



Draft Tiered Site-Specific Environmental Assessment

**Joint Fire and Police Maritime Security
Operations Center Upgrades, Fire Station 5 City
of Tacoma, Pierce County Washington**

Port Security Grant Program
Project # 2009-PU-T9-K044 (33)

April 5, 2011



FEMA

Federal Emergency Management Agency
Department of Homeland Security
500 C Street, SW
Washington, DC 20472

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Deputy Regional Environmental Officer, FEMA Region X

I. Background

The City of Tacoma (City) has applied for fiscal year 2009 funding assistance from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) Port Security Grant Program (PSGP) on behalf of the Tacoma Fire Department (TFD) and Port of Tacoma (Port). The Marine Exchange of Puget Sound is the Fiduciary Agent for the PSGP for FEMA and this project. The City proposes to use PSGP funds to upgrade and install dock infrastructure as part of a separately funded major remodel of TFD Fire Station #5. The facility currently houses the City's Emergency Management Office and combined modifications will result in a Joint Fire and Police Maritime Security Operations Center at Fire Station #5. The floats, piles, and gangway that will be replaced by the project have already been removed as a result of past storm damage and severe deterioration.

In accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ), 40 Code of Federal Regulations (CFR) Parts 1500-1508; and 44 CFR Part 10, FEMA's NEPA implementing procedures; a Programmatic Environmental Assessment (PEA) for Grant Programs Directorate projects, which includes the PSGP, was prepared and a Finding of No Significant Impact (FONSI) issued in July 2010. The PEA and FONSI are available at: <http://www.fema.gov/library/viewRecord.do?id=4143>. This Tiered Site-Specific Environmental Assessment (SEA) is primarily being prepared for the proposed water-side elements in accordance with and to augment the July 2010 PEA. The focus of this Tiered SEA is on environmental or historic preservation resources requiring additional discussion or analysis because they are not adequately addressed in the PEA which is not site-specific.

II. Purpose and Need

The City has applied for PSGP funding under application number 2009-PU-T9-K044 Investment Justification #33. The purpose of the PSGP is to provide for activities which help to enhance the security and safety of ports in the United States. The purpose of the City is to provide layered security to the entire Commencement Bay Port area in its role as the sole provider of law enforcement, fire suppression (both landside and marine), emergency medical services, rescue (again both landside and Marine); and hazardous materials, chemical, biological, radiological, and nuclear response. The City's Charter gives the TFD all responsibilities of Harbormaster, oversight of safety of all Tacoma Harbor areas and responsibility for patrol, regulation of hazardous cargo, removal of hazards to navigation; and inspection of waterways, piers and other structures. In addition, the TFD is a member of the Puget Sound Maritime Firefighting Consortium, and the TFD and Tacoma Police Department are members of the newly formed South Puget Sound Maritime Security Consortium. Currently, the TFD is the only agency in the Port area providing 24/7/365 water-side marine response capability.

The TFD currently operates its maritime security and emergency response functions from a facility on the Foss Waterway under the Murray Morgan Bridge, which has limited capability. Space to increase vessel moorage and for increased staffing is constrained at this location.

Responding from this location requires low vessel speeds to reach Commencement Bay before full speed can be achieved to the dispatch location. This does not enable a reasonable response time for such high priority needs as the Washington State Ferry run to Vashon Island. Other response vessels and resources for port security are widely scattered geographically and uncoordinated. Furthermore there are no redundant or duplicative marine response capabilities. Fire Station #5 once housed a full time TFD fireboat and crew which was decommissioned for several years due to a lack of funding for staffing; and the floats, piles, and gangway that supported the marine response function were removed as a result of past storm damage and severe deterioration.

III. Alternatives

Two project alternatives are evaluated in this draft SEA: 1) the No Action Alternative; and 2) the Proposed Action - upgrades Fire Station #5's water-side infrastructure. The Proposed Action herein is consistent with PEA Alternative 2: New Construction.

No Action Alternative

Under the No Action Alternative, Fire Station #5 would continue to serve as the City's Emergency Management Office. The City (TFD and Port) would continue to provide marine emergency response and security services from the Foss Waterway location. Vessel moorage space would continue to be limited, as would facility space to increase staffing. Marine emergency response times would continue to be slower than desired for high priority needs. And, the moorage of other response vessels and emergency resources for port security would continue to be widely scattered.

Proposed Action

The Proposed Action includes installing Fire Station #5 water-side infrastructure. Fire Station #5 is located at 3301 Ruston Way in Tacoma, Washington (Latitude 47° 16' 56" North, Longitude -122° 28' 45" West) (see Appendix A, location maps). Fire Station #5 was built in 1980 over water on pilings and will be undergoing a \$3 million City-funded remodel and structural rehabilitation project to convert the facility to a full time Maritime Security Operations Center. Work also includes building a new upland apparatus bay. These improvements are not part of the PSGP funding. To complement these improvements, the City proposed to: 1) remove a portion of the existing timber access pier and piles; 2) install about 300' of floating docks to provide a new gangway and moorage for a 70' fire boat and three 30' marine response vessels; 3) install a floating breakwater to shelter improvements; 4) install needed moorage utilities (electric and water); 5) provide for dive team equipment storage; and 6) mount two security video cameras on the existing building (see Appendix B, Site Design). The dock infrastructure has been designed to meet coastal construction standards. The gangway will be grated metal, the deck of the floating dock will be concrete, and the pilings will be galvanized steel.

Alternatives Considered but Dismissed

The City evaluated alternative locations that would effectively serve its maritime security purpose and determined that these would be cost prohibitive as a result of potential land acquisition and new construction costs. Building a new facility would also take much longer than the proposed rehabilitation of Fire Station #5.

