

**Minimum Isolation Distances
From Leachfield**

Water main	50 Feet
Water service line	25 Feet
Roadway/Driveway	10 Feet (25 Feet Downslope)
Stream/Creek	50 Feet
Foundations	35 Feet (75 Feet Downslope)
Property Line	25 Feet

Basics of Design

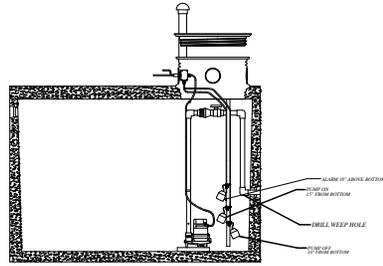
Bedrock House = 400 GPD
 Total Flow = 400 GPD
 Application Rate = 1.0 Gal/ Sq Ft per day
 Absorption Area = 400 gal/ 1.0 gal/ sq ft
 Absorption Area = 400 sq ft
 Area Provided = 500 sq ft
 Use: Trenches = 4' x 62.5' long
 Head Area = 500.74' x 62.5' long x 10.8' deep

**SOIL BORINGS PERFORMED BY
TERRY RAY 10/21/17**

- 0 - 8" TOPSOIL LOAMY SAND
- 8 - 26" FINE SANDY LOAM LIGHT BROWN, FRAGILE
- 26" FAINT MOTTLES, NO WATER OR LEDGE TO DEPTH
- SIB2
- 0 - 8" TOPSOIL LOAMY SAND
- 8 - 26" FINE SANDY LOAM LIGHT BROWN, FRAGILE
- 26" FAINT MOTTLES, NO WATER OR LEDGE TO DEPTH

PERCOLATION TEST

PI - 8 min/ inch



PUMP STATION DETAIL

N.T.S.



EFFLUENT FILTER

N.T.S.

MOUND CONSTRUCTION

***PRIOR TO CONSTRUCTION ALL MATERIALS SHALL BE APPROVED BY THE DESIGNER.

THE FOLLOWING IS THE PROCEDURE FOR MOUND CONSTRUCTION. ANY VARIATIONS SHOULD BE DISCUSSED WITH THE DESIGNER BEFORE ANY MOUND CONSTRUCTION STARTS. MOUND FAILURE MAY RESULT FROM IMPROPER CONSTRUCTION TECHNIQUES AND PROCEDURES. PROPER EQUIPMENT IS ESSENTIAL. SMALL TRACK TYPE DOZERS OR EXCAVATORS WORK BEST. WHEEL TYPE TRACKS MAY COMPLETE THE SURSOIL.

CONSTRUCTION ON WET SOIL CAUSES SOIL SMearing AND COMPACTION AND POSSIBLE FUTURE FAILURES. CONSTRUCTION SHOULD END IF THE DURING DAY WEATHER FROM DUNE. NO MEMBER CONDITIONS PERMITTING AND DURING NO CONSTRUCTION DURING FREEZING TEMPERATURES.

