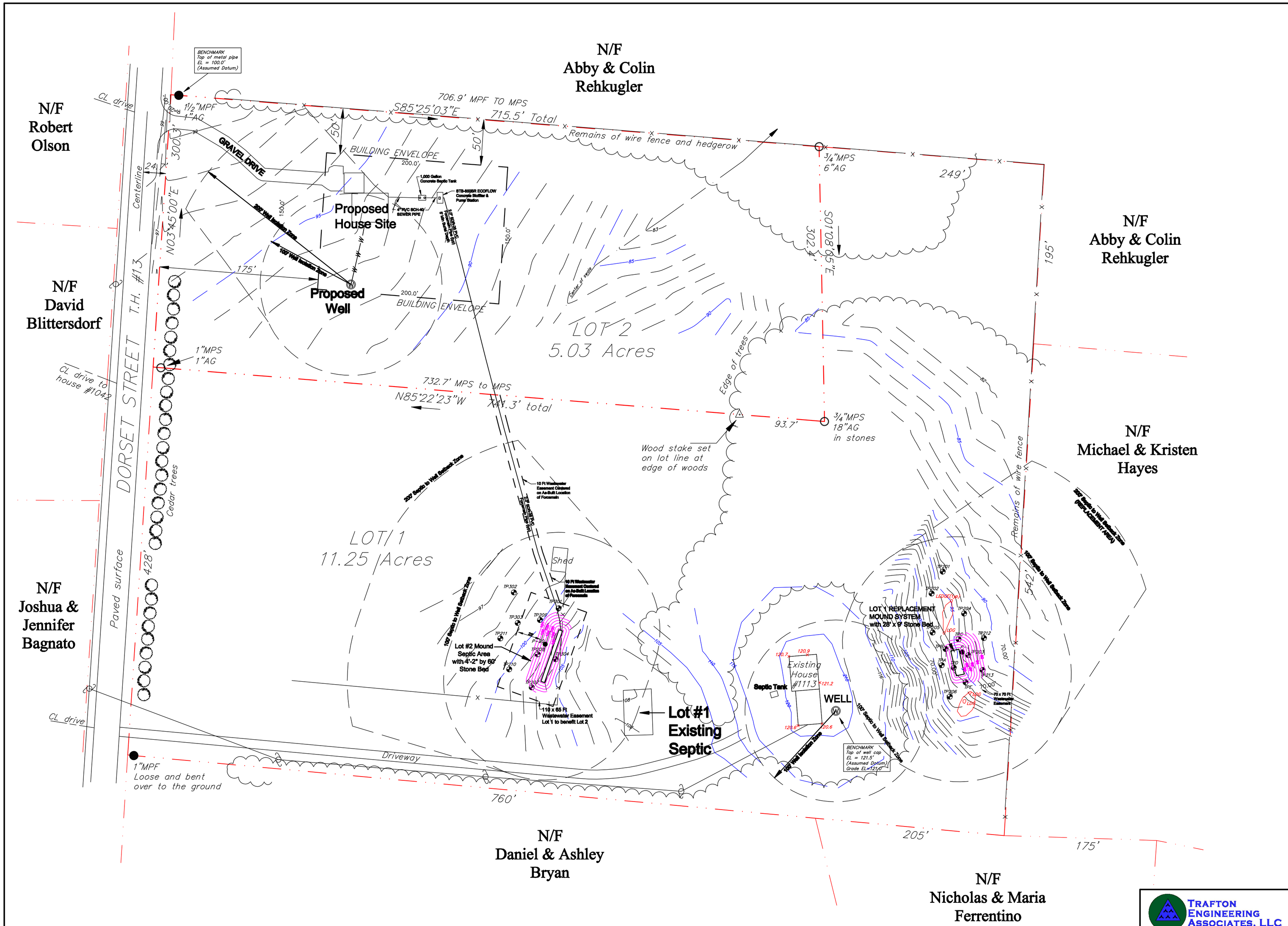

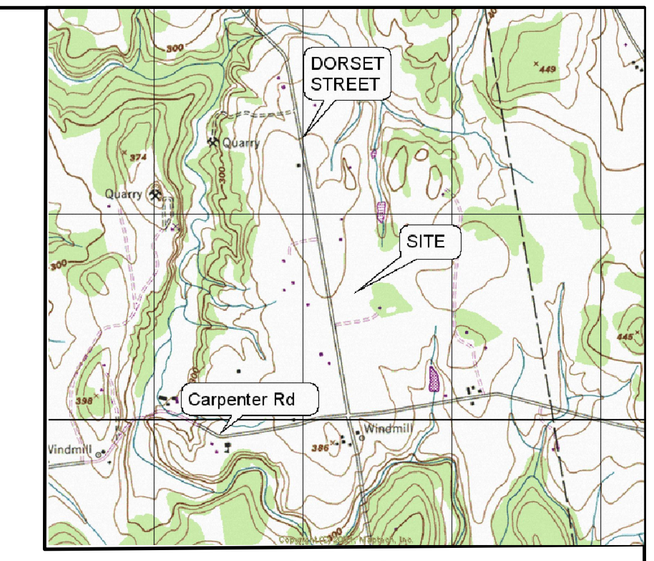

LOCATION MAP
NTS

NOTES

OWNER:	Heather D. Pierce
	1113 Dorset Street, Charlotte, VT 05445
Lot Size:	16.28 Acres
Parcel ID:	000 011 113
Deed:	Vol 161, Pg 1
Zoning District:	Rural

1. This Plan depicts a wastewater system layout and design and is not for any other purpose. This is not a survey. Boundary survey depicted herein is for planning purposes only, and is taken from a survey plat plan produced by Donald Johnston, L.S. of South Mountain Survey & Mapping, P.C. and dated August 5, 2011. Topographic survey information is also from field survey by Donald Johnston, L.S..

2. Project Description: An existing 4-bedroom house will remain on Lot 1, with an exisiting on-site septic system and drilled bedrock well for water supply. A single family 4- bedroom house is planned for Lot #2 a 5.03 acre lot. A new on-site, non-shared, drilled bedrock well will be the water supply for the new house on Lot #2. Wastewater system for Lot #2 will be a performance based design mound with filtrate effluent discharged from an Innovative/Alternative pretreatment system. The wastewater mound for Lot #2 will be located by easement on Lot #1. Pretreatment system to consist of a standard 1,000 gallon concrete septic tank discharging to an STB-650BR Ecoflo Biofilter with an integral pump chamber in a concrete tank. Designated house site is proposed for planing purposes only, and may be re-located within the building envelope shown on the lot in this plan and in compliance with the Town building permit. The septic tank, biofilter tank, building sewer and forcemain must be a minimum of 50 feet away from the water well and 25 feet away from the water service line.

LEGEND

	Property Line
	Zoning Setback
100	Existing Contour
104	Finish Contour
	Edge of Road/Gravel
Ø	Utility Pole
TP201	Soil Test Pit

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Revision #	Description	Date
01	Revise mound and replacement areas	01/07/12
	x	

