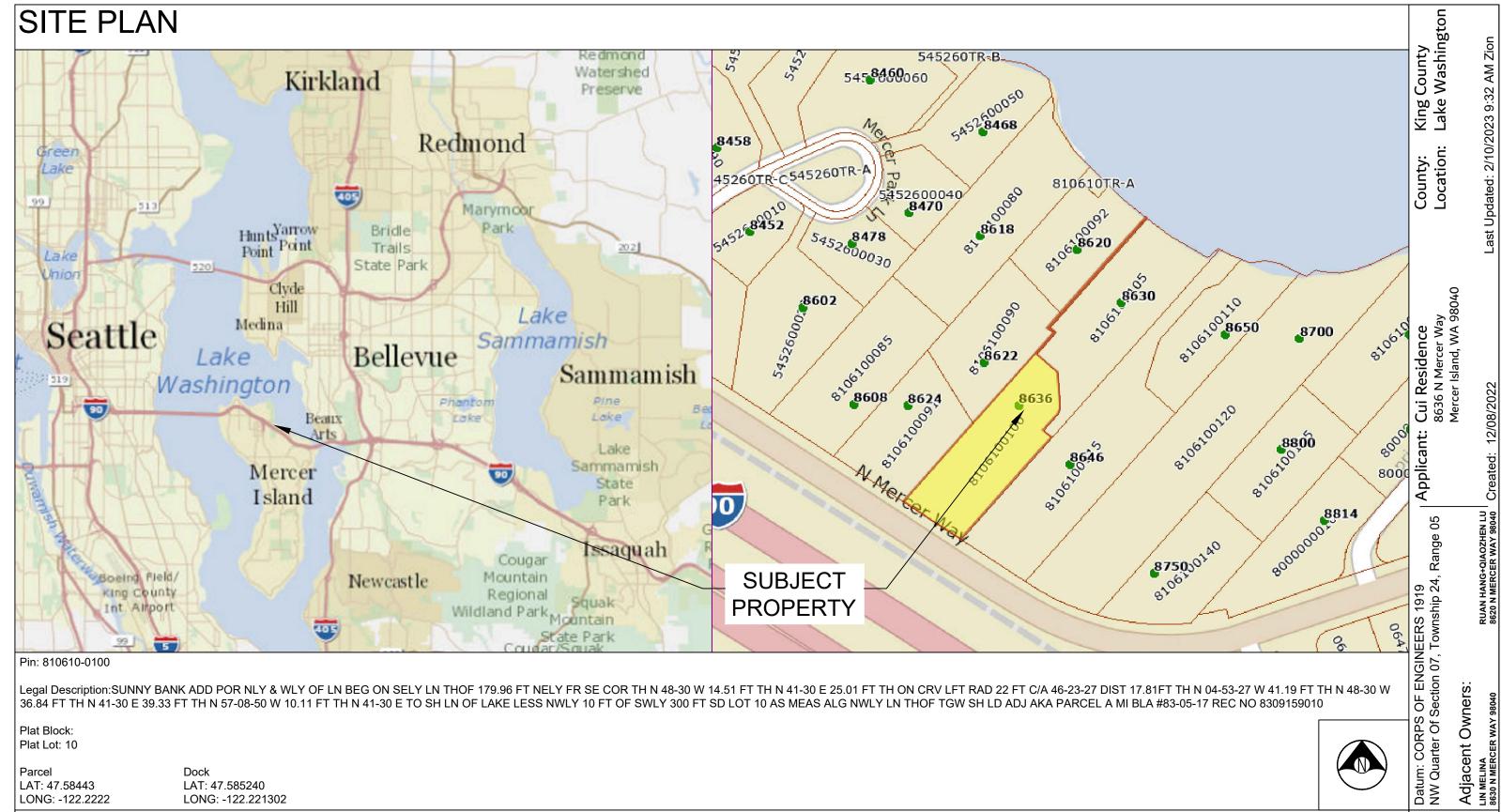
# SITE PLAN



Legal Description:SUNNY BANK ADD POR NLY & WLY OF LN BEG ON SELY LN THOF 179.96 FT NELY FR SE COR TH N 48-30 W 14.51 FT TH N 41-30 E 25.01 FT TH ON CRV LFT RAD 22 FT C/A 46-23-27 DIST 17.81FT TH N 04-53-27 W 41.19 FT TH N 48-30 W 36.84 FT TH N 41-30 E 39.33 FT TH N 57-08-50 W 10.11 FT TH N 41-30 E TO SH LN OF LAKE LESS NWLY 10 FT OF SWLY 300 FT SD LOT 10 AS MEAS ALG NWLY LN THOF TGW SH LD ADJ AKA PARCEL A MI BLA #83-05-17 REC NO 8309159010

