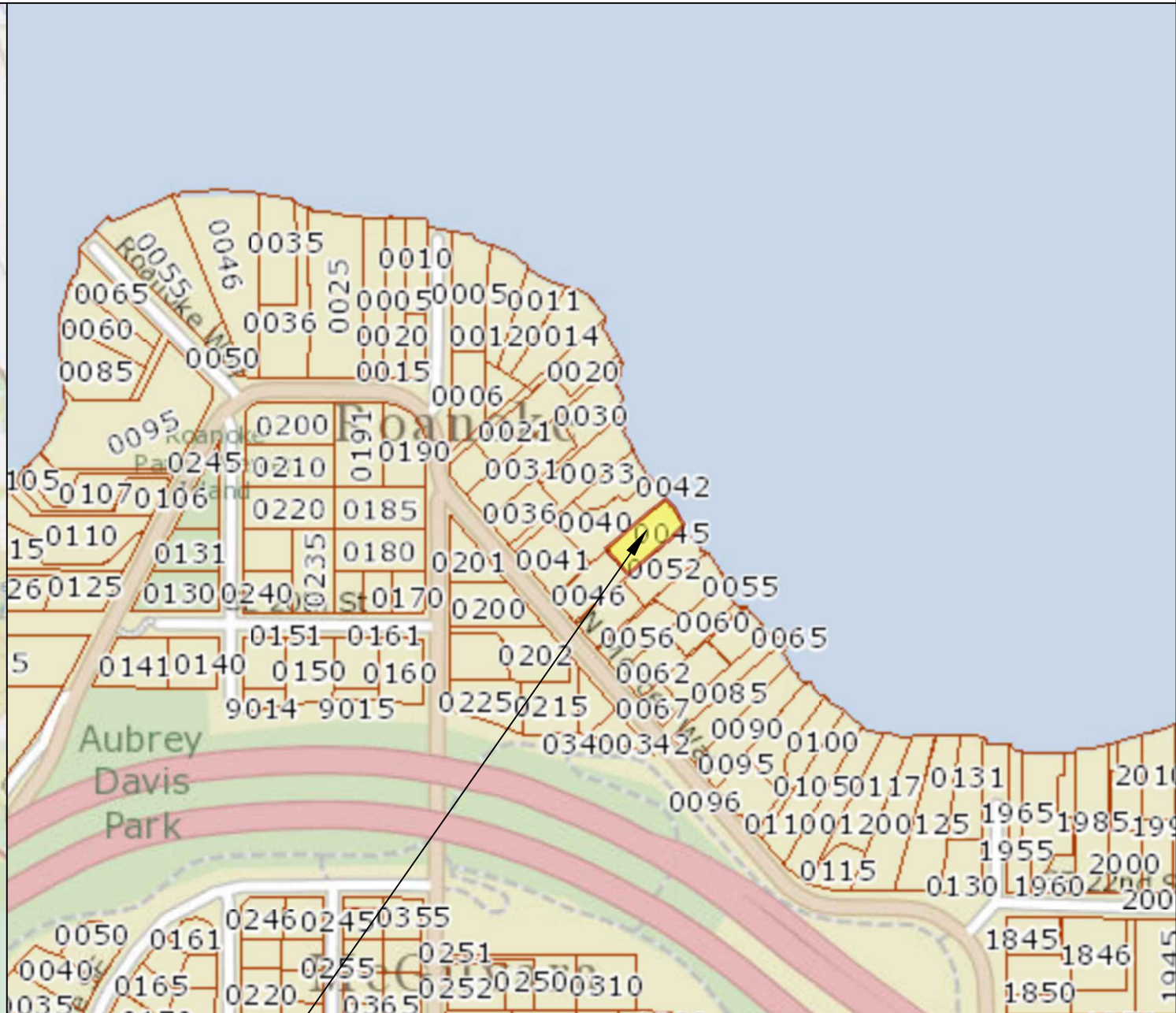
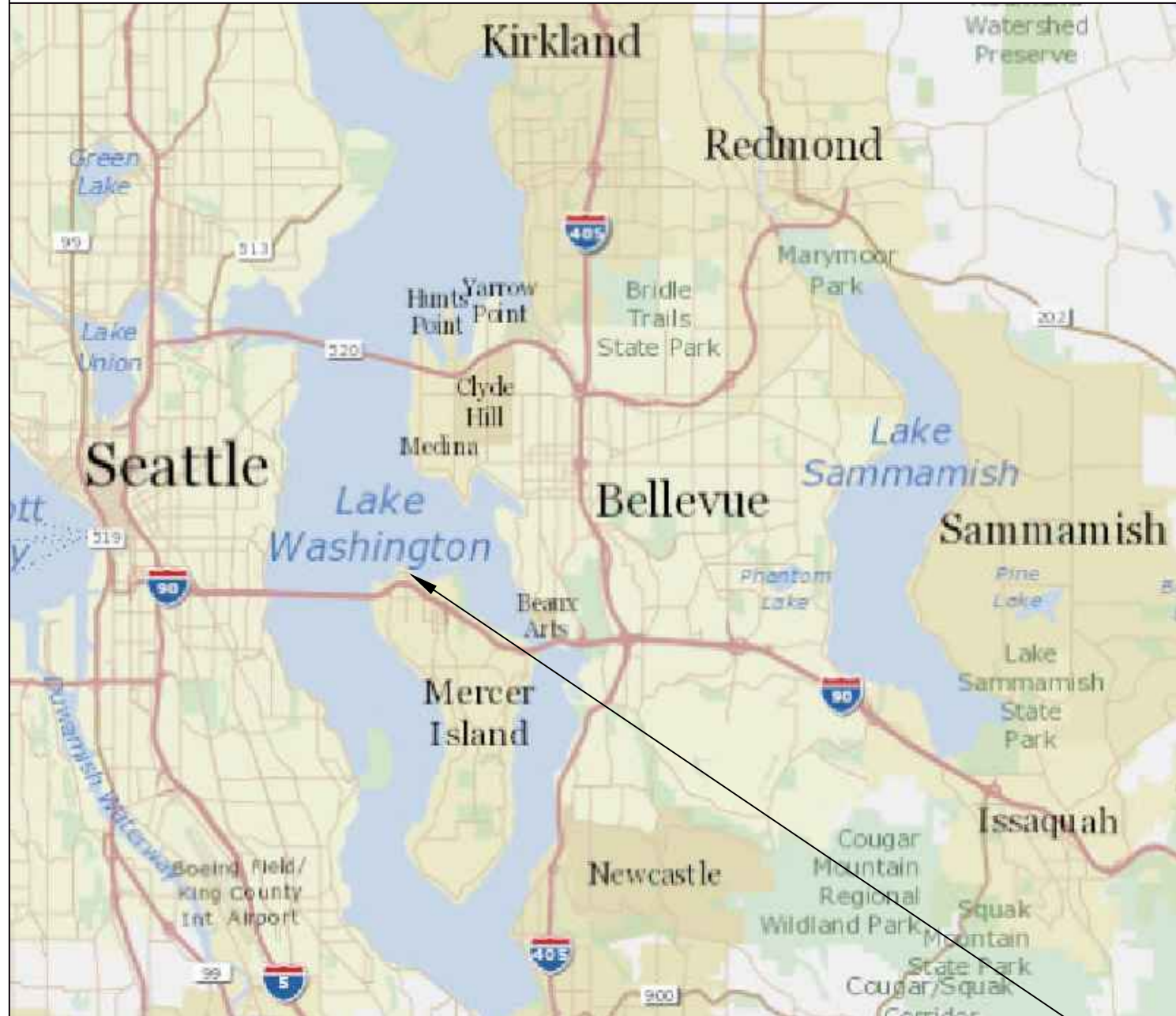


SITE PLAN



Pin: 5315100045

Legal Description: MC GILVRAS ISLAND ADD LOT B MERCER ISLAND SHORT PLAT NO 79-07-22 REC NO 7910030597 & SH LDS ADJ

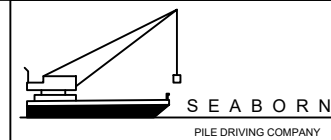
Plat Block: 1
Plat Lot: 9

LAT: 47.59377 LONG: -122.24105

Prepared By:

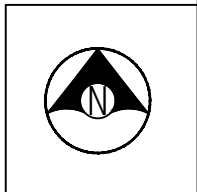
Seaborn Pile Driving
1080 W Ewing St
Seattle, WA 98119

Office: 206-236-1700
permits@seabornpiledriving.com
www.seabornpiledriving.com



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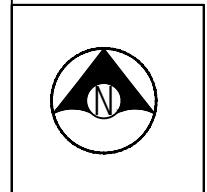
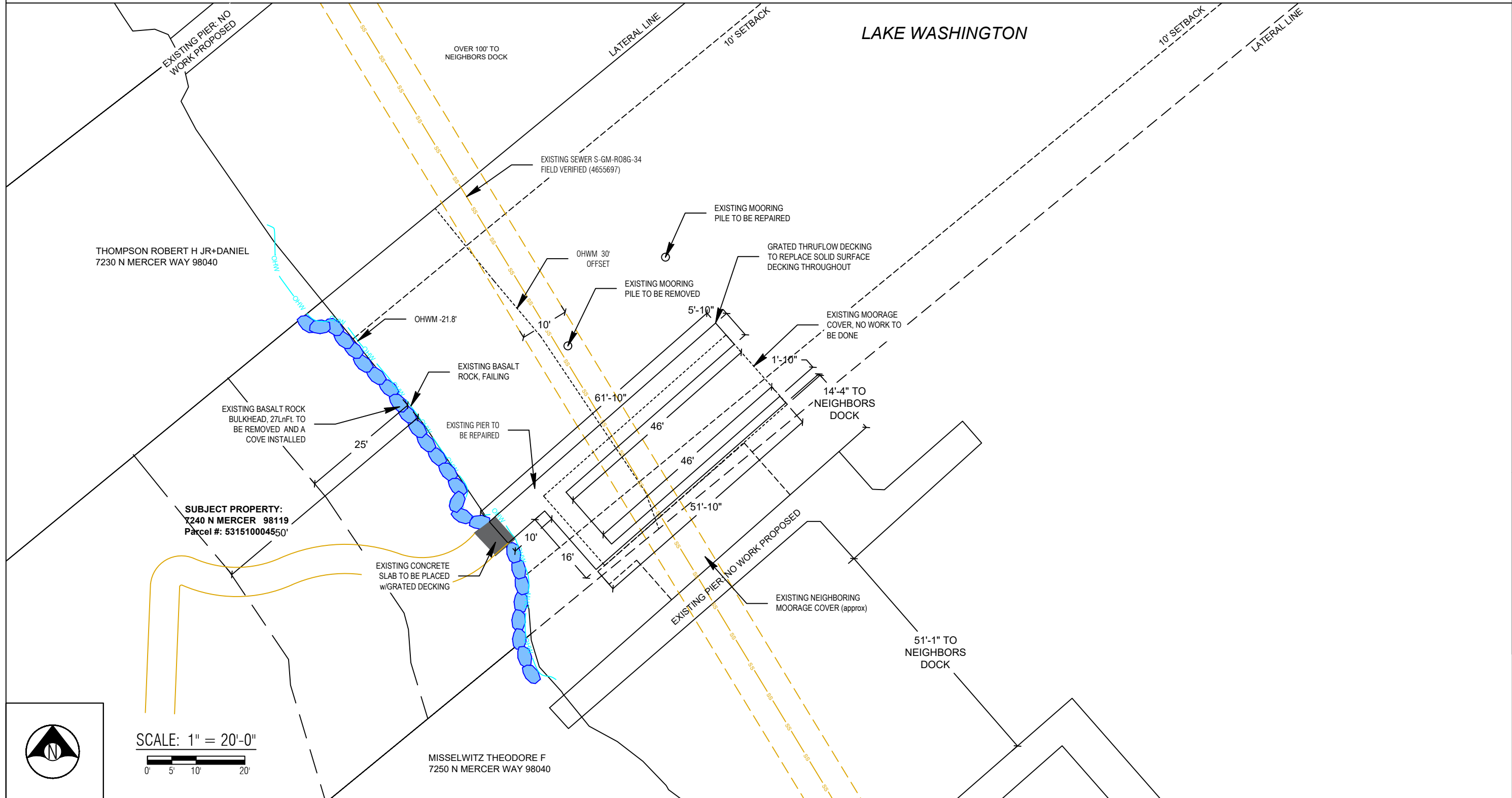


**SUBJECT
PROPERTY**

Contractor: Seaborn Pile Driving Company 1080 W Ewing St Seattle, WA 98119	Applicant: Sun Residence 7240 N MERCER WAY Mercer Island, WA 98119	Datum: CORPS OF ENGINEERS 1919 SW Quarter Of Section 01, Township 24, Range 04
County: King County Location: Lake Washington	Adjacent Owners: THOMPSON ROBERT H JR+DANIEL 7230 N MERCER WAY 98040	Created: 10/22/2021 4:13 PM Keise
<p>SHEET A1.0</p> <p>NWS-2020-1042 PAGE 1 OF 9</p>		

