SAN FRANCISCO
PLANNING DEPARTMENT

Executive Summary
Conditional Use Authorization

HEARING DATE: MARCH 7, 2013

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

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Date:	February 28, 2013
Case No.:	**2012.0815C**
Project Address:	**679 24th Avenue**
Current Zoning:	RH-2 (Residential – House, Two-Family) District 40-X Height and Bulk District
Block/Lot:	1567/012
Project Sponsor:	Sprint Nextel represented by David Alameda, Streamline Engineering 3268 Penryn Rd., Ste 200 Loomis, CA 95650
Staff Contact:	Michelle Stahlhut – (415) 575-9116

PROJECT DESCRIPTION

The proposal is to modify an existing wireless telecommunications services facility. The modification would consist of adding up to three panel antennas to the existing site for a total of six panel antennas on the rooftop of a PG&E substation along with equipment located within a ground level storage area as part of Sprint Nextel's wireless telecommunications network. The antennas are proposed on a Location Preference 1 Site (Preferred Location Site) according to the WTS Siting Guidelines because it is a PG&E substation. The proposed antennas would measure a maximum of 72" high by 12" wide by 6" thick. All six antennas would be mounted on the roof of the building within radomes, with a maximum height of 40'6" above grade.

SITE DESCRIPTION AND PRESENT USE

The building is located on Assessor's Block 1567, Lot 012 on the northwest corner of 24th Avenue and Balboa Street. This site is within a RH-2 (Residential – House, Two-Family) Zoning District and 40-X Height and Bulk District. The Project Site contains a one-story PG&E substation on a corner lot with approximately 112 feet of frontage on 24th Avenue, and 107 feet on Balboa Street. The building was built in 1915 and is considered a Known Historic Resource.

SURROUNDING PROPERTIES AND NEIGHBORHOOD

Nearby land uses include two-family and multi-family residential homes to the north, east, and west, and two-family, multi-family, and the San Francisco County Special Education school to the south. The site is two blocks north of Golden Gate Park.

ENVIRONMENTAL REVIEW

The project is exempt from the California Environmental Quality Act ("CEQA") as a Class 1 categorical exemption. 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, San Francisco.

HEARING NOTIFICATION

TYPE	REQUIRED PERIOD	REQUIRED NOTICE DATE	ACTUAL NOTICE DATE	ACTUAL PERIOD
Classified News Ad	20 days	February 15, 2013	February 15, 2013	20 days
Posted Notice	20 days	February 15, 2013	February 15, 2013	20 days
Mailed Notice	20 days	February 15, 2013	February 15, 2013	20 days

PUBLIC COMMENT

As of February 28, 2013, the Department has received no public comment on the proposed project.

ISSUES AND OTHER CONSIDERATIONS

- Health and safety aspects of all wireless projects are reviewed under the Department of Public Health and the Department of Building Inspections.
- An updated Five Year Plan with approximate longitudinal and latitudinal coordinates of proposed locations, including the subject site is on file with the Planning Department.
- All required public notifications were conducted in compliance with the City's code and policies.

REQUIRED COMMISSION ACTION

Pursuant to Section 209.6(b) of the Planning Code, Conditional Use authorization is required for a WTS facility in RH-2 Districts.

BASIS FOR RECOMMENDATION

This project is necessary and/or desirable under Section 303 of the Planning Code for the following reasons:

- The project complies with the applicable requirements of the Planning Code.
- The project is consistent with the objectives and policies of the General Plan.
- The Project is consistent with the 1996 WTS Facilities Siting Guidelines, Planning Commission Resolution No. 14182 and Resolutions No. 16539 and No. 18523 supplementing the 1996 WTS Guidelines.
- The project site is considered a Location Preference 1, (RH-2 (Residential, Two-Family Zoning District) as an institutional use according to the Wireless Telecommunications Services (WTS) Siting Guidelines.

- Health and safety aspects of all wireless projects are reviewed under the Department of Public Health and the Department of Building Inspections.
- The expected RF emissions fall well within the limits established by the FCC.
- Although the project site is considered a Location Preference 1, (Preferred Location Site) according to the Wireless Telecommunications Services (WTS) Siting Guidelines, the subject site has been determined to be the most viable site to serve the geographic service area through an alternative site analysis.
- Based on propagation maps provided by Sprint, the project will provide coverage in an area that currently experiences several gaps in coverage and capacity.
- Based on the analysis provided by Sprint, the project will 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 Sprint are accurate.
- The proposed antennas will be minimally visible when viewed from adjacent rights-of-way and points further away so as to avoid intrusion into public vistas, avoid disruption of the architectural integrity of building and insure harmony with neighborhood character.
- The proposed project has been reviewed by staff and found to be categorically exempt from further environmental review. The proposed changes to the subject building do not result in a significant impact on the resource. The proposed antenna project is categorically exempt from further environmental review pursuant to the Class 1 exemptions of California Environmental Quality Act.
- A Five Year Plan with approximate longitudinal and latitudinal coordinates of proposed locations, including the subject site, was submitted.
- All required public notifications were conducted in compliance with the City's code and policies.

RECOMMENDATION:	**Approval with Conditions**

☒	Executive Summary	☒	Project sponsor submittal
☒	Draft Motion		Drawings: Proposed Project
☒	Zoning District Map		☒ Check for legibility
☐	Height & Bulk Map	☒	Photo Simulations
☒	Parcel Map	☒	Coverage Maps
☒	Sanborn Map	☒	RF Report
☒	Aerial Photo	☒	DPH Approval
☒	Context Photos	☒	Community Outreach Report
☒	Site Photos	☒	Independent Evaluation

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

SAN FRANCISCO
PLANNING DEPARTMENT

Subject to: (Select only if applicable)

☐ Affordable Housing (Sec. 415)
☐ Jobs Housing Linkage Program (Sec. 413)
☐ Downtown Park Fee (Sec. 412)
☐ First Source Hiring (Admin. Code)
☐ Child Care Requirement (Sec. 414)
☐ Other

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

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Planning Commission Motion No. XXXX

HEARING DATE: MARCH 7, 2013

Date:	February 28, 2013
Case No.:	**2012.0815C**
Project Address:	**679 24th Avenue**
Current Zoning:	RH-2 (Residential – House, Two-Family) District 40-X Height and Bulk District
Block/Lot:	1567/012
Project Sponsor:	Sprint Nextel represented by David Alameda, Streamline Engineering 3268 Penryn Rd., Ste 200 Loomis, CA 95650
Staff Contact:	Michelle Stahlhut – (415) 575-9116 Michelle.Stahlhut@sfgov.org

ADOPTING FINDINGS RELATING TO THE APPROVAL OF A CONDITIONAL USE AUTHORIZATION UNDER PLANNING CODE SECTION 303(c) AND 209.6(b) TO MODIFY AN EXISTING WIRELESS TELECOMMUNICATIONS SERVICES FACILITY. THE MODIFICATION WOULD CONSIST OF ADDING UP TO THREE PANEL ANTENNAS TO THE EXISTING SITE FOR A TOTAL OF SIX PANEL ANTENNAS ON THE ROOFTOP OF A PG&E SUBSTATION ALONG WITH EQUIPMENT LOCATED WITHIN A GROUND LEVEL STORAGE AREA AS PART OF SPRINT NEXTEL'S WIRELESS TELECOMMUNICATIONS NETWORK WITHIN A RH-2 (RESIDENTIAL – HOUSE, TWO-FAMILY) ZONING DISTRICT AND 40-X HEIGHT AND BULK DISTRICT.

PREAMBLE

On June 27, 2012, Sprint Nextel (hereinafter "Project Sponsor"), made an application (hereinafter "Application"), for Conditional Use Authorization on the property at 679 24th Avenue, Lot 012 in Assessor's Block 1567, (hereinafter "Project Site") to modify an existing wireless telecommunications services facility. The modification would consist of adding up to three panel antennas to the existing site for a total of six panel antennas on the rooftop of a PG&E substation along with equipment located within a ground level storage area as part of Sprint Nextel's wireless telecommunications network within a RH-2 (Residential – House, Two-Family) Zoning District and 40-X Height and Bulk district.

The Project is exempt from the California Environmental Quality Act ("CEQA") as a Class 1 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, San Francisco.

On March 7, 2013, 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. 2012.0815C, 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 building is located on Assessor's Block 1567, Lot 012 on the northwest corner of 24th Avenue and Balboa Street. This site is within a RH-2 (Residential – House, Two-Family) Zoning District and 40-X Height and Bulk District. The Project Site contains a one-story PG&E substation on a corner lot with approximately 112 feet of frontage on 24th Avenue, and 107 feet on Balboa Street. The building was built in 1915 and is considered a Known Historic Resource.

3. **Surrounding Properties and Neighborhood**. Nearby land uses include two-family and multi-family residential homes to the north, east, and west, and two-family, multi-family, and the San Francisco County Special Education school to the south. The site is two blocks north of Golden Gate Park.

4. **Project Description.** The proposal is to modify an existing wireless telecommunications services facility. The modification would consist of adding up to three panel antennas to the existing site for a total of six panel antennas on the rooftop of a PG&E substation along with equipment located within a ground level storage area as part of Sprint Nextel's wireless telecommunications network. The antennas are proposed on a Location Preference 1 Site (Preferred Location Site) according to the WTS Siting Guidelines because it is a PG&E substation. The proposed antennas would measure a maximum of 72" high by 12" wide by 6" thick. All six antennas would be mounted on the roof of the building within radomes, with a maximum height of 40'6" above grade.

5. **Past History and Actions.** The Planning Commission adopted the Wireless Telecommunications Guidelines for the installation of Wireless Telecommunications Facilities in 1996 (hereinafter known as "Guidelines"). 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 were 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.

   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.

   On March 7, 2013, the Commission conducted a duly noticed public hearing at a regularly scheduled meeting on the application for a Conditional Use authorization pursuant to Planning Code Section 209.6(b) to modify an existing wireless telecommunications services facility. The modification would consist of adding up to three panel antennas to the existing site for a total of six panel antennas on the rooftop of a PG&E substation along with equipment located within a ground level storage area as part of Sprint Nextel's wireless telecommunications network.

6. **Location Preference.** The *WTS Facilities Siting Guidelines* identify different types of zoning and/or building uses for the siting of wireless telecommunications facilities. Under the *Guidelines*, the Project is a Location Preference Number 1, as the Project Site is located in a RH-2 Zoning District but as a PG&E substation is considered a public structure.

7. **Radio Waves Range.** The Project Sponsor has stated that the proposed wireless network will transmit calls by radio waves operating in the 1710 - 2170 Megahertz (MHZ) bands, which is 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, 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 proposed project was referred to the Department of Public Health (DPH) for emissions exposure analysis. Existing RF levels at ground level were approximately 1% of the FCC public exposure limit. There are three antennas operated by Sprint installed on the rooftop of the PG&E building, and there were no other antennas observed within 100 feet of this site. Sprint Nextel proposes to install three new panel antennas. The antennas will be mounted at a height of approximately 38 feet above the ground. The estimated ambient RF field from the proposed Sprint Nextel transmitters at ground level is calculated to be 0.022 mW/sq. cm., which is 2.3% of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 31 feet which includes portions of the rooftop but does not reach any publicly accessibly 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 7 feet of the front of the antennas while in operation. This rooftop area should be marked with red striping for prohibited access areas and yellow striping for worker notification zones between the antennas and the rooftop edge.

10. **Coverage and Capacity Verification.** The maps, data, and conclusion provided by Sprint Nextel to demonstrate need for coverage and capacity have been determined by EBI Consulting, a radio engineering consulting firm, to accurately represent the carrier's present and post-installation conclusions.

11. **Maintenance Schedule**. The proposed facility would operate without on-site staff, but with a two-person maintenance crew visiting the property approximately once a month and on an as-needed basis to service and monitor the facility.

12. **Community Outreach.** Per the *Guidelines*, the Project Sponsor held a Community Outreach Meeting for the proposed project. The meeting was held at 6:00 p.m. on January 8, 2013 at the San Francisco Public Library – Anza Branch Program Room at 550 37th Avenue. Two members of the community attended the meeting and asked questions regarding whether Sprint meets the FCC standards for RF and how do cell sites work.

13. **Five-year plan:** Per the *Guidelines*, the Project Sponsor submitted its latest five-year plan, as required, in October 2012.

14. **Public Comment.** As of February 28, 2013, the Department has received no public comment on 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 209.6(b), a Conditional Use authorization is required for the installation of other public uses such as wireless transmission facilities.

16. **Planning Code Section 303** establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use approval. On balance, the project does comply 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 proposed project at 679 24th Avenue will be 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 nature of the vicinity. The approval of this authorization has been found, to insure public safety, and insure that the placement of antennas and related support and protection features are so located, designed, and treated architecturally to minimize their visibility from public places, to avoid intrusion into public vistas, avoid disruption of the architectural design integrity of buildings and insure harmony with neighborhood character. The project has been reviewed and determined to not cause the removal or alteration of any significant architectural features on the subject building.

        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 be able to have proper data capacity. It is necessary for San Francisco, as a leader in technology, to have adequate capacity.

The proposed project at 679 24th Avenue 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 Sprint Nextel's Radio Frequency Engineering Team provide evidence that the subject property is the most viable 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:

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

The proposed 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 when operated in compliance with the FCC-adopted health and safety standards.

ii. 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 single maintenance crew visiting the site once a month or on an as-needed basis.

iii. 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.

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

Three additional antennas are proposed to be mounted on the rooftop within radomes and will appear to be rooftop equipment which will be minimally visible from nearby public rights-of-way.

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

BALANCE HOUSING CONSTRUCTION AND COMMUNITY INFRASTRUCTURE

OBJECTIVE 12 – BALANCE HOUSING GROWTH WITH ADEQUATE INFRASTRUCTURE THAT SERVES THE CITY'S GROWING POPULATION.

POLICY 12.2 – Consider the proximity of quality of life elements, such as open space, child care, and neighborhood services, when developing new housing units.

POLICY 12.3 – Ensure new housing is sustainable supported by the City's public infrastructure systems.

The Project will improve Sprint Nextel's coverage and capacity in the surrounding residential, commercial and recreational areas along a primary transportation route in San Francisco.

URBAN DESIGN

HUMAN NEEDS

OBJECTIVE 4 - IMPROVEMENT OF THE NEIGHBORHOOD ENVIRONMENT TO INCREASE PERSONAL SAFETY, COMFORT, PRIDE AND OPPORTUNITY.

POLICY 4.14 - Remove and obscure distracting and cluttering elements.

The Project adequately "stealths" the proposed antennas on the rooftop of the building by screening the antennas within radomes on the roof.

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

Policy 2:
Assure that all commercial and industrial uses meet minimum, reasonable performance standards.

The Project would 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 1:
Seek to retain existing commercial and industrial activity and to attract new such activity to the city.
Policy 3:
Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.

The site is 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 1:
Maintain and enhance a favorable business climate in the City.

Policy 2:
Promote and attract those economic activities with potential benefit to the City.

The Project would 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 Sprint Nextel telecommunications.

COMMUNITY SAFETY ELEMENT

Objectives and Policies

OBJECTIVE 3:
ENSURE THE PROTECTION OF LIFE AND PROPERTY FROM THE EFFECTS OF FIRE OR NATURAL DISASTER THROUGH ADEQUATE EMERGENCY OPERATIONS PREPARATION.
Policy 1:
Maintain a local agency for the provision of emergency services to meet the needs of San Francisco.

Policy 2:
Develop and maintain viable, up-to-date in-house emergency operations plans, with necessary equipment, for operational capability of all emergency service agencies and departments.

Policy 3:
Maintain and expand agreements for emergency assistance from other jurisdictions to ensure adequate aid in time of need.

Policy 4:
Establish and maintain an adequate Emergency Operations Center.

Policy 5:
Maintain and expand the city's fire prevention and fire-fighting capability.

Policy 6:
Establish a system of emergency access routes for both emergency operations and evacuation.

The Project would 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 does comply 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.

No neighborhood-serving retail use would be displaced and the wireless communications network will enhance personal communication services.

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 would 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 would have no adverse impact 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 would not be impeded and neighborhood parking would 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 would cause no 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 would be considered during the building permit application review process.

G. That landmarks and historic buildings be preserved.

The proposed antennas will be mounted on the rooftop of the existing building and will not affect any character-defining features of the building. The antennas will be screened within radomes and will appear as part of the rooftop equipment on top of the building and would be minimally visible as viewed from the public right-of-way. By minimizing the visibility of the proposed antennas, the Project would not significantly alter the subject building.

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

The Project will have no adverse impact on parks or open space, or their access to sunlight or 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 Determination of Compliance authorization would promote the health, safety and welfare of the City.

DECISION

The Commission, after carefully balancing the competing public and private interests, and based upon the Recitals and Findings set forth above, in accordance with the standards specified in the Code, hereby approves the Conditional Use authorization under Planning Code Sections 209.6(b) and to modify an existing wireless telecommunications services facility. The modification would consist of adding up to three panel antennas to the existing site for a total of six panel antennas on the rooftop of a PG&E substation along with equipment located within a ground level storage area as part of Sprint Nextel's wireless telecommunications network within a RH-2 (Residential – House, Two-Family) Zoning District and 40-X Height and Bulk district and subject to the conditions of approval attached hereto as **Exhibit A**.

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. xxxxx. 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.

I hereby certify that the foregoing Motion was adopted by the Planning Commission on **March 7, 2013**.

Jonas P. Ionin
Acting Commission Secretary

AYES
NAYS:

ABSENT:

ADOPTED: March 7, 2013

EXHIBIT A

AUTHORIZATION

This authorization is for a Conditional Use Authorization under Planning Code Sections 209.6(b) and 303 to modify an existing wireless telecommunications services facility. The modification would consist of adding up to three panel antennas to the existing site for a total of six panel antennas on the rooftop of a PG&E substation along with equipment located within a ground level storage area as part of Sprint Nextel's wireless telecommunications network within a RH-2 (Residential – House, Two-Family) Zoning District and 40-X Height and Bulk district

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 **March 7, 2013** under Motion No. xxxxx.

PRINTING OF CONDITIONS OF APPROVAL ON PLANS

The conditions of approval under the 'Exhibit A' of this Planning Commission Motion No. xxxxx 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 and Expiration.** The authorization and right vested by virtue of this action is valid for three years from the effective date of the Motion. A building permit from the Department of Building Inspection to construct the project and/or commence the approved use must be issued as this Conditional Use authorization is only an approval of the proposed project and conveys no independent right to construct the project or to commence the approved use. The Planning Commission may, in a public hearing, consider the revocation of the approvals granted if a site or building permit has not been obtained within three (3) years of the date of the Motion approving the Project. 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. The Commission may also consider revoking the approvals if a permit for the Project has been issued but is allowed to expire and more than three (3) years have passed since the Motion was approved.
   For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org.

2. **Extension.** This authorization may be extended at the discretion of the Zoning Administrator only where failure to issue a permit by the Department of Building Inspection to perform said tenant improvements is caused by a delay by a local, State or Federal agency or by any appeal of the issuance of such permit(s).
   For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org .

DESIGN – COMPLIANCE AT PLAN STAGE

3. **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 .

4. **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:
   f. Antennas and back up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual effects;
   g. Rooftop installations shall be setback such that back up facilities are not viewed from the street;
   h. Antennas attached to building facades shall be so placed, screened or otherwise treated to minimize any negative visual impact; and
   i. 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

5. **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

6. **Monitoring.** The Project requires monitoring of the conditions of approval in this Motion. The Project Sponsor or the subsequent responsible parties for the Project shall pay fees as established under Planning Code Section 351(e) (1) and work with the Planning Department for information about compliance.
   For information about compliance, contact Code Enforcement, Planning Department at 415-575-6863, www.sf-planning.org

7. **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.

8. **Implementation Costs - WTS**.
   a. 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.
   b. 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.
   c. 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

9. **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

10. **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.

i. Notification and Testing. The Project Implementation Report shall set forth the testing and measurements undertaken pursuant to Conditions 2 and 4.

ii. 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.

11. **Notification prior to Project Implementation Report - WTS.** The Project Sponsor shall undertake to inform and perform appropriate tests for residents of any dwelling units located within 25 feet of the transmitting antenna at the time of testing for the Project Implementation Report.
    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

12. **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

13. **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

14. **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

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

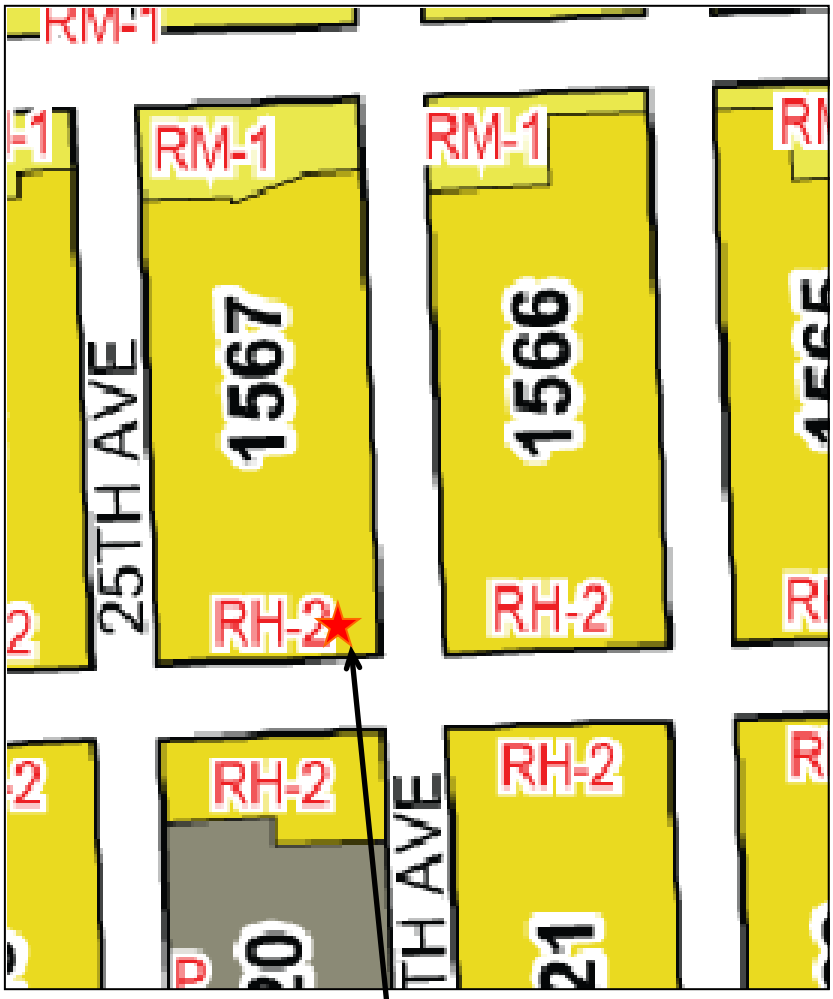
16. **Emissions Conditions – WTS**. It is a continuing condition of this authorization that the facilities be operated in such a manner so as not to contribute to ambient RF/EMF emissions in excess of then current FCC adopted RF/EMF emission standards; violation of this condition shall be grounds for revocation.
For information about compliance, contact the Environmental Health Section, Department of Public Health at (415) 252-3800, www.sfdph.org.

17. **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.

18. **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

19. **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

Zoning Map

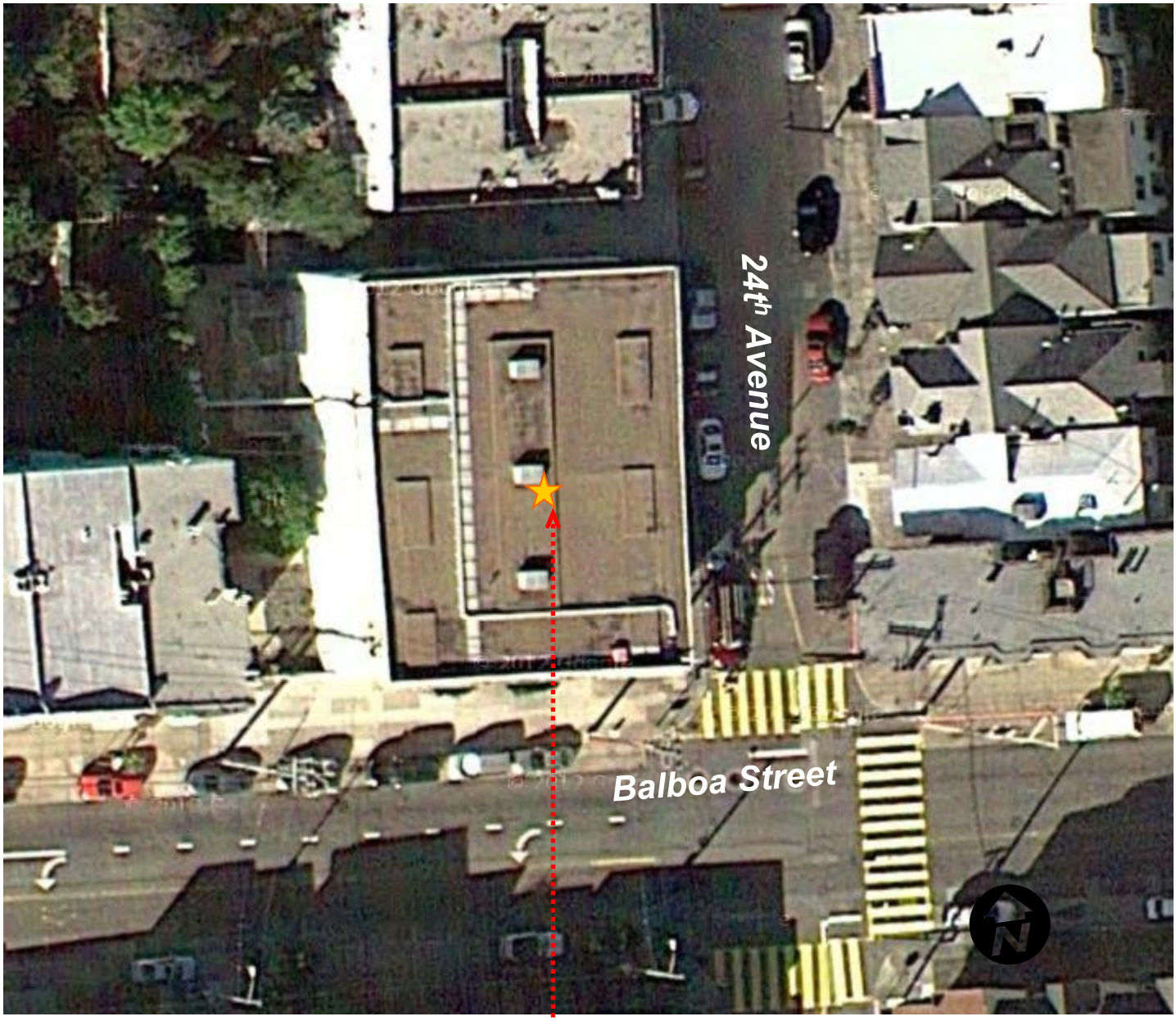


SUBJECT PROPERTY

Case Number 2012.0815C
AT&T Mobility WTS Facility
679 24th Ave

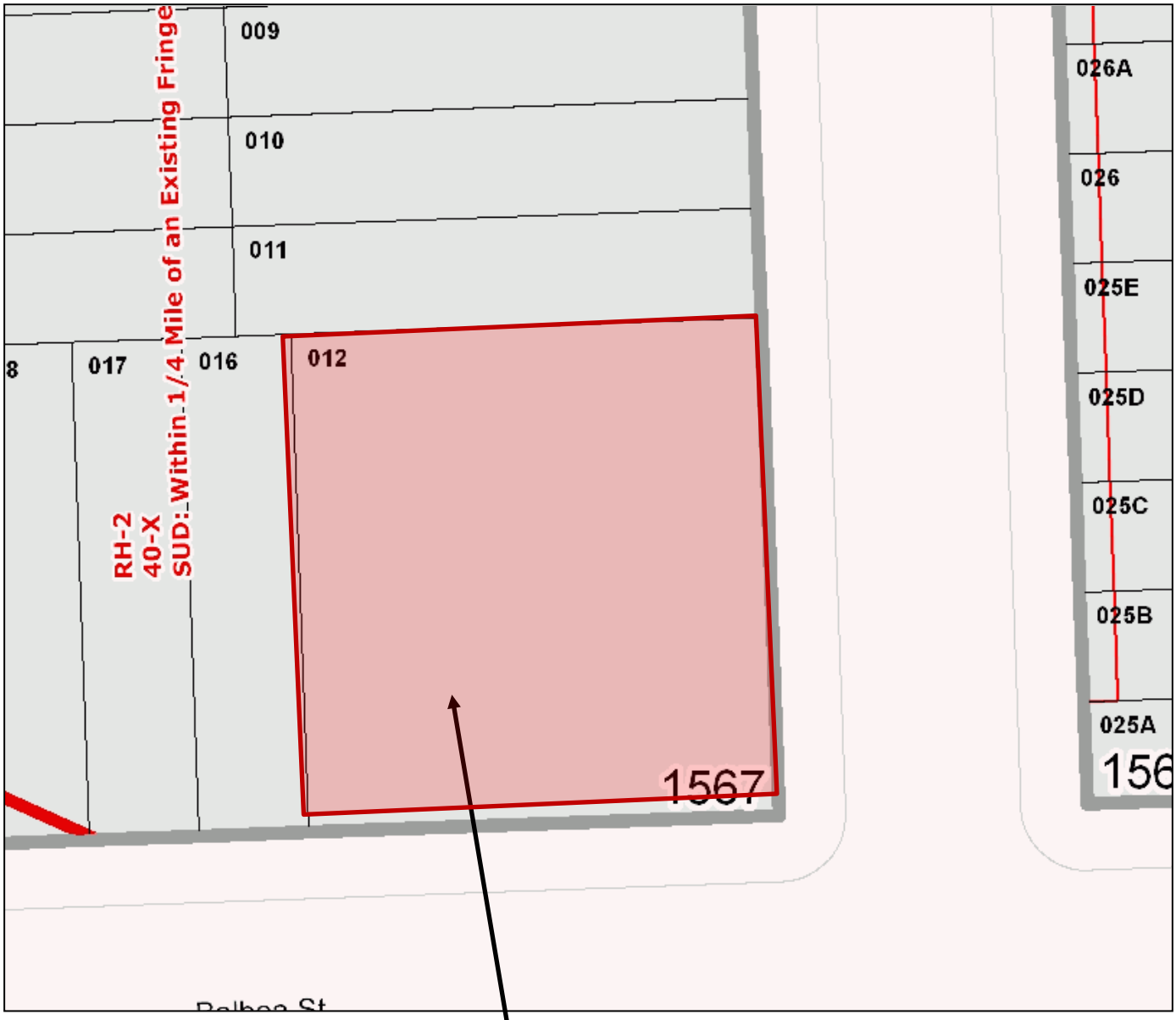
SAN FRANCISCO
PLANNING DEPARTMENT

Aerial Photo



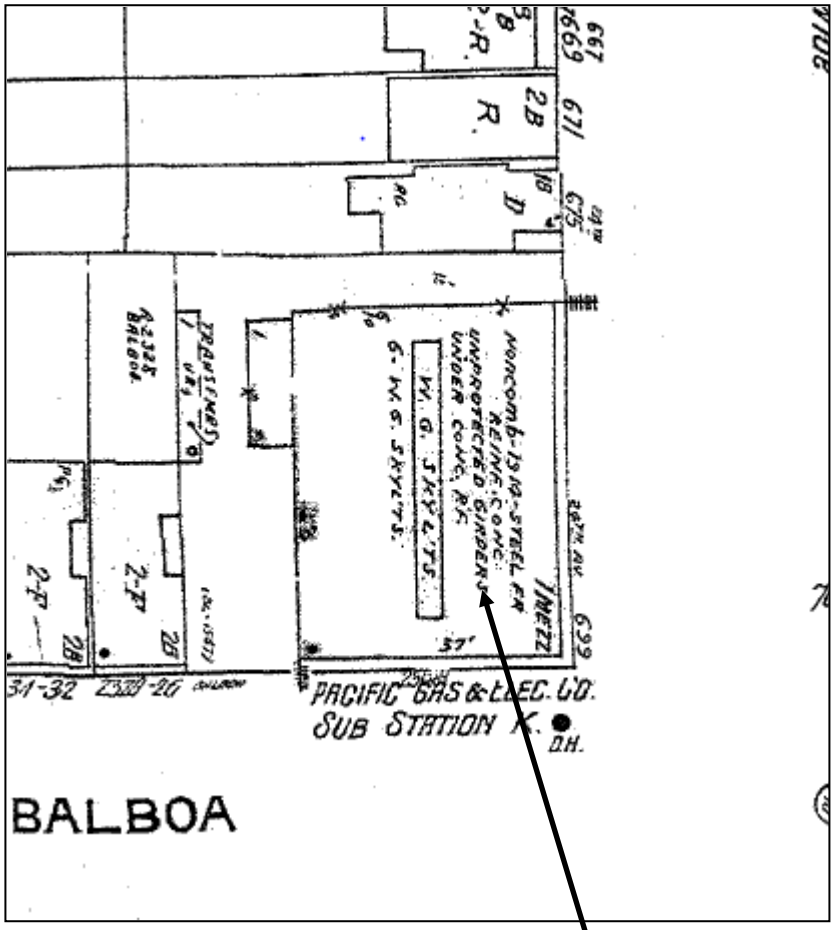
Case Number 2012.0815C
AT&T Mobility WTS Facility
679 24th Ave

Parcel Map



Case Number 2012.0815C
AT&T Mobility WTS Facility
679 24th Ave

Sanborn Map*



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

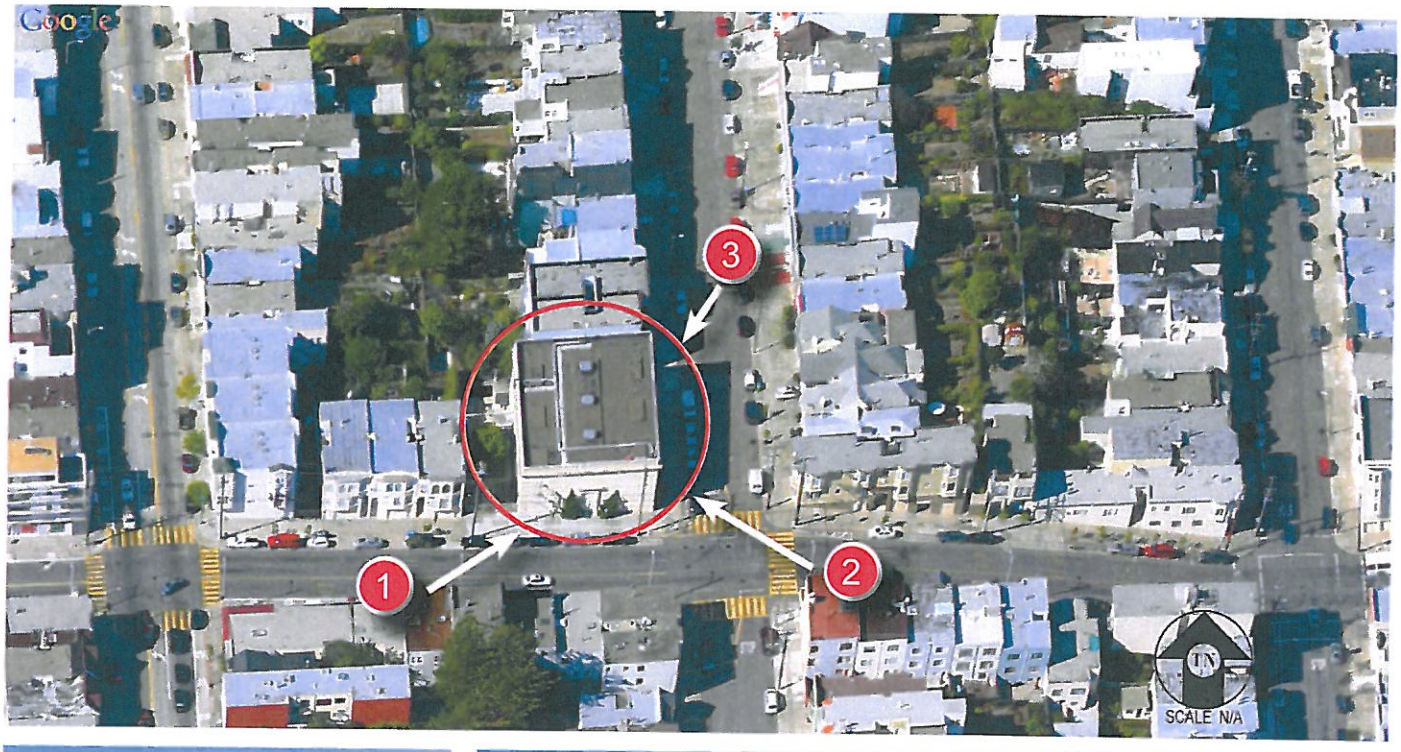
SUBJECT PROPERTY

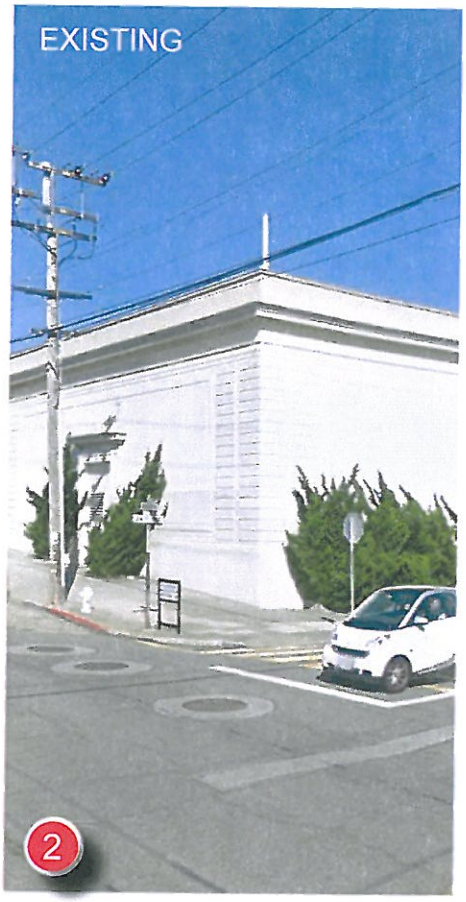
Case Number 2012.0815C
AT&T Mobility WTS Facility
679 24th Ave

Context Photos / Site Photos

Context Photos / Site Photos

Context Photos / Site Photos





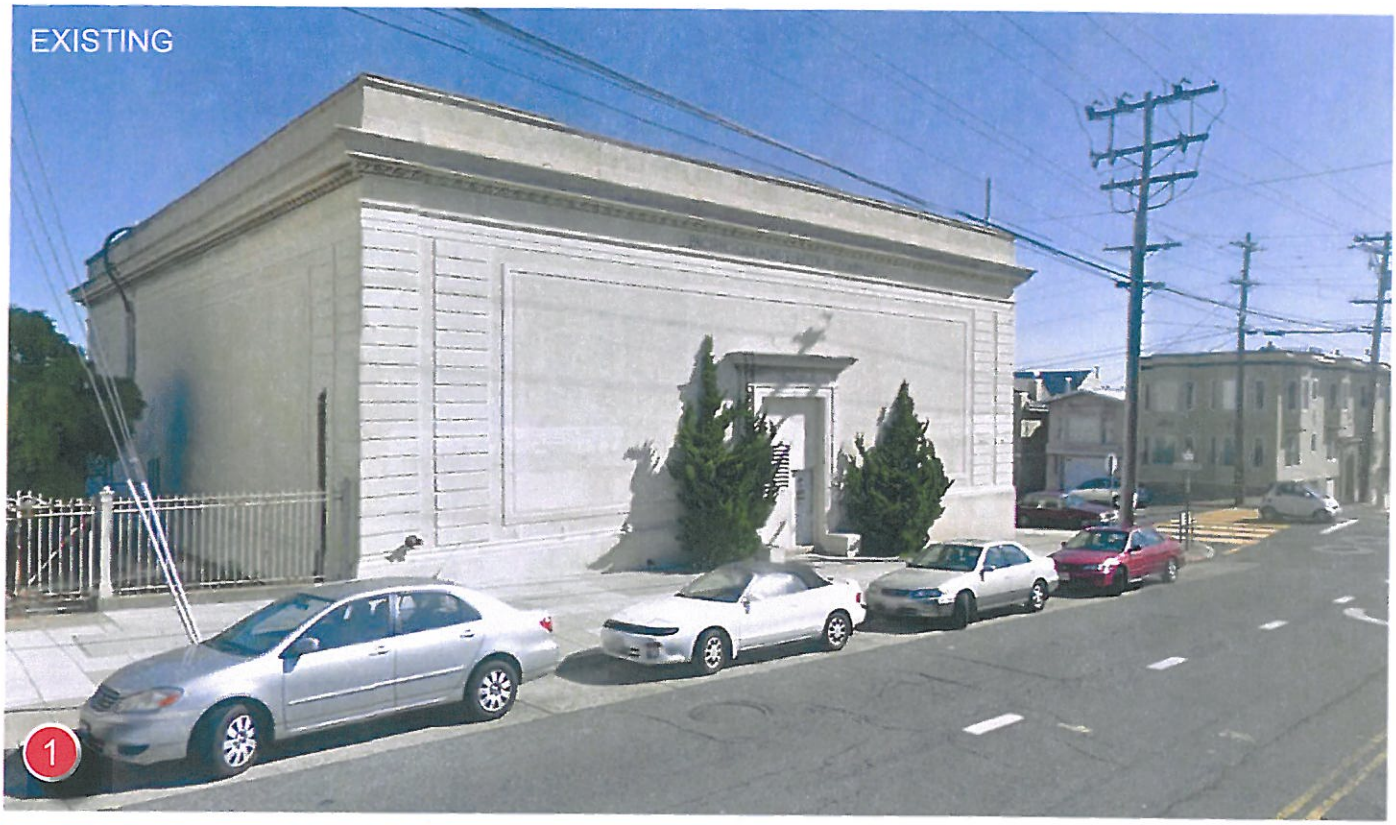
Sprint

SITE PLAN & RESPECTIVE VIEWS

SPRINT-SF33XC682- GOLDEN GATE PARK
692 24TH AVE, SAN FRANCISCO, CA 94121

Streamline Engineering and Design, Inc.
3268 PENRYN RD, SUITE 200 LOOMIS, CA 95650
PHONE: (916) 660-1930
FAX: (916) 600-1941

11/21/12



Sprint

VIEW 1: LOOKING NE FROM BALBOA ST

SPRINT-SF33XC682- GOLDEN GATE PARK
692 24TH AVE, SAN FRANCISCO, CA 94121

Streamline Engineering and Design, Inc.
3268 PENRYN RD, SUITE 200 LOOMIS, CA 95650
PHONE: (916) 660-1930
FAX: (916) 600-1941

11/21/12

Sprint

VIEW 2: LOOKING NW FROM BALBOA ST

SPRINT-SF33XC682- GOLDEN GATE PARK
692 24TH AVE, SAN FRANCISCO, CA 94121

Streamline Engineering and Design, Inc.
3268 PENRYN RD, SUITE 200 LOOMIS, CA 95650
PHONE: (916) 660-1930
FAX: (916) 600-1941

11/21/12

PROPOSED RADOMES NOT SEEN FROM THIS STREET VIEW

Sprint

VIEW 3: LOOKING SW FROM 24TH AVE

SPRINT-SF33XC682- GOLDEN GATE PARK
692 24TH AVE, SAN FRANCISCO, CA 94121

Streamline Engineering and Design, Inc.
3268 PENRYN RD, SUITE 200 LOOMIS, CA 95650
PHONE: (916) 660-1930
FAX: (916) 600-1941

11/21/12

Sprint Nextel • Base Station No. SF33xc682C
692 24th Avenue • San Francisco, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Sprint Nextel, a personal wireless telecommunications carrier, to evaluate proposed modifications to its existing base station (Site No. SF33xc682C) located at 692 24th Avenue 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 a 10-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)	5,000–80,000 MHz	5.00 mW/cm^2	1.00 mW/cm^2
BRS (Broadband Radio)	2,600	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Satellite (Terrestrial Component)	1,600	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

The site was visited by the undersigned engineer on December 4, 2011, and reference has been made to information provided by Sprint Nextel, including zoning drawings by Streamline Engineering and Design, Inc., dated March 26, 2012.

