



Stantec Consulting Services Inc.
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MEMORANDUM

To:	Mr. Pascal Rettig, Chairman Amesbury Planning Board	Date:	May 15, 2026
Cc:	Mr. Nipun Jain, Director of Planning Community & Economic Development	Applicant:	Frank Cavallaro
		Owner:	Frank Cavallaro
From:	Gerard J. Fortin, P.E. Michael Leach Stantec Consulting Services Inc.	RE:	Tax Map 59 Lot 47 29 Lake Attitash Road Development Stormwater Peer Review Project No. 179451250

As requested, Stantec Consulting Services, Inc. (Stantec) has conducted an initial review of the stormwater report and system submitted with the site plan and Special Permit Application relative to the proposed development located at 29 Lake Attitash Road and submitted on behalf of Frank Cavallaro (Applicant). The review was based primarily on plans and stormwater report provided by Millennium Engineering, Inc. (MEI) and additional supporting documents/information that was available and obtained from the City's Planning Board project website. We note the following available materials have been obtained:

1. Site Plan in Amesbury, MA at 29 Lake Attitash Road Prepared for Frank Cavallaro sheets 1 and 2 of 2 dated Sept 29, 2025 and last revised on 1/19/26 prepared by Millennium Engineering, Inc.;
2. Stormwater Management Report for the proposed improvements at 29 Lake Attitash Road Amesbury MA prepared for Frank Cavallaro dated December 10, 2025 prepared by Millennium Engineering, Inc.;
3. Copy of Application for Special Permit by Frank Cavallaro dated 9/29/25;
4. Copy of Certified Abutter List;
5. Copy of StreamStats printout for tributary to Lake Attitash dated 2025-10-15;
6. Copy of "Architectural Plans" submitted Sept 29, 2025.

As submitted, the Applicant proposes to construct a single family dwelling on an existing vacant residential lot located in the City's designated Water Resources Protection District (WRPD) as defined in Amesbury Bylaws under Section XIV. The Applicant's submission indicates the subject parcel is located within the Zone C portion of the WRPD and includes wetlands. The submitted plans indicate a proposed single family dwelling that is served by underground sewer and water services and overhead wires with connections from Lake Attitash Road. Other site improvements include a permeable driveway, permeable walkway and a stormwater rain garden basin with all work located within the 100-foot wetland buffer. The topographic information indicates the elevation change from north to south of approximately four feet (102 to 98). Based upon the above submitted information, we offer the following general comments:

General Comments:

1. The Applicant has provided a stormwater management report for the project. We note the following general concerns:
 - A. The Applicant's design appears to indicate the proposed rain garden stormwater basin will be excavated into the existing ground with depths below the existing ground varying up to one foot to construct the bottom elevation of 99.75 for the proposed bioretention basin. The bioretention detail on sheet 2 indicates the depth below the basin bottom to install the



manufactured bioretention treatment layers is another 28 inches (~2.3 feet) below the basin bottom or to elevation 97.4. The test pits provided indicate the seasonal high water table varies from 16-18 inches below the existing ground and we note this equates to elevation 99.0 to 99.16 as noted on sheet 2 of the plan set. The design plan indicate the existing elevations along the wetlands adjacent to the basin vary from 98 to 99.5 and implies the bottom of the proposed stormwater basin structure would be below the existing seasonal high water table and does not provide the minimum two foot of separation above the seasonal high water table required per Volume 2 Chapter 2: Structural BMP Specifications for the Massachusetts Stormwater Handbook. We recommend the Applicant review the BMP Specifications for the Massachusetts Stormwater Handbook and update the bioretention basin design as necessary, in compliance with the Massachusetts Stormwater Handbook.

- B. The Applicant's design approach does not consider or address the uphill contributing watershed flows to the subject parcel and the proposed stormwater facilities. Based upon the existing topographic information presented, it appears the existing roadway runoff contributes flow onto the subject parcel. In addition, it is unknown if there is existing runoff contributing from abutting lot 46 to the subject parcel. The Applicant shall update the design approach to consider and address the entire watershed flow to and through the subject parcel under this application and provide an appropriate design for all the watershed flows. Please demonstrate compliance is achieved with no increase in runoff under the post development conditions to each abutting property in compliance with Massachusetts Stormwater Management Standards.
- C. The Applicant's design indicates improvements within the Lake Attitash Road right-of-way but the design approach does not address or consider the proposed driveway impacts to Lake Attitash Road for the proposed site development. Please review and revise the analysis and design to demonstrate no increase in runoff to the roadway occurs in compliance with Massachusetts Stormwater Management Standards.
- D. The typical guidance for projects in the WRPD is to demonstrate compliance with Massachusetts Stormwater Management Standards. We note the following:
 - 1. Standard 1 – No New Untreated Discharges: This standard appears to be met with the proposed site drainage directed to the rain garden.
 - 2. Standard 2 – Peak Rate Attenuation: As noted above, the Applicant's analysis and calculations do not address all the existing watershed flows or the proposed impacts to all abutters and compliance with this standard has yet to be demonstrated. Please update the analysis to demonstrate compliance is achieved with no increase in runoff under the post development conditions to each abutter including the roadway.
 - 3. Standard 2: The post development calculation for subcatchment P1B does not properly provide the CN value of 98 for the driveway and sidewalk area noted to be "pervious pavers". The analysis does not provide any calculations relative to these being "pervious" and infiltrating. In addition, the amount of impervious area appears to be more than indicated in the calculations. Please review and revise the calculations accordingly and update the analysis to demonstrate compliance is achieved with no increase in runoff under the post development conditions.



