



November 14, 2017
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Maureen O'Meara, Town Planner
Town of Cape Elizabeth
320 Ocean House Road
P.O. Box 6260
Cape Elizabeth, Maine 04107

Bailyn-Morris Property at 26 Hannaford Cove Road - Resource Protection Permit Review

Dear Maureen:

We have received and reviewed a November 1, 2017 submission package for the subject project. The package included a November 1, 2017 letter addressed to the you and the Planning Board Members from Robert Metcalf of Mitchell & Associates with supporting documentation, along with an October 26, 2017 Wetlands Report prepared by Albert Frick Associates and a November 1, 2017 plan entitled "Existing Conditions Plan, Site Plan, and Site Details" as prepared by Mitchell & Associates. The applicant is proposing to replace a 4-inch diameter underdrain that was installed by a previous landowner and is applying for an After-the-Fact Resource Protection Permit per Section 19-8-3. During our review of the submitted material, the following items were noted:

1. The applicant is proposing to impact 1,557 square feet of wetlands to replace a four-inch underdrain to improve a deficient drainage condition in the back yard of the house. This Resource Protection Permit is being applied for as an After-the-Fact permit as the applicant states that the previous landowner impacted the wetlands with fill and the underdrain installation. It is unclear if the estimated wetland impact covers the entire wetland fill as there is an undescribed shaded area on the plan which would seem to indicate the area to be considered filled, yet the limits of the edge of mowed lawn extends well beyond the shaded area and into the areas characterized as wetlands. From the photographs submitted with the application package, it appears that the lawn area would also represent areas that would be considered wetland fill.
2. We understand that the Board will be conducting a completeness level of review for this project. Several of the following comments represent items that are beyond the completeness level discussion and are provided here to facilitate future submissions and subsequent reviews. It should also be recognized that future submittals may result in additional review comments as more materials and information are provided.
3. We question whether the replacement of the existing underdrain with a new underdrain is necessary. The Project Description narrative in the application package describes the existing outlet end of the pipe as being "buried in sediment and organic debris". Any drainage pipe subjected to this outlet condition would obviously have its capacity to convey surface and subsurface water significantly compromised. It may be a solution to simply uncover the outlet, flush any material out of the pipe that may be causing a blockage, install a rip rap apron at the

outlet to discourage vegetative growth, and then better maintain the outlet to control the potential for future blockage caused by organic debris.

4. If the outlet condition of the pipe cannot be resolved to fix the drainage nuisance condition, we also question whether the replacement of the 4-inch underdrain with another 4-inch underdrain of the same size and capacity will provide an improved condition. From the narrative, it appears that the underdrain not only is expected to convey ground water from the area, it is also being used to convey surface water received on the western side of the property. While 4-inch underdrains are often used to collect and convey subsurface drainage, they are not large enough to effectively convey surface water due to limited capacity and the ease in which they are clogged with debris. It may be beneficial to install a larger diameter pipe with a greater surface opening area so that surface water can be more readily passed through the pipe. If the pipe used is less than a 12-inches in diameter, a grate should be placed in the inlet to prevent materials from entering into the pipe that may result in a blockage.
5. The applicant is requesting several waivers. There is a survey waiver request that is not specifically discussed in the Waiver Request narrative. We believe that this waiver request may involve the Site Plan requirement for a "detailed site plan for the proposed activity including a map at a scale of one (1) inch equals one hundred (100) feet showing the location, width, depth, and length of all existing and proposed structures, roads, wells, sewage treatment facilities, drainage facilities, and utility installations within three hundred (300) feet of the mapped wetland". As this appears to be a very localized impact, we would support the waiver request.
6. The topography request to waive the 1-foot contour requirement and provide 2-foot GIS contours is also acceptable for our purposes. The 1-foot contours would provide a tighter wetland impact estimate, however, there are no critical elevation issues associated with this proposal.
7. The application has also requested a waiver for the description of vegetative cover. In supporting the waiver request, however, the narrative actually describes the impacted and the undisturbed vegetative cover so perhaps a waiver of this requirement is unwarranted. Regardless as the majority of the work is proposed to have occurred within the RP2 wetland and would have had very little impact on the surrounding vegetation, we support this waiver request.
8. The applicant is requested a waiver for the submission of a high intensity soils map. Given that the applicant has provided a wetland report based on recent test pits by Albert Frick Associates and that a majority of the impacts have already occurred, we concur that the submission of this information would yield little added value and support this waiver request.
9. The applicant is requested a waiver for the submission of a stormwater runoff plan for the development of pre- and post- development conditions. As the proposed drainage improvements will allow for water to flow through the site and overall site stormwater runoff patterns will remain relatively unaltered, we support this waiver request. As noted earlier in this letter under Comments #2 and #3, it is more important to determine the actual cause of the pipe failure and provide the proper solution to address the deficiencies in the original installation.
10. On the second page of the submitted cover letter, there is a description of a 275 square foot temporary impact to moss vegetation at the outlet on the westerly side of the yard. We are confused as the underdrain outlet is on the east side of the site. The materials further describe

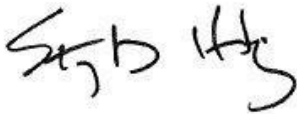
setting aside the moss during the pipe installation to be replanted on the same day once the underdrain system installation is complete. The plan should indicate where this section of moss is located and the steps that the contractor must undertake to salvage the moss and replant it.

11. As a minor comment, there are two un-labeled test pit symbols shown on the plan. These were likely dug by Albert Frick Associates. These test pits should be labeled to indicate who dug them and to reference the on-site October 26, 2017 wetland report.
12. As the applicant is proposing to permit the After-the-Fact filling of approximately 1,557 square-feet of wetlands, it is likely that a U.S. Army Corps of Engineers permit is required for the project. The applicant should contact the Army Corps to ensure that all the necessary permits have been filed.
13. It is likely that the wetland impact would be exempt from the Maine Department of Environmental Protection's ((DEP) Natural Resource Protection Act (NRPA) permit due to the impact being less than 4,300 square feet. There is also a utility installation Permit-by-Rule under NRPA, however again due to the size of the impact, the DEP may not have jurisdiction over this project. The applicant should confirm with the DEP that no permit is required for this action to proceed. A copy of any DEP or Army Corps permits should be provided to the Town.

We trust that these comments will assist the Board during their deliberations on this project. Please do not hesitate to contact us with any questions or comments.

Sincerely,

SEBAGO TECHNICS, INC.



Stephen D. Harding, P.E.
Town Engineer

SDH:llg

cc: Caitlyn Abbott, Sebago Technics