

## PROJECT INFORMATION

### OWNERS

O'NEIL GENERATIONAL TRUST

### DRAWINGS BY:

ECCO DESIGN INC.  
7413 GREENWOOD AVE. N.  
SEATTLE, WA 98103  
206.706.3937

### SITE ADDRESS

4452 FERNCROFT RD  
MERCER ISLAND WA 98040

### PARCEL #

004610-0405

### LEGAL DESCRIPTION:

ADAMS LAKE WASHINGTON TRS POR OF N 70 FT  
OF S 87.88 FT OF 5 E OF LN RNNG N 00 DEG 43  
MIN 30 SEC W FR PT ON S LN OF N 22.12 FT OF 6  
THAT IS N 89 DEG 16 MIN 30 SEC E 314.41 FT FR C/L  
OF 30 FT ESMT & SH LDS ADJ

### BASE ZONE: R-15

### USE: SINGLE FAMILY RESIDENTIAL

### LOT AREA: 16,100 SF

### DESCRIPTION OF WORK

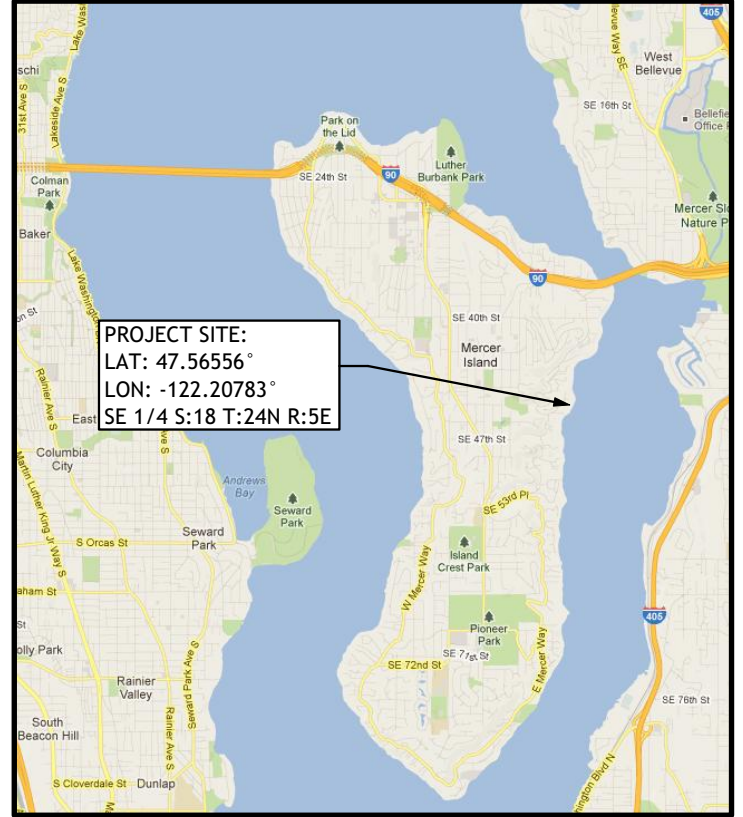
REMOVE A PORTION OF THE EXISTING SHARED  
FIXED PIER (APPROX. 315SF) AND ASSOCIATED  
WOOD PILES (NINE TOTAL). NOTE: THIS WORK IS  
BEING PERFORMED BY OTHERS UNDER A SEPARATE  
PERMIT. REMOVE ONE EXISTING BOTTOM BASED  
BOATLIFT AND CANOPY. RELOCATE ONE EXISTING  
BOTTOM BASED BOATLIFT TO THE NEW PIER.  
INSTALL NEW FULLY GRATED SINGLE FAMILY PIER  
(APPROX. 528SF OVERWATER) & 552SF TOTAL.  
INSTALL NEW NATIVE SHORELINE PLANTINGS.

1 SDP & BLG.

### GENERAL NOTES:

- 1) IT IS THE CONTRACTORS RESPONSIBILITY TO HAVE A LOCATE COMPLETED AND CALL BEFORE YOU DIG.
- 2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY FINAL LOCATION OF ALL STRUCTURES PRIOR TO INSTALLATION