- REMOVE EXISTING TOPSOIL ON TOP OF THE MOUND STOCKPILE FOR FUTURE USE.
- REMOVE STONE AND CONTAMINATED SAND ON MOUND.
- BEFORE NEW AREA TO BE COVERED BY MOUND FILL, FLOW ALONG THE CONTOUR OF THE SLOPE TO A DEPTH OF 8" THROWING THE SOIL TO PLACE. PLACE SAND ON THE FILL. FLOWED AREA IMMEDIATELY AFTER FLOWING IS REQUIRED. DON'T FLOW AREA DOWN SLOPE. SIDE OF FLOWED AREA.
- PLACE APPROVED SAND FILL AROUND THE UPHILL AND SIDE SLOPES OF THE FLOWED AREA. KEEP WHEELS OF TRUCKS OFF FLOWED AREA. NO TRAFFIC DOWNSLOPE SIDE OF FLOWED AREAS. WORK FROM FINS AND UPSLOPE SIDE ONLY.
- MOVE THE SAND FILL INTO PLACE USING A SMALL TRACK TYPE DOZER. ALWAYS KEEP AT LEAST 6" OF SAND BENEATH TRACKS TO PREVENT COMPACTION OF THE FLOWED AREA. PLACE SAND FILL TO THE REQUIRED DEPTH, WHICH IS THE SAME ELEVATION AS THE TOP ELEVATION OF THE STONE IN THE BED OR TRENCHES. SHAPE SIDES TO THE DESIRED SLOPE.
- WITH EXCAVATOR BUCKET, FORM THE TRENCHES IN THE SAND FILL TO A DEPTH OF 12" HAND LEVEL THE BOTTOM OF THE TRENCHES TO MAKE SURE THEY ARE ALL LEVEL AND AT EQUAL ELEVATION ALONG THE ENTIRE LENGTH. MAKE TRENCHES BOTTOM AND SIDEWALLS PRIOR TO PLACEMENT OF STONE.
- PLACE CLEAN WASHED, GRADED OR CRUSHED STONE (1/4" - 1 1/2") IN TRENCHES TO A DEPTH OF 12" FORM 3" DEEP CHANNELS IN THE STONE IN WHICH TO LAY THE PIPING NETWORK. DO NOT USE LIMESTONE.
- CUT EXISTING LATERAL PIPE AND ADD PIPE WITH CLEANOUTS ON BOTH LATERALS. DRILL HOLES TO SIZE AND DISTANCE AS NOTED ON DETAILS. DO NOT GLUE CONNECTION UNIL AFTER PRESSURE TEST HAS BEEN PERFORMED.
- TURN PIPE OVER AND PLACE OR PLACE SHIELD OVER THE HOLES. TURN PIPE OVER AND FACE DOWNWARD. MAKE SURE ALL PIPING CONNECTIONS AND SOLVENT CEMENT PIPING SECURELY IN PLACE. PLACE OR PLACE SHIELDS OVER ALL OF THE STONE.
- PLACE 1" TOPSOIL OR TOPSOIL SOIL LESS PERMEABLE THAN SAND FILL OVER ALL SAND. INCREASE DEPTH TO 1" OVER THE CENTER OF MOUND. PLACE 1" OF GOOD QUALITY TOPSOIL OVER ENTIRE MOUND SURFACE. THIS SOIL MAY BE TAKEN FROM ELSEWHERE ON SITE.
- SEED AND MULCH ENTIRE MOUND SURFACE IMMEDIATELY TO PREVENT EROSION.

INSPECTION

- THE SYSTEM MUST BE INSPECTED BY HIGH KNOB DESIGN ASSOCIATES LLC TO ENSURE COMPLIANCE WITH THESE DESIGN. HIGH KNOB DESIGN ASSOCIATES LLC ASSUMES NO RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE FROM FAILURE TO FOLLOW THE PLANS AND SPECIFICATIONS AND FAILURE TO HAVE BEEN NOTIFIED BY THE CONTRACTOR FOR THE REQUIRED INSPECTIONS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY HIGH KNOB DESIGN ASSOCIATES LLC A MINIMUM OF 72 HOURS IN ADVANCE FOR THE FOLLOWING INSPECTIONS:
 - A) THE FLOWED EXISTING GROUND PRIOR TO PLACEMENT OF SAND FILL
 - B) THE PLACE SAND PRESSURE TEST
 - C) THE SEPTIC TANK AND PUMP STATION PRIOR TO BACKFILLING
 - D) THE PRESSURE DISTRIBUTION SYSTEM TEST
 - E) FINAL GRADING AND SEEDING

7/24/17	ADDED NOTE REGARDING DISPOSAL OF STONE	JK

THIS DESIGN IS PROPOSED TO SATISFY CRITERIA AND MEET THE INTENT OF THE VERMONT ENVIRONMENTAL PROTECTION RULES CHAPTER 602 WATER SYSTEMS AND POTABLE WATER SUPPLY RULES EFFECTIVE SEPTEMBER 20, 2007



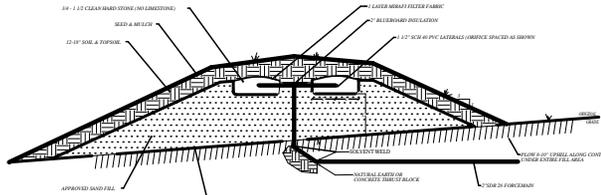
WASTEWATER PLAN

**WELL'S
93 N. OLDE CARRIAGE RD.
CHARLOTTE, VERMONT**



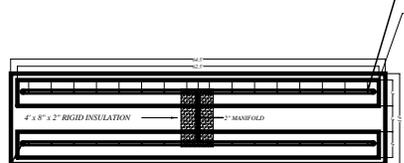
WATER & WASTEWATER DESIGNS
 TOPOGRAPHIC SITE PLANS & MAPPING
 STATE & LOCAL PERMITTING
 981 BIG HOLLOW ROAD
 STARKSBORO, VERMONT 05487
 453-5071

DATE	JK
DATE	6/29/17
DATE	AS NOTED
DATE	201707
DATE	1 OF 1



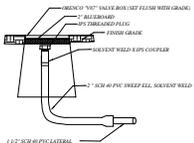
TRENCH MOUND CROSS SECTION

N.T.S.



