



Open Comments

Defer to Board

Conditions of Approval

PROJECT NAME Beaver Brook Road PEER REVIEW

DATE 7/25/2025

UPDATED: _____

PROJECT NO. 25008.04

Peer Review Comment Form

NO.	SHEET NO.	SECTION	GREEN'S COMMENT	Applicant's RESPONSE	CONFIRMED BY	DATE
Stormwater Review						
	PLANS & DETAILS					
1	1	§ 38-16. Erosion and Sediment Control Plan. C.7.	An erosion control barrier is shown in the details but not shown on the plans. Please revise plans to show where the erosion control barrier will be installed.	The proposed erosion control barrier location has been added to the revised site plans.		
2	1	§ 38-16. Erosion and Sediment Control Plan. C.7.	How will the SCMs be protected during construction? Please consider adding notes to the plan that explains how and when this protection will happen. If erosion control barrier are to be used, then these should be show on the plans.	Erosion Control notes have been added to the revised plans on Sheet 3. The proposed erosion control barrier location has been added to the revised site plans.		
3	1	MA Stormwater Handbook V2CH2	MA stormwater handbook recommends an infiltration basin have a minimum 50 ft distance from any slope greater than 15%. The infiltration basins are located on a slope where it slopes down greater than 15%. There is concern of potential breakout in the slope. Please revise the slope or provide a measure to mitigate breakout in the slope.	A cross-section for each stormwater management area has been added to the revised plans. An impermeable core has been specified within each berm to prevent potential breakout in the slope		
4	1	MA Stormwater Handbook V2CH2	MA stormwater handbook recommends a minimum 50 ft distance between an infiltration basin and a soil absorption system. The proposed reserve leaching area is within 50ft of the northern infiltration basin. Please revise.	The plan has been revised to provide a 50-foot offset from the proposed reserve leaching area to the proposed infiltration basin.		
5	1		It is recommended to continue the swale to the northern infiltration basin to make sure the runoff gets to basin and doesn't bypass it. Please revise.	The swale design has been revised. It is currently proposed as a drainage channel that routes the stormwater runoff from the driveway to a deep sump catch basin. The catch basin was implemented to add additional TSS & to limit disturbance.		
6	2		The OCS-1 detail has a callout for a 6" orifice in the same location as the 12" pipe leaving the OCS. Please explain how the 6" orifice works with the 12" pipe in the same location.	The 6" orifice has been removed in OCS-1 & the 12" outlet pipe has been revised to a 6" outlet pipe.		
	STORMWATER MANAGEMENT REPORT					
7	Recharge Calculations	MA Stormwater Handbook Standard 3 Recharge	A drawdown calculation was only performed for the infiltration basin. A drawdown calculation shall be provided for all SCMs. Please revise.	Drawdown calculations have been revised & provided for both infiltration basins. On-site soil testing has confirmed that the underlying soils are HSG "B" rather than HSG "C" as shown on the NRCS Web Soil Survey.		
8	Recharge Calculations	MA Stormwater Handbook Standard 3 Recharge	The recharge calculations show that the recharge volume required is 1,002 cf but the provided is 889. Therefore, the recharge requirement is not met. Please revise to meet the recharge requirement.	Both stormwater management areas have been revised & their supporting calculations have been updated. Please refer to the attached Stormwater Report.		
9	Water Quality Calculations	MA Stormwater Handbook Standard 4 Water Quality/ Stormwater Management and Erosion Control Regulations 4.1.3.5.2.	The water quality calculations shows that the required water quality volume is 1,477 cf but only 889 cf is provided. Therefore, the water quality requirement is not met. The TSS calculations show that 85% TSS removal is achieved but Littleton Regulations require 90% TSS removal. Please revise to meet the water quality requirement.	Additional treatment has been provided to each stormwater management area to achieve 90% TSS. Please refer to the attached Stormwater Report.		
