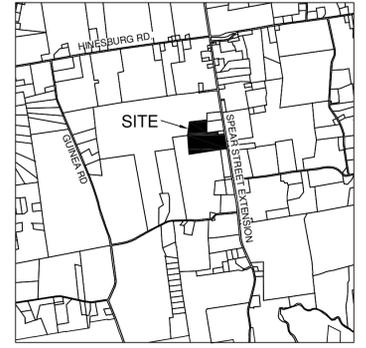


THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

**DESIGN DATA**

- IT IS THE OPINION OF THE DESIGNER THAT SOIL CONDITIONS WITHIN THE PROPOSED WASTEWATER AREA MEET THE REQUIREMENTS OF THE VERMONT ENVIRONMENTAL PROTECTION RULES-CHAPTER 1 FOR PERFORMANCE BASED MOUND WASTEWATER SYSTEMS.
- THE FOLLOWING MINIMUM ISOLATION DISTANCES SHALL BE MAINTAINED FROM THE WASTEWATER ABSORPTION AREA TO:
  - DRILLED WELL (WELL UPSLOPE / DOWNSLOPE) 100 FT / 200 FT
  - SHALLOW WELL (WELL UPSLOPE / DOWNSLOPE) 150 FT / 500 FT
  - WATER SERVICE 25 FT
  - PROPERTY LINE 25 FT
  - BUILDING (DOWNSLOPE, WITH FOOTING DRAIN) 75 FT
  - BUILDING (UPSLOPE, WITH FOOTING DRAIN) 20 FT
  - DRIVEWAYS 10 FT
  - SLOPES STEEPER THAN 30% 25 FT

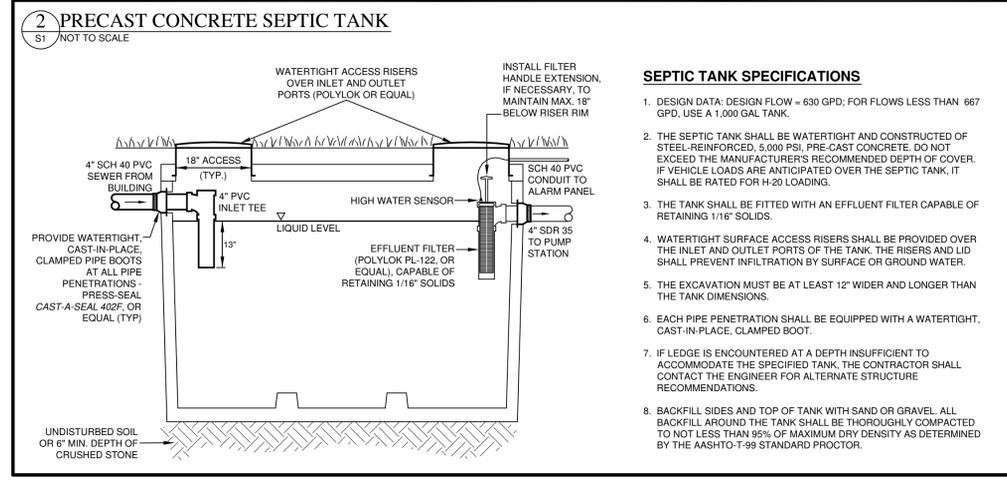
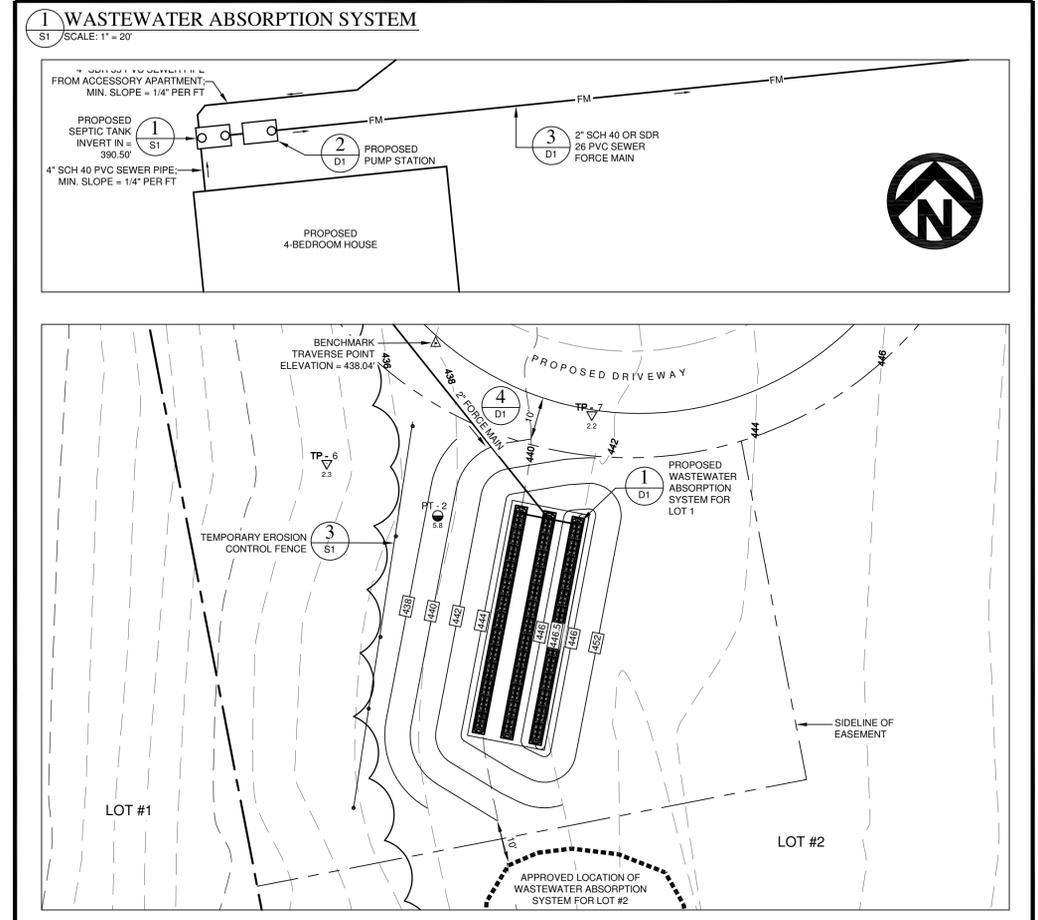
Soil Test Summary			
Logged by Brian Tremback on 9-28-09			
Test #	Depth of evidence of seasonal high groundwater (ft)	Depth to existing groundwater (ft)	Depth to bedrock (ft)
TP-1	1.4	> 3.0	> 3.0
TP-2	1.5	> 3.3	> 3.3
TP-3	2.1	> 3.5	> 3.5
TP-4	0	2.4	> 2.7
TP-5	1.0	> 3.4	> 3.4
TP-6	2.3	> 2.6	> 2.6
TP-7	2.2	> 3.8	> 3.8
TP-8	1.8	> 4.1	> 4.1
TP-9	1.9	> 3.4	> 3.4



