCX

Attachment A

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2011-00077 Hearing Date: October 6, 2022

Prepared By: Tiare Peña, Project Planner For Adoption By: Zoning Hearing Officer

RECOMMENDED FINDINGS

For the Environmental Review, Find:

1. That the project is categorically exempt from the California Environmental Quality Act (CEQA) under provisions of §15301, Class 1, for the continued operation of existing public or private facilities involving no additional physical changes and no expansion of use.

For the Use Permit, Find:

2. That the establishment, maintenance and/or conducting of the use will not, under the circumstances of this particular case, be detrimental to the public welfare or injurious to property or improvements in said neighborhood because the facility will not introduce any significant visual, noise, odor, or light impacts to the surrounding neighborhood.

3. That the approval of this use permit renewal for an existing cellular telecommunication facility is necessary for the public health, safety, convenience or welfare of the community as the site provides telecommunications coverage to the surrounding community, which serves as a benefit to both private and public users.

CONDITIONS OF APPROVAL

1. This approval applies only to the proposal, documents, and plans described in this report and submitted to and approved by the Zoning Hearing Officer on October 6, 2022. Modifications beyond that which was approved by the Zoning Hearing Officer will be subject to review and approval by the Community Development Director and may require review at a public hearing. Minor modifications that are largely consistent with this approval may be approved at the discretion of the Community Development Director.

2. This permit shall be valid for ten (10) years from the date of this approval and shall expire on October 6, 2032. If continuation of this use is desired, the applicant shall file a use permit renewal application with the Planning and Building Department six (6) months prior to its expiration and pay the fees applicable at that time.

3. This use permit renewal shall be for the continued operation of the existing telecommunication facility only. Any substantial change or change in intensity of use shall require an amendment to the use permit, which requires an application for amendment, payment of applicable fees, and consideration at a public hearing.

4. The applicant shall continue to maintain all rooftop facilities a light brown/beige color to match that of the existing building.

5. The applicant shall continue to maintain the color of all existing facilities in a manner that is consistent with the color samples on file. Over time paint colors fade and, as result, facilities may become more visually prominent than initially proposed. The applicant shall continue to take all necessary measures to ensure that the site remains consistent with all approved colors. This includes all screen walls and rooftop facilities approved by this permit.

6. This installation shall be removed in its entirety at that time when this technology becomes obsolete, when the facility is no longer needed to achieve coverage objectives, or if the facility remains inactive for six consecutive months. If any of these circumstances occur, the entire facility, including all antennas and associated equipment, cables, power supplies, etc., shall be removed and the site shall be returned to its pre-construction state to the extent practicable.

7. The applicant shall keep their FCC license active and in good standing throughout this permit's 10-year term. The applicant shall immediately notify the Planning and Building Department if any changes to their license occur.

TGP:mda – TGPGG0312_WMU.DOCX

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT B


Harbor Blvd & O'Neill Ave CCL05258
101
Public Storage
El Metate Taqueria
Alpha Acid Brewing Company
Safeway
Zoom Room Dog Training


Harbor Blvd & O'Neill Ave CCL05258
Public Storage
101
412
Shoreway Rd
Mid-Peninsula Water District
Powervision
El Metate Taqueria
Little Belmont Cafe
Dept of Housing | San Mateo County
Clark Pest Control

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT C

CODE COMPLIANCE

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

1) 2016 CALIFORNIA ADMINISTRATIVE CODE, CHAPTER 10, PART 1, TITLE 24 CODE OF REGULATIONS
2) 2016 CALIFORNIA BUILDING CODE (CBC)
3) 2016 CALIFORNIA RESIDENTIAL CODE (CRC) WITH APPENDIX H, PATIO COVERS, BASED ON THE 2015 IRC (PART 2.5)
4) 2016 CALIFORNIA GREEN BUILDINGS STANDARDS CODE (CALGREEN) (PART 11) (AFFECTED ENERGY PROVISIONS ONLY)
5) 2016 CALIFORNIA FIRE CODE (CFC), BASED ON THE 2015 IFC, WITH CALIFORNIA AMENDMENTS (PART 9)
6) 2016 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2015 UMC (PART 4)
7) 2016 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2015 UPC (PART 5)
8) 2016 CALIFORNIA ELECTRICAL CODE (CEC) WITH CALIFORNIA AMENDMENTS, BASED ON THE 2014 NEC (PART 3)
9) 2016 CALIFORNIA ENERGY CODE (CEC)- PART 6
10) ANSI / EIA-TIA-222-G
11) 2016 NFPA 101, LIFE SAFETY CODE
12) 2016 NFPA 72, NATIONAL FIRE ALARM CODE
13) 2016 NFPA 13, FIRE SPRINKLER CODE

USID: 118858
FA#: 10150734
LTE 7C
PTN#: 3701A0E93A
PACE#: MRSFR045494
LTE 6C
PTN#: 3701A0AHPR
PACE#: MRSFR037285
LTE 5C
PTN#: 3701A0AHRM
PACE#: MRSFR037532
LTE 4C
PTN#: 3701A0AJ65
PACE#: MRSFR037362
ANTENNA MODIFICATIONS
PTN#: 3701A0BBM3
PACE#: MRSFR038382

AT&T

SITE NUMBER: CCL05258
SITE NAME: HARBOR BLVD & O'NEILL AVE
SITE TYPE: ROOFTOP/INDOOR EQUIPMENT
ADDRESS: 333 O'NEILL AVENUE
BELMONT, CA 94002

APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS & AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY LOCAL BUILDING DEPARTMENT & MAY IMPOSE CHANGES AND MODIFICATIONS.

DISCIPLINE:	SIGNATURE	DATE
RF ENGINEER:		
AT&T PM:		
CIVIL:		
A&E:		
SAQ PM:		
PROPERTY OWNER:		

Plan set to serve as the as-built drawings for the renewal of the land use permit previously approved under PLN2011-00077

No proposed changed to the existing facility

PREPARED FOR
AT&T
5001 EXECUTIVE PKWY,
SAN RAMON CA 94583

Vendor:
JS INFRASTRUCTURE
AZ · CA · CO · ID · NM · NV · TX · UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:
CCL05258

DRAWN BY: SLM / JY
CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/23/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

License:
CIVIL

Issued For:
CCL05258
HARBOR BLVD
& O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:
TITLE SHEET

Sheet Number:
T-1

PROJECT TEAM

APPLICANT / LESSEE:
AT&T MOBILITY
5001 EXECUTIVE PKWY,
SAN RAMON, CA 94583
CONTACT: ROZ DUNCAN
EMAIL: rd4459@att.com
PHONE: (925) 518-9917

CONSTRUCTION MANAGER:
AT&T MOBILITY
CONTACT: PHUNG NGUYEN
EMAIL: phung.nguyen@att.com
PH: (925) 277-6480

RF ENGINEER:
AT&T MOBILITY
CONTACT: PREETINDER SINGH
EMAIL: ps7945@att.com
PH: (925) 277-6104

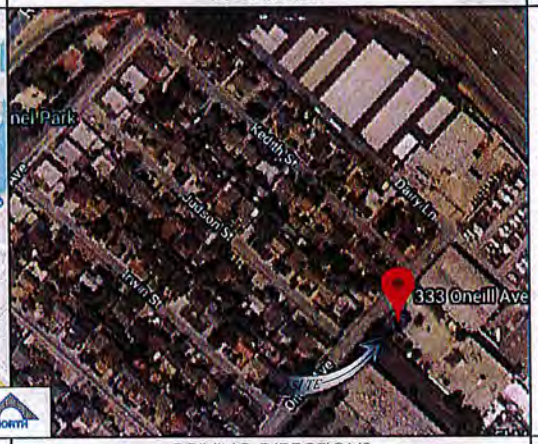
PROJECT MANAGER, LEASING & ZONING:
JS INFRASTRUCTURE PARTNERS
1150 BALLENA BLVD. SUITE 259
ALAMEDA, CA 94501
CONTACT: CHASE OTIS
EMAIL: cotis@jsp.com
PH: (805) 680-5453

ENGINEER:
JS INFRASTRUCTURE PARTNERS
2030 MAIN STREET, SUITE 200
IRVINE, CA 92614
CONTACT: FRANCIS Q. DONG
EMAIL: fdong@jsp.com
PH: (949) 247-7767x112

A&E MANAGER:
JS INFRASTRUCTURE PARTNERS
2030 MAIN STREET, SUITE 200
IRVINE, CA 92614
CONTACT: JASON OFFINEER
EMAIL: joffineer@jsp.com
PH: (619) 370-4859

VICINITY MAP

LOCAL MAP



MODIFICATION TO AN UNMANNED TELECOMMUNICATIONS FACILITY, CONSISTING OF THE FOLLOWING:

- SWAP (3) EXISTING ANTENNAS IN POS 2,3,4 WITH (3) NEW 8-PORT ANTENNAS (TYPICAL EACH SECTOR, TOTAL OF 9)
- SWAP (1) RRUS-12 WITH (1) NEW RRUS 4415 B25 (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW RRU 4478 B14 NEAR ANTENNA(TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW RRU 4478 B5 NEAR ANTENNA (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW RRU 4426 B66 NEAR ANTENNA (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW RRUS-E2 B29 NEAR ANTENNA (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW DC-12 IN EQUIPMENT AREA ON EXISTING RACK
- INSTALL (1) NEW DC-6 SURGE ARRESTOR NEAR ANTENNAS (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (6) PROPOSED POWER TRUNKS AND (3) PROPOSED FIBER TRUNK FROM EQUIPMENT AREA TO (3) PROPOSED DC-6, TYP. (1) DC-6 PER SECTOR
- REMOVE (6) EXISTING RRUW, TYPICAL (2) PER SECTOR
- REMOVE (1) EXISTING DUS41 AND REPLACE WITH (2) PROPOSED 5216
- REUSE (1) EXISTING XMU AND ADD (1) PROPOSED XMU
- REMOVE (2) EXISTING V1 CHASSIS AND REPLACE WITH (2) PROPOSED V2 CHASSIS
- SWAP EXISTING STRUCTURAL ANTENNA FRAME MEMBERS WITH STEEL ANGLES, SECTORS 'A' & 'C'

SITE INFORMATION

PROPERTY OWNER:
PSA INSTITUTIONAL PARTNERS, L.P.
701 WESTERN AVE
GLENDALE, CA 91201

JURISDICTION:	COUNTY OF SAN MATEO
A.P.N.:	046-010-100
CURRENT ZONING:	C-1
EXISTING USE:	COMMUNICATIONS FACILITY
PROPOSED USE:	COMMUNICATIONS FACILITY
LATITUDE (NAD 83):	37.522405 37° 31' 20.658" N
LONGITUDE (NAD 83):	-122.268358 -122° 16' 06.0888" W

ACCESSIBILITY REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY IS NOT REQUIRED PER CBC2016, SECTION 11B-203.4 (LIMITED ACCESS SPACE)

POWER AGENCY:
PG&E
PH: (800) 743-5000

TELEPHONE AGENCY:
AT&T

RFDS VERSION: 3.00
DATE: 04/19/17
DATE UPDATED: 02/20/18

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS

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

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED

STATEMENTS

STRUCTURAL ANALYSIS IS NOT WITHIN THE SCOPE OF WORK CONTAINED IN THIS DRAWINGS SET. FOR ANALYSIS OF EXISTING AND/OR PROPOSED COMPONENTS, REFER TO STRUCTURAL ANALYSIS PROVIDED UNDER SEPARATE COVER.

ANTENNA MOUNT ANALYSIS IS NOT WITHIN THE SCOPE OF WORK CONTAINED IN THIS DRAWING SET. FOR ANALYSIS OF MOUNT TO SUPPORT EXISTING AND/OR PROPOSED COMPONENTS, REFER TO ANTENNA MOUNT STRUCTURAL ANALYSIS PROVIDED UNDER SEPARATE COVER.