IV. Affected Environmental and Potential Impacts - Floodplain

The environmental impacts associated with the No Action Alternative comport with those described in the July 2010 PEA, which is incorporated by reference, thus will not be further discussed in this SEA. Furthermore, review determined that the Proposed Action's effects to the full range of environmental/historic preservation resources are adequately addressed in the PEA, with the exception of floodplain impacts. The below narrative augments the PEA's discussion of floodplain actions, describing how the Proposed Action affects or is affected by the floodplain.

In compliance with FEMA regulations, 44 CFR Part 9, implementing Executive Order 11988, Floodplain Management, FEMA is required to carry out an eight-step decision-making process for actions that are proposed in the floodplain. Step 1 determines whether the project is located in the floodplain. The Proposed Action is located in a Zone VE (EL 9) also called the Coastal High Hazard Area, as depicted on FEMA's Flood Insurance Rate Map Community Panel 5301480005B, effective date December 1, 1983 (see Appendix C). Furthermore, the Maritime Security Operations Center will serve as an emergency response and command center and is thus considered a critical action (facility). Critical actions are evaluated for flood hazards and risks against the 500-year floodplain.

Step 2 requires the public is notified of proposed floodplain actions and given opportunity to participate in the decision-making process. Initial public involvement regarding floodplain actions was completed in 2010 during public City Council meetings, a notice was published on June 1, 2010. A public notice about the proposed project is being published in the local newspaper providing a 15-day comment period (see Appendix D).

Step 3 requires identifying and evaluating practicable alternatives to locating a project in the floodplain, including alternative sites outside of the floodplain. In addition, FEMA's regulations prohibit funding new construction in a V zones unless it is a functionally dependent use. Alternatives are discussed in Section III. The TFD selected the Fire Station #5 location because: 1) of its strategic location on Commencement Bay (the service area), 2) the presence marine oriented emergency response facilities, 3) its proximity to the Port of Tacoma to the southeast, and 4) it previously supported marine emergency responses. Staff working at the facility would have ready and quick access to a fire boat and other emergency response boats that will be moored at Fire Station #5. The proposed dock constitutes new construction and is in the VE zone. However, a dock cannot perform its intended purpose, moorage and water access, without being located in or in close proximity to water, including the VE Zone; thus this infrastructure is considered functionally dependent to the floodplain. Moreover, the effectiveness of marine emergency response and security functions depend on their close proximity to the marine service area. Accordingly, alternatives outside of the floodplain would be impractical and not serve the intent of a dock, nor the purpose and need described in Section II. Therefore practicable alternatives to the Proposed Action are precluded. The No Action alternative does not adequately meet the stated purpose and need.

Step 4 requires identifying impacts associated with occupancy and modification of the floodplain and support of floodplain development that could result from the Proposed Action. Because of

its location in a VE Zone, the dock is potentially at risk of inundation and structural damage due to hydrostatic and hydrodynamic forces caused by high velocity wave action and storm surge, as occurred to the previous dock infrastructure. Given the dock's floating deck design is consistent with coastal construction standards, the risk of damage up to a 500 year event is low, however more severe events are likely to cause significant damage. Additional federal investment, in the form of FEMA's Public Assistance Program or other federal disaster assistance, may be triggered in the event of flood damage to the dock infrastructure. Given the small scale of the replacement dock within Commencement Bay, it is not expected to cause an increase in the base flood elevation nor should it increase the flood hazard potential to other nearby structures. The project area shoreline is already developed with commercial, industrial, and recreational uses; including other docks facilities already present along this stretch of Commencement Bay. Thus the Proposed Action is not expected to encourage future development in the floodplain.

Step 5 requires developing impact minimization measures and ways to restore and preserve the floodplain. In order to reduce the potential flood damages identified in Step 4, the dock structure has been design to meet coastal construction standards. The dock is being built on open pilings with steel piles, a concrete floating deck, and grated metal gangway. The floating deck will allow the dock to rise and fall with water levels including the base flood. Existing timber pier piles on the pier structure are being replaced with steel piles and the existing building is being remodeled to meet seismic codes.

Step 6 is to determine whether the proposed action is practicable and to reevaluate alternatives. Per the discussion above; including the Proposed Action's purpose and need, functional dependency on the floodplain (and VE Zone), and a dock design that meets coastal construction standards; the Proposed Action remains a practicable alternative.

Step 7 requires that the public be provided with an explanation of any final decision that the floodplain action is the only practicable alternative. Final public noticing will be completed as part of making this draft SEA available for public comment as discussed in Section VI.

Step 8 includes implementation of the Proposed Action following release of grant funding.

V. Agencies/Entities Consulted and Permitting

The following agencies/entities have been contacted regarding permitting, approval or consultation for the new maritime security operations facility:

- The U.S. Army Corps of Engineers (USACE), Seattle District
- Washington State Historic Preservation Office
- Washington Department of Ecology
- National Marine Fisheries Service
- US Fish and Wildlife Service
- Puyallup Tribe
- Yakama Nation
- Colville Tribe
- Muckelshoot Tribe

- Nisqually Tribe
- Cowlitz Tribe

The City has applied for the USACE River's and Harbor's Act Section 10 and Clean Water Act permitting through submittal of a Joint Aquatic Resources Permit application to the Washington Department of Ecology.

VI. Public Involvement

Public involvement for the PEA was completed in April and July 2010, the document may be viewed and downloaded at: <http://www.fema.gov/library/viewRecord.do?id=4143>. As discussed in Section IV, initial project public involvement has been completed. A public notice advertising the availability of this draft SEA for public review and comment has been posted and the document may be viewed and downloaded at <http://www.fema.gov/plan/ehp/envdocuments/ea-region4.shtm#2>. The comment period is 15 days, substantive public comments received during the comment period will be addressed with the City.