## VICINITY MAP



**PURPOSE:** Boat Moorage

**DATUM:** 21.8' EST. By  
Corp of Engineers, 1919.

### ADJACENT PROPERTY

#### OWNERS:

1. George Richter
2. Echard Evers

**NAME:** O'Neil Generational Trust

### REFERENCE #:

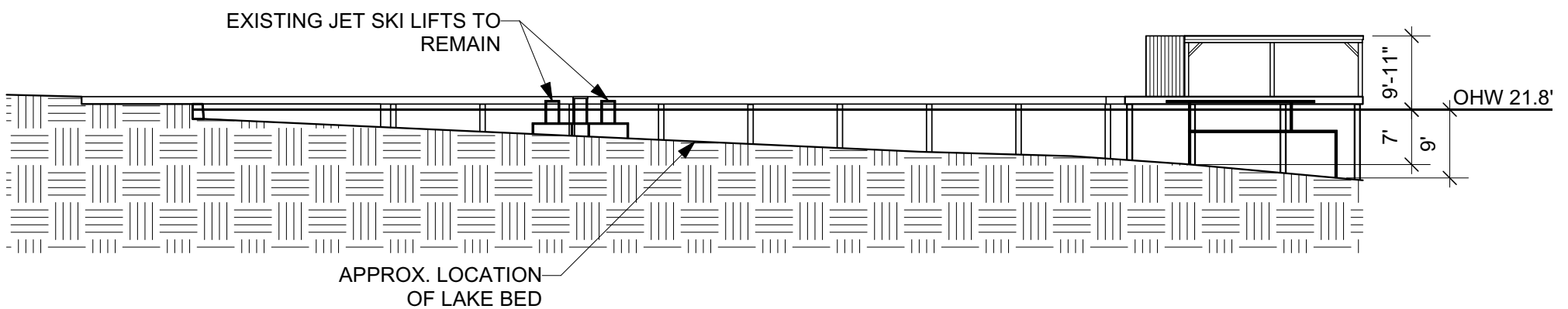
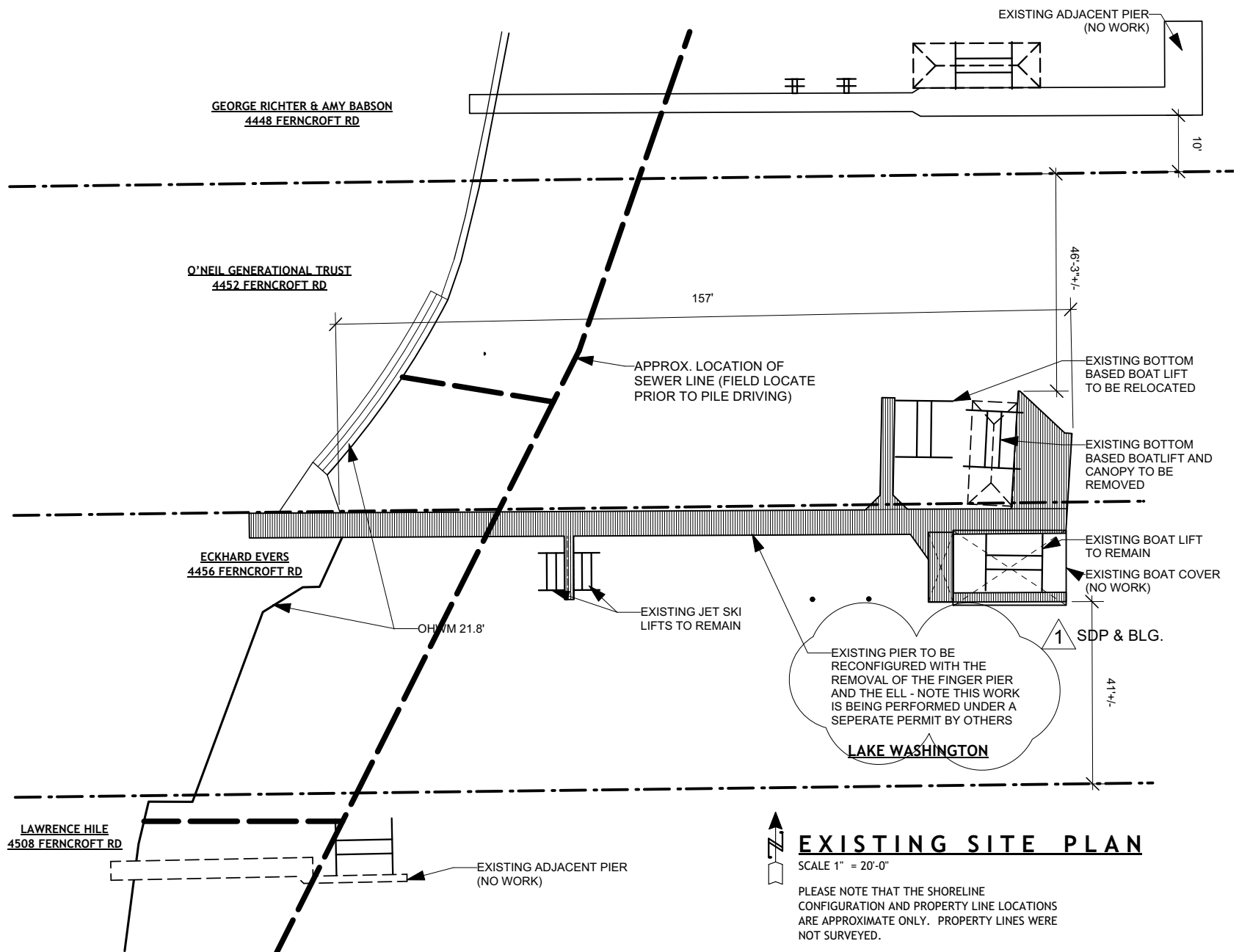
### SITE LOCATION ADDRESS:

4456 Ferncroft Rd  
Mercer Island, WA 98040

**PROPOSED:** New Pier &  
Reconfigure (E) Pier  
**IN:** Lake Washington  
**AT:** Mercer Island  
**COUNTY:** King **STATE:** WA