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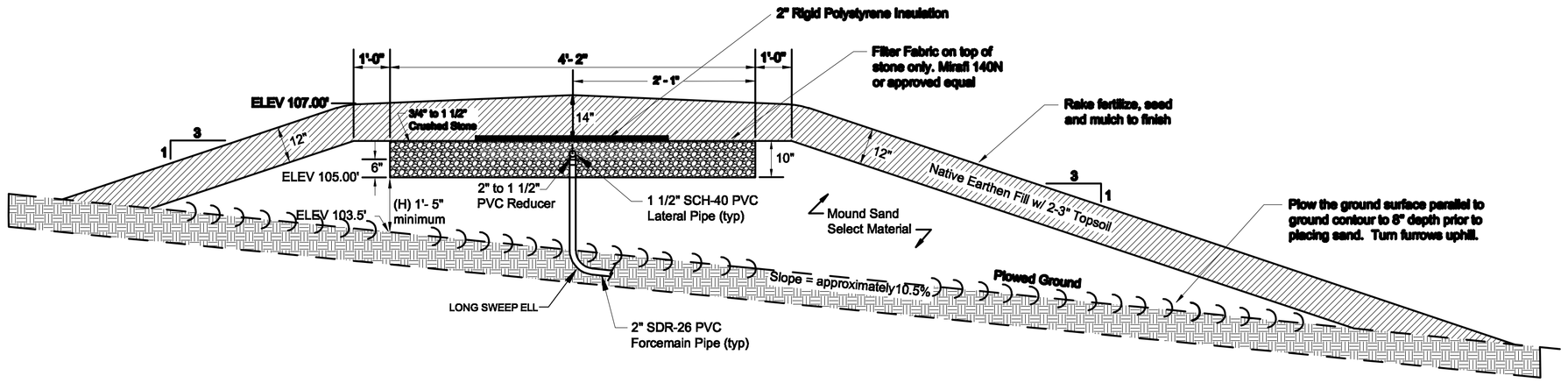
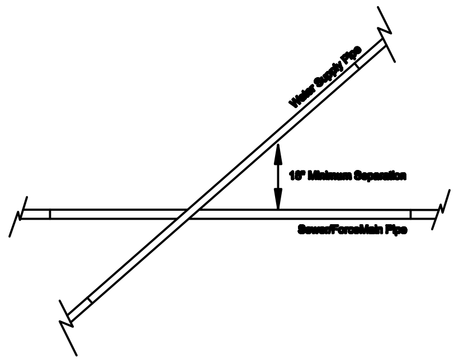
WW SITE PLAN

Pierce WW
1113 Dorset Street
Charlotte, VT

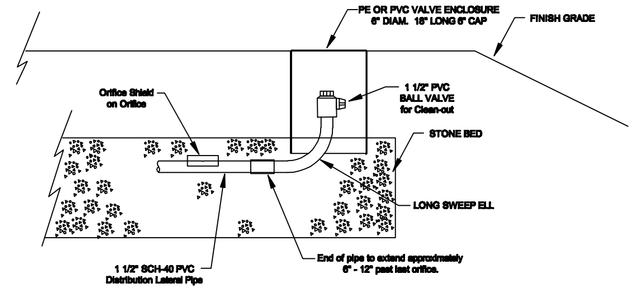
SIZE	DWG Date:	DWG NO.	REV
D	11/24/11	CHL 09019.01	01
SCALE 1" = 20'	Drawn by: TMC	SHEET 1 of 4	



