



January 16, 2024

Robert Hill
485 VT-15
Underhill, VT 05489

RE: 485 & 487 VT Route 15 – Sewage Disposal Potential Evaluation

To Whom it May Concern,

Our firm was hired to perform a cursory evaluation of the sewage disposal potential of an approximately 120-acre parcel located at 485 & 487 VT Route 15 in Underhill, Vermont.

The parcel is located on the west side of VT Route 15 with its southwestern border being the Jericho-Underhill Town Line. The property is currently occupied by a single-family home and a detached accessory building used for the processing of maple syrup. Most of the parcel is wooded and is currently used for the harvesting of sap for maple syrup production. The owners of the 120-acre parcel at 485 & 487 VT Route 15 in Underhill also own an abutting approximately 99-acre parcel located at 320 Cilley Hill Road which is located on the Jericho side of the Jericho-Underhill Town Line. The entirety of the 99-acre parcel is wooded and is also used for the harvesting of sap for maple syrup production.

Our office performed an initial review of the 120-acre parcel's topography and NRCS soils mapping to identify two areas that were likely suitable for sewage disposal. The first area is a +/- 2-acre open field south of the existing accessory building which is primarily mapped Marlow fine sandy loam with 5-20 percent slopes (MeC). The second area is a +/- 2-acre cleared area south of the existing single-family home which is primarily mapped Peru fine sandy loam with 0-20 percent slopes (PsC).

On January 3, 2024, I visited the site to walk the areas of interest and perform soil evaluation test pits. Four (4) exploratory test pits were dug in each of the two potential sewage disposal areas. Test pits #1-#4 were performed in the open field near the accessory building. Test pit #1 was dug in a lower elevation area of the field and revealed fine sandy loams in the upper soil horizons and silty loams in the lower soil horizons. Evidence of seasonal high water table was observed at 30 inches. Test pits #2 - #4 were performed at higher elevation on the summit and shoulders of a small ridge and yielded better results. Test pits #2 - #4 revealed loamy sands in the upper soil horizons which turned to coarse sands with gravel and stones in the lower horizons. The area appeared to be well drained and no conclusive evidence of seasonal high water table was observed to a depth of 72 inches. Considering these results, it is my opinion that the open field south of the accessory building is suitable for either a mound system at lower elevations, or a conventional in-ground system higher up on the ridge, with possible capacity for a 4-bedroom single-family home.

Test pits #5 - #8 were performed in the cleared area south of the single-family home on the summit and shoulders of a high ridge. Test pits #5 - #8 revealed sandy loams in the upper soil horizons which turned to loamy fine sands in the lower horizons. Evidence of seasonal high water table was consistently observed at a depths of 50-60 inches. Considering these results, it is my opinion that the cleared area south of the single-family home is suitable for a conventional in-ground system located on the summit or shoulders of the ridge, with possible capacity for a 4-bedroom single-family home.

In summary, considering the favorable topography and on-site soils, I suggest that subdivision of this property can likely occur for two new building lots with approval of the necessary Town and State permits.

Sincerely,



Graham Tidman, E.I.
Class BW Licensed Designer

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