



SAN FRANCISCO PLANNING DEPARTMENT

Executive Summary Conditional Use Authorization

HEARING DATE: DECEMBER 21, 2017

Date: December 14, 2017
Case No.: **2016-007238CUA**
Project Address: **519 Ellis Street**
Current Zoning: RC-4 (Residential –Commercial, High Density)
80-T Height and Bulk District
Block/Lot: 0334/028A
Project Sponsor: Verizon Wireless, represented by Tom Doherty
12667 Alcosta Blvd., STE 175
San Ramon, CA 94583
Staff Contact: Ashley Lindsay – (415) 575-9178
Ashley.Lindsay@sfgov.org
Recommendation: Approval with Conditions

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

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Information:
415.558.6377

PROJECT DESCRIPTION

The proposal is to install a new Verizon Wireless Macro Wireless Telecommunications Facility consisting of installation of twelve (12) new panel antennas; installation of twenty-four (24) new RRUs (remote radio units); installation of four (4) new four sided FRP (fiber-reinforced plastic) screen boxes on the rooftop, to shroud the proposed antennas and ancillary equipment; installation of one (1) GPS antenna, and installation of additional equipment in the basement, which will not be accessible or visible to the public, at an existing building.

The four (4) FRP screen boxes will be located at four different areas of the rooftop: the two (2) FRP screen boxes at the northwest and northeast areas of the rooftop will be no taller than 10 feet and 4 inches above the top of the roof, and the two (2) FRP screen boxes at the southwest and southeast areas of the rooftop will be no taller than 11 feet and 8 inches above the top of the roof. Each FRP screen box will contain and screen from public views three (3) antennas, RRUs, and ancillary equipment. All FRP screen elements and equipment are proposed to be painted to match the existing building; there shall be no rivet bolts externally visible.

SITE DESCRIPTION AND PRESENT USE

The Project Site is located on Assessor's Block 0334, Lot 028A. The lot is located near the corner of Ellis Street and Leavenworth Street. The six-story building was constructed in 1923, and is a contributor to the Uptown Tenderloin National Register Historic District. The present use of the building is Single-Room-Occupancy (SRO) hotel use with approximately 1414 units, over ground-floor commercial.

SURROUNDING PROPERTIES AND NEIGHBORHOOD

The Project Site is situated within the Downtown/Civic Center neighborhood. Surrounding uses include a mix of residential, commercial, and public uses throughout the RC-4 zoned District. In the blocks surrounding the Project Site, the buildings generally range from 1 story to 6 stories in height.

ENVIRONMENTAL REVIEW

The Project is exempt from the California Environmental Quality Act ("CEQA") as a Class 3 categorical exemption (Construction of New Communications Facilities). The categorical exemption and all pertinent documents may be found in the files of the Planning Department, as the custodian of records, at 1650 Mission Street, Suite 400, San Francisco.

HEARING NOTIFICATION

TYPE	REQUIRED PERIOD	REQUIRED NOTICE DATE	ACTUAL NOTICE DATE	ACTUAL PERIOD
Classified News Ad	20 days	December 1, 2017	November 29, 2017	22 days
Posted Notice	20 days	December 1, 2017	December 1, 2017	20 days
Mailed Notice	20 days	December 1, 2017	December 1, 2017	20 days

PUBLIC COMMENT/COMMUNITY OUTREACH

The Project Sponsor held a community meeting on April 7, 2016 at 6:00pm at the San Francisco Public Library - Koret Auditorium, 100 Larkin Street, San Francisco, CA 94102. Two members of the community attended the meeting.

As of December 14, 2017, the Department has not received any calls or testimony raising concerns about, or expressing support for, the proposed project.

ISSUES AND OTHER CONSIDERATIONS

- Based on the zoning and land use, the proposed WTS facility is considered a Location Preference 5 Site (Mixed Use Buildings in High Density Districts), which is considered a "preferred location" according to the Planning Department's *WTS Facilities Siting Guidelines*, as the Project Site is a structure within the RC-4 District that already has housing above ground-floor commercial.
- Given the directional nature of the panel antennas, their specific orientation, and their placement on the roof, the Radio-Frequency (RF) emissions created by the proposed panel antennas would not result in exposure levels that approach or exceed the public exposure limits set by the Federal Communications Commission (FCC). As noted on RF emissions report, the combined maximum RF exposure for the proposed site at ground level would be 2.7% of the public exposure limit set by the FCC. The antennas are not accessible to any unauthorized persons due to their height and location on the roof. Health and safety aspects (e.g. engineering review for structural loads, and backup battery storage) of all wireless Projects are reviewed by the Department of Public Health, San Francisco Fire Department, and the Department of Building Inspection.

- The proposed macro WTS facility would not significantly impair commercial and residential activities within the Project Site.
- Verizon Wireless has an updated Five Year Plan on file with the Department that includes the approximate longitudinal and latitudinal coordinates of proposed locations, including the Project Site.
- All required public notifications were conducted in compliance with the Planning Code and adopted WTS policies.

REQUIRED COMMISSION ACTION

Pursuant to Sections 303(c) and 209.3 of the Planning Code, a Conditional Use Authorization is required for a new installation of a WTS facility (Utility and Infrastructure Use) in the RC-4 Zoning Districts.

BASIS FOR RECOMMENDATION

- This Project is necessary, desirable, and compatible with the surrounding neighborhood, in accordance with Section 303 of the Planning Code, for the following reasons: The proposed facility would be screened from view by virtue of proposed enclosures and their placement on the rooftop of the Project Site. The proposal would not significantly detract from views of the Subject building or from view of other surrounding buildings, nor would it detract from adjacent streetscapes, and vistas within the Downtown/Civic Center neighborhood and Uptown Tenderloin National Register Historic District.
- The Project is on balance, consistent with the Objectives and Policies of the General Plan, as outlined in the draft Motion.
- The expected RF emissions fall within the limits established by the Federal Communications Commission (FCC).
- According to the Planning Department's Wireless Telecommunications Services (WTS) Facilities Siting Guidelines, the Project Site is a preferred location, as a Location Preference 5 (Mixed Use Buildings in High Density Districts) Site.
- Based on propagation maps provided by Verizon Wireless, the Project would provide enhanced coverage in an area that currently experiences gaps in coverage and capacity.
- Based on the analysis provided by Verizon Wireless, the Project would provide additional capacity in an area that currently experiences insufficient service during periods of high data usage.
- Based on independent third-party evaluation, the maps, data, and conclusions about service coverage and capacity provided by Verizon Wireless are accurate.

RECOMMENDATION:	Approval with Conditions
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Attachments:

Draft Conditional Use Authorization Motion
Block Book Map
Sanborn Map
Zoning Map
Aerial Map

Photo Simulations
Radio Frequency Report
Department of Public Health Approval
Community Outreach Report
Coverage Maps
Independent Evaluation
Reduced Plans

Attachment Checklist

- | | |
|---|---|
| <input checked="" type="checkbox"/> Draft Motion | <input checked="" type="checkbox"/> Project sponsor submittal |
| <input checked="" type="checkbox"/> Zoning District Map | <input checked="" type="checkbox"/> Drawings: <u>Proposed Project</u> |
| <input type="checkbox"/> Height & Bulk Map | <input checked="" type="checkbox"/> Check for legibility |
| <input checked="" type="checkbox"/> Block Book Map | <input checked="" type="checkbox"/> Community Outreach Report |
| <input checked="" type="checkbox"/> Sanborn Map | <input checked="" type="checkbox"/> Coverage Maps |
| <input checked="" type="checkbox"/> Aerial Map | <input checked="" type="checkbox"/> RF Report |
| <input checked="" type="checkbox"/> Context Photos | <input checked="" type="checkbox"/> DPH Approval |
| <input checked="" type="checkbox"/> Photo Simulations | <input checked="" type="checkbox"/> Independent Evaluation |

Exhibits above marked with an "X" are included in this packet AL Planner's Initials

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SAN FRANCISCO PLANNING DEPARTMENT

Subject to: (Select only if applicable)

- | | |
|--|--|
| <input type="checkbox"/> Affordable Housing (Sec. 415) | <input type="checkbox"/> First Source Hiring (Admin. Code) |
| <input type="checkbox"/> Jobs Housing Linkage Program (Sec. 413) | <input type="checkbox"/> Child Care Requirement (Sec. 414) |
| <input type="checkbox"/> Downtown Park Fee (Sec. 412) | <input type="checkbox"/> Other |

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Planning Commission Draft Motion

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San Ramon, CA 94583 Verizon Wireless
Staff Contact: Ashley Lindsay – (415) 575-9178
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ADOPTING FINDINGS RELATING TO THE APPROVAL OF A CONDITIONAL USE AUTHORIZATION UNDER PLANNING CODE SECTIONS 303 AND 209.3 TO INSTALL A VERIZON WIRELESS MACRO WIRELESS TELECOMMUNICATIONS SERVICES FACILITY CONSISTING OF INSTALLATION OF TWELVE (12) NEW PANEL ANTENNAS; INSTALLATION OF TWENTY-FOUR (24) NEW RRUS; INSTALLATION OF FOUR (4) NEW FRP SCREEN BOXES; INSTALLATION OF ONE (1) GPS ANTENNA; AND ANCILLARY EQUIPMENT AS PART OF THE VERIZON WIRELESS TELECOMMUNICATIONS NETWORK WITHIN THE RC-4 (RESIDENTIAL-COMMERICAL, HIGH DENSITY) ZONING DISTRICT AND 80-T HEIGHT AND BULK DISTRICT.

PREAMBLE

On June 1, 2016, Verizon Wireless (hereinafter "Project Sponsor"), submitted an application (hereinafter "Application"), for a Conditional Use Authorization on the property at 519 Ellis Street, Block 0334, Lot 028A (hereinafter "Project Site") to develop a Verizon Wireless Macro Wireless Telecommunications Services Facility consisting of installation of twelve (12) new panel antennas; installation of twenty-four (24) new RRUs (remote radio units); installation of four (4) new four sided FRP (fiber-reinforced plastic) screen boxes on the rooftop, to shroud the proposed antennas and ancillary equipment; installation of one (1) GPS antenna, and installation of additional equipment in the basement, which will not be accessible or visible to the public.

The four (4) FRP screen boxes will be located at four different areas of the rooftop: the two (2) FRP screen boxes at the northwest and northeast areas of the rooftop will be no taller than 10 feet

and 4 inches above the top of the roof, and the two (2) FRP screen boxes at the southwest and southeast areas of the rooftop will be no taller than 11 feet and 8 inches above the top of the roof. Each FRP screen box will contain and screen from public views three (3) antennas, RRUs, and ancillary equipment. All FRP screen elements and equipment are proposed to be painted to match the existing building; there shall be no rivet bolts externally visible, as part of the Verizon Wireless Telecommunications Network, within the RC-4 (Residential-Commercial, High Density) Zoning District, and 80-T Height and Bulk District.

The Project is exempt from the California Environmental Quality Act ("CEQA") as a Class 3 Categorical Exemption (Section 15303 of the California Environmental Quality Act). The Planning Commission has reviewed and concurs with said determination. The categorical exemption and all pertinent documents may be found in the files of the Planning Department (hereinafter "Department"), as the custodian of records, at 1650 Mission Street, Suite 400, San Francisco.

On December 21, 2017 the San Francisco Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting on the Application for a Conditional Use Authorization.

The Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of the Applicant, Department Staff, and other interested parties.

MOVED, that the Commission hereby authorizes the Conditional Use in Application No. 2016-007238CUA, subject to the conditions contained in "EXHIBIT A" of this motion, based on the following findings:

FINDINGS

Having reviewed the materials identified in the preamble above, and having heard all testimony and arguments, this Commission finds, concludes, and determines as follows:

1. The above recitals are accurate and constitute findings of this Commission.
2. **Site Description and Present Use.** The Project Site is located on Assessor's Block 0334, Lot 028A. The lot is located near the corner of Ellis Street and Leavenworth Street. The six-story building was constructed in 1923, and is a contributor to the Uptown Tenderloin National Register Historic District. The present use of the building is Single-Room-Occupancy (SRO) hotel use with approximately 1414 units, over ground-floor commercial.
3. **Surrounding Properties and Neighborhood.** The Project Site is situated within the Downtown/Civic Center neighborhood. Surrounding uses include a mix of residential, commercial, and public uses throughout the RC-4 zoned District. In the blocks surrounding the Project Site, the buildings generally range from 1 story to 6 stories in height.

4. **Project Description.** The proposal is to install a new Verizon Wireless Macro Wireless Telecommunications Facility consisting of installation of twelve (12) new panel antennas; installation of twenty-four (24) new RRUs (remote radio units); installation of four (4) new four sided FRP (fiber-reinforced plastic) screen boxes on the rooftop, to shroud the proposed antennas and ancillary equipment; installation of one (1) GPS antenna, and installation of additional equipment in the basement, which will not be accessible or visible to the public.

The four (4) FRP screen boxes will be located at four different areas of the rooftop: the two (2) FRP screen boxes at the northwest and northeast areas of the rooftop will be no taller than 10 feet and 4 inches above the top of the roof, and the two (2) FRP screen boxes at the southwest and southeast areas of the rooftop will be no taller than 11 feet and 8 inches above the top of the roof. Each FRP screen box will contain and screen from public views three (3) antennas, RRUs, and ancillary equipment. All FRP screen elements and equipment are proposed to be painted to match the existing building; there shall be no rivet bolts externally visible.

5. **Past History and Actions.** The Planning Commission adopted the *Wireless Telecommunications Services (WTS) Facilities Siting Guidelines* ("Guidelines") for the installation of wireless telecommunications facilities in 1996. These Guidelines set forth the land use policies and practices that guide the installation and approval of wireless facilities throughout San Francisco. A large portion of the Guidelines was dedicated to establishing location preferences for these installations. The Board of Supervisors, in Resolution No. 635-96, provided input as to where wireless facilities should be located within San Francisco. The Guidelines were updated by the Commission in 2003 and again in 2012, requiring community outreach, notification, and detailed information about the facilities to be installed.

Section 8.1 of the Guidelines outlines Location Preferences for wireless facilities. There are five primary areas where the installation of wireless facilities should be located:

1. Publicly-used Structures: such facilities as fire stations, utility structures, community facilities, and other public structures;
2. Co-Location Site: encourages installation of facilities on buildings that already have wireless installations;
3. Industrial or Commercial Structures: buildings such as warehouses, factories, garages, service stations;
4. Industrial or Commercial Structures: buildings such as supermarkets, retail stores, banks; and
5. Mixed-Use Buildings in High Density Districts: buildings such as housing above commercial or other non-residential space.

Section 8.1 of the WTS Siting Guidelines further stipulates that the Planning Commission will not approve WTS applications for Preference 5 or below Location Sites unless the

application describes (a) what publicly-used building, co-location site or other Preferred Location Sites are located within the geographic service area; (b) what good faith efforts and measures were taken to secure these more Preferred Locations, (c) explains why such efforts were unsuccessful; and (d) demonstrates that the location for the site is essential to meet demands in the geographic service area and the Applicant's citywide networks.

Before the Planning Commission can review an application to install a wireless facility, the Project Sponsor must submit a five-year facilities plan, which must be updated biannually, an emissions report and approval by the Department of Public Health, Section 106 Declaration of Intent, an independent evaluation verifying coverage and capacity, a submittal checklist and details about the facilities to be installed.

Under Section 704(B)(iv) of the 1996 Federal Telecommunications Act, local jurisdictions cannot deny wireless facilities based on Radio Frequency (RF) radiation emissions so long as such facilities comply with the FCC's regulations concerning such emissions.

6. **Location Preference.** The *WTS Facilities Siting Guidelines* identify different types of zoning districts and building uses for the siting of wireless telecommunications facilities. Based on the zoning and land use, the proposed WTS facility is at a Location Preference 5 Site (Mixed Use Buildings in High Density Districts) according to the WTS Facilities Siting Guidelines, making it a desired location.
7. **Radio Waves Range.** The Project Sponsor has stated that the proposed wireless network is designed to address coverage and capacity needs in the area. The network will operate in the 700 Megahertz (MHZ) bands, which are regulated by the Federal Communications Commission (FCC) and must comply with the FCC-adopted health and safety standards for electromagnetic radiation and radio frequency radiation.
8. **Radiofrequency (RF) Emissions:** The Project Sponsor retained Hammett & Edison, Inc., a radio engineering consulting firm, to prepare a report describing the expected RF emissions from the proposed facility. Pursuant to the Guidelines, the Department of Public Health reviewed the report and determined that the proposed facility complies with the standards set forth in the Guidelines.
9. **Department of Public Health Review and Approval.** The Project was referred to the Department of Public Health (DPH) for emissions exposure analysis. Radio-Frequency (RF) levels from the proposed Verizon Wireless transmitters at any nearby publicly accessible building or area would 2.7% of the FCC public exposure limit.

There are no existing antennas operated by Verizon Wireless installed on the roof top of the building at 519 Ellis Street. Existing RF levels at ground were approximately well below the FCC public exposure limit. There were observed no other antennas within 100 feet of this site. Verizon Wireless proposes to install twelve (12) new antennas. The antennas are mounted at a height of approximately 85 feet above the ground. The estimated RF field from the proposed Verizon Wireless transmitters at ground level is

calculated to be 0.015 mW/sq cm., which is 2.7% of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 117 and 45feet, and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 9 feet of the front of the antennas while they are in operation.

10. **Coverage and Capacity Verification.** The maps, data, and conclusion provided by Verizon Wireless to demonstrate the need for outdoor and indoor coverage and capacity have been determined by Hammett & Edison, Inc., an engineering consultant and independent third party, to accurately represent the carrier's present and post-installation conclusions.
11. **Maintenance Schedule.** The facility would operate without on-site staff but with a maintenance crew visiting the property to service and monitor the facility.
12. **Community Outreach.** As required under the *Guidelines* the Project Sponsor held a community meeting on April 7, 2016 at 6:00pm at the San Francisco Public Library - Koret Auditorium, 100 Larkin Street, San Francisco, CA 94102. Two members of the community attended the meeting.
13. **Five-year plan:** Per the *Guidelines*, the Project Sponsor submitted an updated five-year plan, as required, in October 2017.
14. **Public Comment.** As of December 14, 2017, the Department has not received any calls or testimony raising concerns about, or expressing support for, the proposed project.
15. **Planning Code Compliance.** The Commission finds that the Project is consistent with the relevant provisions of the Planning Code in the following manner:
 - A. **Use.** Per Planning Code Section 209.3, a Conditional Use Authorization is required for a macro WTS facility (Utility and Infrastructure Use).
16. **Planning Code Section 303** establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use approval. On balance, the Project complies with said criteria in that:
 - A. The proposed new uses and building, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable, and compatible with, the neighborhood or the community.
 - i. *Desirable: San Francisco is a leader of the technological economy; it is important and desirable to the vitality of the City to have and maintain adequate telecommunications coverage and data capacity. This includes the installation and upgrading of systems to keep up with changing technology and increases in usage. It is desirable for the City to allow wireless facilities to be installed.*

The Project at 519 Ellis Street is generally desirable and compatible with the surrounding neighborhood because the Project will not conflict with the existing uses of the property and will be designed to be compatible with the surrounding neighborhood. The overall location, setback from public streets, height and design of the proposed facility, including visible screening elements is situated so as to avoid intrusion into public vistas, and to insure harmony with the existing neighborhood character and promote public safety.

- ii. *Necessary: In the case of wireless installations, there are two criteria that the Commission reviews: coverage and capacity.*

Coverage: San Francisco does have sufficient overall wireless coverage (note that this is separate from carrier capacity). San Francisco's unique coverage issues are due to topography and building heights. The hills and buildings disrupt lines-of-site between WTS base stations. Thus, telecommunication carriers continue to install additional installations to make sure coverage is sufficient.

Capacity: While a carrier may have adequate coverage in a certain area, the capacity may not be sufficient. With the continuous innovations in wireless data technology and demand placed on existing infrastructure, individual telecommunications carriers must upgrade and in some instances expand their facilities network to provide proper data and voice capacity. It is necessary for San Francisco, as a leader in technology, to have adequate capacity.

The Project at 519 Ellis Street is necessary in order to achieve sufficient street and in-building mobile phone coverage and data capacity. Recent drive tests in the subject area conducted by the Verizon Wireless Radio Frequency Engineering Team provide that the Project Site is a preferable location, based on factors including quality of coverage and aesthetics.

- B. The proposed project will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity. There are no features of the project that could be detrimental to the health, safety or convenience of those residing or working the area, in that:

- iii. Nature of proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;

The Project must comply with all applicable Federal and State regulations to safeguard the health, safety and to ensure that persons residing or working in the vicinity will not be affected, and prevent harm to other personal property.