**SHEET** 1 of 9

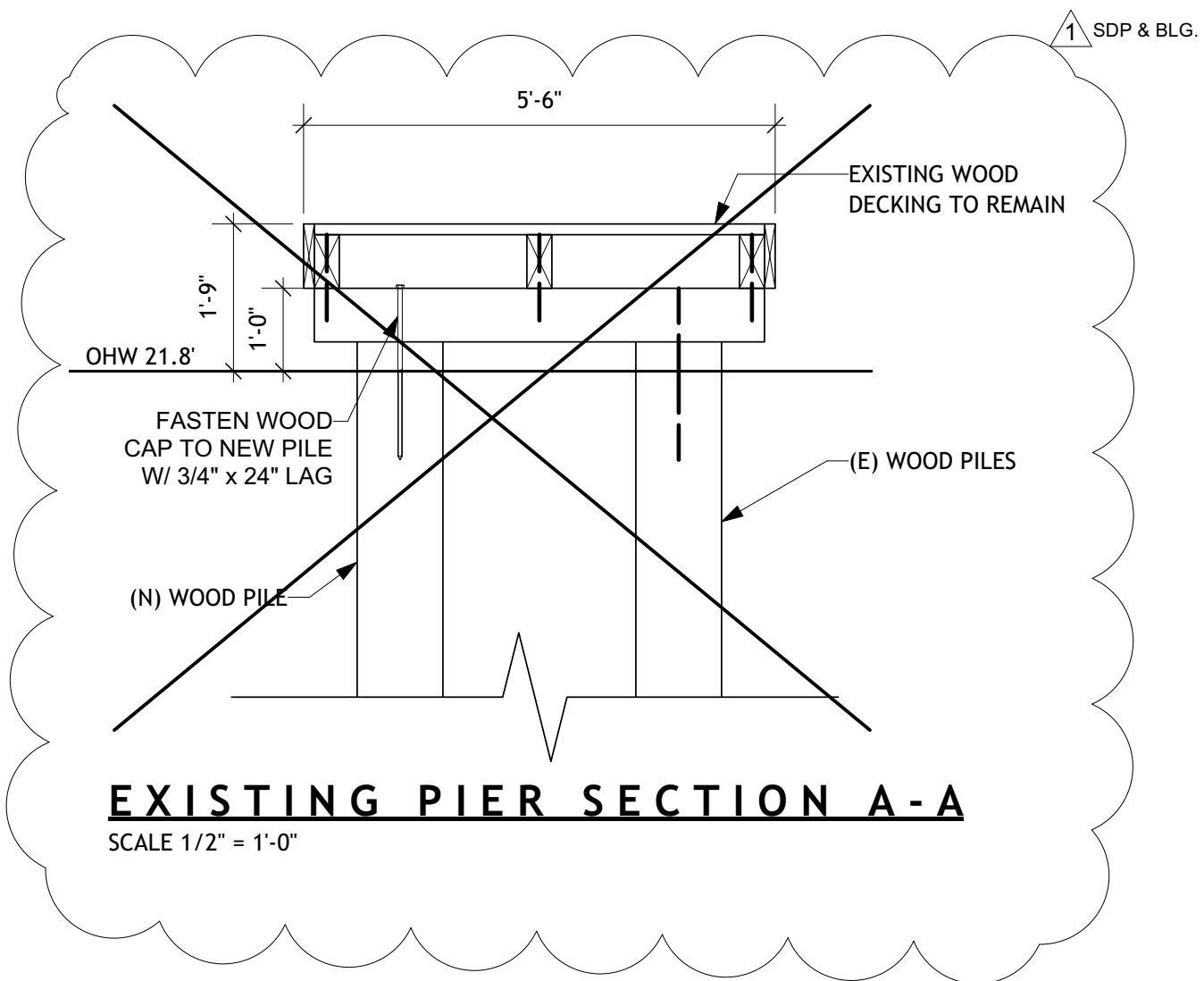
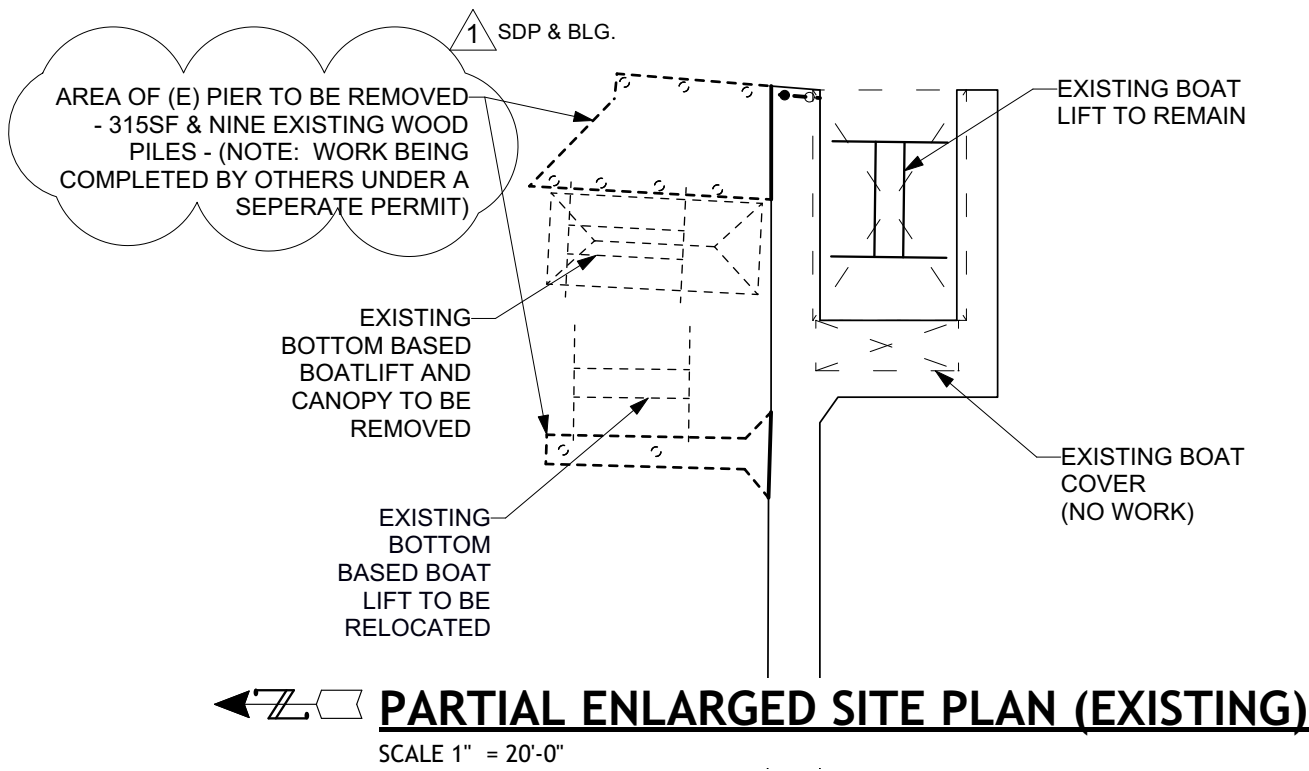
**DATE:** April 25, 2023  
**REV ONE:** August 25, 2023