DRIVING DIRECTIONS

DIRECTIONS FROM AT&T OFFICE: 5001 EXECUTIVE PKWY, SAN RAMON CA 94583

1. HEAD NORTHEAST ON BISHOP DRIVE TOWARD SUNSET DRIVE
2. TURN RIGHT ONTO SUNSET DRIVE
3. TURN RIGHT ON BOLLINGER CANYON ROAD
4. MERGE ONTO I-580 W TOWARD DUBLIN BLVD/OAKLAND
5. LEFT AT FORK TO CONTINUE ON I-238 N
6. TAKE EXIT 15A FOR I-880 S TOWARD SAN JOSE/SAN MATEO BRIDGE
7. MERGE ONTO I-880 S
8. TAKE EXIT 13A TO MERGE ONTO US-101 S TOWARD SAN JOSE
9. TAKE EXIT 412 FOR RALSTON AVE TOWARD NOTRE DAME DE NAMUR UNIVERSITY
10. LEFT AT FORK, FOLLOW SIGNS FOR HARBOR BLVD
11. RIGHT AT FORK, FOLLOW SIGNS FOR HARBOR BLVD
12. CONTINUE ONTO HARBOR BLVD
13. TURN RIGHT ONTO ELMER ST
14. TURN RIGHT ONTO O'NEILL AVE
15. DESTINATION WILL BE ON THE RIGHT

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

SHEET INDEX

PDC Corporation
As-built 9/19/2018
Signed by: Jamelle Espitia

GENERAL CONSTRUCTION NOTES:

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

APPLICABLE CODES, REGULATIONS AND STANDARDS:

1. SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION.
2. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
3. SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
   - 3.1. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   - 3.2. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
   - 3.3. TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
   - 3.4. INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRICAL EQUIPMENT.
   - 3.5. IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")
   - 3.6. IIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS TELCORDIA GR-63 NETWORK
   - 3.7. EQUIPMENT-BUILDING SYSTEM (NEBS): PHYSICAL PROTECTION
   - 3.8. TELCORDIA GR-347 CENTRAL OFFICE POWER WIRING
   - 3.9. TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS
   - 3.10. TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS
   - 3.11. ANY AND ALL OTHER LOCAL & STATE LAWS AND REGULATIONS
   - 3.12. FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS:

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

SYMBOLS LEGEND:

- BLDG. SECTION
- WALL SECTION
- DETAIL
- ELEVATION
- DOOR SYMBOL
- WINDOW SYMBOL
- TILT-UP PANEL MARK
- PROPERTY LINE
- CENTERLINE
- ELEVATION DATUM
- GRID/COLUMN LINE
- KEYNOTE, DIMENSION ITEM
- KEYNOTE, CONSTRUCTION ITEM
- WALL TYPE MARK
- ROOM NAME / ROOM NUMBER
- GROUT OR PLASTER
- (E) BRICK
- (E) MASONRY
- CONCRETE
- EARTH
- GRAVEL
- PLYWOOD
- SAND
- PLYWOOD
- SAND
- (E) STEEL
- MATCH LINE
- GROUND CONDUCTOR
- OVERHEAD SERVICE CONDUCTORS
- TELEPHONE CONDUIT
- POWER CONDUIT
- COAXIAL CABLE
- CHAIN LINK FENCE
- WOOD FENCE
- (P) ANTENNA
- (P) RRU
- (P) DC SURGE SUPPRESSION
- (F) ANTENNA
- (F) RRU
- (E) EQUIPMENT

PDC Corporation
As-built 9/19/2018
Signed by: Jonelle Espitia

PREPARED FOR

AT&T
5001 EXECUTIVE PKWY,
SAN RAMON CA 94583

Vendor:

JS INFRASTRUCTURE
AZ · CA · CO · ID · NM · NV · TX · UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:

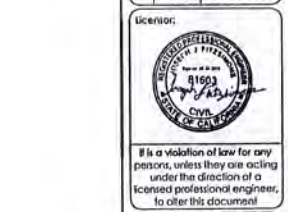
CCL05258

DRAWN BY: SLM / JY

CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/22/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

Licensor:



Issued For:

CCL05258
HARBOR BLVD
& O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:

GENERAL NOTES

Sheet Number:

GN-1

AT&T

This Site Operated by:

AT&T MOBILITY

2600 CAMINO RAMON, 4W750FF
SAN RAMON, CA 94583
IN CASE OF FIRE AND THE NEED FOR SHUTDOWN
TO DEACTIVATE ANTENNAS CALL THE
FOLLOWING NUMBER:
For 24 Hour Emergency Contact and Access Please Call:
(800)832-6662

Reference Site#: CCL05258

Site Address: 333 O'NEILL AVENUE BELMONT, CA 94002

(10) FENCED COMPOUND SIGNAGE
N.T.S.

DANGER

NO TRESPASSING

(9) FENCED COMPOUND SIGNAGE
N.T.S.

INFORMATION

Federal Communications Communication Tower Registration Number

1 2 3 4 5 6 7

Posted in accordance with federal Communications Commission rules and antenna tow er registration 47CFR 17.4(g).

8" x 12"

(6) FCC ASR SIGNAGE
N.T.S.

NOTICE

AUTHORIZED PERSONNEL ONLY

(8) DOOR / EQUIPMENT SIGN
N.T.S.

Property of AT&T

Authorized Personnel Only

No Trespassing
Violators will be Prosecuted

In case of emergency, or prior to performing maintenance on this site, call _____ and reference cell site number _____

(5) GATE SIGNAGE
N.T.S.

0
3 2
ACID

(7) NFPA HAZARD SIGN
N.T.S.

Property of AT&T

Authorized Personnel Only

In case of emergency, or prior to performing maintenance on this site, call _____ and reference cell site number _____

(4) SHELTER / CABINET DOORS SIGNAGE
N.T.S.

8" x 12"

INFORMATION

[illegible]

INFORMACION

[illegible]

(A) INFORMATION SIGN 1-1
SCALE: 1/2" = 1'

5" x 7"

INFORMATION

ACTIVE ANTENNAS ARE MOUNTED

☐ ON THE OUTSIDE FACE OF THIS BUILDING

☐ INFORMATION SIGN 1-2

☐ ON THIS STRUCTURE

STAY BACK A MINIMUM OF 3 FEET FROM THESE ANTENNAS

CONTACT AT&T MOBILITY AT 800-638-2822 & FOLLOW THESE INSTRUCTIONS PRIOR TO PERFORMING ANY MAINTENANCE OR REPAIRS CLOSER THAN 3 FEET FROM THE ANTENNAS.

THIS IS AT&T MOBILITY SITE _____

(B) INFORMATION SIGN 1-2
SCALE: 3/4" = 1'

2" x 1"

AT&T

(C) INFORMATION SIGN 1-3
SCALE: 1/4" = 1'

1-1/2" x 24"

STAY BACK 3 FEET FROM ANTENNA

(D) INFORMATION SIGN 1-4
SCALE: 3/16" = 1'

1. CONTRACTOR SHALL INSTALL ALL INFORMATION SIGNAGE IN ACCORDANCE w/ AT&T WIRELESS DOCUMENT #03-0074, RF EXPOSURE POLICY AND RF SAFETY COMPLIANCE PROGRAM, LATEST EDITION.

2. FABRICATION:

*SIGN 1: ENTRANCE DOOR, SEE DETAIL 1A, THIS SHEET

SIGN 1 IS TO BE MADE ON THE 50 MIL ALUMINUM SHEETING (SIZE 8 INCHES BY 12 INCHES) w/ FOUR (4) ¼ INCH MOUNTING HOLES, ONE EACH CORNER OF THE SIGN FOR MOUNTING w/ HARDWARE w/ TIE WRAPS. THE MAIN BACKGROUND COLOR IS TO BE WHITE FRONT & BACK w/ BLACK LETTERING.

THE INFORMATION BAND SHALL BE 1.2 INCH SOLID GREEN BAND w. 0.5 INCH HIGH BLACK LETTERING. THE BODY TEXT SHALL BE IN BLACK LETTERING w/ 0.2 INCH HIGH LETTERS. THE REF LINE SHALL BE IN ¼ INCH LETTERS

THE PLACEMENT OF TEXT SHALL BE DONE IN A MANNER THAT WILL PERMIT EASY READING FROM A DISTANCE OF APPROXIMATELY 6 FEET IN FRONT OF THE SIGN.

ALL PAINT WILL BE BAKED w/ENAMEL w/ UV PROTECTIVE COATING OVER THE FACE OF THE SIGN.

*SIGN 1-2: POLE, SEE DETAIL 1B, THIS SHEET

SIGN 2 MUST BE A NON METALLIC LABEL w/ AN ADHESIVE BACKING. THE LABEL SHALL BE MADE USING VINYL OR SIMILAR WEATHERPROOF MATERIAL. THE LABEL SHALL BE APPROXIMATELY 5X7 INCHES w/ A WHITE BACKGROUND AND BLACK LETTERING. THE GREEN BAND SHALL BE 1.375 INCH IN HEIGHT & THE LETTERING SHALL BE BLACK w/ 0.75 INCH HIGH LETTERS. THE TEXT LETTERING SHALL BE BLACK w/ ¼ INCH HIGH LETTERS. UV PROTECTION SHALL BE PLACED OVER THE FRONT OF THE LABEL.

*SIGN 1-3: BACK OF ANTENNAS, SEE DETAIL 1C & 3, THIS SHEET

*SIGN 3 IS A 1 INCH X 2 INCH PANEL THAT CAN BE APPLIED TO THE BACK OR SIDE OF AN ANTENNA TO IDENTIFY IT AS AN AT&T ANTENNA.

*SIGN 1-4: SIDE OF ANTENNAS, SEE DETAIL 1D & 3, THIS SHEET

SIGN 4 IS MADE FROM TRANSPARENT MATERIAL 1-1/2 INCHES WIDE & 24 INCHES LONG. THE LETTERING IS TO BE BLACK w/ ¼ INCH LETTERING IN A VERTICAL COLUMN. THE SPACING BETWEEN WORDS MUST BE SUCH THAT IT IS EASILY READ & FILLS THE LENGTH OF THE SIGN.

(3) INFORMATION SIGNAGE
N.T.S.

NOTE:
1. CONTRACTOR SHALL INSTALL ALL INFORMATION SIGNAGE IN ACCORDANCE w/ AT&T WIRELESS DOCUMENT #03-0074, RF EXPOSURE POLICY AND RF SAFETY COMPLIANCE PROGRAM, LATEST EDITION.

2. CONTRACTOR SHALL CONTACT AT&T RFSC FOR INFORMATION ON APPLICABLE LEVELS AND INSTRUCTIONS ON LEVEL AND LOCATION OF SIGNAGE

WARNING

Beyond This Point you are entering a controlled area where RF Emissions exceed the FCC Controlled Exposure limits
Failure to obey all posted signs and site guidelines could result in serious injury

Ref: FCC 47CFR 1.1307(b)

CAUTION

Beyond This Point you are entering a controlled area where RF Emissions *may exceed* the FCC Controlled Exposure limits
Obey all posted signs and site guidelines for working in an RF environment

Ref: FCC 47CFR 1.1307(b) ai&i

NOTICE

Beyond This Point you are entering an area where RF Emissions *may exceed* the FCC General Population Exposure Limits
Follow all posted signs and site guidelines for working in an RF environment

Ref: FCC 47CFR 1.1307(b) ai&i

(2) WARNING, CAUTION AND NOTICE SIGN
N.T.S.

SIGNAGE AND STRIPING INFORMATION

1. THE FOLLOWING INFORMATION IS A GUIDELINE w/ RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATIONS SHOULD BE IN CONFLICT w/ ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER.
2. THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 1mW/cm^2 AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 5mW/cm^2
3. IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR WORKING PLATFORM LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOES NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.
4. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
5. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES & STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
6. ALL TRANSMIT ANTENNAS REQUIRE A THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH, AND CHINESE. THIS SIGN SHALL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED IN PLAIN SIGHT AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES. THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY w/ ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGNS SHALL HAVE AT&T'S NAME AND THE COMPANY CONTACT INFORMATION (e.g. TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER SHALL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.
7. PHOTOS OF ALL STRIPING, BARRICADES & SIGNAGE SHALL BE PART OF THE CONTRACTORS CLOSE OUT PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PROJECT MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE w/ FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS-HATCH PATTERN AS DETAILED BY THE CONSTRUCTION DRAWINGS. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MAIERIAL SO AS NOT TO BLOCK OR INTERFERE w/ THE OPERATION OF THE ANTENNAS. BARRICADES SHALL BE PAINTED w/ FADE RESTRAINT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RF FRIENDLY BARRICADES NEEDED, & SHALL PROVIDE THE AT&T CONSTRUCTION PROJECT MANAGER w/ A DETAILED SHOP DRAWING OF EACH BARRICADE. UPON CONSTRUCTION COMPLETION.

PDC Corporation
As-built 9/19/2018
Signed by: Jenelle Espitia

(1) GENERAL NOTES
N.T.S.

