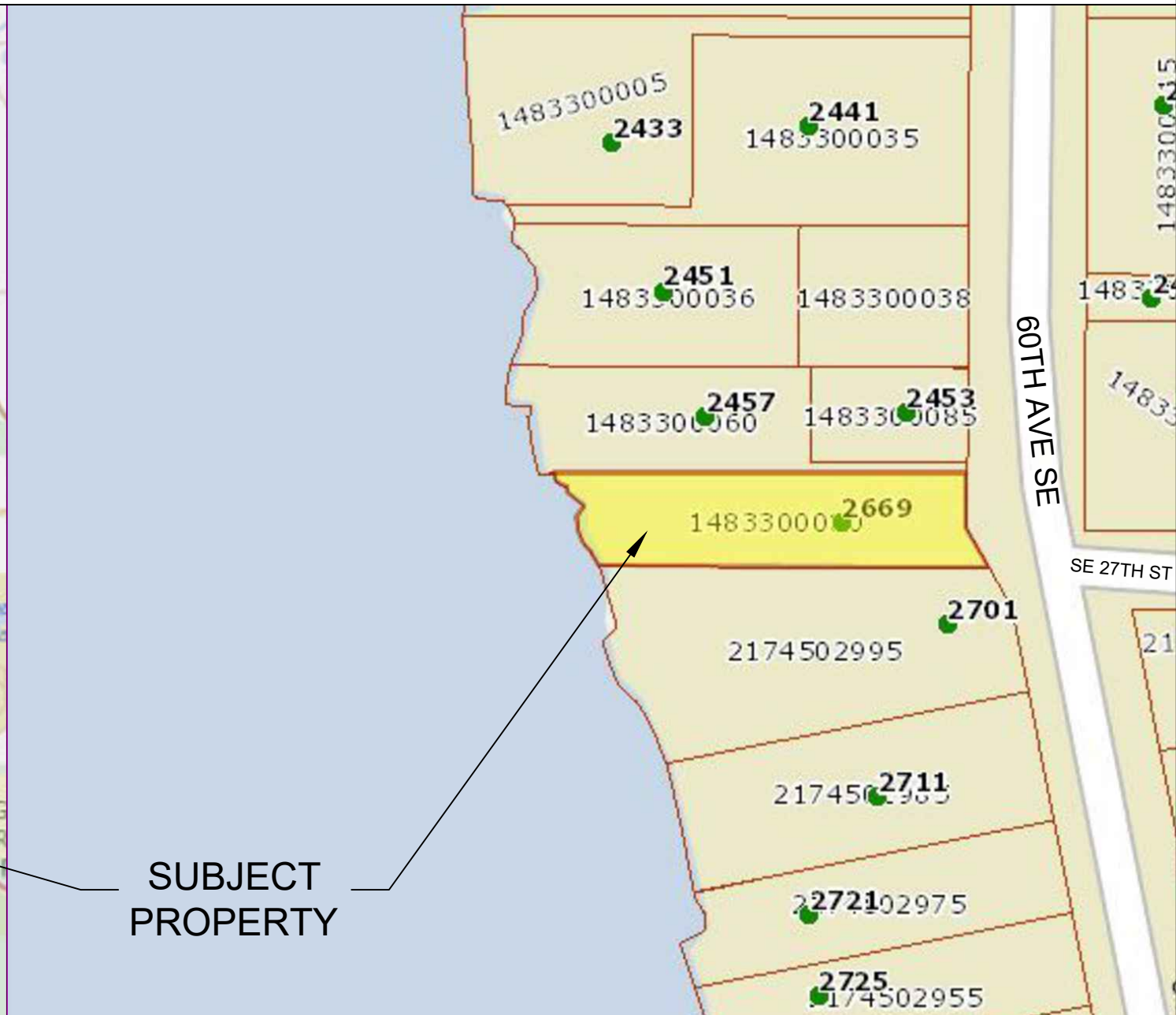
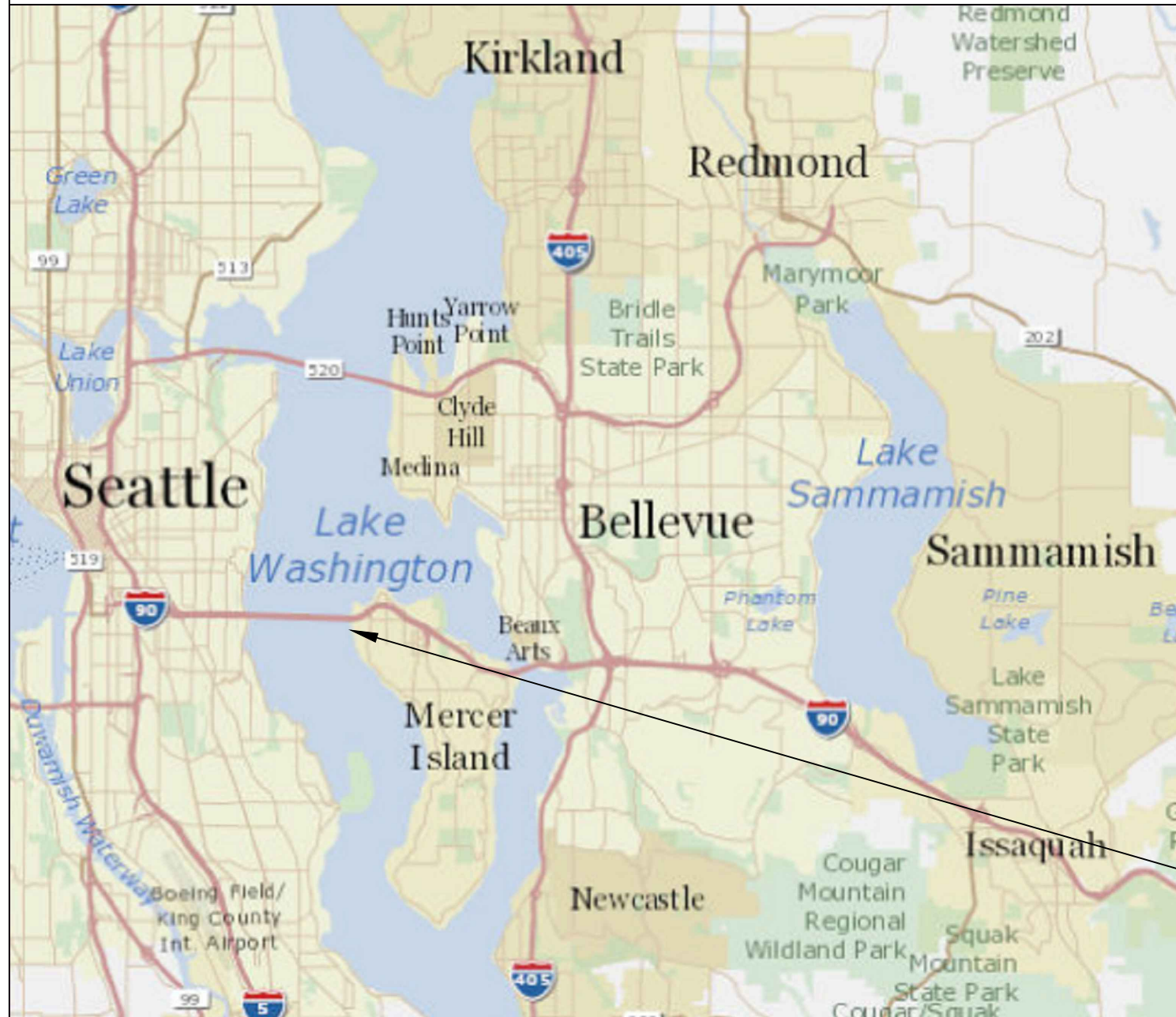