**Reference:**  
**Applicant:** O'Neil Generational Trust

**Proposed:** New Pier & Recon. (E)Pier  
**At:** Mercer Island, WA

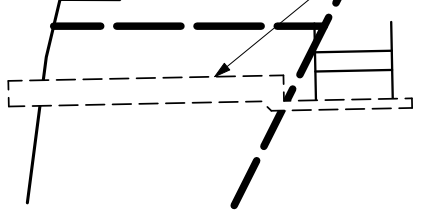
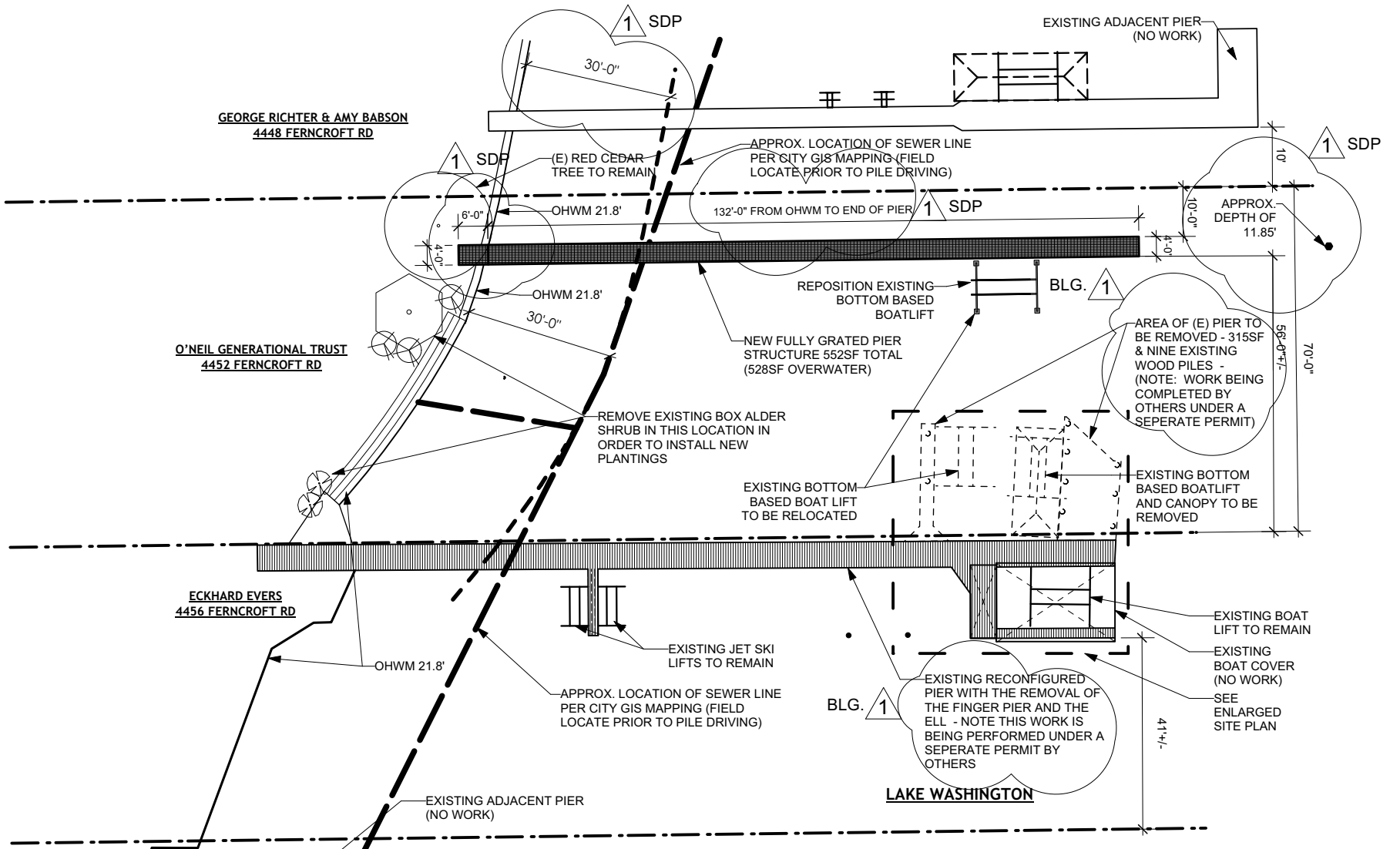
**Sheet 2 of 9**   **Date:** 4/25/2023  
**Rev One:** 8/25/2023



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**PLANT SCHEDULE**

	(1) ONE EXISTING WESTERN RED CEDAR TREE TO REMAIN
	(1) ONE AMELANCHIER ALNIFOLIA SERVICEBERRY (5 GALLON)
	(3) HOLODISCUS DISCOLOR OCEAN-SPRAY (1 GALLON)
	(2) HOOKER WILLOW SHRUB - (SALIX HOOKERIANA) @ 5' O.C.