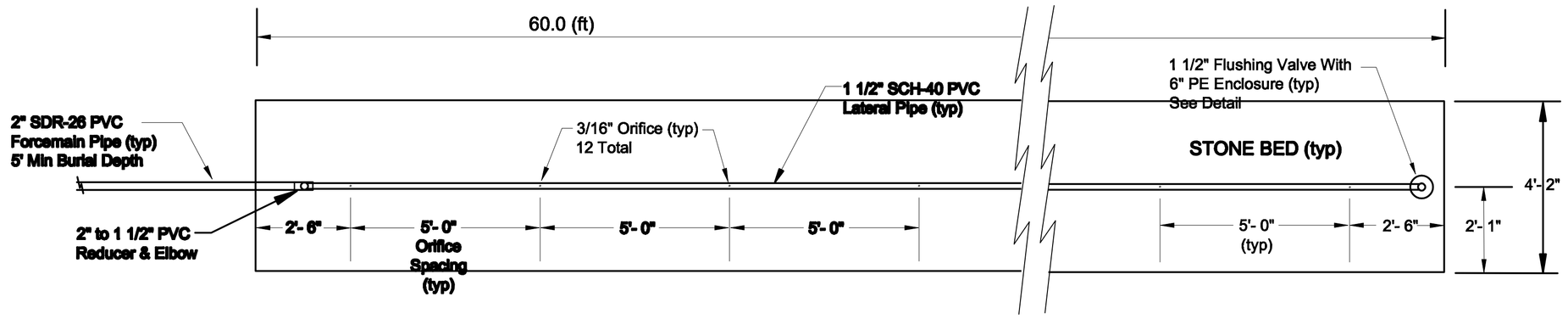
WASTEWATER MOUND PROFILE DETAIL
nts



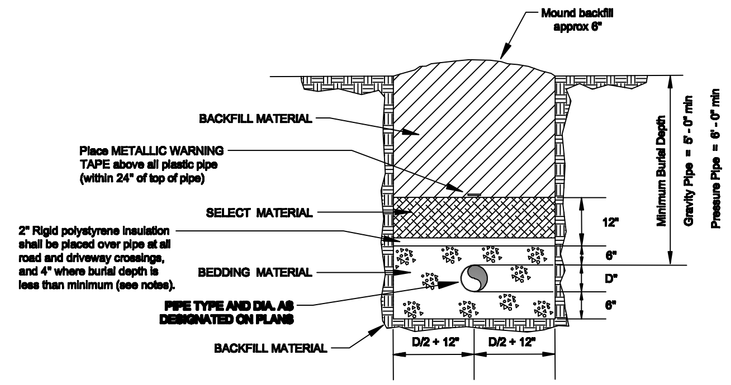
WATER/SEWER PIPE CROSSING DETAIL
nts



CLEANOUT VALVE & VALVE ENCLOSURE DETAIL
nts



STONE BED PIPING DETAIL
nts

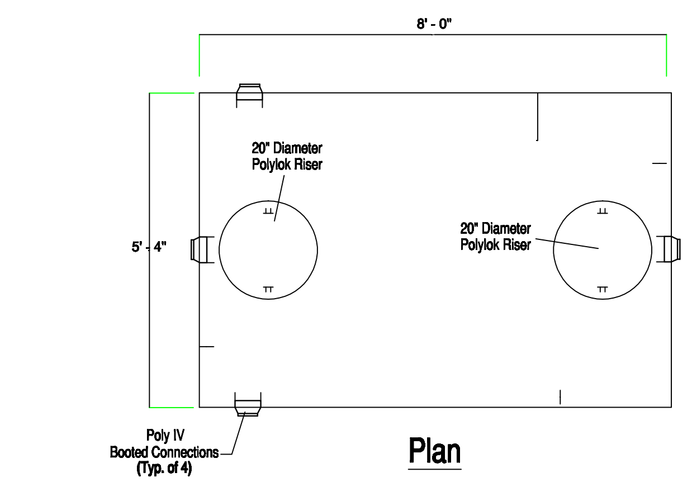


MATERIAL	SANITARY SEWER	WATER MAIN
Bedding Material	Type I, II	Type I or Sand
Select Material	Approved backfill free of stones greater than 1 1/2" diam. Compact in 6 - inch lifts.	
Backfill Material	Approved excavated material compacted in 12" lifts.	