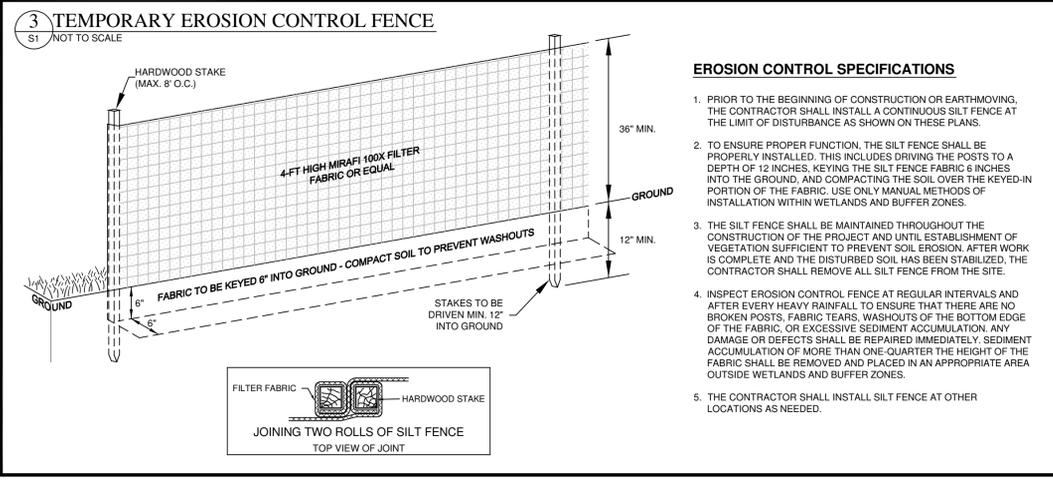
Site Location Map  
NOT TO SCALE

Percolation Testing	
Performed by Brian Tremback on 9-28-09, 11-23-09, and 1-27-10	
Test #	Percolation rate (min/min)
PT-1	9.4
PT-2	5.8
PT-3	6.5
PT-4	11.6

- 3. BASIS OF DESIGN**
- DESKTOP MOUNDING ANALYSIS**
- A) SOIL TEXTURE = SILT LOAM
  - B) NATURAL GROUND SLOPE = 13%
  - C) DEPTH TO EVIDENCE OF SEASONAL HIGH GROUNDWATER = 1.9 FT
  - D) LINEAR LOADING RATE FACTOR (l) = 9.4
  - E) AVAILABLE SOIL DEPTH (h) (MAINTAINING GROUNDWATER MOUND AT 6" BELOW GRADE) = 1.3 FT
  - F) PROPOSED DESIGN FLOW = 630 GPD
  - F) MIN. SYSTEM LENGTH =  $GPD / (h \times l) = 630 / (1.3 \times 9.4) = 51.6$  FT
- ABSORPTION SYSTEM DESIGN (USING INFILTRATOR CHAMBERS)**
- DESIGN FLOW (4-BEDROOM HOUSE) = 490 GPD  
 DESIGN FLOW (1-BEDROOM ACCESSORY APARTMENT) = 140 GPD  
 TOTAL DESIGN FLOW = 630 GPD  
 PERCOLATION RATE = 5.8 MIN/IN  
 APPLICATION RATE = 2 GPD / SQ FT  
 REQUIRED ABSORPTION AREA = 315 SQ FT
- SYSTEM DESIGN: USE THREE (3) 54.2-FT ROWS OF 2.83 FT WIDE (2.27 FT EFFECTIVE WIDTH) INFILTRATOR CHAMBERS. ABSORPTION AREA PROVIDED IS 367 SQ FT.



