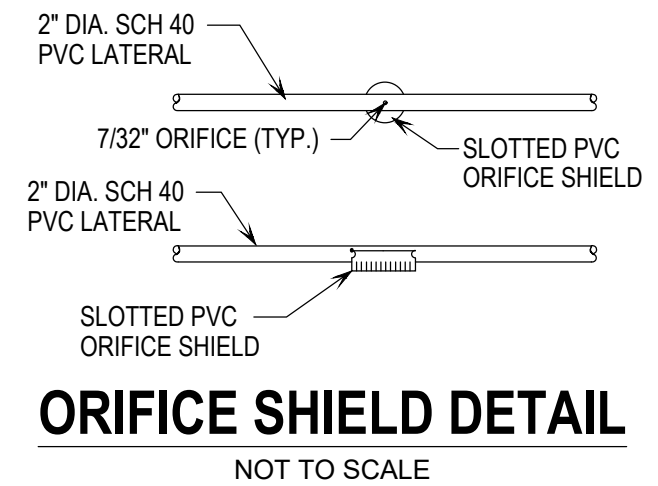
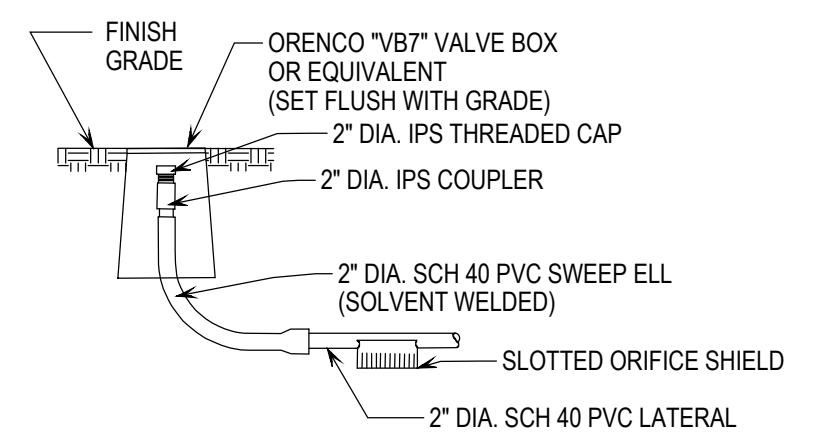


