



June 16, 2021

Mr. John Lee, Chairman  
135 School Street  
Walpole, MA 02081  
United States

**Re: Moose Hill Condominiums  
Comprehensive Permit (40B) Peer Review – Letter 2  
Walpole, Massachusetts**

Dear Mr. Chairman:

**TT 6/16/2021 Update**

The Applicant has provided revised submission materials addressing comments provided in our previous letter including the following documents:

- A plan set (Plans) titled "Site Development Plan "Moose Hill Condominiums" Walpole, Massachusetts", dated March 10, 2020 (Revised May 6, 2021) by GLM Engineering Consultants, Inc. (GLM).
- Stormwater Management Report (Stormwater Report) dated March 10, 2020 (Revised May 6, 2021), prepared by GLM.
- Architectural elevations dated June 1, 2021 prepared by South Coast and Associates, Inc. (SCA).
- A letter from GLM dated May 6, 2021 responding to comments in our January 20, 2021 comment letter.

**Additional Items Reviewed**

- Comment letters from Walpole Fire Department (March 31, 2021 and June 16, 2021) and Town Engineer (May 25, 2021).

The revised Plans and supporting information were reviewed against our previous comment letter (January 20, 2021) and most of our concerns have been substantively addressed. Our two principal concerns (1) vehicle turnaround and (2) infiltration system spacing/documentation have been addressed well enough so that any outstanding issues can be addressed easily in a revised submittal or as a condition of approval.

Comment status is summarized below with gray text representing information contained in previous correspondence while new information is shown in black text. Comments noted as "addressed" will be removed from future correspondence and comment numbering will be maintained throughout the review.

**Existing Conditions Plan**

1. Show test pit and percolation test locations on the existing conditions plan.

*TT 6/16/2021 – Requested information has been added. Comment Addressed*

2. If possible, show trees and fencing that run along the project boundary with the adjacent multi-family development.

*TT 6/16/2021 – Requested information has been added. Comment Addressed*

3. Remove label reference "Proposed Gas Line"

*TT 6/16/2021 – Requested information has been added. Comment Addressed*

4. Provide datum reference (NAVD88 or town datum preferably)

*TT 6/16/2021 – Requested information has been added. Comment Addressed*

### Layout Plan

5. The development proposes a single means of access that is approximately 340 feet long and only 20 feet wide with no accommodation to change vehicle direction other than driveways of individual units. The Fire Department has requested a turn-around be provided and we recommend the applicant coordinate with the Fire Department and make necessary changes to the plans. Modifying roadway widths or lengths may also result in modification of the proposed stormwater infiltration system.

*TT 6/16/2021 – Revised plans show a traditional cul-de-sac turn-around at the end of the site driveway meeting Town of Walpole dimensional requirements. Comment Addressed*

6. The plans provide 3 parking spaces per unit (1 garage, 2 driveway) in an efficient/effective layout but provide no dedicated visitor spaces. While 3 spaces/unit provides reasonable total accommodation, given each space is assigned to a unit, they will be difficult to share. Suggest applicant consider providing 1 or 2 additional spaces that are unassigned to units.

*TT 6/16/2021 – Revised plans include four (4) visitor parking spaces at the cul-de-sac which in our opinion is a reasonable accommodation given the size of the development. Comment Addressed*

7. Driveway depths are shown at 23 feet in front of garages but are not labeled for spaces in front of the porch. Those spaces should maintain a minimum unobstructed depth of 20 feet so parked vehicles do not extend into the narrow travel way.

*TT 6/16/2021 – Revised plans show an 18' parking stall depth for spaces in front of porches which meets Town of Walpole dimensional requirement. Comment Addressed*

8. The 15' driveway radius shown at the intersection with Moose Hill Road is reasonable but may not accommodate the turning radius of the largest Walpole fire apparatus. Please provide a figure showing how fire apparatus will access the site and confirm it meets the requirements noted in the comment letter from the Fire Department.

*TT 6/16/2021 – Truck turning movements have not been provided. **Comment Unresolved** but could be addressed with condition requiring the project obtain Fire Department approval of the driveway design prior to receiving building permits.*

9. Landscape and Lighting Plans should be provided for review and to confirm there are no potential conflicts with proposed underground utilities or infiltration systems.