- SEPTIC TANK SPECIFICATIONS**
- DESIGN DATA: DESIGN FLOW = 630 GPD, FOR FLOWS LESS THAN 667 GPD, USE A 1,000 GAL TANK.
  - THE SEPTIC TANK SHALL BE WATERTIGHT AND CONSTRUCTED OF STEEL-REINFORCED, 5,000 PSI, PRE-CAST CONCRETE. DO NOT EXCEED THE MANUFACTURER'S RECOMMENDED DEPTH OF COVER. IF VEHICLE LOADS ARE ANTICIPATED OVER THE SEPTIC TANK, IT SHALL BE RATED FOR H-20 LOADING.
  - THE TANK SHALL BE FITTED WITH AN EFFLUENT FILTER CAPABLE OF RETAINING 1/16" SOLIDS.
  - WATERTIGHT SURFACE ACCESS RISERS SHALL BE PROVIDED OVER THE INLET AND OUTLET PORTS OF THE TANK. THE RISERS AND LID SHALL PREVENT INFILTRATION BY SURFACE OR GROUND WATER.
  - THE EXCAVATION MUST BE AT LEAST 12" WIDER AND LONGER THAN THE TANK DIMENSIONS.
  - EACH PIPE PENETRATION SHALL BE EQUIPPED WITH A WATERTIGHT, CAST-IN-PLACE, CLAMPED BOOT.
  - IF LEDGE IS ENCOUNTERED AT A DEPTH INSUFFICIENT TO ACCOMMODATE THE SPECIFIED TANK, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR ALTERNATE STRUCTURE RECOMMENDATIONS.
  - BACKFILL SIDES AND TOP OF TANK WITH SAND OR GRAVEL. ALL BACKFILL AROUND THE TANK SHALL BE THOROUGHLY COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE HASHTO-T-99 STANDARD PROCTOR.



- EROSION CONTROL SPECIFICATIONS**
- PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTHMOVING, THE CONTRACTOR SHALL INSTALL A CONTINUOUS SILT FENCE AT THE LIMIT OF DISTURBANCE AS SHOWN ON THESE PLANS.
  - TO ENSURE PROPER FUNCTION, THE SILT FENCE SHALL BE PROPERLY INSTALLED. THIS INCLUDES DRIVING THE POSTS TO A DEPTH OF 12 INCHES, KEYING THE SILT FENCE FABRIC 6 INCHES INTO THE GROUND, AND COMPACTING THE SOIL OVER THE KEYPED-IN PORTION OF THE FABRIC. USE ONLY MANUAL METHODS OF INSTALLATION WITHIN WETLANDS AND BUFFER ZONES.
  - THE SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION OF THE PROJECT AND UNTIL ESTABLISHMENT OF VEGETATION SUFFICIENT TO PREVENT SOIL EROSION. AFTER WORK IS COMPLETE AND THE DISTURBED SOIL HAS BEEN STABILIZED, THE CONTRACTOR SHALL REMOVE ALL SILT FENCE FROM THE SITE.
  - INSPECT EROSION CONTROL FENCE AT REGULAR INTERVALS AND AFTER EVERY HEAVY RAINFALL TO ENSURE THAT THERE ARE NO BROKEN POSTS, FABRIC TEARS, WASHOUTS OF THE BOTTOM EDGE OF THE FABRIC, OR EXCESSIVE SEDIMENT ACCUMULATION. ANY DAMAGE OR DEFECTS SHALL BE REPAIRED IMMEDIATELY. SEDIMENT ACCUMULATION OF MORE THAN ONE-QUARTER THE HEIGHT OF THE FABRIC SHALL BE REMOVED AND PLACED IN AN APPROPRIATE AREA OUTSIDE WETLANDS AND BUFFER ZONES.
  - THE CONTRACTOR SHALL INSTALL SILT FENCE AT OTHER LOCATIONS AS NEEDED.

DATE	REVISIONS	BY	# OF SHEETS
	THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		
	SKETCH/CONCEPT		
	PRELIMINARY		
	FINAL		2
	RECORD DRAWING		

