2016

PORT OF SAN FRANCISCO CODE PROCEDURES

Reference: Port Building Code Section 104A.2.1

PORT OF SAN FRANCISCO

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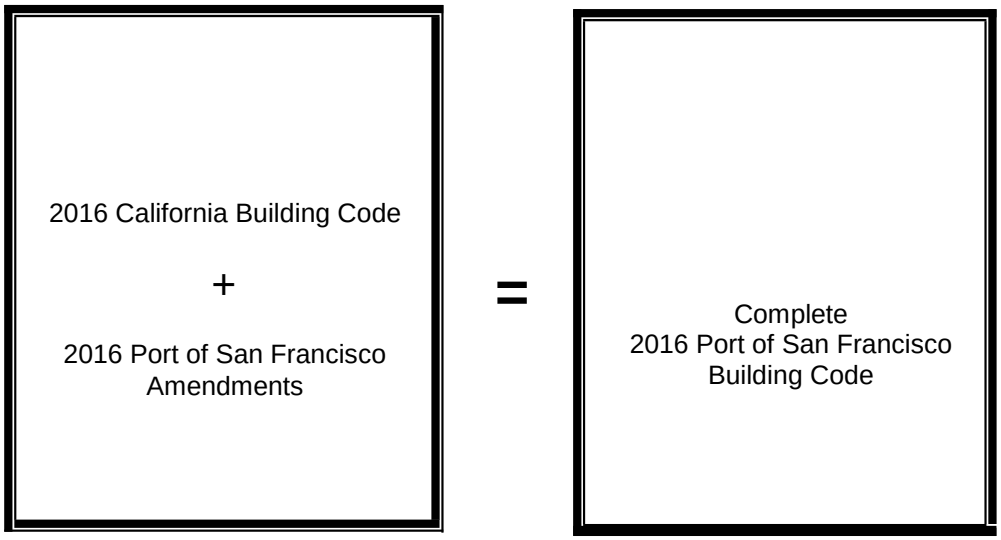
2016 Port of San Francisco Building Code

The complete 2016 Port of San Francisco Building Code adopts and amends the 2016 edition of the California Building Code

Effective Date: January 1, 2017



PUBLISHER'S NOTE

To simplify the use of the Port of San Francisco amendments with corresponding sections of the 2016 California Codes, explanatory remarks appearing in italics are provided at the beginning of each amendment indicating whether the Port of San Francisco Amendments to the 2016 California Codes are adding, revising, or replacing a section or portion of a section.

Should you find publication errors (for example, typographical) or inconsistencies in this code or wish to offer comments toward improving its format, please address your comments to:

Port of San Francisco Engineering Division -
Building Permit Group Pier 1,
The Embarcadero
San Francisco, CA 94111

Phone: (415) 274-0564

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PORT CODE PROCEDURES (PCP)

PCP NUMBER	TITLE
PCP-001	Preparing Port Code Procedures
PCP-002	Port Building Code Area of Application
PCP-003	Accessibility Variances and Exceptions to the Code
PCP-004	Complaints on the Accessibility of Existing Building and Facilities
PCP-005	(Reserved)
PCP-006	(Reserved)
PCP-007	Pre-Application Plan Review Procedure
PCP-008	Port Accessibility Guidelines and Interpretations
PCP-009	Guidelines for Under-pier Construction (Reserved)
PCP-010	Port Structural Engineering Quality Control
PCP-011	Tower Crane Site Safety Plan
PCP-012	(Reserved)
PCP-013	Special Inspection for Demolition Work
PCP-014	Special Inspection and Structural Observation Procedures
PCP-015	Over the Counter Permit Processing (Reserved)
PCP-016	Procedures for Processing Bi-Annual Permit - Port Maintenance Division (Reserved)
PCP-017	Port Variance Procedure for Flood Prone Areas
PCP-018	Solar Energy Application Package – Photovoltaic (SEA – PAC PV)

Original signed documents are filed at Port Engineering Division Permit Desk at Pier 1

PORT CODE PROCEDURE

NO. PCP-001

DATE : January 1, 2017

SUBJECT : General Administrative Procedures

TITLE : Preparing Port Code Procedures

PURPOSE : The purpose of this Port Code Procedure (PCP) is to describe the procedures to be used in originating, writing, editing and distributing PCPs. PCPs document the procedures to be followed by the Port of San Francisco (Port) staff and, if necessary, other agencies which are involved with the regulatory functions of the Port. These PCPs elaborate, clarify, or interpret specified sections or articles of the Building, Existing Building, Mechanical, Electrical or Plumbing Codes. PCPs are the officially adopted interpretations of code sections or the intent of the codes. PCPs are to be used by both Port and the public.

REFERENCE : 2016 Port of San Francisco Building Code Section 104A.2.1

DISCUSSION : The following steps are to be observed in the publishing of a Port Code Procedure. Each Code Procedure shall be reviewed periodically as necessitated by changes in policies or requirements.

1. IDENTIFY THE PROPOSED CODE PROCEDURE

    a. Any individual in the Port may identify the need for a Port Code Procedure and report this need to the supervisor, who will in turn discuss it with the Chief Harbor Engineer (CHE). The CHE will determine if a PCP is required and may give the authorization to proceed with the writing of the PCP.

    b. The CHE will assign a person as Preparer to write a draft procedure and an internal Port Review Panel with expertise in the matter to review the draft procedure. The review panel shall have a designated Chairperson, who will notify the preparer to proceed with the first draft.

2. PREPARE THE DRAFT PORT CODE PROCEDURE

The Preparer shall submit a first draft. Such first draft shall be reviewed by the Review Panel for form and content, and revised as necessary. See ATTACHMENT "A" for the document format which is to be followed. The panel Chairperson shall forward the reviewed draft to the Chief Harbor Engineer for his/her review.

3. REVIEW THE DRAFT PORT CODE PROCEDURE

    a. The Preparer is to include a list of persons or committees to whom the draft is recommended to be sent for review, if needed. The CHE and review panel may revise this list. (See ATTACHMENT "B" for a list of possible reviewers).

    b. The Panel Chairperson will distribute the first draft and, after a review

period, will forward any comments received to the CHE. The CHE will review the first draft and the review comments, and if necessary, discuss them with the Preparer. The CHE may refer the draft Code Procedure to other agencies or personnel for review as deemed appropriate.

4. PREPARE THE FINAL DRAFT FOR REVIEW BY THE CHIEF HARBOR ENGINEER

   Based upon draft review comments a final draft bulletin will be prepared by the Preparer. The review panel will prepare the final draft and review for form and content and assign a PCP number to the procedure.

5. PREPARE THE APPROVED COPY FOR PRINTING AND DISTRIBUTION

   a. The Panel Chairperson shall prepare a final copy for signature by the CHE.

   b. The signed PCP will be duplicated and distributed as noted on a final distribution list. The Panel Chairperson shall sign and file the PCP and record the completed PCP in separate indexes by:

      1) Port Code Procedure Number
      2) Title

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally Approved by the Port Commission on 01/01/2008
Update reviewed and approved by N. Friedman, Chief Building Inspector 10-25-2016

ATTACHMENT "A"

PORT CODE PROCEDURE GUIDE

NO. PCP-001 : *The CODE PROCEDURE NUMBER. is assigned by **Chief Harbor Engineer**.*

DATE : *The DATE is the effective date.*

SUBJECT : *The SUBJECT identifies the major topic or topics covered by the Code Procedure.*

TITLE : *The TITLE should be short and to the point (e.g.. Processing Demolition Applications and Permits).*

PURPOSE : *The PURPOSE serves as an abstract and clearly defines the scope and intent of the Code Procedure.*

REFERENCE : *The REFERENCE materials used in writing the Code Procedure may include to Municipal Codes, City Charter, State and Federal Laws, letters, directives, and other justifications for this Code Procedure. If there are none, leave this item out.*

DISCUSSION : *The DISCUSSION provides background information and a description of the intended action or procedure. It includes detailed explanations and additional examples, attachments, or diagrams.*

The SIGNATURE BLOCK contains the CHE's signature and title. Additional signatures and titles may be included if the Code Procedure is written as a joint document with other agencies.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Approved by the Port Commission on December 3, 2016

Reviewed by Neil Friedman, Chief Building Inspector
11/15/16

ATTACHMENT "B"

Distribution List:

Port of San Francisco:
- Port Executive Director
- Chief Harbor Engineer
- Deputy Director of Maintenance
- Deputy Director of Planning
- Deputy Director of Administration
- Building Permit Group
- Disability Access Coordinator

Port of San Francisco Commission:
Port Building Code Review Board

City Agencies: Mayor's Office
- Clerk of the Bd. Of Supervisors
- City Attorney, Office of Planning Department
- Fire Department

Public Works
Bureau of Architecture Bureau of Engineering Bureau of Construction Mgt. Bureau of Street Use & Mapping BSUM
Bureau of Building Repair Department of Public Health Real Estate Department
Port of San Francisco
Housing Authority

Professional Societies and Organizations:
- American Institute of Architects (A1A), San Francisco Chapter
- American Society of Civil Engineers (ASCE)
- American Society of Fire Protection Engineers (ASFPE)
- American Society of Heating, Refrigeration, and Air Conditioning Engineers, Inc (ASHRAE)
- Consulting Engineers Association of California National Electrical Contractors Association (NECA)
- San Francisco Bay Area Chapter of the National Association of the Remodeling Industry (NARI)
- San Francisco Chapter of the Construction Specifications Institute (CSI)
- San Francisco District of the Associated General Contractors of California, Inc. (AGC)
- Sheet Metal and Air Conditioning National Association, Inc. (SMACNA)
- Structural Engineers Association of Northern California (SEAONC)

Public Organizations:
- Building Owners and Managers Association (BOMA)
- Center for Independent Living
- Foundation for San Francisco's Architectural Heritage
- San Francisco Board of Realtors
- San Francisco Building Trades Council
- San Francisco Chamber of Commerce
- San Francisco Planning & Urban Research Association (SPUR)

Note: This is the current list on file. Any interested individual, agency or organization may be included on this list by sending a written request to: Chief Harbor Engineer, Port of San Francisco, Pier 1 - The Embarcadero, San Francisco, CA 94111

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PORT CODE PROCEDURE

NO. PCP-002

DATE : January 1, 2008

SUBJECT : Area of Port Code Application

TITLE : Port Building Code Area of Application

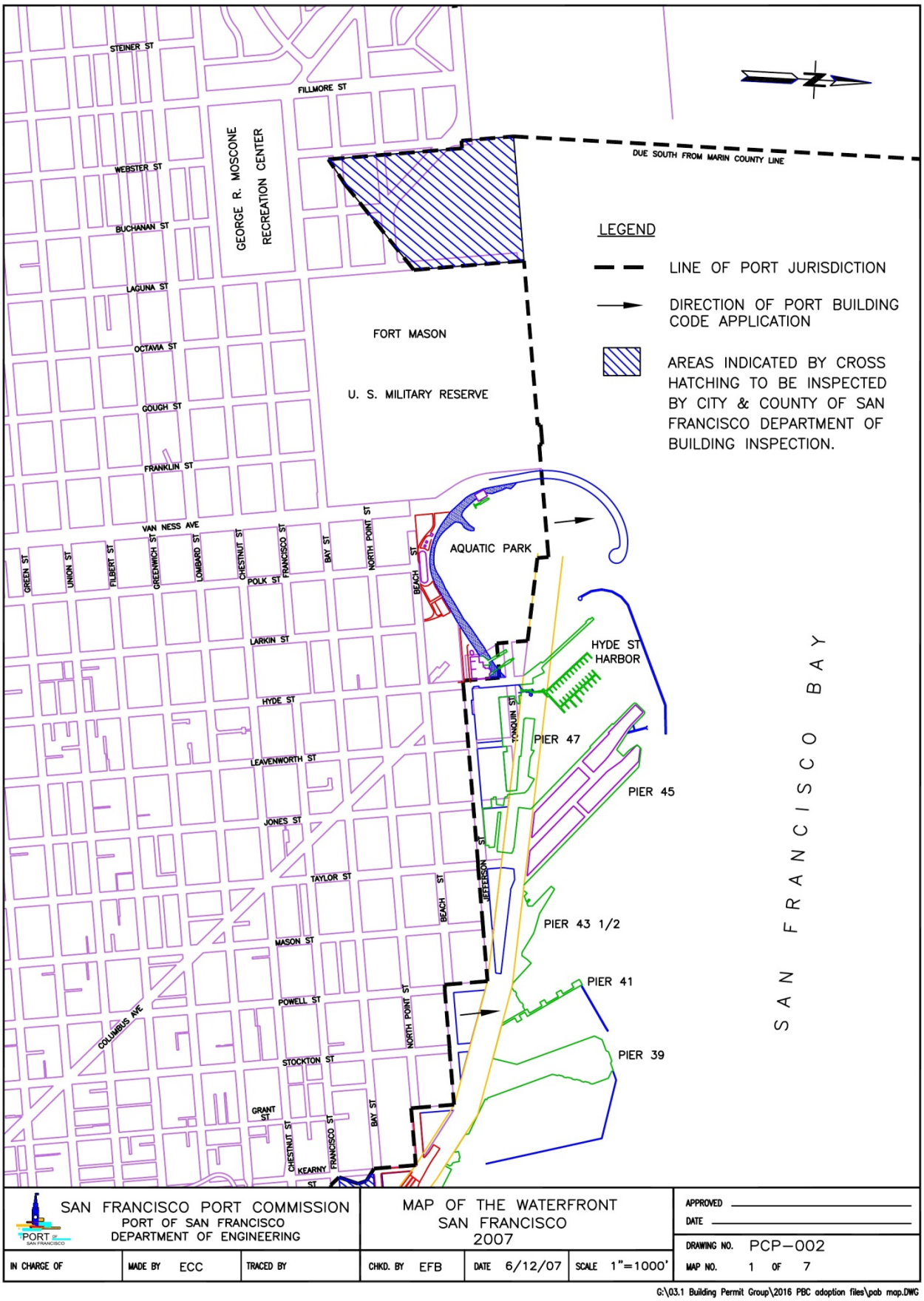
PURPOSE : The purpose of this Procedure is to graphically describe the separation of the jurisdictions of the Port of San Francisco (with the application of the Port of San Francisco Building Codes) and the City of San Francisco (that uses the Department of Building Inspection Codes.)

