## **Mandatory Discretionary Review Analysis**

**HEARING DATE: NOVEMBER 3, 2016** 

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

Reception: 415.558.6378

October 24, 2016

Fax:

Case No.: 2016-004805DRM
Project Address: 1 La Avanzada (aka 250 Palo Alto Avenue)

415.558.6409

Current Zoning: RH-1(D) (Residential House, One-Family - Detached)

Planning Information: 415.558.6377

40-X Height and Bulk District

Block/Lot: 2724/003

Project Sponsor: Sutro Tower Incorporated, represented by

Kristen Thall Peters, Cooper White & Cooper LLP

25 Cadillac Drive, Suite 208 Sacramento, CA 95825

Staff Contact: Ashley Woods – (415) 575-9178

Ashley.Woods@sfgov.org

#### PROJECT DESCRIPTION

Date:

This Mandatory 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 Mandatory Discretionary Review over building permit applications regarding Sutro Tower, its transmission equipment building, or any other part of its site (Lot 003 in Assessor's Block 2724).

The proposal is to allow the following modifications of Sutro Tower:

- Removal of five (5) existing antennas on the rooftop of the facilities building;
- Relocation of the remaining twenty-one (21) existing rooftop-mounted antennas to new locations
  on the roof of the facilities building;
- Installation of a 8' tall equipment screen (parapet) on the facilities building to screen the relocated antennas;
- Installation of new landscaping as part of overall site improvements.

No changes are proposed to tower lighting, the overall profile or structure of Sutro Tower, or the physical dimensions of the main transmission building.

#### SITE DESCRIPTION AND PRESENT USE

The Project Site is located at 1 La Avanzada (also known as 250 Palo Alto Avenue). The 5.6-acre site is owned by Sutro Tower, Incorporated. The site contains a 977-foot tall steel communications tower (Sutro Tower), a three-story 31,000-square-foot facilities building, a one-story 1,200 square-foot garage and storage building, and a one-story guard station, emergency generators, underground storage tanks, ancillary antennas and equipment associated with radio communications, landscaping and a surface parking lot.

The facility, although not the entire parcel, is completely enclosed within a security fence. Most of the area immediately surrounding the facility, including the majority of the northern half of the Project Site, consists of open space. The Tower has been in operation since 1973.

The Tower is located on one of the highest points in San Francisco (834 feet above sea level) and is generally visible from most places throughout the City.

La Avanzada forms the northern and a portion of the eastern boundary of the Project Site. Roughly the southernmost 320 feet of La Avanzada is owned by Sutro Tower, Inc.

Recent modifications to Sutro Tower include: (1) the digital television upgrade (Case No. 2007.0206D; approved by the Planning Commission on October 23, 2008); (2) the addition of 15 new antennas (Case No. 2010.1006D, approved by the Planning Commission on January 27, 2011 for Clearwire, a wireless data service provider, which was recently acquired by Sprint); (3) ground level site improvements and the addition of 51 antennas, microwave dishes, and camera mounts on the Tower (Case No. 2014.1377D; approved by the Planning Commission on March 19, 2015); and (4) the addition of one low power FM antenna to service KQEA Chinese Public Radio (Case No.2015-00913DRM; approved by the Planning Commission on April 21, 2016).

#### SURROUNDING PROPERTIES AND NEIGHBORHOOD

The Project Site is situated in the Twin Peaks neighborhood. The surrounding neighborhoods are characterized by single-family neighborhoods such as Midtown Terrace.

Summit Reservoir, owned and operated by the San Francisco Public Utilities Commission (SFPUC), is located adjacent to and northeast of the Sutro Tower facility. Open space exists on undeveloped land located immediately south of the Project Site. The closest residences to the Project Site are located along Dellbrook Avenue, Farview Court, and Palo Alto Avenue. Residential properties abut portions of the west side of the Project Site boundary; the nearest dwelling is located on Dellbrook Avenue, approximately 200 feet from the Tower.

#### **ENVIRONMENTAL REVIEW**

The addition of screening and antenna relocation is categorically exempt from CEQA under the Class 1 exemption.

The landscaping plan is categorically exempt from CEQA under the Class 4 exemption.

#### **HEARING NOTIFICATION**

ТҮРЕ	REQUIRED PERIOD	REQUIRED NOTICE DATE	ACTUAL NOTICE DATE	ACTUAL PERIOD
Posted Notice	10 days	October 24, 2016	October 21, 2016	13 days*
Mailed Notice	10 days	October 24, 2016	October 21, 2016	13 days

<sup>\*</sup>Notice placed on eight neighborhood locations as is past practice for Sutro Tower.

#### **PUBLIC COMMENT**

	SUPPORT	OPPOSED	NO POSITION
Adjacent Neighbor(s)	0	0	0
Neighborhood Groups	0	0	0
Other Neighbors	0	0	0

#### ISSUES AND OTHER CONSIDERATIONS

- As a condition of approval for Building Permit Application No. 2013.0412.4423 (Case No. 2014.1377D), the Planning Commission required Sutro Tower, Inc. to submit a conceptual landscaping plan to the Department, providing additional trees and landscaping to further screen the main transmission building, facility equipment, and fenced-in area from public view. The item before you is the Sutro Tower Landscaping Plan filed on February 2, 2016 (Building Permit Application No. 2016.0216.9652) seeking to meet the conditions of approval established by the Planning Commission.
- Additionally, as a separate condition of approval for Building Permit Application No. 2013.0412.4423, the Planning Commission required Sutro Tower, Inc. to initiate a review of potential screening systems for existing antennas and satellite dishes currently located on the roof and east-facing façade of the main transmission building. The item before you (Building Permit Application No. 2016.0216.9635) is a plan developed by Sutro Tower, Inc. to address visual concerns raised by some of its neighbors.
- The Project Sponsor was prepared to meet the Conditions of Approval for Building Permit Application No. 2013.0412.4423 during the August 4<sup>th</sup>, 2016 Planning Commission hearing to meet the Commission's September 2016 deadline, however, Sutro Tower, Inc and neighborhood residents agreed to a continuation of the hearing in order to further address resident concerns.
- All required public notifications were conducted in compliance with the Planning Code and adopted WTS policies.

#### REQUIRED COMMISSION ACTION

Pursuant to Section 306.9 of the Planning Code, Mandatory Discretionary Review is required for building permits submitted that include work to be performed on the site of Sutro Tower.

#### BASIS FOR RECOMMENDATION

This Project is necessary and 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 would provide screening of existing antennas on the facilities building.
- The Project would improve the overall condition of landscaping and grounds maintenance of the Sutro Tower site.

• The Landscaping Plan was developed in conjunction with interested neighborhood parties and Planning staff.

RECOMMENDATION: Do not take DR and Approve as Proposed, Subject to the standard Sutro Tower Conditions of Approval

#### **Attachments:**

Standard Sutro Tower Conditions of Approval
Parcel Map
Sanborn Map
Aerial Photograph
Zoning Map
Photo Simulations
CEQA Exemption
Reduced Plans

#### STANDARD ANTENNA CONDITIONS

The Conditions contained in this document were imposed by the Planning Commission on the antennarelated permits (the above-referenced permit application) at its hearing on 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 antennarelated 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 Inspections. 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 indepth 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 Inspection 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 actions 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 exposure 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 any 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 the Department of Public Health within 45 days of the measurements, and those reports shall be made available to members of the public.

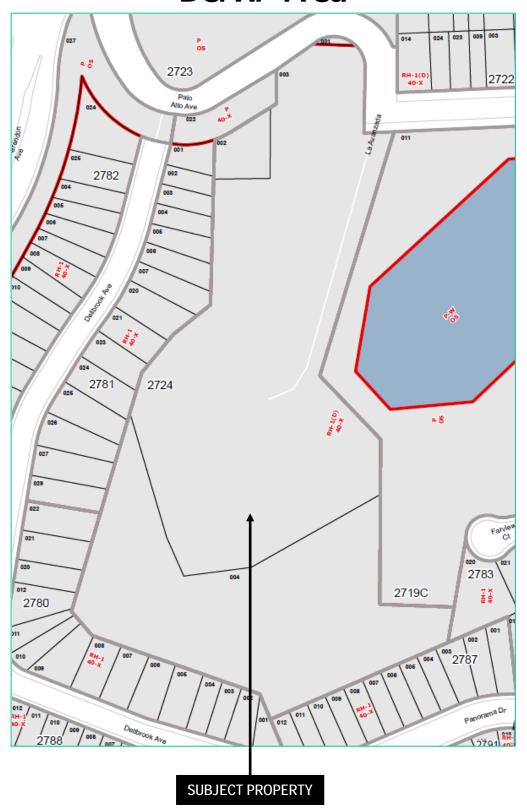
#### 4. Enforcement:

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

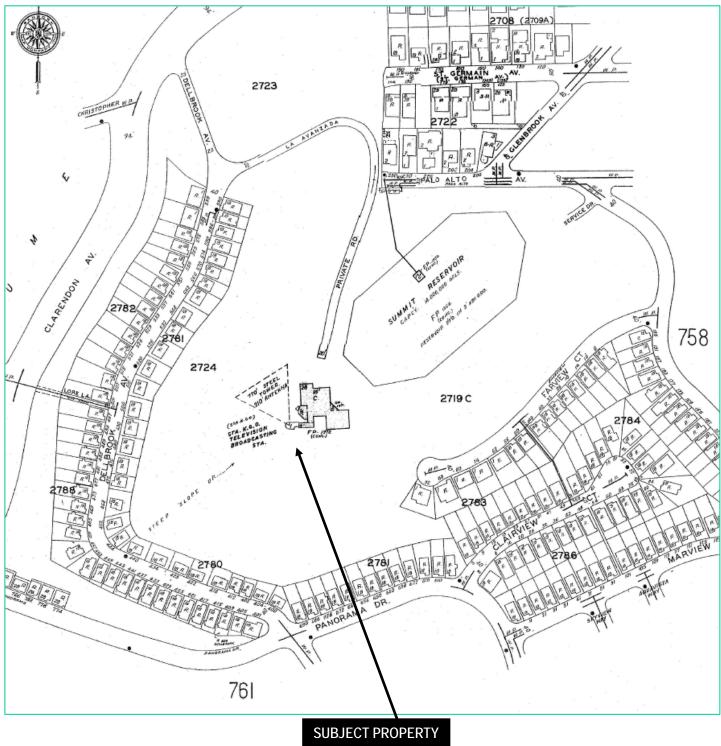
- 1. **Notice**: Within ten days of submitting any report required herein to any public agency, STI shall send notice of the availability of that report to representatives of the Twin Peaks Improvement Association, Forest Knolls Neighborhood Association and Midtown Terrace Homeowners Association.
- Community 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.

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Case Number 2016.004805DRM
Sutro Tower Modification Mandatory DR
1 La Avanzada (also 250 Palo Alto Avenue)

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



#### Case Number 2016.004805DRM

Sutro Tower Modification Mandatory DR 1 La Avanzada (also 250 Palo Alto Avenue)

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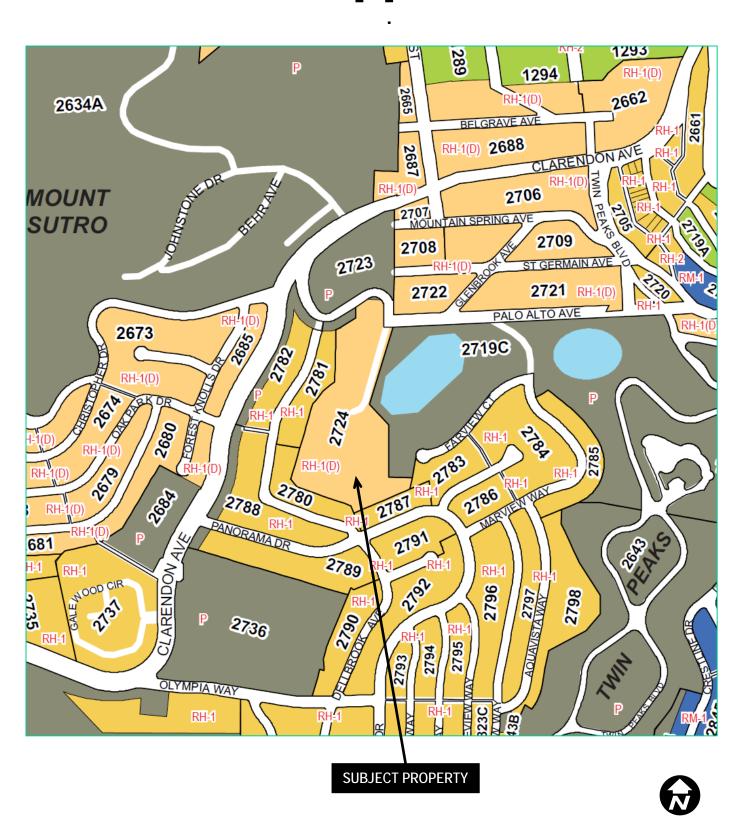




SUBJECT PROPERTY

Case Number 2015.009913DRM Sutro Tower Modification Mandatory DR 1 La Avanzada (also 250 Palo Alto Avenue)

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#### Case Number 2016.004805DRM

Sutro Tower Modification Mandatory DR 1 La Avanzada (aka 250 Palo Alto Avenue)













# SAN FRANCISCO PLANNING DEPARTMENT

## **CEQA Categorical Exemption Determination**

#### PROPERTY INFORMATION/PROJECT DESCRIPTION

Project Address			Block/Lot(s)	
1 La Avanzada (Sutro Tower)			2724/003	
Case No. Permit No.		Permit No.	Plans Dated	
2016-008927PRJ		201602169652	February 2, 2016	
Additio	n/	Demolition	New	Project Modification
Alteratio	on	(requires HRER if over 45 years old)	Construction	(GO TO STEP 7)
Project desc	ription for	Planning Department approval.		
The state of the s		or 1 La Avanzada (Sutro Tower) per F tory Discretionary Review #2014.137		sion Conditions of
STEP 1: EX		CLASS BY PROJECT PLANNER		
*Note: If ne	ither class	applies, an Environmental Evaluation App	lication is required.*	
	Class 1 – I	Existing Facilities. Interior and exterior alter	ations; additions und	ler 10,000 sq. ft.
	Class 3 – New Construction/ Conversion of Small Structures. Up to three (3) new single-family residences or six (6) dwelling units in one building; commercial/office structures; utility extensions.; .; change of use under 10,000 sq. ft. if principally permitted or with a CU. Change of use under 10,000 sq. ft. if principally permitted or with a CU.			
$\checkmark$	Class 4 - minor a	alterations to land.		
STEP 2: CE		TS BY PROJECT PLANNER		
If any box is	s checked b	oelow, an Environmental Evaluation Applic	ation is required.	
Air Quality: Would the project add new sensitive receptors (specifically, schools, day care facilities, hospitals, residential dwellings, and senior-care facilities) within an Air Pollution Exposure Zone?  Does the project have the potential to emit substantial pollutant concentrations (e.g., backup diesel generators, heavy industry, diesel trucks)? Exceptions: do not check box if the applicant presents documentation of enrollment in the San Francisco Department of Public Health (DPH) Article 38 program and the project would not have the potential to emit substantial pollutant concentrations. (refer to EP _ArcMap > CEQA Catex Determination Layers > Air Pollutant Exposure Zone)				
	Hazardous Materials: If the project site is located on the Maher map or is suspected of containing hazardous materials (based on a previous use such as gas station, auto repair, dry cleaners, or heavy manufacturing, or a site with underground storage tanks): Would the project involve 50 cubic yards or more of soil disturbance - or a change of use from industrial to residential? If yes, this box must be checked and the project applicant must submit an Environmental Application with a Phase I Environmental Site Assessment. Exceptions: do not check box if the applicant presents documentation of enrollment in the San Francisco Department of Public Health (DPH) Maher program, a DPH waiver from the			

Revised: 4/11/16

	Maher program, or other documentation from Environmental Planning staff that hazardous material effects would be less than significant (refer to EP_ArcMap > Maher layer).			
	<b>Transportation:</b> Does the project create six (6) or more net new parking spaces or residential units? Does the project have the potential to adversely affect transit, pedestrian and/or bicycle safety (hazards) or the adequacy of nearby transit, pedestrian and/or bicycle facilities?			
	Archeological Resources: Would the project result in soil disturbance/modification greater than two (2) feet below grade in an archeological sensitive area or eight (8) feet in a non-archeological sensitive area? (refer to EP_ArcMap > CEQA Catex Determination Layers > Archeological Sensitive Area)			
	<b>Subdivision/Lot Line Adjustment:</b> Does the project site involve a subdivision or lot line adjustment on a lot with a slope average of 20% or more? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography)			
	<b>Slope = or &gt; 20%:</b> Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography) If box is checked, a geotechnical report is required.			
	<b>Seismic:</b> Landslide Zone: Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) If box is checked, a geotechnical report is required.			
	<b>Seismic:</b> Liquefaction Zone: Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) If box is checked, a geotechnical report will likely be required.			
	oxes are checked above, GO TO STEP 3. <u>If one or more boxes are checked above, an <i>Environmental</i> tion Application is required, unless reviewed by an Environmental Planner.</u>			
<b>√</b>	Project can proceed with categorical exemption review. The project does not trigger any of the CEQA impacts listed above.			
Commo	ents and Planner Signature (optional):			
	B: PROPERTY STATUS – HISTORIC RESOURCE COMPLETED BY PROJECT PLANNER			
PROPE	ERTY IS ONE OF THE FOLLOWING: (refer to Parcel Information Map)			
┝┾╃	Category A: Known Historical Resource. GO TO STEP 5.			
	Category B: Potential Historical Resource (over 45 years of age). GO TO STEP 4.			

Category C: Not a Historical Resource or Not Age Eligible (under 45 years of age). GO TO STEP 6.