SITE PLAN

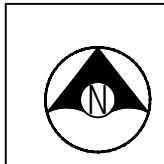


Pin: 148330-0080

Legal Description: CENTRAL ADD TO EAST SEATTLE S 22.50 FT OF 16 BLK 1 & S 22.50 FT OF 1-2-3 BLK 2 SD ADD & VAC ALLEY & 1/2 VAC ST ADJ & SH LDS ADJ

Plat Block: 1 &
Plat Lot: 16

LAT: 47.58719 LONG: -122.25366



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County: King County
Location: Lake Washington

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Mercer Island, WA 98040

Datum: CORPS OF ENGINEERS 1919
NE Quarter Of Section 11, Township 24, Range 04

Adjacent Owners:
TUTLAND ROBERT E
2701 60TH AVE SE 98040

CHAK CHEUNG
2457 60TH AVE SE 98040

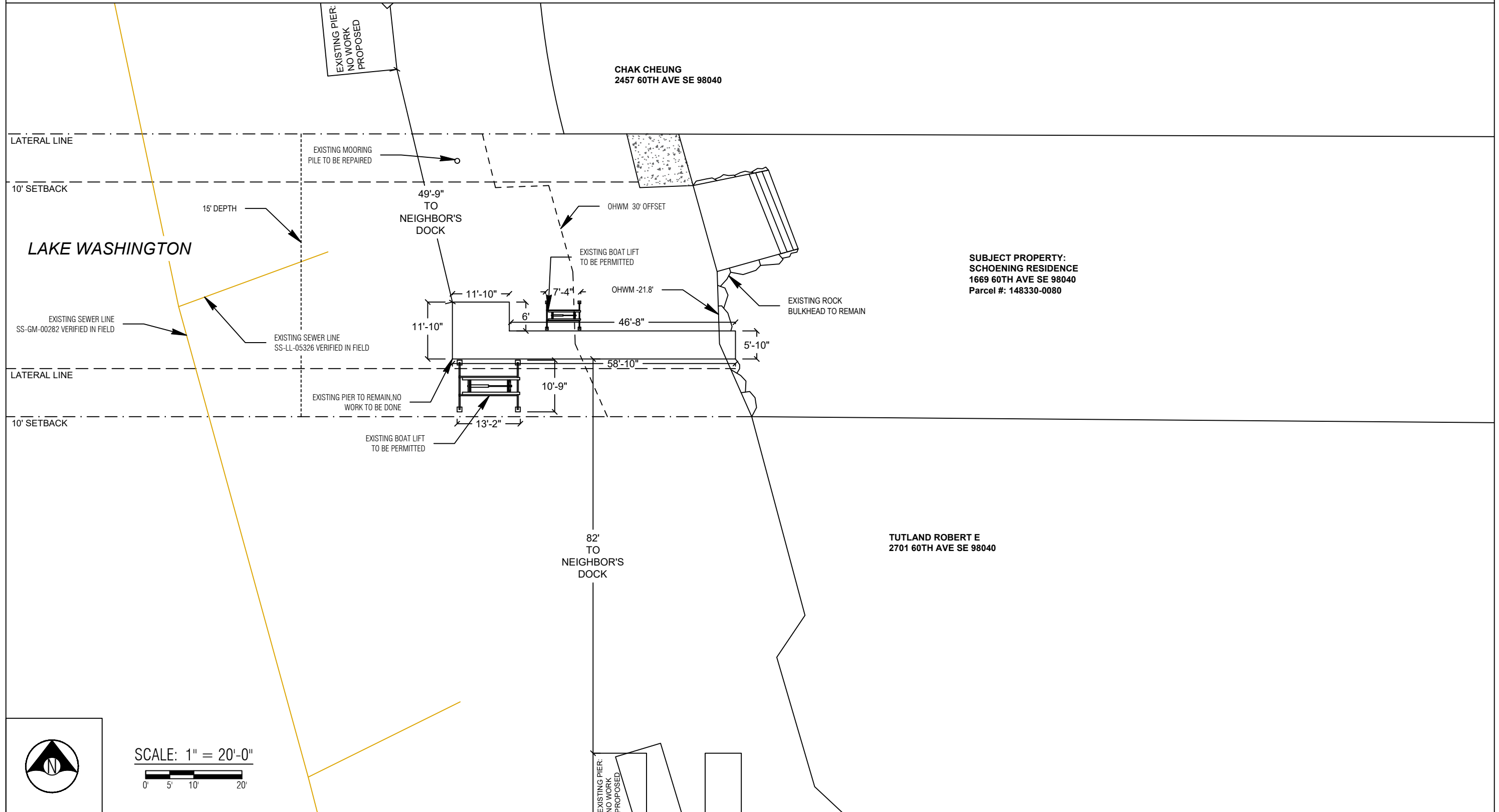
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EXISTING CONDITIONS

****CLEAN UP LAKE AROUND PROJECT****



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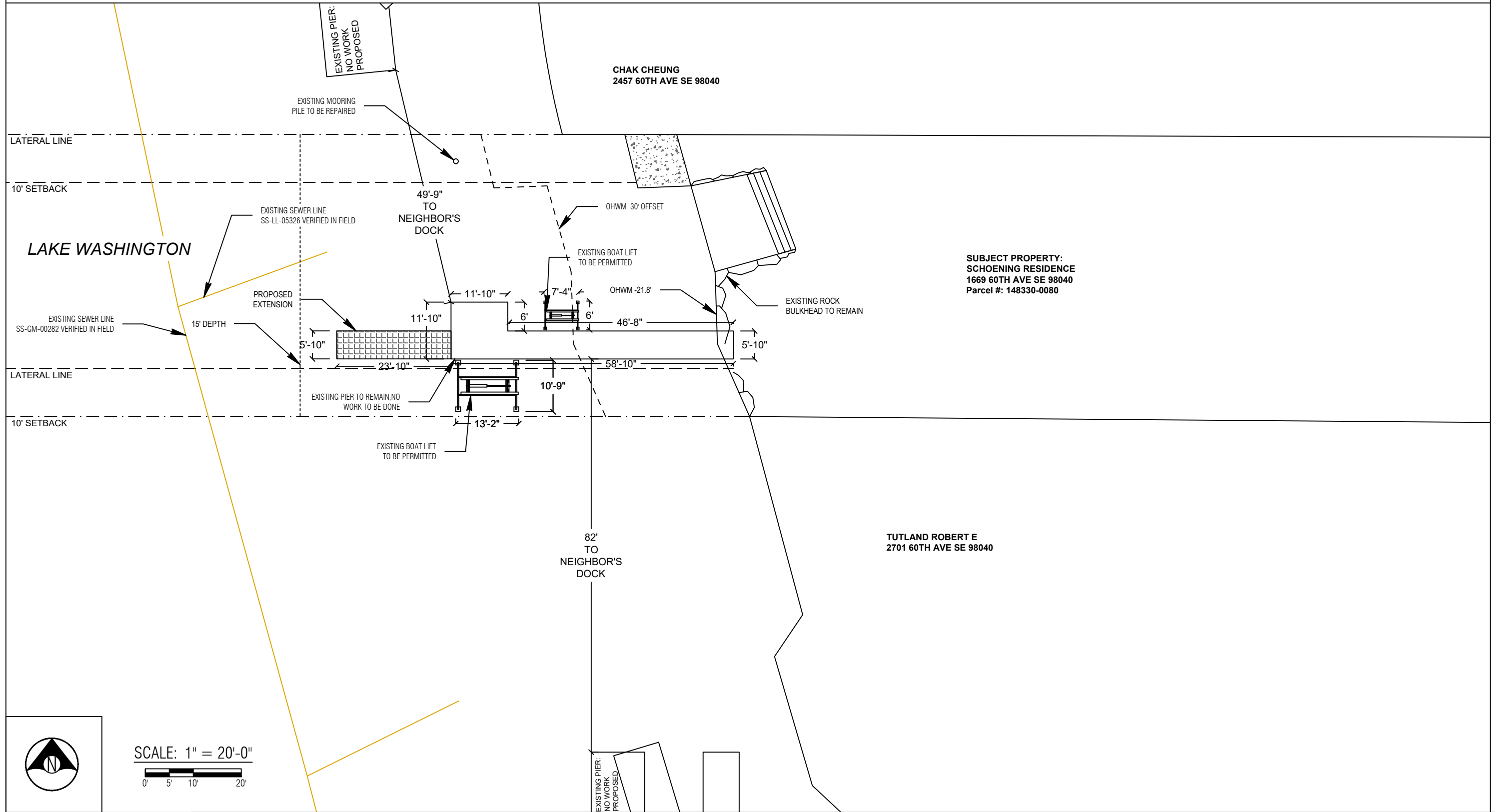
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**SHEET
 A2.0**