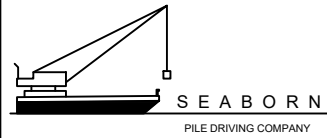
EXISTING CONDITIONS

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



SCALE: 1" = 20'-0"
 0' 5' 10' 20'

Prepared By:
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 1080 W Ewing St
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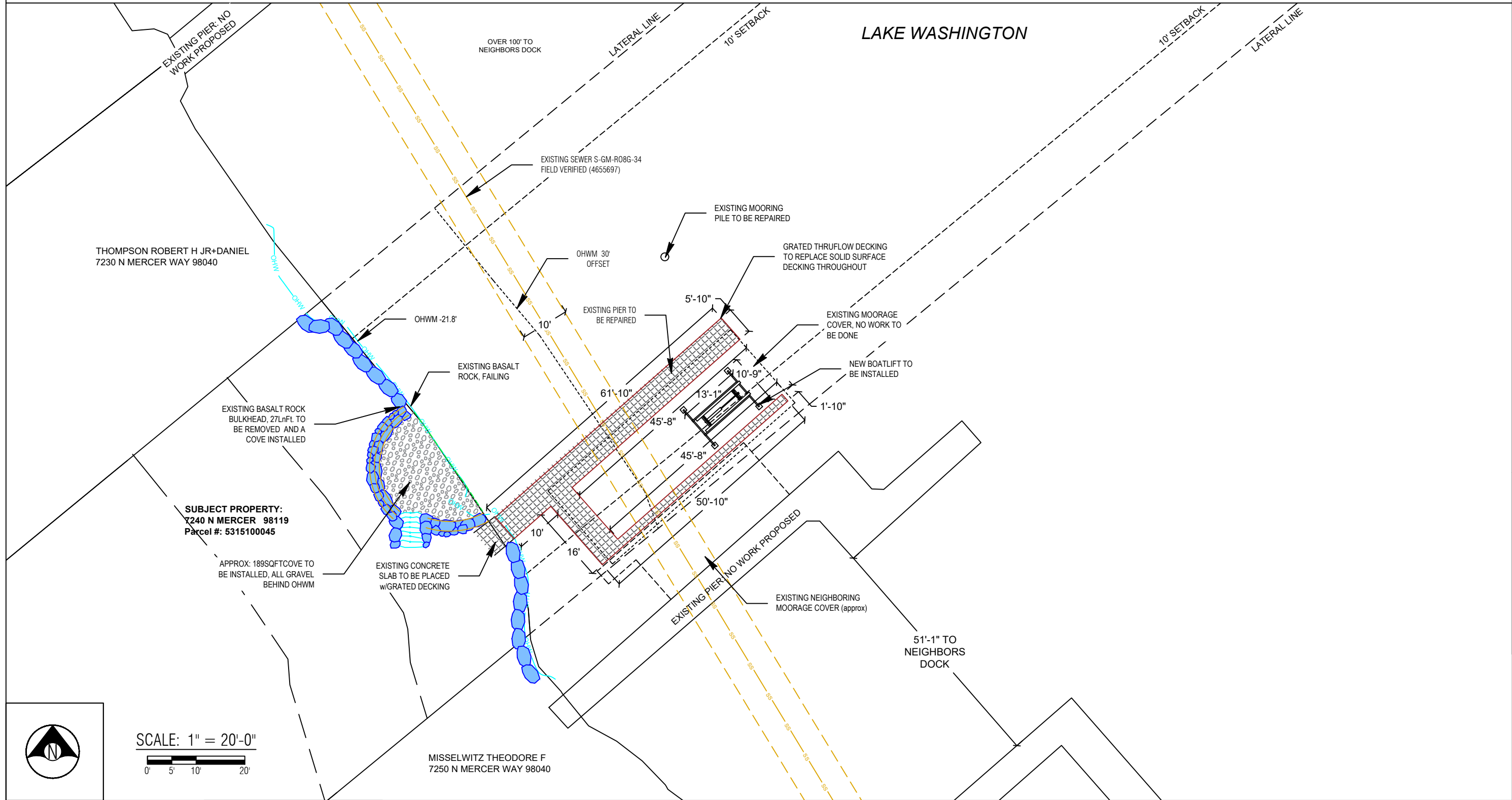
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 Applicant: Sun Residence
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 County: King County
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 Created: 10/22/2021 4:13 PM Keise

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SHEET A2.0
 NWS-2020-1042
 PAGE 2 OF 9

PROPOSED CONDITIONS

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



Contractor: Seaborn Pile Driving Company
1080 W Ewing St
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SHEET A3.0

NWS-2020-1042
PAGE 3 OF 9

PIER DETAILS

LEGEND

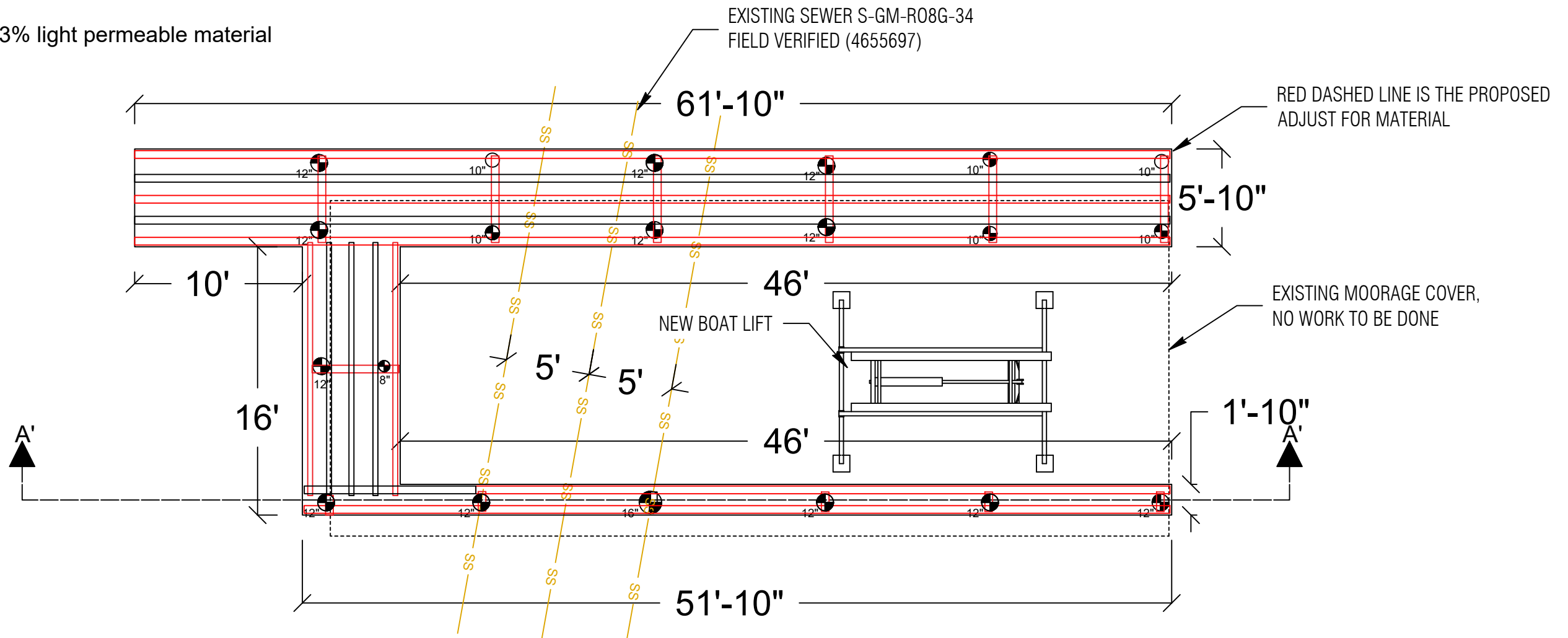
- (19) EXISTING PILES - TO BE REPAIRED
- (11) EXISTING PILES - NO WORK TO BE DONE
- (1) MOORING PILE TO BE REMOVED

Area: 538 sqft (total & over water)
 Area: 538 sqft (new thruflow grated decking)

**Thruflow decking is 43% light permeable material

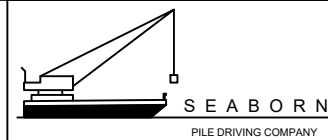
MEMBERS:

- | | |
|------------------------------|---|
| (22) Existing Piles | (19) Repair Piles |
| (13) Existing Caps | (12) Repair Caps |
| (54) Existing Stringers | (35) Repair Stringers |
| (44) Existing brackets | (-) No Brackets, all welded members now |
| (133) Existing total members | (66) Repair members = 49.6% Repair |



PLAN VIEW

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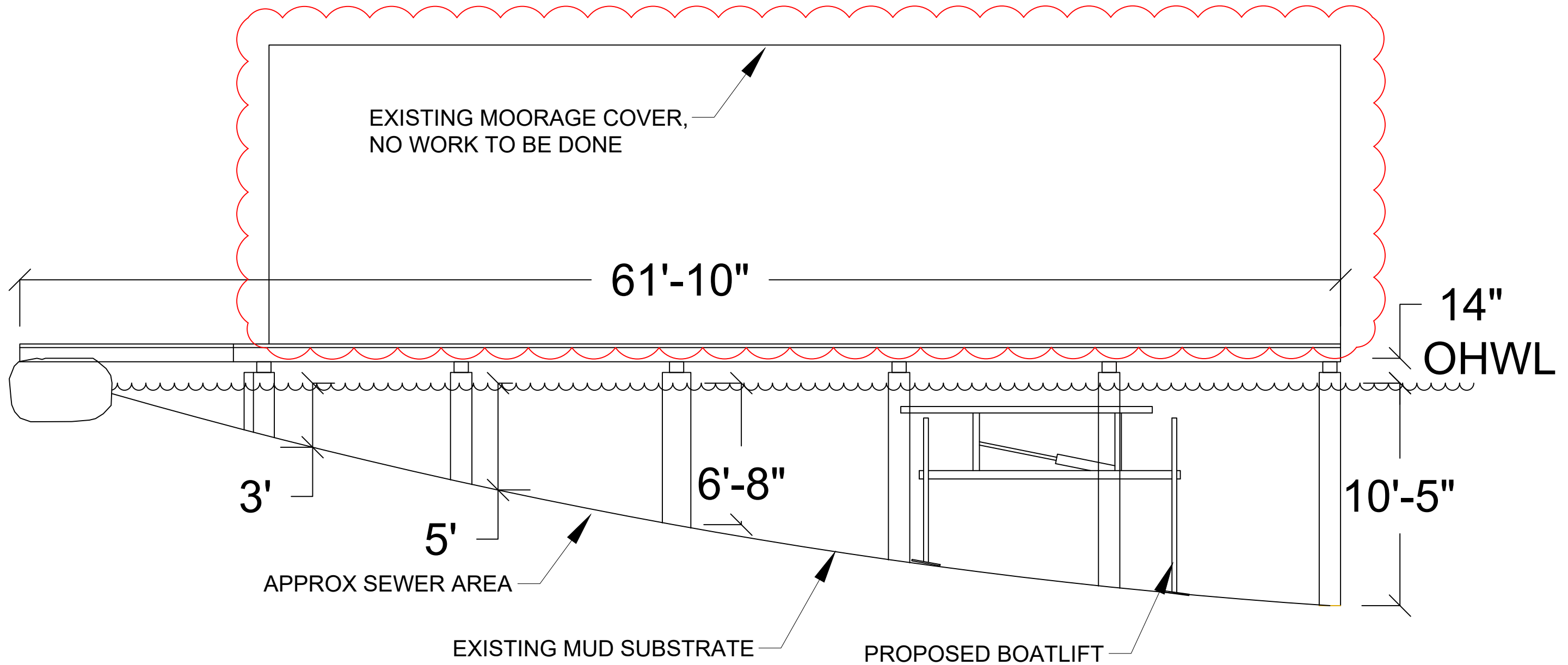
Contractor: Seaborn Pile Driving Company
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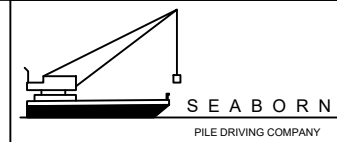
**SHEET
 A4.0**