### STEP 4: PROPOSED WORK CHECKLIST

TO BE COMPLETED BY PROJECT PLANNER

Che				
	ck all that apply to the project.			
	1. Change of use and new construction. Tenant improvements not included.			
	2. <b>Regular maintenance or repair</b> to correct or repair deterioration, decay, or damage to building.			
	3. <b>Window replacement</b> that meets the Department's <i>Window Replacement Standards</i> . Does not include storefront window alterations.			
	4. <b>Garage work.</b> A new opening that meets the <i>Guidelines for Adding Garages and Curb Cuts,</i> and/or replacement of a garage door in an existing opening that meets the Residential Design Guidelines.			
	5. <b>Deck, terrace construction, or fences</b> not visible from any immediately adjacent public right-of-way.			
	6. <b>Mechanical equipment installation</b> that is not visible from any immediately adjacent public right-ofway.			
	7. <b>Dormer installation</b> that meets the requirements for exemption from public notification under <i>Zoning Administrator Bulletin No. 3: Dormer Windows</i> .			
	8. <b>Addition(s)</b> that are not visible from any immediately adjacent public right-of-way for 150 feet in each direction; does not extend vertically beyond the floor level of the top story of the structure or is only a single story in height; does not have a footprint that is more than 50% larger than that of the original building; and does not cause the removal of architectural significant roofing features.			
Note	e: Project Planner must check box below before proceeding.			
	Project is not listed. <b>GO TO STEP 5.</b>			
	Project <b>does not conform</b> to the scopes of work. <b>GO TO STEP 5</b> .			
	Project involves four or more work descriptions. GO TO STEP 5.			
	Project involves less than four work descriptions. GO TO STEP 6.			
	P 5: CEQA IMPACTS – ADVANCED HISTORICAL REVIEW BE COMPLETED BY PRESERVATION PLANNER			
Che	ck all that apply to the project.			
	1. Project involves a <b>known historical resource (CEQA Category A)</b> as determined by Step 3 and conforms entirely to proposed work checklist in Step 4.			
	2. Interior alterations to publicly accessible spaces.			
	2. Interior alterations to publicly accessible spaces.     3. Window replacement of original/historic windows that are not "in-kind" but are consistent with			
	2. Interior alterations to publicly accessible spaces.     3. Window replacement of original/historic windows that are not "in-kind" but are consistent with existing historic character.			
	2. Interior alterations to publicly accessible spaces.  3. Window replacement of original/historic windows that are not "in-kind" but are consistent with existing historic character.  4. Façade/storefront alterations that do not remove, alter, or obscure character-defining features.  5. Raising the building in a manner that does not remove, alter, or obscure character-defining			
	2. Interior alterations to publicly accessible spaces.  3. Window replacement of original/historic windows that are not "in-kind" but are consistent with existing historic character.  4. Façade/storefront alterations that do not remove, alter, or obscure character-defining features.  5. Raising the building in a manner that does not remove, alter, or obscure character-defining features.  6. Restoration based upon documented evidence of a building's historic condition, such as historic			

	9. Other work that would not materially impair a historic district (specify or add comments):			
	(Requires approval by Senior Preservation Planner/Preservation Coordinator)			
	10. <b>Reclassification of property status</b> . (Requires approval by Senior Preservation Planner/Preservation Coordinator)  Reclassify to Category A Reclassify to Category C  a. Per HRER dated:			
Note	e: If ANY box in STEP 5 above is checked, a Preservation	Planner MUST check one box below.		
	Further environmental review required. Based on the Environmental Evaluation Application to be submitted. G			
	Project can proceed with categorical exemption review Preservation Planner and can proceed with categorical	-		
Com	ments (optional):			
Prese	rvation Planner Signature:			
	P 6: CATEGORICAL EXEMPTION DETERMINATION E COMPLETED BY PROJECT PLANNER			
	Further environmental review required. Proposed project	et does not meet scopes of work in either (check		
	all that apply):			
	Step 2 – CEQA Impacts  Step 5 – Advanced Historical Review			
	STOP! Must file an Environmental Evaluation Applicati	on		
	,,			
	No further environmental review is required. The project	Signature:		
	Planner Name: Ashley Woods	Digitally signed by Ashley		
	Project Approval Action:	Δchlων Woods  DN: cn=Ashley Woods,		
	Planning Commission Hearing	Woods DN: cn=Ashley Woods, o=City and County of San Francisco, ou=Planning Department, email=Ashley.Woods@sfgov org, c=US		
	If Discretionary Review before the Planning Commission is requested, the Discretionary Review hearing is the Approval Action for the project.	-07'00'		
	Once signed or stamped and dated, this document constitutes a categorical exemption pursuant to CEQA Guidelines and Chapter 31 of the Administrative Code.  In accordance with Chapter 31 of the San Francisco Administrative Code, an appeal of an exemption determination can only be filed within 30 days of the project receiving the first approval action.			



# SAN FRANCISCO PLANNING DEPARTMENT

## **CEQA Categorical Exemption Determination**

#### PROPERTY INFORMATION/PROJECT DESCRIPTION

Project Address			Block/Lot(s)	
1 La Avanzada (Sutro Tower)			2724/003	
Case No. Permit No.		Plans Dated		
2016-002828PRJ		2016.02.16.9635	October 21, 2016	
✓ Additic	n/	Demolition	New	Project Modification
Alteration		(requires HRER if over 45 years old)	Construction	(GO TO STEP 7)
Project desc	ription for	Planning Department approval.		
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STEP 1: EX		CLASS BY PROJECT PLANNER		
*Note: If no	either class	applies, an Environmental Evaluation App	lication is required.	ŧ
$\overline{\checkmark}$	Class 1 – I	Existing Facilities. Interior and exterior alter	ations; additions und	der 10,000 sq. ft.
	Class 3 – New Construction/ Conversion of Small Structures. Up to three (3) new single-family residences or six (6) dwelling units in one building; commercial/office structures; utility extensions.; .; change of use under 10,000 sq. ft. if principally permitted or with a CU. Change of use under 10,000 sq. ft. if principally permitted or with a CU.			
	Class			
STEP 2: CE	THE RESIDENCE OF THE PARTY OF THE PARTY	TS BY PROJECT PLANNER		
If any box i	s checked l	oelow, an Environmental Evaluation Applic	cation is required.	
Air Quality: Would the project add new sensitive receptors (specifically, schools, day care facilities, hospitals, residential dwellings, and senior-care facilities) within an Air Pollution Exposure Zone?  Does the project have the potential to emit substantial pollutant concentrations (e.g., backup diesel generators, heavy industry, diesel trucks)? Exceptions: do not check box if the applicant presents documentation of enrollment in the San Francisco Department of Public Health (DPH) Article 38 program and the project would not have the potential to emit substantial pollutant concentrations. (refer to EP _ArcMap > CEQA Catex Determination Layers > Air Pollutant Exposure Zone)				
	Hazardous Materials: If the project site is located on the Maher map or is suspected of containing hazardous materials (based on a previous use such as gas station, auto repair, dry cleaners, or heavy manufacturing, or a site with underground storage tanks): Would the project involve 50 cubic yards or more of soil disturbance - or a change of use from industrial to residential? If yes, this box must be checked and the project applicant must submit an Environmental Application with a Phase I Environmental Site Assessment. Exceptions: do not check box if the applicant presents documentation of enrollment in the San Francisco Department of Public Health (DPH) Maher program, a DPH waiver from the			

Revised: 4/11/16

	Maher program, or other documentation from Environmental Planning staff that hazardous material effects would be less than significant (refer to EP_ArcMap > Maher layer).			
	<b>Transportation:</b> Does the project create six (6) or more net new parking spaces or residential units? Does the project have the potential to adversely affect transit, pedestrian and/or bicycle safety (hazards) or the adequacy of nearby transit, pedestrian and/or bicycle facilities?			
	Archeological Resources: Would the project result in soil disturbance/modification greater than two (2) feet below grade in an archeological sensitive area or eight (8) feet in a non-archeological sensitive area? (refer to EP_ArcMap > CEQA Catex Determination Layers > Archeological Sensitive Area)			
	<b>Subdivision/Lot Line Adjustment:</b> Does the project site involve a subdivision or lot line adjustment on a lot with a slope average of 20% or more? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography)			
	<b>Slope = or &gt; 20%:</b> Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Topography) If box is checked, a geotechnical report is required.			
	<b>Seismic:</b> Landslide Zone: Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) If box is checked, a geotechnical report is required.			
	<b>Seismic:</b> Liquefaction Zone: Does the project involve any of the following: (1) square footage expansion greater than 1,000 sq. ft. outside of the existing building footprint, (2) excavation of 50 cubic yards or more of soil, (3) new construction? (refer to EP_ArcMap > CEQA Catex Determination Layers > Seismic Hazard Zones) If box is checked, a geotechnical report will likely be required.			
	are checked above, GO TO STEP 3. <u>If one or more boxes are checked above, an <i>Environmental</i>  Application is required, unless reviewed by an Environmental Planner.</u>			
<b>V</b>	Project can proceed with categorical exemption review. The project does not trigger any of the CEQA impacts listed above.			
Comments a	and Planner Signature (optional):			
TO BE COM	OPERTY STATUS – HISTORIC RESOURCE IPLETED BY PROJECT PLANNER			
	(IS ONE OF THE FOLLOWING: (refer to Parcel Information Map)  Itegory A: Known Historical Resource. GO TO STEP 5.			
	ttegory B: Potential Historical Resource (over 45 years of age). GO TO STEP 4.			

Category C: Not a Historical Resource or Not Age Eligible (under 45 years of age). GO TO STEP 6.

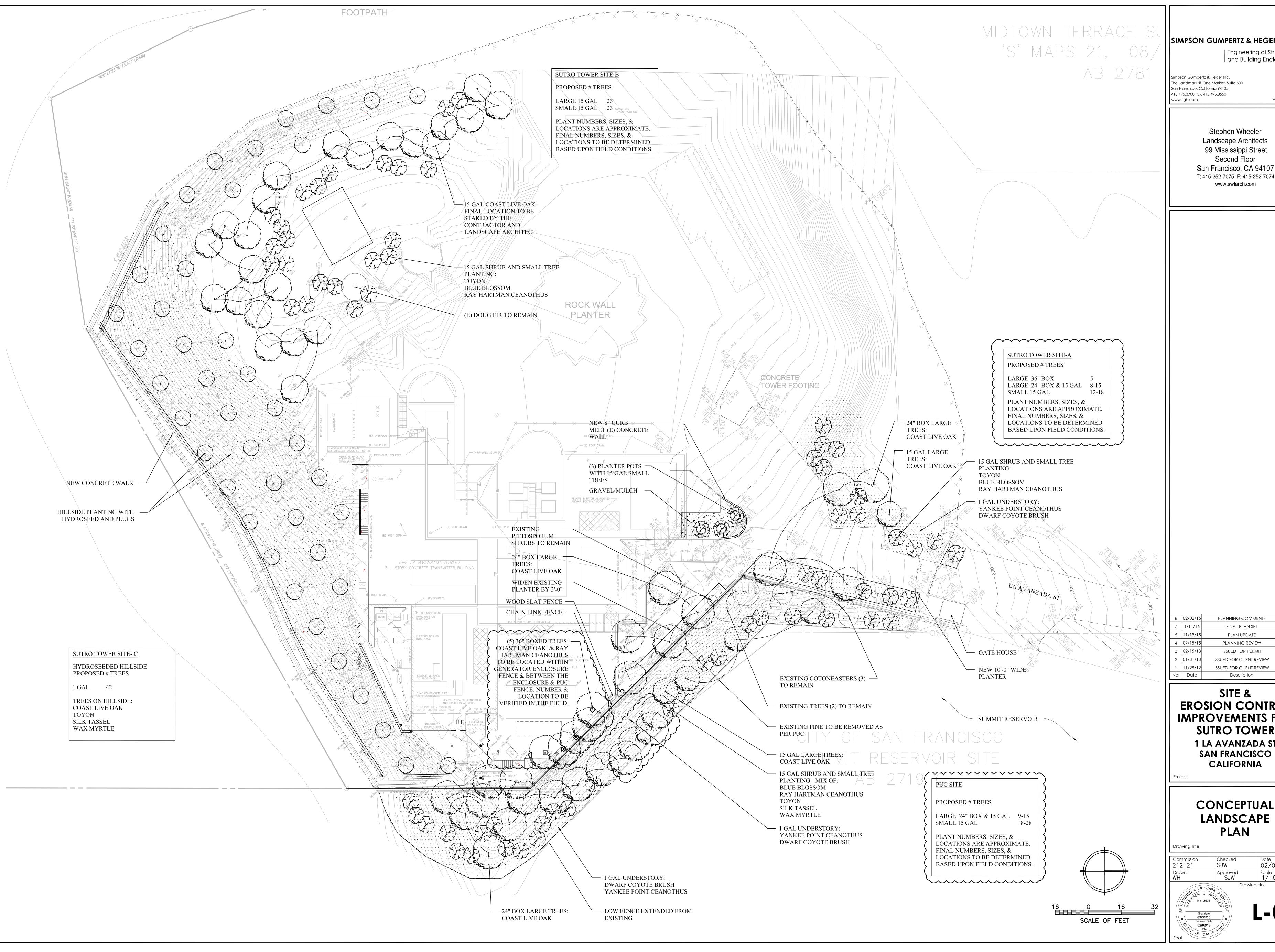
 $\checkmark$ 

### STEP 4: PROPOSED WORK CHECKLIST

TO BE COMPLETED BY PROJECT PLANNER

Che	ck all that apply to the project.		
	1. Change of use and new construction. Tenant improvements not included.		
	2. <b>Regular maintenance or repair</b> to correct or repair deterioration, decay, or damage to building.		
	3. <b>Window replacement</b> that meets the Department's <i>Window Replacement Standards</i> . Does not include storefront window alterations.		
	4. <b>Garage work.</b> A new opening that meets the <i>Guidelines for Adding Garages and Curb Cuts,</i> and/or replacement of a garage door in an existing opening that meets the Residential Design Guidelines.		
	5. Deck, terrace construction, or fences not visible from any immediately adjacent public right-of-way		
	6. <b>Mechanical equipment installation</b> that is not visible from any immediately adjacent public right-ofway.		
	7. <b>Dormer installation</b> that meets the requirements for exemption from public notification under <i>Zoning Administrator Bulletin No. 3: Dormer Windows</i> .		
	8. <b>Addition(s)</b> that are not visible from any immediately adjacent public right-of-way for 150 feet in each direction; does not extend vertically beyond the floor level of the top story of the structure or is only a single story in height; does not have a footprint that is more than 50% larger than that of the original building; and does not cause the removal of architectural significant roofing features.		
Not	e: Project Planner must check box below before proceeding.		
	Project is not listed. <b>GO TO STEP 5.</b>		
	Project does not conform to the scopes of work. GO TO STEP 5.		
	Project involves four or more work descriptions. GO TO STEP 5.		
	Project involves <b>less than four</b> work descriptions. <b>GO TO STEP 6.</b>		
	P 5: CEQA IMPACTS – ADVANCED HISTORICAL REVIEW BE COMPLETED BY PRESERVATION PLANNER		
Che	ck all that apply to the project.		
	1. Project involves a <b>known historical resource (CEQA Category A)</b> as determined by Step 3 and conforms entirely to proposed work checklist in Step 4.		
	2. Interior alterations to publicly accessible spaces.		
	3. <b>Window replacement</b> of original/historic windows that are not "in-kind" but are consistent with existing historic character.		
	4. Façade/storefront alterations that do not remove, alter, or obscure character-defining features.		
	5. <b>Raising the building</b> in a manner that does not remove, alter, or obscure character-defining features.		
	6. <b>Restoration</b> based upon documented evidence of a building's historic condition, such as historic photographs, plans, physical evidence, or similar buildings.		
	7. <b>Addition(s)</b> , including mechanical equipment that are minimally visible from a public right-of-way and meet the <i>Secretary of the Interior's Standards for Rehabilitation</i> .		
	8. <b>Other work consistent</b> with the Secretary of the Interior Standards for the Treatment of Historic Properties (specify or add comments):		

	9. Other work that would not materially impair a historic district (specify or add comments):			
	(Requires approval by Senior Preservation Planner/Preservation Coordinator)			
	10. <b>Reclassification of property status</b> . (Requires approval by Senior Preservation Planner/Preservation Coordinator)  Reclassify to Category A  Reclassify to Category C  a. Per HRER dated:			
Note	e: If ANY box in STEP 5 above is checked, a Preservation	Planner MUST check one box below.		
	Further environmental review required. Based on the Environmental Evaluation Application to be submitted. G			
	Project can proceed with categorical exemption review Preservation Planner and can proceed with categorical			
Com	ments (optional):			
Draca	rvation Planner Signature:			
11686	ivation i faither Signature.			
	6: CATEGORICAL EXEMPTION DETERMINATION E COMPLETED BY PROJECT PLANNER			
	Further environmental review required. Proposed project	ct does not meet scopes of work in either (check		
	all that apply):  Step 2 – CEQA Impacts			
	Step 5 – Advanced Historical Review			
	STOP! Must file an Environmental Evaluation Applicati	on.		
<b>7</b>	No further environmental review is required. The proje	ct is categorically exempt under CEOA		
	Planner Name: Ashley Woods	Signature:		
	-	Digitally signed by Ashley		
	Project Approval Action:	Ashley DN: cn=Ashley Woods,		
	Building Permit	Francisco, ou=Planning Department		
	If Discretionary Review before the Planning Commission is requested, the Discretionary Review hearing is the Approval Action for the project.	Woods DN: cn=Ashley Woods, o=City and County of San Francisco, ou=Planning Department, email=Ashley.Woods@sfgov org, c=US Date: 2016.10.24 09:41:54 -07'00'		
	Once signed or stamped and dated, this document constitutes a categorical exemption pursuant to CEQA Guidelines and Chapter 31 of the Administrative Code.  In accordance with Chapter 31 of the San Francisco Administrative Code, an appeal of an exemption determination can only be filed within 30 days of the project receiving the first approval action.			



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No.	Date	Description	Ву

# **EROSION CONTROL IMPROVEMENTS FOR SUTRO TOWER** 1 LA AVANZADA ST

**CALIFORNIA** 

# CONCEPTUAL LANDSCAPE

Commission 212121	Checked SJW		Date 02/02/16
Drawn WH	Approved SJW	d	Scale 1/16"=1'-0"
L AND SCAPE		Drawing	No.

**L-0** 

## GENERAL NOTES

1. THE EXISTING SITE CONDITIONS INFORMATION SHOWN ON THESE PLANS WAS PROVIDED BY THE OWNER AND TAKEN FROM A TOPOGRAPHIC SURVEY PREPARED IN JULY 2012 BY TRONOFF ASSOCIATES LAND SURVEYORS, 415-392-3215. SWLA MAKES NO REPRESENTATION AS TO THE ACCURACY OF THIS PLAN OR TO THE EXISTENCE OR LOCATION OF ON-SITE UTILITIES OR OTHER IMPROVEMENTS. SWLA ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION AND SHALL NOT BE HELD LIABLE FOR ANY COSTS, DELAYS IN THE WORK, OR DESIGN ERRORS DUE TO INACCURACIES IN THE BASE PLAN. CONTRACTOR SHALL VERIFY THE DIMENSIONS OF THE SITE AND THE LOCATION OF EXISTING SITE IMPROVEMENTS, EXISTING UTILITIES, AND GRADES PRIOR TO CONSTRUCTION. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE BASE PLAN PRIOR TO COMMENCEMENT OF WORK.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL JOB SITE CONDITIONS, INCLUDING THE SAFETY OF ALL PERSONS AND PROTECTION OF ALL PROPERTY DURING CONSTRUCTION OF THE PROJECT. CONTRACTOR SHALL COMPLY WITH ALL OSHA REGULATIONS REGARDING THE USE OF HEAVY EQUIPMENT OR OTHER HAZARDOUS WORK AT THE JOB SITE.