VII. Project Conditions and Mitigation Measures

Before and during project implementation, the City will comply with the following conditions or mitigations measures, in addition to general conditions that are stated in the PEA FONSI, noted above:

- The dock facilities must be built per the proposed design, meeting coastal construction standards, to minimizing potential flood damage.
- The City must secure floodplain construction permitting per its National Flood Insurance Program floodplain ordinance.
- The City must implement and comply with all the terms and conditions of its USACE and WA Department of Ecology Joint Aquatic Resource Permit.
- The City must implement all the conservation measures outlined in the Biological Evaluation (3/2/2012) to protect threatened and endangered species, critical habitat, and essential fish habitat.

VIII. Conclusion

The draft SEA evaluated floodplain impacts of the Proposed Action and did not identify any significant adverse impacts to the floodplain. Implementing the Proposed Action, along with any conditions associated with permits or approvals, is expected to avoid or minimize adverse effects associated with the action. Following public involvement, FEMA will determine whether to issue a FONSI for the Proposed Action. If there are no significant adverse public comments, then this draft SEA will become the final SEA for the Proposed Action.

IX. References

City of Tacoma. *FY09 PSGP Investment Justification (completed for project)*. 2012.

City of Tacoma. *Washington State Joint Aquatic Resources Permit Application Form (completed for project)*. 2011.

City of Tacoma. *US Department of Homeland Security Grant Programs Directorate Environmental and Historic Preservation Screening Memo (completed for project)*. 2011.

Federal Emergency Management Agency. *Flood Insurance Rate Map for Pierce County, Tacoma Washington, Community Panel 5301480005B (Firmette for project location)* accessed from: <https://msc.fema.gov/>. February 2012.

Reid Middleton. *City of Tacoma Joint Fire and Police Maritime Security Operations Center Project Design and Plans*. July 21, 2011.

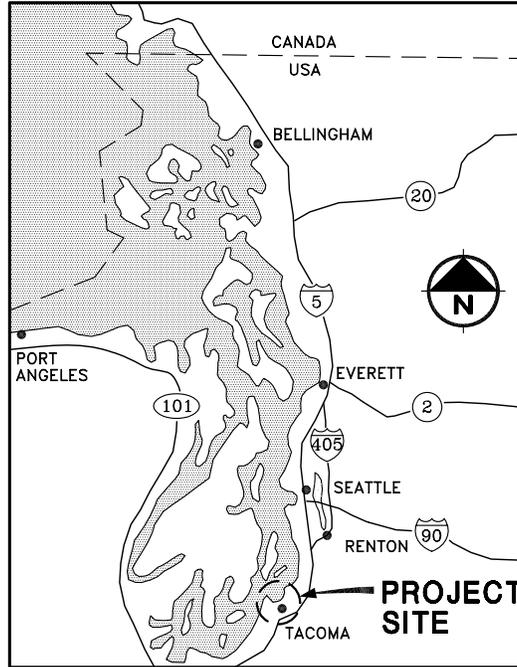
Appendix A
Location Mapu

SITE ADDRESS

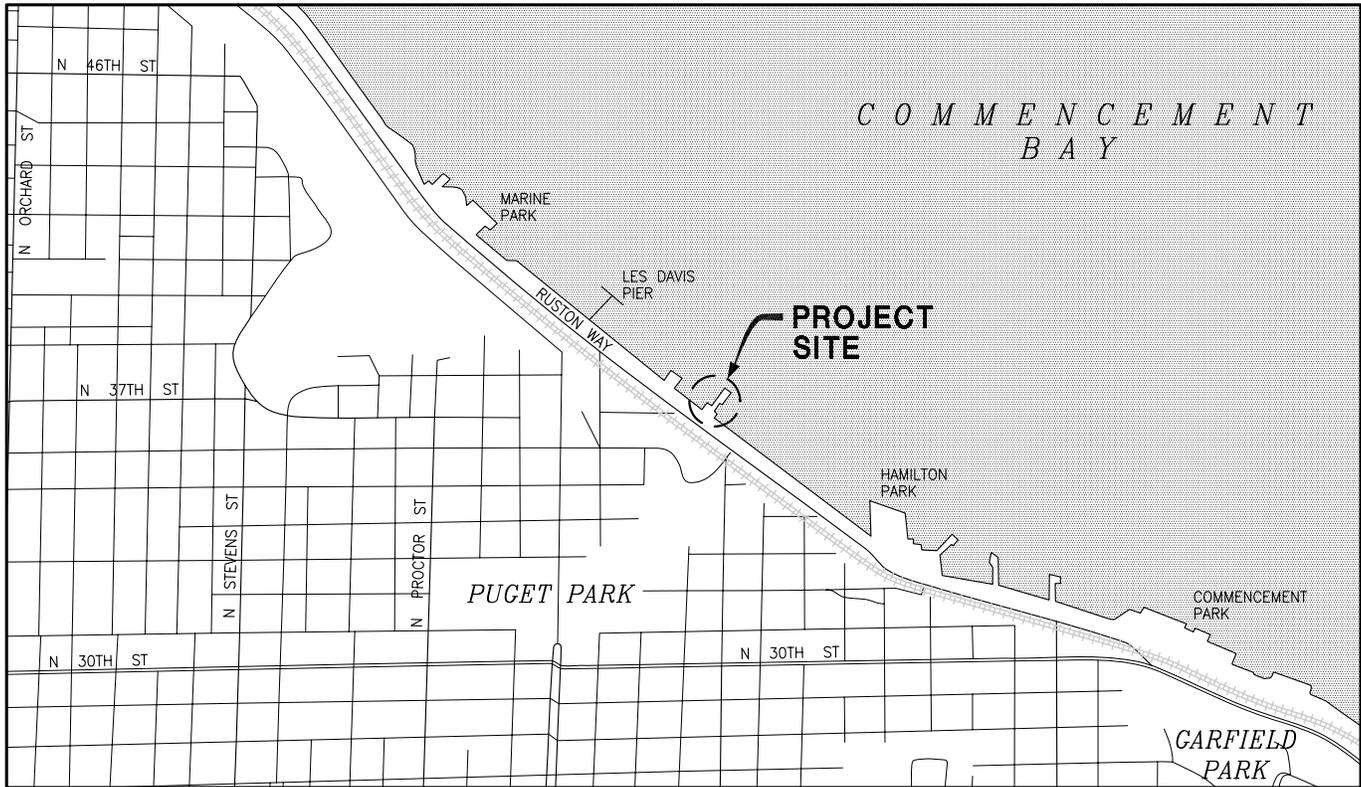
NAME: FIRE STATION 5
3301 RUSTON WAY
TACOMA, WA

