
CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

9611 SE 36TH STREET | MERCER ISLAND, WA 98040

PHONE: 206.275.7605 | www.mercergov.org



STAFF REPORT

SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT

Project No.:	SHL23-014
Description:	Shoreline Substantial Development Permit to replace and reconfigure an existing residential pier and retroactively permit an existing dual personal watercraft lift.
Applicant / Owner:	Kristin Osterberg (Waterfront Construction, Inc.) / Eckhard Evers
Site Address:	4456 Ferncroft Road, Mercer Island, WA 98040; Identified by King County Assessor tax parcel number 004610-0453.
Zoning District:	Single Family Residential (R-15)
Staff Contact:	Andrew Leon, Planner
Exhibits:	<ol style="list-style-type: none">1. Development Application, dated January 10, 20232. Notice of Complete Application, issued by the City of Mercer Island on February 24, 20233. Notice of Application, issued by the City of Mercer Island on March 6, 20234. Development Plan Set, dated September 8, 20235. Project Narrative, dated July 21, 20236. Ecological No Net Loss Assessment Report, prepared by Northwest Environmental Consulting, LLC, dated revised September 20237. SEPA Checklist, updated February 2, 20238. SEPA Determination of Nonsignificance Issued by the City of Mercer Island on November 20, 2023

INTRODUCTION

I. Project Description

The applicant has requested approval of a Shoreline Substantial Development Permit to replace and reconfigure an existing residential pier. The existing pier currently runs along the property's north lateral line, with two finger piers extending into the shorelands of the property to the north. These finger piers are proposed to be removed so the pier is fully within the shorelands of the subject property. The rest of the existing pier is proposed to be removed and replaced with a new pier in the same location. The project also includes the installation of a new finger pier on the south side of the pier, the installation of two moorage piles on the south side of the pier, and the retroactive permitting of an existing dual personal watercraft lift.

Applications for development involving additions to moorage facilities, including the installation of boatlifts, are subject to the development standards of Mercer Island City Code (MICC) 19.13.050(F)(1) or the alternative development standards for moorage facilities of MICC 19.13.050(F)(3). The applicant has requested that the project be reviewed under the alternative development standards of MICC 19.13.050(F)(3).

II. Site Description and Context

1. The proposed activity is to take place at 4456 Ferncroft Road, Mercer Island, WA 98040. This site is designated Single Family Residential (zoned R-15) in the Urban Residential Environment on Mercer Island in Lake Washington pursuant to Appendix F of Title 19 of the Mercer Island City Code and described in MICC 19.13.030(B). Adjacent properties are within the R-15 zone and contain residential uses.

Findings of Fact & Conclusions of Law

III. Application Procedure

1. The application for a Shoreline Substantial Development Permit was received by the City of Mercer Island on January 19, 2023. The application was determined to be complete on February 24, 2023 (Exhibit 2).
2. Under MICC 19.15.030, Table A, applications for Shoreline Substantial Development Permits must undergo Type III review. Type III reviews require notice of application (discussed below). A notice of decision is issued once the project review is complete.
3. The City of Mercer Island provided public notice of application for this Shoreline Substantial Development Permit, as set forth in MICC 19.15.090 (Exhibit 3). The comment period for the public notice period lasted for 30 days, from March 6, 2023 to April 5, 2023. The following methods were used for the public notice of application:
 - 1) A mailing sent to neighboring property owners within 300 feet of the subject parcel.
 - 2) A sign posted on the subject parcel.
 - 3) A posting in the City of Mercer Island's weekly permit bulletin.

No comments were received during the public notice period.

IV. State Environmental Policy Act (SEPA)

A Determination of Nonsignificance (DNS) is being issued concurrently with the approval of this shoreline substantial development permit following the optional DNS process per Washington Administrative Code (WAC) 197-11-355 (Exhibit 8). The SEPA application is identified by City of Mercer Island project number SEP23-003.

V. Consistency with the Shoreline Master Program and Land Development Code

1. MICC 19.13.050(D), Table D lists requirements for moorage facilities and development located waterward from the ordinary high water mark (OHWM):

- a. Setbacks for all moorage facilities, covered moorage, and floating platforms shall be 10 feet from the lateral line, except where the moorage facility is built pursuant to the agreement between adjoining property owners.

Staff Analysis: As shown in Exhibit 4, the existing pier is located within the 10-foot setback from the south lateral line. MICC 19.13.020(B) states that expansions to legal nonconforming overwater structures are permitted, provided that the expanded portion of the structure is constructed in compliance with Chapter 19.13 MICC and all other standards and provisions of the MICC. The proposed dual personal watercraft lift and a portion of the new finger pier are proposed to be located on the south side of the existing pier, further from the lateral line than the existing pier.

- b. Setbacks for boat ramps and other facilities for launching boats by auto or hand, including parking and maneuvering space, shall be 25 feet from any adjacent private property line.

Staff Analysis: This site does not contain a boat ramp or other facility for launching boats. This standard does not apply.

- c. The length or maximum distance from the OHWM for moorage facilities, covered moorage, boatlifts and floating platforms shall be a maximum of 100 feet. In cases where water depth is less than 11.85 feet below the OHWM, length may extend up to 150 feet or to the point where water depth is 11.85 feet at OHWM, whichever is less.

Staff Analysis: Exhibit 4 shows that the existing pier extends 174 feet waterward from the OHWM. MICC 19.13.020(B) states that expansions to legal nonconforming overwater structures are permitted, provided that the expanded portion of the structure is constructed in compliance with Chapter 19.13 MICC and all other standards and provisions of the MICC. Exhibit 4 shows that the proposed addition to the pier will be no more than 150 feet waterward of the OHWM and that the water depth within 150 feet waterward of the OHWM is less than 11.85 feet. This standard is met.

- d. The width of moorage facilities within 30 feet waterward from the OHWM shall be a maximum of 4 feet. This maximum width may increase to 5 feet if one of the following is met:

- Water depth is 4.85 feet or more, as measured from the OHWM.
- A moorage facility is required to comply with Americans with Disabilities Act (ADA) requirements.
- A resident of the property has a documented permanent state disability as defined in WAC 308-96B-010(5).
- The proposed project includes mitigation option A, B or C listed in Table E; and for replacement actions, there is either a net reduction in overwater coverage within 30 feet waterward from the OHWM, or a site-specific report is prepared by a qualified professional demonstrating no net loss of ecological function of the shorelands. Moorage facility width shall not include pilings, boat ramps and lift stations.

Staff Analysis: Exhibit 4 shows that the proposed pier is to be four feet in width within the first 30 feet waterward of the OHWM. This standard is met.

- e. The width of moorage facilities more than 30 feet waterward from the OHWM shall be a maximum of 6 feet. Moorage facility width shall not include pilings, boat ramps and boatlifts.

Staff Analysis: Exhibit 4 shows that all portions of the pier and the finger piers are no more than six feet in width more than 30 feet waterward of the OHWM. This standard is met.

- f. The maximum height limits for walls, handrails and storage containers located on piers shall be 3.5 feet above the surface of a dock or pier. Ramps and gangways designed to span the area between 0 and 30 feet from the OHWM may be 4 feet above the surface of the dock or pier.

Staff Analysis: The elevation view on Sheet 6 of Exhibit 4 shows that the pier does not include walls, rails, or storage containers. This standard is met.

- g. The height limit for mooring piles, diving boards and diving platforms shall be 10 feet above the elevation of the OHWM.

Staff Analysis: The elevation view on Sheet 6 of Exhibit 4 shows that the proposed mooring piles extend less than ten feet above the OHWM. This standard is met.

- h. The minimum water frontage for a dock used by a single-family lot on the shoreline is 40 feet combined for both lots.

Staff Analysis: The pier is located on a lot with a shoreline frontage of approximately 67 feet. This standard is met.

- 2. MICC 19.13.050(F)(3) lists the alternative development standards for moorage facilities. The code official shall approve moorage facilities not in compliance with the development standards in MICC 19.13.050(F)(1) or (F)(2) 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 of this chapter shall be met:

- a. The dock must be no larger than authorized through state and federal approval.

Staff Analysis: The applicant has not yet provided documentation that the project has been approved by the Washington Department of Fish and Wildlife or the U.S. Army Corps of Engineers. This decision conditions that the applicant provide documentation that state and federal agencies approve of the proposal prior to issuance of building permits. As conditioned, this standard is met.

- b. The maximum width must comply with the width of moorage facilities standards specified in MICC 19.13.050(D), Table D.

Staff Analysis: Exhibit 4 shows that the proposed pier is four feet in width within 30 feet from the OHWM and six feet in width more than 30 feet from the OHWM. These proposed widths

comply with the width standards specified in MICC 19.13.050(D), Table D, so this standard is met.

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

Staff Analysis: The applicant has not yet provided documentation that the project has been approved by the Washington Department of Fish and Wildlife or the U.S. Army Corps of Engineers. This decision conditions that the applicant provide documentation that state and federal agencies approve of the proposal prior to issuance of building permits. As conditioned, this standard is met.

- d. 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.

Staff Analysis: The applicant provided an Ecological No Net Loss Assessment Report (Exhibit 6) that indicates that the project will not have a negative impact on the ecological function of the shorelands. This standard is met.

- e. 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.

Staff Analysis: The applicant has not yet provided documentation that the project has been approved by the Washington Department of Fish and Wildlife or the U.S. Army Corps of Engineers. This decision conditions that the applicant provide documentation that state and federal agencies approve of the proposal prior to issuance of building permits. As conditioned, this standard is met.

CONDITIONS OF APPROVAL

1. The project proposal shall be in substantial conformance with Exhibit 4 and all applicable development standards contained within Mercer Island City Code (MICC) Chapter 19.13.
2. The applicant shall obtain any permits from state and federal agencies that are applicable to this project. The applicant is also responsible for documenting any required changes in the project proposal due to conditions imposed by any applicable local, state and federal government agencies.
3. Construction shall not be authorized, nor may begin within twenty-one days of the date of filing of the decision as defined in RCW 90.58.140(6).
4. A City of Mercer Island Building Permit may be required for construction of this project proposal. The Building Official may require an appropriate performance bond in an amount to be determined prior to Building Permit issuance to ensure all required vegetation installation is completed in compliance with applicable code requirements.
5. Construction of this project proposal shall only occur during approved fish windows by local, state, and/or federal government agencies. The applicant is responsible for obtaining permit approvals from all state and federal agencies.

6. Construction of this project proposal shall only occur during approved construction hours by the City of Mercer Island and/or as otherwise restricted by the Building Official.
7. The applicant shall provide the City with documentation of approval of the project from the U.S. Army Corps of Engineers and the Washington Department of Fish and Wildlife. This documentation shall be received by the City prior to issuance of building permits for this project.
8. The applicant shall provide the City with an affidavit prior to **permit issuance** stating that the applicant has field located the sewer lake line and the location on the site plan (as revised) is the actual location within Lake Washington. The affidavit shall acknowledge that the applicant is responsible for any damages to the sewer lake line caused by the construction. **Please note:** Damage can occur from pile driving, grounding the barge or securing it with vertical steel shafts (spuds), and other possible impacts from the project.
9. The applicant shall provide the City with development plans that reflect the field verified location of the sewer lake line pre-construction prior to **permit issuance**. If the lakebed is being disturbed, please contact Fish and Wildlife and the U.S. Army Corps of Engineers, as a permit may be required. **Please note:** Field verification should be performed with due care as the sewer lake line is pressurized in some locations and the pipe material could be prone to damage.

The applicant shall provide development plans based upon a pre-construction field survey locating the sewer lake line, and shall deliver the results to the City in one of the formats listed below, ranked from top to bottom, (a) being the top preferred method:

- a. A hand-drawn or plotted as-built of the lake line location with accurate distance measurements to multiple visible and permanent reference points. Reference points can include dock corners, utilities, structures, stairs, etc.
- b. A CAD file including the lake line and surveyed area in WGS-1984 or Washington State Plane North coordinate systems.
- c. A CAD file including the lake line and surveyed area in an assumed coordinate system, including multiple visible and permanent reference points.
- d. A list of coordinates denoting the lake line location, in WGS-1984 or Washington State Plane North coordinate systems.
- e. If none of the above options are viable, the City will consider reasonable efforts to provide field verification of the sewer lake line. Possible constraints that may make field verification nonviable includes, but is not limited to, the following: if the sewer pipe is too deep to locate or if there are fish window constraints.

If a coordinate system is used, the survey must be performed using high accuracy GPS or total station (half-foot accuracy). This **excludes** cellphone or handheld GPS surveys.

10. The applicant shall inform the Mercer Island Maintenance Department at (206) 275-7608 of the anticipated start date of in-water work prior to commencement of construction.
11. Piles, floats or other structures in direct contact with water shall not be treated or coated with toxic substances harmful to the aquatic environment. Chemical treatment of structures shall comply with all applicable state and federal regulations. Any pollutants entering Lake Washington shall be reported

immediately to the Department of Ecology. N.W. Regional Office: (425) 649-7000 and the City of Mercer Island (206) 275-7605.

12. Construction or substantial progress toward construction of a development for which a permit has been granted must be undertaken within two years after the approval of the permit or the permit shall terminate. The code official shall determine if substantial progress has been made. A single extension before the end of the time limit, with prior notice to parties of record, for up to one year, based on reasonable factors may be granted.

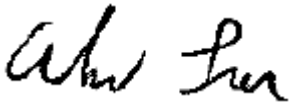
DEVELOPMENT REGULATION COMPLIANCE – DISCLOSURE

1. The applicant is responsible for obtaining any required permits or approvals from the appropriate Local, State, and Federal Agencies. The applicant is responsible for meeting the conditions required by the agencies pursuant to MICC 19.13.010(E) and 19.13.040.
2. All required permits must be obtained prior to the commencement of construction.

DECISION

Based upon the above noted Findings of Fact and Conclusions of Law, Shoreline Substantial Development Permit application SHL23-014, as depicted in Exhibit 4, is hereby **APPROVED**. This decision is final, unless appealed in writing consistent with adopted appeal procedures, MICC 19.15.130(A), and all other applicable appeal regulations.

Approved this 20th day of November, 2023



Andrew Leon
Planner
Community Planning & Development
City of Mercer Island

CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

9611 SE 36TH STREET | MERCER ISLAND, WA 98040

PHONE: 206.275.7605 | www.mercerisland.gov



CITY USE ONLY

PROJECT#

RECEIPT #

FEE

Date Received:

Received By:

DEVELOPMENT APPLICATION

STREET ADDRESS/LOCATION		ZONE
COUNTY ASSESSOR PARCEL #'S		PARCEL SIZE (SQ. FT.)
PROPERTY OWNER <i>(required)</i>	ADDRESS <i>(required)</i>	CELL/OFFICE <i>(required)</i> E-MAIL <i>(required)</i>
PROJECT CONTACT NAME	ADDRESS	CELL/OFFICE E-MAIL
TENANT NAME	ADDRESS	CELL PHONE E-MAIL

DECLARATION: I HEREBY STATE THAT I AM THE OWNER OF THE SUBJECT PROPERTY OR I HAVE BEEN AUTHORIZED BY THE OWNER(S) OF THE SUBJECT PROPERTY TO REPRESENT THIS APPLICATION, AND THAT THE INFORMATION FURNISHED BY ME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

DATE

PROPOSED APPLICATION(S) AND CLEAR DESCRIPTION OF PROPOSAL (PLEASE USE ADDITIONAL PAPER IF NEEDED):

ATTACH RESPONSE TO DECISION CRITERIA IF APPLICABLE

CHECK TYPE OF LAND USE APPROVAL REQUESTED:

CRITICAL AREAS	ENVIRONMENTAL REVIEW (SEPA)	SUBDIVISION
<input type="checkbox"/> Critical Area Review 1	<input type="checkbox"/> SEPA Review	<input type="checkbox"/> Short Plat- Preliminary
<input type="checkbox"/> Critical Area Review 2	<input type="checkbox"/> Environmental Impact Statement	<input type="checkbox"/> Short Plat- Alteration
		<input type="checkbox"/> Short Plat- Final Plat
DESIGN REVIEW		<input type="checkbox"/> Long Plat- Preliminary
<input type="checkbox"/> Design Review – Signs	LEGISLATIVE	<input type="checkbox"/> Long Plat- Alteration
<input type="checkbox"/> Design Review – Code Official	<input type="checkbox"/> Code Amendment	<input type="checkbox"/> Long Plat- Final Plat
<input type="checkbox"/> Design Commission Study Session	<input type="checkbox"/> Comprehensive Plan Docket Application	<input type="checkbox"/> Lot Line Revision
<input type="checkbox"/> Design Commission Review – Exterior Alteration	<input type="checkbox"/> Comprehensive Plan Application (If Docketed)	
<input type="checkbox"/> Design Commission Review – Major New Construction	<input type="checkbox"/> Rezone	
	OTHER LAND USE	
	<input type="checkbox"/> Accessory Dwelling Unit	
	<input type="checkbox"/> Code Interpretation Request	
	<input type="checkbox"/> Conditional Use (CUP)	WIRELESS COMMUNICATION FACILITIES
<input type="checkbox"/> Deviations to Antenna Standards – Code Official	<input type="checkbox"/> Noise Exception Type I - IV	<input type="checkbox"/> New Wireless Communication Facility
<input type="checkbox"/> Deviations to Antenna Standards – Design Commission	<input type="checkbox"/> Other Permit/Services Not Listed	<input type="checkbox"/> Wireless Communications Facilities- 6409 Exemption
<input type="checkbox"/> Public Agency Exception	SHORELINE MANAGEMENT	<input type="checkbox"/> Small Cell Deployment
<input type="checkbox"/> Reasonable Use Exception	<input type="checkbox"/> Shoreline Exemption	<input type="checkbox"/> Height Variance
<input type="checkbox"/> Variance	<input type="checkbox"/> Shoreline Substantial Development Permit	
<input type="checkbox"/> Seasonal Development Limitation Waiver – Wet Season Construction Approval	<input type="checkbox"/> Shoreline Variance	
	<input type="checkbox"/> Shoreline Conditional Use Permit	
	<input type="checkbox"/> Shoreline Permit Revision	



February 24, 2023

Kristin Osterberg
Waterfront Construction, Inc.
205 NE Northlake Way, Ste 230
Seattle, WA 98105

RE: SHL23-014/SEP23-003 (Evers Pier Repair and Expansion)
Notice of Complete Application
4456 Ferncroft Road, Mercer Island, WA 98040; King County Tax Parcel 004610-0453

Dear Kristin Osterberg:

The City of Mercer Island received the above referenced application for a Shoreline Substantial Development Permit with SEPA on January 19, 2023. The City has assigned file number SHL23-014 to the Shoreline Substantial Development Permit application and SEP23-003 to the SEPA review. Following review of the application, City staff has determined that this application was **complete** on February 24, 2023:

Formal review of the application will now begin in compliance with the City of Mercer Island's shoreline regulations as set forth in Chapter 19.13 MICC and environmental regulations as set forth in Chapter 19.21 MICC. As review progresses, additional documentation will most likely be requested. Pursuant to Mercer Island City Code 19.15.020(C)(4), if the applicant fails to provide the required information by the date listed on the request for information, the application shall lapse, and become null and void.

Sincerely,

Andrew Leon, Planner
City of Mercer Island Community Planning and Development
andrew.leon@mercergov.org
(206) 275-7720

CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

9611 SE 36TH STREET | MERCER ISLAND, WA 98040

PHONE: 206.275.7605 | www.mercerisland.gov



PUBLIC NOTICE OF APPLICATION

NOTICE IS HEREBY GIVEN that the City of Mercer Island has received the application described below:

- File No.:** SHL23-014
- Permit Type:** Type III
- Description of Request:** A request for a shoreline substantial development with SEPA for the repair and expansion of an existing residential pier.
- Applicant/ Owner:** Kristin Osterberg (Waterfront Construction, Inc.) / Eckhard Evers
- Location of Property:** 4456 Ferncroft Road, Mercer Island, WA 98040
Identified by King County Assessor tax parcel number: 004610-0453
- SEPA Compliance:** Following review of the submitted State Environmental Policy Act (SEPA) checklist, an initial evaluation of the proposed project for probably significant adverse environmental impacts has been conducted. The City expects to issue a SEPA Determination of Non-Significance (DNS) for this project. The optional DNS process, as specified in Washington Administrative Code (WAC) 197-11-355, is being used. This may be your only opportunity to comment on the on the environmental impacts of the proposal. The proposal may include mitigation measures under applicable codes, and the project review process may incorporate or require mitigation measures regardless of whether an Environmental Impact Statement (EIS) is prepared. A copy of the subsequent threshold determination for this specific project may be obtained upon request.
- Project Documents:** Please follow this file path to access the associated documents for this project:
<https://mieplan.mercergov.org/public/SHL23-014&SEP23-003>
- Written Comments:** Written comments on this proposal may be submitted to the City of Mercer Island either by email or by mail to the City of Mercer Island, 9611 SE 36th Street, Mercer Island, WA 98040-3732. Anyone may comment on the application, receive notice, and request a copy of the decision once made.

Only those persons who submit written comments or participate at the public hearing (if a hearing is required) will be parties of record; and only parties of record will have the right to appeal.

Applicable Development Regulations:

Applications for Shoreline Substantial Development Permits and SEPA environmental reviews are required to be processed as Type III land use reviews pursuant to Mercer Island City Code (MICC) 19.15.030. Processing requirements for Type III land use reviews are further detailed in MICC 19.15.030.

Other Associated Permits:

SEP23-003

Environmental Documents:

Copies of all studies and / or environmental documents are available through the above project documents link.

Public Hearing:

Pursuant to MICC 19.15.030 Table B a public hearing is not required for Type 1-3 permits.

Application Process Information:

Date of Complete Application: February 24, 2022.

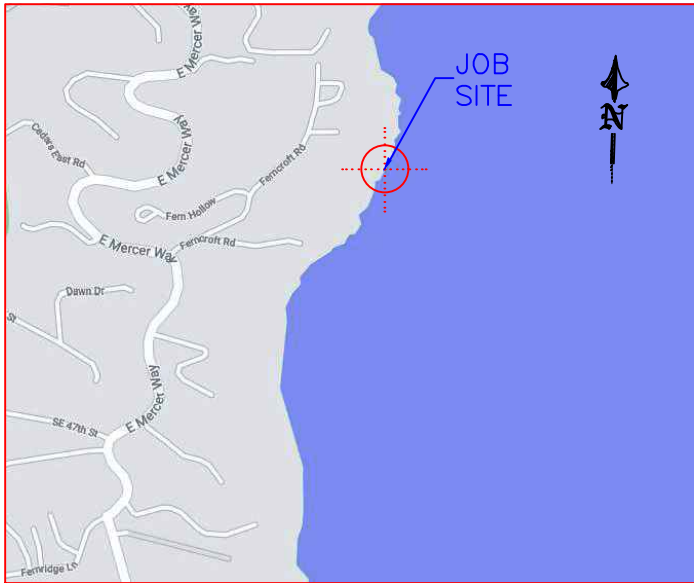
Date of Notice of Application: March 6, 2022 through April 5, 2022.

