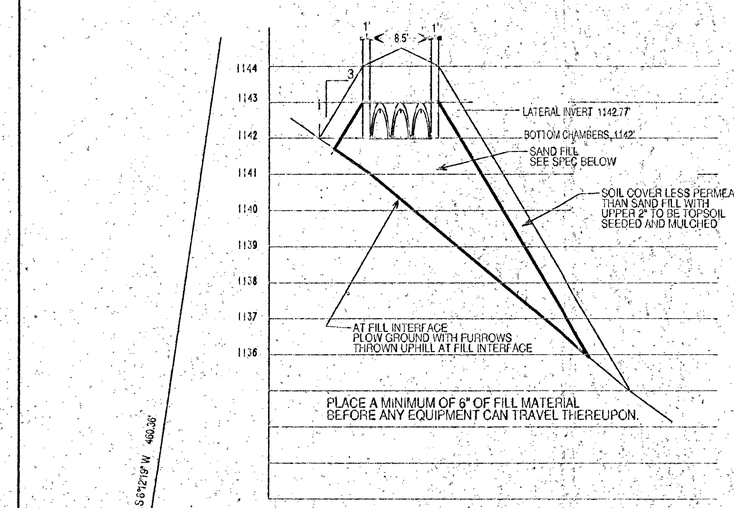
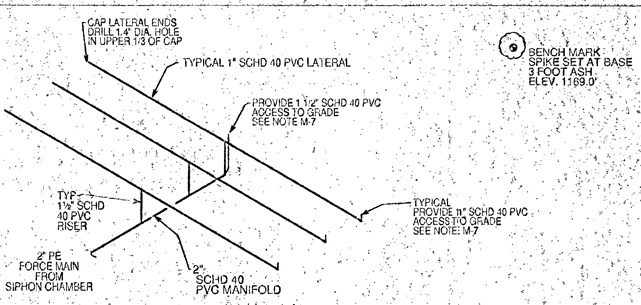


SECTION AA

HORIZONTAL SCALE ONE INCH - 10 FEET
VERTICAL SCALE ONE INCH - 2 FEET



BENCH MARK
SPIKE SET AT BASE
3 FOOT ASH
ELEV. 1169.0'

HIGH RISE MANIFOLD DETAIL

N.T.S.

SAND FILL SPEC. MUST COMPLY WITH A, B, OR C

	SIEVE NUMBER	OPENING (MM)	PERCENT PASSING BY WEIGHT
	10	2.000	85 - 100
	40	0.420	25 - 75
A	60	0.240	0 - 30
	100	0.149	0 - 10
	200	0.074	0 - 0.5
	4	4.750	95 - 100
	8	2.380	80 - 100
B	16	1.190	50 - 85
	30	0.590	25 - 60
	50	0.297	10 - 30
	100	0.149	2 - 10
	10	2.000	85 - 100
C	40	0.420	30 - 50
	200	0.074	0 - 10

MOUND CONSTRUCTION NOTES

M-1. A DESIGNER SHALL REVIEW THE MOUND WASTEWATER DISPOSAL SYSTEM THROUGH THE CRITICAL STAGES OF CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION, THE DESIGNER SHALL SUBMIT A REPORT IN WRITING TO THE SECRETARY INCLUDING THE CERTIFICATION REQUIRED IN 1-202(K) OF THE VERMONT STATE ENVIRONMENTAL PROTECTION RULES. UPON COMPLETION OF PLOWING OF THE MOUND AREA AND PRIOR TO THE PLACING OF THE FILL MATERIAL, THE DESIGNER SHALL INSPECT THE SITE PREPARATIONS. THIS SHALL BE SPECIFICALLY ADDRESSED IN THE DESIGNER'S REPORT. UPON COMPLETION OF THE INSTALLATION OF THE DISTRIBUTION PIPING, THE NETWORK SHALL BE TESTED WITH CLEAN WATER TO ASSURE THAT DISTRIBUTION IS COMPLETE AND MEETS THE REQUIREMENTS IN 1-517 (E)