(SECTION 30, TOWNSHIP 21 N,
RANGE 03 E, W.M. IN THE COUNTY
OF PIERCE, STATE OF WASHINGTON)

LATITUDE: 47° 16' 56" N
LONGITUDE: 122° 28' 45" W



LOCATION MAP



VICINITY MAP

PURPOSE: RENOVATE AN EXISTING PIER AND MOORAGE FLOAT SYSTEM, UPLAND BUILDING ADDITION AND PARKING LOT REVISION

DATUM: MLLW = 0.0'

ADJACENT PROPERTY OWNERS:
1. SEE ATTACHED

**CITY OF TACOMA
JOINT FIRE AND POLICE
MARITIME SECURITY
OPERATIONS CENTER**

NAME: CITY OF TACOMA
ADDRESS: 747 MARKET STREET
TACOMA, WA 98402

ReidMiddleton

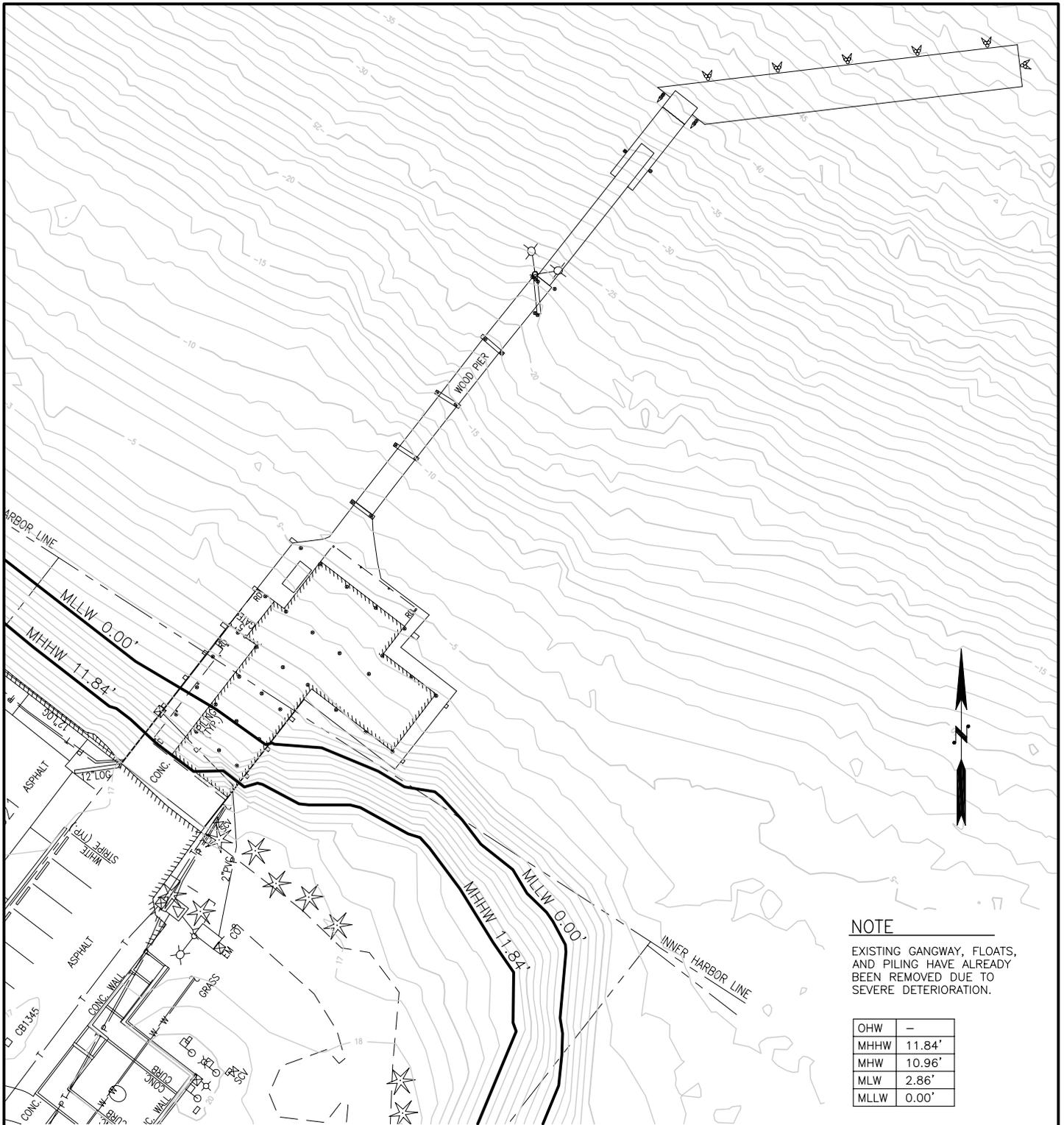
728 134th Street SW · Suite 200
Everett, Washington 98204
Ph: 425 741-3800