PIER DETAILS



SECTION VIEW

Prepared By:
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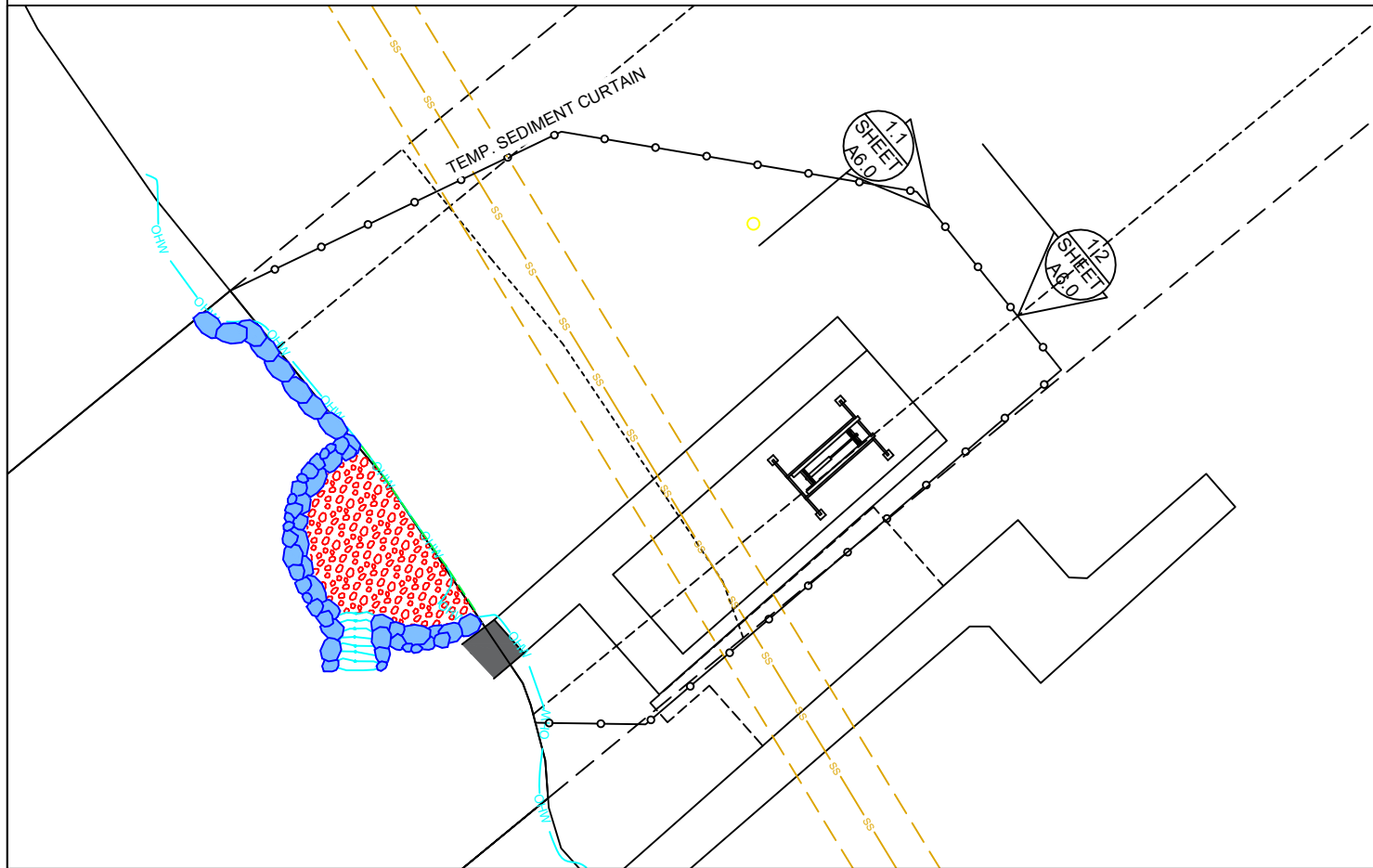
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**SHEET
 A5.0**

BMP INFORMATION

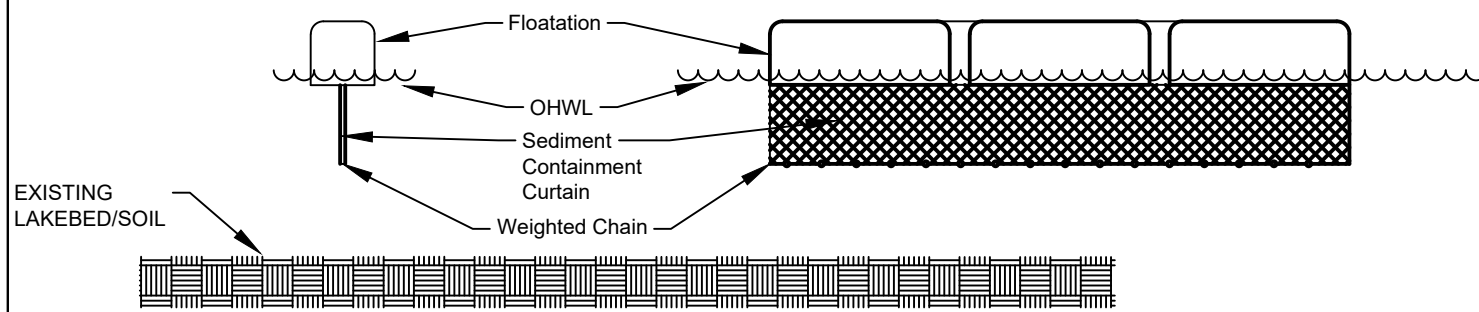


BMP NOTES:

- 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. Piles shall not be treated with pentachlorophenol, creosote, CCA or comparably toxic compounds. If ammoniacal copper zinc arsenate (ACZA) pilings are proposed, the applicant shall meet all of the best management practices, including a post-treatment procedure, as outlined in the amended Best Management Practices of the Western Wood Preservers. All piling sizes are in nominal diameter.
 13. Any paint, stain or preservative applied to components of the overwater structure must be leach resistant, completely dried or cured prior to installation. Materials shall not be treated with pentachlorophenol, creosote, CCA or comparably toxic compounds.

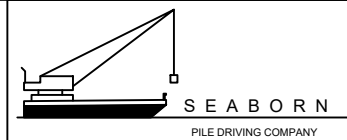
DETAIL 1.1

DETAIL 1.2



DETAIL 1.1 & 1.2

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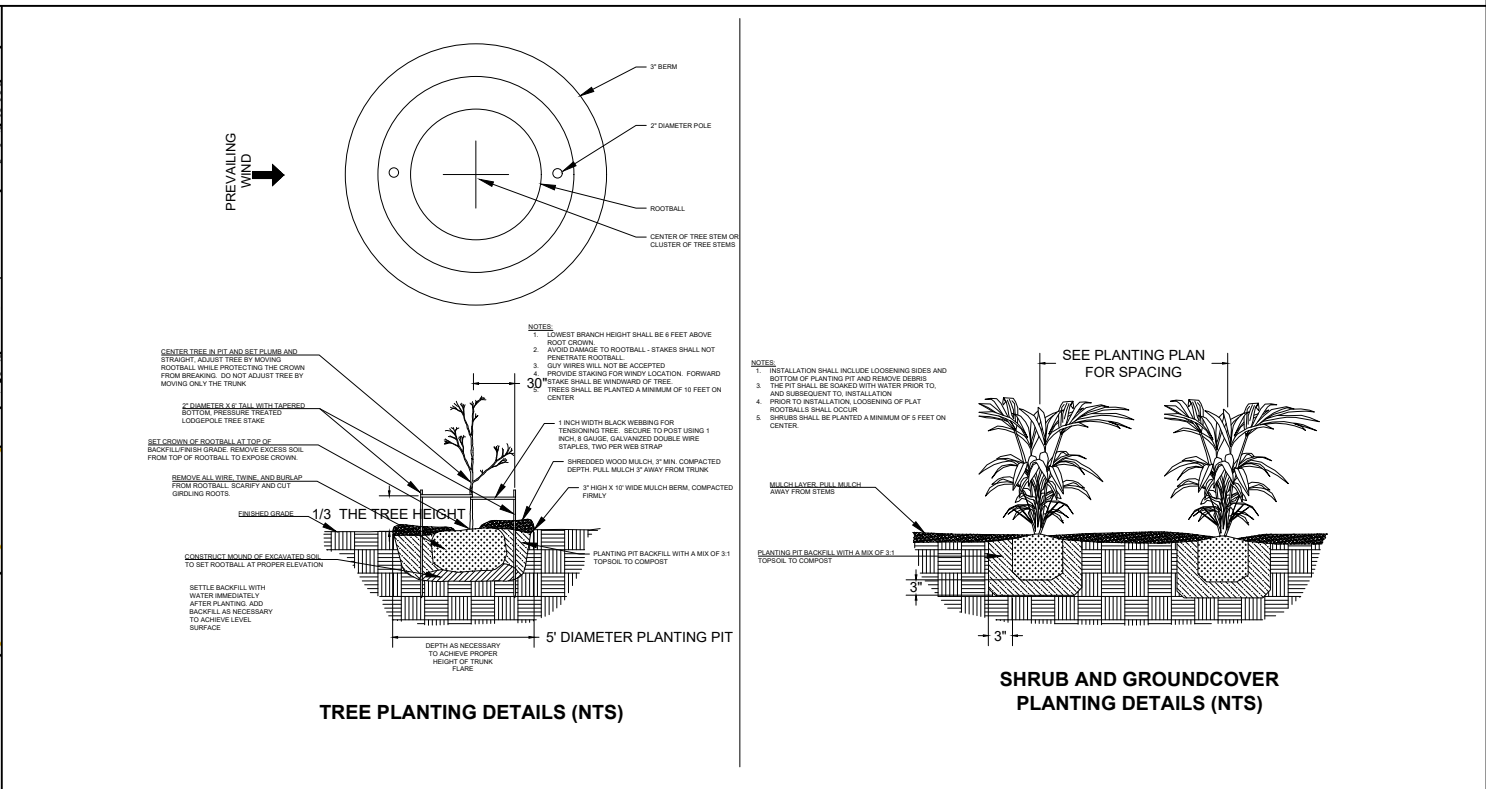
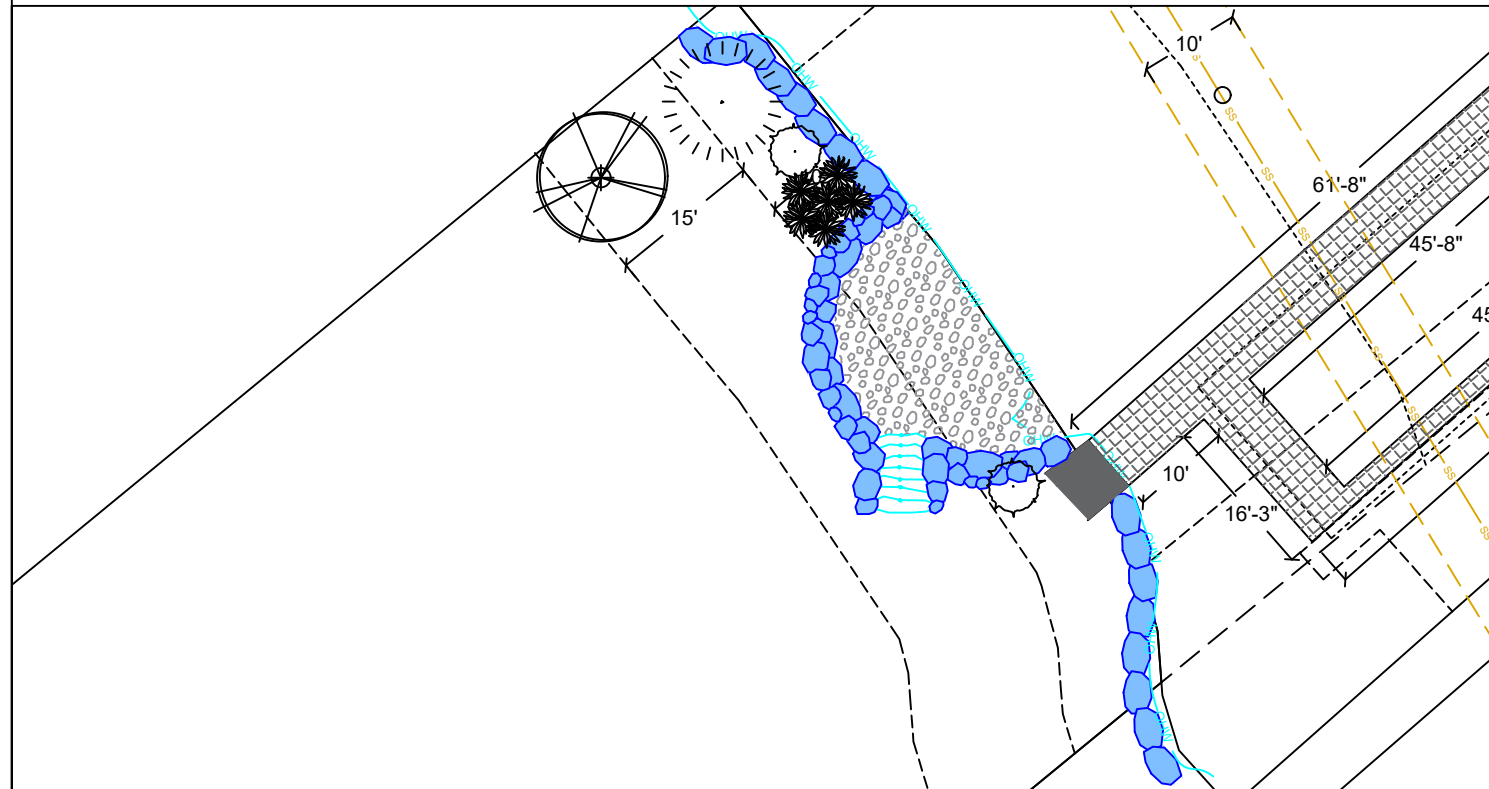
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**SHEET
 A6.0**

PROPOSED MITIGATION



Notes:

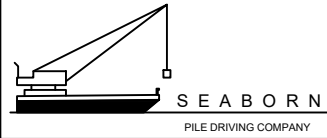
1. Shrubs are show, and shall be planted, at least five feet on center. Trees are show, and shall be planted, at least ten feet to center.
2. The property owner will implement and abide by the shoreline planting plan. The plants shall be installed before or concurrent with the work authorized by this 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
	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	1	3 ft
	PINUS CONTORTA 'CONTORTA'	SHORE PINE	1	3 ft
	CORNUS SERICEA	DOGWOOD	6	1 Gallon
	RIBES SANGUINEUM	RED FLOWERING CURRANT	2	1 Gallon

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

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NWS-2020-1042
 PAGE 7 OF 9

GENERAL NOTES

MATERIALS SPEC LIST:

Boat Lifts:
 * SL8012ARW - 129" x 157"

Decking Material: FRPP - Fiberglass reinforced polypropylene
 Light permeable percentage:
 * Surface - 43%
 * 18" Dock Height - 61%
 * 60" Dock Height - 84%

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

PILES:
 * Repair piles are done as a sleeve/strap method
 * All Pile tops exposed will have a conical cap placed on top

MITIGATION:
 * All All gravel used by Seaborn Pile Driving for coves, beaches or as mitigation will be fish friendly spawning gravel (naturally occurring water rounded aggregates) The sizes will be noted as:
 ** 100% less than 1 inch, 85% less than 0.5 inch, and 40% less than 0.25 inch for areas outside of documented sockeye spawning zone
 * Bulkhead repair will be at the same OHWM as existing or set back. We will not place the material further into the lake
 * All debris around job site will be removed from the lake bed as part of this project
 * Any logs noted on site will stay as necessary and we will avoid touch the log at all costs per the request of WDFW.