PROPOSED CONDITIONS

****CLEAN UP LAKE AROUND PROJECT****



SCALE: 1" = 20'-0"

0' 5' 10' 20'



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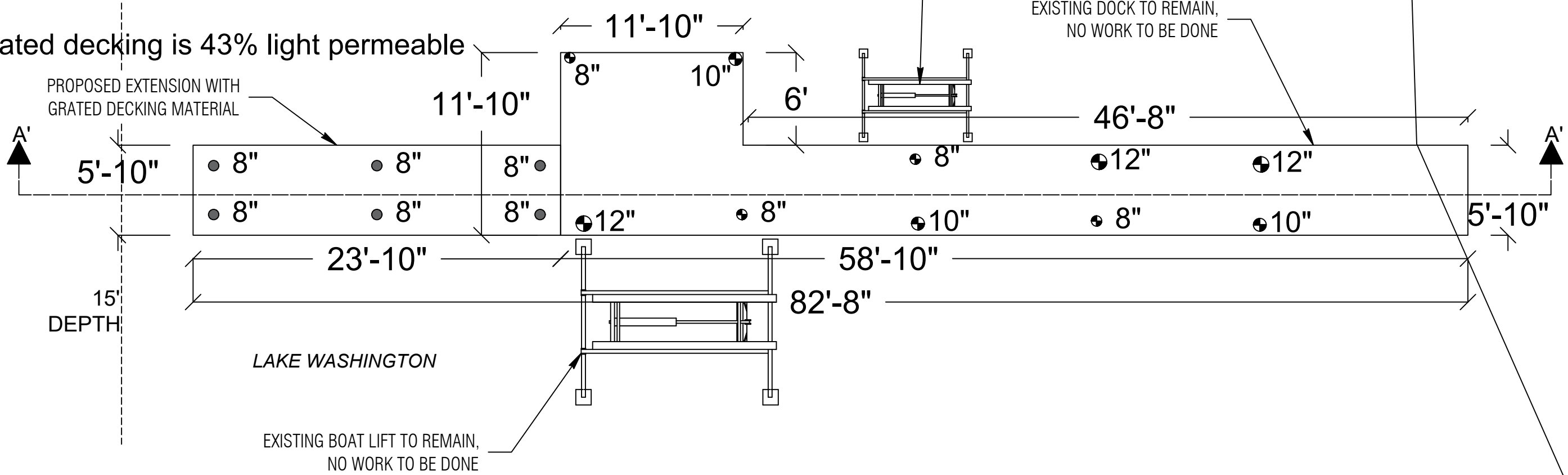
PIER DETAILS - EXISTING/PROPOSED

LEGEND

- (10) EXISTING PILES - TO BE REPAIRED
- (1) EXISTING MOORING PILE - TO BE REPAIRED
- (6) PROPOSED STEEL PILES - TO BE ADDED

Area: 402 sqft (existing overwater)
 Area: 414 sqft (existing dock, no work to be done)
 Area: 139 sqft (new grated decking overwater)

****Grated decking is 43% light permeable**



PLAN VIEW



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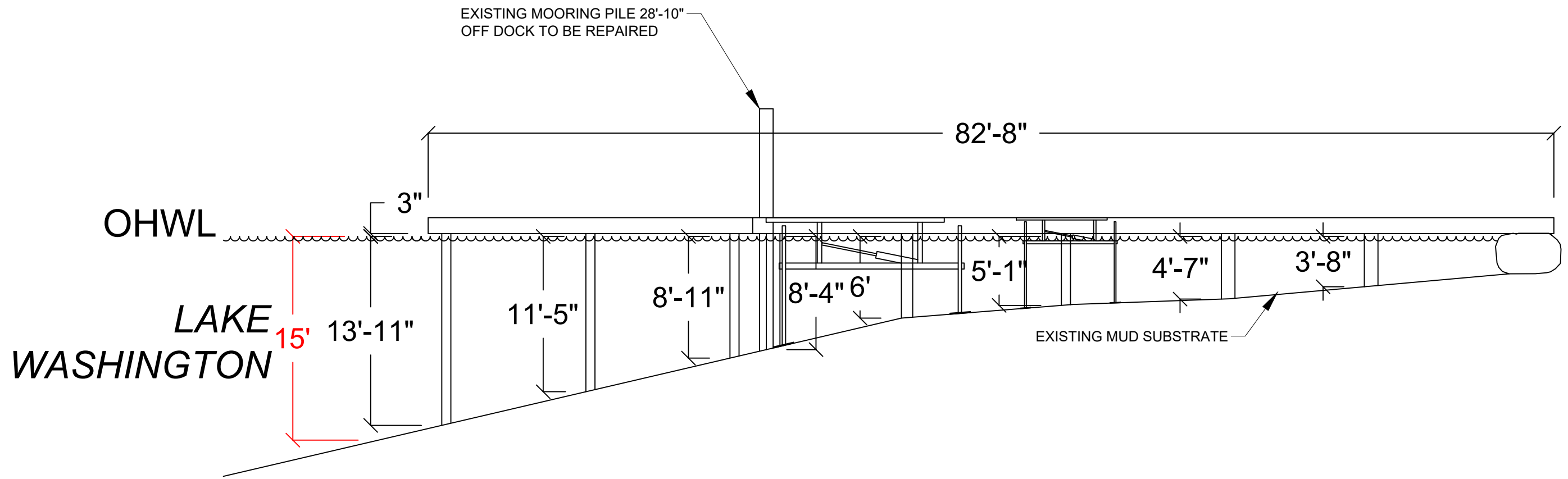
Adjacent Owners:
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PIER DETAILS EXISTING/PROPOSED