M-2. TO PREVENT COMPACTION, CONSTRUCTION EQUIPMENT SHALL NOT BE MOVED ACROSS THE PLOWED SURFACE OF THE EFFLUENT DISPERSAL AREA, HOWEVER, AFTER PLACEMENT OF A MINIMUM OF SIX (8) INCHES OF SAND FILL OVER THE PLOWED AREA, CONSTRUCTION EQUIPMENT MAY BE DRIVEN OVER THE PROTECTED SURFACE TO EXPEDITE CONSTRUCTION. CONSTRUCTION AND/OR PLOWING SHALL NOT BE INITIATED WHEN THE SOIL MOISTURE CONTENT IS HIGH. IF SAMPLE OF SOIL OBTAINED FROM APPROXIMATELY NINE (9) INCHES BELOW THE SURFACE CAN EASILY ROLLED INTO A WIRE, THE SOIL MOISTURE CONTENT IS TOO HIGH FOR CONSTRUCTION PURPOSES.

M-3. ABOVEGROUND VEGETATION SHALL BE CLOSELY CUT AND REMOVED FROM THE GROUND SURFACE THROUGHOUT THE AREA TO BE USED FOR THE PLACEMENT OF THE FILL MATERIAL. THE AREA SHALL THEN BE PLOWED TO A DEPTH OF SEVEN (7) TO EIGHT (8) INCHES, PARALLEL TO THE LAND CONTOUR WITH THE PLOW THROWING THE SOIL UPSLOPE TO PROVIDE A PROPER INTERFACE BETWEEN THE FILL AND NATURAL SOILS. TREE STUMPS SHOULD BE CUT FLUSH WITH THE SURFACE OF THE GROUND AND ROOTS SHOULD NOT BE PULLED. ONCE PLOWING IS COMPLETED, THE AREA SHOULD BE FENCED TO PREVENT VEHICLES AND EQUIPMENT FROM ENTERING THE PLOWED AREA, UNLESS THE FILL MATERIAL IS GOING TO BE IN PLACE WITHIN 24 HOURS OF THE PLOWING. IF THE SITE CANNOT BE PLOWED A BACKHOE BUCKET FITTED WITH CHISEL TEETH MAY BE USED TO "FILL" THE SITE BY CREATING FURROWS THAT ARE PARALLEL TO GROUND CONTOUR.

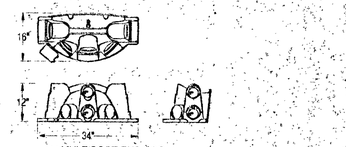
M-4. THE AREA SURROUNDING THE MOUND WASTEWATER DISPOSAL SYSTEM SHALL BE GRADED TO PROVIDE DIVERSION OF SURFACE RUN-OFF WATERS.

M-5. CONSTRUCTION SHOULD BE INITIATED IMMEDIATELY AFTER PREPARATION OF THE SOIL INTERFACE BY PLACING THE SAND FILL. AFTER CONSTRUCTION OF THE DISTRIBUTION SYSTEM, BUT PRIOR TO COVERING THE DISTRIBUTION SYSTEM, A DESIGNER SHALL DIRECT THE TESTING OF THE DISTRIBUTION SYSTEM. AFTER SUCCESSFUL TESTING OF THE DISTRIBUTION SYSTEM, FILTER FABRIC SHALL BE INSTALLED AND THE SYSTEM COMPLETED. THE ENTIRE MOUND WASTEWATER DISPOSAL SYSTEM IS TO BE COVERED WITH TOPSOIL NATIVE TO THE SITE, OR OF SIMILAR CHARACTERISTICS, TO SUPPORT VEGETATION FOUND IN THE AREA. THE INSTALLER SHALL CROWN THE ENTIRE MOUND WASTEWATER DISPOSAL SYSTEM WITH A COVER OF SOIL LESS PERMEABLE THAN THE MOUND FILL, COVERING WITH 12" ON THE SIDES OF THE MOUND. NATIVE SOIL FROM THE SITE IS NORMALLY SUITABLE FOR COVER MATERIAL, THOUGH THE TOP 2-4" OF THIS COVER MUST BE TOP SOIL. THE ENTIRE MOUND SHALL BE SEEDED OR SODDED TO ASSURE STABILITY OF THE INSTALLATION. THIS GRASS COVER SHALL BE MAINTAINED AND SHOULD BE MOWED ON AT LEAST AN ANNUAL BASIS.

M-6. THE PRESSURE DISTRIBUTION PIPE SHALL BE PLACED IN THE CHAMBERS WITH CABLE TIE HANGERS PER SECTION, WITH THE ORIFICES UPWARD.