REFERENCE : The following maps that delineate the area of Port of San Francisco jurisdiction and code enforcement.

DISCUSSION : On the following maps, the Port of San Francisco's Engineering Division Building Permit Group (BPG) will provide all building plan check and inspection services for all areas within Port jurisdiction except for those otherwise specifically indicated on the following maps. The San Francisco Department of Building Inspection will provide plan checking and inspection services only for those areas not shown as belonging to Port Jurisdiction on the following maps.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector 11-06-2016


STEINER ST
FILLMORE ST
WEBSTER ST
BUCHANAN ST
LAGUNA ST
OCTAVIA ST
GOUGH ST
FRANKLIN ST
VAN NESS AVE
GREEN ST
UNION ST
FILBERT ST
GREENWICH ST
LOMBARD ST
CHESTNUT ST
FRANCISCO ST
BAY ST
NORTH POINT ST
POLK ST
LARKIN ST
HYDE ST
LEAVENWORTH ST
JONES ST
TAYLOR ST
MASON ST
POWELL ST
COLUMBUS AVE
STOCKTON ST
GRANT ST
KEARNY ST
BEACH ST
JEFFERSON ST
TONQUIN ST
GEORGE R. MOSCONE RECREATION CENTER
FORT MASON
U. S. MILITARY RESERVE
AQUATIC PARK
HYDE ST HARBOR
PIER 47
PIER 45
PIER 43 1/2
PIER 41
PIER 39
SAN FRANCISCO BAY
DUE SOUTH FROM MARIN COUNTY LINE
LEGEND
LINE OF PORT JURISDICTION
DIRECTION OF PORT BUILDING CODE APPLICATION
AREAS INDICATED BY CROSS HATCHING TO BE INSPECTED BY CITY & COUNTY OF SAN FRANCISCO DEPARTMENT OF BUILDING INSPECTION.
SAN FRANCISCO PORT COMMISSION
PORT OF SAN FRANCISCO
DEPARTMENT OF ENGINEERING
MAP OF THE WATERFRONT
SAN FRANCISCO
2007
APPROVED
DATE
DRAWING NO. PCP-002
MAP NO. 1 OF 7
IN CHARGE OF
MADE BY ECC
TRACED BY
CHKD. BY EFB
DATE 6/12/07
SCALE 1"=1000'
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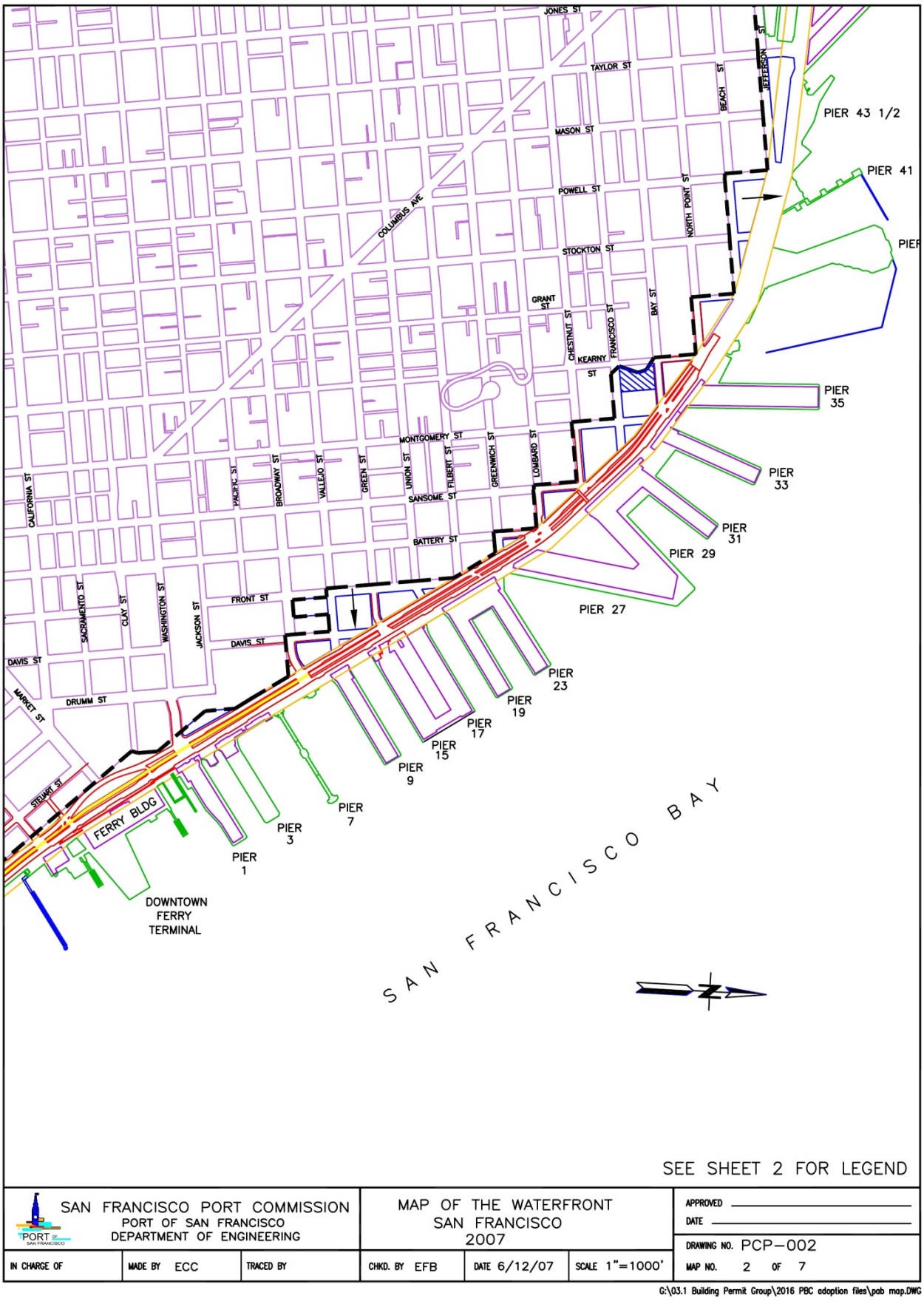

SAN FRANCISCO PORT COMMISSION PORT OF SAN FRANCISCO DEPARTMENT OF ENGINEERING			MAP OF THE WATERFRONT SAN FRANCISCO 2007			APPROVED _____ DATE _____ DRAWING NO. PCP-002
IN CHARGE OF	MADE BY ECC	TRACED BY	CHKD. BY EFB	DATE 6/12/07	SCALE 1"=1000'	MAP NO. 2 OF 7

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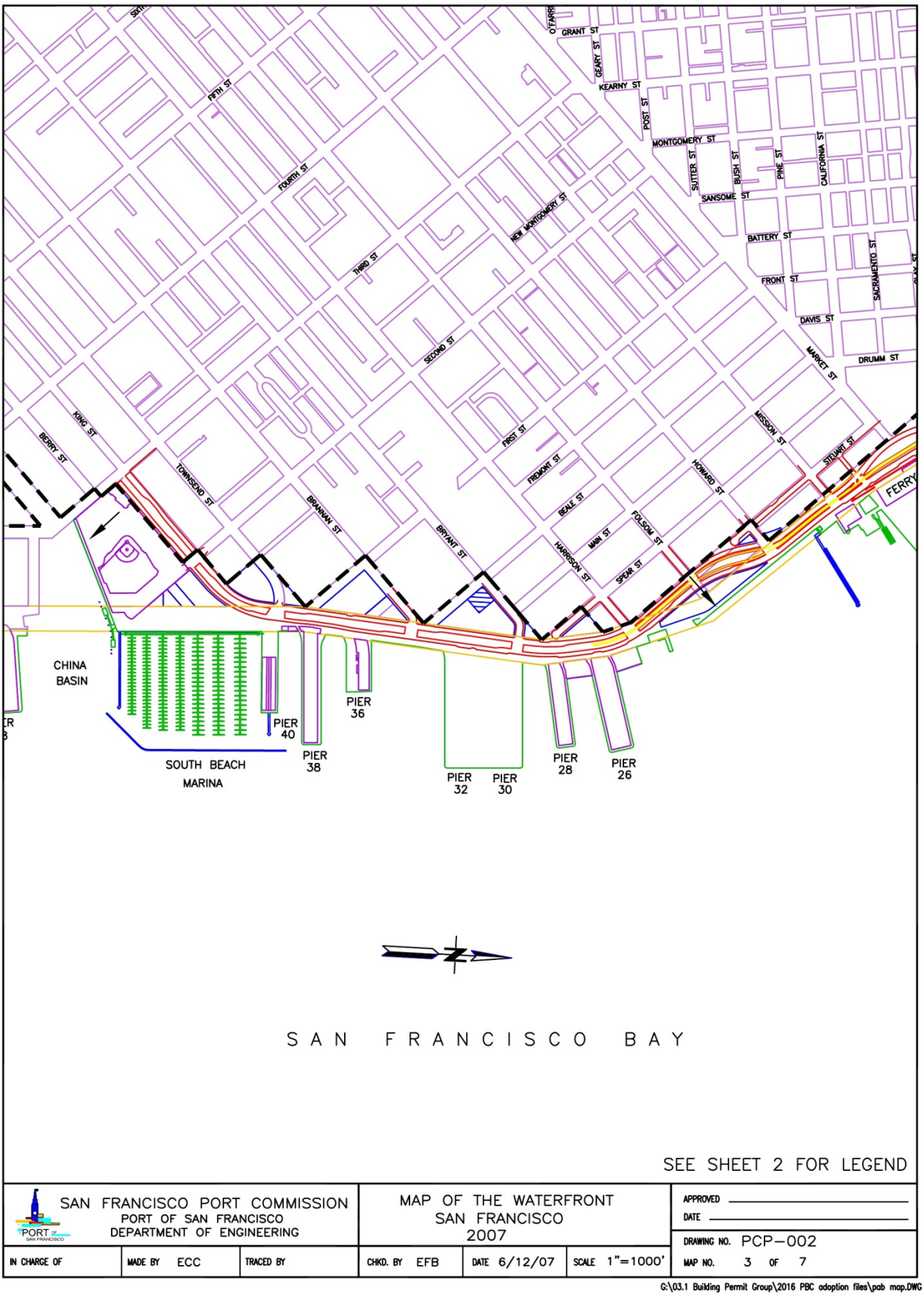
GRANT ST
GEARY ST
KEARNY ST
POST ST
MONTGOMERY ST
SUTTER ST
BUSH ST
PINE ST
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SACRAMENTO ST
DAVIS ST
DRUMM ST
MARKET ST
MISSION ST
STEUART ST
FERRY
FIFTH ST
FOURTH ST
THIRD ST
NEW MONTGOMERY ST
SECOND ST
FIRST ST
FREMONT ST
BEALE ST
MAIN ST
HARRISON ST
FOLSOM ST
HOWARD ST
SPEAR ST
BRYANT ST
BRANNAN ST
TOWNSEND ST
KING ST
BERRY ST
CHINA BASIN
SOUTH BEACH MARINA
PIER 40
PIER 38
PIER 36
PIER 32
PIER 30
PIER 28
PIER 26
SAN FRANCISCO BAY
SEE SHEET 2 FOR LEGEND
SAN FRANCISCO PORT COMMISSION
PORT OF SAN FRANCISCO
DEPARTMENT OF ENGINEERING
MAP OF THE WATERFRONT
SAN FRANCISCO
2007
APPROVED
DATE
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MAP NO. 3 OF 7
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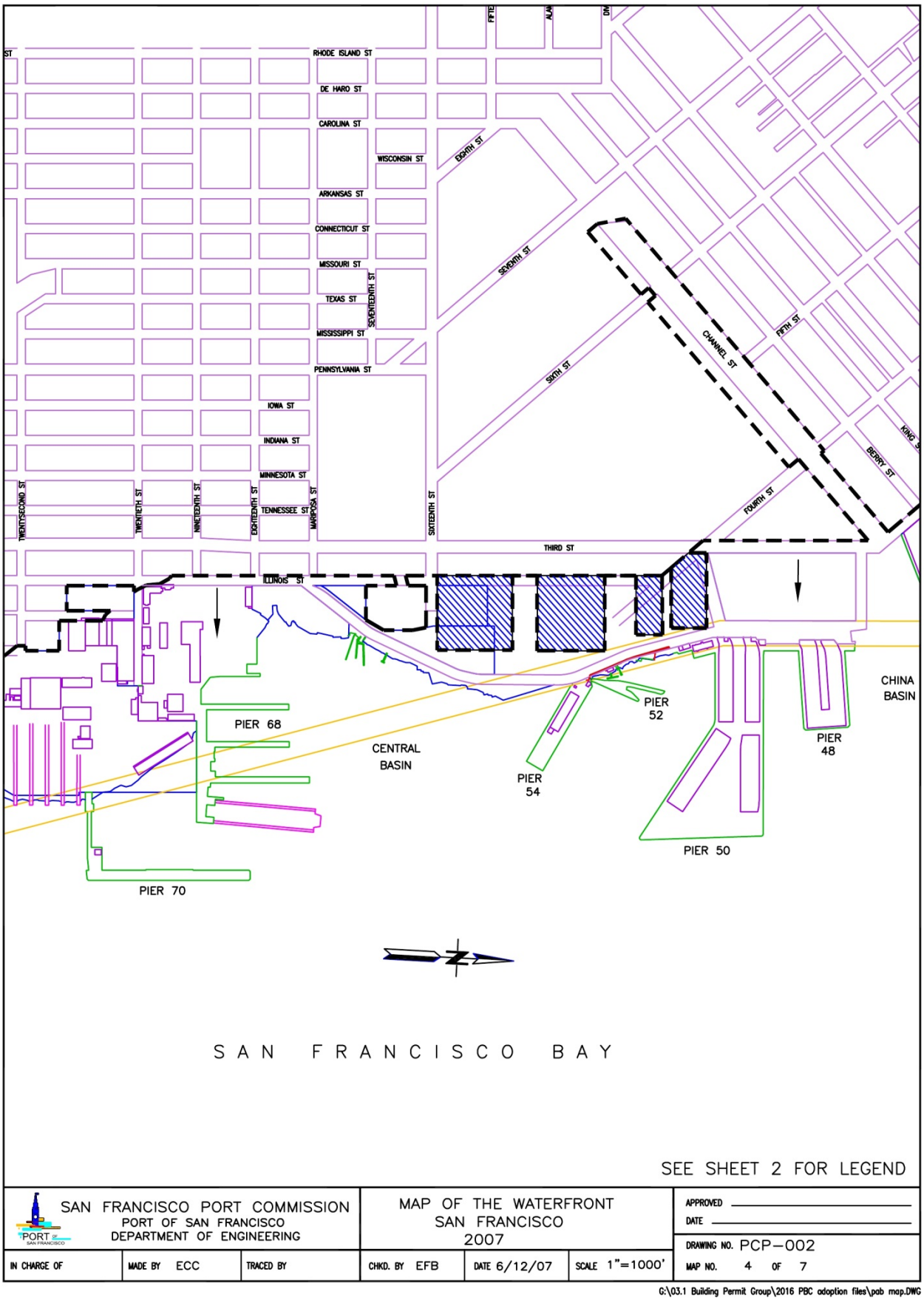

