

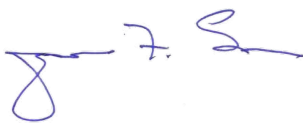
Town of Simsbury

933 HOPMEADOW STREET ~ SIMSBURY, CONNECTICUT 06070

Engineering Department

MEMORANDUM

To: Michael Glidden, Director of Planning and Community Development

From: Jerome F. Shea, P.E., Town Engineer 

Cc: Daniel Gannon, Project Engineer

Subject: **Engineering Comments – Talcott Mountain Self Storage
34 Hopmeadow Street**

Date: April 27, 2021

I have completed a review of the Site Plan Application for development of 34 Hopmeadow Street received by our department on April 9, 2021:

1. Plan set titled “Talcott Mountain Self Storage” prepared by F.A. Hesketh & Associates, Inc., dated April 6, 2021.
2. Storm Water Management Report prepared by F.A. Hesketh & Associates, Inc., dated April 6, 2021.

The applicant has submitted plans for a site plan approval to develop approximately 5.0 acres of a 17.73 acre property on Hopmeadow Street. The development includes a self-storage facility comprised of six one-story buildings totaling 55,000 S.F with 4 associated paved parking spaces, a paved driveway, and paved access to all storage units.

The following comments are based on a review the submitted materials:

1. There is a slight discrepancy in the rainfall values in the NOAA Atlas 14 “Point Precipitation Frequency Estimates” in Attachment 1, the Hydrographs in Attachment 3, and the Hydraflow Rainfall Report in Attachment 3. Although these discrepancies are minor, check and adjust the rainfall values to reflect the NOAA Atlas 14 rainfall data.
2. The bottom elevation of the Water Quality Basin is 190.0’ whereas the existing grade in this area is higher than 195.0’. The cut of greater than 5 feet may encounter groundwater and therefore reduce the amount of storage available within the basin. Provide test pit data in this location to confirm depth to groundwater. Testing should be witness by a qualified professional licensed in the State of Connecticut.

3. Conform to Section 5.2.1.g. of the Highway Construction and Design Standards for the Town of Simsbury – *Minimum Cover: A minimum cover of 2.5 feet shall be provided for all drain pipes unless special designs, as approved by the Town Engineer, are utilized.* Several pipes are proposed with significantly less than 2.5 feet of cover, some with less than 1 foot of cover.
4. The Hydraflow Pond Report shows a total storage from elevation 190.00 to 194.00 of 26,287 cubic feet. The Water Quality Volume Size Calculations sheet shows a total provided storage from elevation 190.0 to 194.0 of 11,914 cubic feet. Please confirm the total storage of the Water Quality Basin and maintain the consistency across all calculations.
5. Based on the 2004 Connecticut Stormwater Quality Manual (CTSWQM), the proposed “Water Quality Basin” is considered a “Dry Detention Pond” as proposed. Dry Detention Basins are considered a Conventional Secondary Treatment Practice due to their water quantity control, but limited applicability for water quality control. Provide *rationale for why the practice meets the performance standards required for classification as a primary treatment practice*, as stated on page 11-3 of the CTSWQM. Alternatively, a sediment forebay enhancement should be considered to improve pretreatment of site runoff prior to entering infiltration / detention basin. It appears there may be adequate capacity in the basin to accommodate this enhancement.
6. A stone check dam is proposed within the infiltration / detention basin. Confirm whether this is intended to remain within the basin post-construction.
7. Labels for the subsurface chambers state “Bottom El.=”. Clarify whether this is the bottom elevation of the chamber or bottom elevation at the bottom of 6” stone bed beneath the chamber.
8. Add check dams in the proposed swale at the northeastern most corner of the site.
9. There is an “ECB” label on Sheet EC-1 which appears to be a slope protection, although there is no ECB in the legend or in the detail sheets. Provide more detail on what is required for slope protection.
10. Utility Notes #11 and #17 on Sheet UT-1 references Aquarion. #34 Hopmeadow Street is currently serviced by Avon Water Co. according to Town of Simsbury records.
11. Approval will be required by WPCA for connection to the sewer manhole off-site.
12. Provide hoods in all catch basins to trap grease, oils, debris, etc. prior to conveyance into the detention basin.
13. The Accessible Parking Space Layout Detail shows one accessible space and one van accessible space with accessible aisles on either side. This does not reflect what is proposed on the plan view.
14. Include on the final project plans a long-term maintenance plan for the stormwater management system.

15. Provide calculations that confirm WQV will drain from the detention basin within 48 -72 hours after a storm event.
16. Provide flared end and countermeasures at the roof drain outfalls to the detention basin to protect against erosion.
17. Provide evidence of a right to pass and repass onto the adjacent property to the north of the proposed development. Also, provide copies of any approvals obtained from the Connecticut Department of Transportation or the Office of State Transportation Administration for the project file.
18. Provide a detail for the detention / infiltration basin.
19. Some of the pipes from the subsurface chambers to catch basins / manholes are flowing upgradient although they are “downstream”. The design appears that the chambers will fill up prior to entering the larger pipe network. Consider providing an overflow at the surface for the downspouts in the event of a backup of runoff. Inspection ports should also be provided for these chambers.
20. If not already done, please coordinate with the Fire Marshal to review emergency access requirements for the site.

This favorable recommendation is subject to resolution of these outstanding comments to the satisfaction of the Engineering Department prior to final sign-off of the project.