



July 6, 2022

Ms. Valerie Oorthuys, Town Planner
Bolton Town Hall
663 Main Street
Bolton, MA 01740

Re: Seventh Peer Review – Comprehensive Permit Application
Mallard Lane, Bolton MA

Dear Ms. Oorthuys:

The Horsley Witten Group (HW) is pleased to provide the Bolton Zoning Board of Appeals (ZBA) with this letter report summarizing our seventh review of the residential development proposed along South Bolton Road between Wheeler Road and Spectacle Hill Road in Bolton, MA. The Applicant and property Owner, James Morin has filed a Comprehensive Permit, updated to include the construction of eight detached age-restricted single family residential dwellings with one common driveway. The 4.70-acre undeveloped parcel includes off-site wetland areas as shown on the project plans prepared by Ducharme & Dillis Civil Design Group, Inc.

The proposed HW understands through conversations with the Bolton Conservation Agent that a Determination of Applicability was issued by the Bolton Conservation Commission indicating the need for the Applicant to file a Notice of Intent (NOI) with the Conservation Commission for work proposed within the 100-foot buffer to the wetland area. While we understand that an NOI has not yet been filed, HW recently received a letter from the Applicant's wetland professional responding to our comments from October 14, 2021, January 11, 2022, where our comments had been reiterated, and June 1, 2022, where HW had additional wetlands comments.

The following comments and responses are based upon HW's three prior letters and:

- Letter re: Comprehensive Permit Application, Mallard Lane – Bolton, MA, prepared by Norse Environmental Services, Inc., and dated June 14, 2022.

Wetlands Review

To reiterate from HW's June 1, 2022 letter report, the Applicant had not appreciably responded to HW's initial wetlands comments from our initial October 14, 2021 letter or the January 11, 2022 letter. While the project design has been modified somewhat, our original six comments regarding impacts to wetlands and associated buffer zones still stand. New comments related to the revised design that were presented in our June 1, 2022 letter continue the previous numbering sequence, beginning with #7.

In order to keep all of the wetlands comments together, here we include all of our comments made since last fall. These are somewhat abbreviated as indicated by an ellipsis '(...)' and include *HW's previous responses as presented in italicized font*. Photos and images have been removed. **HW's follow up comments include a summary of the responses from the**

Applicant's letter dated June 14, 2022, and any additional comments or recommendations are presented in bold font and dated.

October 2021/January 2022 Wetlands Comments

The Existing Conditions Plan indicates that an isolated wetland area is situated entirely on the property located at 31 Spectacle Hill Road with buffer zones extending onto the project site, including the locally regulated 0 to 25-foot Prohibition Area and the 25 to 100-foot "Adjacent Upland Resource Area" (AURA) as regulated under the Bolton Wetland Bylaw (Chapter 233) (...).

The Conservation Agent has submitted comments to the ZBA recommending that the property needs a wetland delineation, ideally submitted under an Abbreviated Notice of Resource Area Delineation (ANRAD). In these comments, and based upon HW's conversation with the Conservation Agent, we understand that the Applicant had filed a Request for Determination of Applicability (RDA) and received a "Positive 2A" Determination, acknowledging the presence of this wetland area. We understand that there may be additional wetland area(s) on or adjacent to this property which would also confer jurisdictional buffer zones onto this project site (...). We further understand that the Applicant has not yet approached the Bolton Conservation Commission with an application filing.

1. Given the lack of definitive information and missing flagging stations and missing wetlands on the plans, HW recommends that the Applicant at a minimum, seek to have the boundaries of all wetland areas established by a wetland professional and survey located on to the existing conditions plan, and file an ANRAD with the Conservation Commission to confirm the wetland boundary and any other resources that may affect the jurisdictional status of this site under the Massachusetts Wetlands Protection Act and/or the Bolton Wetland Bylaw.

HW (01/11/2022): The Applicant's consultant, Norse Environmental Services, Inc., has responded that the Commission issued a Determination of Applicability on April 23, 2019, and included a copy of a Determination (...) [which will expire] October 7, 2023.

The Determination includes the following in the description:

"At this time there is no work proposed. The applicant is inquiring about the boundaries regarding an isolated basin-like area established as a Potential Vernal Pool on NHESP survey."