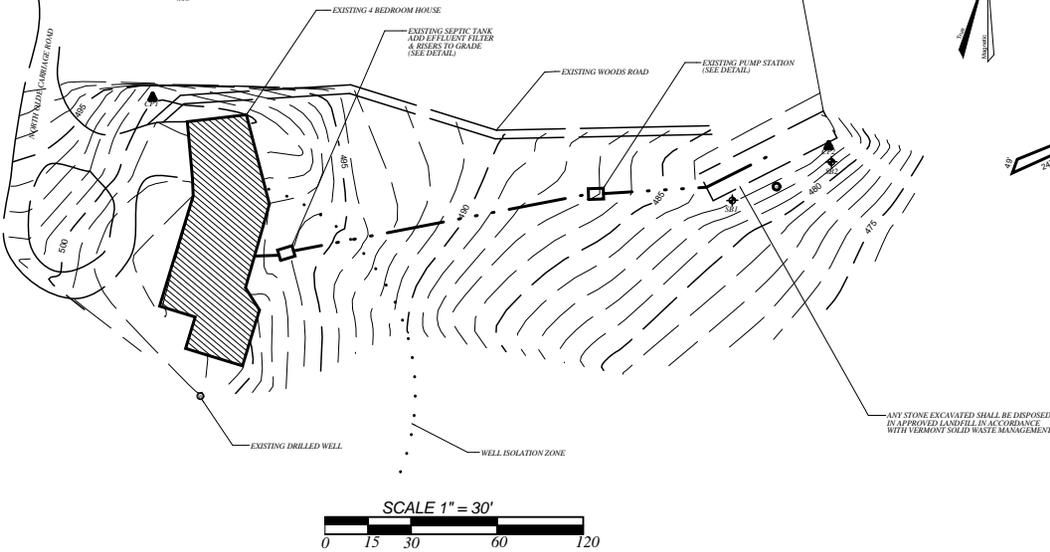
ABSORPTION TRENCH DETAIL

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FLUSHING RISER DETAIL

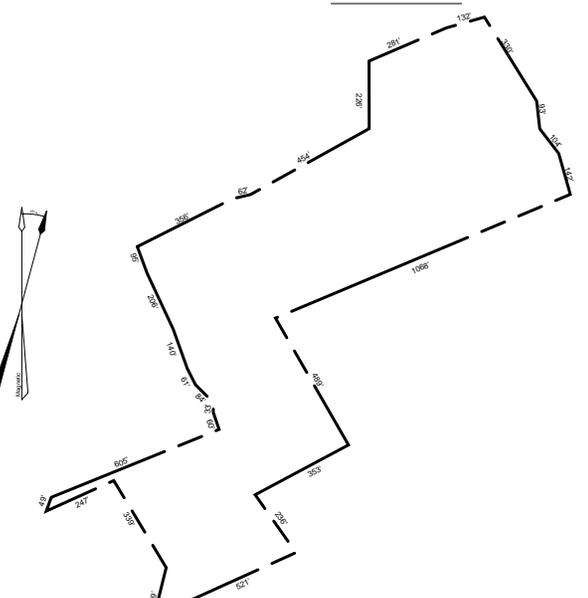
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SCALE 1" = 30'



Locus Map



Lot Layout

N.T.S.

BENCH MARK ELEVATIONS

CP 1 - NAIL IN THE GROUND	= 580.00
CP 2 - NAIL IN THE GROUND	= 481.15
TOP OF PUMP STATION	= 487.13

SURVEY NOTE

BOUNDARIES ARE DEPICTED PER TOWN OF CHARLOTTE PARCEL MAPS AND EVIDENCE FOUND IN THE FIELD. THIS PLAN DOES NOT REPRESENT A LEGAL BOUNDARY SURVEY. CONTACT A LICENSED LAND SURVEYOR AS NECESSARY TO VERIFY BOUNDARIES.

LEGEND

	TREE
	SEPTIC TANK
	DRILLED WELL
	SOIL BORING
	CONTROL POINT
	PERCOLATION TEST
	CURB STOP
	UTILITY POLE
	IRON PIPE SYMBOL
	EXISTING CONTOUR
	PROPOSED BOUNDARY
	PROPOSED CONTOUR