CODE REFERENCES: Mercer Island

We are applying for the permit to be reviewed under the: "Development Standards for Replacement, Repair and Maintenance of Overwater Structures, Including Moorage Facilities" per MIMC 19.13050(F)(2).

2) Development Standards for Replacement, Repair and Maintenance of Overwater Structures, Including Moorage Facilities. The maintenance, repair and complete replacement of legally existing overwater structures is permitted; provided, that:

i. All permit requirements of federal and state agencies are met;

Permits in review with CORPS (NWS-2020-1042) and WDFW (23939)

ii. The area, width, or length of the structure is not increased, but may be decreased;

Dock area, width, and length will not be increased

iii. The height of any structure is not increased, but may be decreased; provided, that the height above the OHWM may be increased as provided in subsection (F)(2)(ix)(b) of this section;

Height will not be increased

iv. The location of any structure is not changed unless the applicant demonstrates to the director's satisfaction that the proposed change in location results in: (A) a net gain in ecological function, and (B) a higher degree of conformity with the location standards for a new overwater structure;

Location of structure is not changing

iw. Piles shall not be treated with pentachlorophenol, creosote, CCA or comparably toxic compounds. If ammoniacal copper zinc arsenate (ACZA) pilings are proposed, the applicant shall meet all of the best management practices, including a post-treatment procedure, as outlined in the amended Best Management Practices of the Western Wood Preservers. All piling sizes are in nominal diameter; Any paint, stain or preservative applied to components of the overwater structure must be leach resistant, completely dried or cured prior to installation. Materials shall not be treated with pentochlorophenol, creosote, CCA or comparably toxic compounds;

Proposed piles will be epoxy coated steel for repair.

vii. The applicant shall abide by the work windows for listed species established by the U.S. Army Corps of Engineers and Washington Fish and Wildlife;

Will follow work window provided by CORPS

viii. Disturbance of bank vegetation shall be limited to the minimum amount necessary to accomplish the project. Disturbed bank vegetation shall be replaced with native, locally adapted herbaceous and/or woody vegetation. Herbaceous plantings shall occur within 48 hours of the completion of construction. Woody vegetation components shall be planted in the fall or early winter, whichever occurs first. The applicant shall take appropriate measures to ensure revegetation success; Ch. 19.13 Shoreline Master Program | Mercer Island City Code Page 29 of 34 The Mercer Island City Code is current through Ordinance 20C-13, passed June 16, 2020.

Mitigation noted on plan set

ix. Structural Repair. The structural repair, which may include replacement of framing elements, of moorage facilities that results in the repair of more than 50 percent of the structure's framing elements within a five-year period shall comply with subsections (F)(2)(ix)(a) through (F)(2)(ix)(c) of this section. For this section, framing elements include, but are not limited to, stringers, piles, pile caps, and attachment brackets, as shown in Figure D: **We are repairing less than 50% of the dock project**

a. One hundred percent of the decking area of the pier, dock, and any platform lifts must be fully grated with materials that allow a minimum of 40 percent light transmittance; *N/A*

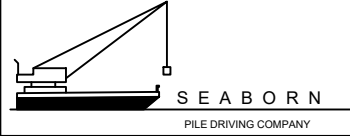
b. The height above the OHWM for moorage facilities, except floats, shall be a minimum of one and one-half feet and a maximum of five feet; and *N/A*

c. An existing moorage facility that is five feet wide or more within 30 feet waterward from the OHWM shall be replaced or repaired with a moorage face *N/A*

Last permit issued for property: 2011

Dock established/constructed: 1959 aerial date

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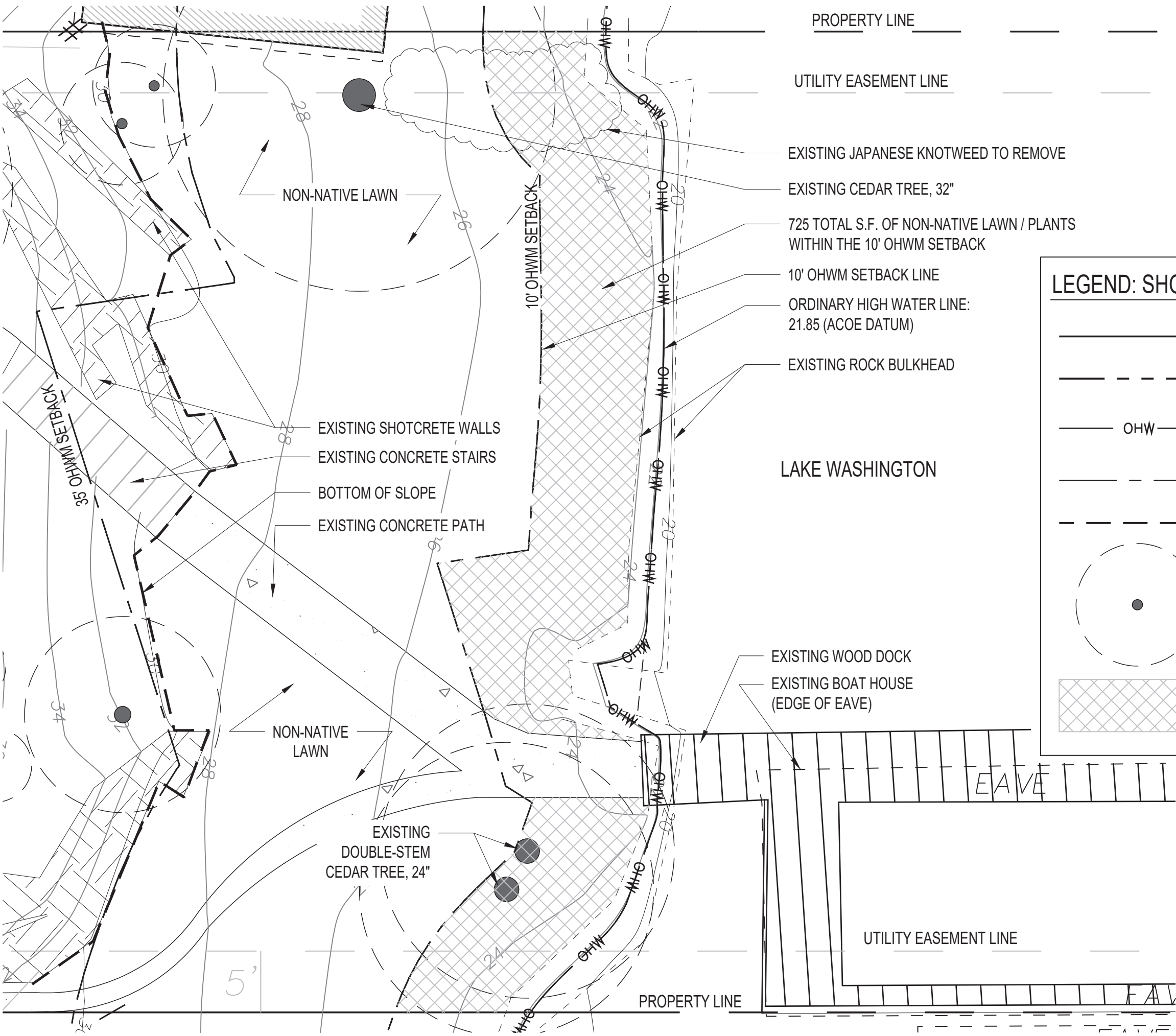


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PROPERTY LINE

UTILITY EASEMENT LINE

EXISTING JAPANESE KNOTWEED TO REMOVE

EXISTING CEDAR TREE, 32"

725 TOTAL S.F. OF NON-NATIVE LAWN / PLANTS WITHIN THE 10' OHWM SETBACK

10' OHWM SETBACK LINE

ORDINARY HIGH WATER LINE: 21.85 (ACOE DATUM)

EXISTING ROCK BULKHEAD

LAKE WASHINGTON

EXISTING WOOD DOCK

EXISTING BOAT HOUSE (EDGE OF EAVE)

UTILITY EASEMENT LINE

PROPERTY LINE

LEGEND: SHORELINE

	PROPERTY LINE
	SETBACK LINE
	ORDINARY HIGH WATER MARK (OHWM)
	OHWM SETBACK LINE
	BOTTOM OF SLOPE
	EXISTING TREE
	10' OHWM BUFFER ZONE



Land Morphology

1512 Alaskan Way
Seattle, WA 98101
206 443 2120

www.landmorphology.com

SUN RESIDENCE

7240 NORTH MERCER WAY
MERCER ISLAND, WA 98040

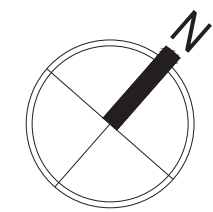
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Date: 10/01/2020

Drawn By: MJ

Checked By: RF

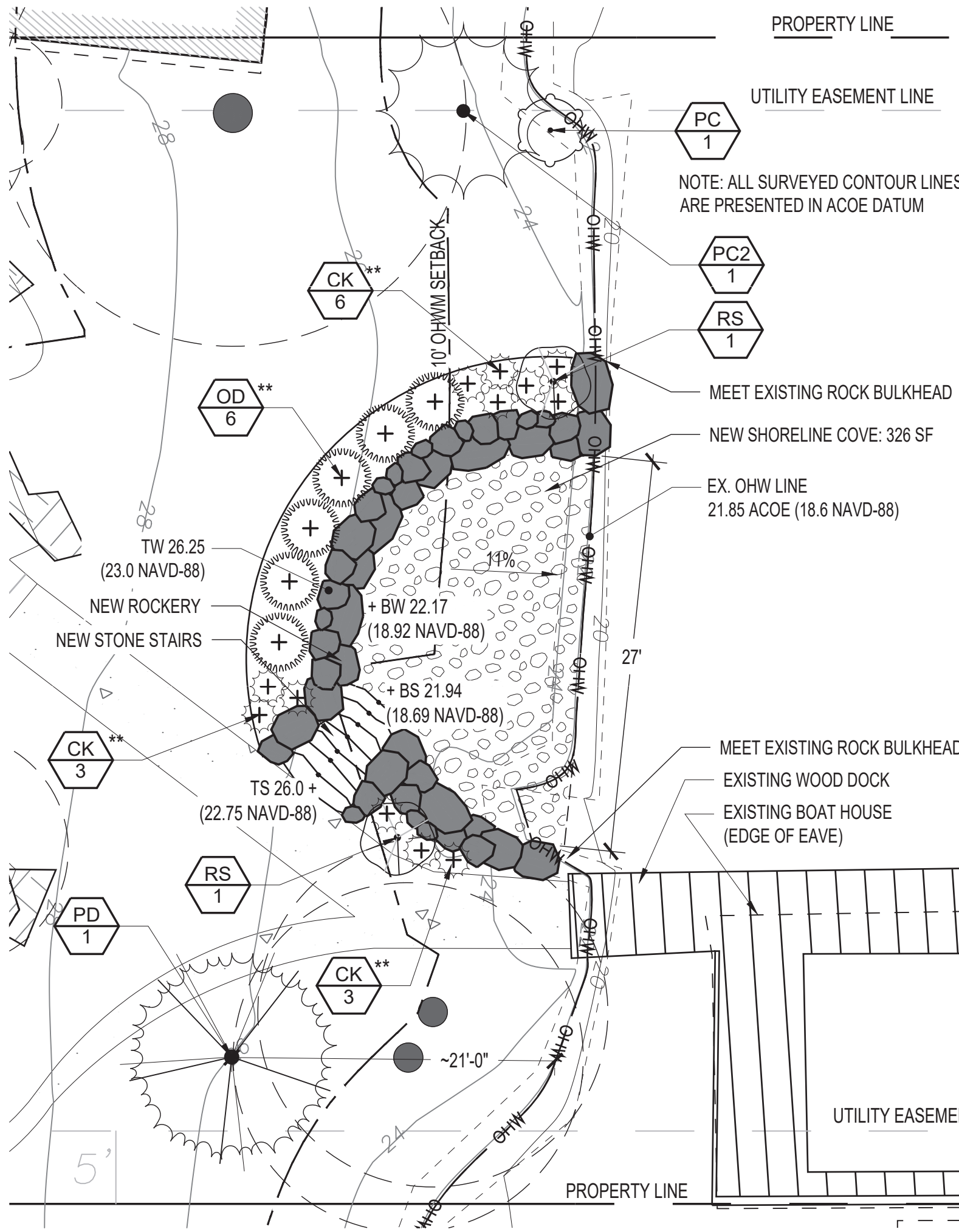
Revisions:



Sheet:

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EX. VEG. PLAN



PROPERTY LINE

UTILITY EASEMENT LINE

PC
1

NOTE: ALL SURVEYED CONTOUR LINES ARE PRESENTED IN ACOE DATUM

PC2
1

RS
1

CK
6

OD
6

MEET EXISTING ROCK BULKHEAD

NEW SHORELINE COVE: 326 SF

EX. OHW LINE
21.85 ACOE (18.6 NAVD-88)

TW 26.25
(23.0 NAVD-88)

NEW ROCKERY
NEW STONE STAIRS

+ BW 22.17
(18.92 NAVD-88)

+ BS 21.94
(18.69 NAVD-88)

27'

MEET EXISTING ROCK BULKHEAD

EXISTING WOOD DOCK

EXISTING BOAT HOUSE
(EDGE OF EAVE)

CK
3

RS
1

PD
1

CK
3

TS 26.0+
(22.75 NAVD-88)

EAVE

UTILITY EASEMENT LINE

PROPERTY LINE

PLANT SCHEDULE SHORELINE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	PC2	1	PINUS CONTORTA 'CONTORTA' SHORE PINE	5 GAL
	PD	1	PSEUDOTSUGA MENZIESII DOUGLAS FIR	5 GAL
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
	CK **	12	CORNUS SERICEA 'KELSEYI' KELSEYI DOGWOOD	2 GAL
	OD **	6	OSMANTHUS DELAVAYI DELAVAYI OSMANTHUS	3 GAL
	PC	1	PHYSOCARPUS CAPITATUS PACIFIC NINEBARK	3 GAL
	RS	2	RIBES SANGUINEUM RED FLOWERING CURRANT	5 GAL

** NOTE: THESE SHRUBS ARE OUTSIDE OF THE 10' OHWM PLANTING ZONE OR EXTRA SHRUBS NOT REQUIRED BY RAP



Land Morphology

1512 Alaskan Way
Seattle, WA 98101
206 443 2120

www.landmorphology.com

SUN RESIDENCE

7240 NORTH MERCER WAY
MERCER ISLAND, WA 98040

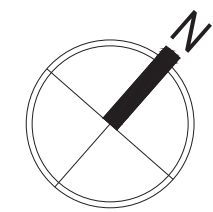
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Date: 10/01/2020

Drawn By: MJ

Checked By: RF

Revisions:



Sheet:

L-1.1

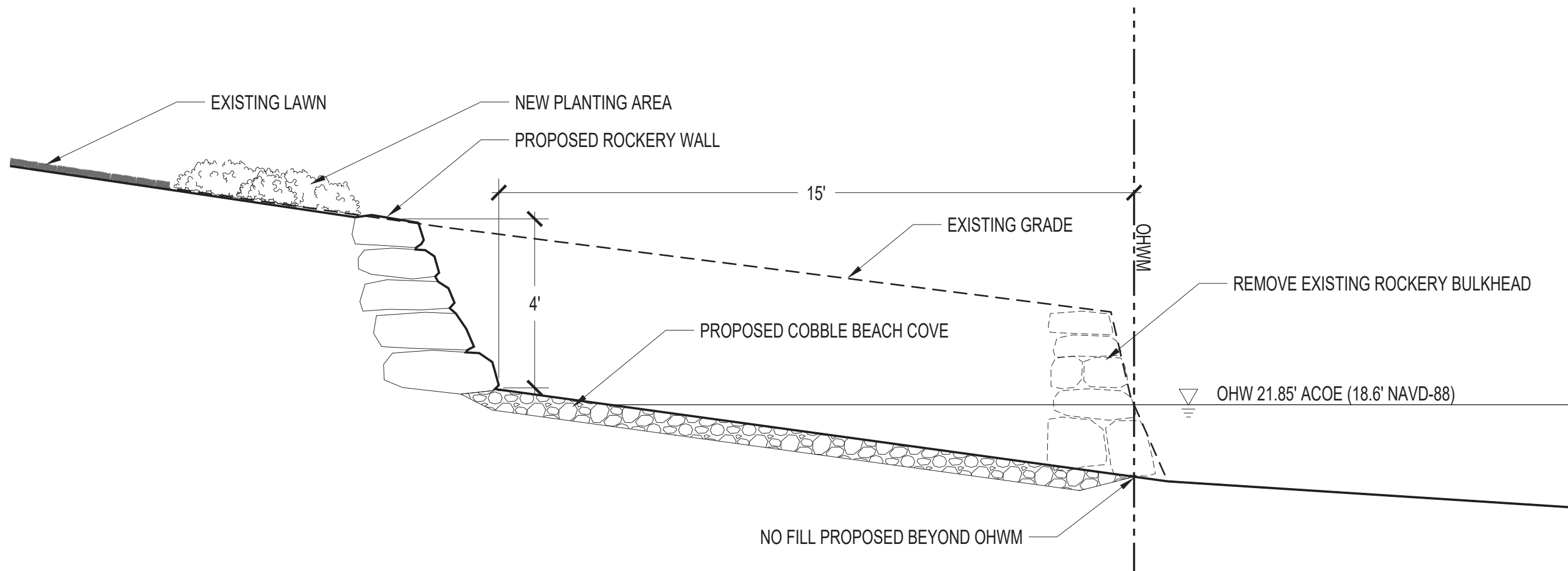
PLANTING PLAN



Land Morphology

1512 Alaskan Way
Seattle, WA 98101
206 443 2120

www.landmorphology.com



1 COBBLE BEACH COVE – SECTION
SCALE: 3/8"=1'-0"

SUN RESIDENCE

7240 NORTH MERCER WAY
MERCER ISLAND, WA 98040

Scale: 3/8" = 1'-0"

Date: 10/01/2020

Drawn By: MJ

Checked By: RF

Revisions:

Sheet:

L-1.2

SECTIONS

STRUCTURAL NOTES

GENERAL REQUIREMENTS

BUILDING CODE & REFERENCE STANDARDS: The "International Building Code" (IBC), 2015 Edition, as adopted and modified by the City of Mercer Island, governs the design and construction of this project. Reference to a specific section in the Code does not relieve the contractor from compliance with the entire materials reference standards noted below. The latest edition of the materials reference standards shall be used.

SCOPE OF STRUCTURAL WORK: Dock repair project involving the repair of (19) existing piles and redecking of the entire dock

DEFINITIONS: The following definitions apply to these general notes:

- "Structural Engineer of Record" (EOR) - The Structural Engineer who is legally responsible for stamping & signing the structural documents for the project. The EOR is responsible for the design of the Primary Structural System.

STRUCTURAL DETAILS: The structural drawings are intended to show the general character and extent of the project and are not intended to show all details of the work.

STRUCTURAL RESPONSIBILITIES: The EOR is responsible for the strength and stability of the Primary Structure in its completed state.

CONTRACTOR RESPONSIBILITIES: The contractor is responsible for the means and methods of construction and all job-related safety standards such as OSHA and WISHA. The contractor is responsible for the strength and stability of the structure during construction and shall provide temporary shoring, bracing and other elements required to maintain stability until the structure is completed. It is the contractor's responsibility to be familiar with the work required in the construction documents and the requirements for executing it properly.

DISCREPANCIES: In case of discrepancies between these general notes, the contract drawings and specifications, and/or reference standards, the EOR shall determine which shall govern. Discrepancies shall be brought to the attention of the EOR before proceeding with the work. Accordingly, any conflict in or between the Contract Documents shall not be a basis for adjustment in the Contract Price.

SITE VERIFICATION: The contractor shall verify all dimensions and conditions at the site prior to fabrication and/or construction. Conflicts between the drawings and actual site conditions shall be brought to the attention of the EOR before proceeding with the work. All underground utilities shall be determined by the Contractor prior to excavation or drilling. Any utility information shown on the drawings and details is approximate and not necessarily complete.

ADJACENT UTILITIES: The contractor shall determine the locations of all adjacent underground utilities prior to pile placement. Any utility information shown on the drawings and details is approximate and not necessarily complete.

DESIGN CRITERIA

CONSTRUCTION LOADS: Loads on the structure during construction shall not exceed the design loads or the capacity of the partially completed construction.

WIND DESIGN: Wind load is determined using Chapter 27 of ASCE 7-10 in accordance with IBC Section 1609 with the following factors:

Basic Wind Speed (3-Second Gust) V = 110 MPH
 Wind Importance Factor $I_w = 1.0$ Risk Category = II
 Exposure Category = D

Analysis Procedure - ASCE 7-10 Chapter 28.

LATERAL LOADS:

P = 21.08 PSF (Unfactored)
 Max Sail Area = 110 ft² or 20x5.5' (Assumed)
 Max Load = 0.873 K/Pile (ASD)

LIVE LOADS:

Dock (Live) 40 PSF
 Dock (Snow) 20 PSF

SUBMITTALS:

NON-STRUCTURAL COMPONENTS: Design, detailing and anchorage of all nonstructural components shall be in accordance with ASCE 7-10, Chapter 13 and the project specifications. Nonstructural components designed by others shall not induce torsional loading into supporting steel structural members without additional bracing of those members to eliminate torsional forces. Torsional bracing shall be designed by the nonstructural component designer and approved by the EOR. Anchorage to the primary structure is per the bidder-design contractor or supplier.

TESTS & INSPECTIONS

INSPECTIONS: All construction is subject to inspection by the Building Official in accordance with IBC Sec 110. The contractor shall coordinate all required inspections with the Building Official. Submit copies of all inspection reports to the Architect/EOR for review. The Building Official may accept inspection of and reports by approved inspection agencies in lieu of Building Official's inspections. The contractor shall obtain approval of Building Official to use the third-party inspection agency and contractor shall alert the Architect/EOR as such.

Soils & Foundations

During driving and testing of piles.

PILES

REFERENCE STANDARDS: Conforms to IBC Sections 1810.3.2.4.

SUBMITTALS: Conform to drawings indicating location, steel strength, diameter, and minimum embedment length.

MATERIALS: Conform to notes for STRUCTURAL STEEL and WOOD FRAMING, this sheet.

SIZE: Pile size shall be as noted on the framing plan drawings.

CAPACITY: Pile capacities shall be as follows: Dock Piles - Lateral loading per tributary area per pile layout on dock for wind pressures, and moisture exposure for appropriate use based on the method of preservative treatment of the wood.

STRUCTURAL STEEL

DESIGN STANDARDS: Structural steel for this project is designed in accordance with the latest edition of the AISC Steel Construction Manual.

REFERENCE STANDARDS: Conform to:

- (1) AISC "Code of Standard Practice for Steel Buildings & Bridges."
- (2) RCSC "Specification for Structural Joints using ASTM A325 or A490 Bolts."
- (3) AWS D1.1 "Structural Welding Code - Steel."

SUBMITTALS:

(1) Submit shop drawings in accordance with AISC Specification Sec M1 "Shop and Erection Drawings."

MATERIALS:

Structural WF Shapes ASTM A992, Fy = 50 ksi
 Other Structural Shapes ASTM A36, Fy = 36 ksi
 Bars & Plates ASTM A36, Fy = 36 ksi
 Steel Pipe ASTM A53, Grade B, Fy = 35 ksi
 Bolts in Wood ASTM A307
 Nuts ASTM A563 or ASTM A194, Grade 2H
 Washers (flat or beveled) ASTM F436
 Welding Electrodes E70XX, 70 ksi, low hydrogen, typical

WELDING: Conform to AWS D1.1, D1.3 & D1.8. Welders shall be certified in accordance with AWS and WABO requirements. Use E70 electrodes of type required for materials to be welded.

FABRICATION/ERECTION: Conform to AISC Specification Sec M2 "Fabrication," AISC Code Sec 6 "Fabrication and Delivery" and AISC Code Sec 8 "Quality Control." The fabricator and erector shall maintain a quality control program to the extent deemed necessary so that all of the work is performed in accordance with this Code, the AISC Specification, contract documents, and project specifications.

SHOP PAINTING: Conform to AISC 360, AISC Specification Sec M3, and AISC Code Sec 6.5. Do not paint surfaces to be field welded or where slip-critical bolts are specified. All other interior steel shall be painted with one coat of grey shop primer. All exposed exterior steel shall be painted with an exterior multi-coat system as per the Architect or project specifications or galvanized per section below. Field touch-up painting shall be with primer for exposed interior surfaces and as per the Architect or project specifications for exposed exterior surfaces.