The Department of Public Health conducted an evaluation of potential health effects from Radio Frequency radiation, and has concluded that the proposed wireless transmission

facilities will have no adverse health effects if operated in compliance with the FCC-adopted health and safety standards.

- iv. The accessibility and traffic patterns for persons and vehicles, the type and volume of such traffic, and the adequacy of proposed off-street parking and loading;

No increase in traffic volume is anticipated with the facilities operating unmanned, with a maintenance crew visiting the Site once a month or on an as-needed basis.

- v. The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;

While some noise and dust may result from the installation of the antennas and transceiver equipment, noise or noxious emissions from continued use are not likely to be significantly greater than ambient conditions due to the operation of the wireless communication network.

- vi. Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs;

The facility will not affect landscaping, open space, required parking, lighting or signage at the Project Site or surrounding area.

- C. That the use as proposed will comply with the applicable provisions of the Planning Code and will not adversely affect the General Plan.

The Project complies with all relevant requirements and standards of the Planning Code and is consistent with Objectives and Policies of the General Plan, as detailed below.

- 17. **General Plan Compliance.** The Project is, on balance, consistent with the following Objectives and Policies of the General Plan:

HOUSING ELEMENT
Objectives and Policies

BALANCE HOUSING CONSTRUCTION AND COMMUNITY INFRASTRUCTURE

OBJECTIVE 12:

BALANCE HOUSING GROWTH WITH ADEQUATE INFRASTRUCTURE THAT SERVES THE CITY'S GROWING POPULATION.

Policy 12.3:

Ensure new housing is sustainable supported by the City's public infrastructure systems.

The Project will improve Verizon Wireless's coverage and capacity within the Downtown/Civic Center neighborhood.

COMMERCE AND INDUSTRY ELEMENT

Objectives and Policies

OBJECTIVE 1:

MANAGE ECONOMIC GROWTH AND CHANGE TO ENSURE ENHANCEMENT OF THE TOTAL CITY LIVING AND WORKING ENVIRONMENT.

Policy 1.1:

Encourage development, which provides substantial net benefits and minimizes undesirable consequences. Discourage development, which has substantial undesirable consequences that cannot be mitigated.

Policy 1.2:

Assure that all commercial and industrial uses meet minimum, reasonable performance standards.

The Project will enhance the total city living and working environment by providing communication services for residents and workers within the City. Additionally, the Project would comply with Federal, State and Local performance standards.

OBJECTIVE 2:

MAINTAIN AND ENHANCE A SOUND AND DIVERSE ECONOMIC BASE AND FISCAL STRUCTURE FOR THE CITY.

Policy 2.1:

Seek to retain existing commercial and industrial activity and to attract new such activity to the city.

Policy 2.3:

Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.

The Site will be an integral part of a new wireless communications network that will enhance the City's diverse economic base.

OBJECTIVE 4:

IMPROVE THE VIABILITY OF EXISTING INDUSTRY IN THE CITY AND THE ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY.

Policy 4.1:

Maintain and enhance a favorable business climate in the City.

Policy 4.2:

Promote and attract those economic activities with potential benefit to the City.

The Project will benefit the City by enhancing the business climate through improved communication services for residents and workers.

VISITOR TRADE

OBJECTIVE 8:

ENHANCE SAN FRANCISCO'S POSITION AS A NATIONAL CENTER FOR CONVENTIONS AND VISITOR TRADE.

Policy 8.3:

Assure that areas of particular visitor attraction are provided with adequate public services for both residents and visitors.

The Project will ensure that residents and visitors have adequate public service in the form of Verizon Wireless telecommunications.

COMMUNITY SAFETY ELEMENT
Objectives and Policies

OBJECTIVE 3:

ESTABLISH STRATEGIES TO ADDRESS THE IMMEDIATE EFFECTS OF A DISASTER.

Policy 1.20

Increase communication capabilities in preparation for all phases of a disaster and ensure communication abilities extend to hard-to-reach areas and special populations.

Policy 2.4

Bolster the Department of Emergency Management's role as the City's provider of emergency planning and communication, and prioritize its actions to meet the needs of San Francisco.

Policy 2.15

Utilize advancing technology to enhance communication capabilities in preparation for all phases of a disaster, particularly in the high-contact period immediately following a disaster.

Policy 3.7:

Develop a system to convey personalized information during and immediately after a disaster.

The Project will enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services.

18. **Planning Code Section 101.1(b)** establishes eight priority-planning policies and requires review of permits for consistency with said policies. On balance, the Project complies with said policies in that:

- A. That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses be enhanced.

The wireless communications network will enhance personal communication services for businesses and customers in the surrounding area.

- B. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods.

No residential uses will be displaced or altered in any way by the granting of this Authorization.

- C. That the City's supply of affordable housing be preserved and enhanced.

The Project will have no adverse effect on housing in the vicinity.

- D. That commuter traffic not impede MUNI transit service or overburden our streets or neighborhood parking.

Due to the nature of the Project and minimal maintenance or repair, municipal transit service will not be significantly impeded and neighborhood parking will not be overburdened.

- E. That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced.

The Project will not cause any displacement of industrial and service sector activity.

- F. That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake.

Compliance with applicable structural safety and seismic safety requirements will be considered during the building permit application review process.

- G. That landmarks and historic buildings be preserved.

The facility will be screened from view by virtue of equipment placement on the rooftop. While the proposed FRP screen walls are minimally visible from surrounding public rights-of-way (e.g. sidewalks along surrounding streets), the size, height, and setback of the screening structures will not significantly detract from views of the subject building.

Furthermore, the proposed WTS facility has been found to be consistent with the intent and requirements outlined in Historic Preservation Commission Motion No. 0289 and Resolution No. 764, and the project was determined to be in conformance with the Secretary of the Interior's Standards for Rehabilitation.

- H. That our parks and open space and their access to sunlight and vistas be protected from development.

The Project will not adversely affect parks or open space, nor their access to sunlight or public vistas.

19. The Project is consistent with and would promote the general and specific purposes of the Code provided under Section 101.1(b) in that, as designed, the Project would contribute to the character and stability of the neighborhood and would constitute a beneficial development.
20. The Commission hereby finds that approval of the Conditional Use Authorization would promote the health, safety and welfare of the City.

DECISION

That based upon the Record, the submissions by the Applicant, the staff of the Department and other interested parties, the oral testimony presented to this Commission at the public hearings, and all other written materials submitted by all parties, the Commission hereby APPROVES Conditional Use Application No. **2016-007238CUA**, subject to the following conditions attached hereto as "EXHIBIT A" in general conformance with plans on file, dated September 12, 2017, and stamped "EXHIBIT B", which is incorporated herein by reference as though fully set forth.

APPEAL AND EFFECTIVE DATE OF MOTION: Any aggrieved person may appeal this Conditional Use Authorization to the Board of Supervisors within thirty (30) days after the date of this Motion No. XXXX. The effective date of this Motion shall be the date of this Motion if not appealed (After the 30-day period has expired) OR the date of the decision of the Board of Supervisors if appealed to the Board of Supervisors. For further information, please contact the Board of Supervisors at (415) 554-5184, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

Protest of Fee or Exaction: You may protest any fee or exaction subject to Government Code Section 66000 that is imposed as a condition of approval by following the procedures set forth in Government Code Section 66020. The protest must satisfy the requirements of Government Code Section 66020(a) and must be filed within 90 days of the date of the first approval or conditional approval of the development referencing the challenged fee or exaction. For purposes of Government Code Section 66020, the date of imposition of the fee shall be the date of the earliest discretionary approval by the City of the subject development.

If the City has not previously given Notice of an earlier discretionary approval of the project, the Planning Commission's adoption of this Motion, Resolution, Discretionary Review Action or the Zoning Administrator's Variance Decision Letter constitutes the approval or conditional approval of the development and the City hereby gives NOTICE that the 90-day protest period under Government Code Section 66020 has begun. If the City has already given Notice that the 90-day approval period has begun for the subject development, then this document does not re-commence the 90-day approval period.

I hereby certify that the foregoing Motion was adopted by the Planning Commission on **December 21, 2017**.

Jonas P. Ionin
Commission Secretary

AYES:

NAYS:

ABSENT:

ADOPTED:

EXHIBIT A

AUTHORIZATION

This authorization is for a Conditional Use to allow a new Macro Wireless Telecommunications Facility (operated by Verizon Wireless) consisting of the installation of twelve (12) new panel antennas; installation of twenty-four (24) new RRUs (remote radio units); installation of four (4) new four sided FRP (fiber-reinforced plastic) screen boxes on the rooftop, to shroud the proposed antennas and ancillary equipment; installation of one (1) GPS antenna, and installation of additional equipment in the basement, which will not be accessible or visible to the public. The four (4) FRP screen boxes will be located at four different areas of the rooftop: the two (2) FRP screen boxes at the northwest and northeast areas of the rooftop will be no taller than 87 feet and 10 inches, and the two (2) FRP screen boxes at the southwest and southeast areas of the rooftop will be no taller than 89 feet and 2 inches. Each FRP screen box will contain and screen from public views three (3) antennas, RRUs, and ancillary equipment. All FRP screen elements and equipment are proposed to be painted to match the existing building; there shall be no rivet bolts externally visible at 519 Ellis Street, Block 0334, Lot 028A, pursuant to Planning Code Sections 303 and 209.3 within the RC-4 Zoning District and an 80-T Height and Bulk District; in general conformance with plans, dated September 12, 2017 and stamped "EXHIBIT B" included in the docket for Record No. 2016-007238CUA and subject to conditions of approval reviewed and approved by the Commission on December 21, 2017, under Motion No. XXXX. This authorization and the conditions contained herein run with the property and not with a particular Project Sponsor, business, or operator.

RECORDATION OF CONDITIONS OF APPROVAL

Prior to the issuance of the building permit or commencement of use for the Project, the Zoning Administrator shall approve and order the recordation of a Notice in the Official Records of the Recorder of the City and County of San Francisco for the subject property. This Notice shall state that the Project is subject to the conditions of approval contained herein and reviewed and approved by the Planning Commission on **December 21, 2017** under Motion No. XXXX.

PRINTING OF CONDITIONS OF APPROVAL ON PLANS

The conditions of approval under the 'Exhibit A' of this Planning Commission Motion No. XXXX shall be reproduced on the Index Sheet of construction plans submitted with the Site or Building permit application for the Project. The Index Sheet of the construction plans shall reference to the Conditional Use Authorization and any subsequent amendments or modifications.

SEVERABILITY

The Project shall comply with all applicable City codes and requirements. If any clause, sentence, section or any part of these conditions of approval is for any reason held to be invalid, such invalidity shall not affect or impair other remaining clauses, sentences, or sections of these conditions. This decision conveys no right to construct, or to receive a building permit. "Project Sponsor" shall include any subsequent responsible party.

CHANGES AND MODIFICATIONS

Changes to the approved plans may be approved administratively by the Zoning Administrator. Significant changes and modifications of conditions shall require Planning Commission approval of a new Conditional Use Authorization.

Conditions of Approval, Compliance, Monitoring, and Reporting

PERFORMANCE

1. **Validity.** The authorization and right vested by virtue of this action is valid for three (3) years from the effective date of the Motion. The Department of Building Inspection shall have issued a Building Permit or Site Permit to construct the project and/or commence the approved use within this three-year period.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

2. **Expiration and Renewal.** Should a Building or Site Permit be sought after the three (3) year period has lapsed, the project sponsor must seek a renewal of this Authorization by filing an application for an amendment to the original Authorization or a new application for Authorization. Should the project sponsor decline to so file, and decline to withdraw the permit application, the Commission shall conduct a public hearing in order to consider the revocation of the Authorization. Should the Commission not revoke the Authorization following the closure of the public hearing, the Commission shall determine the extension of time for the continued validity of the Authorization.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

3. **10-Year Renewal.** This authorization is valid for ten (10) years from date of approval. The project sponsor must seek a renewal of this Authorization prior to expiration, but no earlier than 24 months prior to expiration, by filing an application for an amendment to the original Authorization or a new application for Authorization. Should the project sponsor decline to so file, and decline to decommission the wireless facility, the Commission shall conduct a public hearing in order to consider the revocation of the Authorization. Should the Commission not revoke the Authorization following the closure of the public hearing, the Commission shall determine the extension of time for the continued validity of the Authorization.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

4. **Diligent pursuit.** Once a site or Building Permit has been issued, construction must commence within the timeframe required by the Department of Building Inspection and be continued diligently to completion. Failure to do so shall be grounds for the Commission to consider revoking the approval if more than three (3) years have passed since this Authorization was approved.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

5. **Extension.** All time limits in the preceding three paragraphs may be extended at the discretion of the Zoning Administrator where implementation of the project is delayed by a public agency, an appeal or a legal challenge and only by the length of time for which such public agency, appeal or challenge has caused delay.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

6. **Conformity with Current Law.** No application for Building Permit, Site Permit, or other entitlement shall be approved unless it complies with all applicable provisions of City Codes in effect at the time of such approval.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

DESIGN – COMPLIANCE AT PLAN STAGE

7. **Plan Drawings - WTS.** Prior to the issuance of any building or electrical permits for the installation of the facilities, the Project Sponsor shall submit final scaled drawings for review and approval by the Planning Department ("Plan Drawings"). The Plan Drawings shall describe:

- a. **Structure and Siting.** Identify all facility related support and protection measures to be installed. This includes, but is not limited to, the location(s) and method(s) of placement, support, protection, screening, paint and/or other treatments of the antennas and other appurtenances to insure public safety, insure compatibility with urban design, architectural and historic preservation principles, and harmony with neighborhood character.
- b. **For the Project Site,** regardless of the ownership of the existing facilities. Identify the location of all existing antennas and facilities; and identify the location of all approved (but not installed) antennas and facilities.
- c. **Emissions.** Provide a report, subject to approval of the Zoning Administrator, that operation of the facilities in addition to ambient RF emission levels will not exceed adopted FCC standards with regard to human exposure in uncontrolled areas.

For information about compliance, contact the Case Planner, Planning Department at 415-575-9078, www.sf-planning.org.

8. **Screening - WTS.** To the extent necessary to ensure compliance with adopted FCC regulations regarding human exposure to RF emissions, and upon the recommendation of the Zoning Administrator, the Project Sponsor shall:

- a. Modify the placement of the facilities;
- b. Install fencing, barriers or other appropriate structures or devices to restrict access to the facilities;
- c. Install multi-lingual signage, including the RF radiation hazard warning symbol identified in ANSI C95.2 1982, to notify persons that the facility could cause exposure to RF emissions;
- d. Implement any other practice reasonably necessary to ensure that the facility is operated in compliance with adopted FCC RF emission standards.

- e. To the extent necessary to minimize visual obtrusion and clutter, installations shall conform to the following standards:
 - a. Antennas and back up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual effects;
 - b. Rooftop installations shall be setback such that back up facilities are not viewed from the street;
 - c. Although co location of various companies' facilities may be desirable, a maximum number of antennas and back up facilities on the Project Site shall be established, on a case by case basis, such that "antennae farms" or similar visual intrusions for the site and area is not created.

For information about compliance, contact the Case Planner, Planning Department at 415-575-9078, www.sf-planning.org.

MONITORING - AFTER ENTITLEMENT

- 9. **Enforcement.** Violation of any of the Planning Department conditions of approval contained in this Motion or of any other provisions of Planning Code applicable to this Project shall be subject to the enforcement procedures and administrative penalties set forth under Planning Code Section 176 or Section 176.1. The Planning Department may also refer the violation complaints to other city departments and agencies for appropriate enforcement action under their jurisdiction.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org.

- 10. **Revocation due to Violation of Conditions.** Should implementation of this Project result in complaints from interested property owners, residents, or commercial lessees which are not resolved by the Project Sponsor and found to be in violation of the Planning Code and/or the specific Conditions of Approval for the Project as set forth in Exhibit A of this Motion, the Zoning Administrator shall refer such complaints to the Commission, after which it may hold a public hearing on the matter to consider revocation of this authorization.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org.

- 11. **Implementation Costs - WTS.** The Project Sponsor, on an equitable basis with other WTS providers, shall pay the cost of preparing and adopting appropriate General Plan policies related to the placement of WTS facilities. Should future legislation be enacted to provide for cost recovery for planning, the Project Sponsor shall be bound by such legislation.

The Project Sponsor or its successors shall be responsible for the payment of all reasonable costs associated with implementation of the conditions of approval contained in this authorization, including costs incurred by this Department, the Department of Public Health, the Department of Technology, Office of the City Attorney, or any other appropriate City Department or agency. The Planning Department shall collect such costs on behalf of the City.

The Project Sponsor shall be responsible for the payment of all fees associated with the installation of the subject facility, which are assessed by the City pursuant to all applicable law.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

12. **Implementation and Monitoring - WTS.** In the event that the Project implementation report includes a finding that RF emissions for the site exceed FCC Standards in any uncontrolled location, the Zoning Administrator may require the Applicant to immediately cease and desist operation of the facility until such time that the violation is corrected to the satisfaction of the Zoning Administrator.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

13. **Project Implementation Report - WTS.** The Project Sponsor shall prepare and submit to the Zoning Administrator a Project Implementation Report. The Project Implementation Report shall:

- a. Identify the three dimensional perimeter closest to the facility at which adopted FCC standards for human exposure to RF emissions in uncontrolled areas are satisfied;
- b. Document testing that demonstrates that the facility will not cause any potential exposure to RF emissions that exceed adopted FCC emission standards for human exposure in uncontrolled areas.
- c. The Project Implementation Report shall compare test results for each test point with applicable FCC standards. Testing shall be conducted in compliance with FCC regulations governing the measurement of RF emissions and shall be conducted during normal business hours on a non-holiday weekday with the subject equipment measured while operating at maximum power.
- d. Testing, Monitoring, and Preparation. The Project Implementation Report shall be prepared by a certified professional engineer or other technical expert approved by the Department. At the sole option of the Department, the Department (or its agents) may monitor the performance of testing required for preparation of the Project Implementation Report. The cost of such monitoring shall be borne by the Project Sponsor pursuant to the condition related to the payment of the City's reasonable costs.
- e. Notification and Testing. The Project Implementation Report shall set forth the testing and measurements undertaken pursuant to Conditions 2 and 4.
- f. Approval. The Zoning Administrator shall request that the Certification of Final Completion for operation of the facility not be issued by the Department of Building Inspection until such time that the Project Implementation Report is approved by the Department for compliance with these conditions.

For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, www.sfdph.org.

14. **Coverage and Capacity Verification.** Use is authorized as long as an independent evaluator, selected by the Planning Department, determines that the information and conclusions submitted by the wireless service provider in support of its request for conditional use are accurate. The wireless service provider shall fully cooperate with the evaluator and shall

provide any and all data requested by the evaluator to allow the evaluator to verify that the maps, data, and conclusions about service coverage and capacity submitted are accurate. The wireless service provider shall bear all costs of said evaluation. The independent evaluator, upon request by the wireless service provider shall keep the submitted data confidential and shall sign a confidentiality agreement acceptable to the wireless service provider. The independent evaluator shall be a professional engineer licensed by the State of California.

For information about compliance, contact the Case Planner, Planning Department at 415-575-9079, www.sf-planning.org.

15. **Notification prior to Project Implementation Report - WTS.** The Project Sponsor shall undertake appropriate tests for residents of any dwelling units located within 25 feet of the transmitting antenna.

- a. At least twenty calendar days prior to conducting the testing required for preparation of the Project Implementation Report, the Project Sponsor shall mail notice to the Department, as well as to the resident of any legal dwelling unit within 25 feet of a transmitting antenna of the date on which testing will be conducted. The Applicant will submit a written affidavit attesting to this mail notice along with the mailing list.
- b. When requested in advance by a resident notified of testing pursuant to subsection (a), the Project Sponsor shall conduct testing of total power density of RF emissions within the residence of that resident on the date on which the testing is conducted for the Project Implementation Report.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

16. **Installation - WTS.** Within 10 days of the installation and operation of the facilities, the Project Sponsor shall confirm in writing to the Zoning Administrator that the facilities are being maintained and operated in compliance with applicable Building, Electrical and other Code requirements, as well as applicable FCC emissions standards.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

17. **Periodic Safety Monitoring - WTS.** The Project Sponsor shall submit to the Zoning Administrator 10 days after installation of the facilities, and every two years thereafter, a certification attested to by a licensed engineer expert in the field of EMR/RF emissions, that the facilities are and have been operated within the then current applicable FCC standards for RF/EMF emissions.

