



December 11, 2019
18544

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

**Subject: Ocean House Commons, 326 Ocean House Road
Amended Site Plan and Subdivision Permit Review**

Dear Maureen:

We have received and reviewed a submission package dated November 27, 2019 for the subject project. The package included the following items:

- a November 27, 2019 letter from John Mitchell of Mitchell & Associates;
- a November 25, 2019 letter focusing on stormwater issues from Stephen Bradstreet of Ransom Consulting, Inc.
- a November 25, 2019 revised Stormwater Management Report as prepared by Amber Ferland of Ransom Consulting, Inc.;
- five revised November 19, 2019 drawings (L1 – signed and sealed on November 26, 2019, L2, L4, L5, and L8) from the Amended Subdivision plan set as prepared by Mitchell & Associates;
- a November 1, 2019 Lot 2 Amended Site Plan (L1);
- and an October 31, 2019 (Revision 1) Post-Development Plan (D-2).

Based on our review of the submitted material and the project's conformance to the technical requirements of Section 16-2-3 Subdivision Amendment regulations and Section 19-9 Site Plan Amendments; we offer the following comments:

1. The applicant is proposing a multi-use Village Green-style subdivision development on a 4.1-acre entirely wooded parcel within the Town Center. The first phase of the project has been approved as a Site Plan approval of Lot 2 development featuring a dental office space with residential units in a 3,572 square foot (SF) building with utility and stormwater infrastructure improvements. Twenty proposed parking spaces along a new partially paved access drive looping through the site to connect from Ocean House Drive to the rear parking lot on the adjacent Town Hall property to allow for the development to link traffic flow to Shore Road was also part of the original Site Plan approval. A 20,011 SF public common area adjacent to Ocean House Road to create a Village Green was also included in the original Site Plan approval

In this subsequent phase of the project, it is envisioned that three more buildings will be constructed with uses that will likely include a restaurant, office spaces, and additional residential spaces. Utility extensions from the Phase 1 utility infrastructure will be constructed to meet the needs of the future tenants as the buildings are constructed. The road, to be named Town Common Circle, is proposed to be improved to a paved surface for the complete roadway section extending from the Phase 1 end location to the northerly parking lot connection to the rear of Town Hall. In addition, a 17,031 square foot piece of the property in the central portion of the site is being proposed to be included as "Part 2" to the originally approved Village Green.

The submittal primarily focuses on the subdivision issues associated with the final three lots noting that each of Lots 1, 3, and 4 will also need to undergo a Site Plan approval process once firm development plans for each of the lots has been established. Amended Site Plan information has also been provided in the packet to adjust changes made to the original Lot 2 approval and changes that will be required to provide a roadway connection to the Town Hall parking lot.

2. The Amended Site Plan aspects of this submittal include alterations to the Town Hall lot to accommodate the connection of the new development's roadway, Town Common Circle, to the rear parking lot. The Lot 2 Amended Site Plan aspects relate to changes in the previously approved plan that do not significantly impact engineering related aspects. As stated in our last review comment letter, we do not have any comments on the Amended Site Plan changes included in this application.
3. The applicant has requested waivers of the right-of-way width, road alignment, and centerline radius to deviate the design from strict compliance with the Subdivision Regulations requirements. In past conversations with the Public Works Director, we have typically not supported these types of waivers. As stated in our last review comment letter, we do recognize that the Planning Board has the discretion to grant these waivers. Given the uniqueness of this particular roadway, which is essentially a private paved access way through a parking lot to connect to another parking lot, we would certainly understand the Planning Board's rationale if the Board decided to grant these waiver requests.
4. The Subdivision Plat Plan (L1) indicates the monuments and iron pins that will be set which we understand has been agreed upon during consultation with the Public Works Director who has the latitude to determine which locations along the property line that should have monumentation. The Public Works Director should confirm that the property markers shown to set are consistent with his previous direction.
5. A detail of the buildup of the 11 reserve, grass-surfaced parking spaces to the west of the parking along Town Commons Circle on the Subdivision Layout and Lighting Plan (L2) has been added to the L8 plan. The designer should specify the geotextile product to be installed. Also, the detail indicates a 5-inch layer of loam which is much deeper than what is typically proposed for vehicular access onto a grass surface. The designer should consider a thinner layer of loam or specify a vender-provided product that will allow grass growth and vehicle support.

