



November 1, 2004

Nancy Goodrich  
231 Meadowside Road  
Charlotte, Vermont 05445

RE: Goodrich Property, Meadowside Road, Charlotte, Vermont - Capacity Evaluation of Existing Disposal System

Dear Nancy:

I've completed my evaluation of the capability of your existing disposal system to serve a 3-bedroom residence. The evaluation results indicate that the existing system is easily capable of handling a 3-bedroom residence due to over design in 1975. In the process, I also identified a complying 3-bedroom replacement system which is available for future use, if necessary.

My evaluation included a site and soil evaluation relative to both the existing system and a complying 3-bedroom replacement area, and a review of the 1975 permit and septic system design basis. The 1975 permit indicates sandy soil were present with a percolation rate of 5 min/inch and that 250 feet of seepage trench were required and constructed by Henry Lane in 1975. If one assumes a minimum 2' trench width, 500 ft<sup>2</sup> of leachfield is present that is easily capable of handling 420 to 450 gallons per day (gpd) in sand textured soils using an application rate of 1.0 gpd/ft<sup>2</sup>.

Six test pits were evaluated on October 11, 2004 to define soil conditions in the existing and proposed replacement disposal area shown on the attached Orthophoto Map. Six feet of unsaturated fine sandy loam, loamy fine to medium sand, and fine to medium sands were identified in the existing disposal area and 36 to 48" of the same sandy textured profile was identified in the proposed replacement area. The soils in all test pits were similar with the only difference being depth to ledge. The profile is described as:

- |        |  |
|--------|--|
| 0-10"  | Medium brown fine sandy loam; loose; granular; well drained.   |
| 10-48" | Yellow/brown slightly loamy fine to medium sand; very loose; granular; almost structureless; ledge at 36" in replacement area; no mottles or water to 48". |
| 48-72" | Brown fine to medium sand; loose; granular; no mottles, ledge or water to 72" in existing disposal area.   |
| 72"    | Ledge (in existing disposal area).   |

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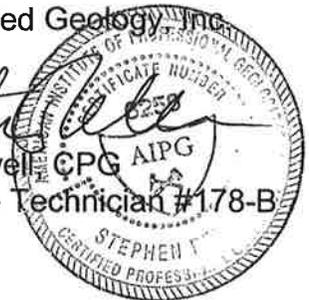
The soils and overall site conditions and the 500 ft<sup>2</sup> seepage trench system in the existing disposal area are suitable to qualify it for use for your 3-bedroom residence. The site and soil conditions in the proposed replacement disposal area qualify it for an at grade type disposal system fed with pretreated effluent. The existing disposal areas and proposed replacement area are both properly isolated from the well.

I've copied this to Tom Mansfield and Spencer Harris at the Town Office's. It should qualify your property and 3-bedroom residence for a Certificate of Occupancy.

If you have any questions or concerns regarding this matter, please do not hesitate to call me at (802) 453-4384.

Very Truly Yours,  
Lincoln Applied Geology, Inc.

  
Stephen Revell, CPG AIPG  
Certified Site Technician #178-B



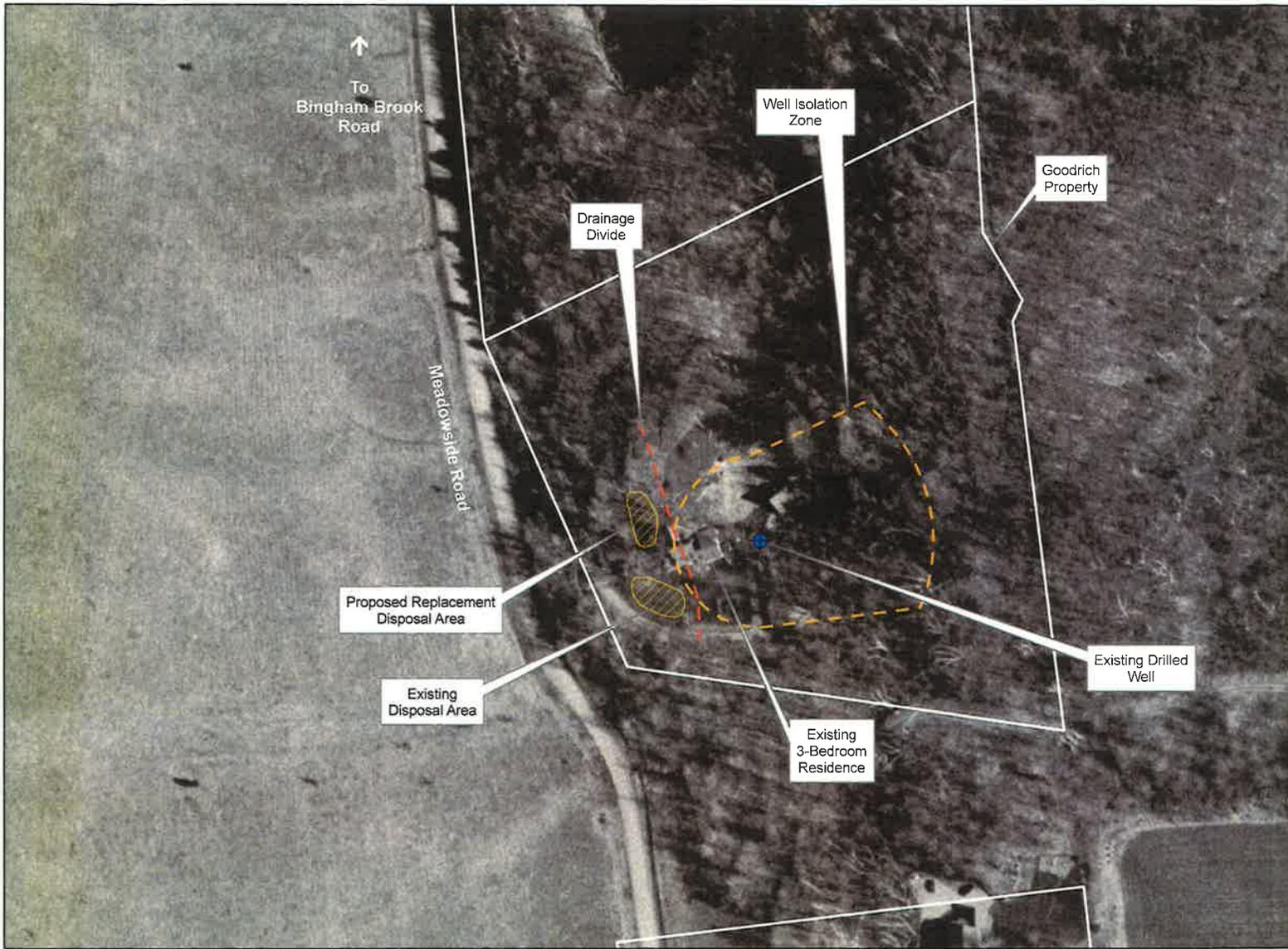
SR/kg  
Enclosures

cc: Tom Mansfield/Spencer Harris, Town of Charlotte



Lincoln Applied Geology, Inc.  
Environmental Consultants

163 Revell Road • Lincoln, VT 05443 • (802) 453-4384 • FAX (802) 453-5399



# Nancy Goodrich Property

## Orthophoto Map Showing Existing Residential Development

Charlotte, Vermont

October 2004

