

MEMORANDUM

TO: Cape Elizabeth Planning Board
FROM: Maureen O'Meara, Town Planner
DATE: September 18, 2018
SUBJECT: Pollack Brook bridge and boardwalk Resource Protection Permit

Introduction

The Town of Cape Elizabeth is requesting a Resource Protection Permit to install 32 sq. ft. of boardwalk in an RP2 wetland and replace an existing 51' long pedestrian bridge with a 70' long pedestrian bridge across Pollack Brook. The application will be reviewed for compliance with Sec. 19-8-3, Resource Protection Permit Regulations.

Procedure

- The Board may want to begin by having the applicant summarize the project.
- The Board should then allow public comment on project completeness.
- The Board should make a finding of completeness. If the application is deemed incomplete, Board members should identify the information needed to make the application complete and no substantive discussion of the project should occur. If the application is deemed complete, the Board may begin review of the project.
- The board should decide if a site walk will be scheduled.
- The board should also open the public hearing scheduled for this evening.
- The board may begin review at any time.
- At the close of discussion, the Board has the option to approve, approve with conditions, deny or table the application.

Summary of Completeness

The completeness checklist and the comments of Acting Town Engineer Todd Gammon, Blais Civil Engineers, are attached. Below is a summary of possible incomplete items:

2. Two foot contours have been provided instead of 1' at the wetland and 2' elsewhere.
9. A waiver has been requested from providing a stormwater runoff plan due to the small area of impervious surface added.

Resource Protection Permit Standards (Sec.19-8-3(B))

Below is a summary of the Resource Protection Permit standards of review and how they may be met.

1. Flow of surface/subsurface waters

The boardwalk will be elevated off the ground and allow water to flow across the ground surface under the boardwalk. The bridge will be anchored on each bank with no support placed in Pollack Brook.

2. Impound surface waters

The bridge and boardwalk will be elevated and not function as a dam to impound surface waters.

3. Increase surface waters

The bridge replaces an existing structure. The boardwalk is 32 sq. ft. of impervious surface surrounded by existing vegetation. This amount of increased impervious surface will not produce a measurable amount of increased stormwater. If increased to 80 sq. ft., this is still an impervious surface with minimal increase in stormwater flows.

4. Damage to spawning grounds

Both structures are adjacent to the Spurwink Marsh, which has been rated high value for wildlife by the Maine Department of Inland Fisheries and Wildlife.

The installation and placement of the bridge and boardwalk will not be detrimental to the habitat functions of the Spurwink Marsh. The bridge replaces an existing structure. It will be installed by crane in one piece and no tree removal will be needed for installation or placement.

The boardwalk is of minimal size to protect wetland soils where a rustic public trail will be created. No removal of significant trees (more than 4" dbh) will be removed to install the boardwalk.

5. Support of structures

The proposed structures are designed to be stable in the proposed locations. See floodplain below.

6. Aquifer recharge/groundwater

No alteration of aquifers is proposed as part of the permit.

7. Coastal dunes

No work in coastal dunes or back dune areas is proposed.

8. Ecological/aesthetic values

Both projects have been recommended by the Conservation Committee as an environmentally sound method to provide public access to important environmental areas.

9. Wetland Buffer

No buffer is proposed as the work, by its nature, will be located entirely in the wetland area.

10. Erosion Control

No erosion control is proposed as there is no ground disturbance included in the proposal.

11. Wastewater discharge

No discharge of wastewater is proposed as part of the project scope.

12. Floodplain Management

Referencing the updated FEMA floodplain maps that will likely become effective January, 2019 and are based on more updated information than current mapping, the flood elevation in the area of the project is elevation 9. As currently proposed, both structures are potentially in the floodplain. Town staff are recommending that adjustments to the proposed plans be made to move structures out of the floodplain as follows.

Bridge: The north side of the bridge is proposed at elevation 10', which is 1' above flood elevation 9'. The south side of the bridge is at elevation 9'. The anchor for the bridge is proposed to be 3 6" x 6" granite blocks ,

depressed below ground, and affixed with a helical anchor. Staff is recommending that the granite blocks be placed at grade, resulting in a base elevation of the lowest horizontal member of the bridge at 10' or greater.