GALVANIZING: Where required, all exposed steel outside the building envelope shall be hot-dipped galvanized. Apply field touch-ups per project specifications. It is acceptable for the contractor to use epoxy coated steel members in lieu of galvanized steel.

ERECTION: Conform to AISC Specification Sec M4 "Erection" and AISC Code Sec 7 "Erection." Steel work shall be carried up true and plumb within the limits defined in AISC Code Sec 7.11.

BRACING: The contractor shall provide temporary bracing by AISC Specification Sec M4.2 "Bracing" and AISC Code Sec 7.10 "Temporary Support of Structural Steel Frames."

WOOD FRAMING

REFERENCE STANDARDS: Conform to:

- (1) IBC Chapter 23 "WOOD."
- (2) NDS and NDS Supplement - "National Design Specification for Wood Construction."

ALTERNATES: Alternates for specified item may be submitted to the EOR for review. Contractor shall submit a current ICC-ESR/APMO-ER report identifying that an alternative component has the same or greater load capacity than the specified item.

IDENTIFICATION: All sawn Lumber and pre-manufactured wood products shall be identified by the grade mark or a certificate of inspection issued by the certifying agency.

MATERIALS:

Sawn Lumber: Conform to grading rules of WWP, WCLB, or NLGA. Finger jointed studs acceptable at interior non-structural walls only.

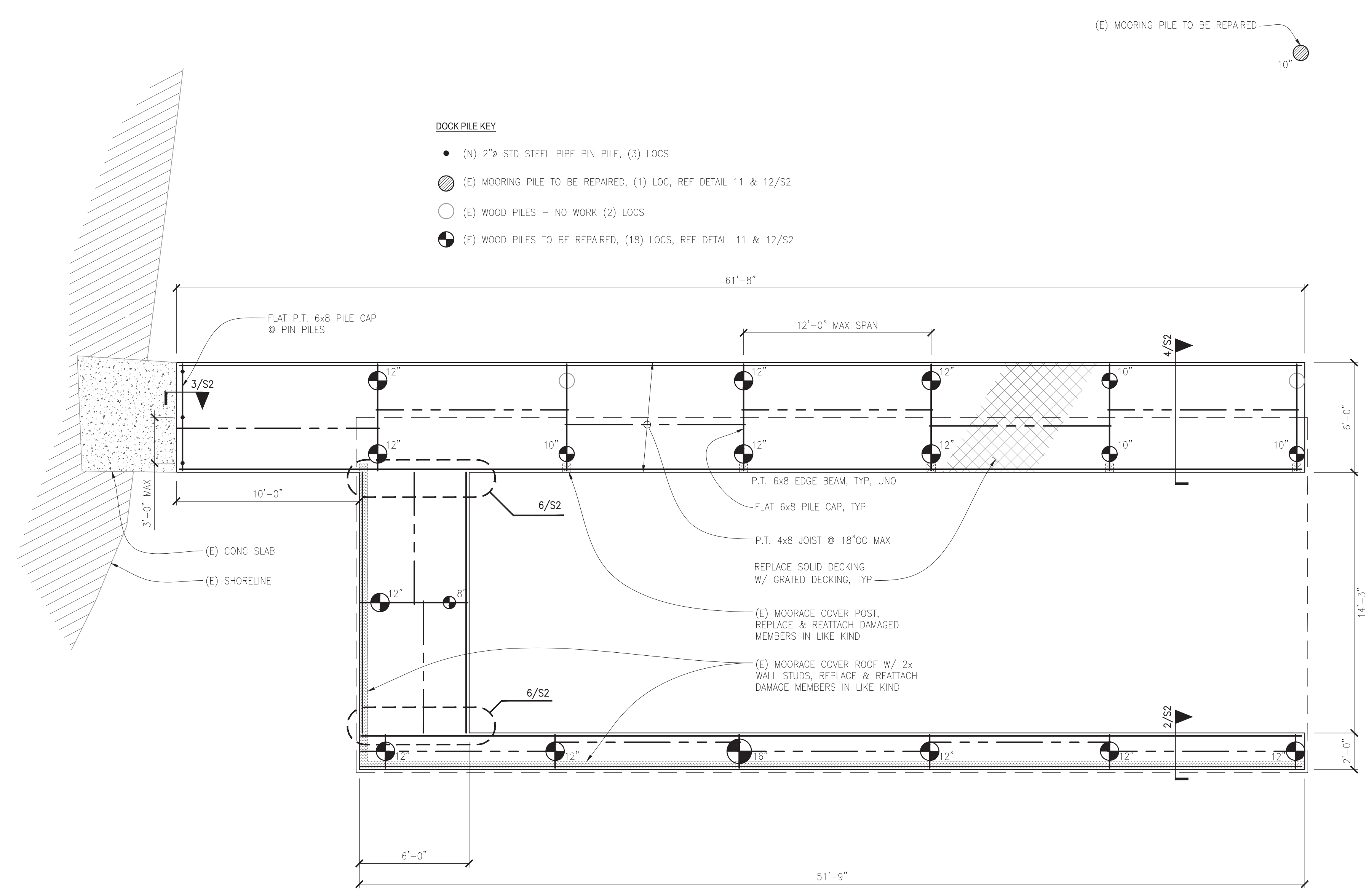
Member Use	Size	Species	Grade
Joists, Ledger	2x, 4x	P.T. DF	No. 1
Beams	5 1/8 x 10 1/2	AC/AC GLB	20F-V12
Round Timber	All Diameter	Pacific Coast DF	Marine

Lag Bolts/Thru-Bolts: Conform to ASTM A307. Provide plate washers under the heads and nuts of all bolts and lag screws bearing on wood.

MOISTURE CONTENT: Wood material used for this project shall have maximum moisture content of 19%.

PRESERVATIVE TREATMENT: Wood materials are required to be "treated wood" under certain conditions in accordance with IBC Sec 2304.12 "Protection against decay and termites." Conform to the appropriate standards of the American Wood-Preservers Association (AWPA) for sawn lumber, glued laminated timber, round poles, wood piles, and marine piles. Follow American Lumber Standards Committee (ALSC) quality assurance procedures. Products shall bear the appropriate mark.

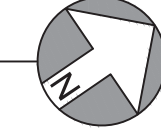
METAL CONNECTORS/PT WOOD: All metal hardware and fasteners in contact with pressure treated lumber shall be stainless steel Type 316L. At the Owner's risk and discretion, hot-dipped galvanized metal hardware and fasteners may be investigated for use in lieu of stainless steel provided that the finish has a minimum zinc content of at least 1.85 oz./SF and its use is coordinated by the Contractor and Wood Supplier for the expected environment and moisture exposure for appropriate use based on the method of preservative treatment of the wood.



DOCK FRAMING PLAN

SCALE: 1/4" = 1'-0"

(PROJECT)



DEI
DIBBLE ENGINEERS INC
 www.dibbleengineers.com
 1029 Market Street, Kirkland, WA 98033
 425.828.4200



SEAL:



11/2/20

SUN DOCK
DOCK REPAIR

7240 N MERCER WAY
 MERCER ISLAND, WA 98119

PROJECT #: 20-940
 DRAWN BY: BGSJ
 DESIGNED BY: MWD
 DATE: DESCRIPTION
 11.02.2020 PERMIT

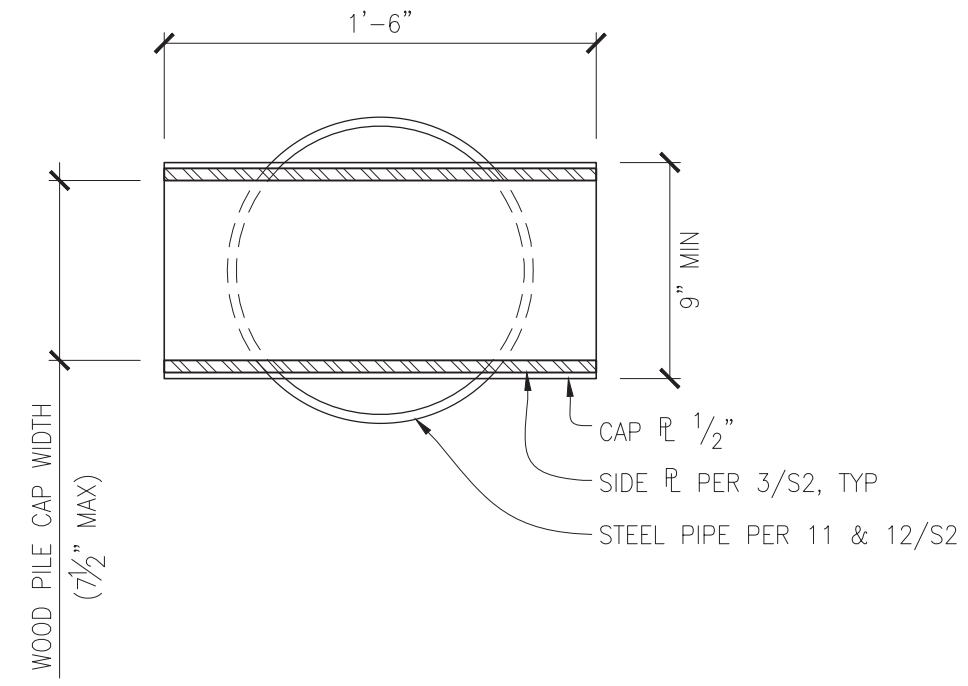
JURISDICTIONAL STAMP:

SHEET TITLE:

STRUCTURAL
GENERAL NOTES
PLAN

SHEET NUMBER:

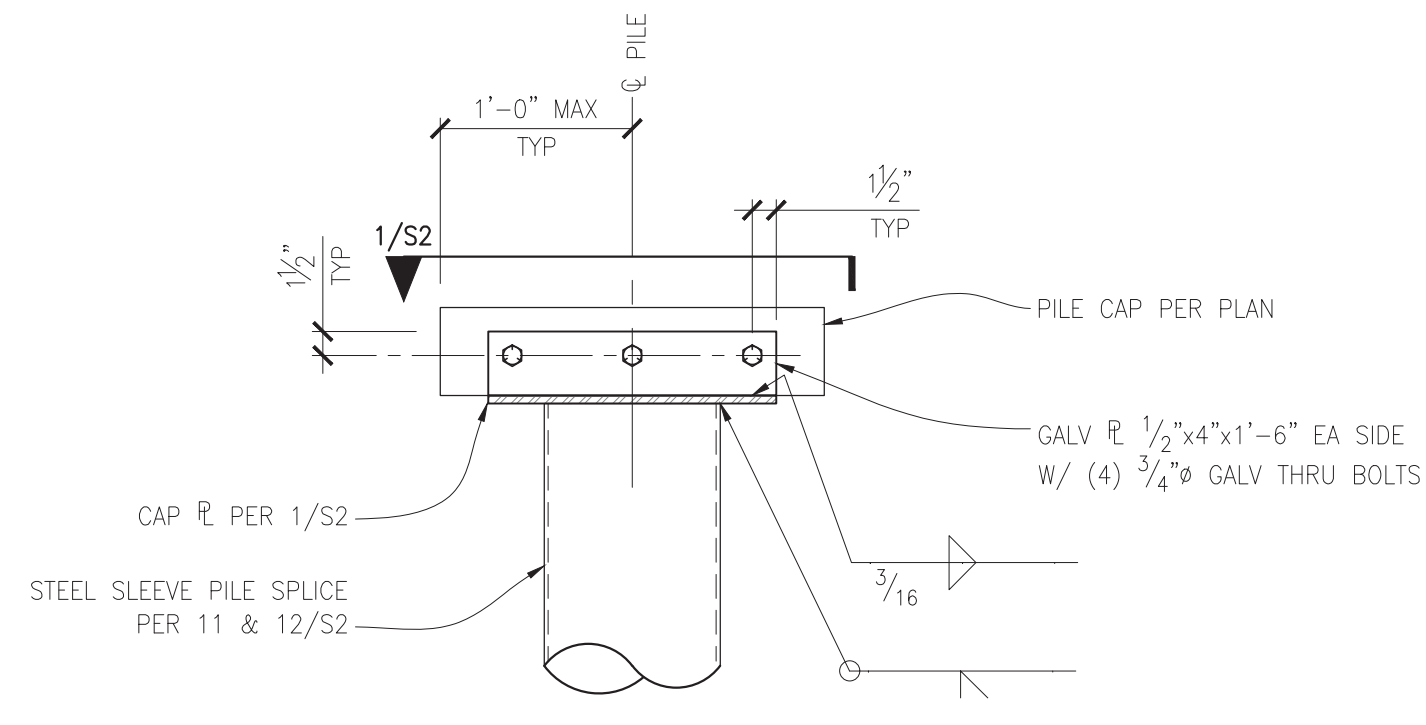
S 1



PLAN VIEW: AT STEEL CAP

SCALE: 1 1/2" = 1'-0"