SECTION VIEW: A'-A'



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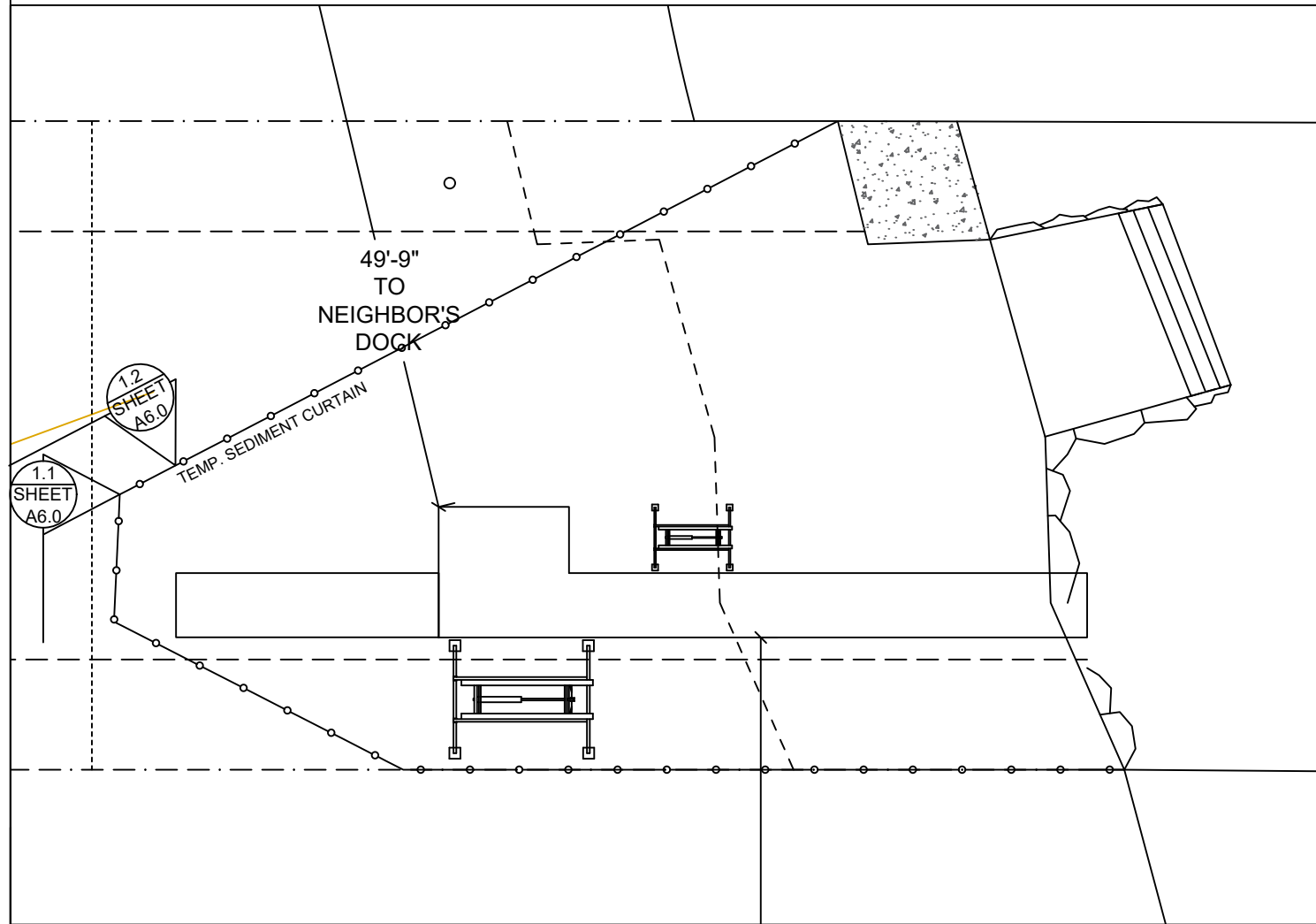
CHAK CHEUNG
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BMP INFORMATION

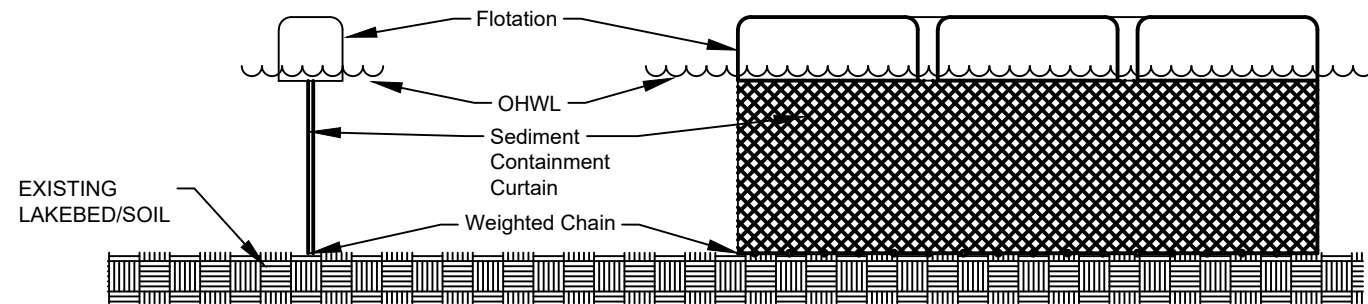


BMP NOTES:

- A. Constant vigilance shall be kept for the presence of protected fish species during all aspects of the proposed action, particularly during in-water activities such as vessel movement, deployment of anchors & spuds, pile driving, dredging, and placement of gravels and other fill.
1. The project manager shall designate an appropriate number of competent observers to survey the project site and adjacent areas for protected species, including the presence of fish as conditions allow.
 2. Visual surveys shall be made prior to the start of work each day, and prior to resumption of work following any break of more than an hour. Periodic additional visual surveys throughout the work day are strongly recommended.
 3. All in-water work shall be done during the in-water work window for the waterbody. Where there is a difference between the USCOE and WDFW work windows, the overlap of the two shall apply.
 4. All pile driving and extraction shall be postponed or halted when obvious aggregations or schooling of fish are observed within 50 yards of that work, and shall only begin/resume after the animals have voluntarily departed the area.
 5. When piloting vessels, vessel operators shall operate at speeds and power settings to avoid grounding vessels, and minimize substrate scour and mobilization of bottom sediments.
- B. No contamination of the marine environment shall result from project-related activities.
1. Appropriate materials to contain and clean potential spills shall be stored and readily available at the work site and/or aboard project-related vessels.
 2. The project manager and heavy equipment operators shall perform daily pre-work equipment inspections for cleanliness and leaks. All heavy equipment operations shall be postponed or halted should a leak be detected, and shall not proceed until the leak is repaired and the equipment is cleaned.
 3. To the greatest extent practicable, utilize biodegradable oils for equipment that would be operated in or near water.
 4. Fueling of land-based vehicles and equipment shall take place at least 50 feet away from the water, preferably over an impervious surface. Fueling of vessels shall be done at approved fueling facilities.
 5. Turbidity and siltation from project-related work shall be minimized and contained through the appropriate use of erosion control practices, effective silt containment devices, and the curtailment of work during adverse weather and tidal/flow conditions.
 6. All wastes shall be collected and contained for proper disposal at approved upland disposal sites appropriate for the material(s).
 7. When removing piles and other similarly treated wood, containment booms must fully enclose the work area. Wood debris, oils, and any other materials released into lake waters must be collected, removed, and properly disposed of at approved disposal sites.
 8. All in- and over-water wood cutting would be limited to the minimum required to remove the subject wood component, and all cutting work should be enclosed within floating containment booms.
 9. When removing piles, no actions shall be taken that would cause adhering sediments to return to lake waters.
 10. Above-water containment shall be installed around removed piles to prevent sediment laden waters from returning to lake waters.
 11. Construction staging (including stocking of materials, etc.) will occur on the supply barge.
 12. All Exposed wood to be used on the project will be treated with a cheminite treatment.