The Determination also clarifies under the Determination 2a. that the boundary delineations of the following resource areas are confirmed as accurate:

"Solely the isolated basin area/Potential Vernal Pool shown on plans referenced above. At this time, the boundary not inclusive of jurisdictional offsets, are confirmed. The applicant shall file a Notice of Intent for the proposed project inclusive of all wetland resource areas delineated, and their adjacent offsets."

The recently submitted plans include a newly delineated wetland area, the "B-series" which was not part of the Commission's Determination. And although the Applicant's consultant indicates that the area is "too small to be considered a potential or certified

vernal pool” and “is unlikely to hold water for a minimum of two months to allow the amphibians to metamorphosis,” this has not yet been approved by the Conservation Commission.

HW (01/11/2022): HW notes that our original recommendation regarding a filing with Conservation still stands, and that the boundaries of the additional wetland areas shown on the plans will need to be confirmed through the NOI review process or under an ANRAD. (...)

HW (07/06/22): The Applicant has responded that they will file an NOI and will seek to have the B-series wetland boundary confirmed through that process. HW has no further comment at this time.

2. Based on HW’s calculations from the PDF plans, the isolated wetland area is approximately 10,900 SF (0.25 ac). As part of the wetland resource area determination, the Applicant should also seek to confirm the jurisdictional status of this area as an Isolated Land Subject to Flooding (ILSF).

HW (01/11/2022): The Applicant’s consultant has responded that the Applicant will verify the ILSF status during the permitting process with the Conservation Commission.

HW (07/06/22): HW has no further comment at this time.

(...)

HW notes that the isolated wetland area has been identified by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) as a Potential Vernal Pool (PVP #2912) (...). In speaking with the Conservation Agent, we understand that a local school group has collected sufficient data to certify this wetland area as a state-recognized Certified Vernal Pool. However, in accordance with Section 3.07(3)(e), the Conservation Commission may recognize and regulate vernal pool habitat regardless of its NHESP certification status.

Section 3.07 of the local wetlands regulations defines vernal pools as follows:

(...) Vernal pools are found across the landscape where small woodland depressions, swales or kettle holes collect spring runoff or intercept seasonally high groundwater tables. They may not be connected to other wetlands. Any wetland resource exhibiting these characteristics can be considered a vernal pool and may or may not be certified.

Section 3.07(2) contains a rebuttable presumption:

Where a freshwater wetland’s physical characteristics conform to those defined for vernal pool habitat, the Conservation Commission shall presume the existence of a vernal pool and vernal pool habitat. This presumption is unconditional and shall be made notwithstanding certification or lack thereof by the Massachusetts Division of Wildlife and Fisheries and notwithstanding the site might not be located within another Resource Area.

Based upon this, and the information from the Conservation Agent, it is HW’s professional opinion that this wetland area meets the presumption under the local regulations as a vernal

pool. The Grading & Drainage Plan indicates that portions of the proposed access road, portions of three of the proposed structures, installation of a sewer line, site grading, and construction of a structural retaining wall in closest proximity to the wetland area (i.e., just outside of the 25-foot wetland buffer as shown). Additional work may occur within jurisdiction of the other wetland area (...). Finally, the project site entrance will result in grading within the buffer zone to the wetland across South Bolton Road to the north.

3. As the performance standards for work within 100-feet of a vernal pool are more stringent and include a limitation on the removal of trees within 100 feet of a vernal pool, we recommend that the Applicant at a minimum file an ANRAD with the Conservation Commission to confirm the wetland boundary as recommended above, and quantify the removal of trees in this area as well as the amount of disturbance within vernal pool habitat, such that the Town may better understand the environmental implications of the extent of work proposed within the 100-foot buffer. Similar calculations should be presented for the project work within the buffer zone to the other wetland areas.

HW (01/11/2022): Comment stands.

HW (07/06/22): The Applicant does not intend to file an ANRAD but refers back to the RDA filing. Please see HW's response to Comment #1 above. As part of the Applicant's response to our Comment #7 (below), we understand that the A-series wetland is in the process of being certified as a Certified Vernal Pool by NHESP.