PREPARED FOR

AT&T

5001 EXECUTIVE PKWY,
SAN RAMON CA 94583

Vendor:

JS INFRASTRUCTURE

2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:

CCL05258

DRAWN BY: SLM / JY

CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/22/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

Licensor:

CIVIL

It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

Issued For:

CCL05258

HARBOR BLVD
& O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:

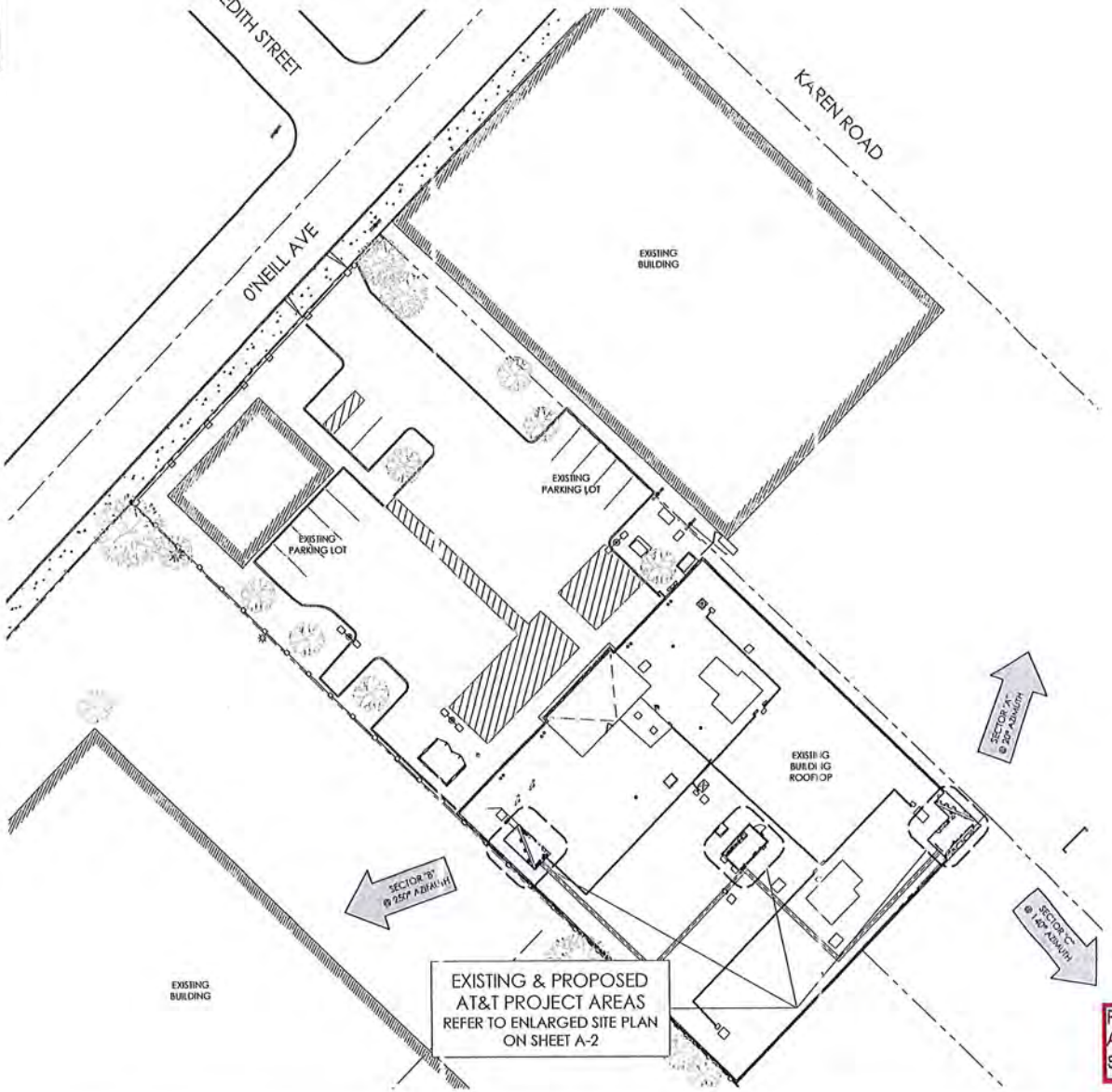
SITE SIGNAGE

Sheet Number:

GN-2

THIS IS NOT A SITE SURVEY

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



PDC Corporation
As-built 9/19/2018
Signed by: Jonelle Baptiste

24"x36" SCALE: 1" = 20'-0"
11"x17" SCALE: 1" = 40'-0"

1 OVERALL SITE PLAN

PREPARED FOR
AT&T
5001 EXECUTIVE PKWY.
SAN RAMON CA 94583

Vendor:
JS INFRASTRUCTURE
AZ - CA - CO - ID - NM - NV - TX - UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:
CCL05258

DRAWN BY: SLM / JY
CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/23/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

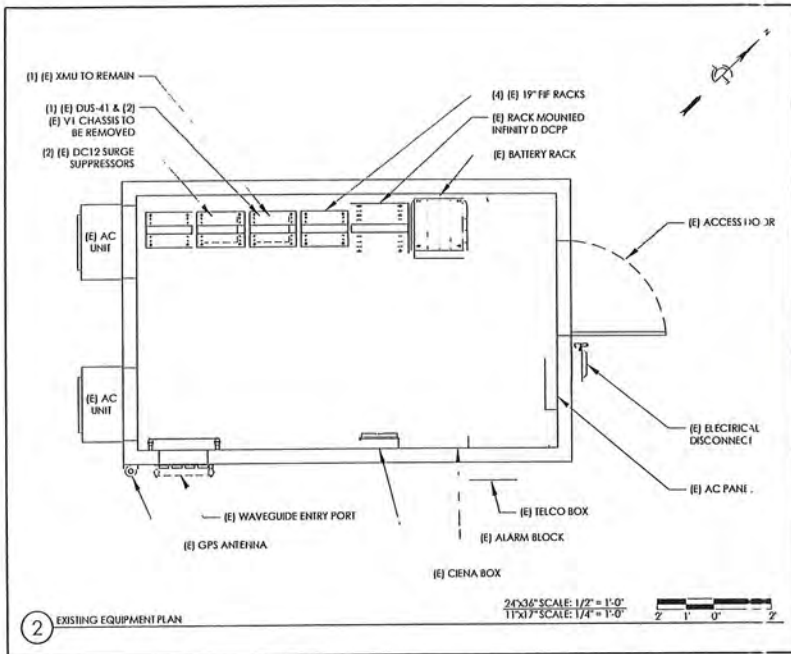
Licensor:
81603
CIVIL
STATE OF CALIFORNIA

It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

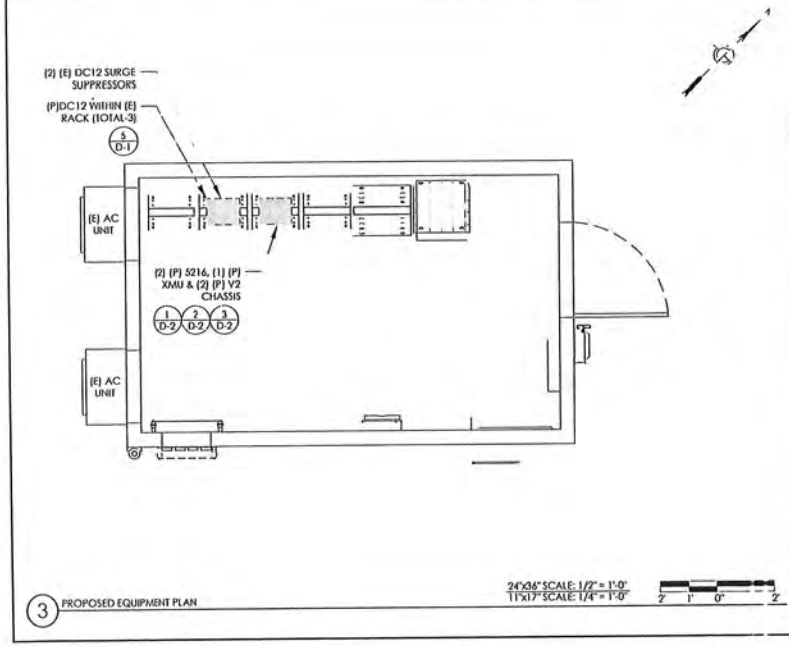
Issued For:
CCL05258
HARBOR BLVD & O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:
OVERALL SITE PLAN

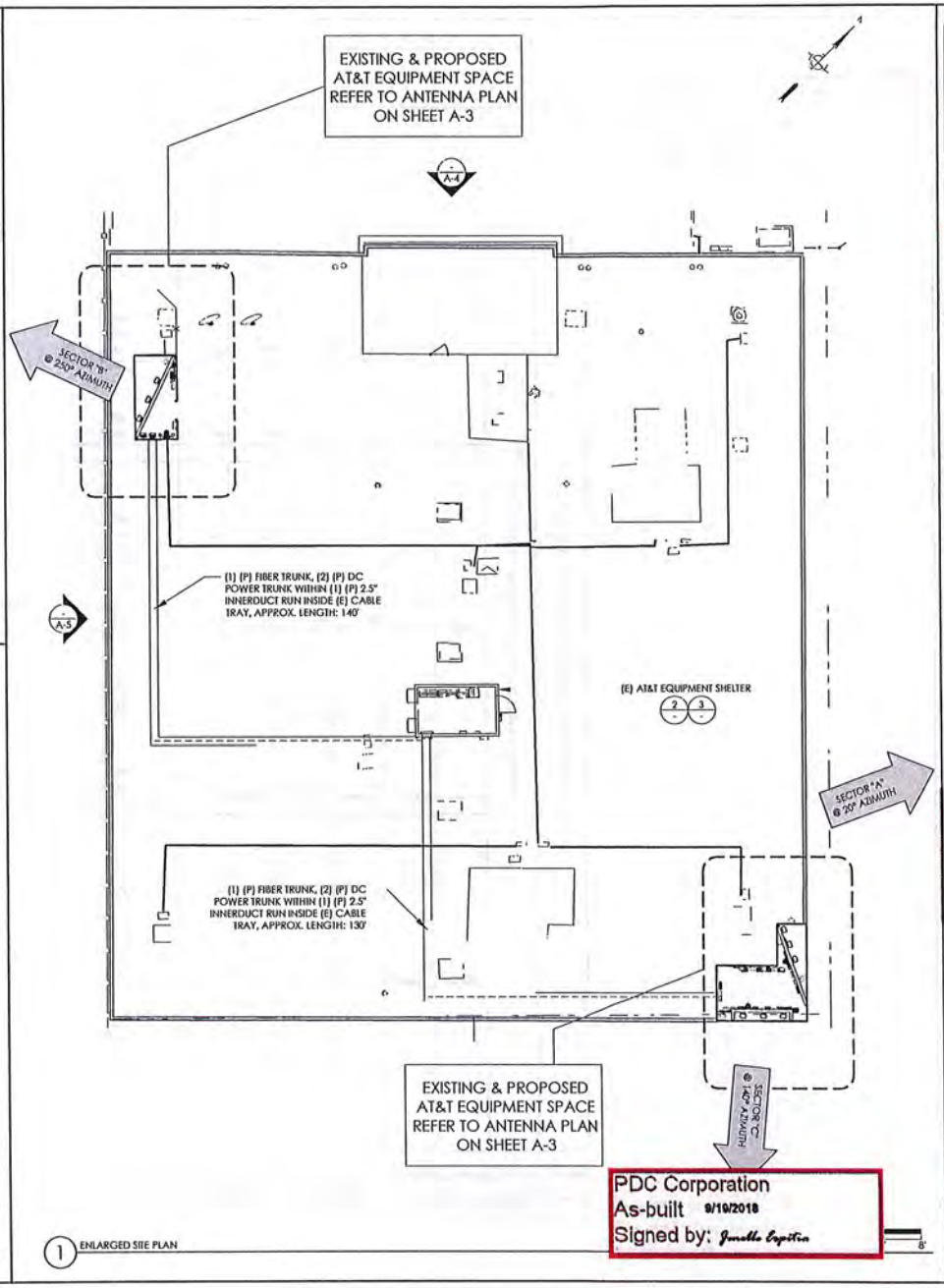
Sheet Number:
A-1



2 EXISTING EQUIPMENT PLAN



3 PROPOSED EQUIPMENT PLAN



1 ENLARGED SITE PLAN

PREPARED FOR

AT&T

5001 EXECUTIVE PKWY.
SAN RAMON CA 94583

Vendor:

JS INFRASTRUCTURE
AZ · CA · CO · ID · NM · NV · TX · UT

2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:

CCL05258

DRAWN BY: SLM / JY

CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/23/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

Licensor:

Issued For:

CCL05258

HARBOR BLVD & O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:

ENLARGED SITE PLAN & EQUIPMENT PLANS

Sheet Number:

A-2

GROUNDING NOTES:

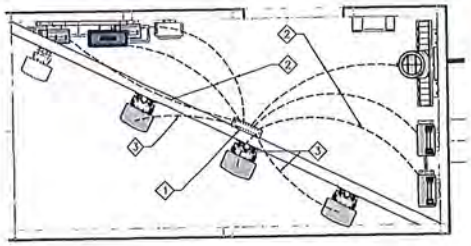
1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION REQUIREMENTS AND CONSTRUCTION ACCORDING TO SITE CONDITIONS.
2. ALL GROUNDING CONDUCTORS: #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
3. GROUND BAR LOCATED IN BASE OF EQUIPMENT WILL BE PROVIDED, FURNISHED AND INSTALLED BY THE VENDOR.
4. ALL BELOW GRADE CONNECTIONS: EXOTHERMIC WELD TYPE, ABOVE GRADE CONNECTIONS: EXOTHERMIC WELD TYPE.
5. GROUND RING SHALL BE LOCATED A MINIMUM OF 24" BELOW GRADE OR 6" MINIMUM BELOW THE FROST LINE.
6. INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE SLAB, SPREAD FOOTING, OR FENCE.
7. EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.
8. GROUND BARS:
   A) EQUIPMENT GROUND BUS BAR (EGB) LOCATED AT THE BOTTOM OF ANTENNA POLE/MAST FOR MAKING GROUNDING JUMPER CONNECTIONS TO COAX FEEDER CABLES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. JUMPERS (FURNISHED BY OWNERS) SHALL BE INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.
9. ALL GROUNDING INSTALLATIONS AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.
10. OBSERVE N.E.C. AND LOCAL UTILITY REQUIREMENTS FOR ELECTRICAL SERVICE GROUNDING.
11. GROUNDING ATTACHMENT TO TOWER SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS OR AT GROUNDING POINTS PROVIDED (2 MINIMUM).
12. IF EQUIPMENT IS IN A C.L. FENCE ENCLOSURE, GROUND ONLY CORNER POSTS AND SUPPORT POSTS OF GATE. IF CHAIN LINK LID IS USED, THEN GROUND LID ALSO.
13. GROUNDING AT PPC CABINET SHALL BE VERTICALLY INSTALLED.
14. ALL GROUNDING FOR ANTENNAS SHALL BE CONNECTED SO THAT IT WILL BY-PASS MAIN BUSS BAR.
15. ALL EMT RUNS SHALL BE GROUNDED AND HAVE A BUSHING, NO PVC ABOVE GROUND.
16. USE SEPARATE HOLES FOR GROUNDING AT BUSS BAR. NO "DOUBLE-UP" OF LUGS.
17. POWER AND TELCO CABINETS SHALL BE GROUNDED (BONDED) TOGETHER.
18. NO LB'S ALLOWED ON GROUNDING.
19. PROVIDE STAINLESS STEEL CLAMP AND BRASS TAGS ON COAX AT ANTENNAS AND DOGHOUSE.
20. ALL ELECTRICAL AND GROUNDING AT THE CELL SITE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUFACTURER SPECIFICATION.
21. IF THE AC PANEL IN THE POWER CABINET IS WIRED AS SERVICE ENTRANCE, THE AC SERVICE GROUND CONDUCTOR SHALL BE CONNECTED TO GROUND ELECTRODE SYSTEM. WHEN THE AC PANEL IN THE POWER CABINET IS CONSIDERED A SUB-PANEL, THE GROUND WIRE SHALL BE INSTALLED IN THE AC POWER CONDUIT. THE INSTALLATION SHALL BE PER LOCAL AND NATIONAL ELECTRIC CODE (NFPA-70).
22. EXOTHERMIC WELDING IS RECOMMENDED FOR GROUNDING CONNECTION WHERE PRACTICAL. OTHERWISE, THE CONNECTION SHALL BE MADE USING COMPRESSION TYPE-2 HOLES, LONG BARREL LUGS OR DOUBLE CRIMP CLAMP "C" CLAMP. THE COPPER CABLES SHALL BE COATED WITH ANTIOXIDANT (COPPER SHIELD) BEFORE MAKING THE CONNECTIONS. THE MANUFACTURER'S TORQUING RECOMMENDATIONS ON THE BOLT ASSEMBLY TO SECURE CONNECTIONS SHALL BE FOLLOWED.
23. THE ANTENNA CABLES SHALL BE GROUNDED AT THE TOP AND BOTTOM OF THE VERTICAL RUN FOR LIGHTING PROTECTION. THE ANTENNA CABLE SHIELD SHALL BE BONDED TO A COPPER GROUND BUSS AT THE LOWER MOST POINT OF A VERTICAL RUN JUST BEFORE IT BEGINS TO BEND TOWARD THE HORIZONTAL PLANE. WIRE RUNS TO GROUND SHALL BE KEPT AS STRAIGHT AND SHORT AS POSSIBLE. ANTENNA CABLE SHIELD SHALL BE GROUNDED JUST BEFORE ENTERING THE CELL CABINET. ANY ANTENNA CABLES OVER 200 FEET IN LENGTH SHALL ALSO BE EQUIPPED WITH ADDITIONAL GROUNDING AT MID-POINT.
24. ALL GROUNDING CONDUCTORS INSIDE THE BUILDING SHALL BE RUN IN CONDUIT RACEWAY SYSTEM, AND SHALL BE INSTALLED AS STRAIGHT AS PRACTICAL WITH MINOR BENDS TO AVOID OBSTRUCTIONS. THE BENDING RADIUS OF ANY #2 GROUNDING CONDUCTOR IS 8". PVC RACEWAY MAY BE FLEXIBLE OR RIGID PER THE FIELD CONDITIONS. GROUNDING CONDUCTORS SHALL NOT MAKE CONTACT WITH ANY METALLIC CONDUITS, SURFACES OR EQUIPMENT.
25. PROVIDE PVC SLEEVES WHERE GROUNDING CONDUCTORS PASS THROUGH THE BUILDING WALLS AND /OR CEILINGS.
26. INSTALL GROUND BUSHINGS ON ALL METALLIC CONDUITS AND BOND TO THE EQUIPMENT GROUND BUSS IN THE PANEL BOARD.
27. GROUND ANTENNA BASES, FRAMES, CABLE RACKS AND OTHER METALLIC COMPONENTS WITH #2 GROUNDING CONDUCTORS AND CONNECT TO INSULATED SURFACE MOUNTED GROUND BARS. CONNECTION DETAILS SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS FOR GROUNDING.
28. ALL PROPOSED GROUNDING CONDUCTORS SHALL BE ROUTED AND CONNECTED TO THE MAIN GROUND BAR OR EXISTING GROUND RING.

4 GROUNDING NOTES
N.T.S.

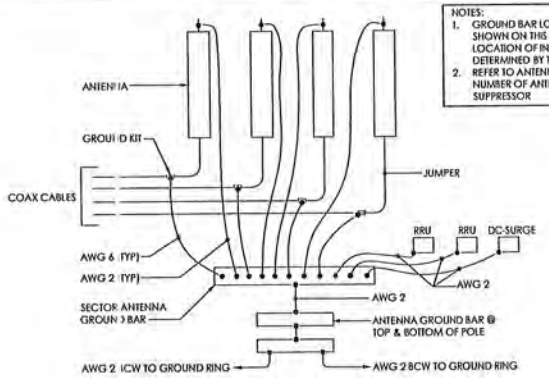
KEY NOTES:

1. (E) ANTENNA GROUND BAR TO BE VERIFIED @ FIELD
2. AWG 2 INSULATED COPPER GROUND WIRE FROM (N) RRUS AND DC6 TO (E) ANTENNA GROUND BAR
3. AWG 6 INSULATED COPPER GROUND WIRE FROM GROUND KIT TO (E) ANTENNA GROUND BAR

NOTES:
1. REFER TO TYP. ANTENNA GROUNDING DIAGRAM
2. (E) GROUND WIRES ARE NOT SHOWN FOR CLARITY



3 ANTENNA GROUNDING PLAN (TYP. PER SECTOR)
1/2" = 1'-0"



NOTES:
1. GROUND BAR LOCATION IS SCHEMATIC AS SHOWN ON THIS SHEET AND ACTUAL LOCATION OF INSTALLATION WILL BE DETERMINED BY THE INSTALLER.
2. REFER TO ANTENNA PLAN FOR EXACT NUMBER OF ANTENNA, RRU AND DC SURGE SUPPRESSOR

2 TYP. ANTENNA GROUNDING DIAGRAM
N.T.S.

1 NOR USED

PDC Corporation
As-built 9/19/2018
Signed by: Jamelle Espitia

PREPARED FOR
AT&T
5001 EXECUTIVE PKWY,
SAN RAMON CA 94583

Vendor:
JS INFRASTRUCTURE
AZ · CA · CO · ID · NM · NV · TX · UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:
CCL05258

DRAWN BY: SLM / JY
CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/23/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

License:
STATE OF CALIFORNIA
51603
CIVIL

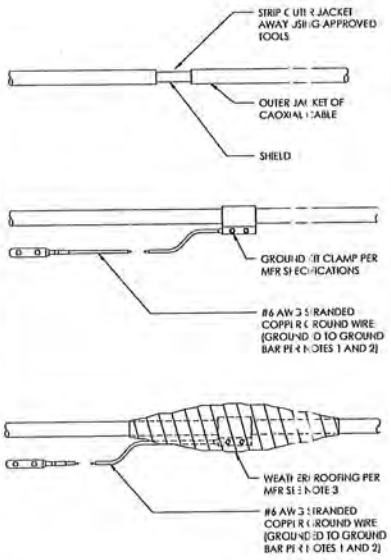
Issued For:
CCL05258
HARBOR BLVD & O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:
GROUNDING PLAN & NOTES

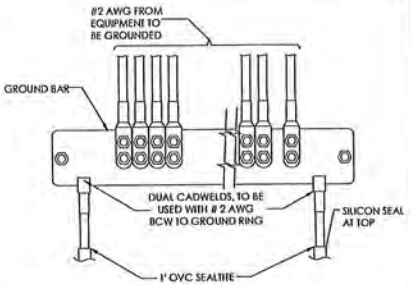
Sheet Number:
G-1

10 NOT USED
N.T.S.

NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MFR
3. WEATHER PROOFING SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY THE CABLE MFR



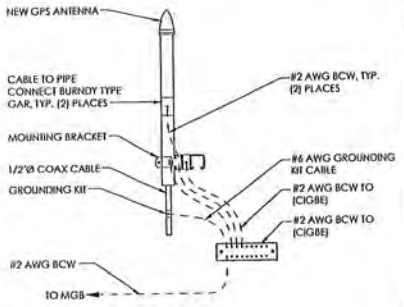
7 GROUND KIT
N.T.S.



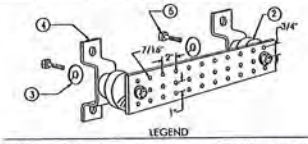
NOTE:
1. CONTRACTOR TO UTILIZE KOPR-SHIELD (THANS & BETTS) ON ALL LUG CONNECTIONS OR APPROVED EQUAL
2. ALL LUGS TO BE DUAL HOLE LONG BARREL AND CRIMPED TWICE WITH MFR'S RECOMMENDED TOOL

5 GROUND BAR CONNECTION
N.T.S.

3 NOT USED
N.T.S.



9 GPS ANTENNA GROUNDING
N.T.S.



1- COPPER GROUND BAR, ¼" X 4" X 20", NEWTON INSTRUMENT CO. CAT. NO. B-6142 OR EQUAL. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION. (ACTUAL GROUND BAR SIZE WILL VARY BASED ON NUMBER OF GROUND CONNECTIONS)

2- INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4 OR EQUAL

3- 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8 OR EQUAL

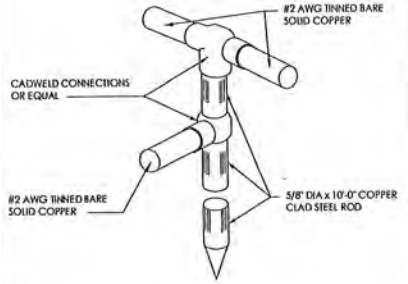
4- WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-6056 OR EQUAL

5- 5/8-11 X 1" HHCS BOLTS, NEWTON INSTRUMENT CO. CAT NO. 3012-1 OR EQUAL

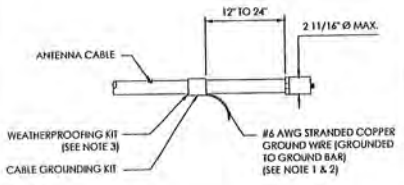
6- INSULATORS SHALL BE ELIMINATED WHEN BONDING DIRECTLY TO TOWER/MONOPOLE STRUCTURE. CONNECTION TO TOWER/MONOPOLE STRUCTURE SHALL BE PER MANUFACTURERS RECOMMENDATIONS.