DETAIL 1.1

DETAIL 1.2



DETAIL 1.1 & 1.2



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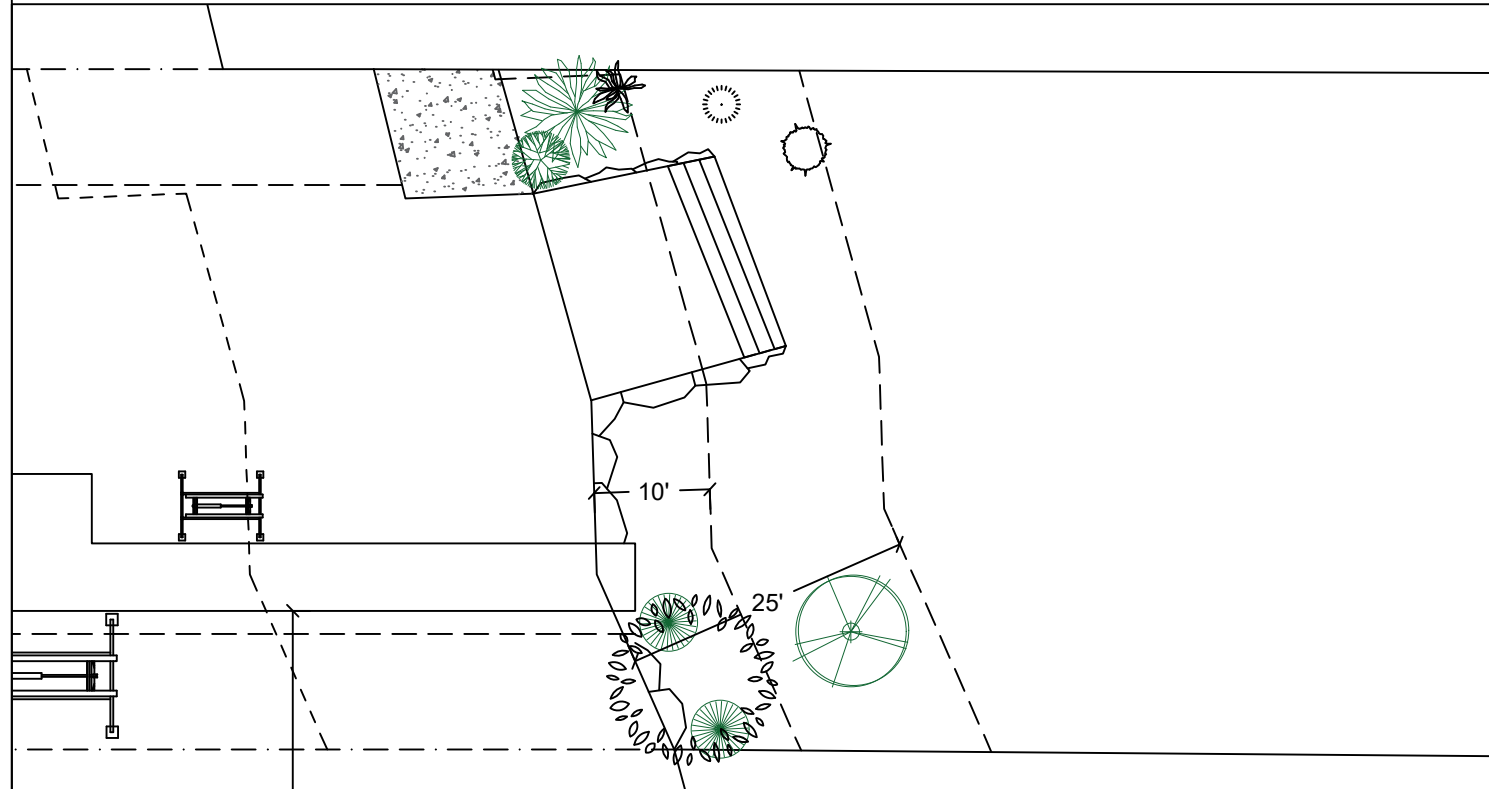
CHAK CHEUNG
2457 60TH AVE SE 98040

Created: 01/15/22

Last Updated: 2/11/2022 12:12 PM Dray

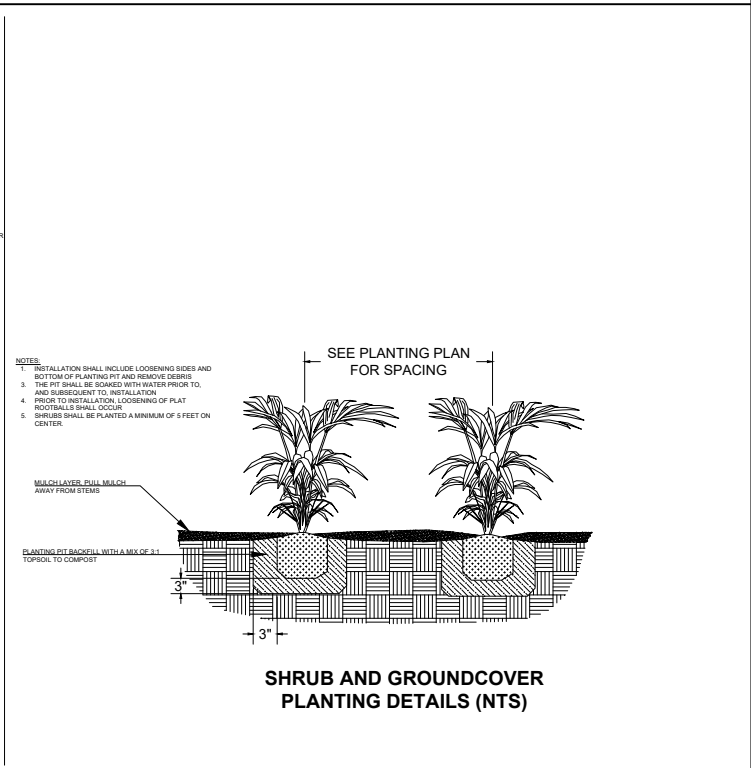
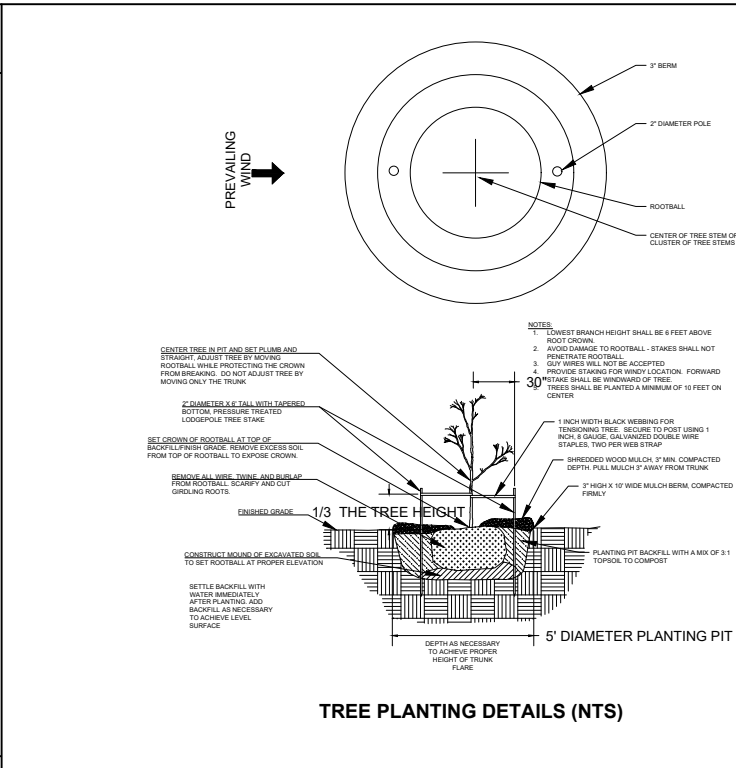
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MITIGATION PLAN



