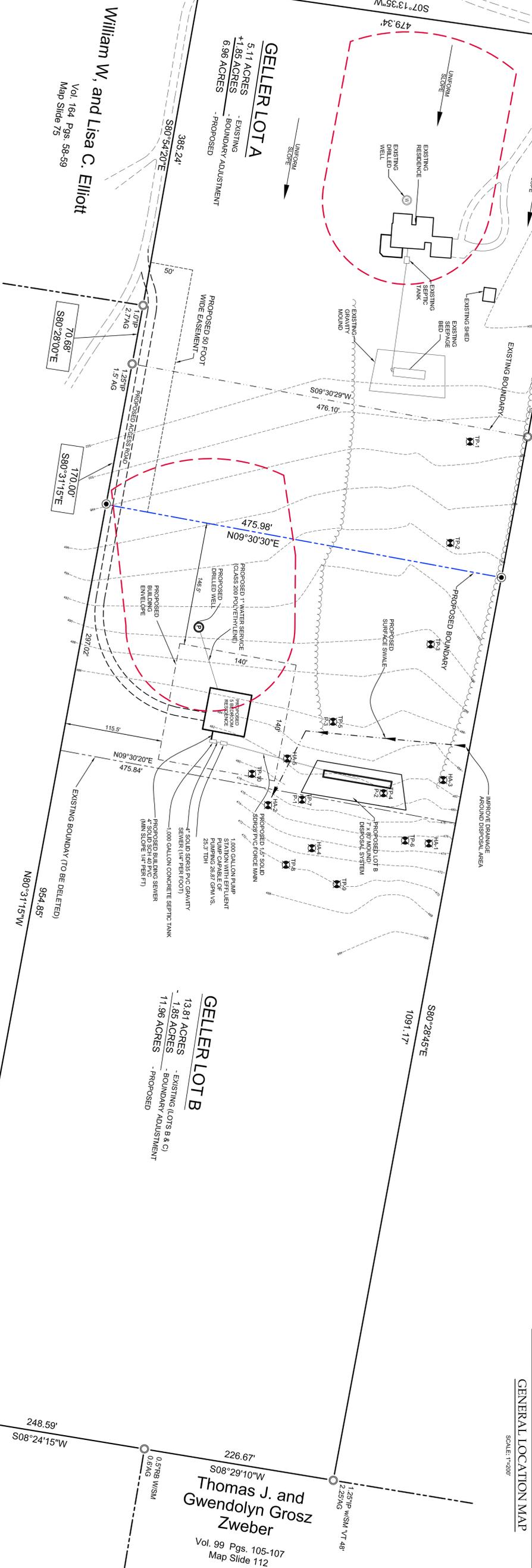


Hayes I. and Susan H. Sogoloff  
Vol. 155 Pgs. 404-405

Steven C. and Elizabeth K. Clark  
Vol. 32 Pg. 99  
Vol. 36 Pgs. 31-36  
Map Slide 15



**LEGEND**

- EXISTING PROPERTY LINE
- - - EXISTING GRAVEL DRIVE
- - - WELL ISOLATION ZONE
- - - EXISTING CONTOUR LINE
- - - PROPOSED CONTOUR LINE
- - - EXISTING BOUNDARY LINE
- - - FUTURE EASEMENT
- - - PROPOSED DRAINAGE SWALE
- TP-1 TO TP-10 TEST PIT/PAVING AUGER
- PA-1 TEST PIT/PAVING AUGER
- DW-1 DRILLED WELL

Pamela G. Baldwin  
Vol. 66 Pgs. 541-543  
Map Slide 15

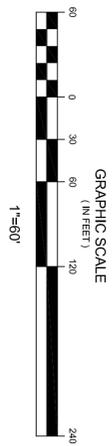
William W. and Lisa C. Elliott  
Vol. 164 Pgs. 58-59  
Map Slide 75

GELLER LOT B  
13.81 ACRES  
- EXISTING (LOTS B & C)  
11.96 ACRES  
- BOUNDARY ADJUSTMENT  
- PROPOSED

GELLER LOT A  
5.11 ACRES  
- EXISTING  
6.96 ACRES  
- BOUNDARY ADJUSTMENT  
- PROPOSED

Thomas J. and Gwendolyn Grosz Zweber  
Vol. 99 Pgs. 105-107  
Map Slide 112

Peter W. and Kathleen R. Post  
Vol. 57 Pgs. 461-462  
Map Slide 15



THE CONTRACTOR SHALL NOTIFY THE STATE AT 1-888-DC-SAFE PRIOR TO ANY EXCAVATION.