For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, www.sfdph.org.

OPERATION

18. **Community Liaison.** Prior to issuance of a building permit application to construct the project and implement the approved use, the Project Sponsor shall appoint a community liaison officer to deal with the issues of concern to owners and occupants of nearby properties. The Project Sponsor shall provide the Zoning Administrator written notice of the name, business address, and telephone number of the community liaison. Should the contact

information change, the Zoning Administrator shall be made aware of such change. The community liaison shall report to the Zoning Administrator what issues, if any, are of concern to the community and what issues have not been resolved by the Project Sponsor.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

19. **Out of Service – WTS.** The Project Sponsor or Property Owner shall remove antennas and equipment that has been out of service or otherwise abandoned for a continuous period of six (6) months.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

20. **Emissions Conditions – WTS.** It is a continuing condition of this authorization that the facilities be operated in such a manner so as not to contribute to ambient RF/EMF emissions in excess of then current FCC adopted RF/EMF emission standards; violation of this condition shall be grounds for revocation.

For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, www.sfdph.org.

21. **Noise and Heat – WTS.** The WTS facility, including power source and cooling facility, shall be operated at all times within the limits of the San Francisco Noise Control Ordinance. The WTS facility, including power source and any heating/cooling facility, shall not be operated so as to cause the generation of heat that adversely affects a building occupant.

For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, www.sfdph.org.

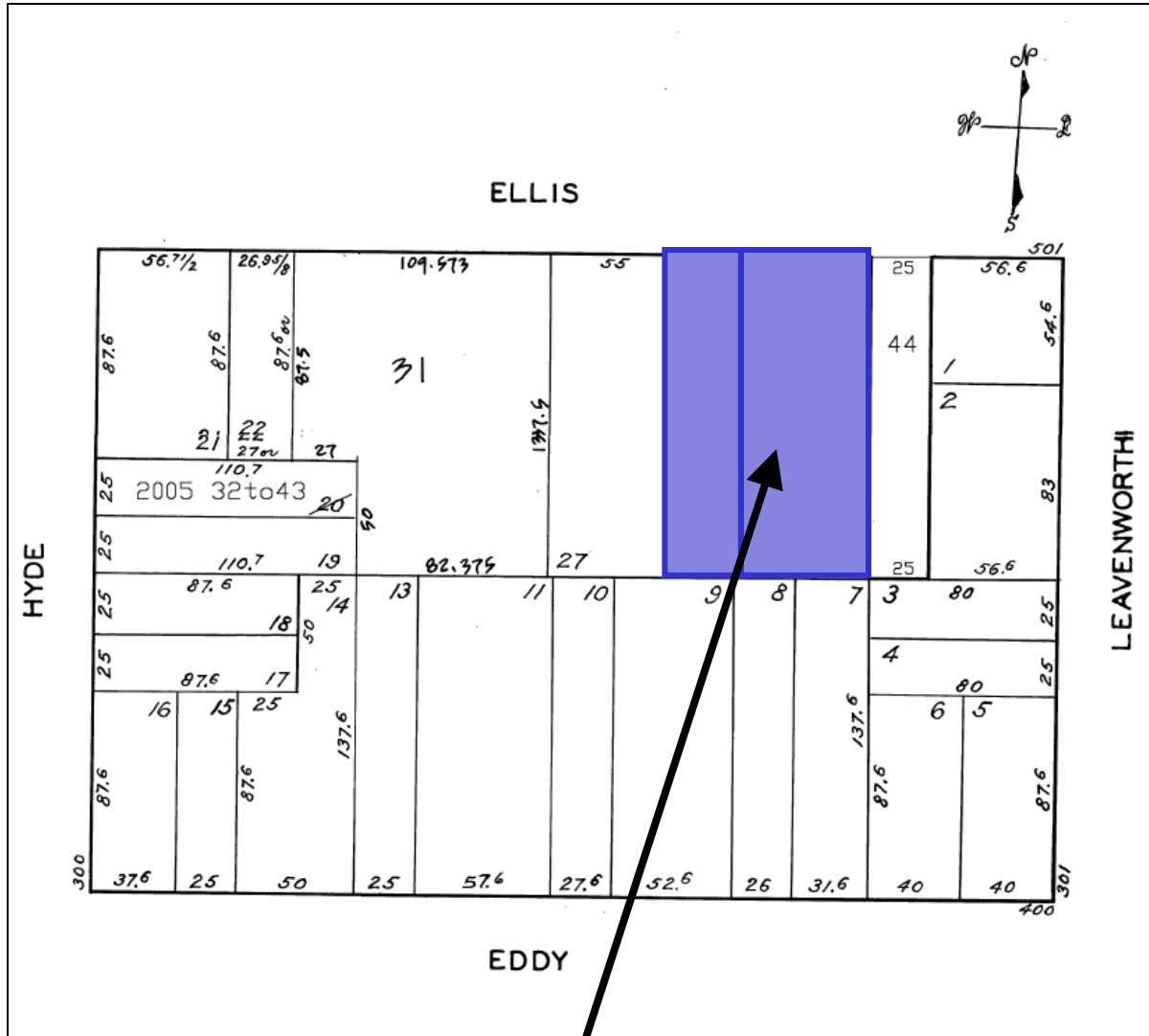
22. **Transfer of Operation – WTS.** Any carrier/provider authorized by the Zoning Administrator or by the Planning Commission to operate a specific WTS installation may assign the operation of the facility to another carrier licensed by the FCC for that radio frequency provided that such transfer is made known to the Zoning Administrator in advance of such operation, and all conditions of approval for the subject installation are carried out by the new carrier/provider.

For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

23. **Compatibility with City Emergency Services – WTS.** The facility shall not be operated or caused to transmit on or adjacent to any radio frequencies licensed to the City for emergency telecommunication services such that the City's emergency telecommunications system experiences interference, unless prior approval for such has been granted in writing by the City.

For information about compliance, contact the Department of Technology, 415-581-4000, <http://sfgov3.org/index.aspx?page=1421>

Block Book Map

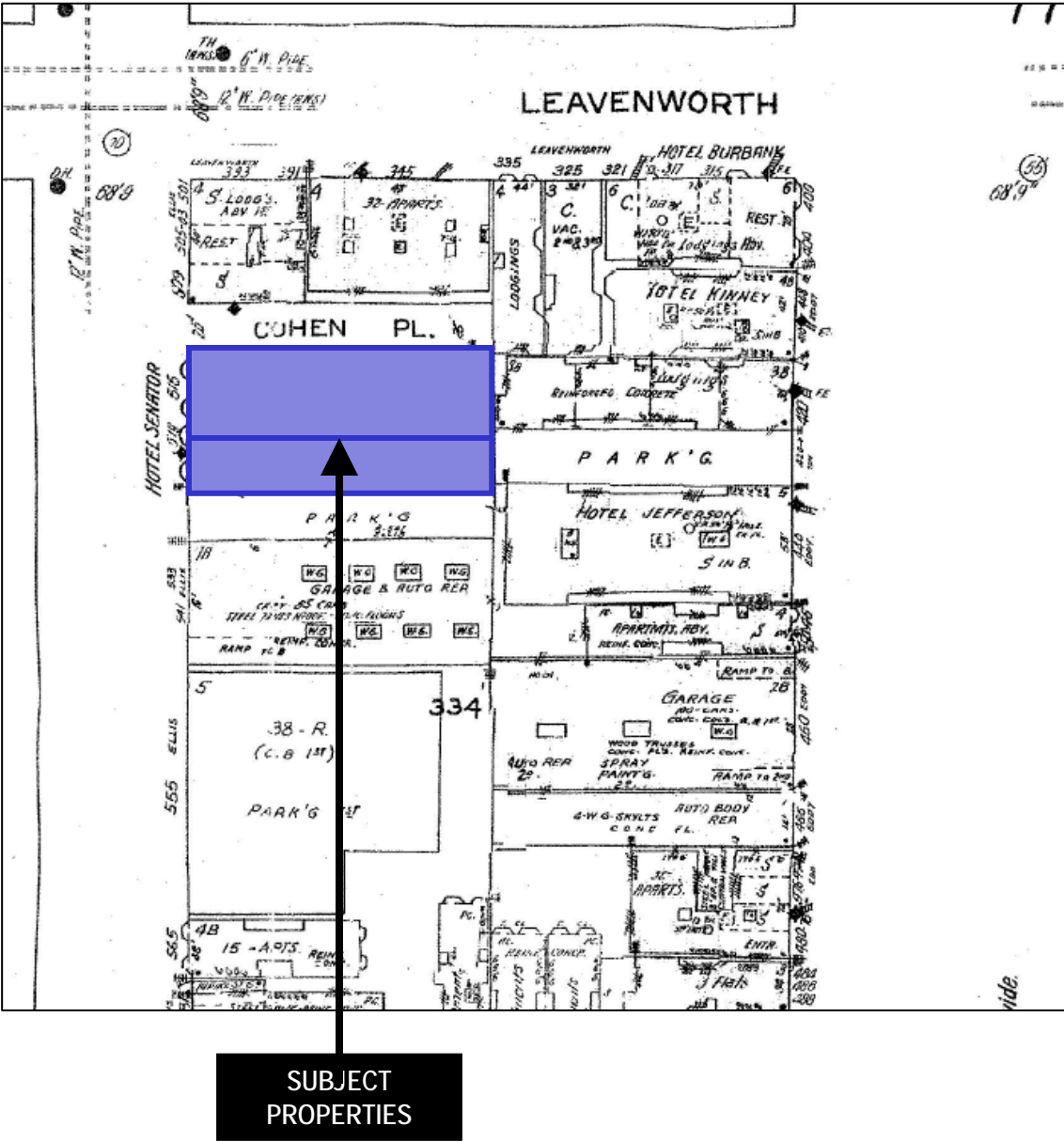


SUBJECT
PROPERTIES



Case Number 2016-007238CUA
Verizon Wireless
Macro WTS Facility
519 Ellis Street

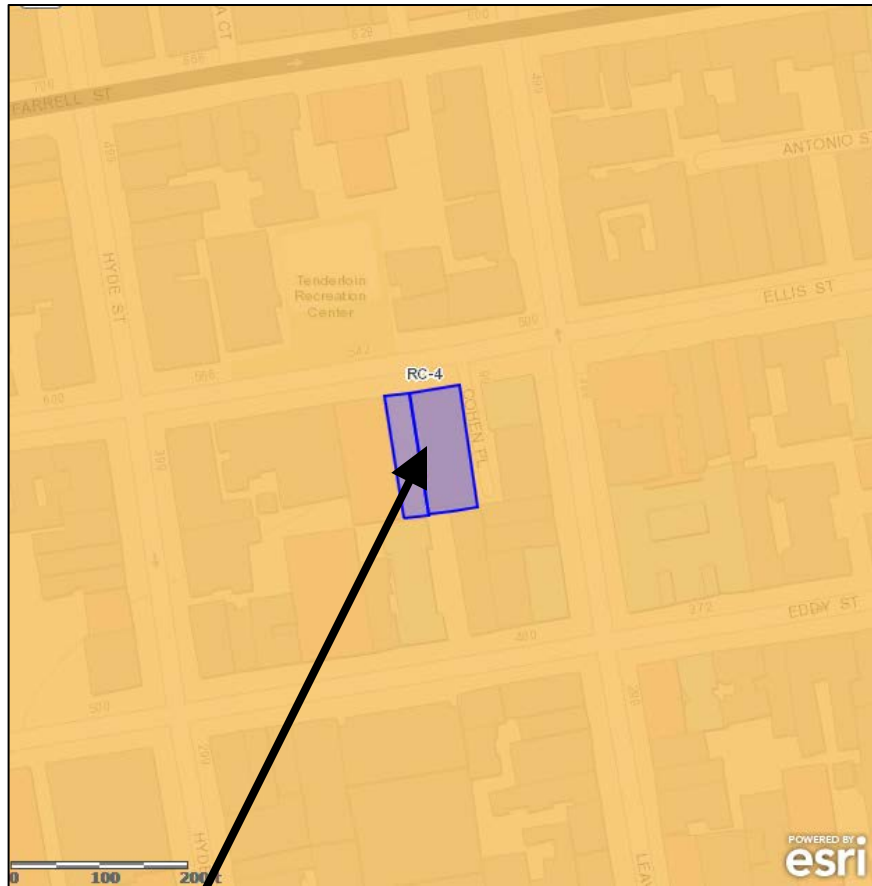
Sanborn Map*



*The Sanborn Maps in San Francisco have not been updated since 1998, and this map may not accurately reflect existing conditions.



Zoning Map



**SUBJECT
PROPERTIES**



Case Number 2016-007238CUA
Verizon Wireless
Macro WTS Facility
519 Ellis Street

Aerial Photo



SUBJECT
PROPERTIES







Existing



Proposed



**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”)
519 Ellis Street • San Francisco, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 280718 “Geary and Leavenworth”) proposed to be located at 519 Ellis Street in San Francisco, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Background

The San Francisco Department of Public Health has adopted an 11-point checklist for determining compliance of proposed WTS facilities or proposed modifications to such facilities with prevailing safety standards. The acceptable limits set by the FCC for exposures of unlimited duration are:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5–80 GHz	5.00 mW/cm ²	1.00 mW/cm ²
WiFi (and unlicensed uses)	2–6	5.00	1.00
BRS (Broadband Radio)	2,600 MHz	5.00	1.00
WCS (Wireless Communication)	2,300	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

Checklist

Reference has been made to information provided by Verizon, including zoning drawings by Streamline Engineering and Design, Inc., dated July 26, 2017. It should be noted that the calculation results in this Statement include several “worst-case” assumptions and therefore are expected to overstate actual power density levels from the proposed operations.

1. The location, identity, and total number of all operational radiating antennas installed at this site.

There are reported no wireless base stations installed at the site.

2. List all radiating antennas located within 100 feet of the site that could contribute to the cumulative radio frequency energy at this location.

There are reported no other WTS facilities within 100 feet of the site.



**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”)
519 Ellis Street • San Francisco, California**

3. Provide a narrative description of the proposed work for this project.

Verizon proposes to install twelve directional panel antennas above the roof of the six-story building located at 519 Ellis Street. This is consistent with the scope of work described in the drawings for transmitting elements.

4. Provide an inventory of the make and model of antennas or transmitting equipment being installed or removed.

Verizon has no antennas or equipment presently installed at the site. It is proposed to install twelve Andrew Model SBNHH-1D45B directional panel antennas in groups of three within four view screen enclosures above the roof of the subject building, set back from each of the four corners of the roof. The antennas would employ up to 6° downtilt. Two groups would be mounted at an effective height of about 85½ feet above ground, 8 feet above the roof, and would be oriented toward 120°T and 220°T. A third group would be mounted at an effective height of about 85 feet above ground, 7½ feet above the roof, and would be oriented toward 30°T. The fourth group would be mounted at an effective height of about 84½ feet above ground, 7 feet above the roof, and would be oriented toward 290°T.

5. Describe the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level. This description may be based on field measurements or calculations.

Because there are no antennas at the site now, existing RF levels for a person on the roof near the proposed antenna locations and for a person at ground are presumed to be well below the applicable public exposure limit.

6. Provide the maximum effective radiated power per sector for the proposed installation. The power should be reported in watts and reported both as a total and broken down by frequency band.

The maximum effective radiated power proposed by Verizon in any direction is 29,560 watts, representing simultaneous operation at 9,220 watts for AWS, 8,460 watts for PCS, 7,520 watts for cellular, and 4,360 watts for 700 MHz service.

7. Describe the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area.

The maximum calculated level at any nearby building* is 6.5% of the public exposure limit; this occurs at the five-story building to the southwest.

* Located at least 20 feet away, based on photographs from Google Maps.

**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”)
519 Ellis Street • San Francisco, California**

8. Report the estimated cumulative radio frequency fields for the proposed site at ground level.

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.015 mW/cm², which is 2.7% of the applicable public exposure limit. Cumulative exposure levels therefore are estimated to remain well below the applicable public limit.

9. Provide the maximum distance (in feet) the three-dimensional perimeter of the radio frequency energy level equal to the public and occupational exposure limit is calculated to extend from the face of the antennas.

The three-dimensional perimeters of RF levels equal to the public and occupational exposure limits are calculated to extend up to 117 and 45 feet out from the antenna faces, respectively, and to much lesser distances above, below, and to the sides; this includes areas of the roof of the building but does not reach any publicly accessible areas.

10. Provide a description of whether or not the public has access to the antennas. Describe any existing or proposed warning signs, barricades, barriers, rooftop striping or other safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards.

It is recommended that barricades be erected, as shown in Figure 1, to preclude inadvertent access by unauthorized persons to areas on the roof in front of the antennas. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use and lockout/tagout procedures, be provided to all authorized personnel who have access to the barricaded area, including employees and contractors of Verizon and of the property owner. No access within 45 feet directly in front of the antennas themselves, such as might occur during certain maintenance activities on the roof, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. It is recommended that “Worker Notification Areas” be marked with yellow paint stripes and that “Prohibited Access Areas” be marked with red paint stripes within the barricades, as shown in Figure 1, to identify areas within which exposure levels are calculated to exceed the FCC public and occupational limits, respectively. It is recommended that explanatory signs[†] be posted at the roof access door and at the barricades, readily visible from any angle of approach to persons who might need to work within that distance.

[†] Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter; the San Francisco Department of Public Health recommends that all signs be written in English, Spanish, and Chinese.

**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”)
519 Ellis Street • San Francisco, California**

11. Statement of authorship and qualification.

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2019. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

Conclusion

Based on the information and analysis above, it is the undersigned’s professional opinion that operation of the base station proposed by Verizon Wireless at 519 Ellis Street in San Francisco, California, can comply with the prevailing standards for limiting human exposure to radio frequency energy and, therefore, need not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Erecting barricades is recommended to establish compliance with public exposure limits; training authorized personnel, marking roof areas, and posting explanatory signs are recommended to establish compliance with occupational exposure limits.

August 31, 2017




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

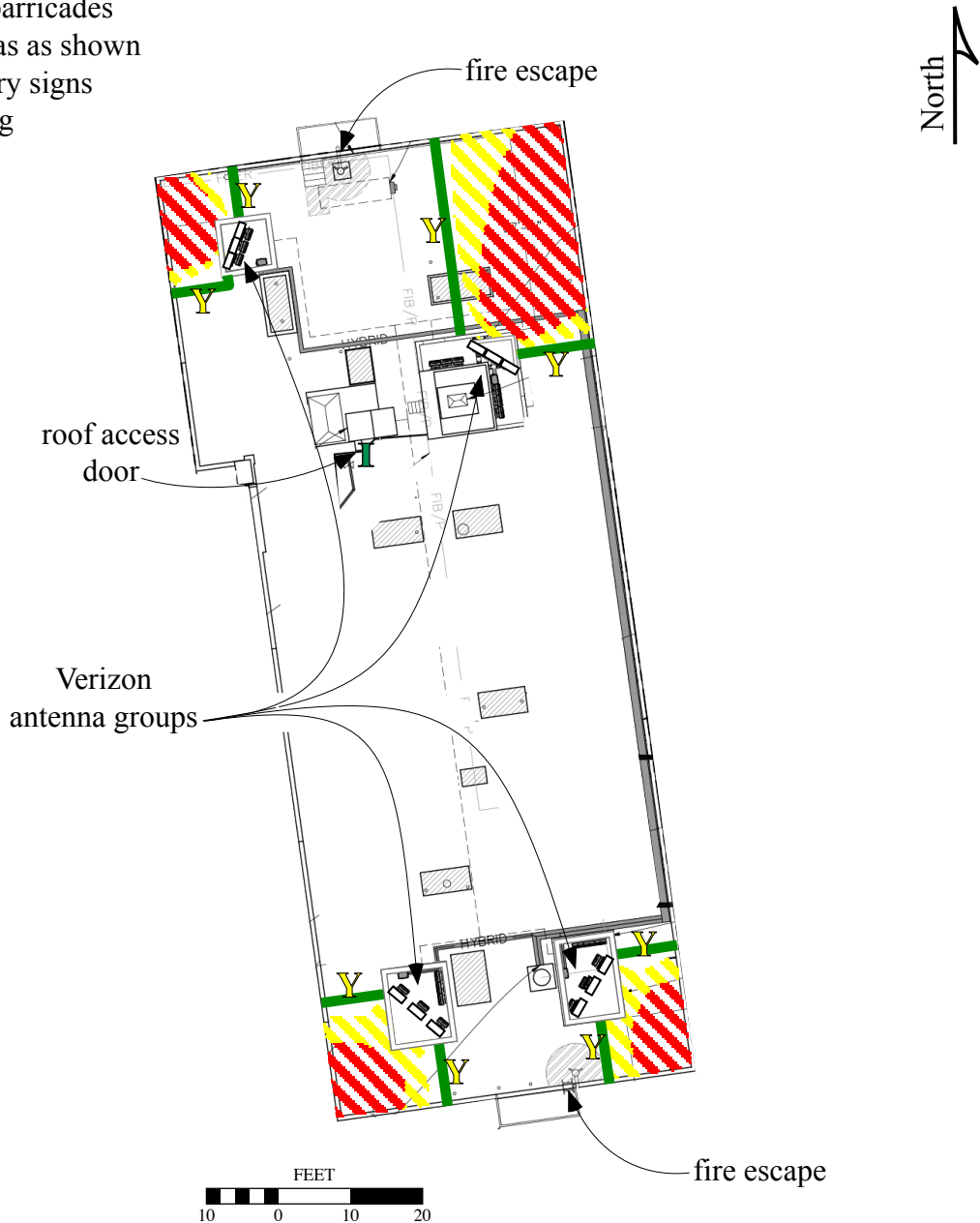


**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”)
519 Ellis Street • San Francisco, California**

Calculated RF Exposure Levels on Roof

Recommended Mitigation Measures

- Install secure barricades
- Stripe roof areas as shown
- Post explanatory signs
- Provide training



Notes:

Base drawing from Streamline Engineering and Design, Inc., dated July 26, 2017.
Calculations performed according to OET Bulletin 65, August 1997.

