

Applicant Information

Project Address:

8636 N Mercer Way
Mercer Island, WA 98040

Parcel Number: 810610-0100

Applicant: Seaborn Pile Driving Company, 1080 W Ewing St Building B, Seattle, WA 98119
206-236-1700

Property Owner: Kan Cui

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

Description 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.

Job specific comments

Purpose

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

Habitat Enhancement

The proposed planting plan has been designed to mitigate for the existing and proposed pier.

Water Quality

In order to prevent debris from entering the lake during the demolition stage of the project, a containment boom will surround the crane barge and work area.

Permits

Mercer Island SSDP w/ SEPA Permit:

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

“Alternative Development Standards” per MIMC 19.13050(F)(3)

Mitigation

Fully grated deck extension: The proposed dock extension will have a fully grated deck to provide light penetration below the dock where there is no light penetration with the existing structure.

Piles: The proposed pier has been designed to maximize the distance between pile bents and minimize the number of piles. The proposed 6" – 8" piles meet local building codes and reduce the pile footprint.

Contractor: Seaborn Pile Driving Company License #: SEABOPD942CG

Address: 1080 W Ewing St. Bldg B. Seattle WA 98119

Office: 206.236.1700

Mobile: 253-459-3267

Contact: Dray Davick

Email: permits@seabornpiledriving.com

Construction Narrative

Mobilization

Mobilize crew, crane barge, supply and debris barges, and materials on site

Pile Repair Standard Pile Sleeve Method

1. Set out a Sediment Containment Curtain around the work area waterward of the bulkhead to contain any silt and debris that may be generated during construction.
2. Cut the pile below the waterline until you reach good wood.
3. Using an epoxy coated steel cap, attach it to the existing stub with epoxy-coated steel thru-bolts and nuts.
4. Confirm the pilings are straight and solid.
5. Cut the pilings to elevation.
6. Attach the new pile repair to the existing pile cap.
7. Clean the work area and remove the sediment curtain.

Pile Driving

1. Set out a Sediment Containment Curtain around the work area waterward of the bulkhead to contain any silt and debris that may be generated during construction.
2. Locate the new piles to be driven per the building permit drawings.
3. Using the crane and a vibro-hammer, drive the piles to required refusal.
4. Cut the piles to elevation.
5. Clean the work area and remove the sediment curtain.

Dock construction (Track Dock)

1. Set out a Sediment Containment Curtain around the work area waterward of the bulkhead to contain any silt and debris that may be generated during construction.
2. Install new piles where applicable.
3. Install new steel I-beam pile caps and attach to the piles by welding.
4. Install metal brackets on edge of cap by welding them to I-beam to support glulam beams.

5. Install dock section made of Glulam Beams and angle iron framing with 2x4 nailers to support the Surestep decking
6. Install electrical conduit and water lines under the deck along the dock. Wiring and re-connection to be completed by others.
7. Install the SureStep grating with epoxy-coated steel screws making sure the screws are aligned and flush with the surface.
8. Install any boat or PWC lifts.
9. Clean the work area and remove the sediment curtain.

Structural Notes

General

- All materials, workmanship, design, and construction shall conform to the submitted drawings and the International Building Code.
- The contractor will be responsible for all safety precautions and methods and processes to perform the designated work.

Design Criteria

- The existing design and construction meets the live load specification of a minimum of 40 PSF. (60psf in Kirkland / Bellevue)

Materials

All materials used in the construction of the dock will be for use on the water and of the highest quality available on the market. All materials will conform to the International Building Code.

For example:

- Wood piles and pile stubs. The proposed wood pile will be Class B (12" @ 3' from Butt) – 40' Douglas Fir pilings per ASTM D-25.
- Steel piles/ Sleeves – ASTM A53 GrB with Devran 261QC low temperate cure epoxy (16 mils) finish coated full length.
- Structural Lumber – All lumber will be graded and marked in conformance with WCLIB standard grading rules.
- Fasteners – All fasteners, bolts, nuts and nails will be epoxy-coated.
- Decking – The decking will consist of Surestep fiberglass grating which is pet and children friendly and will provide years of safe and comfortable use.

Preservatives

- All wood preservatives to be state approved and will be applied and fully cured prior to installation over the water.
- All hardware and fasteners to be epoxy-coated.

Best Management Practices

1. Above the Water Line Work

1. Seaborn Pile Driving Company will employ one crane barge, one supply and one debris barge to complete the scope of work. A tug will tow the barges on and off the job site.
2. Seaborn Pile Driving Company personnel working in, near or over the water will at all time wear either USCG approved life vests or work vest as well as hard hats and safety glasses.

2. Material Handling

1. While at the job site, a floating containment boom will completely surround the work area.
2. All removed piles and the existing dock structure will be placed on the debris barge where they will be contained and kept out of the lake.

3. Hazardous Materials

- No hazardous materials will be mixed or stored in or near the water. No cleaning of materials will be performed in or near the water.

4. Polluting Materials in Water

- Seaborn Pile Driving Company will take extra precautions to ensure materials don't fall into or pollute the water. Any material that enters the water will be removed immediately. Any hazardous material such as oily rags will not be handled near or over the water.
- A spill kit will be employed on the barges at the job site.
- If any pollutants enter the water, Seaborn Pile Driving Company will contact the appropriate agencies and report the spill immediately.

5. Materials Disposal

- Seaborn Pile Driving Company will dispose of the rotten wood and pile sections in an approved legal disposal site in accordance with all applicable laws and permit requirements.