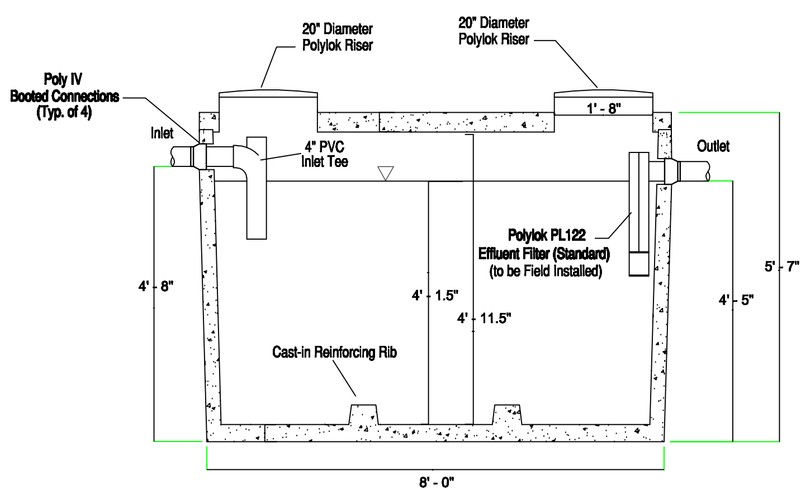
NOTES

1. Backfill material shall contain no stones greater than 3" in diameter, no frozen lumps, and only minimal amounts of clay or organic material. All material to be placed in maximum of 12" lifts and compacted before placing next lift.
   - Type I Material shall be 3/4" clean, hard crushed stone with no frozen lumps, clay or organic material.
   - Type II Material shall be clean, hard crushed stone with a gradation by weight of: 100% passing a 1 1/2" square opening, 30% passing a 3/4" square opening and 0% passing a 1/2" square opening.
   - Sand shall be free from silt, clay, loam or organic materials, conforming to VAOT 703.30 and shall not have any stones greater than 2". Gradation must be: 90% passing a 1 1/2" sieve, not less than 75% passing a 1" sieve, not less than 60% passing a #4 sieve, not more than 30% passing a #100 sieve, and not more than 5% passing a #200 sieve.
2. Backfill designated "compacted" is to 90% - 95% standard proctor, AASHTO T-99. All fill placed below and around any pipes and below pavement must meet this requirement.
3. For all trenches with a lengthwise grade of greater than 4% and/or where groundwater is present, install clay dams around pipe at 100' intervals.
4. Ductile iron pipe may be laid in an excavated trench without 6" bedding below the pipe only if the native material conforms to Type I or Sand.
5. Insulate water or sewer pipe with 4" rigid polystyrene insulation if cover is less than the Minimum Burial Depth. In no case may cover be less than 4 feet for sewer or 5 feet for water mains.