Legend:	Less Than Public	Exceeds Public	Exceeds Occupational	Exceeds 10x Occupational
Striping color	N/A	yellow	red	N/A
Sign type	I - Green INFORMATION	B - Blue NOTICE	Y - Yellow CAUTION	O - Orange WARNING
Barricades shown as green lines 				



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO



San Francisco City and County
Department of Public Health
Environmental Health Section

Edwin M. Lee, Mayor
Barbara Garcia, Director of Health
Stephanie K.J. Cushing, MSPH, CHMM, REHS
Director of Environmental Health

Review of Cellular Antenna Site Proposals

Project Sponsor : Verizon **Planner:** Elizabeth Watty
RF Engineer Consultant: Hammett & Edison **Phone Number:** (707) 996-5200
Project Address/Location: 519 Ellis St
Site ID: 2371 **SiteNo.:** 280718 **Report Dated:** 8/31/2017

The following information is required to be provided before approval of this project can be made. These information requirements are established in the San Francisco Planning Department Wireless Telecommunications Services Facility Sitting Guidelines dated August 1996.

In order to facilitate quicker approval of this project, it is recommended that the project sponsor review this document before submitting the proposal to ensure that all requirements are included.

- ☒ 1. The location, identity and total number of all operational radiating antennas installed at this site was provided. (WTS-FSG, Section 10.4.1, Section 11, 2b)
Number of Existing Antennas: 0
- ☒ 2. A list of all radiating antennas located within 100 feet of the site which could contribute to the cumulative radio frequency energy at this location was provided. (WTS-FSG, Section 10.5.2)
☒ Yes ☐ No
- ☒ 3. A narrative description of the proposed work for this project was provided. The description should be consistent with scope of work for the final installation drawings. (WTS-FSG, Section 10)
☒ Yes ☐ No
- ☒ 4. An inventory of the make and model of antennas or transmitting equipment being installed or removed was provided. The antenna inventory included the proposed installation height above the nearest walking/working surface, the height above ground level and the orientations of the antennas. (WTS-FSG, Section 10.5.2)
☒ Yes ☐ No
- ☒ 5. A description of the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level was provided. A description of any assumptions made when doing the calculations was also provided. (WTS-FSG, Section 10.4.1a, Section 10.4.1c, Section 10.5)
☒ Yes ☐ No
- ☒ 6. The maximum effective radiated power per sector for the proposed installation was provided along with the frequency bands used by the antennas. (WTS-FSG, Section 10.1.2, Section 10.5.1)
Maximum Effective Radiated Power: 29560 Watts
- ☒ 7. Based on the antenna orientation, the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area was provided. (WTS-FSG, Section 10.4, Section 10.5.1)
Maximum percent of applicable FCC public standard at the nearest building or structure: 6.5 %
Distance to this nearby building or structure: 25 feet
- ☒ 8. The estimated maximum cumulative radio frequency fields for the proposed site at ground level. (WTS-FSG, Section 10.5)
Maximum RF Exposure: 0.015 mW/cm² Maximum RF Exposure Percent: 2.7 %

X 9. The maximum distance (in feet) the three dimensional perimeter of the radio frequency energy level equal to the public and occupational exposure limit is calculated to extend from the face of the antennas was provided. Any potential walking/working surfaces exceeding regulatory standards were identified. (WTS-FSG, Section 10.9.2)

☒ Public Exclusion Area

Public Exclusion In Feet: 117

☒ Occupational Exclusion Area

Occupational Exclusion In Feet: 45

X 10. A description of whether or not the public has access to the antennas was provided. A description was also provided of any existing or proposed warning signs, barricades, barriers, rooftop stripping or other safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards. All signs will be provided in English, Spanish and Chinese. (WTS-FSG, Section 9.5, Section 10.9.2)

☒ Yes

☐ No

X 11. Statement regarding the engineer who produced the report and their qualifications was provided. The engineer is licensed in the State of California. (WTS-FSG, Section 11.8)

☒ Yes

☐ No

X **Approved.** Based on the information provided the following staff believes that the project proposal will comply with the current Federal Communication Commission safety standards for radiofrequency radiation exposure. FCC standard CFR47 1.1310 **Approval of the subsequent Project Implementation Report is based on project sponsor completing recommendations by project consultant and DPH.**

Comments:

There are 0 antennas existing operated by Verizon installed on the roof top of the building at 519 Ellis St. Existing RF levels at ground level were around 1% of the FCC public exposure limit. No other antennas were observed within 100 feet of this site. Verizon proposes to install 12 new antennas. Two groups of antennas are mounted at a height of 85.5 feet above the ground, 8 feet above the roof. A third group of antennas would be mounted 85 feet above the ground, 7.5 feet above the roof. The fourth group of antennas would be mounted at 84.5 feet above the ground, 7 feet above the roof. The estimated ambient RF field from the proposed Verizon transmitters at ground level is calculated to be 0.015 mW/sq cm., which is 2.7 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 117 feet and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 45 feet of the front of the antennas while they are in operation.

 Not Approved, additional information required.

 Not Approved, does not comply with Federal Communication Commission safety standards for radiofrequency radiation exposure. FCC Standard

 1 Hours spent reviewing

Charges to Project Sponsor (in addition to previous charges, to be received at time of receipt by Sponsor)

Dated: 10/23/2017

Signed: _____



Arthur Duque

Environmental Health Management Section
San Francisco Dept. of Public Health
1390 Market St., Suite 210,
San Francisco, CA. 94102
(415) 252-3966

Town Consulting, on behalf of Verizon Wireless
100 Clement Street, 3rd Floor
San Francisco, CA 94118

PRSRT FIRST-CLASS MAIL
U. S. POSTAGE PAID
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PERMIT NO. 83

Community Meeting Notice

*****AUTO**MIXED AADC 940 T12 P14
20 SPINRAD TRS
269 MORETON BAY LN UNIT 2
GOLETA CA 93117-6218



MI XE

913 DC 1

0002/28/16

RETURN TO SENDER
ATTEMPTED - NOT KNOWN
UNABLE TO FORWARD

EC: 941183422000

42052-68023-28-21

9411802420



NOTICE OF NEIGHBORHOOD MEETING	
To: Neighborhood Groups, Neighbors & Owners within 500’ radius of 519 Ellis Street	
Meeting Information Date: Thursday, April 7, 2016 Time: 6:00 PM – 7:00 PM Where: The San Francisco Public Library 100 Larkin Street, (<i>at Grove</i>) Koret Auditorium, located on the Library’s lower level Enter 30 Grove Street, proceed down stairs Note: Refreshments are not allowed in the Auditorium Project Site Information Address: 519 Ellis Street Block/Lot: 0334/028A Zoning: RC-4 Applicant Verizon Wireless Contact Information Kelly Pepper (415) 307-5082	Verizon Wireless is proposing to install a wireless communication facility at 519 Ellis Street, needed by Verizon Wireless as part of its San Francisco wireless network. The proposed Verizon Wireless site is an unmanned facility consisting of the installation of twelve (12) panel antennas, roof-mounted on the building. The associated equipment will be located inside the existing building. Plans and photo simulations will be available for your review at the meeting. You are invited to attend an informational community meeting located at the San Francisco Public Library, 100 Larkin Street, (<i>at Grove</i>), Koret Auditorium, located on the Library’s lower level (enter 30 Grove Street, proceed down stairs), on Thursday, April 7, 2016 at 6:00 p.m. to learn more about the project. If you have any questions regarding the proposal and are unable to attend the meeting, please contact Kelly Pepper at (415) 307-5082. Please contact the San Francisco Planning Department at (415) 558-6377 if you have any questions regarding the Planning process. NOTE: If you require an interpreter to be present at the meeting, please contact us at (415) 307-5082 no later than 5:00 pm on Friday, April 1, 2016 and we will make every effort to provide you with an interpreter. <u>NOTE: This is not a Library-Sponsored Program.</u>

NOTIFICACIÓN DE ASAMBLEA VECINAL	
Para: Grupos vecinales, vecinos y propietarios dentro de un radio de 500’ de 519 Ellis Street	
Información de la asamblea Fecha: Jueves, 7 de abril de 2016 Hora: 6:00 PM – 7:00 PM Lugar: Biblioteca Pública de San Francisco 100 Larkin Street, (<i>en Grove</i>) Koret Auditorium, ubicado en la planta baja de la Biblioteca Ingresar por 30 Grove Street, bajar por las escaleras Nota: No se permite ingresar con bebidas al Auditorio Información del lugar del proyecto Dirección: 519 Ellis Street Cuadra/Lote: 0334/028A Zonificación: RC-4 Solicitante Verizon Wireless Información de contacto Kelly Pepper (415) 307-5082	Verizon Wireless propone montar una instalación de comunicación inalámbrica en 519 Ellis Street, como parte de su red inalámbrica en San Francisco. La ubicación propuesta por Verizon Wireless es una instalación sin personal que consiste en la instalación de doce (12) antenas panel, montadas en el techo del edificio. El equipo asociado se ubicará dentro del edificio existente. Habrá planos y fotos disponibles para que usted los revise en la reunión. Se lo invita a asistir a una reunión informativa de la comunidad que se realizará en la Biblioteca Pública de San Francisco, 100 Larkin Street., (<i>en Grove</i>), Koret Auditorium, ubicada en la planta baja de la Biblioteca (ingresar por 30 Grove Street, bajar por las escaleras), el jueves, 7 de abril de 2016 a las 6:00 p.m. para tener más información sobre el proyecto. Si tiene alguna duda en relación a la propuesta y no puede asistir a la reunión, por favor contáctese con Kelly Pepper al (415) 307-5082. Por favor, contacte al Departamento de Planificación de San Francisco al (415) 558-6377 si tiene alguna pregunta relacionada con el proceso de planificación. NOTA: Si necesita que un intérprete esté presente en la reunión, por favor contáctenos al (415) 307-5082 antes de las 5:00 p.m. del viernes, 1 de abril de 2016 y haremos todo lo posible para proporcionarle un intérprete. <u>NOTA: Este no es un programa patrocinado por la Biblioteca.</u>

邻里会议通知	
收件人：居民团体、以及以下地址 500 英尺半径内的邻居和业主：519 Ellis Street	
会议信息 日期： 星期四 2016 年 4 月 7 日 时间： 晚上 6:00 - 7:00 地点： 旧金山公共图书馆 地址： 100 Larkin Street (<i>Grove</i>) Koret 演奏厅 坐落在图书馆的底层 从 30 Grove Street 进入，然后下楼 注：演奏厅严禁携带饮品。 项目站点信息 地址： 519 Ellis Street 街区/ 地号： 0334/ 028A 分区： RC-4 申请人 Verizon 无线 联系人信息 Kelly Pepper, (415) 307-5082	Verizon 无线提出要在 519 Ellis Street 安装一个无线通信设施，作为其在旧金山的无线网络的一部分。拟议的 Verizon 无线网点是一个无人驻地的设施，包括安装十二个（12）面板天线，安装在建筑物的屋顶。相关的设备将位于现有的建筑之内。在会议中将有计划和照片模拟供您审查。您将被邀请出席信息性社区会议，以了解更多有关项目的信息。会议地点位于旧金山公共图书馆，地址：100 Larkin Street（在 Grove）。Koret 演奏厅坐落在图书馆的底层（从 30 Grove Street 进入，然后下楼）。时间：2016年4月7日星期四晚上6: 00。 如果您对该提议有任何疑问并且不能出席会议，请联系 Kelly Pepper，电话：（415）307- 5082。如果您对于规划进程有任何问题，请联系旧金山规划部，电话：（415）558- 6377。 注：如果您在本次会议中需要口译员，请在不迟于2016年4月1日星期五下午5：00之前与我们联系，电话：（415）307- 5082，我们将尽力为您提供口译。 <u>注：这不是图书馆赞助的一个方案。</u>

ABISO NG PULONG NG KAPITBAHAYAN

Para sa: Mga Pangkat ng Kapitbahayan, Mga Magkakaitbahay at Mga May-ari sa loob ng 500’ radius ng 519 Ellis Street

Impormasyon sa Pulong
Petsa: Huwebes, Abril 7, 2016
Oras: 6:00 PM – 7:00 PM
Saan: **The San Francisco Public Library
100 Larkin Street, (*sa Grove*)
Koret Auditorium, nasa ibabang
lebel ng Library**
**Pumasok sa 30 Grove Street, tumuloy pababa
ng hagdan**

Tandaan: Hindi maaaring kumain sa Auditorium

Impormasyon sa Site ng Proyekto
Address: 519 Ellis Street
Block/Lot: 0334/028A
Zoning: RC-4

Aplikante
Verizon Wireless

Impormasyon sa Pakikipag-ugnayan
Kelly Pepper
(415) 307-5082

Pinapanukala ng Verizon Wireless na mag-install ng wireless na pasilidad na pangkomunikasyon sa 519 Ellis Street, kailangan ng Verizon Wireless bilang bahagi ng wireless network nito sa San Francisco. Ang panukalang site ng Verizon Wireless ay isang pasilidad na walang tao, na binubuo ng instalasyon ng labingdalawang (12) panel na antenna, naka-mount sa bubong ng gusali. Ang mga kaugnay na kagamitan ay ilalagay sa ikalawang palapag ng kasalukuyang gusali. Ang mga plano at simulasyong litrato ay maaari niyong repasuhin sa pulong. Iniimbitahan kayong dumalo sa impormal na pulong ng komunidad sa San Francisco Public Library, 100 Larkin Street, (*sa Grove*), Koret Auditorium, nasa ibabang lebel ng Library (pumasok sa 30 Grove Street, tumuloy pababa ng hagdan), sa Huwebes, Abril 7, 2016 ng 6:00 p.m. para matuto pa tungkol sa proyekto.

Kung mayroon kayong anumang mga tanong tungkol sa panukala at hindi kayo makakadali sa pulong, mangyaring makipag-ugnayan kay Kelly Pepper sa (415) 307-5082. Mangyaring makipag-ugnayan sa San Francisco Planning Department, sa (415) 558-6377 kung may anumang mga tanong kayo patungkol sa proseso ng Pagpaplano.

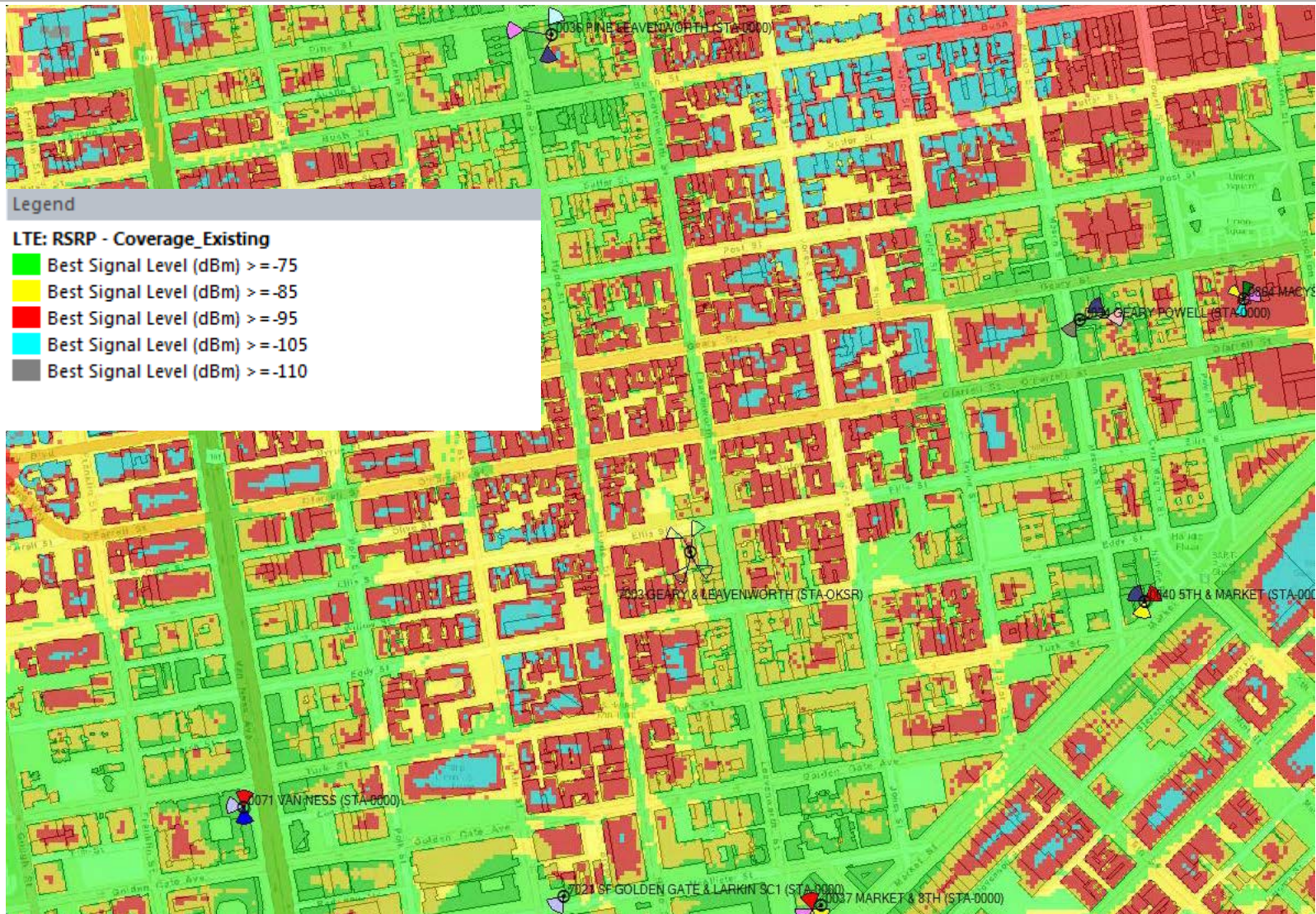
TANDAAN: Kung kailangan niyong mayroong tagapagsaling-wika sa pulong, mangyaring makipag-ugnayan sa amin sa (415) 307-5082 nang hindi lalagpas sa 5:00 pm sa Biyernes, Abril 1, 2016 at gagawin namin lahat ng aming makakaya para bigyan kayo ng tagapagsaling-wika.

TANDAAN: Hindi ito Programang Ini-sponsor ng Library.