3. SWLA SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES IN CONNECTION WITH THE WORK AND SWLA SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S ERRORS OF OMISSION OR FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

4. SWLA SHALL NOT BE RESPONSIBLE FOR JOB SITE SAFETY OR THE IDENTIFICATION, REMOVAL, TREATMENT OR CONSEQUENCES OF ANY HAZARDOUS WASTE, KNOWN OR UNKNOWN AT THE JOB SITE.

5. SWLA SHALL NOT BE RESPONSIBLE OR LIABLE FOR ANY UNAUTHORIZED CHANGES TO THE PLANS OR SUBSTITUTIONS OF SPECIFIED PRODUCTS. ALL PROPOSED CHANGES AND SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.

6. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL CONTACT APPROPRIATE PUBLIC AGENCIES AS NECESSARY FOR REQUIRED REVIEW AND INSPECTION OF PLANS, WORK IN PROGRESS AND OF COMPLETED WORK. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO LOCAL BUILDING CODES, ORDINANCES AND REQUIREMENTS.

### PLANTING NOTES

## 1. HYDROSEEDING:

A. SEED MIXES, MULCHES, BINDERS/TACKIFIERS, FERTILIZER, HUMATE, SOIL INOCULATES AND STRAW TO BE SPECIFIED BY PACIFIC COAST SEED, 925-373-4417.

MIX BASED ON SITE CONDITIONS AND PLANTING TIME.

B. SEED MIXES: SEED VARIETIES AND QUANTITIES SHALL BE PREMIXED AND PACKAGED BY A COMMERCIAL SEED SUPPLIER IN BAGS OR CONTAINERS CLEARLY LABELED TO SHOW THE NAME AND ADDRESS OF THE SUPPLIER, THE SEED NAMES, THE LOT NUMBER, NET WEIGHT, THE PERCENT OF WEED SEED CONTENT AND THE GUARANTEED PERCENTAGE OF PURITY AND GERMINATION. SEED SHALL BE OF COMMERCIAL QUALITY, OF THE BEST STANDARD OF PURITY AVAILABLE, AND CONFORM TO MINIMUM PURITY AND GERMINATION STANDARDS SPECIFIED BY SUPPLIER FOR EACH SPECIES. WEED SEED IN MIXES SHALL NOT EXCEED 0.5 PERCENT BY WEIGHT.

## $\underline{\text{ED}}$ $\underline{\text{#/1000 SF}}$

10#/1000

NATIVE HYDROSEED MIX (MIX TO BE DETERMINED) SF (T.B.D.)

98% PURE / 85% GERMINATION

C. HYDROSEEDING OF AREAS WITH TURF REINFORCEMENT MAT TO BE SEEDED PRIOR TO INSTALLATION OF MAT.

D. CONTRACTOR SHALL PROVIDE TEMPORARY IRRIGATION UNTIL SEEDS ARE ESTABLISHED.

E. HYDROSEED SHALL BE GUARANTEED FOR A PERIOD FROM ONE YEAR FROM THE TIME OF FINAL ACCEPTANCE OF THE PROJECT. AT THE END OF THIS PERIOD, AREAS OBSERVED BY THE LANDSCAPE ARCHITECT TO INDICATE SEED GERMINATION FAILURE SHALL BE RE-SEEDED AT NO ADDITIONAL COST TO THE OWNER

## 2. TREE PLANTING:

A. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON-SITE UTILITIES AND SUBGRADE IMPROVEMENTS PRIOR TO TREE PIT EXCAVATION.

B. CONTRACTOR AND LANDSCAPE ARCHITECT SHALL STAKE THE LOCATION OF ALL TREES PRIOR TO EXCAVATION OF THE TREE PITS. FOLLOWING EXCAVATION OF THE TREE PITS, THE LANDSCAPE ARCHITECT SHALL APPROVE FINAL PLACEMENT AND ORIENTATION OF ALL TREES.

C. CONTRACTOR SHALL HAND WATER TREES ON A WEEKLY BASIS UNTIL TREES ARE ESTABLISHED.

D. TREE PLANTING SHALL BE GUARANTEED FOR A PERIOD FROM ONE YEAR FROM THE TIME OF FINAL ACCEPTANCE OF THE PROJECT. AT THE END OF THIS PERIOD, SHOULD THE APPEARANCE OF ANY TREE INDICATE WEAKNESS OR NON-TYPICAL VIGOR, OR SHOULD A PLANT DIE-BACK AND LOSE THE FORM AND SIZE ORIGINALLY SPECIFIED DUE TO POOR IRRIGATION OR MAINTENANCE, THAT TREE SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE

- 3. FOR PLANT LIST SEE SHEET L2.0
- 4. FOR TREE PLANTING SEE 1/L2.0
- 5. FOR SHRUB PLANTING SEE 2/L2.0
- 6. FOR PLANT SPACING SEE 3/L2.0
- 7. FOR PLANTING SPECIFICATIONS, SEE L0.1

## PLANTING SPECIFICATIONS

1. CONTRACTOR SHALL CLEAR AND GRUB ALL EXISTING ROOTS, INCLUDING GRINDING TREE STUMPS TO A MINIMUM OF 24" BELOW PROPOSED FINISH GRADE OF PLANTING OR PAVING AREAS.

2. FOLLOWING ACCEPTANCE OF GRADING, CONTRACTOR SHALL SUBMIT THREE 1-QUART SAMPLES FROM DIFFERENT SITE LOCATIONS TO A PRE-APPROVED INDEPENDENT SOILS TESTING LABORATORY. LAB SHALL EVALUATE SOIL CHEMICAL FERTILITY AND SHALL RECOMMEND SOIL AMENDMENTS TO IMPROVE FERTILITY. CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS OF ALL SOILS ANALYSIS.

3. CONTRACTOR SHALL SUBMIT CATALOG CUTS, GUARANTEED ANALYSIS AND/OR SAMPLES FOR THE FOLLOWING ITEMS FOR APPROVAL BY THE LANDSCAPE ARCHITECT:

A. LAWN SOD, SOIL AMENDMENTS, FERTILIZER AND PLANT TABLETS, BARK MULCH, REDDY STAKE, RHYZOME BARRIER, STEEL HEADER, AND GRAVEL PAVING

## 4. SOIL PREPARATION:

A. CONTRACTOR SHALL PREPARE SOIL FOR PLANTING AS RECOMMENDED BY THE RESULTS OF THE SOILS TEST.

B. SUBSOIL IN ALL PLANTING AREAS SHALL BE SCARIFIED TO A DEPTH OF 12" WITH THE SPACING OF RIPPER TEETH NO GREATER THAN 1" ON CENTER. ALL ROCK AND OTHER DEBRIS MORE THAN 2" IN ANY DIMENSION SHALL BE REMOVED FROM THE PLANTING AREA.

C. DISTRIBUTE SOIL AMENDMENT AT RATE SPECIFIED BY RESULTS OF SOIL

D. TILL SOIL TO 12" DEPTH WITH ROTARY TILLER SO THAT AMENDMENT IS UNIFORMLY MIXED THROUGHOUT AND SOIL IS FRIABLE. IF SOIL IS DRY, ADD WATER TO OPTIMUM MOISTURE CONTENT. IF SOIL IS TOO WET, STOP WORK AND RESUME WHEN CONDITIONS ARE SATISFACTORY. REMOVE ALL ROCKS AND DEBRIS. LIMIT FINE GRADING TO AREAS WHICH CAN BE PLANTED SOON AFTER GRADING.

E. RAKE SMOOTH SOIL TO A FINISHED GRADE, PITCHED FOR PROPER DRAINAGE. ROUND ALL CHANGES IN GRADIENT AND ELIMINATE ALL DEPRESSIONS WHERE WATER WILL POOL.

## 5. WEED KILL:

A. FOLLOWING SOIL PREPARATION, ALL LANDSCAPE AREAS TO BE PLANTED OR SEEDED SHOULD BE IRRIGATED DURING A MINIMUM PERIOD OF 14 DAYS TO ALLOW FOR WEED GERMINATION.

B. FOLLOWING GERMINATION, AN APPROVED HERBICIDE SHALL BE APPLIED TO ALL PLANTING AREAS, ACCORDING TO MANUFACTURER'S RECOMMENDATION. CARE SHOULD BE TAKEN TO BUFFER SURROUNDING PROPERTIES, BUILDINGS AND EXISTING VEGETATION FROM OVERSPRAY.

C. ALLOW SPRAYED AREAS TO REMAIN UNTOUCHED FOR MINIMUM OF 10 DAYS OR ACCORDING TO MANUFACTURER'S RECOMMENDATION TO ALLOW FOR ADEQUATE WEED KILL.

## D. WEEDS SHOULD BE CLEARED AND REMOVED PRIOR TO PLANTING.

E. LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR INSPECTION ON THE 10TH DAY AFTER APPLICATION. AREAS THAT DID NOT RECEIVE ADEQUATE TREATMENT AS DETERMINED BY THE LANDSCAPE ARCHITECT SHALL REQUIRE RE-APPLICATION.

## 6. FINISH GRADING:

A. WHEN WEEDING, SOIL PREPARATION, AND SOIL CONDITIONING HAVE BEEN COMPLETED AND SOIL HAS BEEN THOROUGHLY WATER SETTLED, ALL PLANTING AREAS SHALL BE SMOOTH GRADED, READY FOR PLACEMENT OF PLANT MATERIAL, AND SODDING. SLOPE ALL GRADES AWAY FROM BUILDINGS AND MAKE MINOR ADJUSTMENTS TO DIRECT DRAINAGE TOWARD DRAINAGE FACILITIES.

B. FINISH GRADING SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT PRIOR TO PROCEEDING WITH PLANTING.

## 7. FERTILIZATION:

A. APPLY TOP-DRESS FERTILIZER IN ALL LAWN, GROUND COVER, SHRUB AND VINE POCKET AREAS AS SPECIFIED BY RESULTS OF THE SOILS TEST. WATER BED THOROUGHLY AFTER FERTILIZER APPLICATION.

## 8. TREE PLANTING:

A. CONTRACTOR SHALL EXAMINE AREAS TO RECEIVE PLANTING PRIOR TO COMMENCEMENT OF WORK. ITEMS TO BE EXAMINED INCLUDE INSTALLATION OF HEADERS, ADJUSTMENT OF GRADES FOR MULCHING, IRRIGATION INSTALLATION, SOIL PREPARATION, AND COMPLETED WORK OF OTHER TRADES.

B. LAYOUT ALL PLANTS AT LOCATIONS SHOWN ON DRAWINGS. MAKE MINOR ADJUSTMENTS NECESSARY TO AVOID CONFLICTS WITH UTILITIES, EXISTING SITE IMPROVEMENTS, ETC. SPOT TREES IN THEIR CONTAINERS OR STAKE LOCATIONS. SECURE APPROVAL OF LOCATIONS BY THE LANDSCAPE ARCHITECT BEFORE EXCAVATING HOLES.

C. EXCAVATE HOLES AS SHOWN ON THE DRAWINGS SO THAT AFTER SETTLEMENT, THE CROWN OF THE PLANT WILL BE 2" ABOVE SURROUNDING GRADE. SCARIFY ALL SIDES OF HOLE.

D. PLACE SPECIFIED FERTILIZER TABLETS 4-INCHES BELOW FINISHED GRADE IN AS FOLLOWS: 1 GALLON / 1 TABLET, 5 GALLON / 3 TABLETS, 15 GALLON / 5 TABLETS, 24" BOX / 8 TABLETS AND 36" BOX / 12 TABLETS.

E. PRUNE ONLY AS NECESSARY TO REMOVE INJURED TWIGS AND FOLIAGE UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT.

F. MULCH: FOLLOWING INSTALLATION OF PLANTS, MULCH ALL PLANTING AREAS WITH 2" OF SPECIFIED BARK OR 2" OF SPECIFIED GRAVEL MULCH AS SHOWN ON THE DRAWINGS.

## 9. HYDROSEEDING:

A. SEED MIXES, MULCHES, BINDERS/TACKIFIERS, FERTILIZER, HUMATE, SOIL INOCULATES AND STRAW TO BE SPECIFIED BY PACIFIC COAST SEED MIX BASED ON SITE CONDITIONS AND PLANTING TIME.

B. SEED MIXES: SEED VARIETIES AND QUANTITIES SHALL BE PREMIXED AND PACKAGED BY A COMMERCIAL SEED SUPPLIER IN BAGS OR CONTAINERS CLEARLY LABELED TO SHOW THE NAME AND ADDRESS OF THE SUPPLIER, THE SEED NAMES, THE LOT NUMBER, NET WEIGHT, THE PERCENT OF WEED SEED CONTENT AND THE GUARANTEED PERCENTAGE OF PURITY AND GERMINATION. SEED SHALL BE OF COMMERCIAL QUALITY, OF THE BEST STANDARD OF PURITY AVAILABLE, AND CONFORM TO MINIMUM PURITY AND GERMINATION STANDARDS SPECIFIED BY SUPPLIER FOR EACH SPECIES. WEED SEED IN MIXES SHALL NOT EXCEED 0.5 PERCENT BY WEIGHT.

#/1000 SF

NATIVE HYDROSEED MIX (MIX TO BE DETERMINED) 10#/1000 SF 98% PURE / 85% GERMINATION

## 10. TREE PLANTING:

A. TREE STAKES: 2" DIAMETER X 10' TALL LODGEPOLE PINE TREATED WITH COPPER NAPTHANATE, CHAMFERED TOP AND BOTTOM IN LENGTHS AS INDICATED ON THE DRAWINGS. INSTALL TWO PER 15-GALLON TREES, AS SHOWN ON THE DRAWINGS.

B. TREE STRAPS: ARBOR TIE, AS MANUFACTURED BY DEEP ROOT PARTNERS, SAN FRANCISCO, CA, 415-437-9700 OR EQUAL.

#### 11. GUARANTEE/MAINTENANCE:

A. MAINTENANCE PERIOD: THAT PERIOD WHICH ENCOMPASSES ALL MAINTENANCE FROM SUBSTANTIAL COMPLETION OF THE PLANTING WORK AND ACCEPTANCE OF THE WORK FOR 90 CALENDAR DAYS THEREAFTER. FINAL ACCEPTANCE OF THE WORK WILL MARK THE END OF THIS PERIOD. MAINTENANCE SHALL INCLUDE:

I. ALL WATERING, WEEDING, CULTIVATION, AND SPRAYING NECESSARY TO KEEP THE PLANTS IN A HEALTHY, GROWING CONDITION AND TO KEEP THE AREAS NEAT AND ATTRACTIVE THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIODS.

II. FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY THE SOILS TEXT AND BY THE MANUFACTURER FOR THE LOCAL SEASONAL AND CLIMATIC CONDITIONS.

III. CONTRACTOR SHALL CHECK THE IRRIGATION SYSTEM FOR PROPER OPERATION ON A WEEKLY BASIS. THE CONTROLLER SHALL BE SET AND PROGRAMMED TO MEET THE SEASONAL REQUIREMENTS FOR THE PLANT MATERIAL. ALL HEADS SHALL BE ADJUSTED TO PROVIDE FULL COVERAGE. ANY DAMAGED OR MALFUNCTIONING HEADS SHALL BE REPLACED WITHIN ONE WATERING PERIOD AT NO COST TO THE OWNER.

IV. CONTRACTOR SHALL KEEP THE PROJECT SITE FREE OF DEBRIS AND IN A NEAT AND ATTRACTIVE CONDITION DURING THE MAINTENANCE PERIOD.

B. GUARANTEE PERIOD: THAT PERIOD WHICH ENCOMPASSES THE REPLACEMENT OF DYING OR UNHEALTHY PLANT MATERIAL DUE TO MALFUNCTION OF THE IRRIGATION SYSTEM FROM THE TIME OF FINAL ACCEPTANCE FOR ONE FULL CALENDAR YEAR.

C. DURING THE CONSTRUCTION, MAINTENANCE, AND GUARANTEE PERIODS, SHOULD THE APPEARANCE OF ANY PLANT INDICATE WEAKNESS OR NON-TYPICAL VIGOR, OR SHOULD A PLANT DIE-BACK AND LOSE THE FORM AND SIZE ORIGINALLY SPECIFIED DUE TO MALFUNCTION OF THE IRRIGATION SYSTEM THAT PLANT SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER.

#### 12. PROJECT CLOSE-OUT:

A. NO LESS THAN 30 DAYS BEFORE THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL REQUEST THE LANDSCAPE ARCHITECT IN WRITING, TO INSPECT THE PLANTING WORK.

B. INSPECTION OF ALL PLANTING WORK IS TO DETERMINE THAT ALL PLANT MATERIAL IS ALIVE AND HEALTHY AND CONFORMS TO THE REQUIREMENTS OF THE CONTRACT.

C. ACCEPTANCE OF PLANT MATERIAL AND LAWN BY THE LANDSCAPE ARCHITECT IN WRITING, WILL CONSTITUTE PROJECT CLOSE-OUT.

## 13. CLEAN UP:

A. CONTRACTOR SHALL KEEP ALL AREAS OF WORK CLEAN, NEAT AND ORDERLY AT ALL TIMES.

B. ANY SOIL, MULCH OR OTHER MATERIAL THAT HAS BEEN BROUGHT ONTO PAVED AREAS SHALL BE REMOVED PROMPTLY UPON COMPLETION OF THE DAY'S PLANTING. ALL EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE FOLLOWING THE COMPLETION OF PLANTING.