Checklist

1. The location of all existing antennas and facilities at site. Existing RF levels.

Sprint Nextel had installed three directional panel antennas within two cylindrical enclosures above the roof of the PG&E "Station K" building located at 692 24th Avenue. There were observed no other wireless base stations installed at the site. Existing RF levels for a person at ground near the site were less than 1% of the most restrictive public exposure limit. The measurement equipment used was a Wandel & Goltermann Type EMR-300 Radiation Meter with Type 18 Isotropic Electric Field Probe (Serial No. C-0010). The meter and probe were under current calibration by the manufacturer.

2. *The location of all approved (but not installed) antennas and facilities. Expected RF levels from approved antennas.*

No other WTS facilities are reported to be approved for this site but not installed.

3. *The number and types of WTS within 100 feet of proposed site and estimates of additive EMR emissions at proposed site.*

There were no other WTS facilities observed within 100 feet of the site.

4. *Location (and number) of Applicant's antennas and back-up facilities per building and location (and number) of other WTS at site.*

Sprint Nextel proposes to install three KMW Model 1900-800-KMW-65 Type 1 directional panel antennas within three additional cylindrical enclosures, configured to resemble vent pipes, above the roof of the building. The six antennas would be mounted with up to 6° downtilt at an effective height of about 37½ feet above ground, 7 feet above the roof, and would be oriented in pairs (one of each) toward 10°T, 100°T, and 220°T.

5. *Power rating (maximum and expected operating power) for all existing and proposed backup equipment subject to application.*

The expected operating power of the Sprint Nextel transmitters is reflected in the resulting effective radiated power given in Item 6 below; the transmitters may operate at a power below their maximum rating.

6. *Total number of watts per installation and total number of watts for all installations at site.*

The maximum effective radiated power proposed by Sprint Nextel in any direction is 5,000 watts, representing simultaneous operation at 4,500 watts for PCS and 500 watts for SMR service.

7. *Plot or roof plan showing method of attachment of antennas, directionality of antennas, and height above roof level. Discuss nearby inhabited buildings.*

The drawings show the proposed antennas to be installed as described in Item 4 above. There were noted buildings of similar height located at least 40 feet from the antennas.

8. *Estimated ambient RF levels for proposed site and identify three-dimensional perimeter where exposure standards are exceeded.*

For a person anywhere at ground, the maximum RF exposure level due to the proposed Sprint Nextel operation is calculated to be 0.022 mW/cm^2, which is 2.3% of the applicable public exposure limit. Ambient RF levels at the site are therefore estimated to be below 3.3% of the limit. The three-dimensional perimeter of RF levels equal to the public exposure limit is calculated to extend up to 31 feet out from the antenna faces and to much lesser distances above, below, and to the sides; this includes areas on the roof of the building but does not reach any publicly accessible areas.

9. Describe proposed signage at site.

Due to their mounting locations, the Sprint Nextel antennas would not be accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 7 feet directly in front of the antennas themselves, such as might occur during maintenance work 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. Marking "Prohibited Access Areas" with red paint stripes and "Worker Notification Areas" with yellow paint stripes on the roof of the building in front of the antennas, as shown in Figure 1 attached, and posting explanatory warning signs* at the roof access hatch and on the enclosures in front of the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines.

10. Statement of authorship.

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2013. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

---

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

Conclusion

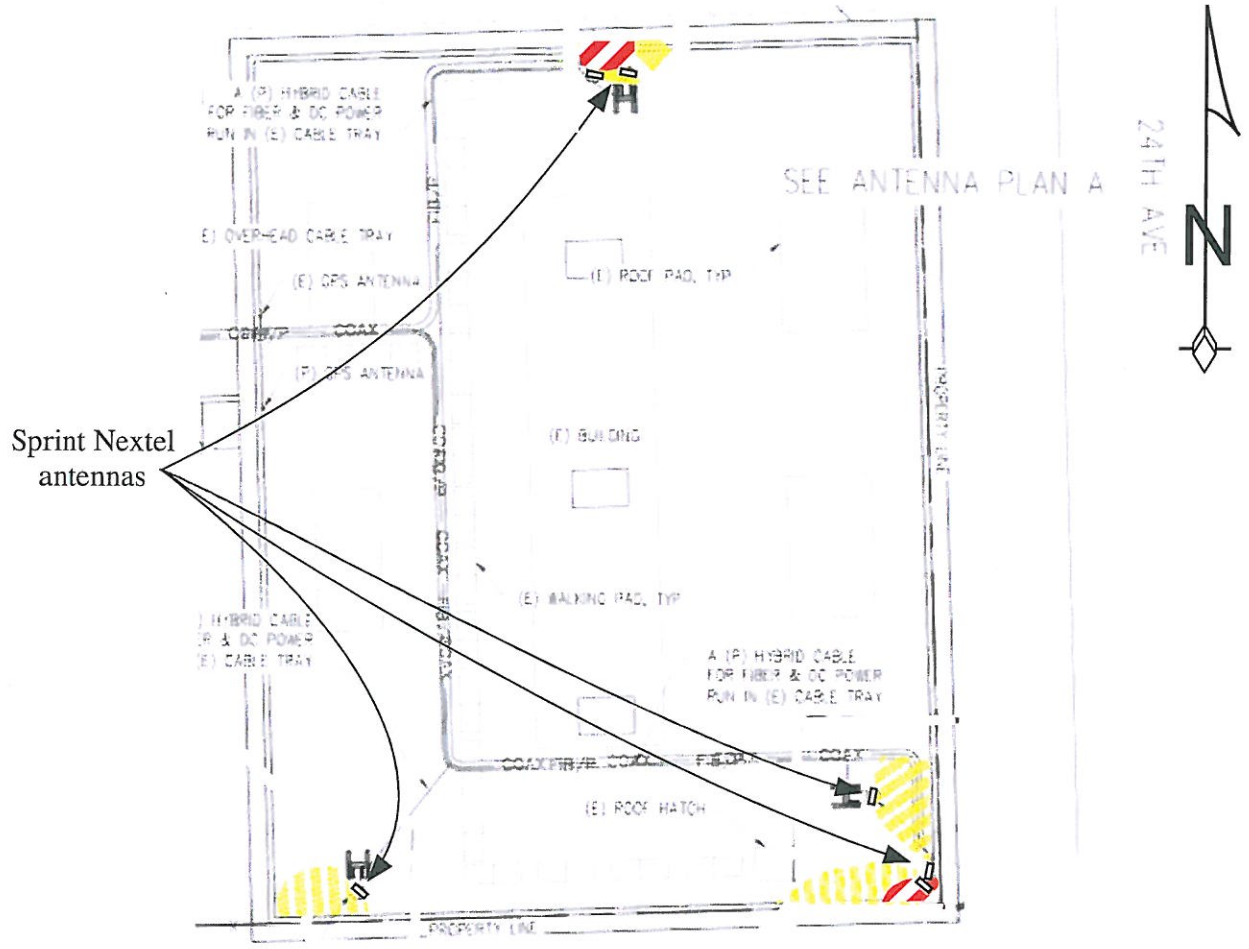
Based on the information and analysis above, it is the undersigned's professional opinion that the proposed operation of the Sprint Nextel base station located at 692 24th Avenue in San Francisco, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Marking roof areas and posting explanatory signs is recommended to establish compliance with occupational exposure limitations.

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

April 16, 2012

Sprint Nextel • Base Station No. SF33xc682C
692 24th Avenue • San Francisco, California

Suggested Locations for Striping to Identify "Prohibited Access Areas" (red) and "Worker Notification Areas" (yellow)



Notes:
Base drawing from Streamline Engineering and Design, Inc., dated March 26, 2012.
"Prohibited Access Areas" should be marked with red paint stripes, "Worker Notification Areas" should be marked with yellow paint stripes, and explanatory warning signs should be posted outside the areas, readily visible to authorized workers needing access. See text.

City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION

Edwin M. Lee, Mayor
Barbara A. Garcia, MPA, Director of Health
Rajiv Bhatia, MD, MPH, Director of EH

Review of Cellular Antenna Site Proposals

Project Sponsor : *Sprint* **Planner:** *Michelle Stahlhut*

RF Engineer Consultant: *Hammett and Edison* **Phone Number:** *(707) 996-5200*

Project Address/Location: *692 24th Av*

Site ID: *688* **SiteNo.:** *SF33xc682C*

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 Siting 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.

X 1. The location of all existing antennas and facilities. Existing RF levels. (WTS-FSG, Section 11, 2b)

☑ Existing Antennas No Existing Antennas: 3

X 2. The location of all approved (but not installed) antennas and facilities. Expected RF levels from the approved antennas. (WTS-FSG Section 11, 2b)

◉ **Yes** ○ **No**

X 3. The number and types of WTS within 100 feet of the proposed site and provide estimates of cumulative EMR emissions at the proposed site. (WTS-FSG, Section 10.5.2)

◉ **Yes** ○ **No**

X 4. Location (and number) of the Applicant's antennas and back-up facilities per building and number and location of other telecommunication facilities on the property (WTS-FSG, Section 10.4.1a)

X 5. Power rating (maximum and expected operating power) for all existing and proposed backup equipment subject to the application (WTS-FSG, Section 10.4.1c)

Maximum Power Rating: 5000 watts.

X 6. The total number of watts per installation and the total number of watts for all installations on the building (roof or side) (WTS-FSG, Section 10.5.1).

Maximum Effective Radiant: 5000 watts.

X 7. Preferred method of attachment of proposed antenna (roof, wall mounted, monopole) with plot or roof plan. Show directionality of antennas. Indicate height above roof level. Discuss nearby inhabited buildings (particularly in direction of antennas) (WTS-FSG, Section 10.41d)

X 8. Report estimated ambient radio frequency fields for the proposed site (identify the three-dimensional perimeter where the FCC standards are exceeded.) (WTS-FSG, Section 10.5) State FCC standard utilized and power density exposure level (i.e. 1986 NCRP, 200 $\mu w/cm^2$)

Maximum RF Exposure: 0.022 mW/cm^2 Maximum RF Exposure Percent: 2.3

X 9. Signage at the facility identifying all WTS equipment and safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards. (WTS-FSG, Section 10.9.2). Discuss signage for those who speak languages other than English.

☑ Public_Exclusion_Area Public Exclusion In Feet: 31

☑ Occupational_Exclusion_Area Occupational Exclusion In Feet: 7

X 10. Statement on who produced this report and qualifications.

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 1986-NCRP **Approval of the subsequent Project Implementation Report is based on project sponsor completing recommendations by project consultant and DPH.**

Comments:

There are 3 antennas operated by Sprint installed on the roof top of the PG&E building at 692 24th Avenue. Existing RF levels at ground level were around 1% of the FCC public exposure limit. There were observed no other antennas within 100 feet of this site. Sprint proposes to install 3 new antenna. The antennas are mounted at a height of 38 feet above the ground. The estimated ambient RF field from the proposed Sprint transmitters at ground level is calculated to be 0.022 mW/sq cm., which is 2.3 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 31 feet which includes portions of the rooftop but 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 7 feet of the front of the antennas while they are in operation. This rooftop area should be marked with red striping for prohibited access areas and yellow striping for worker notification zones between the antennas and the rooftop edge.

___ **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 S]

Signed: Phil Fosdahl Dated: 5/3/2012

Patrick Fosdahl
Environmental Health Management Section
San Francisco Dept. of Public Health
1390 Market St., Suite 210,
San Francisco, CA. 94102
(415) 252-3904

EBI Consulting
environmental | engineering | due diligence

Wireless Application Review

Sprint SF33XC682-C
Golden Gate Park
692 24th Avenue
San Francisco, CA 94121

November 02, 2012

Prepared By:
EBI Consulting
21 B Street
Burlington, MA 01803
(781) 418-2322
Engineer: Scott Heffernan

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. McGUIRE
E18898
EXP. 9.30.13
ELECTRICAL
STATE OF CALIFORNIA

EBI Consulting
environmental | engineering | due diligence

Table of Contents

1.0 Executive Summary

EBI Consulting has been hired to review an application by Sprint for a modification to an existing site located on a rooftop at 692 24th Avenue in San Francisco, California. The scope of this analysis is to review material submitted to the San Francisco Planning Department. This material includes site plans, coverage maps and an emissions report prepared by Hammett and Edison. An alternate site analysis was not a part of this analysis as this is an upgrade to an existing site.

2.0 Site Description

Site Name:	**SF33XC682 – Golden Gate Park**
Owner:	PG&E
Site Description:	Rooftop Wireless Facility
Address:	692 24th Avenue, San Francisco, CA 94121
Ground Elevation:	181 feet AMSL
Latitude:	37.77656 N
Longitude:	-122.483598 W

3.0 Project Overview

Sprint is applying to modify an existing rooftop wireless facility located at 692 24th Avenue in San Francisco, California. The site modifications include the replacement of existing antennas and associated radio units located on site. The proposed modifications will allow for Sprint to upgrade their technology offerings to include a LTE rollout for higher data rates for their customers. The upgrades will also allow for Sprint to install equipment that will improve the performance of their existing wireless facility and provide better efficiencies for capacity as well.

Sprint is proposing to remove the existing tripod mounted panel antennas and replace with three Powerwave P65-16-XLPP-RR antennas, 1 per sector. The three antennas, which have a length of 72 inches and are 12 inches in width, will be installed with a concealment enclosure around each antenna for aesthetic concerns. The enclosures are constructed with RF permeable material which introduces minimal attenuation to the signal broadcast from the facility. The antennas will be mounted with an antenna centerline of 37.5 feet above the ground level. The existing rooftop is 33.5 feet in height above ground level. The overall height of the proposed enclosures is 40.5 feet above ground level. The bottoms of the proposed antennas will be one foot off of the rooftop walking surface.

Additionally, Sprint is looking to remove the existing radio cabinets located on the concrete slab adjacent to the building and replace with Remote Radio Heads (RRH). The RRH is a small remote radio device typically located at or near the antenna location at a given site. This reduces cable loss incurred in bring the transmitted signal from radios located many feet from an antenna location and improves overall performance due to a typically reduced noise environment with the transmitters and receivers located immediately adjacent to the antennas. The RRH is typically fed by fiber optics for the transfer of data traffic from a control cabinet usually located with the remainder of a carrier's equipment.

4.0 Coverage

Coverage plots were submitted as part of the application from Sprint to the San Francisco Planning Board. The plots show existing coverage of their 1900 MHz footprint from this facility in yellow in exhibit 1. In the next plot, Exhibit 2, they are showing the resulting coverage at 1900 MHz . Sprint is proposing to install 1900 MHz and 800 MHz Remote Radio Heads at this site to provide service in both frequency bands. As is typical, the coverage plots presented are shown at the 1900 MHz frequency band as this will be the weaker coverage footprint under similar power settings. While 800 MHz may have the ability to provide a bit more robust footprint all things equal, the carrier can optimize the output and contain coverage as need be for uniformity between the two frequency bands or provide extended reach with the 800 MHz.

Existing SF33XC682 coverage

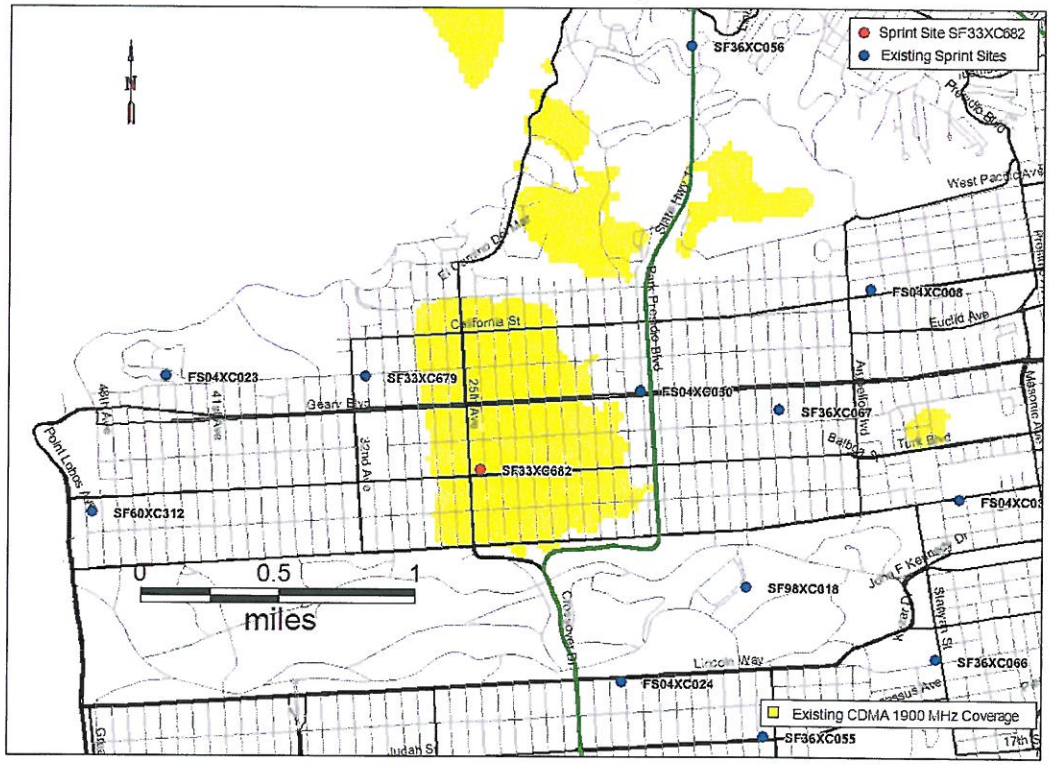


Exhibit 1: Existing Sprint 1900 MHz CDMA coverage

Proposed SF33XC682 coverage

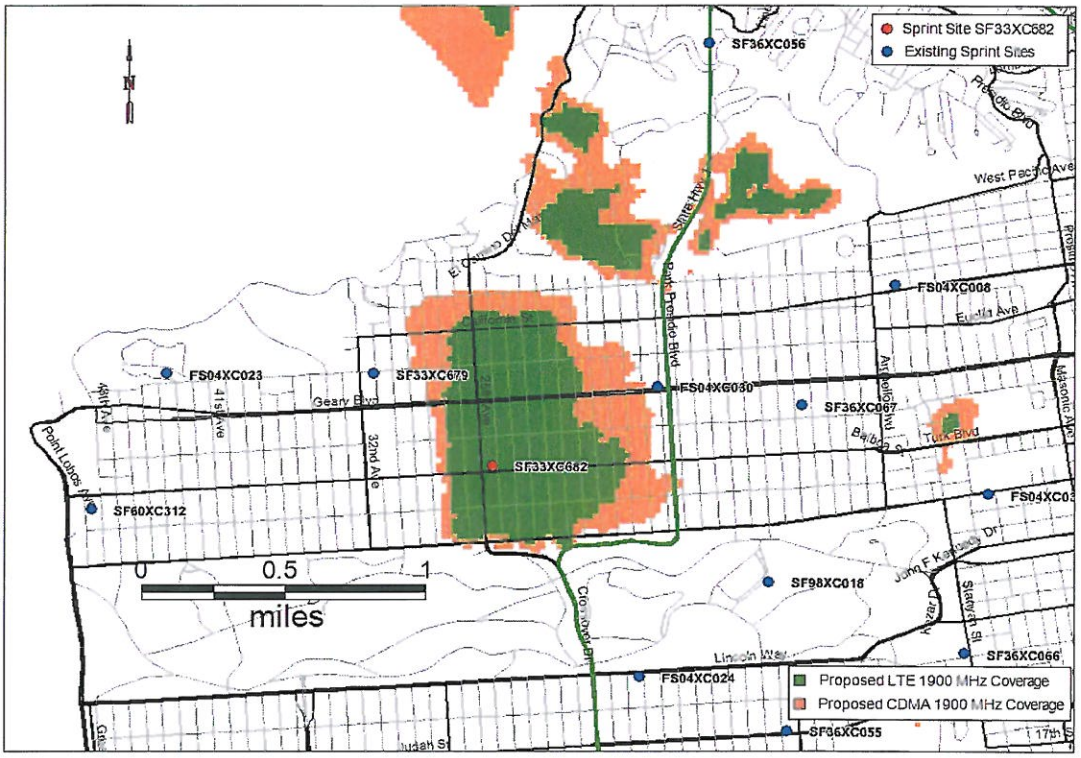


Exhibit 2: Proposed Sprint 1900 MHz CDMA coverage

Anticipated coverage from the proposed upgraded installation is what would be expected from a 37 foot rooftop facility in this geographic area. Anticipated coverage for the 1900 MHz CDMA footprint is shown as extending north approximately 0.6 miles just past California Street, East approximately 0.5 miles to the area around the 15th Avenue area, South approximately 0.25 miles to the Fulton Street area and west approximately 0.15 miles to the 27th street area.

Coverage from the proposed LTE radios is slightly less than the 1900 MHz CDMA footprint and shows up as the green footprint inside the orange footprint representing the 1900 MHz CDMA footprint in Exhibit 2 above.

The provided plots represent coverage areas that fall in line with what we would expect from a site of this configuration and size. Additionally considering the location of the adjacent sites it appears that adequate overlap is possible in all directions to the neighboring sites for proper handoffs to adjacent cells.

The area surrounding the site is comprised of very densely spaced residential dwellings and heavily traveled throughways. In a design scenario such as this a low antenna height facility is a great solution. It allows the carrier to handle a fairly large volume of traffic in a small area. The low antenna height also allows the carrier to contain the footprint very effectively for spectrum reuse considerations on surrounding sites and to reduce interference upon adjacent cells. Additionally, by utilizing existing structures such as rooftops the carrier is able to provide the desired service without the introduction of a new structure.

5.0 Emissions Compliance

An emissions study was completed on the existing Sprint site located at 692 24th Avenue in San Francisco, California by Hammett and Edison on April 16, 2012. The study analyzed emissions compliance for this site based upon FCC standards set forth in Bulletin OET65.

The report states that the emissions produced by the existing Sprint facility are at 2.3% of the FCC allowable limit for public exposure. This is well within the allowable limits.

Since this rooftop is a controlled area, meaning the general public does not have access to the area, no mitigation techniques are needed. Although the site is in compliance, the report does recommend warning striping on the rooftop to alert workers on the roof that within 7 feet of the Sprint antennas there may be areas that exceed the FCC's occupational limits. These references are for the sole purpose of identifying these areas to occupational personnel that may be working on the rooftop as the general public will not have access to this area. Additionally, Signage should be posted at the rooftop access hatch and at locations near the antenna enclosures that warn of the presence of RF energy that may exceed the FCC's general public or occupational limits in certain areas.

With these recommendations the site appears to be in full compliance with all FCC and OSHA standards with regards to emissions and notification.

6.0 Conclusion

EBI Consulting was tasked with reviewing the Sprint application for proposed site upgrades to their existing facility at 692 24th Avenue in San Francisco, California. The project includes the replacement of existing antennas on site with broadband panel antennas capable of handling both 1900 MHz and 800 MHz frequency bands. Additionally, Sprint is proposing to install Remote Radio Heads at the antenna locations and remove some of the larger equipment cabinets located on site adjacent to the building. These upgrades will ultimately allow Sprint to provide greater service levels and capacity to its customers without having to introduce a new facility. All upgrades

proposed to be made to this site are fairly minor in nature and since the antennas will be inside concealment shrouds the change in aesthetics will be minimal.

Sprint has provided coverage plots showing existing and proposed coverage from this facility. Both scenarios depicted coverage footprints that would be expected from a facility of this height and configuration. It appears that the coverage data provided is accurate and appropriate for this site.

Sprint has supplied an emissions study for this existing facility prepared by Hammett and Edison. The report demonstrates that the facility is in full compliance with all applicable federal requirements regarding emissions and signage. One point to note is that the report submitted was done with the existing equipment configuration. The new radio units proposed have slightly different power levels associated with them than the ground based radios currently there. However, the differences in these levels as we have seen in many other sites that we have analyzed for Sprint will not alter the composite emissions values dramatically. The expected difference may be in the 1 to 2 % range overall. These variations still allow the site to be in full compliance as the values will remain far below the FCC's allowable emissions limits.

Based upon our analysis of the Sprint proposed upgrades to their facility at 692 24th Avenue in San Francisco, California, we feel this is a very acceptable proposal. Sprint is proposing to upgrade a site that already exists. The upgrades will benefit existing and future customers in this coverage area. Sprint has proposed a design solution that allows for their upgrades to be fulfilled and keep the aesthetics concerns of the community in mind

Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803

NOTICE OF COMMUNITY OUTREACH MEETING ON A PROPOSED MODIFICATION TO AN EXISTING WIRELESS COMMUNICATION FACILITY IN YOUR NEIGHBORHOOD

To: Neighborhood Groups and Neighbors & Owners within 500' radius of 692 24th Avenue

Meeting Information
Date: Tuesday January 8th, 2013
Time: 6:00 p.m. – 7:30 p.m.
Where: San Francisco Public Library
Anza Branch Program Room
550 37th Avenue
San Francisco, CA 94121

Site Information
Address: 692 24th Avenue
Block/Lot: 1567/012

Applicant
Streamline Engineering & Design, Inc. on Behalf of Sprint Spectrum L.P.
Contact Information:
Streamline Engineering & Design
Alyse Mathis & David Alameda
916.660.1930

Sprint Spectrum is proposing a modification to the existing wireless communication facility at 692 24th avenue to improve its San Francisco wireless network. The proposed modification will consist of removing and replacing 3 existing Sprint antennas with 3 new Sprint antennas and 6 new RRUs. The new antennas will be on the roof top of the existing PG&E Substation. The new antennas will be installed inside new radomes to limit the visual impact to the public. 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 Anza Branch program room located at 550 37th Avenue at 6:00 p.m. to learn more about this project.

If you have any questions regarding the proposed modification and are unable to attend the meeting, please contact Alyse Mathis or David Alameda at 916.660.1930. Please contact the San Francisco Planning Department at (415)558-6378 if you have any questions regarding the planning process.

NOTE: If you require an interpreter to be present at the meeting, please contact our office at (916) 660.1930 no later than 5:00 PM on Thursday January 3rd, 2013 and we will make every effort to provide you with an interpreter.

This is not a Library Sponsored Program

AVISO DE LA REUNIÓN DE ALCANCE DE LA COMUNIDAD SOBRE UNA MODIFICACIÓN PROPUESTA A UN CENTRO DE COMUNICACIÓN INALÁMBRICA EXISTENTE EN SU VECINDARIO

A: Grupos Vecinales y Vecinos y Propietarios dentro de un radio de 500 pies de 692 24th Avenue

Información de la Reunión
Fecha: Martes , 8 de enero de 2013
Hora: 6:00 p.m. --7:30 p.m.
Dónde: San Francisco Public Library
Anza Branch Program Room
550 37th Avenue
San Francisco, CA 94121

Información del sitio
Dirección: 692 24th Avenue
Block/Lot: 1567/012

Solicitante
Streamline Engineering & Design, Inc. on Behalf of Sprint Spectrum L.P.
Información de Contacto:
Streamline Engineering & Design
Alyse Mathis & David Alameda
916.660.1930

Sprint Spectrum propone una modificación de la instalación de comunicación inalámbrica existente en 692 24th Avenue para mejorar su red inalámbrica de San Francisco. La modificación propuesta consistirá en la eliminación y sustitución de 3 antenas existentes de Sprint con 3 nuevas antenas de Sprint y 6 RRUs nuevos. Las nuevas antenas estarán en la parte superior del techo de la actual subestación de PG&E. Las nuevas antenas serán instaladas dentro de radomos nuevos para limitar el impacto visual para el público. Planes y simulaciones de foto estarán disponibles para su revisión en la reunión. Usted está invitado a asistir a una reunión informativa de la comunidad ubicada en la Sala de Programa de la Sucursal Anza de San Francisco Public Library ubicada en 550 37th Avenue a las 6:00 p.m. para aprender más acerca de este proyecto.

Si usted tiene alguna pregunta acerca de la modificación propuesta y no puede asistir a la reunión, por favor póngase en contacto con Alyse Mathis o David Alameda en el 916.660.1930. Por favor póngase en contacto con el Departamento de Planificación de San Francisco en el (415) 558-6378 si usted tiene alguna pregunta con respecto al proceso de planificación.

NOTA: Si necesita que un intérprete esté presente en la reunión, por favor comuníquese con nuestra oficina en el (916) 660.1930 no más tarde de las 5:00 PM del jueves, 3 de enero de 2013 y vamos a hacer todo lo posible para proporcionarle un intérprete.

Este no es un programa patrocinado por la biblioteca

關於對您的社區的現有無線通訊設施進行提議修改的社區宣導會議通告

致：24 大街 692 號 500 英尺範圍內的社區組織、鄰居和業主

會議資訊
日期： 2013 年 1 月 8 日週三
時間： 晚上 6 時 – 7 時 30 分
地點： 三藩市公共圖書館
Anza Branch Program Room
550 37th Avenue
San Francisco, CA 94121

場地資訊
地址： 24 大街 692 號
區/地塊： 1567/012

申請人
Streamline Engineering & Design, Inc. 代表 Sprint Spectrum L.P.
聯繫資訊：
Streamline Engineering & Design
Alyse Mathis & David Alameda
916.660.1930

Sprint Spectrum 公司提議對位於 24 大街 692 號的現有無線通訊設施進行修改，以改善其在三藩市的無線網絡。提議的修改內容包括拆除現有的 3 根 Sprint 天線，用 3 根新的 Sprint 天線和 6 個新的 RRU 取代。新的天線將安裝在現有的 PG&E 分站的屋頂。新的天線將安裝在新的天線罩內，以限制對民眾的視覺影響力。在會議上將提供計劃和照片模擬供您審閱。在此邀請您於晚上 6 時到三藩市圖書館 Anza Branch 計劃室參加一個資訊社區會議，以便更多了解該項目。

如果您對該提議修改有任何疑問並且無法出席會議，請致電 916.660.1930 與 Alyse Mathis 或 David Alameda 聯繫。如果您對規劃程序有任何疑問，請致電 (415)558-6378 與三藩市規劃部聯繫。

注：如果您在本次會議中需要口譯員服務，請在 2013 年 1 月 3 日週四下午 5 時之前致電 (916) 660.1930 與我們辦公室聯繫，我們會竭力為您安排口譯員。

這不是圖書館贊助的計劃

1566/011
Tran Fam Tr
25465 Cumberland Ln
Calabasas, CA 91302

1566/012
547 23rd ave LLC
1433 7th Ave
San Francisco, CA 94121

1566/013
Fred Abdallah
711 29th Ave
San Francisco, CA 94121

1566/014
Neeham Fam Tr
1436 Wawona St
San Francisco, CA 94116

1566/016
Yee Kuong
563 23rd Ave
San Francisco, CA 94121

1566/017
Luong Tran Fam Tr
567 23rd Ave
San Francisco, CA 94121

1566/018
Pamela Fong Rev Tr
571 23rd Ave
San Francisco, CA 94121

1566/019
Maggie Lai
575 23rd Ave
San Francisco, CA 94121

1566/020
Lisita Osip
579 23rd Ave
San Francisco, CA 94121

1566/021
Lee Fam Tr
583 23rd Ave
San Francisco, CA 94121

1566/022
Javier Torres
587 23rd Ave
San Francisco, CA 94121

1566/023
Beatrice Smith
591 23rd Ave
San Francisco, CA 94121

1566/024
Stephen Leung
693 25th Ave
San Francisco, CA 94121

1566/025
Andrew Nguy
PO BOX 21674
El Sobrante, CA 94820

1566/025A
Katherine Velasquez Tr
2240 Balboa St #4
San Francisco, CA 94121

1566/025B
Jay Lee
690 24th Ave
San Francisco, CA 94121

1566/025C
Michael Melnicki
686 24th Ave
San Francisco, CA 94121

1566/025D
Kim Yong
682 24th Ave
San Francisco, CA 94121

1566/025E
Rosario Verzosa Tr
678 24th Ave
San Francisco, CA 94121

1566/026
Samant Shamsunder
545 Seagate Wy
Belmont, CA 94002

1566/026A
Amy Fu
670 24th Ave
San Francisco, CA 94121

1566/026B
Ararat Pogosian
666 24th Ave
San Francisco, CA 94121

1566/026C
Betty Lam
662 24th Ave
San Francisco, CA 94121

1566/026D
Fanny Yee
658 24th Ave
San Francisco, CA 94121

1566/026E
Wai Tang
654 24th Ave
San Francisco, CA 94121

1566/026F
Richard Adhikari
650 24th Ave
San Francisco, CA 94121

1566/026I
Record Does Not Exist

1566/026J
Record Does Not Exist

1566/026K
Same as 1566/026A

1566/027
Elizabeth Barbo Tr
642 24th Ave
San Francisco, CA 94121

Étiquettes faciles à peler
Utilisez le gabarit AVERY® 5160®
Sens de chargement
Repliez à la hachure afin de révéler le rebord Pop-Up™
www.avery.com
1-800-GO-AVERY

1566/027A
Kazuo Miura
66 Cleary Ct #1107
San Francisco, CA 94109

1566/030
Moy Ng
636 24th Ave
San Francisco, CA 94121

1566/031
Jie Mei
630 24th Ave
San Francisco, CA 94121

1566/041
Olga Kartsev
557 23rd Ave
San Francisco, CA 94121

1567/004A
Josh Garzoli
631 24th Ave
San Francisco, CA 94121

1567/005
Lazarus Fam Tr
635 24th Ave
San Francisco, CA 94121

1567/005A
Violet Goebel
639 24th Ave
San Francisco, CA 94121

1567/006
Wei Hu
635 24th Ave
San Francisco, CA 94121

1567/007
Andrew Smith
647 24th Ave
San Francisco, CA 94121

1567/007A
Jennifer Do
651 24th Ave
San Francisco, CA 94121

1567/007B
Paul Yee
655 24th Ave
San Francisco, CA 94121

1567/007C
De Lee
659 24th Ave
San Francisco, CA 94121

1567/008
Ching Pak
14470 Debell Rd
Los Altos, CA 94022

1567/009
John Wong Tr
667 24th Ave
San Francisco, CA 94121

1567/010
John Hung
2533 Chestnut St
San Francisco, CA 94123

1567/011
Andebrahn Woldezghi
675 24th Ave
San Francisco, CA 94121

1567/012
PG & E
1 Market Spear Tower Ste 400
San Francisco, CA 94105

1567/016
Wang Lvg Tr
2201 25th Ave
San Francisco, CA 94116

1567/017
Wong Li Tr
2332A Balboa St
San Francisco, CA 94121

1567/018
Sam Dong Tr
2338 Balboa St
San Francisco, CA 94121

1567/021
Joyce Jew Tr
4719 Geary Blvd #503
San Francisco, CA 94118

1567/021A
Tiffany Tuong
672 25th Ave
San Francisco, CA 94121

1567/022
Fillian Lei
260 La Cruz Ave
Millbrae, CA 94030

1567/022A
Peter Der
664 25th Ave
San Francisco, CA 94121

1567/023
Philip Williams
662 25th Ave
San Francisco, CA 94121

1567/023A
Joe Choy
2 Beachmont Dr
San Francisco, CA 94132

1567/024
Berta Cohn
315 San Marcos Ave
San Francisco, CA 94116

1567/025
Tai Cho
648 25th Ave
San Francisco, CA 94121

1567/026
Lee Fam Tr
210 11th Ave
San Francisco, CA 94118

1567/026A
Yim Fung
640 25th Ave
San Francisco, CA 94121

Easy Peel® Labels
Use Avery® Template 5160®
Feed Paper
Bend along line to expose Pop-Up Edge™
AVERY® 8160®

Easy Peel® Labels
Use Avery® Template 5160®

Feed Paper

Bend along line to
expose Pop-Up Edge™

AVERY® 8160®

Étiquettes faciles à peler
Utilisez le gabarit AVERY® 5160®

Sens de
chargement

Repliez à la hachure afin de
révéler le rebord Pop-Up™

www.avery.com
1-800-GO-AVERY

1567/027
Kuniko Nagura Tr
636 25th Ave
San Francisco, CA 94121

1567/028
Jade Chan
1660 16th Ave
San Francisco, CA 94122

1567/038
Shrayber Fam Tr
5 Greenview Ln
Hillsborough, CA 94010

1567/039
Same as 1567/038

1567/040
Nelly Agranovsky
688-690 25th Ave
San Francisco, CA 94121

1567/041
Same as 1567/040

1568/005A
Joe Tondo
639 25th Ave
San Francisco, CA 94121

1568/006
Pei Li
643 25th Ave
San Francisco, CA 94121

1568/007
Edward Chin
649 25th Ave #3
San Francisco, CA 94121

1568/008
Dorothy Hermida Fam Tr
657 25th Ave
San Francisco, CA 94121

1568/008A
Tung Chiang
661 25th Ave
San Francisco, CA 94121

1568/008B
Jack Lum
665 25th Ave
San Francisco, CA 94121

1568/009
Survivors Tr
PO BOX 7627
Ventura, CA 93006

1568/010
May Yang Rev Tr
1171 Pacific Ave
San Francisco, CA 94121

1568/011
Mahmoud Ghezavat
2892 Hillside Dr
Burlingame, CA 94010

1568/011A
Thai Youn Tr
3730 Webster St
San Francisco, CA 94123

1568/011B
Choy Ng
689 25th Ave
San Francisco, CA 94121

1568/011C
King Leung Tr
693 25th Ave
San Francisco, CA 94121

1568/011D
Florence Kong
2400 Balboa St
San Francisco, CA 94121

1568/012
Miyako Stevens
2418 Balboa St
San Francisco, CA 94121

1619/001
Mae Leong
701 25th Ave
San Francisco, CA 94121

1619/001A
Truman Kwok
705 25th Ave
San Francisco, CA 94121

1619/001B
Takashi Fukumoto
709 25th Ave
San Francisco, CA 94121

1619/001C
Douglas Choy
715 25th Ave
San Francisco, CA 94121

1619/001D
Jason Huang
717 25th Ave
San Francisco, CA 94121

1619/001E
Jimmy Lau
2171 35th Ave
San Francisco, CA 94116

1619/027A
Joseph Lau
2415 Balboa St
San Francisco, CA 94121

1620/001
Powers Fam Tr
101 Edward Ave
San Rafael, CA 94903

1620/001A
Dennis Parque
713 24th Ave
San Francisco, CA 94121

1620/001B
Edith Holtz Rev Tr
717 24th Ave
San Francisco, CA 94121

Étiquettes faciles à peler
Utilisez le gabarit AVERY® 5160®

Sens de chargement

Repliez à la hachure afin de révéler le rebord Pop-up™

www.avery.com
1-800-GO-AVERY

1620/022
Marlene Ungson
222 Verano Dr
South Francisco, CA 94080

1620/022A
Ludmilla Davis
706 25th Ave
San Francisco, CA 94121

1620/023
Providential Inv LLC
700 25th Ave
San Francisco, CA 94121

1620/023A
Gloria Burress
133 Stonecrest Dr
San Francisco, CA 94132

1620/024
Angela Zhao
2329 Balboa St
San Francisco, CA 94121

1620/025
Richard Chow
250 Morningside Dr
San Francisco, CA 94132

1620/026
Ilya Zhuchkov
2800 34th Ave
San Francisco, CA 94116

1620/027
SFUSD
135 Van Ness Ave
San Francisco, CA 94102

1621/001
Yelena Glezer
2878 Hillside Dr
Burlingame, CA 94010

1621/001A
Fong Fam Tr
2223 Balboa St
San Francisco, CA 94121

1621/001B
Olga Cody
300 Anza St
San Francisco, CA 94118

1621/001C
Stephen Cho
611 23rd Ave
San Francisco, CA 94121

1621/001D
Fred Wong Rev Tr
615 23rd Ave
San Francisco, CA 94121

1621/001E
Barbara Jones
619 23rd Ave
San Francisco, CA 94121

1621/001F
Ellen Schip Tr
621 23rd Ave
San Francisco, CA 94121

1621/036
Vincent Wong
281 18th Ave
San Francisco, CA 94121

1621/037
Brendon Woods
728 24th Ave
San Francisco, CA 94121

1621/037A
Vadim Rozenbaum
724 24th Ave
San Francisco, CA 94121

1621/038
Paul Hom
722 24th Ave
San Francisco, CA 94121

1621/038A
Residual Tr
704 Lombard St
San Francisco, CA 94133

1621/039
Janice Jeong Tr
1407 12th Ave
San Francisco, CA 94122

1621/040
Lau Jung
704 24th Ave
San Francisco, CA 94121

1621/041
Chan Fam Tr
296 2nd Ave
San Francisco, CA 94118

1621/042
Mah Chun
2024 Wawona St
San Francisco, CA 94116

1621/043
Norma Ono Rev Tr
2235 Balboa St
San Francisco, CA 94121

1621/044
Stanley Yeung
587 22nd Ave
San Francisco, CA 94121

1621/045
Edward Liu
2231 Balboa St
San Francisco, CA 94121

1566/011
Resident At:
543 23rd Ave
San Francisco, CA 94121

1566/012
Resident At:
547 23rd Ave
San Francisco, CA 94121

1566/013
Resident At:
549 23rd Ave
San Francisco, CA 94121

Easy Peel® Labels
Use Avery® Template 5160®

Feed Paper

Bend along line to expose Pop-up Edge™

AVERY® 5160®

1566/014
Resident At:
555 23rd Ave
San Francisco, CA 94121

1566/023
Resident At:
593 23rd Ave
San Francisco, CA 94121

1566/024
Resident At:
2200 Balboa St
San Francisco, CA 94121

1566/024
Resident At:
2202 Balboa St
San Francisco, CA 94121

1566/024
Resident At:
2204 Balboa St
San Francisco, CA 94121

1566/024
Resident At:
2206 Balboa St
San Francisco, CA 94121

1566/024
Resident At:
2208 Balboa St
San Francisco, CA 94121

1566/024
Resident At:
2210 Balboa St
San Francisco, CA 94121

1566/025
Resident At:
2230 Balboa St
San Francisco, CA 94121

1566/025A
Resident At:
2240 Balboa St
San Francisco, CA 94121

1566/025B
Resident At:
688 24th Ave
San Francisco, CA 94121

1566/026
Resident At:
674 24th Ave
San Francisco, CA 94121

1566/027A
Resident At:
638 24th Ave
San Francisco, CA 94121

1566/027A
Resident At:
640 24th Ave
San Francisco, CA 94121

1566/030
Resident At:
634 24th Ave
San Francisco, CA 94121

1567/006
Resident At:
641 24th Ave
San Francisco, CA 94121

1567/008
Resident At:
663 24th Ave
San Francisco, CA 94121

1567/008
Resident At:
665 24th Ave
San Francisco, CA 94121

1567/010
Resident At:
671 24th Ave
San Francisco, CA 94121

1567/011
Resident At:
677 24th Ave
San Francisco, CA 94121

1567/012
Resident At:
679 24th Ave
San Francisco, CA 94121

1567/016
Resident At:
2326 Balboa St
San Francisco, CA 94121

1567/016
Resident At:
2328 Balboa St
San Francisco, CA 94121

1567/017
Resident At:
2334 Balboa St
San Francisco, CA 94121

1567/018
Resident At:
2340 Balboa St
San Francisco, CA 94121

1567/021
Resident At:
676 25th Ave
San Francisco, CA 94121

1567/022
Resident At:
668 25th Ave
San Francisco, CA 94121

1567/023
Resident At:
660 25th Ave
San Francisco, CA 94121

1567/023
Resident At:
656 25th Ave
San Francisco, CA 94121

1567/023
Resident At:
658 25th Ave
San Francisco, CA 94121

1567/024
Resident At:
652 25th Ave
San Francisco, CA 94121

1567/026
Resident At:
644 25th Ave
San Francisco, CA 94121

1567/028
Resident At:
632 25th Ave
San Francisco, CA 94121

1567/038
Resident At:
692 25th Ave
San Francisco, CA 94121

1567/038
Resident At:
694 25th Ave
San Francisco, CA 94121

1567/039
Resident At:
696 25th Ave
San Francisco, CA 94121

1567/039
Resident At:
698 25th Ave
San Francisco, CA 94121

1568/009
Resident At:
669 25th Ave
San Francisco, CA 94121

1568/009
Resident At:
671 25th Ave
San Francisco, CA 94121

1568/010
Resident At:
675 25th Ave
San Francisco, CA 94121

1568/011
Resident At:
681 25th Ave
San Francisco, CA 94121

1568/011A
Resident At:
685 25th Ave
San Francisco, CA 94121

1619/001
Resident At:
703 25th Ave
San Francisco, CA 94121

1619/001E
Resident At:
721 25th Ave
San Francisco, CA 94121

1620/001
Resident At:
701 24th Ave
San Francisco, CA 94121

1620/022
Resident At:
710 25th Ave
San Francisco, CA 94121

1620/023A
Resident At:
2335 Balboa St
San Francisco, CA 94121

1620/023A
Resident At:
2337 Balboa St
San Francisco, CA 94121

1620/025
Resident At:
2319 Balboa St
San Francisco, CA 94121

1620/025
Resident At:
2321 Balboa St
San Francisco, CA 94121

1620/026
Resident At:
2311 Balboa St
San Francisco, CA 94121

1620/026
Resident At:
2313 Balboa St
San Francisco, CA 94121

1620/026
Resident At:
2315 Balboa St
San Francisco, CA 94121

1620/027
Resident At:
714 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
716 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
718 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
720 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
722 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
724 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
726 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
728 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
730 25th Ave
San Francisco, CA 94121