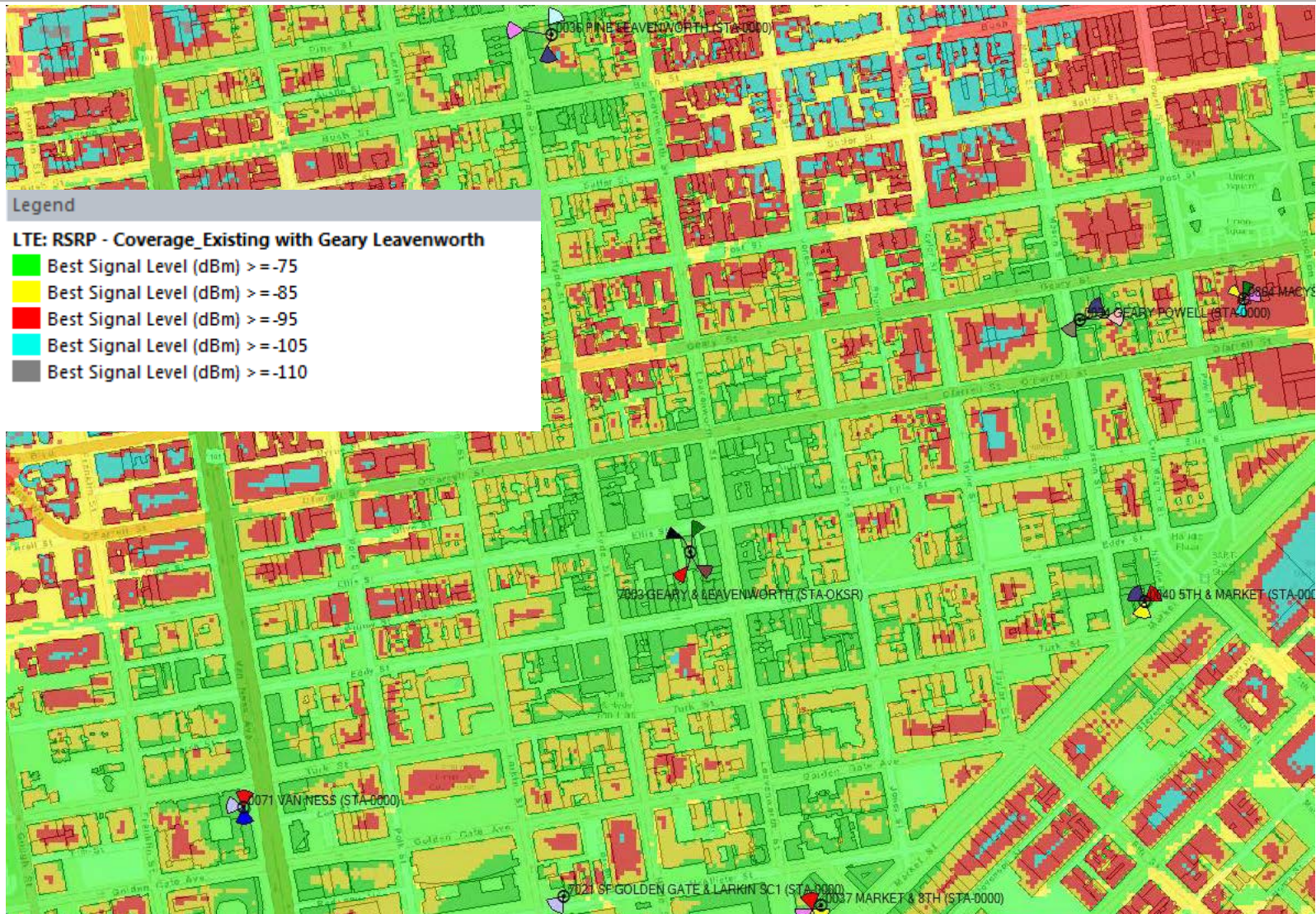
*Informational Community Meeting Sign-In Sheet for
519 Ellis Street
April 7, 2016*

[illegible]

EXISTING COVERAGE PLOT



EXISTING + PROPOSE COVERAGE PLOT





HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
BROADCAST & WIRELESS

WILLIAM F. HAMMETT, P.E.
STANLEY SALEK, P.E.
ROBERT P. SMITH, JR.
RAJAT MATHUR, P.E.
ANDREA L. BRIGHT, P.E.
NEIL J. OLIJ, P.E.
BRIAN F. PALMER

ROBERT L. HAMMETT, P.E.
1920-2002
EDWARD EDISON, P.E.
1920-2009

DANE E. ERICKSEN, P.E.
CONSULTANT

BY E-MAIL – CHAD.BARAN@ERICSSON.COM

April 22, 2016

Mr. Chad Baran
Ericsson | NCAL NSB
6140 Stoneridge Mall Road, 350
Pleasanton, California 94588

Dear Chad:

As requested, we have conducted a review of the coverage maps provided by Verizon Wireless, regarding its proposal for a new base station to be located at 519 Ellis Street in San Francisco (Site No. 280718 “Geary and Leavenworth”).

Executive Summary

We concur with the maps and data provided by Verizon. The maps provided to show the before and after conditions accurately represent the carrier’s present and post-installation coverage.

Verizon proposes to install twelve Andrew Model SBNHH-1D45B directional panel antennas within enclosures above the roof of the six-story building located at 519 Ellis Street. The antennas would be mounted at an effective height of about 85½ feet above ground, 8 feet above the roof, and would be oriented in groups of three towards 30°T, 120°T, 220°T, and 290°T. The maximum effective radiated power proposed by Verizon in any direction is 15,190 watts, representing simultaneous operation at 6,910 watts for AWS, 6,350 watts for PCS, and 1,930 watts for 700 MHz service.

Verizon provided for review two coverage maps, attached for reference. The maps show Verizon’s 4G LTE coverage in the area before and after the site is operational. Both the before and after LTE maps show five signal levels of coverage, which Verizon colors and defines as follows:

Green	above -75 dBm
Yellow	-75 to -85 dBm
Red	-85 to -95 dBm
Blue	-95 to -105 dBm
Gray	-105 to -110 dBm

These service thresholds used by Verizon are in line with industry standards, similar to the thresholds used by other wireless service providers.

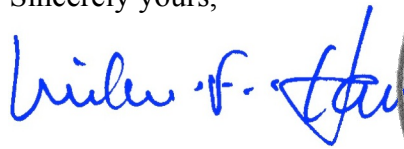
Mr. Chad Baran, page 2
April 22, 2016

We conducted our own drive test to measure the actual Verizon LTE 4G signal strength in the vicinity of the proposed site. Our fieldwork was conducted on April 6, 2016, between 10:50 AM and 12:20 PM. The field measurements were conducted using an Ascom TEMS Pocket network diagnostic tool with built-in GPS along a measurement route selected to cover all the streets within the map area that Verizon had indicated would receive improved service.

Based on the measurement data, we conclude that the Verizon 4G LTE coverage map showing the service area without the proposed installation includes areas of relatively weak signal levels in the carrier's present coverage. The map submitted to show the after coverage with the proposed base station in operation was reportedly prepared on the same basis as the map of the existing conditions and so is expected to accurately illustrate the improvements in coverage.

We appreciate the opportunity to be of service. Please let us know if any questions arise on this matter.

Sincerely yours,



William F. Hammett

scn

Enclosures



cc: Ms. Kelly Pepper (w/encls) – BY E-MAIL KELLY@TOWNCONSULTING.COM

**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”)
519 Ellis Street • San Francisco, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 280718 “Geary and Leavenworth”) proposed to be located at 519 Ellis Street in San Francisco, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Background

The San Francisco Department of Public Health has adopted an 11-point checklist for determining compliance of proposed WTS facilities or proposed modifications to such facilities with prevailing safety standards. The acceptable limits set by the FCC for exposures of unlimited duration are:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5–80 GHz	5.00 mW/cm ²	1.00 mW/cm ²
WiFi (and unlicensed uses)	2–6	5.00	1.00
BRS (Broadband Radio)	2,600 MHz	5.00	1.00
WCS (Wireless Communication)	2,300	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

Checklist

Reference has been made to information provided by Verizon, including zoning drawings by Streamline Engineering and Design, Inc., dated February 3, 2016. It should be noted that the calculation results in this Statement include several “worst-case” assumptions and therefore are expected to overstate actual power density levels from the proposed operations.

1. The location, identity, and total number of all operational radiating antennas installed at this site.

There are reported no wireless base stations installed at the site.

2. List all radiating antennas located within 100 feet of the site that could contribute to the cumulative radio frequency energy at this location.

There are reported no other WTS facilities within 100 feet of the site.



**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”
519 Ellis Street • San Francisco, California**

3. Provide a narrative description of the proposed work for this project.

Verizon proposes to install twelve directional panel antennas above the roof of the six-story building located at 519 Ellis Street. This is consistent with the scope of work described in the drawings for transmitting elements.

4. Provide an inventory of the make and model of antennas or transmitting equipment being installed or removed.

Verizon has no antennas or equipment presently installed at the site. It is proposed to install twelve Andrew Model SBNHH-1D45B directional panel antennas within four view screen enclosures above the roof of the subject building, set back from each of the four corners of the roof. The antennas would employ up to 6° downtilt, would be mounted at an effective height of about 85½ feet above ground, 8 feet above the roof, and would be oriented in groups of three towards 30°T, 120°T, 220°T, and 290°T.

5. Describe the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level. This description may be based on field measurements or calculations.

Because there are no antennas at the site now, existing RF levels for a person on the roof near the proposed antenna locations and for a person at ground are presumed to be well below the applicable public exposure limit.

6. Provide the maximum effective radiated power per sector for the proposed installation. The power should be reported in watts and reported both as a total and broken down by frequency band.

The maximum effective radiated power proposed by Verizon in any direction is 15,190 watts, representing simultaneous operation at 6,910 watts for AWS, 6,350 watts for PCS, and 1,930 watts for 700 MHz service; no operation on cellular frequencies is presently proposed from this site.

7. Describe the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area.

The maximum calculated level at any nearby building* is 3.6% of the public exposure limit; this occurs at the five-story building to the southwest.

8. Report the estimated cumulative radio frequency fields for the proposed site at ground level.

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.0089 mW/cm², which is 0.97% of the applicable public exposure limit. Cumulative exposure levels therefore are estimated to remain well below the applicable public limit.

* Located at least 20 feet away, based on photographs from Google Maps.



**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”
519 Ellis Street • San Francisco, California**

9. Provide the maximum distance (in feet) the three dimensional perimeter of the radio frequency energy level equal to the public and occupational exposure limit is calculated to extend from the face of the antennas.

The three-dimensional perimeters of RF levels equal to the public and occupational exposure limits are calculated to extend up to 72 and 17 feet out from the antenna faces, respectively, and to much lesser distances above, below, and to the sides; this includes areas of the roof of the building but does not reach any publicly accessible areas.

10. Provide a description of whether or not the public has access to the antennas. Describe any existing or proposed warning signs, barricades, barriers, rooftop striping or other safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards.

It is recommended that barricades be erected, as shown in Figure 1, to preclude inadvertent access by unauthorized persons to areas on the roof in front of the antennas. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use and lockout/tagout procedures, be provided to all authorized personnel who have access to the barricaded area, including employees and contractors of Verizon and of the property owner. No access within 17 feet directly in front of the Verizon antennas themselves, such as might occur during certain maintenance activities at the corners of the roof, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. It is recommended that “Worker Notification Areas” be marked with yellow paint stripes on the roof within the barricades, as shown in Figure 1, to identify areas within which exposure levels are calculated to exceed the FCC public limit. It is recommended that explanatory signs[†] be posted at the roof access door and at the barricades, readily visible from any angle of approach to persons who might need to work within that distance.

11. Statement of authorship and qualification.

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-18063, which expires on June 30, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

[†] Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter; the San Francisco Department of Public Health recommends that all signs be written in English, Spanish, and Chinese.

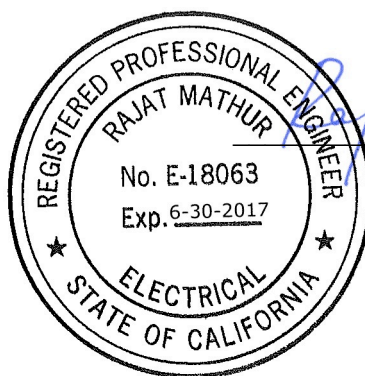


**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”
519 Ellis Street • San Francisco, California**

Conclusion

Based on the information and analysis above, it is the undersigned’s professional opinion that operation of the base station proposed by Verizon Wireless at 519 Ellis Street in San Francisco, California, can comply with the prevailing standards for limiting human exposure to radio frequency energy and, therefore, need not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Erecting barricades is recommended to establish compliance with public exposure limits; training authorized personnel, marking roof areas, and posting explanatory signs are recommended to establish compliance with occupational exposure limits.

April 22, 2016



Rajat Mathur
Rajat Mathur, P.E.
707/996-5200



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

**Verizon Wireless • Proposed Base Station (Site No. 280718 “Geary and Leavenworth”)
519 Ellis Street • San Francisco, California**

Calculated RF Exposure Levels on Roof

Recommended Mitigation Measures

- Install secure barricades
- Stripe roof areas as shown
- Post explanatory signs
- Provide training



Notes:

Base drawing from Streamline Engineering and Design, Inc., dated February 3, 2016.
Calculations performed according to OET Bulletin 65, August 1997.
Training should be provided to all persons requiring access to the roof.

Legend:	Less Than Public	Exceeds Public	Exceeds Occupational	Exceeds 10x Occupational
Striping color	N/A	yellow	red	N/A
Sign type	I - Green INFORMATION	B - Blue NOTICE	Y - Yellow CAUTION	O - Orange WARNING
Barricades shown as green lines				



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

VERIZON WIRELESS EQUIPMENT ENGINEER:

SIGNATUREDATE

VERIZON WIRELESS REAL ESTATE:

SIGNATUREDATE

VERIZON WIRELESS CONSTRUCTION:

SIGNATUREDATE

VERIZON WIRELESS RF ENGINEER:

SIGNATUREDATE

PROPERTY OWNER:

SIGNATUREDATE

RIDGE COMMUNICATIONS INC – LEASING

SIGNATUREDATE

RIDGE COMMUNICATIONS INC – CONSTRUCTION

SIGNATUREDATE

RIDGE COMMUNICATIONS INC – ZONING

SIGNATUREDATE

verizon

GEARY AND LEAVENWORTH

519 ELLIS ST, SAN FRANCISCO, CA 94109

LOCATION NUMBER: 280718

CONDITIONAL USE

AUTHORIZATION:

2016-007238CUA

PROJECT DESCRIPTION

A (P) VERIZON WIRELESS UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF INSTALLING:

- (12) (P) VERIZON WIRELESS ANTENNAS
- (4) (P) FRP SCREENS
- (24) (P) RRU UNITS W/ (24) (P) A2 MODULES
- (8) (P) RAYCAP SURGE SUPPRESSORS, (4) @ EQUIPMENT & (1) PER SECTOR
- (P) VERIZON WIRELESS 116 SQ FT EQUIPMENT LEASE AREA
- (P) GPS ANTENNA

ALL (P) FRP SCREEN ELEMENTS & EQUIPMENT TO BE PAINTED TO MATCH (E) BUILDING & HAVE NO EXTERNAL RIVET BOLTS

PROJECT INFORMATION

SITE NAME:

GEARY AND LEAVENWORTH

SITE #:

280718

COUNTY:

SAN FRANCISCO

JURISDICTION:

CITY & COUNTY OF SAN FRANCISCO

BLOCK/LOT:

0334–028A

POWER:

PG&E

SITE ADDRESS:

519 ELLIS ST
SAN FRANCISCO, CA 94109

TELEPHONE:

AT&T

CURRENT ZONING:

RC–4–RESIDENTIAL–COMMERCIAL, HIGH DENSITY

CONSTRUCTION TYPE:

V–B

OCCUPANCY TYPE:

U, (UNMANNED COMMUNICATIONS FACILITY)

HEIGHT/BULK:

80–T

PROPERTY OWNER:

COMMUNITY HOUSING PARTNERSHIP
20 JONES ST #200
SAN FRANCISCO, CA 94102

APPLICANT:

VERIZON WIRELESS
2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598

SITE ACQUISITION COMPANY:

RIDGE COMMUNICATIONS INC
12667 ALCOSTA BLVD #175
SAN RAMON, CA 94583

LEASING CONTACT:

ATTN: TOM DOHERTY
(925) 451–1504
THOMAS.DOHERTY@RIDGECOMMUNICATE.COM

ZONING CONTACT:

ATTN: TOM DOHERTY
(925) 451–1504
THOMAS.DOHERTY@RIDGECOMMUNICATE.COM

CONSTRUCTION CONTACT:

RIDGE COMMUNICATIONS
ATTN: GENO STEINMANN
(386) 689–5006
GENO.STEINMANN@RIDGECOMMUNICATE.COM

VICINITY MAP

DRIVING DIRECTIONS

FROM: 2785 MITCHELL DRIVE, BLDG 9, WALNUT CREEK, CA 94598

TO: 519 ELLIS ST, SAN FRANCISCO, CA 94109

1. START OUT GOING SOUTHWEST ON MITCHELL DR TOWARD N WIGET LN.

0.2 MI

2. TURN LEFT ONTO N WIGET LN.

0.3 MI

3. TAKE THE 2ND RIGHT ONTO YGNACIO VALLEY RD.

3.0 MI

4. YGNACIO VALLEY RD BECOMES HILLSIDE AVE.

0.07 MI

5. MERGE ONTO CA–24 W TOWARD OAKLAND.

13.5 MI

6. TAKE EXIT 2B TOWARD I–580 / SAN FRANCISCO / HAYWARD.

0.3 MI

7. MERGE ONTO I–580 W.

1.2 MI

8. MERGE ONTO I–80 W VIA EXIT 19A ON THE LEFT (PORTIONS TOLL).

7.3 MI

9. TAKE THE FIFTH ST EXIT, EXIT 2A, ON THE LEFT.

0.3 MI

10. TURN SLIGHT RIGHT ONTO 5TH ST.

0.5 MI

11. 5TH ST BECOMES CYRIL MAGNIN ST.

0.1 MI

12. TURN LEFT ONTO ELLIS ST.

0.3 MI

END AT: 519 ELLIS ST, SAN FRANCISCO, CA 94109

ESTIMATED TIME: 35 MINUTES ESTIMATED DISTANCE: 27.21 MILES

CODE COMPLIANCE

ALL WORK & MATERIALS SHALL BE PERFORMED & 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:

2016 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.

2016 CALIFORNIA BUILDING CODE (CBC), PART 2, VOLUMES 1&2, TITLE 24 C.C.R. (2015 INTERNATIONAL BUILDING CODE AND 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2014 NATIONAL ELECTRICAL CODE AND 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R. (2015 UNIFORM MECHANICAL CODE AND 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2015 UNIFORM PLUMBING CODE AND 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.

2016 CITY OF SAN FRANCISCO FIRE CODE (2015 INTERNATIONAL FIRE CODE AND 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.

2016 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.

ANSI/EIA–TIA–222–G

ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS

DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE, TITLE 24 PART 2, SECTION 11B–203.4

SHEET INDEX

SHEET	DESCRIPTION	REV
T–1	TITLE SHEET	–
T–2	PHOTO SIMULATIONS	–
T–3	SIGNAGE DETAILS	–
C–1	TOPOGRAPHIC SURVEY	–
A–1.1	SITE PLAN	–
A–1.2	EMF REPORT RECOMMENDATIONS	–
A–2	ENLARGED SITE PLAN	–
A–3	EQUIPMENT PLAN & DETAILS	–
A–4	ANTENNA PLANS	–
A–5	ELEVATION	–
A–6	ELEVATION	–
A–7	ELEVATION	–
A–8	ELEVATION	–
A–9	DETAILS	–

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KEVIN R. SORENSEN
S4469

ISSUE STATUS

Δ	DATE	DESCRIPTION	REV.
	03/23/17	CLIENT REV	M.S.
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	06/28/17	CLIENT REV	C.C.
	07/26/17	CLIENT REV	C.C.
	09/12/17	PLANNING COMMENTS	C.C.

