

January 18, 2022 **Revised Jan. 27, 2022** 

Ms. Martha Taylor, Town Planner Newbury Planning Board 12 Kent Way Byfield, Massachusetts 01922

Re: The Governor's Academy

Parker River Environmental Studies Building

1 Elm Street, Byfield, MA

MAI Project No. 8490

Dear Ms. Taylor and Members of the Planning Board:

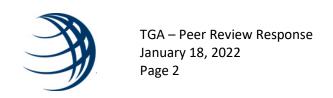
On behalf of The Governor's Academy (TGA), Meridian Associates, Inc. (MAI) would like to provide responses to comments contained in the letter provided to the Board by Joseph J. Serwatka, P.E. (JJS) dated December 30, 2021 regarding the site plan set and stormwater calculations by MAI dated December 3, 2021. MAI provides the following responses in the order that the comments were presented (JJS comments shown in italics for reference):

#### Overall Site Plan, sheet C1:

- 1. The plan labels "future curbing and landscape improvements along drive" that may be for reference only, and not part the site plan approval.
- 1. That is correct, for reference only. It should be noted that these landscape improvements will provide a reduction in impervious area and associated runoff while enhancing the approach to the new PRESB.
- 2. A cantilever dock, gangway and float have been added to the plans. Given the proposed narrow limit of work adjacent to the Parker River, it is not obvious how the proper equipment and materials will be brought in to construct the proposed "cast-in-place concrete anchor block" shown on the plans. The board may want the engineer to address how this will occur.
- 2. The existing gravel drive off of Middle Road will be used for access to this area. We will coordinate with the contractor that a "mini" concrete mixer is to be used and is appropriate for the amount of concrete proposed for the anchor block. No heavy construction vehicles will use this access drive.

#### **Layout & Materials Plan, sheet C2:**

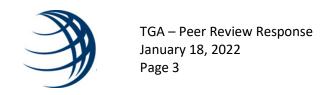
1. The vertical curb around the proposed parking area should be identified as granite, concrete, etc.



- 1. The vertical curbing around the proposed parking area will be vertical granite curbing. Plans shall be updated.
- 2. A "raised boardwalk" is proposed between the building and dock. Given that the limit of work shown is 7-8' wide, the board may want the engineer/architect to address what equipment will be used to construct the ramp and haul materials.
- 2. The equipment and materials will be brought in from the existing gravel access road (off Middle Road). We understand the equipment to install the "pin-pier" footings (see enclosed Detail Sheet A5.2) are handheld (think jack-hammer) so heavy construction vehicles are not necessary.
- 3. The proposed water and electric service should be shown between the building and dock. The board may want a "limit of work" line shown in this area, as the work involves excavation on a steep slope.
- 3. These lines are shown on sheet C3. Plans will be updated to show the limit of work. These services are planned to only be approximately 2 feet below grade, so disturbance should be minimal.
- 4. The board may want a snow storage area to be depicted on the plan, as would be typical.
- 4. Snow storage will be in the existing "earth pile" area. A note will be added to the updated plans.

#### **Grading, Drainage & Utilities Plan, sheet C3:**

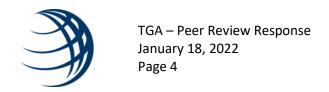
- 1. The proposed sewermain between SMH-1 and SMH-2 has a bend in it. Changes in direction should only occur at manholes.
  - 1. This line will be straightened and SMH-2 to be relocated to remove pipe conflicts (see comment 4. below) on revised plans.
- 2. The size, material and slope of the proposed sewer service to the building should be provided, as would be typical.
- 2. The All sewer lines are to be 6" PVC or Newbury DPW approved equal (see Utility Note 16 on plan). The slope will be added to revised plans.
- 3. Two fire hydrants are shown on the plan, about 100 feet apart, which is unusual.
- 3. The Fire Department requested these two hydrants during our original meetings for the project (Nov. 2017), one within 50 feet of the PRESB building and one at the end of the proposed drive.
- 4. There appears to be a conflict between the proposed 6" sewermain and the existing 12" HDPE into DMH5. The engineer should review this.
- 4. See response to comment 1. above.