IN: PUGET SOUND
AT: COMMENCEMENT BAY
COUNTY OF: PIERCE
STATE OF: WASHINGTON
APPLICATION BY: CITY OF TACOMA

SHEET 1 OF 8 DATE: JULY 21, 2011

Appendix B

Site Design



EXISTING CONDITIONS

SCALE: 1"=40'

PURPOSE: RENOVATE AN EXISTING PIER AND MOORAGE FLOAT SYSTEM, UPLAND BUILDING ADDITION AND PARKING LOT REVISION

DATUM: MLLW = 0.0'

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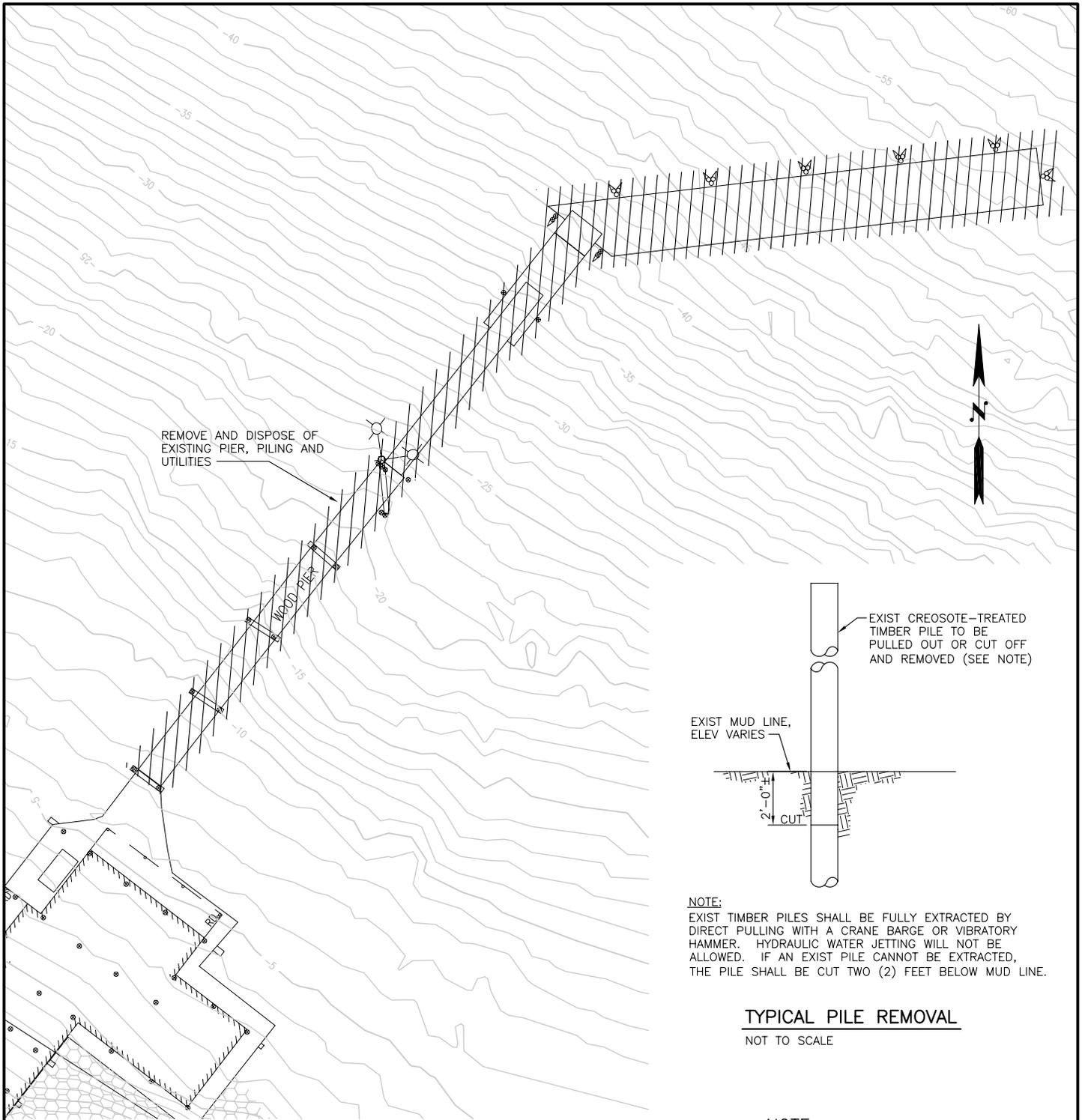
NAME: CITY OF TACOMA
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APPLICATION BY: CITY OF TACOMA

SHEET 2 OF 8 DATE: JULY 21, 2011



DEMOLITION PLAN
SCALE: 1"=30'

NOTE:
EXIST TIMBER PILES SHALL BE FULLY EXTRACTED BY DIRECT PULLING WITH A CRANE BARGE OR VIBRATORY HAMMER. HYDRAULIC WATER JETTING WILL NOT BE ALLOWED. IF AN EXIST PILE CANNOT BE EXTRACTED, THE PILE SHALL BE CUT TWO (2) FEET BELOW MUD LINE.