No.	REVISION	DATE
1	DELETED LOT C	10/26/2008
2	REGISTERED LOCATION AND DESIGN	10/26/2008
3		
4		

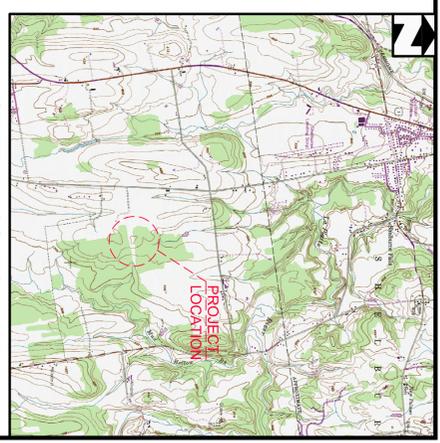
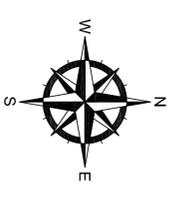
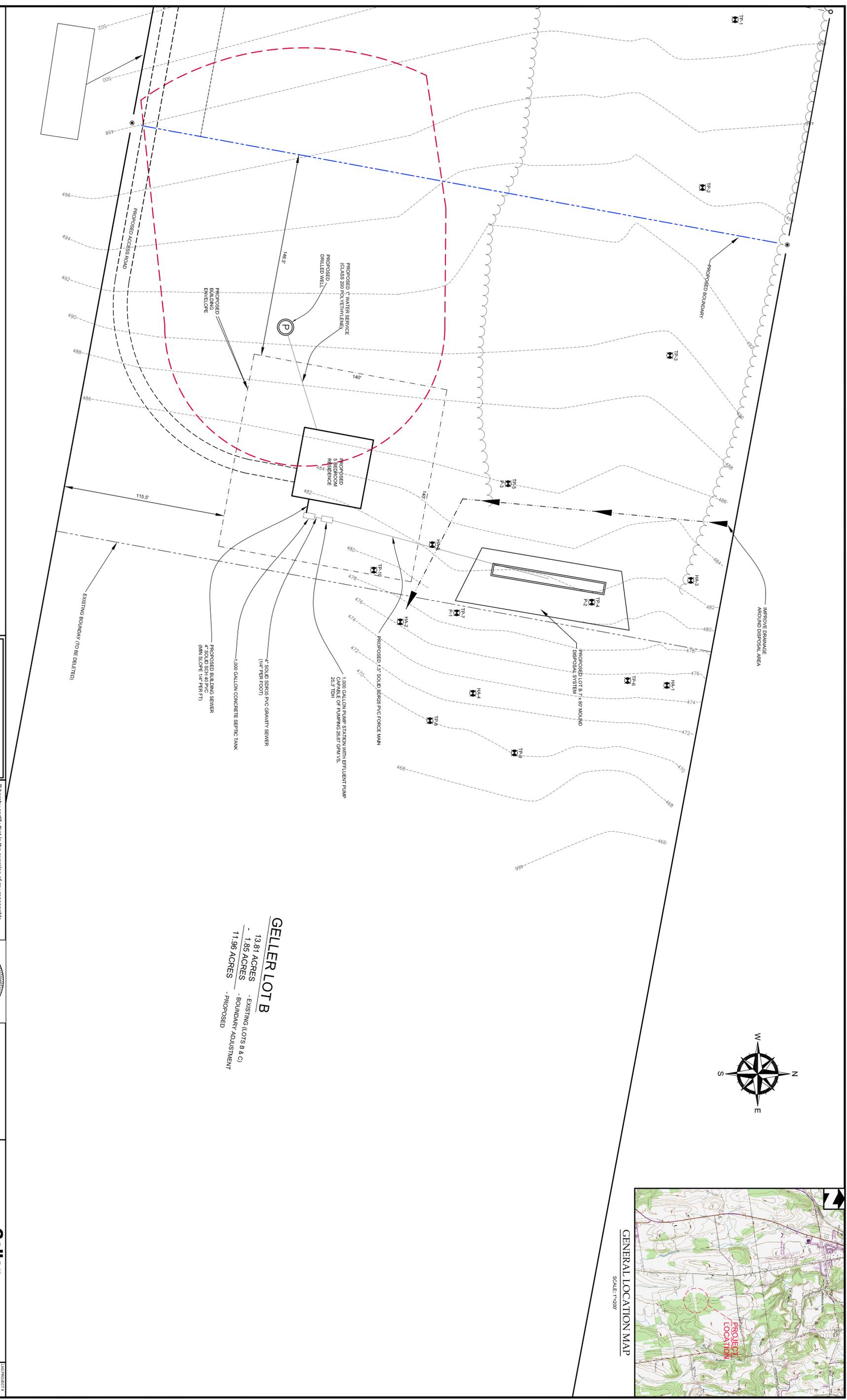
I hereby certify that in the exercise of my reasonable professional judgment the design-related information submitted with this application is true and correct, and that I am duly licensed to practice as a Professional Engineer in the State of Vermont. My registration number is 9229. I am not providing this information in connection with any other project. I understand that the Vermont Water Supply Rules, Supply Rules and the Vermont Water Supply Rules apply to this project.

Stephen Revell, CPG  
Licensed Class B Designer #178

Date \_\_\_\_\_

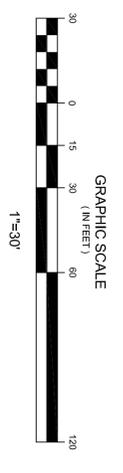


<p><b>Geller</b> 147 Clark Road Charlotte, Vermont</p> <p>Revised Site Plan with Lot B Development Plan</p>	<p>DATE: 05/18/11</p> <p>DATE: October 26, 2008</p> <p>DATE: 05/18/11</p> <p>DATE: 05/18/11</p>
	<p>SCALE: 1"=200'</p> <p>PROJECT LOCATION</p>



GENERAL LOCATION MAP  
SCALE: 1"=200'

**GELLER LOT B**  
 13.81 ACRES - EXISTING (LOTS B & C)  
 - 1.85 ACRES - BOUNDARY ADJUSTMENT  
 11.96 ACRES - PROPOSED



THE CONTRACTOR SHALL NOTIFY DISSEASER AT 1-888-DC-SAFE PRIOR TO ANY EXCAVATION.