- 5. It appears that all proposed grading is not accounted for between basin IB-1 and the 100' wetland buffer. The engineer should review this.
- 5. This grading will be updated on the revised plans.
- 6. It appears that substantial ledge removal will be required to accommodate the installation of the utilities to the building. The board may want the engineer to address whether this will be done by hammering or drilling/blasting.
- 6. We anticipate only hammering will be used to remove ledge for utility installation.
- 7. The "raised boardwalk" appears to be 2-3 feet above grade in some locations, but at grade in other locations. The watershed maps appear to assume that surface runoff will be able to flow under the boardwalk. The board may want the engineer to address this by providing adequate details of the boardwalk, and verify that surface runoff will not be blocked.
- 7. The boardwalk is intended to maintain an elevation of approximately 2 feet above grade for its entire run (see enclosed Detail Sheet A5.2) and allow for runoff to flow underneath. Conflicting elevations will be updated on the plans.
- 8. A detail is provided on sheet C6 for basin IB-1, but not IB-2 or 3. Details should be provided, as would be typical, not only for construction, but to demonstrate compliance with the Policy.
- 8. Basin IB-1 was detailed specifically for the Outlet Control Structure (OCS), whereas basin IB-2 & 3 only have stone spillways, which are fairly simple. A Stone Spillway Detail has been added to sheet C6.
- 9. The engineer should address how all of the proposed infiltration basins comply with table IB.1 Site Criteria for Infiltration Basins, from volume 2, chapter 2 of the Policy.
- 9. As these basins have not changed from the original approvals, we consider the infiltration basins in compliance with the Stormwater Policy. If there is a specific criteria missing please point out and we can address.
- 10. The engineer should address how access is provided to basins IB-2 and 3 in order to conduct maintenance and inspections.
- 10. Access can be provided from the existing gravel access road. This will be shown on the revised plans.

# <u>Landscape & Lighting Plan, sheet C4:</u>

- 1. Relative to infiltration basin design, the Policy states "never plant trees or shrubs in the basin". The plan calls for 16 shrubs in basin IB-2. The engineer should address this issue.
- 1. This basin (IB-2) is intended to act similar to a rain garden, using planting to treat the runoff. It should be noted that this basin is mainly capturing roof runoff and that the Policy recommends rain gardens for applications near Critical Areas and cold-water fisheries.



- 2. The plan is stamped/signed by a professional engineer, rather than a landscape architect, as is typical. The board may want a landscape architect stamp on the plan, as many of the landscape notes refer to "the landscape architect".
- 2. The Landscape Plan will be stamped by a landscape architect for the revised set.
- 3. The plant schedule lists 6 trees, but they do not appear to be located on the plan. The engineer should address this.
- 3. The table will be updated.
- 4. Street and pedestrian lights are shown on the plan, no details or illumination numbers are provided.
- 4. Lighting for the project is confined to the walkway and building and will be minimal. Specific fixtures have not yet been selected. No lighting will affect surrounding properties or abutters.
- 5. The Proposed Planting Legend has a symbol for "existing tree to remain and be protected", within the limit of work, but the sheet C3 shows grading changes around many of these trees. The engineer should address how the trees can protected and graded around at the same time.
- 5. A revised Site Preparation Plan (sheet C5) was provided for our recent Conservation meeting to address this issue (See revised sheet C5 enclosed). This plan now provides a note to coordinate between the tree protection and boardwalk installation and associated erosion control. This revised plan will be incorporated into the revised set.

# **Landscape & Lighting Plan, sheet C4:**

- 1. Rather than placing a silt sock at the limit of work near the proposed building, the only erosion control is 100 feet downslope, adjacent to the Parker River. The board may want erosion control shown at the building site.
- 1. See revised Site Preparation Plan (sheet C5) enclosed and comment 5. above.
- 2. The board may want soil and material stockpile areas to be shown on the plan, as would be typical.
- 2. The area near the existing earth pile area can be utilized for a material stockpile area. We will show this on the updated plans.

# **Landscape & Lighting Plan, sheet C4:**

- 1. The report should be stamped and signed by a professional engineer, as would be typical.
- 1. See The report was stamped in the Checklist for Stormwater Report section (near the back of the report). We will have the cover sheet stamped also.
- 2. The 11X17 watershed maps are difficult to read. Full-size maps would be helpful.
- 2. Full size watershed maps will be provided.



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- 3. As mentioned previously, the engineer should address how the proposed infiltration basins comply with table IB.1 Site Criteria for Infiltration Basins. Adequate access to the basins should also be addressed.
- 3. We consider the infiltration basins in compliance with the Stormwater Policy. If there is a specific criteria missing please point out and we can address. See comment 10. for sheet C3 above in regards to access to basins IB-2 & 3.

Thank you for your consideration of these responses. We look forward to addressing any additional questions at our hearing this Wednesday (1/19/22). Please contact our office is you have any questions.

Sincerely,

**MERIDIAN ASSOCIATES, INC.** 

Drew Garvin, EIT

Senior Project Engineer

Copy: Joseph Serwatka, Peer Review Consultant

Tom Woodruff, TGA

Flansburgh

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