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October 08, 2021

Karen Sherman  
Town Planner  
Holliston Planning Board  
703 Washington Street  
Holliston, MA 01746

**Re: Stormwater Design Engineering Peer Review #3  
“Eagle Path Definitive Subdivision” Holliston, MA  
CMG ID 2021-118**

Dear Karen,

CMG is providing this letter report detailing our third engineering peer review of the stormwater management system design for the “Eagle Path Definitive Subdivision” in Holliston, MA. The project is located on a 6.2 +/- Acre parcel identified by the Town of Holliston’s Tax Assessor’s Map as Map 8.E, Block 3, Lot 19.3 (the “Site”). The project Applicant, *Eagle Path, LLC* is proposing a four (4) lot conventional residential subdivision within the Residential District.

CMG is in receipt of the following documents:

- Site Plans entitled “Eagle Path Definitive Subdivision in Holliston, Massachusetts” prepared by Guerriere & Halnon, Inc., dated 4/29/21, revise date September 30, 2021.
- “Stormwater Management Report – Eagle Path, Holliston, MA” prepared by Guerriere & Halnon, Inc., dated 4/29/21, revise date September 30, 2021.
- Guerriere & Halnon (G&H) Email, date 10/7/21 with “Apron Design Dimensions” calculation summary sheet and “Existing Conditions & Demolition Plan” revise date 9/30/21.

G&H’s plan and stormwater report revisions listed above address the majority of CMG’s September 22, 2021 peer review letter #2 comments relating to the engineering and stormwater design comments.

CMG is providing the following remaining comments for the Planning Board’s consideration:

2. Pre and Post Development Condition plans should provide a legend and clearly depict time of concentration flow paths, lengths, slopes and NRCS soil type limits.

*G&H Response: Pre & Post Development Condition Plans now show flow paths, lengths, slopes and NRCS soil types.*

CMG Comment #2: Topographic contours must be clearly labeled on the Pre and Post Development Conditions plans.

*G&H Response #2: Plans have been corrected.*

**CMG Comment #3: Comment remains. Existing and proposed contours are not labelled on the Post-Development Conditions Plan.**

4. The proposed stormwater basin's outlet control pipe appears to have incorrect inlet invert and outlet invert elevations labelled on Sheets 4 & 5. (Plans show 345.00 and 344.50, assume inverts should be 245.00 and 244.50 respectively)

*G&H Response: Basin outlet control pipe call out had incorrect elevations (345.00 & 344.50). These have been corrected.*

CMG Comment #2: Plans and HydroCAD calculations still contain inconsistencies. Outlet control structure detail must be provided to verify construction detail, orifice openings, frame and grate, and outlet pipe size, type, and inverts.

HydroCAD model incorrectly models the outlet structure. Two (2) 6" orifices should be routed through "Device #1" in order to take into account the 0.47' ponding within the basin and not listed as primary outlets.

HydroCAD model lists 18" round culvert primary outlet and plans show a 12" RCP.

Basin 5P emergency spillway is not included in the HydroCAD model.

Proposed Basin 5P does not currently provide 1 ft. of freeboard during the 100-year storm event.

*G&H Response #2: Basin Berm is set at 248.50 which is above the 247.42 / 100 Yr. Elevation.*

**CMG Comment #3: Hydrocad calculations should also include the 248.5 top of berm elevation & additional volume to be consistent with design plan.**

8. Drain pipe type, length, and slopes should also be labelled on the plan view.

*G&H Response: Drain pipe type, length and slope information has been labeled on the plan view.*

CMG Comment #2: Comment remains. Labels are shown on the profile only and should be added to the plan view & grading and utility plan.

*G&H Response #2: Plans have been corrected.*

**CMG Comment #3: Comment remains. Drain pipe type, length, and slopes should also be labelled on the plan view & grading and utility plan.**

10. Drain Manhole and Catch Basin structure frames and grates should match those specified in Holliston Subdivision Regulations Section 5.3.4.