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: –

DATE: 09/12/17

SHEET TITLE:

TITLE

SHEET NUMBER:

T-1



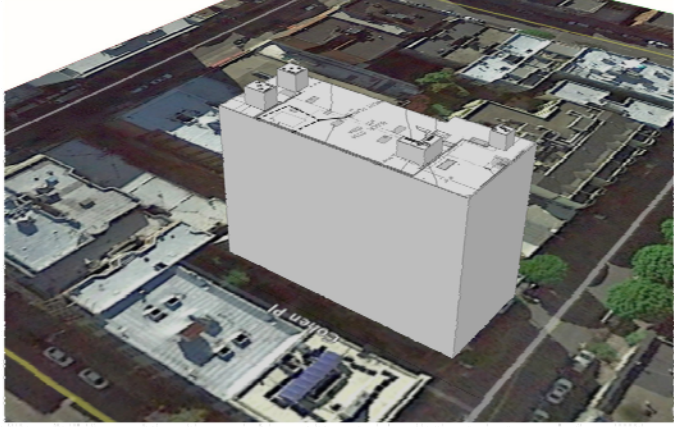
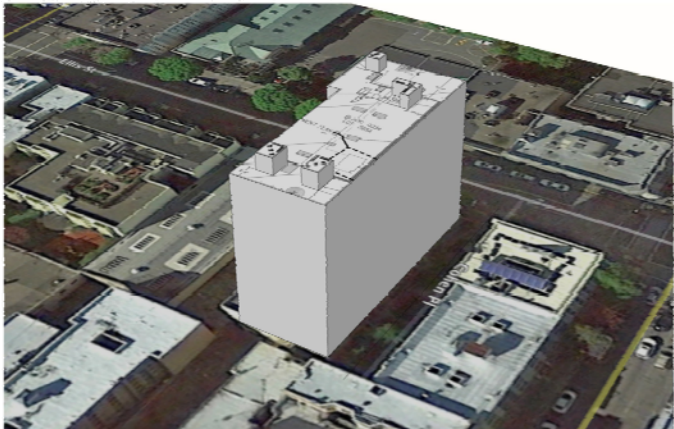
verizon Geary And Leavenworth Site # 280718 Looking East from Ellis Street
519 Ellis Street View #1
San Francisco, CA
9/01/17 Applied Imagination 510 914 0200



verizon Geary And Leavenworth Site # 280718 Looking Southwest from Leavenworth
519 Ellis Street View #2
San Francisco, CA
9/01/17 Applied Imagination 510 914 0200



verizon Geary And Leavenworth Site # 280718 Looking North from Eddy Street
519 Ellis Street View #3
San Francisco, CA
9/01/17 Applied Imagination 510 914 0200



verizon Geary And Leavenworth Site # 280718 3D Model Views
519 Ellis Street
San Francisco, CA
9/01/17 Applied Imagination 510 914 0200

GEARY AND LEAVENWORTH

280718
519 ELLIS ST
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WALNUT CREEK, CA 94598

Streamline Engineering
and Design Inc.

8445 Sierra College Blvd, Suite E Granite Bay, CA 95661
Contact: Larry Houghtby Phone: 916-275-4180
E-Mail: larry@streamlineeng.com Fax: 916-860-1941
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DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 09/12/17

SHEET TITLE:

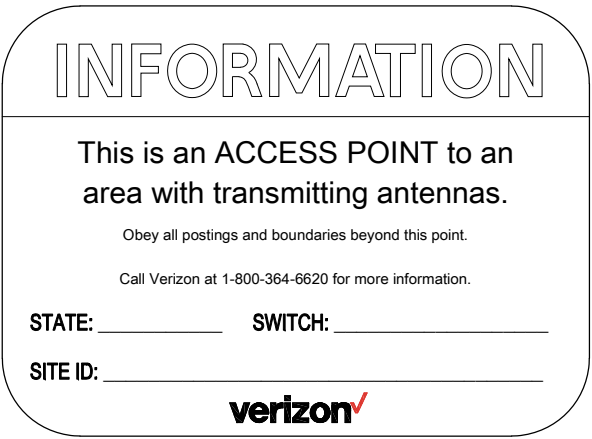
PHOTO SIMULATIONS

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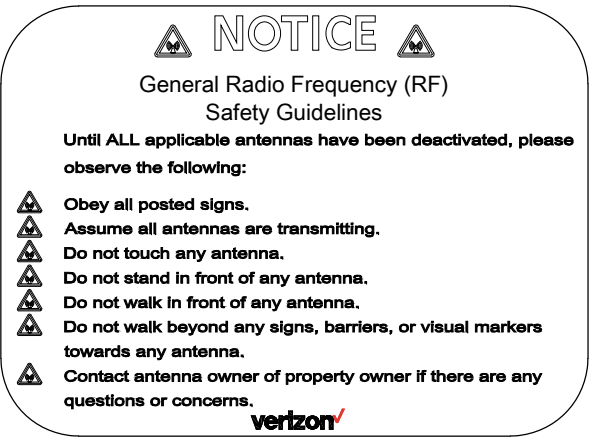
T-2

SIGNAGE AND STRIPING INFORMATION

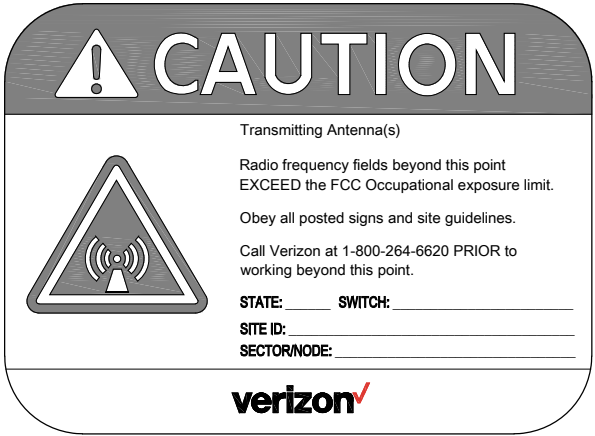
1. THE FOLLOWING INFORMATION IS A GUIDELINE WITH RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATION SHOULD BE IN CONFLICT WITH ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER.
2. THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BY VERIZON WIRELESS IS 1mWcm² AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY VERIZON WIRELESS IS 5mWcm²
3. IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR ROOF 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 CANNOT BE LOCKED OR THERE IS AN EXISTING FIRE EGRESS), THEN BOTH BARRICADES AND STRIPING WILL BE NEEDED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING WILL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER THE CONSTRUCTION OF THE SITE. 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 NOT EXCEEDED AND THE AREA IS NOT PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR IS LOCKED), THEN JUST STRIPING OUT TO THE PUBLIC LIMIT WILL BE NEEDED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE STRIPING WILL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER THE CONSTRUCTION OF THE SITE. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH STRIPING.
6. ALL TRANSMIT ANTENNAS REQUIRE A (3) THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH, AND CHINESE. THIS SIGN WILL BE PROVIDED TO THE CONTRACTOR BY THE VERIZON WIRELESS CONSTRUCTION MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES IN PLAIN SIGHT AND THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNAS THEMSELVES OR ON THE OUTSIDE OF THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGNS WILL HAVE VERIZON WIRELESS'S NAME AND THE COMPANY CONTACT INFORMATION (e.g. TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER WILL BE PROVIDED TO THE CONTRACTOR BY THE VERIZON WIRELESS CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.
7. PHOTOS OF ALL STRIPING, BARRICADES, AND SIGNAGE WILL BE PART OF THE CONTRACTORS CLOSE OUT PACKAGE AND WILL BE TURNED INTO THE VERIZON WIRELESS CONSTRUCTION PROJECT MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE WITH FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS HATCH PATTERN. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO THAT THEY DO NOT BLOCK OR INTERFERE WITH THE OPERATION OF THE SITE AND SHALL BE PAINTED WITH FADE RESISTANT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RF FRIENDLY BARRICADES NEEDED AND SHALL PROVIDE THE VERIZON WIRELESS CONSTRUCTION PROJECT MANAGER WITH A DETAILED SHOP DRAWING OF EACH BARRICADE.
8. ALL REQUIRED SIGNAGE WILL BE INSTALLED AS NEEDED AND FIELD VERIFIED.



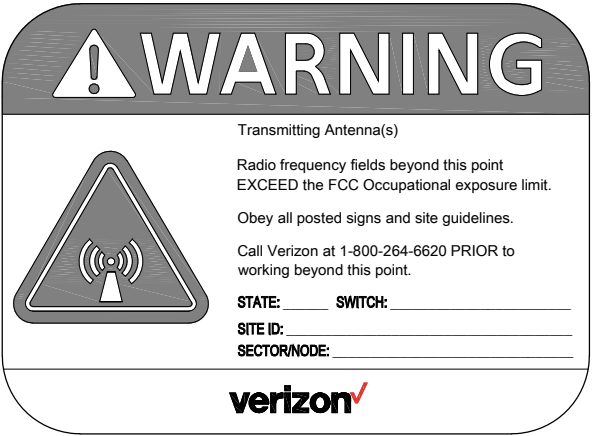
1 TYPICAL INFORMATION SIGN



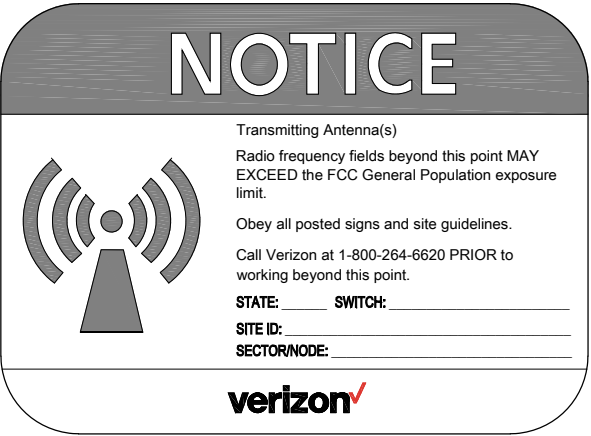
2 TYPICAL GUIDELINES SIGN



3 TYPICAL CAUTION SIGN



4 TYPICAL WARNING SIGN



5 TYPICAL NOTICE SIGN

GEARY AND LEAVENWORTH

280718
519 ELLIS ST
SAN FRANCISCO, CA 94109

verizon

2785 MITCHELL DRIVE BLDG 9
WALNUT CREEK, CA 94598

Streamline Engineering and Design Inc.

8445 Sierra College Blvd, Suite E Granite Bay, CA 95661
Contact: Larry Houghtby Phone: 916-275-4180
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S4469

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	07/26/17	CLIENT REV	C.C.
	09/12/17	PLANNING COMMENTS	C.C.

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

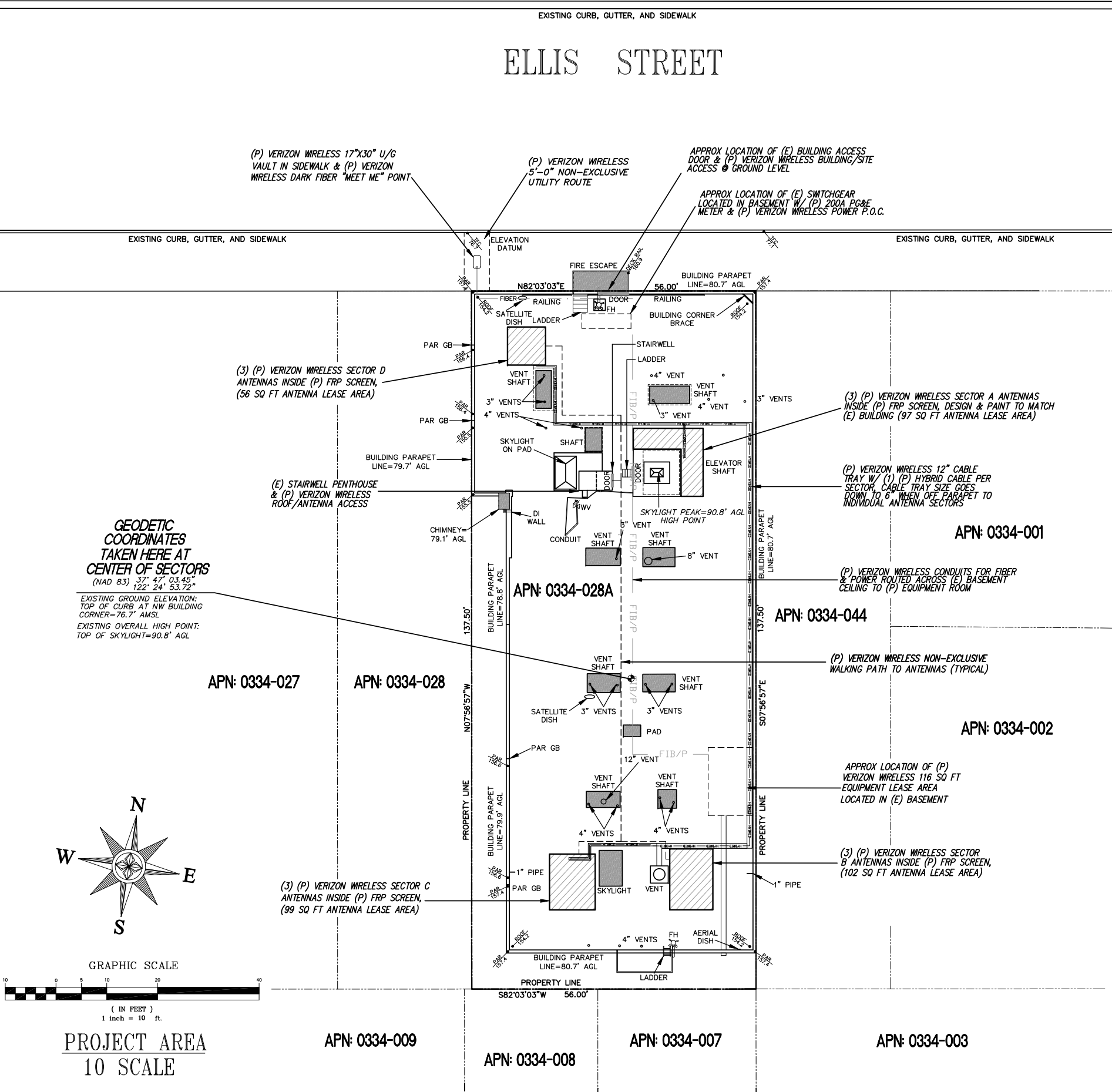
DATE: 09/12/17

SHEET TITLE:

SIGNAGE DETAILS

SHEET NUMBER:

T-3



PROPERTY INFORMATION
OWNER: COMMUNITY HOUSING PARTNERSHIP
ADDRESS: 20 JONES STREET #200
SAN FRANCISCO, CA 94102
SITE: GEARY AND LEAVENWORTH
519 ELLIS STREET
SAN FRANCISCO, CA 94109
ASSESSOR'S PARCEL NUMBER: APN: 0334-028A
EXISTING GROUND ELEVATION: TOP OF CURB AT NORTHWEST BUILDING CORNER=76.7' AMSL

SURVEYOR'S NOTES
ALL EASEMENTS CONTAINED IN SAID TITLE REPORT AFFECTING THE IMMEDIATE AREA SURROUNDING THE LEASE HAVE BEEN PLOTTED. SURVEYOR HAS NOT PERFORMED A SEARCH OF PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE ISSUED. THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY.

SURVEY DATE
9/07/15
TITLE REPORT
TITLE REPORT WAS PROVIDED BY STEWART TITLE OF CALIFORNIA, ORDER NO: 01180-185689, DATED: APRIL 10, 2017.

EXCEPTIONS #12 & #16 FOR SITE ACCESS AND ASSOCIATED EQUIPMENT AND RIGHTS INCIDENTAL TO AND IN THE FAVOR OF COMCAST OF CALIFORNIA III.

UTILITY NOTES
SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT U.S.A. AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/ OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

BASIS OF BEARING
BEARINGS SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM STATE PLANE COORDINATE ZONE 3 DETERMINED BY GPS OBSERVATIONS.

BENCHMARK
ELEVATION ESTABLISHED FROM GPS DERIVED ORTHOMETRIC HEIGHTS, APPLYING GEOID 99 SEPARATIONS, CONSTRAINING TO NGS CONTROL STATION 'LUTZ' ELEVATION=450.0' (NAVD88)

LESSOR'S LEGAL DESCRIPTION
ALL THAT CERTAIN REAL PROPERTY SITUATE IN THE CITY AND COUNTY OF SAN FRANCISCO, STATE OF CALIFORNIA, RECORDED OCTOBER 4, 2013, IN DOCUMENT NO. J766844.

NO EASEMENTS DESCRIBED ON SAID DOCUMENT CONFLICT WITH THE PROPOSED PROJECT AREA.

LEGEND	
P.O.B.	POINT OF BEGINNING
TFC	TOP FACE OF CURB
R/W	RIGHT OF WAY
EP	EDGE OF PAVEMENT
D/W	ACCESS DRIVEWAY
PS	PARKING SPACE
SW	SIDEWALK
PAR	TOP OF PARAPET
COL	TOP OF ROOF COLUMN
GEODETIC COORDINATES	
SPOT ELEVATION	
DISH ANTENNA	
WATER CONTROL VALVE	
FIRE HYDRANT	
GUY CONDUCTOR	
FOUND AS NOTED	
POWER POLE	
LIGHT POLE	
ELECTRICAL TRANSFORMER	
AIR CONDITIONING UNIT	
TELEPHONE PEDESTAL	
TELEPHONE VAULT	
TELEPHONE MANHOLE	
GAS VALVE	
GAS METER	
PROPERTY LINE	
CHAIN LINK FENCE	

NOTE:
Exception #12, #13 AND #16 of above indicates that Comcast has a right to use a portion of Parcel 2 as depicted in Exhibit A to the exception document.
The Exhibit describes the entire Parcel 2 as the Comcast lease area and cannot be plotted in the survey.

ISSUE STATUS	
DATE	DESCRIPTION
9/14/2015	SITE PLAN
2/01/2016	PER AE DESIGN
5/16/2016	REVISED AE DESIGN
3/08/2017	REVISED DESIGN AE
4/09/2017	REVISED LEASE AREA
5/06/2017	UPDATED TITLE REPORT
5/17/2017	DARK FIBER ADDED
8/31/2017	REVISED LEASE AREA



HAYES
Land Surveying
And Mapping
2820 MADISON COURT
CONCORD, CA 94518



verizon
2785 MITCHELL DRIVE
WALNUT CREEK, CA. 94598
OFFICE: 925-279-6000
(925) 279-6333

TOPOGRAPHIC SURVEY
EXISTING CONDITIONS
PSL #280718
GEARY AND LEAVENWORTH
519 ELLIS STREET
SAN FRANCISCO, CA 94109

C-1
SHEET 1 of 1

280718
519 ELLIS ST
SAN FRANCISCO, CA 94109

2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK CA 94598

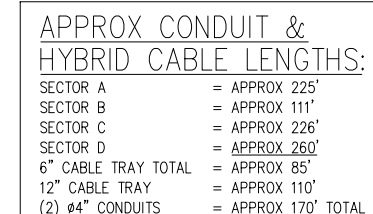
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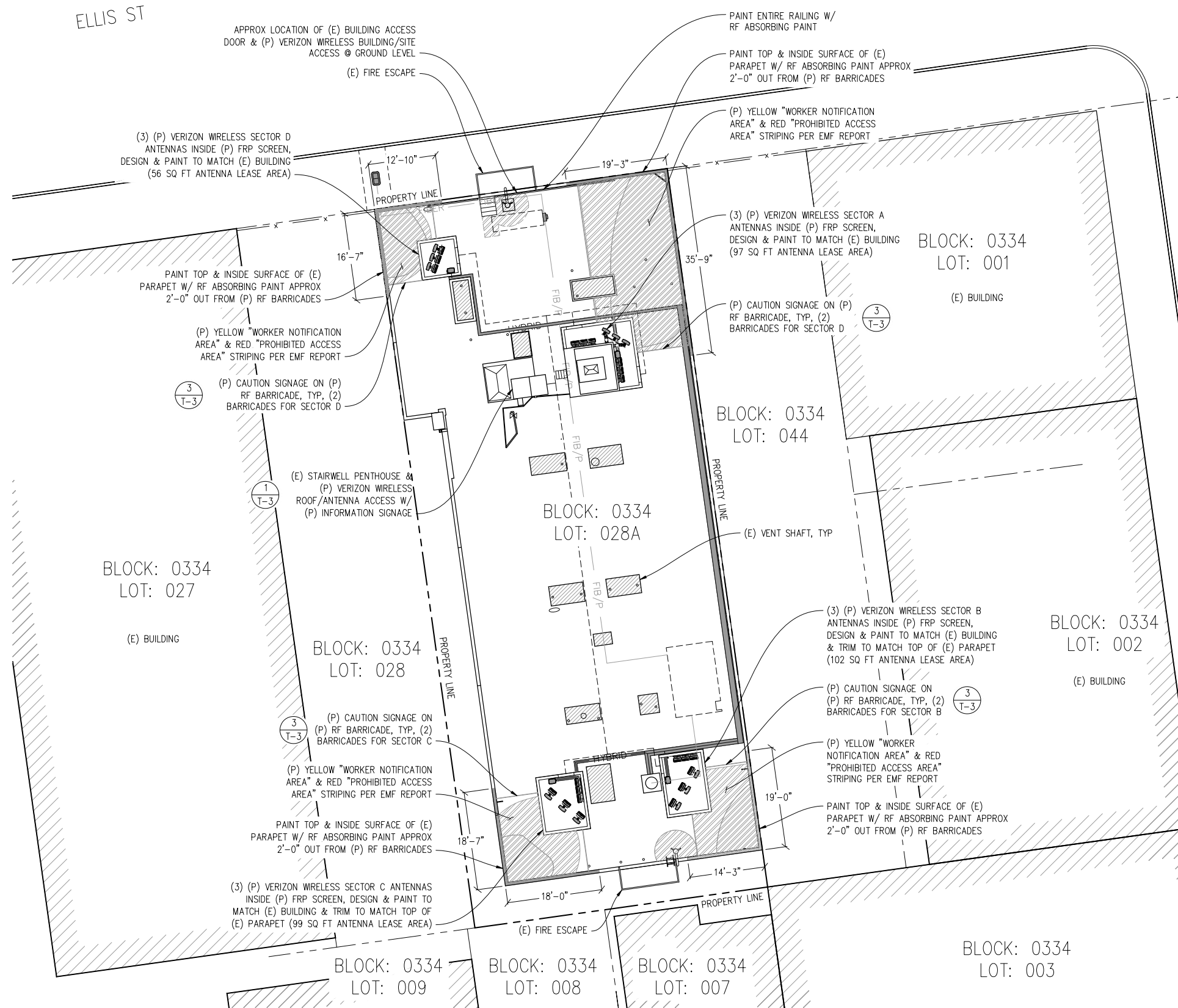
KEVIN R. SORENSEN
S4469

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	06/28/17	CLIENT REV	C.C.
	07/26/17	CLIENT REV	C.C.
	09/12/17	PLANNING COMMENTS	C.C.

