



SAN FRANCISCO PLANNING DEPARTMENT

Discretionary Review Analysis

HEARING DATE JANUARY 20, 2011

Date: January 13, 2008
Case No.: 2010.1006D
Project Address: 1 LA AVANZADA STREET (AKA 250 PALO ALTO AVENUE)
Permit Application: 2010 0527 3352
Zoning: RH-1 (Residential House, One-Family, Detached)
40-X Height and Bulk District
Block/Lot: 2724/003
Project Sponsor: Eric Dausman
Sutro Tower Inc. c/o
1 La Avanzada Street
San Francisco, CA 94131-1124
Staff Contact: Rick Crawford – (415) 558-6358
rick.crawford@sfgov.org
Recommendation: **Take DR and approve project as proposed subject to the Standard Antenna Conditions.**

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

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

PROJECT DESCRIPTION

This Discretionary Review was initiated by the Planning Department pursuant to Resolution No. 11399, adopted by the Planning Commission on July 14, 1988, which established the Commission's policy requiring a Discretionary Review over any and all building permit applications regarding Sutro Tower, its transmission equipment building or any other part of its site (Lot 3 in Assessor's Block 2724).

Building Permit Application No. 2010 0527 3352 would place 15 new antennas at various locations on Sutro Tower for Clearwire, a wireless data service provider, to provide high speed and mobile Internet Services. The proposed antennas include 14 new panel antennas and one microwave dish antenna. These antennas are considered the final part of the digital television conversion project approved by the Commission on October 23, 2008.

ENVIRONMENTAL REVIEW

On October 23, 2008, the Planning Commission certified the Final Environmental Impact Report for the conversion from analog to digital television. That EIR included a discussion of additional antennas on the Tower and concluded that capacity remained for additional facilities on the Tower. The present request complied with the 2008 EIR.

RECOMMENDATION:	Take DR and approve project as proposed subject to the Standard Antenna Conditions appended hereto.
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Attachments:

Parcel Map
Sanborn Map
Zoning Map
Aerial Photograph

Standard Antenna Conditions

The Conditions contained in this document were imposed by the Planning Commission on the antenna-related permits (the above-referenced permit applications) at its hearing of February 16, 2006. It is the intent of the Commission, as so moved and adopted as Commission policy at said hearing, to impose these standard conditions (as a Notice of Special Restrictions) regarding inspections, RF levels (monitoring), operation and neighborhood communication (including notification) on all future antenna-related permits for Sutro Tower.

A. **STRUCTURAL INSPECTIONS:** In June of 1999, the Department of Building Inspection accepted an Inspection Protocol governing Sutro Tower. Sutro Tower, Inc. (hereinafter STI) shall adhere to said Inspection Protocol as summarized below:

1. **Annual Inspection ("Routine Inspection"):**

- a. STI shall have an independent testing laboratory approved by the Department of Building Inspection ("independent laboratory") conduct Annual. The Annual Inspection shall consist of visual observations and/or measurements needed to determine the physical and functional condition of the Tower and to identify any changes from the Baseline Inspection that was conducted in 1999 pursuant to the Inspection Protocols or from previously recorded conditions. Each Annual Inspection shall cover approximately one-third of the Tower such that the entire structure will be evaluated over a three-year interval.
- b. A California-licensed professional engineer retained by STI ("licensed engineer") shall review the results of the Annual Inspection, along with prior inspection results, to determine the extent of remedial action that may be necessary. The licensed engineer shall also ensure that the detailed inspection plan for subsequent years is modified to reflect any additional inspection requirements or areas where more in-depth inspection is required.
- c. STI shall undertake all additional inspections recommended by the licensed engineer as a result of the Annual Inspection.
- d. STI shall undertake all remedial action recommended by the licensed engineer as a result of the Annual Inspection. A Special Inspection shall thereafter be conducted to assess the performance of any repairs resulting from the Annual Inspection.
- e. A report of each Annual Inspection shall be prepared by the licensed engineer and submitted to the Planning Department and to the Department of Building Inspection within 45 days of the inspection, and those reports shall be made available to members of the public.

- f. STI shall send notice of the availability of each Annual Inspect report to representatives of the Twin Peaks Improvement Association and Midtown Terrace Homeowners Association.

2. In-Depth Inspection

- a. In 2004 and every five years thereafter or as otherwise required by the licensed engineer during an Annual Inspection or Event Inspection, STI shall have an independent laboratory conduct a close-up, hands-on inspection of one or more structural members or connections to identify problems not readily detectable with a visual review in the Annual Inspection.
- b. If recommended by the licensed engineer to fully ascertain the presence or extent of damage, STI shall have non-destructive field-testing, load tests, and/or materials tests performed by an independent testing laboratory.
- c. STI shall undertake all additional inspections recommended by the licensed engineer as a result of the In-Depth Inspection.
- d. STI shall undertake all remedial action recommended by the licensed engineer as a result of the In-Depth Inspection. A Special Inspection shall thereafter be conducted to assess the performance of any repairs resulting from the In-Depth Inspection.
- e. A report of each In-Depth Inspection shall be prepared by the licensed engineer and submitted to the Planning Department and to the Department of Building Inspection within 45 days of the inspection, and those reports shall be made available to members of the public.
- f. STI shall send notice of the availability of each In-Depth Inspection report to representatives of the Twin Peaks Improvement Association and Midtown Terrace Homeowners Association.

3. Event Inspection ("Unscheduled Inspection")

- a. As required by a licensed engineer, STI shall have an independent laboratory conduct an Event Inspection as soon as practical after the occurrence of a severe storm, earthquake, mudslide, or other triggering environmental event that exceeds the design load of the Tower (winds in excess of 70 miles per hour at 10 meters in elevation, or a 1000-year seismic event as defined in the dynamic analysis report of June 1999).
- b. Following a severe storm or earthquake, particular inspection attention shall be given to detecting damage and indirect signs of damage such as areas of missing cladding, paint cracking due to yielding of steel members, spalling of concrete, misalignment in connections, loosening or lengthening of bolts, or obvious structural displacements.