Notes:

1. Shrubs are show, and shall be planted, at least five feet on center. Trees are show, and shall be planted, at least ten feet to center.
2. The property owner will implement and abide by the shoreline planting plan. The plants shall be installed before or concurrent with the work authorized by this permit. A report, as-built drawing and photographs demonstrating the plants have been installed or a report on the status of project construction will be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch, within 12 months from the date of permit issuance. This reporting requirement may be met by completing and submitting a U.S. Army Corps of Engineers approved Report for Mitigation Work Completion form.
3. The property owner will maintain and monitor the survival of installed shoreline plantings for five years after the U.S. Army Corps of Engineers accepts the as-built report. Installed plants shall achieve 100% survival during monitoring Years 1 and 2. Installed plants shall achieve at least 80% survival during monitoring Years 3, 4 and 5. Percent survival is based on the total number of plants installed in accordance with the approved riparian planting plan. Individual plants that die will be replaced with native riparian species in order to meet the survival performance standards.
4. The property owner will provide annual monitoring reports for five years (Monitoring Years 1-5). Each annual monitoring report will include written and photographic documentation on plant mortality and replanting efforts and will document whether the performance standards are being met. Photos will be taken from established points and used repeatedly for each monitoring year. In addition to photos at designated points, photo documentation will include a panoramic view of the entire planting area. Submitted photos will be formatted on standard 8 1/2 x 11" paper, dated with the date the photo was taken, and clearly labeled with the direction from which the photo was taken. The photo location points will be identified on an appropriate drawing. Annual shoreline planting monitoring reports will be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch, by November 31 of each monitoring year. This reporting requirement may be met by completing and submitting a U.S. Army Corps of Engineers approved Mitigation Planting Monitoring Report form.



PROPOSED PLANTING SPECIES/QUANTITIES

SYMBOL	LATIN NAME	COMMON NAME	QTY	SIZE
	<i>Alnus rubra</i>	Red Alder	1	3 ft
	<i>Pinus contorta v contorta</i>	Shore pine	1	3 ft
	<i>Symphoricarpos albus</i>	Snowberry	1	1 Gallon
	<i>Holodiscus discolor</i>	Oceanspray	2	1 Gallon

PLANTS: Shrubs to be installed 5ft on center and trees to be installed 10ft on center.

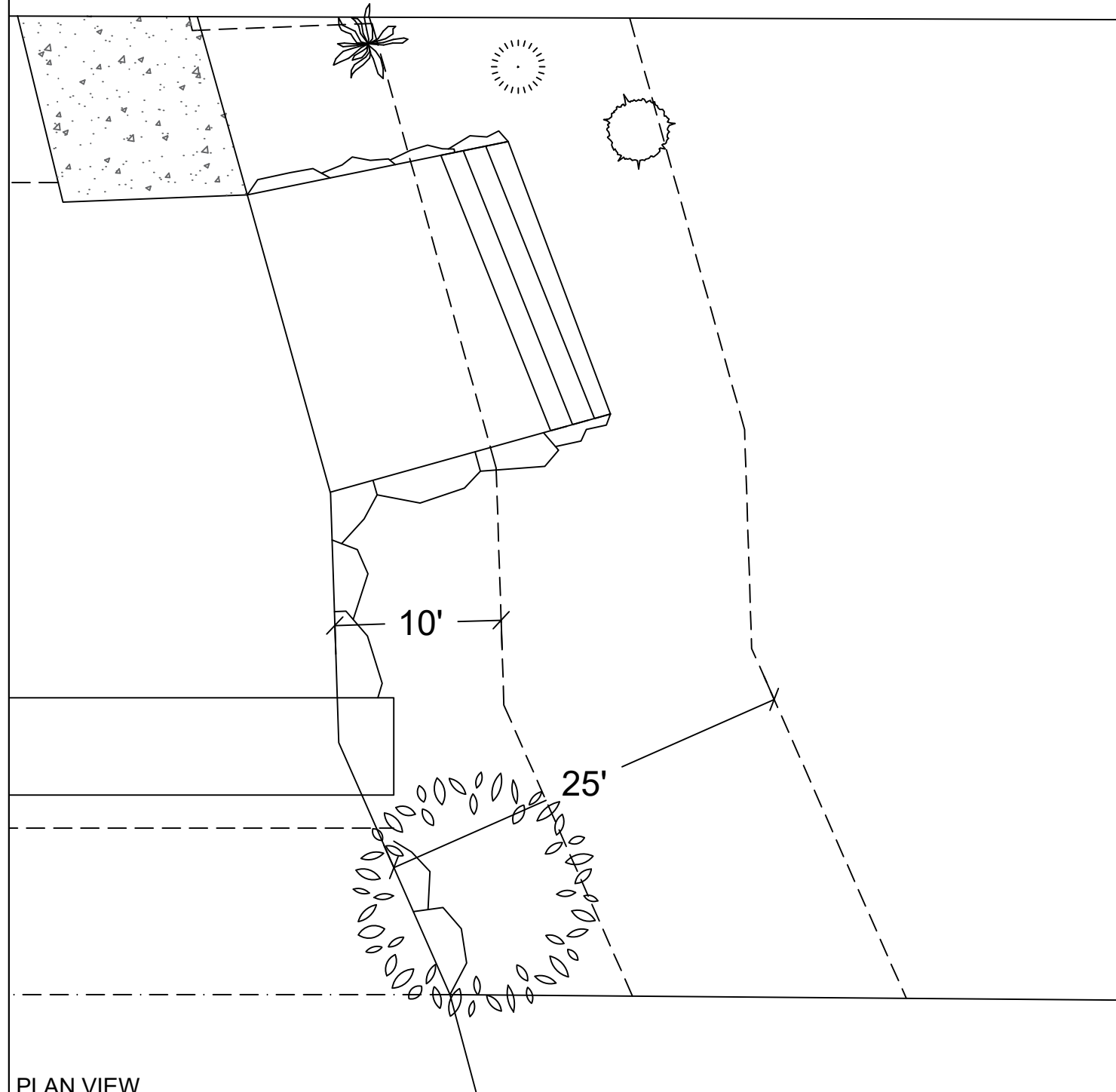


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EXISTING PLANT PLAN



PLAN VIEW

EXISTING PLANTING SPECIES/QUANTITIES

SYMBOL	SCIENTIFIC NAME	COMMON NAME	QTY	SIZE
	<i>Cosmos bipinnatus</i>	Garden Cosmos	1	~3ft
	<i>Vaccinium corymbosum</i>	Blueberry bush	1	~4ft
	<i>Cladrastis kentukea</i>	Yellow wood	1	~ 12ft
	<i>Deschampsia cespitosa</i>	tufted hairgrass	1	~ 4ft

EXISTING PLANTS TABLE

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 A8.0**

GENERAL NOTES:

MATERIALS SPEC LIST:

Boat Lifts:

- * SL10014ARW - 72" x 88"
- * SL8012ARW - 158" x 129"

Decking Material: FRPP - Fiberglass reinforced polypropylene

Light permeable percentage:

- * Surface - 43%
- * 18" Dock Height - 61%

SEWER:

- * All sewer is field verified by probing the lake bed manually during the allowed work windows for the area.