M-7. THE DISTRIBUTION PIPE SHALL BE CONSTRUCTED SO THAT THERE IS GRADE ACCESS TO THE MANIFOLD AND END PIPES. ACCESS CAPS SHALL BE TIGHT FITTING, APPROVED SCREWED WITH TEFLON PIPE TAPE OR O-RING TYPE.

QUICK 4 STANDARD CHAMBER



MULTIPORT END CAP

INFILTRATOR QUICK 4 STANDARD DETAILS
ONE INCH = 2 FEET

SYSTEM DESIGN CRITERIA

LIMITING FACTOR: SEASONAL ESTIMATED HIGH WATER TABLE IS 25 TO 35"
UTILIZE MOUND SYSTEM DESIGN

DAILY USAGE:
5 BEDROOMS = (3 AT 110 GPD)+(2 AT 70GPD) = 560 GPD

PERC RATE: <45 MIN/INCH

SYSTEM SIZING:
FIELD SIZE: 560 GPD/1.0 GPD/SF= 560 SF
(560/4.5 SF/LF)*4LF/CHAMBER = 30.8 CHAMBERS
PROVIDE 3 X 10 CHAMBERS = 30 X 18.16= 544.8 SF
+ 8 END CAP PAIRS AT 7.1 = 566.1 SF
MIN. REQ. EFFECTIVE BASAL AREA: 560 GPD/0.74 GPD/SF=757 SF
PROJECT BASAL AREA, 42 X 36 = 1512 SF

PRESSURE DISTRIBUTION SYSTEM:

USE: (3) 37' 4" LONG 1" SCHD 40 LATERALS
LATERAL (8) 1/4" ORIFICES SPACED 5.33' = 5' 4" APART O.C.
(LAST ORIFICE ON EITHER SIDE OF LATERAL IN THE END CAP)
= 24 TOTAL ORIFICES

LATERAL INV. ELEVATION: 1142.77'
PUMP SET AT ELEVATION: 1130.7'
LENGTH OF FORCE MAIN: 105'

DESIGN HEAD, MIN.2.5' AS DESIGNED 4.0'

DISCHARGE RATE:AS DESIGNED = 35 GPM
MINIMUM SCOUR RATE: 35GPM/0.163GPF/60MPS= 3.6 FPS

DOSING:

LATERAL VOLUME: 37.33 FT X 0.041 GAL/FT X 3 LAT= 4.6 GAL

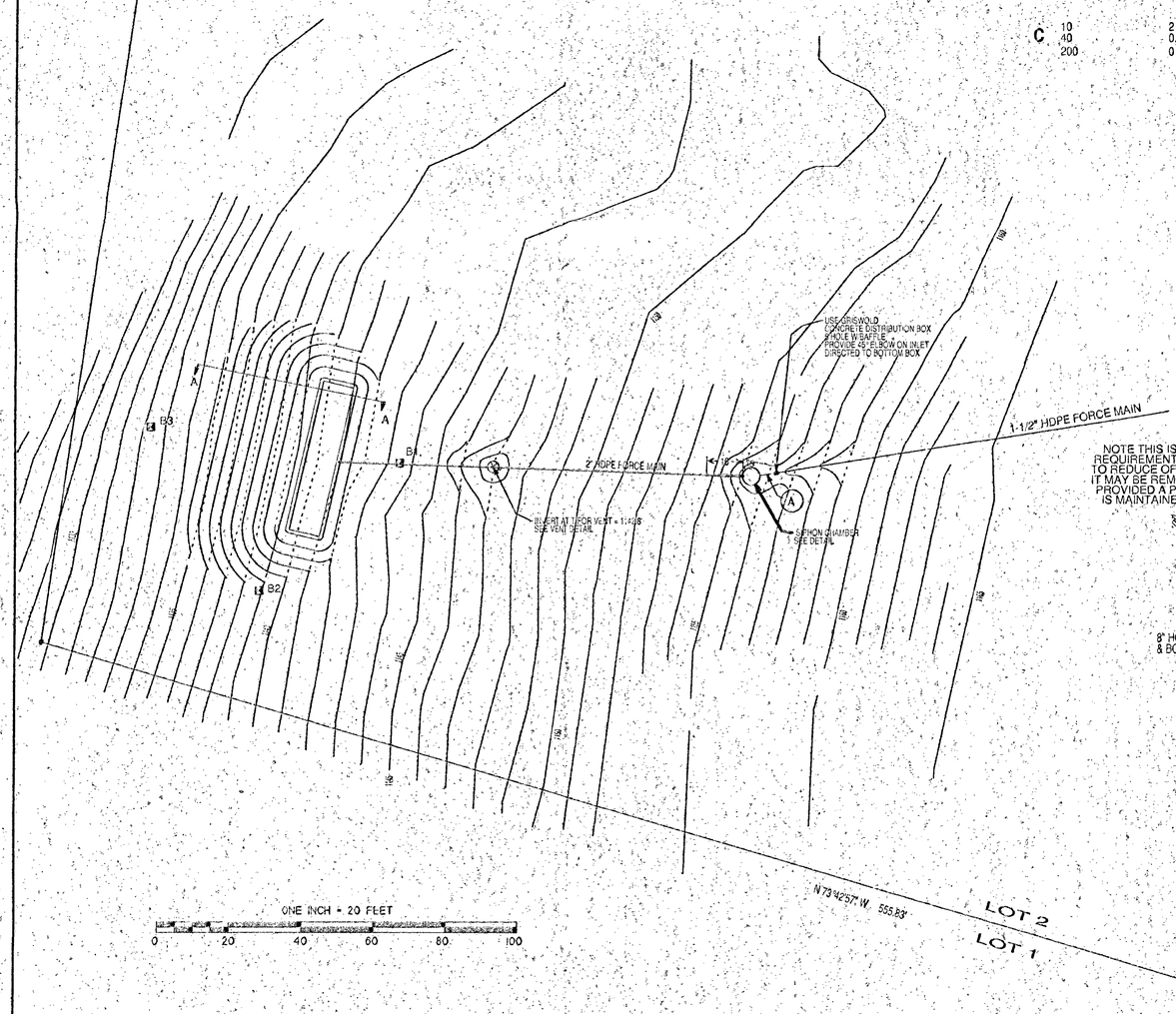
RECHARGEABLE FORCE MAIN VOLUME
50' X 0.16 GAL/FT + 10' X 0.65 GAL/FT = 16.1 GAL

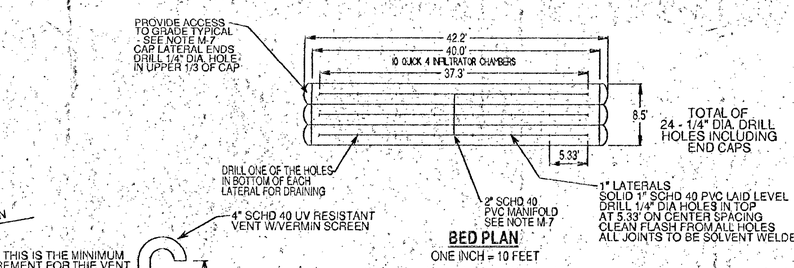
TOTAL = 20.7 GAL
MIN DOSE = 20.7 GAL X 5 = 103.5 GAL