Depending on the severity of the triggering storm or earthquake, an In-Depth Inspection may be appropriate in areas of local damage to the Tower.

- c. STI shall undertake all additional inspections recommended by the licensed engineer as a result of the Event Inspection.
- d. STI shall undertake all remedial action recommended by the licensed engineer as a result of the Event Inspection. A Special Inspection shall thereafter be conducted to assess the performance of any repairs resulting from the Event Inspection.
- e. A report of each Event Inspection shall be prepared by the licensed engineer and submitted to the Planning Department and to the Department of Building Inspection within 45 days of the inspection, and those reports shall be made available to members of the public.
- f. STI shall send notice of the availability of each In-Depth Inspection report to representatives of the Twin Peaks Improvement Association and Midtown Terrace Homeowners Association.

4. Special Inspections

- a. STI shall have an independent laboratory conduct a Special Inspection to monitor repairs resulting from previous inspections or to otherwise assess the performance of repairs implemented to ensure the structural integrity of the Tower. The Special Inspection shall be undertaken as part of an Annual Inspection conducted within one year after completion of the repair, if practical, or during the next inspection cycle.
- b. STI shall have an independent laboratory conduct a Special Inspection as recommended by a licensed engineer for any reason, including monitoring defects, damage, local corrosion, or other conditions potentially affecting the structural integrity of the Tower.
- c. STI shall undertake all additional inspections recommended by the licensed engineer as a result of the Special Inspection.
- d. STI shall undertake all remedial action recommended by the licensed engineer as a result of the Special Inspection.
- e. A report of each Special Inspection shall be prepared by the licensed engineer and submitted to the Planning Department and to the Department of Building Inspection within 45 days of the inspection, and those reports shall be made available to members of the public.
- f. STI shall send notice of the availability of each In-Depth Inspection report to representatives of the Twin Peaks Improvement Association and Midtown Terrace Homeowners Association.

5. **Enforcement**

- a. Technical compliance with conditions regarding structural inspection shall be monitored and enforced by the Department of Building Inspection. The Planning Department shall enforce these conditions only at the recommendation of the Director of the Department of Building Inspection.
- b. STI shall provide to the Planning Department a complete set of all building permit application materials required by the Department of Building Inspection, including but not limited to: scaled drawings, elevations, site plans, engineering or structural analyses, and photographs.

B. **RADIO FREQUENCY (RF) LEVEL**

1. **FCC Emission Compliance:** It shall be a continuing condition of this permit that the subject antennas be operated in such a manner so as not to contribute to ambient RF emissions in excess of the then-current FCC emission standards for public exposure. Violation of this condition shall be grounds for revocation.
2. **Publicly-Accessible Property:**
 - a. Consistent with the agreement between STI and the Planning Commission at its February 26, 1998, hearing on DTV antenna installation, STI shall measure RF public exposure levels at 200 publicly-accessible sites within 1000 feet of the Tower. Measurement shall be made each three years, or within six months of the activation of any DTV broadcasting antenna, or within six months of any increase in power from any main DTV antenna's initial power level, whichever is earliest.
 - b. STI shall notify the Department of Public Health at least three days before taking any RF exposure measurements at publicly accessible sites. A representative of the Department of Public Health and up to two community observers identified by the Department of Public Health may observe the measurement session and recommend sites for measurement.
 - c. STI shall promptly remedy any ambient or localized field found by these measurements to exceed the FCC standard for RF exposure ("Guidelines for the Evaluation of the Environmental Effects of Radio Frequency Radiation") and then take new measurements to demonstrate compliance with the standard.
 - d. A report of any RF exposure measurements required herein shall be submitted to the Planning Department and the Department of Public Health within 45 days of the measurements, and those reports shall be made available to members of the public.

- e. STI shall send notice of the availability of each RFR exposure report to representatives of the Twin Peaks Improvement Association and Midtown Terrace Homeowners Association.

3. **Private Property:**

- a. Upon a written request to STI from an individual property owner within 1000 feet of the Tower, STI shall measure RF exposure levels at the accessible front yard and rear yard of the property. If RF levels in the yards comply with the 1996-FCC standard for RF exposure, then no additional measurements shall be thereafter required for any reason until three years have elapsed, at which time the property owner may submit a new written request for exposure level measurements.
- b. With the cooperation and approval of the property owner, STI shall promptly remedy and ambient or localized field found by these measurements to exceed the FCC standard and then take new measurements to confirm compliance with the standard.
- c. With the written approval of the owner of the private property requesting the RF exposure level measurements, STI shall submit a report to the Planning Department and to the Department of Public Health within 45 days of the measurements, and those reports shall be made available to members of the public.