PILES:

- * All new piles are epoxy coated steel piles *size varies, see plan set
- * Repair piles are done as a sleeve/strap method
- * Piles are driven using the vibro method

CODE REFERENCES: MERCER ISLAND

We are applying for the permit to be reviewed under the:

"Alternative Development Standards" per MIMC 19.13050(F)(3).

The code official shall approve moorage facilities not in compliance with the development standards in subsection (F)(1) or (F)(2) of this section subject to both U.S. Army Corps of Engineers and Washington Department of Fish and Wildlife approval to an alternate project design. The following requirements and all other applicable provisions in this chapter shall be met:

i. The dock must be no larger than authorized through state and federal approval; Ch. 19.13 Shoreline Master Program Mercer Island City Code Page 30 of 34 The Mercer Island City Code is current through Ordinance 20C-13, passed June 16, 2020.

The dock length is in compliance.

ii. The maximum width must comply with the width of moorage facilities standards specified in standards specified in subsection D of this section (Table D);

The maximum width is in compliance.

iii. The minimum water depth must be no shallower than authorized through state and federal approval;

The minimum water depth is in compliance.

iv. The applicant must demonstrate to the code official's satisfaction that the proposed project will not create a net loss in ecological function of the shorelands; and

No net loss report is attached.

v. The applicant must provide the city with documentation of approval of the moorage facilities by both the U.S. Army Corps of Engineers and the Washington Department of Fish and Wildlife.

The plan set is under review by CORPS and WDFW.

Datum: CORPS OF ENGINEERS 1919

Concrete Slab Permitted: 1/11/1996

Dock established/constructed: 1/24/1989

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**SHEET
A9.0**

DETAILS - REPAIR

S1 DETAIL NOT IN USE

S2 DETAIL NOT IN USE

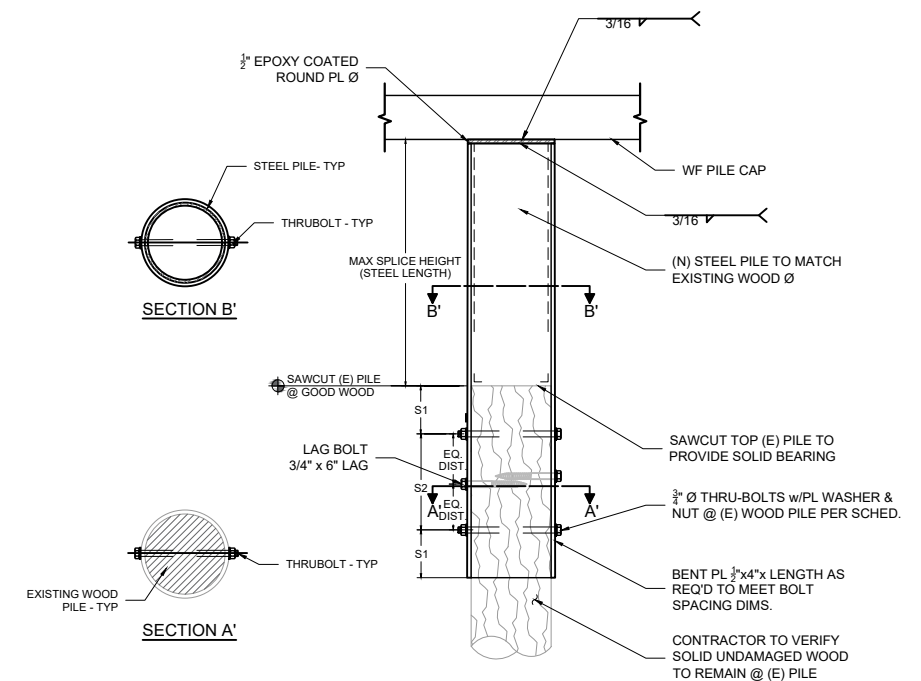
S3 DETAIL NOT IN USE

S4 DETAIL NOT IN USE

S5 SPLICE PILE REPAIR - TYP
SCALE: 1/2" = 1'

STEEL SLEEVE TABLE				
PILE Ø	MAX SPLICE HEIGHT	S1	S2	S3
9"	15"	6"	12"	3"
12"+	28"	6"	12"	3"

- NOTES:
- 1) MAX PILE LOAD = 1,200 # / PILE (BOAT LOAD PARALLEL TO DOCK). CONTACT ENGINEERING IF BOAT SIZE EXCEEDS GENERAL NOTES MAXIMUM ALLOWABLE.
 - 2) MINIMUM BOLT SPACING = 3"
 - 3) STRAP AXIS SHALL BE ORIENTED PERPENDICULAR TO LONGITUDINAL AXIS OF DOCK.