**Snyder Property**  
 Lot #1, Snyder Subdivision  
 Spear Street Extension, Charlotte, Vermont

**Wastewater System Design**

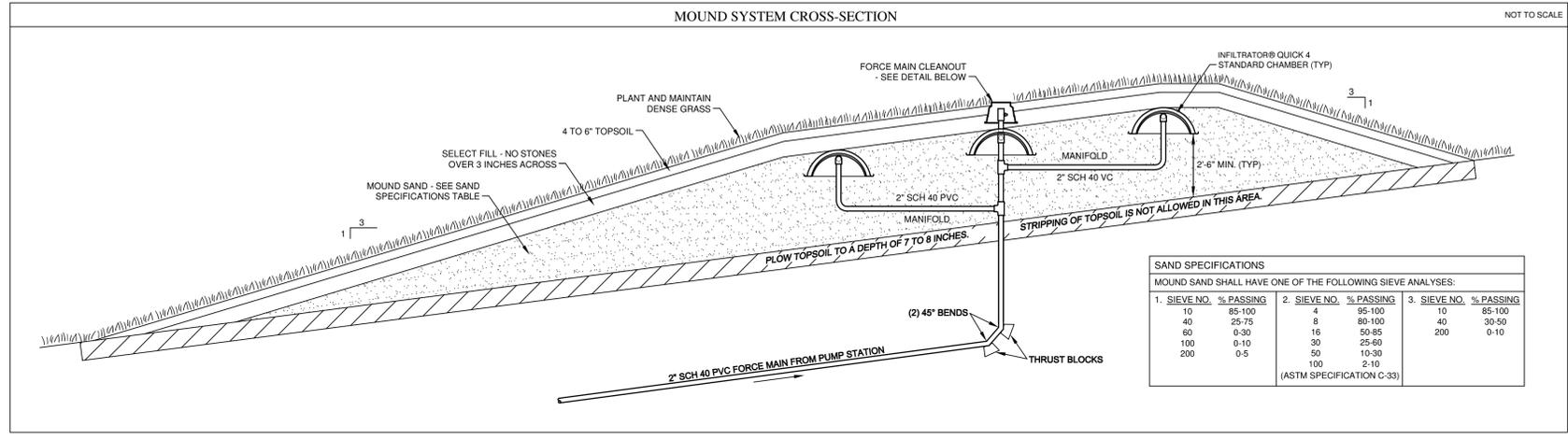
**Lamoureux & Dickinson**  
 Consulting Engineers, Inc.  
 14 Morse Drive, Essex, VT 05452  
 802-678-4450 www.LDengineering.com

Proj. no. 09095  
 Survey AP  
 Design BJT  
 Drawn BJT  
 Checked DJG/ABR  
 Date 2010-01-04  
 Scale AS NOTED  
 Sht. no. **S1**

P:\2009\09095\09095\_S1.LOT 1.dwg, 3/15/2011, 1:46:48 PM

# 1 WASTEWATER ABSORPTION SYSTEM

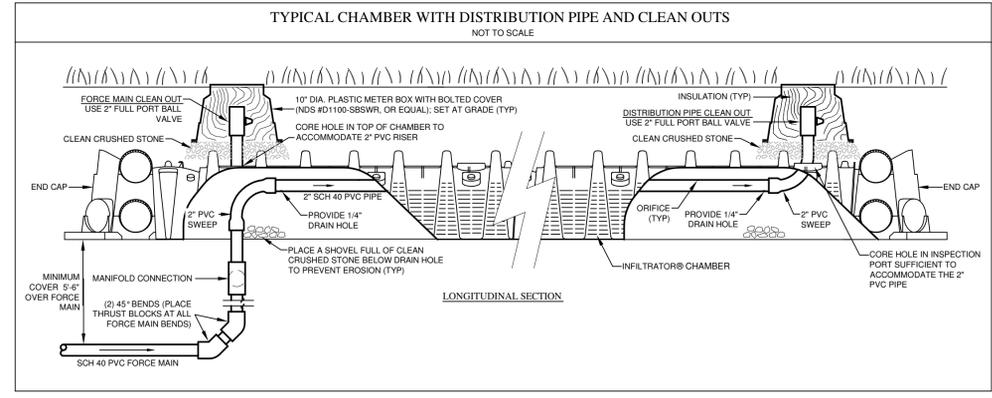
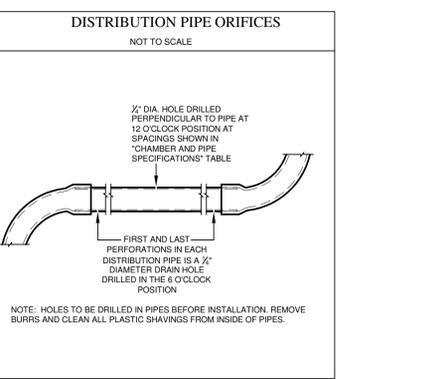
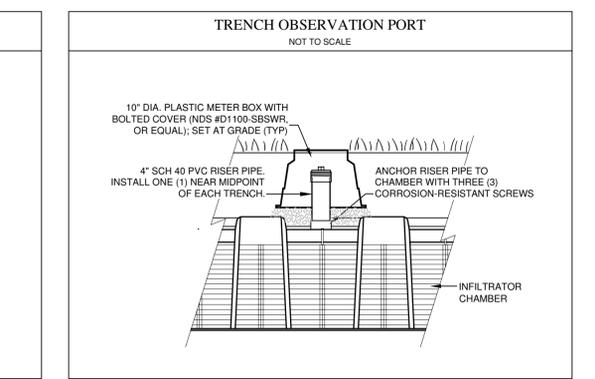
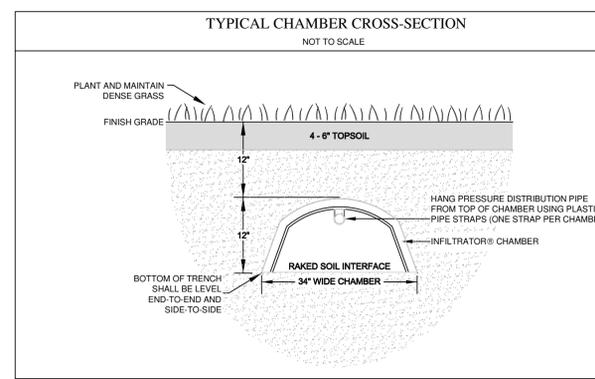
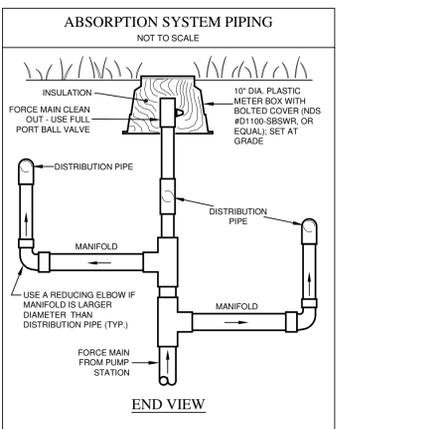
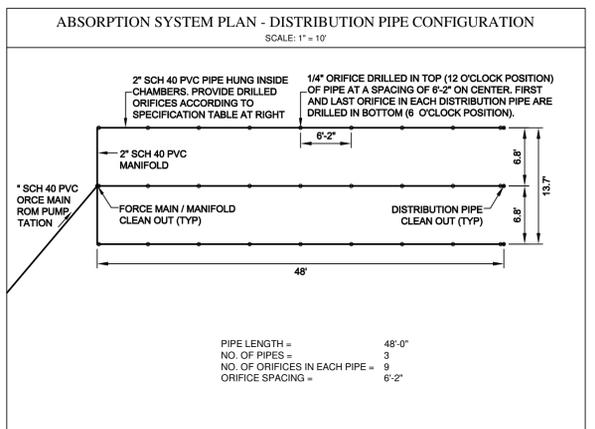
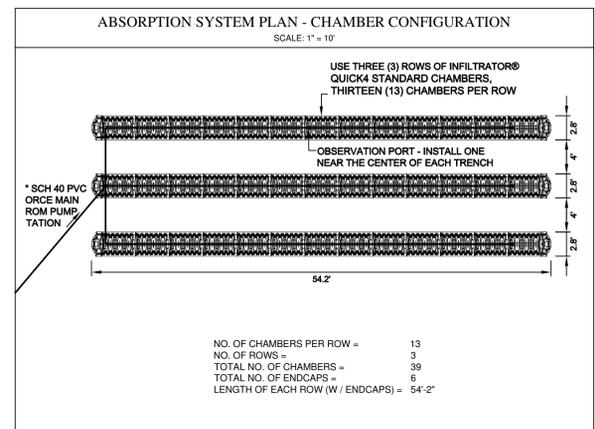
SCALE AS SHOWN