MAXIMUM DAILY DOSE = 560 GPD/4 DOSE = 140 GAL/DOSE
USE DOSAGE RATE OF 133 GAL/DOSE

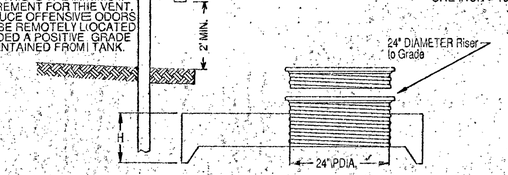
GENERAL NOTES

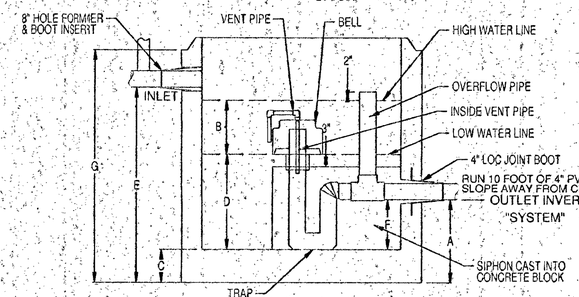
1.0) PRIOR TO ANY CONSTRUCTION A QUALIFIED CONSULTANT MUST BE NOTIFIED.
2.0) PROVIDE A MINIMUM OF 4 FOOT OF SOIL COVER OVER FORCE MAIN. IF THIS IS NOT FEASIBLE PLACE 2" THICK BY 2 FOOT WIDE EXTRUDED POLYSTYRENE CENTERED OVER LINE WITH A MINIMUM OF 2 FOOT SOIL COVER. AT DRIVEWAY CROSSING SLEAVE FORCE MAIN IN 4" PVC SCHD 40 AND PLACE 2" THICK BY 2 FOOT WIDE EXTRUDED POLYSTYRENE CENTERED OVER LINE WITH A MINIMUM OF 4 FOOT SOIL COVER FOR 5 FOOT FROM EDGE OF DRIVEWAY
3.0) PROVIDE A MINIMUM OF 1.5' SOIL COVER OVER TANKS TO PREVENT TANK FLOATATION PROVIDE A MINIMUM OF ONE ACCESS TO GRADE (MINIMUM 18" DIA.) OVER SEPTIC TANK. USE A TIGHT FITTING COVER DESIGNED TO PREVENT CHILD ENTRY. ALSO PROVIDE A TUFTITE EF4COMBO, EFFLUENT FILTER OR EQUAL.
4.0) NO BUILDING, DRIVEWAY, OR ANY OTHER SUBSURFACE OBSTRUCTION SHALL BE LOCATED WITHIN 10 OF THE TOE OF THE MOUND SITE ON THE SIDES, EXCEPT THIS DISTANCE TO BE 25 FROM THE DOWNGRADIENT TOE OF THE MOUND.
5.0) LOT 1 REPLACEMENT SEPTIC SYSTEM FOOTPRINT IS BASED ON EXISTING 3 BEDROOM RESIDENCE AND ON USING A PERFORMANCE BASED APPROACH WITH INFILTRATORS AND PRETREATMENT. NOTE EXISTING WELL CAN BE BROUGHT INTO COMPLIANCE BY RELOCATION EDGE OF DRIVE.
6.0) "SYSTEM" 48" I.D SIPHON CHAMBER IS RATED FOR DOSE OF 125 GAL. W/316. THIS IS TO BE ADJUSTED AT THE PLANT OR FIELD MODIFIED TO 108.4 GAL. FIELD MODIFICATION CAN BE 2 MORTORED STACKED COLUMNS OF 8"X16" 2 CORE SPLITTER CONCRETE BLOCK RISING THROUGH THE HIGH WATER LINE.





BED PLAN
ONE INCH = 10 FEET



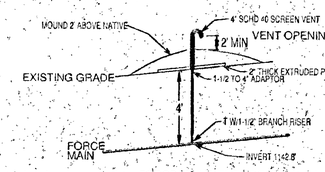


"DELIVERY" GRISWOLD 36" I.D. SIPHON CHAMBER WITH SIPHON #207
"SYSTEM" GRISWOLD 48" I.D. SIPHON CHAMBER WITH SIPHON #417
N.T.S.

RUN 10 FOOT OF 2" PVC THEN REDUCE TO 1-1/2"
SLOPE AWAY FROM CHAMBER A MIN OF 1/4"/FT
OUTLET INVERT 1318'
"DELIVERY"

SIPHON CHAMBER	SIPHON MODEL	A	B	DOSE	C	D	E	F	G	H
"DELIVERY"	207	12.8"	7"	30.8 GAL	6"	11.8"	45"	8.8"	54"	12"
"SYSTEM"	316	22.5"	16"	108.4 GAL	8"	22"	59"	14.5"	68"	12"

SEE NOTE 6



FORCE MAIN VENT DETAIL
N.T.S.

NOV 21 2008

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05250

SUBDIVISION PLAN AND
SEPTIC SYSTEM DESIGN PREPARED FOR

JANET LEE FRAM

ROUTE 315 - CLARK ROAD
RUPERT, VERMONT

RECORD OWNER: SAME

Department of Environmental Conservation
Approved: [signature]
Permit #: [illegible]
Date: 11/21/08

DATE: OCTOBER 30, 2008
SCALE: AS NOTED

SHEET 2 OF 2

DESIGN BY: LARRY J PARKS ST#7/8

FILE No. 1203