

**Jason Barnard**  
**Consulting, LLC**  
4400 VT Route 17  
Starksboro, VT 05487  
(802) 453-2597 (Phone)

December 2, 2010

Town of Charlotte  
Planning and Zoning Department  
Attn: Tom Mansfield  
159 Ferry Road  
Charlotte, Vermont 05445

Subject: Thomas J. and Gwendolyn Zweber, 950 Spear Street, Charlotte, Vermont  
(WW-138-1012) – Lot 1 Replacement Wastewater System Completion Letter

Dear Tom:

I am writing to inform you that the replacement mound wastewater disposal system has been successfully completed for the Thomas J. and Gwendolyn Zweber proposed Lot 1 (14.8+/- acre parcel) located at 950 Spear Street in Charlotte, Vermont. The Town of Charlotte approved (WW-138-1012) replacement mound wastewater disposal system was staked out by me on September 22, 2010, and was installed by Parker Excavating between September 29 and November 15, 2010. Based on my inspections, the replacement mound wastewater system that will serve the 5-bedroom single-family residence was installed in reasonable conformance with my design drawings dated June 4, 2010.

During construction of the replacement mound wastewater system, inspections of the existing 1,200-gallon concrete septic tank, the new 1,000-gallon concrete pump station, plowed layer beneath the mound sand, the placement of the State of Vermont approved mound sand, mound system absorption bed, the distribution piping network, and system final grading was performed between September 29 and November 29, 2010. Before the existing 1,200 gallon concrete septic tank was retrofitted with a new Polylok PL-122 effluent filter, the existing septic tank was inspected by Parker Excavating personnel and the tank was noted in good condition with no signs of leakage.

Results of my inspections clearly show the proper preparation of the ground surface prior to placing the mound sand, the proper placement of the approved mound sand (see **Attachment A** - mound sand sieve analysis) and system stone, and the proper installation of the required effluent filter in the existing 1,200 gallon concrete septic tank. My inspections also show the new 1,000 gallon concrete pump station was properly installed. The final grading inspection that was performed on November 29<sup>th</sup> showed the replacement mound wastewater disposal system has been properly covered, graded, seeded and mulched.

A flow test of the piping distribution network was performed on October 23, 2010. Results of the flow test show the squirt height was 54 inches high and the difference in flow (i.e. squirt height) was less than 10% between any of the distribution system orifices.

Based on my inspections during the construction of the replacement mound wastewater disposal system and the successful completion of all performance tests, "I hereby certify that, in the exercise of my reasonable professional judgment, the installation-related information submitted is true and correct and the wastewater system was installed in accordance with the permitted design and all permit conditions, were inspected, were properly tested, and have successfully met those performance tests".

As a note to the homeowner, in order to ensure longevity of the system the septic tank and pump station should be pumped out every three (3) years. Additionally, to ensure proper working order of the system, the effluent filter should be accessed and rinsed back into the septic tank once a year.

Should you have any questions or comments regarding the installation information discussed above, please feel free to call me at (802) 453-2597.

Regards,



Jason S. Barnard  
Licensed Designer #430-B

C: Thomas and Gwendolyn Zweber