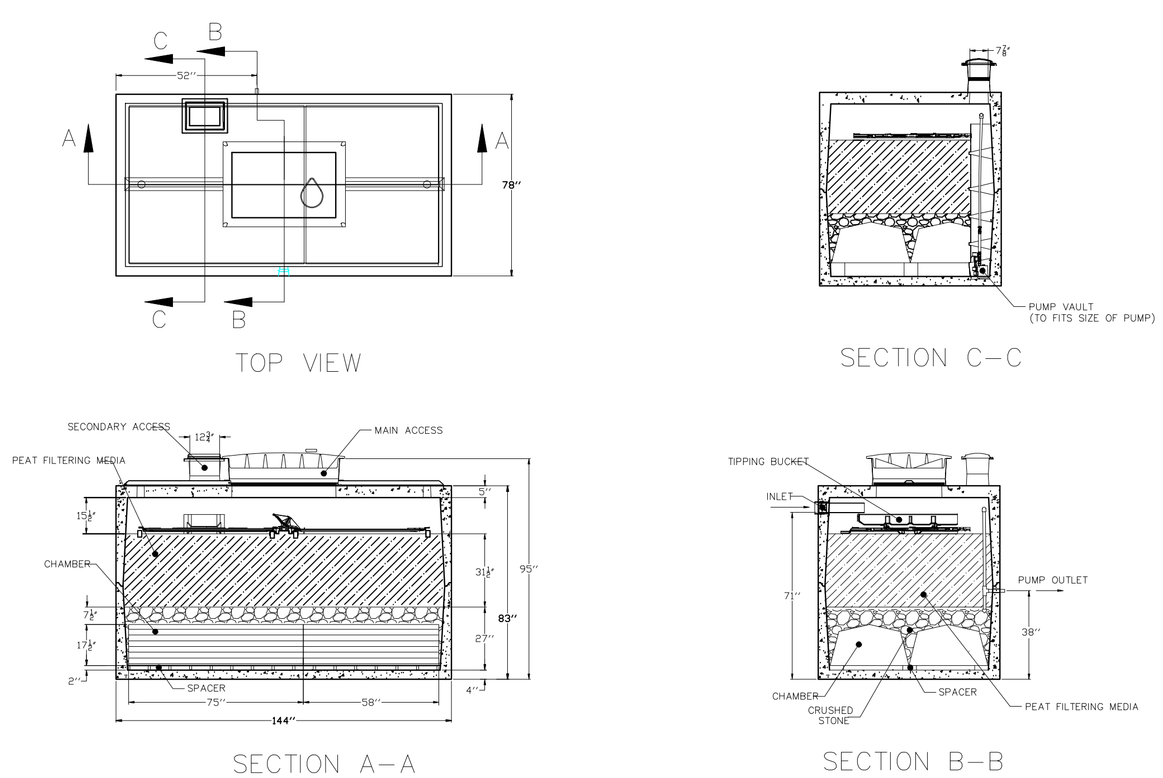
PIPE TRENCH DETAIL
nts



Plan



1,000 GALLON SEPTIC TANK
nts



STB-650BR ECOFLOW PEAT BIOFILTER
nts

Soil Test Pits Conducted by Hand Tools on December 16, 2011

TP-301	0 – 10"	A_o Dark Brown 10YR 3/3 fine sandy loam, friable, medium blocky, with some gravel and cobbles, 5/10/10, roots common, moist.
	10"-14"	B_1 Light Olive Brown loam, friable, medium blocky, with some stone & gravel, 5/5/5, roots common, moist.
	14"-20"	B_2 Brownish-Yellow loam, friable, medium blocky with stone, cobbles & gravel, lenses of sandy gravel, 5/5/5, no roots, moist to wet. Mottles: medium to faint; 10% gray Fe depletions, faint fine; 2% brownish red Fe concentrations.
	20"-30"	C_1 Olive Brown silty clay loam, friable, fine blocky with stone, cobbles & gravel, 2" lenses of yellowish brown sandy loam, 5/5/5, no roots, moist to wet. Mottles: medium to faint; 10% gray Fe depletions, faint fine; 2% brownish red Fe concentrations. End of pit, no groundwater or bedrock encountered.
	ESHWT = 14"	
TP-302	0 – 7"	A_o Dark Olive Brown silty clay loam, friable, medium blocky, with some stone and gravel, 5/5/5, roots common, moist to wet.
	7"-10"	B_1 Dark Olive Brown loam, friable, medium blocky, with trace gravel, 5/5/5, roots common, moist.
	10"-26"	C_1 Dark Olive Brown silty clay loam, platy, medium firm, with gravel, 0/5/5, no roots, wet. Mottles: fine faint; 5% gray Fe depletions, fine faint; 5% brownish red Fe concentrations. End of pit, no bedrock encountered, groundwater seeps at 16", later GW observed at 10-11".
	ESHWT = 10"	
TP-303	0 – 6"	A_o Dark Olive Brown silt loam, friable, medium blocky, with some stone and gravel, 5/5/5, roots common, moist to wet.
	6"-13"	B_1 Dark Olive Brown loam, friable, medium blocky, with trace gravel, 5/5/5, roots common, moist.
	13"-25"	C_1 Dark Olive Brown silty clay loam, platy, medium firm, with gravel, 0/5/5, no roots, wet. Mottles: fine faint; 5% gray Fe depletions, fine faint; 2% brownish red Fe concentrations. End of pit, no bedrock encountered, groundwater seeps at 18".
	ESHWT = 13"	
TP-304	0 – 10"	A_o Dark Brown 10YR 3/3 loam, friable, medium blocky, with some gravel and cobbles, 5/10/10, roots common, moist.
	10"-17"	B_1 Light Olive Brown loam, friable, medium blocky, with some stone & gravel, 5/5/5, roots common, moist.
	17"-24"	C_1 Brownish-Yellow fine sandy loam, friable, medium blocky with stone, cobbles & gravel, lenses of sandy gravel, 5/5/5, no roots, moist to wet. Mottles: medium to faint; 10% gray Fe depletions, faint fine; 2% brownish red Fe concentrations. End of pit, no groundwater encountered Bedrock found at 24".
	ESHWT = 17"	

Revision #	Description	Date
01	Revise mound profile, pipe detail, add test pits	01/07/12