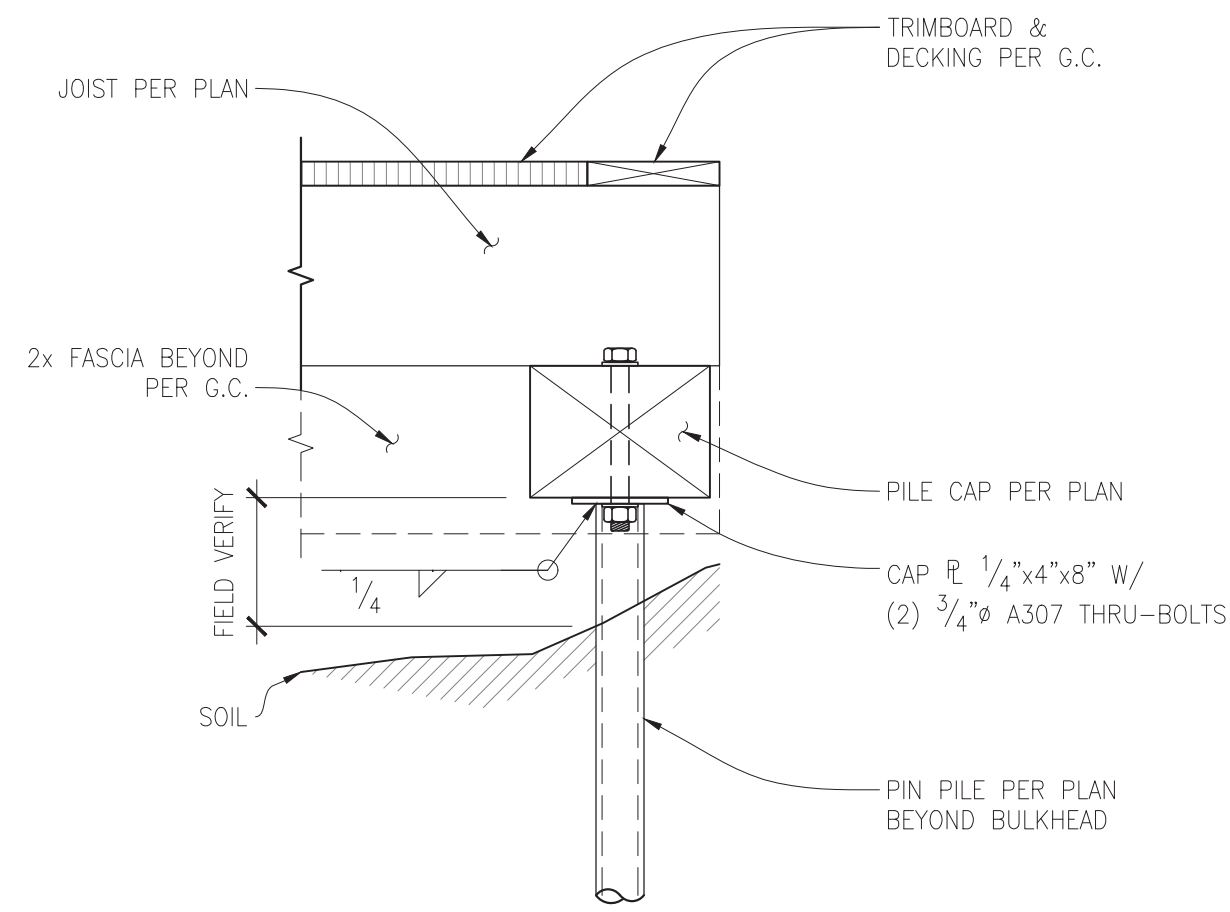
7068 **1**



SINGLE PILE AT 2'-0" FINGER

SCALE: 1"=1'-0"

7064 **2**



PIER FRAMING AT BULKHEAD

SCALE: NTS

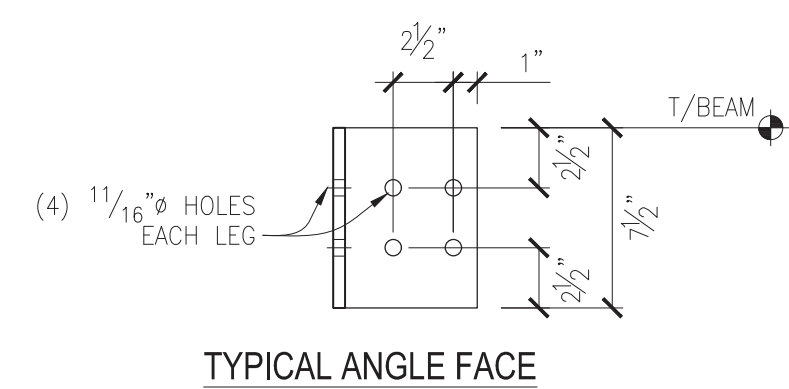
7003 **3**



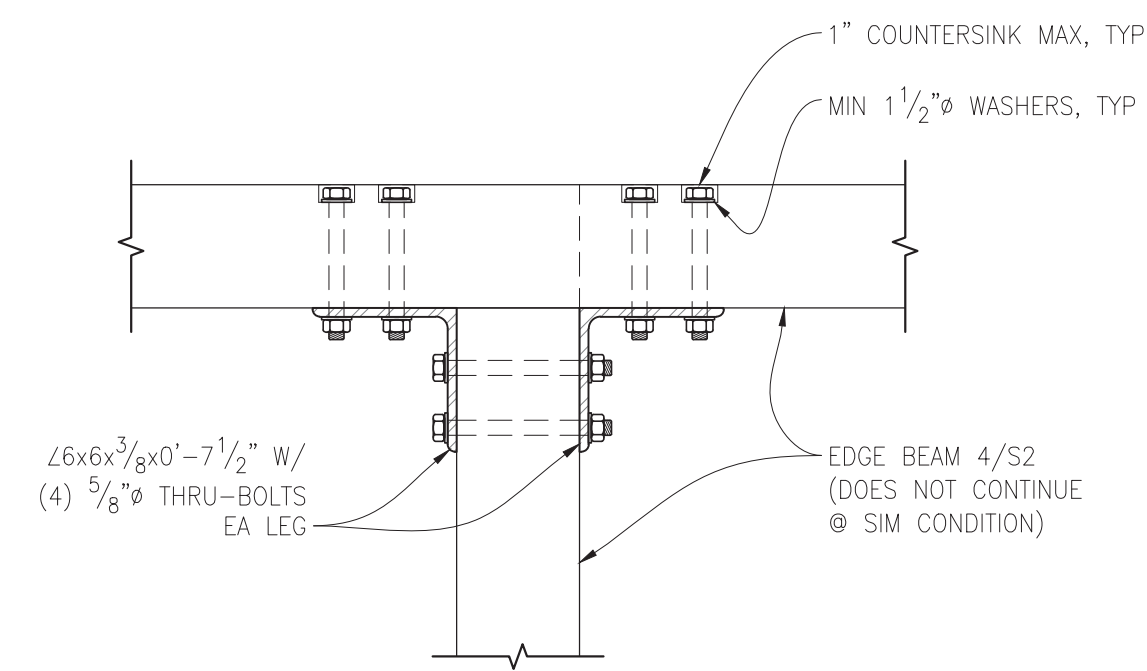
TYPICAL DOCK SECTION AT EXIST WOOD PILES

SCALE: NTS

7004 **4**



TYPICAL ANGLE FACE



PLAN VIEW - BEAM-TO - BEAM CONNECTION

SCALE: NTS

7006 **6**

STEEL SLEEVE REPAIR

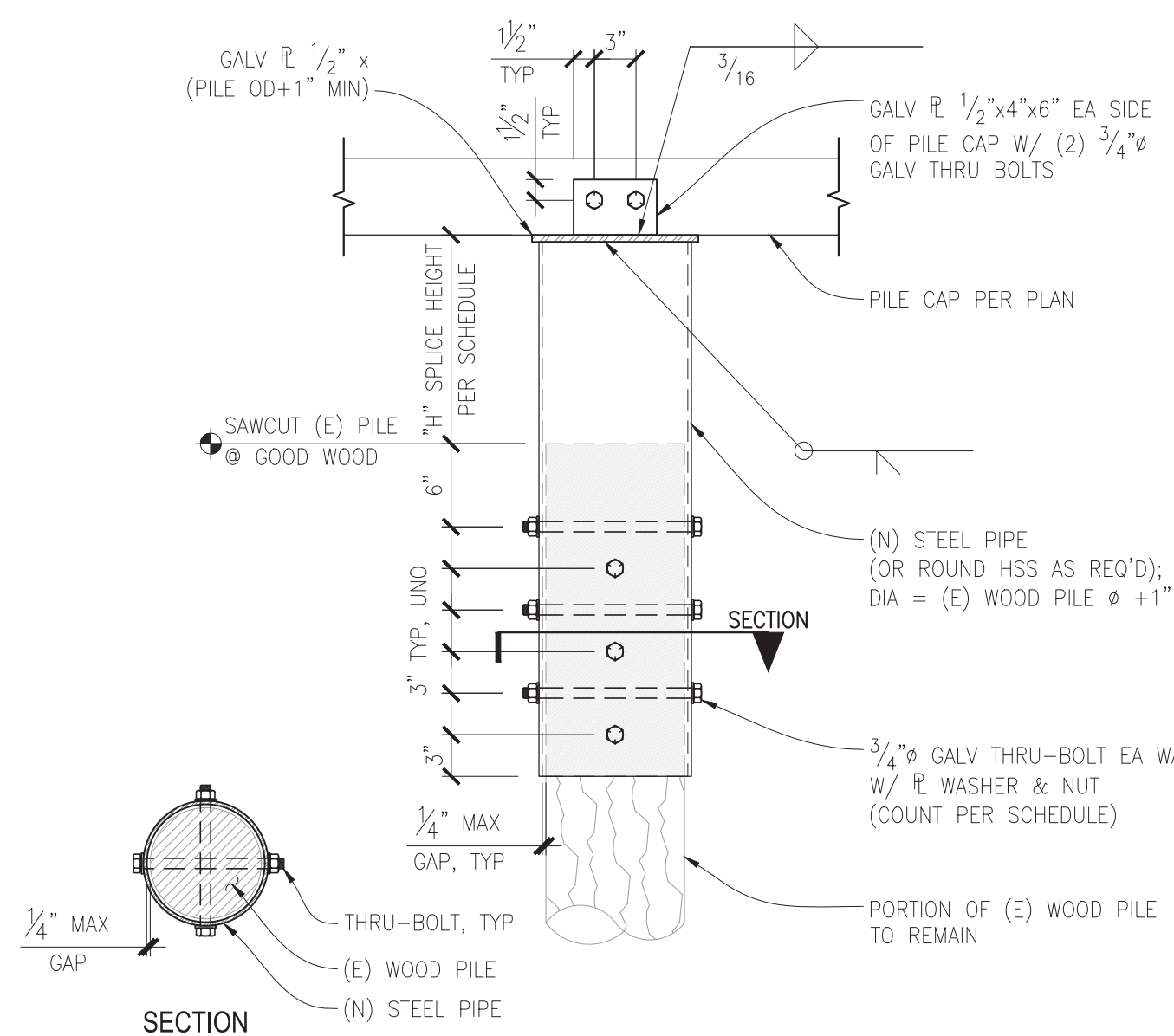
PILE DIAMETER (IN)	# BOLTS	"H" MAX FROM TOP OF SPLICE
8	3	1'-11"
	4	3'-1"
	5	4'-3"
10	3	2'-7"
	4	4'-0"
	5	5'-5"
12 & GREATER	3	3'-3"
	4	5'-0"
	5	6'-8"

- NOTES:**
- MAX PILE LOAD = 1091#/PILE (BOAT LOAD PARALEL TO DOCK). CONTACT DEI IF BOAT SIZE EXCEEDS GSN MAXIMUM ALLOWABLE.
 - MINIMUM BOLT SPACING = 3"

STEEL SPLICE TABLE

PILE DIAMETER (IN)	# BOLTS IN (E) WOOD PILE	"H" MAX FROM TOP OF SPLICE
8	2	2'-3"
	3	3'-5"
	4	4'-7"
	5	5'-9"
10	2	2'-10"
	3	4'-3"
	4	5'-9"
	5	7'-2"
12 & GREATER	2	3'-5"
	3	5'-2"
	4	6'-10"
	5	8'-7"

