



November 11, 2020

Mr. Andrew Bevilacqua, P.E.
Town Engineer
Town of North Haven
18 Church Street
North Haven, Connecticut 06473

Re: Applicant - GBRSTORZ, LLC
Resubdivision of Anderson Sunnyside Farm
318 Kings Highway

Mr. Bevilacqua, P.E.,

This letter is prepared to address your review comments that our office received via email dated 11/10/2020.

The following are your comments in italics font our response is provided in normal font. Also, enclosed are revised plans which reflect the review comments.

I'm in the process of reviewing your resubmission for the above. I believe that the new approach is a big improvement over the prior submission. Here are a couple of initial thoughts:

- *You are using an existing conditions curve number of 76 for woods/grass combo in 'C' soils. Your proposed condition lawn area curve number is 74. This implies that there is a greater potential for runoff in the existing wooded condition, than in the proposed lawn condition. I think it would be more appropriate to use a woods cover in fair (73), or good (70) condition. I sincerely doubt that the proposed lawns would be more effective at capturing runoff than an established wooded area.*

The runoff curve numbers have been adjusted in the HydroCad Stormwater modeling System. The revised peak rates of runoff produced at each catch basin in the drainage system (existing & proposed) are provided in tabular form for the 2-year, 10-year & 25-year storm events on the Existing Conditions & Developed Conditions drainage area maps. These maps can be found in the Engineering Summary Report.

- *Due to the prevalent groundwater issue in the area, I'd prefer to see the proposed detention basins provided with a low permeability liner in order to restrict infiltration.*

A low permeability woven fabric has been added to the stormwater management areas on lots 1, 2 & 7 and is shown on the Site Development Plan, sheet SDP-1 to limit stormwater exfiltration. A product cut sheet has been added to the Construction Details, sheet DN-2.

LRC Engineering & Surveying, DPC
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- *I'm concerned over the 6" low level outlet from the ponds, and the likelihood of clogging due to debris and vegetation. Proper maintenance of the basins will be critical in their long term effective function. A clogged outfall could result in long term ponding in the basin, adversely effecting available storage volume, and risking possible overtopping of the basin berm.*

Note 16 on the Site Development Plan, sheet SDP-I describes that the individual property owners will be responsible for routine cleaning and maintenance of all water quality measures/rain gardens/stormwater management areas, outlet pipes and spillways on their property. Maintenance agreements will be prepared and recorded on the land records describing the requirements for maintenance and inspections.

- *An additional swale is needed at the rear of Lot 8 in order to direct runoff away from 1952 & 1954 Hartford Turnpike.*

A grass lined swale has been added to the rear of lot 8 to direct stormwater runoff to the stormwater management areas as shown on the Site Development Plan, sheet SDP-I.

- *The detention systems and downstream piping should be constructed first, prior to clearing of the balance of the site.*

Note 24 on the Site Development Plan, sheet SDP-I instructs the site contractor to construct the stormwater management areas and downstream piping prior to clearing of the site.

- *Grass swales should be provided with a jute mesh or other type of temporary liner until sufficient vegetation is established to limit erosion.*

The Grassed Lined Swale Detail on the Detail sheet DN-I notes the installation of temporary high velocity synthetic matting C125 BN manufactured by North American Green to minimize erosion.

- *Detailed site plans must be submitted and approved for each individual building lot prior to issuance of a building permit.*

Note 16 on the Site Development Plan, sheet SDP-I describes that the individual plot plans for each lot will be required and approved by town staff prior to construction.

Sincerely,

LRC Engineering & Surveying, DPC



Richard Reynolds
Project Engineer