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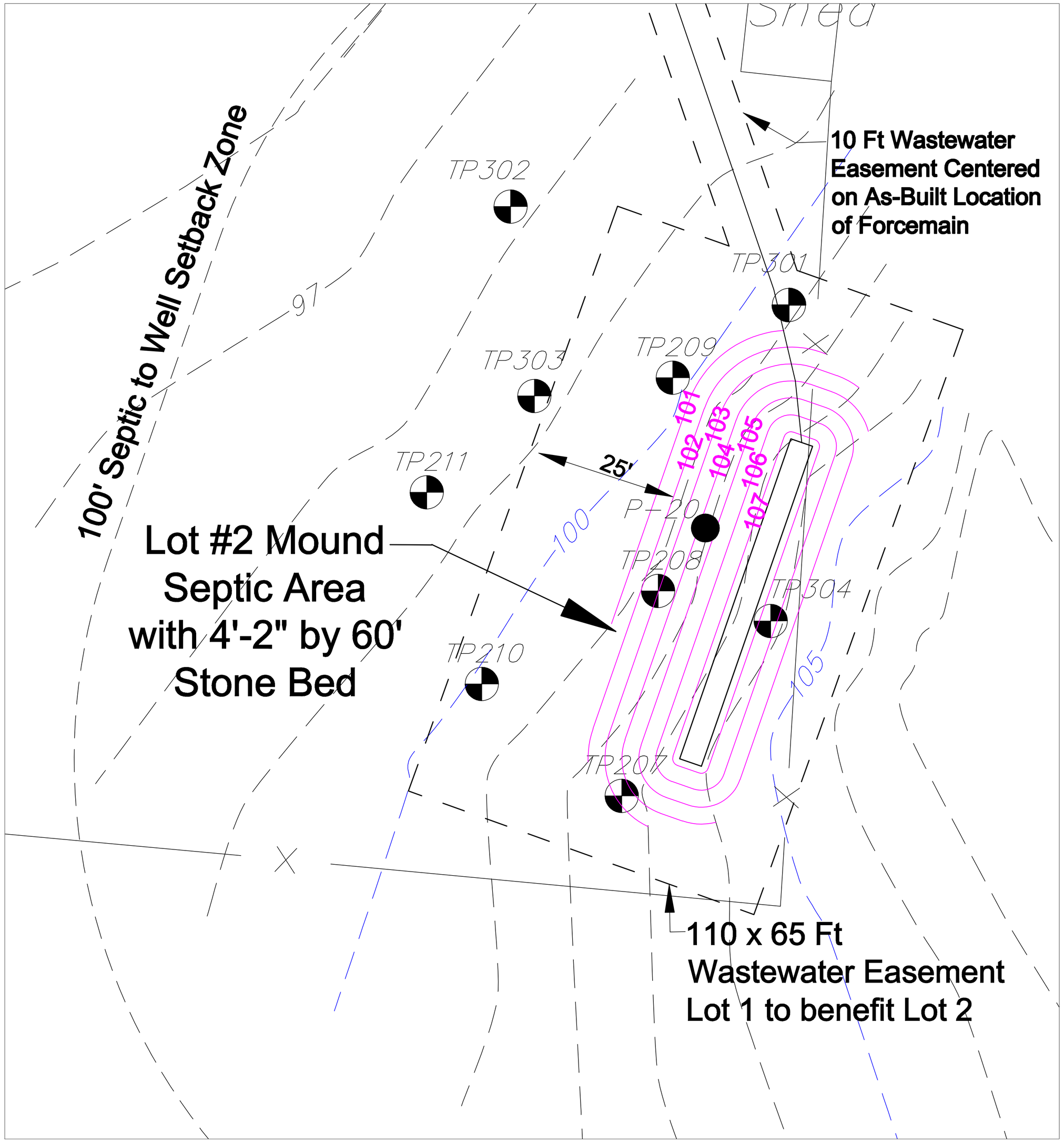
WW DETAILS

