

Chapter 2 – Proposed Project and Alternatives

2.1 Description of Proposal

2.1.1 Name of Proposal

“Port Ludlow Marina Expansion”

2.1.2 Project Sponsor

Port Ludlow Associates, LLC
70 Breaker Lane
Port Ludlow, WA 98365

2.1.3 Project Location

The Port Ludlow Marina is located in Port Ludlow Bay, Jefferson County, Washington. The Marina is located on the north shore of the Bay, inside Burner Point. Port Ludlow Bay is located on the west shore of Admiralty Inlet at the mouth of Hood Canal. (Section 16, Township 28 North, Range 01 East, W.M.) The location of the project is shown in Figures 1 and 2.

2.1.4 Existing Project Features

The Port Ludlow Marina currently provides 280 slips, additional side tie areas for 20 to 40 boats, as well as a boat sewage pumpout, dinghy float, fuel float, kayak float, and public access to the water. Water, fire protection, and electrical service are available at the docks. Upland facilities include a store, rest rooms and showers, parking areas, and waterfront trails. In December 2001, the moorage distribution was 225 permanent residents, seven permanent non-residents, and 48 slips available for guests.

Water depths at the Marina vary from shallow intertidal (approximately –10 feet Mean Lower Low Water - MLLW) around the perimeter of the Marina to depths of –38 feet MLLW. The Marina is configured with five dock systems and one fuel float. The fuel float, as well as the A- and B-Docks, are located at the east end of the Marina, just inside Burner Point, and extend from shore in a north-south direction. A floating breakwater is located at the end of A-Dock. Two five-foot gangways provide access to A- and B-Docks, the fuel float, and the kayak float from the upland facilities. The C-, D-, and E-Docks are connected by one central walkway and are located to the west, in a general east-west configuration. These docks are accessed from the upland facilities by a third gangway.

The existing 1,600 square foot wood and foam kayak float accommodates 40 kayaks in racks and is located on the west side of B-Dock. The existing 680 square foot wood dinghy float is located at C-Dock, at the junction of the main walkway and the lateral. This dinghy float completely covers the area between the walkway and the first finger to the south.

The boat sewage pump-out station is located on the fuel float. The fuel float also accommodates a small structure for fueling accessories and the cash register. The fuel float is also used occasionally by seaplanes for docking.

The current mix of slips at the Port Ludlow Marina ranges from 24-foot slips up to side tie areas for boats in the 80-foot range. The recent trend in boat design is toward boats that are longer, have wider beams, and include amenities such as “swim steps.”

2.2 Proposed Project and Alternatives

The proposed project is an addition of dock systems at the Port Ludlow Marina to provide an additional 100 slips. For all expansion alternatives, the existing kayak and dinghy floats will be replaced. The new Marina floats will be constructed of concrete sections with structural wood wales and an encapsulated foam floatation core. The new floats will generally be 5 feet to 8 feet in width and will be held in place by new steel piling. Floats for the outer dock will be 12 feet in width. These outer floats serve as a floating breakwater to protect the Marina from waves and wakes. The wider width is necessary to provide this protection.

It is very likely that mitigation as requested by the Jefferson County Fire District 3 to provide additional access to the floats will be provided. The mitigation measure will include installation of a float to provide a connection between B-Dock and C-Dock to increase access to the floats to and from land. Currently, only one gangway provides land access to C, D, E, and F-docks. This mitigation will require an additional three piling to be located in water less than 20 feet in depth.

The only upland actions associated with this project are new utility tie-ins that will be required in an area of approximately 50 feet upland of OHW.

Alternative 1: Proposed Project

The proposed project (i.e., the Marina expansion as proposed by the project sponsor) is shown as Alternative 1. The proposed project adds 100 slips to the Marina by expanding the existing float system both westward and waterward. The proposed configuration of the new floats/slips is as follows:

- D-Dock will be extended 120 feet to the west to accommodate an additional twelve 36-foot slips.
- E-Dock will be extended 400 feet to the west to accommodate an additional 42 slips (seven 50-foot, nine 60-foot, and twenty-six 45-foot slips).
- The east side of E-Dock will be reconfigured to accommodate sixteen slips (eight 36-foot slips and eight 40-foot slips, to replace 10 existing slips).
- A new F-Dock will be constructed waterward of E-Dock. The new F-Dock will extend 700 feet westerly and 250 feet easterly of the central walkway. The new F-Dock will

accommodate 40 new slips (thirty 45-foot slips and ten 50-foot slips). F-Dock will serve as a floating breakwater to protect the Marina.