Plat Block: Plat Lot: 10

Parcel LAT: 47.58443

LAT: 47.585240 LONG: -122.2222 LONG: -122.221302

Dock



Seaborn Pile Driving 1080 W Ewing St Seattle, WA 98119

Office: 206-236-1700 ext. 3 www.seabornpiledriving.com

Scope of Work: We propose to repair (9) existing piles, drive (10) new 8" steel piles, relocate the existing platform lift, relocate the existing dual jet ski lift, and install a (364 sqft) new extension.

SHEET 1.0

ast Updated: 2/10/2023 9:32 AM Zion

# **GENERAL NOTES:**

## MATERIALS SPEC LIST:

**Boat Lifts:** Aluminum

- \* SL10014ARW 146" x 191"
- SL8012ARW 146" x 167"
- \* SL2008AR2D2 104" x 132" (dual jet ski)

Decking Material: FRPP - Fiberglass reinforced polypropylene

Light permeable percentage:

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

### Sewer:

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

## Piles:

- All new piles are epoxy coated steel piles
- Repair piles are done as a sleeve/strap method
- \* Piles are driven using the vibro method

## CODE REFERENCES: Mercer Island

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

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

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

The dock must be no larger than authorized through state and federal approval;

## The dock will be no larger than authorized.

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

## The dock will comply with the specified standards.

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

## The dock will comply with authorized depth requirements.

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

## NNL report attached.

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

## Project is under review by CORPS and WDFW.

Last permit issued for property: 2207-241 11/03/2022 Dock established/constructed: 1959 Sewer Easement