*G&H Response: Note added to details regarding DMH and catch basin to meet Subdivision Regulations 5.3.4.*

CMG Comment #2: Catch Basin frame and grate reference is still incorrect on Sheet 7 of 8.

*G&H Response #2: Plans have been corrected.*

**CMG Comment #3: Comment remains. Catch Basin frame and grate reference is still incorrect on Sheet 7 of 8. Should specify “Standard catch basin frame and grate shall be manufactured by East Jordan Iron Works (formerly LeBaron Foundry Co. Catalog No. LF 248-2) or approved equal.**

14. Location of the proposed stormwater basin’s 15” RCP outlet pipe may cause potential erosion issues to the abutting N/F Themeli property located northeast of the Site. Applicant’s Engineer should provide additional information to verify the basin’s outlet will not cause flooding or erosion on abutting property and/or relocate this discharge point in a manner to direct runoff towards the nearby wetlands.

*G&H Response: Discharge from the basin goes onto a rip-rap apron that is sized to mitigate the 100 yr. peak flow. Calculations are in the Storm water report.*

CMG Comment #2: Comment Remains. Stormwater basin outlet pipe discharge location should be moved further to the south to direct storm water closer to the off-site wetlands as discussed on the 9/15/21 Site walk with the Applicant’s Engineer. A construction detail for the “outlet control structure” must be provided to clarify orifice openings, grate construction, and outlet pipe configuration.

*G&H Response #2: Outlet pipe discharge location revised. Outlet control structure removed.*

**CMG Comment #3: Location should be adjacent to 100-year spillway should be shifted more towards the center of the stormwater basin.**

**Recommend the Applicant’s Engineer consider the design of an 8~12” depth level spreader for the 15” outlet pipe discharge between the stormwater basin and the existing stone wall to lessen the effects of the point discharge.**

**Location of proposed erosion control in this area should be shifted back 5 ft. +/- and staked along edge of stone wall adjacent to the three (3) N/F Themeli properties to allow room for the construction of a level spreader.**

15. Rip-rap aprons are not shown for proposed flared end sections for basin inlet and outlet control structures as necessary to dissipate flow and deter scouring of vegetated slopes. Applicant’s engineer should also provide design calculations for proposed riprap aprons to verify the apron size will be able to handle 100-year flow events.

*G&H Response: Rip-rap aprons have been added to both the inlet and outlet points. Calculations are provided in the Storm Water report to show that the proposed apron size will handle a 100 year flood.*

CMG Comment #2: A rip-rap apron is not shown for the 12” RCP pipe FES inlet to the forebay; sizing calculations should also be provided. Rip-rap apron locations and dimensions should be called out on the Grading and Drainage Plan Sheet 4 of 8.

*G&H Response #2: Rip Rap added to plans and calculations provided.*

**CMG Comment #3: 12” FES forebay inlet rip-rap apron dimensions should be noted on Sheet 4 of 8 “Grading and Utility Plan”.**

37. Site is > 1 Acre therefore an EPA NPDES Construction General Permit (CGP) registration and SWPPP is required to be submitted prior to construction. CMG recommends the Planning Board make this a condition of approval.

*G&H Response: Acknowledged*

**CMG recommends this as a Condition of Approval**

43. As the Responsible party will not be the final Owner of the parcel (Lot 3) where the Stormwater Basin BMP is located, a copy of the DRAFT – “plan and easement deed” that allows site access for the legal entity to operate and maintain BMP functions must be provided.

*G&H Response: This is typically done at the end of the project with the Road Acceptance. We request that this be made a condition of approval.*

**CMG recommends this as a Condition of Approval**

If you have any questions or need additional information please contact me at (508) 864-6802.

Sincerely,  
CMG ENVIRONMENTAL, INC.



David T. Faist, PE  
Principal Engineer – Engineering Services