4. **Enforcement:**

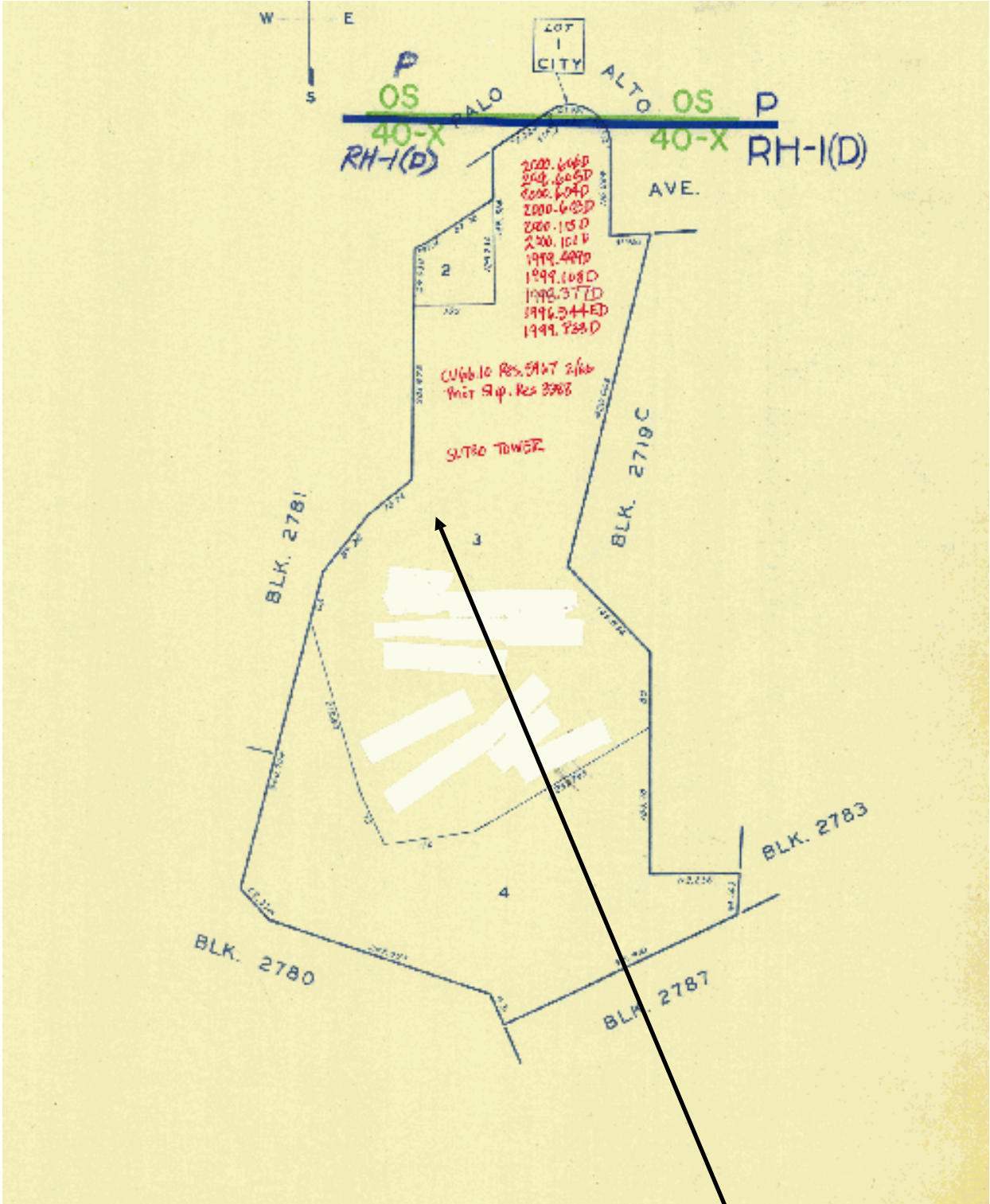
- a. Technical compliance with conditions pertaining to RFR exposure shall be monitored and enforced by the Department of Public Health. The Planning Department shall enforce these conditions only at the recommendation of the Director of the Department of Public Health.

C. **NEIGHBORHOOD COMMUNICATION**

1. **Notice:** Within ten days of submitting any report required herein to any public agency, STI shall send notice of the availability of that report to representatives of the Twin Peaks Improvement Association, Forest Knolls Neighborhood Association and Midtown Terrace Homeowners Association.
2. **Community Liaison:** STI shall appoint a community liaison to respond to neighborhood inquiries and concerns. STI shall invite the Twin Peaks Improvement Association, Forest Knolls Neighborhood Association and the Midtown Terrace Homeowners Association to appoint one community liaison each with whom to communicate regarding Sutro Tower operations.

