

16373

October 12, 2016

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

SUBJECT: Town of Cape Elizabeth Recycling Center Upgrade - Site Plan Review

Dear Maureen:

We have received and reviewed a submission package from Woodard & Curran dated September 30, 2016 for the subject project. The package included eight (8) revised drawings of the 14 page plan set, with revision date September 30, 2016, a post-development HydroCAD analysis of the Underdrain Soil Filter subcatchment area dated September 30, 2016, and supporting documentation for the Site Plan Amendment. Based on our previous September 14, 2016 review, and our review of the newly submitted material and the project's conformance to the technical requirements of Section 19-9, Site Plan Review, we offer the following comments:

- 1. The Underdrain Soil Filter has been resized to avoid disturbance to the wetland which was recently delineated by FB Environmental Associates on September 26, 2016. Woodard & Curran has also provided a 25-year storm HydroCAD analysis of the Underdrain Soil Filter. In our opinion, all comments from our previous review letter have been addressed, and the newly submitted material represents a complete package. The following comments are considered minor and should be used to facilitate future reviews/approvals.
- 2. Drainage Pipe-9 from OSC-1 at the Underdrain Soil Filter appears to have a negative slope to DMH-1. The invert out at OSC-1 is currently shown as 50.0-feet, and the invert in at DMH-1 is currently shown as 50.15-feet. The design engineer should make the necessary changes to both Sheet C-201 and the HydroCAD analysis.
- 3. For consistency purposes, the culvert pipe outlet device for the Underdrain Soil Filter in the HydroCAD model analysis should be shown as a 12-inch diameter pipe rather than a 10-inch diameter pipe.
- 4. The designer should clarify if permanent turf reinforcement matting is to be used within the sediment forebay of the Underdrain Soil Filter. If so, the designer should provide detail for the matting or product specifications.

Maureen O'Meara October 12, 2016 Page 2

- 5. Although this design is not required to be approved by the Maine DEP, the designer should consider placing a second underdrain pipe within the filter to ensure that the filter bed is properly drained. Schematically, it also appears that the UD pipe is curved, indicating the use of a coiled pipe which is more suitable for a foundation drain application. We suggest that the designer consider a solid, perforated material such as HDPE or SDR 35.
- 6. The designer should review the erosion and sediment control measures at the underdrain soil filter. It appears that additional silt fence should be placed downgradient from the southeast berm, and that stone check dams may be beneficial in the swale along the south grassed berm.

As noted in our original review letter, Sebago Technics and the applicant, the Town of Cape Elizabeth, have a continuing business relationship and Sebago has reviewed this submission under its ongoing engineering review capacity for the Planning Board. We trust that the above 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:cca

cc: Bob Malley, Public Works Director
Megan McDevitt, Woodard and Curran