\* Boat lifts permitted under 2207-241 11/03/2022



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SHEET 2.0

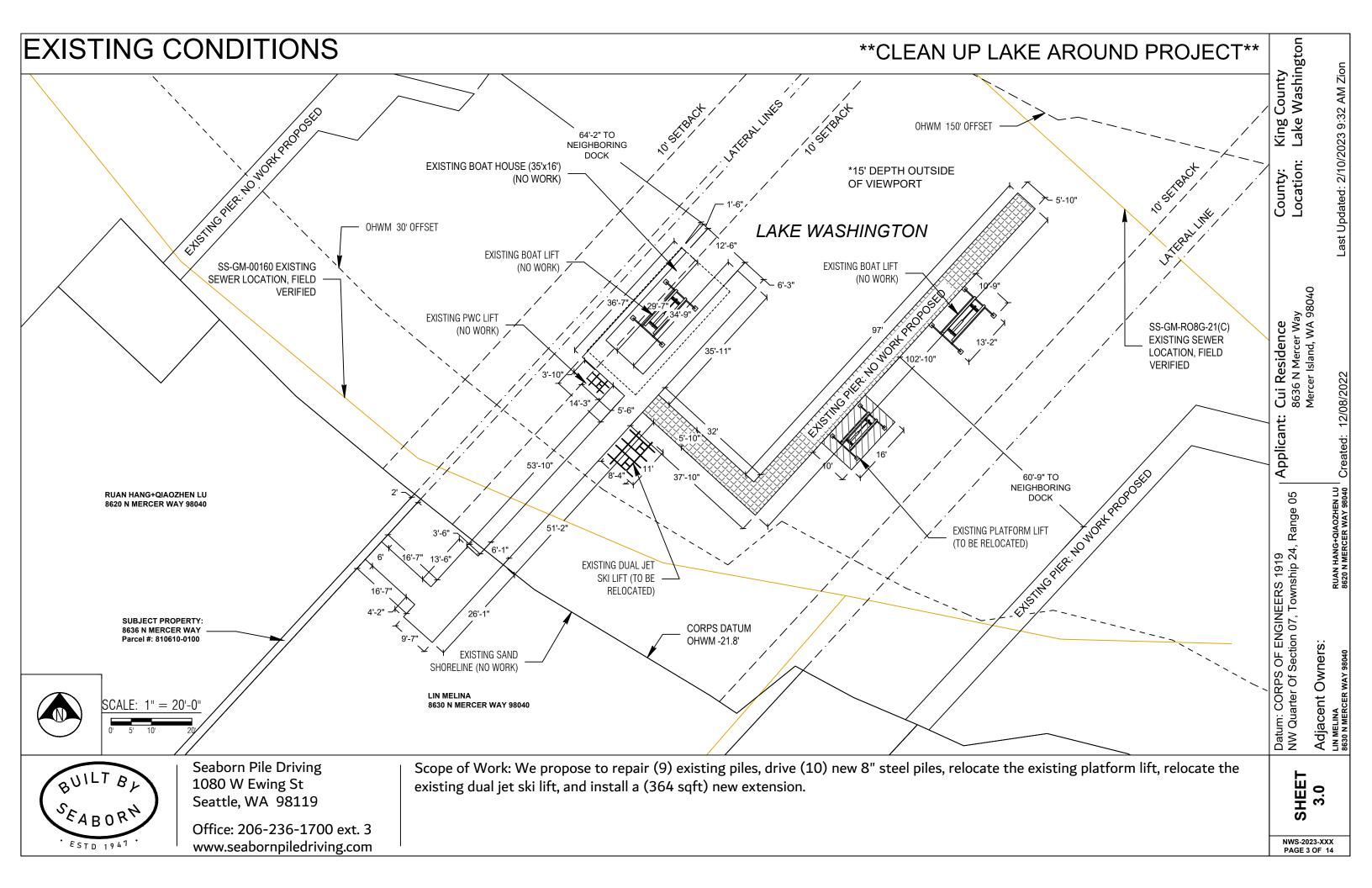