Project Contact:

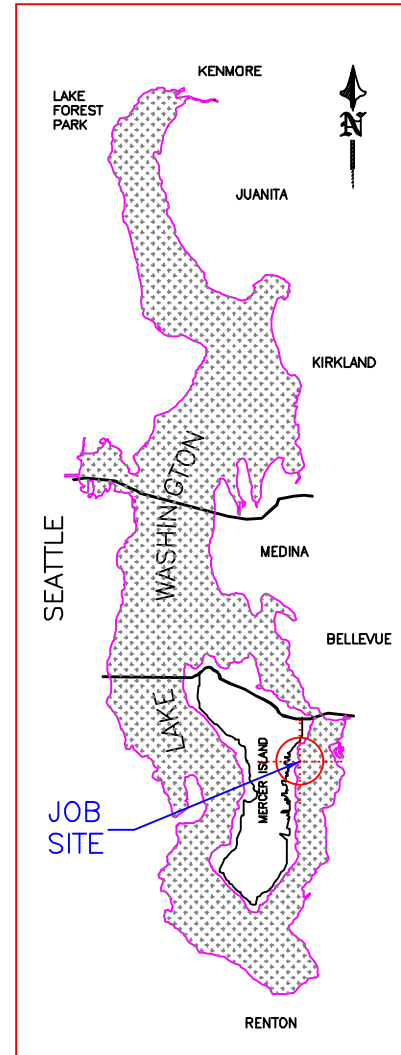
Andrew Leon, Planner

Andrew.Leon@mercerisland.gov | 206-275-7720

VICINITY MAP/NO SCALE



AREA MAP/NO SCALE



LEGAL DESCRIPTION

SECTION: SE-18-24-05 LAT: 47.565560 (47° 33' 56.016" N)
 TAXLOT #: 004610-0453 LONG: -122.208440 (122° 12' 30.384" W)

ADAMS LAKE WASHINGTON TRS POR OF N 22.12 FT OF 6 & OF S 17.88 FT OF 5 E OF LN RNNG N 00 DEG 43 MIN 30 SEC W FR PT ON S LN SD POR OF 6 314.41 FT E OF C/L OF PRIVATE RD & SH LDS ADJ & POR OF S 20 FT OF N 42.12 FT OF 6 E OF LN RNNG S 00 DEG 43 MIN 30 SEC E FR PT ON N LN SD S 20 FT 285.41 FT E OF C/L OF PRIVATE RD SH LDS ADJ

REVISED
09/08/2023

PER STRUCTURAL ENGINEERING
 BY PACIFIC ENGINEERING
 TECHNOLOGIES, INC.

PROJECT DESIGNED BY:

Waterfront Construction Inc.

THIS DOCUMENT IS PROPRIETARY PROPERTY OF WATERFRONT CONSTRUCTION INC., AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WATERFRONT CONSTRUCTION INC.

ADJACENT OWNERS:

- ① ERIKA ONEIL
4452 FERNCROFT ROAD
MERCER ISLAND, WA 98040
- ② LAWRENCE HILE
4508 FERNCROFT ROAD
MERCER ISLAND, WA 98040

APPLICATION#:

PROPOSED: PIER REPAIR

PURPOSE: RESTORE STRUCTURAL INTEGRITY

DATUM: C.O.E. MLLW=0.0'

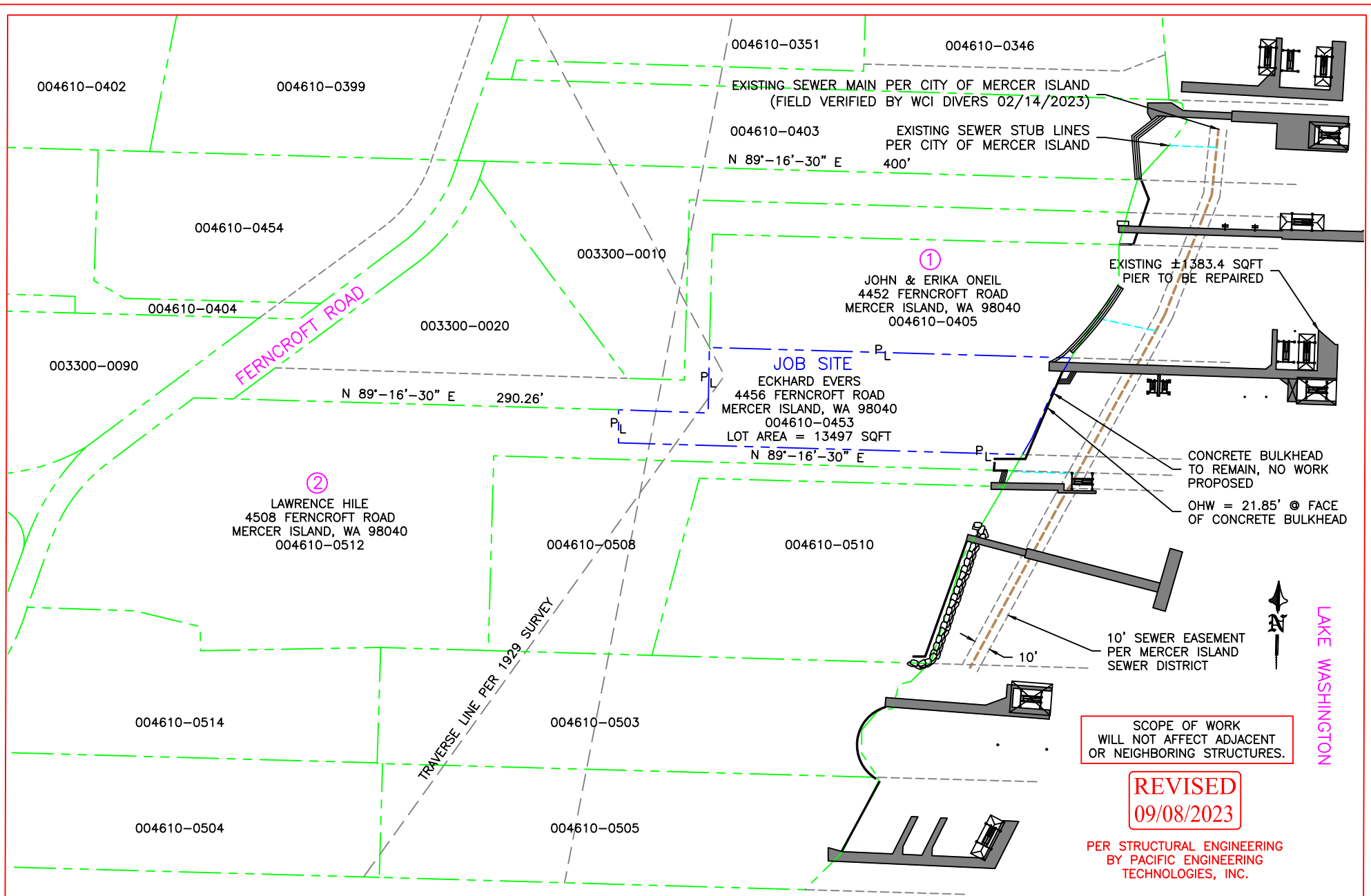
DWG#: 21-32061-A6-1

APPLICANT: ECKHARD EVERS

SITE ADD. 4456 FERNCROFT ROAD
MERCER ISLAND, WA 98040

MAIL ADD. (SAME AS ABOVE)

PAGE: 1 OF: 14 DATE: 06/28/2022



004610-0402

004610-0399

004610-0351

004610-0346

EXISTING SEWER MAIN PER CITY OF MERCER ISLAND
(FIELD VERIFIED BY WCI DIVERS 02/14/2023)

004610-0403
N 89°-16'-30" E

EXISTING SEWER STUB LINES
PER CITY OF MERCER ISLAND
400'

004610-0454

003300-0010

①
JOHN & ERIKA ONEIL
4452 FERNCROFT ROAD
MERCER ISLAND, WA 98040
004610-0405

EXISTING ±1383.4 SQFT
PIER TO BE REPAIRED

004610-0404

003300-0020

FERNCROFT ROAD

003300-0090

N 89°-16'-30" E 290.26'

JOB SITE

ECKHARD EVERS
4456 FERNCROFT ROAD
MERCER ISLAND, WA 98040
004610-0453
LOT AREA = 13497 SQFT
N 89°-16'-30" E

CONCRETE BULKHEAD
TO REMAIN, NO WORK
PROPOSED
OHW = 21.85' @ FACE
OF CONCRETE BULKHEAD

②

LAWRENCE HILE
4508 FERNCROFT ROAD
MERCER ISLAND, WA 98040
004610-0512

004610-0508

004610-0510

TRAVERSE LINE PER 1929 SURVEY

10' SEWER EASEMENT
PER MERCER ISLAND
SEWER DISTRICT

004610-0514

004610-0503

SCOPE OF WORK
WILL NOT AFFECT ADJACENT
OR NEIGHBORING STRUCTURES.

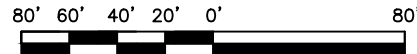
004610-0504

004610-0505

REVISED
09/08/2023

PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.

EXISTING SITE PLAN



SCALE: 1"=80'

PROJECT DESIGNED BY:

Waterfront Construction Inc.

THIS DOCUMENT IS PROPRIETARY PROPERTY OF WATERFRONT
CONSTRUCTION INC., AND IS NOT TO BE USED, IN WHOLE OR IN
PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN
AUTHORIZATION OF WATERFRONT CONSTRUCTION INC.

REFERENCE #:

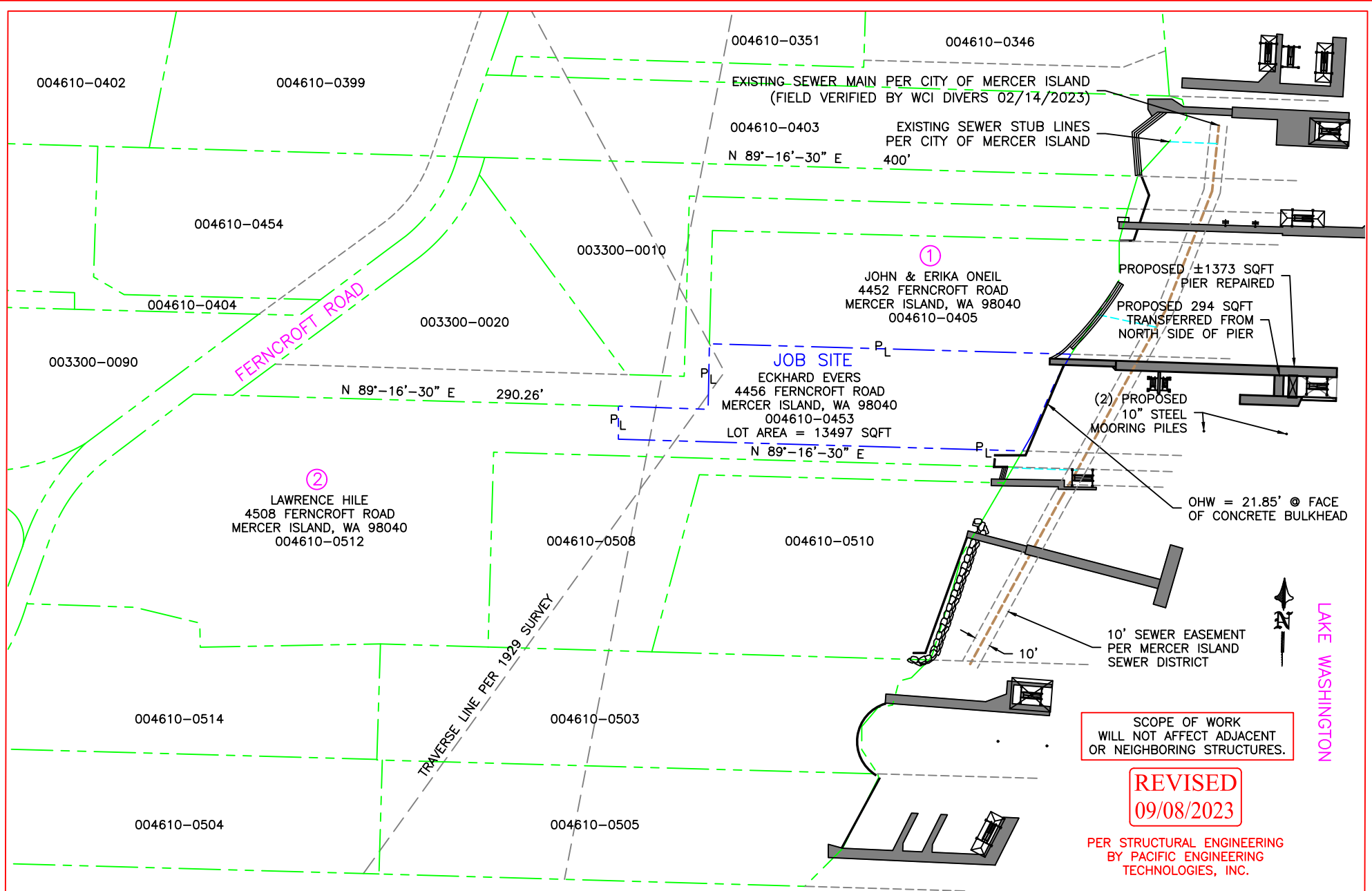
APPLICANT: ECKHARD EVERS

PROPOSED: PIER REPAIR

SHEET: 2 OF: 14 NEAR/AT: MERCER ISLAND

DATE: 06/28/2022 DWG#: 21-32061-A6-2

LAKE WASHINGTON



004610-0351 004610-0346
 EXISTING SEWER MAIN PER CITY OF MERCER ISLAND
 (FIELD VERIFIED BY WCI DIVERS 02/14/2023)
 004610-0403 EXISTING SEWER STUB LINES
 PER CITY OF MERCER ISLAND
 N 89°-16'-30" E 400'

①
 JOHN & ERIKA ONEIL
 4452 FERNCROFT ROAD
 MERCER ISLAND, WA 98040
 004610-0405

JOB SITE
 ECKHARD EVERS
 4456 FERNCROFT ROAD
 MERCER ISLAND, WA 98040
 004610-0453
 LOT AREA = 13497 SQFT
 N 89°-16'-30" E

②
 LAWRENCE HILE
 4508 FERNCROFT ROAD
 MERCER ISLAND, WA 98040
 004610-0512

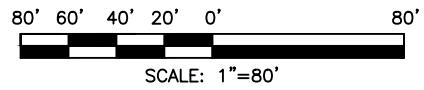
PROPOSED ±1373 SQFT
 PIER REPAIRED
 PROPOSED 294 SQFT
 TRANSFERRED FROM
 NORTH SIDE OF PIER
 (2) PROPOSED
 10" STEEL
 MOORING PILES
 OHW = 21.85' @ FACE
 OF CONCRETE BULKHEAD

SCOPE OF WORK
 WILL NOT AFFECT ADJACENT
 OR NEIGHBORING STRUCTURES.

REVISED
09/08/2023

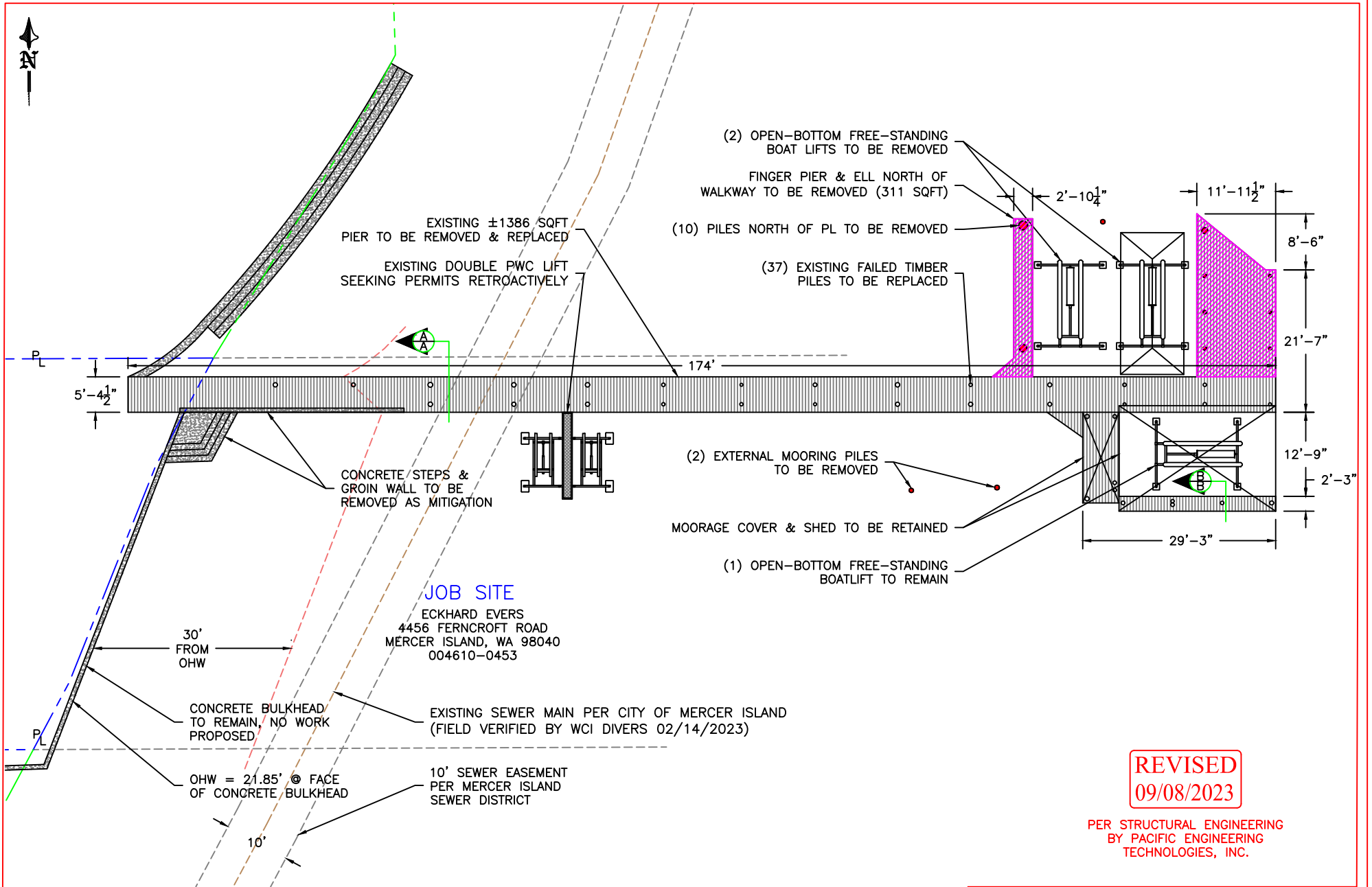
PER STRUCTURAL ENGINEERING
 BY PACIFIC ENGINEERING
 TECHNOLOGIES, INC.

PROPOSED SITE PLAN



PROJECT DESIGNED BY:
 Waterfront Construction Inc.
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 CONSTRUCTION INC., AND IS NOT TO BE USED, IN WHOLE OR IN
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REFERENCE #:	
APPLICANT:	ECKHARD EVERS
PROPOSED:	PIER REPAIR
SHEET:	3 OF 14
DATE:	06/28/2022
NEAR/AT:	MERCER ISLAND
DWG#:	21-32061-A6-3



REVISED
09/08/2023

PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.

EXISTING SITE PLAN DETAIL

20' 15' 10' 5' 0' 20'



SCALE: 1"=20'

PROJECT DESIGNED BY:

Waterfront Construction Inc.

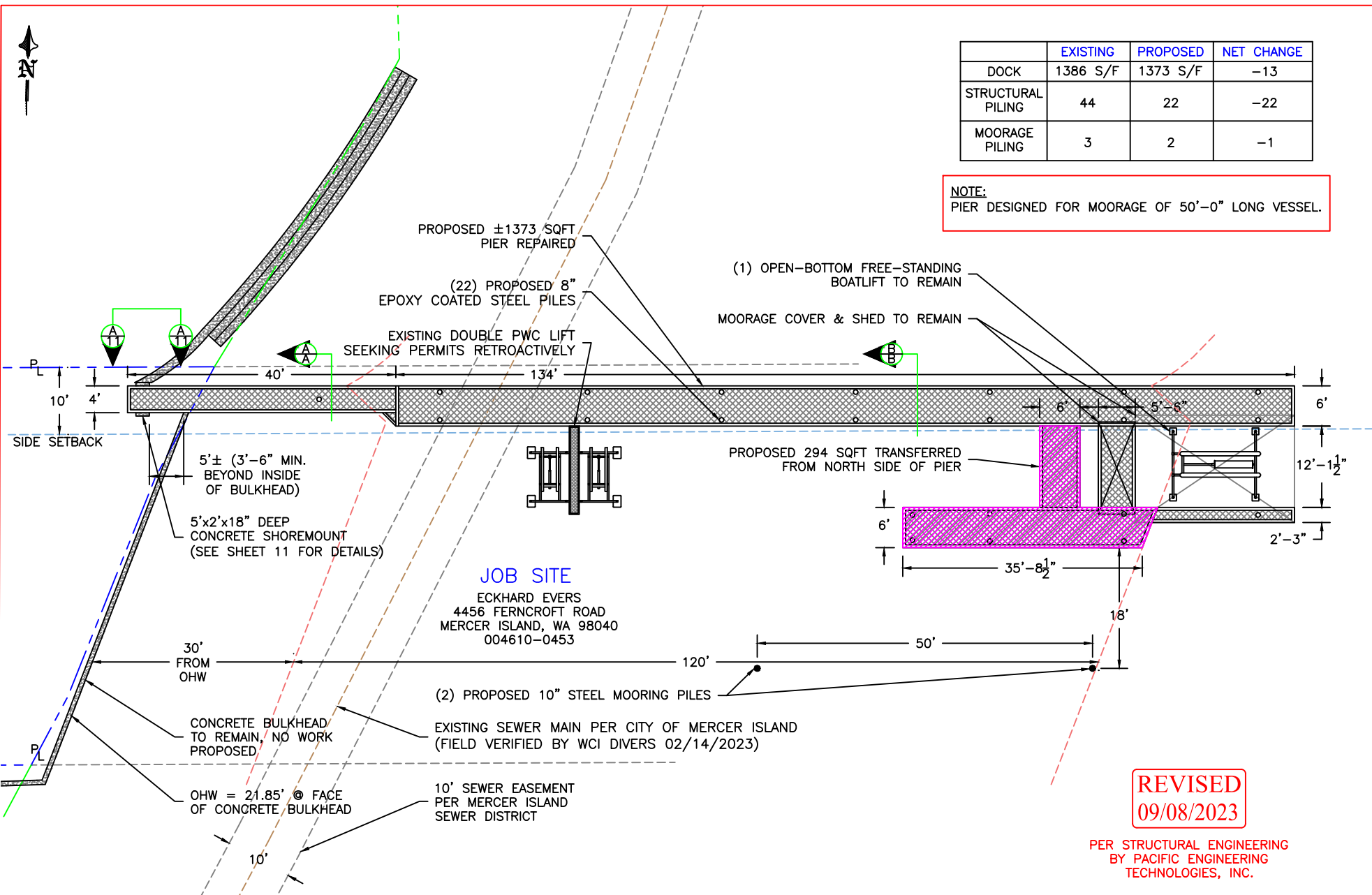
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REFERENCE #:		
APPLICANT: ECKHARD EVERS		
PROPOSED: PIER REPAIR		
SHEET: 4	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG#: 21-32061-A6-4	



	EXISTING	PROPOSED	NET CHANGE
DOCK	1386 S/F	1373 S/F	-13
STRUCTURAL PILING	44	22	-22
MOORAGE PILING	3	2	-1

NOTE:
PIER DESIGNED FOR MOORAGE OF 50'-0" LONG VESSEL.