G:\DOCUMENTS\SW Cases\Sutro Tower\08 Digital Conversion\0206d rpt.doc

Parcel Map

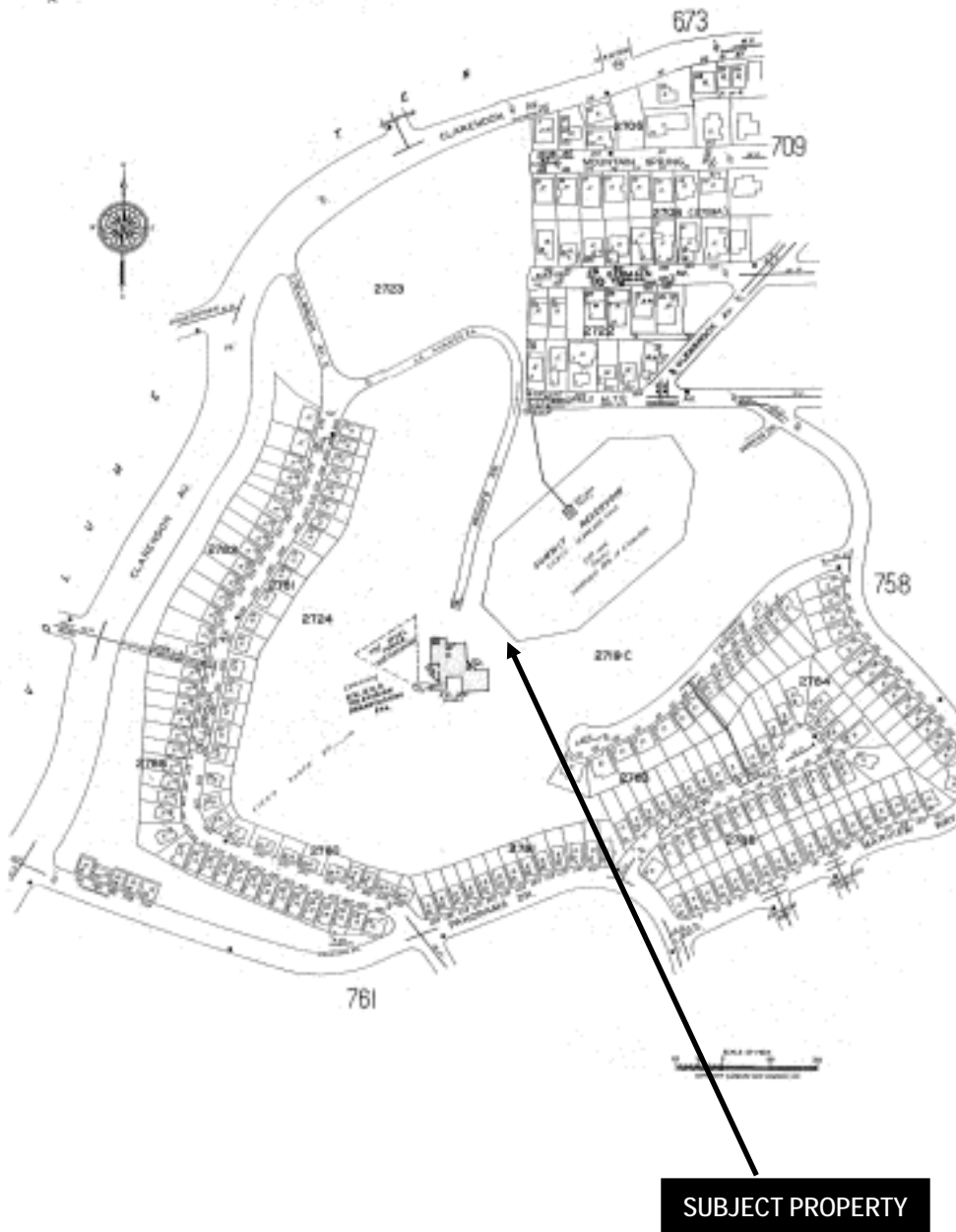


SUBJECT PROPERTY



Discretionary Review Hearing
Case Number 2010.1006C
Sutro Tower, 1 La Avanzada

Sanborn Map*



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

Discretionary Review Hearing
Case Number 2010.1006C
Sutro Tower, 1 La Avanzada

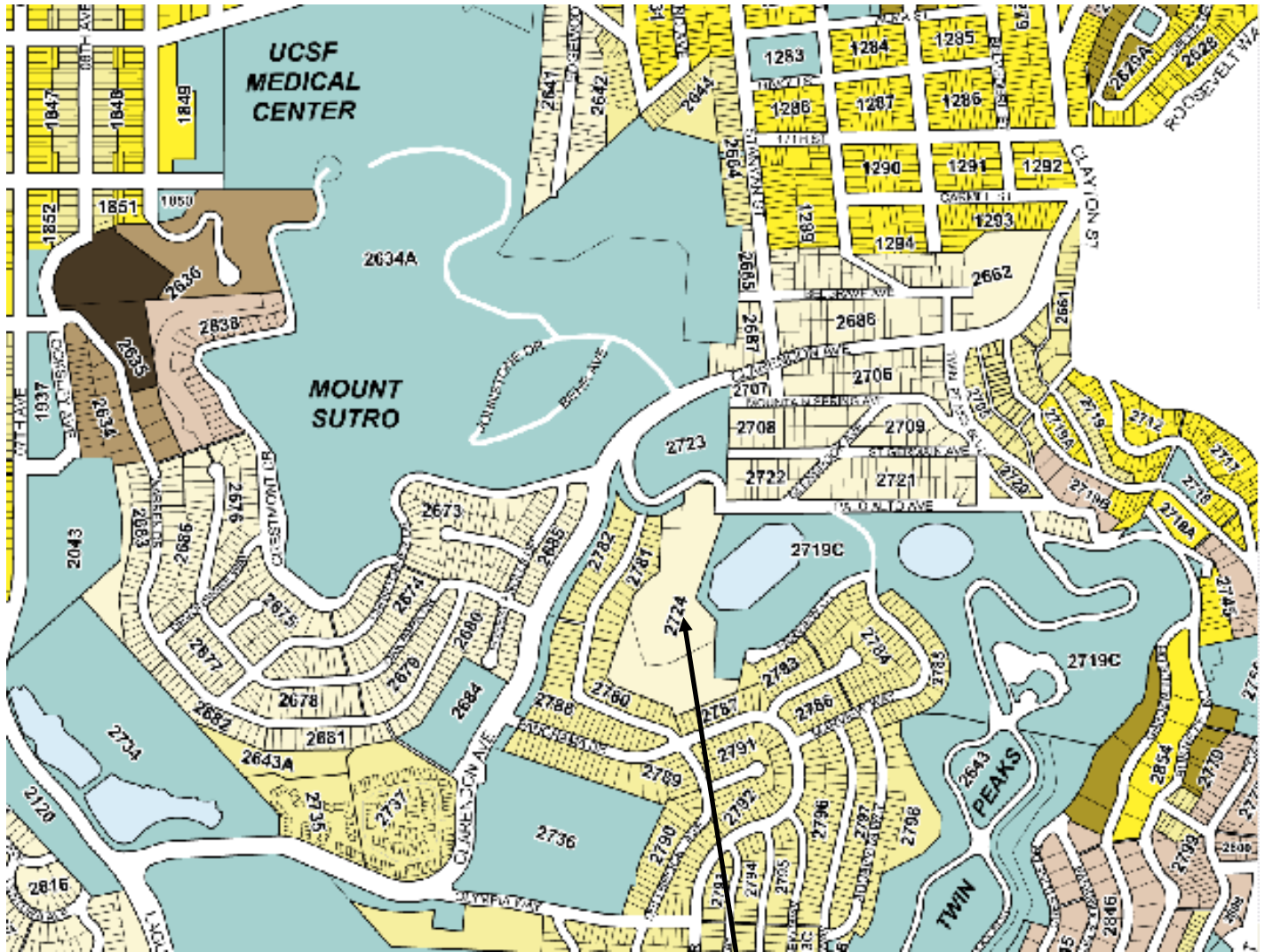
Aerial Photo



SUBJECT PROPERTY

Discretionary Review Hearing
Case Number 2010.1006C
Sutro Tower, 1 La Avanzada

Zoning Map



ZONING USE DISTRICTS

RESIDENTIAL, HOUSE DISTRICTS					
RH-1(D)	RH-1	RH-1(S)	RH-2	RH-3	
RESIDENTIAL, MIXED (APARTMENTS & HOUSES) DISTRICTS					
RM-1	RM-2	RM-3	RM-4		
NEIGHBORHOOD COMMERCIAL DISTRICTS					
NC-1	NC-2	NC-3	NCD	NC-S	
SOUTH OF MARKET MIXED USE DISTRICTS					
SPD	RED	RSD	SLR	SLI	SSO
COMMERCIAL DISTRICTS					
C-2	C-3-S	C-3-G	C-3-R	C-3-O	C-3-OISD
INDUSTRIAL DISTRICTS					
C-M	M-1	M-2			

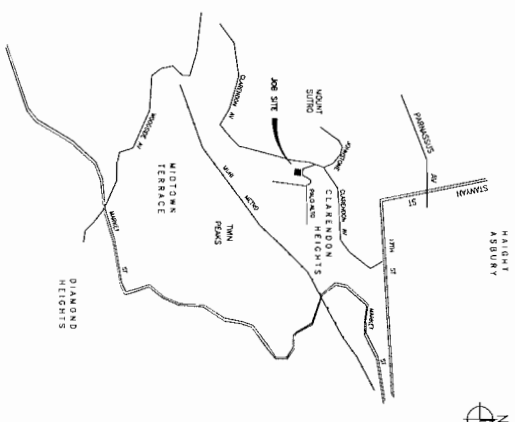
SUBJECT PROPERTY