No.	REVISION	DATE
1	DELETED LOT C	10/26/2008
2	REGISTERED LOCATION AND DESIGN	10/26/2008

I hereby certify that in the exercise of my reasonable professional judgment the design-related information submitted with this application is true and correct, and that I am duly licensed to practice my profession in accordance with the current Vermont application and Design Water Supply, Rules and the Vermont Water Supply Rules.  
 Stephen Revell, CPG  
 Licensed Class B Designer #178  
 Date



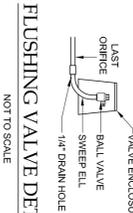
**Geller**  
 147 Clark Road  
 Charlotte, Vermont

**Revised Site Development Plan Blow-Up**  
**Lot B**  
**With Water & Wastewater System**

PROJECT #	05181.1
DATE	October 26, 2008
SURVEYING	SCOTT ELLIOTT
DESIGN TEAM	STEPHEN REVELL
PLANSHEET #	2

## CONSTRUCTION SPECIFICATIONS - MOUND

1. MOUND CONSTRUCTION PROCEDURES ARE LIST AS IMPORTANT AS THE MOUND DESIGN. GOOD DESIGN WITH POOR CONSTRUCTION WILL RESULT IN THE MOUND OPERATING POORLY AND MAY RESULT IN FAILURE. PROPER EQUIPMENT IS ESSENTIAL. SMALL TRACK TYPE LOADERS SHOULD BE USED FOR THE MOUND. THE MOUND SHOULD BE CONSTRUCTED TO THE FULL. THE FOLLOWING IS A STEP-BY-STEP PROCEDURE FOR MOUND CONSTRUCTION, WHICH HAS BEEN TESTED AND PROVEN. OTHER TECHNIQUES COULD BE USED AS LONG AS THE BASIC PRINCIPLES OF MOUND DESIGN, OPERATION, AND CONSTRUCTION ARE NOT VIOLATED.
2. SUBMIT A REPRESENTATIVE SAMPLE (ENOUGH TO FILL A 5 GALLON BUCKET) OF MOUND MATERIAL TO THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION. CONSULTING ENGINEERS, FIELD ENGINEERS, OTHER CHECK ENGINEERS, AND DESIGNER PRIOR TO INITIATING CONSTRUCTION.
3. STAKE OUT THE MOUND ON THIS SITE SO THAT THE TRENCHES OR BED RUN REFERENCED TO THE DIRECTION OF THE SLOPE. REFERENCE STAKES ARE N.C. MUST STAKE OUT VERY CAREFULLY.
4. STAKE OUT CORNERS OF THE BED AND DETERMINE THE BOTTOM ELEVATION OF THE BED. DETERMINE WHERE THE FORCE MAIN FROM THE PUMP CHAMBER CONNECTS TO THE DISTRIBUTION SYSTEM IN THE MOUND.
5. TRENCH AND LAY THE FORCE MAIN FROM THE PUMP CHAMBER TO THE MOUND. LAY THE FORCE MAIN WITH 2" OF RIBBED POLYESTER INSULATION. WHERE THERE IS LESS THAN 2" OF COVER INSULATE WITH 2" OF RIBBED POLYESTER INSULATION. 4" MINIMUM COVER IS REQUIRED. THE FORCE MAIN SHOULD BE PROTECTED FROM DAMAGE BY THE TRENCH BACKFILL. THE FORCE MAIN SHOULD BE PROTECTED FROM DAMAGE BY THE TRENCH BACKFILL. THE FORCE MAIN SHOULD BE PROTECTED FROM DAMAGE BY THE TRENCH BACKFILL.
6. CHECK THE MOISTURE CONTENT OF THE SOIL AT 7, 8, 9 DEEP. IF IT IS TOO WET, SWEAKING AND COMPACTION WILL RESULT. THIS REDUCING THE INFILTRATION CAPACITY OF THE SOIL. SOIL MOISTURE CAN BE DETERMINED BY ROLLING A SOIL SAMPLE BETWEEN THE HANDS. IF IT PRESENTS A CRUMBLE, THE SITE IS TOO WET TO PREPARE. IF IT CRUMBLES, SOIL PREPARATION IS REQUIRED.
7. INSTALL THE CURTAIN DRAIN (IF SHOWN ON PLANS).
8. OUT TREES TO GROUND LEVEL. REMOVE EXCESS VEGETATION BY MOWING. DO NOT DEEP PLOWING MAY BE USED IF A HOLOBOARD PLOW IS NOT AVAILABLE. ROTOTILLING MUST NOT BE DONE ON HEAVY SOILS. SOIL CAN BE DESIGN NON-STRUCTURAL SOILS SUCH AS CLAY, SILT, AND SAND. SOIL SHOULD BE DESIGNED TO BE NON-STRUCTURAL. SOIL SHOULD BE DESIGNED TO BE NON-STRUCTURAL. SOIL SHOULD BE DESIGNED TO BE NON-STRUCTURAL.
9. SURFACE MUST LOAM AS THOUGH IT HAD BEEN PLOWED WITH A MOUND PLOW. AS FLOWING TO AROUND AREA WITH VERTICAL TRENCH. DESIGNER INSPECTION REQUIRED AT THIS POINT.