DATE: 09/12/17

A-1.1





EMF REPORT RECOMMENDATIONS

1"=10'-0"



**GEARY
AND
LEAVENWORTH**

280718
519 ELLIS ST
SAN FRANCISCO, CA 94109

verizon

2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598

**Streamline Engineering
and Design, Inc.**

8445 Sierra College Blvd, Suite E Granite Bay, CA 95661
Contact: Larry Houghtby Phone: 916-275-4180
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DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

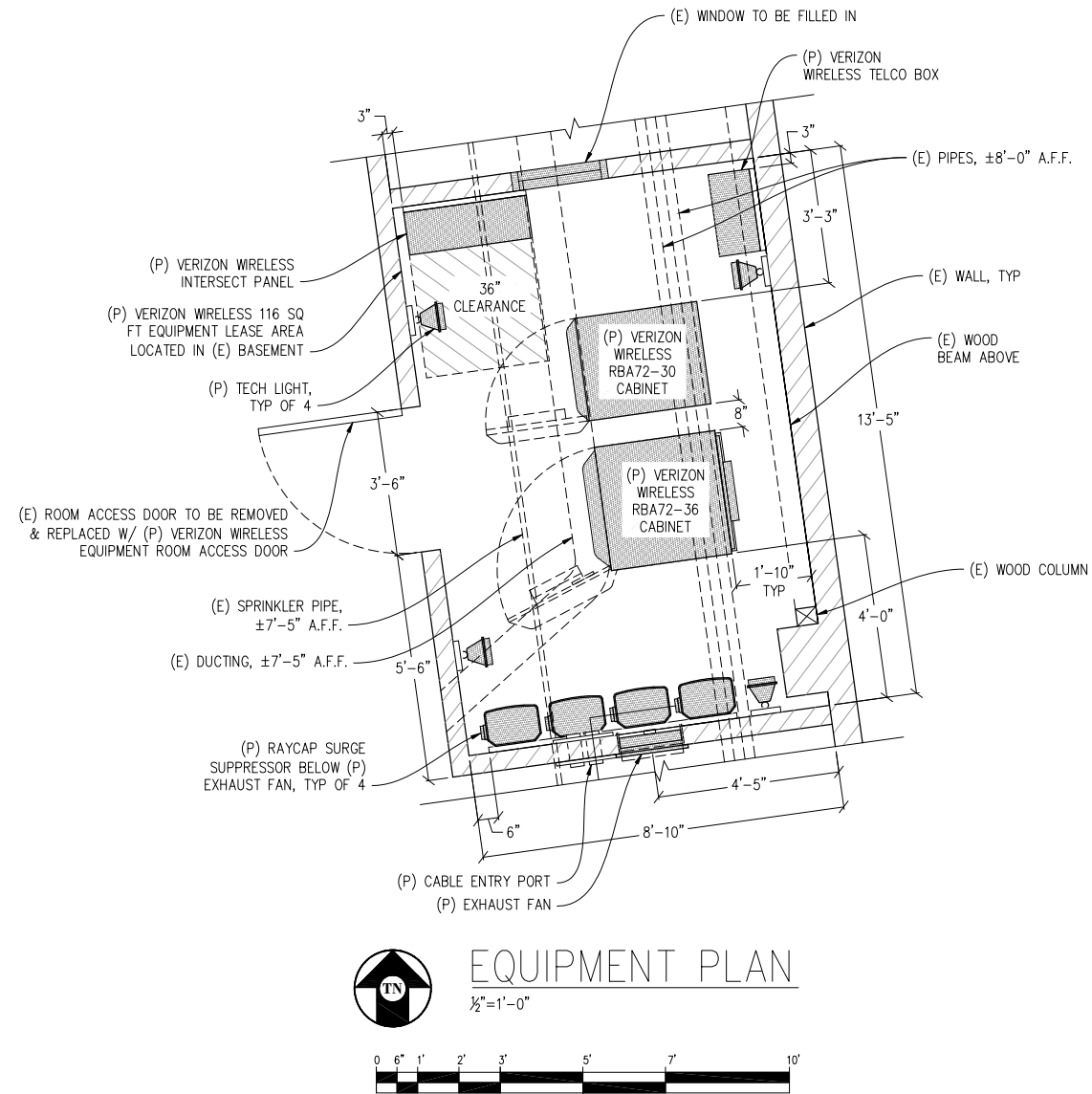
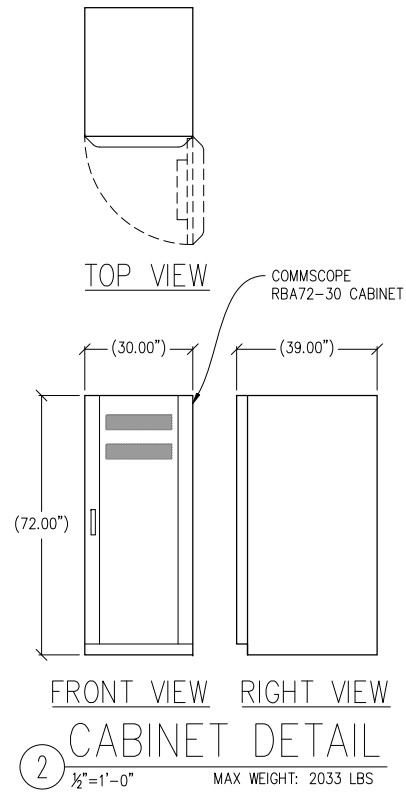
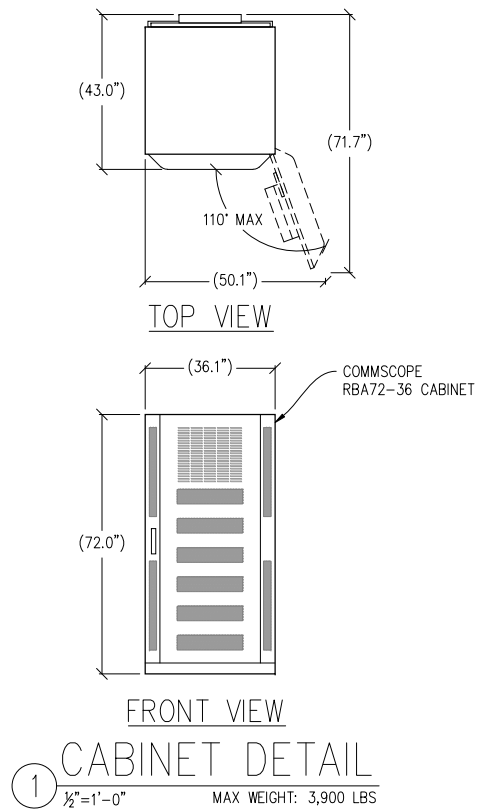
DATE: 09/12/17

SHEET TITLE:

EMF REPORT
RECOMMENDATIONS

SHEET NUMBER:

A-1.2



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AND
LEAVENWORTH

280718
519 ELLIS ST
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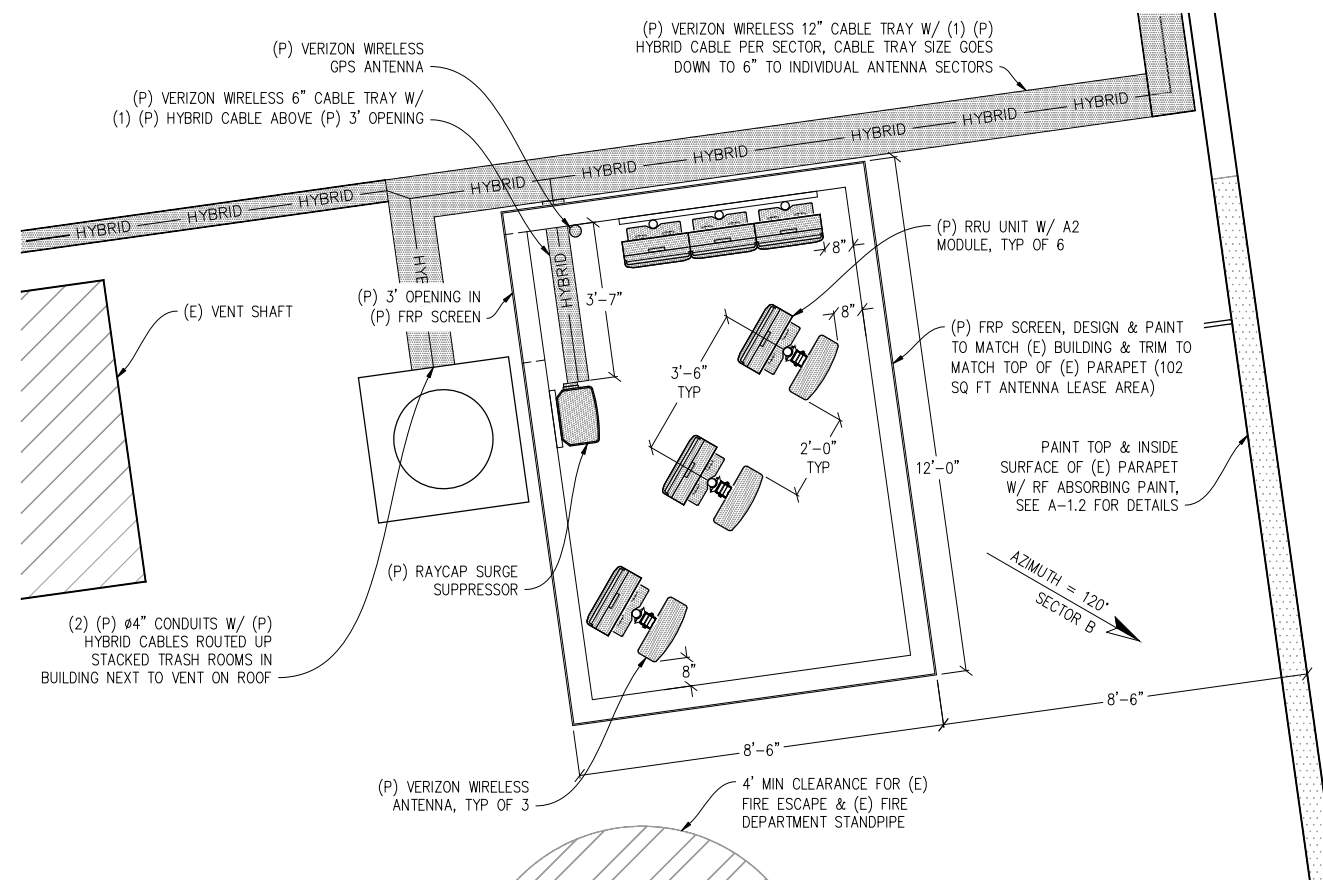
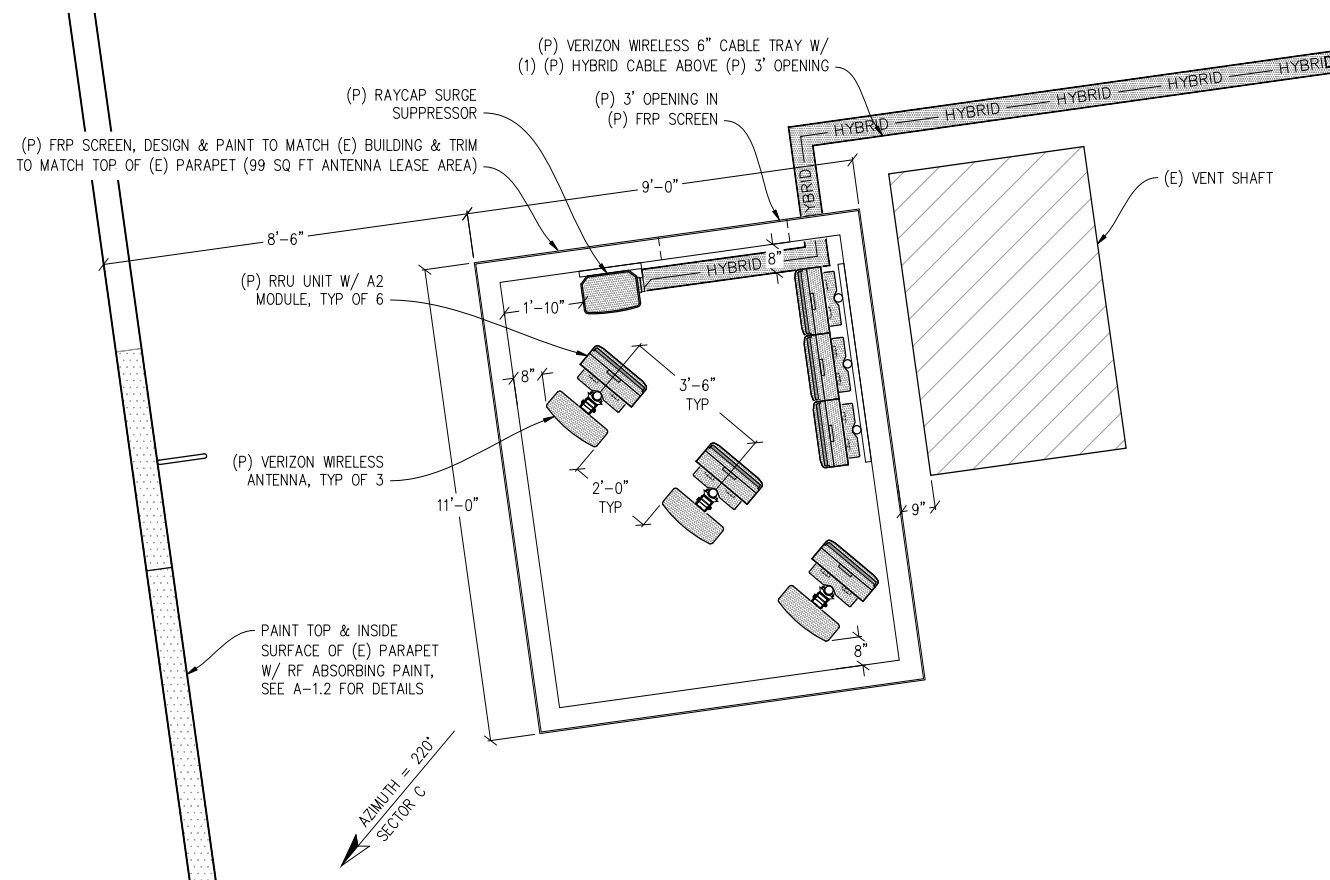
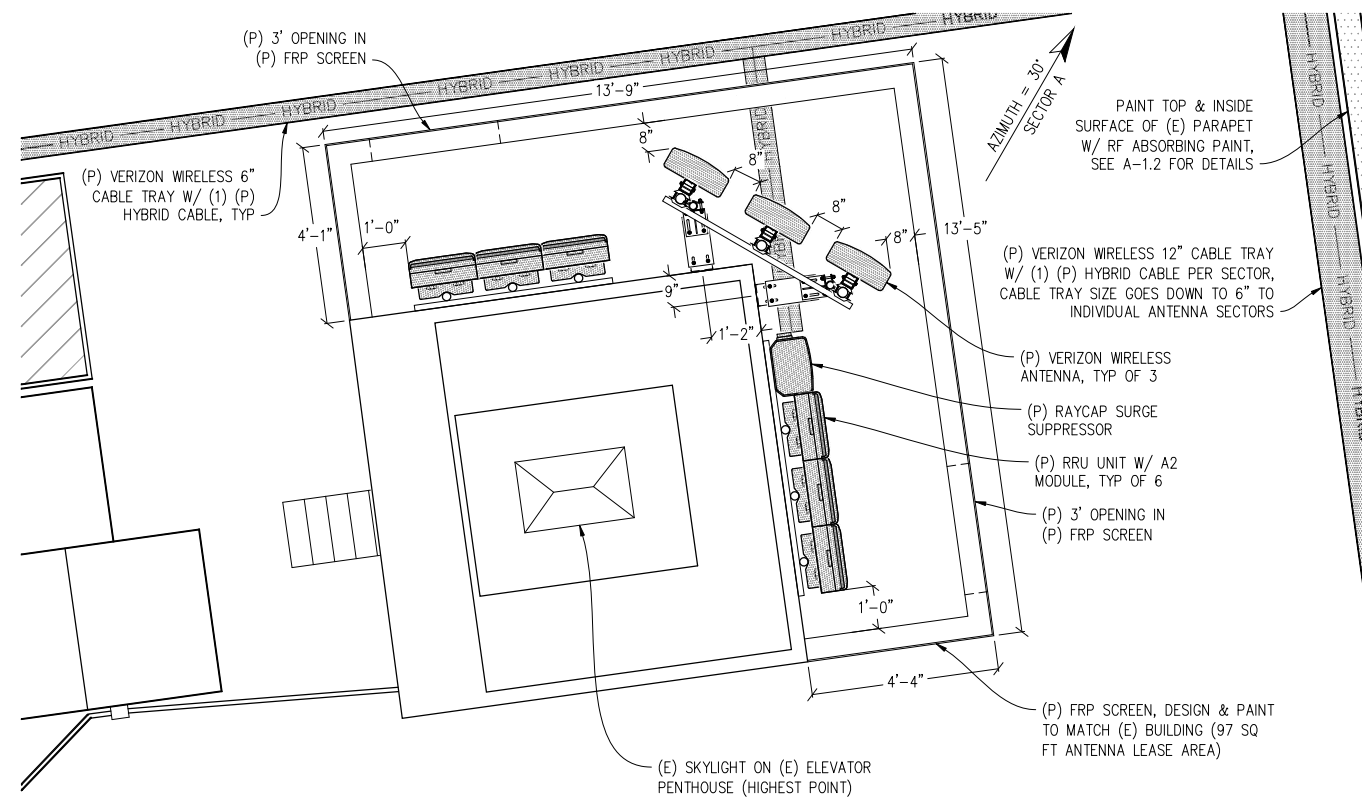
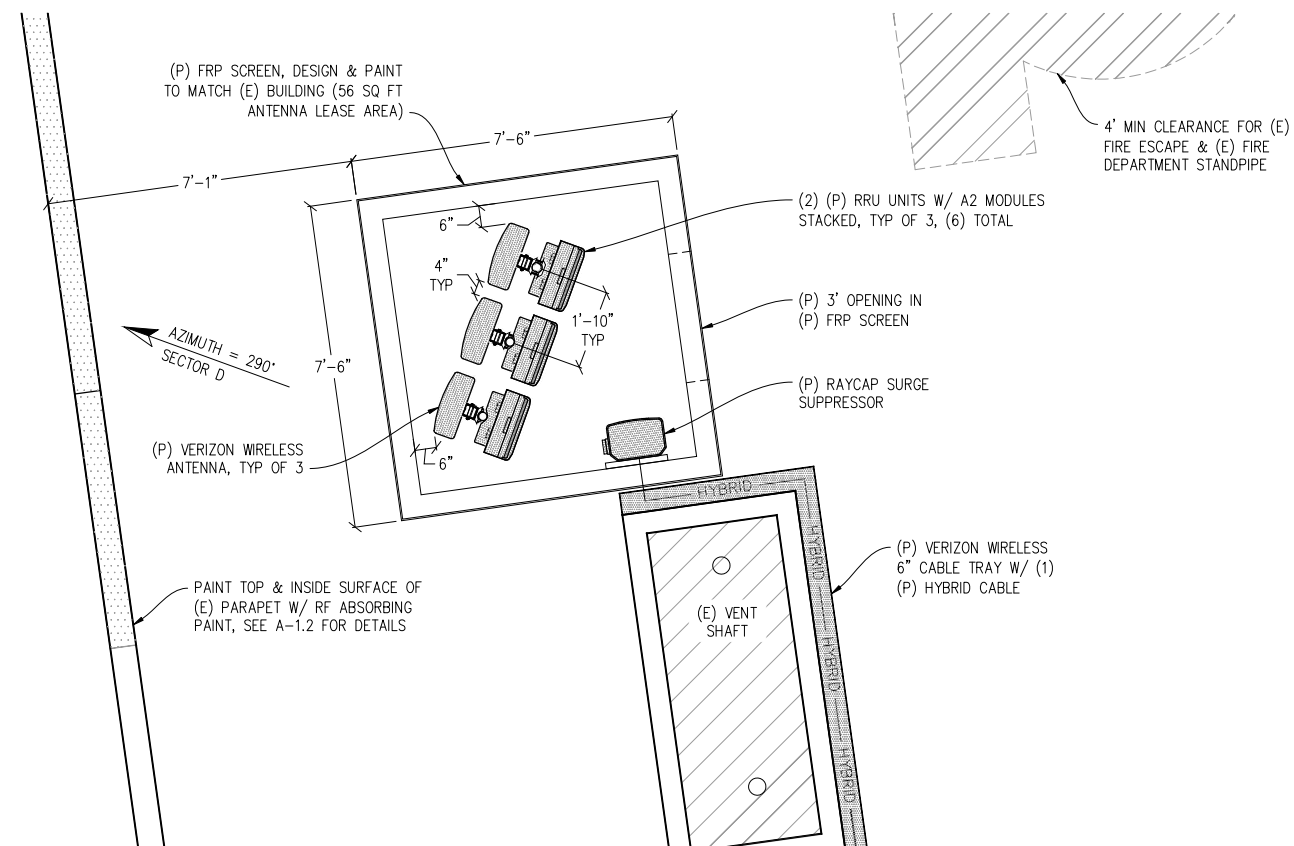
DATE: 09/12/17