1620/027
Resident At:
732 25th Ave
San Francisco, CA 94121

1621/001
Resident At:
2201 Balboa St
San Francisco, CA 94121

1621/001A
Resident At:
2221 Balboa St
San Francisco, CA 94121

1621/001B
Resident At:
607 23rd Ave
San Francisco, CA 94121

1621/036
Resident At:
732 24th Ave
San Francisco, CA 94121

1621/038
Resident At:
720 24th Ave
San Francisco, CA 94121

1621/038A
Resident At:
716 24th Ave
San Francisco, CA 94121

1621/038A
Resident At:
718 24th Ave
San Francisco, CA 94121

1621/039
Resident At:
712 24th Ave
San Francisco, CA 94121

1621/040
Resident At:
706 24th Ave
San Francisco, CA 94121

1621/041
Resident At:
2247 Balboa St
San Francisco, CA 94121

1621/041
Resident At:
2249 Balboa St
San Francisco, CA 94121

1621/042
Resident At:
2241 Balboa St
San Francisco, CA 94121

1621/042
Resident At:
2243 Balboa St
San Francisco, CA 94121

1621/043
Resident At:
2237 Balboa St
San Francisco, CA 94121

1621/044
Resident At:
2229 Balboa St
San Francisco, CA 94121

1621/044
Resident At:
2231 Balboa St
San Francisco, CA 94121

1622/029A
Murray Brozinsky
640 23rd Ave
San Francisco, CA 94121

1622/030
Allyn Louie
634 23rd Ave
San Francisco, CA 94121

1622/031
Resident At:
630 23rd Ave
San Francisco, CA 94121

1622/032
Egert Fam Lvg Tr
66 Westdale Ave
Daly City, CA 94015

1622/032
Allyn Louie
626 23rd Ave
San Francisco, CA 94121

1622/033
Coleman Ow
1600 Mason St #11
San Francisco, CA 94133

1622/033
Resident At:
622 23rd Ave
San Francisco, CA 94121

1622/034
Wing Lee
130 Stanyan St
San Francisco, CA 94118

1622/034
Resident At:
618 23rd Ave
San Francisco, CA 94121

1622/035
Linna Chen
614 23rd Ave
San Francisco, CA 94121

1622/036
Paul Hargrove
610 23rd Ave
San Francisco, CA 94121

1622/037
William Seto
608 23rd Ave
San Francisco, CA 94121

1622/038
Robert Ho
95 Cerritos Ave
San Francisco, CA 94127

1622/038
Resident At:
2139 Balboa St
San Francisco, CA 94121

1622/038
Resident At:
2141 Balboa St
San Francisco, CA 94121

1622/038
Resident At:
2143 Balboa St
San Francisco, CA 94121

1622/038
Resident At:
2145 Balboa St
San Francisco, CA 94121

1622/038
Resident At:
2147 Balboa St
San Francisco, CA 94121

1622/038
Resident At:
2149 Balboa St
San Francisco, CA 94121

1622/038
Resident At:
2151 Balboa St
San Francisco, CA 94121

1622/038
Resident At:
2153 Balboa St
San Francisco, CA 94121

1622/038
Resident At:
2155 Balboa St
San Francisco, CA 94121

1622/039
Betty Hom
448 22nd Ave
San Francisco, CA 94121

1622/039
Resident At:
2133 Balboa St
San Francisco, CA 94121

1622/039
Resident At:
2135 Balboa St
San Francisco, CA 94121

1622/040
Rosa Parsons
2127 Balboa St
San Francisco, CA 94121

1565/022A
Godin Fam Tr
530 23rd Ave
San Francisco, CA 94121

1565/017
Roth Heinz Rev Tr
554 23rd Ave
San Francisco, CA 94121

1565/018
Cynthia Pon
552 23rd Ave
San Francisco, CA 94121

1565/018
Resident At:
550 23rd Ave
San Francisco, CA 94121

1565/019
Craig Keith
546 23rd Ave
San Francisco, CA 94121

1565/020
Manaharial Amin
1820 University Ave
Berkeley, CA 94703

1565/020
Resident At:
543 23rd Ave
San Francisco, CA 94121

1565/021
Kirsten Havrehed
538 23rd Ave
San Francisco, CA 94121

1565/022
Donald Creighton
534 23rd Ave
San Francisco, CA 94121

1565/012E
Kwok Cheung
2126 balboa St
San Francisco, CA 94121

1565/012F
Chok Cheung
2132 Balboa St
San Francisco, CA 94121

1565/012G
Gursky Fam Tr
958 Randy Wy
Brentwood, CA 94513

1565/013
Helen Mar
588 23rd Ave
San Francisco, CA 94121

1565/013
Resident At:
586 23rd Ave
San Francisco, CA 94121

1565/013A
Sun Mah
584 23rd Ave
San Francisco, CA 94121

1565/013A
Resident At:
582 23rd Ave
San Francisco, CA 94121

1565/014
Paul McIntosh
578 23rd Ave
San Francisco, CA 94121

1565/014A
Eun Cho
574 23rd Ave
San Francisco, CA 94121

1565/015
Larry Cho
2501 G St
Bakersfield, CA 93301

1565/015
Resident At:
570 23rd Ave
San Francisco, CA 94121

1565/015A
Resident At:
566 23rd Ave
San Francisco, CA 94121

1565/016
Catherine Chu
562 23rd Ave
San Francisco, CA 94121

1565/016A
Benjamin Moy
558 23rd Ave
San Francisco, CA 94121

1566/001
Dai Pham
3201 Anza St
San Francisco, CA 94121

1566/001
Resident At:
3203 Anza St
San Francisco, CA 94121

1566/001
Resident At:
3205 Anza St
San Francisco, CA 94121

1566/001
Resident At:
3207 Anza St
San Francisco, CA 94121

1566/002
Chiu Survivors Tr
238 San Fernando Wy
Daly City, CA 94105

1566/002
Resident At:
505 23rd Ave
San Francisco, CA 94121

1566/002
Resident At:
507 23rd Ave
San Francisco, CA 94121

1566/002
Resident At:
509 23rd Ave
San Francisco, CA 94121

1566/003
Lam Fam Tr
513 23rd Ave
San Francisco, CA 94121

1566/004
Clarence Grider
190 Upland Dr
San Francisco, CA 94127

1566/004
Resident At:
515 23rd Ave
San Francisco, CA 94121

1566/004
Resident At:
517 23rd Ave
San Francisco, CA 94121

1566/005
Herman Low
2800 Vicente St
San Francisco, CA 94116

1566/005
Resident At:
519 23rd Ave
San Francisco, CA 94121

1566/005
Resident At:
521 23rd Ave
San Francisco, CA 94121

1566/006
Fredrick Furd
525 23rd Ave
San Francisco, CA 94121

1566/007
Fang Yang
527 23rd Ave
San Francisco, CA 94121

1566/008
Jesse Ma Fam Tr
549 El Camino Del Mar
San Francisco, CA 94121

1566/008
Resident At:
531 23rd Ave
San Francisco, CA 94121

1566/008
Resident At:
533 23rd Ave
San Francisco, CA 94121

1566/009
Qwan Fam Ltd Ptnshp
1211 Monterey Blvd
San Francisco, CA 94127

1566/009
Resident At:
535 23rd Ave
San Francisco, CA 94121

1566/009
Resident At:
537 23rd Ave
San Francisco, CA 94121

1566/010
Louie Rev Tr
25 Arroyo Seco
Millbrae, CA 94030

1566/010
Resident At:
539 23rd Ave
San Francisco, CA 94121

1566/010
Resident At:
541 23rd Ave
San Francisco, CA 94121

1566/033
Stanislav Stolyarov
626 24th Ave
San Francisco, CA 94121

1566/034
Kuen Wong Rev Tr
622 24th Ave
San Francisco, CA 94121

1566/035
Ng Fam Tr
618 24th Ave
San Francisco, CA 94121

1566/036
Kiangs Prop LLC
683 Miramar Dr
San Francisco, CA 94112

1566/036
Resident At:
600 24th Ave
San Francisco, CA 94121

1566/037
Choon Hong
3245 Anza St
San Francisco, CA 94121

1566/038
Michael Kwong
3239 Anza St
San Francisco, CA 94121

1566/039
Joseph Maynes
3235 Anza St
San Francisco, CA 94121

1566/039
Resident At:
3233 Anza St
San Francisco, CA 94121

1566/040
Isabel D'Romo Rev Tr
3227 Anza St
San Francisco, CA 94121

1567/001
William Chan
2190 29th Ave
San Francisco, CA 94116

1567/001
Resident At:
601 24th Ave
San Francisco, CA 94121

1567/001
Resident At:
603 24th Ave
San Francisco, CA 94121

1567/001
Resident At:
605 24th Ave
San Francisco, CA 94121

1567/001
Resident At:
607 24th Ave
San Francisco, CA 94121

1567/002
Benny Lum
609 24th Ave
San Francisco, CA 94121

1567/002
Resident At:
611 24th Ave
San Francisco, CA 94121

1567/002A
Joseph Fernandez
619 24th Ave
San Francisco, CA 94121

1567/002A
Resident At:
621 24th Ave
San Francisco, CA 94121

1567/003
Clarence Hom
2 Sunnyhill Wy
Pittsburg, CA 94565

1567/003
Resident At:
623 24th Ave
San Francisco, CA 94121

1567/004
David Wong
627 24th Ave
San Francisco, CA 94121

1567/029
Gaw Fam Tr
565 22nd Ave
San Francisco, CA 94121

1567/029
Resident At:
628 25th Ave
San Francisco, CA 94121

1567/029A
Barbara Shew Rev Tr
526 26th Ave
San Francisco, CA 94121

1567/029A
Resident At:
622 25th Ave
San Francisco, CA 94121

1567/029A
Resident At:
624 25th Ave
San Francisco, CA 94121

1567/030
Survivors Tr
105 Alvarado Ave
Los Altos, CA 94022

1567/031
May Leong Tr
748 Berkshire Dr
Millbrae, CA 94030

1567/031
Resident At:
600 25th Ave
San Francisco, CA 94121

1567/031A
Kenneth Ho
1559 Pacific Ave
San Francisco, CA 94109

1567/031A
Resident At:
3345 Anza St
San Francisco, CA 94121

1567/031A
Resident At:
3347 Anza St
San Francisco, CA 94121

1567/032
Cuong Phan
3339 Anza St
San Francisco, CA 94121

1567/032A
Huey Fam Tr
3333 Anza St
San Francisco, CA 94121

1567/033
Baron Zalaman
441 30th Ave
San Francisco, CA 94121

1567/033
Resident At:
3325 Anza St
San Francisco, CA 94121

1567/034
Qiang Ma
3321 Anza St
San Francisco, CA 94121

1567/035
Carl Robinson
3317 Anza St
San Francisco, CA 94121

1567/035
Resident At:
3315 Anza St
San Francisco, CA 94121

1567/036
Sum Cheung
3309 Anza St
San Francisco, CA 94121

1567/036
Resident At:
3311 Anza St
San Francisco, CA 94121

1568/001
Paul Lew
779 43rd Ave
San Francisco, CA 94121

1568/001
Resident At:
3405 Anza St
San Francisco, CA 94121

1568/001A
Lin Peng
609 25th Ave
San Francisco, CA 94121

1568/001A
Resident At:
611 25th Ave
San Francisco, CA 94121

1568/001B
4G1B Prpts LLC
435 Helen Ave
Millbrae, CA 94030

1568/001B
Resident At:
615 25th Ave
San Francisco, CA 94121

1568/001C
Jean Sui Rev Tr
617 9th Ave
San Francisco, CA 94118

1568/001C
Resident At:
619 25th Ave
San Francisco, CA 94121

1568/002
Stacy Tam
621 25th Ave
San Francisco, CA 94121

1568/003
Lee Lvg Tr
623 25th Ave
San Francisco, CA 94121

1568/003
Resident At:
625 25th Ave
San Francisco, CA 94121

1568/003
Resident At:
627 25th Ave
San Francisco, CA 94121

1568/003
Resident At:
629 25th Ave
San Francisco, CA 94121

1568/004
Pamela Chow
519 35th Ave
San Francisco, CA 94121

1568/004
Resident At:
631 25th Ave
San Francisco, CA 94121

1568/004A
Man Yu
534 26th Ave
San Francisco, CA 94121

1568/004B
Alcyne Wong
630 26th Ave
San Francisco, CA 94121

1568/005
Yan Wong
511 Green St
San Francisco, CA 94133

1568/005
Resident At:
635 25th Ave
San Francisco, CA 94121

1568/012A
Sum Hung
20920 Glenwood Dr
Castro Valley, CA 94552

1568/012A
Resident At:
2424 Balboa St
San Francisco, CA 94121

1568/013
William Wong
1637 Leavenworth St
San Francisco, CA 94109

1568/013
Resident At:
2430 Balboa St
San Francisco, CA 94121

1568/014
Yamasaki Rev Tr
2434 Balboa St
San Francisco, CA 94121

1568/014
Resident At:
2436 Balboa St
San Francisco, CA 94121

1568/014
Resident At:
2438 Balboa St
San Francisco, CA 94121

1568/014A
David Hall
678 26th Ave
San Francisco, CA 94121

1568/014B
Tom Lvg Tr
626 Tennyson Ave
Palo Alto, CA 94301

1568/014B
Resident At:
2440 Balboa St
San Francisco, CA 94121

1568/014B
Resident At:
2442 Balboa St
San Francisco, CA 94121

1568/014C
Joaquin Kuan
686 26th Ave
San Francisco, CA 94121

1568/014D
Cho Chan
682 26th Ave
San Francisco, CA 94121

1568/015
Ho Choy
674 26th Ave
San Francisco, CA 94121

1568/016
Zacarias Sagum
2134 22nd Ave
San Francisco, CA 94116

1568/016
Resident At:
670 26th Ave
San Francisco, CA 94121

1568/017
Garrick Evans
666 26th Ave
San Francisco, CA 94121

1568/018
See Lew
660 26th Ave
San Francisco, CA 94121

1568/019
William Woo
658 26th Ave
San Francisco, CA 94121

1568/020
Hgnes Chan
499 11th Ave
San Francisco, CA 94118

1568/020
Resident At:
654 26th Ave
San Francisco, CA 94121

1568/021
Po Wong
648 26th Ave
San Francisco, CA 94121

1568/021
Resident At:
650 26th Ave
San Francisco, CA 94121

1568/022
Wing Choi
646 26th Ave
San Francisco, CA 94121

1568/023
Daniel Ng
642 26th Ave
San Francisco, CA 94121

1568/024
Louis Hong
807 Salt Lake Dr
San Jose, CA 95133

1568/024
Resident At:
638 26th Ave
San Francisco, CA 94121

1568/025
Allen Leong
7 Sylvan Dr
San Francisco, CA 94132

1568/025
Resident At:
626 26th Ave
San Francisco, CA 94121

1568/025A
Hansen Toy
622 26th Ave
San Francisco, CA 94121

1568/025A
Resident At:
624 26th Ave
San Francisco, CA 94121

1568/027
576 12th Ave
3405 Anza St
San Francisco, CA 94118

1568/027
Resident At:
3433 Anza St
San Francisco, CA 94121

1568/027
Resident At:
3435 Anza St
San Francisco, CA 94121

1568/028
Tran/Vuong Fam Tr
3429 Anza St
San Francisco, CA 94121

1568/028
Resident At:
3431 Anza St
San Francisco, CA 94121

1619/002
Pearl Chan Tr
318 San Marcos Ave
San Francisco, CA 94116

1619/002
Resident At:
723 25th Ave
San Francisco, CA 94121

1619/002
Resident At:
725 25th Ave
San Francisco, CA 94121

1619/003
Unknown Owner

1619/003
Resident At:
727V 25th Ave
San Francisco, CA 94121

1619/004
Louis May
729 25th Ave
San Francisco, CA 94121

1619/005
Fortunato Estonina
733 25th Ave
San Francisco, CA 94121

1619/005A
Rebecca Yee
739 25th Ave
San Francisco, CA 94121

1619/006A
Mary Sawasaki Rev Tr
759 25th Ave
San Francisco, CA 94121

1619/006B
Yao Ouyang
771 25th Ave
San Francisco, CA 94121

1619/006B
Resident At:
773 25th Ave
San Francisco, CA 94121

1619/019A
Michael Satoshi
758 26th Ave
San Francisco, CA 94121

1619/021
Record Does Not Exist

1619/022
Bradford Fam Tr
282 Urbano Dr
San Francisco, CA 94127

1619/022
Resident At:
738 26th Ave
San Francisco, CA 94121

1619/023
Ben Jow
36 Fortuna Ave
San Francisco, CA 94115

1619/023
Resident At:
732 26th Ave
San Francisco, CA 94121

1619/024
Alex Wong
728 26th Ave
San Francisco, CA 94121

1619/024A
Fred Murata
724 26th Ave
San Francisco, CA 94121

1619/024B
Kinako Kobayashi Tr
1731 27th Ave
San Francisco, CA 94122

1619/024B
Resident At:
720 26th Ave
San Francisco, CA 94121

1619/024C
Lu/Quach Fam Tr
572 41st Ave
San Francisco, CA 94121

1619/024C
Resident At:
716 26th Ave
San Francisco, CA 94121

1619/025
George Kwan
712 26th Ave
San Francisco, CA 94121

1619/025A
Saetang Yongjoot
2639 Balboa St
San Francisco, CA 94121

1619/025A
Resident At:
2445 Balboa St
San Francisco, CA 94121

1620/005
Tang Fam Tr
773 24th Ave
San Francisco, CA 94121

1620/005
Resident At:
771 24th Ave
San Francisco, CA 94121

1620/005A
Au Fam Tr
768 25th Ave
San Francisco, CA 94121

1620/005A
Resident At:
766 25th Ave
San Francisco, CA 94121

1621/028
Murdock-Elliot Rev Tr
764 24th Ave
San Francisco, CA 94121

1621/029
Joseph Cordi
760 24th Ave
San Francisco, CA 94121

1621/030
Pedersen Jay
756 24th Ave
San Francisco, CA 94121

1621/031
Irene Gertrude
752 24th Ave
San Francisco, CA 94121

1621/032
Joseph Cordi
748 24th Ave
San Francisco, CA 94121

1621/033
Annette Camegle
744 24th Ave
San Francisco, CA 94121

1621/034
Juana Bagnol
740 24th Ave
San Francisco, CA 94121

1621/035
Mo Lee Tr
736 24th Ave
San Francisco, CA 94121

1621/001G
Mark Leach
623 23rd Ave
San Francisco, CA 94121

1621/001H
Melvin Ng
273 Barrett Cir
Danville, CA 94526

1621/001H
Resident At:
627 23rd Ave
San Francisco, CA 94121

1621/002
Richard Tom
635 23rd Ave
San Francisco, CA 94121

1621/003
Vladimir Leykin
639 23rd Ave
San Francisco, CA 94121

1621/004
Byung Park
643 23rd Ave
San Francisco, CA 94121

1621/005
Len Galant
647 23rd Ave
San Francisco, CA 94121

1621/006
Martin Wong
651 23rd Ave
San Francisco, CA 94121

1621/007
Seto Fam Tr
655 23rd Ave
San Francisco, CA 94121

1621/008
John Wong
659 23rd Ave
San Francisco, CA 94121

1621/009
Tom Wing
663 23rd Ave
San Francisco, CA 94121

Margaret Brady
Save Our Richmond Environment
535-39th Ave.
San Francisco, CA 94121

Norman Kondy
Lincoln Park Homeowners Assoc.
271 32nd Ave.
San Francisco, CA 94121

Dan Baroni
Planning Asn for the Richmond(Par)
2828 Fulton Street
San Francisco, CA 94118-3300

Peter Winkelstein
Planning Asn for the Richmond(Par)
129 24th Avenue
San Francisco, CA 94121

David Campos
Board of Supervisors
1 Dr. Carlton B. Goodlett Pl.
San Francisco, CA 94102

Eric Mar
Board of Supervisors
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Megan Sullivan
Mid Richmond Coalition
376 17th Avenue
San Francisco, CA 94121

Rose Hillson
Jordan Park Improvement Assn.
115 Parker Avenue
San Francisco, CA 94118-2607

Jesse Fink
Clement Street Merchants Association
401 Clement Street
San Francisco, CA 94118

Pre-Application Meeting Sign-in Sheet

Meeting Date: 1/8/13
Meeting Time: 6:00 - 7:30pm
Meeting Address: 550 37th Ave San Francisco, CA 94121
Project Address: 692 24th Ave San Francisco, CA 94121
Property Owner Name: PG&E
Project Sponsor/Representative: Streamline Engineering & Design

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only.

NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS
1. BARBARA CASE	2321 BALBOA	387-9947		☐
2. Jennifer Greenblat N/A	591 8th Ave	(415) 831-8568	Kinipola12003@yahoo.com	☐
3.				☐
4.				☐
5.				☐
6.				☐
7.				☐
8.				☐
9.				☐
10.				☐
11.				☐
12.				☐
13.				☐
14.				☐
15.				☐
16.				☐
17.				☐
18.				☐

Summary of discussion from the Pre-Application Meeting

Meeting Date: 1/8/13
Meeting Time: 6:00PM-7:30 PM
Meeting Address: 550 37th Ave San Francisco, CA 94121
Project Address: 692 24th Ave San Francisco, CA 94121
Property Owner Name: PG&E
Project Sponsor/Representative: Streamline Engineering & Design

Please summarize the questions/comments and your response from the Pre-Application meeting in the space below. Please state if/how the project has been modified in response to any concerns.

Question/Concern #1 by (name of concerned neighbor/neighborhood group): Barbara Case
Do we meet Federal standards for RF? How do cell sites work?

Project Sponsor Response: Showed her the third party Report. Gave her a cell site 101 discussion

Question/Concern #2: Jennifer Greenhat
How do cell sites work?

Project Sponsor Response: Gave her a cell site 101 Issuecsion.

Question/Concern #3:

Project Sponsor Response:

Question/Concern #4:

Project Sponsor Response:

Affidavit of Conducting a Pre-Application Meeting, Sign-in Sheet and Issues/Responses submittal

I, David Alameda, do hereby declare as follows:

1. I have conducted a Pre-Application Meeting for the proposed new construction or alteration prior to submitting any entitlement (Building Permit, Variance, Conditional Use, etc.) in accordance with Planning Commission Pre-Application Policy.

2. The meeting was conducted at 550 37th Ave. (location/address) on 1/8/13 (date) from 6:00PM - 7:30 PM (time). stayed until 8.30PM with last resident.

3. I have included the mailing list, meeting initiation, sign-in sheet, issue/response summary, and reduced plans with the entitlement Application. I understand that I am responsible for the accuracy of this information and that erroneous information may lead to suspension or revocation of the permit.

4. I have prepared these materials in good faith and to the best of my ability.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

EXECUTED ON THIS DAY, 1/8/13, 20_____ IN SAN FRANCISCO.

Signature

David Alameda

Name (type or print)

Project Manager

Relationship to Project (e.g Owner, Agent)
(if Agent, give business name & profession)

692 24th Ave.

Project Address

Sprint®

PROJECT: NETWORK VISION MM
MARKET: SAN FRANCISCO BAY

SF33XC682-C -GOLDEN GATE PARK

692 24TH AVE
SAN FRANCISCO, CA 94121

PROJECT DESCRIPTION

A MODIFICATION TO AN (E) UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF ADDING A (N) SPRINT MMBS CABINET, A (N) BATTERY CABINET, (3) (N) SPRINT ANTENNAS, (6) (N) RRU'S, (3) (N) HYBRID CABLES FOR FIBER & DC POWER, A (N) CIENA CABINET, A (N) UAM CABINET, A (N) FTP BOX, (N) PG&E EMERGENCY SHUTDOWN BUTTON & (3) (N) TRIPOD MOUNTS W/ ±18" RADOMES & REMOVING (3) (E) SPRINT ANTENNAS.

PROJECT INFORMATION

SITE NAME:	GOLDEN GATE PARK	SITE #:	SF33XC682-C
COUNTY:	SAN FRANCISCO	JURISDICTION:	CITY OF SAN FRANCISCO
APN:	1567 012	POWER:	PG&E
SITE ADDRESS:	692 24TH AVE SAN FRANCISCO, CA 94121	TELEPHONE:	AT&T
CURRENT ZONING:	RH-2		
CONSTRUCTION TYPE:	V		
OCCUPANCY TYPE:	U, (UNMANNED COMMUNICATIONS FACILITY)		
PROPERTY OWNER:	PG&E 245 MARKET ST MAIL CODE N10D SAN FRANCISCO, CA 94105		
APPLICANT:	BLACK & VEATCH 2999 OAK RD SUITE 490 WALNUT CREEK, CA 94597		
LEASING CONTACT:	ATTN: LAURA SONATY (925) 949-5976		
ZONING CONTACT:	ATTN: LARRY HOUGHTBY (916) 275-4180		
CONSTRUCTION CONTACT:	ATTN: KEVIN FOSTER (650) 281-4675		
LATITUDE:	N 37° 46' 35.6304" NAD 83 N 37.776564° NAD 83		
LONGITUDE:	W 122° 29' 0.9528" W -122.483598° NAD 83		
AMSL:	±181'		

PG&E INFORMATION

SITE INFO:

PG&E SITE NAME:	SF STATION K
PROJECT#:	2011-06 MOD (NV/LTE)
SBE#:	135-38-002-5

PG&E CONTACT INFO:

LAND AGENT CONTACT:	MATT RANGE (415) 973-3353 E-MAIL: MJRH@PGE.COM MAYA HERR-ANDERSON (415) 973-5736 E-MAIL: M4HA@PGE.COM
PROJECT MANAGER:	RICHARD SARTINI MOBILE: (415) 308-9400 E-MAIL: RRSR@PGE.COM
ADDRESS:	245 MARKET ST MAIL CODE N10D SAN FRANCISCO, CA 94105

VICINITY MAP

DRIVING DIRECTIONS

FROM: 2999 OAK RD SUITE 490, WALNUT CREEK, CA 94597
TO: 692 24TH AVE, SAN FRANCISCO, CA 94121

1. HEAD SOUTH ON OAK RD TOWARD COGGINS DR	312 FT
2. TURN RIGHT ONTO TREAT BLVD	0.1 MI
3. CONTINUE STRAIGHT TO STAY ON TREAT BLVD	0.1 MI
4. TURN RIGHT ONTO N MAIN ST	0.2 MI
5. TURN RIGHT ONTO THE INTERSTATE 680 S RAMP TO OAKLAND/SAN JOSE	0.1 MI
6. MERGE ONTO I-680 S	1.4 MI
7. TAKE EXIT 45 FOR CALIFORNIA 24 TOWARD LAFAYETTE/OAKLAND	1.3 MI
8. MERGE ONTO CA-24 W	12.3 MI
9. TAKE EXIT 2B TOWARD I-580 W	1.0 MI
10. MERGE ONTO I-580 W	0.5 MI
11. TAKE EXIT 19A ON THE LEFT TO MERGE ONTO I-80 W TOWARD SAN FRANCISCO	8.3 MI
12. TAKE EXIT 1B TO MERGE ONTO US-101 N TOWARD GOLDEN GATE BRIDGE	0.7 MI
13. CONTINUE ONTO CENTRAL FWY (SIGNS FOR OCTAVIA BLVD/FELL ST)	0.4 MI
14. CONTINUE ONTO OCTAVIA BLVD	0.3 MI
15. TURN LEFT ONTO FELL ST	1.6 MI
16. TURN RIGHT ONTO SHRADER ST	0.2 MI
17. TURN LEFT ONTO FULTON ST	1.7 MI
18. TURN RIGHT ONTO 24TH AVE	0.3 MI

END AT: 692 24TH AVE, SAN FRANCISCO, CA 94121
ESTIMATED TIME: 46 MINUTES ESTIMATED DISTANCE: 30.4 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.

1. 2010 CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLES 24 & 25)
2. 2010 CALIFORNIA BUILDING CODE
3. 2010 CALIFORNIA ELECTRICAL CODE
4. 2010 CALIFORNIA MECHANICAL CODE
5. 2010 CALIFORNIA PLUMBING CODE
6. 2010 CITY OF SAN FRANCISCO FIRE CODE
7. LOCAL BUILDING CODES
8. CITY/COUNTY ORDINANCES
9. 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 11348.2.1, EXCEPTION 4

SHEET INDEX

SHEET	DESCRIPTION	REV
T-1	TITLE SHEET	–
T-2	FIRE DEPT CHECKLIST	–
T-3	EMF REPORT	–
T-4	SIGNAGE DETAILS	–
A-1	SITE PLAN	–
A-2	EXISTING / INTERIM EQUIPMENT PLAN & DETAILS	–
A-3	FINAL CONFIGURATION EQUIPMENT PLAN & ELEVATION	–
A-4	EXISTING ANTENNA PLANS	–
A-5	INTERIM ANTENNA PLANS & DETAILS	–
A-6	FINAL CONFIGURATION ANTENNA PLANS	–
A-7	ELEVATIONS	–
A-8	DETAILS	–
A-9	DETAILS	–
A-10	DETAILS	–
S-1	STRUCTURAL DETAILS	–
E-1	ELECTRICAL PLAN	–
E-2	PG&E GROUND GRID	–
E-3	GROUNDING DETAILS	–
F-1	FIBER DESIGN ONE LINE DIAGRAM	–
F-2	NID DETAILS	–

APPROVAL

RF

LEASING

ZONING

CONSTRUCTION

SPRINT

PG&E

GOLDEN GATE PARK
SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: C. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THE CONSTRUCTION DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS PREPARED BY STREAMLINE ENGINEERING AND DESIGN, INC. ("STREAMLINE") ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF STREAMLINE. THE CONSTRUCTION DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE NOT TO BE CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN AUTHORIZATION AND CONSENT OF STREAMLINE. STREAMLINE SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
TITLE

SHEET NUMBER:
T-1

SAN FRANCISCO FIRE DEPT CHECKLIST - PAGE 1 OF 2

2.06 PERMIT APPLICATION CHECKLIST FOR CELLULAR ANTENNA SITES AND ALL EQUIPMENT SERVING THE CELLULAR ANTENNA SITE

This checklist shall be printed on a drawing sheet and submitted as part of the plans submitted with any building permit application creating or modifying cellular antenna sites regardless of RF emission quantities. This checklist is designed to assist designers, installers, plan reviewers, and field inspectors. This checklist shall be prepared by the design professional and shall be stamped and wet-signed.

This document is not all-inclusive of all requirements for cellular antenna sites and it is the responsibility of the designer to research the applicable codes. Documents referenced for this bulletin are as follows:

FCC OET Bulletin 56 - Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields (August 1999)
FCC OET Bulletin 65 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (Ed. 97-01:August 1997)
FCC - A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance (June 2, 2000)
2010 California Building Code (2010 CBC)
2010 California Fire Code (2010 CFC)
2010 California Mechanical Code (2010 CMC)
2010 San Francisco Fire Code (2010 SFFC)
2010 NFPA 13 Automatic Sprinkler Systems
2010 NFPA 72 National Fire Alarm Code

COMPLETE / SEE T-1 — 1. Provide a description of work on the plans.
COMPLETE / SEE A-1 THRU A-8 — 2. Plans shall include plan views and elevations showing all equipment locations and cable runs.
COMPLETE / SEE A-X — 3. Plans shall include antenna cut-sheets and equipment list on a drawing sheet.
COMPLETE / SEE T-3 — 4. Include a copy of the signed and stamped RF report on a drawing sheet as a reference to identify the exclusion area required to prevent occupational exposures in excess of the FCC guidelines (47CFR1.1310 and FCC OET Bulletin 65 edition 97-01).
COMPLETE / SEE T-3 — 5. The RF report shall indicate whether or not the site under review is a part of a multiple transmitter site and shall show compliance with FCC 47CFR1.1307(b)(3), as amended, all transmitters shall not exceed 5% of the power density exposure limit.
COMPLETE / SEE A-1 — 6. Drawings shall reflect the striped/exclusion areas per the above RF Report with a minimum radius being 1 foot.

SAN FRANCISCO FIRE DEPT CHECKLIST - PAGE 2 OF 2

COMPLETE / SEE T-3 — 7. Plans shall include a quantitive three dimensional image of the RF levels from each antenna located near an egress point (e.g. penthouse stair, fire escape, roof walking paths, skylights, etc.)
COMPLETE / SEE T-4 — 8. "Notice to Workers" warning signage as applicable per the above RF Report shall be permanently mounted at the stairwell side of the roof-access door (ANSI C95.2-1982(Reference [3])-yellow or more durable color for outdoor longevity).
COMPLETE / SEE A-X — 9. Camouflaged antennas shall have 4inch x 4inch signage permanently mounted to the exterior of the RF screen as provided below. The sign shall be weatherproof with contrasting background color and shall contain the yellow triangle around the antenna symbol (see ANSI C95.2-1982(Reference [3])-yellow or more durable color for outdoor longevity). Signage locations(s) and detail of the sign shall be included on the plans.
COMPLETE — 10. Cables/wiring shall not be allowed in exit enclosures, smoke-proof towers, elevator shafts, or in front of dry standpipes. 2010 CFC 1022.4 and 509.2
COMPLETE — 11. Antennas shall not be mounted closer than the exclusion zone plus 4 feet for installations near fire escapes, stair penthouse doors, exterior standpipe outlets, skylights, or other fire department operations considerations.
COMPLETE — 12. There is no guarantee that the fire department will not shutdown the power to the site in an emergency situation although in order to reduce the site operator's possible loss of service the following information may be provided at the equipment room entrance:

COMPLETE / SEE A-X — Provide emergency shutdown procedure signage. The sign shall include the following:

COMPLETE / SEE T-4 — * Emergency 24 hour/7 day a week NOC / field technician telephone number for RF shutdown.
COMPLETE — * Cell site identification number.
COMPLETE / SEE T-4 — *Map to location of electrical main-electrical main shall be clearly identified with a permanent red label and white lettering.
COMPLETE / SEE T-4 — *Map to location of battery cabinets and breakers-cabinets and breakers shall be clearly identified with a permanent red label and white lettering.
COMPLETE — *Any other relevant information or procedures as required for the individual cellular site.
COMPLETE / SEE T-4 — * The sign shall be clearly labeled in a phenolic label with a white background and black lettering. The title block shall be a red background and 1" high white lettering. Multiple signs may need to be installed based upon the cellular site configuration.
COMPLETE / SEE T-4 — * The actual breaker(s) shall be a phenolic label (red background and white lettering) with lettering not less than 1/8" high.
COMPLETE / SEE T-4 — * A copy of the signage shall be included on a drawing sheet.

Prepared by: Mr. Kevin R. Sorensen, SE
(Please include professional title and stamp)

Firm Name: STREAMLINE ENGINEERING & DESIGN, INC.
Address: 3268 PENRYN RD, SUITE 200
LOOMIS, CA 95650
Phone Number: 1-916-660-1930

For further information see the FCC website: http://www.fcc.gov/oet/rfsafety
or contact the
San Francisco Fire Department
1660 Mission Street, 4th Floor
San Francisco, CA 94103
(415) 558-6187

GOLDEN GATE PARK
SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY: C. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

KEVIN R SORENSEN No.4469 STRUCTURAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
FIRE DEPT CHECKLIST

SHEET NUMBER:
T-2

NOTE:
THIS PLAN SET IS IN COMPLIANCE WITH SFFD ADMINISTRATIVE BULLETIN 2.06

GOLDEN GATE PARK

SF33XC682-C

692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY: C. TIBBETT

CHECKED BY: C. MATHISEN

APPROVED BY: K. SORENSEN

DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact Kevin Sorensen Phone: 916-660-1930
E-Mail kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:

EMF REPORT

SHEET NUMBER:

T-3

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 SPRINT IS 1mW/cm² AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY SPRINT IS 5mW/cm².
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 SPRINT 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 SPRINT'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 SPRINT 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 SPRINT 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 SPRINT CONSTRUCTION PROJECT MANAGER WITH A DETAILED SHOP DRAWING OF EACH BARRICADE.
8. ALL REQUIRED SIGNAGE WILL BE INSTALLED AS NEEDED AND FIELD VERIFIED

NOTICE TO WORKERS

RADIO FREQUENCY ANTENNAS ON THIS ROOF
PLEASE EXERCISE CAUTION AROUND ANTENNAS AND OBEY POSTED SIGNS AND/OR MARKINGS FOR ACCESS TO RESTRICTED AREAS OR FOR FURTHER INFORMATION. PLEASE CALL 1-888-859-1400 (SITE NUMBER SF33XC682)

IN ACCORDANCE WITH FCC RULES 47 CFR 1.1310

AVISO A TRABAJADORES

EXISTEN ANTENAS DE RADIOFRECUENCIA EN ESTE TECHO POR FAVOR USE PRECAUCION ALREDOR DE LAS ANTENAS Y OBEDEZCA A LAS ZONAS RESTRINGIDAS O PARA OBTENER MAS INFORMACION, LLAME AL TELEFONO 1-888-859-1400 (NUMERO DE SITIO: SF33XC682)

DE ACUERDO A LAS REGLAS DE FCC 47 CFR 1.1310

工作人員注意

此屋宇房頂有射頻天線裝置
在天線範圍四周請小心,並遵照各已張貼之指示
及/或運經行事
如需進入禁區範圍或索取更多資料
請致電 1-888-859-1400 此站區號: (SF33XC682)

依據FCC條例第47 CFR1.1310 執行

NOTES:

1. WARNING SIGN TO BE MOUNTED AT ANTENNA LOCATIONS.
2. SIGN SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS.
3. SIGNAGE SHALL BE CLEARLY LABELED IN A PHENOLIC LABEL WITH A WHITE BACKGROUND AND BLACK LETTERING, AND SHALL BE READABLE FROM AT LEAST (15) FEET FROM THE SIGN.
4. PROPOSED 12"X20" PLASTIC SIGN

1 MULTI-LANGUAGE SIGN

NOTICE

Radio frequency fields beyond this point may exceed the FCC general public exposure limit.

Obey all posted signs and site guidelines for working in radio frequency environments.

SITE NO. SF33XC682

2 TYPICAL CAUTION SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED AT ANTENNA LOCATIONS.

NOTICE

GUIDELINES FOR WORKING IN RADIO FREQUENCY ENVIRONMENTS

- All personnel should have electromagnetic energy (EME) awareness training.
- All personnel entering this site must be authorized. Obey all posted signs.
- Assume all antennas are active. Before working on antennas, notify owners and disable appropriate transmitters.
- Maintain minimum 3 feet clearance from all antennas. Do not stop in front of antennas. Use personal RF monitors while working near antennas.
- Never operate transmitters without shields during normal operation.
- Do not operate base station antennas in equipment rooms.

3 TYPICAL CAUTION SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED TO THE STAIRWELL SIDE OF THE ROOF ACCESS

EMERGENCY SHUT DOWN

FOR IMMEDIATE SHUT DOWN OF ALL RADIO FREQUENCY EMISSIONS OF THIS SITE,

1) CALL CONTACT NUMBER AND GIVE SITE IDENTIFICATION NO.

CONTACT PHONE NUMBER: 1-888-859-1400
SITE IDENTIFICATION NUMBER: SF33XC682

2) DISCONNECT POWER AT MAIN SERVICE DISCONNECT:

CONTRACTOR TO SUBMIT PROPOSED WRITTEN DIRECTIONS FOR EACH OF (5) SIGNS TO PROJECT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO ORDERING SIGNS

3) DISCONNECT BACK-UP POWER AT BATTERY DISCONNECT:

CONTRACTOR TO SUBMIT PROPOSED WRITTEN DIRECTIONS FOR EACH OF (5) SIGNS TO PROJECT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO ORDERING SIGNS

SIGN SHALL BE A PHENOLIC LABEL WITH WHITE BACKGROUND AND BLACK LETTERING. THE TITLE BLOCK SHALL BE A RED BACKGROUND AND 1" HIGH WHITE LETTERING.

4 TYPICAL DISCONNECT SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED AT THE FOLLOWING LOCATIONS:

1) CELL SITE EQUIPMENT ROOM DOOR
2) BATTERY LOCATION WITHIN PROXIMITY OF BATTERY DISCONNECT
3) FCC (FIRE CONTROL CENTER) ROOM WITHIN PROXIMITY OF THE FIRE ALARM PANEL
4) BUILDING'S MAIN ELECTRICAL ROOM WITHIN PROXIMITY OF THE MAIN SHUTOFF
5) THE CELL SITE MAIN ELECTRICAL DISCONNECT

GOLDEN GATE PARK
SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY: C. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R SORENSEN
No 4459
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
SIGNAGE DETAILS

SHEET NUMBER:
T-4

PROJECT GENERAL NOTES

1. THIS FACILITY IS AN UNOCCUPIED WIRELESS TELECOMMUNICATION FACILITY.
2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE.
3. THE SCOPE OF WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
4. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRM THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PAY FOR PERMIT FEES, AND TO OBTAIN SAID PERMITS AND TO COORDINATE INSPECTIONS.
6. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
7. CALL BEFORE YOU DIG. CONTRACTOR IS REQUIRED TO CALL 811 (NATIONWIDE "CALL BEFORE YOU DIG" HOTLINE) AT LEAST 72 HOURS BEFORE DIGGING.
8. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
9. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONTRACTOR SHALL ALSO COORDINATE ALL PORTIONS OF THE WORK UNDER THE CONTRACT, INCLUDING CONTACT AND COORDINATION WITH THE CONSTRUCTION MANAGER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.
10. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, GALVANIZED SURFACES, ETC., AND UPON COMPLETION OF WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF THE PROJECT MANAGER.
11. KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS AND RUBBISH. REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
12. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED, OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
13. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND ALL OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK SHALL BE PROTECTED AT ALL TIMES.
14. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
15. THE CONTRACTOR SHALL PROVIDE A TOILET FACILITY DURING ALL PHASES OF CONSTRUCTION.
16. SUFFICIENT MONUMENTATION WAS NOT RECOVERED TO ESTABLISH THE POSITION OF THE BOUNDARY LINES SHOWN HEREON. THE BOUNDARY REPRESENTED ON THIS MAP IS BASED ON COMPILED RECORD DATA AND BEST FIT ONTO EXISTING IMPROVEMENTS. IT IS POSSIBLE FOR THE LOCATION OF THE SUBJECT PROPERTY TO SHIFT FROM THE PLACEMENT SHOWN HEREON WITH ADDITIONAL FIELD WORK AND RESEARCH. THEREFORE ANY SPATIAL REFERENCE MADE OR SHOWN BETWEEN THE RELATIONSHIP OF THE BOUNDARY LINES SHOWN HEREON AND EXISTING GROUND FEATURES, EASEMENTS OR LEASE AREA IS INTENDED TO BE APPROXIMATE AND IS SUBJECT TO VERIFICATION BY RESOLVING THE POSITION OF THE BOUNDARY LINES.
17. THE CONTRACTOR TO VERIFY THE LATEST/CURRENT RF DESIGN.
18. WHERE APPLICABLE, CONTRACTOR SHALL PROVIDE SEPARATE PLANS, SPECIFICATIONS, FEES AND PERMITS FOR ANY REVISION TO ANY FIRE SPRINKLER AND/OR ALARM SYSTEM ON THE PREMISES AS MAY BE NEEDED TO COMPLETE THE WORK DEPICTED HEREIN, USING A C-10 LICENSED SUBCONTRACTOR FOR ALL SUCH WORK.