Discretionary Review Hearing
 Case Number 2010.1006C
 Sutro Tower, 1 La Avanzada

CLEARWIRE EQUIPMENT INSTALLATION SUTRO TOWER SAN FRANCISCO, CALIFORNIA

VICINITY MAP



PROJECT SCOPE:

INSTALLATION OF 11 PARABOLIC ANTENNA AND 10% ANTENNA OR
EQUIPMENT ON MOUNT SUTRO, SAN FRANCISCO, CALIFORNIA. THE
SCOPE OF WORK INCLUDES THE DESIGN AND CONSTRUCTION OF THE
ANTENNA FOUNDATION, MOUNTING STRUCTURE, AND ALL NECESSARY
PERMITS AND REGULATORY APPROVALS. THE PROJECT WILL BE
COMPLETED BY THE END OF 2024.

LIST OF DRAWINGS

- 600 TITLE SHEET, VICINITY MAP & LIST OF DRAWINGS
- 601 GENERAL NOTES, REGULATIONS & LEGEND
- 610 FOUNDATION PLAN & ELEVATION
- 620 ANTENNA PLAN & ELEVATION
- 630 ELECTRICAL PLAN
- 640 SITE PLAN

SIMPSON QUIRETZ & HINGER
ENGINEERING OF STRUCTURAL
(Civil, Mechanical, Electrical)

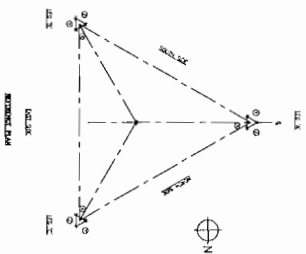
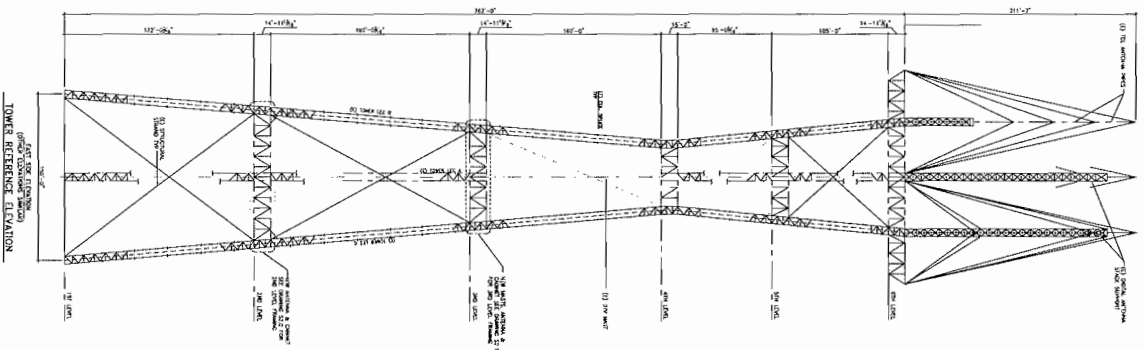
1000 Market Street, Suite 1000
San Francisco, CA 94102
Phone: (415) 774-1111
Fax: (415) 774-1112
www.sqh-engineering.com

