



April 13, 2016
16031

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

Subject: Cape Chiropractic & Acupuncture Site Plan/Minor Subdivision Review

Dear Maureen:

We have received and reviewed a revised submission package dated April 1, 2016 for the subject project. The package included an April 1, 2016 cover letter addressed to you from John Kenney of WBRC Architects & Engineers of Bangor and Portland, Maine along with a 21 page drawing set of the project plans with a revision date of April 1, 2016. Also included in the submission package was a standalone February 26, 2016 Subdivision Plat Plan, and revised April 1, 2016 HydroCAD stormwater calculations.

Sebago also participated in a March 30, 2016 meeting with the applicant, the design engineer, and Town Staff to discussion coordination and design issues associated with the proposed improvements to the Hill Way right of way and the anticipated improvements that the Town may undertake in Hill Way. Based on our review of submitted material and the project's conformance to the technical requirements of Section 16-2-3, Minor Subdivision Completeness and Section 19-9, Site Plan Completeness for a project site within the Town Center District Zone, we offer the following comments:

General Engineering Comments:

1. A meeting was held on March 30th between the applicant, the project designer, the Town Staff, and Sebago. At that meeting, the infrastructure improvements which the applicant is proposing was discussed. The Town is also envisioning future changes to the Hill Way infrastructure as part of a current Town Council goal to improve Hill Way. It was determined that the improvements suggested by this current plan could either be implemented unilaterally or in concert with the Town's future improvements. Given that the potential construction periods of the project may be complimentary to one another, there is a strong possibility of resource cooperation to combine the proposed improvements. Should the Town project not come to fruition or be delayed, however, the improvements proposed by the current application plans could be implemented independently without adversely impacting the Town's future plans.
2. It should be noted that many of the comments in our initial March 9, 2016 review letter have been addressed, however, there still remains several comments review letter that have not yet been addressed. The designer should submit written responses to each of our comments during the next submission process so that should the designer decide to not address a comment through plan revisions, we can receive and assess the reasoning behind the designer's approach. In addition to new comments, comments from our previous review letter are included below.

3. A detail for the precast concrete paver sidewalk should be included. This item may also provide an opportunity for the designer to continue to implement additional surface water treatment by use of porous materials.
4. From our experience on reviews of past projects, the proposed dumpster pad sizing appears to be too small to handle both recycling and trash waste receptacles for an establishment of this size. The designer should consider expanding the dumpster pad.
5. Curbing tipdowns with sidewalk ramps should be shown at the ends of the sidewalk along Hill Way. All sidewalk ramps along Hill Way should include a cast iron tactile warning strip. This detail should be added to the plan set.
6. There is an existing water line along the subject project side of Hill Way. The designer should review with the Portland Water District as to the age of the water line and any concerns that they may have with blasting near the water line. Past blasting procedures on municipal projects have impacted older water lines to the point that the Town no longer allows blasting on roadway improvement projects and that any ledge removal needs to be done with mechanical means rather than blasting. The ledge removal on-site should not impact the water line if the method of blasting is properly used.
7. It does not appear that the stone retaining wall is being proposed to stabilize either the concrete patio or grass area. The designer may wish to rename the wall to reflect that it is being proposed to create a separation barrier and also call out the location of the detail on the plan view drawing to clearly demonstrate the wall's intended construction characteristics.
8. Rip rap should be specified along the 1:1 slope at the east of the project site.
9. The sawcut lines of the public roadways should be shown on the grading plan as a proposed line.
10. The designer should add invert information to all utility connections at the buildings.
11. Pump station elevations and pipe inverts should be added to the Utility Plan as well as the details.
12. The designer should add a note to the plans stating that the pump station will be privately maintained.
13. Length and slope information should be added to storm drain pipes.
14. A note should be added to Detail N1 on Sheet C501 to specify the purpose of the underdrain pipe where the porous pavement meets the HMA section.
15. In discussions with the design engineer, information for the porous pavement material will be provided within the Specifications prior to the start of construction.
16. Temporary construction entrances should be shown on the grading plan.

17. A general note should be added to the plan set for Inspection and Maintenance Plan to be submitted annually by July 1st to the Town. Provisions to inspect and maintain the rain garden should be added to this plan.
18. The designer should confirm that vehicle movements of a B-40 (fire truck) vehicle were analyzed through the site.
19. As a minor comment, the 18-inch dimension on Detail N5 on Sheet C504 for the soil filter bed should be made clear.

Stormwater Design Comments:

1. Flow arrows should be added to the watershed plans.
2. The post-development drainage will be routed through a porous pavement system and a rain garden which will act to both treat the surface water quality and reduce the estimated peak rate of runoff from the site. The design has been implemented in a manner to address surface water treatment while still maintaining existing tree canopy coverage to the extent practical. In doing so the quality of the surface water will be enhanced and the projected peak rate of flow will approximate those levels estimated for the pre-development condition (0.16 cubic feet per second increase for the 2-year storm event and 0.11 cfs increase in the 25-year storm event).

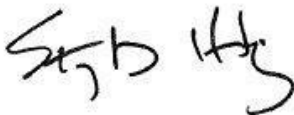
The runoff from this site predominately drains to the municipal system at the intersection of Route 77 and Hill Way. In our conversations with the Public Works Director, this system has historically handled large runoff events without nuisance flooding conditions so it is anticipated that the post-development runoff flow will continue to be readily handled by the Town's drainage infrastructure without creating adverse conditions to the drainage system or its receiving areas.

3. An updated stormwater report should be submitted to reflect the addition of the rain garden.

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:cca/lfg

cc: John Kenney, WBRC
Bob Malley, Public Works Director
Caitlyn Abbott, Sebago Technics