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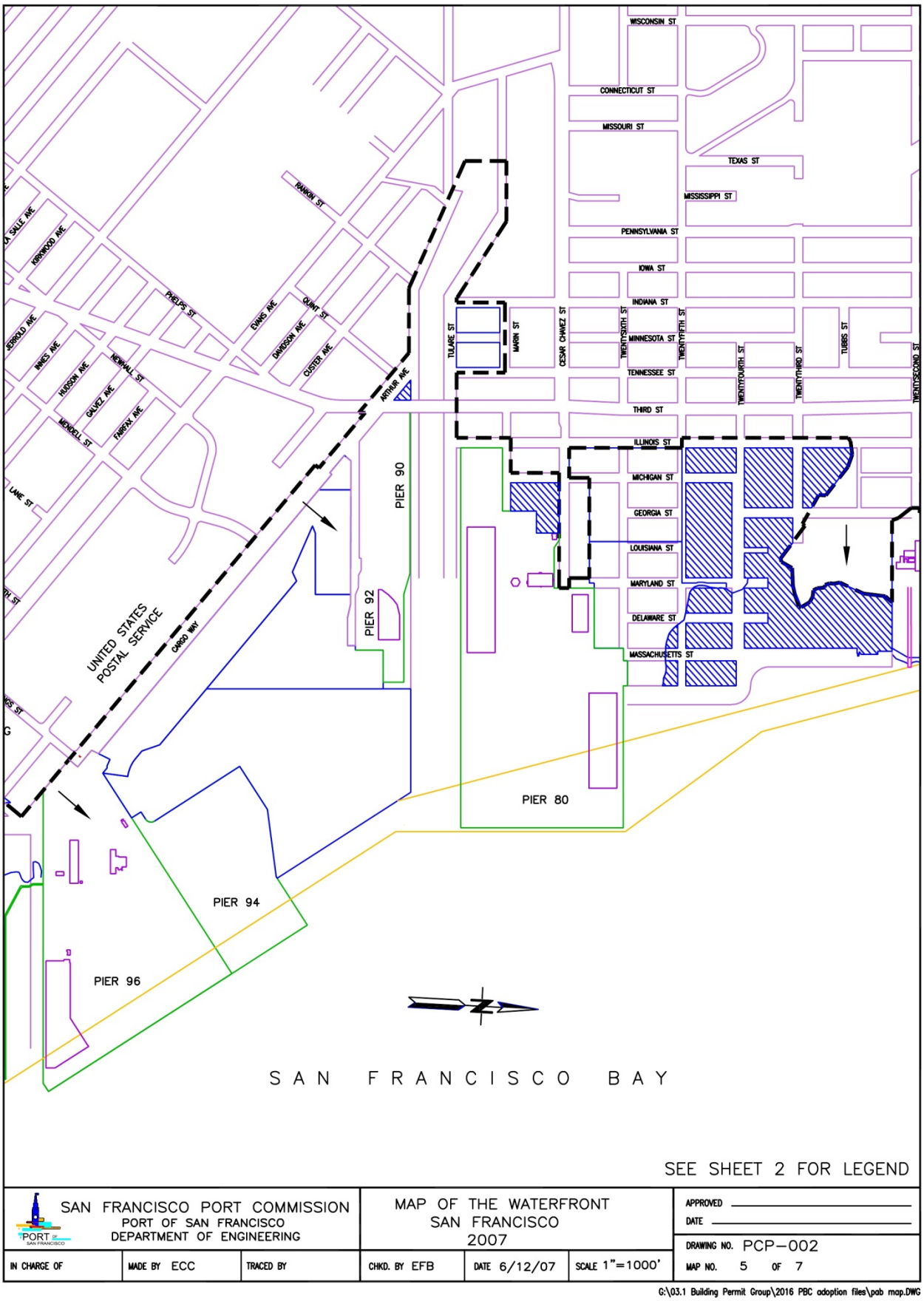

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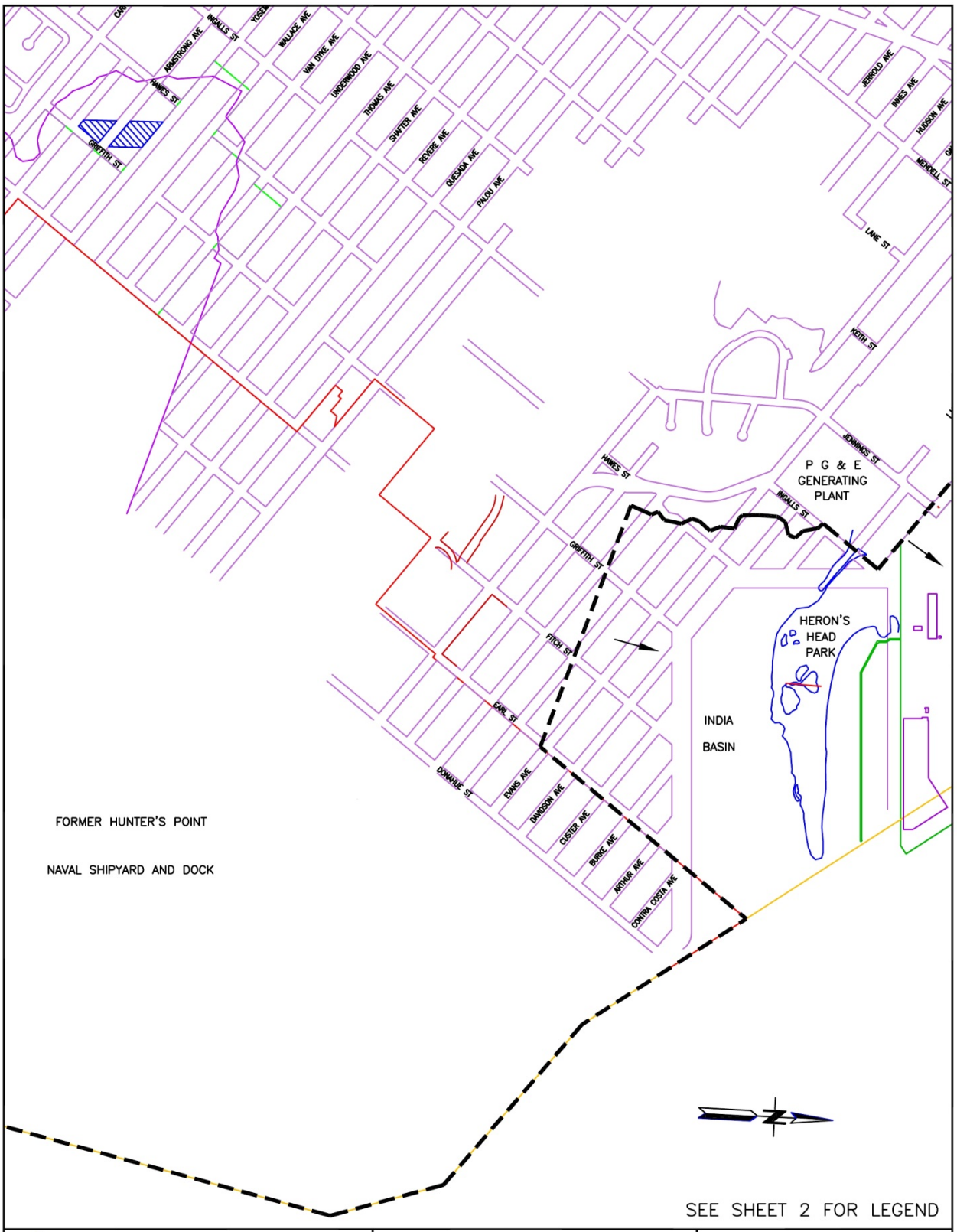

SAN FRANCISCO PORT COMMISSION PORT OF SAN FRANCISCO DEPARTMENT OF ENGINEERING			MAP OF THE WATERFRONT SAN FRANCISCO 2007			APPROVED _____ DATE _____ DRAWING NO. PCP–002
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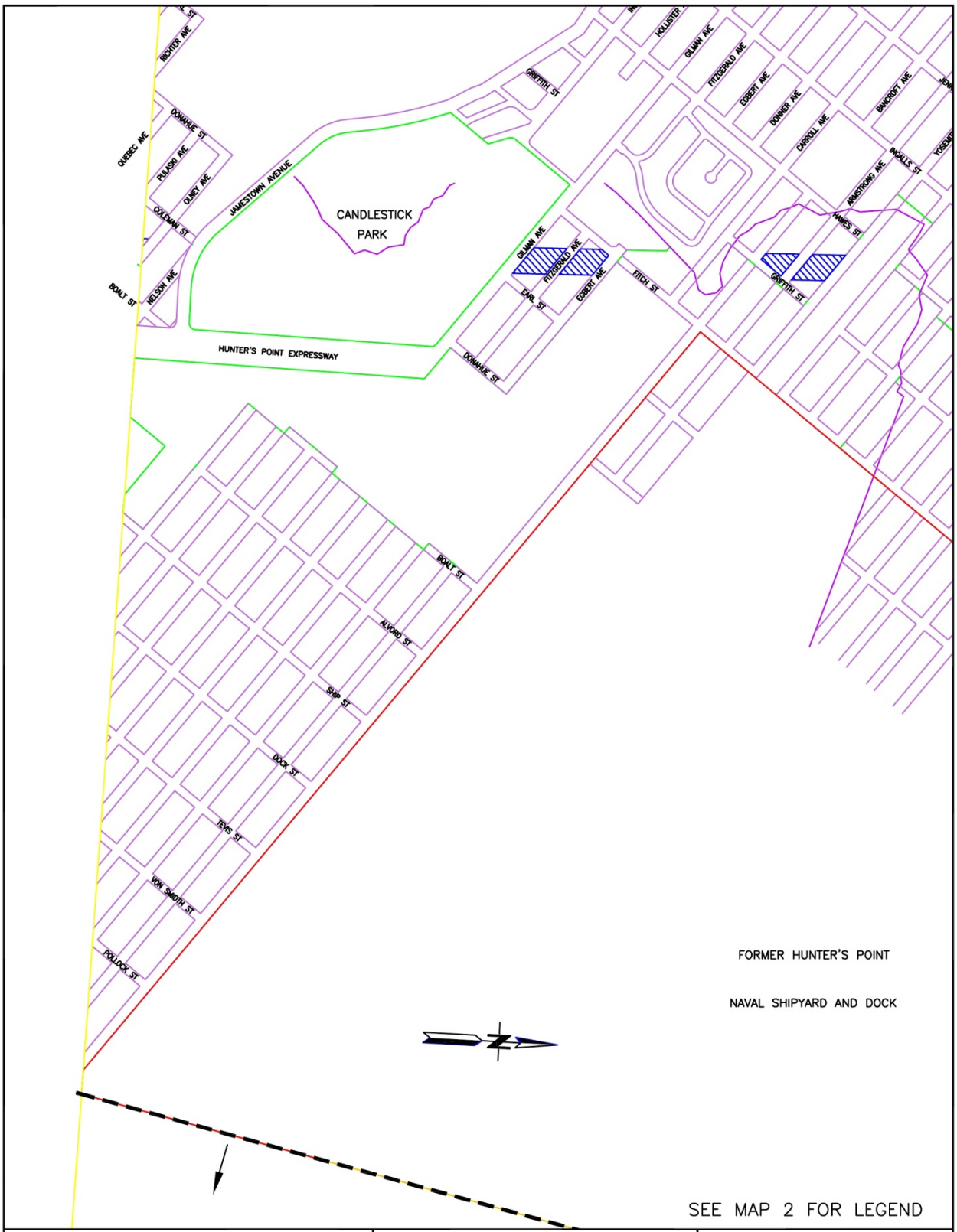
CANDLESTICK PARK
HUNTER'S POINT EXPRESSWAY
JAMESTOWN AVENUE
GRIFFITH ST
HOLLISTER
GILMAN AVE
FITZGERALD AVE
EGBERT AVE
DONNER AVE
CARROLL AVE
BANCROFT AVE
INGALLS ST
ARMSTRONG AVE
HAWES ST
FITCH ST
EARL ST
DONAHUE ST
QUEBEC AVE
PULASKI AVE
QUINCY AVE
COLEMAN ST
BOALT ST
NELSON AVE
RICHTER AVE
ALVORD ST
SHIP ST
DOCK ST
TEVIS ST
YOH SMITH ST
POLLOCK ST
FORMER HUNTER'S POINT
NAVAL SHIPYARD AND DOCK
SEE MAP 2 FOR LEGEND
SAN FRANCISCO PORT COMMISSION
PORT OF SAN FRANCISCO
DEPARTMENT OF ENGINEERING
MAP OF THE WATERFRONT
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PORT CODE PROCEDURE

NO. PCP-003

DATE : January 1, 2008

SUBJECT : Barrier Free Access

TITLE : Accessibility Variances and Exceptions to the Code

PURPOSE : To serve the Port of San Francisco (Port) and the general public by hearing written appeals brought by any person regarding actions taken by the Port's Engineering Division's Building Permit Group (BPG) in the enforcement of the requirements for access to public accommodations by persons with disabilities under California Title 24, as well as action taken by the Port of San Francisco in the enforcement of barrier free access and access appeals.