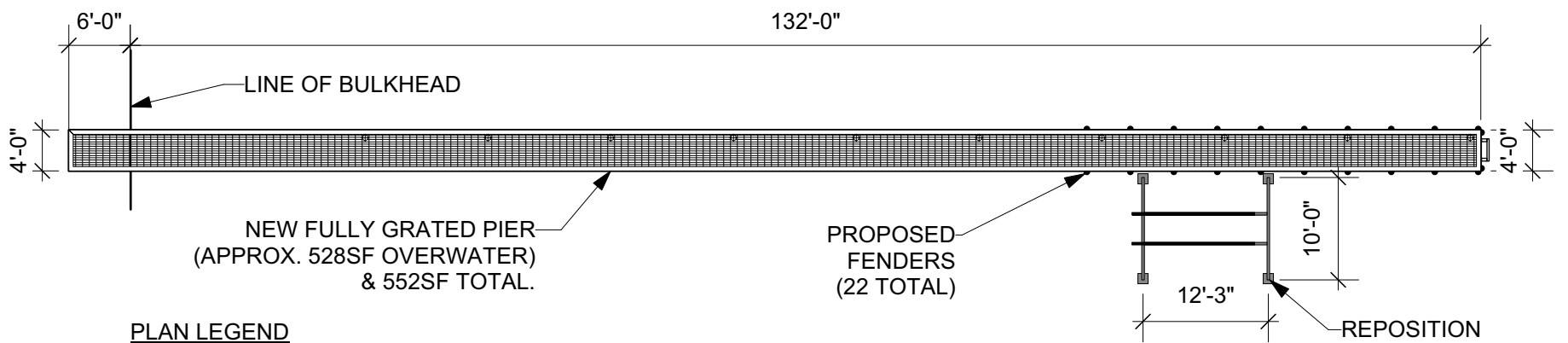
**PROPOSED SITE PLAN**  
SCALE 1" = 30'-0"

PLEASE NOTE THAT THE SHORELINE CONFIGURATION AND PROPERTY LINE LOCATIONS ARE APPROXIMATE ONLY. PROPERTY LINES WERE NOT SURVEYED.  
DEPTH AT END OF PIER WAS RECORDED BY MARKER OFF SHORE ON 12/17/2021

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**PLAN LEGEND**

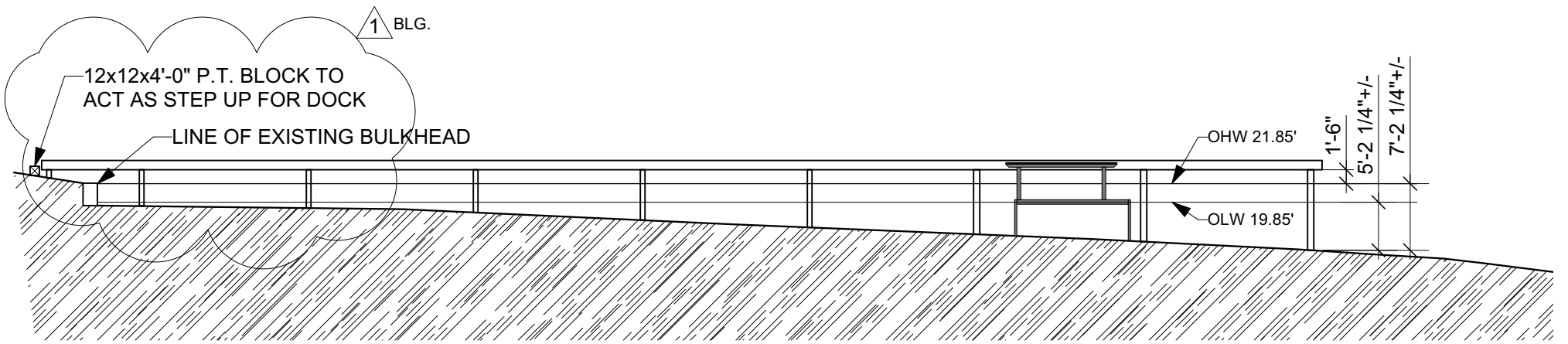
- ALUM. SWIM LADDER (1) LOCATION
- FENDERS 5"X5", TYP. 22 LOCATIONS
- DOCK LIGHT (EPL1 OR 3) DEPENDING ON LOCATION - CONFIRM LIGHT MEETS SPECIFICATIONS BELOW, TYP. (10) LOCATIONS.

NOTE: ARTIFICIAL NIGHT LIGHTING ON AND FROM OVERWATER STRUCTURES MUST BE MINIMIZED BY FOCUSING THE LIGHT ON THE PIERS SURFACE, AND USING SHADES THAT MINIMIZE ILLUMINATION OF THE SURROUNDING ENVIRONMENT AND REDUCES GLARE ON THE WATER SURFACE. THE VISIBLE LIGHT EMITTED BY AN INDIVIDUAL FIXTURE SHALL NOT EXCEED 450 LUMENS, AND THE TOTAL VISIBLE LIGHT EMITTED BY ALL FIXTURES ON A PIER SHALL NOT EXCEED 2,700 LUMENS