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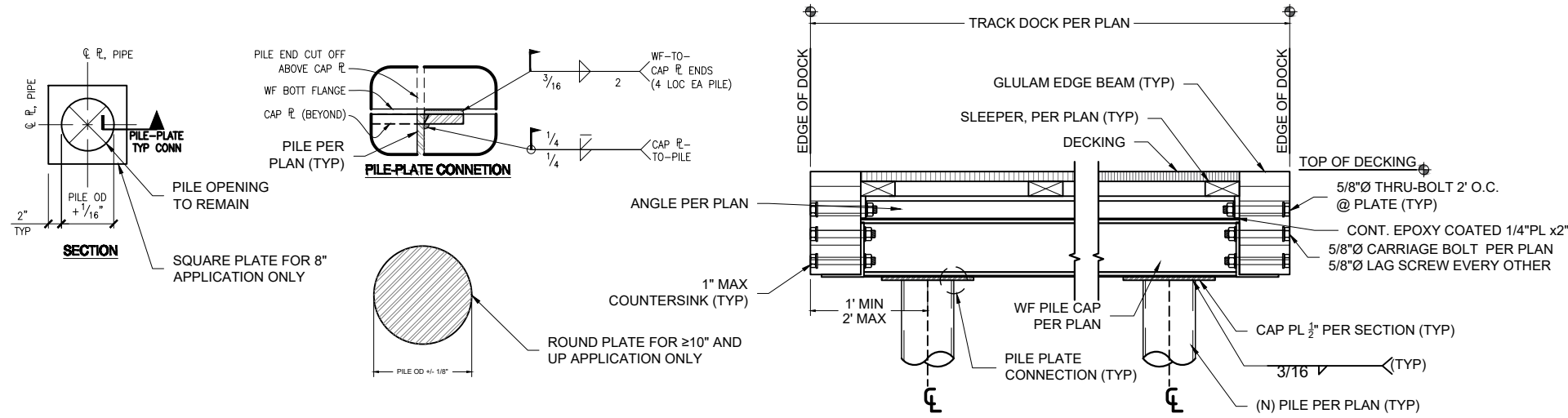
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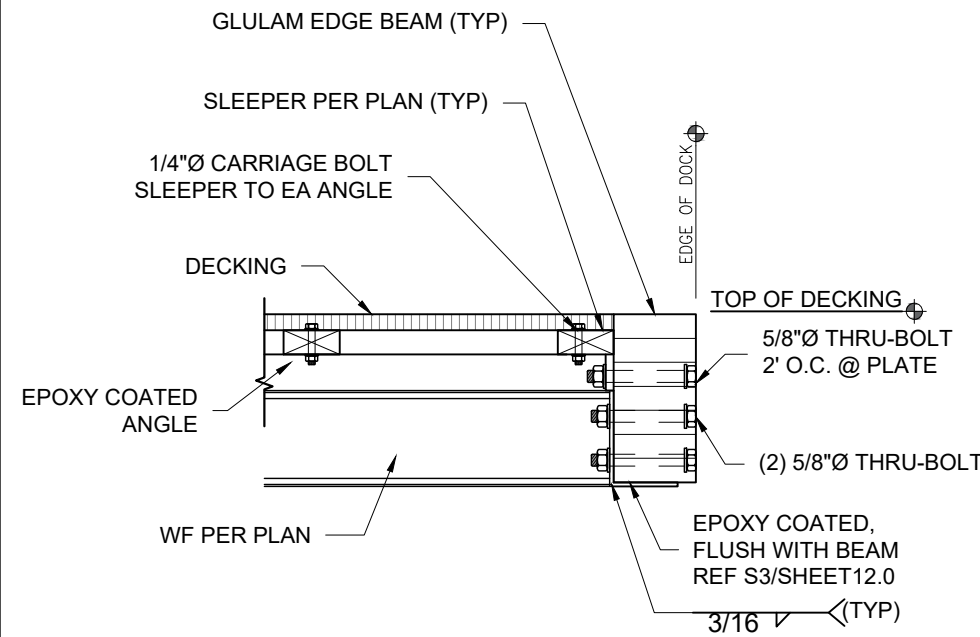
**SHEET
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DETAILS - TRACK

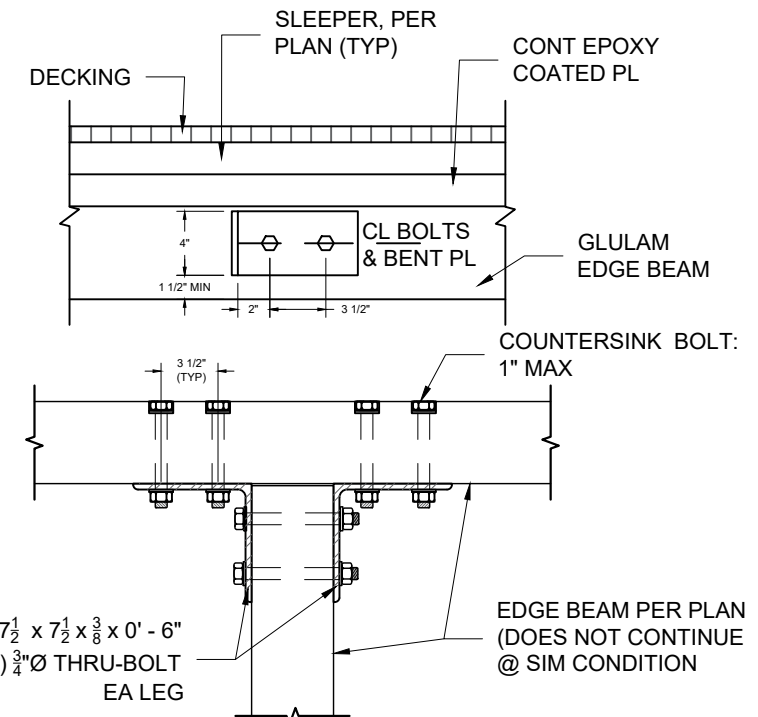


S1 DOCK SECTION w/PILES - TYP
SCALE: 1" = 1'

S3 DETAIL NOT IN USE



S5 EDGE SECTION (STEEL TRACK) - TYP
SCALE: 1" = 1'



S6 BEAM TO BEAM - TYP
SCALE: 1" = 1'

S4 DETAIL NOT IN USE



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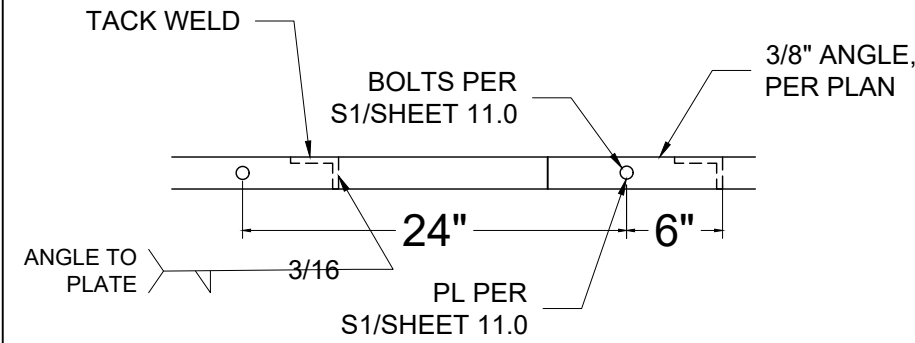
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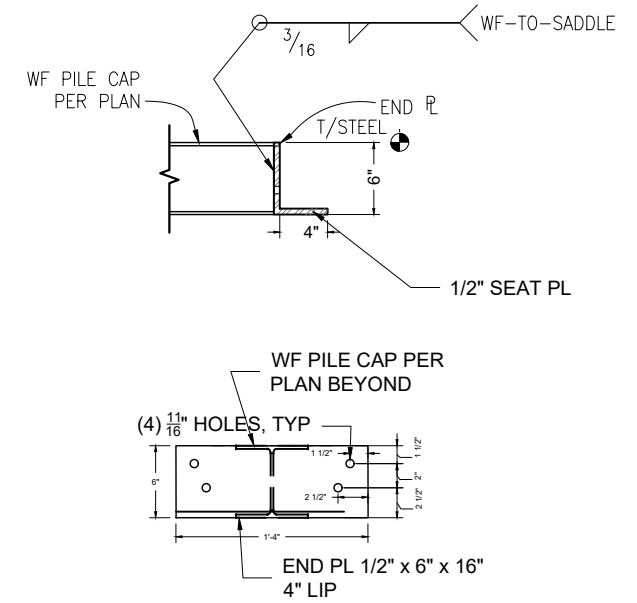
Last Updated: 2/11/2022 12:12 PM Dray

DETAILS - TRACK

S1 DETAIL NOT IN USE



S2 ANGLE TO PLATE - TYP
SCALE: 1" = 1"



S3 BEAM SADDLE BRACKET
SCALE: 3/4" = 1"

S4 DETAIL NOT IN USE

S5 DETAIL NOT IN USE

S6 DETAIL NOT IN USE



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