C. UPON COMPLETION OF WORK, REMOVE ALL SURFACE MATERIAL, TOOLS RUBBISH AND DEBRIS RESULTING FROM THE WORK.



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 No.
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 By

# SITE & EROSION CONTROL IMPROVEMENTS FOR SUTRO TOWER 1 LA AVANZADA ST

SAN FRANCISCO

**CALIFORNIA** 

Project

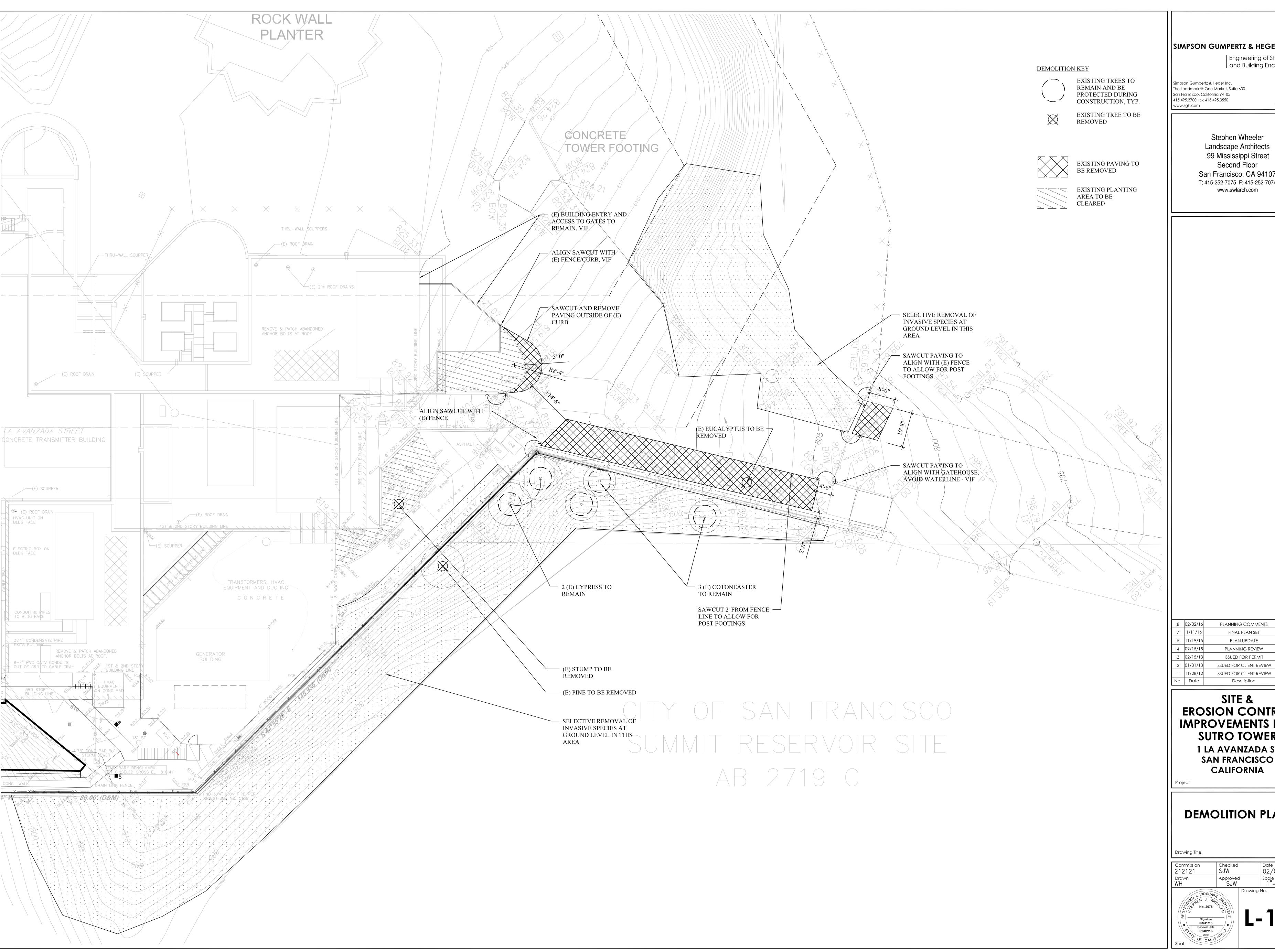
## LANDSCAPE NOTES

SJW

Drawing Title

Drawn <b>WH</b>	Approved SJW	b
Signature 03/31/16 Renewal Date 05/CALIF		Dr

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1	11/28/12	ISSUED FOR CLIENT REVIEW	WLS
No.	Date	Description	Ву

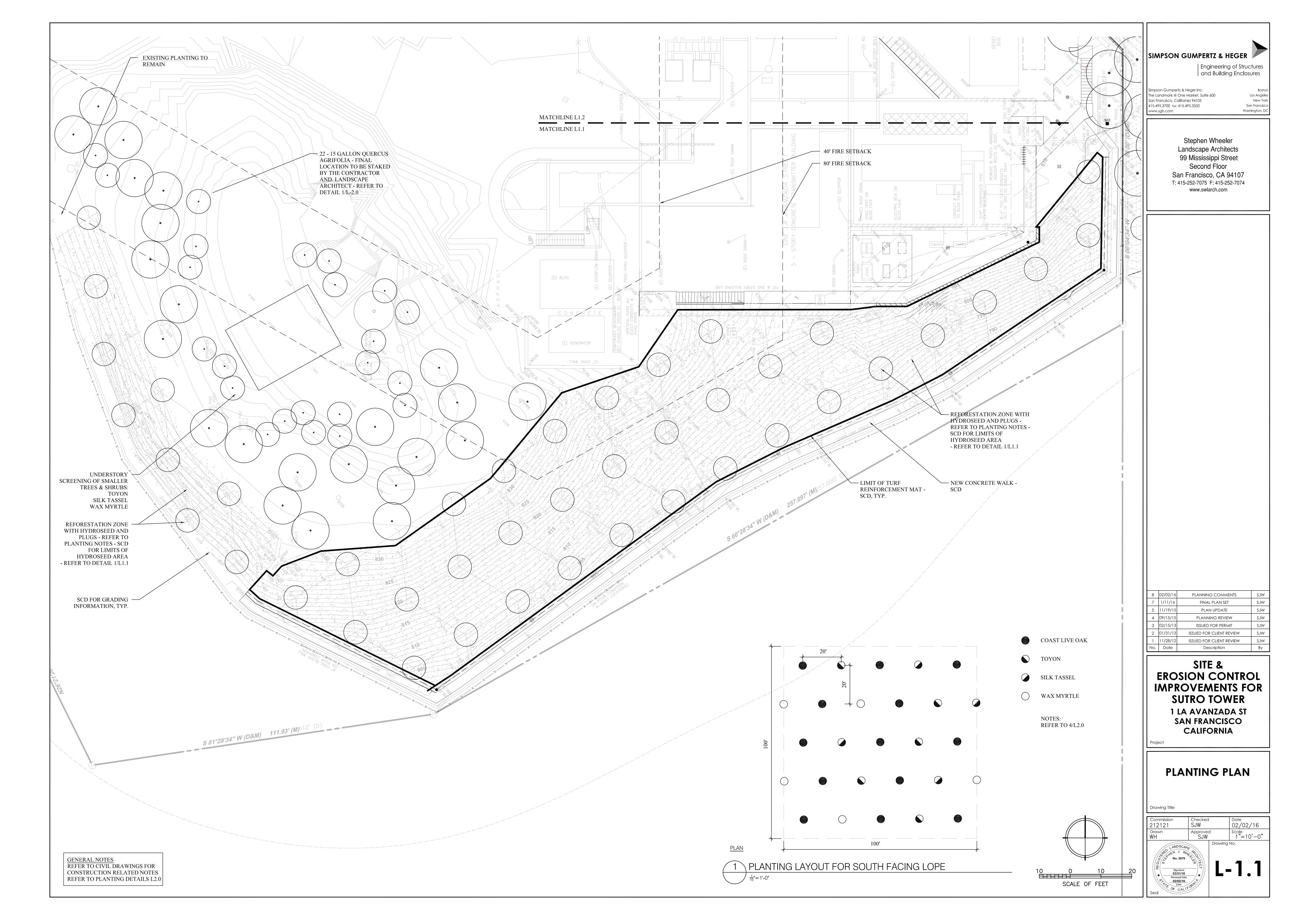
SITE & **EROSION CONTROL IMPROVEMENTS FOR SUTRO TOWER** 1 LA AVANZADA ST

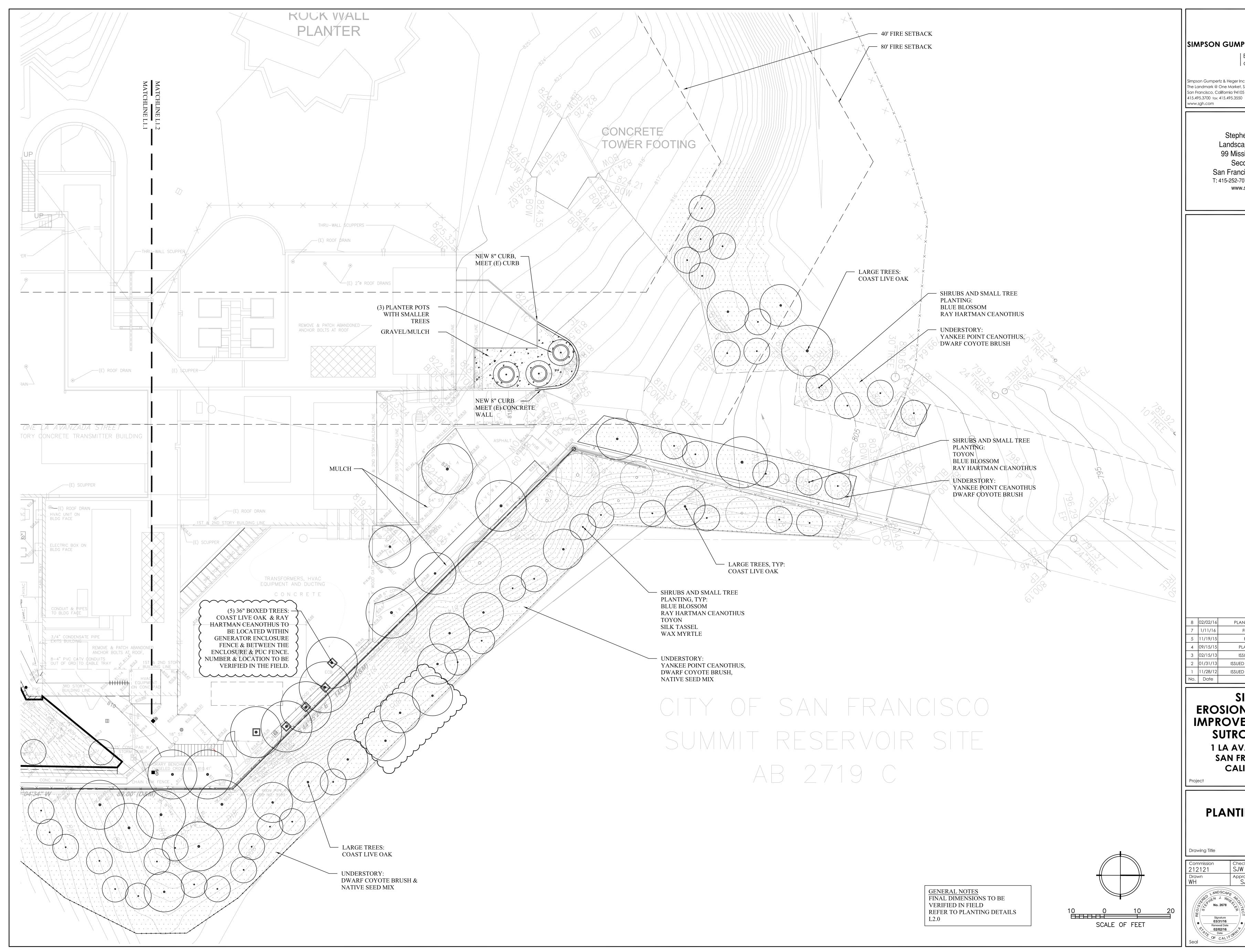
CALIFORNIA

**DEMOLITION PLAN** 

Commission 212121	Checked SJW	Date 02/02/16
Drawn WH	Approved SJW	Scale 1"=10'-0"
L AND SCAP	Draw	ving No.







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7 1,	2/02/16 /11/16 1/19/15	PLANNING COMMENTS  FINAL PLAN SET  PLAN UPDATE	WL2
5 11	1/19/15	PLAN UPDATE	6 1347
			SJW
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3 02	2/15/13	ISSUED FOR PERMIT	SJW
2 01	1/31/13	ISSUED FOR CLIENT REVIEW	SJW
1 11	1/28/12	ISSUED FOR CLIENT REVIEW	SJW
No.	Date	Description	Ву

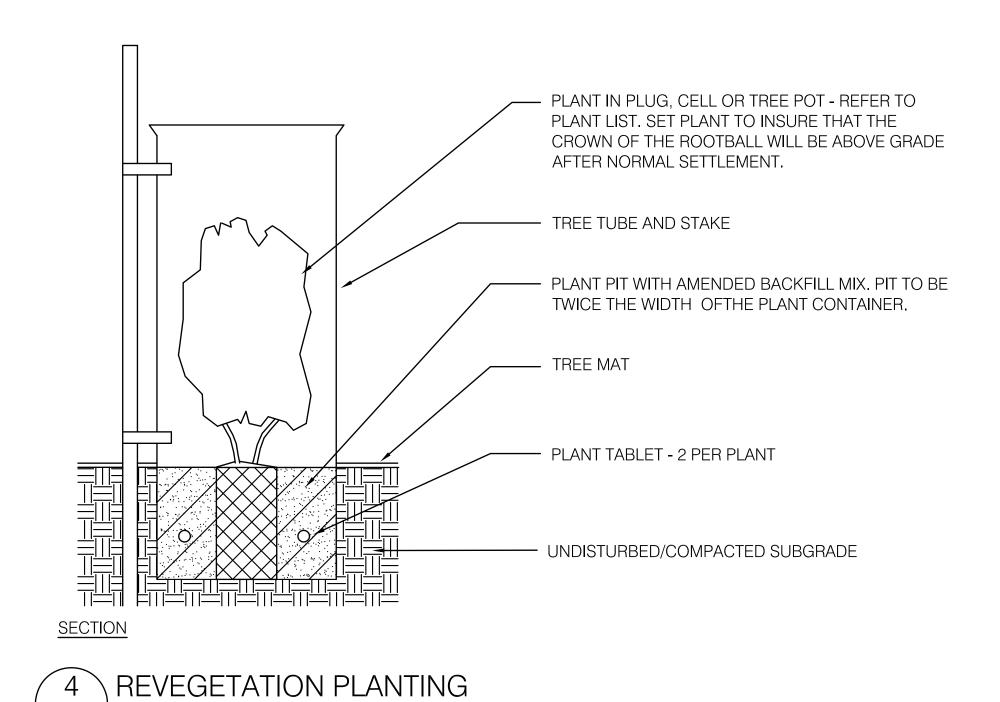
## SITE & **EROSION CONTROL IMPROVEMENTS FOR SUTRO TOWER** 1 LA AVANZADA ST

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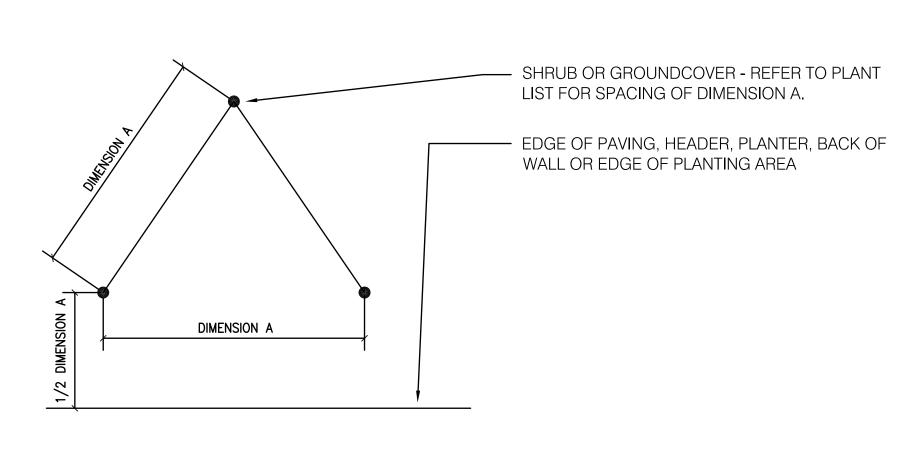
PLANTING PLAN

02/02/16 SJW Approved SJW Scale 1"=10'-0" Drawing No.