10. EXTEND THE EFFLUENT PIPE TO SERVICE FEET ABOVE THE GROUND SURFACE.
11. PLACE THE APPROVED FILL MATERIAL AROUND THE BOSE OF THE LOAMED AREA. KEEP THE MOUND WORK FROM THE END AND UPSLOPE SIDE.
12. MOVE THE FILL MATERIAL INTO PLACE USING A SMALL TRACK TYPE TRACTOR WITH A COMPACTOR OF THE NATURAL SOIL.
13. PLACE THE FILL MATERIAL TO THE REQUIRED DEPTH. INSPECT THE TOP OF THE TRENCHES OR BED. SHAPE SIDES TO THE DESIRED SLOPE. INSPECTION REQUIRED AT THIS POINT.
14. WITH THE BLADE OF THE TRACTOR FROM THE BED OR TRENCHES, HAND LEVEL THE BOTTOM OF THE BED. MAKE SURE BOTTOM IS AT THE SAME ELEVATION AND LEVEL.
15. PLACE THE CORNER AGGREGATE IN THE TRENCHES OR BED. IT SHOULD BE TO THE WASHED DURABLE AGGREGATE (IE. NOT LIMESTONE OR MARBLE). LEVEL AGGREGATE TO THE DESIGN DEPTH.
16. PLACE THE DISTRIBUTION SYSTEM ON THE AGGREGATE. CONNECT THE MAINFOLD TO THE FORCE MAIN FROM THE PUMP CHAMBER OR Siphon CHAMBER. SLOPE MAINFOLD SIGHTLY TOWARD DISTRIBUTION LATERALS. LAY LATERALS LEVEL. REMOVING OBESSE AND DISCHARGE FLOTE AND PRESSURE TESTING.
17. PLACE SHIELDS ON OBSTACLES AND PROPERLY GEMENT ALL COMPONENTS. PLACE 2" OF AGGREGATE OVER THE DISTRIBUTION PIPE.
18. PLACE A SYNTHETIC NON-WOVEN FILTER FABRIC (MINIAT 140K OR EQUIVALENT OVER POLYESTER INSULATION. 2" THICK, CENTERED OVER FORCE MAIN RISER. PLACE INSULATION IN TWO LAYERS (1" EACH) AND STAGGER THE JOINT PATTERN.
19. PLACE SOIL ON TOP OF THE BED OR TRENCH TO A DEPTH OF 1" IN CENTER AND 6" AT OUTER EDGE OF BED OR TRENCHES. THIS MAY BE A SUBSOIL OR TOPSOIL.
20. PLACE 6" OF GOOD QUALITY TYPICAL OVER THE ENTIRE MOUND SURFACE. THIS WILL RAISE THE ELEVATION AT THE CENTER OF THE MOUND TO A MINIMUM OF 4.5" AND THE OUTSIDE EDGES OF BED OR TRENCHES 1". INSPECTION REQUIRED AT THIS POINT.
21. LANDSCAPE THE MOUND BY PLANTING GRASS. USING THE BEST VEGETATION ADAPTABLE TO THE AREA. A MIXTURE OF 90% BIRDSFOOT TREFLEAF AND 10% TIMOTHY MAY BE DESIRABLE IF THE MOUND IS NOT MANICURED. IF MANICURING IS DESIRED, A COMBINATION OF BIRDSFOOT TREFLEAF, CRYSTAL BURNING BROOM, AND ANNUAL RYE GRASS AND UP TO 25% OF BIRDSFOOT TREFLEAF SHOULD BE USED. THE MOUND SHOULD BE MAINTAINED TO A MINIMUM OF 4.5" AND THE OUTSIDE EDGES OF BED OR TRENCHES 1". INSPECTION REQUIRED AT THIS POINT.
22. MOUND MAINTENANCE INVOLVES RAINING THE SEPTIC TANK AND PUMP CHAMBER. EVERY YEAR TO OBTAIN A MAINTENANCE SCHEDULE. MAINTENANCE SHOULD BE DONE ON A REGULAR BASIS. MAINTENANCE SHOULD BE DONE ON A REGULAR BASIS. MAINTENANCE SHOULD BE DONE ON A REGULAR BASIS.
23. UTILITIES INFORMATION SHOWN ON THIS PLAN WAS OBTAINED FROM AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR CORRECT. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITIES. PAVED OR FINISHED SURFACES SHOULD NOT BE DAMAGED TO ANY UTILITY. PAVED OR FINISHED SURFACES SHOULD NOT BE DAMAGED TO ANY UTILITY. PAVED OR FINISHED SURFACES SHOULD NOT BE DAMAGED TO ANY UTILITY.
24. ALL FILL AROUND THE STRUCTURES SHALL BE PLACED IN 12" LIFTS AND THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
25. THIS DESIGN MUST BE INSPECTED BY LINCOLN APPLIED GEOLOGY, INC. LINCOLN, VERMONT TO ENSURE COMPLIANCE WITH THESE PLANS. LINCOLN APPLIED GEOLOGY, INC. FAILURE TO FOLLOW SPECIFICATIONS, AND THE DESIGN INTENT THAT THE PLANS CONVEY, AND FROM FAILURE TO HAVE BEEN NOTIFIED BY THE CONTRACTOR FOR INSPECTIONS.