NOTE: ALL HARDWARE SHALL BE STAINLESS STEEL

4 GROUND BAR DETAIL
N.T.S.

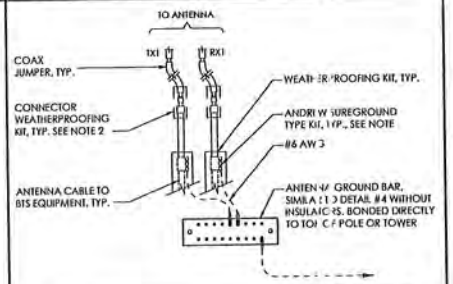


2 GROUND ROD DETAIL
N.T.S.



NOTE:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)

8 CONNECTION OF GROUND KIT TO ANTENNA CABLE
N.T.S.



NOTE:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR
2. WEATHER PROOFING SHALL BE ANDREW TWO-PART RFPE KIT. COLD SHRINK SHALL NOT BE USED

6 GROUND CONNECTION TO GROUND BAR
N.T.S.

PDC Corporation
As-built 8/19/2018
Signed by: Jonelle Espitia

1 TYPICAL MECHANICAL CONNECTIONS
N.T.S.

PREPARED FOR
AT&T
5001 EXECUTIVE PKWY, SAN RAMON CA 94583

Vendor:
15 INFRASTRUCTURE
AZ • CA • CO • FL • NM • NV • TX • UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:
CCL05258

DRAWN BY: SLM / JY
CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/23/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

License:
STATE OF CALIFORNIA
31803
CIVIL

Issued For:
CCL05258
HARBOR BLVD & O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:
GROUNDING DETAILS

Sheet Number:
G-2

Position	Antenna					RRU				Additional Antenna Information				Line Information			
	Use	Type		Technology		Existing		Proposed		Azimuth		RAD Center		Coax Cables		Power/Fiber	
	Swap/New	Existing	Proposed	Existing	Proposed	RRU Type	RRU Location	RRU Type	RRU Location	Existing	Propose	Existing	Propose	Existing	Propose	Existing	Propose
ALPHA																	
1	Use Existing	Commscope SBNHH-1D65B	Commscope SBNHH-1D65B	LTE 700 BC / LTE 1900 2x2	LTE 700 BC / LTE 1900 4x4	RRUS11 - 700BC RRUS12 - PCS	TOP TOP	RRUS11 - 700BC RRUS-4415 B25	TOP TOP	20	20	57	57	NONE	NONE	(9) 0.8" dia power trunk cables + (6) 0.4" dia fiber trunk cables	(15) 0.8" dia power trunk cables + (9) 0.4" dia fiber trunk cables
2	Swap	Commscope SBNHH-1D65B	Commscope JAHH-65B-R3B v3	LTE WCS	LTE 700 FNET1 / LTE 850 / LTE WCS	RRUS32 B30 WCS	TOP	RRU 4478 B14 RRU 4478 B5 RRUS32 B30 WCS	TOP TOP TOP	20	20	57	57				
3	Swap	Andrew SBNH-1D6565B	Commscope JAHH-65B-R3B v3	UMTS 850	LTE 700 FNET2 / UMTS 850 / LTE AWS	RRUW RRUW	TOP TOP	RRUW RRU 4426 B66 AWS	TOP TOP	20	20	57	57				
4	Swap	Andrew SBNH-1D6565B	Commscope JAHH-65B-R3B v3	UMTS 850	LTE 700 DE / UMTS 850	RRUW RRUW	TOP TOP	RRUS-E2 - 700 DE RRUW	TOP TOP	20	20	57	57				
BETA																	
1	Use Existing	Commscope SBNHH-1D65B	Commscope SBNHH-1D65B	LTE 700 BC / LTE 1900 2x2	LTE 700 BC / LTE 1900 4x4	RRUS11 - 700BC RRUS12 - PCS	TOP TOP	RRUS11 - 700BC RRUS-4415 B25	TOP TOP	250	250	45	45	NONE	NONE		
2	Swap	Commscope SBNHH-1D65B	Commscope JAHH-65B-R3B v3	LTE WCS	LTE 700 FNET1 / LTE 850 / LTE WCS	RRUS32 B30 WCS	TOP	RRU 4478 B14 RRU 4478 B5 RRUS32 B30 WCS	TOP TOP TOP	250	250	45	45				
3	Swap	Andrew SBNH-1D6565B	Commscope JAHH-65B-R3B v3	UMTS 850	LTE 700 FNET2 / UMTS 850 / LTE AWS	RRUW RRUW	TOP TOP	RRUW RRU 4426 B66 AWS	TOP TOP	250	250	45	45				
4	Swap	Andrew SBNH-1D6565B	Commscope JAHH-65B-R3B v3	UMTS 850	LTE 700 DE / UMTS 850	RRUW RRUW	TOP TOP	RRUS-E2 - 700 DE RRUW	TOP TOP	250	250	45	45				
GAMMA																	
1	Use Existing	Commscope SBNHH-1D65B	Commscope SBNHH-1D65B	LTE 700 BC / LTE 1900 2x2	LTE 700 BC / LTE 1900 4x4	RRUS11 - 700BC RRUS12 - PCS	TOP TOP	RRUS11 - 700BC RRUS-4415 B25	TOP TOP	140	140	57	57	NONE	NONE		
2	Swap	Commscope SBNHH-1D65B	Commscope JAHH-65B-R3B v3	LTE WCS	LTE 700 FNET1 / LTE 850 / LTE WCS	RRUS32 B30 WCS	TOP	RRU 4478 B14 RRU 4478 B5 RRUS32 B30 WCS	TOP TOP TOP	140	140	57	57				
3	Swap	Andrew SBNH-1D6565B	Commscope JAHH-65B-R3B v3	UMTS 850	LTE 700 FNET2 / UMTS 850 / LTE AWS	RRUW RRUW	TOP TOP	RRUW RRU 4426 B66 AWS	TOP TOP	140	140	57	57				
4	Swap	Andrew SBNH-1D6565B	Commscope JAHH-65B-R3B v3	UMTS 850	LTE 700 DE / UMTS 850	RRUW RRUW	TOP TOP	RRUS-E2 - 700 DE RRUW	TOP TOP	140	140	57	57				

NOTES TO CONTRACTOR:
1. CONTRACTOR IS TO REFER TO AT&T'S MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION.
2. CABLE LENGTHS WERE DETERMINED BASED ON VISUAL INSPECTION DURING SITE-WALK. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK.
3. CONTRACTOR TO VERIFY PORTS HAVE SUFFICIENT ROOM.

NOTE:
(E) ANTENNA AZIMUTHS ARE ESTIMATED AND ARE TO BE VERIFIED BY RF.

PDC Corporation
As-built 9/19/2018
Signed by: Jonello Espiritu

(1) PROPOSED RF SCHEDULE

PREPARED FOR
AT&T
5001 EXECUTIVE PKWY,
SAN RAMON CA 94583

Vendor:
J5 INFRASTRUCTURE PARTNERS
AZ · CA · CO · ID · NM · NV · TX · UT
2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:
CCL05258

DRAWN BY: SLM / JY
CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/23/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

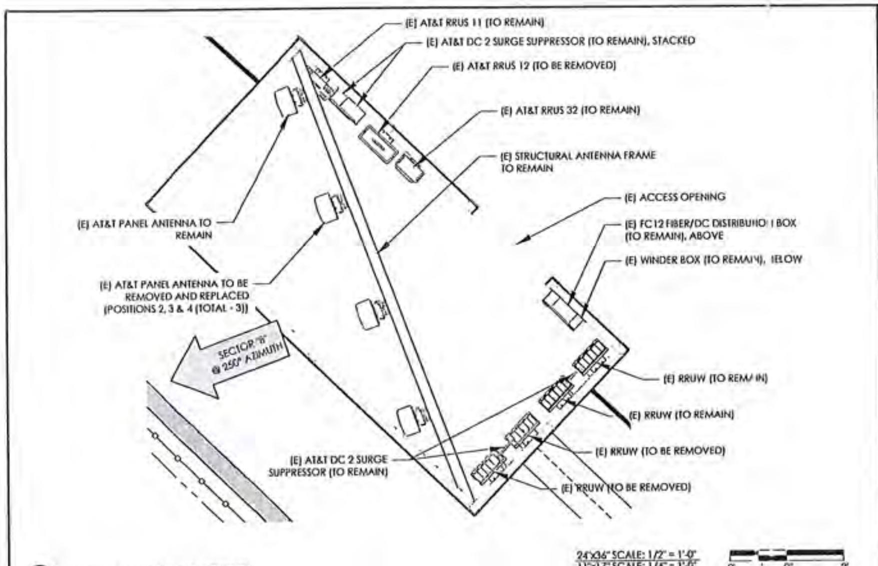
Licensor:
REGISTERED PROFESSIONAL ENGINEER
JONATHAN J. PITTENGER
No. 81603
CIVIL
STATE OF CALIFORNIA

It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

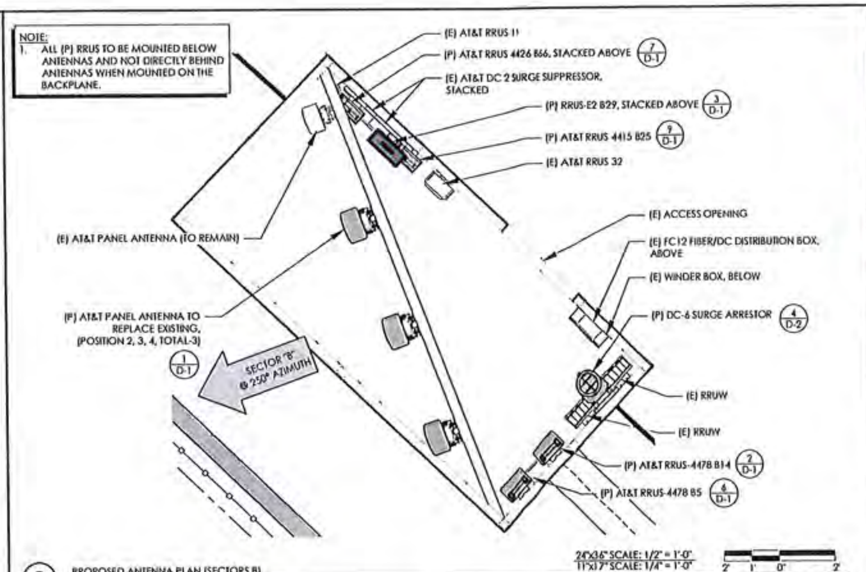
Issued For:
CCL05258
HARBOR BLVD & O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:
RF SCHEDULE

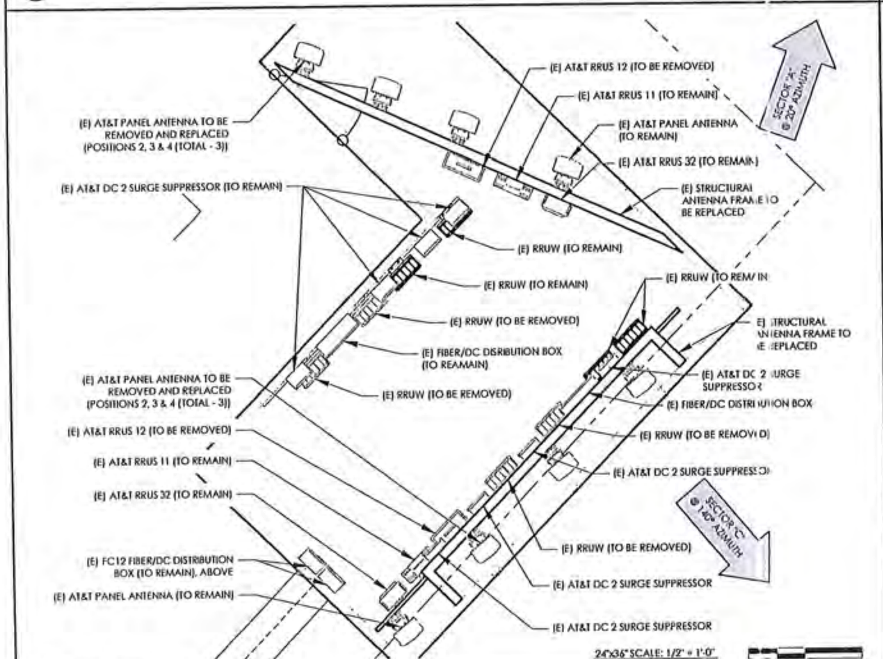
Sheet Number:
A-3



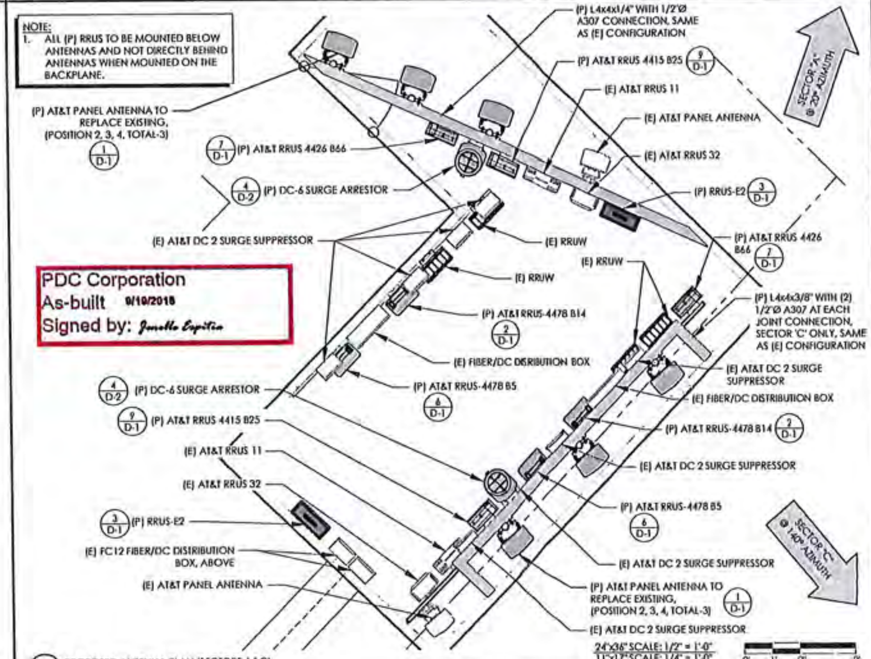
1 EXISTING ANTENNA PLAN (SECTOR B)