TYPICAL PILE REMOVAL
NOT TO SCALE

NOTE
EXISTING GANGWAY, FLOATS, AND PILING HAVE ALREADY BEEN REMOVED DUE TO SEVERE DETERIORATION.

PURPOSE: RENOVATE AN EXISTING PIER AND MOORAGE FLOAT SYSTEM, UPLAND BUILDING ADDITION AND PARKING LOT REVISION
 DATUM: MLLW = 0.0'
 ADJACENT PROPERTY OWNERS:
 1. SEE ATTACHED

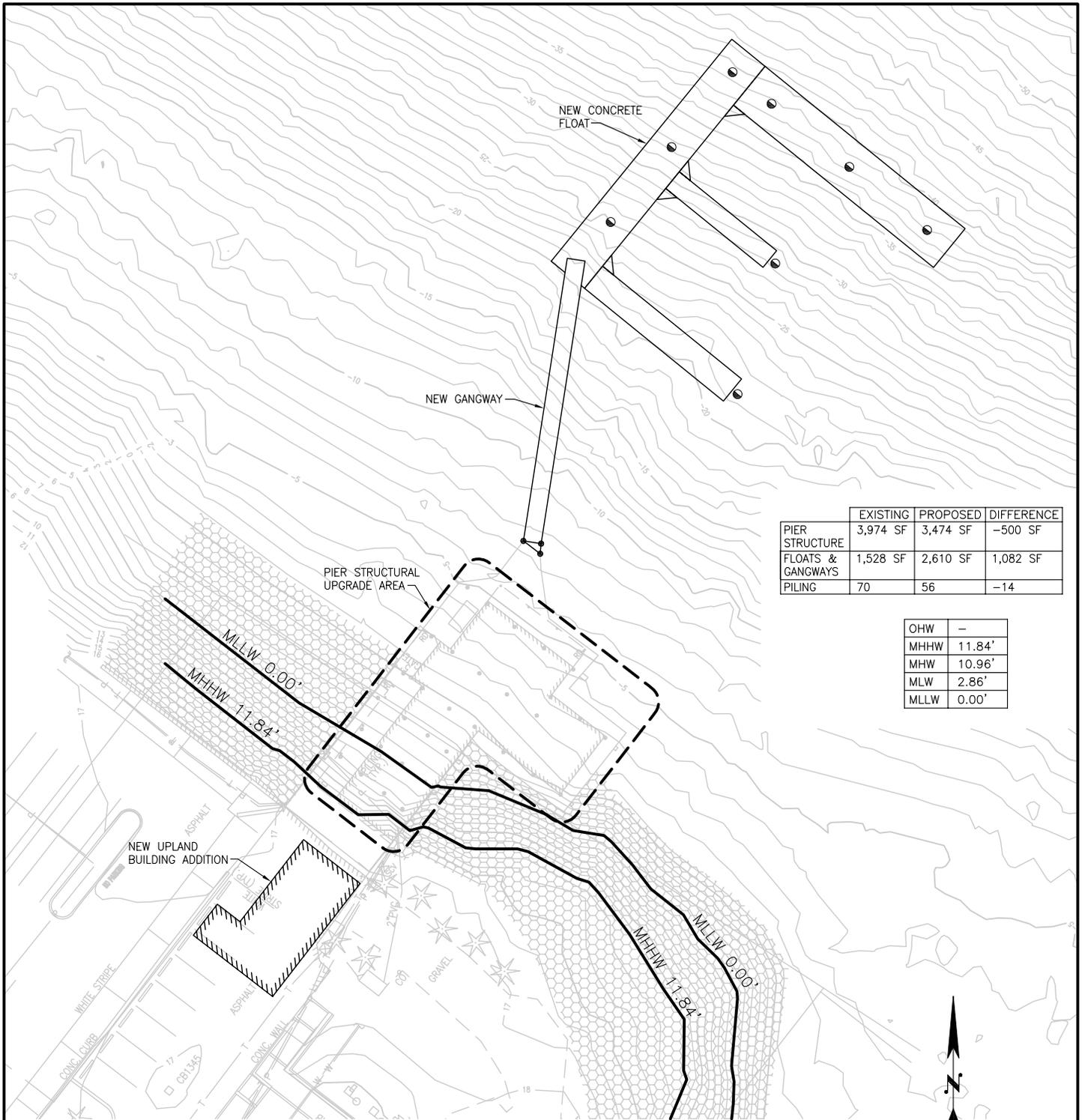
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	EXISTING	PROPOSED	DIFFERENCE
PIER STRUCTURE	3,974 SF	3,474 SF	-500 SF
FLOATS & GANGWAYS	1,528 SF	2,610 SF	1,082 SF
PILING	70	56	-14

OHW	-
MHHW	11.84'
MHW	10.96'
MLW	2.86'
MLLW	0.00'

PROPOSED SITE PLAN
SCALE: 1"=40'

PURPOSE: RENOVATE AN EXISTING PIER AND MOORAGE FLOAT SYSTEM, UPLAND BUILDING ADDITION AND PARKING LOT REVISION

DATUM: MLLW = 0.0'