REFERENCE : Part 5.5, Sections 19955-59 of the Health and Safety Code of the State of California

DISCUSSION : **A. Application for Unreasonable Hardship (AUH)**. The applicant may appeal a decision or action made by the BPG in their enforcement of the California Code of Regulations, Title 24. To make such an application, the applicant must first file an AUH (see Exhibit A) through the BPG. In the event, the AUH is denied; the applicant shall be informed as to the reason for that denial. Upon denial of the AUH request, the applicant may make an appeal in accordance with PBC Section 105A. All applications should be made in writing to the Chief Harbor Engineer (CHE) and shall include the following:

1. Date of the appeal application.
2. Address or Facility Identification Number (FIN) of the subject property
3. Port building permit or complaint number and date of decision or action of appeal.
4. Identify whether the applicant is a master lesser, tenant, temporary operator or Special Event sponsor of Port property.
5. Description of the area or condition for which the appeal is being made.
6. Identification and content of applicable Port of San Francisco Building Code sections on which the appeal is being based.
7. Identification and content of accessibility determinations from Port Code Procedure(s), or Division of the State Architect Policy(s) applicable to the appeal request, or any other technical guideline that provides equal or greater accessibility.

AUH forms are also available at the Port Pier 1 Office Building Permit Desk. When requested, the Building Permit Group or the Port Accessibility Coordinator can provide the applicant assistance in filling out this form.

B. Application Fee. A BPG filing fee of $350.00 is required for each appeal. Request for hearing fee is $100.00.

C. Background Report. The Americans with Disabilities Act (ADA) Title 2 Coordinator or the CHE shall prepare a background report with a recommendation for action by the appeal reviewers.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally Approved by the Port Commission on 01/01/2008
Update reviewed and approved by N. Friedman, Chief Building Inspector 10-26-2016

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PORT CODE PROCEDURE

NO. PCP-004

DATE : January 1, 2008

SUBJECT : Complaints regarding lack of accessible building features

TITLE : Complaints on the Accessibility of Existing Buildings and Facilities

PURPOSE : The purpose of this Port Code Procedure (PCP) is to describe the procedures to be used in receiving and resolving complaints concerning existing buildings, structures and facilities operated to serve public accommodations within Port boundaries.

This PCP is the Port of San Francisco's accessibility grievance and complaint procedure and is part of the Port's policy to provide accessibility to persons with disabilities. Accessibility grievance and/or complaint procedures are required under:

1) Section §35.107 Americans with Disabilities Act, 28 CFR PART 35 Nondiscrimination on the Basis of Disability in State and Local Government Services, (Title II) with the ADA's Accessibility Guidelines (ADAAG) and
2) State of California Government Code section 4453, known as the Unruh Civil Rights Act (UCRA).

The Port of San Francisco Chief Harbor Engineer (CHE) may, at his or her discretion, refer accessibility grievances or complaints regarding Port programs, services, or facilities to the Port of San Francisco's Accessibility coordinator. Appeals of the Port coordinator's decisions will be referred to the Access Appeals Commission of the San Francisco Department of Building Inspection. These grievances or complaints will be administered per the policies established by the Port Building Code. Appeals of the decisions of the Port Coordinator will be heard in accordance with PCP-004 and Section 105A.1 of the 2016 Port of San Francisco Building Code.

Additionally, complaints regarding the accessibility of a public accommodation's temporary or permanent buildings, structures and facilities may be directed to the Port of San Francisco Chief Harbor Engineer (CHE). This PCP addresses the procedure for investigation and, if required, abatement of the condition.

Where the complaint involves issues other than accessibility of real property, the complaint shall be directed to the Port's Accessibility Coordinator.

REFERENCE : 2016 Port of San Francisco Building Code (PBC) Section 104A.2.1

DISCUSSION : A. **Definitions**

Removal of Existing Architectural Barriers – means the Title II 35.150 (d), Title II §364.304 or State (UCRA) §51 requirement to removal barriers to access in existing facilities and buildings.

Path of Travel – means a requirement that, when an alteration affects or could affect the usability of or access to an area containing a primary function, that an amount not to exceed 20% of the cost of construction shall be allocated so as to ensure that, to the maximum extent feasible, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope as determined under criteria established by the Attorney General.

B. General Requirements. Where the complaint is made against Port of San Francisco tenants or temporary event operators that occur within the Port's boundaries, the compliant shall be investigated in the following manner.

1.0 Determination of Applicability of Standards. The CHE or designee shall review the facility complaint per PBC Section 102A and the applicable provisions of the building code. The Port's Chief Building Inspector or the Port's ADA Title 2 Coordinator may serve as the CHE's designee.

1.1 Determination of Standards. Where possible, a determination shall be made if the object of the complaint is a barrier removal obligation under the California Building Code (CBC)/Port Building Code (PBC) or a design compliance issue associated with construction that occurred after January 26, 1992. The object of the compliant shall be reviewed for its performance to the appropriate accessibility guideline standards.

1.2 Architectural Barriers in Existing Buildings. Complaints regarding the removal of existing architectural barriers in buildings or facilities existing prior to July,26, 1992 shall be investigated for compliance to the alteration standard of ADAAG and/or CBC/PBC Chapter 11B of the code.

1.3 Barriers in New Construction or Alterations. Complaints regarding buildings or facilities constructed after July 26, 1992 shall comply with the new construction standard of this code or ADAAG.

1.4 Equivalencies. In determining equivalencies for the compliance of buildings and facilities, the CHE is permitted to utilize:

1) The most current edition of the US Access Board's ADA Accessibility Guidelines,

2) The most current edition of the PBC and/or

3) ICC/ANSI A117.1-2003 Accessible and Usable Buildings and Facilities standard.

4) Port of San Francisco Code Procedures

2.0 Acknowledgment and Time for review.

2.1 Acknowledgement. The CHE or his/her designee shall acknowledge the receipt of the complaint in writing within 5 working days.

2.2 Investigation. The investigation of the complaint shall be completed within 10 working days after acknowledgement of the complaint, to determine whether the complainant has identified an architectural barrier(s) for persons with disabilities.

2.3 Response to Complainant. The CHE or his designee shall respond in writing to the complainant on the results of the investigation within 20 working days after acknowledgement of complaint receipt.

2.4 Abatement. Where a building, facility or improvement is determined to be in non-compliance with the PBC due to architectural barriers to access for people with disabilities, it shall be declared a public nuisance and the CHE shall direct that it be abated, by repair, rehabilitation, demolition or removal per Section 102A and as provided herein.

3.0 Appeals. Appeal of the CHE's decisions may be made to the Port Building Code Review Board in accordance with Section 105A.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally Approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-2016

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PORT CODE PROCEDURE

NO. PCP-007

DATE : January 1, 2008

SUBJECT : General Administrative Procedures

TITLE : Pre-Application Plan Review Procedure

PURPOSE : To establish policies and procedures allowing for review and comment of specific design issues by the Port of San Francisco prior to application for a permit.

REFERENCE : Port of San Francisco Building Code (PBC)

Section 106A.4.8 Pre-application Plan Review
Section 110A, Table 1A -B Building Permit Application and Plan Review Fees

DISCUSSION : A preliminary verbal interpretation of a code requirement or alternative method of construction is considered informal information and may not always be accepted by the Plan Reviewer or Inspector who has been assigned to check the submittal documents for a project. Rather than wait for the plan review to reveal requirements of specific design issues, it may be advantageous to project sponsors to verify code requirements with a formal PBC interpretation prior to completion of project drawings and before submitting an application for a building permit.

This procedure sets out the process for requesting, conducting and concluding such a Pre-Application Plan Review.

NOTE: It is not intended that a general, non-directed plan review of a project will be made during this review; the intention of the Pre-Application Plan Review is to address and resolve specific code issues.

Formal written confirmation of interpretations will be issued to the project sponsor following the review.

REQUEST FOR PRE-APPLICATION PLAN REVIEW: Submit requests for a Pre-Application Plan Review in writing as follows:

List each of the items to be reviewed in specific question format that can be answered "yes or no," if possible. The applicant shall propose a solution or provide a statement of position regarding each question asked, and shall include pertinent code references. Items should be sequentially numbered. This list of questions or items will then form the agenda for a written response.

Include applicable drawings, documents, and other information as necessary to describe the conditions under question,

On the submitted drawings, highlight or "cloud" the areas to be reviewed, and provide cross-references to the questions. Where questions pertain to means of egress, indicate the path of egress on the drawings with arrows.

For applications where a Change of Occupancy is proposed, the registered design professional shall provide plans to show the occupancy classification, use, square footage, load factor, and calculated occupant load for each area within the entire shed or building. A summary table with the above information shall be provided. Also see Chapter 4 of the Port of San Francisco Existing Building Code.

To cover fees, include a check made payable to the Port of San Francisco (See FEES below).

Note; a separate payment is required for Fire Department representation. (See FEES below).

Address requests to:

Chief Building Inspector, Engineering Division
Port of San Francisco
Pier 1, San Francisco, CA 94111

Indicate on the outside of the envelope:
PCP-007 Pre-Application Plan Review Request

RESPONSE:

The Chief Building Inspector will assign your Pre-Application Plan Review request to one of the following:

Building Permit Group,
Plan Review Engineer Structural/Civil,
Plan Review Engineer Electrical
Plan Review Engineer Mechanical
Port Architect
Other divisional staff as determined by the Chief Building Inspector

The request for a Pre-Application Plan Review may result in a meeting if it is determined to be appropriate by the reviewer or the Chief Building Inspector.

The plan review will be conducted by the Port representative as assigned. One or more plan reviewers from Engineering Division staff may be assigned to participate in the Pre-Application Plan Review depending on the complexity of the project and the issues in question. Interpretations by consultants from other agencies, such as; San Francisco Fire Department, Dept. of Public Health, Planning Department, or the Dept. of Building Inspection may be requested by the Chief Harbor Engineer for a building code interpretation to be made.

The Port representative will have final authority to determine which questions are addressed. Questions that are determined to be too broad in scope may be deleted from the request. Discussion will be limited only to written items of request in a question and answer format.

The Port may request additional information from the project sponsor in preparation for, or during, a Pre-Application Plan Review.

The Port reviewer shall prepare a letter of response within 30 days following the conclusion of the Pre-Application Plan Review. Such letter of response shall address each specific question and shall state the reasons for all conclusions. The letter shall be signed by the reviewer and issued to the project sponsor within 10 days of completion. Port of San Francisco will track the time of issuance and approval of such letters to confirm that the above time limits are met.

For clarity, each item number of the written response shall correspond to the item number on the written request.

Notes, annotated drawings and other documents may be attached to the notes or letter of response for reference at the time of a building permit application.

The project sponsor shall attach a copy of the signed conclusions of the Pre-Application Plan Review letter of response as a lead sheet to the building permit application drawings. The responsible plan reviewer during the plan review process will honor these decisions.

The project sponsor may request a review of the Port staff determination by the Chief Harbor Engineer (CHE). Determinations of the CHE may be appealed in accordance with Section 105A.

FEES:

Pre-Application Plan Review fees are payable upon request according to the Section 107A, Table 1A -B, Item 6 and Table 1A-H.

The San Francisco Fire Department charges plan review fees in addition to the above fees when Fire Department personnel are included in a review. See San Francisco Fire Code Section 106.11 for appropriate fee. A separate payment for such fees made to Port of San Francisco is required for Fire Department representation.

Fees, in addition to the advance Pre-Application Plan Review payment, will be calculated at the conclusion of the review. The Port of San Francisco will not release notes or letters of written interpretation until all Pre-Application Plan Review fees are paid.

If the initial Pre-Application Plan review fee is paid but no such review is subsequently performed and no preparatory work has been done, the fee may be refunded in accordance with Section 107A.6.1.1.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally Approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-16

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PORT CODE PROCEDURE

NO. PCP-008

DATE : January, 12 2008

SUBJECT : Accessibility

TITLE : Port Accessibility Guidelines

PURPOSE : The purpose of this Port Code Procedure (PCP) is to amend accessibility requirements of the code and provide interpretation and guidance on areas where the code lacks the minimum requirements or is potentially in conflict of the 28 CFR Part 36 Americans with Disabilities Act accessibility guidelines (ADAAG). The information in Accessibility guidelines is to be used by both Port and the public.

REFERENCE : 2016 California Building Code and Port Building Code Section 11B

DISCUSSION : The California Building Code has not been certified by the Department of Justice as meeting the requirements of the ADA's Subpart F- Certification of State Laws or Local Building Codes. The Division of the State Architect acknowledges that the California Building Code does not comply with ADAAG and has made application to the Department of Justice for review of the revisions to the code.

In the interim the DSA has issued Polices to provide guidance and interpretation of Chapter 11B accessibility requirements.

REQUIREMENTS: 1. With specific amendments, the Port adopts the following DSA Polices and Port Code Procedures to be a part of the Port Building Code.

DSA POLICIES

94-05 Accessible Requirements For Exit-Only Doors

94-10 Resurfacing, Restriping And Alterations Of Parking Lots

94-22 Reconstruction After Fire Damage

95-09 Revised 3/15/2000 Accessible Seating At Service Counters, except that the minimum length of counter at wheelchair seating shall be a minimum of 60 inches (1525 mm).

96-01 DSA Seismic Upgrade Projects

96-10 Handrails at Steps

97-01 Unisex Toilet Rooms

97-02 Permit Extensions

97-03 Interim Disabled Access guidelines for Electrical Vehicle Charging Stations

97-06 Parking Ticket Dispensers

98-05 Revised 3/16/2000 Folding Bleachers Accessible Seats, except that

wheelchair seating in bleachers, folding and portable seating systems complying with ICC/ANSI A11 7.1-2003 is permitted for equivalent facilitation to this code.

98-07 Assembly Seating, except that wheelchair disbursement complying with ICC/ANSI A117.1-2003 is permitted for equivalent facilitation to this code.