2 PROPOSED ANTENNA PLAN (SECTORS B)



3 EXISTING ANTENNA PLAN (SECTOR A&C)



PDC Corporation
As-built 9/10/2018
Signed by: Jonella Espitia

4 PROPOSED ANTENNA PLAN (SECTORS A&C)

PREPARED FOR

AT&T

5001 EXECUTIVE PKWY,
SAN RAMON CA 94583

Vendor:

JS INFRASTRUCTURE PARTNERS

2030 MAIN STREET, SUITE 200
IRVINE, CALIFORNIA 92614

AT&T Site ID:

CCL05258

DRAWN BY: SLM / JY

CHECKED BY: JO

REV	DATE	DESCRIPTION
2	6/23/18	EME REPORT
1	5/18/18	100% CDs
0	5/11/18	100% CDs

Licensor:

It is a violation of law for any persons, unless they are acting under the direction of a licensed professional engineer, to alter this document

Issued For:

CCL05258

HARBOR BLVD
& O'NEILL AVE
333 O'NEILL AVENUE
BELMONT, CA 94002

Sheet Title:

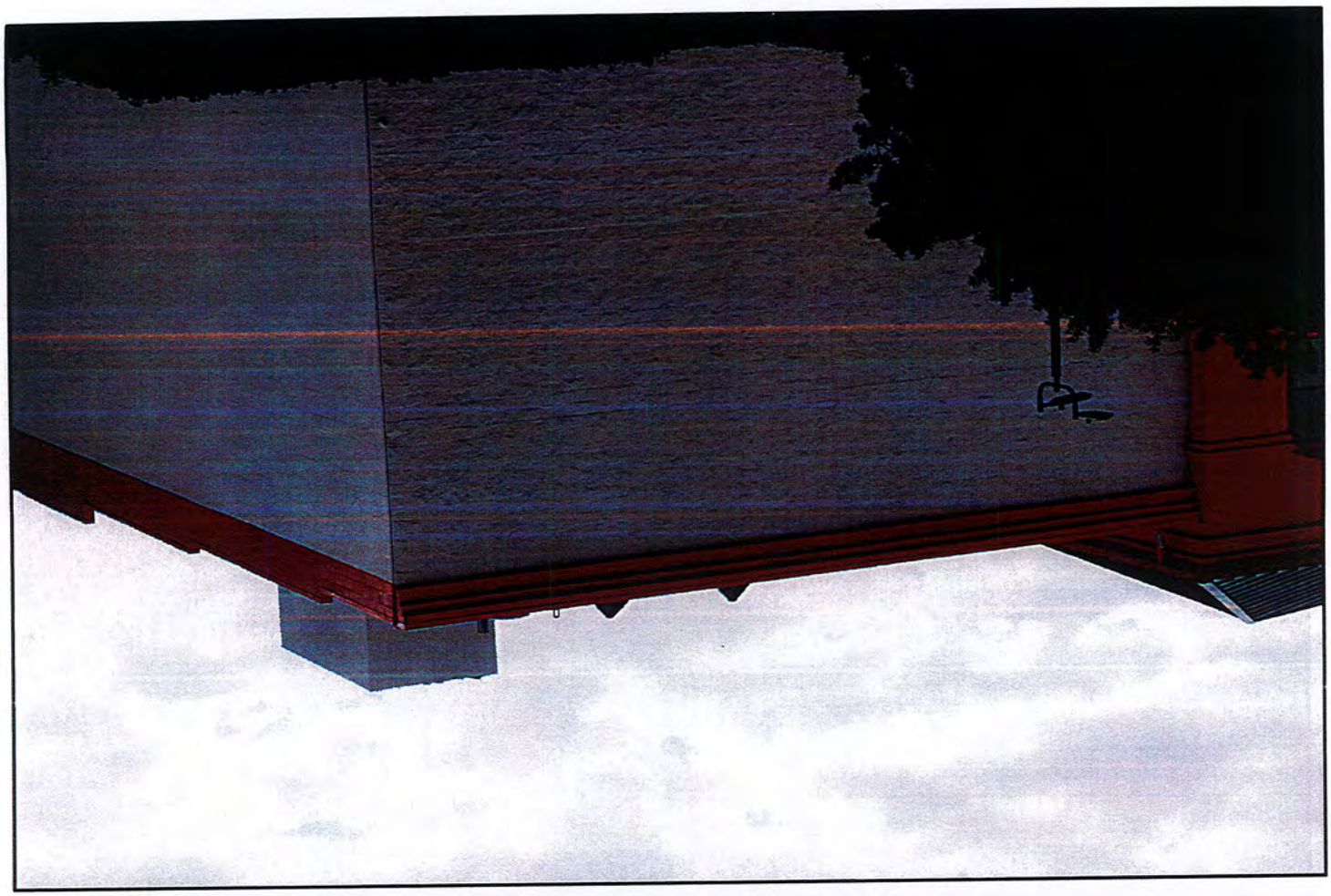
EXISTING & PROPOSED ANTENNA PLANS

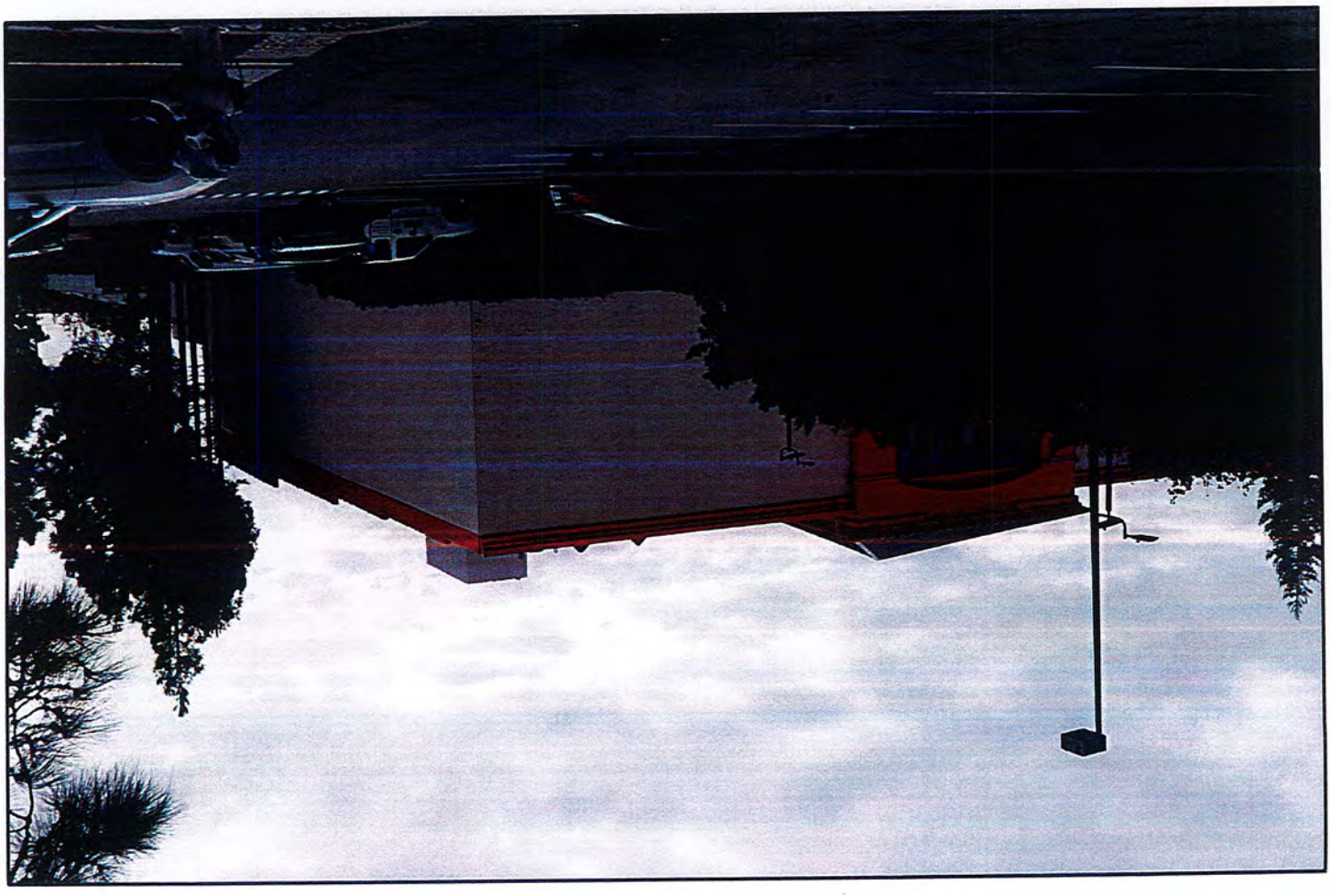
Sheet Number:

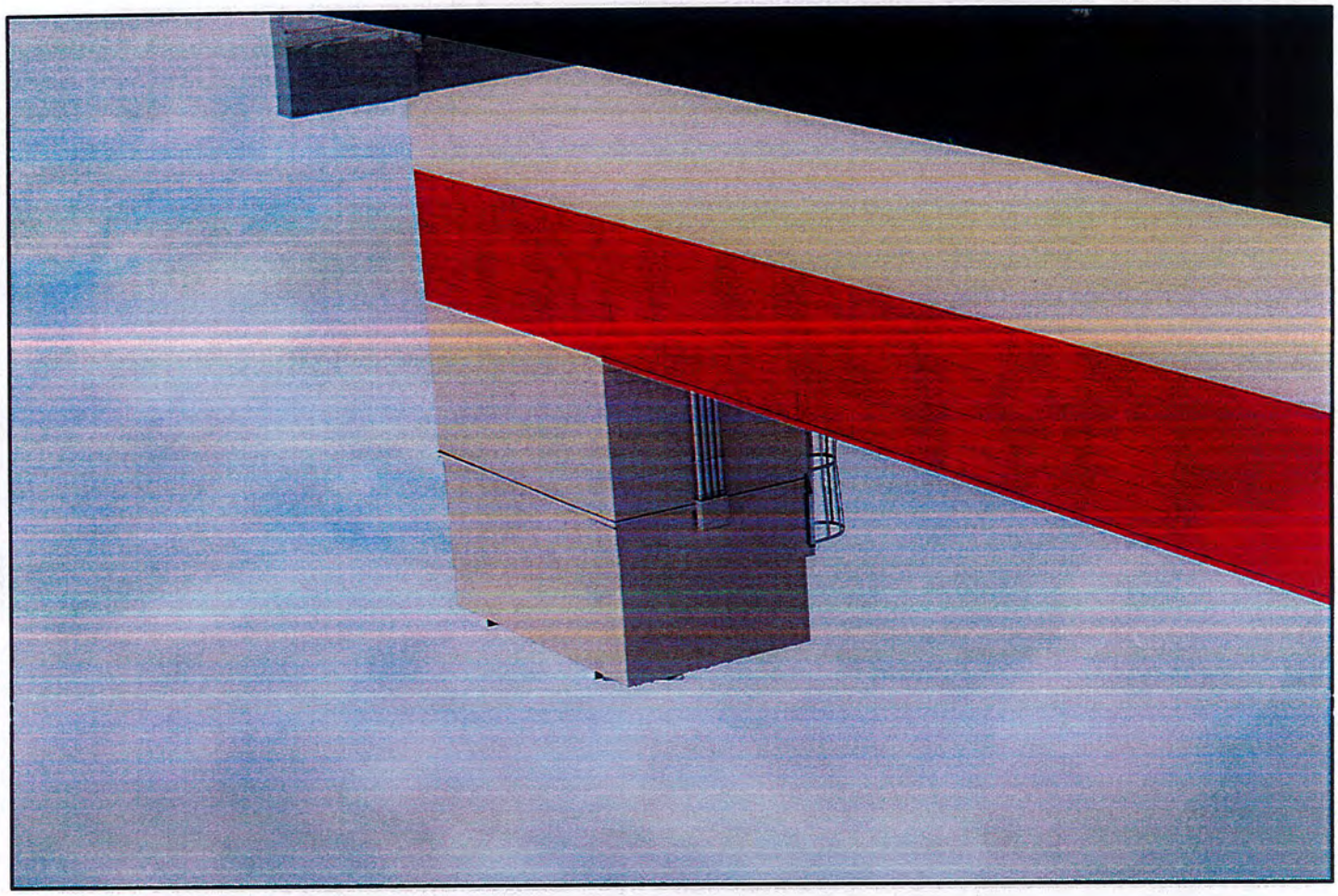
A-3.1

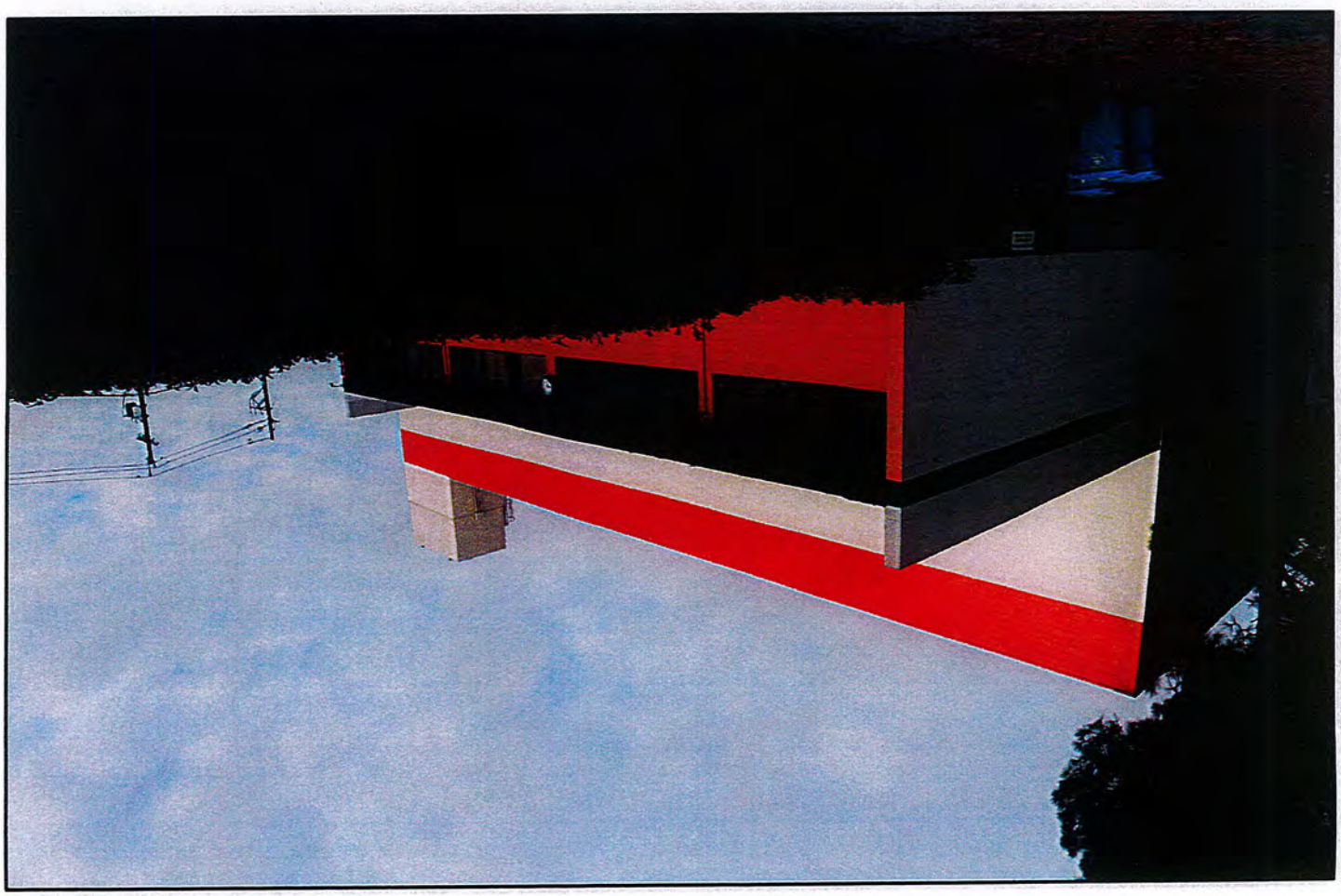
Icon
Alcon

Public Storage









COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT D

WATERFORD

Radio Frequency Emissions Compliance Report For AT&T Mobility

Site Name:	**Harbor Boulevard and O'Neill Avenue**	**Site Structure Type:**	**Rooftop**
Address:	**333 O'Neill Avenue**	**Latitude:**	**37.522405**
	Belmont, CA 94002	**Longitude:**	**-122.268358**
Report Date:	**October 21, 2021**	**Project:**	**Modification**

Compliance Statement

Based on information provided by AT&T Mobility and predictive modeling, the Harbor Boulevard and O'neill Avenue installation proposed by AT&T Mobility will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. At the rooftop of 333 O'Neill Avenue, delineating areas that are predicted to exceed the FCC MPE limits with barriers and RF alerting signage and restricting access to these areas to authorized personnel that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members of the General Public to hazardous levels of RF energy at ground level or in adjacent buildings.

Certification

I, David C. Cotton, Jr., am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

REGISTERED PROFESSIONAL ENGINEER
DAVID CHARLES COTTON, JR.
NO. 18838
2021-Oct-25
ELECTRICAL
STATE OF CALIFORNIA

David Charles Cotton, Jr.
Registered Professional Engineer (Electrical)
State of California, 18838

General Summary

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure. Based on the criteria for these classifications, the FCC General Population limit is considered to be a level that is safe for continuous exposure time. The FCC General Population limit is 5 times more restrictive than the Occupational limits.

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Table 1: FCC Limits

Frequency (MHz)	*Limits for General Population/ Uncontrolled Exposure*		*Limits for Occupational/ Controlled Exposure*	
	Power Density (mW/cm^2)	Averaging Time (minutes)	Power Density (mW/cm^2)	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any location given the spatial orientation and operating parameters of multiple RF sources. The power density in the Far Field of an RF source is specified by OET-65 Equation 5 as follows:

$$S = \frac{EIRP}{4 \cdot \pi \cdot R^2} \ (\mathrm{mW/cm^2})$$

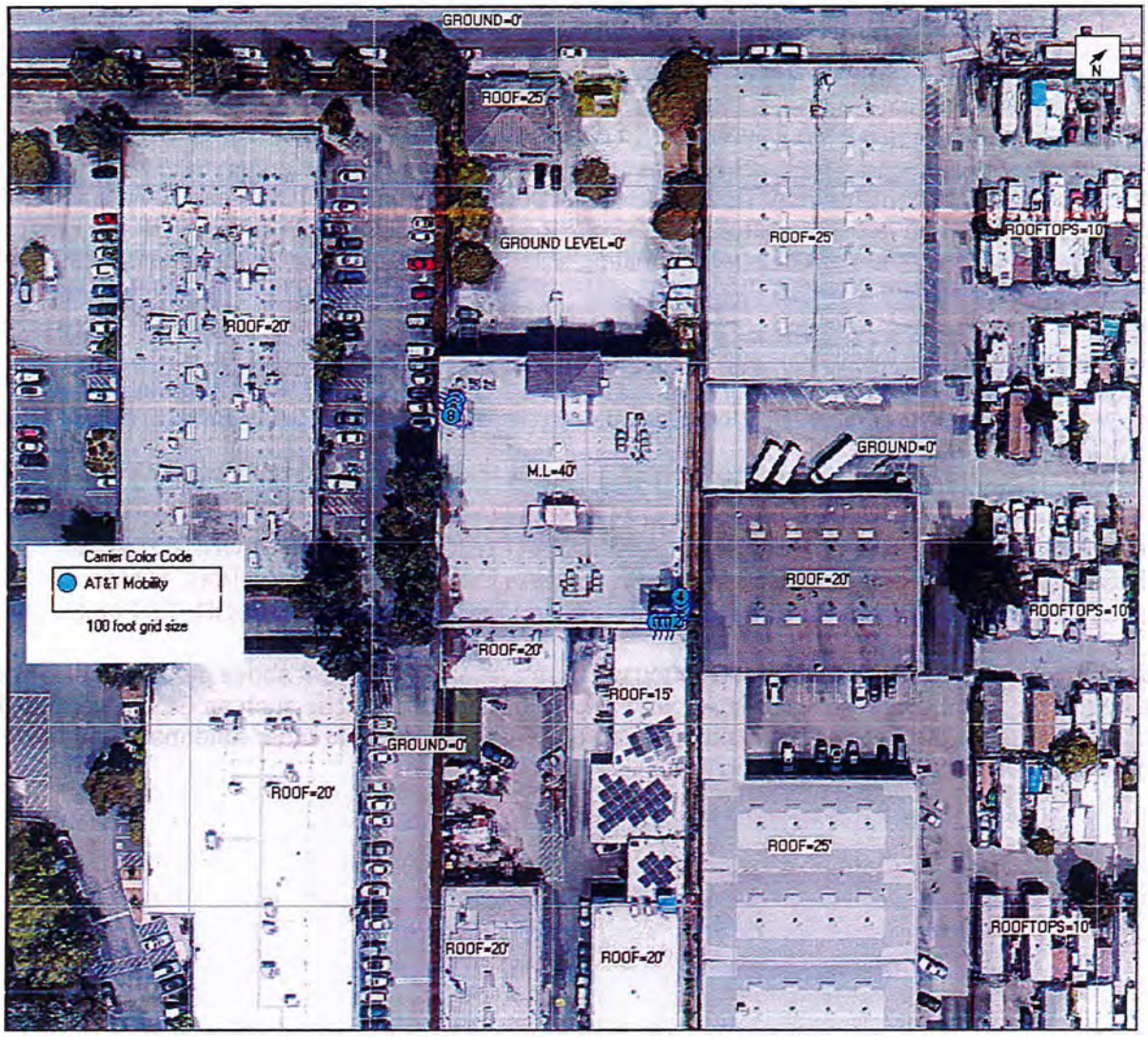
where EIRP is the Effective Radiated Power relative to an isotropic antenna and R is the distance between the antenna and point of study. Additionally, consideration is given to the manufacturers' horizontal and vertical antenna patterns as well as radiation reflection. At any location, the predicted power density in the Far Field is the spatial average of points within a 0 to 6-foot vertical profile that a person would occupy. Near field power density is based on OET-65 Equation 20 stated as

$$S = \left(\frac{180}{\theta_{BW}}\right) \cdot \frac{100 \cdot P_{in}}{\pi \cdot R \cdot h} \ (\mathrm{mW/cm^2})$$

where P_{in} is the power input to the antenna, θ_{BW} is the horizontal pattern beamwidth and h is the aperture length.

Some antennas employ beamforming technology where RF energy allocated to each customer device is dynamically directed toward their location. In the analysis presented herein, predicted exposure levels are based on a statistical distribution of all beams being spread in different directions during the 6-minute averaging time. This statistical approach equates to a "power reduction factor" and conservatively utilizes the lowest 95th percentile value {b-IEC TR 62669}. With a technology duty cycle of 0.75 for Time Division Duplexing associated with downlink transmissions, the actual maximum power (averaged over 6 minutes) is therefore 25% of the maximum power. These results are supported by carriers as well as equipment manufacturer measurement testing.

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com



Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serves to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 6.57% of the FCC General Population limits. Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 12.2351% of the FCC General Population limits. The proposed operation will not expose members of the General Public to hazardous levels of RF energy at ground level or in adjacent buildings.