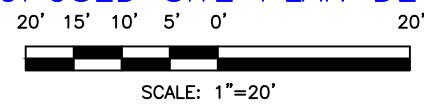


JOB SITE
ECKHARD EVERS
4456 FERNCROFT ROAD
MERCER ISLAND, WA 98040
004610-0453

REVISED
09/08/2023

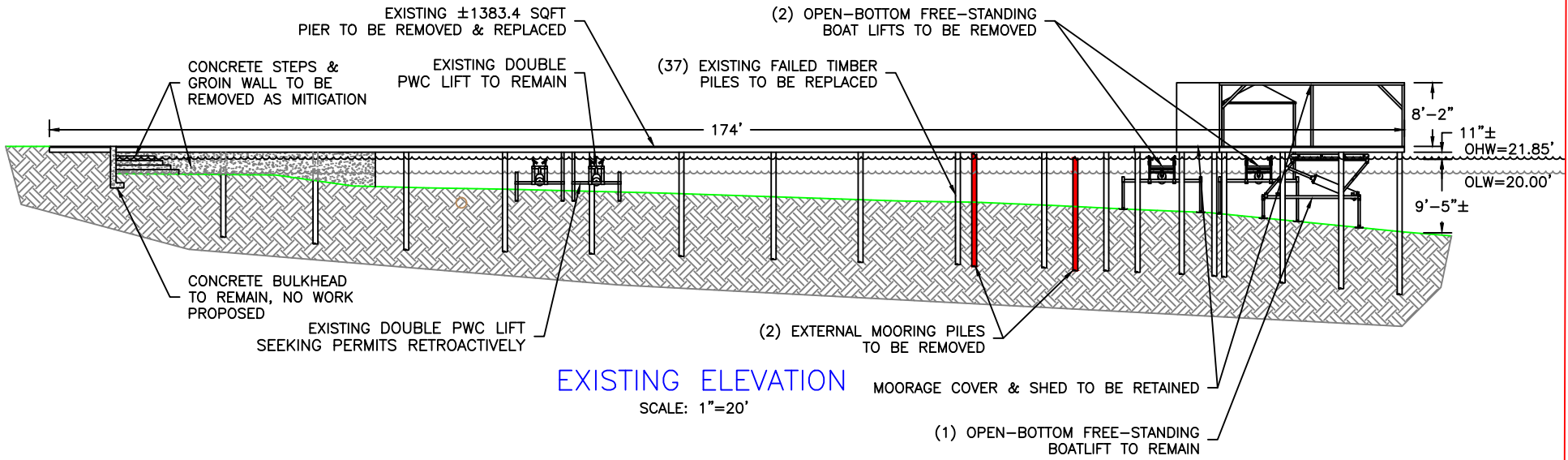
PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.

PROPOSED SITE PLAN DETAIL



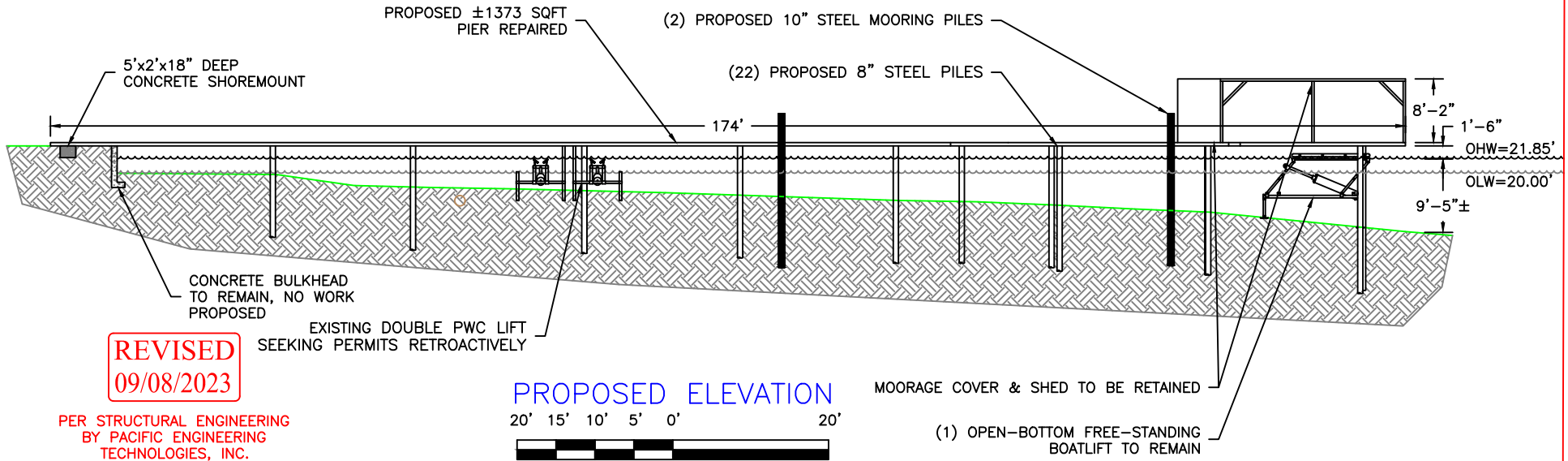
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PROPOSED: PIER REPAIR	
SHEET: 5	OF: 14
NEAR/AT: MERCER ISLAND	
DATE: 06/28/2022	DWG#: 21-32061-A6-5



EXISTING ELEVATION

SCALE: 1"=20'



PROPOSED ELEVATION

20' 15' 10' 5' 0' 20'



SCALE: 1"=20'

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09/08/2023

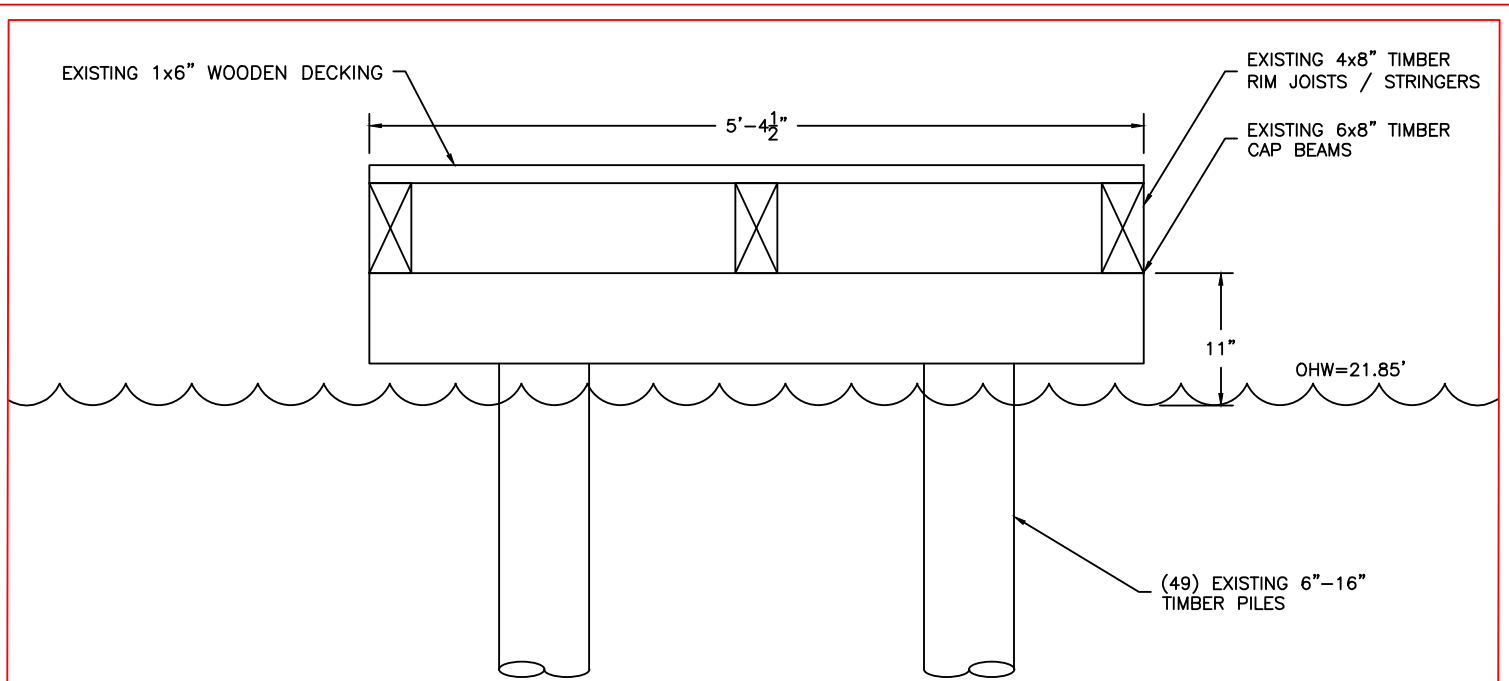
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PROJECT DESIGNED BY:

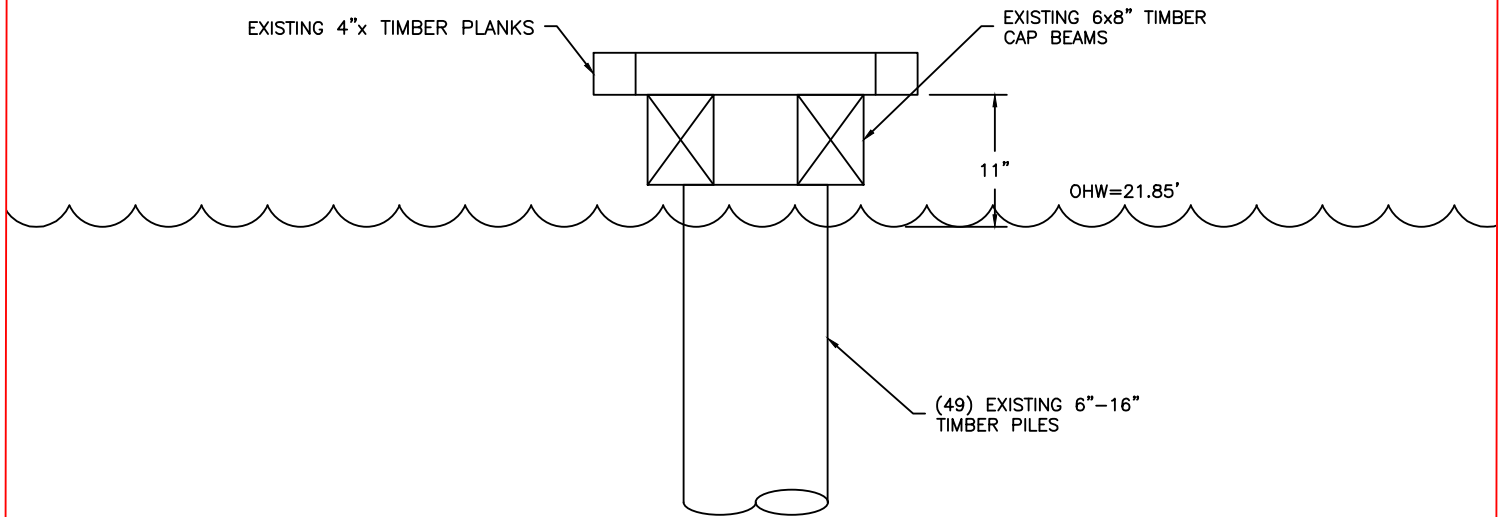
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PROPOSED: PIER REPAIR		
SHEET: 6	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG#: 21-32061-A6-6	



EXISTING SECTION A-A
SCALE: 3/4"=1'



EXISTING SECTION B-B
SCALE: 3/4"=1'

REVISED
09/08/2023

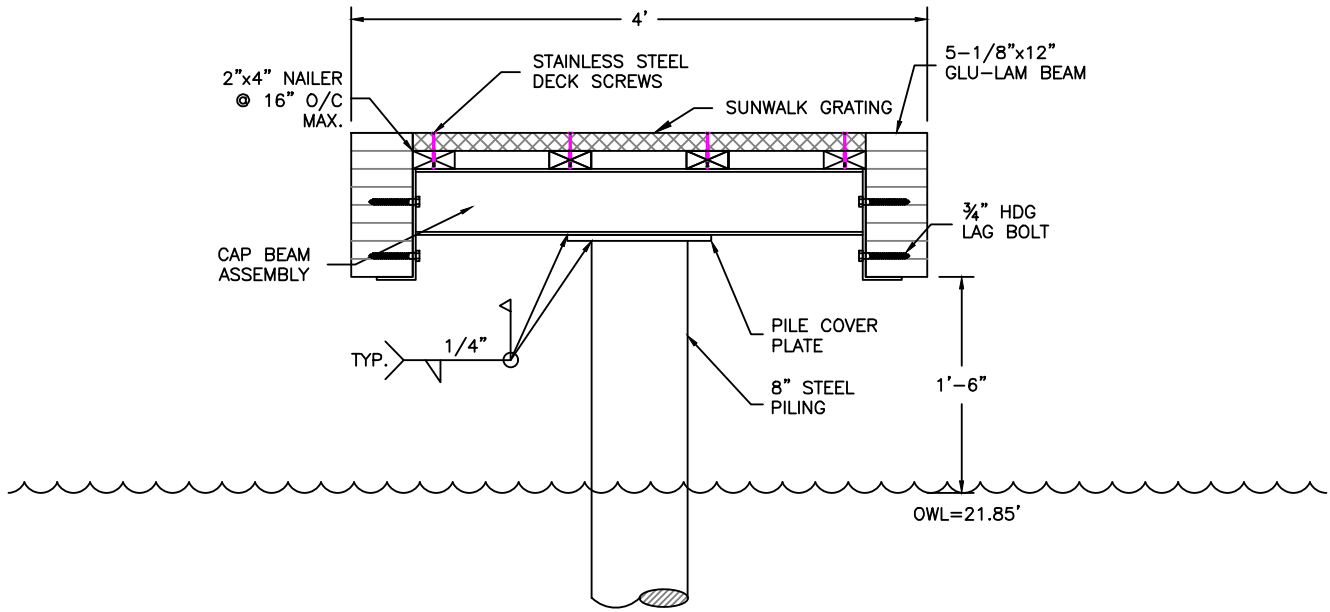
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TECHNOLOGIES, INC.

PROJECT DESIGNED BY:

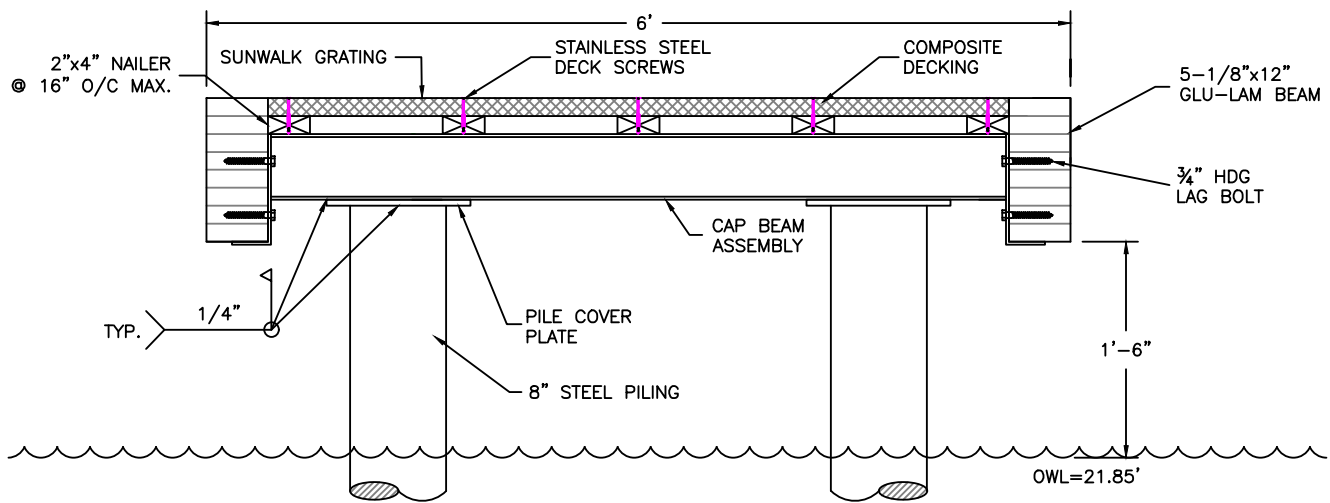
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PROPOSED: PIER REPAIR		
SHEET: 7	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG#: 21-32061-A6-7	



PROPOSED SECTION A-A
SCALE: 3/4"=1'



PROPOSED SECTION B-B
SCALE: 3/4"=1'

REVISED
09/08/2023

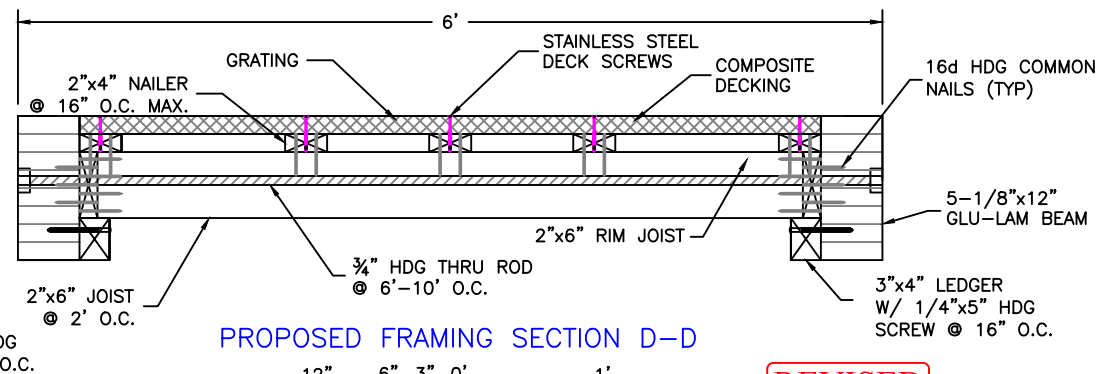
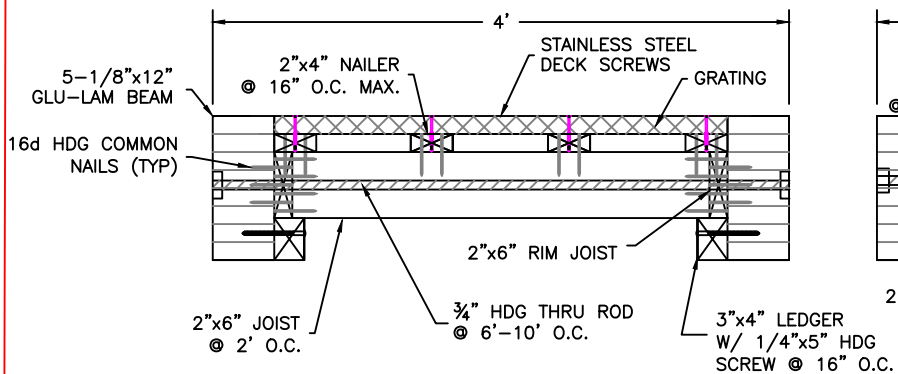
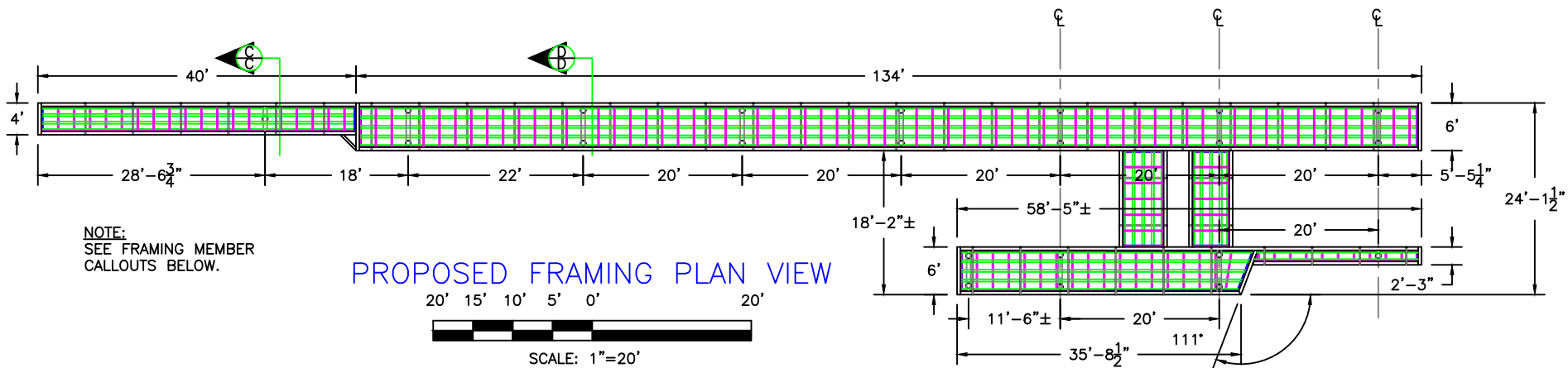
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SHEET: 8	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG #: 21-32061-A6-8	



REVISED
09/08/2023

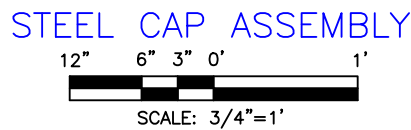
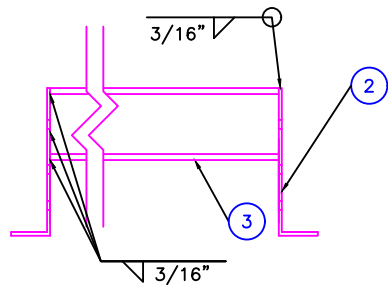
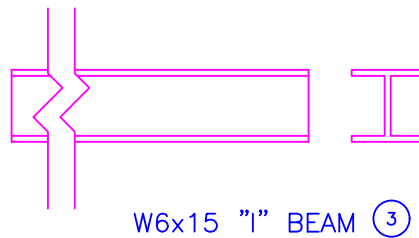
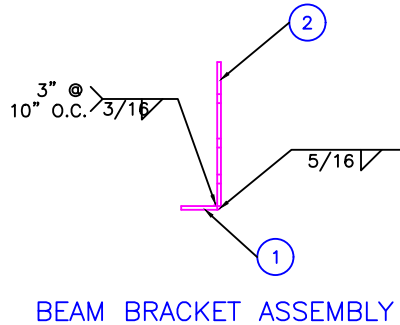
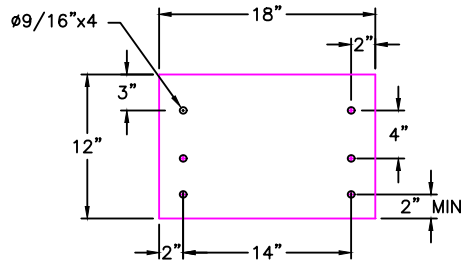
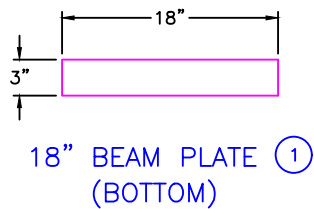
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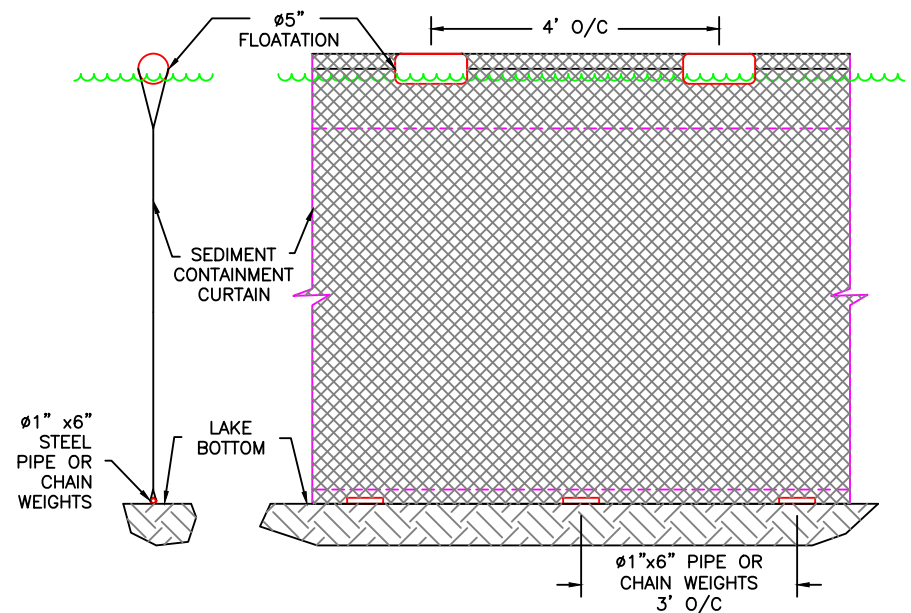
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PROPOSED: PIER REPAIR		
SHEET: 9	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG#: 21-32061-A6-9	



REVISED
09/08/2023

PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.