In addition, the Applicant proposes to clear and remove 21 trees measuring 6" DBH or larger within 100 feet of the vernal pool. HW recommends that the Applicant demonstrate how the removal of these trees and any subsequent restoration of vernal pool habitat will not have an adverse effect on the vernal pool.

Given the proximity of proposed work within 25 feet of the isolated wetland area, the wetlands regulations under Section 3.02(3) grant discretion to the Conservation Commission to seek mitigation commensurate within the scope of the project.

4. Should the Town determine that the project has met its burden for avoiding and minimizing impacts to resource areas and the AURA, we recommend that the Town consider appropriate mitigation measures for this project site.

HW (01/11/2022): Comment stands.

HW (07/06/22): The Applicant notes that the project plans have since been revised and that no work will occur within 25 feet of the isolated wetlands, and that the buffer zone along the westerly edge of the roadway and behind Units 7 & 8. Restoration efforts include the application of a native seed mix (New England Conservation Wildlife Mix) and be allowed to naturalize. The Applicant indicates that signage may also be added to prevent further encroachment.

Restoration using a seed mix does not appear to commensurate with the loss of mature trees and shrubs within sensitive buffer zone areas. HW recommends that the Applicant include a more robust restoration planting plan and our comment from the January 11, 2022 letter still stands:

Once the Applicant has provided this additional information to the Town, HW may have additional comments regarding the protection of wetland resource areas and specifically on the local interests protected under the local wetlands bylaw and regulations.

Relief Sought from Local Wetlands Bylaw and Regulations

5. HW recommends that the Applicant specifically state if it is seeking relief from the local bylaws as part of the Comprehensive Permit application, including under §233 – Wetlands to allow for alterations within the adjacent upland resource areas (AURA).

HW (01/11/2022): *Comment stands.*

The local wetlands bylaw requires that the Applicant consider project alternatives:

Where the presumption set forth in Section 1.18.2 is not overcome, the Applicant shall prove by a preponderance of the evidence that there are no practicable and substantially equivalent economic alternatives to the proposed project with less adverse effects on the interests identified in Section 1.18.1. Further, the Applicant shall prove that the work including proposed mitigation will have no significant adverse or cumulative adverse effect on the resource areas or resource interests.

HW (07/06/22): The Applicant notes that a list of requested waivers was submitted as part of the [March 30, 2022] letter from Dillis and Roy, Civil Design Group. Please see HW's additional responses under Comment #7 below.

6. HW recommends that the Town take into consideration the need for the Applicant to demonstrate to the satisfaction of the Conservation Commission that all efforts have been made to avoid and minimize resource area and local buffer (AURA) alterations when reviewing the Comprehensive Permit application.

HW (01/11/2022): *Comment stands.*

HW (07/06/22): The Applicant has provided a list of alternatives with respect to work occurring first near the A-series Wetland, and then near the B-series Wetland, although does not present project alternatives for the project as a whole. HW notes that the alternatives presented for work near wetland areas appear to be reasoned, in part due to the unusual configuration of the northern portion of the property. The Applicant also alludes to the unfeasibility of further reducing site impacts, which HW interprets as part of the project economics.

The Applicant's 6/14/22 response letter also notes that under existing conditions, the full 100-foot AURA is not realized due to the existing 12-foot wide gravel driveway and notes that the Applicant intends to restore the area with a

conservation wildlife seed mix and allow the area to naturalize, which may invite the spread of undesirable invasive species.

However, in order to support the interests of the wetland resource areas, HW believes that a more robust planting schedule, consisting of trees, shrubs, and groundcover to replace the proposed loss of 21 mature trees will not only address the local considerations for the AURA, but will also serve to protect the wetlands interests where these isolated wetlands, including a certifiable vernal pool, may not be protected under the Massachusetts Wetlands Protection Act. Additional restoration of the areas behind Unit #7 may also be in order, where the existing tree line provides a full 100-foot buffer zone (AURA) to the B-series wetland.

HW recommends that the Applicant be required to submit a restoration plan specifically with respect to the extensive grading associated with the roadway and the work behind Units #7 and #8. The restoration plan should include a warranty or other contingency to ensure that the plantings are maintained, and that the resultant restoration area is dominated by native plants.

One of our original points raised was the potential for the largest of the wetland areas (Wetland A) to serve as vernal pool habitat, which has been documented by a local school group. (...)