Stormwater Comments:

6. The submission package included a revised Stormwater Management Report narrative exhibit with supporting calculations which detailed the proposed improvements and the inclusion of stormwater quality treatment methods before stormwater is discharged to the Town's enclosed drainage system at the intersection of Jordan Way and Ocean House Road. As with the previous Lot 2 Site Plan approval, the proposed stormwater treatment methods include building drip edges, wooded buffers, two vegetated underdrained filter swales, and two Focal Points systems which treat runoff prior to an overflow catch basin before being discharged to the Town's public stormwater system.
7. As the subdivision now contains over 1-acre of impervious area, a Maine Department of Environmental Protection (DEP) Stormwater Law permit is required. This level of development also triggers the need to meet the current DEP stormwater standards through the Town's Ordinance Chapter 25 standards. We understand that the Stormwater Management Plan will follow the DEP guidelines for on-site stormwater runoff water quality treatment with an undetained quantity release into the Town's receiving system. This approach has been confirmed in earlier meetings with the DEP staff to be in keeping with their guidelines as long as the Town accepts the post-development flow into the municipal system.
8. Based on Ransom Consulting's stormwater flow rate projections from the Ocean House Commons development, Sebago Technics recently completed a November 22, 2019 Town Center Drainage Study and concluded that *"Based on the modeling data, post-development peak flow rates examined at the study point for the watershed show a slight and predictable increase due to the inclusion of the Ocean House Commons development from pre-development flow rates during the 2-year, 10-year, and 25-year storms. As stated before, the addition of the proposed Ocean House Commons project appears to affect the existing drainage system minimally. Anecdotally, according to Town Staff, the existing drainage system does not exhibit flooding problems"*.

Therefore, we believe that the Town's receiving drainage system appears to be operating satisfactorily and will be able to absorb the additional flow the full build out of the Ocean House Commons project. Sebago's report also included possible alterations to the Town's system that would increase the drainage network's capacity should any issues arise in the future. It is important to note that these solutions were evaluated for overall improvement of the Town Center stormwater infrastructure and not because the improvements are directly needed to handle stormwater flows from the Ocean House Commons development.

9. In response to a previous comment, the designer has adjusted the rim elevation of the Overflow Catch Basin located within the Village Green area to elevation 86.5. This elevation will improve the practicality of the system in collecting runoff during intense rain events to prevent local flooding issues.
10. The land area of Village Green Part 2 was to rely heavily on the infiltration abilities of the native subsurface soil conditions to infiltrate stormwater in order to address the stormwater treatment needs for the site. The designer has informed us in a December 6, 2019 email that a test pit dug in the area proposed for infiltration revealed that the native soil conditions are not conducive to infiltrate stormwater. Therefore, the design will likely need to be reassessed in consultation with the Maine DEP Stormwater reviewer to establish whether the current design as proposed would

meet the DEP Chapter 500 rules or need further treatment features to meet the required treatment thresholds.

11. The designer noted in the December 6, 2019 email that the project's overall total developed area treatment would be 75% without the Village Green infiltration area. The DEP requirements for water quality treatment are that 95% of the impervious surface areas are to be treated and that 80% of the disturbed areas (which includes impervious surfaces) are treated. On most developments, the 80% disturbed area treatment level is typically met by treating at least 95% of the impervious surface area. With the significant surface area of the Village Green being considered a disturbed area, however, the 80% disturbed area threshold is more difficult to achieve for this project. In our December 7th response email, we suggested the designer consider the off-site Town Hall parking lot impervious areas, which are being treated by the two new vegetated underdrain filter swales as part of this proposed development, within the overall percentage treatment calculation as that approach may allow the treatment percentages to meet the DEP stormwater treatment threshold.
12. Regardless of the stormwater treatment resolution, a large portion of Part 2 of the Village Green area will be very flat which could result in undesirable wet surface conditions. As with an athletic field, we believe that shallow vertical j-drains should be installed or some other means provided to encourage positive flow from this expansive open area to ensure that the ground surface recovers after rainstorm events does not remain saturated for prolonged periods.
13. Stormwater vegetated underdrained filtration swales have been proposed to be installed on the south side of the Town's parking lot behind Town Hall. In response to a comment made in our last review comment letter, observation risers acting as cleanouts have been included in the design. We understand that the Town will be receiving an easement from the applicant to maintain the easterly underdrained filtration swale and will be given the land of the westerly underdrained filtration swale as part of the Village Green Part 2 property. If the Town's easement to the easterly filter swale is intended to be described via a metes and bounds description then the limits of the easement should be included with a description on the Subdivision Plot Plan, L1. If the easement is to be agreed upon via a narrative, the location of the filter swale should be shown and the easement should be noted on the Subdivision Plot Plan
14. In response to a previous review comment, corrections have been made to the invert elevations and slopes of the pipes within the drainage system design.
15. As noted in our last review comment letter, the designer should check the invert elevation (87.0) of the 6-inch underdrain pipe entering Drainage Manhole #1 from the Village Green area as it appears that the DMH #1 rim elevation of 87.9 will not allow the pipe connection to be constructible. Adding invert elevations at both ends of the underdrain pipe to be located under the proposed curvilinear Village Green walk and the walk's width would also be beneficial for clarity during construction.
16. As suggested in our last review comment letter, the designer added spot grades along the parking lot edges to convey the design intent for the paved surfaces to the contractor.
17. As an MS4 community, the Town is responsible for ensuring that post-construction maintenance and inspections are ongoing and reported on an annual basis in accordance with the DEP's most