MATERIAL LIST

PART	SPECS	TREATMENT
NAILERS	2"x4" DF #2 OR BTR	ACZA
LEDGERS	3"x4" DF #2 OR BTR	ACZA
GRATING	MOLDED PLASTIC	NONE
HARDWARE	STEEL	STAINLESS OR HDG.
PILING	X-STRONG 4", 8" & 10"	EPOXY-COATED
CAPS	W6x15 "1" BEAM	GALVANIZED
GLU-LAMS	5 1/8"x12" DF	ACZA
JOIST	2"x6" DF #2 OR BTR	ACZA
RIM JOIST	2"x6" DF #2 OR BTR	ACZA

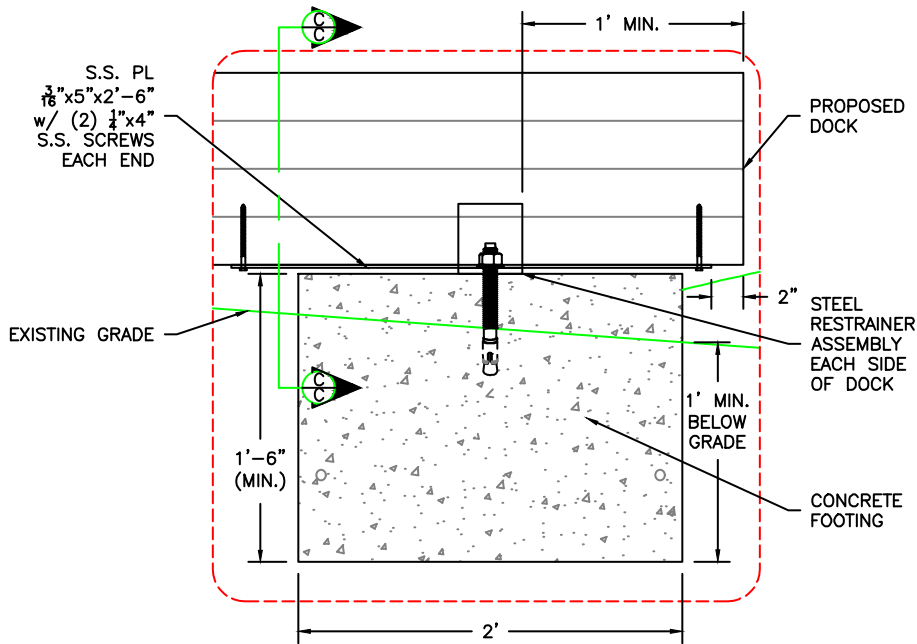
PART #	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
3	W6x15 "1" BEAM	6" 15 LB PER FOOT I-BEAM
2	18" BACK BEAM PLATE	18"x18"x5/16" STEEL PLATE
1	18" BOTTOM BEAM PLATE	18"x3"x5/16" STEEL PLATE

PROJECT DESIGNED BY:

Waterfront Construction Inc.

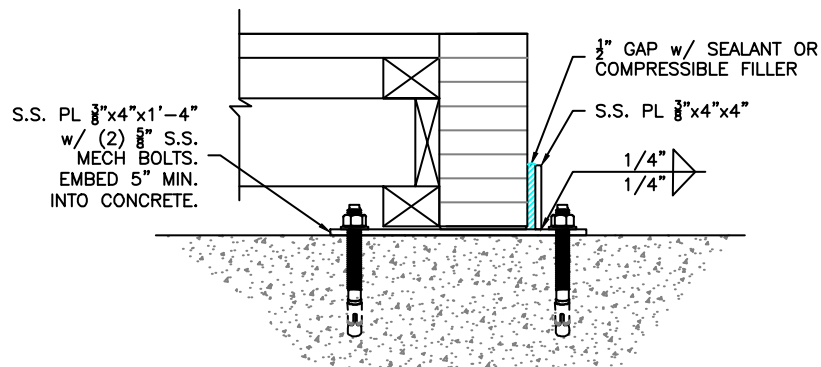
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APPLICANT:	ECKHARD EVERS
PROPOSED:	PIER REPAIR
SHEET:	10 OF 14
NEAR/AT:	MERCER ISLAND
DATE:	06/28/2022
DWG#:	21-32061-A6-10

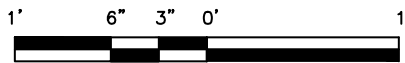


PIER TO CONC. SHOREMOUNT: A-11

SCALE: 1"=1'



SECTION C-C



SCALE: 1"=1'

REVISED
09/08/2023

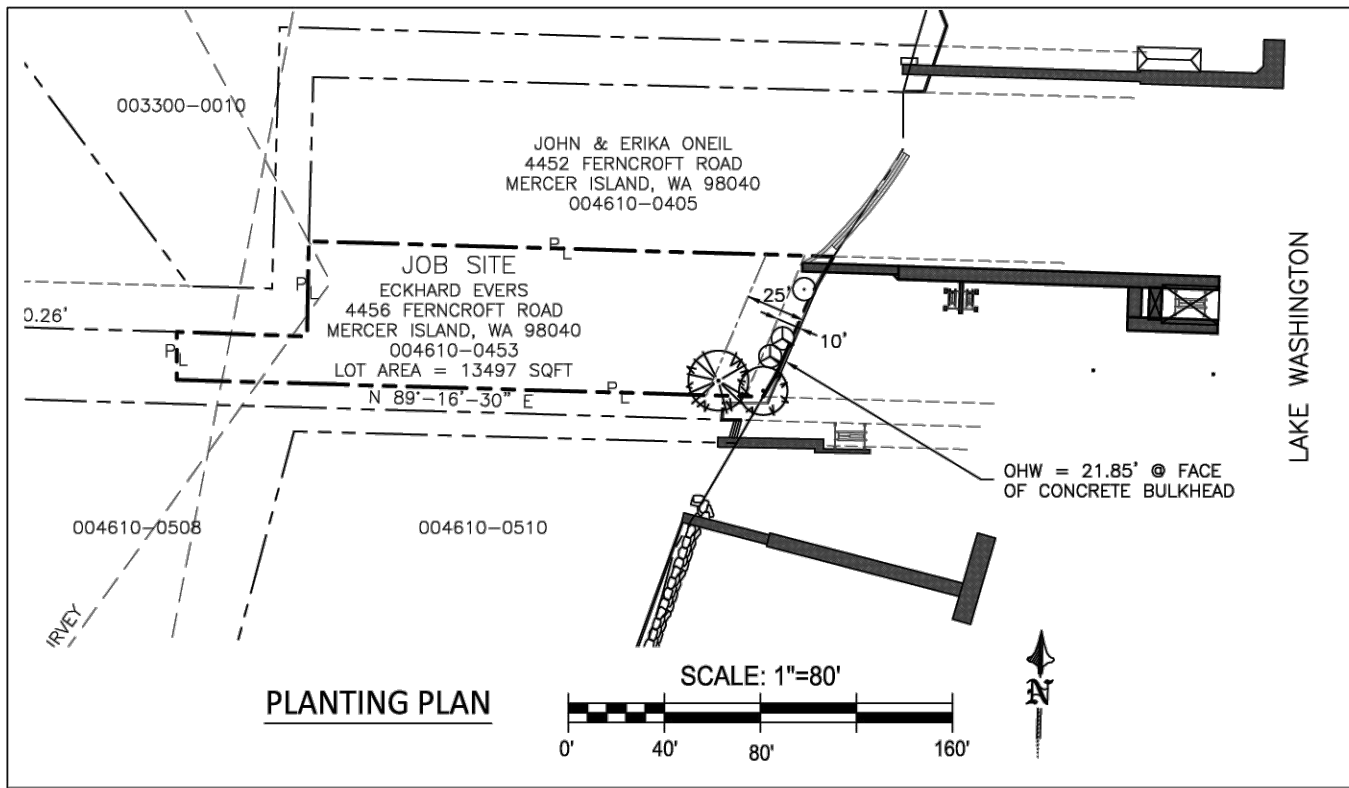
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REFERENCE #:		
APPLICANT: ECKHARD EVERS		
PROPOSED: PIER REPAIR		
SHEET: 11	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG #: 21-32061-A6-11	



LAKE WASHINGTON

PLANTING PLAN

PLANTING NOTES:

1. REMOVE ALL HIMALAYAN BLACKBERRY, JAPANESE KNOTWEED, BAMBOO, AND ENGLISH IVY FROM PLANTING AREA USING KING COUNTY RECOMMENDATIONS. RETAIN AND PROTECT ALL EXISTING NATIVE VEGETATION.
2. PLANT MATERIAL SHALL BE LOCALLY GROWN (PUGET SOUND REGION) AND CONFORM TO THE MOST RECENT ANLA STANDARDS. THE OWNER RESERVES THE RIGHT TO REFUSE ANY AND ALL PLANT MATERIAL THAT DOES NOT MEET STANDARDS.
3. PLANT LOCATIONS ARE SCHEMATIC AND MAY NEED ADJUSTMENT TO MEET ACTUAL FIELD CONDITIONS. WHEN A CONFLICT WITH FIELD CONDITIONS OCCURS CONSULT WITH THE PROJECT BIOLOGIST. MAINTAIN A MINIMUM OF 2 FEET FROM EXISTING SHRUBS, AND 3 FEET FROM EXISTING TREES.

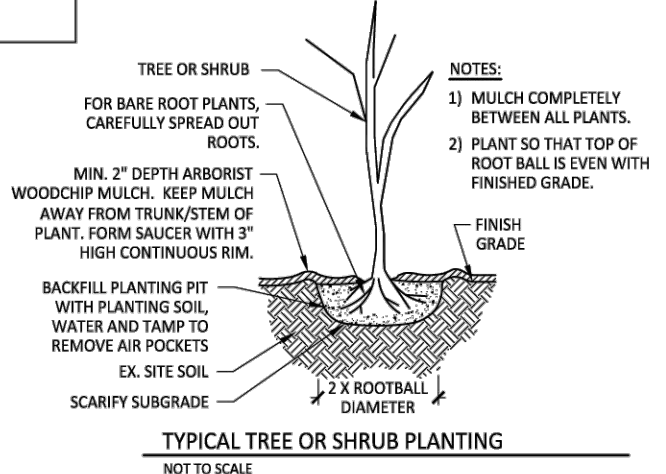
REVISED
09/08/2023

PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.

PLANT SCHEDULE					
Symbol	Common Name	Scientific Name	Size	Condition	Qty
	Douglas Fir	<i>Pseudotsuga menziesii</i>	6'-8' height	Bare root or container	1
	Shore Pine	<i>Pinus contorta</i>	6'-8' height	Bare root or container	1
	Red Elderberry	<i>Sambucus racemosa</i>	#2	Container	1
	Red Flowering Current	<i>Ribes sanguineum</i>	#2	Container	2
				Total Trees:	2
				Total Shrubs:	3
				Total Plants:	5

PLANTING SEQUENCE:

1. PLANTING AREA SHALL BE PLANTED WITH THE SPECIES INDICATED IN THE PLANTING SCHEDULE. DIG A HOLE FOR EACH PLANT THAT IS TWICE THE SIZE OF THE ROOT BALL OR PLANT CONTAINER. REMOVE LARGE ROCKS AND OTHER DEBRIS INCLUDING ROOTS FROM PIT. SOAK PIT WITH WATER BEFORE PLANTING. BARK MULCH SHOULD NOT BE USED TO BACKFILL THE PLANTING HOLE.
2. PULL BACK MULCH FROM PLANTINGS TO CREATE A MULCH RING AROUND PLANTS.
3. PLANTINGS SHOULD BE WATERED THROUGHOUT THE SUMMER MONTHS IF DROUGHT CONDITIONS OCCUR.
4. TWO 5-GALLON BUCKETS OF ARBORIST CHIPS OR MULCH SHALL BE PLACED AROUND EACH PLANTING.



TYPICAL TREE OR SHRUB PLANTING

NOT TO SCALE

PROJECT DESIGNED BY:



3639 PALATINE AVE N
SEATTLE, WA 98103
206-634-9193

REFERENCE #:	
APPLICANT: ECKHARD EVERS	
PROPOSED: PIER REPAIR	
SHEET: 12 OF: 14 NEAR/AT: MERCER ISLAND	
DATE: 12/16/2022	DWG#:

STRUCTURAL NOTES

CODE:

THE INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION AND THE 2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC), WITH THE STATE OF WASHINGTON AMENDMENTS.

THE 2009 UNIFIED FACILITIES CRITERIA (UFC).

LIVE LOADS:

RESIDENTIAL PIER 40 PSF

LATERAL LOADS (BASED ON ASCE 7):

WIND DESIGN DATA:

WIND SPEED 98 MPH
IMPORTANCE FACTOR I
RISK CATEGORY II
EXPOSURE C
TOPOGRAPHICAL FACTOR 1

FOUNDATION:

BEFORE WORK BEGINS, LOCATE ALL UNDERGROUND UTILITIES BY CONTACTING "CALL BEFORE YOU DIG" AT 1-800-424-5555 OR 811. HOWEVER, THIS SERVICE DOES NOT HAVE A COMPLETE DATABASE OF ALL OBSTRUCTIONS, THEREFORE OTHER LOCATING SERVICES MAY ALSO BE NECESSARY.

EXTEND FOOTINGS TO FIRM UNDISTURBED SOIL OF 1500 PSF BEARING CAPACITY.

STEEL PILING:

8" PILING SHALL BE X-STRONG ASTM A252, GRADE "3" Fy = 45,000 PSI
10" PILING SHALL BE STANDARD OR X-STRONG ASTM A252, GRADE "3" Fy = 45,000 PSI.

CORROSION PROTECTION TO BE PROVIDED BY OTHERS.

PILE INSTALLATION:

THE PILES SHALL BE DRIVEN TO REFUSAL USING A VIBRATOR OR DIESEL HAMMER. OUR DESIGN ASSUMES THAT THERE IS A LAYER OF SOFT SOIL BELOW THE MUDLINE THAT IS UP TO 20 FEET DEEP THAT IS UNDERLAIN BY DENSE SOIL THAT IS SUFFICIENT FOR BEARING. THE DEPTH OF THIS SOFT SOIL LAYER SHOULD BE MONITORED AND RECORDED TO CONFIRM THAT IT IS NOT MORE THAN 20 FEET THICK. NOTIFY ENGINEER IF THE SOFT SOIL LAYER IS MORE THAN 20 FEET THICK. THE PILES SHALL BE DRIVEN A MINIMUM OF 5 FEET INTO THE DENSE BEARING SOIL. THE DEPTH OF EMBEDMENT INTO THE DENSE BEARING SOIL SHOULD BE MONITORED AND RECORDED TO CONFIRM THAT THE MINIMUM EMBEDMENT IS ACHIEVED. THE TOTAL EMBEDMENT DEPTH SHALL BE 16 FEET MINIMUM. IF THE MINIMUM EMBEDMENTS ARE NOT REACHED, THEN OVERDRIVING OF THE PILES WILL BE NECESSARY.

CONCRETE:

CONCRETE f'c = 3,000 PSI AT 28 DAYS. CONCRETE EXPOSED TO THE WEATHER IS TO BE AIR-ENTRAINED.

CONCRETE PROTECTION FOR REINFORCING SHALL BE AS FOLLOWS:

BOTTOM OF FOOTINGS 3"
CONCRETE EXPOSED TO EARTH & WEATHER (#5 & SMALLER) 1 1/2"

ALL CONCRETE IN FOOTINGS SHALL BE PLACED IN A MONOLITHIC POUR UNLESS SHOWN OTHERWISE OR APPROVED BY THE ENGINEER PRIOR TO PLACING. ALUMINUM CONDUIT AND ACCESSORIES SHALL NOT BE EMBEDDED IN CONCRETE.

REINFORCING STEEL:

DEFORMED BILLET STEEL CONFORMING TO ASTM A615 (STANDARD 04, 2013 CURRENT), GRADE 60.

STRUCTURAL STEEL:

WIDE-FLANGE BEAMS ASTM A992 Fy = 50,000 PSI. CHANNELS, ANGLES, AND PLATES ASTM A36 Fy = 36,000 PSI. ALL FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AISC "STEEL CONSTRUCTION MANUAL."

ALL WELDS SHALL BE 3/16" MINIMUM CONTINUOUS FILLET WELDS USING AWS D1.1 CLASS E70 ELECTRODES UNLESS NOTED OTHERWISE. ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED BY WABO.

ALL STEEL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123. REPAIR ALL SCRAPES, DINGS, WELDS, ETC., IN ACCORDANCE WITH ASTM A780.

PROJECT DESIGNED BY:

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REVISED
09/08/2023

PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.

REFERENCE #:

APPLICANT: ECKHARD EVERS

PROPOSED: PIER REPAIR

SHEET: 13 OF 14 NEAR/AT: MERCER ISLAND

DATE: 06/28/2022 DWG#: 21-32061-A6-13

STRUCTURAL NOTES CONT:

STEEL BOLTS:

ALL BOLTS AND THREADED RODS SHALL BE ASTM A307 HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153-CLASS C UNLESS NOTED OTHERWISE. GALVANIZED BOLTS SHOULD BE INSTALLED IN STANDARD SIZE HOLES UNLESS NOTED OTHERWISE.

ALL BOLTS NOT SPECIFIED AS SLIP CRITICAL ARE TO BE ASSEMBLED "SNUG TIGHT" MEANING FULL EFFORT USING A STANDARD HAND-HELD WRENCH OR A FEW IMPACTS OF AN IMPACT WRENCH AFTER FINGER TIGHTENING.

STRUCTURAL LUMBER:

ALL LUMBER SHALL BE GRADED IN ACCORDANCE WITH CURRENT WWA STANDARD GRADING RULES FOR WESTERN LUMBER. USE THE FOLLOWING SPECIES AND MINIMUM GRADE:

JOISTS & RAFTERS D.F.-L #1 Fb=1,000 PSI OR #2 Fb=900 PSI

GLUED LAMINATED LUMBER:

DOUGLAS FIR-LARCH GRADE 24F-V4 (Fb=2400 PSI) FOR SINGLE SPAN BEAMS AND 24F-V8 FOR BEAMS CONTINUOUS OVER SUPPORTS, COMBINATION 3 FOR COLUMNS $F_c = 2,300$ PSI. ALL GLULAM MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AITC A190.1 AND BE STAMPED WITH AN AITC QUALITY MARK OR AN APA-EWS TRADEMARK. ADHESIVES USED IN THE GLULAM MANUFACTURING PROCESS SHALL CONFORM TO AITC 405 FOR WET USE ADHESIVES. GLULAM MEMBERS SHALL BE MANUFACTURED FROM DOUGLAS FIR LAMINATING LUMBER. ALL BEAMS SHALL HAVE ZERO CAMBER UNLESS NOTED OTHERWISE. MEMBERS NOT EXPOSED TO VIEW IN THE COMPLETED WORK SHALL BE INDUSTRIAL APPEARANCE GRADE. MEMBERS EXPOSED TO VIEW IN THE COMPLETED WORK SHALL BE ARCHITECTURAL APPEARANCE GRADE.

WOOD FOR OVER-WATER AND IN-WATER:

ALL WOOD PARTIALLY OR FULLY SUBMERGED IN WATER SHALL BE TREATED WITH AMMONIACAL COPPER ZINC ARSENATE (ACZA), EXCEPT WHEN WOOD IS IN STATE-OWNED AQUATIC LANDS (SOAL) MANAGED BY THE DEPARTMENT OF NATURAL RESOURCES (DNR) WHERE TREATMENT TO WOOD IN WATER/IN SPLASH ZONE IS PROHIBITED. ALL WOOD INSTALLED ABOVE WATER (WHERE CLEARLY OUT OF THE SPLASH ZONE) SHALL BE TREATED WITH AMMONIACAL COPPER ZINC ARSENATE (ACZA). WOOD TREATED WITH PENTACHLOROPHENOL, CREOSOTE, CHROMATE COPPER ARSENATE (CCA), OR COMPARABLY TOXIC COMPOUNDS IS PROHIBITED FOR PIERS, DOCKS, AND PILING.

WOOD SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD U1. USE THE FOLLOWING MINIMUM AWPA USE CATEGORIES:

WOOD OVER WATER: UC4B
WOOD IN WATER: UC4C

TREAT CUT ENDS OF AND HOLES IN TREATED WOOD WITH SAFECOAT'S DYNOSEAL OR SEAL-IT-GREEN XTREME PLANT BASED STAIN.

MISCELLANEOUS:

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD. REPETITIVE FEATURES MAY BE DRAWN OR CALLED OUT ONCE BUT SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL. ALL WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND INDUSTRY STANDARDS. PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS AND STIFFENINGS HAVE BEEN INSTALLED.

SAFETY:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION, TEMPORARY BRACING, SHORING, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES IN CONNECTION WITH THE WORK.

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITION ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE REQUIRED AND/OR IMPLIED DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF CONTRACTOR'S PERFORMANCE DOES NOT, AND IS NOT INTENDED TO, INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.



THE ENGINEERING SEAL ON THESE CALCULATIONS REPRESENTS THE FOLLOWING LIMITED SCOPE OF STRUCTURAL ENGINEERING DESIGN:

- DESIGN OF THE PIER FRAMING MEMBERS: GLULAM BEAMS AND JOISTS.
- DESIGN PILES FOR BOAT IMPACT LOADS AND WIND FORCES.
- DESIGN OF THE GLULAM CONNECTION.
- DESIGN OF FOOTING FOR THE CONNECTION OF THE PIER TO THE INSIDE OF THE BULKHEAD.

DESIGN IS IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE WITH WASHINGTON STATE AMENDMENTS. OUR SCOPE OF WORK DOES NOT INCLUDE THE DESIGN OF THE MOORAGE COVER, SHED, GRATING, BULKHEAD, UPLAND STRUCTURES, ETC.

THE SITE INFORMATION, DIMENSIONS, AND PLAN LAYOUT HAVE BEEN PROVIDED TO US BY WATERFRONT CONSTRUCTION, INC.

PACIFIC ENGINEERING JOB NUMBER: 23191.00

PROJECT DESIGNED BY:

Waterfront Construction Inc.

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REVISED
09/08/2023

PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.

REFERENCE #:		
APPLICANT: ECKHARD EVERS		
PROPOSED: PIER REPAIR		
SHEET: 14	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG# 21-32061-A6-14	

Waterfront Construction, Inc

Project Narrative Evers, Eckhard – Pier Repair

A. Project Location

The project is located at a single family residence with a personal use pier. The project lot size is 13,497 s/f. The project site is located at 4456 Ferncroft Rd, Mercer Island, WA 98040. The property is situation in the SE Quarter of Section 18, Township 24, Range 05 at 47.5655 Lat. and -122.2083 Long. Tax lot #0046100453

B. Project Description ; reviewed under MICC 19.13.050(F)(3)

The existing pier is unofficially (not recorded) multi-use and partially crosses the lot line to the north. The aim of this project is to repair the pier and simultaneously convert it back to a single use pier, removing all parts of the structure crossing the lot line: One finger pier, one deck/platform area, two boat lifts, one moorage canopy cover and one mooring pile.