10	Pretreatment Calculations	MA Stormwater Handbook V2CH2	A grass channel is proposed for pretreatment prior to discharge to the infiltration basin. When impervious surfaces sheet flow use a vegetated filter strip on a gentle slope or pea gravel diaphragm. The vegetated filter strip shall meet the requirements of the MA stormwater handbook. Grass channels shall not exceed 1 feet per second and depth shall not exceed 4" during the 24 hour water quality storm event. Provide a minimum of 1 foot of freeboard above the 10-year storm event. Please provide back up calculations to show the grass channel meets the requirements of the MA stormwater handbook.	The swale design has been revised. It is currently proposed as a drainage channel that routes the stormwater runoff from the driveway to a deep sump catch basin. The catch basin was implemented to add additional TSS & to limit disturbance.		
11	Pretreatment Calculations		The TSS calculations indicate there is a sediment forebay pretreating the southern infiltration basin. The sediment forebay is not shown on the plans. Please show on the plans and provide backup calculations showing it is sized for the receiving area.	Both stormwater management areas including each respective sediment forebay has been revised & their supporting calculations have been updated. Please refer to the attached Stormwater Report.		
12	O&M	MA Stormwater Handbook V2CH2	The MA Stormwater Handbook recommends inspecting Grassed Channels semi-annually the first year and once a year thereafter. Please revise.	The swale design has been revised. It is currently proposed as a drainage channel that routes the stormwater runoff from the driveway to a deep sump catch basin. The catch basin was implemented to add additional TSS & to limit disturbance.		
13	O&M	§ 38-18. Operation and Maintenance Plan. B. 3.	Signature(s) of the owner(s) required for O&M plan. We recommend this be made a condition of approval.	The Applicant has no dispute with this requirement.		
14	Test Pits	§ 38-18. Stormwater Management Plan. C.5.	It appears that no test pits were performed. Please perform test pits in accordance with Chapter 38 and the MA stormwater handbook. Please provide ESHGW for each SCM to confirm adequate separation to groundwater and bedrock is provided.	On-site soil testing has been conducted. The testing has confirmed that the underlying soils are HSG "B" rather than HSG "C" as shown on the NRCS Web Soil Survey. The HydroCAD Model has been updated accordingly. Please refer to the included test pit data on the revised Site Plans on Sheet 3.		
15	MA Stormwater Checklist		The MA stormwater checklist and illicit discharge statement is missing. Since the Littleton Bylaw requires compliance with the Stormwater Standards please provide.	The MA Stormwater Checklist & Illicit Discharge Statement have been included in the revised Stormwater Report.		
16	HydroCAD		Per direction of the conservation commission, please revise calculations to use the NRCC rainfall data for the 100 year storm event which is 7.98".	The 100 year storm event has been revised to 7.98". Please refer to the attached HydroCAD Report in the revised Stormwater Report.		
17	HydroCAD	MA Stormwater Handbook V2CH2	The peak elevation for the 100-year storm for the northern infiltration basin is elevation 241.77 and the top of the basin is at elevation 242. It is recommended that the basin have 1' of freeboard. Please revise.	Both infiltration basins have been revised & each basin provides 1-foot of freeboard. Please refer to the added SWMA details on Sheet 4.		
18	Watershed Plans		The watershed plans indicate there is only one discharge point to the north instead of indicating multiple discharge points which would include discharging to each of the wetlands and the property to the north. Please clarify why the wetlands were not considered as discharge points.	A larger DEP documented wetland exists just north of the property in which all of the smaller wetlands along the northern property line are tributary to. This larger wetland system was delineated as a common discharge point (Design Point A).		



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19	Watershed Plans		The watershed plans are cut off at the southern property line. The watershed boundary should extend to the south to include the full catchment area. Also, the boundary between A.3 and A.1 seems incorrect southeast of the southern building. The boundary should go straight south and not turn east before the property line. The concern is that the areas going to the infiltration basins are larger than what is modeled and the basins may not have capacity to handle the additional runoff from the property to the south. Please revise.	Watershed boundaries have been extended south to ensure that each infiltration basin has been designed with sufficient capacity. Subcatchment A.1 has been revised to extend directly south.		