**SAND SPECIFICATIONS**  
MOUND SAND SHALL HAVE ONE OF THE FOLLOWING SIEVE ANALYSES:

1. SIEVE NO.	% PASSING	2. SIEVE NO.	% PASSING	3. SIEVE NO.	% PASSING
10	85-100	4	85-100	10	85-100
40	25-75	8	80-100	40	30-50
60	0-30	18	50-85	200	0-10
100	0-10	30	25-60		
200	0-5	50	10-30		
		100	2-10		

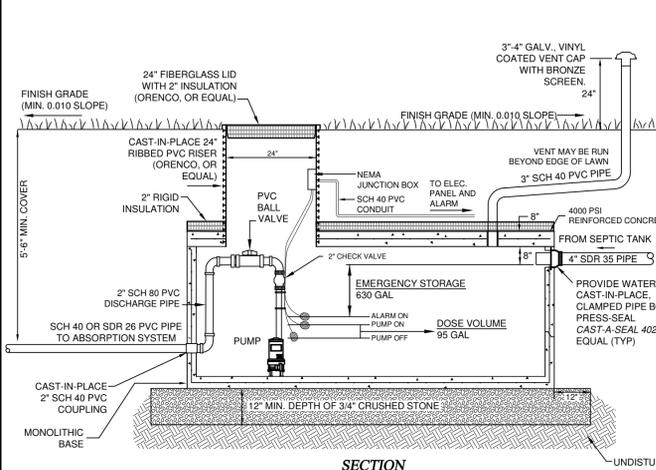
(ASTM SPECIFICATION C-33)