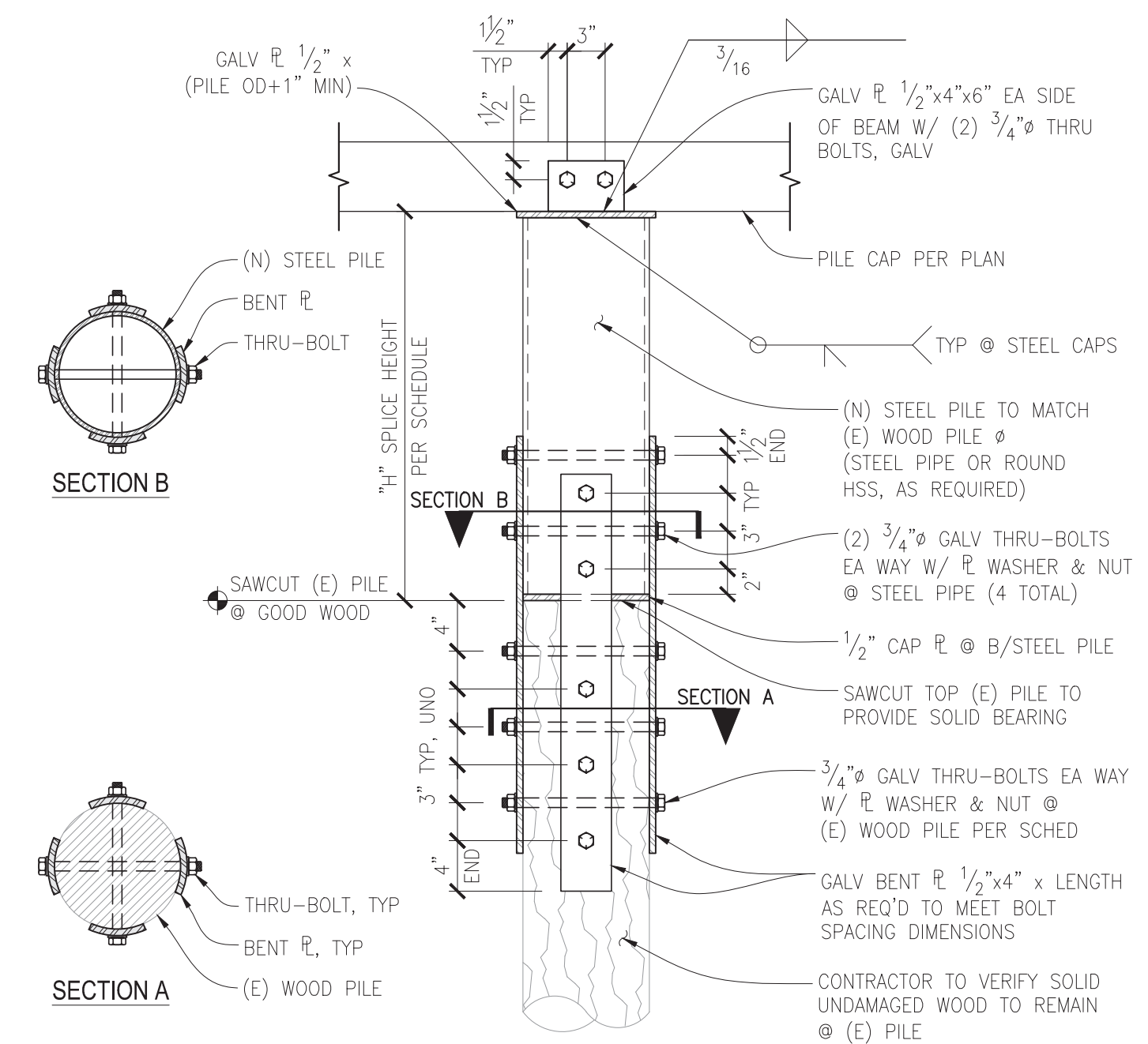
- NOTES:**
- MAX PILE LOAD = 1091#/PILE (BOAT LOAD PARALEL TO DOCK). CONTACT DEI IF BOAT SIZE EXCEEDS GSN MAXIMUM ALLOWABLE.
 - MINIMUM BOLT SPACING = 3"



PILE SLEEVE REPAIR DETAIL

SCALE: N.T.S.

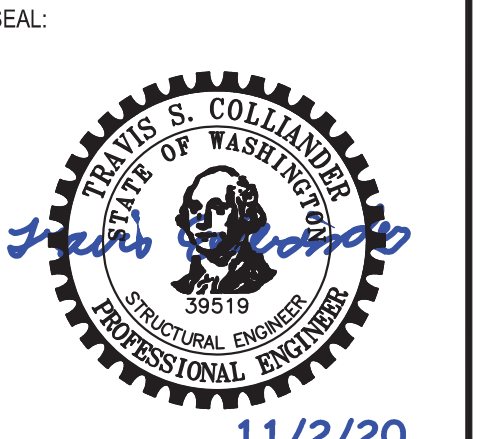
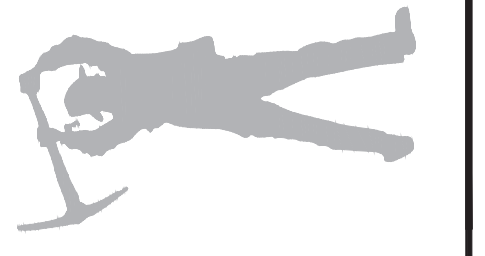
7011 **11**



PILE SPLICE - STEEL SPLICE

SCALE: N.T.S.

7012 **12**



PROJECT #: 20-940
DRAWN BY: BGI
DESIGNED BY: MWD
DATE: 11.02.2020
DESCRIPTION: PERMIT

JURISDICTIONAL STAMP:

SHEET TITLE:

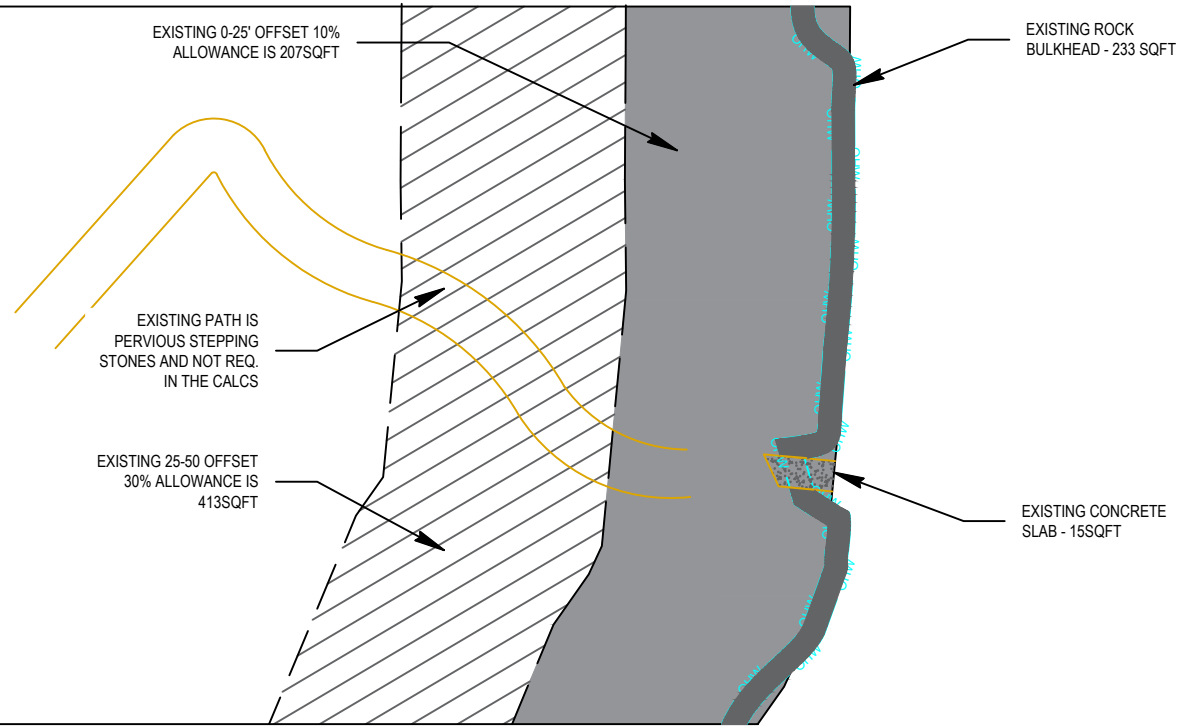
STRUCTURAL SECTIONS & DETAILS

SHEET NUMBER:

J:\2021\Projects\2020\Sun Dock\A202001404-DE Docking.dwg, 11/02/20 11:20:31 PM, BGI/BGI

IMPERVIOUS SURFACE CALCULATIONS

SUBJECT PROPERTY:
7240 N MERCER 98119
Parcel #: 5315100045



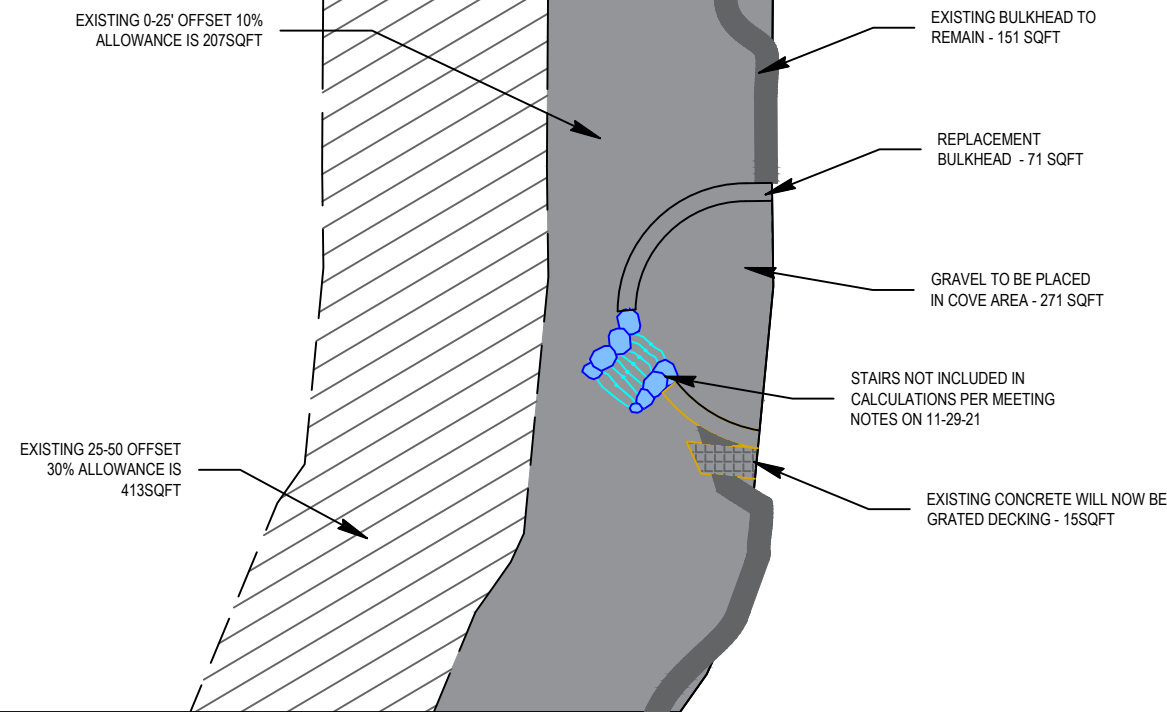
Allowed Impervious Quantities

SETBACK (total sqft)	ALLOWED	STEEP SLOPE ORDINANCE	CURRENTLY USED	REMOVING (TOTAL%)	PROPOSED
0' - 25' SETBACK (2,059,0800 sqft)	10% (205,908 sqft)	12% (248 sqft)	12% (248 sqft)	1% (21sqft)	11% (222 sqft)
25' - 50' SETBACK (2,070,8769 sqft)	30% (621,26307 sqft)	N/A	N/A	N/A	REMAIN AS IS

LEGEND

DESCRIPTION	AREA	HATCH
0'-25' SETBACK	2,059,0800 sqft	[Hatched Pattern]
25'-50' SETBACK	2,070,8769 sqft	[Diagonal Line Pattern]
BULKHEAD 25FT SETBACK	233 sqft	[Dark Grey Pattern]
CONCRETE SLAB 25FT SETBACK	15 sqft	[Stippled Pattern]

SUBJECT PROPERTY:
7240 N MERCER 98119
Parcel #: 5315100045



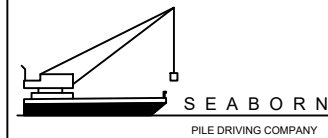
LEGEND

DESCRIPTION	AREA	HATCH
0'-25' SETBACK	2,059,0800 sqft	[Hatched Pattern]
25'-50' SETBACK	2,070,8769 sqft	[Diagonal Line Pattern]
REMAINING BULKHEAD 25FT SETBACK	151 sqft	[Dark Grey Pattern]
PROPOSED COVE BULKHEAD 25FT SETBACK	71 sqft	[Stippled Pattern]
GRAVEL 25FT SETBACK	37 sqft	[Star Pattern]
GRATED DECKING 25FT SETBACK	15 sqft (PERVIOUS)	[Grid Pattern]
STEPS 25FT SETBACK	N/A	[Step Pattern]

Prepared By:

Seaborn Pile Driving
1080 W Ewing St
Seattle, WA 98119

Office: 206-236-1700
permits@seabornpiledriving.com
www.seabornpiledriving.com



Purpose: **The proposed dock is to provide for safe boat moorage and safe water recreational activities for a single family residence.**

Scope of Work: We propose to repair (19) existing pile, install new grated decking on entire dock, remove (1) mooring pile and repair the existing bulkhead on the North side of dock with new rock and a cove. We also propose to install a new boatlift.

Contractor: Seaborn Pile Driving Company
1080 W Ewing St
Seattle, WA 98119

Applicant: Sun Residence
7240 N MERCER WAY
Mercer Island, WA 98119
County: King County
Location: Lake Washington

Datum: CORPS OF ENGINEERS 1919
SW Quarter Of Section 01, Township 24, Range 04

Adjacent Owners:
THOMPSON ROBERT H JR+DANIEL
7230 N MERCER WAY 98040
MISSELWITZ THEODORE F
7250 N MERCER WAY 98040

Last Updated: 10/22/2021 4:13 PM Keise

Created: 10/22/2021