CFC CHAPTER 6 COMPLIANCE

TOTAL ELECTROLYTE= 12 BATTERIES X 2.49 GAL/BATTERY = 29.88 GAL

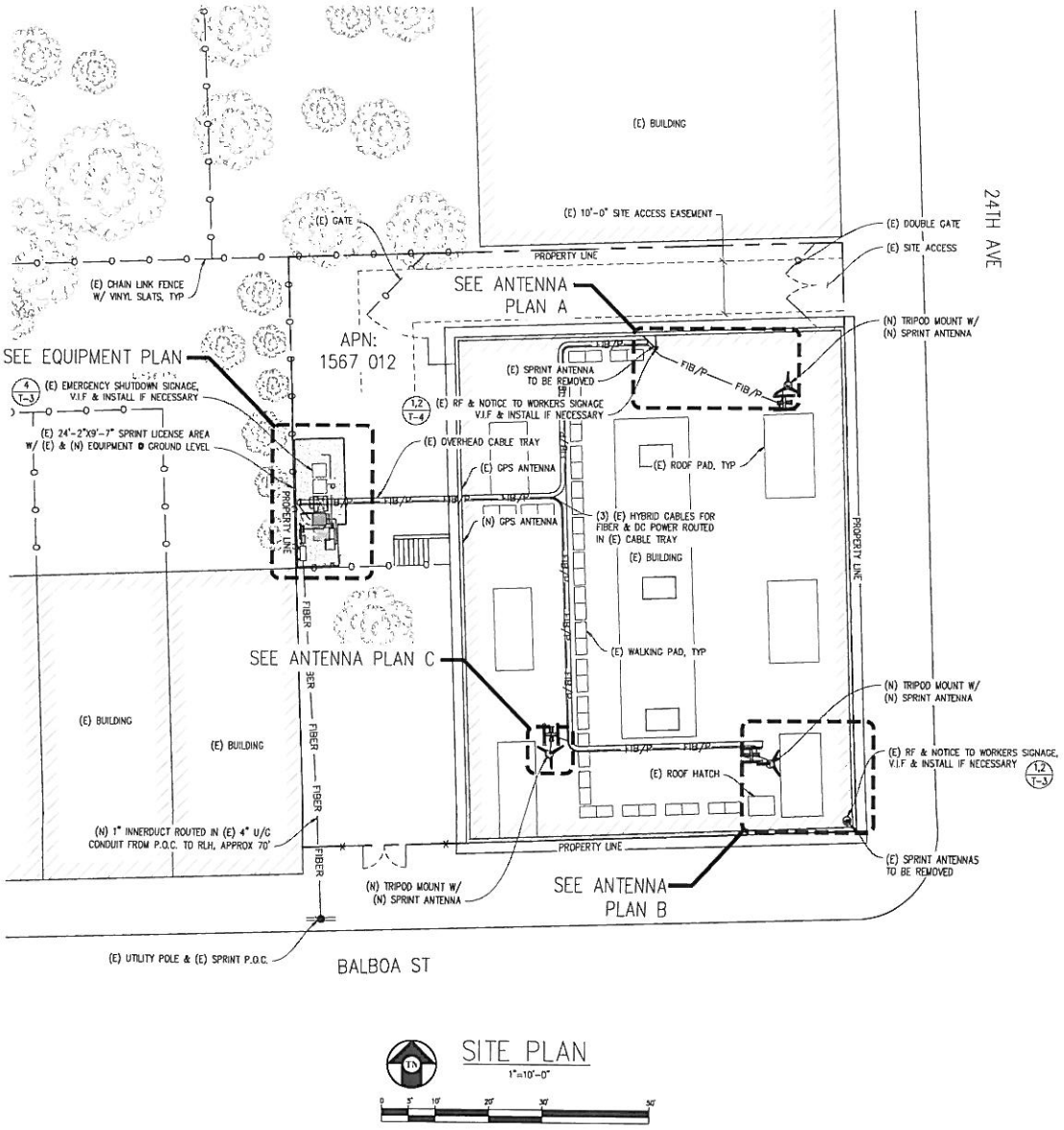
(SINCE <50 GAL OF ELECTROLYTE, CFC CHAPTER 6, SECTION 608 NOT APPLICABLE)

BATTERY INFORMATION (BATTERY ELECTROLYTE DATA-12V MONOBLOCKS)

BATTERY MODEL	TOTAL # OF BATTERY UNITS INSTALLED	TOTAL ELECTROLYTE VOLUME(GAL) PER UNIT	TOTAL ELECTROLYTE WEIGHT (LBS) PER UNIT	% SULFURIC ACID BY VOL = ACID VOLUME/UNIT / ELECTROLYTE VOLUME/UNIT
NARADA 12NDT190	12	2.49 GAL	29.88 LBS	58% = 1.45 GAL/2.49 GAL

% SULFURIC ACID BY WEIGHT = TOTAL ACID WEIGHT / TOTAL ELECTROLYTE WEIGHT	TOTAL SULFURIC VOLUME (GAL) = TOTAL UNITS X ELECTROLYTE VOLUME/UNITS	TOTAL SULFURIC WEIGHT (LBS) = TOTAL UNITS X ACID WEIGHT/UNIT
37.3% = 11.12 LBS/29.88 LBS	17.4 GAL = 12 UNITS X 1.45 GAL/UNIT	133.44 LBS = 12 UNITS X 11.12 LBS

BATTERY DATA CHART



SITE PLAN

1"=10'-0"

0 5' 10' 20' 30' 50'

GOLDEN GATE PARK

SF33XC682-C

693 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN, INC. AND SHALL NOT BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF STREAMLINE ENGINEERING AND DESIGN, INC. IN THE EVENT OF UNAUTHORIZED REUSE OF THESE PLANS BY ANY THIRD PARTY, THE THIRD PARTY AGREES TO INDEMNIFY AND HOLD HARMLESS STREAMLINE ENGINEERING AND DESIGN, INC. FOR ANY AND ALL CLAIMS, DAMAGES AND EXPENSES ARISING OUT OF SUCH UNAUTHORIZED REUSE.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
A-1

EXPANSION & EPOXY ANCHORS

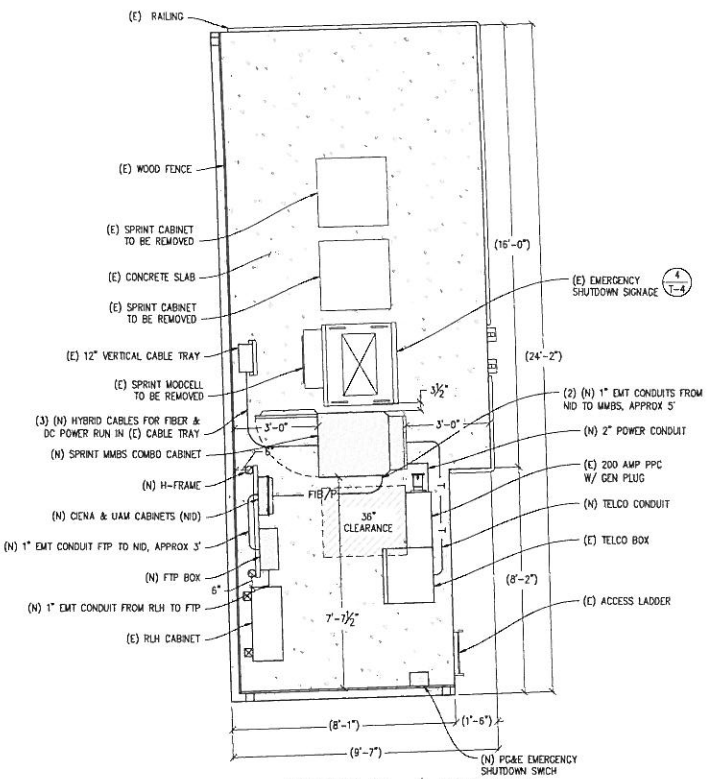
1. EXPANSION AND EPOXY ANCHORS SHALL BE IN CONFORMANCE WITH ALL REQUIREMENTS OF THE 2010 CALIFORNIA BUILDING CODE (CBC).
2. ALL ANCHORS PROVIDED SHALL BE INCLUDED IN EVALUATION REPORTS OF THE INTERNATIONAL CODE COUNCIL (ICC), AND SHALL BE EVALUATED FOR 2006 IBC MINIMUM REQUIREMENTS. IN THE ICC REPORT
3. CONCRETE EXPANSION ANCHORS SHALL BE KWIK BOLT TZ BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1917 OR APPROVED EQUIVALENT.
4. CMU EXPANSION ANCHORS SHALL BE KWIK BOLT 3 BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1385 OR APPROVED EQUIVALENT. ANCHORS SHALL BE INSTALLED A MINIMUM OF 1⅜" FROM ANY VERTICAL MORTAR JOINT TYPICAL. ANCHORS TO BE SPACED 8 INCHES ON CENTER MINIMUM AND LIMITED TO ONE ANCHOR PER CELL.
5. CONCRETE & GROUT FILLED CMU ADHESIVE EPOXY ANCHORS SHALL BE HIT RE-500SD BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-2322 OR APPROVED EQUIVALENT
6. INSTALL EXPANSION AND EPOXY ANCHORS WITH SPECIAL INSPECTION IN ACCORDANCE WITH THE 2010 CBC, CHAPTER 17, AND ALL REQUIREMENTS OF THE MANUFACTURER, THE MANUFACTURER'S ICC APPROVAL AND THESE DRAWINGS.
7. EXPANSION ANCHORS SHALL BE 304/316 STAINLESS STEEL U.O.N. EPOXY ANCHOR THREADED ROD SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL U.O.N.
8. LOCATE AND AVOID REINFORCEMENT AND OTHER EMBEDDED ITEMS WHEN INSTALLING ANCHORS, TYPICAL. SEE CONCRETE CORE DRILLING NOTES FOR ADDITIONAL INFORMATION.
9. THE SPECIAL INSPECTOR MUST MAKE PERIODIC INSPECTIONS DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE AND DIMENSIONS, CONCRETE MEMBER THICKNESS, ANCHOR SPACING, EDGE DISTANCES, TIGHTENING TORQUE, HOLE DIAMETER, DEPTH AND CLEANLINESS, ANCHOR EMBEDMENT AND ADHERENCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. SEE NOTE 10 BELOW FOR FREQUENCY OF INSPECTIONS.
10. 50% OF ALL ANCHORS, INCLUDING ALTERNATE BOLTS IN A GROUP OF ANCHORS, SHALL BE INSPECTED PER NOTE 9 ABOVE AND TORQUE TESTED PER THE ICC REPORT TEST VALUES.

CONCRETE CORE/DRILLING NOTES

1. WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED OR POST-TENSIONED REINFORCED CONCRETE (MILD REINFORCED), USE CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE (E) REINFORCING BARS. WHEN INSTALLING THEM INTO (E) PRE-STRESSED OR POST-TENSIONED CONCRETE LOCATE THE PRE-STRESSED OR POST-TENSIONED TENDONS BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, AT POINT OF PENETRATION. PRIOR TO INSTALLATION, EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.
2. WHEN CORING EXISTING REINFORCED CONCRETE OF ANY CONSTRUCTION TYPE (PRE-STRESSED, POST-TENSIONED OR MILD REINFORCED), LOCATE THE EXISTING REINFORCING BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, PRIOR TO CORING. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING ANY REINFORCING DURING CORING. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE CORE. THE MAXIMUM SIZE OF ANY CORE IS TO BE 8" DIAMETER AND THE MINIMUM SPACING BETWEEN CORES IS TO BE TWICE THE CORE DIAMETER (I.E. 12" SPACING FOR A 6" DIAMETER CORE).
3. INSPECTOR IS TO BE PRESENT DURING ALL CORE DRILLING OPERATIONS TO VERIFY THAT NO REINFORCING CABLES, TENDONS, OR REBAR HAVE BEEN CUT. (SEE NOTE 5 BELOW)
4. THE INSPECTOR SHALL SUBMIT A WRITTEN REPORT TO THE OWNER.
5. THE INSPECTIONS INDICATED IN NOTES 3 AND 4 ABOVE ARE NOT REQUIRED FOR A CONCRETE FILL OVER METAL DECK APPLICATION WHERE INDICATED ON THE CONSTRUCTION DRAWINGS.

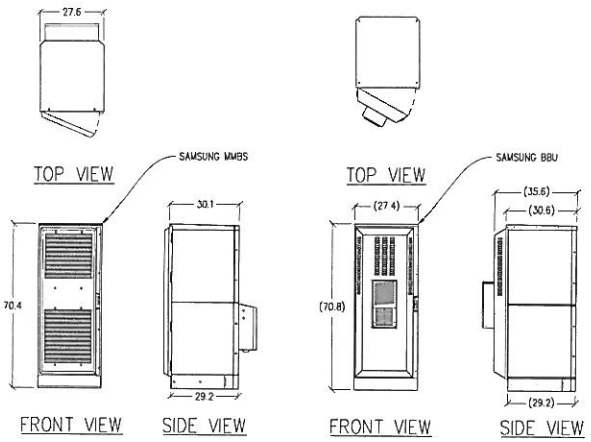
STRUCTURAL STEEL NOTES

1. ALL STEEL CONSTRUCTION INCLUDING FABRICATION, ERECTION AND MATERIALS SHALL COMPLY WITH ALL REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND THE 2010 CBC.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED. ALL WF (WIDE FLANGE) & WT (TEE) SHAPES TO BE ASTM A992 (F_y=50,000 PSI) UNLESS NOTED OTHERWISE. ALL STRUCTURAL TUBING (TS OR HSS) SHALL BE ASTM A500 GRADE B (F_y=46,000 PSI). ALL STEEL PIPE SHALL BE ASTM A53 (TYPE E OR S, GRADE B (F_y=35,000 PSI)) SCHEDULE 40 WITH OUTSIDE DIAMETERS GIVEN UNLESS OTHERWISE NOTED
3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND SHALL CONFORM TO AISC & AWS D1.1 WHERE FILLET WELD SIZES ARE NOT SHOWN PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC SPECIFICATION. PAINTED SURFACES SHALL BE TOUCHED UP.
4. ALL WELDING SHALL BE PERFORMED BY QUALIFIED, CERTIFIED WELDERS.
5. BOLTS SHALL BE GALVANIZED ASTM A325 MINIMUM. BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS. SPECIAL INSPECTION NOT REQUIRED U.O.N.
6. THREADED RODS SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL. BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS.
7. ALL HOLES FOR BOLTED CONNECTIONS SHALL BE 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. USE STANDARD AISC GAGE AND PITCH FOR BOLTS EXCEPT AS NOTED OTHERWISE. HOLES FOR ANCHOR BOLTS IN BASE PLATES MAY BE AISC "OVERSIZE" HOLES WHERE ACCOMPANIED BY OVERSIZED HARDENED HDG WASHERS.
8. ALL SHOP FABRICATED STEEL STRUCTURAL MEMBERS FOR EXTERIOR USE SHALL BE HOT DIP GALVANIZED PER ASTM A123 AFTER FABRICATION & PAINTED PER CUSTOMER SPECIFICATIONS AS REQUIRED. STEEL FOR INTERIOR USE SHALL BE SHOP COAT OR GALVANIZED & PAINTED PER PLAN.
9. ALL FIELD FABRICATED GALVANIZED STEEL THAT IS CUT, GROUND, DRILLED, WELDED OR DAMAGED SHALL BE TREATED WITH "ZINC RICH" COLD GALVANIZING SPRAY OR COATING. NO RAW STEEL SHALL BE EXPOSED.



EXISTING / INTERIM EQUIPMENT PLAN

1/2"=1'-0"

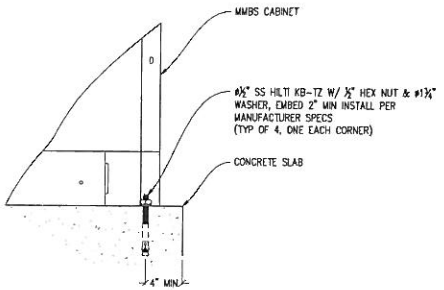


1 MMBS CABINET

1/2"=1'-0"

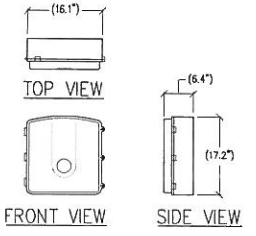
2 BATTERY CABINET

1/2"=1'-0"



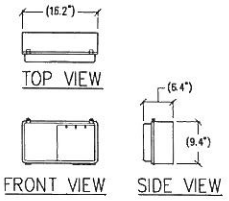
3 CABINET ANCHORING DETAIL

1"=6"



4 CN 3911 DETAIL

1"=1'-0"



5 UAM DETAIL

1"=1'-0"

GOLDEN GATE PARK

SF33XC682-C

692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1300 Fax: 916-660-1941
E-Mail: kevin@streamlineeng.com

THESE PLANS ARE THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN, INC. AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF STREAMLINE ENGINEERING AND DESIGN, INC. VISUAL CONTACT WITH THESE PLANS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

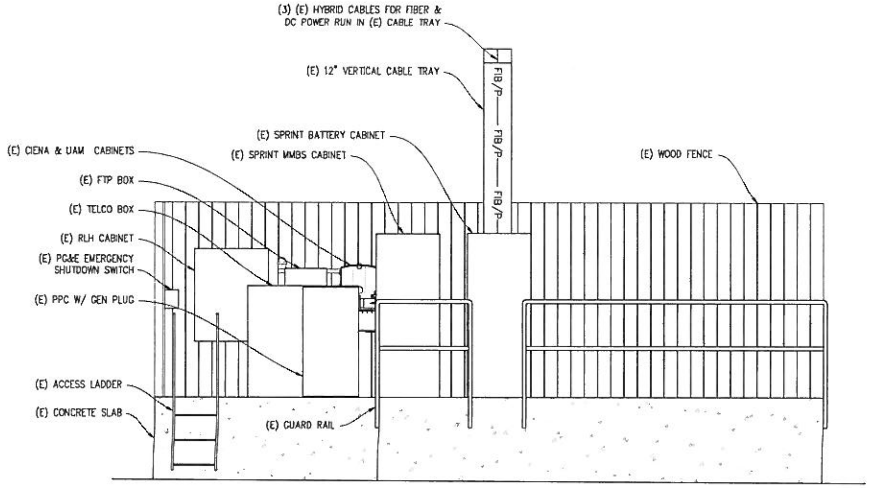
REGISTERED PROFESSIONAL ENGINEER
KEVIN R SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

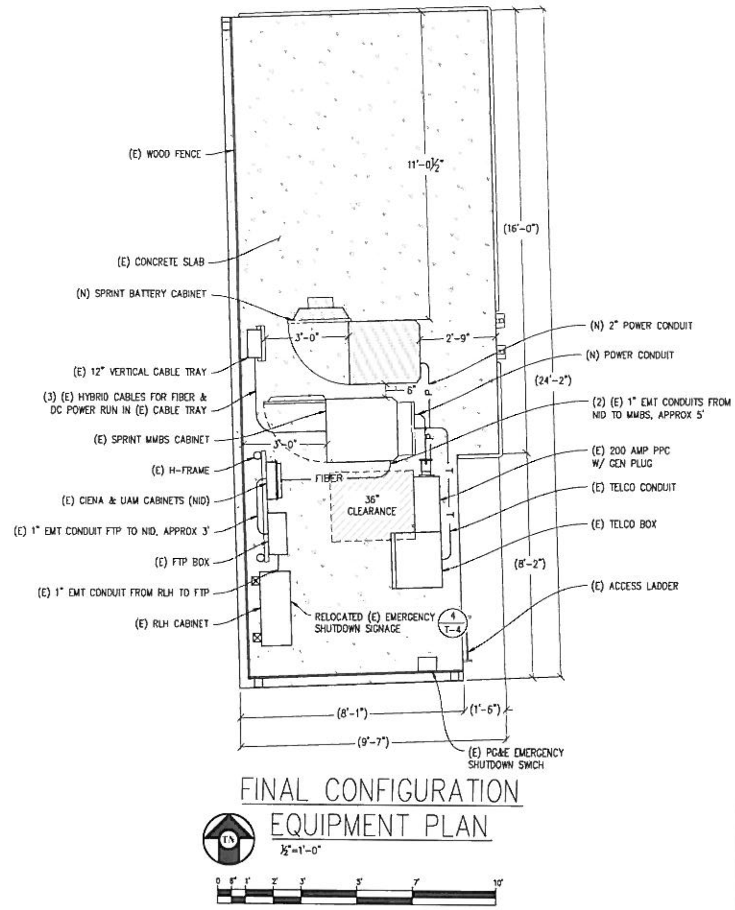
1267 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
EXISTING / INTERIM EQUIPMENT PLAN & DETAILS

SHEET NUMBER:
A-2


(3) (E) HYBRID CABLES FOR FIBER & DC POWER RUN IN (E) CABLE TRAY
(E) 12" VERTICAL CABLE TRAY
(E) SPRINT BATTERY CABINET
(E) SPRINT MMBS CABINET
(E) WOOD FENCE
(E) CIENA & UAM CABINETS
(E) FTP BOX
(E) TELCO BOX
(E) RLH CABINET
(E) PG&E EMERGENCY SHUTDOWN SWITCH
(E) PPC W/ GEN PLUG
(E) ACCESS LADDER
(E) CONCRETE SLAB
(E) GUARD RAIL
FIB/P

EQUIPMENT ELEVATION
½"=1'-0"


(E) WOOD FENCE
(E) CONCRETE SLAB
(N) SPRINT BATTERY CABINET
(E) 12" VERTICAL CABLE TRAY
(3) (E) HYBRID CABLES FOR FIBER & DC POWER RUN IN (E) CABLE TRAY
(E) SPRINT MMBS CABINET
(E) H-FRAME
(E) CIENA & UAM CABINETS (NID)
(E) 1" EMT CONDUIT FTP TO NID, APPROX 3'
(E) FTP BOX
(E) 1" EMT CONDUIT FROM RLH TO FTP
(E) RLH CABINET
RELOCATED (E) EMERGENCY SHUTDOWN SIGNAGE
(N) 2" POWER CONDUIT
(N) POWER CONDUIT
(2) (E) 1" EMT CONDUITS FROM NID TO MMBS, APPROX 5'
(E) 200 AMP PPC W/ GEN PLUG
(E) TELCO CONDUIT
(E) TELCO BOX
(E) ACCESS LADDER
(E) PG&E EMERGENCY SHUTDOWN SWICH
11'-0½"
(16'-0")
(24'-2")
(8'-2")
2'-9"
3'-0"
6"
FIBER
36" CLEARANCE
(8'-1")
(9'-7")
(1'-6")

FINAL CONFIGURATION
EQUIPMENT PLAN
½"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

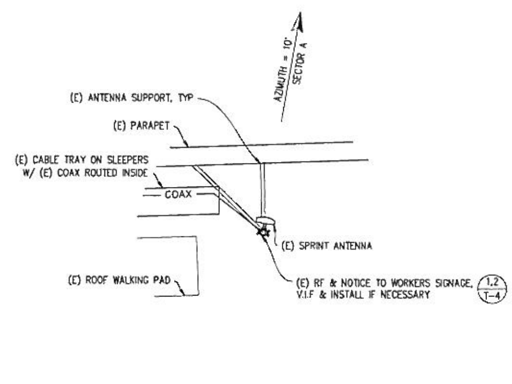
Streamline Engineering and Design Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

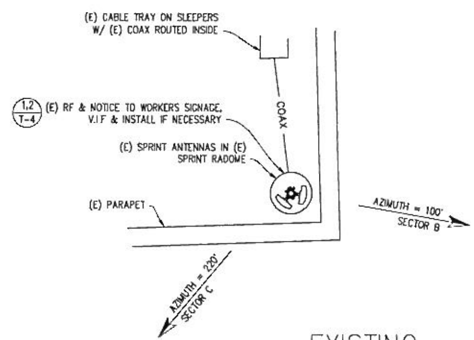
Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
FINAL CONFIGURATION EQUIPMENT PLAN & ELEVATION

SHEET NUMBER:
A-3



EXISTING
ANTENNA PLAN A
½"=1'-0"



EXISTING
ANTENNA PLAN B & C
½"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

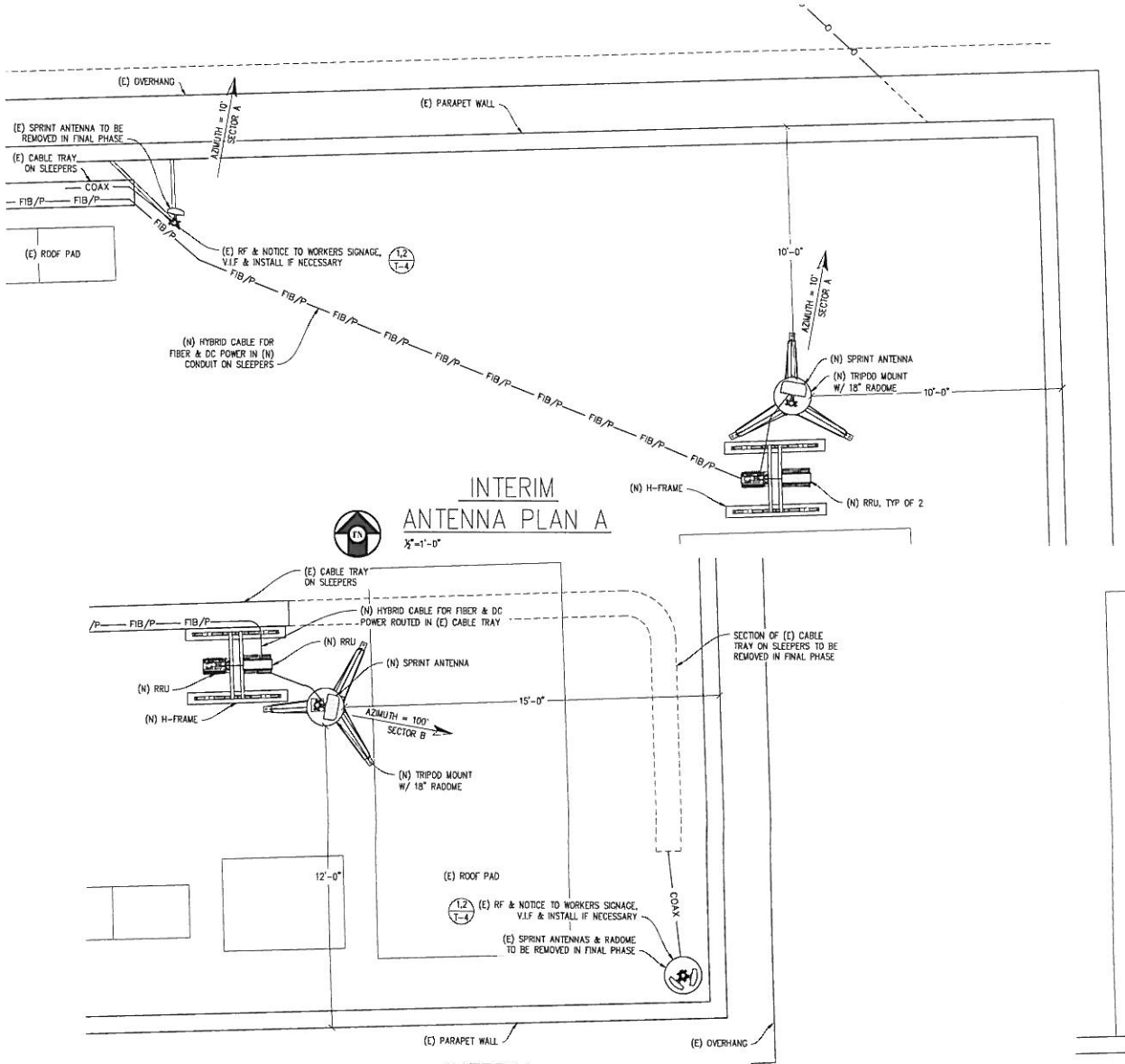
Streamline Engineering and Design Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact Kevin Sorensen Phone 916-660-1930
E-Mail kevin@streamlineeng.com Fax 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

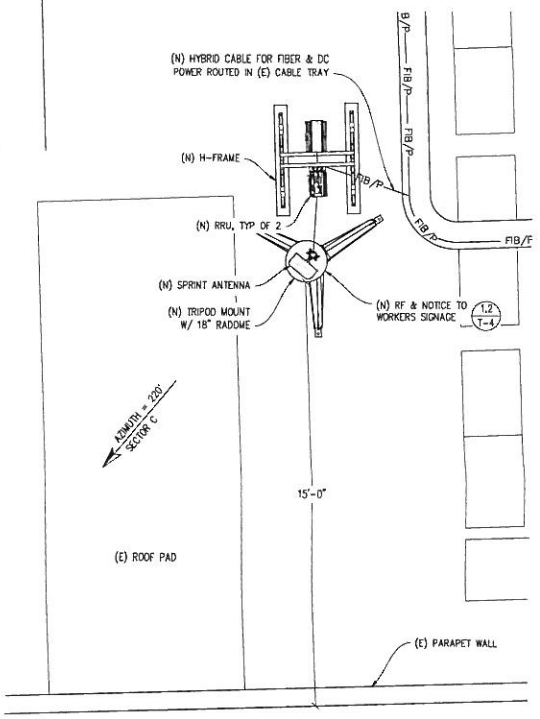
SHEET TITLE:
EXISTING ANTENNA PLANS

SHEET NUMBER:
A-4



INTERIM
ANTENNA PLAN A
1/2"=1'-0"

INTERIM
ANTENNA PLAN B
1/2"=1'-0"



INTERIM
ANTENNA PLAN C
1/2"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
492 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

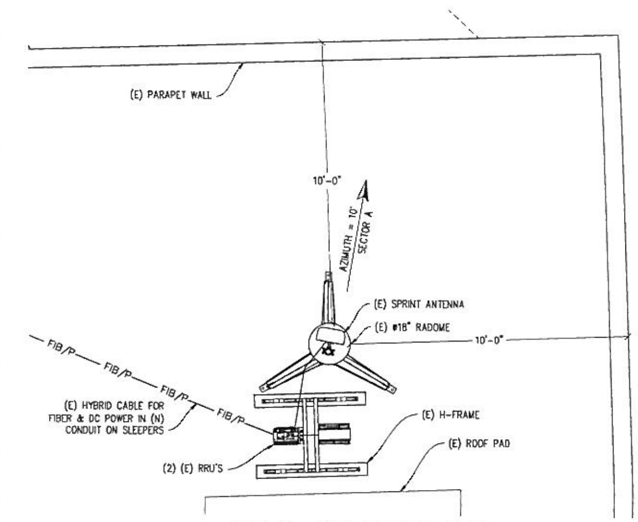
Streamline Engineering and Design
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

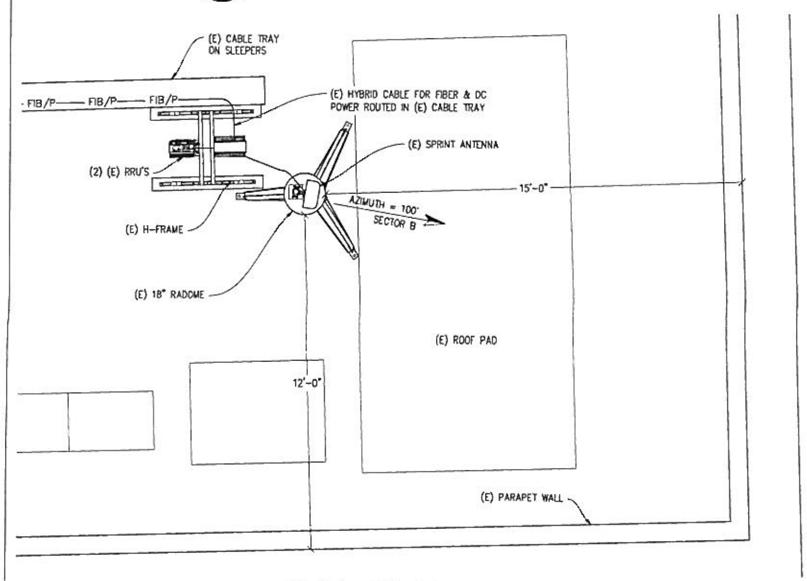
Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
INTERIM ANTENNA PLANS & DETAILS

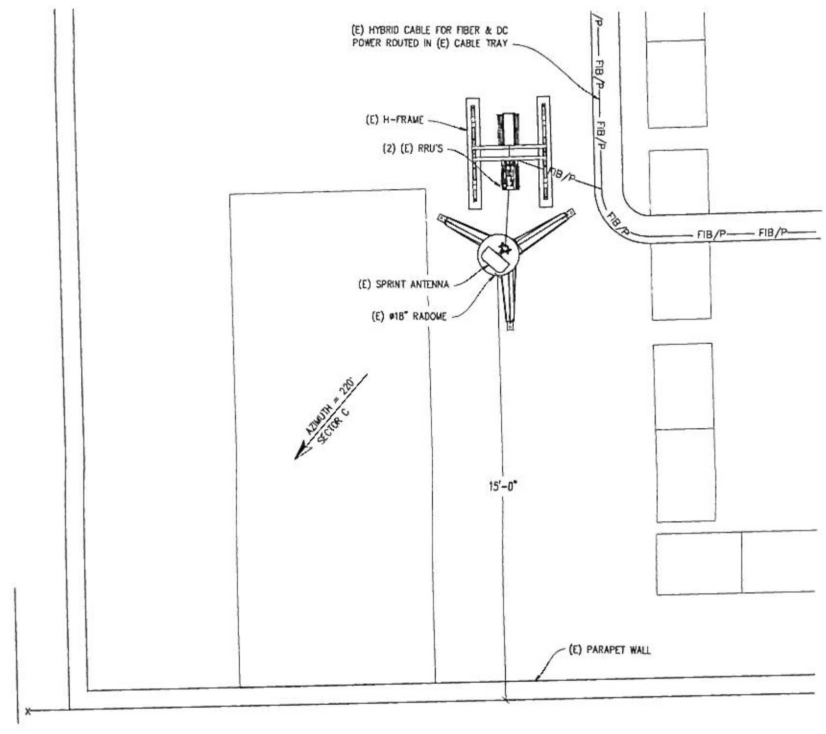
SHEET NUMBER:
A-5



FINAL CONFIGURATION
ANTENNA PLAN A
½"=1'-0"



FINAL CONFIGURATION
ANTENNA PLAN B
½"=1'-0"



FINAL CONFIGURATION
ANTENNA PLAN C
½"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

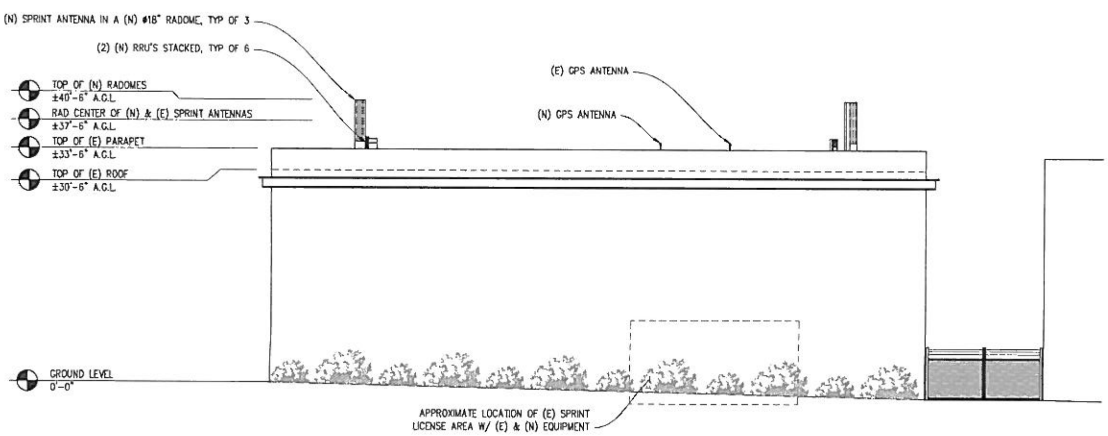
DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone 916-660-1930
E-Mail: kevin@streamlineeng.com Fax 916-660-1941

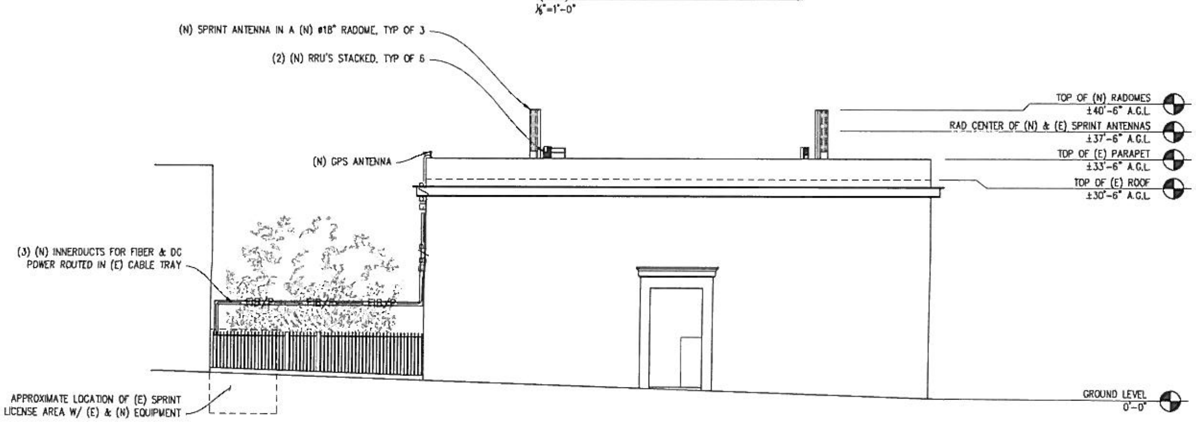
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
FINAL CONFIGURATION ANTENNA PLANS
SHEET NUMBER:
A-6



(N) EAST ELEVATION
⅛"=1'-0"



(N) SOUTH ELEVATION
⅛"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY:	G. TIBBETT
CHECKED BY	C. MATHISEN
APPROVED BY	K. SORENSEN
DATE:	10/20/12

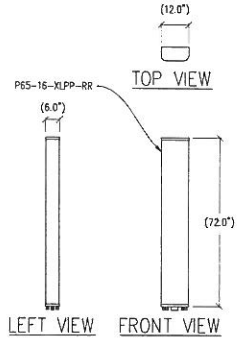
Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact Kevin Sorensen Phone 916-660-1930
E-Mail kevin@streamlineeng.com Fax 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

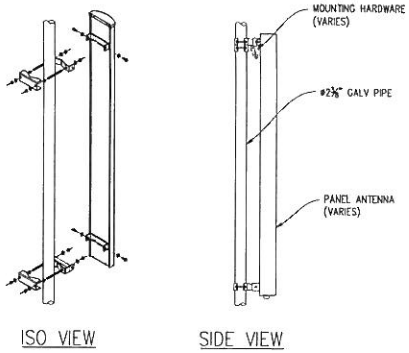
Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
ELEVATIONS

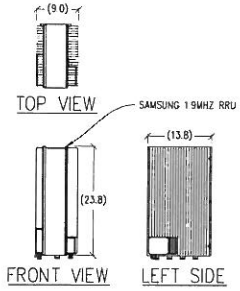
SHEET NUMBER:
A-7



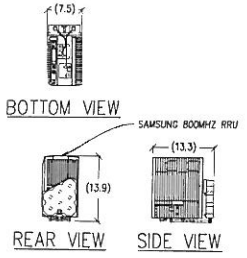
1 ANTENNA DETAIL
1"=1'-0"



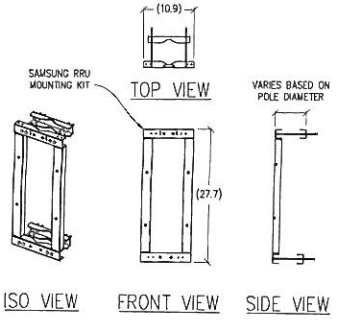
2 ANTENNA MOUNT DETAIL
1"=1'-0"



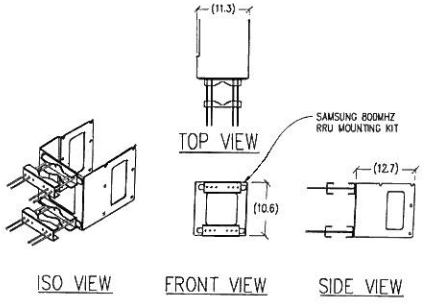
3 1900MHZ RRU UNIT
1"=1'-0"



4 800MHZ RRU UNIT
1"=1'-0"



5 1900 RRU PIPE MOUNT
1"=1'-0"



6 800MHZ RRU PIPE MOUNT
1"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
691 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY: C. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

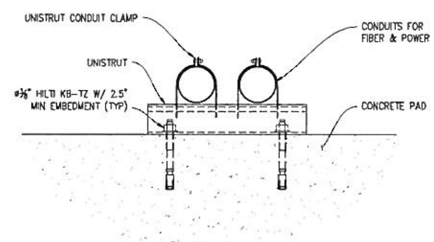
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
DETAILS

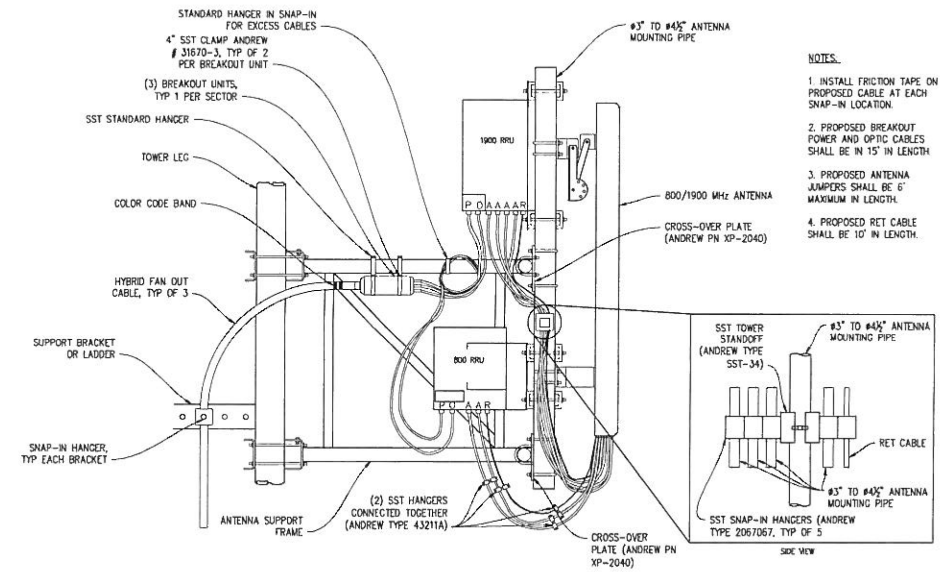
SHEET NUMBER:
A-8

CONSTRUCTION NOTES

1. EXISTING BUILDING CONSTRUCTION CONDITIONS INDICATED ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION OR ORDERING OF MATERIALS. IF EXISTING CONDITIONS DO NOT ALLOW FOR DETAILS OF CONSTRUCTION AS SHOWN ON THESE DRAWINGS, NOTIFY ENGINEER OF RECORD FOR RESOLUTION PRIOR TO PROCEEDING. CONTRACTOR SHALL EXPOSE AND REVIEW EXISTING CONDITIONS IN A TIMELY MANNER SUCH THAT ALTERNATE DESIGNS OR DETAILS, IF REQUIRED MAY BE GENERATED WITHOUT DELAY TO THE PROJECT.
2. DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT ALTER, DAMAGE OR REMOVE ANY PART OF THE EXISTING STRUCTURE UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS.
3. THE INTENT OF THESE DRAWINGS IS THAT THE WORK OF THE ADDITION, ALTERATION, REHABILITATION, OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 2010 CBC. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE 2010 CBC, A CHANGE ORDER, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE PREPARED AND SUBMITTED TO AND APPROVED BY THE BUILDING DEPARTMENT PRIOR TO PROCEEDING WITH THE WORK.
4. ALL WORK AND MATERIALS SHOWN ARE NEW UNLESS INDICATED AS EXISTING (E).
5. IT MAY BE NECESSARY TO REMOVE ARCHITECTURAL FINISHES, PLUMBING PIPES AND FIXTURES, ELECTRICAL CONDUIT, FIXTURES, PANELS, BOXES, TELEPHONE OR FIRE ALARM WIRING AND FIXTURES OR OTHER NON-STRUCTURAL ITEMS TO INSTALL STRUCTURAL WORK AND MATERIALS SHOWN ON THESE DRAWINGS. SUCH ITEMS SHALL BE REMOVED, REPAIRED AND/OR REPLACED TO MATCH PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTORS EXPENSE.
6. ALL WEATHER PROOFING INCLUDING BUT NOT LIMITED TO TORCH DOWN, CAULKING, Z-FLASHING OR ANY OTHER MATERIAL THAT MAY BE ALTERED DURING INSTALLATION SHALL BE REPAIRED REPLACED AND/OR MODIFIED TO ENSURE THE BUILDING AT THE INSTALLATION SITE IS WEATHER PROOF.
7. ANY PROPOSED SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE, ANCHOR TYPES, OR DETAILING INDICATED IN THESE DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ORDERING MATERIALS. SUCH REVIEW SHALL BE BILLED ON A TIME AND MATERIALS BASIS TO THE CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.