**CLEARWIRE
EQUIPMENT
INSTALLATION
SUTRO TOWER
SAN FRANCISCO
CALIFORNIA**

**TITLE SHEET
VICINITY MAP
&
LIST OF DRAWINGS**

\$0.0

No.	Description	Scale	Date



\$1.0

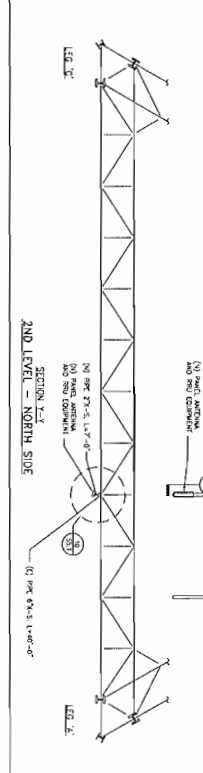
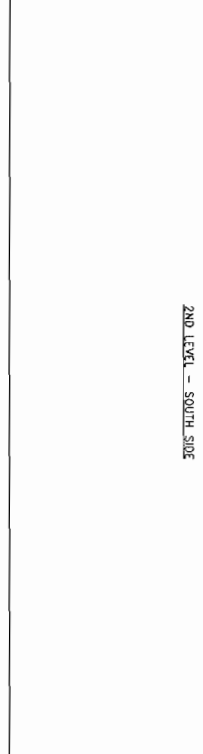
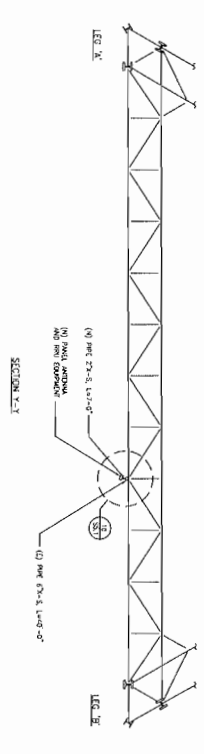
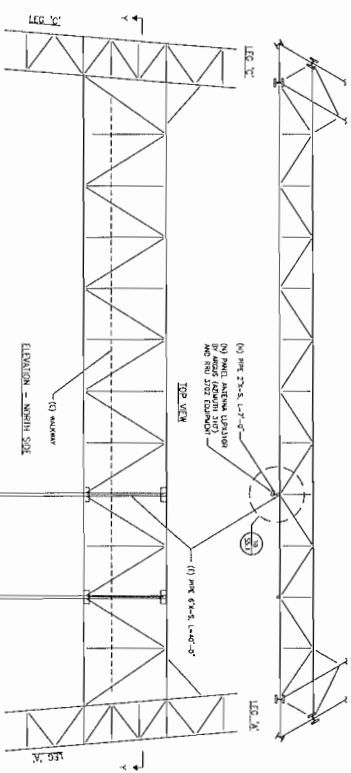
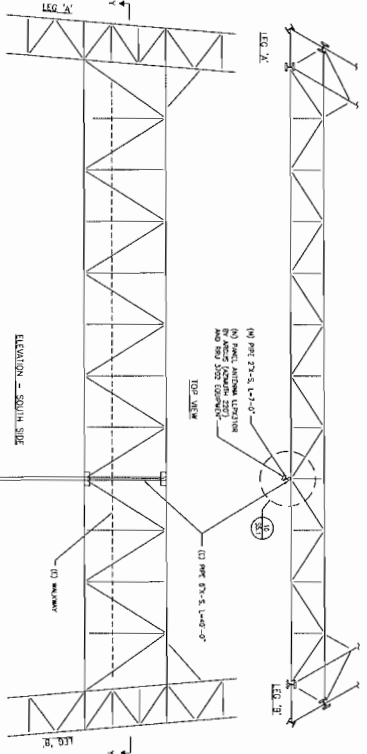
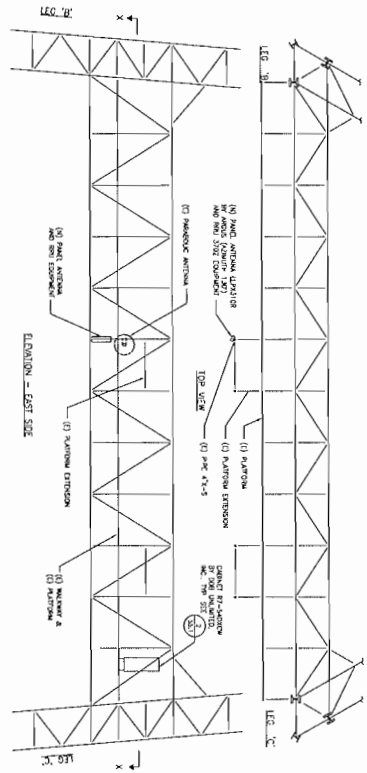
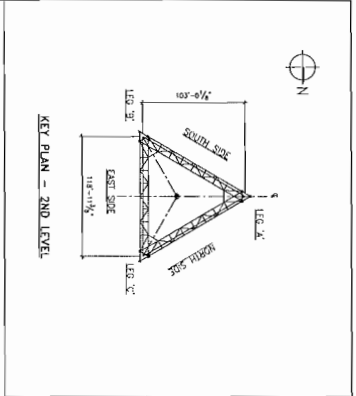
Drawing No. 07
 07/09/08
 07/29/13
 1" = 1'

TOWER REFERENCE ELEVATION

CLEARWIRE EQUIPMENT INSTALLATION SUTRO TOWER SAN FRANCISCO CALIFORNIA

No.	REVISION	DATE

SIMPSON GARNETT & NECE
 Engineering & Architecture
 4701 California Street
 San Francisco, California 94133
 Phone: (415) 774-4200
 Fax: (415) 774-4201
 www.simpson-garnett.com



SAMPSON QUINNERTZ & HEGER
 Engineering of Structures
 3700 Sandoz Boulevard
 San Francisco, California 94134
 Telephone: (415) 774-1100
 Telex: 780000
 Fax: (415) 774-1101

