Applicant Information

Project Address 7240 N. Mercer Way, Mercer Island, WA. 98040

Parcel Number: 5315100045

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

206-236-1700

<u>Property Owner</u>: SUN YEI+SUN LIPING – 7240 N. Mercer Way, Mercer Island, WA. 98040

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

<u>Description of Work</u>: We propose to repair (10) existing pile, construct a beach cove, remove (1) mooring pile, installing new thruflow decking on entire dock & installing a boat lift under the existing moorage cover.

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 Exemption Permit:

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

"Alternative Development Standards" per MIMC 19.07.110(6)(c).

Mitigation

Shoreline Plantings: The shoreline plantings have been designed to provide the spread of tree and shrub nutrients into the adjacent waters of Lake Washington.

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

Contractor: Seaborn Pile Driving Company License #: SEABOPD942CG

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

Phone: 206.236.1700 Mobile: 253-569-0300 Fax: 206.236.2700

Contact: Kelsey Meyer Email: permits@seabornpiledriving.com

Construction Narrative

Mobilization

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

Pile Repair Standard Pile Stub Method

- Construct a silt fence/boom waterward of the bulkhead to contain any silt and debris that 1. may be generated during construction.
- Cut the pile below the waterline. 2.
- Using a steel can pile attach it to the exiting stub with galvanized steel thru-bolts and nuts. 3.
- 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 silt fence/boom.

Dock construction (Rebuild Dock)

- 1. Construct a silt fence/boom waterward of the bulkhead to contain any silt and debris that may be generated during construction.
- 2. Install new Doug-Fir pile caps and attach to the piles with a steel plate and thru-bolts.
- 3. Install new Doug-Fir stringers on to the pile caps to support the ThruFlow grating.
- 4. Install new trim along edges of deck, flush with ThruFlow decking.
- 5. Install electrical conduit and water lines under the deck along the dock. Wiring and reconnection to be completed by others.
- 6. Install the ThruFlow grating with stainless steel screws making sure the screws are aligned and flush with the surface.
- 7. Install cedar fascia along side of dock to bottom of cap.
- 8. Install any boat or PWC lifts.
- 9. Clean the work area and remove the silt fence/boom.

Rock Bulkhead and Beach Construction

- 1. Construct a silt fence/boom waterward of the bulkhead to contain any silt and debris that may be generated during construction.
- 2. Excavate proposed beach area onto debris barge and dispose in an approved upland disposal
- 3. Dig a keyway into the substrate to set the first row of rocks.
- 4. Install filter fabric into the keyway, and backfill with 2" 4" cleaned crushed rock.
 5. Install the largest rocks into the keyway
- 6. Install the remaining rows of rocks to complete the bulkhead, then envelope with the filter fabric.
- 7. Backfill into the cove with 5/8" minus clean washed fish friendly gravel.

- 8. Backfill the back of the cove with clean sand.
- 9. Clean the work area and remove the silt fence/boom.

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.

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 stub will be Class B (12" @ 3' from Butt) 40' Douglas Fir pilings per ASTM D-25.
- <u>Steel pile collars</u> ASTM A53 GrB with Devran 261QC low temperate cure epoxy (16 mils) finish coated full length.
- <u>Structural Lumber</u> All lumber will be graded and marked in conformance with WCLIB standard grading rules.
- <u>Fasteners</u> All fasteners, bolts, nuts and nails will be hot-dip galvanized.
- <u>Decking</u> The decking will consist of ThruFlow 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 hot dipped galvanized.

Best Management Practices

1. Above the Water Line Work

- 1. Seaborn Pile Driving Company will employ one each 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.