(1) CONDUIT MOUNTING DETAIL
1"=3"



NOTES:

1. INSTALL FRICTION TAPE ON PROPOSED CABLE AT EACH SNAP-IN LOCATION.
2. PROPOSED BREAKOUT POWER AND OPTIC CABLES SHALL BE IN 15' IN LENGTH
3. PROPOSED ANTENNA JUMPERS SHALL BE 6' MAXIMUM IN LENGTH.
4. PROPOSED RET CABLE SHALL BE 10' IN LENGTH.

(2) BOOM & STAND-OFF 800/1900 ANTENNA DETAIL
NOT TO SCALE
NOTE: FOR DIAGRAMMATICAL PURPOSE ONLY. ACTUAL ANTENNA MOUNT WILL VARY.

ANTENNA SCHEDULE [SF33XC682-C]

	ANTENNAS					RRU'S				CABLING							
	SECTOR	TECHNOLOGY	ANTENNA MODEL	RAD CENTER	AZIMUTH	RRU FREQ.	RRU MODEL	NO. OF RRU'S	NO. OF FILTERS	NO. OF JUMPERS	JUMPER LENGTH (ø½")	NO. OF RET CABLES	NO. OF HYBRID CABLES	HYBRID CABLE LENGTH (LINEAR FEET)	NO. OF COAX CABLES	COAX DIA.	COAX LENGTH
ALPHA SECTOR	A1	800/1900 MHz	P65-16-XLPP-RR	37'-6"	10°	800 MHz	RRH-C2A	1	1	2	8'	1	1	131'	N/A	N/A	N/A
						1900 MHz	RRH-P4	1	0	4	8'	1			N/A	N/A	N/A
	A2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			4	⅞	128'
	A3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A
BETA SECTOR	B1	800/1900 MHz	P65-16-XLPP-RR	37'-6"	100°	800 MHz	RRH-C2A	1	1	2	8'	1	1	180'	N/A	N/A	N/A
						1900 MHz	RRH-P4	1	0	4	8'	1			N/A	N/A	N/A
	B2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			4	⅞	177'
	B3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A
GAMMA SECTOR	C1	800/1900 MHz	P65-16-XLPP-RR	37'-6"	220°	800 MHz	RRH-C2A	1	1	2	8'	1	1	148'	N/A	N/A	N/A
						1900 MHz	RRH-P4	1	0	4	8'	1			N/A	N/A	N/A
	C2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			4	⅞	145'
	C3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A
	N/A	GPS	GPS-TMG-HR-26NCM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	½"	10'

SECTOR	CABLE	FIRST RING	SECOND RING	THIRD RING
1 ALPHA	1	GREEN	NO TAPE	NO TAPE
	2	BLUE	NO TAPE	NO TAPE
	3	BROWN	NO TAPE	NO TAPE
	4	WHITE	NO TAPE	NO TAPE
	5	RED	NO TAPE	NO TAPE
	6	SLATE	NO TAPE	NO TAPE
	7	PURPLE	NO TAPE	NO TAPE
	8	ORANGE	NO TAPE	NO TAPE
2 BETA	1	GREEN	GREEN	NO TAPE
	2	BLUE	BLUE	NO TAPE
	3	BROWN	BROWN	NO TAPE
	4	WHITE	WHITE	NO TAPE
	5	RED	RED	NO TAPE
	6	SLATE	SLATE	NO TAPE
	7	PURPLE	PURPLE	NO TAPE
	8	ORANGE	ORANGE	NO TAPE
3 GAMMA	1	GREEN	GREEN	GREEN
	2	BLUE	BLUE	BLUE
	3	BROWN	BROWN	BROWN
	4	WHITE	WHITE	WHITE
	5	RED	RED	RED
	6	SLATE	SLATE	SLATE
	7	PURPLE	PURPLE	PURPLE
	8	ORANGE	ORANGE	ORANGE

FREQUENCY COLOR CODE FOR PAIRS AND FIBER CABLES OF HYBRID CABLE

FREQUENCY COLOR CODE	INDICATOR	ID
800 MHz #1	YELLOW	GREEN
1900 MHz #1	YELLOW	RED
1900 MHz #2	YELLOW	BROWN
RESERVED	YELLOW	BLUE
RESERVED	YELLOW	SLATE
RESERVED	YELLOW	ORANGE
RESERVED	YELLOW	WHITE
RESERVED	YELLOW	PURPLE

TYPICAL HYBRID CABLE COLOR CODE

SECTOR	FIRST RING	SECOND RING	THIRD RING
1	GREEN	NO TAPE	NO TAPE
2	GREEN	GREEN	NO TAPE
3	GREEN	GREEN	GREEN

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

Δ	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

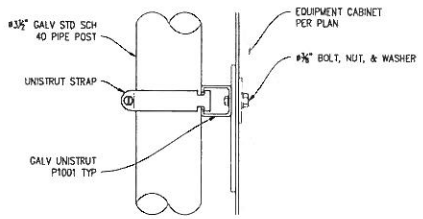
DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

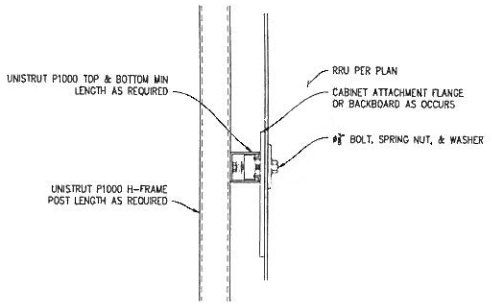
Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
DETAILS & NOTES
SHEET NUMBER:
A-9

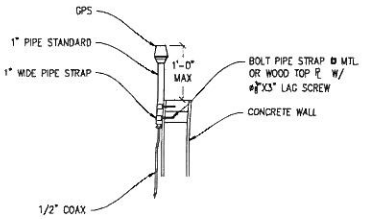


SIDE VIEW

1 CABINET MOUNTING DETAIL
1"=1'-0"



2 H-FRAME CABINET MOUNTING DETAIL
1"=1'-0"

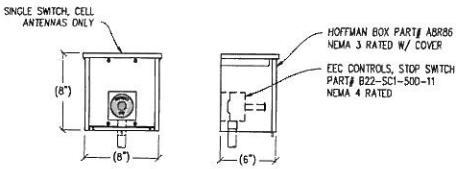


SIDE VIEW

3 GPS ANTENNA DETAIL
1"=1'-0"

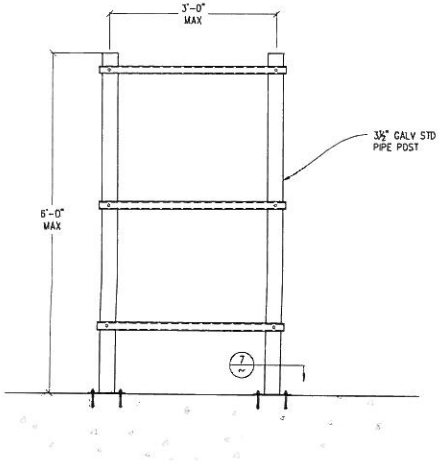
INSTALLATION & PLACEMENT GUIDELINES

1. THE SHUTDOWN SWITCH BOX SHALL BE, CLEARLY VISIBLE WHEN APPROACHING THE SITE, LOCATED INSIDE A PG&E LOCKED BOX, AND LOCATED OUTSIDE LICENSEE EQUIPMENT SHELTER
2. FOR EQUIPMENT SHELTER INSTALLATIONS: THE SHUTDOWN SWITCH BOX SHALL BE LOCATED ADJACENT TO THE EQUIPMENT SHELTER ENTRANCE DOOR.
3. FOR FENCED EQUIPMENT CABINET INSTALLATIONS: THE SHUTDOWN SWITCH BOX SHALL BE LOCATED WITHIN THE FENCED AREA AS CLOSE AS POSSIBLE TO THE FENCE ENTRANCE AND IN PLAIN VIEW.
4. FOR UNFENCED EQUIPMENT CABINET INSTALLATIONS: THE SHUTDOWN SWITCH BOX SHALL BE PLACED IN DIRECT VIEW FROM SITE ACCESS PATH.
5. FOR UNDERGROUND VAULT INSTALLATIONS: THE SHUTDOWN SWITCH BOX SHALL BE MOUNTED TO THE ABOVE GROUND PORTION OF THE ACCESS ENTRANCE.

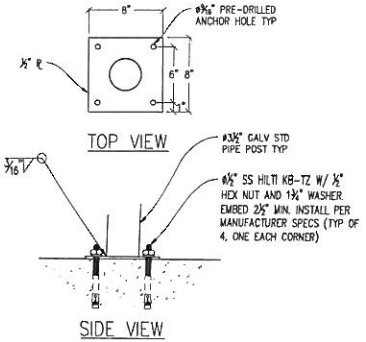


FRONT VIEW RIGHT VIEW

4 EMERGENCY STOP SWITCH DETAIL
1"=6"



5 H-FRAME DETAIL
1"=1'-0"



6 H-FRAME PLATE DETAIL
1"=6"

GOLDEN GATE PARK
SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact Kevin Sorensen Phone 916-660-1930
E-Mail kevin@streamlineeng.com Fax 916-660-1941

THESE PLANS ARE AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. THEY ARE NOT TO BE CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF STREAMLINE ENGINEERING AND DESIGN INC. ANY UNAUTHORIZED USE OF THESE PLANS IN ANY MANNER WHATSOEVER SHALL BE AT THE SOLE RISK OF THE PARTY USING OR RELYING UPON THE PLANS, AND SHALL BE WITHOUT LIABILITY TO STREAMLINE ENGINEERING AND DESIGN INC. THE PARTY USING OR RELYING UPON THE PLANS AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS STREAMLINE ENGINEERING AND DESIGN INC. FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, ARISING OUT OF OR RESULTING FROM THE UNAUTHORIZED USE OF THE PLANS.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
DETAILS

SHEET NUMBER:
A-10

CONSTRUCTION NOTES

1. EXISTING BUILDING CONSTRUCTION CONDITIONS INDICATED ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION OR ORDERING OF MATERIALS. IF EXISTING CONDITIONS DO NOT ALLOW FOR DETAILS OF CONSTRUCTION AS SHOWN ON THESE DRAWINGS, NOTIFY ENGINEER OF RECORD FOR RESOLUTION PRIOR TO PROCEEDING. CONTRACTOR SHALL EXPOSE AND REVIEW EXISTING CONDITIONS IN A TIMELY MANNER SUCH THAT ALTERNATE DESIGNS OR DETAILS, IF REQUIRED MAY BE GENERATED WITHOUT DELAY TO THE PROJECT.
2. DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT ALTER, DAMAGE OR REMOVE ANY PART OF THE EXISTING STRUCTURE UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS.
3. THE INTENT OF THESE DRAWINGS IS THAT THE WORK OF THE ADDITION, ALTERATION, REHABILITATION, OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 2010 CBC. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE 2010 CBC, A CHANGE ORDER, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE PREPARED AND SUBMITTED TO AND APPROVED BY THE BUILDING DEPARTMENT PRIOR TO PROCEEDING WITH THE WORK.
4. ALL WORK AND MATERIALS SHOWN ARE NEW UNLESS INDICATED AS EXISTING (E).
5. IT MAY BE NECESSARY TO REMOVE ARCHITECTURAL FINISHES, PLUMBING PIPES AND FIXTURES, ELECTRICAL CONDUIT, FIXTURES, PANELS, BOXES, TELEPHONE OR FIRE ALARM WIRING AND FIXTURES OR OTHER NON-STRUCTURAL ITEMS TO INSTALL STRUCTURAL WORK AND MATERIALS SHOWN ON THESE DRAWINGS. SUCH ITEMS SHALL BE REMOVED, REPAIRED AND/OR REPLACED TO MATCH PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTORS EXPENSE.
6. ALL WEATHER PROOFING. INCLUDING BUT NOT LIMITED TO TORCH DOWN, CAULKING, Z-FLASHING OR ANY OTHER MATERIAL THAT MAY BE ALTERED DURING INSTALLATION SHALL BE REPAIRED REPLACED AND/OR MODIFIED TO ENSURE THE BUILDING AT THE INSTALLATION SITE IS WEATHER PROOF.
7. ANY PROPOSED SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE, ANCHOR TYPES, OR DETAILING INDICATED IN THESE DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ORDERING MATERIALS. SUCH REVIEW SHALL BE BILLED ON A TIME AND MATERIALS BASIS TO THE CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.

EXPANSION & EPOXY ANCHORS

1. EXPANSION AND EPOXY ANCHORS SHALL BE IN CONFORMANCE WITH ALL REQUIREMENTS OF THE 2010 CALIFORNIA BUILDING CODE (CBC).
2. ALL ANCHORS PROVIDED SHALL BE INCLUDED IN EVALUATION REPORTS OF THE INTERNATIONAL CODE COUNCIL (ICC), AND SHALL BE EVALUATED FOR 2006 IBC MINIMUM REQUIREMENTS. IN THE ICC REPORT
3. CONCRETE EXPANSION ANCHORS SHALL BE KWIK BOLT TZ BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1917 OR APPROVED EQUIVALENT
4. CMU EXPANSION ANCHORS SHALL BE KWIK BOLT 3 BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1385 OR APPROVED EQUIVALENT. ANCHORS SHALL BE INSTALLED A MINIMUM OF 1⅜" FROM ANY VERTICAL MORTAR JOINT TYPICAL. ANCHORS TO BE SPACED 8 INCHES ON CENTER MINIMUM AND LIMITED TO ONE ANCHOR PER CELL.
5. CONCRETE & GROUT FILLED CMU ADHESIVE EPOXY ANCHORS SHALL BE HIT RE-500SD BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-2322 OR APPROVED EQUIVALENT.
6. INSTALL EXPANSION AND EPOXY ANCHORS WITH SPECIAL INSPECTION IN ACCORDANCE WITH THE 2010 CBC, CHAPTER 17, AND ALL REQUIREMENTS OF THE MANUFACTURER. THE MANUFACTURER'S ICC APPROVAL AND THESE DRAWINGS.
7. EXPANSION ANCHORS SHALL BE 304/316 STAINLESS STEEL U.O.N.. EPOXY ANCHOR THREADED ROD SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL U.O.N.
8. LOCATE AND AVOID REINFORCEMENT AND OTHER EMBEDDED ITEMS WHEN INSTALLING ANCHORS, TYPICAL. SEE CONCRETE CORE DRILLING NOTES FOR ADDITIONAL INFORMATION.
9. THE SPECIAL INSPECTOR MUST MAKE PERIODIC INSPECTIONS DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE AND DIMENSIONS, CONCRETE MEMBER THICKNESS, ANCHOR SPACING, EDGE DISTANCES, TIGHTENING TORQUE, HOLE DIAMETER, DEPTH AND CLEANLINESS, ANCHOR EMBEDMENT AND ADHERENCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. SEE NOTE 10 BELOW FOR FREQUENCY OF INSPECTIONS.
10. 50% OF ALL ANCHORS, INCLUDING ALTERNATE BOLTS IN A GROUP OF ANCHORS, SHALL BE INSPECTED PER NOTE 9 ABOVE AND TORQUE TESTED PER THE ICC REPORT TEST VALUES.

CONCRETE CORE/DRILLING NOTES

1. WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED OR POST-TENSIONED REINFORCED CONCRETE (MILD REINFORCED), USE CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE (E) REINFORCING BARS. WHEN INSTALLING THEM INTO (E) PRE-STRESSED OR POST-TENSIONED CONCRETE LOCATE THE PRE-STRESSED OR POST-TENSIONED TENDONS BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, AT POINT OF PENETRATION, PRIOR TO INSTALLATION. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.
2. WHEN CORING EXISTING REINFORCED CONCRETE OF ANY CONSTRUCTION TYPE (PRE-STRESSED, POST-TENSIONED OR MILD REINFORCED), LOCATE THE EXISTING REINFORCING BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, PRIOR TO CORING. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING ANY REINFORCING DURING CORING. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE CORE. THE MAXIMUM SIZE OF ANY CORE IS TO BE 6" DIAMETER AND THE MINIMUM SPACING BETWEEN CORES IS TO BE TWICE THE CORE DIAMETER (I.E. 12" SPACING FOR A 6" DIAMETER CORE).
3. INSPECTOR IS TO BE PRESENT DURING ALL CORE DRILLING OPERATIONS TO VERIFY THAT NO REINFORCING CABLES, TENDONS, OR REBAR HAVE BEEN CUT. (SEE NOTE 5 BELOW)
4. THE INSPECTOR SHALL SUBMIT A WRITTEN REPORT TO THE OWNER.
5. THE INSPECTIONS INDICATED IN NOTES 3 AND 4 ABOVE ARE NOT REQUIRED FOR A CONCRETE FILL OVER METAL DECK APPLICATION WHERE INDICATED ON THE CONSTRUCTION DRAWINGS.

STRUCTURAL STEEL NOTES

1. ALL STEEL CONSTRUCTION INCLUDING FABRICATION, ERECTION AND MATERIALS SHALL COMPLY WITH ALL REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND THE 2010 CBC.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED. ALL WF (WIDE FLANGE) & WT (TEE) SHAPES TO BE ASTM A992 (F_Y=50,000 PSI) UNLESS NOTED OTHERWISE. ALL STRUCTURAL TUBING (TS OR HSS) SHALL BE ASTM A500 GRADE B (F_Y=46,000 PSI). ALL STEEL PIPE SHALL BE ASTM A53 (TYPE E OR S, GRADE B (F_Y=35,000 PSI)) SCHEDULE 40 WITH OUTSIDE DIAMETERS GIVEN UNLESS OTHERWISE NOTED
3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND SHALL CONFORM TO AISC & AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC SPECIFICATION. PAINTED SURFACES SHALL BE TOUCHED UP.
4. ALL WELDING SHALL BE PERFORMED BY QUALIFIED, CERTIFIED WELDERS.
5. BOLTS SHALL BE GALVANIZED ASTM A325 MINIMUM. BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS. SPECIAL INSPECTION NOT REQUIRED U.O.N.
6. THREADED RODS SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL . BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS.
7. ALL HOLES FOR BOLTED CONNECTIONS SHALL BE 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. USE STANDARD AISC GAGE AND PITCH FOR BOLTS EXCEPT AS NOTED OTHERWISE. HOLES FOR ANCHOR BOLTS IN BASE PLATES MAY BE AISC "OVERSIZE" HOLES WHERE ACCOMPANIED BY OVERSIZED HARDENED HDG WASHERS.
8. ALL SHOP FABRICATED STEEL STRUCTURAL MEMBERS FOR EXTERIOR USE SHALL BE HOT DIP GALVANIZED PER ASTM A123 AFTER FABRICATION & PAINTED PER CUSTOMER SPECIFICATIONS AS REQUIRED. STEEL FOR INTERIOR USE SHALL BE SHOP COAT OR GALVANIZED & PAINTED PER PLAN.
9. ALL FIELD FABRICATED GALVANIZED STEEL THAT IS CUT, GROUND, DRILLED, WELDED OR DAMAGED SHALL BE TREATED WITH "ZINC RICH" COLD GALVANIZING SPRAY OR COATING. NO RAW STEEL SHALL BE EXPOSED.

PLACE HOLDER

STRUCTURALS IN PROCESS

GOLDEN GATE PARK

SF33XC682-C

692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No. 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

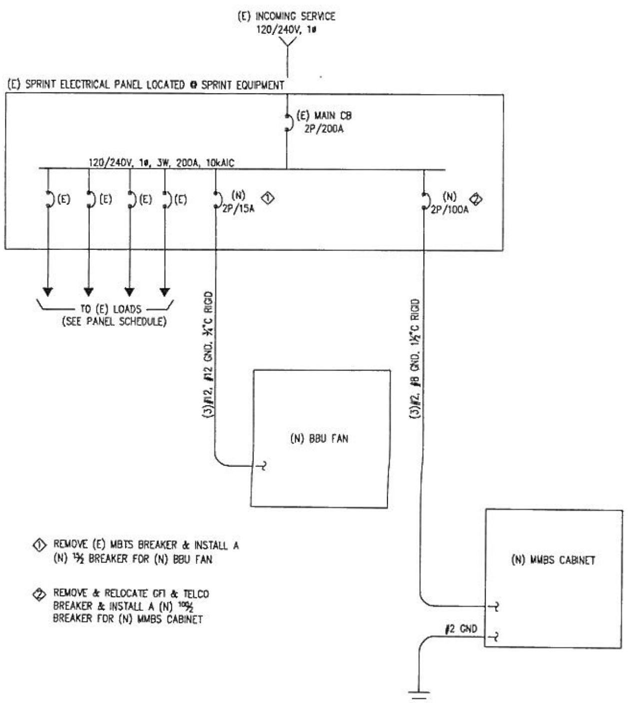
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
STRUCTURAL NOTES

SHEET NUMBER:
S-1

ELECTRIC LEGEND

- CIRCUIT BREAKER
- SERVICE GROUND
- WIRED CONNECTION



1. REMOVE (E) MBTS BREAKER & INSTALL A (N) 15/2 BREAKER FOR (N) BBU FAN
2. REMOVE & RELOCATE GFI & TELCO BREAKER & INSTALL A (N) 100/2 BREAKER FOR (N) MMBS CABINET

SINGLE LINE DIAGRAM

FINAL CONFIGURATION

ELECTRICAL NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE CEC AS WELL AS ALL APPLICABLE STATE AND LOCAL CODES.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, CONDUCTORS, PULL BOXES, TRANSFORMER PADS, POLE RISERS, AND PERFORM ALL TRENCHING AND BACKFILLING REQUIRED IN THE PLANS.
3. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER PLAN SPECIFICATIONS.
4. ALL CIRCUIT BREAKERS, FUSES, AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTION RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED WITH A MINIMUM OF 10,000 A.I.C. OR AS REQUIRED.
5. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.
6. ELECTRICAL WIRING SHALL BE COPPER #12 MIN WITH TYPE XHHW, THWN, OR THHN INSULATION.
7. ALL OUTDOOR EQUIPMENT SHALL HAVE NEMA 3R ENCLOSURE.
8. ALL BURIED WIRE SHALL RUN THROUGH SCHEDULE 40 PVC CONDUIT UNLESS OTHERWISE NOTED
9. A GROUND WIRE IS TO BE PULLED IN ALL CONDUITS.
10. WHERE ELECTRICAL WIRING OCCURS OUTSIDE A STRUCTURE AND HAS THE POTENTIAL FOR EXPOSURE TO WEATHER, WIRING SHALL BE IN WATERTIGHT GALVANIZED RIGID STEEL OR FLEXIBLE CONDUIT.

INTERIM (E) PANEL SCHEDULE

NAMEPLATE : PANEL A			SC LEVEL : 10,000				VOLTS: 120V/240V, 1Ø		
LOCATION : OUTSIDE							BUS AMPS: 200A		
MOUNTING : PEDESTAL							MAIN CB: 200A		
ØA	ØB							ØA	ØB
LOAD VA	LOAD VA	LOAD DESCRIPTION	BKR AMP/ POLE	CIRCUIT NO		BKR AMP/ POLE	LOAD DESCRIPTION	LOAD VA	LOAD VA
3,600		(E) BTS CABINET	80/2	1	2	60/2	SURGE SUPPRESSOR	30	
	3,600	" "	–	3	4	–	" "		30
4,800		(E) BTS CABINET	80/2	5	6	80/2	(E) BTS CABINET	3,600	
	4,800	" "	–	7	8	–	" "		3,600
300		LIGHTS	20/1	9	10	100/2	(N) MMBS CABINET	2,736	
	580	RELOCATED GFI & TELCO FAN	20/1	11	12	–	" "		2,736
8,700	8,980	PHASE TOTALS					PHASE TOTALS	6,366	6,366
TOTAL VA = 30,412			TOTAL AMPS = 127A						

NOTE: EXISTING LOADS HAVE NOT BEEN FIELD VERIFIED. THEY ARE APPROXIMATE BASED ON EXISTING CB SIZES. CONTACT THE ENGINEER IF THE LOADS DIFFER FROM THAT WHICH IS SHOWN ON THE PLANS

FINAL CONFIGURATION (E) PANEL SCHEDULE

NAMEPLATE : PANEL A			SC LEVEL : 10,000				VOLTS: 120V/240V, 1Ø		
LOCATION : OUTSIDE							BUS AMPS: 200A		
MOUNTING : PEDESTAL							MAIN CB: 200A		
ØA	ØB							ØA	ØB
LOAD VA	LOAD VA	LOAD DESCRIPTION	BKR AMP/ POLE	CIRCUIT NO		BKR AMP/ POLE	LOAD DESCRIPTION	LOAD VA	LOAD VA
		SPARE	80/2	1	2	60/2	SURGE SUPPRESSOR	30	
		" "	–	3	4	–	" "		30
			80/2	5	6	15/2	(N) BBU FAN	400	
	180	RELOCATED GFI	20/1	7	8	–	" "		400
300		LIGHTS	20/1	9	10	100/2	(N) MMBS CABINET	7,000	
	400	TELCO FAN	20/1	11	12	–	" "		7,000
300	580	PHASE TOTALS					PHASE TOTALS	7,430	7,430
TOTAL VA = 15,740			TOTAL AMPS = 66A						

NOTE: EXISTING LOADS HAVE NOT BEEN FIELD VERIFIED. THEY ARE APPROXIMATE BASED ON EXISTING CB SIZES. CONTACT THE ENGINEER IF THE LOADS DIFFER FROM THAT WHICH IS SHOWN ON THE PLANS

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
ELECTRICAL PLAN

SHEET NUMBER:
E-1

![PG&E logo]

Pacific Gas and Electric Company

Report Date: 05/02/12
Revision: 0

High Voltage Transmission Tower Cell Site Datasheet

Site Information

Company	Sprint		
Site name:	Golden Gate Park	Site number:	SNX-SF-33xo-882
Site address:	629 24th avenue, San Francisco		
PG&E Contact:	Ralph Seban	Phone:	(925) 866-5634

Soil Data

Soil Model:	Uniform	10.0 Ohm-meters	Infinite thickness

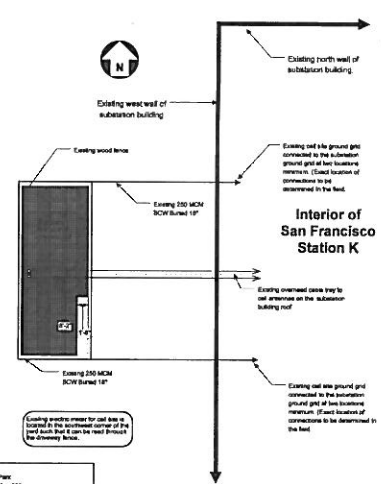
GPR Information

Grid Area	13,940	Ft^2
Grid Resistance	0.1	Ohms
Ground Fault Duty	15,002	Amps $_{RMS}$
X/R Ratio	1.4	
Voltage $_{(Line-Line)}$	12	kV $_{RMS}$
DC Offset	1.10	
GPR $_{RMS}$	2,042	Volts $_{RMS}$
GPR Peak Symmetrical	2,887	Volts (Peak Symmetrical)
GPR Peak with DC Offset	3,189	Volts (Peak Asymmetrical)

Ralph Seban
PG&E Representative

5/2/2012
Date

PG&E Grounding Requirements-Sheet 1
(Required Design Details are Located on Sheet 2)



Carrier: Sprint Title: Golden Gate Park Site No.: SNX-SF-33xo-882 Co-Location: N/A Line Name: N/A Tower No.: N/A Tower SAP No.: N/A				
Designed By: Ralph Seban Phone: (925) 866-5634	SIZE 0	PG&E Proj Mgr: Richard Settini Phone: (925) 308-8400	DWG NO SNX-SF-33xo-882	REV 0
Approved By: Marcos Eblen, P.E.	Carrier Dwgs. Dated 9/23/11	Issue Date: 5/2/12	SHEET 1 of 2	

The following design details MUST BE incorporated into the final engineering and construction drawings for the cell site ground grid. Where conflicts arises between these details and cell vendor generic details, these details SHALL prevail.

REQUIRED DESIGN DETAILS:

☐ _____1. Existing grounding connections and grid intersections are exothermic. All new grounding connections and grid intersections SHALL be made using approved 'DMC' GroundLok System' compression components.

☐ _____2. Ground grid safety calculations are based on the ground grid conductors being at 18" below natural grade.

☐ _____3. Cell site ground grid MUST be connected to the substation ground grid at two locations minimum. Exact connection points to be determined in the field.

☐ _____4. Cell antennas on the substation building roof MUST be connected to the cell site equipment ground grid with 250 MCM BCW or equivalent.

☐ _____5. Cell site equipment ground bus MUST be connected to the ground grid with 2-250 MCM BCW or equivalent. If more than one ground bus is used, all ground buses must be either connected together or connected to ground grid separately with #2 BCW or larger.

☐ _____6. All fences MUST be of non-conductive material.

☐ _____7. Electric meter is located in the southwest corner of the substation yard such that the meter can be read through the substation driveway fence.

☐ _____8. Meter ground rod MUST be attached to the substation ground grid with a 250 kcmil BCW or equivalent.

☐ _____9. Ground grid backfill material (at least 6") covering the 250 MCM BCW MUST be clean loamy material (or conductive material) and be free of rocks and foreign material

☐ _____10. If drilling is required to achieve ground rod depth, a minimum 2" hole is required. The hole MUST be backfilled with bentonite (or equivalent) material

☐ _____11. Concrete pad size or any dimension stated on sheet 1 can not be changed without prior authorization from the grounding designer

Carrier: Sprint Title: Golden Gate Park Site No.: SNX-SF-33xo-882 Co-Location: N/A Line Name: N/A Tower No.: N/A Tower SAP No.: N/A				
Designed By: Ralph Seban Phone: (925) 866-5634	SIZE 0	PG&E Proj Mgr: Richard Settini Phone: (925) 308-8400	DWG NO SNX-SF-33xo-882	REV 0
Approved By: Marcos Eblen, P.E.	Carrier Dwgs. Dated 9/23/11	Issue Date: 5/2/12	SHEET 2 of 2	

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

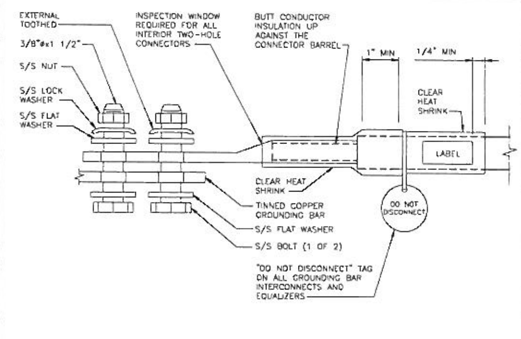
Streamline Engineering and Design Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone 916-660-1930
E-Mail kevin@streamlineeng.com Fax 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No. 4469
STRUCTURAL
STATE OF CALIFORNIA

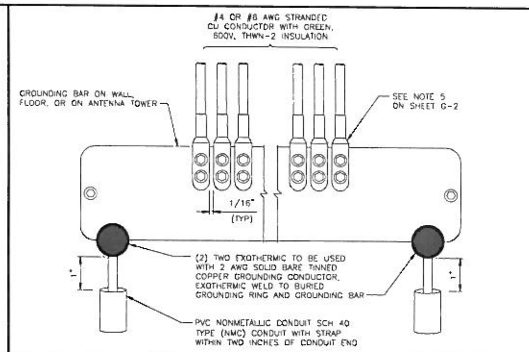
Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
PG&E GROUNDING GRID

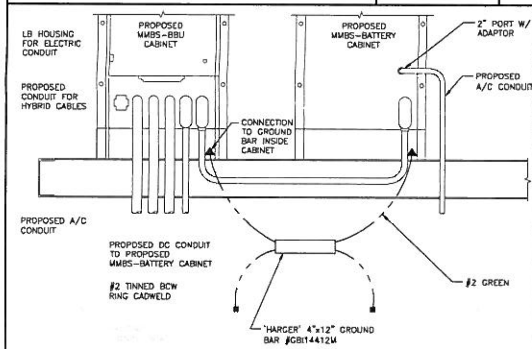
SHEET NUMBER:
E-2



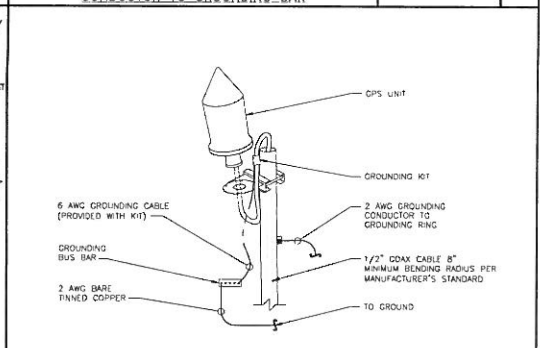
TWO HOLE LUG | NO SCALE | A



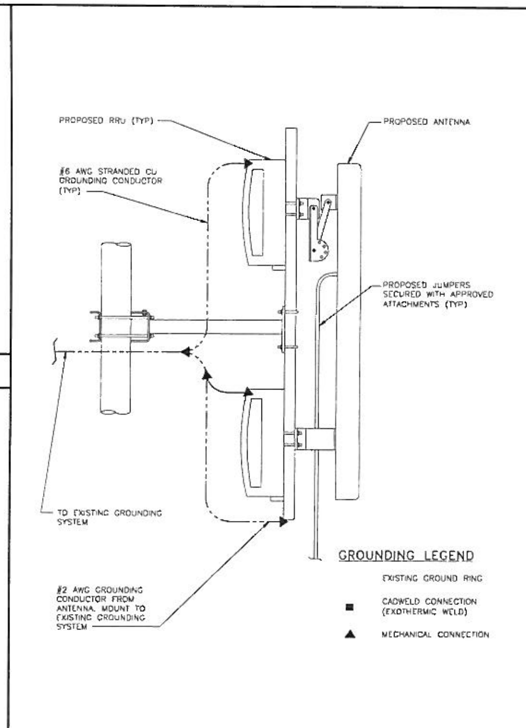
INSTALLATION OF GROUNDING CONDUCTOR TO GROUNDING BAR | NO SCALE | B



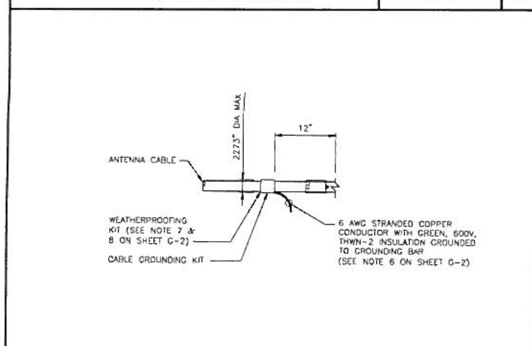
CABINET GROUNDING SCHEMATIC | NO SCALE | C



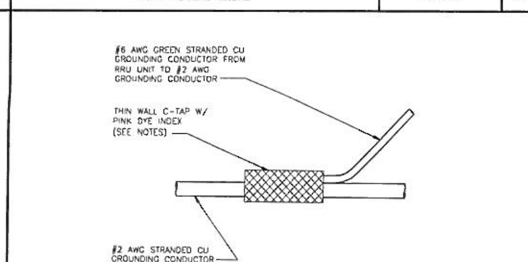
GPS GROUNDING | NO SCALE | D



ANTENNA GROUNDING | NO SCALE | E



CONNECTION OF CABLE GROUNDING KIT TO ANTENNA CABLE | NO SCALE | F



NOTE

CONTRACTOR TO SURROUND COMPLETED CONNECTION W/ WEATHER PROOFING TAPE TO ENSURE WEATHER PROOF CONNECTION

C-TAP CONNECTION | NO SCALE | G

1. COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD
2. EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH LETTERS
3. ALL HARDWARE 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER
4. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, 600 VOLT INSULATION, ON ALL GROUNDING TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
6. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
7. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
8. WEATHERPROOFING SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER
9. SUPPLIED AND INSTALLED BY CONTRACTOR
10. WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING BAR TO AN EXISTING TOWER, THE SUBCONTRACTOR SHALL OBTAIN APPROVAL FROM THE TOWER OWNER PRIOR TO MOUNTING THE GROUNDING BAR TO THE TOWER.
11. EXTEND TWO (2) 2 AWG TINNED CU CONDUCTOR FROM BURIED GROUNDING RING AND CONNECT TO THE PROPOSED TOWER. FOLLOW MANUFACTURERS RECOMMENDATIONS FOR GROUNDING CONNECTIONS TO THE TOWER. (APPLICABLE TO NEW TOWERS ONLY.)
12. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUNDING BARS AS REQUIRED. PROVIDING 50% SPARE CONNECTION POINTS

GROUNDING NOTES | NO SCALE | H

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVT
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

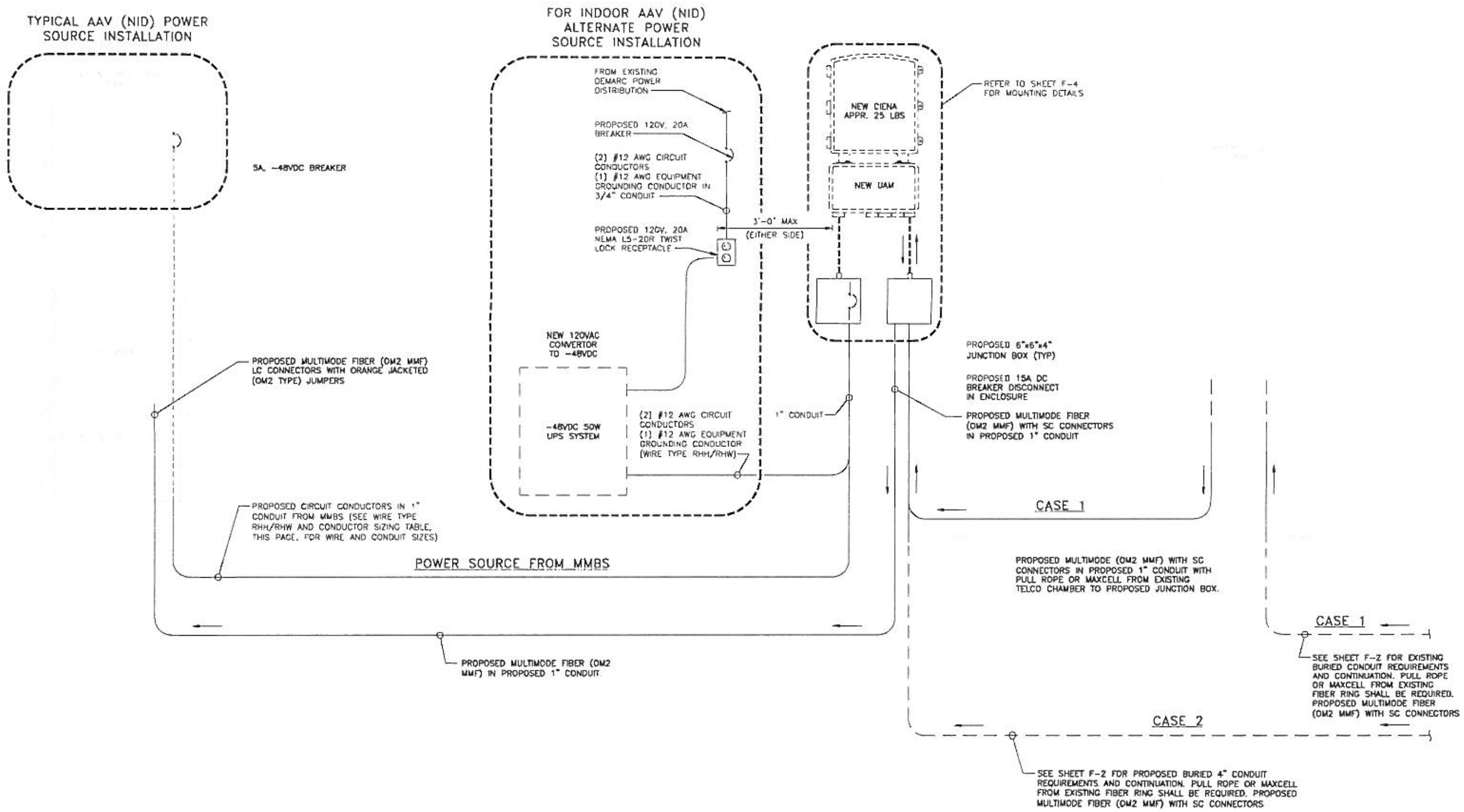
Streamline Engineering and Design Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone 916-660-1930
E-Mail kevin@streamlineeng.com Fax 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
GROUNDING DETAILS

SHEET NUMBER:
E-3



NOTES

1. CONTRACTOR SHALL FOLLOW ALL LOCAL MUNICIPAL CODES FOR CONDUIT SPECIFICATION AND INSTALLATION.
2. ALL UNISTRUT ENDS SHALL BE COLD-GALVANIZED AND CAPPED.
3. ALL INTERIOR CONDUITS SHALL BE EMT.
4. ALL ABOVE GROUND CONDUIT SHALL BE RIGID.
5. CASE 1 – FIBER PATH TO BE USED IF EXISTING CONDUIT FROM "MEET-ME POINT" TO EXISTING TELCO CABINET EXIST.
6. CASE 2 – FIBER PATH TO BE USED IF EXISTING CONDUIT FROM "MEET-ME POINT" TO EXISTING TELCO CABINET IS NOT AVAILABLE OR IF EXISTING CONDUIT DOES NOT HAVE ENOUGH CAPACITY FOR PROPOSED FIBER RUN.

WIRE TYPE RHH/RHW AND CONDUCTOR SIZING TABLE (48VDC @ 96W/2.0 AMPS)

DISTANCE (FT)	0'-180'	180'-280'	280'-480'	480'-720'
CIRCUIT CONDUCTOR SIZE	(2) #12 AWG	(2) #10 AWG	(2) #8 AWG	(2) #6 AWG
GND CONDUCTOR SIZE	(1) #12 AWG	(1) #12 AWG	(1) #12 AWG	(1) #10 AWG
CONDUIT SIZE	1"	1"	1"	1"

AAV (NID) ENCLOSURE ONE-LINE DIAGRAM

NO SCALE

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

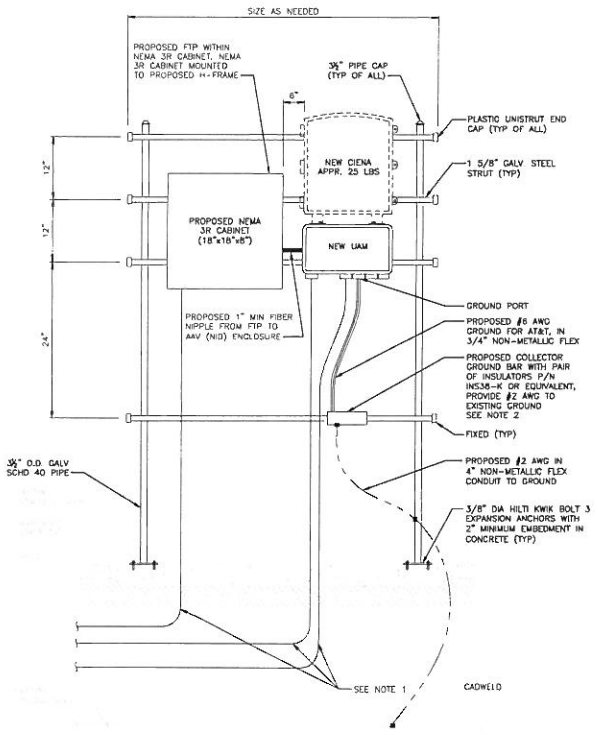
DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER KEVIN R. SORENSEN No 4469 STRUCTURAL STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
FIBER DESIGN ONE LINE DIAGRAM
SHEET NUMBER:
F-1



H-FRAME MOUNT

NOTES

1. REFER TO SHEET F-1 FOR CONDUIT ROUTING DETAIL.
2. CONTRACTOR TO SUPPLY GROUND TO NEAREST ACCESSIBLE MASTER GROUND OR MAIN GROUNDING SYSTEM.

H-FRAME AAV (NID) AND FTP ENCLOSURE INSTALLATION DETAIL (AS REQUIRED)
NO SCALE

GOLDEN GATE PARK

SF33XC682-C

592 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: C. TIBBETT
CHECKED BY C. MATHISEN
APPROVED BY K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3266 Penryn Rd, Suite 200 Loomis, CA 95650
Office: Kevin Sorensen Phone: 916-660-1550
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No. 4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
NID DETAILS

SHEET NUMBER:
F-2

Sprint®

PROJECT: NETWORK VISION MM
MARKET: SAN FRANCISCO BAY

SF33XC682-C -GOLDEN GATE PARK

692 24TH AVE
SAN FRANCISCO, CA 94121

PROJECT DESCRIPTION

A MODIFICATION TO AN (E) UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF ADDING A (N) SPRINT MMBS CABINET, A (N) BATTERY CABINET, (3) (N) SPRINT ANTENNAS, (6) (N) RRU'S, (3) (N) HYBRID CABLES FOR FIBER & DC POWER, A (N) CIENA CABINET, A (N) UAM CABINET, A (N) FTP BOX, (N) PG&E EMERGENCY SHUTDOWN BUTTON & (3) (N) TRIPOD MOUNTS W/ ø18" RADOMES & REMOVING (3) (E) SPRINT ANTENNAS.