The remaining portion of the existing wood pier will be repaired, using 6x12" glue-lams & molded plastic decking with more than 40% light passthrough. "L" shaped pier will be added to the south of existing structure. Drive twenty-two (22) epoxy coated steel internal piles per plan set using a vibratory hammer to the point of refusal. All hardware will be stainless steel, grating will be made by SunWalk, and the new wood material will be treated with Chemonite (ACZA). Accessories to be replaced. Remove two wood mooring piles to the south of pier, install two new steel mooring piles waterward of existing mooring piles (south of boat slip). The first 30' of the walkway will be reduced to 4' wide.

The existing pier footprint will be reduced from 1386 s/f to 1373 s/f and elevated to 18" above the OHWM. No treated wood will be used in the water, steel will be epoxy-coated.

We are also applying retroactively to permit the install of a double personal watercraft lift, which was installed without permission between 2009 and 2012. The double personal watercraft lift is located on the south side of the main pier walkway. Please see attached plan set for details.

C. Construction Technique & Sequencing

1. Pre-Fabrication

All construction materials will be loaded onto the crane barge in the contractor's Seattle yard and transported to the site for installation.

2. Site Preparation

This site requires no preparation prior to construction.

3. Onsite Construction

- Remove storage shed and canopy cover, temporarily store on barge.
- Remove existing deck structure and load into 20 debris containers on barge for disposal upland;
- Existing forty-seven (47) timber piles will be either pulled or cut at the mudline if extraction is not possible;
- Demolish and remove existing concrete groin wall and steps, load into 20 debris containers on barge for disposal upland;
- Drive twenty (22) 8" epoxy coated steel piles to the point of refusal;
- Install cap beams;
- Using a barge crane, hoist pier sections into place and bolt to cap beams;
- Reinstall storage shed and boat canopy cover;
- Reinstall all accessories per plan set;
- Collect construction debris and place on barge for upland disposal;
- Mobilize to WCI Seattle yard;
- Dispose of demolition debris at an approved upland site.

Waterfront Construction, Inc

4. Equipment used

All construction equipment and materials used in this project will be stationed on the construction barge.

5. Materials used

Piles will be epoxy coated steel. Cap beams will be galvanized steel. Pier decking is treated wood frame with molded plastic grating.

6. Work Corridor

The construction barge will operate offshore to avoid bottom and shoreline disturbances that could occur with ground-based equipment. All staging will take place on the barge.

7. Staging Area

The barge will hold all construction materials during the project and all construction debris will be held in a 20 c/y steel debris container that is secured on the barge for upland disposal later.

8. Running of Equipment During Construction

Equipment will be running off and on during the construction phase, only when required, and only during allowed work hours.

9. Clean-Up

All construction debris will be removed and loaded into a 20 c/y steel debris container secured on the construction barge during construction. Debris is then transported by barge to the contractor's Seattle yard, off-loaded, and shipped to an approved upland disposal site. A temporary silt fence will be installed prior to construction to contain any potential debris in the water during construction.

10. Project Timing

All proposed construction will take place during daylight hours in approved work windows unless work needs to be coordinated with evening hours to facilitate construction in the approved work window.

11. Duration of Construction

On-site construction will take between four and six weeks.

Ecological No Net Loss Assessment Report

Prepared for

**Eckhard Evers Residence
4456 Ferncroft Road
Mercer Island, WA 98040**

Prepared by



**Northwest Environmental Consulting, LLC
600 North 36th Street, Suite 425
Seattle, WA 98103
206-234-2520**

July 2022

Revised September 2023

Purpose

The purpose of this report is to fulfill the requirements of City of Mercer Island Municipal Code (MICC) Shoreline Master Program by assessing overall project impacts and proposed mitigation to determine if the project meets the “No Net Loss” General Regulation of the Shoreline Master Program.

No Net Loss is defined as “An ecological concept whereby conservation losses in one geographic or otherwise defined area are equaled by conservation gains in function in another area.”

Permits are being applied for a dock repair and reconfiguration and removal of existing boat lifts. The report includes analysis of a double personal watercraft lift (PWC) that was installed without permits.

Location

The subject property is located at 4456 Ferncroft Road (King County parcel number 8106100105) in the City of Mercer Island, Washington (see Appendix A – Sheet A1.0). The parcel is on the waterfront of Lake Washington, a shoreline of the state, that contains several endangered fish species listed under the Endangered Species Act and Washington State designated priority fish species.

Project Description

The work on the dock will include repairing and reconfiguring the existing dock and pile repair. The existing dock will be removed and reconstructed. The work will include narrowing the dock within the first 30 feet from 6 feet wide to 4 feet wide. The finger pier and ell will be removed on the north side of the dock and the two existing boat lifts removed. A new finger pier and access pier will be constructed on the south side of the dock. The existing moorage cover and shed will remain and one of the existing lifts. Thirty-seven of the existing timber piles will be replaced with 20 new 8-inch steel piles and 2 4-inch pin piles. Two approximately 12-inch timber mooring piles will be removed and replaced with two 10-inch steel mooring piles. A double personal watercraft lift was installed about 50 feet from shore and is also being included in this analysis for retroactive permitting.

The reconfiguration in the first 30 feet of the shoreline will include removal of existing concrete stairs and concrete groin as mitigation. The existing wood decking will be replaced with thruflow grated decking on existing and new decked areas. Project drawings are included in Attachment A.

During construction, a floating boom will surround the work barge and dock. (See Appendix A – Sheets A6.0)

A shoreline vegetation plan is proposed, that will add two native conifer trees and 3 native deciduous shrubs. These shoreline plantings will provide shade and allow allochthonous material to enter the lake along the shoreline and improve shoreline conditions (see Appendix A – Planting Plan).

Approach

Northwest Environmental Consulting LLC (NVEC) biologist Brad Thiele conducted a site visit on June 3, 2022 to evaluate conditions on site and adjacent to the site. NVEC also consulted the following sources for information on potential critical fish and wildlife habitat along this shoreline:

- Washington Department of Fish and Wildlife (WDFW): Priority Habitats and Species online database (<http://apps.wdfw.wa.gov/phsontheweb/>)
- WDFW SalmonScape online database of fish distribution and ESA listing units (<https://apps.wdfw.wa.gov/salmonscape/>)
- Mercer Island GIS online database (<https://chgis1.mercergov.org/Html5Viewer/Index.html?viewer=PubMaps&viewer=PubMaps>)

Site Description

The subject property is a shoreline tract in a residential neighborhood. It has shoreline on its northern boundary with single-family homes to the north and south along the shoreline and waterward of the parcel.

The only existing structures on the property are the house, and the existing wood decked dock.

The shoreline is landscaped with lawn to ornamental beds along the landward side of the bulkhead. Vegetation includes azaleas, boxwoods, hydrangeas, and groundcovers. The bulkhead is concrete and has steps down to the beach. The substrates are sand and gravel along the shore shifting with cobble mixing in about 20 feet from shore. Milfoil is present about 75 feet from the shore.

The neighboring properties are similar in shoreline conditions and have docks. See attached photos.

Species Use

WDFW's PHS mapping and SalmonScape mapping tools show the following salmonid species using Lake Washington for migration and/or rearing: residential coastal cutthroat (*Oncorhynchus clarkii*), winter steelhead (*O. mykiss*), Dolly Varden/bull trout (*Salvelinus malma*), sockeye salmon (*O. nerka*), fall Chinook (*O. tshawytscha*), coho salmon (*O. kisutch*), and kokanee (*O. nerka*). The SalmonScape database maps the site as accessible to the Endangered Species Units (ESU) of Threatened Chinook and steelhead. Juveniles migrate and may rear in the waters near the project when traveling from spawning sites on other lake tributaries to the lake's outlet at the Hiram M. Chittenden Locks. The project site is accessible to any fish migrating or rearing in the lake. The shoreline is mapped as a sockeye salmon spawning location.

Priority Habitats and Species mapping does not list any priority species or habitats within 1,000 feet of the project other than Lake Washington as mentioned above.

The Mercer Island GIS does not show any environmental layers at the location.

Project Impacts and Conservation Measurements

Direct Impacts:

Sediments: Sediment disturbance will occur below the OHWM and along the shoreline of Lake Washington during pile installation, removal of boat lifts and docks, and construction of new docks and double personal water craft lift. Additionally, the tug and barge propwash may disturb sediments temporarily when making trips to/from the site.

Impacts to sediments should be minimal from installation of the pilings and lifts and are expected to stay within State Water Quality Standards.

Removal of the concrete groin and steps has the potential to create a sediment plume. A floating silt fence will surround the work area and prevent and suspended solids from leaving the area.

The boat lift is in the deepest water possible on the site so that disturbance from castoff and docking will be minimized. The personal watercraft are shallow draft and are not usually a source of prop wash during castoff and docking and operation of the new double PWC will not be likely to be a source of significant turbidity.

Shoreline: Planting additional native vegetation, especially a native cedar tree and native willow trees, will increase the habitat functions of the shoreline by creating shade along the shoreline that will be an improvement from the existing baseline habitat conditions at the project site. These plants will provide overhanging cover for fish, structural diversity for birds and wildlife, detritus for aquatic invertebrates and long-term recruitment of woody material and other allochthonous food sources. The proposed planting plan is included (see Appendix A – Planting Plan).

Lakebed: Installation of 20 new 8-inch diameter piles and 2 10-inch steel mooring piles will displace 8.1 square feet of lakebed. The removal of 37 12-inch timber piles will restore 29 square feet of lakebed resulting restoration of 21 square feet of lakebed.

Noise: Construction equipment will create noise audible to neighbors and in-water. Noise disturbance will be short-term and should have negligible effects on fish and wildlife in the area. Work will be completed during the in-water work window when juvenile fish are not expected to be present.

Potential spills: Short-term risks include the potential for petroleum spills that can occur with any equipment operation. The level of impact to the aquatic environment is expected to be reduced because a crew competent using spill containment measures will be on site and employ these measures should a spill occur.

Indirect Impacts:

Shading: The proposed decking will be ThruFlow grated decking. Grated decking allows more light to penetrate the waters below a dock, which can increase productivity in the water column, and reduce the full shade favored by salmonid predators. Salmonid predators are known to use

hard shadowing under solid-decked docks to ambush juvenile salmonids. Reducing these hard shadows limits their ability to effectively hunt salmonids.

ThruFlow grated decking has measured performance at 43 percent light penetration (ThruFlow, 2021). Thus, the increase in lighting under the pier is effectively 57% of the area of a solid decked structure.

The existing 1,383 square-foot wood deck will be replaced with ThruFlow grated decking. The dock will also be narrowed within the first 30 feet of the shoreline reducing the main dock by 49.4 square feet. The existing 311 square-foot finger pier and ell on the north side of the dock will be removed and a new 300-square-foot finger/access pier will be constructed on the south side of the dock removing an additional 11 square feet of overwater coverage resulting in a reduction of 60.4 square feet of overwater coverage. Using ThruFlow decking will reduce the effective overwater coverage at the site by 763 square feet.

The personal watercraft lifts include a catwalk made of grated decking. The walkway adds about 14 square feet of overwater coverage and is fully grated. The personal watercraft walkway will therefore add about 8 square feet of effective overwater coverage. With the reduction in 49.4 square feet of overwater coverage within 30 feet of shore and 11 square feet at the end of the dock, the net reduction with the personal watercraft will be 46.4 square feet.

In addition, reducing the overwater coverage within the first 30 feet of shoreline may reduce salmon outmigration times. Juvenile salmon follow the shoreline and overwater coverage may cause them to hesitate before passing under the structure.

The personal watercraft lift will keep the craft out of the water when not in use. The footprint of these watercraft is small and lifting them above the water will allow light underneath.

Recreational Boating: The project supports continued recreational boating, which has been identified as a limiting factor for salmonid populations in Lake Washington. The pier will not introduce additional boating to Lake Washington, as the owners could still access the lake from a public boat launch or private moorage facility.

Other Conservation measures:

Work window: The work will be completed during the prescribed in-water work window for this area of Lake Washington (July 16 to April 30). Operating within this time frame helps protect Chinook salmon, steelhead, bull trout and other salmonid fish species by doing work when juvenile fish are not expected to be present.

Best Management Practices: Applicable BMPs will be used, such as a floating boom around the in-water work area, to contain any floating debris that may escape during construction. The barge will have a perimeter containment sock to absorb oil and grease that might inadvertently wash from the barge during construction. A silt curtain will be installed around the shoreline during removal of existing concrete to prevent turbidity from leaving the work area.

Hazardous material containment materials such as spill absorbent pads and trained personnel will be required onsite during any phase of construction where machinery is in operation near surface waters.

Conclusion

Juvenile Chinook salmon, and other salmonids, rear and migrate along the Lake Washington shoreline.

There will be temporary impacts from noise and disturbed sediments during construction. The new personal watercraft lift will be set on the bottom and minimally disturbs the lakebed. The project will improve shoreline conditions by removing approximately 115 (SF) of concrete from the shoreline. The concrete groin modifies beach flows and acts as a barrier to juvenile fish migration.

The reconfiguration of the dock and addition of the personal watercraft lift will result in a decrease in overwater coverage by 46 square feet, in addition narrowing the dock within 30 feet of shore may reduce the occurrence of juvenile salmonid from hesitating to pass under the dock increasing outmigration times. The new dock surface and PWC lift catwalk will be grated with Thru-flow decking resulting in a decrease of 763 square feet of effective overwater coverage. The project will also result in net decrease of 17 pilings and restore 21 square feet of lakebed. The grating reduces the hard shadows favored by salmonid predators and increases productivity under the pier. Two boat lifts will be removed from the site.

Using the lifts is less impacting than leaving the personal watercraft moored to the dock. The personal watercraft lift will keep the craft out of the water when not in use which will allow light under the personal watercraft and reduce maintenance that can result in cleaners and other solvents from being washed into the water. The lift itself is made of tubing and has a minimal footprint.

A shoreline planting plan will be implemented and will add 2 native trees and 3 shrubs to the shoreline that will provide natural shading, allochthonous food sources and will eventually be a source of woody materials and will improve shoreline conditions at the site in the long-term to offset temporary construction impacts.

The project will minimize construction effects on the environment by following the prescribed fish window and using applicable BMPs to prevent construction spills, turbidity, and floating debris from escaping the area. The construction crew will retrieve all dropped items from the bottom and dispose of them properly.

This project has been designed to meet current residential dock standards and will use Best Management Practices to reduce project impacts. The conservation measures are designed to improve ecological functions or prevent further degradation of habitat **and will result in No Net Loss of ecological functions**. Removal of the groin and effective overwater coverage, coupled with the planting plan **will result increased ecological functions** as the site.

Document Preparers

Brad Thiele

Biologist

29 years of experience

Northwest Environmental
Consulting, LLC (NVEC)

The conclusions and findings in this report are based on field observations and measurements and represent our best professional judgment and to some extent rely on other professional service firms and available site information. Within the limitations of project scope, budget, and seasonal variations, we believe the information provided herein is accurate and true to the best of our knowledge. Northwest Environmental Consulting does not warrant any assumptions or conclusions not expressly made in this report, or based on information or analyses other than what is included herein.

REFERENCES

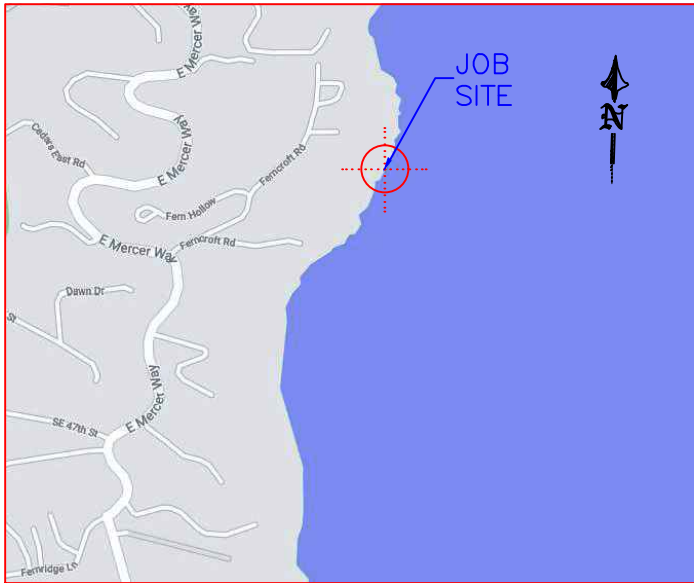
King County. 2022. King County iMap. Online database. Accessed June 2022 at <https://gismaps.kingcounty.gov/iMap/>

Washington Department of Fish and Wildlife (WDFW). 2022. Priority Habitats and Species. Online database. Accessed April 2021 at <http://apps.wdfw.wa.gov/phsontheweb/>

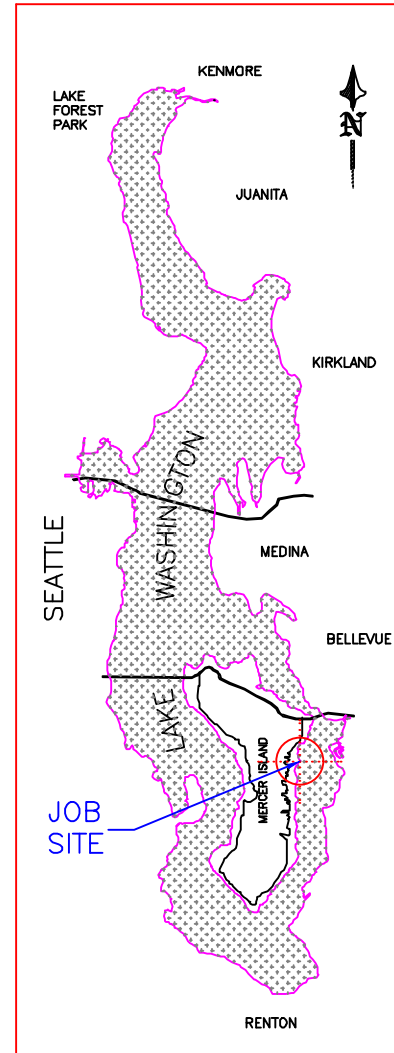
WDFW. 2022. SalmonScape. Online database. Accessed June 2022 at <http://apps.wdfw.wa.gov/salmonscape/>

Appendix A: Project Drawings

VICINITY MAP/NO SCALE



AREA MAP/NO SCALE



LEGAL DESCRIPTION

SECTION: SE-18-24-05 LAT: 47.565560 (47° 33' 56.016" N)
 TAXLOT #: 004610-0453 LONG: -122.208440 (122° 12' 30.384" W)

ADAMS LAKE WASHINGTON TRS POR OF N 22.12 FT OF 6 & OF S 17.88 FT OF 5 E OF LN RNNG N 00 DEG 43 MIN 30 SEC W FR PT ON S LN SD POR OF 6 314.41 FT E OF C/L OF PRIVATE RD & SH LDS ADJ & POR OF S 20 FT OF N 42.12 FT OF 6 E OF LN RNNG S 00 DEG 43 MIN 30 SEC E FR PT ON N LN SD S 20 FT 285.41 FT E OF C/L OF PRIVATE RD SH LDS ADJ

REVISED
09/07/2023

PER STRUCTURAL ENGINEERING
 BY PACIFIC ENGINEERING
 TECHNOLOGIES, INC.

PROJECT DESIGNED BY:

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ADJACENT OWNERS:

- ① ERIKA ONEIL
4452 FERNCROFT ROAD
MERCER ISLAND, WA 98040
- ② LAWRENCE HILE
4508 FERNCROFT ROAD
MERCER ISLAND, WA 98040

APPLICATION#:

PROPOSED: PIER REPAIR

PURPOSE: RESTORE STRUCTURAL INTEGRITY

DATUM: C.O.E. MLLW=0.0'

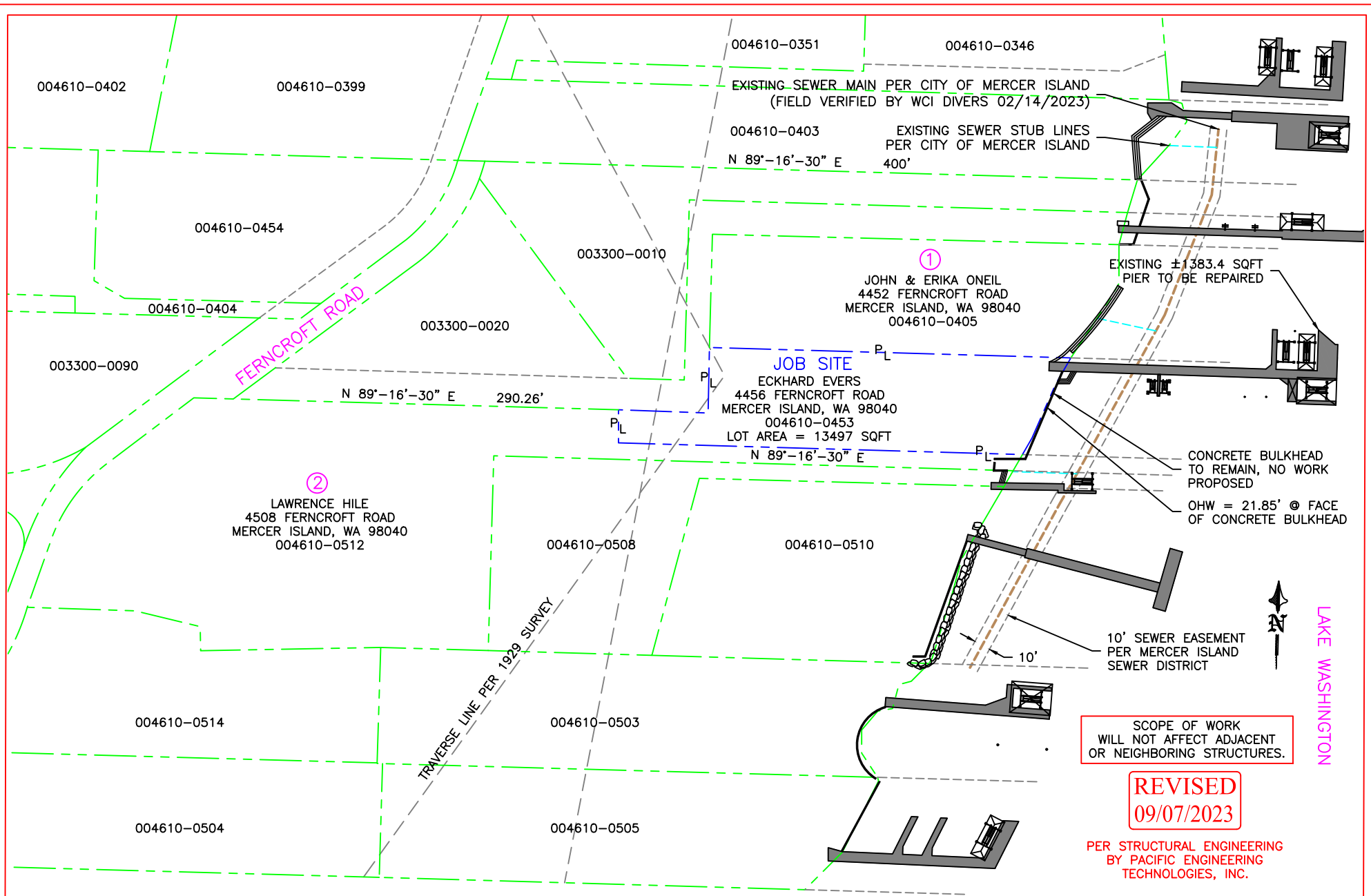
DWG#: 21-32061-A6-1

APPLICANT: ECKHARD EVERS

SITE ADD. 4456 FERNCROFT ROAD
MERCER ISLAND, WA 98040

MAIL ADD. (SAME AS ABOVE)

