

2. Alternatives

2.1. Identified Alternatives

An alternatives analysis was conducted for this project to determine if avoidance and minimization have been adequately considered. The most practical and efficient alternative has been selected as the Proposed Action.

2.1.1. Alternative 1 – No Action

The no action alternative would involve no additional construction or renovation of marina facilities and no dredging for marina expansion. The marina would continue to operate in its current condition. Existing docks/pilings would eventually require replacement at the end of their useful lives, but the timing of such activity is unknown and would be considered standard repair and maintenance activities. The proposed improvements to the existing upland Gazebo are expected to be implemented whether or not the over-water project components are constructed, but this improvement is not likely to have any adverse effects on environmental, cultural, or other resources.

The no action alternative would not meet the purpose and need for the project, the steadily increasing demand for transient dockage in Rockland Harbor. However, the no action alternative is required by NEPA and serves as the baseline against which the other alternatives are compared.

2.1.2. Alternative 2 - Pursue Other Sites

As established in the purpose and need statement (Section 1.3), this site is well suited to transient boating, with existing infrastructure, setting, and amenities that transient boaters require. As the project is an expansion of an existing marina facility, **relocation to an alternative site is not a viable alternative and has not been considered in further, detailed analysis.**

2.1.3. Alternative 3 – Pursue a Larger Project

Early in the planning phase and shortly after obtaining the BIG, the applicant engaged with the City of Rockland, local stake holders, and the public regarding a potential larger “Inner Harbor” project. The consideration was that the marina expansion could leverage a larger public/private project. Figure 2.1.3-1 illustrates the larger Inner Harbor plan that was considered.



Figure 2.1.3-1: Larger Inner Harbor Plan

This ambitious plan tried to tackle numerous public needs associated with expansion and/or addition of other City-owned marina and commercial docking facilities in addition to providing a substantially larger expansion at the subject facility.

The plan was met with public opposition concerning impact to views from the outer harbor breakwater, impact to views from the upland due to larger vessels being oriented broadside to the majority of the Rockland waterfront and public harbor walk, and relocation of a city-maintained navigation channel. Additionally, the sourcing of public and private funding for the larger Inner Basin concept was undetermined and would not be able to be executed in the immediate future. Finally, the regulatory permitting and compliance issues associated with the larger Inner Harbor concept would be extremely more complex and would likely result in significant processing timelines and negative impacts to required project implementation schedule related to the BIG grant program. For these various reasons, **the Larger Inner Harbor project is not a viable alternative and has not been considered in further, detailed analysis.**

2.1.4. Alternative 4 – Proposed Action

The Proposed Action, as described in detail below, was chosen due to the fact that it will maintain an existing use at the subject site, expand an existing marina facility (resulting in less cost and environmental impacts than development of a new marina at a less desirable site), is economically viable, and meets the stated needs and purpose of the proposed marina expansion project.

Project Components – Proposed Action

The Proposed Action for the marina expansion project includes the following primary components:

- Landward Extension of an Existing Fixed Pier
- Dock Construction
 - Dock A
 - Fixed Gangway Access Platform
 - 6-ft x 80-ft ADA-Compliant Gangway
 - Floating Concrete Docks
 - Floating Concrete Wave Attenuator Docks
 - Dock B – Floating Concrete Docks
 - Dock C – Floating Timber Docks
- Dredging
- Improvements to Existing Upland Gazebo

These proposed project elements are described in detail in the following sections. Please also refer to the Project Drawings provided as Appendix A.

Landward Extension of Existing Fixed Pier

The existing 16-ft-wide fixed pier will be extended landward by 65 ft. This new section of pier will allow a better delineation of the entrance of the marina and the entrance of the onsite restaurant and will provide a public viewing area.

The structure is expected to be primarily of timber construction, including timber decking and framing on timber piles supported on concrete footings to generally match the existing pier in terms of materials and

design. The total area of the structure, including necessary tie-ins to the existing pier, is 981 square feet (sf). The structure is expected to require a maximum of thirty (30) piles, noting that the piles will be supported on a continuous concrete footer and, as such, will not be driven below existing grades.

Dock A

Dock A refers to those docks located east of the existing pier and wave screen at the subject site as well as the northernmost “T” head adjacent to the City Channel. A new 24-ft by 24-ft (576 sf) gangway access platform will be built directly adjacent to the existing fixed pier to support a new 6-ft by 80-ft (480-sf) aluminum ADA-compliant gangway to provide pedestrian access to Dock A. The gangway access platform is expected to be supported by a maximum of nine (9) piles.

The new floating docks and attenuator docks at Dock A will be monolithic concrete pontoons that consist of a foam core encapsulated by reinforced concrete. The outer portion of Dock A that extends past the end of the existing fixed pier will be wider and include special design characteristics such as higher mass, deeper draft, etc., to attenuate incoming waves.

Dock A includes a total of 15,874 sf of new floating docks and attenuators which will be anchored via a maximum of forty-one (41) piles.

Dock B

Dock B refers to those docks located on the western side of the existing fixed pier and wave screen. These docks will be primarily accessed by the existing gangways to the west side of the existing pier. However, a small floating concrete dock will connect Dock A to Dock B to ensure that all docks will be accessible for disabled persons via the new ADA-compliant gangway located near Dock A. The new floating docks will be monolithic concrete pontoons as described for Dock A.

The Dock B improvements include removal of 1,628 sf of existing timber floating docks and installation of 4,023 sf of new floating concrete docks. The floating docks will be anchored via a maximum of thirteen (13) piles.

Dock C

Dock C refers to the new dock “tree” of smaller boat slips located west of the existing floating docks. The new floating docks for Dock C will consist of timber decking and framing on “polytub” flotation pontoons (i.e., a foam core fully encapsulated by polyethylene cladding). The new docks will be accessed via an existing floating timber dock.