PROJECT INFORMATION

SITE NAME:	GOLDEN GATE PARK
COUNTY:	SAN FRANCISCO
APN:	1567 012
SITE ADDRESS:	692 24TH AVE SAN FRANCISCO, CA 94121
CURRENT ZONING:	RH-2
CONSTRUCTION TYPE:	V
OCCUPANCY TYPE:	U, (UNMANNED COMMUNICATIONS FACILITY)
PROPERTY OWNER:	PG&E 245 MARKET ST MAIL CODE N10D SAN FRANCISCO, CA 94105
APPLICANT:	BLACK & VEATCH 2999 OAK RD SUITE 490 WALNUT CREEK, CA 94597
LEASING CONTACT:	ATTN: LAURA SONATY (925) 949-5976
ZONING CONTACT:	ATTN: LARRY HOUGHTBY (916) 275-4180
CONSTRUCTION CONTACT:	ATTN: KEVIN FOSTER (650) 281-4675
LATITUDE:	N 37° 46' 35.6304" NAD 83 N 37.776564° NAD 83
LONGITUDE:	W 122° 29' 0.9528" W -122.483598° NAD 83
AMSL:	±181'

SITE #:	SF33XC682-C
JURISDICTION:	CITY OF SAN FRANCISCO
POWER:	PG&E
TELEPHONE:	AT&T

PG&E INFORMATION

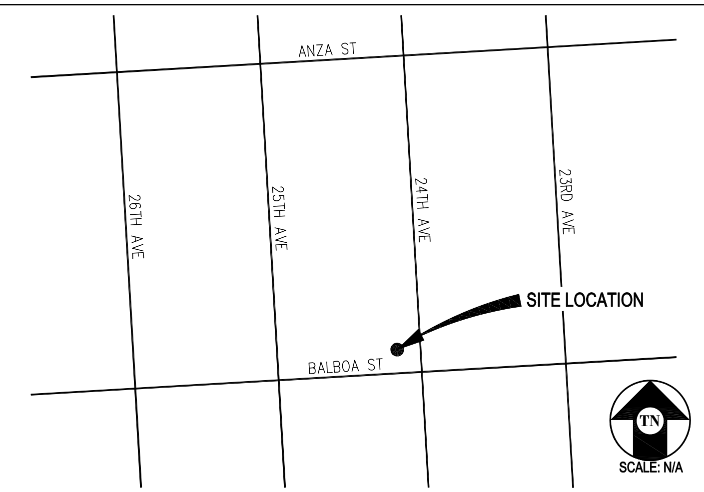
SITE INFO:

PG&E SITE NAME:	SF STATION K
PROJECT#:	2011-06 MOD (NV/LTE)
SBE#:	135-38-002-5

PG&E CONTACT INFO:

LAND AGENT CONTACT:	MATT RANGE (415) 973-3353 E-MAIL: M3RH@PGE.COM MAYA HERR-ANDERSON (415) 973-5736 E-MAIL: M4HA@PGE.COM
PROJECT MANAGER:	RICHARD SARTINI MOBILE: (415) 308-9400 E-MAIL: RRSR@PGE.COM
ADDRESS:	245 MARKET ST MAIL CODE N10D SAN FRANCISCO, CA 94105

VICINITY MAP



DRIVING DIRECTIONS

FROM: 2999 OAK RD SUITE 490, WALNUT CREEK, CA 94597
TO: 692 24TH AVE, SAN FRANCISCO, CA 94121

1. HEAD SOUTH ON OAK RD TOWARD COGGINS DR	312 FT
2. TURN RIGHT ONTO TREAT BLVD	0.1 MI
3. CONTINUE STRAIGHT TO STAY ON TREAT BLVD	0.1 MI
4. TURN RIGHT ONTO N MAIN ST	0.2 MI
5. TURN RIGHT ONTO THE INTERSTATE 680 S RAMP TO OAKLAND/SAN JOSE	0.1 MI
6. MERGE ONTO I-680 S	1.4 MI
7. TAKE EXIT 46 FOR CALIFORNIA 24 TOWARD LAFAYETTE/OAKLAND	1.3 MI
8. MERGE ONTO CA-24 W	12.3 MI
9. TAKE EXIT 2B TOWARD I-580 W	1.0 MI
10. MERGE ONTO I-580 W	0.5 MI
11. TAKE EXIT 19A ON THE LEFT TO MERGE ONTO I-80 W TOWARD SAN FRANCISCO	8.3 MI
12. TAKE EXIT 1B TO MERGE ONTO US-101 N TOWARD GOLDEN GATE BRIDGE	0.7 MI
13. CONTINUE ONTO CENTRAL FWY (SIGNS FOR OCTAVIA BLVD/FELL ST)	0.4 MI
14. CONTINUE ONTO OCTAVIA BLVD	0.3 MI
15. TURN LEFT ONTO FELL ST	1.6 MI
16. TURN RIGHT ONTO SHRADER ST	0.2 MI
17. TURN LEFT ONTO FULTON ST	1.7 MI
18. TURN RIGHT ONTO 24TH AVE	0.3 MI

END AT: 692 24TH AVE, SAN FRANCISCO, CA 94121
ESTIMATED TIME: 46 MINUTES ESTIMATED DISTANCE: 30.4 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:

1. 2010 CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLES 24 & 25)
2. 2010 CALIFORNIA BUILDING CODE
3. 2010 CALIFORNIA ELECTRICAL CODE
4. 2010 CALIFORNIA MECHANICAL CODE
5. 2010 CALIFORNIA PLUMBING CODE
6. 2010 CITY OF SAN FRANCISCO FIRE CODE
7. LOCAL BUILDING CODES
8. CITY/COUNTY ORDINANCES
9. 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 1134B.2.1, EXCEPTION 4

SHEET INDEX

SHEET	DESCRIPTION	REV
T-1	TITLE SHEET	–
T-2	FIRE DEPT CHECKLIST	–
T-3	EMF REPORT	–
T-4	SIGNAGE DETAILS	–
A-1	SITE PLAN	–
A-2	EXISTING / INTERIM EQUIPMENT PLAN & DETAILS	–
A-3	FINAL CONFIGURATION EQUIPMENT PLAN & ELEVATION	–
A-4	EXISTING ANTENNA PLANS	–
A-5	INTERIM ANTENNA PLANS & DETAILS	–
A-6	FINAL CONFIGURATION ANTENNA PLANS	–
A-7	ELEVATIONS	–
A-8	DETAILS	–
A-9	DETAILS	–
A-10	DETAILS	–
S-1	STRUCTURAL DETAILS	–
E-1	ELECTRICAL PLAN	–
E-2	PG&E GROUND GRID	–
E-3	GROUNDING DETAILS	–
F-1	FIBER DESIGN ONE LINE DIAGRAM	–
F-2	NID DETAILS	–

APPROVAL

RF
LEASING
ZONING
CONSTRUCTION
SPRINT
PG&E

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
TITLE

SHEET NUMBER:
T-1

SAN FRANCISCO FIRE DEPT CHECKLIST - PAGE 1 OF 2

2.06 PERMIT APPLICATION CHECKLIST FOR CELLULAR ANTENNA SITES AND ALL EQUIPMENT SERVING THE CELLULAR ANTENNA SITE

This checklist shall be printed on a drawing sheet and submitted as part of the plans submitted with any building permit application creating or modifying cellular antenna sites regardless of RF emission quantities. This checklist is designed to assist designers, installers, plan reviewers, and field inspectors. This checklist shall be prepared by the design professional and shall be stamped and wet-signed.

This document is not all-inclusive of all requirements for cellular antenna sites and it is the responsibility of the designer to research the applicable codes. Documents referenced for this bulletin are as follows:

FCC OET Bulletin 56 - Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields (August 1999)
FCC OET Bulletin 65 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (Ed. 97-01:August 1997)
FCC - A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance (June 2, 2000)
2010 California Building Code (2010 CBC)
2010 California Fire Code (2010 CFC)
2010 California Mechanical Code (2010 CMC)
2010 San Francisco Fire Code (2010 SFFC)
2010 NFPA 13 Automatic Sprinkler Systems
2010 NFPA 72 National Fire Alarm Code

COMPLETE / SEE T-1 — 1. Provide a description of work on the plans.
COMPLETE / SEE A-1 THRU A-8 — 2. Plans shall include plan views and elevations showing all equipment locations and cable runs.
COMPLETE / SEE A-X — 3. Plans shall include antenna cut-sheets and equipment list on a drawing sheet.
COMPLETE / SEE T-3 — 4. Include a copy of the signed and stamped RF report on a drawing sheet as a reference to identify the exclusion area required to prevent occupational exposures in excess of the FCC guidelines (47CFR1.1310 and FCC OET Bulletin 65 edition 97-01).
COMPLETE / SEE T-3 — 5. The RF report shall indicate whether or not the site under review is a part of a multiple transmitter site and shall show compliance with FCC 47CFR1.1307(b)(3), as amended, all transmitters shall not exceed 5% of the power density exposure limit.
COMPLETE / SEE A-1 — 6. Drawings shall reflect the striped/exclusion areas per the above RF Report with a minimum radius being 1 foot.

SAN FRANCISCO FIRE DEPT CHECKLIST - PAGE 2 OF 2

COMPLETE / SEE T-3 — 7. Plans shall include a quantitive three dimensional image of the RF levels from each antenna located near an egress point (e.g. penthouse stair, fire escape, roof walking paths, skylights, etc.)
COMPLETE / SEE T-4 — 8. "Notice to Workers" warning signage as applicable per the above RF Report shall be permanently mounted at the stairwell side of the roof-access door (ANSI C95.2-1982(Reference [3])-yellow or more durable color for outdoor longevity).
COMPLETE / SEE A-X — 9. Camouflaged antennas shall have 4inch x 4inch signage permanently mounted to the exterior of the RF screen as provided below. The sign shall be weatherproof with contrasting background color and shall contain the yellow triangle around the antenna symbol (see ANSI C95.2-1982(Reference [3])-yellow or more durable color for outdoor longevity). Signage locations(s) and detail of the sign shall be included on the plans.
COMPLETE — 10. Cables/wiring shall not be allowed in exit enclosures, smoke-proof towers, elevator shafts, or in front of dry standpipes. 2010 CFC 1022.4 and 509.2
COMPLETE — 11. Antennas shall not be mounted closer than the exclusion zone plus 4 feet for installations near fire escapes, stair penthouse doors, exterior standpipe outlets, skylights, or other fire department operations considerations.
COMPLETE — 12. There is no guarantee that the fire department will not shutdown the power to the site in an emergency situation although in order to reduce the site operator's possible loss of service the following information may be provided at the equipment room entrance:

COMPLETE / SEE A-X — Provide emergency shutdown procedure signage. The sign shall include the following:

COMPLETE / SEE T-4 — * Emergency 24 hour/7 day a week NOC / field technician telephone number for RF shutdown.
COMPLETE — * Cell site identification number.
COMPLETE / SEE T-4 — *Map to location of electrical main-electrical main shall be clearly identified with a permanent red label and white lettering.
COMPLETE / SEE T-4 — *Map to location of battery cabinets and breakers-cabinets and breakers shall be clearly identified with a permanent red label and white lettering.
COMPLETE — *Any other relevant information or procedures as required for the individual cellular site.
COMPLETE / SEE T-4 — * The sign shall be clearly labeled in a phenolic label with a white background and black lettering. The title block shall be a red background and 1" high white lettering. Multiple signs may need to be installed based upon the cellular site configuration.
COMPLETE / SEE T-4 — * The actual breaker(s) shall be a phenolic label (red background and white lettering) with lettering not less than 1/8" high.
COMPLETE / SEE T-4 — * A copy of the signage shall be included on a drawing sheet.

Prepared by: Mr. Kevin R. Sorensen, SE
(Please include professional title and stamp)

Firm Name: STREAMLINE ENGINEERING & DESIGN, INC.
Address: 3268 PENRYN RD, SUITE 200
LOOMIS, CA 95650
Phone Number: 1-916-660-1930

For further Information see the FCC website: http://www.fcc.gov/oet/rfsafety
or contact the
San Francisco Fire Department
1660 Mission Street, 4th Floor
San Francisco, CA 94103
(415) 558-6187

GOLDEN GATE PARK
SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
FIRE DEPT CHECKLIST

SHEET NUMBER:
T-2

GOLDEN GATE PARK

SF33XC682-C

692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Pennyn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS ARE REFERENCE AS INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN, INC. THESE PLANS ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF STREAMLINE ENGINEERING AND DESIGN, INC. © 2012 STREAMLINE ENGINEERING AND DESIGN, INC. ALL RIGHTS RESERVED

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:

EMF REPORT

SHEET NUMBER:

T-3

NOTE:
THIS PLAN SET IS IN COMPLIANCE WITH SFFD ADMINISTRATIVE BULLETIN 2.06

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 SPRINT IS $1mWcm^2$ AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY SPRINT IS $5mWcm^2$

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 SPRINT 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 SPRINT'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 SPRINT 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 SPRINT 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 SPRINT CONSTRUCTION PROJECT MANAGER WITH A DETAILED SHOP DRAWING OF EACH BARRICADE.

8. ALL REQUIRED SIGNAGE WILL BE INSTALLED AS NEEDED AND FIELD VERIFIED.

NOTICE TO WORKERS

RADIO FREQUENCY ANTENNAS ON THIS ROOF.
PLEASE EXERCISE CAUTION AROUND ANTENNAS AND OBEY POSTED SIGNS AND/OR MARKINGS. FOR ACCESS TO RESTRICTED AREAS OR FOR FURTHER INFORMATION, PLEASE CALL 1-888-859-1400 (SITE NUMBER: SF33XC682)

IN ACCORDANCE WITH FCC RULES 47 CFR 1.1310

AVISO A TRABAJADORES

EXISTEN ANTENAS DE RADIOFRECUENCIA EN ESTE TECHO. POR FAVOR USE PRECAUCION ALREDOR DE LAS ANTENAS Y OBEDEZCA A LAS ZONAS RESTRINGIDAS O PARA OBTENER MAS INFORMACION, LLAME AL TELEFONO 1-888-859-1400 (NUMERO DE SITIO: SF33XC682)

DE ACUERDO A LAS REGLAS DE FCC 47 CFR 1.1310

工作人員注意

此屋宇房頂有射頻天線裝置
在天線範圍四周務請小心,並遵照各已張貼之指示及/或標緻行事
如需進入禁區範圍或索取更多資料
請致電 1-888-859-1400 此站區號: (SF33XC682)

依據FCC條例第47 CFR1.1310 款執行

NOTES:

1. WARNING SIGN TO BE MOUNTED AT ANTENNA LOCATIONS.
2. SIGN SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS.
3. SIGNAGE SHALL BE CLEARLY LABELED IN A PHENOLIC LABEL WITH A WHITE BACKGROUND AND BLACK LETTERING, AND SHALL BE READABLE FROM AT LEAST (15) FEET FROM THE SIGN.
4. PROPOSED 12"X20" PLASTIC SIGN

1 MULTI-LANGUAGE SIGN

NOTICE

Radio frequency fields beyond this point may exceed the FCC general public exposure limit.

Obey all posted signs and site guidelines for working in radio frequency environments.

In accordance with Federal Communications Commission rules on radio frequency emissions 47 CFR 1.1307(b)

SITE NO. SF33XC682

2 TYPICAL CAUTION SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED AT ANTENNA LOCATIONS.

NOTICE

GUIDELINES FOR WORKING IN RADIO FREQUENCY ENVIRONMENTS

- All personnel should have electromagnetic energy (EME) awareness training.
- All personnel entering this site must be authorized. Obey all posted signs.
- Assume all antennas are active. Before working on antennas, notify owners and disable appropriate transmitters.
- Maintain minimum 3 feet clearance from all antennas Do not stop in front of antennas. Use personal RF monitors while working near antennas.
- Never operate transmitters without shields during normal operation.
- Do not operate base station antennas in equipment rooms.

3 TYPICAL CAUTION SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED TO THE STAIRWELL SIDE OF THE ROOF ACCESS

EMERGENCY SHUT DOWN

FOR IMMEDIATE SHUT DOWN OF ALL RADIO FREQUENCY EMISSIONS OF THIS SITE,

1) CALL CONTACT NUMBER AND GIVE SITE IDENTIFICATION NO.

CONTACT PHONE NUMBER: 1-888-859-1400
SITE IDENTIFICATION NUMBER: SF33XC682

2) DISCONNECT POWER AT MAIN SERVICE DISCONNECT:

CONTRACTOR TO SUBMIT PROPOSED WRITTEN DIRECTIONS FOR EACH OF (5) SIGNS TO PROJECT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO ORDERING SIGNS

3) DISCONNECT BACK-UP POWER AT BATTERY DISCONNECT:

CONTRACTOR TO SUBMIT PROPOSED WRITTEN DIRECTIONS FOR EACH OF (5) SIGNS TO PROJECT CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO ORDERING SIGNS

SIGN SHALL BE A PHENOLIC LABEL WITH WHITE BACKGROUND AND BLACK LETTERING. THE TITLE BLOCK SHALL BE A RED BACKGROUND AND 1" HIGH WHITE LETTERING.

4 TYPICAL DISCONNECT SIGN

NOTE: SIGN TO BE PERMANENTLY MOUNTED AT THE FOLLOWING LOCATIONS;
1) CELL SITE EQUIPMENT ROOM DOOR
2) BATTERY LOCATION WITHIN PROXIMITY OF BATTERY DISCONNECT
3) FCC (FIRE CONTROL CENTER) ROOM WITHIN PROXIMITY OF THE FIRE ALARM PANEL
4) BUILDING'S MAIN ELECTRICAL ROOM WITHIN PROXIMITY OF THE MAIN SHUTOFF
5) THE CELL SITE MAIN ELECTRICAL DISCONNECT

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. THEY ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF STREAMLINE ENGINEERING AND DESIGN INC. © COPYRIGHT 2012

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
SIGNAGE DETAILS

SHEET NUMBER:
T-4

PROJECT GENERAL NOTES

1. THIS FACILITY IS AN UNOCCUPIED WIRELESS TELECOMMUNICATION FACILITY.

2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE.

3. THE SCOPE OF WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

4. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRM THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PAY FOR PERMIT FEES, AND TO OBTAIN SAID PERMITS AND TO COORDINATE INSPECTIONS.

6. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

7. CALL BEFORE YOU DIG. CONTRACTOR IS REQUIRED TO CALL 811 (NATIONWIDE "CALL BEFORE YOU DIG" HOTLINE) AT LEAST 72 HOURS BEFORE DIGGING.

8. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.

9. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONTRACTOR SHALL ALSO COORDINATE ALL PORTIONS OF THE WORK UNDER THE CONTRACT; INCLUDING CONTACT AND COORDINATION WITH THE CONSTRUCTION MANAGER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.

10. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, GALVANIZED SURFACES, ETC., AND UPON COMPLETION OF WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF THE PROJECT MANAGER.

11. KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS AND RUBBISH. REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.

12. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED, OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.

13. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND ALL OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK SHALL BE PROTECTED AT ALL TIMES.

14. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.

15. THE CONTRACTOR SHALL PROVIDE A TOILET FACILITY DURING ALL PHASES OF CONSTRUCTION.

16. SUFFICIENT MONUMENTATION WAS NOT RECOVERED TO ESTABLISH THE POSITION OF THE BOUNDARY LINES SHOWN HEREON. THE BOUNDARY REPRESENTED ON THIS MAP IS BASED ON COMPILED RECORD DATA AND BEST FIT ONTO EXISTING IMPROVEMENTS. IT IS POSSIBLE FOR THE LOCATION OF THE SUBJECT PROPERTY TO SHIFT FROM THE PLACEMENT SHOWN HEREON WITH ADDITIONAL FIELD WORK AND RESEARCH. THEREFORE ANY SPATIAL REFERENCE MADE OR SHOWN BETWEEN THE RELATIONSHIP OF THE BOUNDARY LINES SHOWN HEREON AND EXISTING GROUND FEATURES, EASEMENTS OR LEASE AREA IS INTENDED TO BE APPROXIMATE AND IS SUBJECT TO VERIFICATION BY RESOLVING THE POSITION OF THE BOUNDARY LINES.

17. THE CONTRACTOR TO VERIFY THE LATEST/CURRENT RF DESIGN.

18. WHERE APPLICABLE, CONTRACTOR SHALL PROVIDE SEPARATE PLANS, SPECIFICATIONS, FEES AND PERMITS FOR ANY REVISION TO ANY FIRE SPRINKLER AND/OR ALARM SYSTEM ON THE PREMISES AS MAY BE NEEDED TO COMPLETE THE WORK DEPICTED HEREIN, USING A C-10 LICENSED SUBCONTRACTOR FOR ALL SUCH WORK.

CFC CHAPTER 6 COMPLIANCE

TOTAL ELECTROLYTE= 12 BATTERIES X 2.49 GAL/BATTERY = 29.88 GAL

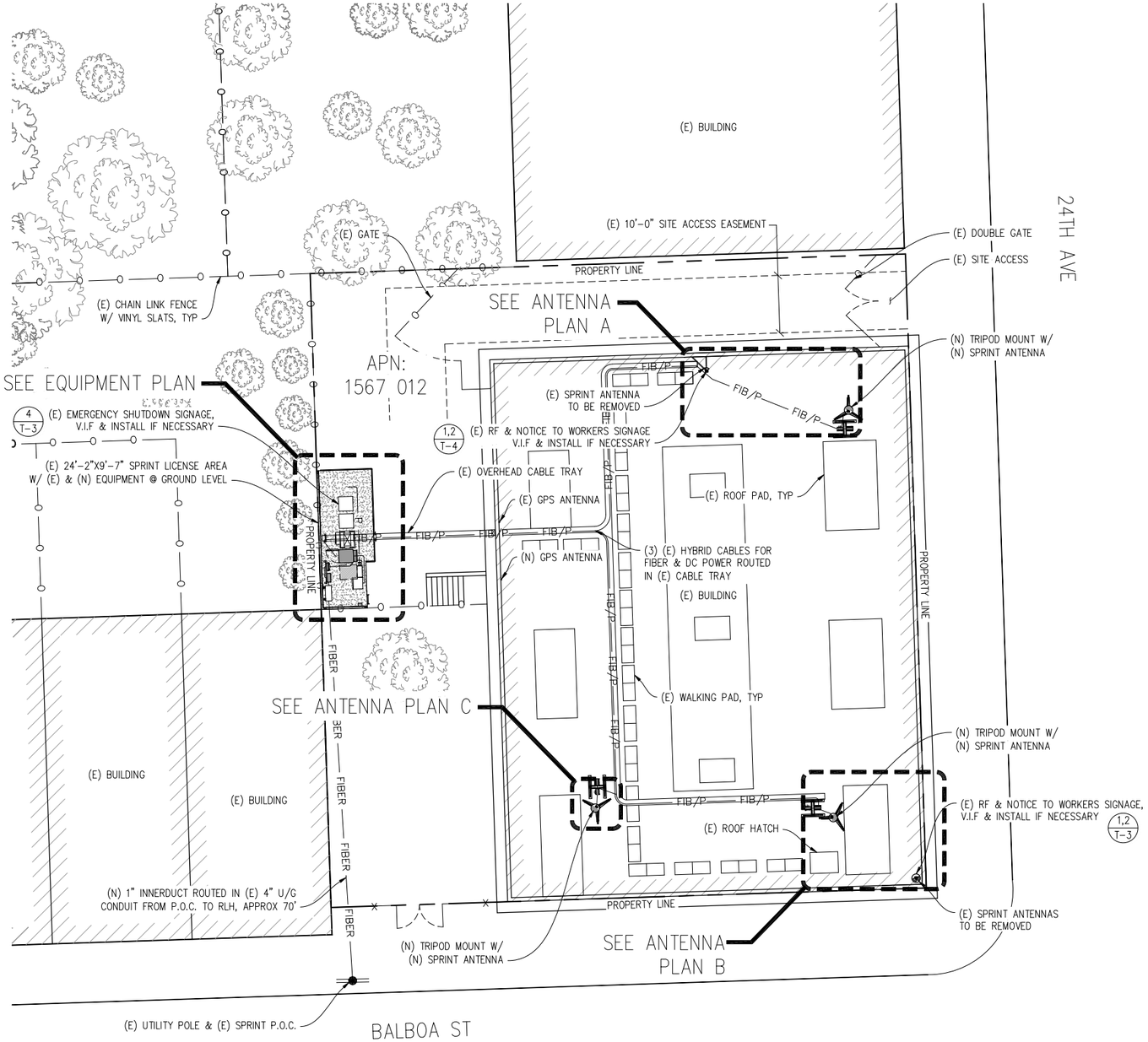
(SINCE <50 GAL OF ELECTROLYTE, CFC CHAPTER 6, SECTION 608 NOT APPLICABLE)

BATTERY INFORMATION (BATTERY ELECTROLYTE DATA-12V MONOBLOCKS)

BATTERY MODEL	TOTAL # OF BATTERY UNITS INSTALLED	TOTAL ELECTROLYTE VOLUME(GAL) PER UNIT	TOTAL ELECTROLYTE WEIGHT (LBS) PER UNIT	% SULFURIC ACID BY VOL = ACID VOLUME/UNIT / ELECTROLYTE VOLUME/UNIT
NARADA 12NDT190	12	2.49 GAL	29.88 LBS	58% = 1.45 GAL/2.49 GAL

% SULFURIC ACID BY WEIGHT = TOTAL ACID WEIGHT / TOTAL ELECTROLYTE WEIGHT	TOTAL SULFURIC VOLUME (GAL) = TOTAL UNITS X ELECTROLYTE VOLUME/UNITS	TOTAL SULFURIC WEIGHT (LBS) = TOTAL UNITS X ACID WEIGHT/UNIT
37.3% = 11.12 LBS/29.88 LBS	17.4 GAL = 12 UNITS X 1.45 GAL/UNIT	133.44 LBS = 12 UNITS X 11.12 LBS

BATTERY DATA CHART



SITE PLAN

1"=10'-0"

0 5' 10' 20' 30' 50'

GOLDEN GATE PARK

SF33XC682-C

692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	-	-	-
	-	-	-

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. THESE PLANS AND SPECIFICATIONS ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE OR PROJECT OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED AND PUBLISHED. NO PART OF THESE DRAWINGS AND SPECIFICATIONS SHALL BE COPIED, DISCLOSED TO OTHERS OR USED IN CONNECTION WITH ANY OTHER PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2005 STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

A-1

EXPANSION & EPOXY ANCHORS

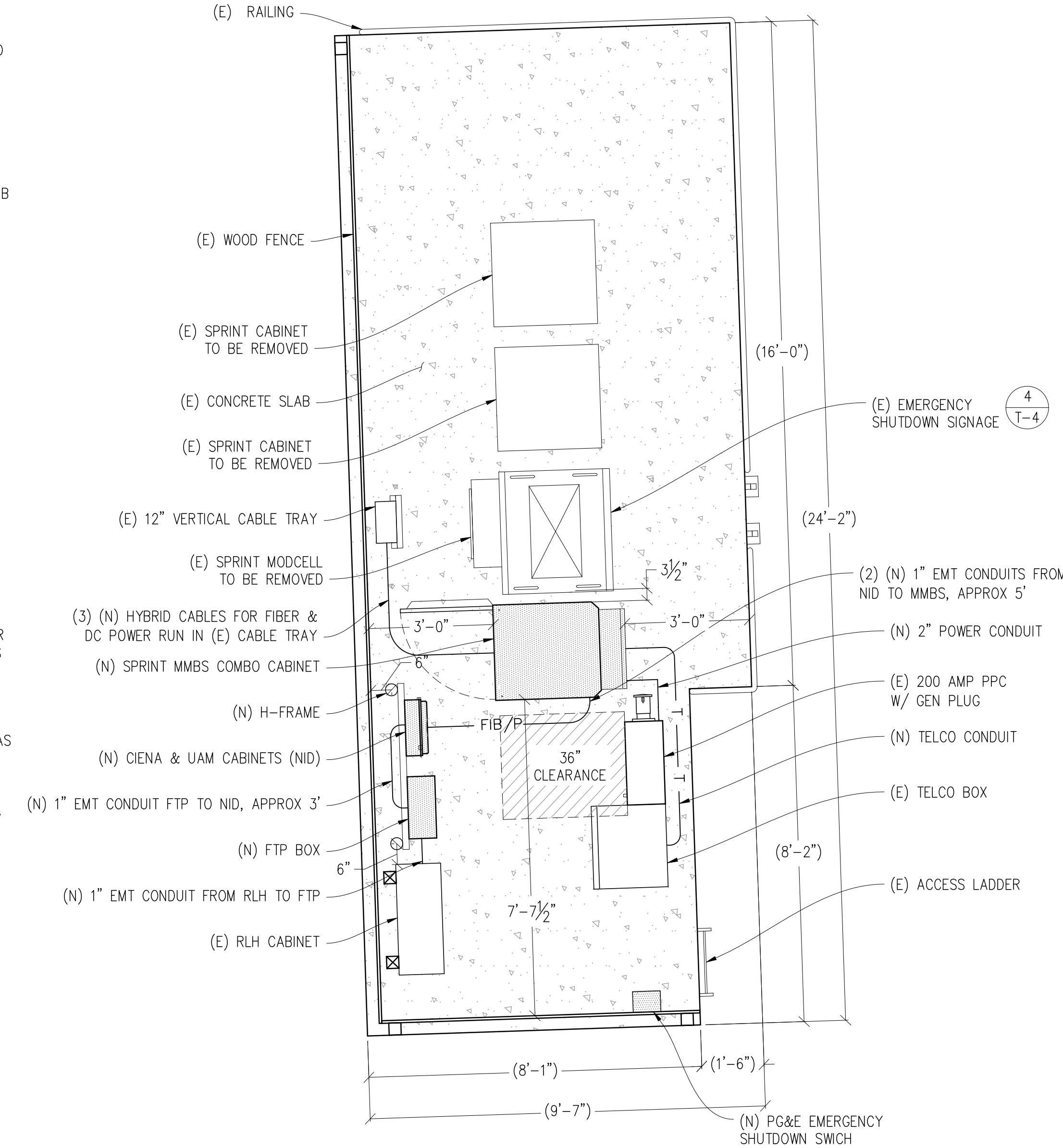
1. EXPANSION AND EPOXY ANCHORS SHALL BE IN CONFORMANCE WITH ALL REQUIREMENTS OF THE 2010 CALIFORNIA BUILDING CODE (CBC).
2. ALL ANCHORS PROVIDED SHALL BE INCLUDED IN EVALUATION REPORTS OF THE INTERNATIONAL CODE COUNCIL (ICC), AND SHALL BE EVALUATED FOR 2006 IBC MINIMUM REQUIREMENTS. IN THE ICC REPORT
3. CONCRETE EXPANSION ANCHORS SHALL BE KWIK BOLT TZ BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1917 OR APPROVED EQUIVALENT.
4. CMU EXPANSION ANCHORS SHALL BE KWIK BOLT 3 BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1385 OR APPROVED EQUIVALENT. ANCHORS SHALL BE INSTALLED A MINIMUM OF 1⅜" FROM ANY VERTICAL MORTAR JOINT TYPICAL. ANCHORS TO BE SPACED 8 INCHES ON CENTER MINIMUM AND LIMITED TO ONE ANCHOR PER CELL.
5. CONCRETE & GROUT FILLED CMU ADHESIVE EPOXY ANCHORS SHALL BE HIT RE-500SD BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-2322 OR APPROVED EQUIVALENT.
6. INSTALL EXPANSION AND EPOXY ANCHORS WITH SPECIAL INSPECTION IN ACCORDANCE WITH THE 2010 CBC, CHAPTER 17, AND ALL REQUIREMENTS OF THE MANUFACTURER, THE MANUFACTURER'S ICC APPROVAL AND THESE DRAWINGS.
7. EXPANSION ANCHORS SHALL BE 304/316 STAINLESS STEEL U.O.N.. EPOXY ANCHOR THREADED ROD SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL U.O.N.
8. LOCATE AND AVOID REINFORCEMENT AND OTHER EMBEDDED ITEMS WHEN INSTALLING ANCHORS, TYPICAL. SEE CONCRETE CORE DRILLING NOTES FOR ADDITIONAL INFORMATION.
9. THE SPECIAL INSPECTOR MUST MAKE PERIODIC INSPECTIONS DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE AND DIMENSIONS, CONCRETE MEMBER THICKNESS, ANCHOR SPACING, EDGE DISTANCES, TIGHTENING TORQUE, HOLE DIAMETER, DEPTH AND CLEANLINESS, ANCHOR EMBEDMENT AND ADHERENCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. SEE NOTE 10 BELOW FOR FREQUENCY OF INSPECTIONS.
10. 50% OF ALL ANCHORS, INCLUDING ALTERNATE BOLTS IN A GROUP OF ANCHORS, SHALL BE INSPECTED PER NOTE 9 ABOVE AND TORQUE TESTED PER THE ICC REPORT TEST VALUES.

CONCRETE CORE/DRILLING NOTES

1. WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED OR POST-TENSIONED REINFORCED CONCRETE (MILD REINFORCED), USE CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE (E) REINFORCING BARS. WHEN INSTALLING THEM INTO (E) PRE-STRESSED OR POST-TENSIONED CONCRETE LOCATE THE PRE-STRESSED OR POST-TENSIONED TENDONS BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, AT POINT OF PENETRATION, PRIOR TO INSTALLATION. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.
2. WHEN CORING EXISTING REINFORCED CONCRETE OF ANY CONSTRUCTION TYPE (PRE-STRESSED, POST-TENSIONED OR MILD REINFORCED), LOCATE THE EXISTING REINFORCING BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, PRIOR TO CORING. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING ANY REINFORCING DURING CORING. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE CORE. THE MAXIMUM SIZE OF ANY CORE IS TO BE 6" DIAMETER AND THE MINIMUM SPACING BETWEEN CORES IS TO BE TWICE THE CORE DIAMETER (I.E. 12" SPACING FOR A 6" DIAMETER CORE).
3. INSPECTOR IS TO BE PRESENT DURING ALL CORE DRILLING OPERATIONS TO VERIFY THAT NO REINFORCING CABLES, TENDONS, OR REBAR HAVE BEEN CUT. (SEE NOTE 5 BELOW)
4. THE INSPECTOR SHALL SUBMIT A WRITTEN REPORT TO THE OWNER.
5. THE INSPECTIONS INDICATED IN NOTES 3 AND 4 ABOVE ARE NOT REQUIRED FOR A CONCRETE FILL OVER METAL DECK APPLICATION WHERE INDICATED ON THE CONSTRUCTION DRAWINGS.

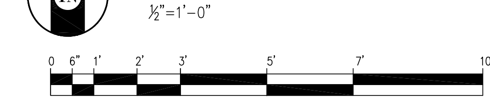
STRUCTURAL STEEL NOTES

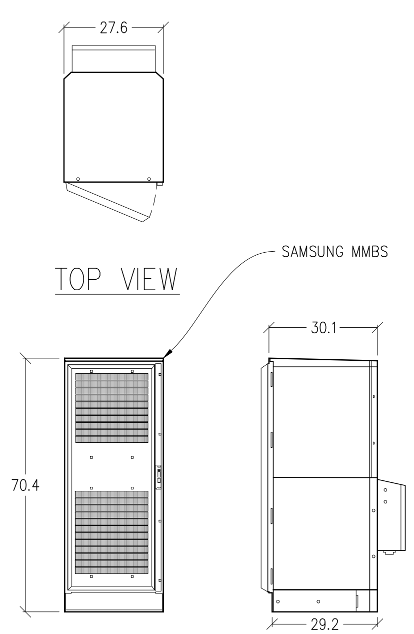
1. ALL STEEL CONSTRUCTION INCLUDING FABRICATION, ERECTION AND MATERIALS SHALL COMPLY WITH ALL REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND THE 2010 CBC.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED. ALL WF (WIDE FLANGE) & WT (TEE) SHAPES TO BE ASTM A992 (F_Y=50,000 PSI) UNLESS NOTED OTHERWISE. ALL STRUCTURAL TUBING (TS OR HSS) SHALL BE ASTM A500 GRADE B (F_Y=46,000 PSI). ALL STEEL PIPE SHALL BE ASTM A53 (TYPE E OR S, GRADE B (F_Y=35,000 PSI)) SCHEDULE 40 WITH OUTSIDE DIAMETERS GIVEN UNLESS OTHERWISE NOTED.
3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND SHALL CONFORM TO AISC & AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC SPECIFICATION. PAINTED SURFACES SHALL BE TOUCHED UP.
4. ALL WELDING SHALL BE PERFORMED BY QUALIFIED, CERTIFIED WELDERS.
5. BOLTS SHALL BE GALVANIZED ASTM A325 MINIMUM. BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS. SPECIAL INSPECTION NOT REQUIRED U.O.N.
6. THREADED RODS SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL . BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS.
7. ALL HOLES FOR BOLTED CONNECTIONS SHALL BE 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. USE STANDARD AISC GAGE AND PITCH FOR BOLTS EXCEPT AS NOTED OTHERWISE. HOLES FOR ANCHOR BOLTS IN BASE PLATES MAY BE AISC "OVERSIZE" HOLES WHERE ACCOMPANIED BY OVERSIZED HARDENED HDG WASHERS.
8. ALL SHOP FABRICATED STEEL STRUCTURAL MEMBERS FOR EXTERIOR USE SHALL BE HOT DIP GALVANIZED PER ASTM A123 AFTER FABRICATION & PAINTED PER CUSTOMER SPECIFICATIONS AS REQUIRED. STEEL FOR INTERIOR USE SHALL BE SHOP COAT OR GALVANIZED & PAINTED PER PLAN.
9. ALL FIELD FABRICATED GALVANIZED STEEL THAT IS CUT, GROUND, DRILLED, WELDED OR DAMAGED SHALL BE TREATED WITH "ZINC RICH" COLD GALVANIZING SPRAY OR COATING. NO RAW STEEL SHALL BE EXPOSED.



