



October 10, 2018
18454

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

Subject: Appletree School at 44 Two Lights Road
Amended Site Plan, Subdivision, and Resource Protection Permit Review

Dear Maureen:

We have received and reviewed a submission package dated September 28, 2018 for the subject project. The package included a September 28, 2018 cover letter from John Mitchell of Mitchell & Associates, a four (4) drawing plan set as prepared by Mitchell & Associates dated September 28, 2018. The package also included supporting documentation. Based on our review of the submitted material and the project's conformance to the technical requirements of Section 19-9 Site Plan Completeness, Section 19-8-3, Resource Protection Permit completeness, and Section 16-2-5 Amendments to previous subdivisions; we offer the following comments:

1. The applicant is requesting a review of a 227 square foot building expansion to create a new toilet room and office space and a proposed parking area expansion which will result in a net increase of 2,649 square feet of impervious area. The expansion is to accommodate an increase in students from the current level of 20 to a new total of 40 students. The parcel is within Residential District RA and is approximately 2.4 acres in size.
2. We understand that the Board will be conducting a completeness review for this project at their upcoming meeting. Many of our following comments should be considered beyond the completeness level and have been provided here to facilitate future submissions and reviews of the project. It should be noted that additional submitted information may result in additional review comments.
3. All drawings should be sealed by the appropriate professional.
4. The applicant has submitted a Stormwater Management narrative exhibit which outlines the minimal nature of the proposed improvements and the inclusion of a rain garden to mitigate the effect of the net additional impervious surfaces. We believe that the actual impact of the new developed areas will have an insignificant effect on the site's stormwater characteristics and receiving areas. Further given the relatively small areas of the property which has been developed and the proposed 2,649 +/- square feet of additional impervious surface areas, a formal Stormwater Management Plan analysis with supporting calculations would be compromised due to the limitations of the available software modeling programs. The submitted Stormwater Management narrative should include a conclusion statement, however, so that we can either concur or oppose the applicant's position on the stormwater management conditions of the proposed plan.

5. The project includes a new rain garden sited to the rear of the developed area. The rain garden should include proposed grading and spot grades to provide the contractor with a clear direction as to the designer's intent.
6. We are concerned that runoff from the bulk of the paved area will be directed to the front of the existing proposed classroom and building expansion area. It is not readily apparent how the stormwater runoff is diverted away from the building, but the designer should ensure that there is a means to collect the surface runoff from the westerly side of the building and convey the collected stormwater around the building's north side to avoid water damage to the building and nuisance ponding which could also become a safety concern in winter months.
7. It appears that the project area was mapped for wetlands that have been historically impacted. We understand that there is a need to continue to document the two proposed mapped Resource Protection wetland impacts to this area. Section 4 of the submission package includes a September 14, 2018 letter regarding wetlands as prepared by Albert Frick of Albert Frick Associates. This letter describes the proposed project area as being uplands and references an attached plan depicting the current location of nearby wetland. The referenced plan wasn't provided with the letter.

It may be from a technical sense that the project will temporarily impact approximately 477 square feet of former wetlands to construct the new addition and sanitary service pipe from the new building expansion sanitary facilities to the existing pump station, but in actuality, the wetland impact occurred long ago and only areas maintained currently as lawn areas will be temporarily impacted. It should also be noted that the 300 square foot proposed rain garden appears to also be sited in a historically impacted wetland area that is now maintained as a lawn. As the submission package indicates, this rain garden is proposed to be planted with wetland vegetation so the creation of the rain garden could be considered an area of wetland restoration.

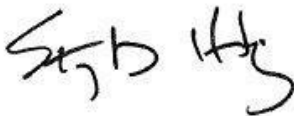
8. Proposed sanitary sewer pipe elevations, slope, length, size, and material should be added to the plan to describe the new pipe connection from the building expansion to the pump station.
9. The applicant is acquiring land from the abutter to the north so that an expanded parking area with suitable access drives can be constructed. The new pavement edge will be placed one-foot from the new property line and siltation fence is shown to be temporarily added during construction onto the abutting property. The applicant should also receive permission to access and utilize the strip alongside the new property line temporarily during construction.
10. The interior of the paved surface appears to have proposed painted lines to depict the edge of circulation aisle and parking spaces with no interior islands. Radii dimensions should be added to the plan.
11. The accessible parking space is indicated to be van-accessible and shown at an eight-foot width with a five-foot wide striped no parking aisle. In order to compliant with the Americans with Disability Act (ADA), we believe that the striped aisle needs to be eight-feet wide to meet the 16-foot wide van accessible space requirement.

12. There is a brick paving sidewalk detail included on Sheet 4. The designer should call out on the Site Plan where this detail would apply.
13. Sheet 4 also includes a bituminous drive and parking lot buildup. The pavement layers are referenced as Grade B and Grade C mixes which aren't specified any longer by the Maine Department of Transportation (MDOT). Current MDOT pavement specifications should be added to this detail.
14. Section 5 in the submission package includes a September 12, 2018 letter from the Portland Water District's (PWD) Robert Bartels confirming adequate water supply and pressure and noting that the current water service should suffice for the expansion needs. This letter includes two conditions of service regarding a backflow preventer installation and a meter upgrade. A note should be added to the plans regarding these two PWD conditions.
15. Section 5 in the submission package also includes an August 3, 2018 letter from Albert Frick of Albert Frick Associates regarding the suitability of using the current septic system to meet the needs of the expanded student population. We defer to the Code Enforcement Officer as to the appropriateness of this approach.
16. Section 7 in the submission package includes a September 26, 2018 memorandum on sight distance from Transportation Engineer Randall Dunton of Gorrill-Palmer. This memo indicates that ample sight distance to meet the Town and the MDOT sight distance requirements. The measured sight distances and their source should be added to the plan. A note should be added to the plan reiterating the traffic engineer's recommendation that signage and vegetation be kept out of sightlines or maintained below two feet in elevation. The plan should specifically call out any clearing of any existing vegetation that needs be removed.
17. Although it appears that Two Lights Road should have ample capacity to handle the traffic needs of the proposed expansion, the traffic engineer should provide an opinion on the road's capacity to meet the project demands so that the Planning Board can base their evaluation on that statement.

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: John Mitchell, Mitchell & Associates