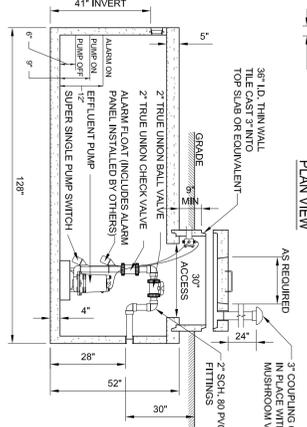
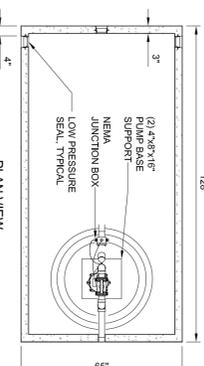
FLUSHING VALVE DETAIL  
NOT TO SCALE

## SEWAGE DESIGN INFORMATION

1. THE SEWAGE DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION DESIGN RULES.
2. THE FOLLOWING MINIMUM ISOLATION DISTANCES SHALL BE MAINTAINED FROM THE DISPOSAL AREA TO:
  - PROPERTY LINE: 25 FEET
  - EXISTING OR PROPOSED BUILDING (WITH FOOTING DRAIN) UPSLOPE OR SLOPE: 25 FEET
  - EXISTING OR PROPOSED BUILDING (WITH FOOTING DRAIN) DOWNSLOPE: 75 FEET
  - DRIVEWAYS & PARKING LOTS: 10 FEET
  - TREES: 10 FEET
3. BASIS OF DESIGN:
  - NO. OF BEDROOMS: 4
  - PERCAPITATION RATE: 1.0 GALLON PER DAY
  - LOADING RATE (OR TRENCHES): 1.0 GALLON PER DAY (OR STONE)
4. SEPTIC TANK:
  - 1. A 1000 GALLON PRECAST CONCRETE SEPTIC TANK COMP. PRECAST OR APPROVED WATERPROOF JOINTS AND SET ON HORIZONTAL COMPACTED SUBGRADE. THE OUTLET BAFFLE SHALL HAVE AN EFFLUENT FILTER & TWO (2) FOOT DIAMETER RISER TO GRADE WITH STEEL COVER.
  - 2. THE USE OF GARBAGE DISPOSALS IS NOT RECOMMENDED.
  - 3. MISC.:
  - A. IF A WATER TREATMENT SYSTEM IS GOING TO BE USED, THE BACKWASH WATER MAY NOT BE DISCHARGED INTO THE DISPOSAL SYSTEM.

## OPERATION & MAINTENANCE RECOMMENDATIONS

1. THE SEPTIC TANK'S PURPOSE IS TO SETTLE OUT SOLIDS, CONTAIN THE SCUM AND PASS TREATED EFFLUENT. BACTERIA WITHIN THE SEPTIC TANK HELPS DECOMPOSE THE SOLIDS. SOLIDS SHOULD BE REMOVED FROM THE SYSTEM REGULARLY. ONLY HUMAN WASTES SHOULD ENTER THE SEWAGE SYSTEM. WATER USE SHOULD BE CONSERVATIVE AND CLEANING AGENTS CANNOT ENTER THE SYSTEM, AS THEY WILL BE BACTERIAL.
2. THE STATE FLOW FIGURES OF 140 GPD/400 BEDROOM ARE BASED ON SHORT TERM PEAK USE PERIODS (IE. DAILY EVENTS). ACTUAL FLOWS SHOULD AVERAGE 15-80 GALLONS PER DAY PER BEDROOM.
3. ONCE PER YEAR, THE DEPTH OF SCUM AND SLUDGE IN THE SEPTIC TANK SHOULD BE MEASURED AND THE TANK SHALL BE PUMPED IF:
- A. THE SLUDGE LEVEL IS WITHIN 12 INCHES OF THE TOP OF THE OUTLET.
- B. IF A OR B IS ANTICIPATED TO OCCUR PRIOR TO THE NEXT INSPECTION.
- C. IN ANY CASE, THE TANK SHALL BE PUMPED AT A MINIMUM 5 YEAR INTERVAL.
4. ONCE A YEAR, THE DISTRIBUTION BOX AND/OR PUMP STATION SHOULD BE INSPECTED AND ANY SETTED SOLIDS REMOVED.
5. THE EFFLUENT FILTER SHOULD BE INSPECTED AND CLEANED ANNUALLY.
6. ABOVE ITEMS 1-5 ARE INTENDED TO PROLONG THE LIFE OF THE SYSTEM, NOT GUARANTEE IT.



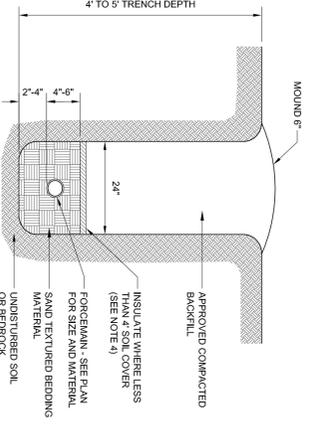
CROSS SECTION  
NOT TO SCALE

## 1,000 GALLON PRECAST CONCRETE PUMP STATION

NOT TO SCALE

### DESIGN NOTES:

1. 4000 PSI CONCRETE. 28 DAY STRENGTH.
2. LOW PRESSURE SEALS DESIGNED TO ACCEPT 4" C.I. OR PVC PIPE.
3. REQUIRES 2538 TYP. AND A SUPER SINGLE PUMP SWITCH WITH A 3/8" SWING LEVEL ALARM SET 6" ABOVE THE PUMP ON SETTING.
4. IT SHOULD BE NOTED THAT ANY DEVIATION IN THE LOCATION OR ELEVATION OF THE SEPTIC TANK, PUMP STATION OR THE DISPOSAL SYSTEM FROM THE DESIGNED LOCATION MAY REQUIRE A DIFFERENT SIZE PUMP.