*TT 6/16/2021 – Plans have not been provided. **Comment Unresolved** but could be addressed with condition requiring landscape and lighting plans be submitted for review and approval by the Board prior to receiving building permits.*

### Grading and Utilities Plans

10. The plans only show two test pits that are relatively closely spaced and not within the footprint of a stormwater infiltration system or a proposed sewage disposal area. Stormwater standards and septic

system regulations require test pits be conducted within the proposed system footprint. At a minimum, additional testing should be provided with better representative coverage across the site and with enough detail to determine estimated seasonal high groundwater at infiltration systems.

*TT 6/16/2021 – The response letter indicates testing is currently being planned and will be provided when complete. Although we do not expect soil conditions to vary dramatically from that shown we request the applicant provide results of additional testing and include those results on the Plans. **Comment Unresolved.***

11. Please provide a datum reference on any sheets where contours are shown.

*TT 6/16/2021 – Requested information has been added. Comment Addressed*

12. The plans do not appear to comply with the minimum 50-foot setback required between infiltration structures and Title 5 systems. See Mass. Stormwater Handbook Vol 1, Ch 1, page 8. This conflict must be addressed to prove viability of the project layout/density shown.

*TT 6/16/2021 – Plans now show compliance with the 50-foot setback requirement. Comment Addressed*

13. Please be advised, the plans show several infiltration systems close to each other and at or near allowed setbacks leaving very little, if any, room for adjustment. As such we recommend additional detail be provided regarding the design and layout of the septic system including proposed septic tank locations, absorption system sizing and location of reserve area to demonstrate that spacing shown is capable of meeting applicable regulations.

*TT 6/16/2021 – Additional information has been provided indicating the systems can be designed to meet applicable design guidance and requirements. Please be advised, septic systems will require review and approval by the Walpole Board of Health per the requirements of 310 CMR 15 (Title 5) at which time compliance with mandatory offsets and setbacks can be confirmed. Comment Addressed*

14. The proposed underground infiltration systems provide no accommodation for overflow during storms exceeding the design capacity or in the event of system failure. Please consider when addressing issues noted above and make sure to direct potential surcharge away from sewage disposal areas.

*TT 6/16/2021 – Stormwater infiltration systems have been located in areas where they are not likely to impact subsurface sewage disposal systems. However, we expect minor changes will be needed to address stormwater modeling comments provided later and request the applicant provide confirmation that overflows will be directed away from sewage disposal systems. Comment Addressed*

15. Water, gas and roof drain lines are proposed to run along the rear of the property in a relatively narrow area. While the area provided can accommodate the utilities shown, access in the future will be difficult and conditions may be required to ensure access is available for repairs.

*TT 6/16/2021 – The revised plans show an excavatable area between the decks and the property line varying in width from 10' - 15' which should be adequate space in which to install and maintain utilities shown. Comment Addressed*

16. No hydrants are shown on the plans. Hydrant placement should be coordinated with the Fire Department and shown on the plans to confirm arrangement with other site features.

*TT 6/16/2021 – There are still no hydrants proposed on site. The Walpole Fire Department and the Town Engineer have requested the water main be extended to a new hydrant installed at the cul-de-sac. The additional hydrant will provide much better emergency hydrant access and will assist in water main*

chlorination and maintenance. We recommend a condition requiring the project to provide a hydrant at the cul-de-sac. **Comment Unresolved**

17. The plans do not show elements needed to comply with the 44% TSS removal pre-treatment requirement for infiltration systems in soils with fast infiltration rates. Please describe how this standard will be met and note the components on the plans.

*TT 6/16/2021 – Requested information has been added. Comment Addressed*

### **Erosion Control Plan**

18. Ideally the temporary construction entrance would not extend into the public right of way. If possible, provide a paved driveway apron to connect the subject property to the travel way at the start of construction and pull the temporary stone construction entrance back so material is not tracked directly onto Moose Hill Road.

*TT 6/16/2021 – Plans still show the temporary construction entrance extending into the public right of way. We recommend any decision included a condition requiring the project to construct a paved apron extending from Moosehill Road to the edge of the right of way and that the stone construction entrance be located on the subject property to avoid potential damage of the Moosehill Road pavement that would likely occur if the stone entrance were allowed to connect at the street edge. **Comment Unresolved***

19. Soil stockpile(s) should not be over an area that will be used for infiltration system. Suggest deferring construction of building 4 until after construction of other site elements are complete so the building 4 area can be used for soil stockpile without impact to infiltration areas.