Dock C includes a total of 5,611 sf of new floating timber docks which will be anchored via a maximum of thirty-three (33) piles.

Dredging

Dredging will be required to accommodate the increased size and number of vessels that will be utilizing the facility. The dredge plan was developed to minimize the total volume of dredging required while maximizing the operational efficiency and safe navigation for visiting vessels.

Proposed dredge depths are indicated in the provided Project Drawings (Appendix A) and range from -6 ft to -13 ft relative to mean low water (MLW). The proposed dredge plan results in a total of approximately 12,520 cy of excavation encompassing an area of approximately 138,000 sf (3.2 acres). Dredged material

will be disposed in accordance with the conditions of the MDEP issued Upland Dredge Disposal Permit (Appendix B.1).

Gazebo Improvements

Proposed improvements to an existing open-aired gazebo located on the upland of the subject site are also to be partially funded via BIG funds. These improvements include enclosing the existing structure to create a climate-controlled boater’s lounge and reception area, improvement to existing laundry facilities, and improvement to existing restroom facilities.

2.1.5. Proposed Action Selection and Avoidance/Minimization of Potential Impacts

The Proposed Action alternative was selected because it would incur the least environmental impacts of the identified alternatives (excluding the “no action” Alternative 1), is economically viable, and adequately meets the stated needs and purpose of the proposed project. Specifically, the Proposed Action alternative will benefit boaters by providing expanded transient dockage capacity with new/improved slip utilities (power, water, fire standpipe, blackwater pumpout, in-slip fueling), improved access to the marina via the proposed landward extension of the existing pier (which will also benefit the general public via inclusion of a public viewing area), and the creation of a climate-controlled boater’s lounge and improved restroom/laundry facilities for marina patrons via improvements to an existing on-site gazebo (as opposed to holistic construction of a new marina building).

The Proposed Action avoids and/or minimizes numerous potential negative impacts to environmental and cultural resources relative to the other identified alternatives. Specifically, the Proposed Action alternative:

- Meets the stated Purpose and Need (Section 1.3) for the project as opposed to the “No Action” alternative (Alternative 1);
- Maintains an existing use in an area that has served the boating community for many years as opposed to developing a new facility at another site (Alternative 2);
- Avoids additional environmental impacts, prohibitive costs, and anticipated regulatory challenges that would be presented with development of a new facility at another site (Alternative 2);
- Significantly minimizes impacts to wetland habitat relative to the larger Inner Harbor project (Alternative 3);
- Allows for larger vessels to be berthed with the stern or bow oriented toward the view from the Rockland waterfront and public Harborwalk, addressing stated public concerns over impacts to views of the harbor associated with the larger Inner Harbor project (Alternative 3); and
- Represents an economically viable marina expansion program as compared to development of a new marina facility at a different site (Alternative 2) or development of the larger Inner Harbor concept (Alternative 3).

Additional Avoidance and Minimization Efforts

The Proposed Action is the result of several other impact avoidance and minimization efforts not directly related to the other identified alternatives, as described below:

- The scope of the landward pier extension originally planned for accommodation of vehicles and a crane truck for servicing boats. This type of use has been eliminated from the scope, and the pier extension will now be intended for pedestrian and small golf/maintenance cart use only. This resulted in approximately 4,000 sf reduction in the total area of the proposed pier extension, minimizing both direct and indirect impacts in the intertidal zone.
- The Proposed Action alternative includes modification of an existing open-aired gazebo located on the property. Utilizing the existing gazebo (as opposed to demolition and/or new construction) significantly minimizes potential impacts associated with this improvement.
- The proposed fueling system will include a “bunkering” system which provides double-walled piping from the upland to the proposed dispensers. A connection will be provided on the upland which will allow fuel delivery tanker trucks to pump fuel directly into the piping on an “as- needed” basis, eliminating the need for upland storage tanks and minimizing potential impacts associated with fueling activities.

2.2. Summary of Alternatives

The identified alternatives selected for further analysis are summarized in Table 2.2-1, noting that Alternatives 2 and 3 were found to be non-viable and as such are not included.

Table 2.2-1: Summary of Identified Alternatives

| Table 2.2-1 - Viable Alternatives Summary | | |
|--|---|---|
| Description | Alternative 1: No Action | Alternative 4: Proposed Action |
| General Concept | No marina expansion works undertaken | Expand an existing marina at the subject site |
| Marina Operations | No change to existing marina operations | Existing staff retained with direct experience regarding operation, maintenance, etc. of the existing marina facility; potential opportunity to increase staffing levels to accommodate expanded marina capacity/offers |
| Long Term Implications | No change | Relatively low impact to environmental and cultural resources; increased capacity to accommodate transient boaters; new/improved marina utilities and infrastructure |

Table 2.2-2 provides a summary of how each viable alternative meets (or doesn’t meet) the project’s stated Purpose and Need (see Section 1.3).

Table 2.2-2: Project Purpose and Need Compliance for Identified Alternatives

| Table 2.2-2: Project Need and Purpose Compliance for Identified Viable Alternatives | | |
|--|--------------------------|--------------------------------|
| Description | Alternative 1: No Action | Alternative 4: Proposed Action |
| Provide Additional and Improved Dockage/Utilities/Amenities | Does Not Meet | Meets |
| Provide Enhanced Experience for Boating Public | Does Not Meet | Meets |
| Provide Enhanced Recreational Opportunities for the General Public | Does Not Meet | Meets |
| Minimize Adverse Environmental Impacts | Meets | Meets |
| Maintain Project Financial Feasibility | Meets | Meets |