99-02 Playgrounds

99-08 Door Stops and Other Floor-Mounted Obstructions

00-01 Self Evaluations and Transition Plans

DSA INTERPRETATIONS OF REGULATIONS

	ACCESS
11B-1	Visual Alarms in Classrooms
11B-2	Beveled Lip at Curb Ramps
11B-3	Detectable Warnings at Curb Ramps
11B-4	Detectable Warnings
11B-5	Effort to Operate Exterior Doors

Port of San Francisco Building Code Port Code Procedures

PCP-002	Port Building Code Area of Application
PCP-003	Accessibility Variances and Exceptions to the Code
PCP-008	Port Accessibility Guidelines and Interpretations

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally Approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-2011

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PORT CODE PROCEDURE

NO. PCP-009

DATE : January 1, 2008

SUBJECT : Under-Pier Construction

TITLE : Guidelines for Under-Pier Construction (reserved)

PURPOSE :

REFERENCE :

DISCUSSION :

_____

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Original approved by the Port Commission on 01/01/2008

Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-2016

2016 Port of San Francisco Building Code

PORT CODE PROCEDURE

NO. PCP-010 :

DATE : January 1, 2008

SUBJECT : Structural Plan Checking of Port Projects

TITLE : Port Structural Engineering Quality Control

PURPOSE : The purpose of this Port Code Procedure (PCP) is to describe the quality assurance procedures to be used for structural engineering performed for Port Projects. Port projects are projects developed by Port Staff and its consultants.

REFERENCE : SEAONC (Structural Engineers Association of Northern California) Structural Plan Check Position Statement, March 2004

DISCUSSION : The Port is an organization responsible for both project development and plan checking. This PCP delineates the protocol to be followed for structural plan check review as applied to internally developed designs and is intended to provide the necessary level of professional review to assure compliance with all applicable codes during the plan check process. Structural plans and calculations shall be completely developed by the originating licensed engineer and checked by another licensed engineer.

1. DEVELOP STRUCTURAL PLANS AND CALCULATIONS

    a. A licensed engineer from Port Staff or consultant shall prepare the necessary design drawings and calculations to describe the improvement.

    b. The calculations and computer analysis shall be sufficiently developed and documented to describe the gravity and lateral load resisting systems to permit the plan checker to fully review the improvement without making assumptions or generating separate calculations.

    c. Develop a list of any special inspections that are required during the construction.

    d. The completed design documents and required special inspections shall be submitted to the Chief Harbor Engineer (CHE) for plan check.

2. PLAN CHECKING

    a. The CHE shall assign the plan checking to another licensed engineer.

    b. The plan checking process shall include complete review of the structure's vertical and lateral load systems.

    c. The plan checker shall review the design documents until he or she is fully satisfied with the capacity of the structure to withstand the required loads.

    d. The plan checker shall forward all comments to the CHE for return to the originator to review and incorporate into the design, as applicable.

e. Any unresolved professional design disagreement between the originator and the plan checker shall be resolved by the CHE.

3. DOCUMENTATION

a. The plan check review documents shall be retained in the Port's archives according to the Port's Document Retention Procedure, for not less than 5 years.

b. The originator and the plan checker shall sign all structural design documents. When requested by the CHE, the originator and the plan checker shall stamp the design documents indicating their professional review and concurrence with the design.

b. The final design drawings shall be approved by the CHE.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Original approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26--2016

PORT CODE PROCEDURE

NO. PCP-0011

DATE : January 1, 2007

SUBJECT : Construction Site Safety

TITLE : Tower Crane Site Safety Plan

PURPOSE : The purpose of this Port Code Procedure is to detail procedures regarding tower crane safety which comply with the intent of Port Building Code Section 1704.19.

Implementation of the intent of the code requires that a contractor identify the location of proposed crane operations on a Crane Site Safety Plan and agree to comply with tower crane safety regulations; to require the presence of a safety representative during tower crane erection, jumping, and dismantling and to prohibit these operations during typical rush hours; and to require employment of a flag-person to redirect traffic when loads are lifted over public streets and walkways during typical rush hours.

REFERENCE : 2016 Port of San Francisco Building Code Section 1704.19.
Title 8, Occupational Safety and Health Regulations (CAL/OSHA), Tower Cranes re: Requirements for erection, dismantling, operation, tests/examination of equipment and accessory gear.

DISCUSSION : Following a tower crane collapse in November 1989, the State of California passed legislation regulating certain tower crane operations. The San Francisco Board of Supervisors approved an ordinance based on that state legislation, adding a section regarding tower crane safety requirements to the San Francisco Building Code (SFBC).

Crane safety remains under the jurisdiction of Cal/OSHA, which requires an inspection certification prior to and following erection of a tower crane. While the PSF has no authority over, and its employees have no expertise in, the regulation of cranes; the following forms and procedures are developed to administer a level of safety within the Port of San Francisco equal to that of the City's Department of Building Inspection requirements.

DEFINITIONS :

For the purposes of this Port Code Procedure, the following definitions apply:

1. **Contractor** is the building contractor licensed by the State of California responsible for tower crane site safety for the project.

2. **Tower crane** is a crane in which a boom, swinging jib, or other structural member is mounted on a vertical mast or tower, and includes the following subcategories as defined by Cal/OSHA General Industry Safety Orders, Article 91, 4885(U)(1-4):

a. **Tower crane (climber)** is a crane erected upon and supported by a building or other structure which may be raised or lowered to different floors or levels of the building or structure.

b. **Tower crane (free standing)** is a crane with a horizontally swinging boom which may be on a fixed base or mounted on rails.

c. **Tower crane (mobile)** is a tower crane which is mounted on a crawler, truck or similar carrier for travel or transit.

d. **Tower crane (self-erector)** is a mobile tower crane that is truck- carrier mounted and capable of self-erection.

3. **Jumping a crane** is the process of increasing the height of a tower crane by raising the cab and inserting a modular section beneath it.

GENERAL REQUIREMENTS: A Crane Site Safety Plan is to be submitted the Port of San Francisco Engineering Division's Building Permit Group (BPG) prior to issuance of a building permit for the superstructure for any high-rise building site on which a tower crane will be used.

PROCEDURE : Any new construction permit application submitted for a high-rise construction project shall have a notation made by the plan reviewer regarding the requirements for submittal of a Crane Site Safety Plan. When the contractor confirms that a tower crane will be used, the following procedure is to be followed:

1. The contractor shall provide to the BPG a completed *Crane Site Safety Plan Submittal Form and Crane Safety Compliance Agreement* (Attachment A).

2. The contractor shall indicate on a plan attached to the submittal form the use and location of tower cranes by circling the applicable areas on the plan and by numbering the circled areas according to the corresponding location listed on the form.

Note: A site plan showing what streets will be impacted by the moving, erection, and operation of the tower crane is required by PSF Engineering Encroachment Division in order to obtain a street use permit for crane erection. That site plan can be used as the crane site safety plan by adding the necessary additional information.

3. The contractor shall submit to the BPG two copies of the Crane Site Safety Plan with a Submittal Form and Safety Compliance Agreement attached to each plan.

4. The PSF plan reviewer will review the submittals to determine if all documents comprising the Crane Site Safety Plan are complete and if the Submittal Forms and Safety Compliance Agreements are signed by a California licensed contractor. Incomplete or unsigned documents shall be not be accepted.

5. The PSF shall stamp as ”approved” both copies of a properly submitted Crane Site Safety Plan and shall provide one copy to the contractor, which shall be posted by the contractor at the job site.

6. The plan reviewer shall attach these documents to the approved construction documents for inclusion in the permanent project record.

7. The contractor shall submit to the BPG a copy of a tower crane inspection certificate issued by a Cal/OSHA approved inspection agency following erection of the tower crane and prior to its use. This may be done by mail or in person. This submittal must indicate the permit application or permit number
for the project.

8. BPG shall include the Cal/OSHA Crane Inspection Certificate as part of the approved construction documents.

9. All documents submitted to BPG related to Crane Site Safety shall be Included and retained as part of the approved permit documents.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-2016

Attachment: *Crane Site Safety Plan Submittal Form and Crane Safety Compliance Agreement.*

CRANE SITE SAFETY PLAN SUBMITTAL FORM
& CRANE SAFETY COMPLIANCE AGREEMENT
[Attach form to each copy of plans submitted]

Date _____

Site: _____ Permit Application No: _____

Name of Applicant _____ Phone_____

A. Attached are two (2) copies of a Crane Site Safety Plan which includes the required information, circled and marked with applicable numbers on the Plan:

1. Location of tower crane on the construction site
2. Location of tower crane in adjoining streets
3. Location of crane-related designated loading areas
4. Location of crane-related designated storage areas
5. Tower crane foundation design and details (may be submitted on separate sheet)

B. Copy of Cal/OSHA permit for the erection and operation of a crane is attached, and if required, a copy of California crane operator(s) license(s).

C. Crane is to be used for: [ ] Steel erection [ ] Concrete placement
[ ] Other:_____

D. I will comply with all of the following requirements:

1. Applicable CAL/OSHA safety requirements.
2. Crane manufacturer safety requirements.
3. Safety representative: I will not allow installing, increasing the height ("jumping"), or dismantling of a crane without a safety representative of the crane manufacturer, distributor, or a representative of a licensed crane certifier being present on site for consultation during all such procedures.
4. Prohibited hours: I will not allow installing, increasing the height ("jumping"), or dismantling of a crane during the weekday hours (excluding holidays) of 7:00 a.m. to 9:00 a.m. or between the hours of 4:00 p.m. and 6:00 p.m.
5. Flag person: I will assure that no crane will lift a load over roadways or pedestrian walkways during the hours of 7:00 a.m. through 9:00 a.m. and during the hours of 4:30 p.m. through 7:00 p.m. without a flag person directing the flow of pedestrian and automobile traffic away from the area where the load is being lifted.

E. I will submit a copy of the crane inspection certificate to PSF - BPG after erection of the crane and prior to its use.

_____ _____
Contractor responsible for Crane Site Safety CA Contractor License No.

Received by: _____ Date _____

_____
BPG Plan Reviewer

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PORT CODE PROCEDURE

NO. PCP-013 :

DATE : January 1, 2008

SUBJECT : Inspection

TITLE : Special Inspection for Demolition Work

PURPOSE : For demolition of buildings of Types I, II, III and IV construction, and which are over 2 stories or 25 feet in height, a special inspector shall be on the site to observe and/or supervise the work to assure it is proceeding in a safe manner.

REFERENCE : 2016 Port of San Francisco Building Code

- 1701.1-1701.3; Special Inspection
- 1704.15; Demolition
- 3303.7; Special Inspection for Demolition

DISCUSSION : Demolition work creates ongoing, and often sudden, life hazards. The general requirements for special inspection in PBC Sec. 1704 are made more specific in this ruling to reflect the need for extra supervision of such work.

REQUIREMENT :

The Demolition Contractor or permit applicant shall identify the Special Inspector for demolition work before a demolition permit is issued. For buildings over 6 stories high, the Contractor and/or Special Inspector shall schedule a meeting with the Port of San Francisco Building Inspector to review the demolition work and arrive at a clear understanding on what is expected of all parties prior to the start of work. The Applicant or Demolition Contractor shall notify the Special Inspector and the Port Building Inspector at least two days prior to the start of the demolition operations. By obtaining the permit, the applicant acknowledges the authority of the Special Inspector over the demolition work as described below.

The Special Inspector:

1. Shall be a California registered Civil Engineer or licensed Architect, and preferably, the individual who prepared the approved demolition sequence. Shall be at the site at all times when dismantling or demolition work is proceeding on any component which, when removed, reduces the stability of the building. These include, but are not limited to, the following:

    a. Exterior walls

    b. Bearing walls

    c. Beams, girders and columns

    d. Diaphragms (roof and floors which contribute stability to building)

2. Shall observe and/or direct that the work conforms to the sequence of operations which was approved by PSF. In the event a potentially hazardous situation develops as a result of conditions uncovered or unintentionally created by the demolition work, the Special Inspector

shall notify PSF by telephone as soon as possible, and at that point shall require and allow only corrective work to take place to substantially reduce the hazards present. The Special Inspector shall then not allow any more work to be done until a revised demolition sequence has been submitted to PSF and approved.

In the event an unexpected development occurs which jeopardizes the public, such as materials falling onto the street or partial collapse of a wall, the Special Inspector may allow the demolition work to continue only if all the following conditions are complied with:

a. No continuing hazards to the public exist after the incident.

b. No significant deviations from the approved sequence are necessary as a result of the incident.

c. The Contractor provides/establishes measures and assurances that such incidents will not occur again, to the satisfaction of the Inspector.

d. The Special Inspector reports the incident to PSF in writing as soon as possible. The report shall explicitly address the issues in conditions a through c above.

If the above conditions are not met, the Special Inspector shall stop the job and notify PSF. The Special Inspector shall not allow the work to resume until PSF gives permission.

In the event deviations from the approved sequence are necessary due to unexpected field conditions, and potentially hazardous conditions are not present or would not be created, the Special Inspector may allow or direct such deviations be made without stopping the work. Such deviations shall be reported in the Special Inspectors next report to PSF.

3. Shall make written reports to PSF on a weekly basis or as required by PSF. Such reports shall include information on the progress of the demolition, any deviations which were not reported previously, and a statement that the demolition work is adhering to the approved sequence.

4. May be an employee of the Special Inspector only when the following conditions are complied with:

   a. The employee is a California registered Civil Engineer or licensed Architect.

   b. The employee shall be under the immediate supervision of the Special Inspector. The Special Inspector shall provide to PSF a written statement in which he acknowledges complete responsibility for the inspection work, actions and decisions of the employee.

   c. All reports shall be signed by the Engineer or Architect.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector, 10-26-2016

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PORT CODE PROCEDURE

NO. PCP-014 :

DATE : December 5, 2012

SUBJECT : Permit Process; Inspection

TITLE : Special Inspection and Structural Observation Procedures

PURPOSE : The purpose of this Port Code Procedure is to describe the procedures to be used in the administration and enforcement of special inspection and structural observation requirements of the Port of San Francisco Building Code (PBC). It is intended as an aid for design professionals in their preparation of inspection and observation programs. It provides information for building owners, architects and engineers, contractors, and special inspection agencies about their responsibilities regarding special inspection and structural observation and includes standardized forms and formats applicable to these functions.