- ABSORPTION SYSTEM SPECIFICATIONS**
- CONSTRUCTION EQUIPMENT SHALL BE KEPT OFF THE AREA TO BE USED FOR EFFLUENT ABSORPTION AS MUCH AS POSSIBLE TO PREVENT UNDESIRABLE COMPACTION OF THE SOILS.
  - THROUGHOUT THE WASTEWATER ABSORPTION SYSTEM AREA, THE ABOVE-GROUND VEGETATION SHALL BE CUT FLUSH WITH THE GROUND SURFACE AND REMOVED.
  - THE AREA TO RECEIVE MOUND SAND SHALL BE SCARIFIED TO A DEPTH OF SEVEN (7) TO EIGHT (8) INCHES USING A PLOW OR THE TEETH OF A BACKHOE BUCKET TO PROVIDE A LOOSE, ROUGH INTERFACE BETWEEN THE NATIVE SOIL AND MOUND SAND.
  - THE MOUND SAND SHALL HAVE A PARTICLE SIZE GRADATION AS SHOWN IN THE DETAIL. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FURNISH A CURRENT SIEVE ANALYSIS REPORT ON THE SAND TO BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.
  - PLACE MOUND SAND TO THE SPECIFIED DEPTH TO PRODUCE A LEVEL SURFACE FOR THE CHAMBERS. THE SAND BASE FOR THE CHAMBERS SHALL BE ABSOLUTELY LEVEL END-TO-END AND SIDE-TO-SIDE.
  - THE PRESSURE DISTRIBUTION PIPE SHALL BE RIGID PLASTIC PIPE, SCHEDULE 40, WITH DIAMETER AS INDICATED. THE PIPE SHALL HAVE A SINGLE ROW OF HOLES DIRECTED UPWARD, WITH THE EXCEPTION OF THE FIRST AND LAST HOLE IN THE DISTRIBUTION PIPE WHICH WILL BE LINED DOWNWARD TO PROVIDE DRAINAGE. THE SIZE AND SPACING OF THE HOLES SHALL BE AS INDICATED IN THE DETAIL. ALL JOINTS AND CONNECTIONS SHALL BE SOLVENT-CEMENTED.
  - A SHOVEL FULL OF CLEAN CRUSHED STONE SHALL BE PLACED ON THE SAND BENEATH EACH OF THE TWO DOWNWARD FACING HOLES IN EACH DISTRIBUTION PIPE TO PREVENT EROSION.
  - ASSEMBLE AND TEST THE PRESSURE DISTRIBUTION PIPES BEFORE PLACING THE CHAMBERS.
  - AFTER COMPLETION AND TESTING OF THE DISTRIBUTION PIPES AND CHAMBERS, THE AREA SHALL BE BROUGHT TO THE GRADE SPECIFIED ON THE PLANS WITH FILL MATERIAL, THE UPPER FOUR (4) INCHES OF WHICH SHALL BE TOPSOIL. THE AREA OVER AND AROUND THE ABSORPTION SYSTEM SHALL BE GRADED SUCH THAT THERE ARE NO AREAS CAPABLE OF PONDING WATER AND SUCH THAT THERE IS SUFFICIENT SLOPE TO ENSURE DRAINAGE.
  - THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH AS BUILT INFORMATION AND CERTIFICATION THAT THE SYSTEM WAS INSTALLED IN ACCORDANCE WITH THE PLANS AND ALL PERTINENT APPROVALS AND PERMITS ISSUED FOR THE PROJECT.

# 2 PUMP STATION

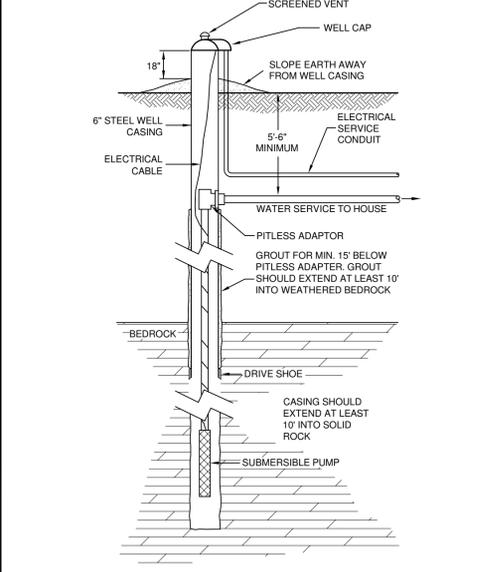
SCALE AS SHOWN



- PUMP STATION SPECIFICATIONS**
- THE PUMP STATION TANK SHALL HAVE SUFFICIENT CAPACITY TO ACCOMMODATE THE REQUIRED PUMP, THE SPECIFIED DOSE VOLUME, AND THE NECESSARY EMERGENCY STORAGE VOLUME.
  - LAMOUREUX & DICKINSON RECOMMENDS THE USE OF A WATERTIGHT, STEEL-REINFORCED, 5000 PSI, PRE-CAST CONCRETE TANK. DO NOT EXCEED THE MANUFACTURER'S RECOMMENDED DEPTH OF COVER. IF VEHICLE LOADS ARE ANTICIPATED OVER THE PUMP STATION, IT SHALL BE RATED FOR H-20 LOADING.
  - THE PUMP STATION SHALL BE CONSTRUCTED TO MINIMIZE THE RISK OF FREEZING OF EFFLUENT IN THE PIPES OR STRUCTURE. THIS INCLUDES, BUT IS NOT LIMITED TO PROVIDING INSULATION IN THE ACCESS LID AND OVER THE TANK.
  - BACKFILL SIDES AND TOP OF TANK WITH SAND OR GRAVEL. ALL BACKFILL MATERIAL AROUND THE TANK SHALL BE THOROUGHLY COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE AASHTO-T-99 STANDARD PROCTOR.
  - ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE AND MATERIALS SHALL MEET U.L. APPROVAL.
  - PUMP SPECIFICATIONS:  
LENGTH OF FORCE MAIN = 480 FT  
FORCE MAIN DIAMETER = 2 IN  
ABSORPTION SYSTEM ELEV = 445.5 FT  
PUMP ELEV = 390.0 FT  
PRESSURE NETWORK DISCHARGE RATE = 30.2 GPM  
HEAD LOSSES:  
STATIC LIFT = 61.5 FT  
FORCE MAIN FRICTION = 8.1 FT  
VALVES AND FITTINGS = 5.0 FT  
NETWORK LOSSES = 0.7 FT  
IN-LINE PRESSURE = 2.5 FT  
TOTAL HEAD LOSS = 78.2 FT  
USE ONE (1) EFFLUENT PUMP, SINGLE PHASE, 230 VOLTS, MINIMUM CAPACITY 30.2 GPM @ 78.2 FT TDH - USE HYDROMATIC 50HD150, OR EQUAL  
IF THE "PUMP OFF" ELEVATION IS LESS THAN 384.0 FT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO VERIFY ADEQUACY OF THE SPECIFIED PUMP.
  - EMERGENCY STORAGE - PROVIDE 630 GALLONS OF STORAGE ABOVE THE ALARM LEVEL IN THE PUMP STATION.
  - TESTING: THE CONTRACTOR AND THE ENGINEER SHALL BE PRESENT DURING START-UP. THE CONTRACTOR SHALL PROVIDE A WATER SOURCE TO PERFORM A FULL OPERATIONAL CHECK OF THE PUMP STATION INCLUDING ALL FLOW FUNCTIONS, ALARMS, AND INDICATOR LIGHTS. THE PUMP SHALL BE FIELD-TESTED TO INSURE THE PUMPING CAPACITY MEETS THE PROJECT REQUIREMENTS.