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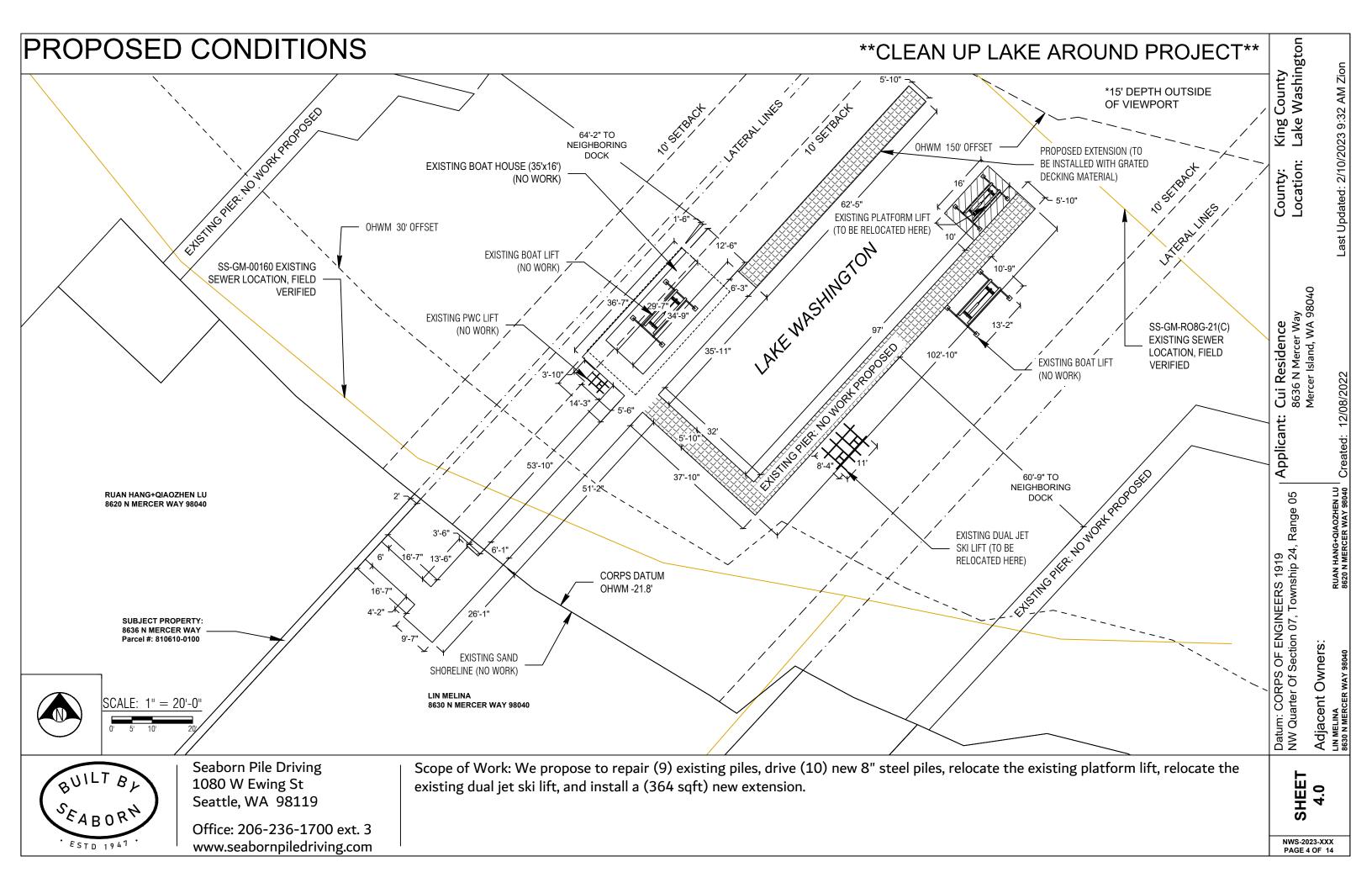
Cui Residence 8636 N Mercer Way Mercer Island, WA 98040 Applicant:

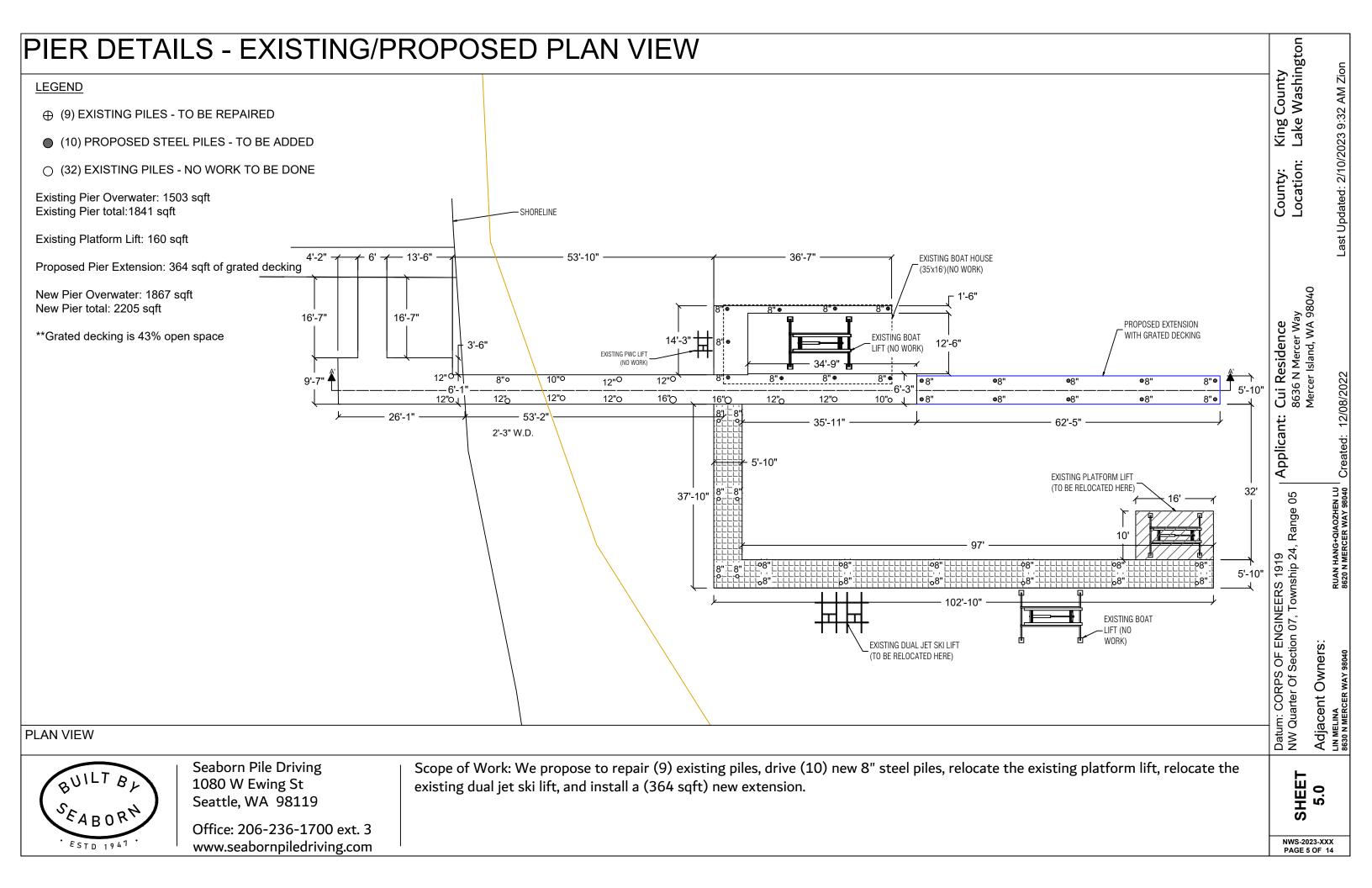
King County Lake Washington

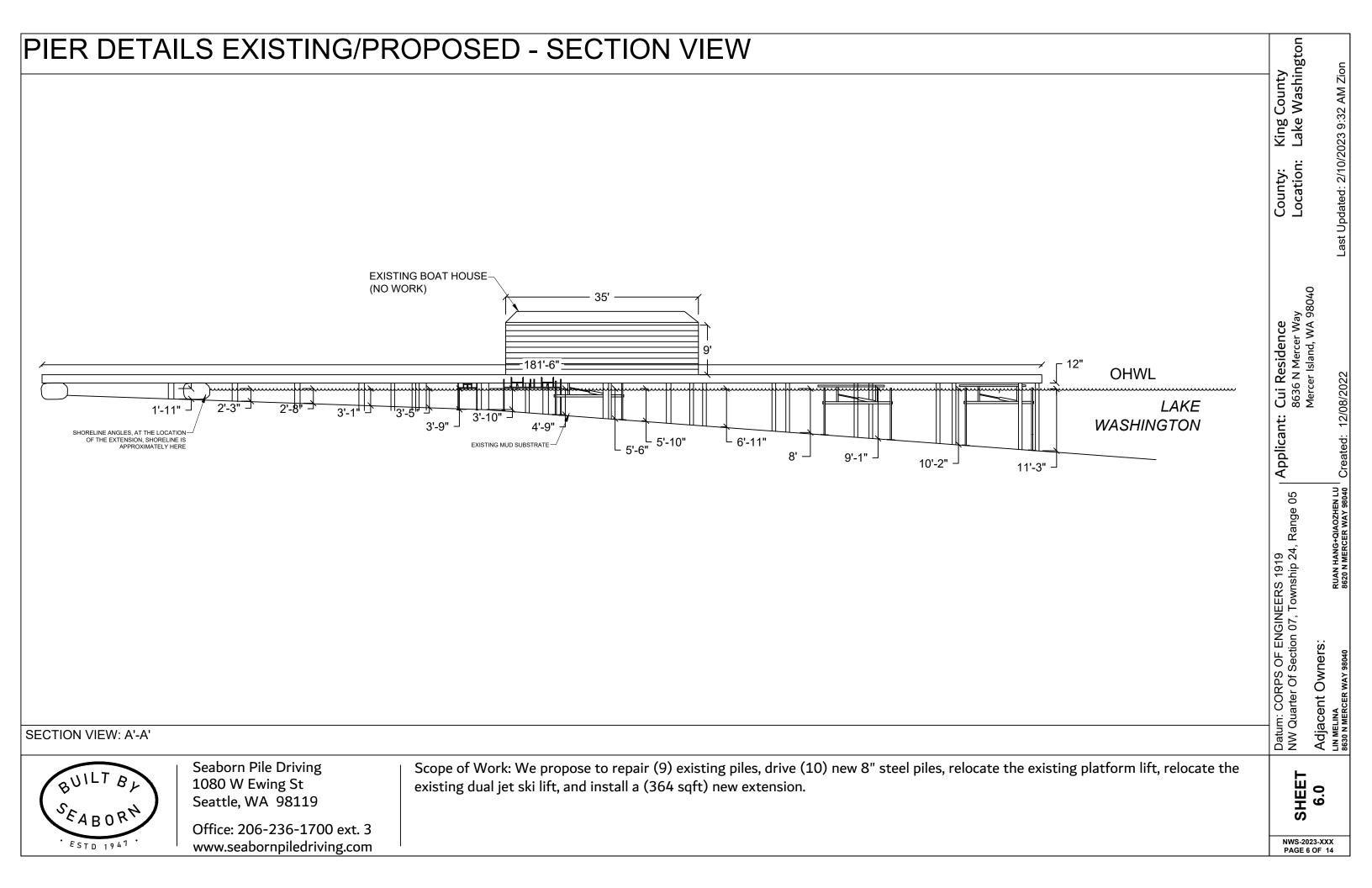
ast Updated: 2/10/2023 9:32 AM Zion

Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 07, Township 24, Range 05

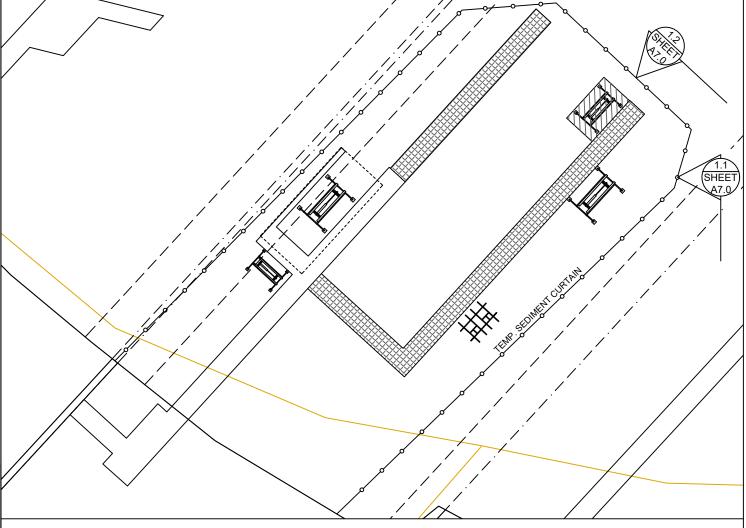








# BMP INFORMATION



# DETAIL 1.1 DETAIL 1.2 Flotation OHWL Sediment Containment Curtain LAKEBED/SOIL Weighted Chain

BMP NOTES:

A. Constant vigilance shall be kept for the presence of protected fish species during all aspects of the proposed action, particularly during in-water activities such as vessel movement, deployment of anchors & spuds, pile driving, dredging, and placement of gravels and other fill.