7. HW recommends that the vernal pool status of Wetland A be confirmed as it relates to the protection of vernal pool habitat in light of the proposed project.

HW (07/06/22): The Applicant confirms that the A-series wetland is being certified as a vernal pool.

(...) [T]he Applicant has outlined the specific relief sought from the Bolton Wetlands By-Law Section 233-2 to allow alterations depicted on the plans within the adjacent upland resource area and buffer zones to wetland resource areas.

HW feels that it is important for the Town to understand the implication of the requested relief. This includes relief from the wetland setbacks relating to proposed grading, pavement, and a retaining wall associated with the main road; setbacks from proposed wells for four of the eight proposed units, placement of a stormwater outfall, and one of the units (Unit 7) as outlined in the table below. (...)

Relief Sought	Distance to Wetland (feet)	Wetland Designation
Grading*	30	A, B
Pavement	56	A
Retaining wall	44	A
Drainage Outlet	62	A
Well (Unit 1)	73	A
Well (Unit 6)	100	AB
Well (Unit 7)	57	B
Well (Unit 8)	78	BA
Unit 7	90	B

*Grading is proposed along the western side of Wetland A.

8. HW recommends that the Applicant quantify the amount of lost forested vernal pool habitat that will occur as a result of the proposed site grading and installation of the proposed road as currently designed and assess how the loss of this forested habitat would affect the vernal pool habitat.

HW (07/06/22): The Applicant notes that approximately 13,406 SF (0.31 ac) will be permanently disturbed within the AURA surrounding the A-series Wetland, including the removal of 21 mature trees. Restoration is proposed using a native seed mix and the area allowed to naturalize. Again, HW recommends that the Town seek to have a more robust restoration plan for temporary disturbance within the AURA/buffer zone to the wetlands in order to protect the interests that these wetlands serve.

9. HW recommends that the Town seek to have the Applicant qualify and quantify how the proposed wells for Units 1 and 6-8 will affect the water levels in the potential vernal pool within Wetland A.

HW (07/06/22): The Applicant responded that the vernal pool is fed by groundwater and that the wells proposed for these units are artesian wells located below the water table where water is drawn from an aquifer confined below impermeable rock. (Note that it is the wells from Units 1 and 8, not 6, that are located within the AURA to the A-series wetland.)

We consulted with our Principal Hydrogeologist who noted that it is unlikely that the wells are artesian well, which are uncommon, but rather are deep wells that would be drawing from the groundwater that also likely supports the vernal pool, where the hydroperiod supporting the vernal pool species is sensitive. HW continues to believe that it would be useful for the Applicant to quantify the amount of water withdrawn from these wells or else seek to have the wells relocated further from the wetland area.

10. HW recommends that the Town seek to have the Applicant qualify and quantify how the proposed stormwater outfall will affect the water levels and the water quality in the potential vernal pool within Wetland A.

HW (07/06/22): The Applicant has responded that the stormwater outfall is for emergency overflows and located 75 feet from the vernal pool and would not affect water levels or water quality. HW agrees that the outfall is located approximately 75 feet from the vernal pool, that the peak flow rate is slightly reduced, and that the stormwater will be treated prior to discharge. HW has no further comment.

11. HW recommends that the Applicant quantify how much of the vernal pool habitat will be lost as a result of site grading and installation of the proposed road.

HW (07/06/22): As noted above under comment #8, approximately 0.31 ac of disturbance will occur. HW's comments regarding the need for a more robust planting plan still stand.

Conclusions

HW recommends that the Bolton Zoning Board of Appeals require that the Applicant provide a more robust planting plan adjacent to the vernal pool and evaluate the feasibility of relocating two of the wells further from the wetland. The Applicant is advised that provision of these comments does not relieve him/her of the responsibility to comply with all Commonwealth of Massachusetts laws, and federal regulations as applicable to this project. Please contact Janet Carter Bernardo at jbernardo@horsleywitten.com or Amy Ball at aball@horsleywitten.com or at 508-833-6600 if you have any questions regarding these comments.

Sincerely,

Horsley Witten Group, Inc.



Janet Carter Bernardo, P.E.
Associate Principal



Amy M. Ball, PWS, CWS
Senior Project Manager – Senior Ecologist