

April 13, 2017

17048

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

Subject: Holt Private Road Review

Dear Maureen:

We have received and reviewed a submission package dated March 31, 2017 for the subject project. The package included a March 31, 2017 cover letter addressed to you and the Planning Board Members from Robert Metcalf of Mitchell & Associates of Portland, Maine along with supporting information and a seven page drawing set of the project plans with revision dates of March 3 and March 30, 2017. Based on our review of submitted material and the project's conformance to the technical requirements of and Section 19-7-9, Completeness for a private road project, we offer the following comments:

General Engineering Comments:

- 1. As stated in our previous review letter, the applicant is requesting a waiver from the road width requirement of 22-feet, to a 14-foot paved surface with two, 2-foot wide grassed shoulders. We have not supported the road width reduction requests in the past, but understand that the Planning Board as the decision-making body has the prerogative to do so on a case-by-case basis.
- 2. The applicant is requesting a waiver for curbing with a 25-foot radius at the entrance and an enclosed drainage system. While the enclosed drainage system waiver may be a more appropriate request given the fact that the applicant is proposing to improve an existing drive with multiple culverts already in place, we do not support the waiving of the entrance radii and curbing requirements. We have conferred with the Public Works Director and he also is not in favor of the entryway radii & curbing waiver.
- 3. The applicant has submitted a request for waiving a formal stormwater report with supporting calculations. We agree with the applicant's assertion that the improvements to the existing drive will create a minimal net gain of 1,900 square feet of impervious area which will have a negligible impact on the stormwater runoff characteristics of the project area. Therefore, we support the Planning Board granting this waiver.

- 4. As noted in our last review comment letter, we also support the granting of the waiver to allow the roadway to not be centered within the right-of-way and to be allowed to maintain its current alignment which varies slightly from being consistently centered within the right-of-way.
- 5. The sewer easement should be labeled throughout the plan set.
- 6. We understand that the Tote Road passing through the Holt property providing access to an existing residential property is still under discussion with the Planning Board/Town Staff on how the proposed private road may affect the Tote Road access to the adjoining property.
- 7. There does not appear that horizontal curve information or vertical curve information that has been shown in the plan view or in the profile view.
- 8. The note "Limit of Pavement Removal" is shown near the Holt residence on the Existing Conditions Plan. A leader is not attached to the note. It is also unclear whether or not the entire roadway will receive a full-depth box cut. The designer should clarify this on the plan set. If existing gravels are to remain in any areas, the designer should submit a description on any required material testing.
- 9. There are a few places on the Private Road plan, Sheet L2.0, where lot boundary limits have not been defined by an orientation and direction.
- 10. The existing water line from Station 0+00 to approximately 1+00 has not been shown on Sheet L2.1. This should be added to the plan set.
- 11. As a general comment, various proposed features appear to be on existing layers, and the line weight between existing and proposed features is relatively the same. This condition has made the readability of the plans challenging. Many of the various items on the plan are also shown as open circles which makes the plans difficult to follow. Also, the designer should check each leader to make sure that that they are properly connecting the note to the actual symbol being represented.
- 12. There is a note on Sheet L2.1 near station 1+50 that calls out a proposed hydrant. We do not believe that a hydrant is being proposed in this location. Further, the designer may wish to consider adding insulation in areas where a new water service is crossing under the large culverts.
- 13. The plan set is still missing existing and proposed pipe types and sizes for the water line, sewer main, and drainage pipe.
- 14. The water line pipe to the northeast of the proposed water meter pit should be labeled.
- 15. The 40-foot length of drainage pipe under the turnaround that is proposed with a flat (i.e., zero percent slope). Inverts should be revised to provide slope across the proposed pipe. No pipe information was given for the outlet pipe at the proposed catch basin.

- 16. The contour around the proposed 3-foot catch basin should be assigned an elevation. If this catch basin is depressed, grate information should be added to Detail 3, "3' Manhole Catch Basin" on Sheet L3.1, to define this structure as a catch basin rather than a drainage manhole.
- 17. It is also very difficult to see the existing contours. The line weight should be darker.

We trust that these comments will assist the Board during their deliberations on this project. Should there be any questions or comments regarding our review, please do not hesitate to contact us.

Sincerely,

SEBAGO TECHNICS, INC.

Stephen D. Harding, P.E.

Town Engineer

SDH:sdh

cc: Robert Metcalf, Mitchell & Associates Steve Bradstreet, Ransom Environmental Bob Malley, Public Works Director Caitlyn Abbott, Sebago Technics