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

**DETAIL 1.1 & 1.2** 

SEABORK SEABORK

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SHEET 7.0

Adjacent Owners:
LIN MELINA
8630 N MERCER WAY 98040

County Washington

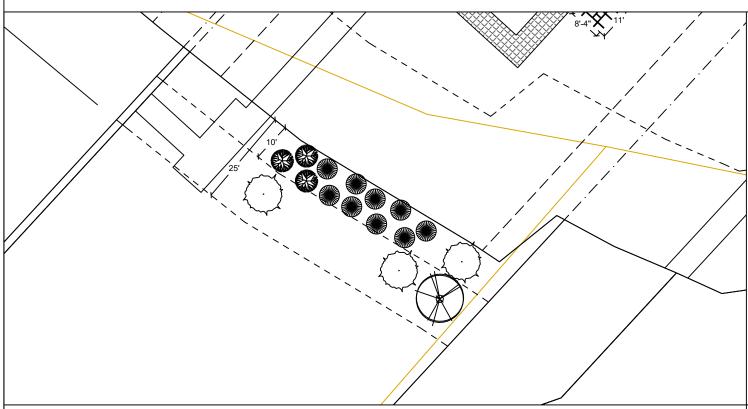
King ( Lake '

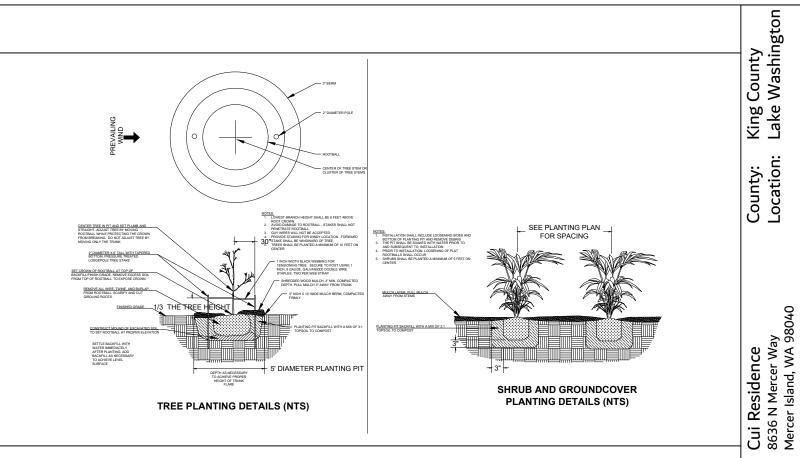
Cui Residence 8636 N Mercer Way Mercer Island, WA 98040

Applicant:

Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 07, Township 24, Range 05 \_ast Updated: 2/10/2023 9:32 AM

# MITIGATION PLAN





## Notes:

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

PLANTS: No additional plants are proposed due to fully planted shoreline and easement restriction.

SEABORN . ESTD 1941.