REFERENCE :
- 2016 Port of San Francisco Building Code
- Section 108A Inspections
- Chapter 17 Structural Tests and Inspections

I DEFINITION AND

PURPOSE: Special

Inspection
of the building structure or public safety. Special inspection is the review of the work of the contractors and their employees to assure that the approved plans and specifications are and that relevant codes and ordinances are being observed. The special inspection process addition to the regular inspections conducted by Port of San Francisco building inspectors engineer or architect of record as part of periodic structural observation. The special continuous or periodic inspection as required by the Port of San Francisco Building Code.

Good communication between the special inspector and the designers, contractor, and department is essential to project quality assurance.

Structural Observation

Structural Observation means the visual observation of the structural system, for general to the approved plans and specifications, at significant construction stages and at completion structural system. Structural observation does not include or waive the responsibility for the inspections required by Section 108A, Sections 1704 through 1708, and other sections of this code.

II DUTIES AND RESPONSIBILITIES OF THE PARTIES RESPONSIBLE FOR SPECIAL INSPECTION PROGRAM AND STRUCTURAL OBSERVATION PROGRAM

A. Duties and Responsibilities of the Project Owner

The project owner, or the registered design professional in responsible acting as the owner's responsible for funding special inspection services.

B. Duties and Responsibilities of the registered design professional in responsible charge

The registered design professional in responsible charge must be a California registered civil or structural engineer and has many duties and responsibilities related to special inspection and structural observation activities. These include the following:

1. Identify the need for special inspection and structural observation services.

The registered design professional in responsible charge prepares *Statement of Special Inspections* (See Exhibit No. 1) in accordance with section 1704.2.3 of the PBC. The Statement of Special Inspection shall be attached to each set of project plans and specifications which are submitted to the Chief Harbor Engineer as part of building permit application.

2. Review reports from special inspection agencies/special inspectors/structural observer and respond to field discrepancies

The registered design professional reviews all structural observation and special inspection reports. Material and design discrepancies which are not resolved in a timely manner or are about to be incorporated in the work must be brought to the attention of the registered design professional in responsible charge and the Chief Harbor Engineer. Uncorrected field deficiencies observed by the special inspector and structural observer must be brought to their attention. The registered design professional in responsible charge is instrumental in effecting the remedial process of deficiency correction. The registered design professional in responsible charge is responsible for any design changes in addition to acknowledgment and approval of shop drawings which may detail structural information, and for submission of such changes to the Chief Harbor Engineer for approval.

3. Submit final compliance report

The registered design professional in responsible charge shall submit an overall final compliance report to plan review engineer stating that all items requiring special inspection and structural observation were performed in accordance with the approved plans, specifications, and applicable workmanship
provisions of the PBC. See Exhibit No. 1A, *Special Inspection Review and Conformance Certification*,

C. Duties and responsibilities of the registered design professional responsible for the structural observation program

The owner shall employ a California registered design professional (Civil or Structural) to perform structural observation as defined in PBC Section 1702 and as required by PBC Section 1704.5. The registered design professional assigned to perform structural observation shall submit to the plan review engineer and the registered design professional in responsible charge, a written statement declaring that the site visits have been made and identifying any reported deficiencies that, to the best of the his/her knowledge, have not been resolved. See Exhibit No. 3 - *Special Observation Final Compliance Report.* A copy of this report shall be maintained at the job site.

D. Duties and Responsibilities of the Special Inspection Agencies/Special Inspectors

The special inspectors are individuals with highly developed, specialized skills who observe those critical building or structural features which they are qualified to inspect. Duties of the special inspectors and/or inspection agencies include the following:

1. Observe all work for which they are responsible

Special inspectors shall inspect all work for conformance with the Port of San Francisco approved set of plans and specifications and applicable provisions of the PBC.

2. Provide timely reports

The special inspector should complete written inspection reports for each inspection visit and provide the reports in a timely manner. The special inspector or inspection agency shall furnish these reports directly to the plan review engineer and the registered design professional in responsible charge. A copy of these reports shall also be kept at job site. Special inspectors shall bring all non-conforming items to the immediate attention of the contractor. If any such item is not resolved in a timely manner or is about to be incorporated in the work, the registered design professional in responsible charge and the plan review engineer shall be notified immediately. See Exhibit Nos. 5 to 8.

3. Submit a final signed report

Special inspectors or special inspection agencies shall submit a final report signed by a California registered design professional (civil or structural), who is responsible for the special inspection, to the plan review engineer and the registered design professional in responsible charge stating that all items requiring special inspection and testing were constructed, to the best of their knowledge, in conformance with the approved design drawings, specifications, approved change orders and the applicable provisions of the code. See Exhibit No. 2 - *Special Inspection Final Compliance Report.*

E. Duties and Responsibilities of the Chief Harbor Engineer

1. Review and examine plans, specifications and contract documents for compliance with special inspection and structural observation requirements

The Chief Harbor Engineer is charged with the legal authority to review the plans and specifications for compliance with the code requirements.

2. Monitor the special inspection and structural observation activities

The Chief Harbor Engineer shall monitor the job site to see that special inspection and structural observation is being performed and that an adequate number of special inspection staff is present depending upon the extent and complexity of the project.

3. Review inspection reports

The Chief Harbor Engineer receives, reviews and makes the inspection reports part of the inspection records.

4. Review the final report

The Certificate of Occupancy shall not be issued until the final report has been received and approved by the Chief Harbor Engineer.

F. Duties and Responsibilities of the Contractor

The contractor's duties include the following:

1. Notify the special inspector

The contractor is responsible for notifying the special inspector or special inspection agency regarding special inspections required by the Port of San Francisco. Adequate notice shall be provided so that the special inspector has time to become familiar with the project.

2. Provide access to approved plans

The contractor is responsible for providing the special inspector with access to approved plans at the job site.

3. Retain special inspection records

The contractor is responsible for retaining at the job site all special inspection records submitted by the special inspector, and providing these records for review by the Port of San Francisco building inspector upon request.

III SPECIAL INSPECTOR QUALIFICATIONS:

Special Inspectors shall be one of the following:

A. A qualified person employed by the City and County of San Francisco or an approved inspection and testing agency conforming in so far as applicable to the requirements of ASTM E329.

Except for testing of materials and reporting of numerical results, the inspector shall work under the general supervision of a registered design professional, and all reports and certification of compliance must be signed by the engineer.

B. A California registered design professional (civil or structural) or California licensed architect who can demonstrate to the satisfaction of the Chief Harbor Engineer that he or she has the experience and expertise to qualify as a special inspector for the specific type of inspection work, and has appropriate equipment to conduct such inspections and tests.

Note: The above applies to any engineer or architect who is not the registered design professional or architect responsible for the project. Qualifications must be approved by the Chief Harbor Engineer.

C. The licensed architect or registered design professionals (civil or structural) who are responsible for work.

Note: The registered design professional who is responsible for geotechnical investigation work or who prepared the soil report may perform the special inspection of foundation or geotechnical work requiring special inspection.

D. For plant fabrication of precast concrete elements, a registered civil engineer who supervises all phases of quality control work. The registered civil engineer shall be subject to the approval of the Chief Harbor Engineer.

E. For welding, the welding inspector shall be qualified as per/AWS D1.1. The minimum requirements for a qualified welding inspector shall be AWS- certified welding inspector (CWI), as defined in the provisions of the AWS QCI.

IV SPECIAL INSPECTION AND STRUCTURAL OBSERVATION OPERATIONAL PROCEDURE WITHIN ENGINEERING DIVISION'S BUILDING PERMIT GROUP (BPG)

A. BPG - Plan Review Engineers and Building Inspectors

1. Review the special inspection and structural observation requirements in S*tatement of Special*

Inspection (Exhibit no. 1) prepared by the registered design professional in responsible charge.

2. During construction, the plan review engineer reviews and files special inspection progress reports. If reports indicate problems which need to be brought to the attention of the building inspector, the plan review engineer forwards a copy of the report to the appropriate building inspector. The building inspector will notify the contractor who in turn shall notify the registered design professional in responsible charge to resolve the field problems. Resolution reports shall be submitted to plan review engineer for review and file. See Exhibit No. 4, *Special Inspection/Structural Observation Transmittal Letter.*

3. Before final building inspection approval, the owner submits to the plan review engineer final compliance reports covering each item requiring special inspection and structural observation. Final reports shall be wet signed and stamped by the responsible engineer of the special inspection agency, geotechnical firm, engineer or architect of record - as appropriate to the type(s) of special inspection. See Exhibit No. 2, *Special Inspection Final Compliance Report and Exhibit* No. 3, *Structural Observation Final Compliance Report*. The final compliance reports shall be accompanied by an overall final compliance report prepared by the registered design professional in responsible charge. See Exhibit No. 1A, *Special Inspection Review and Conformance Certification.*

4. When final reports are submitted, the plan review engineer will review the documents for compliance and completeness. If documentation is not sufficient, plan review engineer informs the registered design professional in responsible charge regarding what items are missing. If compliance has been verified, plan review engineer signs and dates Special Inspection and Structural Observation Program form.

5. Plan review engineer files the final compliance approval in the Special Inspection file.

6. Plan review engineer routes a copy of the signed Special Inspection and Structural Observation Program form to the building inspector. Building inspector records receipt of the form on the permit Job Card and routes the form to the permit file.

7. For permits issued over the counter when special inspection is required, staff makes copy of the Special Inspection and Structural Observation Form and distributes as follows:

a. One copy to applicant,
b. One copy to the plan review engineer.

B. Building Inspection

1. For projects requiring special inspection, at the first site inspection, building inspectors inform the applicant or applicant's agent of the Special Inspection procedures and discuss the requirements with the person in charge of the work. The Special Inspector shall be identified to building inspector prior to start of the work for which special inspection is required. See Exhibit No. 1, *Schedule of Special Inspections.*

2. Building inspectors monitor the special inspection activities at the project site for compliance with this procedure. In the event that building inspectors discover that required special inspection is not being performed, or not in compliance with the approved plans, they are authorized to suspend or stop the progress of the work.

ATTACHMENTS:

1. Exhibit No. 1-Statement of Special Inspections

1A-Exhibit No. 1A-Specail Inspection Review and Conformance Certification

2. Special Inspection Final Compliance Report

3. Structural Observation Final Compliance Report

4. Special Inspection/Structural Observation Transmittal Letter

5. Special Inspection Record

6. Special Inspection Daily Report

7. Special Inspection Weekly Report

8. Special Inspection Discrepancy Notice

Eunejune Kim Date

Chief Harbor Engineer

Port of San Francisco

Originally Approved by the Port Commission on 01/01/2008

Update reviewed and approved by Neil Friedman, Chief Building Inspector, 10-26-2016

Exhibit No. 1
Statement of Special Inspections

ADDRESS_____ PERMIT NO._____

This Statement of Special Inspections is submitted in fulfillment of the requirements of CBC Sections 1704 Included are:

- Schedule of Special Inspections and tests applicable to this project:
- List of the Testing Agencies and other special inspectors that will be retained to conduct the tests and inspections.

Special Inspections and Testing will be performed in accordance with the approved plans and specifications, this statement and PBC (CBC) Sections 1705

The Schedule of Special Inspections summarizes the Special Inspections and tests required. Special Inspectors will refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests and inspections required by the approved plans and specifications will also be performed.

Interim reports will be submitted to the Chief Harbor Engineer and the Registered Design Professional in Responsible Charge in accordance with PBC (CBC) Section 1704.2.4

A Final Report of Special Inspections documenting required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Final Completion and Occupancy (Section 109A.1, 109A.3, 1704.2.4). A Certificate of Temporary Occupancy (Section 109A.4) may be issued with written approval of the Chief Harbor Engineer. The Final Report will document:

- Required special inspections.
- Correction of discrepancies noted in inspections.

The Owner recognizes his or her obligation to ensure that the construction complies with the approved permit documents and to implement this program of special inspections. In partial fulfillment of these obligations, the
Owner will retain and directly pay for the Special Inspections as required in CBC Section 1704.2.

This plan has been developed with the understanding that the Chief Harbor Engineer will:

- Review and approve the qualifications of the Special Inspectors who will perform the inspections.
- Monitor special inspection activities on the job site to assure that the Special Inspectors are qualified and are performing their duties as called for in this Statement of Special Inspection.
- Review submitted inspection reports.
- Perform inspections as required by the local building code.

Prepared by:		Owner's Authorization	
Registered Design Professional in Responsible Charge (Print Name):		Owner (print name)	
Signature	Date	Signature	Date
Plan Review Engineer Acceptance			
(print name)	Signature		Date

Exhibit no. 1 continued

Schedule of Inspection, Testing Agencies, and Inspectors

The following are the testing agencies and special inspectors that will be retained to conduct tests and inspection on this project.

Responsibility	Firm (or Registered Professional)	Address, Telephone, e-mail
1. Special Inspection (except for geotechnical)		
2. Material Testing		
3. Geotechnical Inspections		
4. (Reserved)		
5. Structural Observation		

Seismic Requirements (Section 1704.3.2)

Description of seismic-force-resisting system and designated seismic systems subject to special inspections as per Section 1704.3.2:

The extent of the seismic-force-resisting system is defined in more detail in the construction documents.

Wind Requirements (Section 1704.3.3)

Description of main wind-force-resisting system and designated wind resisting components subject to special inspections in accordance with Section 1704.3.3

The extent of the main wind-force-resisting system and wind resisting components is defined in more detail in the construction documents.

Exhibit No. 1 continued:

SCHEDULE OF SPECIAL INSPECTION

Notation Used in Table:

Column headers:

C Indicates continuous inspection is required.
P Indicates periodic inspections are required. The notes and or contract documents should clarify.

Box entries:

X Is placed in the appropriate column to denote either "C" continuous or "P" periodic inspections.
--- Denotes an activity that is either a one-time activity or one whose frequency is defined in some other manner.
***** √ **Required**

Additional detail regarding inspections and tests are provided in the project specifications or notes on the drawings.
This table is a guide only. It can be modified or edited as allowed in Port of San Francisco Building Code.