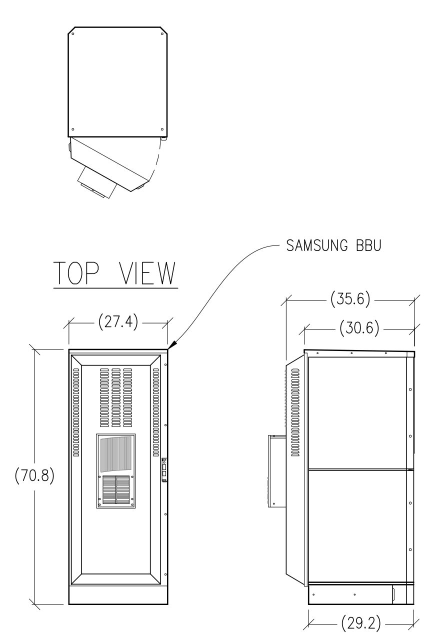
EXISTING / INTERIM EQUIPMENT PLAN

½"=1'-0"

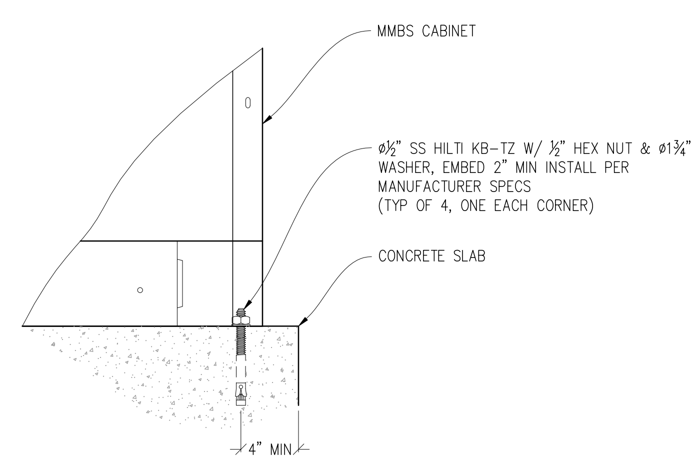




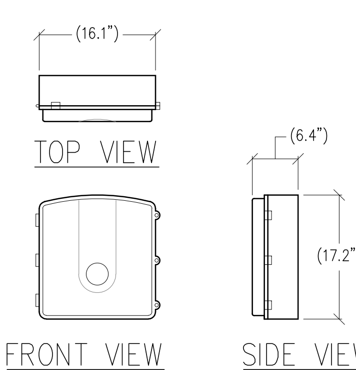
1 MMBS CABINET
½"=1'-0"



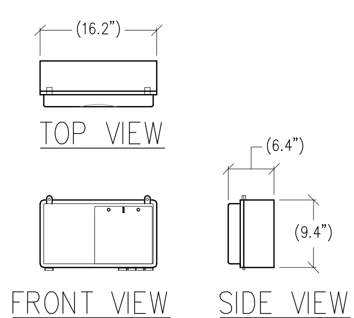
2 BATTERY CABINET
½"=1'-0"



3 CABINET ANCHORING DETAIL
1"=6"



4 CN 3911 DETAIL
1"=1'-0"



5 UAM DETAIL
1"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

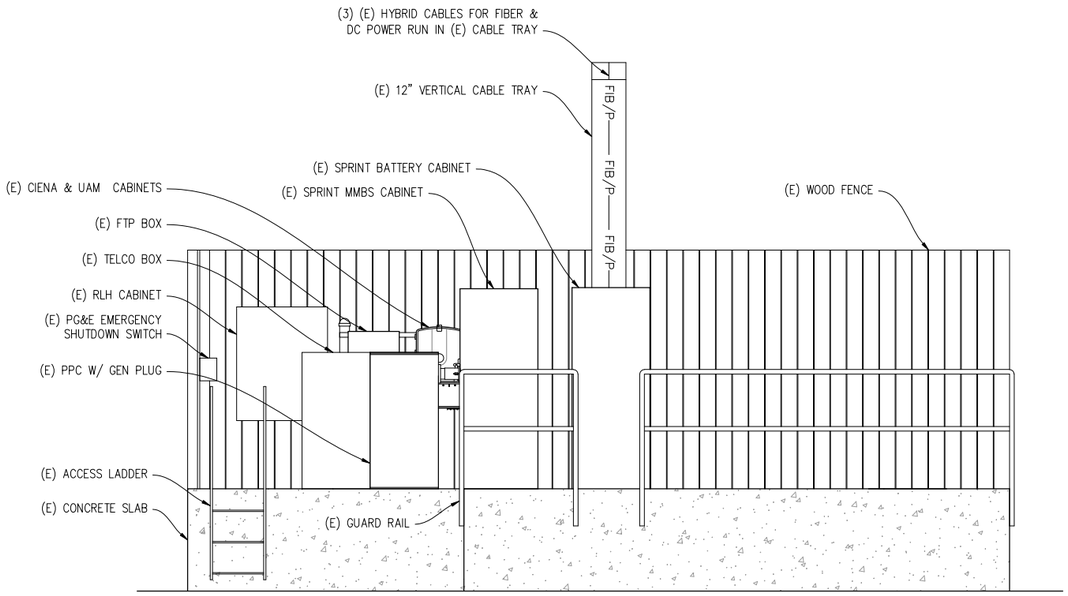
THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. WHETHER THE PROJECT FOR WHICH THEY ARE MADE BE EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2006, STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

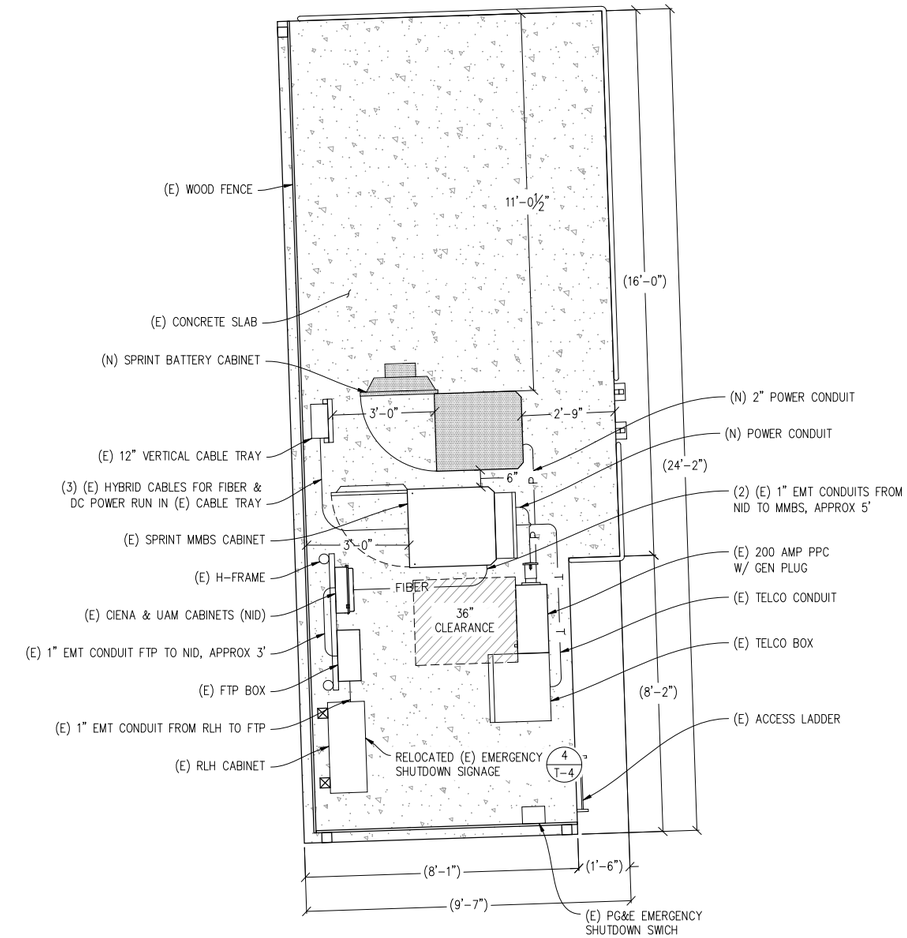
SHEET TITLE:
EXISTING / INTERIM EQUIPMENT PLAN & DETAILS

SHEET NUMBER:
A-2



EQUIPMENT ELEVATION

½"=1'-0"



FINAL CONFIGURATION EQUIPMENT PLAN

½"=1'-0"

TN

0 6" 1' 2' 3' 5' 7' 10'

GOLDEN GATE PARK

SF33XC682-C

692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. THESE PLANS AND SPECIFICATIONS ARE NOT TO BE CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF STREAMLINE ENGINEERING AND DESIGN INC. ANY UNAUTHORIZED USE OF THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE THE RESPONSIBILITY OF THE ENGINEER. ANY PERSON OR ENTITY ON OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2009, STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

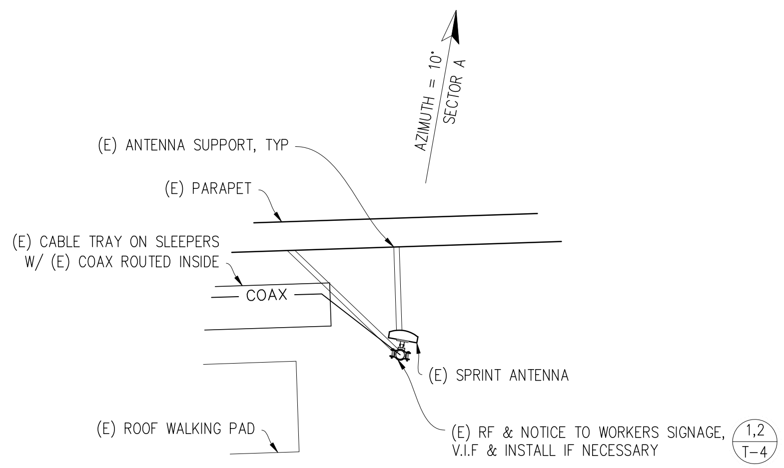
12857 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:

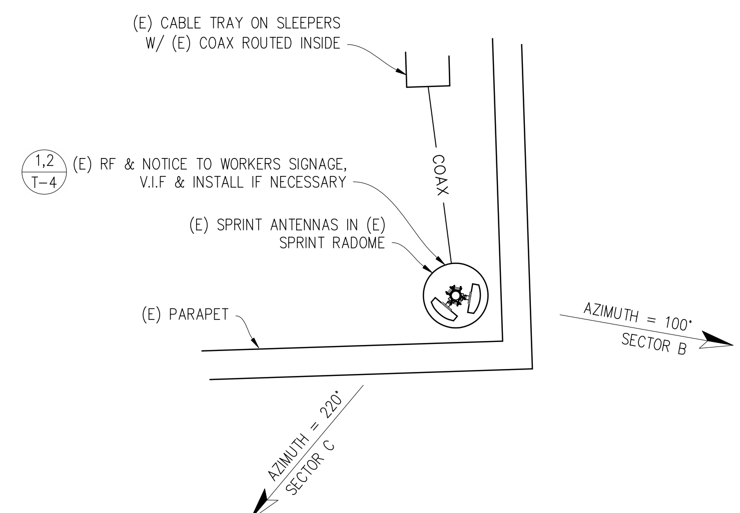
FINAL CONFIGURATION EQUIPMENT PLAN & ELEVATION

SHEET NUMBER:

A-3



EXISTING
ANTENNA PLAN A
½"=1'-0"



EXISTING
ANTENNA PLAN B & C
½"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

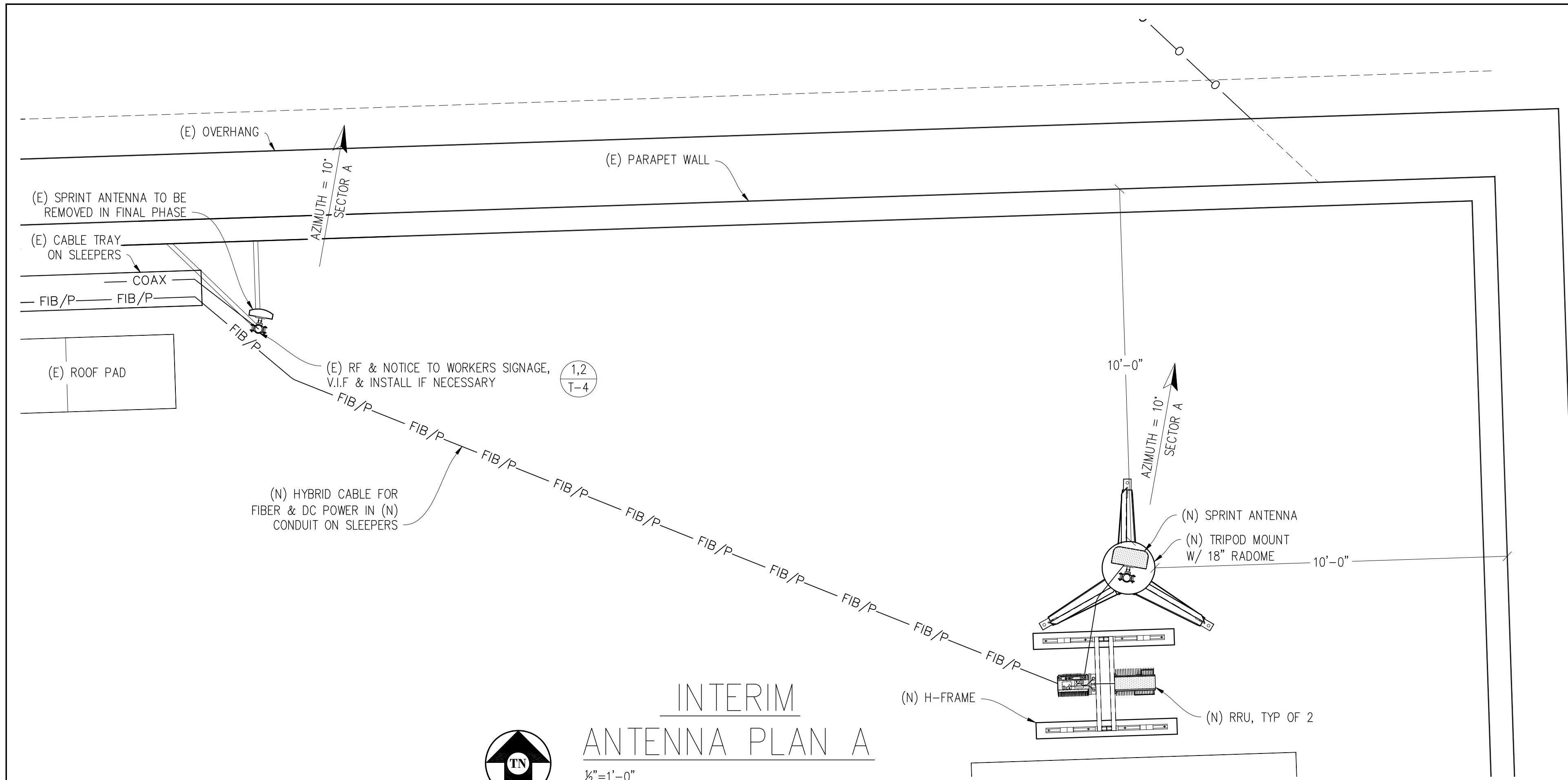
Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

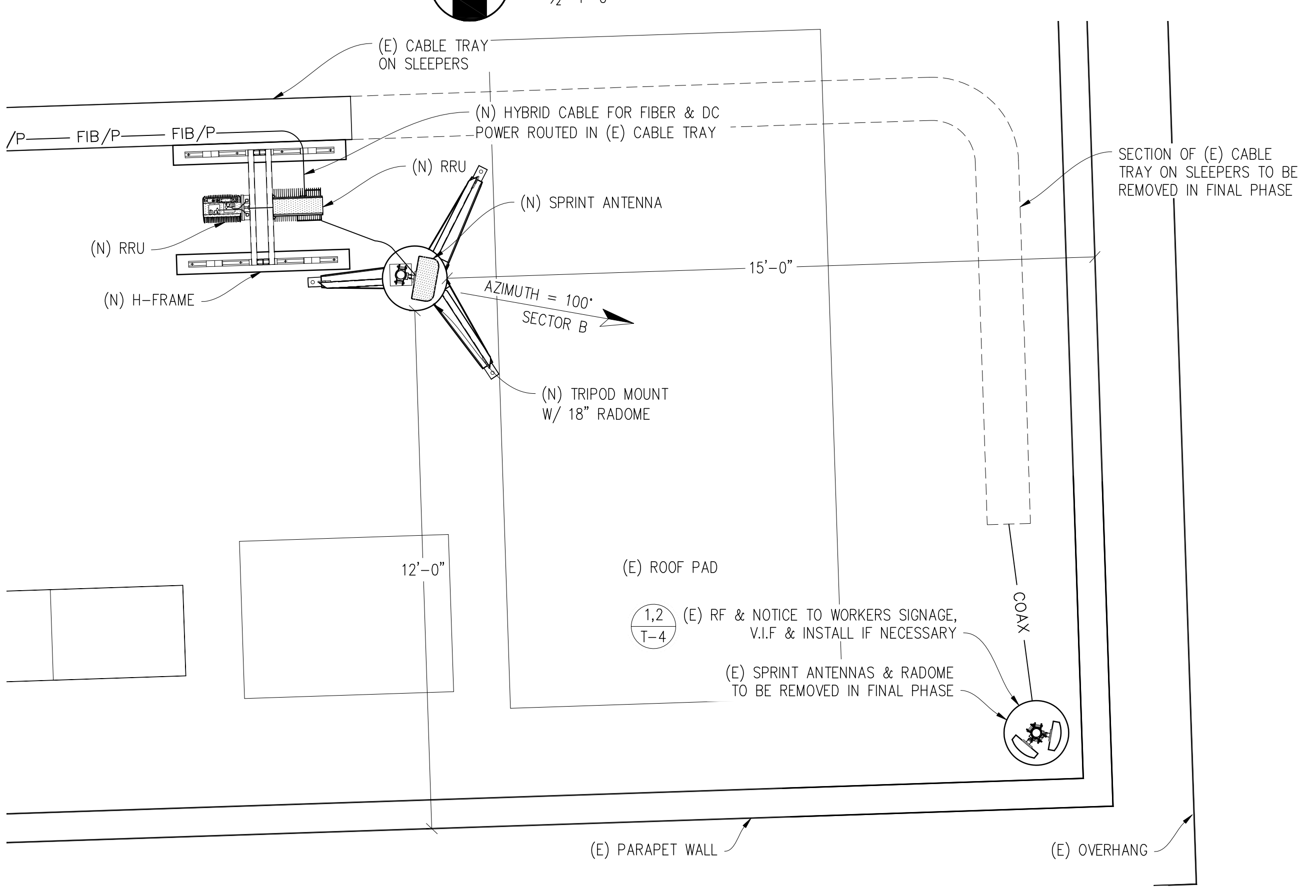
SHEET TITLE:
EXISTING ANTENNA PLANS

SHEET NUMBER:
A-4



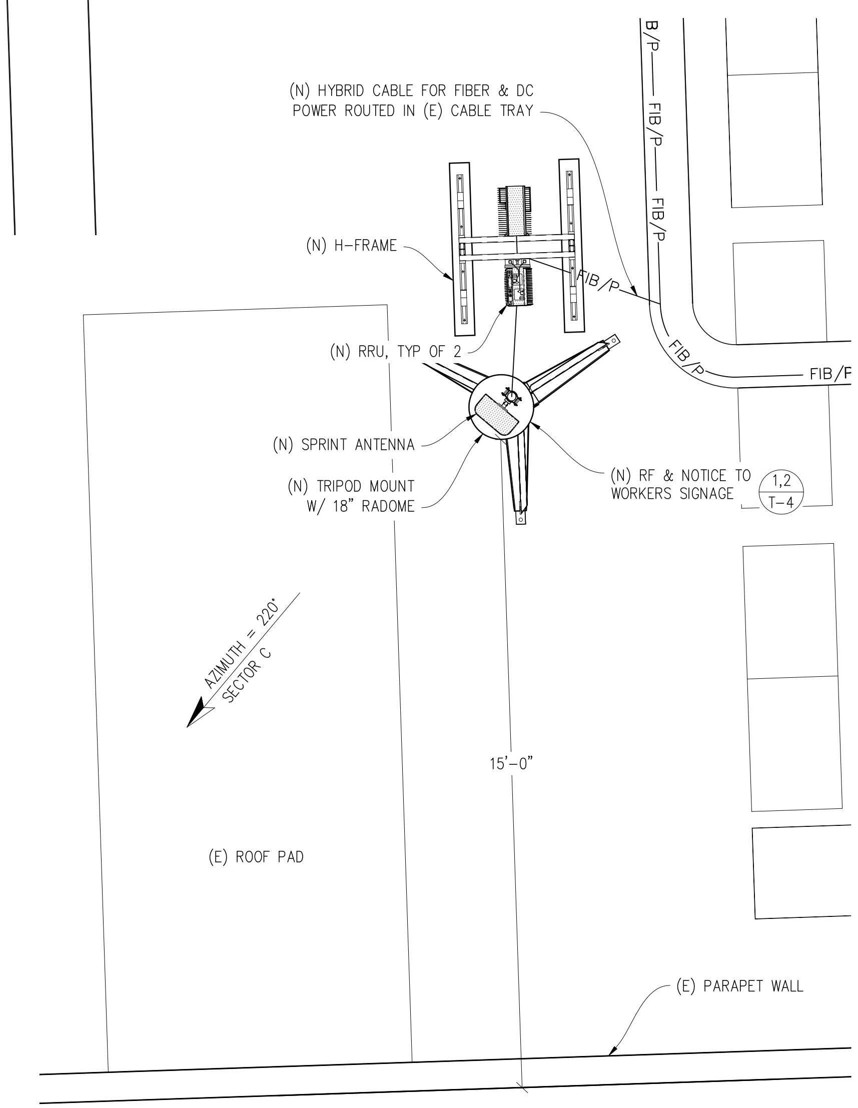
INTERIM ANTENNA PLAN A

½"=1'-0"



INTERIM ANTENNA PLAN B

½"=1'-0"



INTERIM ANTENNA PLAN C

½"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

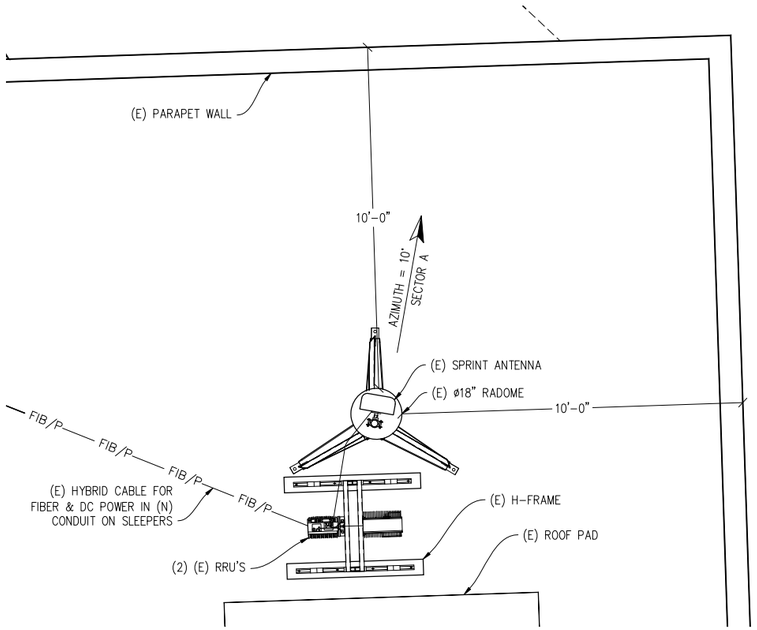
Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

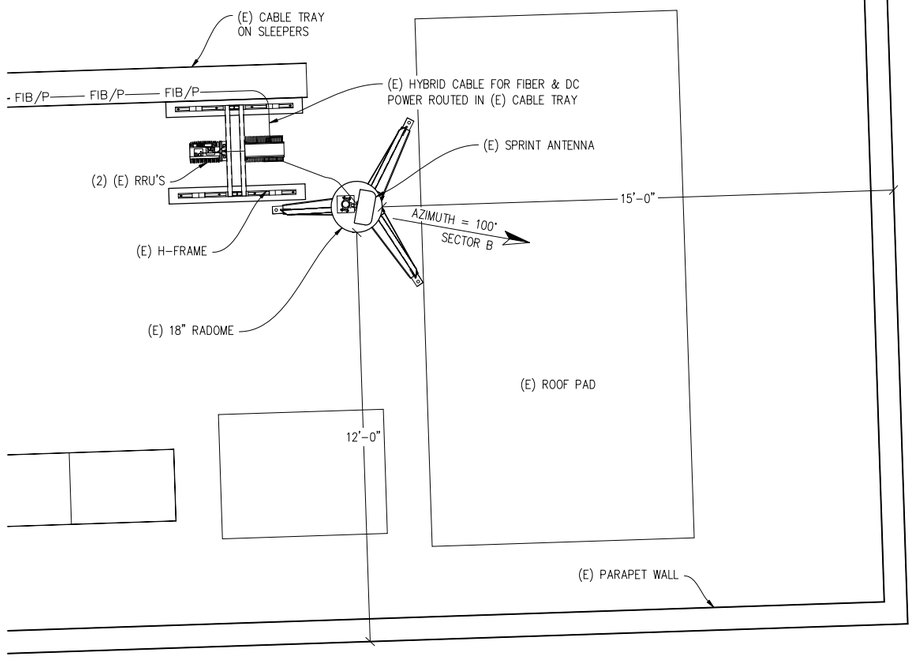
SHEET TITLE:
INTERIM ANTENNA PLANS & DETAILS

SHEET NUMBER:
A-5



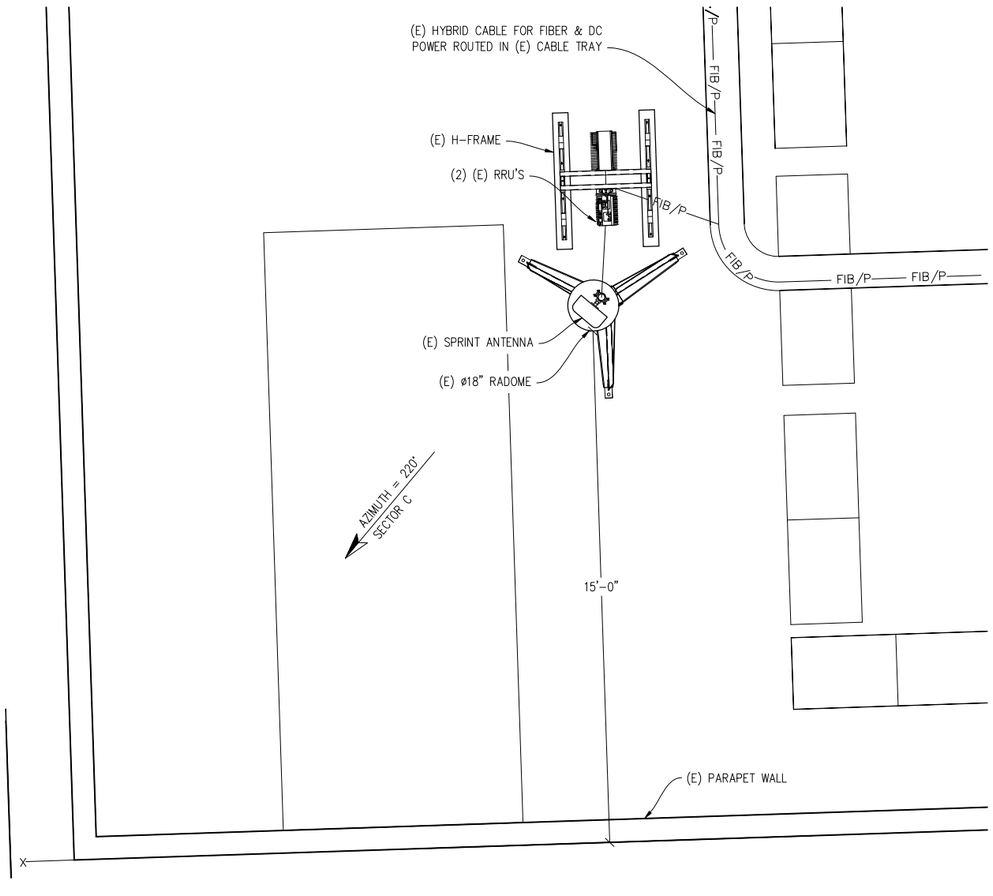
FINAL CONFIGURATION
ANTENNA PLAN A

½"=1'-0"



FINAL CONFIGURATION
ANTENNA PLAN B

½"=1'-0"



FINAL CONFIGURATION
ANTENNA PLAN C

½"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN, INC. THEY ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE DRAWINGS AND SPECIFICATIONS SHALL NOT BE LOANED TO ANY PERSON OR ENTITY OR OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2009, STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

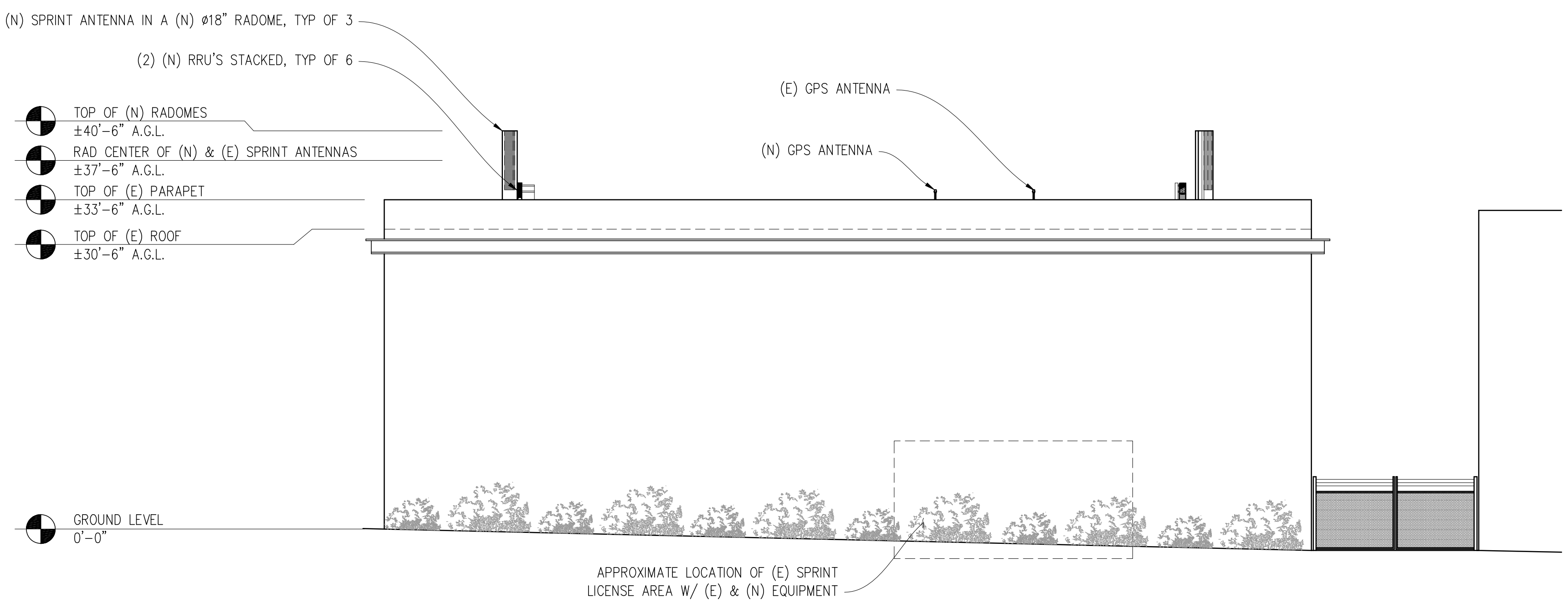
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

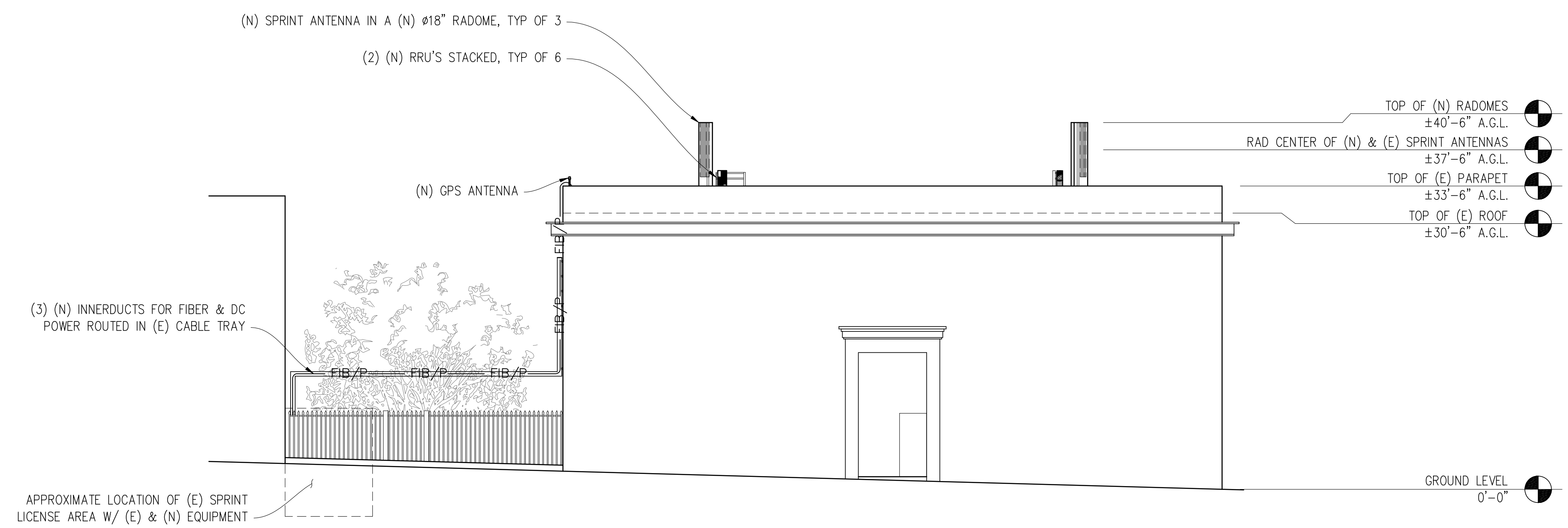
SHEET TITLE:
FINAL CONFIGURATION
ANTENNA PLANS

SHEET NUMBER:
A-6



(N) EAST ELEVATION

1/8"=1'-0"



(N) SOUTH ELEVATION

1/8"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

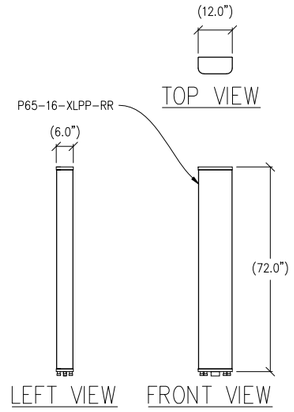
Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

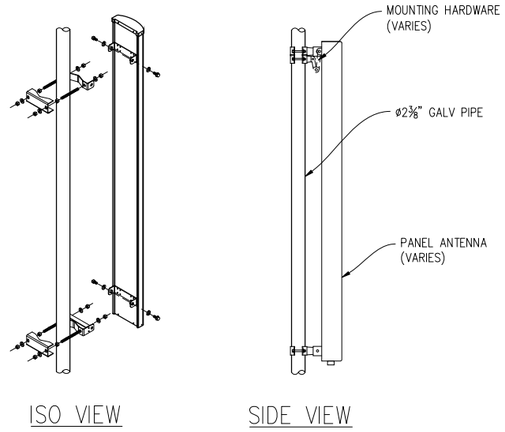
Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
ELEVATIONS

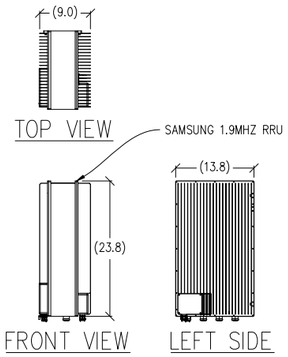
SHEET NUMBER:
A-7



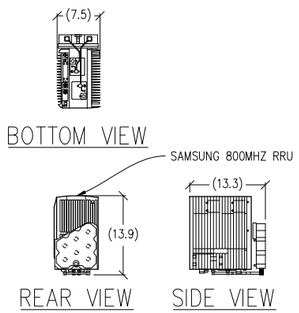
1 ANTENNA DETAIL
½"=1'-0"



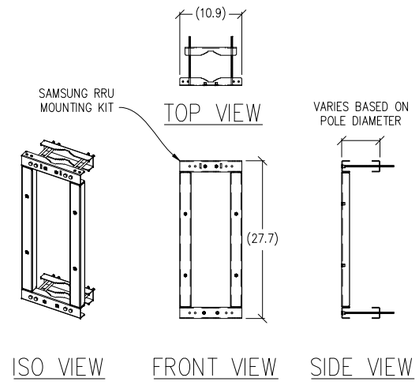
2 ANTENNA MOUNT DETAIL
1"=1'-0"



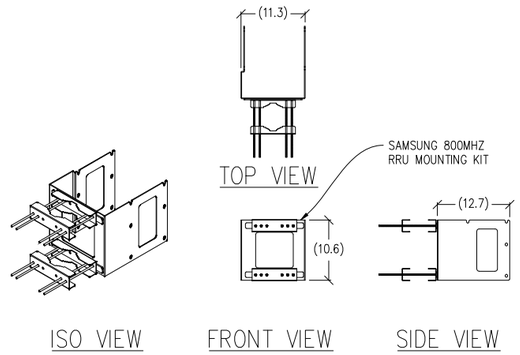
3 1900MHZ RRU UNIT
1"=1'-0"



4 800MHZ RRU UNIT
1"=1'-0"



5 1900 RRU PIPE MOUNT
1"=1'-0"



6 800MHZ RRU PIPE MOUNT
1"=1'-0"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THE REUSE OF THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON ENTIRELY ON OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. ©copyright © 2009, STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12857 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
DETAILS

SHEET NUMBER:
A-8

CONSTRUCTION NOTES

1. EXISTING BUILDING CONSTRUCTION CONDITIONS INDICATED ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION OR ORDERING OF MATERIALS. IF EXISTING CONDITIONS DO NOT ALLOW FOR DETAILS OF CONSTRUCTION AS SHOWN ON THESE DRAWINGS, NOTIFY ENGINEER OF RECORD FOR RESOLUTION PRIOR TO PROCEEDING. CONTRACTOR SHALL EXPOSE AND REVIEW EXISTING CONDITIONS IN A TIMELY MANNER SUCH THAT ALTERNATE DESIGNS OR DETAILS, IF REQUIRED MAY BE GENERATED WITHOUT DELAY TO THE PROJECT.

2. DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT ALTER, DAMAGE OR REMOVE ANY PART OF THE EXISTING STRUCTURE UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS.

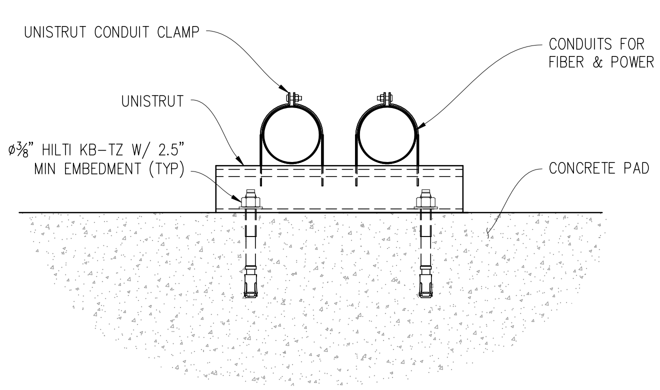
3. THE INTENT OF THESE DRAWINGS IS THAT THE WORK OF THE ADDITION, ALTERATION, REHABILITATION, OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 2010 CBC. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE 2010 CBC, A CHANGE ORDER, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE PREPARED AND SUBMITTED TO AND APPROVED BY THE BUILDING DEPARTMENT PRIOR TO PROCEEDING WITH THE WORK.

4. ALL WORK AND MATERIALS SHOWN ARE NEW UNLESS INDICATED AS EXISTING (E).

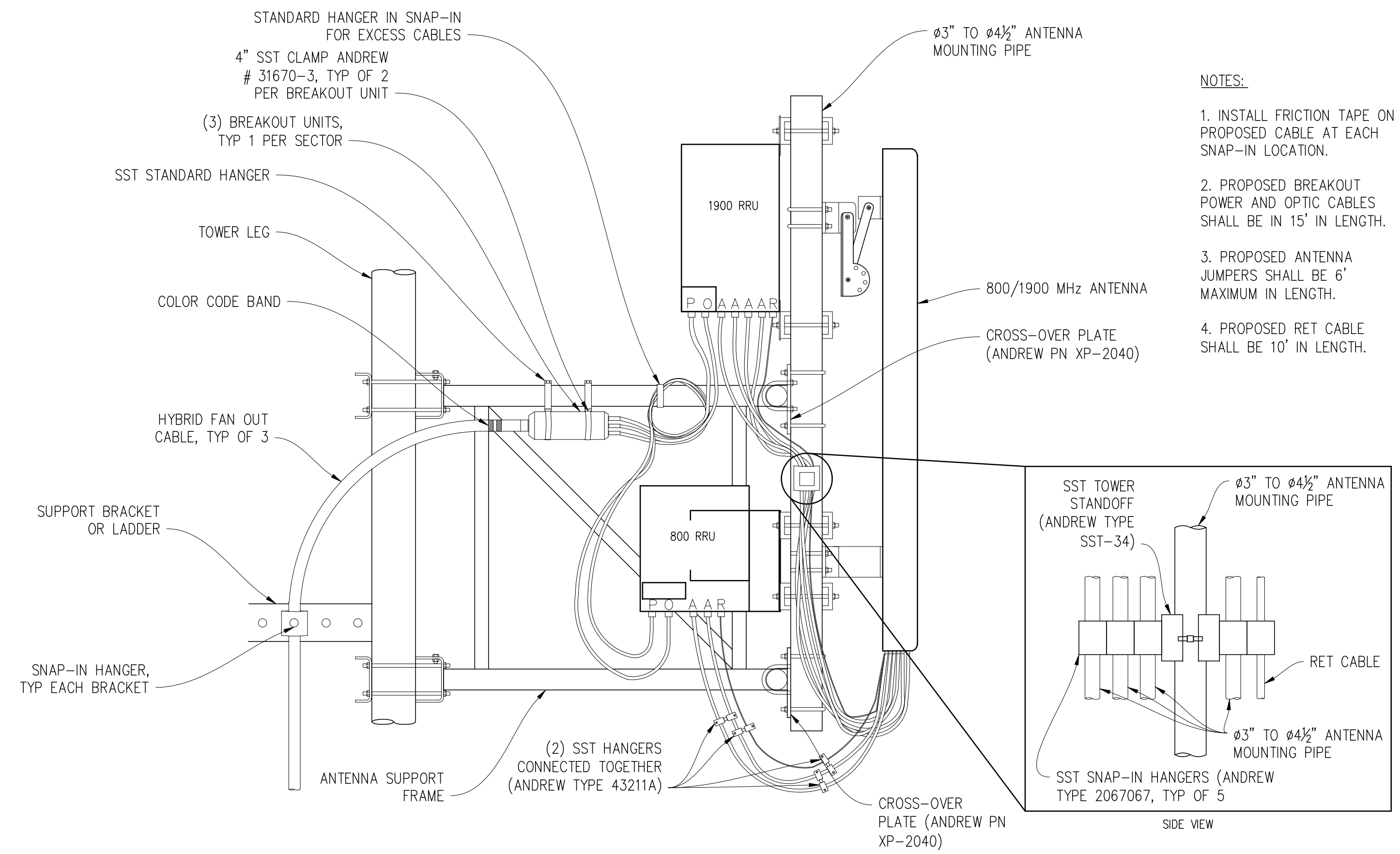
5. IT MAY BE NECESSARY TO REMOVE ARCHITECTURAL FINISHES, PLUMBING PIPES AND FIXTURES, ELECTRICAL CONDUIT, FIXTURES, PANELS, BOXES, TELEPHONE OR FIRE ALARM WIRING AND FIXTURES OR OTHER NON-STRUCTURAL ITEMS TO INSTALL STRUCTURAL WORK AND MATERIALS SHOWN ON THESE DRAWINGS. SUCH ITEMS SHALL BE REMOVED, REPAIRED AND/OR REPLACED TO MATCH PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTORS EXPENSE.

6. ALL WEATHER PROOFING. INCLUDING BUT NOT LIMITED TO TORCH DOWN, CAULKING, Z-FLASHING OR ANY OTHER MATERIAL THAT MAY BE ALTERED DURING INSTALLATION SHALL BE REPAIRED REPLACED AND/OR MODIFIED TO ENSURE THE BUILDING AT THE INSTALLATION SITE IS WEATHER PROOF.

7. ANY PROPOSED SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE, ANCHOR TYPES, OR DETAILING INDICATED IN THESE DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ORDERING MATERIALS. SUCH REVIEW SHALL BE BILLED ON A TIME AND MATERIALS BASIS TO THE CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.



1 CONDUIT MOUNTING DETAIL
1"=3"



NOTES:

1. INSTALL FRICTION TAPE ON PROPOSED CABLE AT EACH SNAP-IN LOCATION.
2. PROPOSED BREAKOUT POWER AND OPTIC CABLES SHALL BE IN 15' IN LENGTH.
3. PROPOSED ANTENNA JUMPERS SHALL BE 6' MAXIMUM IN LENGTH.
4. PROPOSED RET CABLE SHALL BE 10' IN LENGTH.

2 BOOM & STAND-OFF 800/1900 ANTENNA DETAIL
NOT TO SCALE
NOTE: FOR DIAGRAMMATICAL PURPOSE ONLY. ACTUAL ANTENNA MOUNT WILL VARY.

ANTENNA SCHEDULE [SF33XC682-C]

	ANTENNAS					RRU'S				CABLING								
	SECTOR	TECHNOLOGY	ANTENNA MODEL	RAD CENTER	AZIMUTH	RRU FREQ.	RRU MODEL	NO. OF RRU'S	NO. OF FILTERS	NO. OF JUMPERS	JUMPER LENGTH (ø½")	NO. OF RET CABLES	NO. OF HYBRID CABLES	HYBRID CABLE LENGTH (LINEAR FEET)	NO. OF COAX CABLES	COAX DIA.	COAX LENGTH
ALPHA SECTOR	A1	800/1900 MHz	P65-16-XLPP-RR	37'-6"	10°	800 MHz	RRH-C2A	1	1	2	8'	1	1	131'	N/A	N/A	N/A
						1900 MHz	RRH-P4	1	0	4	8'	1			N/A	N/A	N/A
	A2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			4	⅞	128'
	A3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A
BETA SECTOR	B1	800/1900 MHz	P65-16-XLPP-RR	37'-6"	100°	800 MHz	RRH-C2A	1	1	2	8'	1	1	180'	N/A	N/A	N/A
						1900 MHz	RRH-P4	1	0	4	8'	1			N/A	N/A	N/A
	B2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			4	⅞	177'
	B3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A
GAMMA SECTOR	C1	800/1900 MHz	P65-16-XLPP-RR	37'-6"	220°	800 MHz	RRH-C2A	1	1	2	8'	1	1	148'	N/A	N/A	N/A
						1900 MHz	RRH-P4	1	0	4	8'	1			N/A	N/A	N/A
	C2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			4	⅞	145'
	C3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A
	N/A	GPS	GPS-TMG-HR-26NCM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	¼"	10'

SECTOR	CABLE	FIRST RING	SECOND RING	THIRD RING
1 ALPHA	1	GREEN	NO TAPE	NO TAPE
	2	BLUE	NO TAPE	NO TAPE
	3	BROWN	NO TAPE	NO TAPE
	4	WHITE	NO TAPE	NO TAPE
	5	RED	NO TAPE	NO TAPE
	6	SLATE	NO TAPE	NO TAPE
	7	PURPLE	NO TAPE	NO TAPE
	8	ORANGE	NO TAPE	NO TAPE
2 BETA	1	GREEN	GREEN	NO TAPE
	2	BLUE	BLUE	NO TAPE
	3	BROWN	BROWN	NO TAPE
	4	WHITE	WHITE	NO TAPE
	5	RED	RED	NO TAPE
	6	SLATE	SLATE	NO TAPE
	7	PURPLE	PURPLE	NO TAPE
	8	ORANGE	ORANGE	NO TAPE
3 GAMMA	1	GREEN	GREEN	GREEN
	2	BLUE	BLUE	BLUE
	3	BROWN	BROWN	BROWN
	4	WHITE	WHITE	WHITE
	5	RED	RED	RED
	6	SLATE	SLATE	SLATE
	7	PURPLE	PURPLE	PURPLE
	8	ORANGE	ORANGE	ORANGE

FREQUENCY COLOR CODE FOR PAIRS AND FIBER CABLES OF HYBRID CABLE

FREQUENCY COLOR CODE	INDICATOR	ID
800 MHz #1	YELLOW	GREEN
1900 MHz #1	YELLOW	RED
1900 MHz #2	YELLOW	BROWN
RESERVED	YELLOW	BLUE
RESERVED	YELLOW	SLATE
RESERVED	YELLOW	ORANGE
RESERVED	YELLOW	WHITE
RESERVED	YELLOW	PURPLE

TYPICAL HYBRID CABLE COLOR CODE

SECTOR	FIRST RING	SECOND RING	THIRD RING
1	GREEN	NO TAPE	NO TAPE
2	GREEN	GREEN	NO TAPE
3	GREEN	GREEN	GREEN

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

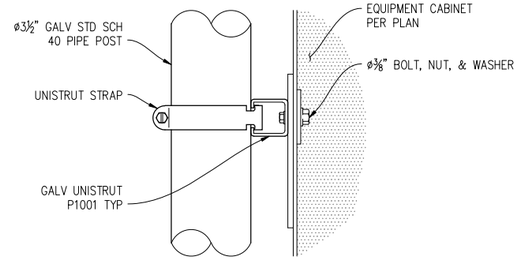
THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. AND WERE PREPARED FOR THE SPECIFIC PROJECT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON ON OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2006, STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

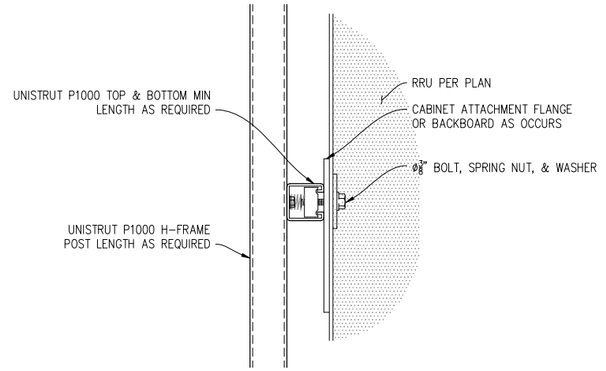
SHEET TITLE:
DETAILS & NOTES

SHEET NUMBER:
A-9



SIDE VIEW

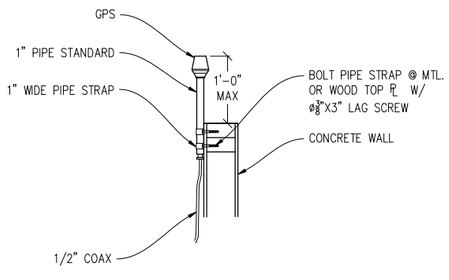
1 CABINET MOUNTING DETAIL
1"=3"



2 H-FRAME CABINET MOUNTING DETAIL
1"=3"

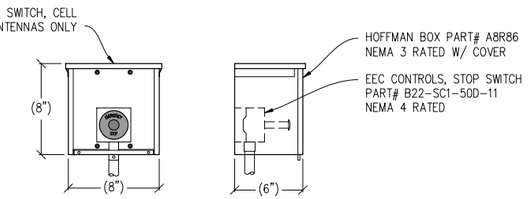
INSTALLATION & PLACEMENT GUIDELINES

1. THE SHUTDOWN SWITCH BOX SHALL BE, CLEARLY VISIBLE WHEN APPROACHING THE SITE, LOCATED INSIDE A PG&E LOCKED BOX, AND LOCATED OUTSIDE LICENSEE EQUIPMENT SHELTER.
2. FOR EQUIPMENT SHELTER INSTALLATIONS: THE SHUTDOWN SWITCH BOX SHALL BE LOCATED ADJACENT TO THE EQUIPMENT SHELTER ENTRANCE DOOR.
3. FOR FENCED EQUIPMENT CABINET INSTALLATIONS: THE SHUTDOWN SWITCH BOX SHALL BE LOCATED WITHIN THE FENCED AREA AS CLOSE AS POSSIBLE TO THE FENCE ENTRANCE AND IN PLAIN VIEW.
4. FOR UNFENCED EQUIPMENT CABINET INSTALLATIONS: THE SHUTDOWN SWITCH BOX SHALL BE PLACED IN DIRECT VIEW FROM SITE ACCESS PATH.
5. FOR UNDERGROUND VAULT INSTALLATIONS: THE SHUTDOWN SWITCH BOX SHALL BE MOUNTED TO THE ABOVE GROUND PORTION OF THE ACCESS ENTRANCE.