Seaborn Pile Driving 1080 W Ewing St Seattle, WA 98119

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SHEET 8.0

Adjacent Owners:
LIN MELINA
8630 N MERCER WAY 98040

Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 07, Township 24, Range 05 ast Updated: 2/10/2023 9:32 AM

# King County Lake Washington EXISTING PLANT PLAN ast Updated: 2/10/2023 9:32 AM Zion **EXISTING PLANTING SPECIES/QUANTITIES SIZE SYMBOL LATIN NAME COMMON NAME QTY** Thuja picatta Western Redcedar 3 ft 1 Gallon Rosa nutkana Nootka Rose 3 Salix sitchensis Sitka Willow 1 Gallon Applicant: Cui Residence 8636 N Mercer Way Mercer Island, WA 98040 Salix lasiandra Pacific Willow 3 ft Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 07, Township 24, Range 05 Adjacent Owners: LIN MELINA 8630 N MERCER WAY 98040 **PLAN VIEW EXISTING PLANTS TABLE** Seaborn Pile Driving Scope of Work: We propose to repair (9) existing piles, drive (10) new 8" steel piles, relocate the existing platform lift, relocate the 1080 W Ewing St existing dual jet ski lift, and install a (364 sqft) new extension.



Seattle, WA 98119

Office: 206-236-1700 ext. 3 www.seabornpiledriving.com SHEET 9.0

# **GENERAL ENGINEERING NOTES:**

#### **GENERAL**

- 1. ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS.
- 2. CONTRACTOR SHALL VERIFY ALL LEVELS, DIMENSIONS, AND EXISTING CONDITIONS IN THE FIELD BEFORE PROCEEDING. CONTRACTOR SHALL NOTIFY THE ENGINEER OF AND DISCREPANCIES OR FIELD CHANGES PRIOR TO INSTALLATION OR FABRICATION. IN CASE OF DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN DIRECTION FROM THE ENGINEER BEFORE PROCEEDING. DIMENSIONS NOTED AS PLUS OR MINUS (±) OR REF INDICATE UNVERIFIED DIMENSIONS AND ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY OF CONFLICTS OR EXCESSIVE VARIATIONS FROM INDICATED DIMENSIONS, NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS DO NOT SCALE DRAWINGS. DIMENSIONS OF EXISTING CONDITIONS ARE BASED ON RECORD DRAWINGS AND ARE TO BE FIELD—VERIFIED BY THE CONTRACTOR.
- 3. CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS AND EXISTING MEMBERS, AS REQUIRED, AND IN A MANNER SUITABLE TO WORK SEQUENCE. TEMPORARY SHORING AND BRACING SHALL NOT BE REMOVED UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWNGS AND MATERIALS HAVE ACHIEVED DESIGN STRENGTH.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES REQUIRED TO PERFORM THE WORK.
- 5. ALL MATERIALS SHALL BE NEW, UNO.
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE DRAWINGS, NOTES, AND MANUFACTURER RECOMMENDATIONS. IF THERE ARE ANY CONFLICTS BETWEEN THESE DOCUMENTS, THE ENGINEER SHALL BE CONTACTED FOR DIRECTION.
- 7. THE CONTRACTOR SHALL CAREFULLY DECONSTRUCT EXISTING ELEMENTS AS NECESSARY TO ACCESS THE WORK AREAS. SUCH DECONSTRUCTION MAY INCLUDE, INTERIOR AND EXTERIOR FINISHES. ALL DECONSTRUCTION ELEMENTS SHALL BE RECONSTRUCTED TO MATCH THE ORIGINAL APPEARANCE AND MEET THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.
- 8. ALL MOORAGE COVERS AND LIFTS SHALL BE FREESTANDING AND SHALL NOT BE ATTACHED TO THE DOCK, UNLESS NOTED OTHERWISE.

## **CODES AND STANDARDS**

- 1. ALL METHODS AND MATERIALS SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE 2018 FOLITION
- AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- 3. WOOD WORK SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION (NDS) 2018
- 4. AMERICAN SOCIETY FOR TESTING AND MATERIALS, CURRENT EDITION

### **DESIGN CRITERIA**

WIND DESIGN: WIND LOAD IS BASED ON ASCE 7 CHAPTER 29 WITH THE FOLLOWING

TACTORS

RISK CATEGORY = II

EXPOSURE CATEGORY = D  $V_{3S} = 98MPH$ 

WIND IMPORTANCE FACTOR,  $I_{W} = 1.0$ 

DESIGN VESSEL IS 30' LONG WITH AVERAGE FREEBOARD OF 11'-6" DESIGN VESSEL IS 60' LONG WITH AVERAGE FREEBOARD OF 14'