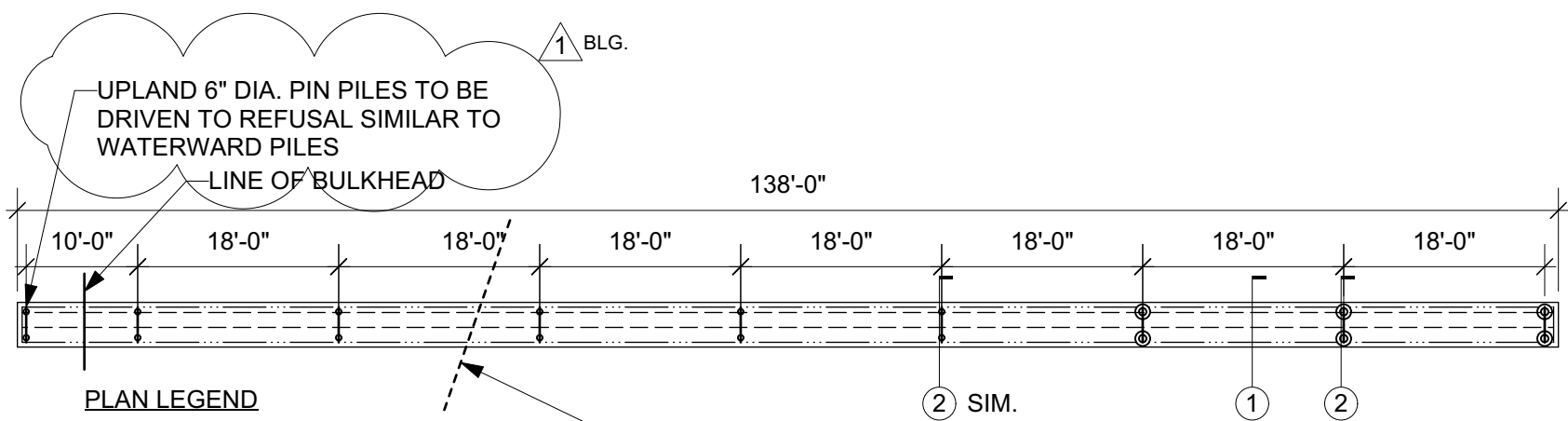
**PROPOSED PIER PLAN**

SCALE 1/16" = 1'-0"



**PROPOSED ELEVATION**

SCALE 1/16" = 1'-0"



**PLAN LEGEND**

- 6" DIA. STD. PIPE (12 TOTAL) (note that two are upland of bulkhead)
- ⊙ 8" DIA. XX-STRONG PIPE (6 TOTAL)
- APPROX. LOCATION OF SEWER LINE (FIELD LOCATE PRIOR TO PILE DRIVING)

GENERAL NOTE:  
MIN. PILE EMBEDMENT - 16'-0" BELOW MUD LINE



**PROPOSED FRAMING PLAN**

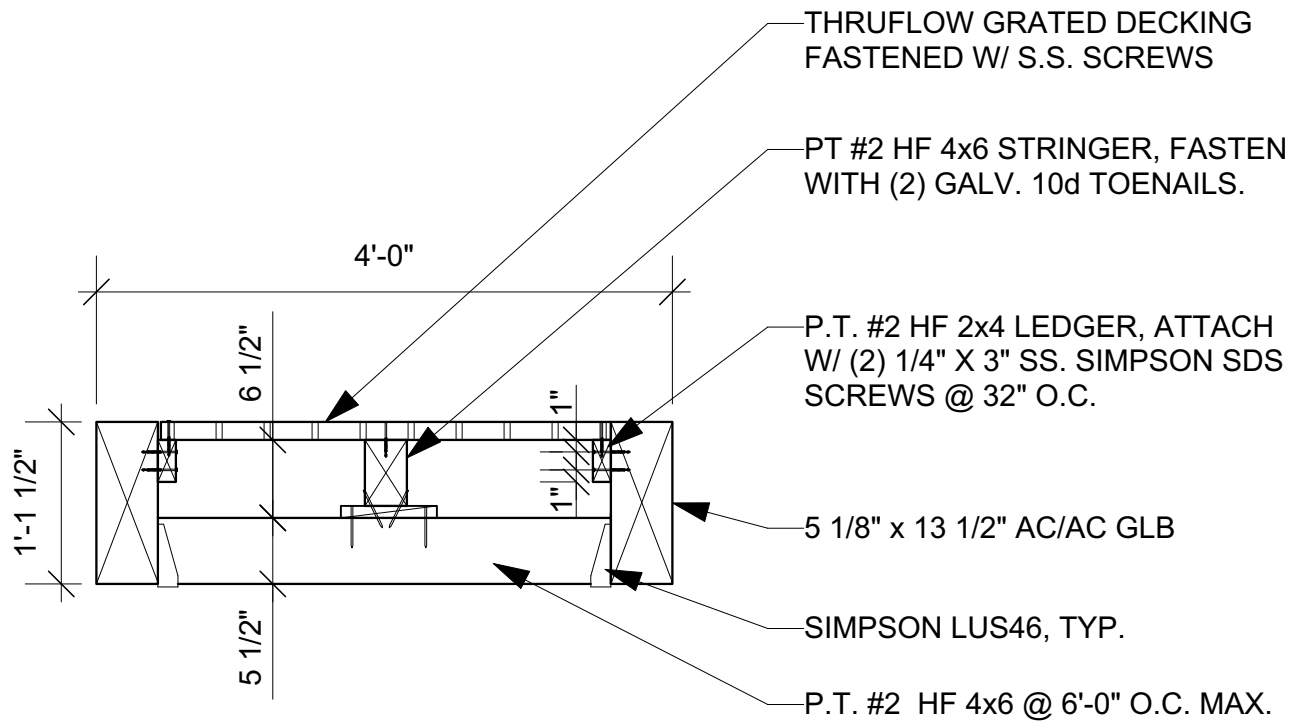
SCALE 1/16" = 1'-0"