PAGE: 1 OF: 14 DATE: 06/28/2022



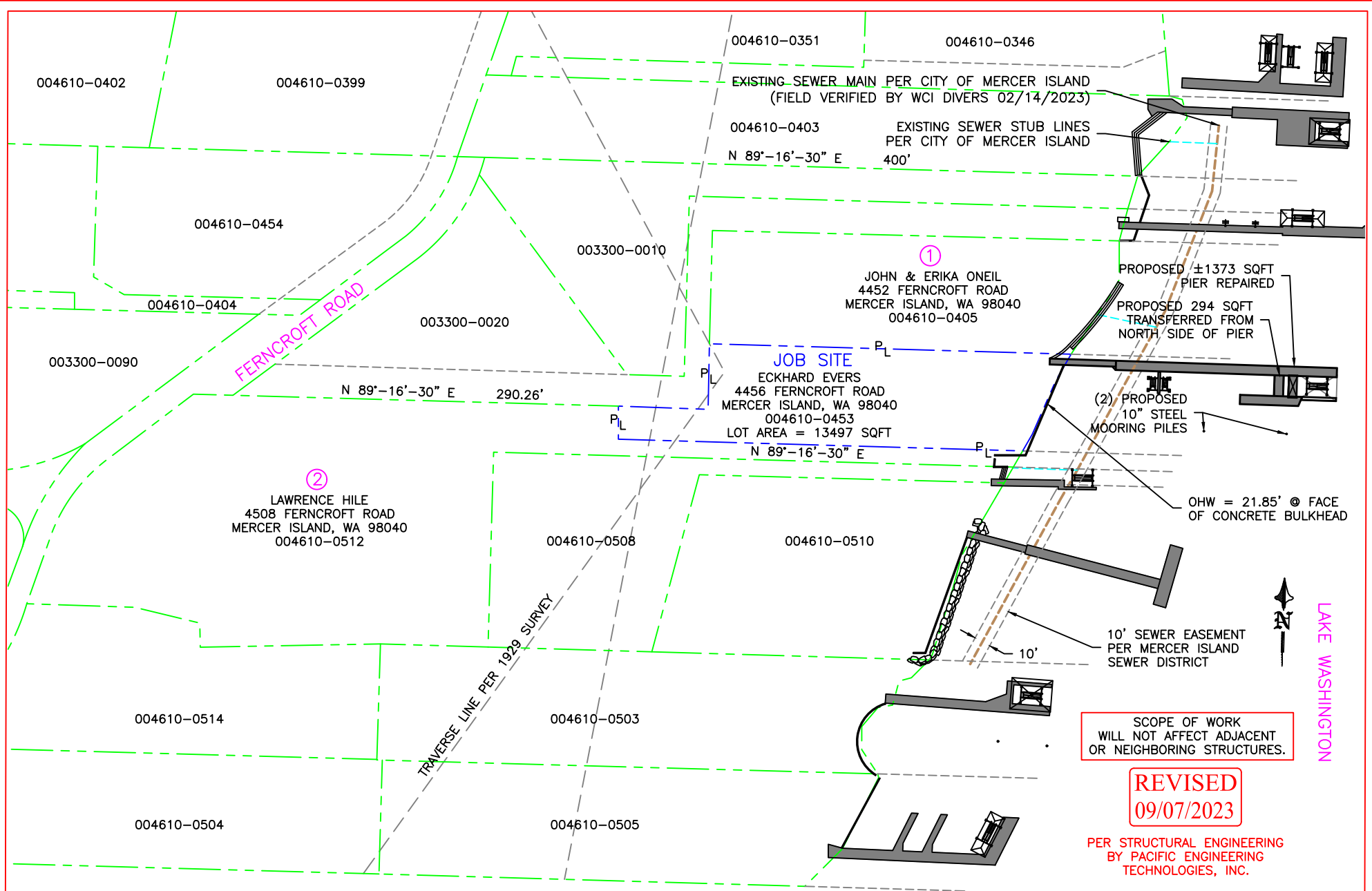
SCOPE OF WORK
WILL NOT AFFECT ADJACENT
OR NEIGHBORING STRUCTURES.

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09/07/2023

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APPLICANT: ECKHARD EVERS		
PROPOSED: PIER REPAIR		
SHEET: 2	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG#: 21-32061-A6-2	



FERNCROFT ROAD

LAKE WASHINGTON

EXISTING SEWER MAIN PER CITY OF MERCER ISLAND
(FIELD VERIFIED BY WCI DIVERS 02/14/2023)

EXISTING SEWER STUB LINES
PER CITY OF MERCER ISLAND
N 89°-16'-30" E 400'

①
JOHN & ERIKA ONEIL
4452 FERNCROFT ROAD
MERCER ISLAND, WA 98040
004610-0405

JOB SITE
ECKHARD EVERS
4456 FERNCROFT ROAD
MERCER ISLAND, WA 98040
004610-0453
LOT AREA = 13497 SQFT
N 89°-16'-30" E

②
LAWRENCE HILE
4508 FERNCROFT ROAD
MERCER ISLAND, WA 98040
004610-0512

PROPOSED ±1373 SQFT
PIER REPAIRED

PROPOSED 294 SQFT
TRANSFERRED FROM
NORTH SIDE OF PIER

(2) PROPOSED
10" STEEL
MOORING PILES

OHW = 21.85' @ FACE
OF CONCRETE BULKHEAD

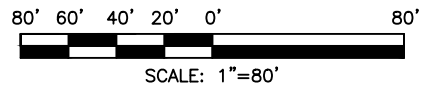
10' SEWER EASEMENT
PER MERCER ISLAND
SEWER DISTRICT

SCOPE OF WORK
WILL NOT AFFECT ADJACENT
OR NEIGHBORING STRUCTURES.

REVISED
09/07/2023

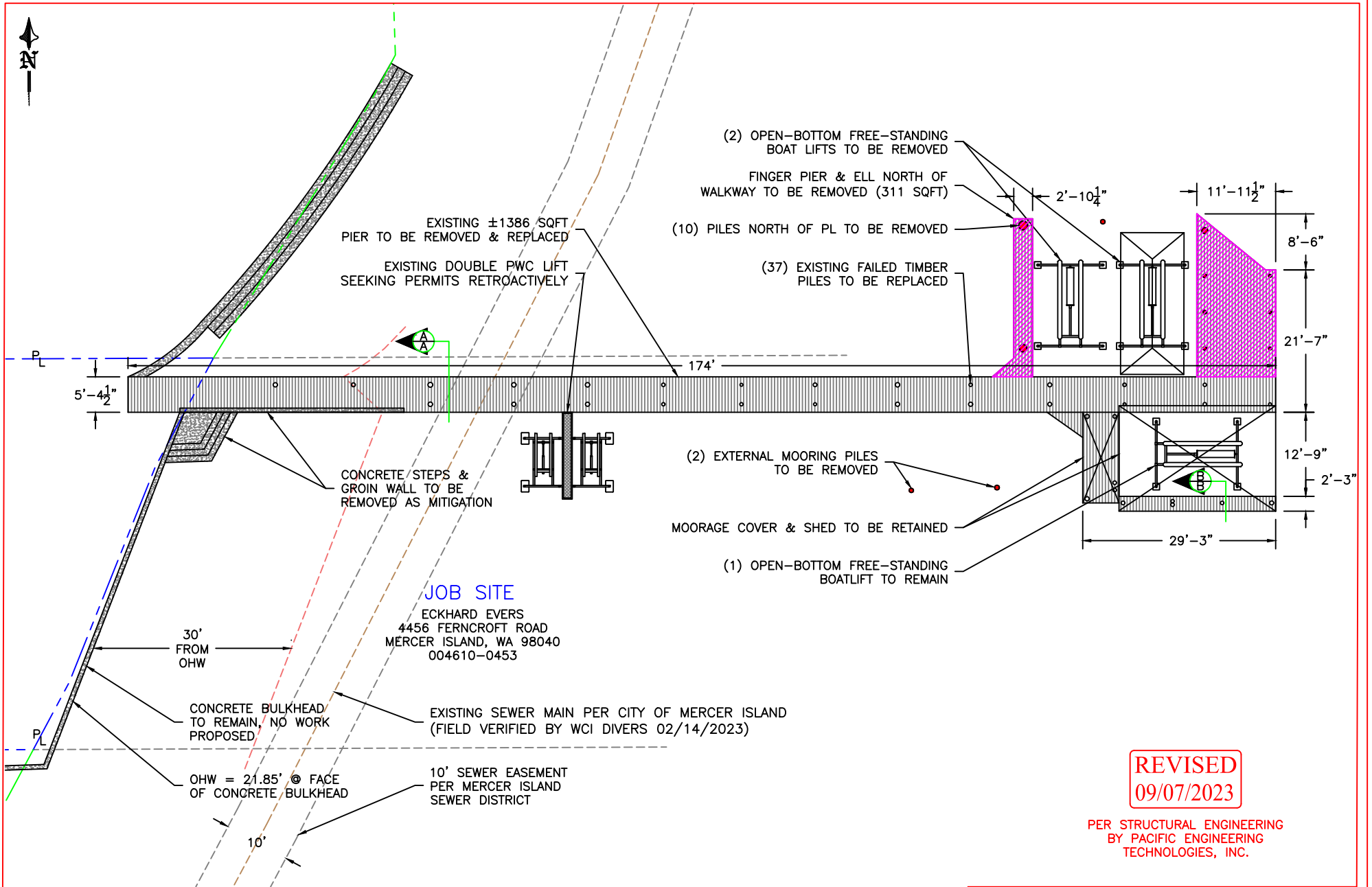
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PROPOSED SITE PLAN



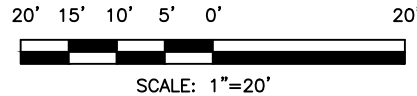
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SHEET: 3	OF: 14
NEAR/AT: MERCER ISLAND	
DATE: 06/28/2022	DWG#: 21-32061-A6-3



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EXISTING SITE PLAN DETAIL



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SHEET: 4	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG#: 21-32061-A6-4	

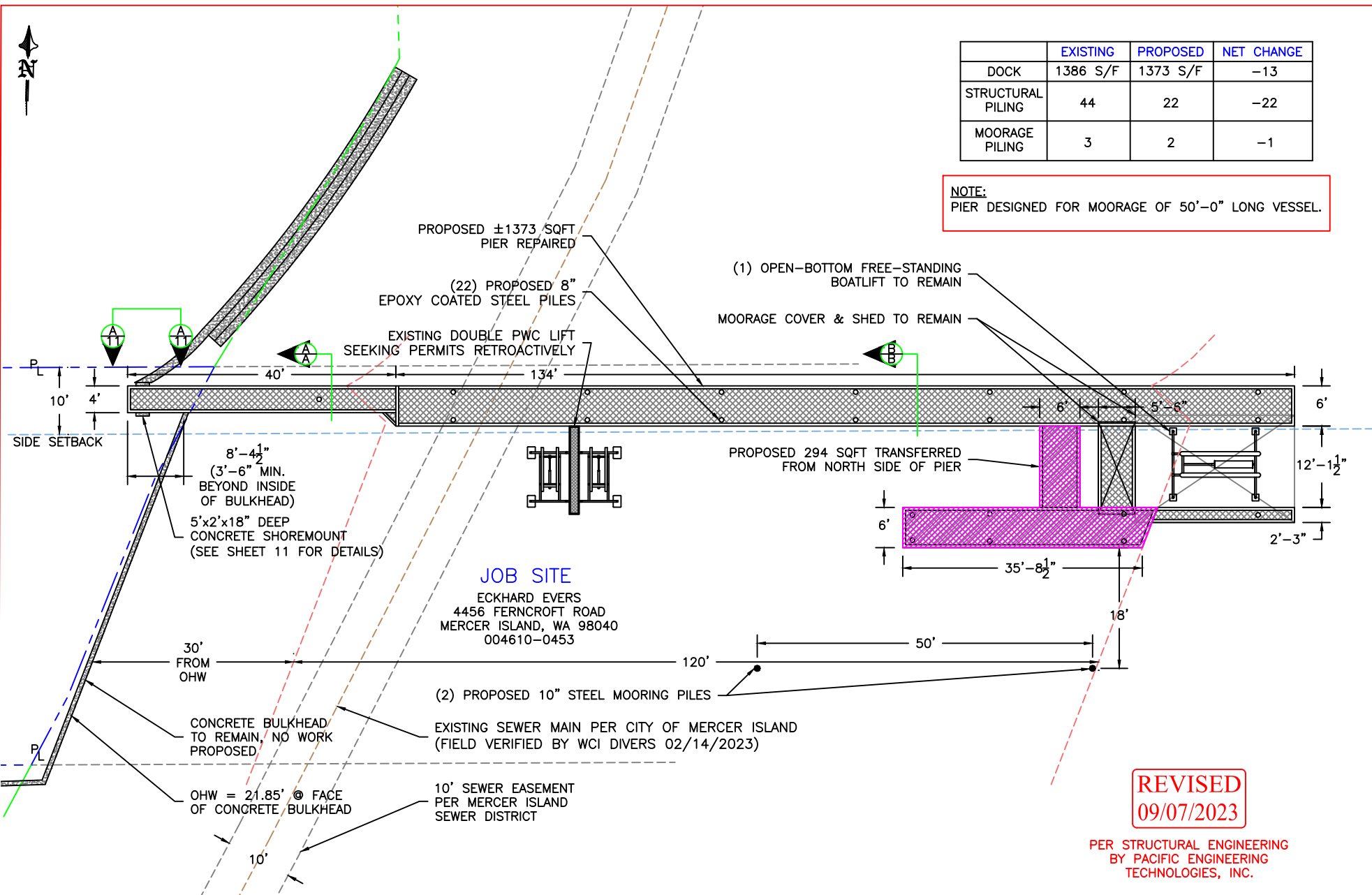
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09/07/2023

PER STRUCTURAL ENGINEERING
 BY PACIFIC ENGINEERING
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	EXISTING	PROPOSED	NET CHANGE
DOCK	1386 S/F	1373 S/F	-13
STRUCTURAL PILING	44	22	-22
MOORAGE PILING	3	2	-1

NOTE:
PIER DESIGNED FOR MOORAGE OF 50'-0" LONG VESSEL.



JOB SITE
ECKHARD EVERS
4456 FERNCROFT ROAD
MERCER ISLAND, WA 98040
004610-0453

PROPOSED SITE PLAN DETAIL

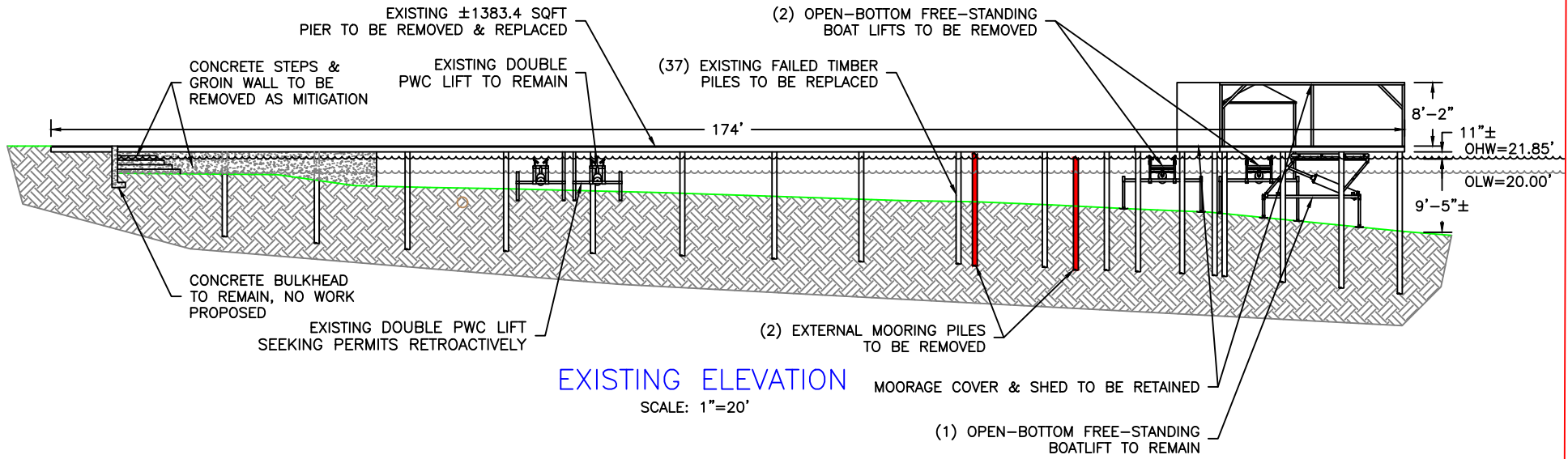


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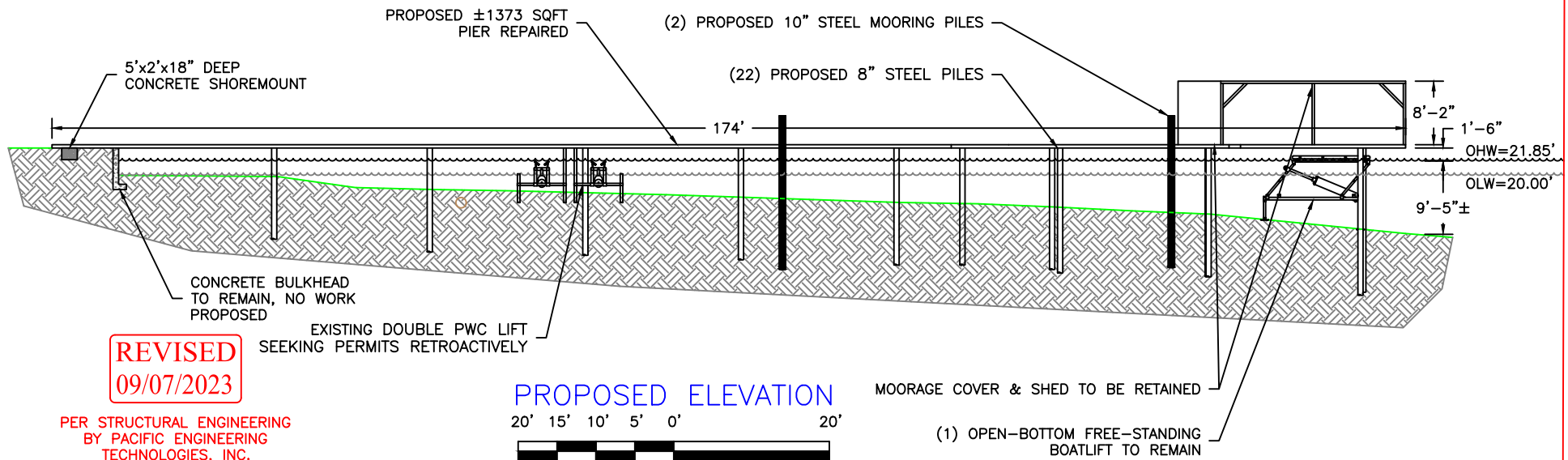
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SHEET: 5	OF: 14
DATE: 06/28/2022	NEAR/AT: MERCER ISLAND
	DWG#: 21-32061-A6-5



EXISTING ELEVATION

SCALE: 1"=20'



PROPOSED ELEVATION

20' 15' 10' 5' 0' 20'



SCALE: 1"=20'

REVISED
09/07/2023

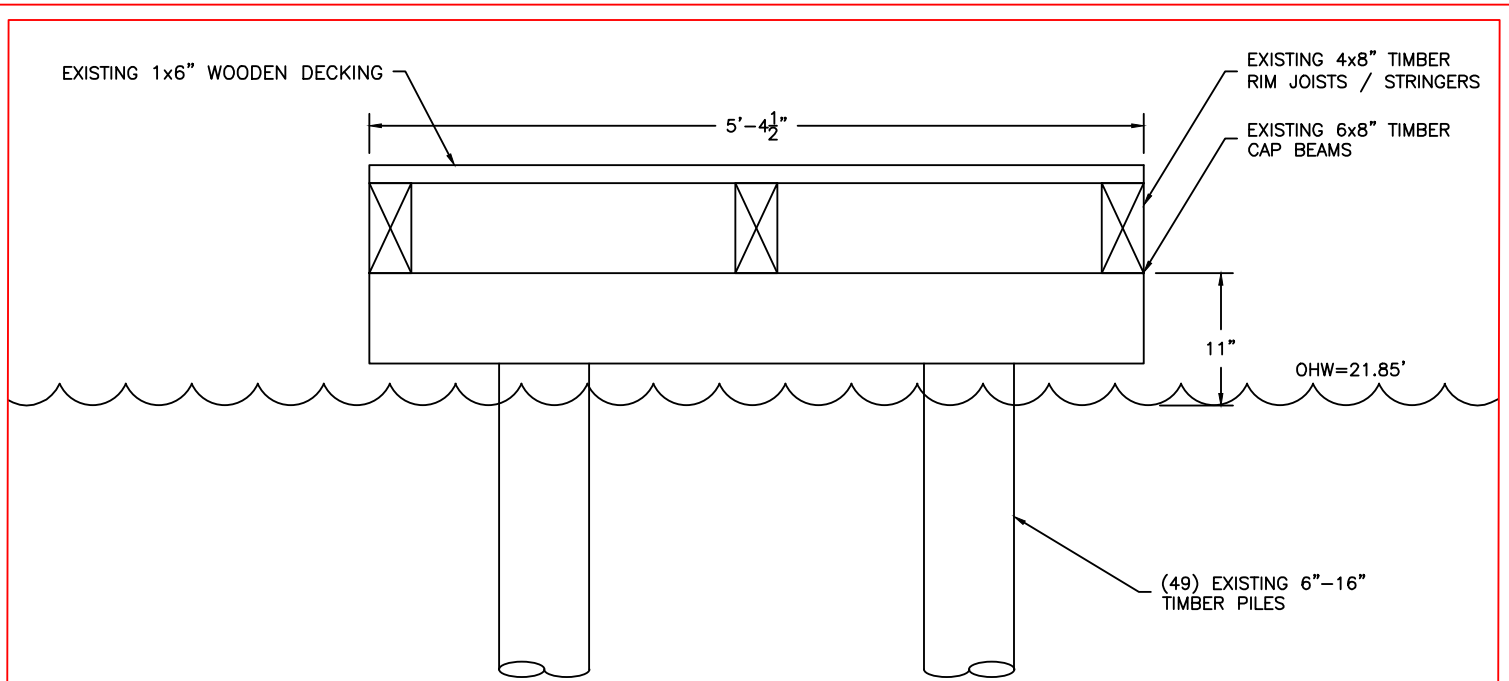
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PROJECT DESIGNED BY:

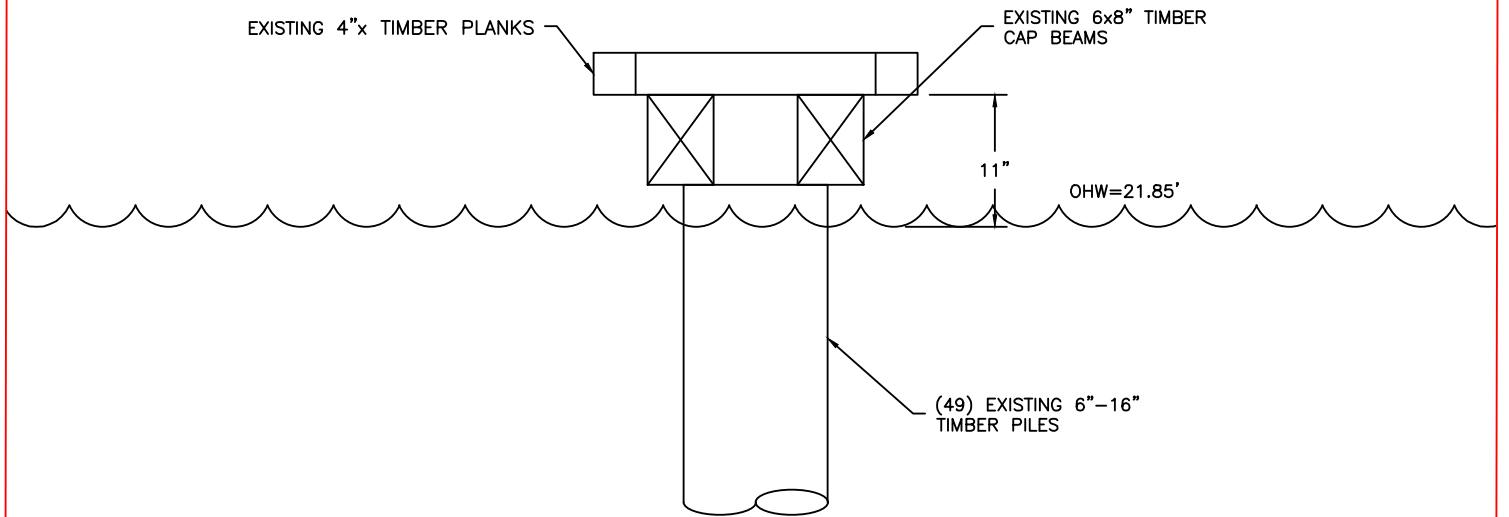
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DATE: 06/28/2022	DWG#: 21-32061-A6-6	



EXISTING SECTION A-A
SCALE: 3/4"=1'



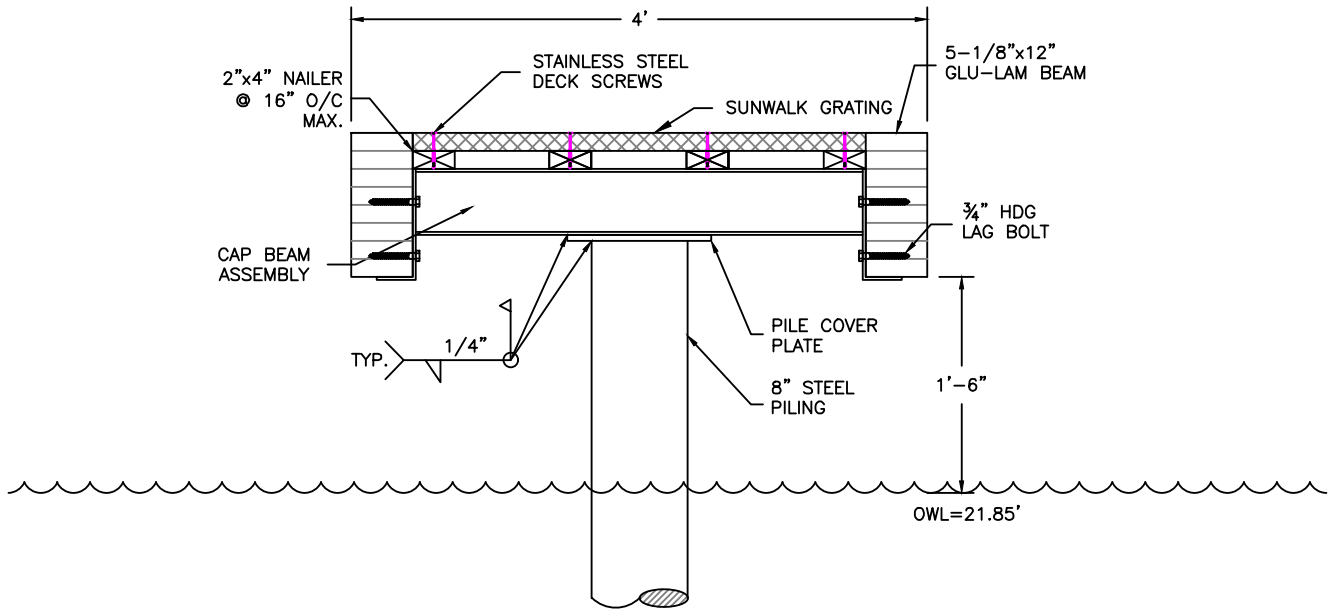
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SCALE: 3/4"=1'

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09/07/2023

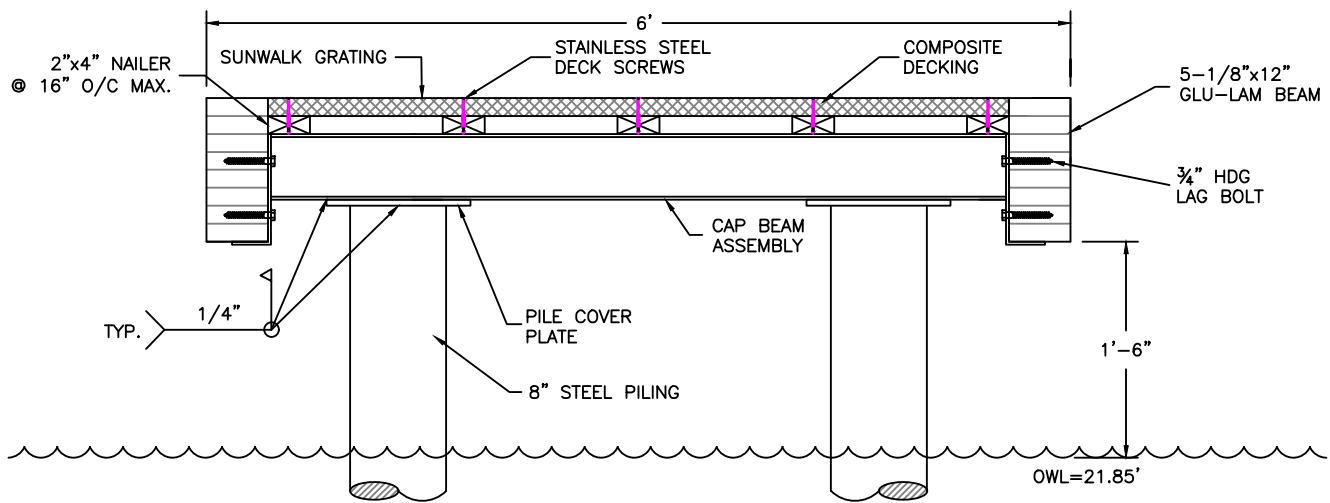
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TECHNOLOGIES, INC.

PROJECT DESIGNED BY:
Waterfront Construction Inc.
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REFERENCE #:		
APPLICANT: ECKHARD EVERS		
PROPOSED: PIER REPAIR		
SHEET: 7	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG#: 21-32061-A6-7	



PROPOSED SECTION A-A
SCALE: 3/4"=1'



PROPOSED SECTION B-B
12" 6" 3" 0' 1'
SCALE: 3/4"=1'

REVISED
09/07/2023

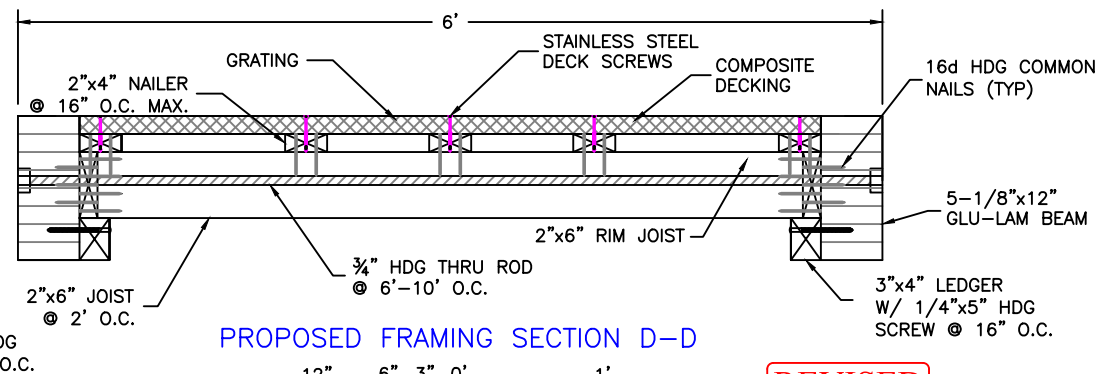
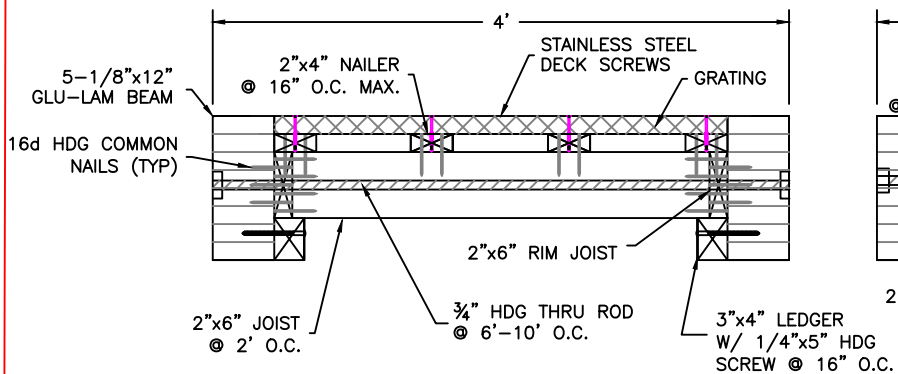
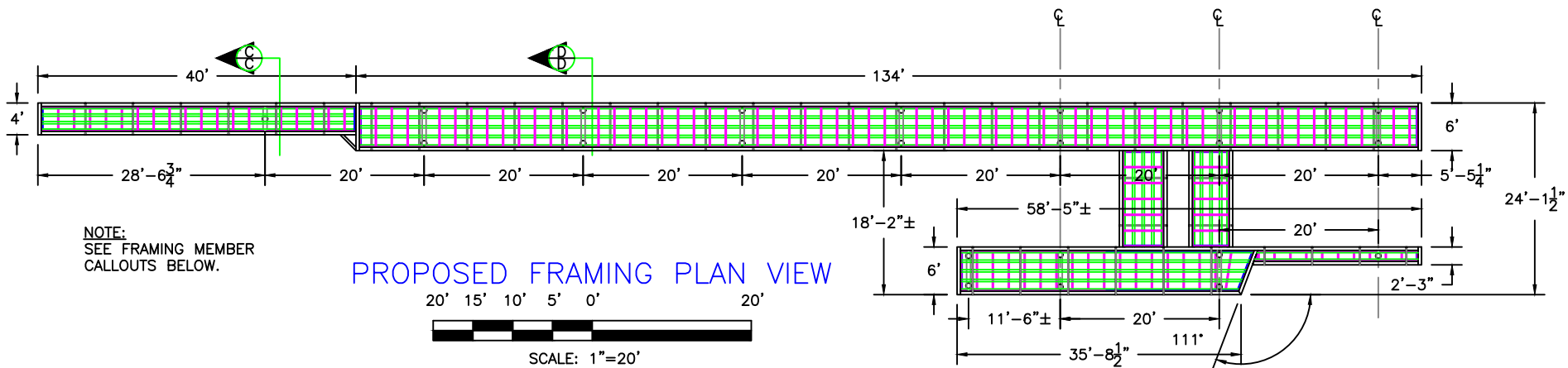
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SHEET: 8	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG #: 21-32061-A6-8	



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09/07/2023

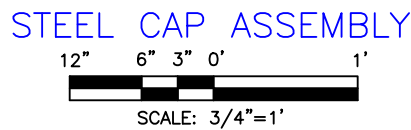
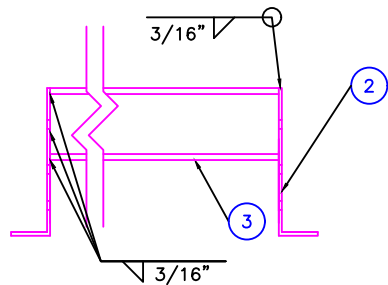
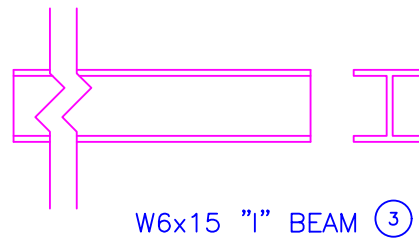
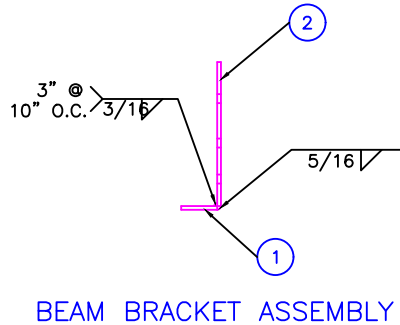
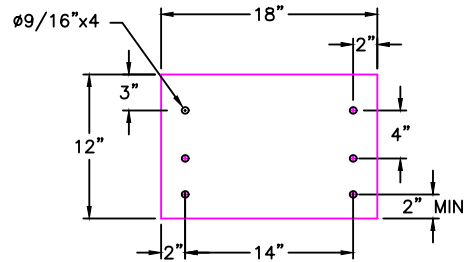
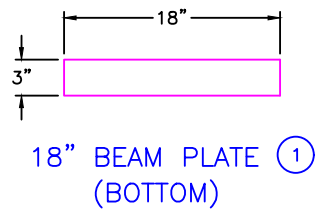
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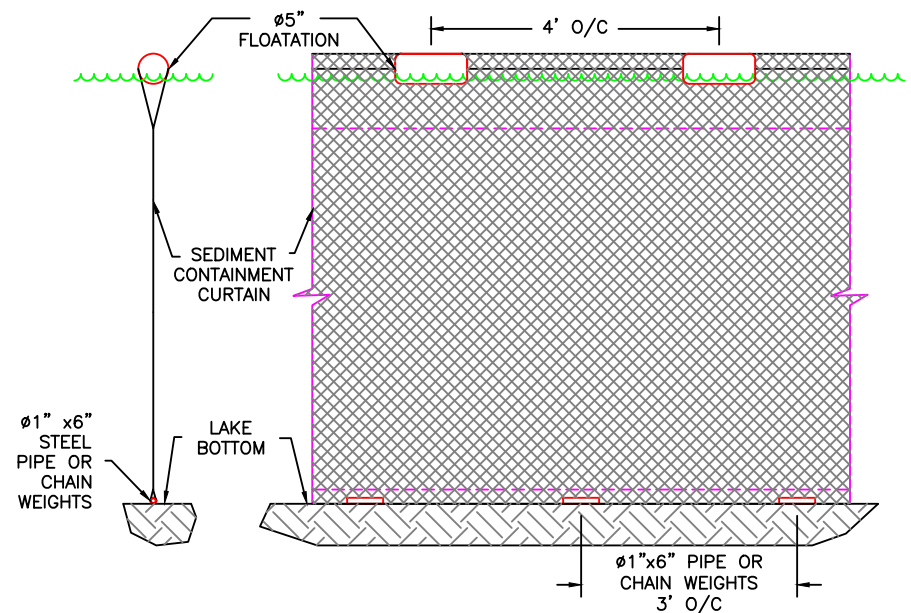
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DATE: 06/28/2022	DWG#: 21-32061-A6-9	



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PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.



MATERIAL LIST

PART	SPECS	TREATMENT
NAILERS	2"x4" DF #2 OR BTR	ACZA
LEDGERS	3"x4" DF #2 OR BTR	ACZA
GRATING	MOLDED PLASTIC	NONE
HARDWARE	STEEL	STAINLESS OR HDG.
PILING	X-STRONG 4", 8" & 10"	EPOXY-COATED
CAPS	W6x15 "1" BEAM	GALVANIZED
GLU-LAMS	5 1/8"x12" DF	ACZA
JOIST	2"x6" DF #2 OR BTR	ACZA
RIM JOIST	2"x6" DF #2 OR BTR	ACZA

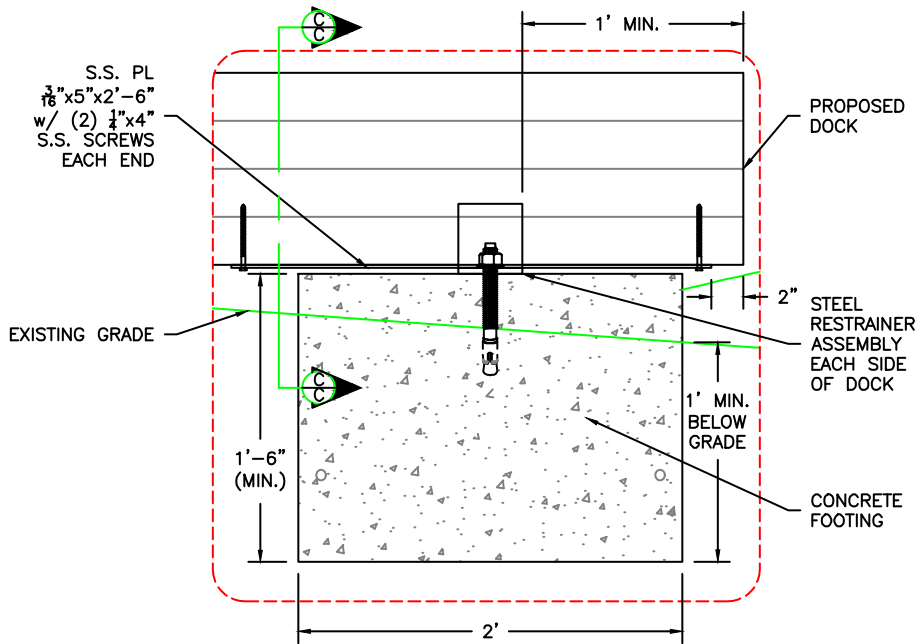
PART #	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
3	W6x15 "1" BEAM	6" 15 LB PER FOOT I-BEAM
2	18" BACK BEAM PLATE	18"x18"x5/16" STEEL PLATE
1	18" BOTTOM BEAM PLATE	18"x3"x5/16" STEEL PLATE

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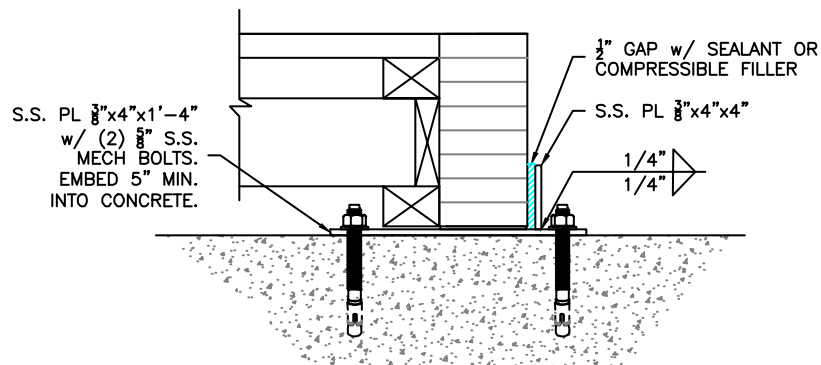
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REFERENCE #:	
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PROPOSED: PIER REPAIR	
SHEET: 10	OF: 14
NEAR/AT: MERCER ISLAND	
DATE: 06/28/2022	DWG#: 21-32061-A6-10

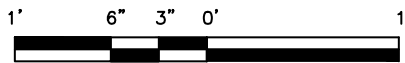


PIER TO CONC. SHOREMOUNT: A-11

SCALE: 1"=1'



SECTION C-C



SCALE: 1"=1'

REVISED
09/07/2023

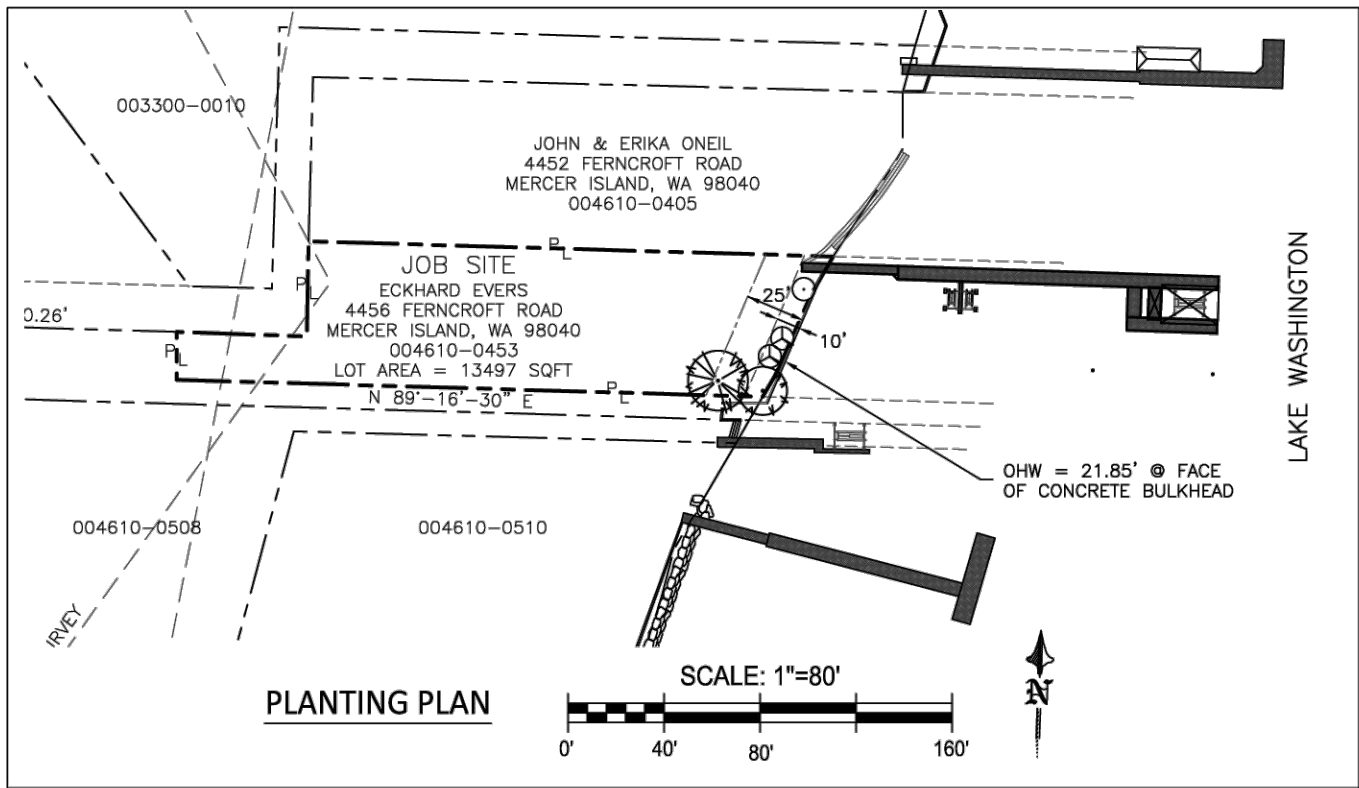
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SHEET: 11	OF: 14	NEAR/AT: MERCER ISLAND
DATE: 06/28/2022	DWG #: 21-32061-A6-11	



PLANTING PLAN

PLANTING NOTES:

1. REMOVE ALL HIMALAYAN BLACKBERRY, JAPANESE KNOTWEED, BAMBOO, AND ENGLISH IVY FROM PLANTING AREA USING KING COUNTY RECOMMENDATIONS. RETAIN AND PROTECT ALL EXISTING NATIVE VEGETATION.
2. PLANT MATERIAL SHALL BE LOCALLY GROWN (PUGET SOUND REGION) AND CONFORM TO THE MOST RECENT ANLA STANDARDS. THE OWNER RESERVES THE RIGHT TO REFUSE ANY AND ALL PLANT MATERIAL THAT DOES NOT MEET STANDARDS.
3. PLANT LOCATIONS ARE SCHEMATIC AND MAY NEED ADJUSTMENT TO MEET ACTUAL FIELD CONDITIONS. WHEN A CONFLICT WITH FIELD CONDITIONS OCCURS CONSULT WITH THE PROJECT BIOLOGIST. MAINTAIN A MINIMUM OF 2 FEET FROM EXISTING SHRUBS, AND 3 FEET FROM EXISTING TREES.

