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October 6, 2021

Town of Wilton
Department of Public Works – Engineering Division
Attn: Frank Smeriglio, P.E. – Asst. Dir. Of Public Works/Town Engineer
238 Danbury Road
Wilton, CT 06897

Re: Property of Brian Angerame
30 Sturges Ridge Road
SUB #922

We are writing in regard to DPW Engineering's September 27, 2021 comments for the above-referenced parcel. We will respond to each of the comments in the order in which they appear on your review.

1. We have added the sight line distances to the site plan. It is important to note that the driveways as shown for the two proposed lots already exist as curb cuts, as the proposed driveway for Lot 1 is the same as the existing driveway, and the proposed driveway for Lot 2 is in the original location of the old dirt driveway that led to the barn that used to be on the property.

2. We have eliminated the connection to the Town catch basin.

3. We have modeled the existing site as Open Space in poor condition with a Hydrologic Soil Group "B" rating. It is important to note that this property is not a mature forest; it is an overgrown, effectively "abandoned" parcel. There was a house, lawn, driveways, a barn, and other hardscapes on the property prior to the demolition of the original house. The lot has sat undeveloped for nearly 14 years. During that time, invasive species have overtaken the property and are threatening the healthy, mature trees. When we performed the test holes for the septic system on each lot, we had to wade through pricker bushes, vines, weeds, and other plants that could hardly be described as "woods". As such, it is our professional opinion that the Runoff Curve Number used to describe the existing conditions is appropriate.

4. Tables I, II, and III in our Drainage Summary Report summarize the flow rates and volumes for all design storms for the "Site Northeast", "Site South" and "Site Southeast" sub-catchments, respectively.

5. We have enclosed a Directly Connected Impervious Area chart. All new impervious areas are either draining towards a Cultec system or sheet flowing onto adjacent pervious areas and thus can be considered "Disconnected".

6. Each lot, when developed, will have an as-built survey and engineer's certification letter prepared.

7. See responses to items 1-6 above.

8. We have changed the proposed access driveway for Lot 2 to a gravel driveway, and have also proposed a 40'-long curtain drain on the down-gradient side of the driveway to intercept runoff and prevent a point discharge.

9. We have enclosed with the Drainage Summary Report the Existing Conditions Watershed Map that shows the points of concern ("POC") to the neighbors. "POC-South" is the point of concern that drains towards the now or formerly Schneider & Schulte property; "POC-Southeast" is the point of concern from the subject parcel to the now or formerly Case & Pinkham properties; and "POC-Northeast" is the point of concern from the subject parcel to the now or formerly Case property. These POCs correspond to the "Site South", "Site Southeast" and "Site Northeast" sub-catchments identified in the Drainage Summary Report. We have demonstrated that for all design storms there should be no adverse impact on these parcels from stormwater runoff.

10. Groundwater from the footing drain from the house on Lot 1 will first have to flow through Lot 2, which is also owned by the applicant, prior to flowing onto adjacent parcels. The footing drain for the house on Lot 2 will discharge to a level spreader, so in effect the groundwater will just be moving from one underground drain to another. The level spreader will be set above the mottling depth, so groundwater will be able to flow through the *in situ* soils surrounding the spreader. Should water reach the surface, it still will need to travel over one-hundred (100) feet through native vegetation before it can reach a downstream neighbor. It is our professional opinion that the proposed footing drain outlets as shown are sufficient.

11. We have included in our Drainage Summary Report our Outlet Protection Calculations that show how the level spreaders for the Cultec unit overflows are of sufficient length to convert the point discharge from the outlet pipe into sheet flow.

We therefore ask that your department recommend approval of the project so that the owners may obtain approval through Planning & Zoning for the subdivision. Please contact us if you have any questions. Thank you very much for your time and assistance.

Sincerely,
Frangione Engineering, LLC

Robert M. Frangione, P.E.
Owner & Chief Engineer

Enclosures