The existing 1,600-sq. ft. timber kayak float will be replaced in the same location with a 2,850-sq. ft. float with light transmission capabilities. The new kayak float will be constructed using plastic pontoons for floatation and timber for the connection system. The float cross section will consist of three pontoons. A space will be left open between each of the pontoons in the cross section. The new float design will incorporate light-transmission panels. The two gaps between the three pontoons will be spanned by grating or sandblasted plexiglass (versus timber decking), which will allow light to penetrate beneath the float.

The existing 680-sq. ft. dinghy float on C-Dock will also be replaced with three new floats totaling 1,086 sq. ft. The floats will be 6 feet wide and attached to the sides of the main walkway and the C-Dock lateral, the E-Dock lateral, and the F-Dock lateral. The new dinghy floats at E-and F-Docks will be located at water depths of greater than 20 feet (MLLW=0 Datum). The new dinghy float at the junction of the main walkway and the C-Dock lateral will open up a now covered side space between the dinghy dock and the first finger.

The proposed project is shown in Figure 3.

Alternative 1 will result in an additional 33,745 sq. ft. of overwater structure. Of this total, 966 sq. ft. of new overwater structure will be located in water depths of less than 20 feet (MLLW=0). The remaining 32,779 sq. ft. will be located at water depths of 20 feet or greater. Approximately 100-130 new steel piles will be required. The proposed project includes placement of one of the piles in water less than 20 feet in depth.

Pile-driving equipment will be barge-mounted and will be either a diesel-powered hammer or vibratory driver. Pile-driving equipment will be sized according to the geotechnical characteristics of the substrate. The barge will be sized to accommodate the equipment used during the pile driving. The one piling to be installed in shallow water (18 to 20 feet deep) will be shorter than those to be installed in deeper water, requiring less energy to install than the pilings in deeper water. Installing the one piling in shallow water will take less than 1 day, minimizing the time of potential disturbance of any salmonids that may be present in the nearshore area. The remaining piles will be installed at water depths of greater than 34 feet. The barge will be maintained at sufficient depth to ensure that it will not ground. All pile driving will be done outside the closed work window for listed species.

Alternative 2: Deep Water Expansion

Alternative 2 provides for a 100-slip expansion primarily waterward, rather than laterally to the west. The existing dinghy dock will remain in place. The proposed configuration of the new floats/slips is as follows:

- Thirteen 45-slips will be added to the waterward side of E-Dock, west of the central walkway.

- The east side of E-Dock will be reconfigured to accommodate sixteen slips (eight 45-foot slips and eight 50-foot slips, replacing 10 existing slips).
- New F- and G-Docks will be constructed waterward of E-Dock. The new F-Dock will extend 250 westerly and 180 feet easterly of the central walkway, and will accommodate 35 slips (twenty-one 45-slips, eight 50-foot slips, and six 60-foot slips. The new G-Dock will extend 170 feet westerly and 180 feet easterly of the central walkway, and will accommodate 14 slips (eight 45-foot slips and six 60-foot slips). This will serve as a floating breakwater.
- A-Dock will be extended 270 feet waterward and will accommodate an additional thirty-two 45-foot slips. This will serve as a floating breakwater.
- A new float will provide a connection between B-Dock and C-Dock, and the existing kayak float will be repositioned to the new extension on the A-Dock.

Alternative 2 will result in an additional 37,865 sq. ft. of overwater structure. All of the 37,865 sq. ft. of additional overwater coverage will be located at water depths of 20 feet or greater. Approximately 100-130 new steel or concrete piles will be required. None of the piles will be located in water less than 20 feet in depth (MLLW=0 Datum).

Alternative 2 is shown in Figure 4.