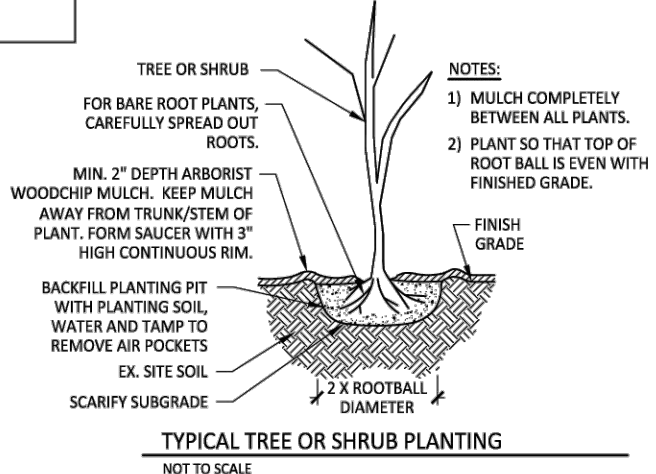
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PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.

PLANT SCHEDULE					
Symbol	Common Name	Scientific Name	Size	Condition	Qty
	Douglas Fir	<i>Pseudotsuga menziesii</i>	6'-8' height	Bare root or container	1
	Shore Pine	<i>Pinus contorta</i>	6'-8' height	Bare root or container	1
	Red Elderberry	<i>Sambucus racemosa</i>	#2	Container	1
	Red Flowering Current	<i>Ribes sanguineum</i>	#2	Container	2
				Total Trees:	2
				Total Shrubs:	3
				Total Plants:	5

PLANTING SEQUENCE:

1. PLANTING AREA SHALL BE PLANTED WITH THE SPECIES INDICATED IN THE PLANTING SCHEDULE. DIG A HOLE FOR EACH PLANT THAT IS TWICE THE SIZE OF THE ROOT BALL OR PLANT CONTAINER. REMOVE LARGE ROCKS AND OTHER DEBRIS INCLUDING ROOTS FROM PIT. SOAK PIT WITH WATER BEFORE PLANTING. BARK MULCH SHOULD NOT BE USED TO BACKFILL THE PLANTING HOLE.
2. PULL BACK MULCH FROM PLANTINGS TO CREATE A MULCH RING AROUND PLANTS.
3. PLANTINGS SHOULD BE WATERED THROUGHOUT THE SUMMER MONTHS IF DROUGHT CONDITIONS OCCUR.
4. TWO 5-GALLON BUCKETS OF ARBORIST CHIPS OR MULCH SHALL BE PLACED AROUND EACH PLANTING.



TYPICAL TREE OR SHRUB PLANTING

NOT TO SCALE

PROJECT DESIGNED BY:



3639 PALATINE AVE N
SEATTLE, WA 98103
206-634-9193

REFERENCE #:	
APPLICANT:	ECKHARD EVERS
PROPOSED:	PIER REPAIR
SHEET:	12 OF 14 NEAR/AT: MERCER ISLAND
DATE:	12/16/2022 DWG#

STRUCTURAL NOTES

CODE:

THE INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION AND THE 2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC), WITH THE STATE OF WASHINGTON AMENDMENTS.

THE 2009 UNIFIED FACILITIES CRITERIA (UFC).

LIVE LOADS:

RESIDENTIAL PIER 40 PSF

LATERAL LOADS (BASED ON ASCE 7):

WIND DESIGN DATA:

WIND SPEED 98 MPH
IMPORTANCE FACTOR I
RISK CATEGORY II
EXPOSURE C
TOPOGRAPHICAL FACTOR 1

FOUNDATION:

BEFORE WORK BEGINS, LOCATE ALL UNDERGROUND UTILITIES BY CONTACTING "CALL BEFORE YOU DIG" AT 1-800-424-5555 OR 811. HOWEVER, THIS SERVICE DOES NOT HAVE A COMPLETE DATABASE OF ALL OBSTRUCTIONS, THEREFORE OTHER LOCATING SERVICES MAY ALSO BE NECESSARY.

EXTEND FOOTINGS TO FIRM UNDISTURBED SOIL OF 1500 PSF BEARING CAPACITY.

STEEL PILING:

8" PILING SHALL BE X-STRONG ASTM A252, GRADE "3" Fy = 45,000 PSI
10" PILING SHALL BE STANDARD OR X-STRONG ASTM A252, GRADE "3" Fy = 45,000 PSI.

CORROSION PROTECTION TO BE PROVIDED BY OTHERS.

PILE INSTALLATION:

THE PILES SHALL BE DRIVEN TO REFUSAL USING A VIBRATOR OR DIESEL HAMMER. OUR DESIGN ASSUMES THAT THERE IS A LAYER OF SOFT SOIL BELOW THE MUDLINE THAT IS UP TO 20 FEET DEEP THAT IS UNDERLAIN BY DENSE SOIL THAT IS SUFFICIENT FOR BEARING. THE DEPTH OF THIS SOFT SOIL LAYER SHOULD BE MONITORED AND RECORDED TO CONFIRM THAT IT IS NOT MORE THAN 20 FEET THICK. NOTIFY ENGINEER IF THE SOFT SOIL LAYER IS MORE THAN 20 FEET THICK. THE PILES SHALL BE DRIVEN A MINIMUM OF 5 FEET INTO THE DENSE BEARING SOIL. THE DEPTH OF EMBEDMENT INTO THE DENSE BEARING SOIL SHOULD BE MONITORED AND RECORDED TO CONFIRM THAT THE MINIMUM EMBEDMENT IS ACHIEVED. THE TOTAL EMBEDMENT DEPTH SHALL BE 16 FEET MINIMUM. IF THE MINIMUM EMBEDMENTS ARE NOT REACHED, THEN OVERDRIVING OF THE PILES WILL BE NECESSARY.

CONCRETE:

CONCRETE f'c = 3,000 PSI AT 28 DAYS. CONCRETE EXPOSED TO THE WEATHER IS TO BE AIR-ENTRAINED.

CONCRETE PROTECTION FOR REINFORCING SHALL BE AS FOLLOWS:

BOTTOM OF FOOTINGS 3"
CONCRETE EXPOSED TO EARTH & WEATHER (#5 & SMALLER) 1 1/2"

ALL CONCRETE IN FOOTINGS SHALL BE PLACED IN A MONOLITHIC POUR UNLESS SHOWN OTHERWISE OR APPROVED BY THE ENGINEER PRIOR TO PLACING. ALUMINUM CONDUIT AND ACCESSORIES SHALL NOT BE EMBEDDED IN CONCRETE.

REINFORCING STEEL:

DEFORMED BILLET STEEL CONFORMING TO ASTM A615 (STANDARD 04, 2013 CURRENT), GRADE 60.

STRUCTURAL STEEL:

WIDE-FLANGE BEAMS ASTM A992 Fy = 50,000 PSI. CHANNELS, ANGLES, AND PLATES ASTM A36 Fy = 36,000 PSI. ALL FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AISC "STEEL CONSTRUCTION MANUAL."

ALL WELDS SHALL BE 3/16" MINIMUM CONTINUOUS FILLET WELDS USING AWS D1.1 CLASS E70 ELECTRODES UNLESS NOTED OTHERWISE. ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED BY WABO.

ALL STEEL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123. REPAIR ALL SCRAPES, DINGS, WELDS, ETC., IN ACCORDANCE WITH ASTM A780.

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PER STRUCTURAL ENGINEERING
BY PACIFIC ENGINEERING
TECHNOLOGIES, INC.

REFERENCE #:

APPLICANT: ECKHARD EVERS

PROPOSED: PIER REPAIR

SHEET: 13 OF 14 NEAR/AT: MERCER ISLAND

DATE: 06/28/2022 DWG#: 21-32061-A6-13

STRUCTURAL NOTES CONT:

STEEL BOLTS:

ALL BOLTS AND THREADED RODS SHALL BE ASTM A307 HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153-CLASS C UNLESS NOTED OTHERWISE. GALVANIZED BOLTS SHOULD BE INSTALLED IN STANDARD SIZE HOLES UNLESS NOTED OTHERWISE.

ALL BOLTS NOT SPECIFIED AS SLIP CRITICAL ARE TO BE ASSEMBLED "SNUG TIGHT" MEANING FULL EFFORT USING A STANDARD HAND-HELD WRENCH OR A FEW IMPACTS OF AN IMPACT WRENCH AFTER FINGER TIGHTENING.

STRUCTURAL LUMBER:

ALL LUMBER SHALL BE GRADED IN ACCORDANCE WITH CURRENT WWA STANDARD GRADING RULES FOR WESTERN LUMBER. USE THE FOLLOWING SPECIES AND MINIMUM GRADE:

JOISTS & RAFTERS D.F.-L #1 Fb=1,000 PSI OR #2 Fb=900 PSI

GLUED LAMINATED LUMBER:

DOUGLAS FIR-LARCH GRADE 24F-V4 (Fb=2400 PSI) FOR SINGLE SPAN BEAMS AND 24F-V8 FOR BEAMS CONTINUOUS OVER SUPPORTS, COMBINATION 3 FOR COLUMNS Fc = 2,300 PSI. ALL GLULAM MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AITC A190.1 AND BE STAMPED WITH AN AITC QUALITY MARK OR AN APA-EWS TRADEMARK. ADHESIVES USED IN THE GLULAM MANUFACTURING PROCESS SHALL CONFORM TO AITC 405 FOR WET USE ADHESIVES. GLULAM MEMBERS SHALL BE MANUFACTURED FROM DOUGLAS FIR LAMINATING LUMBER. ALL BEAMS SHALL HAVE ZERO CAMBER UNLESS NOTED OTHERWISE. MEMBERS NOT EXPOSED TO VIEW IN THE COMPLETED WORK SHALL BE INDUSTRIAL APPEARANCE GRADE. MEMBERS EXPOSED TO VIEW IN THE COMPLETED WORK SHALL BE ARCHITECTURAL APPEARANCE GRADE.

WOOD FOR OVER-WATER AND IN-WATER:

ALL WOOD PARTIALLY OR FULLY SUBMERGED IN WATER SHALL BE TREATED WITH AMMONIACAL COPPER ZINC ARSENATE (ACZA), EXCEPT WHEN WOOD IS IN STATE-OWNED AQUATIC LANDS (SOAL) MANAGED BY THE DEPARTMENT OF NATURAL RESOURCES (DNR) WHERE TREATMENT TO WOOD IN WATER/IN SPLASH ZONE IS PROHIBITED. ALL WOOD INSTALLED ABOVE WATER (WHERE CLEARLY OUT OF THE SPLASH ZONE) SHALL BE TREATED WITH AMMONIACAL COPPER ZINC ARSENATE (ACZA). WOOD TREATED WITH PENTACHLOROPHENOL, CREOSOTE, CHROMATE COPPER ARSENATE (CCA), OR COMPARABLY TOXIC COMPOUNDS IS PROHIBITED FOR PIERS, DOCKS, AND PILING.

WOOD SHALL BE TREATED IN ACCORDANCE WITH AWWA STANDARD U1. USE THE FOLLOWING MINIMUM AWWA USE CATEGORIES:

WOOD OVER WATER: UC4B
WOOD IN WATER: UC4C

TREAT CUT ENDS OF AND HOLES IN TREATED WOOD WITH SAFECOAT'S DYNOSEAL OR SEAL-IT-GREEN XTREME PLANT BASED STAIN.

MISCELLANEOUS:

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD. REPETITIVE FEATURES MAY BE DRAWN OR CALLED OUT ONCE BUT SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL. ALL WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND INDUSTRY STANDARDS. PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS AND STIFFENINGS HAVE BEEN INSTALLED.

SAFETY:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION, TEMPORARY BRACING, SHORING, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES IN CONNECTION WITH THE WORK.

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITION ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE REQUIRED AND/OR IMPLIED DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF CONTRACTOR'S PERFORMANCE DOES NOT, AND IS NOT INTENDED TO, INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

THE ENGINEERING SEAL ON THESE CALCULATIONS REPRESENTS THE FOLLOWING LIMITED SCOPE OF STRUCTURAL ENGINEERING DESIGN:

- DESIGN OF THE PIER FRAMING MEMBERS: GLULAM BEAMS AND JOISTS.
- DESIGN PILES FOR BOAT IMPACT LOADS AND WIND FORCES.
- DESIGN OF THE GLULAM CONNECTION.
- DESIGN OF FOOTING FOR THE CONNECTION OF THE PIER TO THE INSIDE OF THE BULKHEAD.

DESIGN IS IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE WITH WASHINGTON STATE AMENDMENTS. OUR SCOPE OF WORK DOES NOT INCLUDE THE DESIGN OF THE MOORAGE COVER, SHED, GRATING, BULKHEAD, UPLAND STRUCTURES, ETC.

THE SITE INFORMATION, DIMENSIONS, AND PLAN LAYOUT HAVE BEEN PROVIDED TO US BY WATERFRONT CONSTRUCTION, INC.

PACIFIC ENGINEERING JOB NUMBER: 23191.00

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PER STRUCTURAL ENGINEERING
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TECHNOLOGIES, INC.

REFERENCE #:

APPLICANT: ECKHARD EVERS

PROPOSED: PIER REPAIR

SHEET: 14 OF: 14 NEAR/AT: MERCER ISLAND

DATE: 06/28/2022 DWG# 21-32061-A6-14

Appendix B: Site Photographs



Photo 1 - Existing dock looking waterward.



Photo 2 - Existing dock looking landward.



Photo 3 - Shoreline conditions north of dock



Photo 4 - Shoreline conditions south of dock. Note concrete stairs to be removed.



Photo 5 - Shoreline conditions south of the site. Note broken mooring piles to be removed.



Photo 6 - Shoreline conditions north of the site.

CITY OF MERCER ISLAND
COMMUNITY PLANNING & DEVELOPMENT

9611 SE 36TH STREET | MERCER ISLAND, WA 98040
 PHONE: 206.275.7605 | www.mercergov.org



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ENVIRONMENTAL CHECKLIST

PURPOSE OF CHECKLIST

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

PRE-APPLICATION MEETING

A pre-application meeting is used to determine whether a land use project is ready for review, to review the land use application process, and to provide an opportunity for initial feedback on a proposed application. Some land use applications require a pre-application – in particular: short and long subdivisions, lot line revisions, shoreline permits, variances, and critical area determinations. The City strongly recommends that all land use applications use the pre-application process to allow for feedback by City staff.

Please note: pre-application meetings are held on Tuesdays, by appointment. To schedule a meeting, submit the meeting request form and the pre-application meeting fee (see fee schedule). Meetings must be scheduled at least one week in advance. Applicants are required to upload a project narrative, a list of questions/discussion points, and preliminary plans to the Mercer Island File Transfer Site one week ahead of the scheduled meeting date.

SUBMITTAL REQUIREMENTS

In addition to the items listed below, the code official may require the submission of any documentation reasonably necessary for review and approval of the land use application. An applicant for a land use approval and/or development proposal shall demonstrate that the proposed development complies with the applicable regulations and decision criteria.

- A. **Completed pre-application.**
- B. **Development Application Sheet.** Application form must be fully filled out and signed.
- C. **Development Plan Set.** Please refer to the Land Use Application- Plan Set Guide in preparing plans.
- D. **Title Report.** Less than 30 days old.
- E. **SEPA checklist.**

INSTRUCTIONS FOR APPLICANTS

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you. The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

USE OF CHECKLIST FOR NONPROJECT PROPOSALS

For nonproject proposals complete this checklist and the supplemental sheet for nonproject actions (Part D). The lead agency may exclude any question for the environmental elements (Part B) which they determine do not contribute meaningfully to the analysis of the proposal. For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

- 1. Name of proposed project, if applicable:

- 2. Name of applicant:

- 3. Address and phone number of applicant and contact person:

Site address: 4456 Ferncroft Road, Mercer Island, WA 98040

Applicant address: 205 NE Northlake Way, Ste 230, Seattle, WA 98105 | Phone: 206-334-5096

- 4. Date checklist prepared:

- 5. Agency requesting checklist:

- 6. Proposed timing or schedule (including phasing, if applicable):

7. Do you have any plans for future additions, expansions, or further activity related to or connected with this proposal? If yes, explain:

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal:

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain:

10. List any government approvals or permits that will be needed for your proposal, if known:

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

Flat Rolling Hilly Steep slopes Mountainous Other

b. What is the steepest slope on the site (approximate percent slope)?

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, and industrial wood smoke) during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

3. Water

a. Surface:

i. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

ii. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

iii. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

iv. Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

v. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

- vi. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

b. Ground

- i. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

- ii. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, [containing the following chemicals...]; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

c. Water runoff (including stormwater):

- i. Describe the source of runoff (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

- ii. Could waste materials enter ground or surface waters? If so, generally describe.

- d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any:

4. Plants

- a. Check types of vegetation found on the site
- Deciduous tree: Alder, Maple, Aspen, other
 - Evergreen tree: Fir, Cedar, Pine, other
 - Shrubs
 - Grass

- Pasture
- Crop or grain
- Wet soil plants: Cattail, buttercup, bulrush, skunk cabbage, other
- Water plants: Water lily, eelgrass, milfoil, other
- Other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

c. List threatened or endangered species known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

e. List all noxious weeds and invasive species known to be on or near the site.

5. Animals

a. State any birds and animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: hawk, heron, eagle, songbirds, other:

Mammals: deer, bear, elk, beaver, other:

Fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

c. Is the site part of a migration route? If so, explain.

d. Proposed measure to preserve or enhance wildlife, if any:

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- e. List any invasive animal species known to be on or near the site.
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6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
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- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
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- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
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7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.
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-
-

- i. Describe any known or possible contamination at the site from present or past uses.
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- ii. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
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-

- iii. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
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-
-

iv. Describe special emergency services that might be required.

v. Proposed measures to reduce or control environmental health hazards, if any:

b. Noise

i. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

ii. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

iii. Proposed measures to reduce or control noise impacts, if any:

8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

c. Describe any structures on the site.

d. Will any structures be demolished? If so, what?

e. What is the current zoning classification of the site?

f. What is the current comprehensive plan designation of the site?

g. If applicable, what is the current shoreline master program designation of the site?

h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify.

i. Approximately how many people would reside or work in the completed project?

j. Approximately how many people would the completed project displace?

k. Proposed measures to avoid or reduce displacement impacts, if any:

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

- c. Proposed measures to reduce or control housing impacts, if any:

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior material(s) proposed?

- b. What views in the immediate vicinity would be altered or obstructed?

- c. Proposed measures to reduce or control aesthetics impacts, if any:

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

- c. What existing off-site sources of light or glare may affect your proposal?

- d. Proposed measures to reduce or control light and glare impacts, if any:

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? Informal recreational opportunities in the immediate vicinity include swimming, boating and fishing.

b. Would the proposed project displace any existing recreational uses? If so, describe.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

- c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

- h. Proposed measures to reduce or control transportation impacts, if any:

15. Public services

- a. Would the project result in an increased need for public services (for example; fire protection, police protection, health care, schools, other)? If so, generally describe.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

16. Utilities

a. Check utilities currently available at the site:

- Electricity Natural Gas Water Refuse Service
Telephone Sanitary sewer Septic system Other

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

C. SIGNATURE

I certify (or declare) under penalty of perjury under the laws of the State of Washington that the answers to the attached SEPA Checklist are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Date Submitted: _____

SEPA RULES

SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; productions, storage, or release of toxic or hazardous substances; or production of noise?

Proposed measures to avoid or reduce increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Proposed measures to protect such resources or to avoid or reduce impacts are:

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

[Statutory Authority: RCW [43.21C.110](#), WSR 16-13-012 (Order 15-09), § 197-11-960, filed 6/2/16, effective 7/3/16. Statutory Authority: RCW [43.21C.110](#) and [43.21C.100](#) [43.21C.170]. WSR 14-09-026 (Order 13-01), § 197-11-960, filed 4/9/14, effective 5/10/14. Statutory Authority: RCW [43.21C.110](#), WSR 13-02-065 (Order 12-01), § 197-11-960, filed 12/28/12, effective 1/28/13; WSR 84-05-020 (Order DE 83-39), § 197-11-960, filed 2/10/84, effective 4/4/84.]

CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

9611 SE 36TH STREET | MERCER ISLAND, WA 98040

PHONE: 206.275.7605 | www.mercerisland.gov



DETERMINATION OF NON-SIGNIFICANT (DNS)

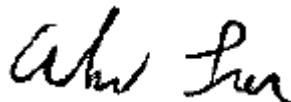
Application No.:	SEP23-003
Description of proposal:	Review under the State Environmental Policy Act (SEPA) for the reconstruction and expansion of a residential pier. The reconstruction activity is proposed to include replacement of an existing pier, construction of a new finger pier on the south side of the existing pier, installation of two moorage piles, and retroactive permitting of an existing dual personal watercraft lift.
Proponent:	Kristin Osterberg (Waterfront Construction)
Owner:	Eckhard Evers
Location of proposal:	4456 Ferncroft Road, Mercer Island, WA 98040; King County Assessor tax parcel numbers 004610-0453
Lead agency:	City of Mercer Island
Project Documents:	https://mieplan.mercergov.org/public/SHL23-014&SEP23-003

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after a completed environmental checklist review. This information is available to the public on request.

	There is no comment period for this DNS
✓	This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.
	The DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date below. Comments must be submitted by <u>N/A at 5:00pm</u> .

Responsible Official: Andrew Leon, Planner
Andrew.Leon@mercerisland.gov | (206) 275-7720

Date: November 20, 2023

Signature: 

APPEAL INFORMATION

This decision to issue a Determination of Non-significance (DNS) rather than to require an EIS may be appealed pursuant to Section 19.21 of the Mercer Island Unified Land Development Code, Environmental procedures.

✓	<p>Any party of record may appeal this determination to the City Clerk at 9611 SE 36th Street Mercer Island, WA 98040 no later than 5:00 PM on Monday, December 4, 2023, by filing a timely and complete appeal application and paying the appeal fee. You should be prepared to make specific factual objections. Contact the City Clerk to read or ask about the procedures for SEPA appeals. To reverse, modify or remand this decision, the appeal hearing body must find that there has been substantial error, the proceedings were materially affected by irregularities in procedure, the decision was unsupported by material and substantial evidence in view of the entire record, or the decision is in conflict with the city's applicable decision criteria.</p>
	<p>There is no agency appeal.</p>