current MS4 5-year permit. According to our conversations with Kristie Rabasca of Integrated Environmental Engineering who is the Town's MS4 Stormwater Compliance representative and works closely with the Public Works Director Bob Malley to ensure the Town is maintaining their commitments under their MS4 permit, the following items will need to be followed to maintain future compliance for this project:

The Town will be responsible for any the post construction inspection and maintenance stormwater elements that the Town accepts, such as the vegetated underdrained soil filters. There have also been ongoing discussions that the Town may also consider the addressing the future maintenance of the focal point systems. Therefore, some of the items that would normally fall to the responsibility of the applicant will not apply for those Town maintained systems. Effectively, the applicant will not need a maintenance agreement, note on the plans, annual maintenance certifications to the Town, nor will they need 5-year certifications to DEP for any aspects of the project stormwater infrastructure taken over by the Town as the Town will maintain this infrastructure under its MS4 program.

Note #19 has been added to the Subdivision Plot Plan, L1, regarding the MS4 program requirements and the need to provide annual maintenance certifications to the Town for any owner retained items.

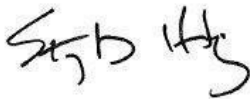
18. The Stormwater Report Appendices A and B should be revised once it is determined which elements will remain privately maintained and which will be turned over to the Town.
 - a. Currently Appendix A describes that a portion of the system will remain private and a portion of the system will be turned over to the Town, but then Appendix B contains inspection forms for both the public and private stormwater infrastructure. There should be one inspection form for the infrastructure that will remain privately maintained (potentially only the roof drip edges and level lip spreader) and a separate inspection form for the infrastructure that will be turned over to the Town.
 - b. In addition, the Maine DEP guidance specifies that grassed underdrained biofilters should be inspected after a significant rain event (approximately 1.5 inches of rain in 24 hours) to assess if the filter is draining properly after 48 and 72 hours. ACF Environmental provides an operation and maintenance plan that states the Focal Point Units should also be inspected at least twice annually after storm events of 1-inch or more and they provide a detailed inspection form. This information should be included in the appendices.
 - c. In Appendix A, item (d) references annual report filing fees. There are no filing fees for the annual report. Item (d) can be removed.
19. The Stormwater Management Report describes that one of the grassed underdrained biofilters will discharge to the back of the site. The westerly vegetated underdrain filter swale is not mentioned in the report. The report should be corrected to properly reflect the proposed filter swales inclusion within the project Stormwater Management Plan.
20. If the Town decides to accept the future maintenance responsibilities of the focal point units and drainage pipes within the site then we suggest that the cleanout proposed in the Village Green Part 2 area be converted to a manhole or a catch basin if the design would support

surface water entering the system. Also, the pipe connecting this new structure to the overflow catch basin should be enlarged to a 12-inch diameter pipe. These changes would simplify access to the system and maintenance of the components.

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" followed by a stylized flourish.

Stephen D. Harding, P.E.
Town Engineer

SDH:sdh

cc: John Mitchell, Mitchell & Associates
Amber Ferland, Ransom Environmental
Bob Malley, Public Works Director
Kristie Rabasca, Integrated Environmental Engineering