LOT 2 MOUND WASTEWATER DISPOSAL SYSTEM PLAN VIEW

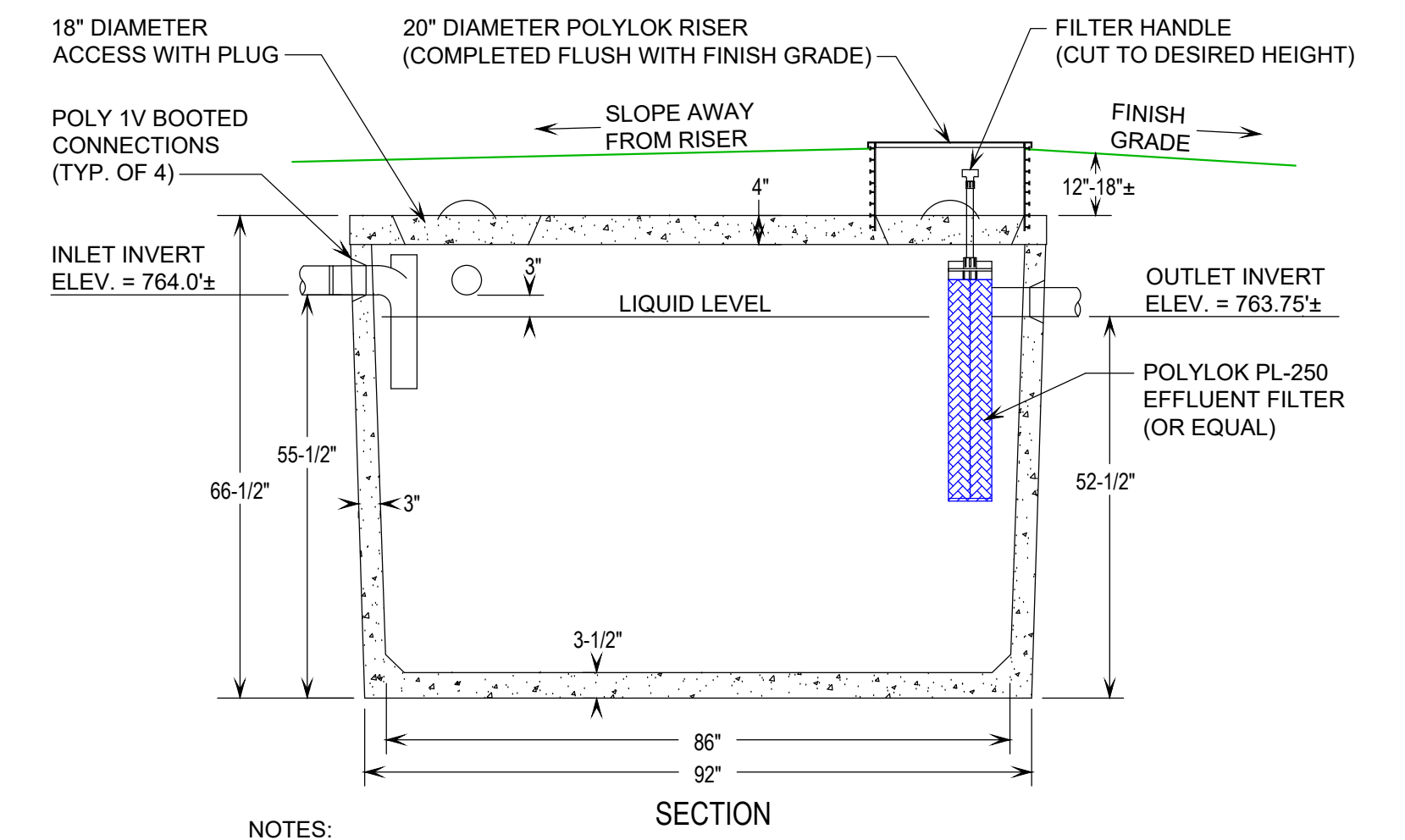
SCALE: 1-INCH = 5-FEET



ORIFICE SHIELD DETAIL
NOT TO SCALE

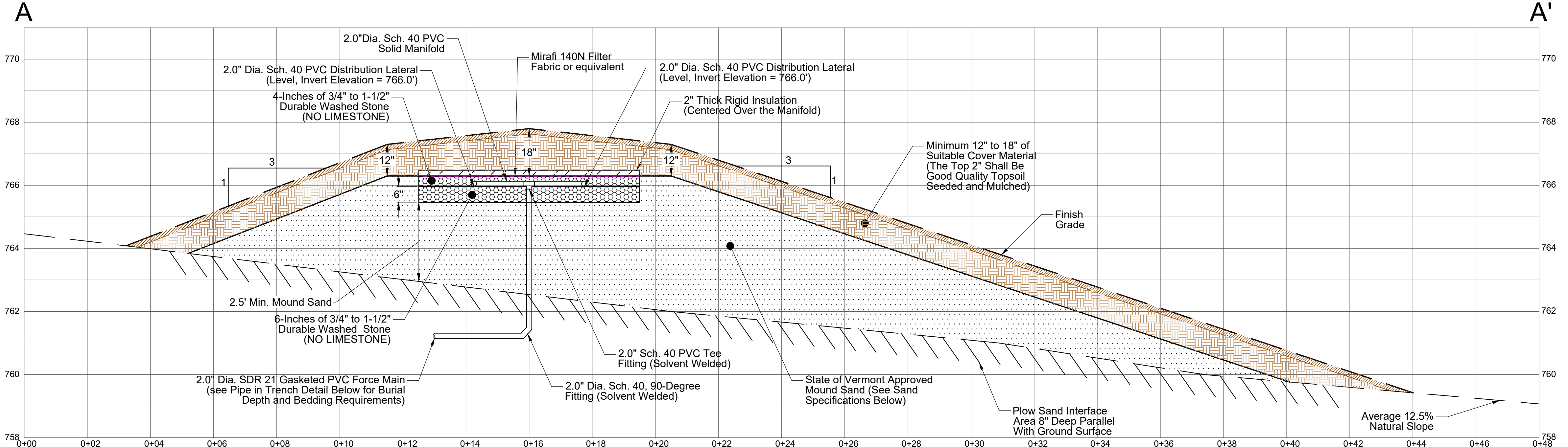


FLUSHING RISER DETAIL
NOT TO SCALE



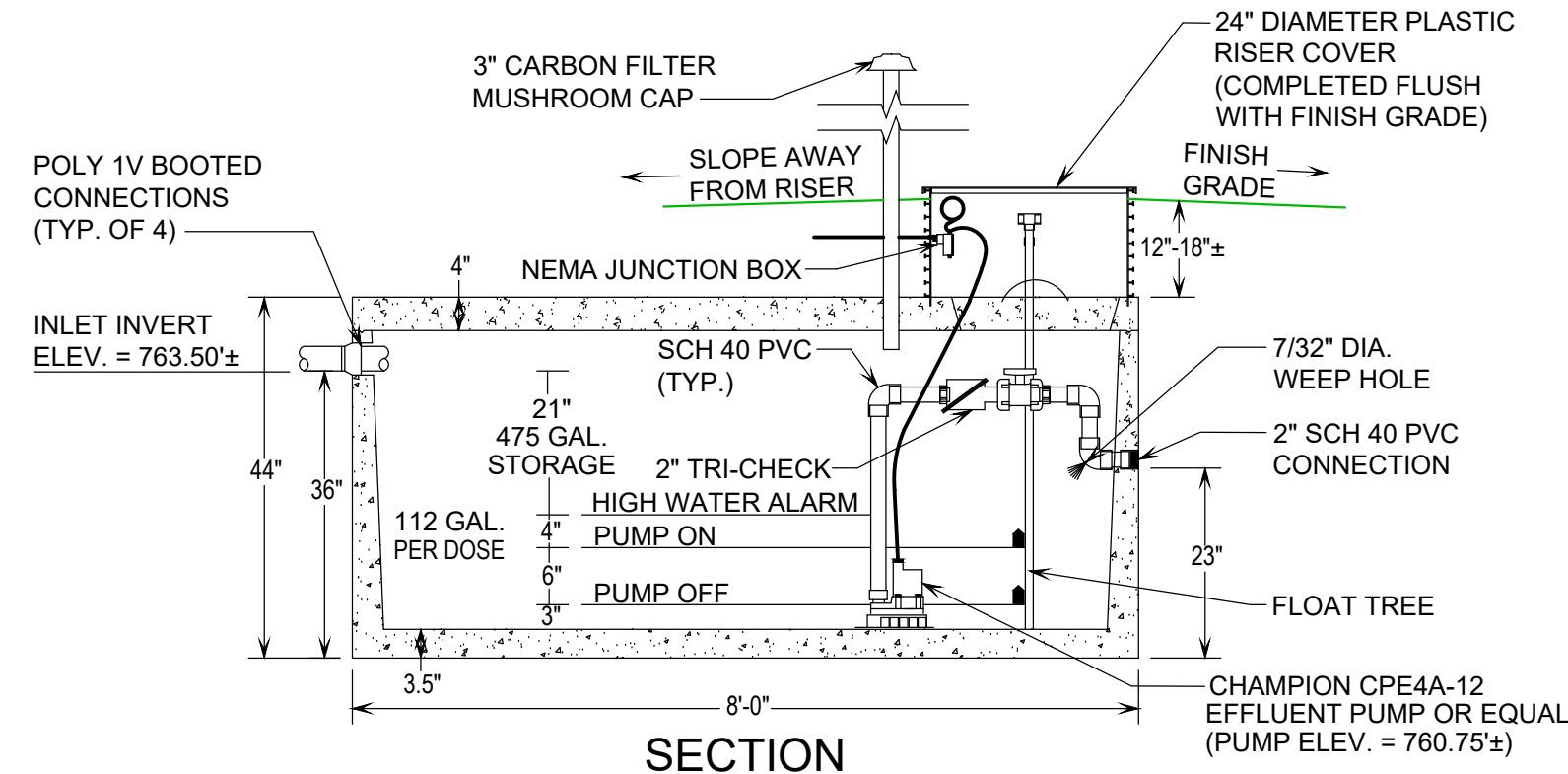
- NOTES:
1. SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF SIX INCHES OF COMPACTED GRANULAR BASE.
 2. AN INLET TEE BAFFLE IS REQUIRED.
 3. IF WATER-PROOF BOOTED CONNECTIONS ARE NOT USED, ALL PIPE PENETRATIONS SHALL BE SEALED WITH A "WATER PLUG" NON-SHRINK HYDRAULIC CEMENT.
 4. EFFLUENT FILTER ACCESS SHALL BE COMPLETED FLUSH WITH FINISH GRADE.

1,000 GALLON TOP-SEAM CONCRETE SEPTIC TANK
NOT TO SCALE



LOT 2 MOUND WASTEWATER DISPOSAL SYSTEM SECTION

VERTICAL SCALE: 1-INCH = 2-FEET