*TT 6/16/2021 – Requested information has been added. Comment Addressed*

20. Please review notes to correct references to other projects (see reference to Burns Ave in note 9).

*TT 6/16/2021 – Comment Addressed*

### **Stormwater Report**

21. Report indicates project will be connected to town sewer which does not appear to be the case based on the plans. Please clarify.

*TT 6/16/2021 – Comment Addressed*

22. Please provide page numbers and table numbers in future reports.

*TT 6/16/2021 – Comment Addressed*

23. It is unclear if runoff originating from offsite flows into the project site. Runoff from offsite should either be diverted around the stormwater management system or be incorporated in its sizing.

*TT 6/16/2021 – Comment Addressed*

24. Report and plans do not address 44% TSS removal pretreatment and report takes credit for catchbasins in series which is not allowed per stormwater standards. Please address in future submittals.

*TT 6/16/2021 – Comment Addressed*

25. Modeling for Pond 3 appears to calculate infiltration over “wetted perimeter”. Please adjust models so that infiltration is calculated over system bottom area and infiltration rates are constant per guidance in Vol 3 Chapter 1 of the Stormwater Handbook. Pond model should not include additional exfiltration that may be attributable to system sidewalls or due to vertical load of water column. Please address in future submittals.

*TT 6/16/2021 – Revised materials include new stormwater modeling which addresses the bulk of our prior concern but still requires minor adjustment to comply with applicable guidance. Specifically, the model should be adjusted to include static infiltration over surface area only (not variable infiltration over wetted perimeter). Incorporation of these modeling changes will likely result in minor modification of system performance/sizing/layout but is not expected to substantially impact site layout. We request the applicant provide revised modeling and confirm at least on foot of freeboard is provided during the 100-year storm event. **Comment Unresolved.***

26. Final plans should include monitoring well at infiltration basin location.

*TT 6/16/2021 – Comment Addressed*

27. Catch basins are required to be inspected 4 times per year. The O&M plan should be modified accordingly.

*TT 6/16/2021 – Comment Addressed*

## Traffic

28. The project accurately forecasts the relatively minor increase in new traffic in comparison to current volumes on Moose Hill Road. Project traffic is not expected to significantly impact operations at nearby intersections.

*TT 6/16/2021 – Comment did not require response. Comment Addressed*

29. Site distance triangles should be shown on the approved plans.

*TT 6/16/2021 – Site distance triangles have not been shown on the plans. Site distance triangles as well as stop bar and stop sign recommended in the April 27, 2020 traffic memorandum should be included on plans that will be referenced in a decision. **Comment Unresolved.***

30. As noted earlier, there are no proposed accommodations for fire truck or any other vehicle turnaround. We recommend the applicant coordinate with the Fire Department to determine an acceptable accommodation. Any turnaround meeting Fire Department requirements will be suitable to accommodate the range of typical uses.

*TT 6/16/2021 – Revised plans include a cul-de-sac meeting minimum dimensions. Comment Addressed*

31. A Fire Truck Access Plan should be provided.

*TT 6/16/2021 – Fire Truck Access Plan has not been provided. Given the relatively straight roadway geometry and the addition of the cul-de-sac turnaround we do not expect fire truck access to be a problem. We still request a plan be provided to confirm suitability of entrance curb radii. **Comment Unresolved.***

32. Pedestrian and traffic volumes are expected to be low decreasing the need for on-site sidewalks.

*TT 6/16/2021 – Comment did not require response. Comment Addressed*

Additional Comments (June 16, 2021)

33. Please include North arrows on all plans in future submittals.
34. The roadway grading pattern indicates an awkward transition from gutter line flow along the north curbed through the middle of the cul-de-sac. Please revise grading to maintain consistent defined flow path to collection feature.
35. Sign and stamp Stormwater Checklist and sign Illicit Discharge Compliance Statement
36. The box indicating separation from groundwater is less than 4 feet and that a mounding analysis has been provided (Standard 3) is checked. No mounding analysis was found in documentation provided.
37. Please show snow storage areas on the Plans.

If you have any questions or comments, please feel free to contact us at (508) 786-2230.

Very truly yours,



Sean P. Reardon, P.E.  
Vice President

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