FORCEMAIN TRENCH NOTES:

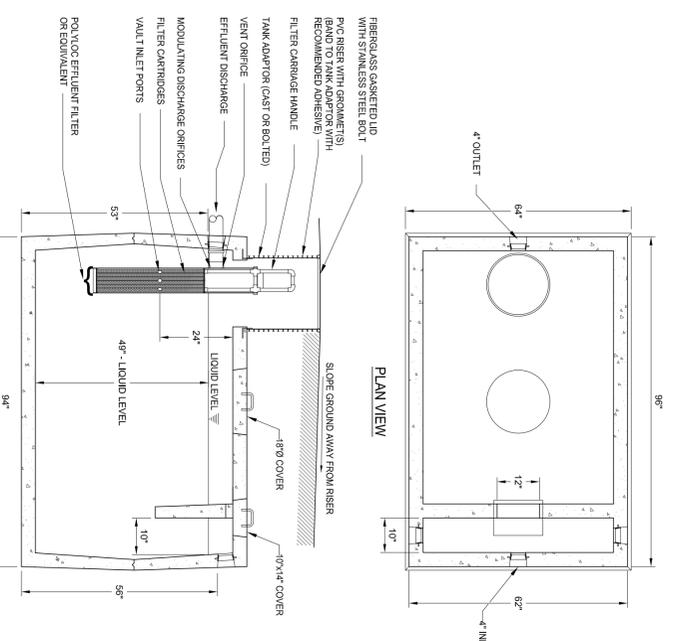
1. BACKFILL AND BEDDING SHALL BE PROPERLY COMPACTED.
2. GRAVELS WITH A MAXIMUM SIZE OF 3/4".
3. BACKFILL SHALL NOT CONTAIN:
- A. STONES OR OTHER MATERIALS WITHIN 2" OF COVER.
- B. DEBRIS.
- C. ANY OTHER MATERIALS.
4. USE CONTAIN ANY FROST VENT FOR ORGANIC MATERIAL.
5. FORCEMAIN MUST BE TESTED FOR LEAKAGE.
6. AT ANY CROSSING UNDER A ROAD OR DRIVE, FORCEMAIN IS TO BE ENCASED IN A 4" POLYETHYLENE SAND SLEEVE IS TO EXTEND 8" IN EITHER DIRECTION FROM EDGE OF ROAD.
7. THE SIDES OF THE TRENCHES 4" OR MORE IN DEPTH ENTERED BY PERSONNEL SHALL BE SHEETED OR SLOPED TO THE ANGLE OF REPOSE AS DETERMINED BY O.S.H.A. STANDARDS.

## FORCEMAIN TRENCH DETAIL

NOT TO SCALE

## 1,000 GALLON PRECAST CONCRETE SEPTIC TANK

NOT TO SCALE



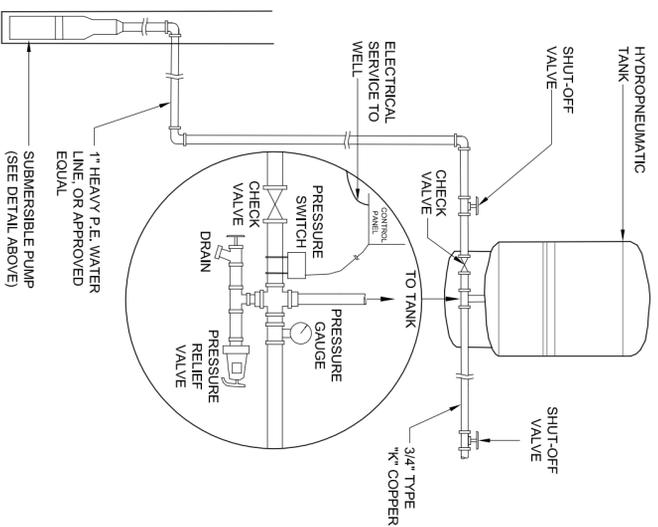
### DESIGN NOTES:

1. INLET, OUTLET, SEAL, AND CASTING HOLES TO BE SEALED.
2. TANK TO BE SET LEVEL.
3. DIMENSIONS MAY VARY AMONG DIFFERENT MANUFACTURERS.

