

April 26, 2022

Pembroke Planning Board  
Town Hall  
100 Center Street  
Pembroke, MA 02359

ATTN: Matthew Heins, Planning Board Assistant

**RE: Response to Peer Review  
Site Plan – 631 Washington Street  
Pembroke, Massachusetts  
Applicant: Nike Construction Services, LLC**

Dear Matthew and Board Members:

Attached please find revised plans and a revised Stormwater Management Report for the above referenced project. Since the revisions did not change some of the Appendix's in the Report, several of the attachments have been left out as noted in the report itself.

The revisions have been made in response to the feedback from the Pembroke DPW Director, Eugene Fulmine Jr in his emails dated 4/11/2022 and 4/25/2022 (which were also sent to Planning Board Assistant, Matthew Heins). Eugene indicated that if the stormwater system were designed to contain the 25-year storm event, analysis of the municipal drainage system would not be required. He also confirmed on 4/25/2022 that a piped connection would not be required from the infiltration basin outlet.

The plans also address the peer review comments from Thomas C. Houston, P.E., AICP, Consulting Engineer, dated April 11, 2022 and summarized in his "*Peer Review Status, 631 Washington Street, Pembroke, MA*" received the same day. To simplify our letter, we have responded to the summarized Unresolved Issues in the "*Peer Review Status, 631 Washington Street, Pembroke, MA*" document. Our responses to the review comments are presented below and follow the format of the summary document. The original review comments are presented in *italic* text and our responses are presented in ***bold italic text***.

### UNRESOLVED ISSUES

#### Stormwater

1. *A revised analysis of subcatchment 1A should be provided using a shorter time of concentration for pavement runoff.*

***Not applicable; the proposed infiltration basin has been relocated and the proposed subcatchment 4A is no longer associated with the existing subcatchment 1A.***

2. *Runoff from predevelopment subcatchment 1A and post development subcatchment 4P should be revised using a consistent time of concentration for the sheet flow segment of the flow path.*

***Similar to the above response, the subcatchment areas have been modified due to the relocation of the basin. The time of concentrations for the existing subcatchment area 1A and proposed 1A are the same.***

3. *Revise the overall predevelopment and post development runoff calculations*



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incorporating the above revisions and verify the post development peak rate of runoff to the "Discharge Catchbasin" is less than the predevelopment peak rate of runoff.

**Revised runoff calculations have been provided for the new stormwater basin location showing no overflow from the basin for up to and including the 25-year storm event. Additionally, the proposed flows to the downstream catch basin are greatly reduced.**

**Additionally, the groundwater elevation in testhole D-1 is at elevation =61.00 and the bottom of the basin has been designed at elevation=65.00, which provides 4 feet of separation, eliminating the need for a groundwater mounding analysis.**

4. Provide an analysis of the capacity of the Old Washington Street stormdrain system that complies with a "Scope" developed by the Department of Public Works.

**As mentioned above, the DPW Director, Eugene Fulmine Jr confirmed in his email dated 4/11/2022 that an analysis of the municipal drainage system was not required if the basin were designed to contain up to and including the 25-yr storm event.**

5. Obtain authorization from the Department of Public Works to connect to the municipal stormdrain system or revise the on-site stormwater system to eliminate the off-site discharge.

**DPW Director, Eugene Fulmine Jr confirmed in his email dated 4/25/2022 that it would be acceptable to allow storms greater than the 25-yr storm event to discharge towards the existing catch basin and that a piped connection would not be required.**

6. Provide fencing for the stormwater basin.

**The stormwater basin is just over 2.5' deep; the Applicant requests that a fence around the basin not be required, similar to other infiltrations basins in Town and so as not to detract from the landscaping and appearance of the site.**

#### Site Planning

7. Obtain Fire Department approval of fire truck access. The submitted swept path plan shows the fire truck path that is restricted by three parked vehicles.

**We reached out to Acting Fire Chief James Shea regarding the emergency vehicle access to the site and he did not raise any concerns in his email dated March 28, 2022.**

8. Supplement plantings by installing a 6-ft. high opaque wood board fence along the north and east property lines in order to mitigate vehicular noise and headlight impacts on future project residents.

**The applicant requests that the existing vegetated screening proposed be allowed in lieu of the fencing recommended above to provide a more natural wooded look, with the taller evergreens providing better tear round noise and headlight mitigation.**

#### CONDITIONS OF APPROVAL

##### Post Decision

1. Within 30 days of expiration of the 20-day appeal period or resolution by

*the courts, reformat the drawings to comply with Registry of Deeds standards and record the drawings and the Board's Decision in the Registry of Deeds.*

**No Comment**

Prior to Construction

**The Applicant has requested that all of the items below be included as conditions of approval.**

2. *Obtain a MassDOT Access Permit or document contact with MassDOT establishing that a permit is not required.*
3. *Obtain a Land Disturbance Permit.*
4. *Submit a copy of the SWPPP.*
5. *Revise the O&M Plan by submitting a plan of BMPs to facilitate location by maintenance personnel.*
6. *Determine the pipe diameter of the fire protection service and requirements for a PIV valve for the five-unit building.*
7. *Modify the five-unit building design to introduce jogs to eliminate the "long flat façade."*

During Occupancy

8. *Given that the design relies on a "No Exfiltration" analysis, require a Professional Engineer to observe the on-site stormwater basin following a 24-hour storm with rain exceeding 3.35 inches and submit a written report to the Board stating that the basin drained within 72-hours.*

**The applicant notes that this will be required as part of the Post Construction O&M Plan and its ongoing inspections after development is completed.**

Should you have any questions, please do not hesitate to contact this office.

Very truly yours,

MERRILL ENGINEERS AND LAND SURVEYORS



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Dana Altobello, PE

Senior Project Manager

CC: Bill Pappastratis  
Atty Jeff De Lisi  
Atty Mark Stiles