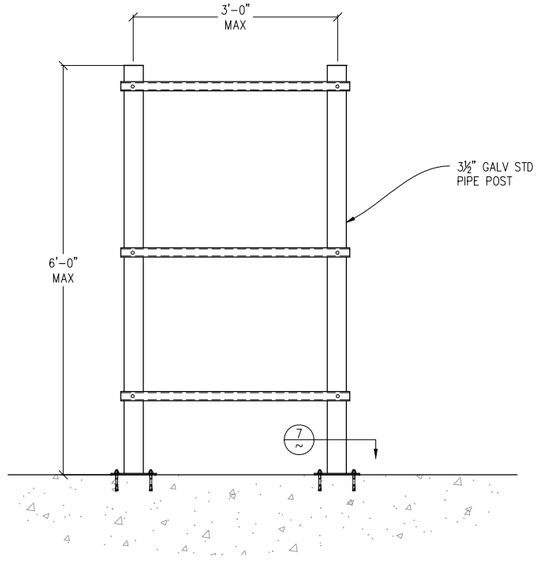
SIDE VIEW

3 GPS ANTENNA DETAIL
1"=1'-0"

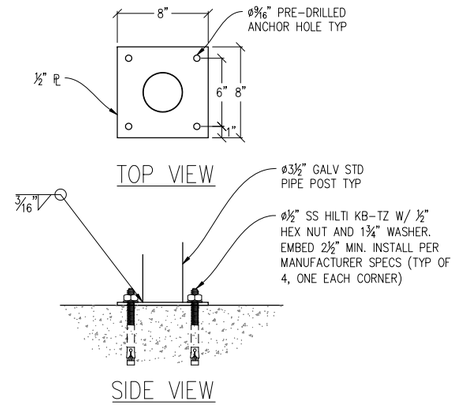


FRONT VIEW RIGHT VIEW

4 EMERGENCY STOP SWITCH DETAIL
1"=6"



5 H-FRAME DETAIL
1"=1'-0"



SIDE VIEW

6 H-FRAME PLATE DETAIL
1"=6"

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON ENTITY ON OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2005 STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
DETAILS

SHEET NUMBER:
A-10

CONSTRUCTION NOTES

1. EXISTING BUILDING CONSTRUCTION CONDITIONS INDICATED ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION OR ORDERING OF MATERIALS. IF EXISTING CONDITIONS DO NOT ALLOW FOR DETAILS OF CONSTRUCTION AS SHOWN ON THESE DRAWINGS, NOTIFY ENGINEER OF RECORD FOR RESOLUTION PRIOR TO PROCEEDING. CONTRACTOR SHALL EXPOSE AND REVIEW EXISTING CONDITIONS IN A TIMELY MANNER SUCH THAT ALTERNATE DESIGNS OR DETAILS, IF REQUIRED MAY BE GENERATED WITHOUT DELAY TO THE PROJECT.
2. DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT ALTER, DAMAGE OR REMOVE ANY PART OF THE EXISTING STRUCTURE UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS.
3. THE INTENT OF THESE DRAWINGS IS THAT THE WORK OF THE ADDITION, ALTERATION, REHABILITATION, OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 2010 CBC. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE 2010 CBC, A CHANGE ORDER, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE PREPARED AND SUBMITTED TO AND APPROVED BY THE BUILDING DEPARTMENT PRIOR TO PROCEEDING WITH THE WORK.
4. ALL WORK AND MATERIALS SHOWN ARE NEW UNLESS INDICATED AS EXISTING (E).
5. IT MAY BE NECESSARY TO REMOVE ARCHITECTURAL FINISHES, PLUMBING PIPES AND FIXTURES, ELECTRICAL CONDUIT, FIXTURES, PANELS, BOXES, TELEPHONE OR FIRE ALARM WIRING AND FIXTURES OR OTHER NON-STRUCTURAL ITEMS TO INSTALL STRUCTURAL WORK AND MATERIALS SHOWN ON THESE DRAWINGS. SUCH ITEMS SHALL BE REMOVED, REPAIRED AND/OR REPLACED TO MATCH PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTORS EXPENSE.
6. ALL WEATHER PROOFING. INCLUDING BUT NOT LIMITED TO TORCH DOWN, CAULKING, Z-FLASHING OR ANY OTHER MATERIAL THAT MAY BE ALTERED DURING INSTALLATION SHALL BE REPAIRED REPLACED AND/OR MODIFIED TO ENSURE THE BUILDING AT THE INSTALLATION SITE IS WEATHER PROOF.
7. ANY PROPOSED SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE, ANCHOR TYPES, OR DETAILING INDICATED IN THESE DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ORDERING MATERIALS. SUCH REVIEW SHALL BE BILLED ON A TIME AND MATERIALS BASIS TO THE CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.

EXPANSION & EPOXY ANCHORS

1. EXPANSION AND EPOXY ANCHORS SHALL BE IN CONFORMANCE WITH ALL REQUIREMENTS OF THE 2010 CALIFORNIA BUILDING CODE (CBC).
2. ALL ANCHORS PROVIDED SHALL BE INCLUDED IN EVALUATION REPORTS OF THE INTERNATIONAL CODE COUNCIL (ICC), AND SHALL BE EVALUATED FOR 2006 IBC MINIMUM REQUIREMENTS. IN THE ICC REPORT
3. CONCRETE EXPANSION ANCHORS SHALL BE KWIK BOLT TZ BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1917 OR APPROVED EQUIVALENT.
4. CMU EXPANSION ANCHORS SHALL BE KWIK BOLT 3 BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-1385 OR APPROVED EQUIVALENT. ANCHORS SHALL BE INSTALLED A MINIMUM OF 1⅜" FROM ANY VERTICAL MORTAR JOINT TYPICAL. ANCHORS TO BE SPACED 8 INCHES ON CENTER MINIMUM AND LIMITED TO ONE ANCHOR PER CELL.
5. CONCRETE & GROUT FILLED CMU ADHESIVE EPOXY ANCHORS SHALL BE HIT RE-500SD BY HILTI, INC., TULSA, OKLAHOMA AS PER ICC REPORT NO. ESR-2322 OR APPROVED EQUIVALENT.
6. INSTALL EXPANSION AND EPOXY ANCHORS WITH SPECIAL INSPECTION IN ACCORDANCE WITH THE 2010 CBC, CHAPTER 17, AND ALL REQUIREMENTS OF THE MANUFACTURER, THE MANUFACTURER'S ICC APPROVAL AND THESE DRAWINGS.
7. EXPANSION ANCHORS SHALL BE 304/316 STAINLESS STEEL U.O.N.. EPOXY ANCHOR THREADED ROD SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL U.O.N.
8. LOCATE AND AVOID REINFORCEMENT AND OTHER EMBEDDED ITEMS WHEN INSTALLING ANCHORS, TYPICAL. SEE CONCRETE CORE DRILLING NOTES FOR ADDITIONAL INFORMATION.
9. THE SPECIAL INSPECTOR MUST MAKE PERIODIC INSPECTIONS DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE AND DIMENSIONS, CONCRETE MEMBER THICKNESS, ANCHOR SPACING, EDGE DISTANCES, TIGHTENING TORQUE, HOLE DIAMETER, DEPTH AND CLEANLINESS, ANCHOR EMBEDMENT AND ADHERENCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. SEE NOTE 10 BELOW FOR FREQUENCY OF INSPECTIONS.
10. 50% OF ALL ANCHORS, INCLUDING ALTERNATE BOLTS IN A GROUP OF ANCHORS, SHALL BE INSPECTED PER NOTE 9 ABOVE AND TORQUE TESTED PER THE ICC REPORT TEST VALUES.

CONCRETE CORE/DRILLING NOTES

1. WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED OR POST-TENSIONED REINFORCED CONCRETE (MILD REINFORCED), USE CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE (E) REINFORCING BARS. WHEN INSTALLING THEM INTO (E) PRE-STRESSED OR POST-TENSIONED CONCRETE LOCATE THE PRE-STRESSED OR POST-TENSIONED TENDONS BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, AT POINT OF PENETRATION, PRIOR TO INSTALLATION. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.
2. WHEN CORING EXISTING REINFORCED CONCRETE OF ANY CONSTRUCTION TYPE (PRE-STRESSED, POST-TENSIONED OR MILD REINFORCED), LOCATE THE EXISTING REINFORCING BY USING A NON-DESTRUCTIVE METHOD, SUCH AS X-RAY, PRIOR TO CORING. EXERCISE EXTREME CARE & CAUTION TO AVOID CUTTING OR DAMAGING ANY REINFORCING DURING CORING. MAINTAIN A MINIMUM CLEARANCE OF TWO INCHES BETWEEN REINFORCEMENT AND THE CORE. THE MAXIMUM SIZE OF ANY CORE IS TO BE 6" DIAMETER AND THE MINIMUM SPACING BETWEEN CORES IS TO BE TWICE THE CORE DIAMETER (I.E. 12" SPACING FOR A 6" DIAMETER CORE).
3. INSPECTOR IS TO BE PRESENT DURING ALL CORE DRILLING OPERATIONS TO VERIFY THAT NO REINFORCING CABLES, TENDONS, OR REBAR HAVE BEEN CUT. (SEE NOTE 5 BELOW)
4. THE INSPECTOR SHALL SUBMIT A WRITTEN REPORT TO THE OWNER.
5. THE INSPECTIONS INDICATED IN NOTES 3 AND 4 ABOVE ARE NOT REQUIRED FOR A CONCRETE FILL OVER METAL DECK APPLICATION WHERE INDICATED ON THE CONSTRUCTION DRAWINGS.

STRUCTURAL STEEL NOTES

1. ALL STEEL CONSTRUCTION INCLUDING FABRICATION, ERECTION AND MATERIALS SHALL COMPLY WITH ALL REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND THE 2010 CBC.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED. ALL WF (WIDE FLANGE) & WT (TEE) SHAPES TO BE ASTM A992 (F_Y=50,000 PSI) UNLESS NOTED OTHERWISE. ALL STRUCTURAL TUBING (TS OR HSS) SHALL BE ASTM A500 GRADE B (F_Y=46,000 PSI). ALL STEEL PIPE SHALL BE ASTM A53 (TYPE E OR S, GRADE B (F_Y=35,000 PSI)) SCHEDULE 40 WITH OUTSIDE DIAMETERS GIVEN UNLESS OTHERWISE NOTED.
3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND SHALL CONFORM TO AISC & AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC SPECIFICATION. PAINTED SURFACES SHALL BE TOUCHED UP.
4. ALL WELDING SHALL BE PERFORMED BY QUALIFIED, CERTIFIED WELDERS.
5. BOLTS SHALL BE GALVANIZED ASTM A325 MINIMUM. BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS. SPECIAL INSPECTION NOT REQUIRED U.O.N.
6. THREADED RODS SHALL BE ASTM F593 CW 304/316 STAINLESS STEEL . BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS.
7. ALL HOLES FOR BOLTED CONNECTIONS SHALL BE 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. USE STANDARD AISC GAGE AND PITCH FOR BOLTS EXCEPT AS NOTED OTHERWISE. HOLES FOR ANCHOR BOLTS IN BASE PLATES MAY BE AISC "OVERSIZE" HOLES WHERE ACCOMPANIED BY OVERSIZED HARDENED HDG WASHERS.
8. ALL SHOP FABRICATED STEEL STRUCTURAL MEMBERS FOR EXTERIOR USE SHALL BE HOT DIP GALVANIZED PER ASTM A123 AFTER FABRICATION & PAINTED PER CUSTOMER SPECIFICATIONS AS REQUIRED. STEEL FOR INTERIOR USE SHALL BE SHOP COAT OR GALVANIZED & PAINTED PER PLAN.
9. ALL FIELD FABRICATED GALVANIZED STEEL THAT IS CUT, GROUND, DRILLED, WELDED OR DAMAGED SHALL BE TREATED WITH "ZINC RICH" COLD GALVANIZING SPRAY OR COATING. NO RAW STEEL SHALL BE EXPOSED.

PLACE HOLDER

STRUCTURALS IN PROCESS

GOLDEN GATE PARK

SF33XC682-C

692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. THESE PLANS AND SPECIFICATIONS ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECTS. THE DRAWINGS AND SPECIFICATIONS SHALL NOT BE LOANED, COPIED OR MADE AVAILABLE TO ANY PERSON ENTITY OR ON OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2005 STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED

KEVIN R. SORENSEN
No.4469
STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:

STRUCTURAL NOTES

SHEET NUMBER:

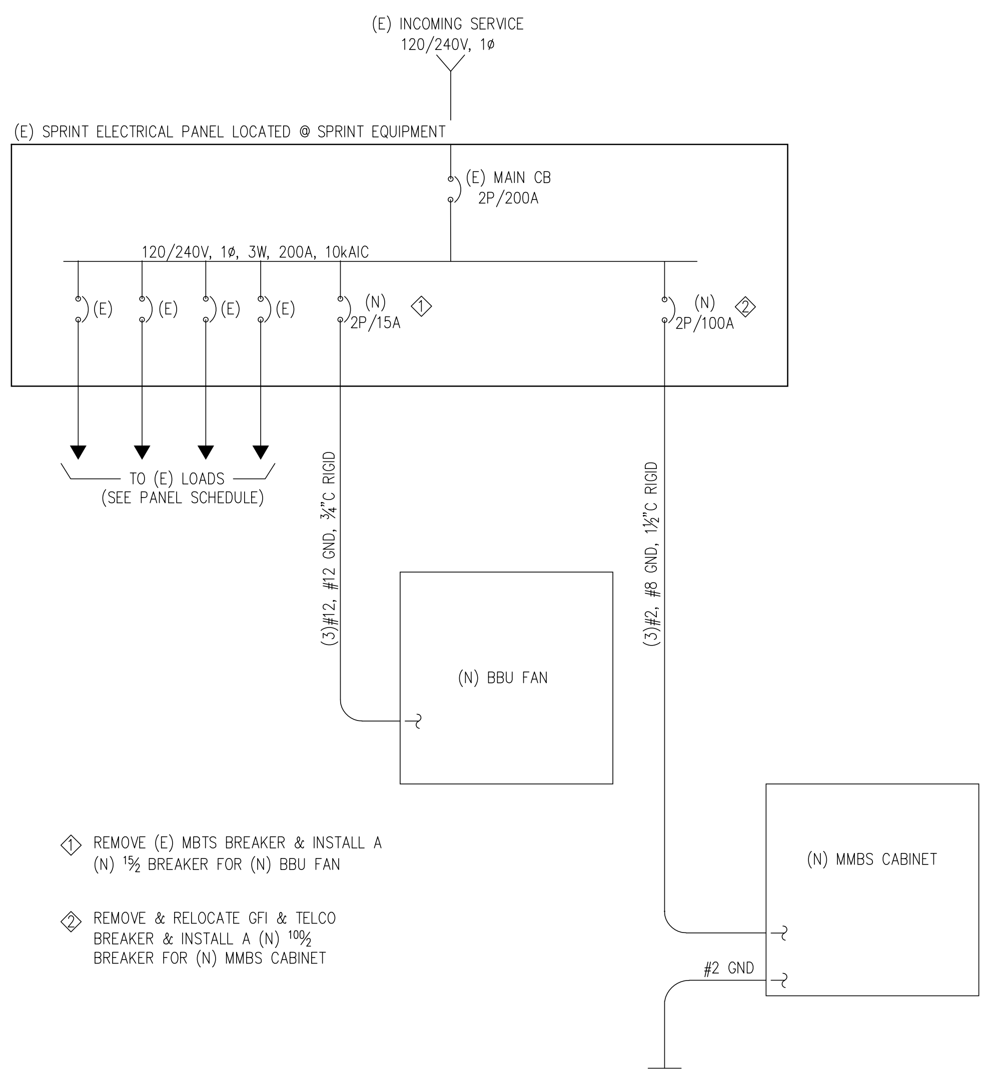
S-1

ELECTRIC LEGEND

- CIRCUIT BREAKER
- SERVICE GROUND
- WIRED CONNECTION

ELECTRICAL NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE CEC AS WELL AS ALL APPLICABLE STATE AND LOCAL CODES.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, CONDUCTORS, PULL BOXES, TRANSFORMER PADS, POLE RISERS, AND PERFORM ALL TRENCHING AND BACKFILLING REQUIRED IN THE PLANS.
3. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER PLAN SPECIFICATIONS.
4. ALL CIRCUIT BREAKERS, FUSES, AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTION RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED WITH A MINIMUM OF 10,000 A.I.C. OR AS REQUIRED.
5. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.
6. ELECTRICAL WIRING SHALL BE COPPER #12 MIN WITH TYPE XHHW, THWN, OR THHN INSULATION.
7. ALL OUTDOOR EQUIPMENT SHALL HAVE NEMA 3R ENCLOSURE.
8. ALL BURIED WIRE SHALL RUN THROUGH SCHEDULE 40 PVC CONDUIT UNLESS OTHERWISE NOTED.
9. A GROUND WIRE IS TO BE PULLED IN ALL CONDUITS.
10. WHERE ELECTRICAL WIRING OCCURS OUTSIDE A STRUCTURE AND HAS THE POTENTIAL FOR EXPOSURE TO WEATHER, WIRING SHALL BE IN WATERTIGHT GALVANIZED RIGID STEEL OR FLEXIBLE CONDUIT.



1. REMOVE (E) MBTS BREAKER & INSTALL A (N) 15/2 BREAKER FOR (N) BBU FAN
2. REMOVE & RELOCATE GFI & TELCO BREAKER & INSTALL A (N) 100/2 BREAKER FOR (N) MMBS CABINET

SINGLE LINE DIAGRAM

FINAL CONFIGURATION

INTERIM (E) PANEL SCHEDULE

NAMEPLATE : PANEL A			SC LEVEL : 10,000				VOLTS: 120V/240V, 1ø		
LOCATION : OUTSIDE							BUS AMPS: 200A		
MOUNTING : PEDESTAL							MAIN CB: 200A		
ØA LOAD VA	ØB LOAD VA	LOAD DESCRIPTION	BKR AMP/ POLE	CIRCUIT NO		BKR AMP/ POLE	LOAD DESCRIPTION	ØA LOAD VA	ØB LOAD VA
3,600		(E) BTS CABINET	80/2	1	2	60/2	SURGE SUPPRESSOR	30	
	3,600	" "	–	3	4	–	" "		30
4,800		(E) BTS CABINET	80/2	5	6	80/2	(E) BTS CABINET	3,600	
	4,800	" "	–	7	8	–	" "		3,600
300		LIGHTS	20/1	9	10	100/2	(N) MMBS CABINET	2,736	
	580	RELOCATED GFI & TELCO FAN	20/1	11	12	–	" "		2,736
8,700	8,980	PHASE TOTALS					PHASE TOTALS	6,366	6,366
TOTAL VA = 30,412			TOTAL AMPS = 127A						

NOTE: EXISTING LOADS HAVE NOT BEEN FIELD VERIFIED. THEY ARE APPROXIMATE BASED ON EXISTING CB SIZES. CONTACT THE ENGINEER IF THE LOADS DIFFER FROM THAT WHICH IS SHOWN ON THE PLANS

FINAL CONFIGURATION (E) PANEL SCHEDULE

NAMEPLATE : PANEL A			SC LEVEL : 10,000				VOLTS: 120V/240V, 1ø		
LOCATION : OUTSIDE							BUS AMPS: 200A		
MOUNTING : PEDESTAL							MAIN CB: 200A		
ØA LOAD VA	ØB LOAD VA	LOAD DESCRIPTION	BKR AMP/ POLE	CIRCUIT NO		BKR AMP/ POLE	LOAD DESCRIPTION	ØA LOAD VA	ØB LOAD VA
		SPARE	80/2	1	2	60/2	SURGE SUPPRESSOR	30	
		" "	–	3	4	–	" "		30
		" "	80/2	5	6	15/2	(N) BBU FAN	400	
	180	RELOCATED GFI	20/1	7	8	–	" "		400
300		LIGHTS	20/1	9	10	100/2	(N) MMBS CABINET	7,000	
	400	TELCO FAN	20/1	11	12	–	" "		7,000
300	580	PHASE TOTALS					PHASE TOTALS	7,430	7,430
TOTAL VA = 15,740			TOTAL AMPS = 66A						

NOTE: EXISTING LOADS HAVE NOT BEEN FIELD VERIFIED. THEY ARE APPROXIMATE BASED ON EXISTING CB SIZES. CONTACT THE ENGINEER IF THE LOADS DIFFER FROM THAT WHICH IS SHOWN ON THE PLANS

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd. Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint
12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
ELECTRICAL PLAN

SHEET NUMBER:
E-1

Pacific Gas and Electric Company

Report Date: 05/02/12
Revision: 0

High Voltage Transmission Tower Cell Site Datasheet

Site Information

Company:	Sprint		
Site name:	Golden Gate Park	Site number:	SNX-SF-33xc-682
Site address:	629 24th avenue, San Francisco		
PG&E Contact:	Ralph Seban	Phone:	(925) 866-5634

Soil Data

Soil Model:			
	Uniform	10.0 Ohm-meters	Infinite thickness

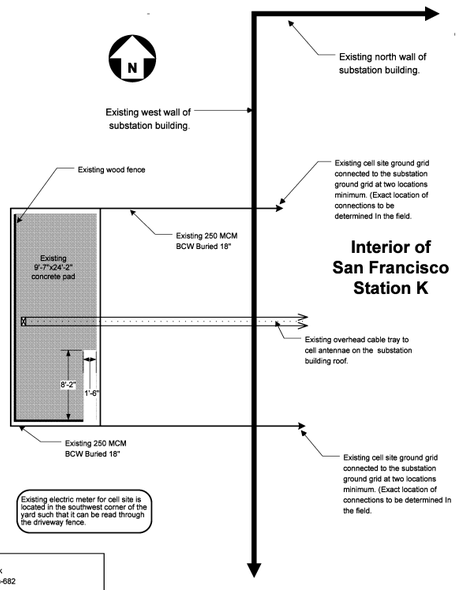
GPR Information

Grid Area	13,940	Ft^2
Grid Resistance	0.1	Ohms
Ground Fault Duty	15,002	Amps $_{RMS}$
X/R Ratio	1.4	
Voltage $_{(Line-Line)}$	12	kV $_{RMS}$
DC Offset	1.10	
GPR $_{RMS}$	2,042	Volts $_{RMS}$
GPR Peak Symmetrical	2,887	Volts (Peak Symmetrical)
GPR Peak with DC Offset	3,189	Volts (Peak Asymmetrical)

Ralph Seban
PG&E Representative

5/2/2012
Date

PG&E Grounding Requirements-Sheet 1
(Required Design Details are Located on Sheet 2)



The following design details MUST BE incorporated into the final engineering and construction drawings for the cell site ground grid. Where conflicts arises between these details and cell vendor generic details, these details SHALL prevail.

REQUIRED DESIGN DETAILS:

☐_____1. Existing grounding connections and grid intersections are exothermic. All new grounding connections and grid intersections SHALL be made using approved 'DMC' GroundLok System' compression components.

☐_____2. Ground grid safety calculations are based on the ground grid conductors being at 18" below natural grade.

☐_____3. Cell site ground grid MUST be connected to the substation ground grid at two locations minimum. Exact connection points to be determined in the field.

☐_____4. Cell antennae on the substation building roof MUST be connected to the cell site equipment ground grid with 250 MCM BCW or equivalent.

☐_____5. Cell site equipment ground bus MUST be connected to the ground grid with 2-250 MCM BCW or equivalent. If more than one ground bus is used, all ground buses must be either connected together or connected to ground grid separately with #2 BCW or larger.

☐_____6. All fences MUST be of non-conductive material.

☐_____7. Electric meter is located in the southwest corner of the substation yard such that the meter can be read through the substation driveway fence.

☐_____8. Meter ground rod MUST be attached to the substation ground grid with a 250 kcmil BCW or equivalent.

☐_____9. Ground grid backfill material (at least 6") covering the 250 MCM BCW MUST be clean loamy material (or conductive material) and be free of rocks and foreign material.

☐_____10. If drilling is required to achieve ground rod depth, a minimum 2" hole is required. The hole MUST be backfilled with bentonite (or equivalent) material.

☐_____11. Concrete pad size or any dimension stated on sheet 1 can not be changed without prior authorization from the grounding designer.

Carrier: Sprint Title: Golden Gate Park Site No.: SNX-SF-33xc-682 Co-Location: N/A Line Name: N/A Tower No.: N/A Tower SAP No.: N/A					
Designed By: Ralph Seban Phone: (925) 866-5634	SIZE 0	PG&E Proj Mgr: Richard Sartini Phone: (925) 308-9400	DWG NO SNX-SF-33xc-682	REV 0	
Approved By: Marcia Eblen, P.E.	Carrier Dwgs. Dated 9/23/11	Issue Date: 5/2/12	SHEET 1 of 2		

Carrier: Sprint Title: Golden Gate Park Site No.: SNX-SF-33xc-682 Co-Location: N/A Line Name: N/A Tower No.: N/A Tower SAP No.: N/A					
Designed By: Ralph Seban Phone: (925) 866-5634	SIZE 0	PG&E Proj Mgr: Richard Sartini Phone: (925) 308-9400	DWG NO SNX-SF-33xc-682	REV 0	
Approved By: Marcia Eblen, P.E.	Carrier Dwgs. Dated 9/23/11	Issue Date: 5/2/12	SHEET 2 of 2		

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT. DRAWINGS AND SPECIFICATIONS SHALL NOT BE LOANED, COPIED OR OTHERWISE DISPOSED OF WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2005 STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

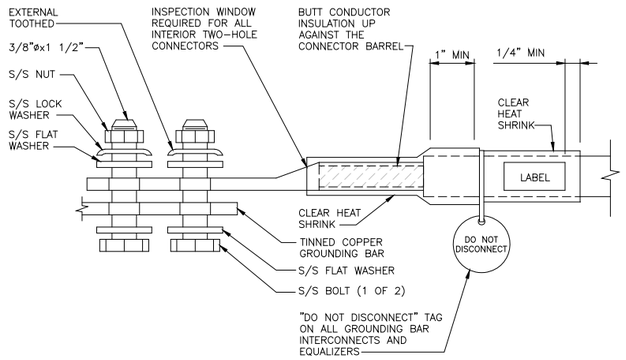
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

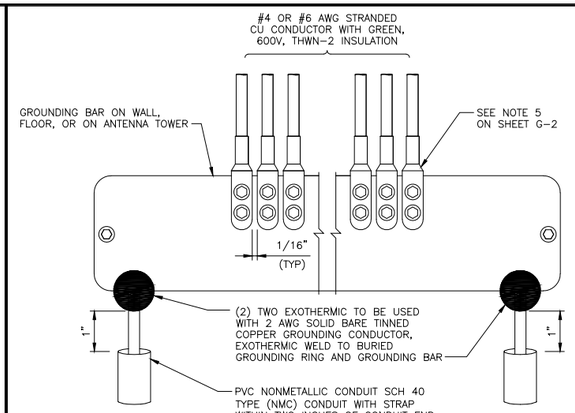
12857 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
PG&E GROUNDING GRID

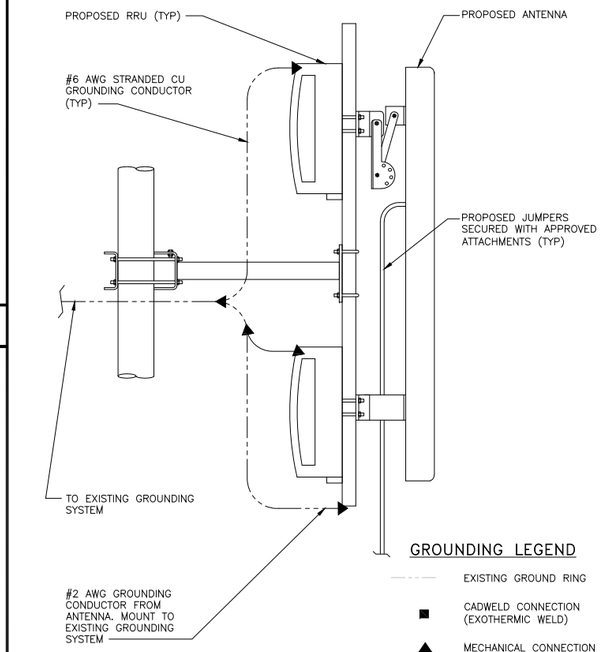
SHEET NUMBER:
E-2

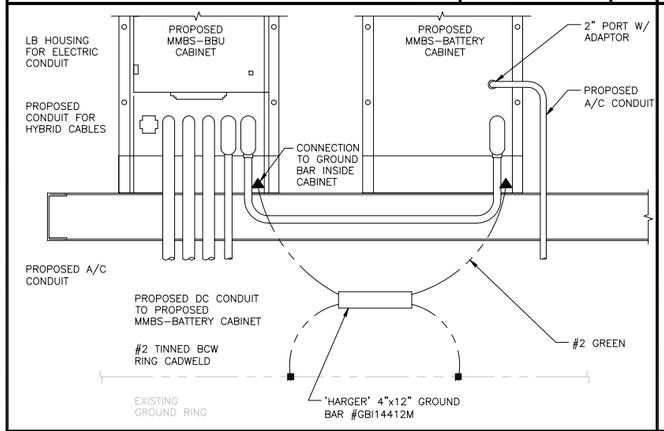


TWO HOLE LUG | NO SCALE | A

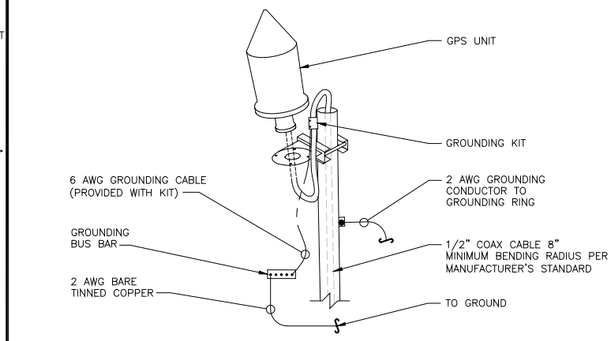


INSTALLATION OF GROUNDING CONDUCTOR TO GROUNDING BAR | NO SCALE | B

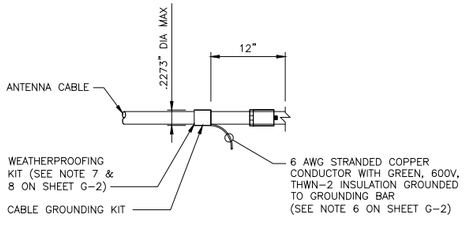




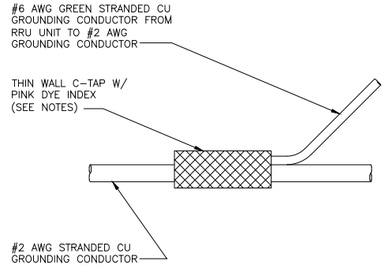
CABINET GROUNDING SCHEMATIC | NO SCALE | C



GPS GROUNDING | NO SCALE | D



CONNECTION OF CABLE GROUNDING KIT TO ANTENNA CABLE | NO SCALE | F



NOTE

CONTRACTOR TO SURROUND COMPLETED CONNECTION W/ WEATHER PROOFING TAPE TO ENSURE WEATHER PROOF CONNECTION.

C-TAP CONNECTION | NO SCALE | G

1. COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH LETTERS.
3. ALL HARDWARE 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER.
4. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, 600 VOLT INSULATION, ON ALL GROUNDING TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
6. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
7. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
8. WEATHERPROOFING SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
9. SUPPLIED AND INSTALLED BY CONTRACTOR.
10. WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING BAR TO AN EXISTING TOWER, THE SUBCONTRACTOR SHALL OBTAIN APPROVAL FROM THE TOWER OWNER PRIOR TO MOUNTING THE GROUNDING BAR TO THE TOWER.
11. EXTEND TWO (2) 2 AWG TINNED CU CONDUCTOR FROM BURIED GROUNDING RING AND CONNECT TO THE PROPOSED TOWER. FOLLOW MANUFACTURERS RECOMMENDATIONS FOR GROUNDING CONNECTIONS TO THE TOWER. (APPLICABLE TO NEW TOWERS ONLY.)
12. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUNDING BARS AS REQUIRED, PROVIDING 50% SPARE CONNECTION POINTS.

GROUNDING NOTES | NO SCALE | H

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. THESE PLANS AND SPECIFICATIONS ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECTS. DRAWINGS AND SPECIFICATIONS SHALL NOT BE LOANED, COPIED OR USED FOR ANY PURPOSE EXCEPT ON THIS PROJECT WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. Copyright © 2005 STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

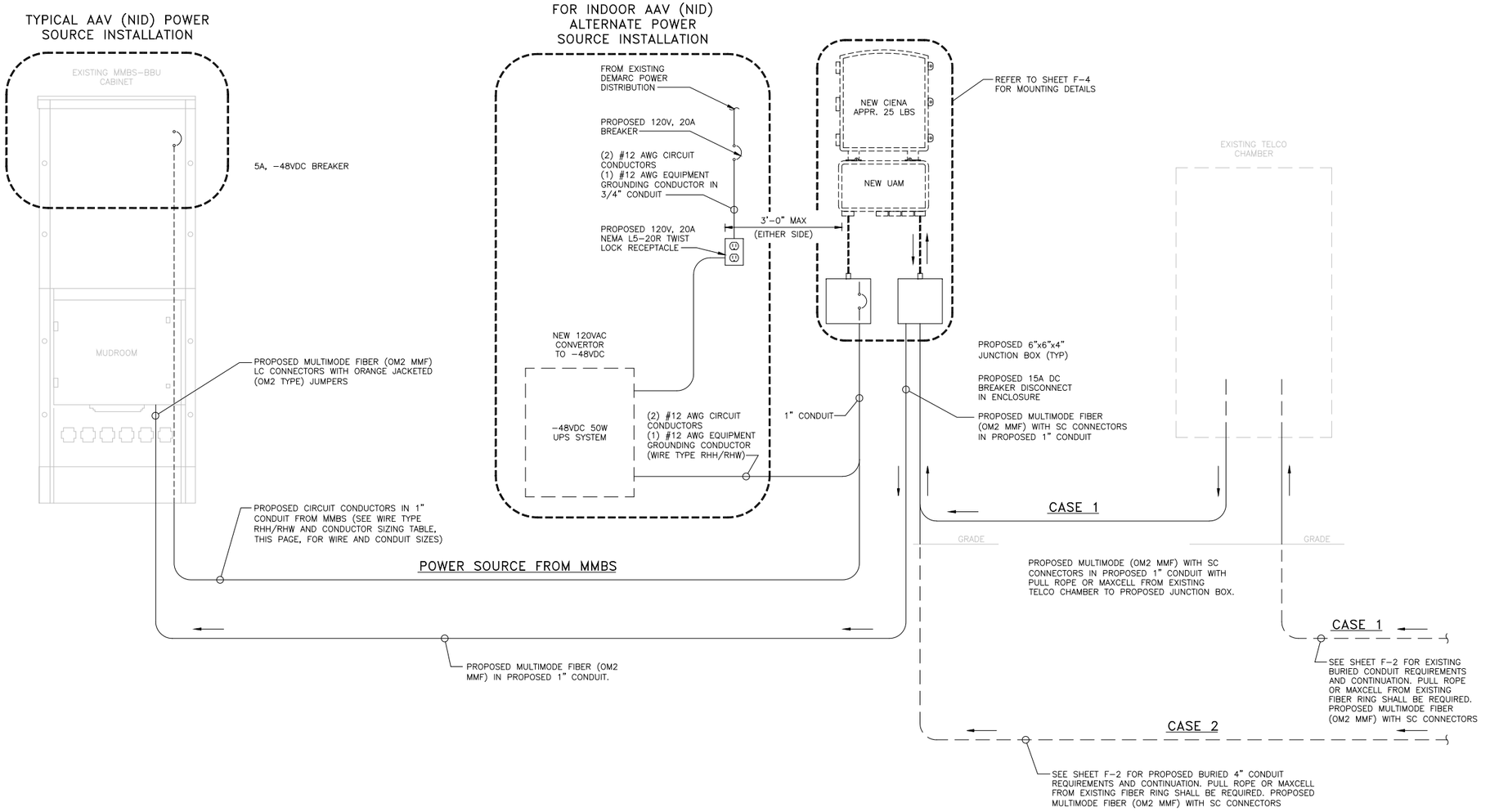
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12857 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
GROUNDING DETAILS

SHEET NUMBER:
E-3



NOTES

1. CONTRACTOR SHALL FOLLOW ALL LOCAL MUNICIPAL CODES FOR CONDUIT SPECIFICATION AND INSTALLATION.
2. ALL UNISTRUT ENDS SHALL BE COLD–GALVINIZED AND CAPPED.
3. ALL INTERIOR CONDUITS SHALL BE EMT.
4. ALL ABOVE GROUND CONDUIT SHALL BE RIGID.
5. CASE 1 – FIBER PATH TO BE USED IF EXISTING CONDUIT FROM "MEET–ME POINT" TO EXISTING TELCO CABINET EXIST.
6. CASE 2 – FIBER PATH TO BE USED IF EXISTING CONDUIT FROM "MEET–ME POINT" TO EXISTING TELCO CABINET IS NOT AVAILABLE OR IF EXISTING CONDUIT DOES NOT HAVE ENOUGH CAPACITY FOR PROPOSED FIBER RUN.

WIRE TYPE RHH/RHW AND CONDUCTOR SIZING TABLE (48VDC @ 96W/2.0 AMPS)				
DISTANCE (FT)	0'–180'	180'–280'	280'–460'	460'–720'
CIRCUIT CONDUCTOR SIZE	(2) #12 AWG	(2) #10 AWG	(2) #8 AWG	(2) #6 AWG
GND CONDUCTOR SIZE	(1) #12 AWG	(1) #12 AWG	(1) #12 AWG	(1) #10 AWG
CONDUIT SIZE	1"	1"	1"	1"

AAV (NID) ENCLOSURE ONE–LINE DIAGRAM

NO SCALE

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY: G. TIBBETT
CHECKED BY: C. MATHISEN
APPROVED BY: K. SORENSEN
DATE: 10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT. DRAWINGS AND SPECIFICATIONS SHALL NOT BE LOANED, COPIED OR USED FOR OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. Copyright © 2005 STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

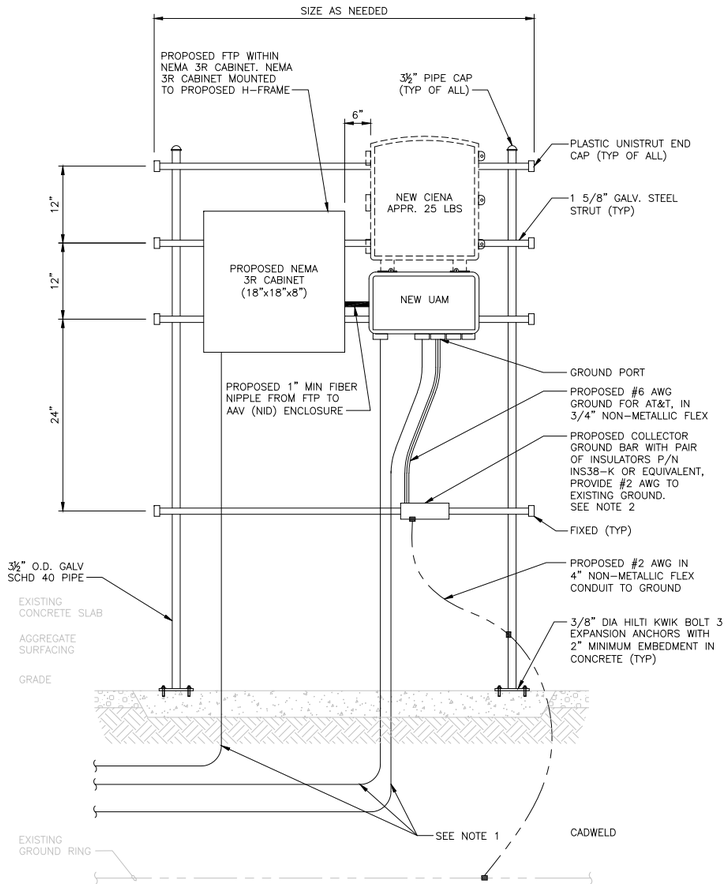
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12857 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:
FIBER DESIGN ONE LINE DIAGRAM

SHEET NUMBER:
F-1



H-FRAME MOUNT

NOTES

1. REFER TO SHEET F-1 FOR CONDUIT ROUTING DETAIL.
2. CONTRACTOR TO SUPPLY GROUND TO NEAREST ACCESSIBLE MASTER GROUND OR MAIN GROUNDING SYSTEM.

H-FRAME AAV (NID) AND FTP ENCLOSURE INSTALLATION DETAIL (AS REQUIRED)
NO SCALE

GOLDEN GATE PARK

SF33XC682-C
692 24TH AVE
SAN FRANCISCO, CA 94121

ISSUE STATUS

△	DATE	DESCRIPTION	
	05/08/12	CD 90%	J.K.
	06/06/12	CD 100%	J.K.
	10/05/12	CLIENT REV	K.P.
	10/20/12	CLIENT REV	J.K.
	–	–	–
	–	–	–

DRAWN BY:	G. TIBBETT
CHECKED BY:	C. MATHISEN
APPROVED BY:	K. SORENSEN
DATE:	10/20/12

Streamline Engineering and Design, Inc.
3268 Penryn Rd, Suite 200 Loomis, CA 95650
Contact: Kevin Sorensen Phone: 916-660-1930
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN INC. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON ENTITY ON OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER. ©copyright © 2009, STREAMLINE ENGINEERING AND DESIGN INC. ALL RIGHTS RESERVED.

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. SORENSEN
No.4469
STRUCTURAL
STATE OF CALIFORNIA

Sprint

12657 ALCOSTA BLVD SUITE 300
SAN RAMON, CA 94583

SHEET TITLE:

NID
DETAILS

SHEET NUMBER:

F-2