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	05/27/13
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3	AS NOTED	
4	AS NOTED	
5	AS NOTED	
6	AS NOTED	
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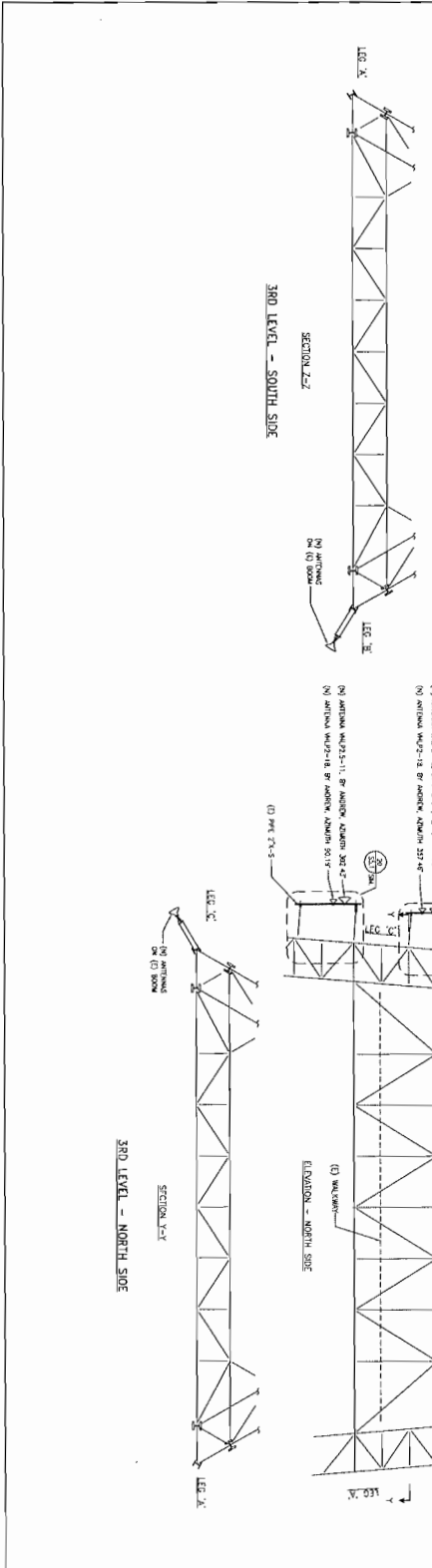
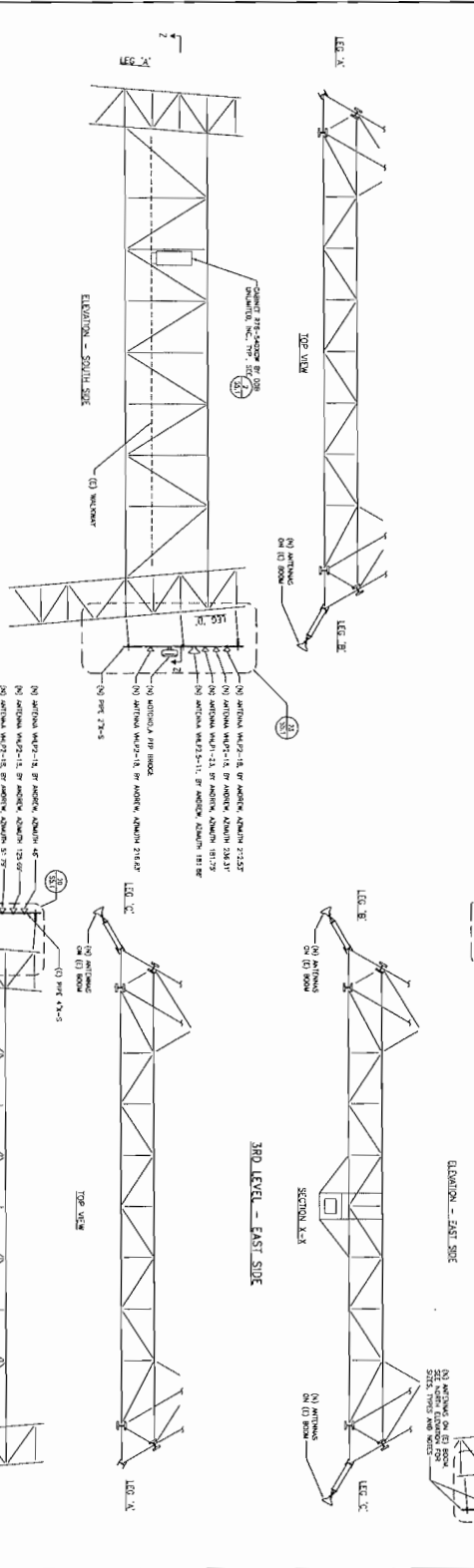
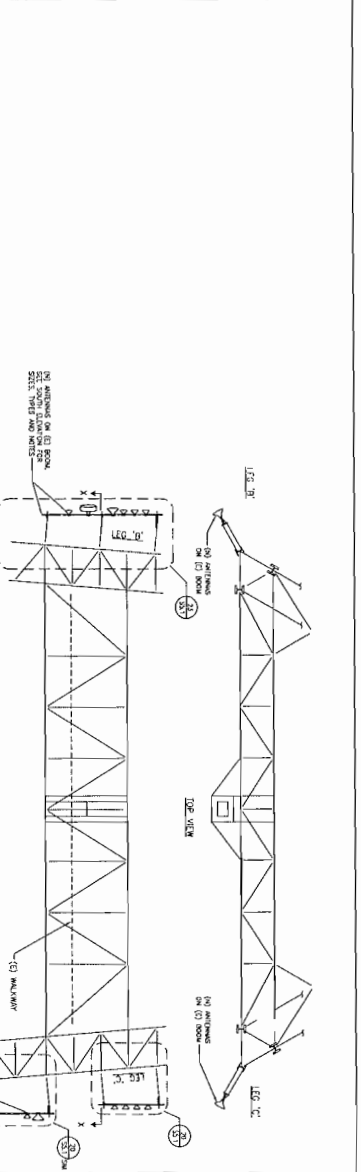
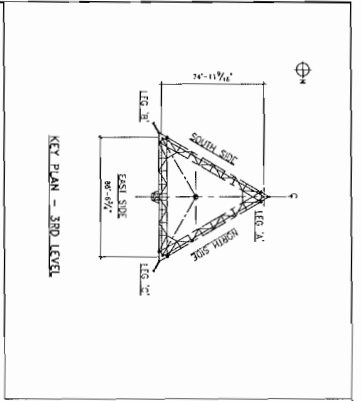
CLEARWIRE
 EQUIPMENT
 INSTALLATION
 SUTRO TOWER
 SAN FRANCISCO
 CALIFORNIA