# 3 TYPICAL DRILLED WELL

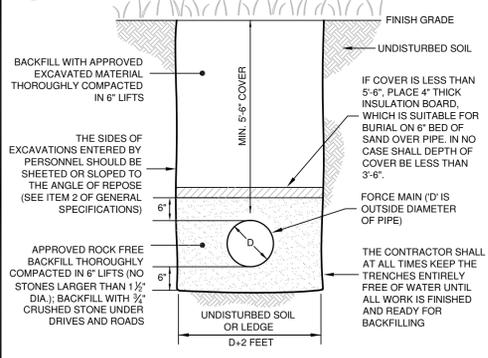
SCALE AS SHOWN



- GENERAL SPECIFICATIONS**
- UTILITIES INFORMATION SHOWN HEREON WERE OBTAINED FROM THE BEST AVAILABLE SOURCES AND MAY NOT BE EITHER ACCURATE OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, WHETHER OR NOT SHOWN HEREON.
  - THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.
  - LAMOUREUX & DICKINSON DOES NOT UNDERTAKE OR ASSUME ANY RESPONSIBILITY FOR SAFETY ON THE CONSTRUCTION SITE BUT DOES DEMAND THE CONTRACTOR THAT THEY SHOULD WORK IN STRICT COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) STANDARDS.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING VEGETATION, PAVEMENT AND STRUCTURES NECESSARY TO DEVELOP THIS PROPERTY UNLESS OTHERWISE NOTED ON THESE PLANS. CONTRACTOR SHALL REMOVE ALL TRASH FROM SITE UPON COMPLETION OF CONSTRUCTION.
  - THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OWN EXPENSE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. WHERE AND WHEN DEEMED NECESSARY BY THE ENGINEER, THE CONTRACTOR WILL BE REQUIRED TO WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER, APPLY CALCIUM CHLORIDE, OR SWEEP THE ROADWAY WITH A POWER BROOM AS DUST CONTROL.
  - ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 4 INCHES OF TOPSOIL AND SHALL BE IMMEDIATELY SEEDED AND MULCHED/MATTED AFTER COMPLETION OF GRADING. ANY WORK PERFORMED AFTER OCTOBER 1 OF EACH YEAR SHALL BE STABILIZED WITH MULCH OR MATTING SUFFICIENT TO PREVENT EROSION AND SHALL BE IMMEDIATELY SEEDED AND REMULCHED OR REMATTED AS SOON AS WEATHER PERMITS IN THE SPRING.
  - ALL SLOPES, DITCHES, AND DISTURBED AREAS SHALL BE GRADED SMOOTH AND BE FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.
  - ALL FILL OR BACKFILL SHALL BE PLACED IN 6 INCH LIFTS AND THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698 STANDARD PROCTOR.
- MAINTENANCE**
- ONCE PER YEAR, THE SEPTIC TANK SHALL BE INSPECTED BY A QUALIFIED PERSON FOR THE ACCUMULATION OF SLUDGE AND SCUM. THE TANK SHALL BE PUMPED IF THE DEPTH OF SLUDGE IS GREATER THAN 6 INCHES OR THE DEPTH OF SCUM IS GREATER THAN 3 INCHES.
  - ONCE PER YEAR, THE PUMP STATION SHALL BE INSPECTED BY A QUALIFIED PERSON. IT SHALL BE VERIFIED THAT IT IS FUNCTIONING PROPERLY AND ANY NECESSARY REPAIRS OR CLEANING SHALL BE UNDERTAKEN.
  - ONCE EVERY 6 MONTHS, OR MORE OFTEN AS NEEDED, THE EFFLUENT FILTER SHALL BE CLEANED BY HOISING IT OFF INTO THE SEPTIC TANK.
  - ONCE PER YEAR, THE ABSORPTION SYSTEM SHALL BE INSPECTED BY A QUALIFIED PERSON. THE PROPER FUNCTIONING OF THE SYSTEM SHALL BE VERIFIED AND ANY NECESSARY REPAIRS, OR OTHER MAINTENANCE, SHALL BE DONE.
  - DO NOT FLUSH OR DISCHARGE TO THE SEWAGE DISPOSAL SYSTEM ANY MATERIALS THAT ARE NON-BIODEGRADABLE OR SLOW TO DECOMPOSE, SUBSTANCES THAT CAN SLOW OR HALT BIOLOGICAL ACTIVITY, OR MATERIALS THAT CAN OVERLOAD THE TREATMENT CAPACITY OF THE SYSTEM. THIS INCLUDES, FOR EXAMPLE, FOOD WASTE, HIGH-STRENGTH PAPER TOWELS, FEMININE NAPKINS AND TAMPONS, CONDOMS, FATS AND OILS, PESTICIDES, DISINFECTANTS, STRONG ACIDS AND BASES, PAINTS, SOLVENTS, SOIL, AND SALTS. DO NOT USE GARBAGE DISPOSALS.
  - EXCESS WATER USAGE WILL SIGNIFICANTLY REDUCE THE LIFE OF ANY SEWAGE DISPOSAL SYSTEM. WATER FIXTURES SHALL BE REGULARLY INSPECTED FOR LEAKS AND PROMPTLY REPAIRED IF NECESSARY. INSTALL AND MAINTAIN WATER-CONSERVING FIXTURES (TOILETS WITH MAX. 1.6 GALLON FLUSH AND SHOWERHEAD AND FAUCET AERATORS WITH MAX. 2 GALLON PER MINUTE FLOW).
  - THIS WASTEWATER SYSTEM DESIGN INCLUDES ONE OR MORE STRUCTURES THAT MEET THE DEFINITION OF A "CONFINED SPACE" UNDER NO CIRCUMSTANCES SHALL A CONFINED SPACE BE ENTERED EXCEPT IN STRICT CONFORMANCE WITH OSHA REQUIREMENTS.