## STATE OF VERMONT MOUND SAND SPECIFICATIONS

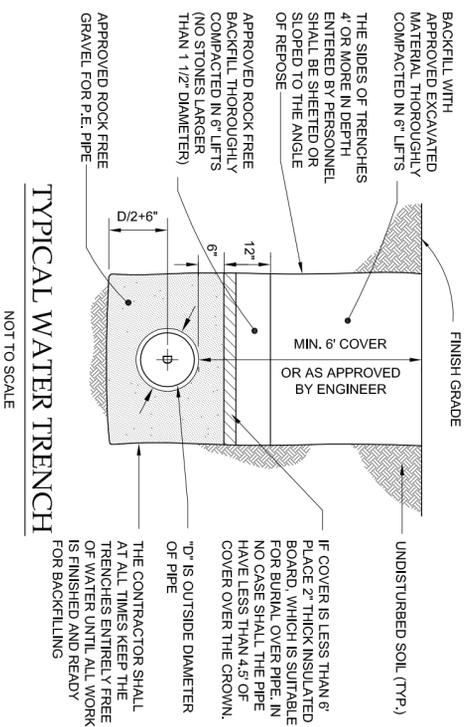
Fill material - The fill material from the natural soil placed on top of the gravel or bed shall be sand texture with one of the following sieve analyses:

Sieve Number	Opening (mm)	Percent Passing, by Weight
1	75	100
2	150	100
3	300	100
4	475	100
5	600	100
6	750	100
10	2000	100
20	850	100
30	1050	100
40	1250	100
60	2500	100
100	4250	100
200	8500	100
400	17000	100
800	33500	100
1600	67000	100
3200	134000	100
6400	268000	100
12800	536000	100
25600	1072000	100
51200	2144000	100
102400	4288000	100
204800	8576000	100
409600	17152000	100
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3276800	137216000	100
6553600	274432000	100
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32451856931838156061180819091200	13589214434446619184044842229504000	100
64903713863676312122236168182400	27178428868893238368089684459008000	100
129807427717352624444523366364800		



**TYPICAL INDIVIDUAL WATER SYSTEM**

NOT TO SCALE



**TYPICAL WATER TRENCH**

NOT TO SCALE

**INDIVIDUAL DRILLED WELL DESIGN DATA**

1. THE DRILLED WELL(S) CONSTRUCTION, LOCATION, DISINFECTION, AND TESTING SHALL BE IN ACCORDANCE WITH THE STATE OF VERMONT - WATER SUPPLY RULES.
2. THE BASIS OF DESIGN FOR EACH DRILLED WELL IS:
  - A. AVERAGE DAY DEMAND: 5 BEDROOM = 560GPD.
  - B. MAXIMUM DAILY DEMAND: (680/720 MIN/DAY) = 0.77 GPM (5 BEDROOM).
  - C. OPERATING PRESSURE RANGE: 40-60 PSI AT PRESSURE SWITCH.
  - D. INSTANTANEOUS PEAK DEMAND = 5 GPM.

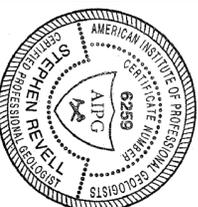
**NOT TO SCALE**

No.	REVISION	DATE
4		
3		
2	REVISED WATER DESIGN DATA	
1		10/26/2009

"I, hereby certify that in the exercise of my reasonable professional judgment the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules."

Stephen Revell, CPG  
Licensed Class B Designer #178

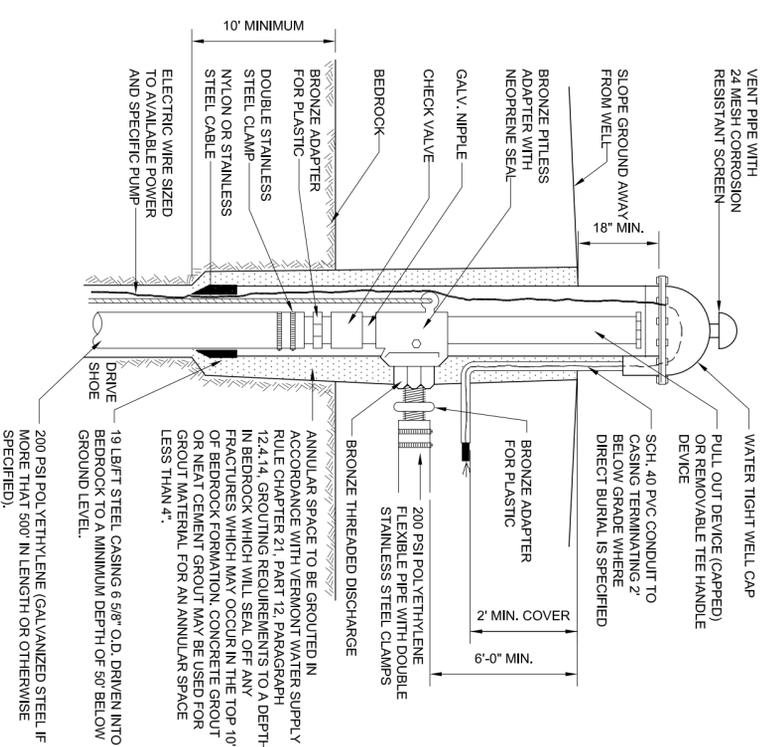
Date



**Geller**  
147 Clark Road  
Charlotte, Vermont

Revised Lot B  
Water System Details

LAG PROJECT # 03193.1  
DATE October 26, 2009  
SURVEYORS EET/M  
DRAWN TAM  
PLAN SHEET # 4



**TYPICAL INDIVIDUAL DRILLED WELL**

NOT TO SCALE

**INDIVIDUAL DRILLED WELL NOTE:**

1. THE SUBMERSIBLE PUMP MODEL AND DEPTH OF SETTING TO BE SPECIFIED BY THE ENGINEER AFTER THE WELL IS DRILLED AND YIELD TESTED (PIPE AND ADAPTOR SIZE TO SUIT ALSO).

