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May 13, 2022

Town of Hinesburg Development Review Board
c/o: Mitchel Cypes, Development Review Coordinator
mcypes@hinesburg.org

RE: Proposed 8-Lot Subdivision - Laster Property
Preliminary Plat Submittal – Response to 5/5/22 Development Review Coordinator Comments

Dear Mitch,

Thank you for your preliminary review of the Preliminary Plat Submission for the above referenced project. Responses are outlined below. We look forward to addressing any additional comments at the upcoming Development Review Board meeting.

1. *Per several Orders (1, 2c, 2d+), portions of the proposed building envelopes are not locatable. Setbacks from property lines with monuments are fine. Setbacks from wetland buffers are not easily locatable. We will need a describable boundary, which includes line(s) that exclude the wetland buffer area.*

   The intent of the project is to restrict development within the class II wetland buffer. The building envelopes are shown to extend to the limit of the existing buffer.

2. *Per Orders 1 & 2f, the building envelopes and utilities need to be shown on the plat. There is plenty of information as to where these are located. I am fine having you update this at final plat.*

   Understood, utilities and building envelopes will be added to the Final Plat.

3. *Per Order 3c, the submittal does not mention any investigation of potential option for other access.*

   The proposed access off Mechanicsville Road results in the least amount of impact to existing environmental features. Shifting the access north would result in permanent impacts to the existing stream buffer. Shifting south would result in greater permanent and temporary impacts to the Class II wetland and buffer area. Visibility at Mechanicsville Road is very good at this location.

4. *Per Order 3d, did you have more coordination with the trails committee?*

   No. No trail connectivity is proposed as part of this portion of the development.

5. *Per Order 3f, please confirm that there is no need for any retaining walls.*

Site retaining walls are not included in the current design.

6. *Per Order 3h, the plans show garages 10-feet back from the front of the houses. This could be a requirement. There is no information on the rooflines. What do you propose?*

   Buildings on proposed lots 1 & 2 have been designed. The remaining 6 houses shown are representative only and subject to change.

7. *Per Order 3i, where less is more per the Town's outdoor lighting standards per Section 5.29 of the HZR, the DRB can require some lighting per Section 6.3 of the HSR. The one area of concern is by the proposed Mechanicsville crosswalk. Is there an existing light in that area? I plan to look later? If not, one may be needed.*

   No street light currently exists near the propose curb cut. There is no objection to including a street light mounted to the relocated power pole next to the new crosswalk, pending approval from the utility company and input from the town.

8. *Per Order 3k, I do have some stormwater comments. Please note this is a preliminary review:*
   a. *There are uphill areas that will be draining into the stormwater infrastructure, which will affect the performance of the infrastructure. The subcatchment areas need to be modified to include these areas in both existing and proposed modeling.*

   It is good standard practice to divert upland offsite flow around proposed development stormwater systems to maximize treatment of new impervious areas. These upland areas do not change between the pre and post development condition and would not impact the peak flow reduction. These areas can be added to the modeling.

   b. *The subcatchment area modeling was not included in the submittal.*

   Subcatchment reports can be added to the modeling attachment.

   c. *The gravel wetland modeling was not included in the 10-year and 100-year storm events.*

   Summaries for the gravel wetlands can added for the 10-year and 100-year storm events.

   d. *Device #4 of GW#2 appears to be a copy of device #3.*

   Yes, two risers are needed at two different elevations to mitigate peak flows for the 10-year and 100-year rain events.

   e. *Have you evaluated the capacity of the 12-inch diameter storm pipe to convey the stormwater discharge from events evaluated in the design?*

   Thank you, the 12" dia. discharge pipe for gravel wetland #1 as been upsized to 15" dia. which is capable of passing 7.82-cfs of flow. Peak flow discharging from gravel wetland #1 for the 100-year event is 5.57-cfs.

   f. *It seems to me that the void percentage of elevation 368.50 in GW#1 should be 20%.*

Yes, thank you. This elevation represents the wetland media which should be evaluated as 20% void space. The resulting reduction in storage volume can be supplemented by raising the elevation of the top of the berm 3". The modeling can be revised accordingly.

g. *You need to address the low impact design standard. Let me know if you need some reference materials for guidance.*

To the extent practical given existing site constraints, low impact design standards have been implemented. Gravel wetland treatment areas are recognized by the State of Vermont Agency of Natural Resources as a standard treatment practice with pollutant removal rates ranging from 60-80% total phosphorus and 80-97% total suspended solids, as designed for the 1" water quality event. The gravel wetlands include a ponding area above with outlet structures designed to control the rate at which water is released to adjacent waters. Control orifices and bypass drop inlets are designed to reduce peak flows from the existing condition for the 1-year, 10-year and 100-year storm events.

h. *Has the existing 36"CMP under Mechanicsville Road been evaluated?*

The existing 36" CMP appears in good condition. The project proposes a reduction to peak flows from the existing condition.

9. *For the DRB and the Public, it would be helpful to have the limits of disturbance LOD line in the legend.*

Understood, the Limits of Disturbance can be identified in the legend.

10. *The DRB will be asking if the conduit and/or wiring for energy net zero ready infrastructure will be provided for the residences.*

Yes.

Respectfully,

Engineering Ventures, PC

Hannah Wingate, PE - Civil Project Engineer

Cc: Joe Laster
Kevin Worden