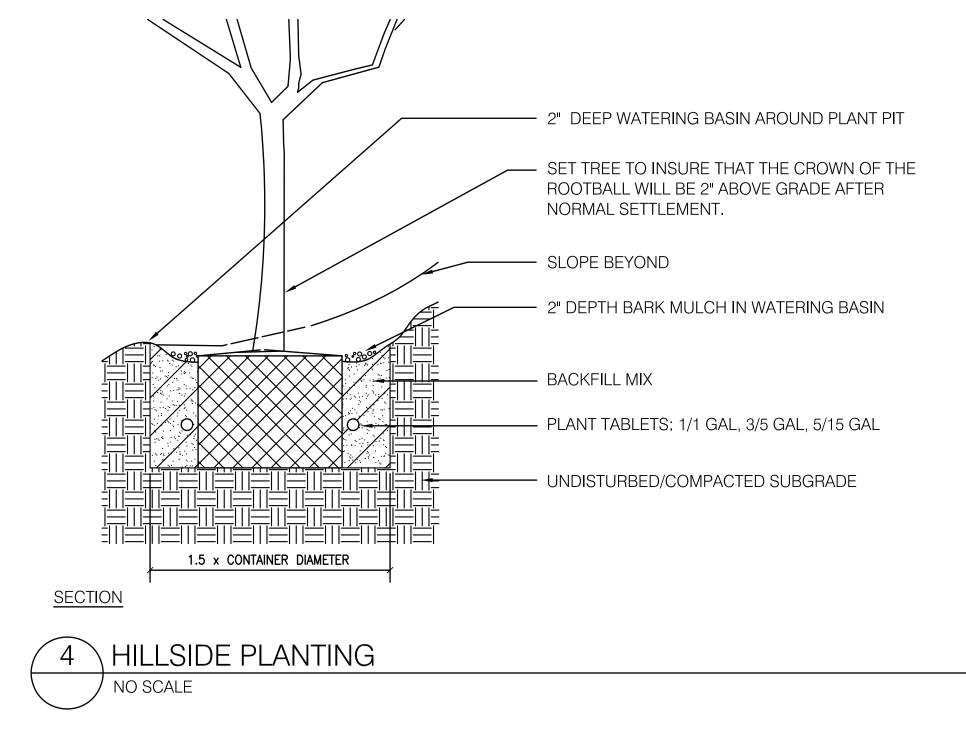


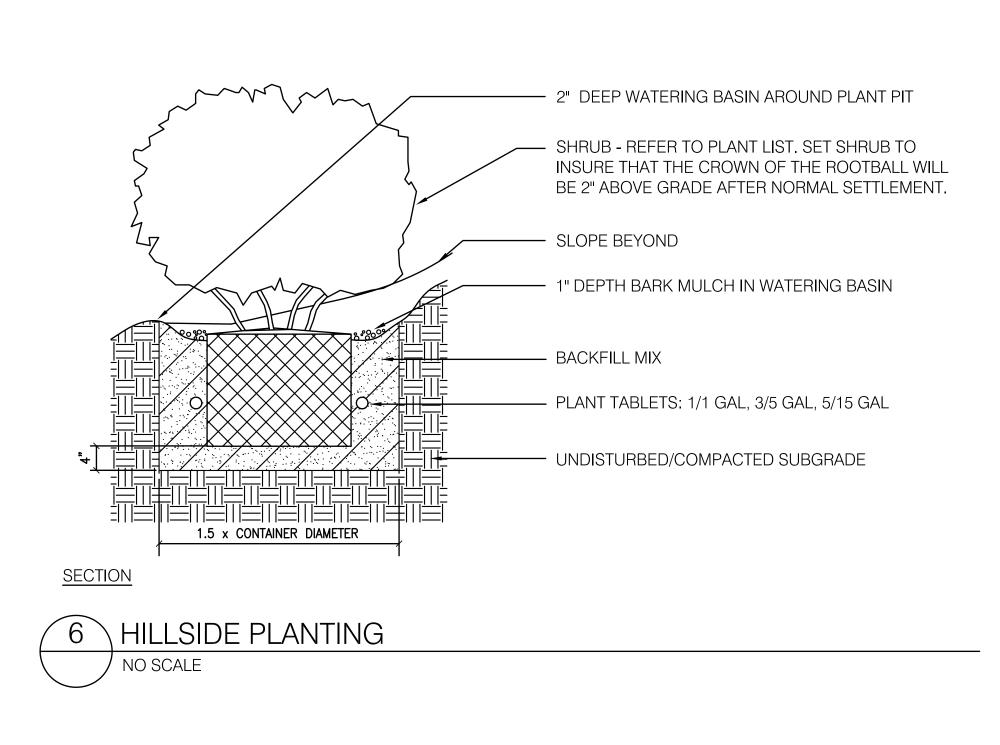


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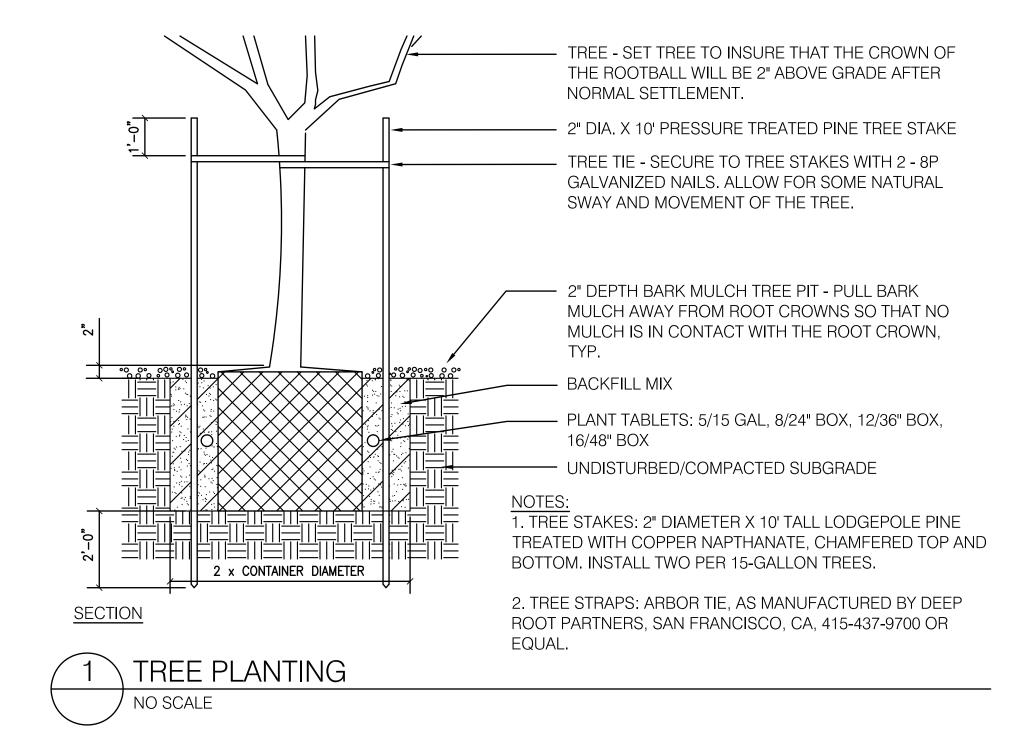


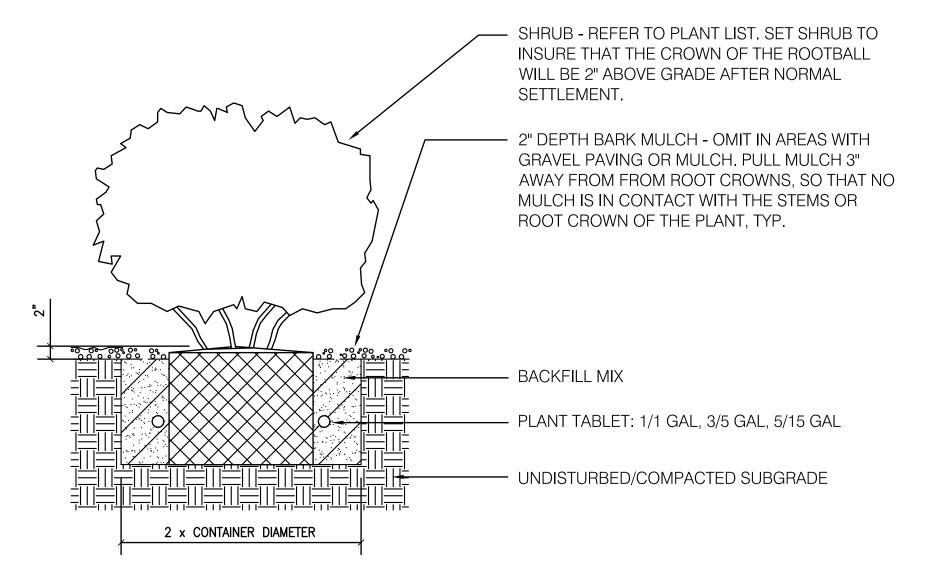












SECT	<u>ION</u>
2	\ SHRUB PLANTING
	NO SCALE

8	02/02/16	PLANNING COMMENTS	SJW
7	1/11/16	FINAL PLAN SET	SJW
5	11/19/15	PLAN UPDATE	SJW
4	09/15/15	PLANNING REVIEW	SJW
3	02/15/13	ISSUED FOR PERMIT	SJW

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# 1 11/28/12 ISSUED FOR CLIENT REVIEW SJW No. Date Description By SITE & EROSION CONTROL IMPROVEMENTS FOR

ISSUED FOR CLIENT REVIEW

SUTRO TOWER

1 LA AVANZADA ST
SAN FRANCISCO
CALIFORNIA

Project

## PLANTING DETAILS

Checked

Drawing

212121	SJW		02/02/16
Drawn <b>WH</b>	Approved SJW	b	Scale SHOWN
AND SCAP J. WHY. No. 2678  Signature 03/31/16	ARCHITECT LER	Drawing	-2.0

## Trees, shrubs, and Ground Cover Recommended for Planting at Sutro Tower Site

**Trees** 

Characterist	ics:							
Species	Foilage	Leaf Color	Flowers/Fruit	Shape	Mature Height (ft)	Rate of Height Growth ("/yr)	Screen	Hedge
Coast Live Oak (Quercus agrifolia)	evergreen	dark glossy green	inconspicuous flowers acorn	rounded, umbrella	65	24	1	1
Toyon (Heteromeles arbutifolia)	evergreen	dark glossy green	showy, white flowers small red berry	rounded or vase Shape	25	12-24	1	1
Silk tassel (Garrya elliptica)	evergreen	gray green or dark green	showy, green or yellow flowers small purple berry	rounded	25	24	1	1
Wax myrtle ( <i>Myrica</i> californica)	evergreen	dark glossy green	Inconspicuous flowers purple single seeded berry	conical or oval	20-25	24	1	1

Site	Cond	ition

Species	Sunset Zone <sup>1</sup>	USDA Hardiness Zone <sup>2</sup>	Exposure	Soil Moisture	Drought Tolerance	Soil Texture	Soil pH	Litter Maintenance Issues	Fire Resistance	Wildlife Habitat Value
Coast Live Oak (Quercus agrifolia)	5,7 10-12 14-24	9-10	Full sun to partial shade	Moist to dry	tolerant	Clay, loam, or sand	Highly acid to slightly alkaline	none	favorable	high
Toyon (Heteromeles arbutifolia)	5-9 14-24	9-11	Full sun to partial shade	Moist to dry	tolerant	Clay, loam, or sand	Highly acid to slightly alkaline	none	favorable	high
Silk tassel (Garrya elliptica)	5-9 14-21	7-10	Full sun to partial shade	Moist to dry	tolerant	Clay, loam, or sand	Highly acid to slightly alkaline	none	favorable	moderate
Wax myrtle ( <i>Myrica</i> californica)	4-9 14-24	7-10	Full sun to partial shade	Moist to dry	tolerant	Clay, loam, or sand	Highly acid to slightly alkaline	none	favorable	moderate

<sup>1</sup> San Francisco = 17; <sup>2</sup> San Francisco = 10

#### Shrubs Characteristics: Mature Rate of Screen Hedge Height Height (ft) Growth Species Leaf Color Foilage Flowers/Fruit Height Height (ft) Growth ("/yr) 10-20 24-36 ✓ evergreen glossy, medium flowers to dark Small black or Oval or Blossom rounded (Ceanothis thyrsiflorus) green Ray Hartman evergreen dark Ceanothus green thyrsiflorus) purple capsule showy, medium 10-20 12-24 🗸 blue flowers small purple (Ceanothus arboreus x C. capsule arboreus A C. griseus) Silver Lupine evergreen gray Light blue 110word (Lupinus green small purple albifrons) or dark berry green Light blue flowers rounded

Site Condition	ons:									
Species	Sunset Zone <sup>1</sup>	USDA Hardiness Zone <sup>2</sup>	Exposure	Soil Moisture	Drought Tolerance	Soil Texture	Soil pH	Litter Maintenance Issues	Fire Resistance	Wildlife Habitat Value
Blue Blossom (Ceanothis thyrsiflorus)	4-7 14-24	8-10	Full sun to partial shade	Moist to dry	tolerant	loam or sand	Highly acid to slightly alkaline	none	favorable	moderate
Ray Hartman Ceanothus (Ceanothus arboreus x C. griseus)	4-7 14-24	9-11	Full sun to partial shade	Moist to dry	tolerant	Clay, loam, or sand	Highly acid to slightly alkaline	none	favorable	moderate
Silver Lupine (Lupinus albifrons)	5-9 14-21	6-10	Full sun	Moist to dry	tolerant	loam or sand, well drained	Slightly acid to slightly alkaline	none	low	Host plant for Mission blue butterfly

<sup>1</sup> San Francisco = 17; <sup>2</sup> San Francisco = 10

<u>PLAN</u>

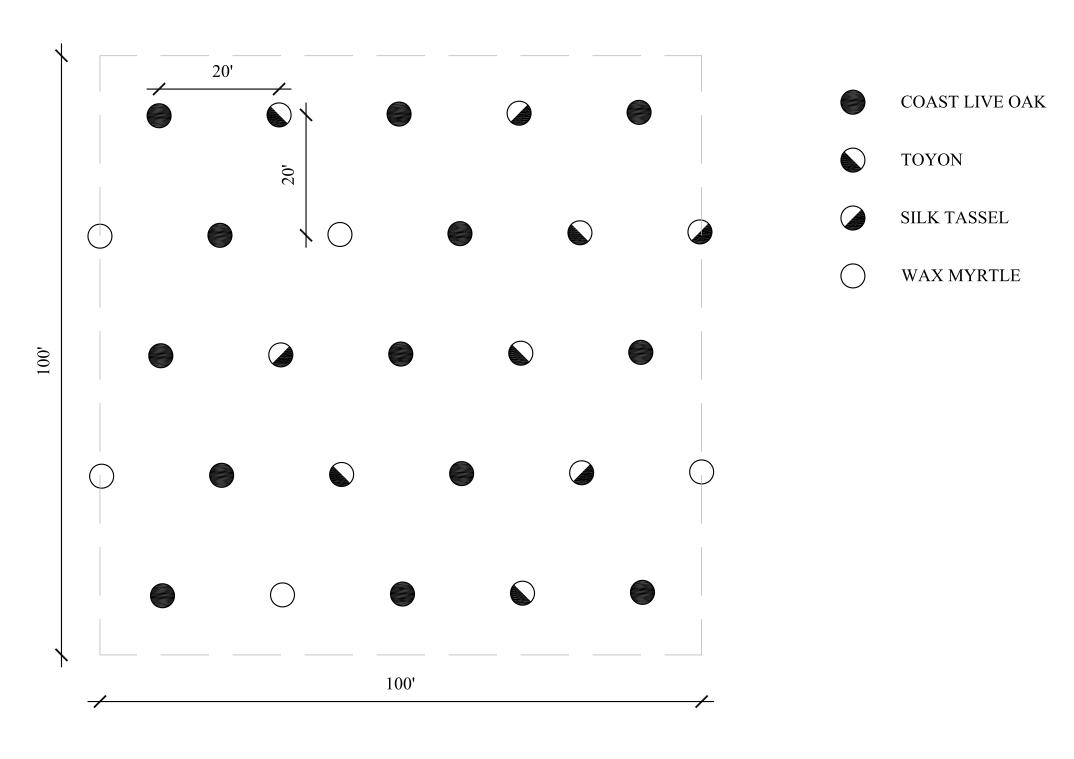
**Ground Cover** 

Characterist	ics:					
Species	Foilage	Leaf Color	Flowers/Fruit	Shape	Mature Height (ft)	Rate of Height Growth ("/yr)
Yankee Point California Lilac (Ceanothis griseus hirizontalis 'Yankee Point')	evergreen	glossy, dark green	Showy medium blue flowers Small black or purple capsule	Flat to rounded	3	??
Dwarf Coyote Brush (Baccharis pilularis Twin Peaks')	evergreen	dark gr <del>ee</del> n	Small white flowers small achene	Flat to rounded	1-2	??

## Site Conditions:

Species	Sunset	USDA	Exposure	Soil	Drought	Soil	Soil	Litter	Fire	Wildlife
-	Zone <sup>1</sup>	Hardiness		Moisture	Tolerance	Texture	рН	Maintenance	Resistance	Habitat
		Zone <sup>2</sup>						Issues		Value
Yankee Point California Lilac (Ceanothis griseus hirizontalis 'Yankee	4-7 14-24	8-10	Full sun to partial shade	Moist to dry	tolerant	Clay, loam, or sand	Slightly acid to slightly alkaline	none	favorable	low
Point') Dwarf Coyote Brush (Baccharis pilularis 'Twin Peaks')	5-11 14-24	8-11	Full sun	Moist to dry	tolerant	Clay, loam, or sand	Highly acid to slightly alkaline	none	favorable	low

<sup>1</sup> San Francisco = 17; <sup>2</sup> San Francisco = 10



1 PLANTING LAYOUT FOR SOUTH FACING LOPE

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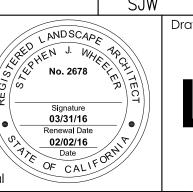
3	02/02/16	PLANNING COMMENTS	WLS
7	1/11/16	FINAL PLAN SET	WL2
5	11/19/15	PLAN UPDATE	WL2
1	09/15/15	PLANNING REVIEW	WL2
}	02/15/13	ISSUED FOR PERMIT	WL2
2	01/31/13	ISSUED FOR CLIENT REVIEW	WL2
	11/28/12	ISSUED FOR CLIENT REVIEW	WL2
э.	Date	Description	Ву

## SITE & **EROSION CONTROL IMPROVEMENTS FOR SUTRO TOWER** 1 LA AVANZADA ST

SAN FRANCISCO **CALIFORNIA** 

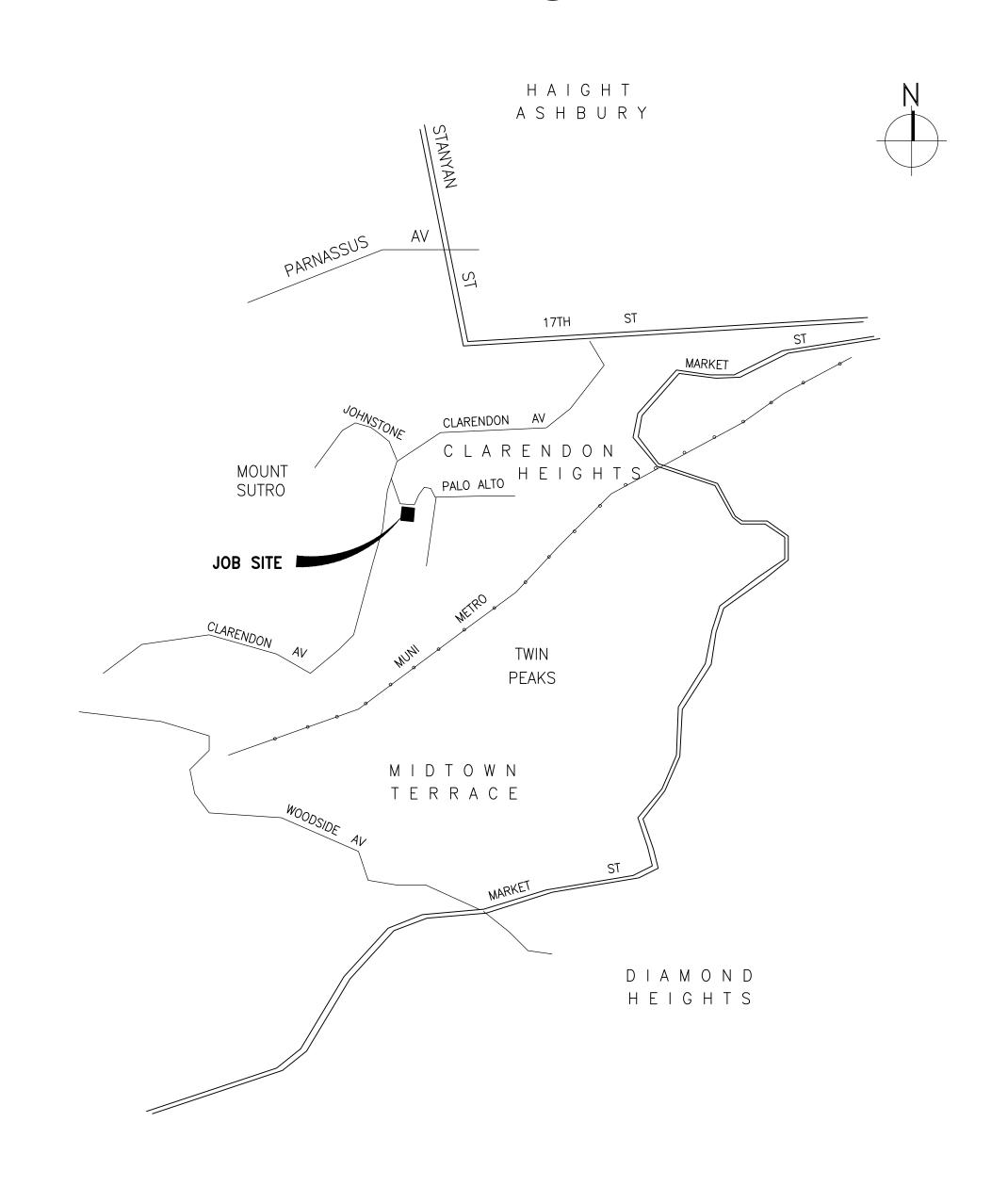
**PLANT KEY** 

Commission 212121	Checked SJW		Date 02/02/16
Drawn <b>WH</b>	Approved SJW	b	Scale
AND SCAP	1, 25 CH	Drawing	No.