POTENTIAL SOURCE OF CONTAMINATION AND OTHER SITING LIMITATIONS	SEPARATION DISTANCE
Roadway, Parking Lot (outer edge of shoulder)	25 Feet
Driveway (Fewer than 3 residences)	15 Feet
Sewage System Disposal Fields	(See a.)
Subsurface Wastewater Piping and Related Tanks	50 Feet
Property Line	10 Feet (See b.)
Limit of Herbicide Application on utility R.O.W.	100 Feet (See c.)
Surface Water	10 Feet (See d.)
Buildings	10 Feet
Concentrated Livestock Holding Areas and Manure Storage Systems	200 Feet
Hazardous or Solid Waste Disposal Site	(See 1.)
Non-sewage Wastewater Disposal Fields	(See 1.)

**DRILLED WELL ISOLATION DISTANCES**

- See Table at 1-2.
- Increased to 50' when adjacent to agricultural cropland.
- Applies to rights-of-way (ROW) where herbicides have been applied in the past 12 months or may be applied in the future. This distance may be increased to 200' depending on the active ingredient in the herbicide according to Vermont Regulations for Control of Pesticides.
- For Public water sources, see appendix A, Part 3, Subpart 3.4.
- Water sources shall not be located in a flood way.
- If a water source is potentially downgradient of a source of contamination, then the Secretary shall apply criteria in Appendix A Subpart 11.4.2.2.

PRESSURE DISTRIBUTION & MOUND DIMENSION DETAILS

CLIENT'S NAME: Geller-Lot B (5-BR Mound)  
 DATE: 10/27/2009 PERFORMED BY: S. Revell LAG Project #: 05183.1

Design Flow Rate	560	GPD
Width of Distribution Stone Bed/Trench	7	FEET
Length of Distribution Stone Bed/Trench	80	FEET
Thickness of Sand Beneath Distribution Stone Bed/Trench	2.5	FEET
Thickness of Stone Beneath Laterals	6	INCHES
Soil Cover Thickness at Edge of Level Area	12	INCHES
Front Slope of Finished Mound	33	PERCENT
Side and Rear Slope of Finished Mound	33	PERCENT
Percolation Rate	30	MPI
Natural Ground Slope	10	PERCENT
Thickness of Sand on Upper Side of Level Area	3.15	FEET
Thickness of Sand on Lower Side of Level Area	4.05	FEET
Width of Level Area	9	FEET
Length of Level Area	82	FEET
Area of Distribution Stone Bed/Trench	560	SQUARE FT
Volume of Stone Required	13	CUBIC YARDS
Proposed Basal Area	2209	SQUARE FEET
Volume of Mound Sand Required	439.3	CUBIC YARDS
Number of Laterals	4	
Length of Each Lateral	37.5	FEET
Number of Orifices in the Manifold	0	
Number of Orifices in Each Lateral	8	
Distance Between Manifold and First Orifice	2.5	FEET
Distance Between Orifices (on center)	5	FEET
Distribution Area per Orifice	17.50	SQ. FT.
Design Pressure Head	5	FEET
Diameter of Orifices (enter as fraction)	0.188	INCHES
Elevation From Pump Intake to Laterals (0 if siphon)	8	FEET
Diameter of Force Main	1.5	INCHES
Length of Force Main	160	FEET
Length of Manifold to Lateral	1.5	FEET
Diameter of Manifold Pipe	1.5	INCH
Diameter of Lateral Pipe	1.5	INCH
Friction Loss in Force Main	12.10	FEET
Friction Loss in Manifold	0.03	FEET
Friction Loss in Section 1	0.01	FEET
Friction Loss in Entire Lateral	0.06	FEET
Discharge Rate at First Orifice	0.93	GPM
Discharge Rate at Last Orifice	0.92	GPM
Percent Difference in Flow Rate First to Last Orifice	0.52	PERCENT

PRESSURE DISTRIBUTION & MOUND DIMENSION DETAILS

CLIENT'S NAME: Geller-Lot B (5-BR Mound)  
 DATE: 10/27/2009 PERFORMED BY: S. Revell LAG Project #: 05183.1

DIMENSIONS OF MOUND SYSTEM

Dimensions of Mound Sand

7.3 feet from level area to uphill sand toe	10.4 ft corner of level area to upper toe corner
9 ft wide level area	9.5 ft to side toe from upper edge of level area
7 ft wide stone bed/trench	
80 ft long stone bed/trench	12.3 ft to side toe from lower edge of level area
82 ft long level area	
17.6 feet from level area to downhill sand toe	24.9 ft corner of level area to lower toe corner

Dimensions of Final Cover

9.7 feet from level area to uphill toe	13.6 ft corner of level area to upper fill toe
	12.6 ft to side toe from upper edge of level area
9 ft wide level area	
82 ft long level area	15.3 ft to side toe from lower edge of level area
	31.1 ft corner of level area to lower fill toe
22.0 feet from level area to downhill toe	

PLOW AREA LAYOUT MEASUREMENTS

Center of Bed/Trench to Downslope Toe	68.3 feet
End of Level Area @ Midpoint to Downslope Toe	34.4 feet
Center of Bed/Trench to Upslope Toe	52.6 feet
End of Level Area @ Midpoint to Upslope Toe	17.1 feet