**MCS** OLYMPIA WASHINGTON  
MC SQUARED 360-754-9339

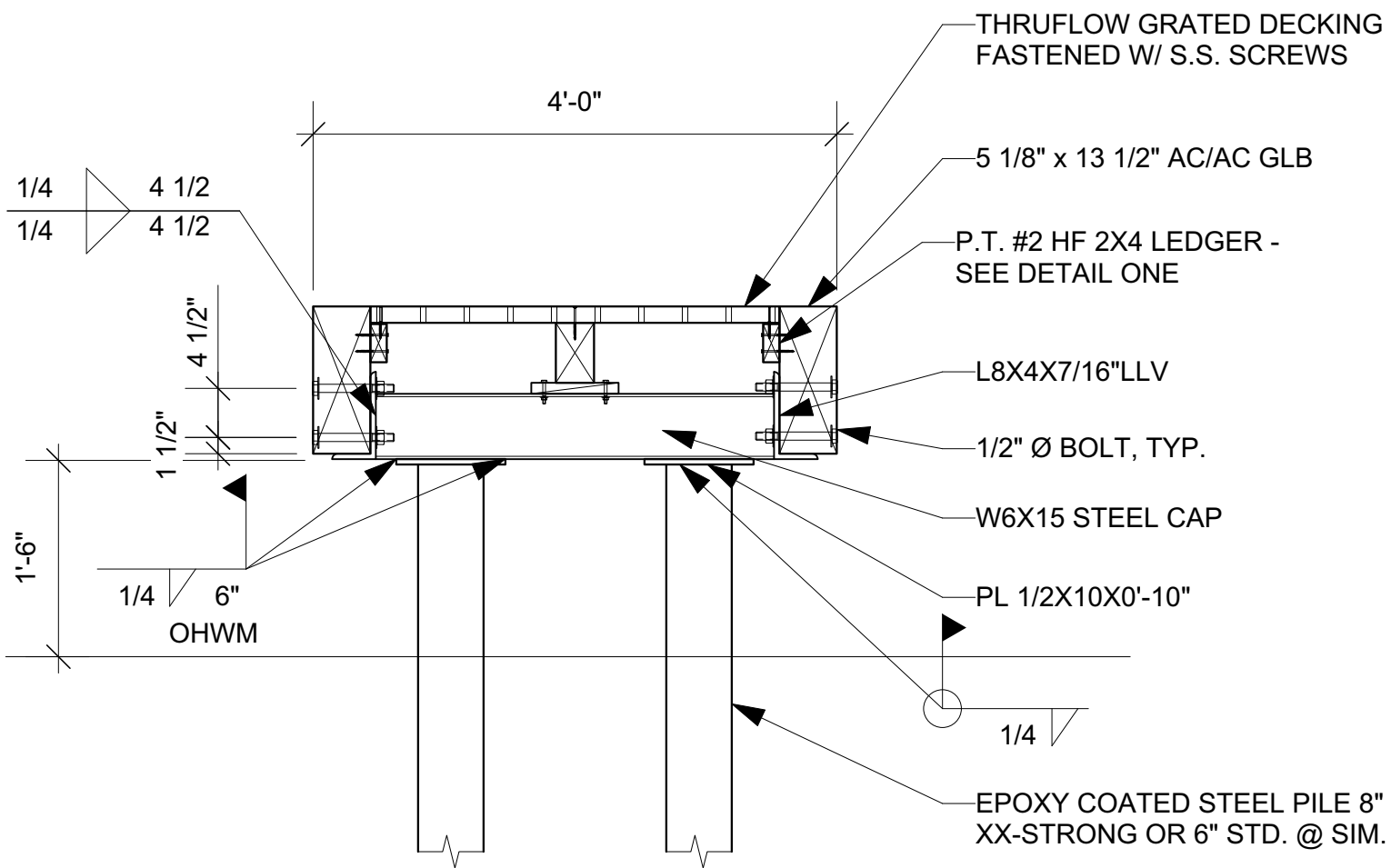
**STRUCTURAL ONLY**

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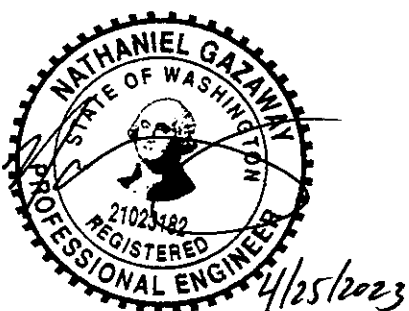
**MIDSPAN SECTION - B**

SCALE 1/2" = 1'-0"



**PILE CAP SECTION - A**

SCALE 1/2" = 1'-0"



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**STRUCTURAL ONLY**

## GENERAL NOTES

- A. These notes are in abbreviated form. The intent is to further define those areas of work not clearly delineated on the drawings. The quality of workmanship throughout should be first class and all materials shall meet or exceed the normal industry standards applicable in each case.
- B. All work is to be performed in strict compliance with applicable provisions of prevailing local, state, and federal code ordinances, including appropriate licensing laws including local amendments.
- C. Notify and consult with Owner and Permit Agent if discrepancies are found between drawings and/or on site conditions and/or building or zoning requirements prior to start of work.
- D. Contractor to physically inspect site prior to commencing any work. Report any discrepancy to Owner and Permit Agent. Contractor to review construction documents prior to commencing construction. Any questions should be directed to owner and permit agent. Contractor to crossreference with city approved plans for any changes and/or additional requirements by city.
- E. Area measurements: area is measured from the perimeter of each floor/space within the footprint of the structure and is inclusive of all open areas, stairways, stairwells and basement stem walls, at each level. Projections such as bay windows are also included in heated area calculations. Interior walls separating heated and unheated enclosed space is measured from the exterior of conditioned space.
- F. Do not scale drawings. During the reprographic process, proportions may have been altered. Use written dimensions. Where conflicts exist, notify the permit agent immediately. Written dimensions take precedence.
- G. Contractor to maintain in force at all times, insurance as required by Article II of the General Conditions of the Contract for Construction, AIA Document A201.
- H. The Contractor should carry all insurance required by law.
- I. Contractor is solely responsible for all construction means and methods and shall maintain the structural integrity of any construction until all final lateral and vertical load carrying systems are completed. Approvals from the permit agent do not extend to approval of construction means and methods.
- J. Drawings are for a complete installation with fully-functional assemblies. Contractor is to field verify all dimensions and conditions prior to any work, and shall be responsible for all work and materials including those finished by subcontractor.
- K. All information contained in these documents represents a "basic limited architectural service" that requires the contractor to be knowledgeable and experienced with all aspects of construction including all building codes and regulations imposed by the city or county and any other agency having jurisdiction over the project.
- L. All work shall comply with the state and local ordinances and shall be done to the highest standards of craftsmanship by journeymen of the respective trades.
- M. Safety, care of adjacent properties during construction, compliance with local, state, federal regulations regarding safety on site shall be the contractors responsibility.
- N. No deviations from these documents shall be made without written approval from the owner and permit agent. Any changes can affect the structural integrity and code related issues of the structure.
- O. All information contained in these documents is for the purpose of construction permit acquisition and construction only. The information provided is not intended for any other purpose and no other use is intended or implied. e.g. plan information is not intended to be used as a base for sale or transfer of real estate.
- P. Unless otherwise specified, electrical, mechanical, etc. is bidder designed. Owner and/or agent (contractor) is responsible for all work done on site (field) as to proper installation etc.
- Q. The permit agent may assist in coordination with consultants (such as soils, structural, civil engineers etc.) but under the terms of basic limited service, receives no compensation for, and assumes no responsibility or liability for the area of their (consultants) work and expertise.