# FACILITIES BUILDING EQUIPMENT SCREIN SUTRO TOWER SAN FRANCISCO, CALIFORNIA

# VICINITY MAP



# PROJECT SCOPE:

INSTALLATION OF AN EQUIPMENT SCREEN ABOVE THE ROOF LEVEL ON THE NORTH AND EAST SIDES OF THE FACILITIES BUILDING, ON THE NORTH AND EAST SIDES OF THE GENERATOR BUILDING AND THE RELOCATION OF (25) EXISTING ANTENNAS.

# LIST OF DRAWINGS

GO.O TITLE SHEET, VICINITY MAP & LIST OF DRAWINGS

A2.00 NORTH AND EAST ELEVATIONS

A7.01 SPECIFICATIONS

SO.1 GENERAL NOTES, ABBREVIATIONS & LEGEND

A1.00 EXISTING AND PROPOSED SITE PLAN

A5.00 DETAILS

A7.00 SPECIFICATIONS

S2.1 ROOF PLAN CURRENT ANTENNA LOCATIONS S2.2 ROOF PLAN RELOCATED ANTENNA LOCATIONS

S3.0 DETAILS S3.1 ELEVATIONS

S5.0 DETAILS

S6.0 ANTENNA PHOTOGRAPHS

	10/21/16	REVISED SCREEN HEIGHT FOR PLANNING	ROH
	7/26/16	revised for permit	ROH
	2/16/16	ISSUED FOR PERMIT	ROH
No.	Date	Description	Ву

**EQUIPMENT SCREEN SUTRO TOWER** 1 LA AVANZADA STREET SAN FRANCISCO, CALIFORNIA

TITLE SHEET **VICINITY MAP** LIST OF DRAWINGS

Project No. 067199.12 Drawn	Checked BW	Date 06/17/15 Scale
JT	Approved ROH	NONE  Drawing No.
		(÷() ()

## GENERAL

- 1. General notes and typical details apply to all structural features, unless otherwise indicated.
- 2. If certain features are not fully shown or called out on the drawings or in the specifications, their construction shall be of the same character as for similar conditions.
- 3. Dimensions shall not be scaled off of the drawings.
- 4. All work shall conform to minimum standards of the 2013 California Building Code, of any codes listed in the drawings or specifications and of any regulating agencies which have authority over any portion of the work, including the State of California Division of Industrial Safety.
- 5. Openings, pockets, etc. shall not be placed in structural members unless specifically detailed on the structural drawings. Notify the structural engineer when work requires openings, pockets, etc. in structural members not shown on the structural drawings.
- 6. The contractor shall be responsible for coordinating the work of all trades and shall check all dimensions and holes and openings required in structural members. All discrepancies shall be called to the attention of the structural engineer and shall be resolved before proceeding with the work.
- 7. The contract documents represent the finished structure. They do not indicate the method of construction. The contractor shall provide all measures necessary to protect life and property during construction. Such measures shall include, but are not limited to, bracing and shoring for loads due to construction equipment and materials. Observation visits to the site by the structural engineer shall not include inspection of the above items.
- 8. Construction materials shall be spread out if placed on framed floors or roofs. Load shall not exceed the design live load per square foot. Provide adequate shoring where overload is anticipated.
- 9. The contractor shall use extreme caution to protect all conduits, pipes, ducts, architectural finishes and utilities not indicated as being removed from damage during construction and shall restore all damaged or otherwise affected elements to their preconstruction condition, unless otherwise noted.
- 10. The Sutro Tower transmission facilities must remain in operation at all times during the construction period. Contractor shall submit a written work plan indicating the proposed sequence and schedule of work and specific operations to be conducted, to Sutro Tower for review, prior to performing any work on site. The work plan shall be revised and resubmitted on a weekly basis to alert Sutro Tower as to the progress of work accomplished to date and current schedule for performing additional work.
- 11. Sutro Tower is a radio transmission facility and emits high energy radio waves. The contractor shall be responsible for determining and implementing appropriate protective measures for personnel working on
- 12. The contractor shall maintain a fire watch and employ the necessary protective measures when welding near flammable materials.
- 13. The removal, cutting, drilling, etc. of existing work shall be performed with care in order not to jeopardize the structural integrity of the structure. If structural members or mechanical, electrical or architectural features not indicated for removal interferes with the new work, the Engineer shall be notified immediately and prior approval shall be obtained before removal of members.
- 14. The contractor shall promptly repair any damage caused during operations, using materials and workmanship similar to that which was
- 15. All removed items, materials and debris, unless otherwise noted, shall be removed promptly from the site and disposed of in a legal manner.

## STRUCTURAL STEEL & MISC. METALS

- 1. Fabrication and erection of structural steel shall be in accordance with the "Code of Standard Practice for Steel Buildings and Bridges" AISC 303-10 adopted effective April 14, 2010.
- Materials:

A.	Plates:	ASTM A572 grade 50 u.o.n.
В.	Structural steel tubes:	ASTM A500 grade B (fy = $46 \text{ k}$
C.	Structural steel pipes:	ASTM A53 grade B (fy = $35 \text{ ksi}$
D.	Channel:	ASTM A572 grade 50
E.	Wide flange:	ASTM A992

- 3. All bolts are ASTM A325. Pretensioning is not required.
- 4. Bolt holes in steel shall be  $\frac{1}{16}$  inch larger diameter than nominal size of bolt used, unless otherwise noted.
- 5. For bolted connections, provide 1½ inch edge and end distance, unless otherwise noted.
- 6. All welds shall be prequalified or qualified by test in conformance with the "Structural Welding Code — Steel" (AWS D1.1—04) of the American Welding Society. Minimum tensile strength of weld metal shall be 70 ksi typical, unless otherwise noted. Welding electrodes shall be as recommended by their manufacturer for the position and other conditions of actual use.
- 7. Weld symbols shown on the drawings do not necessarily differentiate between shop weld and field welds. When field welds are necessary due to construction procedure or sequence, welds shall be provided and be inspected per specifications. All welds shown as field welds shall be done in the field as indicated.
- 8. All structural steel, miscellaneous metal and connectors exposed to weather shall be hot—dip galvanized after fabrication. Finish paint shall be in accordance with owner's specification.
- 9. No penetrations through structural steel columns, beams or girders are allowed except as indicated on the structural drawings.
- 10. The structural steel fabricator shall furnish shop drawings of all steel for the engineer's review before fabrication.
- 11. A welding procedure specification (W.P.S.) per A.W.S. D1.1 shall be developed by the fabricator/erector and approved by the engineer of record or his designee. The W.P.S. shall include the welding parameters recommended by the electrode manufacturer.
- 12. All complete joint penetration groove welds shall be inspected and tested per City of San Francisco requirements.
- 13. Inspectors are to be S.F. City deputy inspectors and A.W.S. Q.C.I. Certified (a C.W. Inspector), reference A.W.S. D1.1—94, Section 6.1.3.1.

- CONCRETE & REINFORCING STEEL
- 1. All concrete shall be ready—mix in accordance with ASTM C94.
- 2. Cement: ASTM C150 Type II.
- 3. Aggregate: ASTM C33.
- 4. Non-shrink grout: ASTM C1107, premixed, non-staining, non-shrink
- 5. Grout or concrete containing more than 0.1 percent of soluble chloride shall not be used.
- 6. Mixes are to be reviewed by COR's testing lab and submitted to the cor for approval. do not cast concrete without approval by COR. Max. w/c Air <u>strength</u> <u>size</u> <u>ratio</u> <u>co</u>ntent 4000 psi  $\frac{3}{4}$ " 0.45  $\frac{1}{2}$ % Mechanical pads
  - See specifications for additional requirements. all concrete shall be hard rock aggregate, regular—weight concrete, 145 pcf, unless otherwise
- 7. Inserts: all items to be cast in concrete, such as reinforcing dowels, bolts, anchors, pipes, sleeves, etc., shall be securely positioned in the forms before placing the concrete.
- 8. Pipes and electrical conduits shall not be embedded in structural concrete, except where specifically approved by the COR.
- 9. Dry pack or place non-shrink grout under base plates, sill plates, etc., as required for full bearing.
- 10. Reinforcing steel: ASTM A615 Grade 60.
- 11. All reinforcement shall be continuous. stagger splices where possible. laps shall be per typical details, unless otherwise noted.
- 12. Minimum clear concrete cover for reinforcement, unless otherwise noted:

Cast against earth:	3 inches
Cast in forms and exposed to earth or weather:	
#6 bar and larger:	2 inches
#5 bar and smaller:	1½ inches
Not exposed to earth or weather:	
Slabs, walls and joists:	1 inch
Beams, girders and columns (to ties):	1½ inches

## POST-INSTALLED ANCHORS

Clearances are to closest reinforcement.

- 1. Post—installed anchors include all adhesive anchors (reinforcing bar dowels and threaded rods) and expansion anchors set in holes drilled in existing concrete or masonry.
- 2. Installation of post-installed anchors shall conform to all requirements of the applicable code evaluation reports and manufacturers' recommendations.
- 3. Mark the location of all existing reinforcing in the substrate material within 12" of the proposed locations of all post—installed anchors. notify the COR of any conflicts discovered between the proposed anchor locations and the existing reinforcing prior to fabrication of any steel and prior to any hole drilling, so as to avoid disturbing, cutting, or otherwise harming the existing reinforcing.
- 4. Holes for adhesive anchors in concrete shall be drilled, cored holes are not permitted.
- 5. Do not install adhesive anchors in concrete if concrete strength is less than 2500 psi, age is less than 21 days, or temperature is less than 50 degrees fahrenheit.
- 6. Adhesive anchors in concrete (reinforcing bar dowels or threaded rods):
- A. HILTI "RE-500-SD" ICC ESR-2322.
- B. hilti "HIT-HY 150 MAX-SD" ICC ESR-3013.
- C. Simpson "SET-XP" Epoxy adhesive. ICC ESR-2508.
- D. Simpson "AT-XP" Anchoring adhesive IAPMO ER-263.
- 7. Expansion anchors in concrete:
- A. HILTI "KWIK-BOLT TZ" ICC ESR-1917.
- B. SIMPSON "STRONG BOLT 2" ICC ESR-3037.
- 8. Anchors that fail the proof test shall be replaced by the contractor at no additional cost.
- 9. Re-testing of replaced anchors that fail tests shall be paid for by the
- 10. Typical embedment depths and proof loads for testing are indicated in the following tables.

## POST-INSTALLED ANCHORS (CON'T)

	ADHESIVE ANCHORS						
ANCHOR SIZE	TYPICAL EMBEDMENT (U.O.N.)	PROOF LOAD NORMAL WEIGHT CONCRETE	PROOF LOAD LIGHT WEIGHT CONCRETE	PROOF LOAD GROUT-FILLED CMU BLOCK			
#3 OR ¾"ø	3½"	2100 lb.	1600 lb.	1600 lb.			
#4 OR ½"ø	4½"	3700 lb.	1900 lb.	1900 lb.			
#5 OR %"ø	55%"	5800 lb.	2800 lb.	2800 lb.			
#6 OR ¾"ø	6¾"	6900 lb.		_			
#7 OR %"ø	7%"	11500 lb.	_	_			
#8 OR 1"ø	93%"	12400 lb.	_	_			
#9 OR 11/8"ø	10¾"	19000 lb.	_	_			

## **EXPANSION ANCHORS**

ANCHOR SIZE	TYPICAL EMBEDMENT (U.O.N.)	PROOF TORQUE NORMAL WEIGHT CONCRETE	PROOF TORQUE LIGHT WEIGHT CONCRETE	PROOF TORQUE GROUT—FILLED CMU BLOCK
3⁄8"ø	27/8"	25 ftlb.	15 ft.−lb.	15 ftlb.
½"ø	37/8"	40 ftlb.	25 ftlb.	25 ftlb.
5⁄8"ø	5½"	60 ftlb.	35 ft.−lb.	35 ft.−lb.
3∕4"ø	53/4"	110 ftlb.	65 ftlb.	65 ftlb.

#### STATEMENT OF SPECIAL INSPECTIONS

THE FOLLOWING TESTS AND INSPECTIONS ARE REQUIRED FOR THIS PROJECT THE TESTS AND INSPECTIONS INDICATED HERE ARE THE RESPONSIBILITIES OF THE COR'S SPECIAL INSPECTOR, AS REQUIRED BY SECTION 1704 OF THE BUILDING CODE.

### STRUCTURAL INSPECTION AND TESTING

- 1. SPECIAL INSPECTION AND TESTING ARE REQUIRED IN SECTIONS 1704, 1706, 1707 AND 1708 OF THE CBC. THE "STATEMENT OF SPECIAL INSPECTIONS," SUBMITTED WITH THE PERMIT APPLICATION, INDICATES THE SPECIFIC INSPECTIONS AND TESTS THAT ARE REQUIRED, AS WELL AS THE PERSONS OR FIRMS RESPONSIBLE FOR THIS WORK.
- 2. ALL TESTS AND INSPECTIONS SHALL BE PERFORMED BY A CERTIFIED SPECIAL INSPECTOR FROM AN INDEPENDENT TESTING AGENCY WHO IS APPROVED BY THE GOVERNMENT AND EMPLOYED BY THE CONTRACTOR.
- A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
- B. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ARCHITECT, STRUCTURAL ENGINEER AND OTHER DESIGNATED PERSONS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL.
- C. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE. IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND APPLICABLE STANDARDS OF QUALITY AND WORKMANSHIP OF THE CBC.
- 3. THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING INVOLVING THE COR, ARCHITECT, STRUCTURAL ENGINEER AND THE SPECIAL INSPECTOR IN ORDER TO DISCUSS THE SPECIFIC REQUIREMENTS OF THIS
- 4. MATERIAL TESTING REQUIREMENTS ARE INDICATED IN THE SPECIFICATIONS AND/OR GENERAL NOTES.

## <u>CONCRETE</u>

CONCRETE REINFORCEMENT AND CAST-IN-PLACE ANCHORS

- 1. REINFORCING STEEL PLACEMENT. PROVIDE PERIODIC INSPECTION OF THE FOLLOWING:
- A. THE REINFORCING GRADE, SIZE, NUMBER, LOCATION, AND BEND DETAILING ARE AS SHOWN ON THE DRAWINGS AND ARE IN ACCEPTABLE CONDITION.
- B. ALL REQUIRED DEVICES HAVE BEEN PROPERLY INSTALLED TO SECURE THE REINFORCEMENT IN PLACE DURING THE PLACEMENT OF
- CONCRETE. 3. INSTALLATION OF CAST-IN-PLACE ANCHORS AND OTHER EMBEDMENTS. VERIFY THE FOLLOWING:
- A. THE ANCHOR DIAMETER, LENGTH, TYPE, GRADE, AND DEPTH OF
- EMBEDMENT INTO THE CONCRETE. B. ALL REQUIRED ITEMS HAVE BEEN PROPERLY INSTALLED TO SECURE

## THE EMBEDDED ITEM DURING PLACEMENT OF CONCRETE. CAST-IN-PLACE CONCRETE

- 1. PROVIDE CONTINUOUS INSPECTION DURING CONCRETE PLACEMENT. VERIFY THE FOLLOWING:
- A. THE CONCRETE DELIVERED TO THE JOB HAS BEEN PREPARED WITH THE APPROVED MIX DESIGN APPROPRIATE FOR THE APPLICATION AND IS TRANSPORTED AND PLACED WITHIN THE TIME AND UNDER THE CONDITIONS PERMITTED BY ASTM C94 AND THE PROJECT SPECIFICATIONS.
- B. THE CONCRETE IS PLACED, CONSOLIDATED, AND FINISHED AS INDICATED ON THE DRAWINGS.
- 2. SAMPLING OF FRESH CONCRETE: ASTM C 172, EXCEPT AS MODIFIED FOR SLUMP TO COMPLY WITH ASTM C 94.
- A. SLUMP: ASTM C 143: ONE TEST AT POINT OF PLACEMENT FOR EACH SET OF COMPRESSION TEST SPECIMENS: ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY SEEMS TO HAVE CHANGED.
- B. CONCRETE TEMPERATURE: ASTM C 1064; ONE TEST HOURLY WHEN AIR TEMPERATURE IS 40 DEGREES FAHRENHEIT AND BELOW OR 80 DEGREES FAHRENHEIT AND ABOVE, AND ONE TEST FOR EACH SET OF COMPRESSIVE-STRENGTH SPECIMENS.

## CONCRETE (CON'T)

POST-INSTALLED ANCHORS

1. PROVIDE PERIODIC INSPECTION OF THE FOLLOWING:

THE EXPIRATION DATE HAS NOT PASSED.