Pierce WW
1113 Dorset Street
Charlotte, VT

SIZE	FROM NO.	DWG NO.	REV
D	11/28/11	CHL 09019.03	01
SCALE	Drawn by: TMC	SHEET 3 of 4	

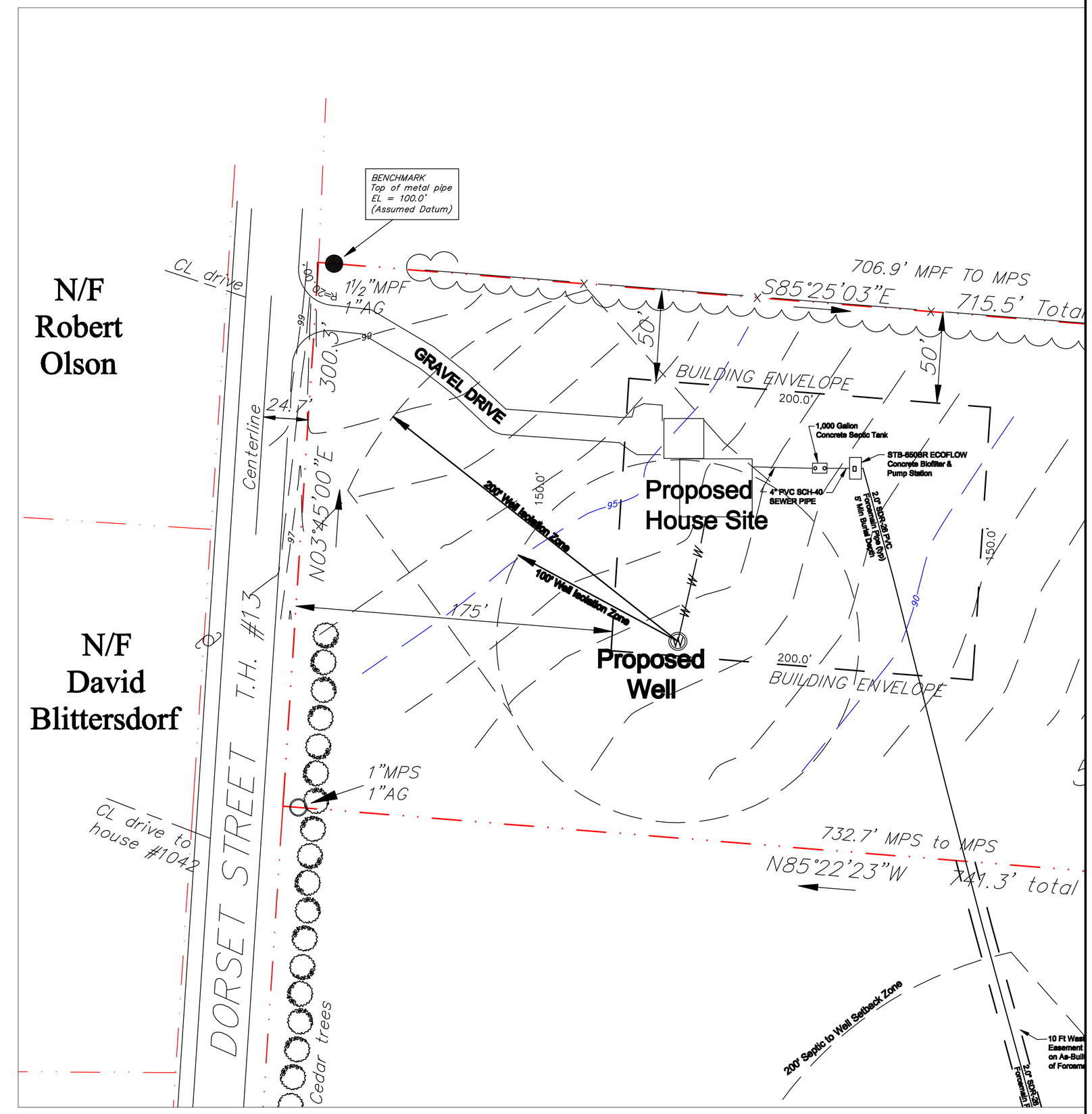


WASTEWATER MOUND DESIGN PLAN

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.



HOUSE/DRIVEWAY PLAN

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

Revision #	Description	Date
01	Revise building envelope and mound	01/09/12

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MOUND PLAN

Pierce WW
1113 Dorset Street
Charlotte, VT

SIZE	FROM NO.	DWG NO.	REV
D	11/24/11	CHL 09019.02	01
SCALE: varies	Drawn by: TMC	SHEET 2 of 4	