Boardwalk: The boardwalk is proposed at elevation 8', which was intended to alter the least amount of RP2 wetland. This boardwalk should be relocated to the narrowest point of wetland crossing above flood elevation 9'. This point is at elevation 14' and results in a longer boardwalk with an RP2 alteration of not more than 80 sq. ft.

Motions for the Board to Consider

A. Motion for Completeness

BE IT ORDERED that, based on the plans and materials submitted and the facts presented, the application of The Town of Cape Elizabeth for a Resource Protection Permit to install 32 sq. ft. of boardwalk in an RP2 wetland and replace an existing 51' long pedestrian bridge with a 70' long pedestrian bridge across Pollack Brook be deemed (complete/incomplete). Waivers granted include one foot contours of the wetland where two foot contours have been provided and waiver of the stormwater runoff plan due to the small amount of impervious surface proposed.

B. Motion for Approval

Findings of Fact

1. The Town of Cape Elizabeth is requesting a Resource Protection Permit to install 32 sq. ft. of boardwalk in an RP2 wetland and replace an existing 51' long pedestrian bridge with a 70' long pedestrian bridge across Pollack Brook, which requires review under Sec. 19-8-3 Resource Protection Permit Regulations.
2. The proposed bridge and boardwalk (will/will not) materially obstruct the flow of surface or subsurface waters across or from the alteration area;
3. The proposed bridge and boardwalk (will/will not) impound surface waters or reduce the absorptive capacity of the alteration area so as to cause or increase the flooding of adjacent properties;
4. The proposed bridge and boardwalk (will/will not) increase the flow of surface waters across, or the discharge of surface waters from, the

- alteration area so as to threaten injury to the alteration area or to upstream and/or downstream lands by flooding, draining, erosion, sedimentation or otherwise;
5. The proposed bridge and boardwalk (will/ will not) result in significant damage to spawning grounds or habitat for aquatic life, birds or other wildlife;
 6. The proposed bridge and boardwalk (will/will not) pose problems related to the support of structures;
 7. The proposed bridge and board walk(will/will not) be detrimental to aquifer recharge or the quantity or quality of groundwater;
 8. The proposed bridge and boardwalk are not located in, and therefore will not disturb, coastal dunes or contiguous back dune areas;
 9. The proposed bridge and boardwalk (will/will not) maintain or improve ecological and aesthetic values;
 10. The bridge and boardwalk will disturb a minimal amount of ground area and otherwise (will/ will not) maintain an adequate buffer area between the wetland and adjacent land uses;
 11. The bridge and boardwalk, by not removing vegetation or disrupting ground surface, (will/ will not) be accomplished in conformance with the erosion prevention provisions of Environmental Quality Handbook Erosion and Sediment Control, published by the Maine Soil and Water Conservation Commission dated March, 1986, or subsequent revisions thereof;
 12. The bridge and boardwalk (will/will not) be accomplished without discharging wastewater from buildings or from other construction into Wastewater Treatment Facilities in violation of Section 15-1-4 of the Sewage Ordinance;
 13. The bridge and boardwalk, subject to the conditions below, (is/is not) located in the 100-year floodplain; and
 14. The application substantially complies with Sec. 19-8-3, Resource Protection Regulations.

THEREFORE, BE IT ORDERED that, based on the plans and materials submitted and the facts presented, the application of The Town of Cape Elizabeth for a Resource Protection Permit to install 32 sq. ft. of boardwalk in an RP2 wetland and replace an existing 51' long pedestrian bridge with a 70' long pedestrian bridge across Pollack Brook be approved, subject to the following conditions:

1. That the MDEP permit for the boardwalk be obtained;
2. That the anchor for the south side of the bridge be revised to elevate the lowest horizontal member of the bridge to at least 1' above flood elevation 9'.
3. That the boardwalk be relocated upland of flood elevation 9' and may be increased in size to no more than 80 sq. ft. of RP2 wetland alteration.
4. That there be no alteration of the site until plans have been revised and submitted to the town planner to satisfy the above conditions.