SHEET TITLE:

EQUIPMENT PLAN
& DETAILS

SHEET NUMBER:

A-3

GEARY
AND
LEAVENWORTH

280718
519 ELLIS ST
SAN FRANCISCO, CA 94109



2785 MITCHELL DRIVE, BLDG 9
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DRAWN BY: C. CODY

CHECKED BY: J. GRAY

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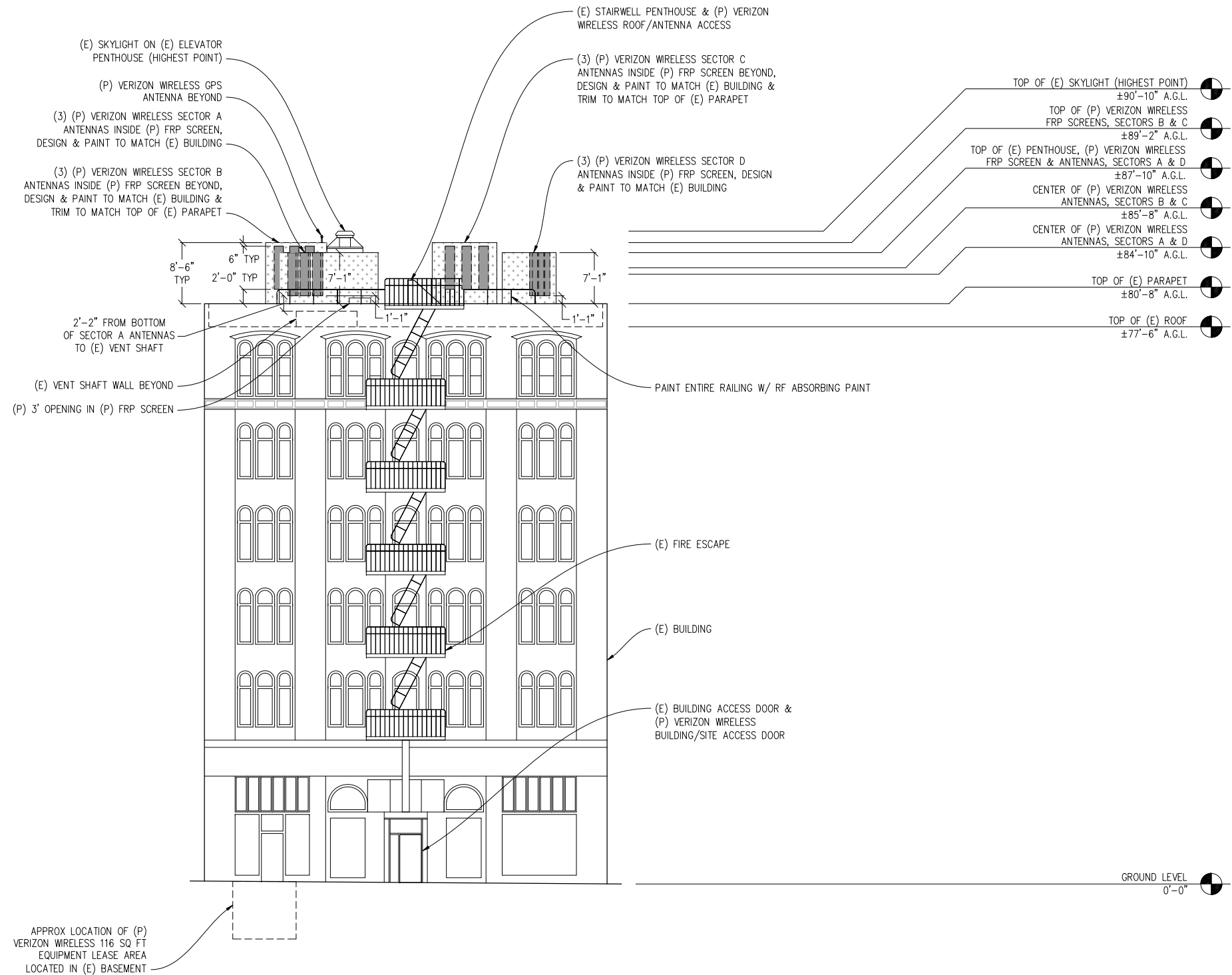
DATE: 09/12/17

SHEET TITLE:

ANTENNA PLANS

SHEET NUMBER:

A-4



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

NOTE: OUTWARD APPEARANCE OF (P) FRP SCREENS TO BE FREE OF SEAMS, BOLTS OR RIVETS

VIEW FROM ELLIS ST

GEARY
AND
LEAVENWORTH

280718
519 ELLIS ST
SAN FRANCISCO, CA 94109

verizon

2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598

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E-Mail: larry@streamlineeng.com Fax: 916-660-1941

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KEVIN R. SORENSEN
S4469

ISSUE STATUS

Δ	DATE	DESCRIPTION	REV.
	03/23/17	CLIENT REV	M.S.
	04/07/17	CLIENT REV	C.C.
	05/15/17	CLIENT REV	C.C.
	06/28/17	CLIENT REV	C.C.
	07/26/17	CLIENT REV	C.C.
	09/12/17	PLANNING COMMENTS	C.C.

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 09/12/17

SHEET TITLE:

ELEVATION

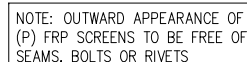
SHEET NUMBER:

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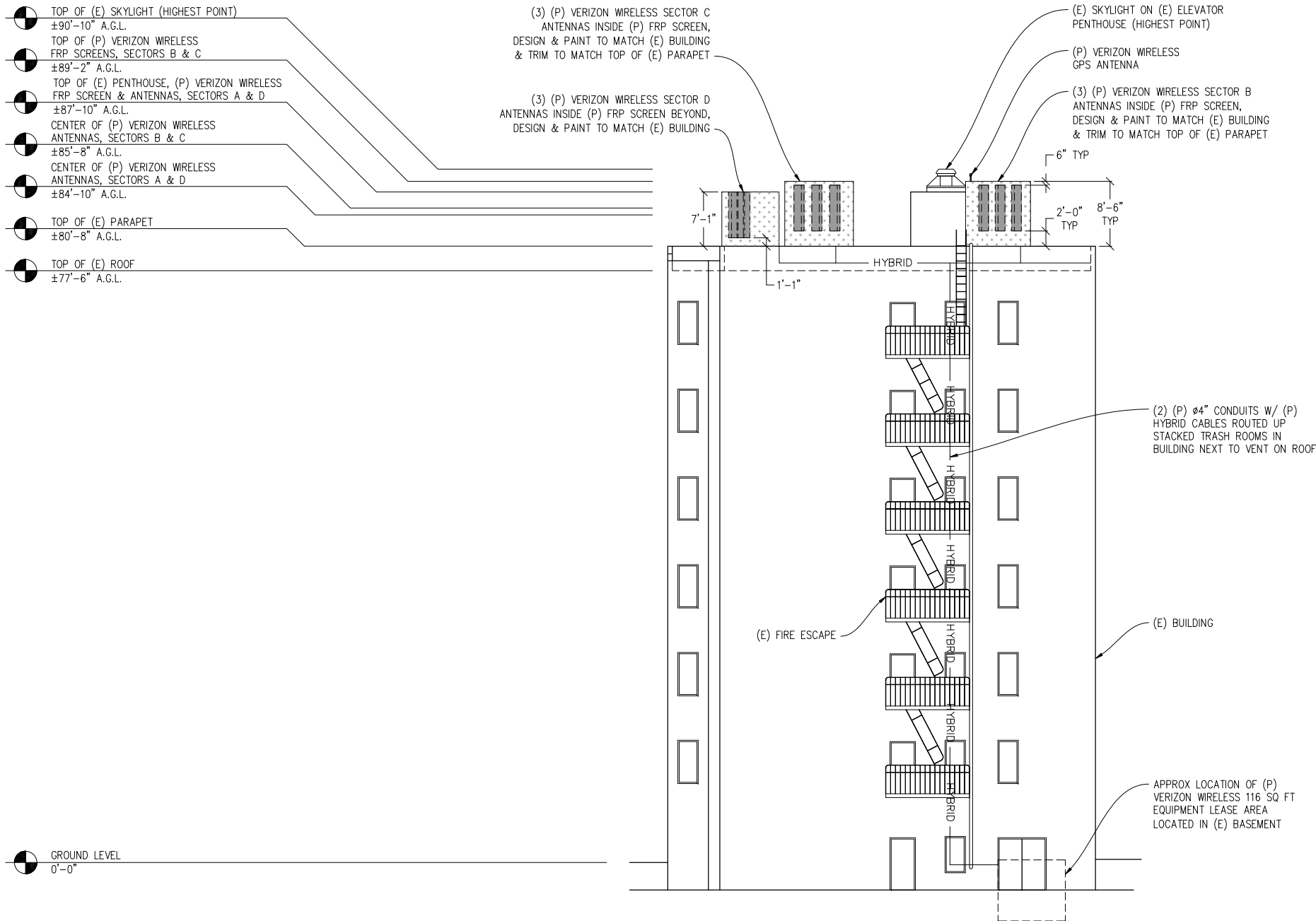
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S4469

DRAWN BY:	C. CODY
CHECKED BY:	J. GRAY
APPROVED BY:	-
DATE:	09/12/17

A-6



VIEW FROM LEAVENWORTH ST



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

VIEW FROM EDDY ST

NOTE: OUTWARD APPEARANCE OF (P) FRP SCREENS TO BE FREE OF SEAMS, BOLTS OR RIVETS

GEARY
AND
LEAVENWORTH

280718
519 ELLIS ST
SAN FRANCISCO, CA 94109

verizon

2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598

Streamline Engineering
and Design, Inc.

8445 Sierra College Blvd, Suite E Granite Bay, CA 95661
Contact: Larry Houghtby Phone: 916-275-4180
E-Mail: larry@streamlineeng.com Fax: 916-660-1941

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	07/26/17	CLIENT REV	C.C.
	09/12/17	PLANNING COMMENTS	C.C.

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 09/12/17

SHEET TITLE:

ELEVATION

SHEET NUMBER:

A-7

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519 ELLIS ST
SAN FRANCISCO, CA 94109



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WAINUT CREEK CA 94598

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△	DATE	DESCRIPTION	R
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	04/07/17	CLIENT REV	C
	05/15/17	CLIENT REV	C
	06/28/17	CLIENT REV	C
	07/26/17	CLIENT REV	C
	09/12/17	PLANNING COMMENTS	C

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: —

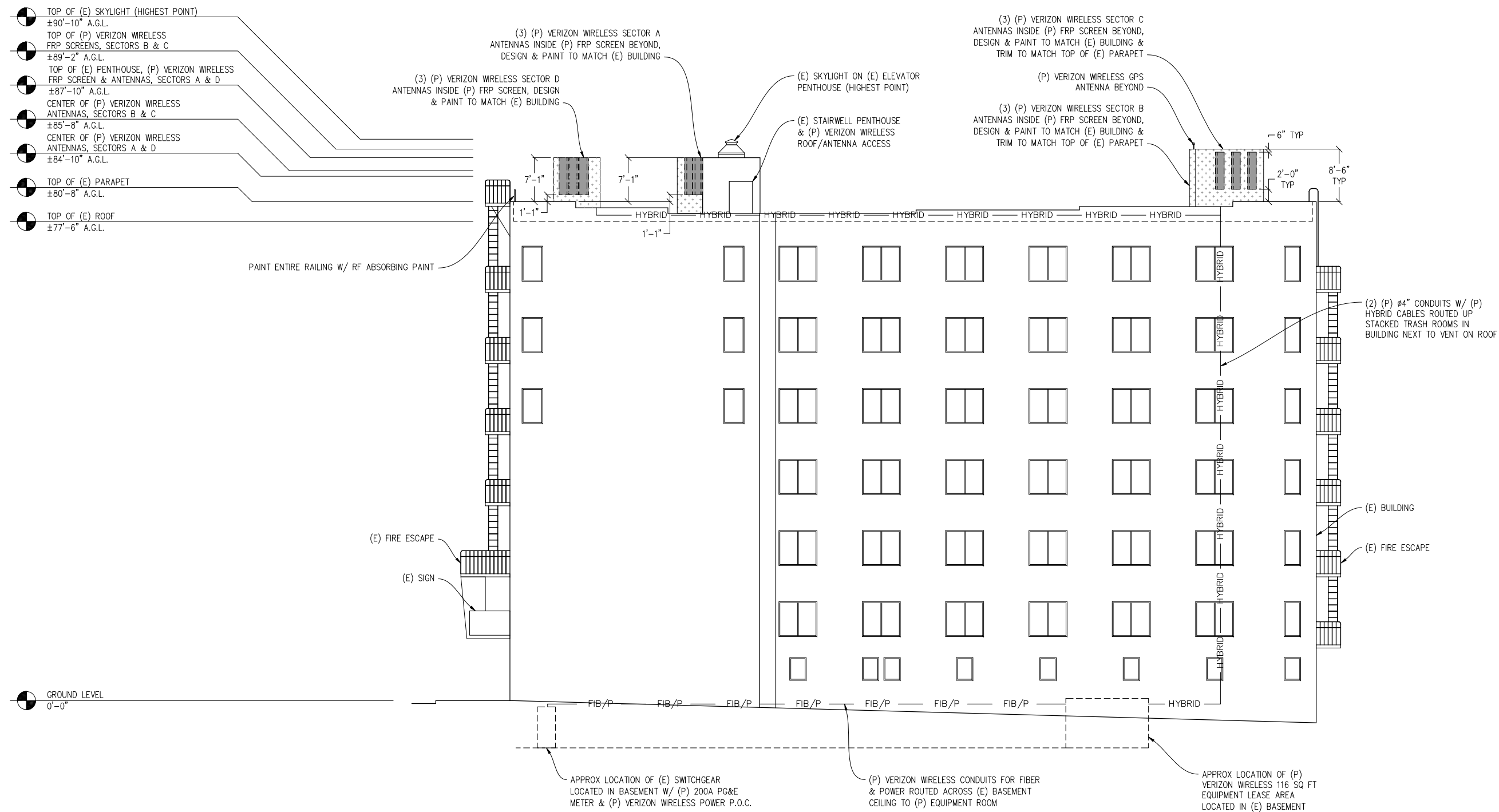
DATE: 09/12/17

SHEET TITLE:

ELEVATION

SHEET NUMBER:

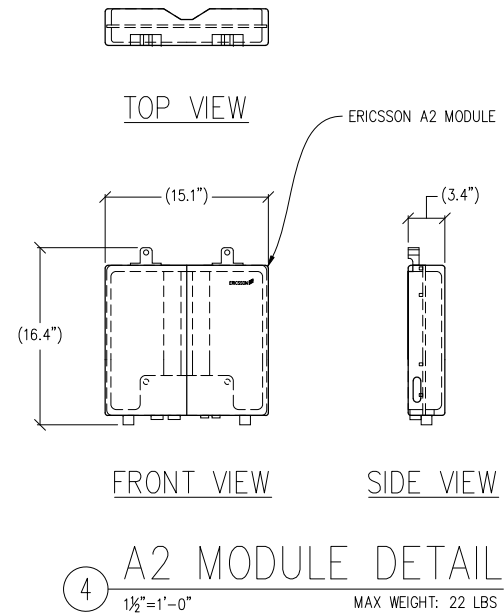
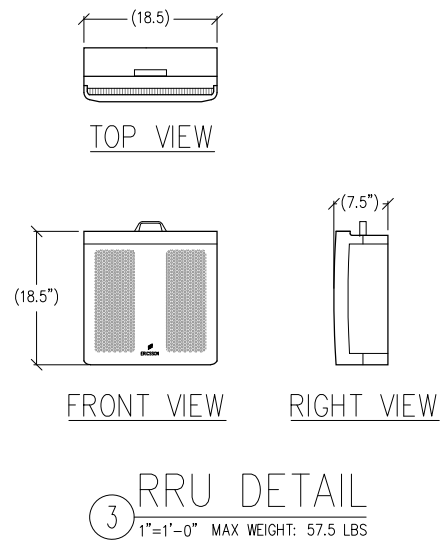
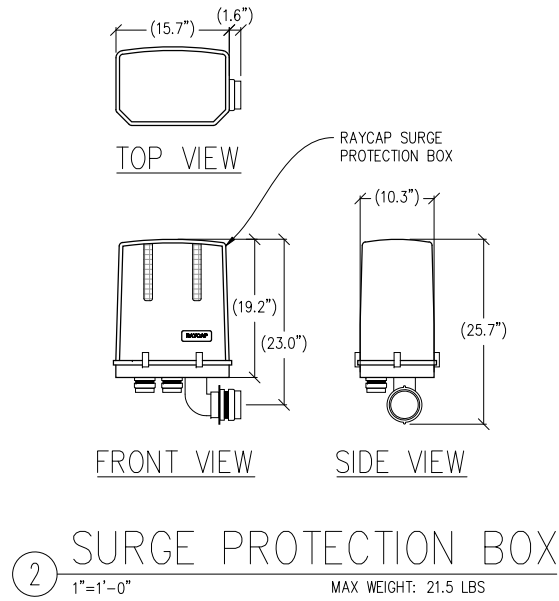
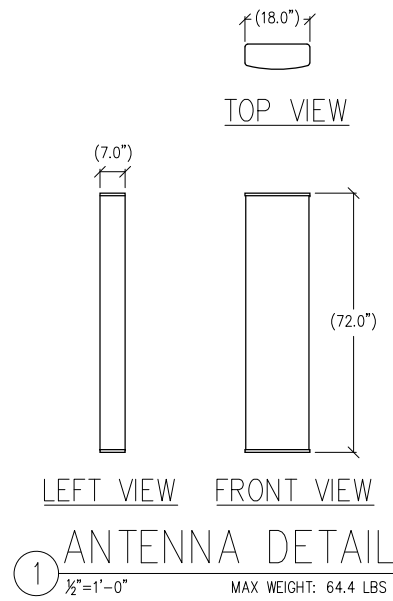
A-8



WEST ELEVATION

NOTE: OUTWARD APPEARANCE OF
(P) FRP SCREENS TO BE FREE OF
SEAMS, BOLTS OR RIVETS

VIEW FROM HYDE ST



GEARY
AND
LEAVENWORTH

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DRAWN BY: C. CODY			
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APPROVED BY: -			
DATE: 09/12/17			
SHEET TITLE:			
DETAILS			
SHEET NUMBER:			
A-9			