Alternative 3: 1993 Design

Alternative 3 will include a 100-slip expansion and improvements with the configuration proposed in the 1993 *“Port Ludlow Development Program Final Environmental Impact Statement.”* The proposed configuration of the new floats/slips is as follows:

- C-Dock will be expanded 60 feet to the west to accommodate 120 feet of side ties.
- D-Dock will be extended 240 feet to the west to accommodate an additional fourteen 40-foot slips and twelve 48-foot slips.
- E-Dock will be extended 200 feet to the west to accommodate an additional ten 48-foot slips, and seven new 50-foot slips will be added to the east side of E-Dock.
- A new L-shaped dock will be constructed approximately 150 feet waterward of E-Dock to provide additional side-ties.
- A-Dock will be extended 150 feet waterward and will accommodate an additional thirty-four 40-foot slips.
- A new dock will be constructed between the fuel float and Burner Point. This new dock will accommodate fourteen 40-foot slips and will be located in water less than 20 feet in depth.

- Approximately 500 cubic yards of dredging will be required at slightly less than a 1-acre area along Burner Point in order to increase water depths and improve access to this new inner dock.

Alternative 3 will result in an additional 31,164 sq. ft. of overwater structure. Of this total, 7,956 sq. ft. of new overwater structure will be located in water depths of less than 20 feet. The remaining 23,208 sq. ft. will be located in water depths of 20 feet or greater. Approximately 100-130 new steel piles will be required. Approximately two-third of these piles will be located in water greater than 20 feet in depth. Alternative 3 is shown in Figure 5.

Alternative 4: No Action

This alternative will result in maintenance of the existing Marina facilities, but no expansion of docks or slips, and no upgrade of amenities such as the dinghy float or kayak float, at this time. Alternative 4 is shown in Figure 6.

Alternative 5: Response to DSEIS Comments

Alternative 5 provides for a 100-slip expansion designed to minimize view impacts from Scott Court and Burner Point. The proposed configuration of the new floats/slips is as follows:

- D-dock will be extended 120 feet to the west to accommodate additional twelve 36-foot slips.
- E-dock will be extended 270 feet to the west to accommodate additional 35 slips (five 60-foot, seven 50-foot, and twenty three 45-foot slips).
- The east side of E-dock will be reconfigured to accommodate 23 slips (thirteen 36-foot slips and ten 60-foot slips to replace 10 existing slips).
- A-Dock will be extended 220 feet waterward and will accommodate additional fifteen slips (eight 50-foot and seven 60-foot slips). An L-shaped floating breakwater will be constructed.
- The existing float between the fuel float and A-Dock will be relocated to provide a connection between B-Dock and C-Dock. This will increase access from C, D, E, and F-Docks to land, thus improving fire safety at the Marina.
- The existing kayak float will be removed and replaced with a new grated kayak float (2,850 sq. ft.).

Alternative 5 will result in an additional 37,400 sq. ft. of overwater structure. Approximately 1,330 sq. ft. of new overwater structure will be located in water depths of less than 20 feet. Approximately 120 new steel piles will be required. A total of four piles will be located in water less than 20 feet in depth (MLLW=0 Datum). The existing dinghy float on C-dock will be replaced with three new dinghy floats totaling 960 sq. ft. The dinghy floats will be six feet wide and attached to the sides of the main walkway and the C-dock lateral, E-dock lateral, and the F-dock lateral.

Alternative 5 is shown in Figure 7.

2.3 Benefits/Disadvantages of Delaying Implementation

The SEPA Guidelines encourage permitting agencies to view each generation as a trustee for succeeding generations. With this perspective, environmental review is encouraged to consider whether approving/implementing a proposal at this time will preclude future options {WAC 197-11-440(5)(c)(vii)}.

The benefits of delaying expansion of the Marina relate to delaying the associated impacts to the natural and built environments. No expansion of the Marina at this time will result in no immediate construction or additional operational impacts to the marine environment or impacts to views from adjacent residential properties and the traveling public.

The Port Ludlow Marina is now at full capacity, and there is an increased demand for both more boating facilities and larger slips to accommodate larger boats. The Marina now turns away approximately 30 vessels each month between Memorial Day and Labor Day. It is unknown whether delaying implementation will result in potential Marina customers constructing their own docks in Port Ludlow Bay, additional boats anchoring in the Bay, and/or increased use of alternate marina locations.

The disadvantage of delaying the expansion relates to delaying provision of planned facilities and services for local and traveling boaters. As stated above, if the expansion is not permitted at this time, the demand for boating facilities in and around Port Ludlow Bay will continue to increase. Also, merely delaying implementation to a later point in time will not minimize identified impacts.