- A. THE SPECIFIC MANUFACTURER AND MODEL OF ANCHORS HAVE BEEN APPROVED FOR THE APPLICATION BY THE COR.
- B. THE HOLES ARE DRILLED AT THE ANGLE REQUIRED AND OF THE DIAMETER AND DEPTH REQUIRED.
- C. THE HOLES ARE CLEAN PRIOR TO INSTALLATION OF THE ANCHORS.
- D. THE ADHESIVE PACKAGING INDICATES AN EXPIRATION DATE AND THAT
- E. THE ADHESIVE IS MIXED PROPERLY AND THAT THE INITIAL PORTION OF ADHESIVE COMING OUT OF THE NOZZLE IS WASTED, AS REQUIRED BY THE MANUFACTURER.
- F. THE ANCHORS ARE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- 2. PERFORM TESTS OF ANCHORS ACCORDING TO ASTM E 488 AND AS FOLLOWS:
- A. TEST TEN PERCENT OF EACH APPLICATION OF ANCHORS TO THE TENSILE OR TORQUE PROOF LOAD AS INDICATED ON THE DRAWINGS.
- B. ONE APPLICATION OF ANCHORS OR DOWELS SHALL BE DEFINED AS THOSE ANCHORS OR DOWELS INSTALLED BY A SINGLE CREW IN A
- C. TEST LOCATIONS ARE RANDOM AT THE DISCRETION OF THE TESTING LAB, UNLESS OTHERWISE DIRECTED BY THE COR.
- D. TENSION TEST LOADS SHALL BE MAINTAINED FOR A MINIMUM OF TWO MINUTES.
- TENSION TEST CRITERIA: ANCHOR DISPLACEMENT AT THE END OF THE LOADING PERIOD SHALL BE LIMITED TO ONE-FIFTH OF THE NOMINAL ANCHOR DIAMETER. DISPLACEMENT FOLLOWING RELEASE OF LOAD SHALL RETURN TO ZERO.
- TORQUE TEST CRITERIA: TEST TORQUE MUST BE REACHED WITHIN A HALF TURN OF THE NUT, EXCEPT FOR 3/4" DIAMETER ANCHORS. FOR WHICH TEST TORQUE MUST BE REACHED WITHIN A QUARTER TURN OF THE NUT.
- 5. IF ANY ANCHOR FAILS THE TEST, TEST ALL ANCHORS IN THE SAME APPLICATION NOT PREVIOUSLY TESTED UNTIL 10 CONSECUTIVE ANCHORS

## STRUCTURAL STEEL

INSPECTION AND TESTING OF WELDED JOINTS

- 1. Inspection of welded connections shall include the following:
- A. Verification that applicable and approved Welding Procedure Specifications (WPS) are available for all welds to be performed.

B. Verification that manufacturer certifications for filler metals and

- fluxes (welding consumables) are available for all welds to be
- C. Verification that base material and welding consumable selection conforms to the requirements of the approved WPS.
- D. Verification that welders are appropriately qualified for the type, position, and class of weld to be performed.

E. Verification of the contractor's welder identification system.

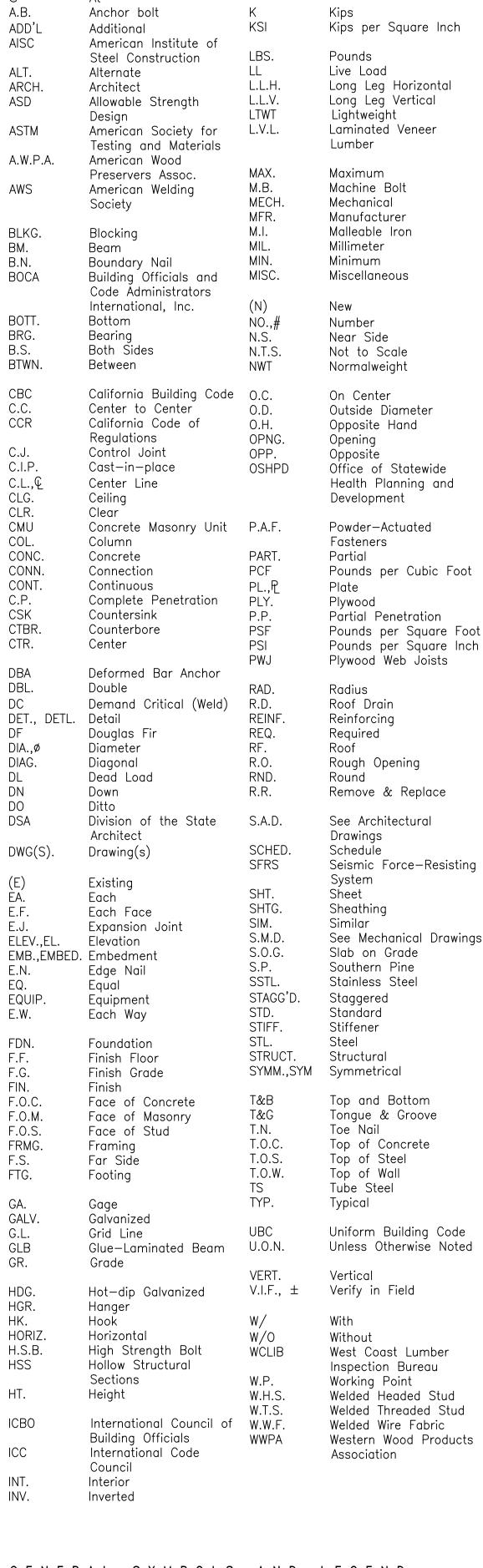
- F. Inspection of materials handling, packaging, and storage.
- INSPECTION AND TESTING OF BOLTED JOINTS USING HIGH-STRENGTH BOLTS

1. Inspection of connections using high-strength bolts shall include the

- following: A. Verification that manufacturer certifications for fastener components
- are available for all joints. B. Verification that the proper bolting procedure and fasteners (grade, type, and length) are selected for each joint detail. The fasteners
- shall be marked in accordance with ASTM requirements. C. Verification that all connected plies within the grip of the bolt and any materials used under the bolt head or nut are composed of
- steel only. D. Verification that the connecting elements, including the appropriate faying surface condition and hole preparation, meet applicable
- requirements for the joint type. E. Verification of the nominal dimensions of bolt holes.
- F. Verification that burrs larger than  $\frac{1}{16}$  inch in height have been removed or reduced to  $\frac{1}{16}$  inch in height or less from the faying surfaces of all joints.
- G. Inspection and documentation of pre-installation verification testing by the installation personnel for fastener assemblies and methods
- H. Inspection of materials handling, packaging, and storage.
- 2. Inspection of the following is required for the duration of high-strength bolting procedures.
- A. Verification that fastener assemblies of suitable condition are placed in all holes and that washers (if required) are properly positioned. B. Verification that fastener components that are not turned by the
- wrench are prevented from rotating. C. Verification that nuts in snug—tight joints cannot be removed without the use of wrench.

## OTHER STRUCTURAL STEEL INSPECTIONS

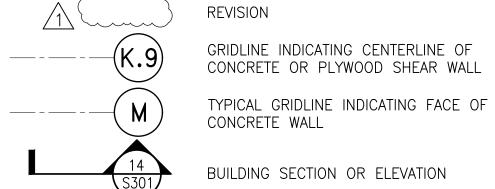
1. Inspection of anchor rods and other embedments supporting structural steel shall include verification of the following prior to the placement of concrete: diameter, grade, type, and length of the anchor rod or embedded item; and the extent or depth of embedment into the concrete.



ABBREVIATIONS

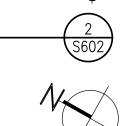
JST.

## <u>GENERAL SYMBOLS AND LEGEND</u>



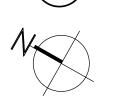
REVISION GRIDLINE INDICATING CENTERLINE OF CONCRETE OR PLYWOOD SHEAR WALL

BUILDING SECTION OR ELEVATION



\_\_\_\_\_\_

WORK POINT. DATUM OR CONTROL POINT. FIN. FLR. ELEVATION, S.A.D. DETAIL REFERENCE



PROJECT NORTH, S.A.D. FOR TRUE NORTH

SIMPSON GUMPERTZ & HEGER Engineering of Structures and Building Enclosures Simpson Gumpertz & Heger Inc. 100 Pine Street, Suite 1600 San Francisco, California 94111 main: 415.495.3700 fax: 415.495.3550 Consultant

Los Angeles

San Francisco

Washington, DO

New York

10/21/16 REVISED SCREEN HEIGHT FOR PLANNING ROH REVISED FOR PERMIT ISSUED FOR PERMIT No. Date Description **EQUIPMENT SCREEN** 

**SUTRO TOWER** 

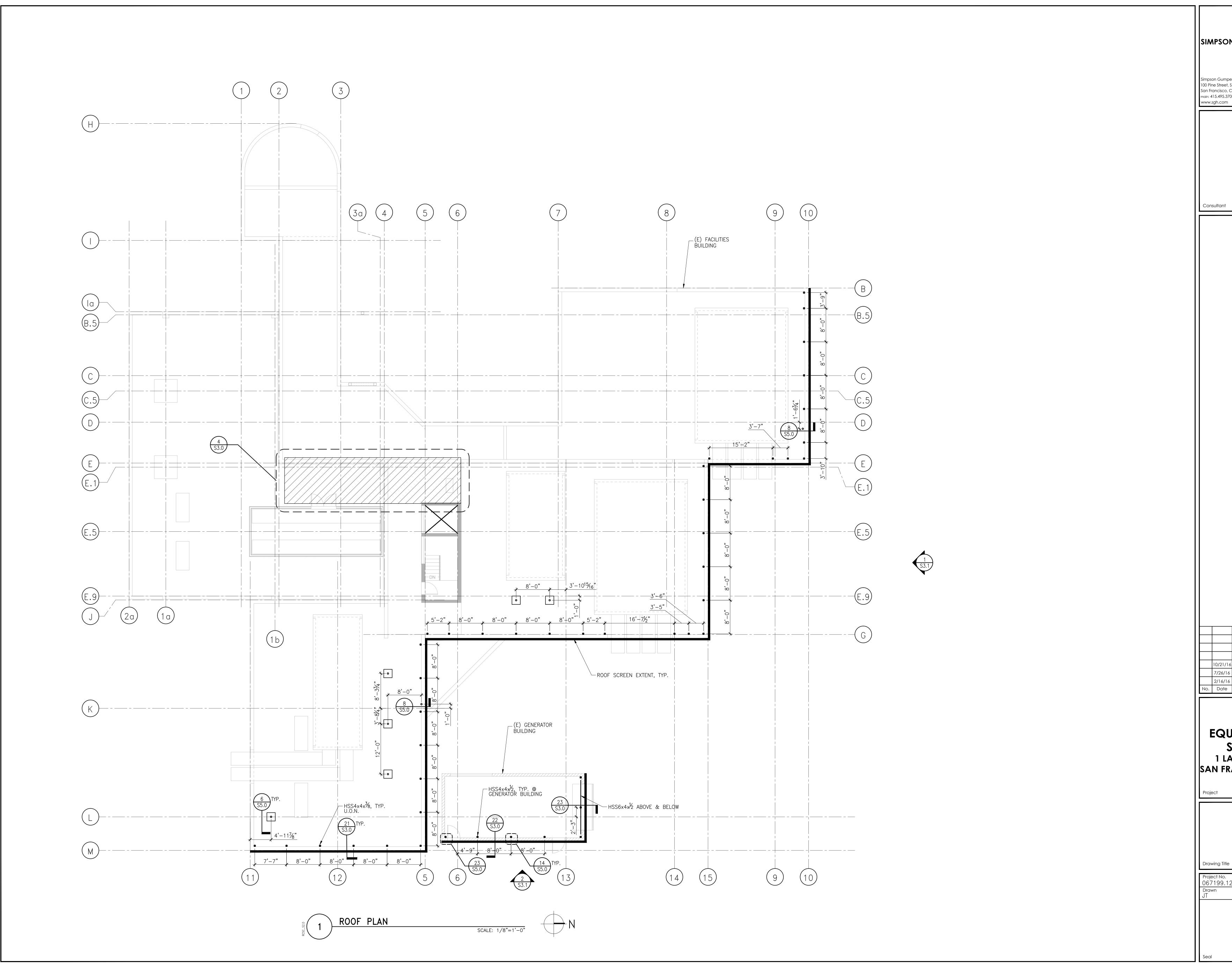
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SAN FRANCISCO, CALIFORNIA

**GENERAL NOTES ABBREVIATIONS LEGEND** 

06/17/15 067199.12 ВW NONE ROH Drawing No.

Drawing Title



SIMPSON GUMPERTZ & HEGER Engineering of Structures and Building Enclosures Chicago Houston Los Angeles New York San Francisco Washington, DC Simpson Gumpertz & Heger Inc. 100 Pine Street, Suite 1600 San Francisco, California 94111 main: 415.495.3700 fax: 415.495.3550

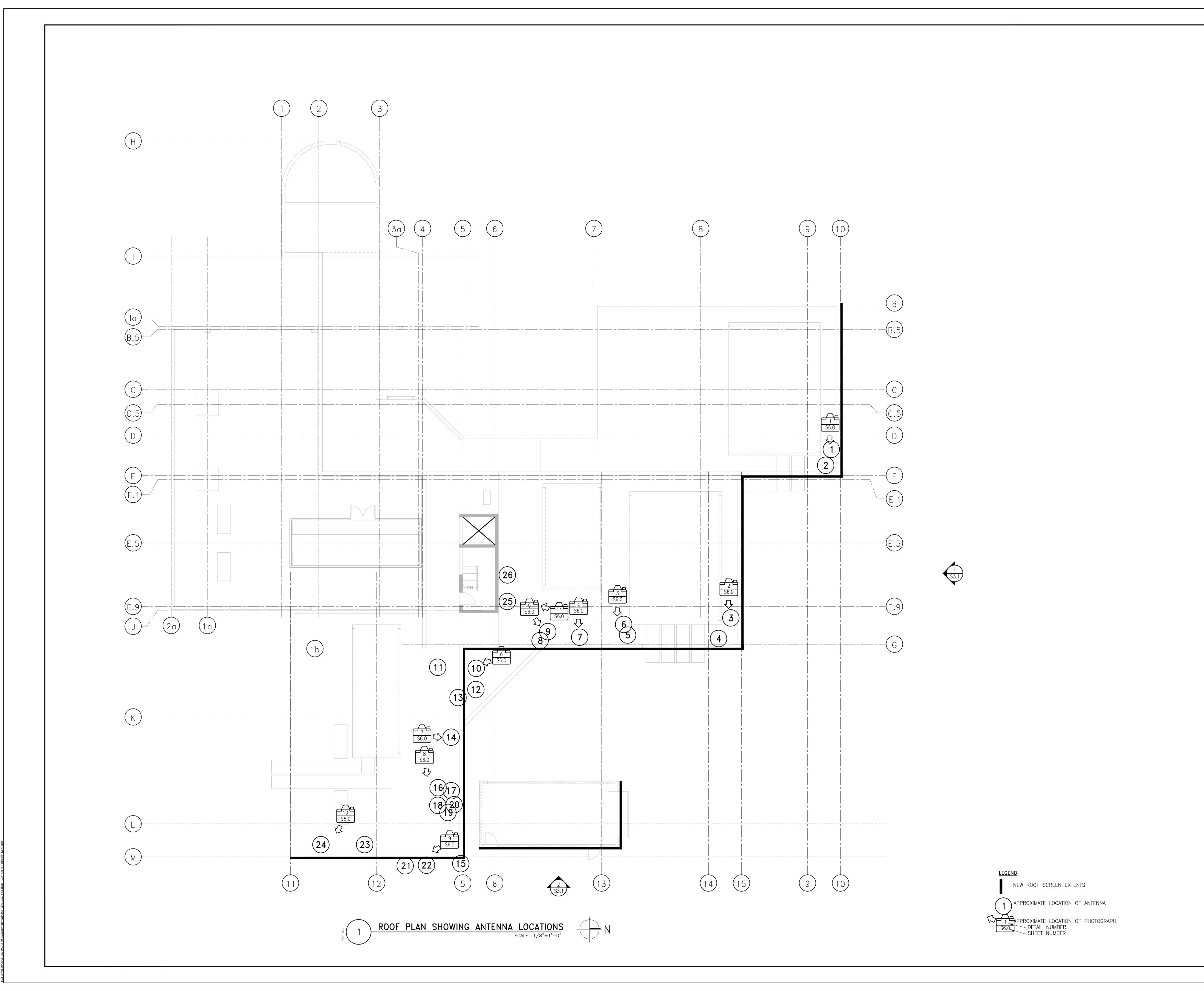
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**EQUIPMENT SCREEN** SUTRO TOWER
1 LA AVANZADA STREET SAN FRANCISCO, CALIFORNIA

**ROOF PLAN** 

067199.12	BW		06/17/15
Drawn JT	Approved ROH	d	Scale AS NOTED
		Drawing	No.

**S2.0** 



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Consultant

NSTRUCTION

10/21/16 REVISED SCREEN HEIGHT FOR PLANNING ROH
7/26/16 REVISED FOR PERMIT ROH
2/16/16 ISSUED FOR PERMIT ROH
Date Description By

EQUIPMENT SCREEN
SUTRO TOWER
1 LA AVANZADA STREET
SAN FRANCISCO, CALIFORNIA

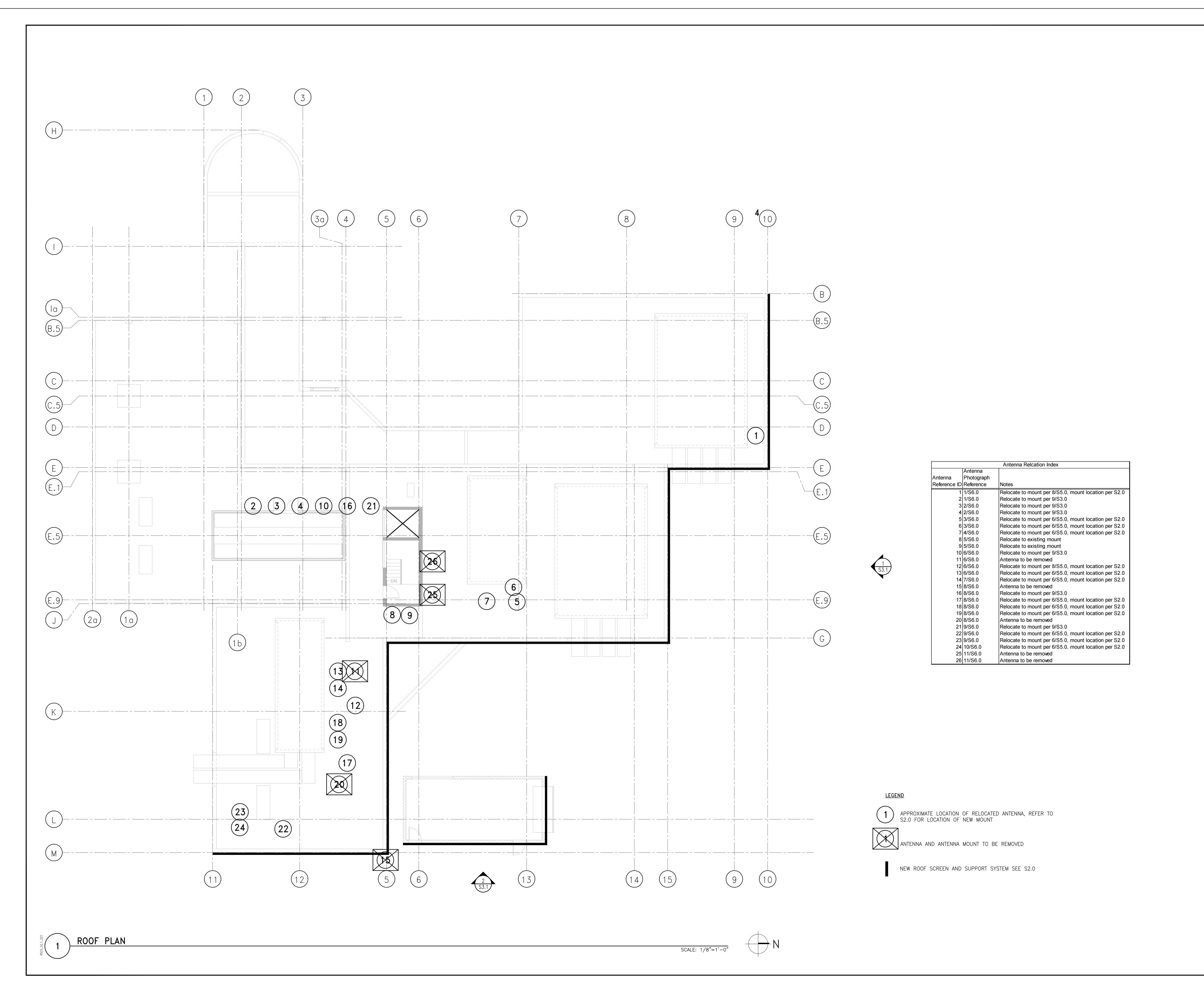
Project

ROOF PLAN
CURRENT ANTENNA
LOCATIONS

Drawing Tit

067199.12	BW		06/17/15
Drawn JT	Approved ROH	d	Scale AS NOTED
		Drawing	No.

**S2.1** 



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OT FOR CONSTRUCTION

10/21/16	REVISED SCREEN HEIGHT FOR PLANNING	ROH
7/26/16	REVISED FOR PERMIT	ROH
2/16/16	ISSUED FOR PERMIT	ROH
Date	Description	Ву
	7/26/16 2/16/16	2/16/16 ISSUED FOR PERMIT