MARK BOXES WITH "*" BELOW WHERE INSPECTION REQUIRED

VERIFICATION AND INSPECTION	C	P	NOTES	*
1704.2.5 - Inspect fabricator's fabrication and quality control procedures.	---	---		
1705.2.1 – Structural Steel				
Special Inspection for structural steel shall be in accordance with the quality assurance inspection requirements of AISC 360				
Table 1705.2.2 – Steel Construction Other Than Structural Steel				
1. Material verification of cold-formed steel deck:				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.		X		
b. Manufacturer's certified test reports.		X		
2. Inspection of welding:				
a. Cold-formed steel deck:				
1) Floor and roof deck welds		X		
b. Reinforcing Steel				
1) Verification of weldability of reinforcing steel other than ASTM A706		X		

2) Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement	X			
3) Shear reinforcement	X			
4) Other reinforcing steel		X		
Table 1705.3 – Concrete				
1. Inspection of reinforcing steel, including prestressing tendons and placement.		X		
2. Inspection of reinforcing steel welding in accordance with Table 1705.2.2 Item 2b.	---	---		
3. Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used.		X		
4. Inspection of anchors post installed in hardened concrete.		X		
5. Verifying use of required design mix.		X		
6. At time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete.	X			
7. Inspection of concrete and shotcrete placement for proper application techniques.	X			
8. Inspection for maintenance of specified curing temperature and techniques.		X		
9. Inspection of prestressed concrete.				
a. Application of prestressing forces.	X			
b. Grouting of bonded prestressing tendons in the seismic force-resisting system.	X			
10. Erection of precast concrete members.		X		
11. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.		X		
12. Inspect formwork for shape, location, and dimensions of the concrete member being formed.		X		
1705.4 Masonry Construction				
Masonry construction shall be inspected and verified in accordance with TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6 quality assurance program requirements				
1705.5 Wood Construction				
1705.5.1 - Inspect high-load diaphragms: --- ---				

1705.5.2 – Metal plate connected wood trusses spanning 60 feet or greater				
Table 1705.6 - Inspection of Soils				
1. Verify materials below shallow foundations are adequate to achieve the desired bearing capacity.		X		
2. Verify excavations are extended to proper depth and have reached proper material.		X		
3. Perform classification and testing of compacted fill materials.		X		
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X			
5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly.		X		
Table 1705.7 - Driven Deep Foundations				
1. Verify element materials, sizes and lengths comply with the requirements.	X			
2. Determine capacities of test elements and conduct additional load tests, as required.	X			
3. Observe driving operations and maintain complete and accurate records for each element.	X			
4. Verify placement locations of piles and their plumbness. a. Confirm type and size of hammer. b. Record number of blows per foot of penetration. c. Determine required penetrations to achieve design capacity. d. Record tip and butt elevations and document any damage to foundation element.	X			
5. For steel elements, perform additional inspections in accordance with Section 1705.2	---	---		
6. For concrete elements and concrete-filled elements, perform additional inspections in accordance with Section 1705.3	---	---		
7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge.	---	---		
Table 1705.8 - Cast-In-Place Deep Foundations				
1. Observe drilling operations and maintain complete and accurate records for each element.	X			
2. Verify locations of piers and their relation to plumb. Confirm: a. Element diameters, b. Bell diameters (if applicable), c. Lengths, embedment into bedrock, if applicable d. Adequate end strata bearing capacity. e. Record concrete or grout volumes.	X			

3. For concrete elements, perform additional inspection in accordance with Section 1705.3				
1705.9 – Helical Pile Foundations				
1705.10 – Special Inspections for Wind Resistance				
1705.10.1 – Structural Wood				
1. Inspect field gluing operations of elements of the seismic- force-resisting system.	X			
2. Inspect nailing, bolting, anchoring, and other fastening of components within the seismic-force-resisting system, including: a. wood shear walls, b. wood diaphragms, c. drag struts, braces, d .shear panels, e. hold-downs.		X		
1705.10.2 – Cold-formed steel light-frame construction				
1. Welding of elements of the wind-force-resisting system.		X		
2. Inspection of screw attachments, bolting, anchoring, and other fastening of components within the wind-force-resisting system including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs.		X		
1705.10.3 – Wind-resisting components				
1. Roof Cladding		X		
2. Wall Cladding		X		
1705.11 Special Inspections for Seismic Resistance				
1705.11.1 – Special inspection for structural steel shall be in accordance with the quality assurance requirements of AISC 341				
1705.11.2 - Structural Wood				
1. Inspect field gluing operations of elements of the seismic-force-resisting system.	X			
2. Inspect nailing, bolting, anchoring, and other fastening of components within the seismic-force-resisting system, including: a. wood shearwalls, b. wood diaphragms, c. drag struts, braces, d. shear panels, e. hold-downs.		X		
1705.11.3 - Cold-Formed Steel Framing				

1. Welding of elements of the seismic-force-resisting system.		X		
2. Inspection of screw attachments, bolting, anchoring, and other fastening of components within the seismic-force-resisting system including shear walls, braces, diaphragms, collectors (drag struts) and hold-downs.		X		
1705.11.4 – **Designated seismic systems**				
1705.11.5 - Architectural Components				
1. Inspect erection and fastening of exterior cladding weighing more than 5 psf.		X		
2. Inspect erection and fastening of interior and exterior non-bearing walls weighing more than 15 psf.		X		
3. Inspect erection and fastening of interior and exterior veneer weighing more than 5 psf.		X		
1705.11.6 - Mechanical and Electrical Components				
1. Inspect anchorage of electrical equipment for emergency or stand-by power systems in structures assigned to Seismic Design Category C, D, E, or F.		X		
2. Inspect anchorage of non-emergency electrical equipment in structures assigned to Seismic Design Category E or F.		X		
3. Inspect installation of piping systems and associated mechanical units carrying flammable, combustible, or highly toxic contents and their associated mechanical units in structures assigned to Seismic Design Category C, D, E or F.		X		
4. Inspect installation of HVAC ductwork that contains hazardous materials in structures assigned to Seismic Design Category C, D, E or F.		X		
5. Inspect installation of vibration isolation systems where required by Section 1707.7.		X		
1705.11.7 - Anchorage of storage racks and access floors 8 feet or greater in height.		X		
1705.11.8 - Seismic isolation system:		X		
1705.13 - Sprayed Fire-Resistant Materials				
1. Physical and Visual Tests per PBC 1705.13.1 Demonstrate compliance with listing and fire resistance rating: a) Condition of substrate b) Thickness of application c) Density of pounds per cubic foot d) Bond strength adhesion/cohesion e) Condition of finished application				---
2. Structural member surface conditions per PBC 1705.13.2	---	---		
3. Application per PBC 1705.13.3	---	---		

4. Thickness per PBC 1705.13.4	---	---		
5. Density per PBC 1705.13.5	---	---		
6. Bond strength per PBC 1705.13.6	---	---		
1705.14 - Mastic and Intumescent Fire-Resistant Coating	---	---		
1705.15 - Exterior Insulation and Finish Systems (EIFS)	---	---		
1705.16 – Fire-resistant penetrations and joints	---	---		
1705.17 - Smoke Control System	---	---		
Please list any additional requirements below:				
		x		

Schedule of Structural Observation (Section 1710):

Item	List Structural Observer	Frequency and Extent of Observation	*
Seismic resistance			
Wind requirements			
Please list any additional requirements			
Please list any additional requirements			

Exhibit No.
1A
(Required Format)
SPECIAL INSPECTION REVIEW AND CONFORMANCE CERTIFICATION

[Date]

Plan Review Engineer
Port of San Francisco Engineering Division
Building Permit Group
Pier 1, The
Embarcadero San
Francisco, CA 94111

Building Permit No. _____

Re: Project Address: _____

All items requiring special inspection and structural observation were performed in accordance with Exhibit No. 1 and the approved plans, specifications, and applicable workmanship provisions of the PBC. Substantiating reports are attached in Exhibits 2, 3, 5, 6, 7 and 8.

By Registered Design Professional In Responsible Charge

Signed: _____ Date: _____

Print full name: _____

cc: Client/Project Owner

Exhibit No. 2
(Required Format)
SPECIAL INSPECTION FINAL COMPLIANCE REPORT

[Date]

Plan Review Engineer
Port of San Francisco Engineering Division
Building Permit Group
Pier 1, The
Embarcadero San
Francisco, CA 94111

Building Permit No. _____

Re: Project Address: _____

In accordance with Section 1704 of the 2016 Port of San Francisco Building Code, Special Inspection has been provided for items as specified in the Statement of Special Inspections (Exhibit No. 1):

Based upon inspections performed and my substantiating reports, it is my professional judgment that, to the best of my knowledge, the inspected work was performed in accordance with the approved plans, specifications, and applicable workmanship provisions of the Port of San Francisco Building Code.

Signed:_____ Agency:_____
[Agency Responsible Engineer's stamp]

Print full name: _____

cc: Client/Project Owner

Exhibit No. 3
(Required Format)
STRUCTURAL OBSERVATION FINAL COMPLIANCE REPORT

[Date]

Plan Review Engineer
Port of San Francisco Engineering Division
Building Permit Group
Pier 1, The Embarcadero
San Francisco, CA 94111

Building Permit No. _____

Re: Project Address: _____

In accordance with Section 1710 of the 2016 Port of San Francisco Building Code, I have provided structural observation for items as specified in the Statement of Special Inspections (Exhibit No. 1):

Based upon inspections performed and my substantiating reports, it is my professional judgment that, to the best of my knowledge, the observed structural work was performed in accordance with the approved plans, specifications, and applicable workmanship provisions of the Port of San Francisco Building Code.

By Registered Design Professional:

Signed: _____ Date: _____

Print full name: _____

cc: Client/Project Owner

Exhibit No. 4
(Required Format)

Special Inspection/Structural Observation Transmittal Letter

From: _____ **Date:**
Plan Review Engineer

To: _____
PSF Building Inspector

Building Permit No. _____

Re: Project Address: _____

The attached special inspection/structural observation report(s) show(s) discrepancies:

- ☐ Contact plan checker for discussion on proposed action
- ☐ Issue correction notice to resolve discrepancy(s)
- ☐ Stop work in the area(s) of discrepancy(s)
- ☐ Stop all work. Conference with Chief Harbor Engineer or Senior Building Inspector Required
- ☐ Other:

☐ **All final reports were received and are acceptable. Final inspection may be scheduled.**

Exhibit No.

(Recommended for Format Purpose only)

SPECIAL INSPECTION RECORD

Site Address: _____ Permit No.: _____

NOTE: Each special inspector shall complete for each day's inspection. Post this card adjacent to building permit inspection the record card. Weekly reports to be submitted by each special inspector/inspection agency to the Port Plan Review Engineer and Chief Building Inspector.

When attached to the job inspection record card, this card becomes a part of inspection record.

INSPECTION TYPE	SPECIAL INSPECTOR	ID NO.	DATE	NOTES	TIME	
					ARR	LEFT

(Recommended for Format Purposes, only)

SPECIAL INSPECTION DAILY REPORT

Building Permit No. _____ **Date** _____

Project Name/Address:

Inspection Type(s)/Coverage: _____

⑤ **Continuous** ⑤ **Periodic; frequency:** _____

Inspections made, including locations: _____

_____

_____

_____

_____

_____

Tests performed: _____

_____

_____

Items requiring 1) Correction, 2) Correction of previously listed items, and 3) Previously listed uncorrected items: _____

_____

_____

_____

Changes to approved plans authorized by engineer or architect of record: _____

_____

_____

_____

_____

Comments: _____

_____

_____

_____

To the best of my knowledge, work inspected was in accordance with the Port of San Francisco approved plans, specifications, and applicable workmanship provisions of the PBC except as noted above.

Special Inspector: _____

Inspection Agency: _____

(Recommended for Format Purposes, only)

SPECIAL INSPECTION WEEKLY REPORT

Building Permit No. _____

Project Name/Address: _____

Inspection Type(s)/Coverage: _____

☐**Continuous** ☐ **Periodic; frequency:** _____

Total Inspection Time Each Day

Date:						
Hours:						
Inspector:						

Inspections made, including locations: _____

_____

Tests performed: _____

_____

Items requiring 1) Correction, 2) Correction of previously listed items, and 3) Previously listed uncorrected items:

_____

_____

_____

_____

Changes to approved plans authorized by engineer or architect of record: _____

_____

_____

Comments: _____

_____

_____

_____

_____

To the best of my knowledge, work inspected was in accordance with the Port of San Francisco approved plans, specifications, and applicable workmanship provisions of the PBC except as noted above.

cc: Port Plan Review Engineer and Chief Building Inspector
Engineer/Architect

(Recommended for Format Purposes, only)

SPECIAL INSPECTION DISCREPANCY NOTICE

Building Permit No. _____

Project Name/Address:

Inspection Type(s)/Coverage: _____

⑤ Continuous ⑤ Periodic; frequency: _____

Notice delivered to: ⑤ Contractor ⑤ Engineer/Architect ⑤ Building Inspector

The following discrepancies require correction and inspection approval prior to proceeding with this phase of the work:

_____
_____
_____
_____
_____
_____
_____

_____
_____

_____
_____
_____
_____
_____
_____
_____
_____

Signed: _____

Inspection Agency: _____

Print full name & ID Number: _____

DO NOT REMOVE THIS NOTICE
Post with building permit inspection record card

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PORT CODE PROCEDURE

NO. PCP-015 :

DATE : January 1, 2008

SUBJECT : Permit Process

TITLE : Over-the-Counter Permit Processing (Reserved)

PURPOSE :

REFERENCE :

DISCUSSION :

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-2016

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PORT CODE PROCEDURE

NO. PCP-016 :

DATE : January 1, 2008

SUBJECT : Bi-Annual Permit - Port Maintenance Division (Section 106A.1.3)

TITLE : Procedures for Processing Bi-Annual Port Maintenance Permits (Reserved)

PURPOSE :

REFERENCE :

DISCUSSION :

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally Approved by the Port Commission on 01/01/2008
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-2016

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PORT CODE PROCEDURE

NO. PCP-17 :

DATE : 03/23/2010

SUBJECT : Permit Application Procedure for Flood Prone Areas

TITLE : Port Variance Procedure for Flood Prone Areas

PURPOSE : To provide a procedure for processing building permit applications for proposed work in properties in designated flood prone areas.