# 4 FORCE MAIN TRENCH

SCALE AS SHOWN



- INSPECTION**
- IT IS RECOMMENDED THAT THIS DESIGN BE INSPECTED BY LAMOUREUX & DICKINSON CONSULTING ENGINEERS, INC., ESSEX, JUNCTION, VERMONT TO ENSURE COMPLIANCE WITH THESE PLANS. LAMOUREUX & DICKINSON WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE FROM FAILURE TO FOLLOW THESE PLANS.
  - THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR NOTIFYING THE ENGINEER AND THE TOWN FOR INSPECTION OF THE WASTEWATER SYSTEM AT

- FORCE MAIN SPECIFICATIONS**
- USE 2-INCH SDR28 OR SCH 40 PVC PIPE.
  - PLACE THRUST BLOCKS AT ALL FORCE MAIN BENDS.
  - TESTING: THE CONTRACTOR SHALL FURNISH ALL FACILITIES AND PERSONNEL FOR CONDUCTING THE FOLLOWING TEST. THE PVC FORCE MAIN SHALL BE FILLED WITH WATER AND TESTED BY THE CONTRACTOR TO A MINIMUM PRESSURE OF 50 PSI AT THE HIGHEST POINT ALONG THE FORCE MAIN FOR TWO HOURS AND THE PRESSURE SHALL NOT VARY MORE THAN 5 PSI. THE NEW LINES SHALL NOT BE ACCEPTED IF THE LEAKAGE DURING THE TWO-HOUR TEST IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:  
$$L = \frac{ND \sqrt{P}}{7400}$$

WHERE L = THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR  
N = THE NUMBER OF JOINTS IN THE LENGTH OF PIPELINE TESTED  
D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES  
P = THE AVERAGE TEST PRESSURE MEASURED IN LBS/SQ IN

LEAKAGE IS DEFINED AS THE QUANTITY OF WATER THAT MUST BE SUPPLIED INTO THE NEWLY LAID PIPE TO MAINTAIN THE PRESSURE OF 50 PSI. THE CONTRACTOR SHALL AT ONCE LOCATE ANY LEAKS AND ACHIEVE THE ACCEPTABLE LIMIT AT NO EXTRA CHARGE TO THE OWNER.



DATE	REVISIONS	BY
	THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:	# OF SHEETS
	<input type="checkbox"/> SKETCH/CONCEPT	
	<input type="checkbox"/> PRELIMINARY	
	<input checked="" type="checkbox"/> FINAL	2
	<input type="checkbox"/> RECORD DRAWING	

**Snyder Property**  
Lot #1, Snyder Subdivision  
Spear Street Extension, Charlotte, Vermont

**Wastewater System Details and Specifications**

**Lamoureux & Dickinson**  
Consulting Engineers, Inc.  
14 Morse Drive, Essex, VT 05452  
802-878-4450 www.LDengineering.com

Proj. no. 09095  
Survey AP  
Design BJT  
Drawn BJT  
Checked DJG/ABR  
Date 2010-01-04  
Scale AS NOTED  
Sht. no. D1