Acceptance of these plans for construction constitutes an understanding of above mentioned terms and basic limited architectural service as described in agreement between owner/permit agent.

## GENERAL NOTES - CONT.

### GENERAL REQUIREMENTS

- A. Provide all required temporary facilities and all temporary utilities as required. Contractor is responsible for all costs associated with temporary facilities and temporary utilities.
- B. Construction Barricades: Provide construction barricade as required to keep public and employees safe, following all applicable federal, state and city codes and regulations.

### DRAWINGS / PERMITS BY OTHERS:

It is the contractor's responsibility to provide additional drawings and permits as required to complete the project. The following list is by no means meant to be comprehensive, rather suggestive of the possible types of additional permits, drawings, and submittals that may be required during the course of the project. Depending on the project, some of the following permits, drawings, and submittals could come up including others not listed below:

- Provide information to City regarding disposal of materials.
- Provide Design / obtain Permit for any required Shoring work.
- Provide Drawings / obtain Permit for Plumbing work.
- Provide Drawings / obtain permit for Electrical work.
- Obtain permit for Storm Sewer design and hook-up
- Apply and pay for any required Water Meters.
- Obtain separate permits for Demolition, accessory buildings, and retaining walls.
- Any deferred submittals shall be submitted to the Building Department for review and approval.

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## STRUCTURAL NOTES

### General Notes:

These structural notes supplement the drawings. Any discrepancy found among the drawings, these notes, and the site conditions shall be reported to the Engineer, who shall correct such discrepancy in writing. Any work done by the Contractor after discovery of such discrepancy shall be done at the Contractor's risk. **The Contractor shall verify and coordinate the dimensions among all drawings prior to proceeding with any work or fabrication.** The Contractor is responsible for all bracing and shoring during construction.

All construction shall conform to the applicable portions of the latest edition of the International Building Code except where noted.

### Design Criteria:

- |              |   |   |
|--------------|---|---|
| 1. Live Load | = | 60 PSF (Dock)   |
| 2. Dead Load | = | 12 PSF (Dock)   |
| 3. Wind      | = | 2018 IBC Exposure D @ 100 mph (LRFD), 77 MPH (ASD), 3 second gust   |
| 4. Wave      | = | Wind Speed: 77 MPH<br>Controlling Fetch 0.89 mi<br>Wave Ht: 2.4 ft<br>Wave Period: 2.3 secs<br>Wave Acceleration: 9.5 ft/sec <sup>2</sup> |
| 5. Soil      | = | 1500 PSF, Assumed Bearing Capacity<br>40 PCF, Active Pressure<br>150 PCF, Passive Pressure<br>0.45 coefficient of Friction                |

### Steel:

1. All steel shall be ASTM A36 except as noted.
2. Structural pipe shall be ASTM A53 type S.
3. All bolts shall be ASTM A325, except as noted.
4. Welding shall be by AWS certified welders with E70 electrodes in accordance with AWS D1.1-75.
5. All steel members and parts exposed to weather or in contact with the ground shall be galvanized per ASTM A-123 with 1.25 oz. of zinc spelter per square foot of contact area. All other steel surfaces shall be shop painted with two coats of red oxide primer after fabrication. Columns and other steel parts placed below grade and exposed to earth shall be painted with two coats of red oxide primer in addition to the galvanization.



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Piles:

1. Pile shall meet structural pipe material identified under Steel, note 2.
2. Welding shall be by AWS certified welders with E70 electrodes in accordance with AWS D1.1-75.
3. Drive to piles to minimum depth identified on the plans or until refusal. Refusal is defined as less than one inch of penetration per one minute of continuous jacking using a vibratory driver. If using a hammer driver, refusal is defined as 50 blows with less than 1" of penetration.
4. Cut off piles at equal final elevations.
5. Attach steel pile cap plates. See details for plate size and attachment.

Note: Pile splices may either be field welded or connected with friction fittings as approved by the engineer. Damaged piles should be removed and a new pile shall be re-driven.

Carpentry:

1. Structural framing shall be pressure treated #2 Hem Fir.
2. 6X beams shall be #1 pressure treated Hem Fir.
3. 4X joists shall be kiln dried and stored in a dry area prior to installation.
4. Alaskan Cedar Glue laminated beams shall be 20F-V12

(Fb = 2000 PSI)  
(Fv = 265 PSI)  
(E = 1,500,00 PSI)  
(FcL = 560 PSI)

Hardware:

All connection hardware shall be Simpson "Strong Tie", unless noted otherwise.

Connection hardware exposed to weather or in contact with the ground or pressure treated wood shall be galvanized per ASTM A-123 with 1.25 oz. of zinc spelter per square foot of contact area.

CAUTION

CONTRACTOR TO FIELD VERIFY ALL CONDITIONS AND ALL ELEVATIONS.



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