4. Standard 2: The post development pond routing analysis for pond 7P implies storage is available below the outlet, but the analysis does not include any infiltration as noted in the report description for groundwater recharge and to empty the pond. Please revise the analysis to include recharge or revise to eliminate storage below the outlet since volume below the outlet would not be available when the pond is full or under frozen conditions. Please review and revise the calculations accordingly and update the analysis to demonstrate compliance is achieved with no increase in runoff under the post development conditions.
5. Standard 2: The post development pond routing analysis for pond 7P implies a rectangular weir is proposed with a height to 4.50 feet, but the spot elevations note the proposed pond embankment is only 0.1 feet below (101.15 Weir vs .101.25 top of bank) and is not representative of the design presented. With an earthen embankment proposed at the outlet location, it is not likely that a rectangular outlet can be constructed. Please review and revise the analysis accordingly.
6. Standard 3 – Recharge: The project report discusses recharge by infiltration, however the analysis does not include any infiltration calculations as noted above or recharge information. Please review and revised the analysis accordingly.
7. Standard 4 – Water Quality: The report includes a TSS removal worksheet, but the calculation does not appear to be properly completed consistent with the Structural BMP Specifications for the Massachusetts Stormwater Handbook. The specifications note that 90% TSS removal requires pretreatment. Please review and revise and clarify any pretreatment devices if applicable.
8. Standard 4: The removal of the nitrogen and phosphorus in the report should be reviewed and revised, if necessary, based upon the final design of the proposed stormwater system per Section XIV.I.7(a)(1).
9. Standard 4: The report does not include a Long Term Pollution Prevention and Operations and Maintenance Plan document for maintenance of the post construction BMP's. We recommend the Applicant prepare a Long Term Pollution Prevention and Operations and Maintenance Plan document and recommend the document be a separate complete document as typically requested by the Board. This document may become part of the special permit conditions under this application per Section XIV.I.B.7(a)(2)of the bylaws.
10. Standard 5 – Land Use with Higher Potential Pollutant Loads: This standard does not apply to this project.
11. Standard 6 – Critical Areas: The project location is within a WRPD and this area is considered to be a Critical Area for the City of Amesbury. The Applicant should update the analysis to demonstrate the proposed project will provide water quality treatment consistent with Standard 4.
12. Standard 6: Although not included in the report, the information provided separately to the Conservation Commission indicates the site is not in a Critical Habitat location.
13. Standard 7 - Redevelopment: This standard does not apply to this project.
14. Standard 8 – Construction Period Controls: The report does not include a document or information relative to the proposed construction. We note sheet 2 includes a silt soxx detail. We recommend the Applicant update the plans to include discussion about construction sequence, construction management, good



May 15, 2025
Stormwater Peer Review for
29 Lake Attitash Road Development
Applicant: Frank Cavallaro
Page 4 of 5

- housekeeping practices during construction and minimizing exposure during construction consistent with this standard.
15. Standard 9 – Operation and Maintenance Plan: We would anticipate this standard would be part of the information provided under Standard 4 above.
 16. Standard 10 – Illicit Discharges to Drainage System: We would anticipate this information would be part of the information provided under Standard 4 above.
2. The Applicant's site plan indicates flow arrows at the driveway to direct runoff to the rain garden, but does not provide spot elevations to clarify and demonstrate the grading design intent for proper construction. Please include spot elevations in the updated grading design to clarify the proper grading intent and for proper construction. Please provide documentation from the DPW that the updated driveway is acceptable for the Planning Board's project file.
 3. We recommend the site plan be updated to include dimensions of the proposed driveway and sidewalks and the plans set updated to include details of the proposed features for proper construction.
 4. The proposed bioretention detail on sheet 2 indicates the proposed filter media does not meet the specifications noted for the BMP in the Massachusetts Stormwater Handbook. In addition, we recommend the detail be expanded to clarify the width of the proposed embankment and detail of the proposed outlet weir for proper construction. The Applicant should review and revise the bioretention detail accordingly.
 5. The design indicates overhead utility services from the roadway which does not comply with section XI.C.8.m requiring underground utilities from existing roadway utilities. Please update the design accordingly for compliance and provide a utility trench detail in the revised plan set submission.
 6. The project proposes clearing on the site, but the plans do not identify all trees larger than 8" per XI.C.5.b of the Zoning Bylaws. We note portions of the existing tree canopy along the property lines are shown to remain undisturbed. The trees to remain should also be noted on the site plan.
 7. The plan set does not include a driveway sight distance plan and profile that demonstrates the minimum sight distance of 300 feet is provided. We recommend the plan set be revised accordingly.

Other information for Planning Board Consideration under a Special Permit:

1. Special Permit under Section XIV of the Bylaws:
 - A. The submission appears to indicate a proposed impervious area of approximately 1,440 SF including the improvements in Lake Attitash Road and appear to be less than 15 percent of the subject lot area ($10,919 \text{ SF} \times 0.15 = 1,638 \text{ SF}$) per Section XIV.I.7(a).
 - B. The stormwater report does not include information relative to the proposed recharge per Section XIV.I.7(a)(1).

Design with community in mind



May 15, 2025
Stormwater Peer Review for
29 Lake Attitash Road Development
Applicant: Frank Cavallaro
Page 5 of 5

2. The Applicant has submitted an NOI application to the Conservation Commission and DEP for this project that is currently under consideration by the Commission and DEP.

Summary:

We recommend the Applicant arrange a meeting with the Community and Economic Department before addressing the issues noted above. After the meeting, we recommend the Applicant address the comments and issues noted above and resubmit revised drawings and supporting information. We recommend the Applicant provide a summary response letter with the revised stormwater report, drawings, and supporting information addressing each comment noted above.

GJF/ml