WAVE LOADS: P = 328 LBS

LIVE LOADS: LIVE LOAD = 40 PSF

SNOW LOAD = 25 PSF

SEISMIC LOADS: DOCK PILING R = 2.0SEISMIC IMPORTANCE = 1.0

 $SD_1 = 0.595q$ 

#### STRUCTURAL STEEL

- . ALL MISCELLANEOUS STEEL SHAPES AND PLATES, EXCEPT AS NOTED BELOW, SHALL CONFORM TO ASTM 36.
- 2. ALL WF SHAPES SHALL CONFORM TO ASTM A992, Fy = 50 KSI
- 3. ALL PILES SHALL CONFORM TO ASTM A252 GRADE 3, Fy = 45 KSI
- 4. ALL BOLTS SHALL BE ASTM A307, UNO.
- 5. ALL NUTS SHALL BE ASTM A563, UNO.
- 6. ALL WASHERS SHALL BE ASTM F436, UNO.
- 7. ALL THREADED RODS SHALL CONFORM TO ASTM F1554, GRADE 36.
- ALL STEEL MEMBERS AND FASTENERS THAT ARE NOT EPOXY COATED SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 AS APPLICABLE.

## WELDING

- ALL WELDING SHALL BE PERFORMED BY WELDERS QUALIFIED FOR THE WELD AND POSITION SHOWN IN ACCORDANCE WITH AWS AND HAVING CURRENT CERTIFICATION FROM WABO.
- 2. ALL WELDS SHALL BE PERFORMED WITH PROCEDURES PREQUALIFIED OR QUALIFIED IN ACCORDANCE WITH AWS D1.1.
- 3. THE WELDS SHOWN ARE FOR THE FINAL CONNECTIONS, FIELD WELD SYMBOLS ARE SHOWN WHERE FIELD WELDS ARE REQUIRED BY THE STRUCTURAL DESIGN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF A WELD SHOULD BE SHOP OR FIELD WELDED IN ORDER TO FACILITATE THE STRUCTURAL STEEL ERECTION.
- 4. WELDING ELECTRODES SHALL BE 70 KSI STRENGTH AND SHALL BE "LOW-HYDROGEN FLECTRODES"

#### WOOD

- . EACH PIECE OF LUMBER SHALL BEAR A STAMP INDICATING A GRADE MARK OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB), WESTERN WOOD PRODUCTS ASSOCIATION (WWPA), OR OTHER AGENCY ACCREDITED BY THE AMERICAN STANDARD COMMITTEE (ALSC).
- . DIMENSION LUMBER SHALL BE P.T. DOUG-FIR NO 2 OR BETTER, UNLESS NOTED OTHERWISE.
- STRUCTURAL GLUED LAMINATED TIMBER SHALL BE ALASKAN CEDAR AC.AC 20F-V12.
   WOOD SHALL BE SEASONED DRY WITH A MAXIMUM MOISTURE CONTENT OF 19%.
- PRESERVATIVE TREATED WOOD SHALL CONFORM TO THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) UC4A. ALL WOOD SHALL BEAR A TREATMENT IDENTIFICATION
- ALL BOLT HOLES IN WOOD MEMBERS SHALL BE A MINIMUM OF 1/32" TO MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. PROVIDE PLATE WASHERS WHERE NUTS, BEAR ON WOOD. CUT WASHERS SHALL MEASURE 2 1/4" x 3/16" THICK.

#### GRATING

1. DECK GRATING SHALL BE SUNWALK 90 SERIES OR APPROVED EQUAL.

### ABBREVIATIONS

AMERICAN WELDING SOCIETY CLR COL CONT. COLUMN. CONTINUOUS DOUG FIR EXISTING EX OR (E) GLULAM BEAM LONG LEG HORIZONTAL MNFR MANUFACTURER OC OPP ON CENTER OPPOSITE PL PSI POUNDS PER SQUARE INCH POUNDS PER SQUARE FOOT P.T. PRESERVATIVE TREATED SQUARE FOOT REF REFERENCE SIM SS STAINLESS STEEL **TYPICAL** 

UNO UNLESS NOTED OTHERWISE
VIF VERIFY IN FIELD
WABO WASHINGTON ASSOCIATION OF
BUILDING OFFICIALS
WF WIDE FLANGE

/ WITH

SEABORN . ESTD 1947.

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SHEET 10.0

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County Washington

King Lake

Cui Residence 8636 N Mercer Way Mercer Island, WA 9

Applicant:

, Range 05

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