For accessible areas at the roof level of 333 O'Neill Avenue, the maximum predicted power density level resulting from all AT&T Mobility operations is 777.736% of the FCC Occupational limits (3888.68% of the FCC General Population limits). Based on the operating parameters in Appendix A, the maximum cumulative predicted power density level from all antennas on the interior top floor is 19.55% of the FCC General Population limits. For areas on the roof near the antennas that are predicted to exceed the General Population limits, barriers and RF alerting signs (Caution) should be posted to be visible upon approach to provide

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

Analysis

AT&T Mobility proposes the following installation at this location:

- SWAP (3) EXISTING ANTENNAS IN POS 2,3,4 WITH (3) NEW 8-PORT ANTENNAS (TYPICAL EACH SECTOR, TOTAL OF 9)
- SWAP (1) RRUS-12 WITH (1) NEW RRUS 4415 B25 (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW RRU 4478 B14 NEAR ANTENNA (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW RRU 4478 B5 NEAR ANTENNA (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW RRU 4426 B66 NEAR ANTENNA (TYPICAL EACH SECTOR, TOTAL OF 3)
- INSTALL (1) NEW RRUS-E2 B29 NEAR ANTENNA (TYPICAL EACH SECTOR, TOTAL OF 3)

The antennas will be mounted on a 40-foot Rooftop with centerlines 57 & 45 feet above ground level. Proposed antenna operating parameters are listed in Appendix A. Other appurtenances such as GPS antennas, RRUs and hybrid cable below the antennas are not sources of RF emissions. No other antennas are known to be operating in the vicinity of this site.

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

notification of potential conditions at these areas. These recommendations are depicted in Figure 2. Any work activity in front of transmitting antennas should be coordinated with AT&T Mobility.

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

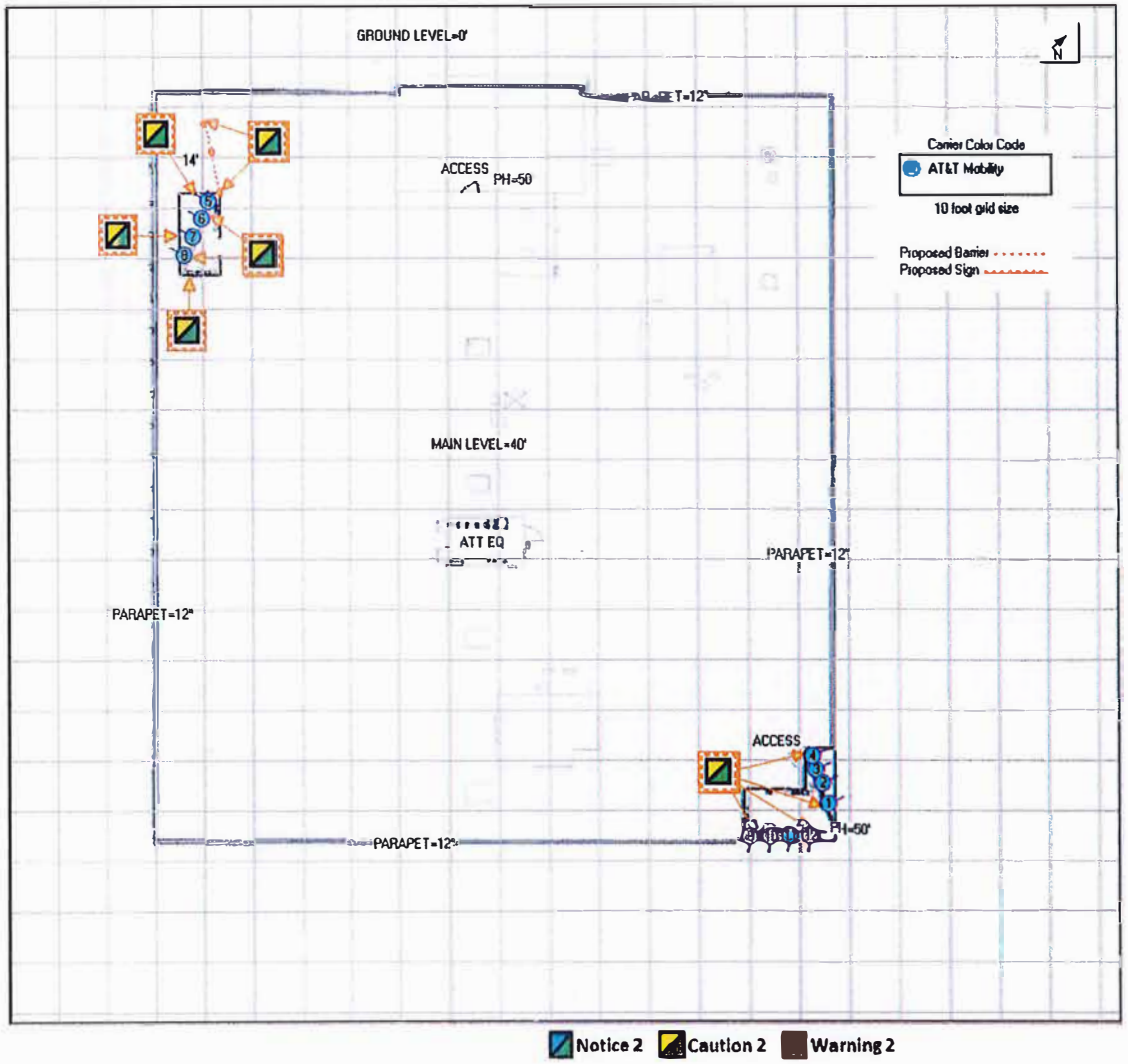


Figure 2: Mitigation Recommendations

Recommendations

AT&T Mobility All Sectors
Caution 2 sign required behind antennas on all sectors.

AND

Caution 2 sign required on the barrier post and on the front of the antenna on the screen wall on beta sector.

Materials –

Alpha
2 Caution 2 Signs

Beta
3 Post,
7 Caution 2 Signs,
Roughly 14' Chain.
Barriers Space – 14'

Gamma
2 Caution 2 Signs

****Barriers must be built a minimum of 6 feet away from unprotected roof edge. Minimum of 36" of parapet wall**

7430 New Technology Way, Suite 150 Frederick, Maryland 21703 (703) 596-1022 Phone www.waterfordconsultants.com

Appendix A: Operating Parameters Considered in this Analysis

Antenna #:	Carrier:	Manufacturer	Pattern:	Band (MHz):	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	EIRP (W):	Rad Center (ft):
1	AT&T	COMMSCOPE	SBNHH-1D65B-SR 00DT	700	20	0	68	6.1	30	2	0	12.26	1010	1656	57
1	AT&T	COMMSCOPE	SBNHH-1D65B 00DT	1900	20	0	66	6.1	40	4	0	15.89	6210	10189	57
2	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	20	0	67	6	40	2	0	12.11	1300	2133	57
2	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	20	0	64	6	40	2	0	12.81	1528	2507	57
2	AT&T	COMMSCOPE	JAHH-65B-R3B 00DT	2300	20	0	65	6	25	4	0	16.06	4036	6622	57
3	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	20	0	67	6	40	2	0	12.11	1300	2133	57
3	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	20	0	64	6	60	2	0	12.81	2292	3760	57
3	AT&T	COMMSCOPE	JAHH-65B-R3B 00DT	2100	20	0	65	6	60	4	0	15.71	8937	14663	57
4	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	20	0	67	6	40	2	0	12.11	1300	2133	57
4	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	20	0	64	6	60	2	0	12.81	2292	3760	57
5	AT&T	COMMSCOPE	SBNHH-1D65B-SR 00DT	700	250	0	68	6.1	30	2	0	12.26	1010	1656	45
5	AT&T	COMMSCOPE	SBNHH-1D65B 00DT	1900	250	0	66	6.1	40	4	0	15.89	6210	10189	45
6	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	250	0	67	6	40	2	0	12.11	1300	2133	45
6	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	250	0	64	6	40	2	0	12.81	1528	2507	45
6	AT&T	COMMSCOPE	JAHH-65B-R3B 00DT	2300	250	0	65	6	25	4	0	16.06	4036	6622	45
7	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	250	0	67	6	40	2	0	12.11	1300	2133	45
7	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	250	0	64	6	60	2	0	12.81	2292	3760	45
7	AT&T	COMMSCOPE	JAHH-65B-R3B 00DT	2100	250	0	65	6	60	4	0	15.71	8937	14663	45
8	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	250	0	67	6	40	2	0	12.11	1300	2133	45
8	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	250	0	64	6	60	2	0	12.81	2292	3760	45
9	AT&T	COMMSCOPE	SBNHH-1D65B-SR 00DT	700	140	0	68	6.1	30	2	0	12.26	1010	1656	57
9	AT&T	COMMSCOPE	SBNHH-1D65B 00DT	1900	140	0	66	6.1	40	4	0	15.89	6210	10189	57
10	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	140	0	67	6	40	2	0	12.11	1300	2133	57
10	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	140	0	64	6	40	2	0	12.81	1528	2507	57
10	AT&T	COMMSCOPE	JAHH-65B-R3B 00DT	2300	140	0	65	6	25	4	0	16.06	4036	6622	57
11	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	140	0	67	6	40	2	0	12.11	1300	2133	57

Antenna #:	Carrier:	Manufacturer	Pattern:	Band (MHz):	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	EIRP (W):	Rad Center (ft):
11	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	140	0	64	6	60	2	0	12.81	2292	3760	57
11	AT&T	COMMSCOPE	JAHH-65B-R3B 00DT	2100	140	0	65	6	60	4	0	15.71	8937	14663	57
12	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	700	140	0	67	6	40	2	0	12.11	1300	2133	57
12	AT&T	COMMSCOPE	JAHH-65B-R3B 02DT	850	140	0	64	6	60	2	0	12.81	2292	3760	57

Notes: Table depicts recommended operating parameters for AT&T Mobility proposed operations.

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT E

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2011-00077 Hearing Date: September 1, 2011

Prepared By: Joseph Camicia, Project Planner For Adoption By: Zoning Hearing Officer

RECOMMENDED FINDINGS

For the Environmental Review, Find:

1. That the project is categorically exempt from the California Environmental Quality Act (CEQA) under provisions of Class 3, Section 15303 (construction of small facilities) of the CEQA Guidelines.

For the Use Permit, Find:

2. That the establishment, maintenance and/or conducting of the proposed use will not, under the circumstances of this particular case, be detrimental to the public welfare or injurious to property or improvements in said neighborhood because the facility will not introduce any significant visual, noise, odor, or light impacts to the surrounding neighborhood.

3. That the approval of this use permit renewal for an existing cellular telecommunication facility is necessary for the public health, safety, convenience or welfare of the community as the site provides telecommunications coverage to the surrounding community, which serves as a benefit to both private and public users.

CONDITIONS OF APPROVAL

1. This approval applies only to the proposal, documents, and plans described in this report and submitted to and approved by the Zoning Hearing Officer on September 1, 2011. Modifications beyond that which was approved by the Zoning Hearing Officer will be subject to review and approval by the Community Development Director and may require review at a public hearing. Minor modifications that are largely consistent with this approval may be approved at the discretion of the Community Development Director.

2. This permit shall be valid for ten (10) years from the date of this approval and shall expire on September 1, 2011. If continuation of this use is desired, the applicant shall file a use permit renewal application with the Planning and Building Department six months prior to its expiration and pay the fees applicable at that time.

3. The applicant shall paint all new rooftop facilities a light brown/beige color to match that of the existing building and be consistent with the photosimulations on file. The applicant shall arrange for color verification prior to calling for a final inspection.

4. The applicant shall continue to maintain the color of all existing facilities in a manner that is consistent with the color samples on file. Over time paint colors fade and, as result, facilities may become more visually prominent than initially proposed. The applicant shall continue to take all necessary measures to ensure that the site remains consistent with all approved colors. This includes all screen walls and rooftop facilities approved by this permit.

5. This installation shall be removed in its entirety at that time when this technology becomes obsolete, when the facility is no longer needed to achieve coverage objectives, or if the facility remains inactive for six consecutive months. If any of these circumstances occur, the entire facility, including all antennas and associated equipment, cables, power supplies, etc., shall be removed and the site shall be returned to its pre-construction state to the extent practicable.

6. The applicant shall submit proof of its FCC and CPUC licenses/registrations prior to receiving final approval on the building permit. The applicant shall keep their FCC license active and in good standing throughout this permit's 10-year term. The applicant shall immediately notify the Planning and Building Department if any changes to their license occur.

Building Inspection Section

7. The applicant shall apply for and obtain a building permit prior to beginning construction of the facilities approved by the Zoning Hearing Officer on September 1, 2011.

JC:cdn – JXCV0572_WCU.DOC