EQUIPMENT SCREEN
SUTRO TOWER
1 LA AVANZADA STREET
SAN FRANCISCO, CALIFORNIA

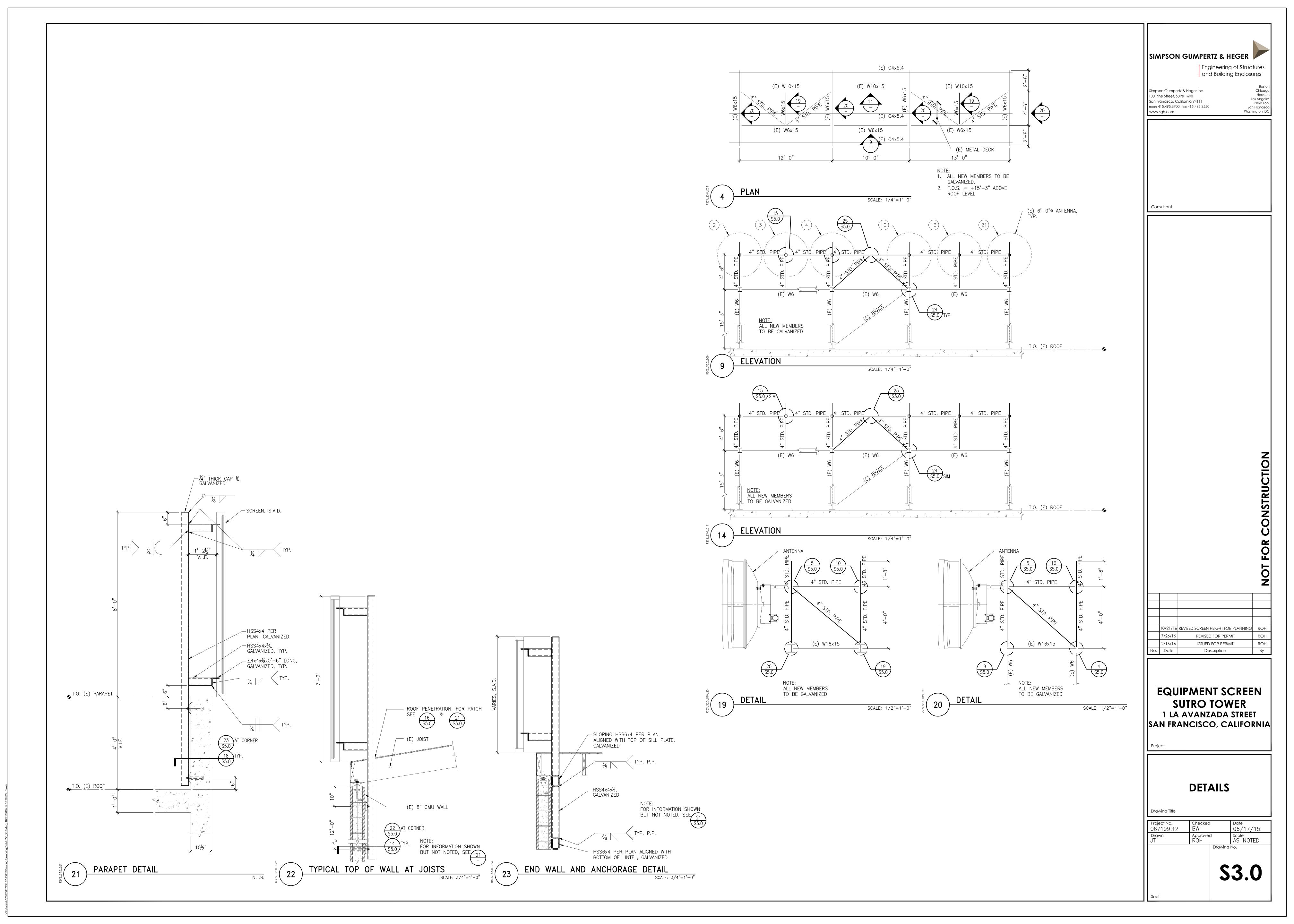
Project

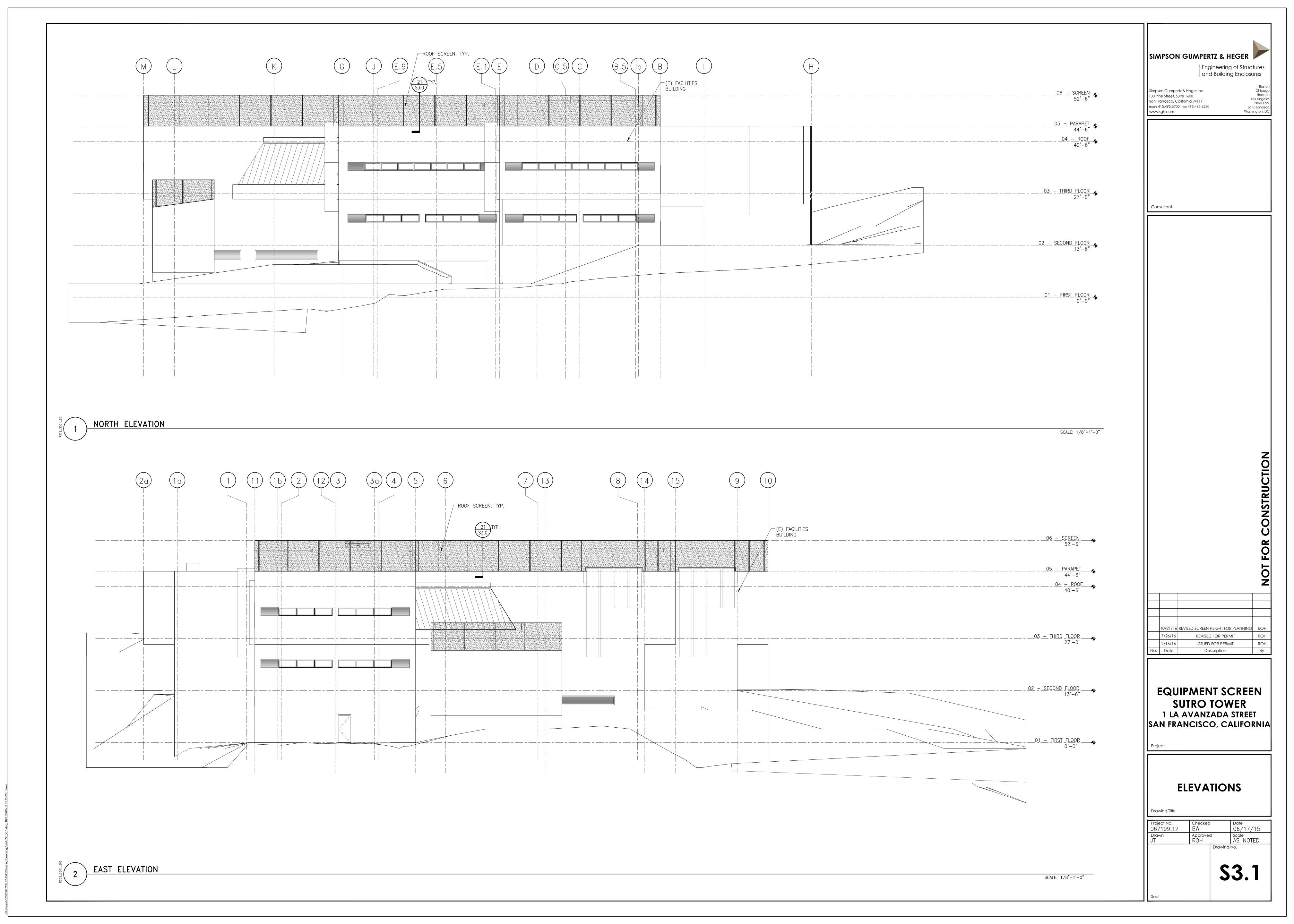
ROOF PLAN
RELOCATED ANTENNA
LOCATIONS

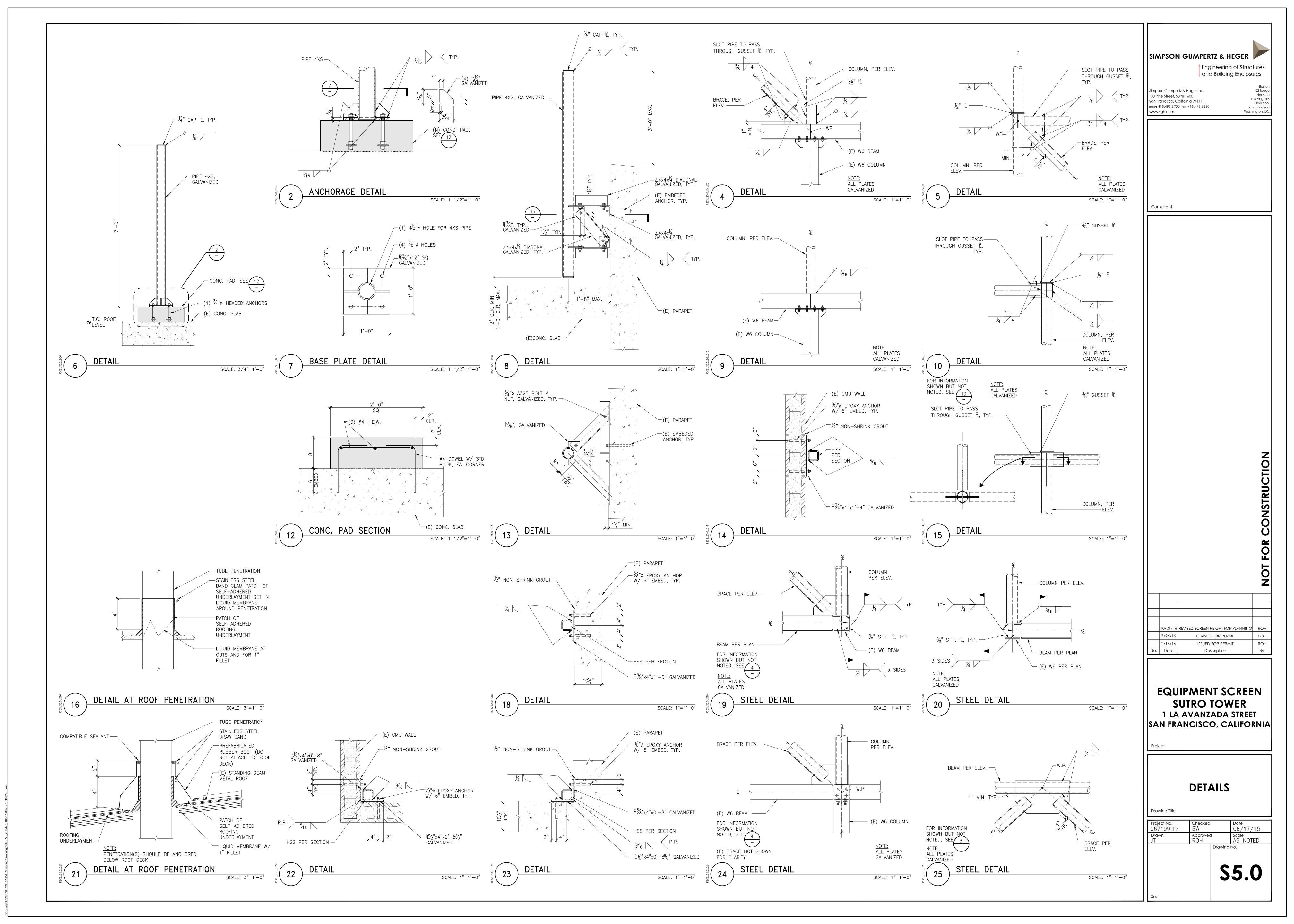
Drawing Tit

Project No. 067199.12	Checked BW		Date 06/17/15
Drawn JT	Approved ROH	d	Scale AS NOTED
		Drawing	No.
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**S2.2** 



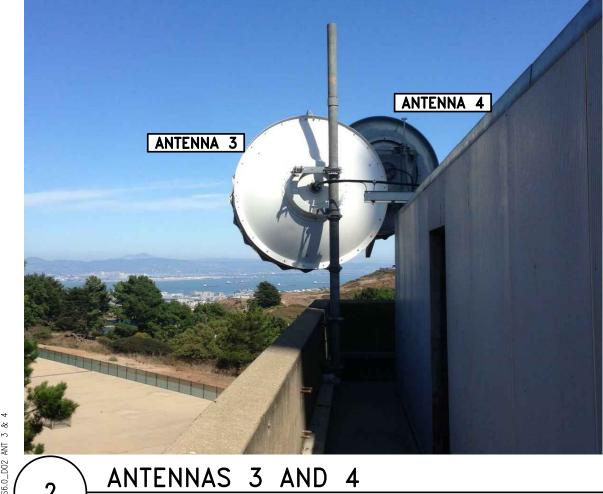




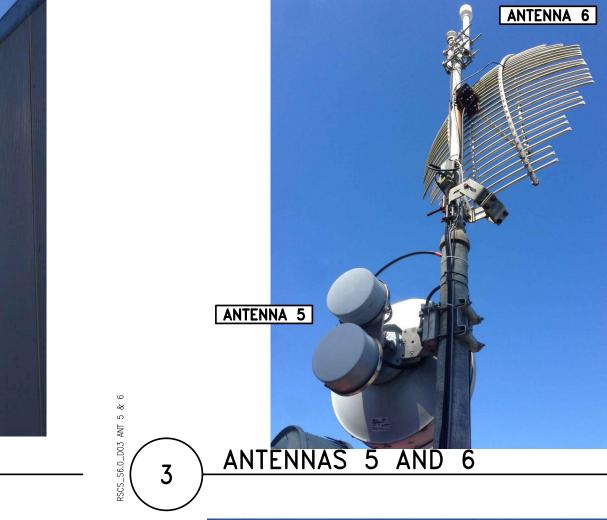


ANTENNAS 1 AND 2

ANTENNA 13



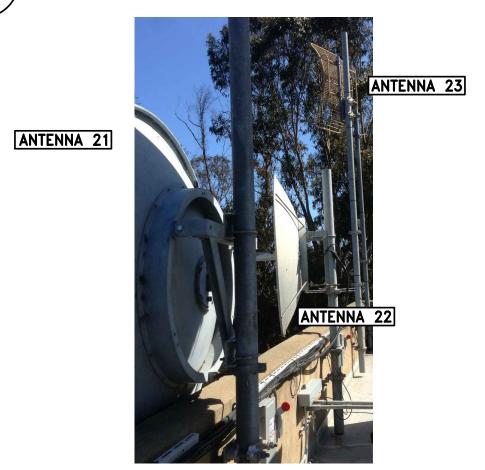
ANTENNA 14



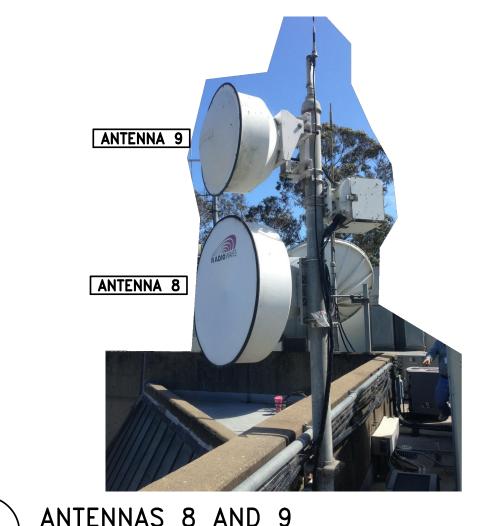
ANTENNAS 15 THROUGH 20



ANTENNA 7



ANTENNAS 21, 22 AND 23

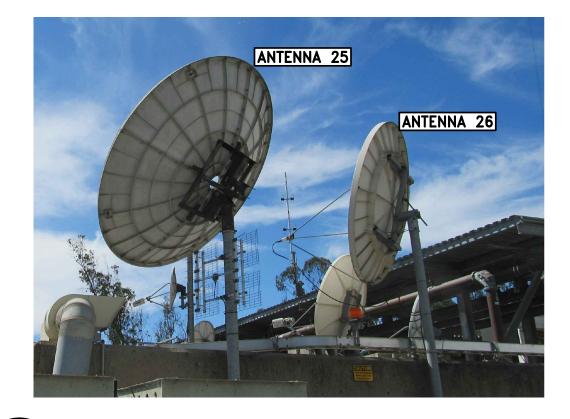






ANTENNAS 8 AND 9

ANTENNA 24



ANTENNAS 10 THROUGH 13

ANTENNAS 25 & 26

10/21/16 REVISED SCREEN HEIGHT FOR PLANNING ROH REVISED FOR PERMIT ISSUED FOR PERMIT Description

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Engineering of Structures and Building Enclosures

Boston Chicago Houston Los Angeles New York San Francisco Washington, DC

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**ANTENNA PHOTOGRAPHS** 

Project No. 067199.12