



May 9, 2018
18039

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

Subject: Aster Lane Private Road Review

Dear Maureen:

We have received and reviewed a submission package dated April 30, 2018 for the subject project. The package included a 30, 2018 response letter addressed to you from the project designer Stephen Bradstreet of Ramsom Consulting, Inc. along with supporting information and a five drawing set of the project plans. The plan set included four engineering related drawings as prepared by Ramsom Consulting Engineering and Scientists of Portland, Maine with revision date of April 30, 2018 and an April 27, 2018 Boundary & Topographic Survey plan as prepared by Owen Haskell, Inc. of Falmouth, Maine. Based on our review of submitted material and the project's conformance to the technical requirements of Section 19-7-9 for a private road project, we offer the following comments:

General Engineering Comments:

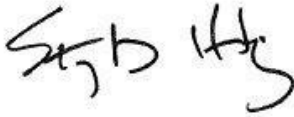
1. The applicant is proposing to construct a gravel road connection between the current paved northerly paved end of the Aster Lane public roadway to the existing southerly portion of the gravel surfaced South Street private roadway. This connection will require that the width of the new gravel surface be tapered between the existing 22-foot wide Aster Lane end to the 18-foot wide section of South Street. In doing so, the applicant will have created the required frontage along a roadway to construct a residential home. In a variation from the original application submittal on this project, the applicant is now proposing to not relocate the existing gate between Aster Lane and South Street and is instead proposing that no gate be installed
2. The applicant is requesting a waiver from the road width requirement of 22-feet to taper the existing gravel extension to an 18-foot wide surface. As noted our previous April 12th letter, we have historically not supported other 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.

3. The new private road will need to meet the local road standards as set forth in Chapter 16, Subdivision Regulations with the Planning Board having the right to grant certain waivers. The applicant is requesting waivers of the local road standard for four foot shoulders, that the road shall be centered in the right of way, and that an enclosed drainage system to be provided. The applicant is requesting these waivers to minimize impacts and to match existing improvements already constructed within and alongside of South Street. As these waivers do not adversely affect the functionality of this low speed and volume roadway, we defer to the Planning Board for a decision on granting the waivers.
4. The applicant's designer has stated that since a minimal increase in new impervious surface occurs as part of the new roadway construction that a formal stormwater report with supporting calculations is not required. We agree with the applicant's assertion that the improvements to the existing drive will create a minimal net gain impervious area and that if the new impervious surface area does not exceed 10,000 square feet, the project does not require a formal stormwater analysis report with supporting calculations.
5. The applicant has altered and embellished upon the roadway related drainage improvements. The originally proposed rain garden has been eliminated and replaced with a system of rip rap armored swale sections, a culvert outlet plunge pool, and stone check dams. These new features will act to attenuate stormwater runoff velocities which will protect against erosion and mitigate the drainage generated from the roadway improvements.
6. The designer is proposing to temporarily install a section of siltation fence or haybales downgradient of the last stone check dam. These items are not recommended to be installed in concentrated flow areas. We suggest that in lieu of either the silt fence/hay bales installation that additional stone check dams be installed in the ditch section alongside the applicant's property.
7. The designer has also incorporated the existing paved berm at the end of the paved section of Aster Lane into the design and provided rip rap protection in its receiving ditch. This step will help to protect against the gravel areas beyond the end of the paved section of Aster Lane from being washed out during intense rainfall events
8. In response to an earlier comment, the designer has added the location of the new lot's driveway and provided a 12-inch driveway culvert along with sizing calculations.
9. In response to an earlier comment, the plans show monumentation to depict locations of the publicly accepted end of the Aster Lane.

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.

A handwritten signature in black ink, appearing to read "SDH/Hg".

Stephen D. Harding, P.E.
Town Engineer

SDH/Ilg

cc: Bob Malley, Cape Elizabeth Public Works Director
Steve Bradstreet, Ransom Consulting Engineering and Scientists