ADJACENT PROPERTY OWNERS:
1. SEE ATTACHED

**CITY OF TACOMA
JOINT FIRE AND POLICE
MARITIME SECURITY
OPERATIONS CENTER**

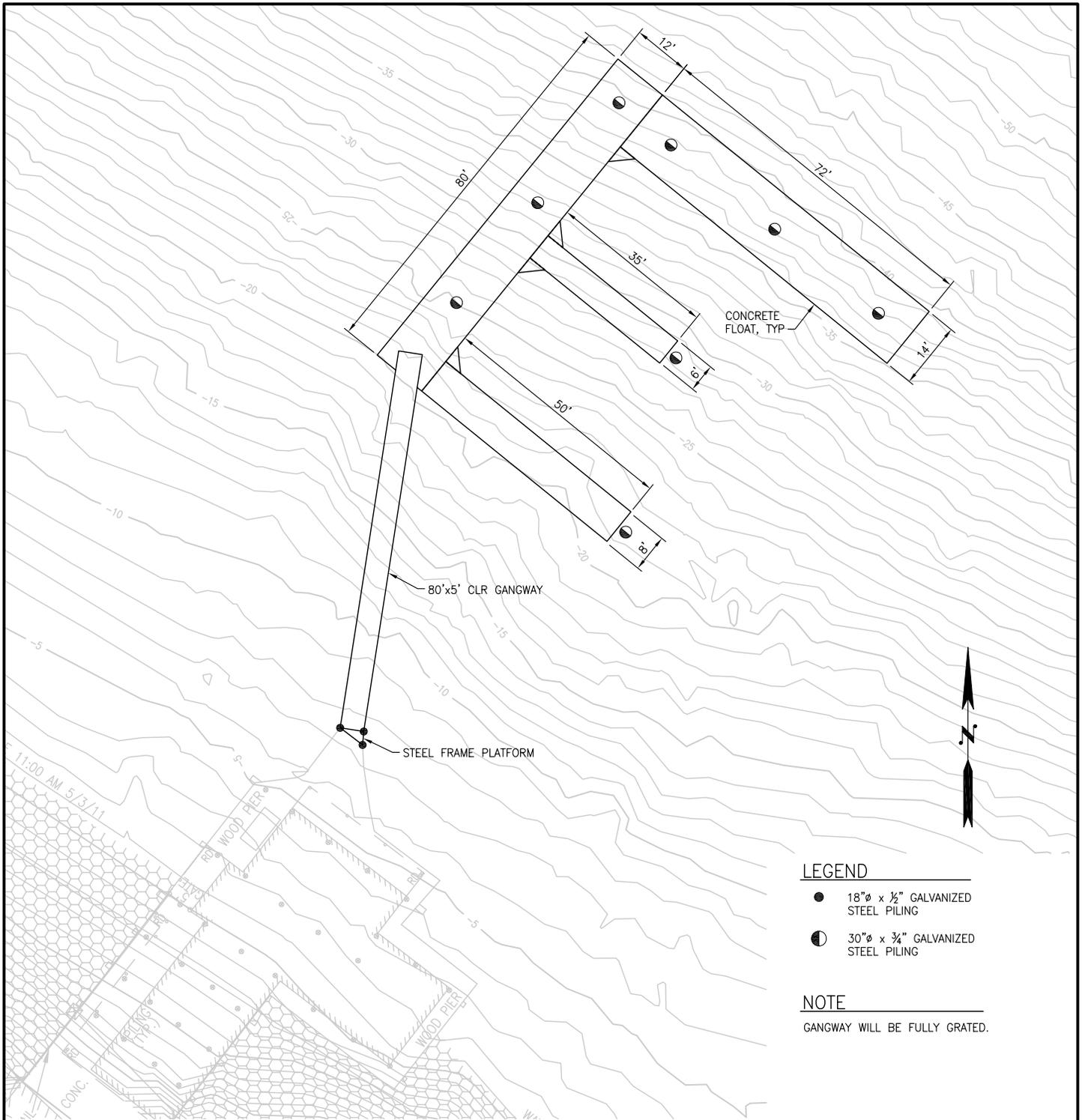
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SHEET 4 OF 8 DATE: JULY 21, 2011



LEGEND

- 18"Ø x ½" GALVANIZED STEEL PILING
- ◐ 30"Ø x ¾" GALVANIZED STEEL PILING

NOTE

GANGWAY WILL BE FULLY GRATED.

FLOAT AND PILE PLAN

SCALE: 1"=30'

PURPOSE: RENOVATE AN EXISTING PIER AND MOORAGE FLOAT SYSTEM, UPLAND BUILDING ADDITION AND PARKING LOT REVISION

DATUM: MLLW = 0.0'

ADJACENT PROPERTY OWNERS:
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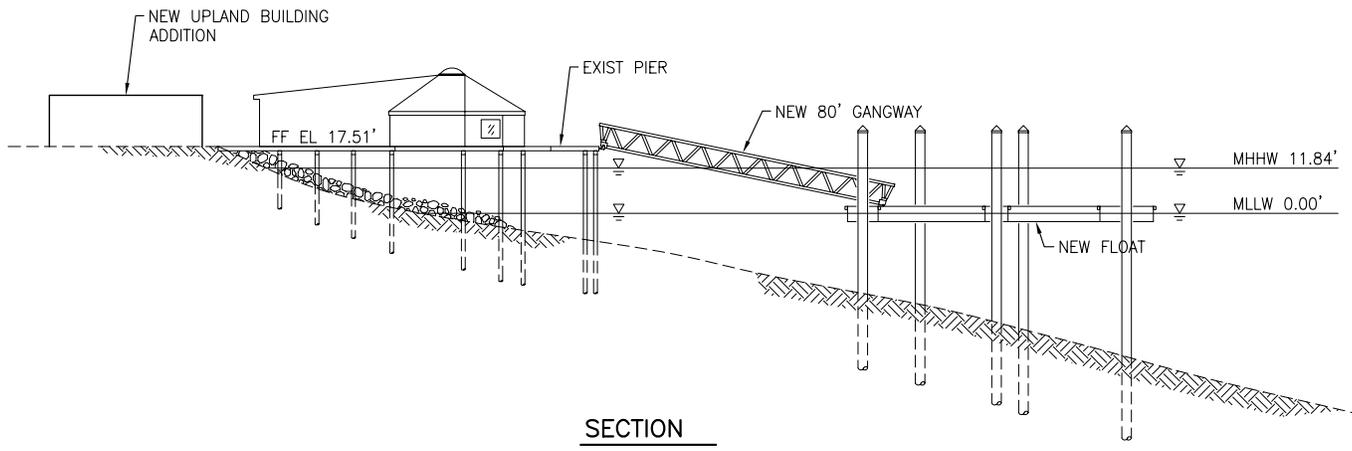
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SHEET 5 OF 8 DATE: JULY 21, 2011