REFERENCE : PBC Section 104A Organization and Enforcement
PBC Section 104A.1 Enforcement Agency
PBC Section 104A.2 General
PBC Section 104A.2.1.1 Floodplain Management
PBC Section 104A.2.1.2 Floodplain Variance
PBC Section 105A Port Building Code Review Board
PBC Section 109A.3 Certificate Issued
PBC Section1612.6 Alternate Flood Provisions

DISCUSSION :

The Port Building Code (PBC) incorporates the City and County of San Francisco Floodplain Management Ordinance at Section 104A.2.1.1 and provides for engineering standards in Chapter 16. PBC Section 104A.2.1.2 permits variances from requirements for new construction and substantial improvements of existing facilities in identified flood prone areas. The Chief Harbor Engineer, per/ PBC Section 104A.2.2, has the authority to hear, review and determine, on a case by case basis, if a specific variance is to be granted for property located within the jurisdiction of the Port.

The variance criteria in this procedure apply only to parcels, buildings and structures located in flood prone areas per 1612.3. The need to protect persons and property from flooding requires that variance standards are strictly interpreted and enforced. Variances will be considered only in exceptional cases. The variance criteria will provide the Chief Harbor Engineer with information to determine whether an alternative other than a variance may be appropriate. The Chief Harbor Engineer will approve a variance only after detailed requirements are identified and incorporated into the design. The Chief Harbor Engineer will not issue a building permit for a substantial improvement requiring a variance from PBC Section 104A.1.3 or 1612 until after the variance is approved.

CRITERIA :

In the request for a variance, the applicant shall submit to the Chief Harbor Engineer for review:

1. Applicant's written analysis and conclusions regarding all technical aspects, evaluations, relevant factors, standards, engineering and construction options, and PBC requirements applicable to the proposed improvement;

2. A California licensed engineer’s written analysis of: (a) whether the improvement is likely to cause any imminent or substantial danger that materials may be swept onto other lands due to

3. flooding or erosion, whether the improvement causes any imminent or substantial danger to life and/or property due to flooding or erosion damage; and (c) the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site and the expected effects of such forces or loads to the proposed improvement or facility;

4. The significance of the proposed improvement or facility in providing important services or public benefits to the community;

5. The necessity of a waterfront location to the structure;

6. The ability of the proposed improvement or facility to ensure continuous safe access to the site for vehicles (emergency and non-emergency) in time of flood; and

7. A detailed cost analysis of providing governmental services to the site during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas electrical, and water systems, and streets and bridges.

ISSUANCE :

A. Variances shall only be issued if the Chief Harbor Engineer's determines, based upon required submittals, that:

1. The applicant has demonstrated good and sufficient reason for the requested variance;

2. Failure to grant the variance would result in exceptional hardship to the applicant; and

3. Granting the requested variance would not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create a nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

In furtherance of the purpose of PBC Section 104A.2.1.1, Section 104A.2.1.2, Chapter 16 and this Port Code
Procedure, the Chief Harbor Engineer may attach additional conditions when granting variances.

CONSIDERATIONS :

A. Generally, variances may be issued for structures in flood prone areas, including facilities located seaward of the reach of mean high tide, providing that the structure is adequately connected to the pier deck, the pier deck is above the Base (100-year) Flood Elevation noted in the PBC, if denial would cause other hardships, such as re-use of existing pier-supported facilities located over the water where structural elements may protrude below FEMA/ASCE 24-05 prescribed elevations but are determined sound and compliant with PBC Flood Load provisions through engineering analysis reviewed and approved through the Port Plan Check review process.

B. Variances shall only be issued upon the Chief Harbor Engineer's determination that the variance is the minimum necessary to afford relief. “Minimum necessary” means a minimum of deviation from the PBC requirements.

C. Any variance granted under this procedure will be evidenced by a written document signed by the Chief Harbor Engineer.

APPEALS :

Appeals from the Chief Harbor Engineer's determination concerning any variance shall be heard and decided by the Port Building Code Review Board in accordance with Port Building Code Section 105A.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Originally approved by the Port Commission on 5/25/2010
Update reviewed and approved by Neil Friedman, Chief Building Inspector 10-26-2016

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PORT CODE PROCEDURE

NO. PCP-018 :

DATE : January 1, 2011

SUBJECT : Solar Energy Permitting Procedures for Solar Photovoltaic Systems

TITLE : Solar Energy Application Package – Photovoltaic (SEA-PAC PV)

PURPOSE : In an effort to promote consistent standards to achieve a timely, cost-effective process for reviewing solar energy building permit application submittals; this standardized Solar Energy Application Package for Photovoltaic Systems (SEA-PAC PV) procedure has been developed for roof mounted PV systems within the jurisdiction of the Port of San Francisco. Through this procedure, the Chief Harbor Engineer directs Engineering staff to route and review building permit applications that meet the detailed requirements of a SEA-PAC PV submittal in front of all other applications for an immediate review at minimum costs and requests all Port divisions to expedite the applications in the same manner.

REFERENCE : California Government Code Section 6580.5

DISCUSSION : California Legislature has determined through CA Section 6580.5 that energy conservation and the promotion of solar energy systems is a state wide concern. Photovoltaic (PV) systems have emerged as one of the leading solar energy systems in use today. Generally, the procedure for building permit applications for solar systems involves a two step process. First is the plan review stage where information presented by an applicant is reviewed for accuracy, completeness and compliance with the health and safety requirements of the building codes. Second is the field inspection stage where the installation is reviewed for compliance with approved plans and documents. In keeping with CA Section 6580.5, these reviews are limited to those standards and regulations necessary to ensure that solar energy systems will not have a specific, adverse impact upon the public health or safety. Section 6580.5 states local jurisdictions are not allowed to create unreasonable barriers to solar system installations, including, but not limited to, design review for aesthetic purposes. The intent of SEA-PAC PV is to guarantee nondiscretionary issuance of solar energy permits, encourage the installation of such systems by removing obstacles and minimize permit costs for such systems, while ensuring public and property safety.

PERMIT FEES : A building permit is required which includes electrical permit and inspection fees. Fees shall be based at the rates established below:

Building Permit:	PBC Table 1A-A Alteration permit fee (using a $1.00 valuation)
Building Plan Review:	PBC Table 1A-B Plan review fees for alteration (80% of Building Permit Fee)
Electrical Permit:	PBC Table 1A-E Standard permit issuance fee
Electrical Plan Review:	PBC Table 1A-B Electrical Plan Review (1 hr. max.)
Electrical Inspection:	PBC Table 1A-E Standard Inspection Fee (2 insp. min.)
Fire Plan Review:	SFFC Table 1-113-B Standard Plan Review (using a $1.00 valuation)
Fire Inspection:	SFFC Table 1-113-C Standard Fire Inspection Fee

NOTE: Fees are based on installations to an existing roof system that is structurally sound. Additional valuation, plan review and/or inspection fees may be required for work that, in the opinion of the Chief Harbor Engineer, includes structural repair and/or extensive electrical systems.

DESIGN REVIEW : Permit submittals using SEA-PAC PV may be accepted at the Permit Desk without a review for completeness, other than verification that a PV Solar Worksheet (See Attachment A) has been completed and signed by the applicant. The applicant (or agent) will have the responsibility of providing all information necessary. Applications submitted that do not meet the requirements detailed in this procedure may be put on hold status and required to submit additional information or documentation in order to assure code compliance.

Planning	Review is not required for installations of solar equipment on an existing building except where the installation of the solar photovoltaic system creates or is part of a vertical or horizontal addition to a building, such as a new roof structure or overhang. Applications for installations on existing buildings will be copied and sent to Planning for informational purposes only.
Accounting	Review and approval is required.
Real Estate	Review and approval is required.
Maritime	Maritime review and approval is not required.
HazMat	Review and approval required if scope of work includes removal of roofing materials or is determined to include a potential adverse effect to the bay waters or wildlife.
Utilities	Review and approval required.

STRUCTURAL : Structural

Structural plan review and inspection is required in order to ensure public safety.

Exception:

In lieu of the structural review by Port plan review engineers, structural safety may be solely ensured through a California licensed engineer. For these PV assemblies, the submittal must include an engineer's structural analysis of the PV and roof framing, including all connections, demonstrating code compliance for vertical and horizontal loads and an official written statement by the licensed engineer verifying that, to the best of the engineer's knowledge, no structural deficiencies exist.

At the conclusion of the work, an inspection and report by the certifying engineer indicating that inspections were made, that the installation was performed in compliance with the design, and that there are no structural deficiencies may be accepted in lieu of structural inspections by building inspection staff.

FIRE ACCESS : Fire Review — Port Fire Marshall review and approval required.

INSPECTIONS :

Building	Building inspection of wiring methods, panel installation and final approval is required for all permits.
Fire	Fire inspection requirements shall be determined by the Port Fire Marshall.
HazMat	HazMat inspection requirements shall be determined by a Port Environmentalist.

WORK SHEET : A PV Solar Work Sheet (See Attachment A) is required for all SEA-PAC PV submittals. The Work Sheet must include an Informational Check List completed and signed by the applicant and 11"x17" minimum sized diagram(s) providing the following information:

- ✓ General information: Name of applicant, site address, licensed contractor, size of system proposed
- ✓ Electrical drawing(s) signed by California Licensed Electrical Engineer or C10 Licensed contractor who is going to perform the installation work.
- ✓ Fully dimensioned site plan, single line diagram of electrical equipment clearly indicating the size of main panel, sub panels, PV system equipment, including make model, size of units, and disconnects.
- ✓ Conductor wiring methods and insulation rating, system and solar panel grounding methods as per inverter and solar panel manufacturer's listings, and PV system DC and AC disconnects
- ✓ Signage (on panel(s), disconnects and transmission line conductors)
- ✓ Placement of equipment and modules with associated access and pathways
- ✓ Equipment type, listing, testing agency approvals including maximum weight of modules and racks, wire type, method of grounding of PV modules and cut sheets for mounting details.
- ✓ Access to and location of roof mounted apparatus such as mechanical equipment, antennas, cameras, etc.
- ✓ Fire access pathways for emergency response, smoke ventilation, standpipes and other emergency equipment located on the roof.
- ✓ Roof framing plan and structural details (or engineers structural analysis)

GENERAL REQUIREMENTS : Solar photovoltaic panels must be supported on the roof or surface of the building that they serve

Solar photovoltaic panels may be installed over only one roof covering of a flat/built up roof or two coverings of a shingled roof, unless otherwise approved by the Chief Harbor Engineer

Storage batteries are not part of the system

PV disconnect shall be installed in a readily accessible location and means of disconnect shall be located together when possible

All electrical panel disconnecting means shall be designed to shut off all power (solar and domestic)

All sharp edges and fastener tips shall be covered or crimped over in order to minimize risk of injury to emergency responders or other individuals requiring access to the roof top

All roof surface mounted conduits, pipes, braces, etc. crossing access pathways are to be clearly identified by a red/white reflective tape, or other approved identifying material

Provide permanent tag near main disconnect indicating that the facility is served by PV.

Eunejune Kim Date
Chief Harbor Engineer
Port of San Francisco

Reviewed and updated by Neil Friedman, Chief Building Inspector, 10-26-2016

SEA-PAC-PV

SOLAR – ENERGY
APPLICATION PACKAGE

PHOTOVOLTAIC

SUBMITTED FOR

RAPID REVIEW

SEA-PAC PV

Diagram Information
(Unchecked boxes may delay the review process)

- □ Yes Is a site diagram or plan provided showing the site location?
- □ Yes Is a single line wiring diagram or plan provided?
- □ Yes Is Array configuration shown?
- □ Yes Is Array wiring identified?
- □ Yes Is Combiner/junction box defined?
- □ Yes Is AC/DC disconnect box identified?
- □ Yes Is Equipment grounding specified?
- □ Yes Is Conduit from array to power source identified?
- □ Yes Is Conduit from disconnect to inverter identified?
- □ Yes Is System grounding identified?
- □ Yes Are cut sheets provided for the mounting hardware?
- □ Yes Is diagram/plan noted to crimp sharp edges and fastener tips?
- □ Yes Are surface mounted conduits, pipes, braces, etc. noted as being identified with red/white reflective tape or other approved means?
- □ Yes Do plans note marking for warning signage with permanently affixed labels having a red background with red lettering at the Main Service Disconnect, DC Current Conduit, Raceways, Enclosures, Cable Assemblies, and J Boxes?

General Information
(Unchecked boxes may delay the review process)

- □ Yes Are panels solely supported on the structure they serve?
- □ Yes Is this application for a flat roof with no more than one roof covering?
- □ Yes Is this application for a pitched roof with no more than two roof coverings?
- □ Yes Is the PV disconnect located in a readily accessible location?

PCP-018 ATTACHMENT "A" (SIDE B)

Roof Design

(Check appropriate boxes)

- □ A roof framing plans and attachment details are provided.
- □ A California licensed engineer's structural analysis is provided.
- □ An official written statement from a California licensed engineer verifying that site visits have been made; including a report that, to the best of the engineers knowledge, no structural deficiencies exist at the conclusion of the work performed under the permit **will be submitted at the conclusion of the work.**

PV System Components

Per Module Manufacturer and Model

Photovoltaic Panel _____

Rated Power (Max) _____ Watts

Open Circuit Voltage (Voc) _____ VDC

Short Circuit (Isc) _____ Amps DC

Maximum Voltage (Vmax) _____ VDC

Maximum Current (I max) _____ Amps DC

Inverter Model _____

FIN:

Module Configuration

No. of Modules in Series _____

No. of Strings in Parallel _____

DC Grounding Conductor _____AWG _____CEC Sec 250.166

AC Grounding Conductor _____AWG _____CEC Sec 250.166

Site Address/Tenant Name:

Installer Name/Address/Contact Number(s):

Prepared by:

Sign:

Date:

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