2ND LEVEL FRAMING

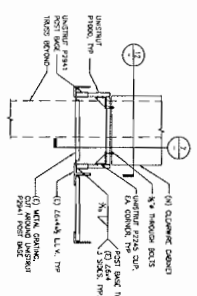
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DATE: 05/27/13

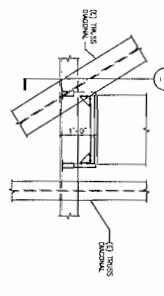
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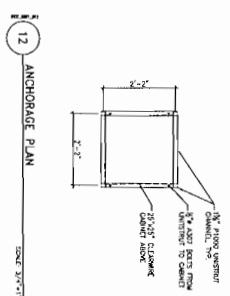
<p>SAMPSON GILBERT & HIGGS</p> <p>Structural Engineers</p> <p>1000 Market Street, Suite 1000 San Francisco, California 94102</p> <p>Phone: (415) 774-1100 Fax: (415) 774-1101</p>	<p>Engineering of Structures</p> <p>and Related Disciplines</p>	<p>Project: CLEARWIRE EQUIPMENT INSTALLATION SUTRO TOWER SAN FRANCISCO CALIFORNIA</p> <p>3RD LEVEL FRAMING</p> <p>Scale: 1/2" = 1'-0"</p> <p>Date: 1/27/21</p> <p>Drawn by: [Signature]</p> <p>Checked by: [Signature]</p> <p>Approved by: [Signature]</p>
<p>52.1</p>		



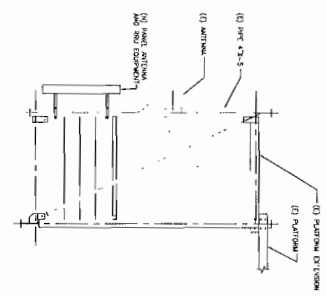
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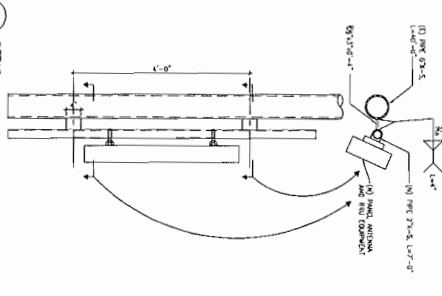
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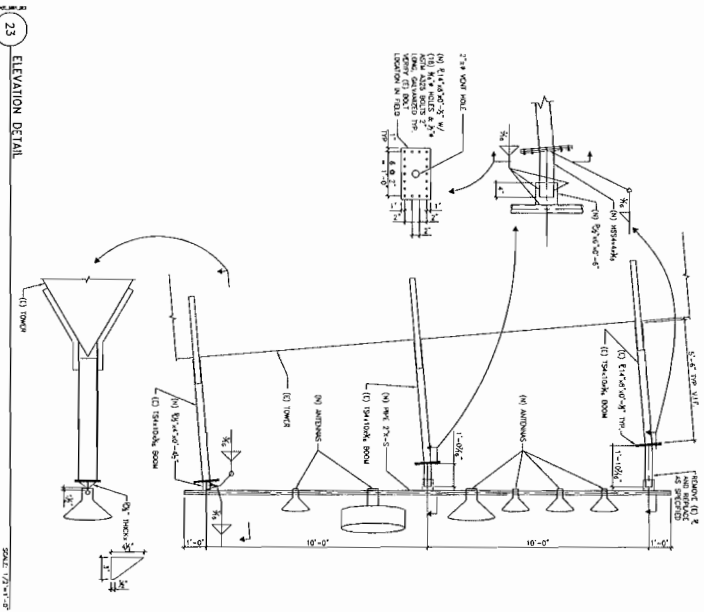
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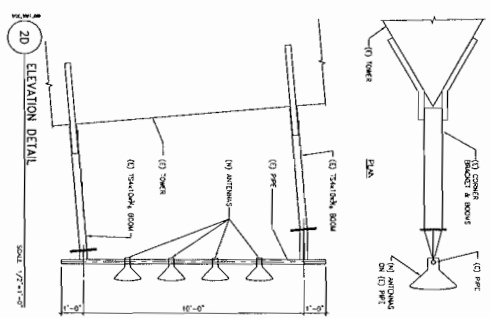
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10 DETAIL SCALE: 1/2\"/>



23 ELEVATION DETAIL SCALE: 1/2\"/>



20 ELEVATION DETAIL SCALE: 1/2\"/>

SIMPSON QUAMBERT & HEER
 [Professional Engineer Seal]
 License No. 10100
 State of California
 10100
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CLEARWIRE
 10100
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NO.	DESCRIPTION	QTY	UNIT
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CLEARWIRE EQUIPMENT INSTALLATION SITRO TOWER
 SAN FRANCISCO CALIFORNIA

DETAILS

DATE: 01/18/18
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT: [Name]
 SHEET NO.: 55.1