SECTION

SCALE: 1"=50'

PURPOSE: RENOVATE AN EXISTING PIER AND MOORAGE FLOAT SYSTEM, UPLAND BUILDING ADDITION AND PARKING LOT REVISION

DATUM: MLLW = 0.0'

ADJACENT PROPERTY OWNERS:
1. SEE ATTACHED

**CITY OF TACOMA
JOINT FIRE AND POLICE
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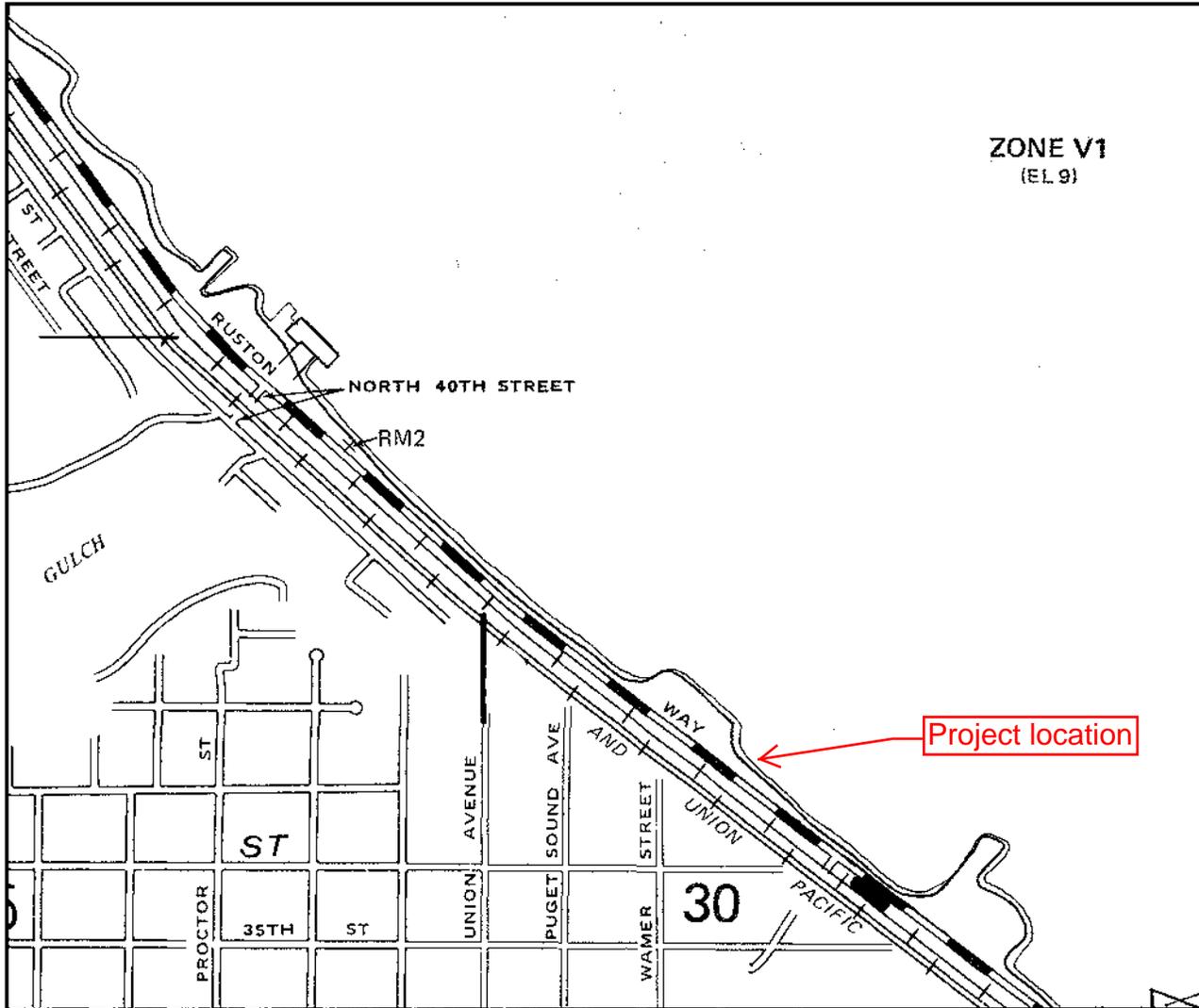
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SHEET 8 OF 8 DATE: JULY 21, 2011

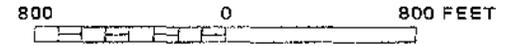
Appendix C
Floodplain Map



ZONE V1
(EL 9)



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

**CITY OF TACOMA,
WASHINGTON
PIERCE COUNTY**

PANEL 5 OF 45
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
530148 0005 B

EFFECTIVE DATE:
DECEMBER 1, 1983



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Appendix D

Initial Public Notice