HORIZONTAL SCALE: 1-INCH = 2-FEET



- NOTES:
1. PUMP STATION SHALL BE SET LEVEL ON A MINIMUM OF SIX INCHES OF COMPACTED GRANULAR BASE.
 2. PUMP STATION SECTIONS SHALL HAVE BUTYL RUBBER JOINT SEALER.
 3. IF WATER-PROOF BOOTED CONNECTIONS ARE NOT USED, ALL PIPE PENETRATIONS SHALL BE SEALED WITH A "WATER PLUG" NON-SHRINK HYDRAULIC CEMENT.
 4. ON/OFF FLOAT SWITCH TO BE SET WITH A 6-INCH SWING SETTING TO PROVIDE A 112 GALLON DOSE VOLUME.
 5. HIGH WATER LEVEL ALARM AND PUMP STATION SHALL BE WIRED BY A LICENSED ELECTRICIAN.
 6. THE HIGH WATER LEVEL ALARM SHALL BE MOUNTED AT A VISIBLE LOCATION.
 7. THE EFFLUENT PUMP SHALL BE CAPABLE OF 36 GPM VS. 17 TDH.

800 GALLON TOP-SEAM CONCRETE PUMP STATION
NOT TO SCALE

WASTEWATER DISPOSAL SYSTEM CONSTRUCTION AND MAINTENANCE NOTES

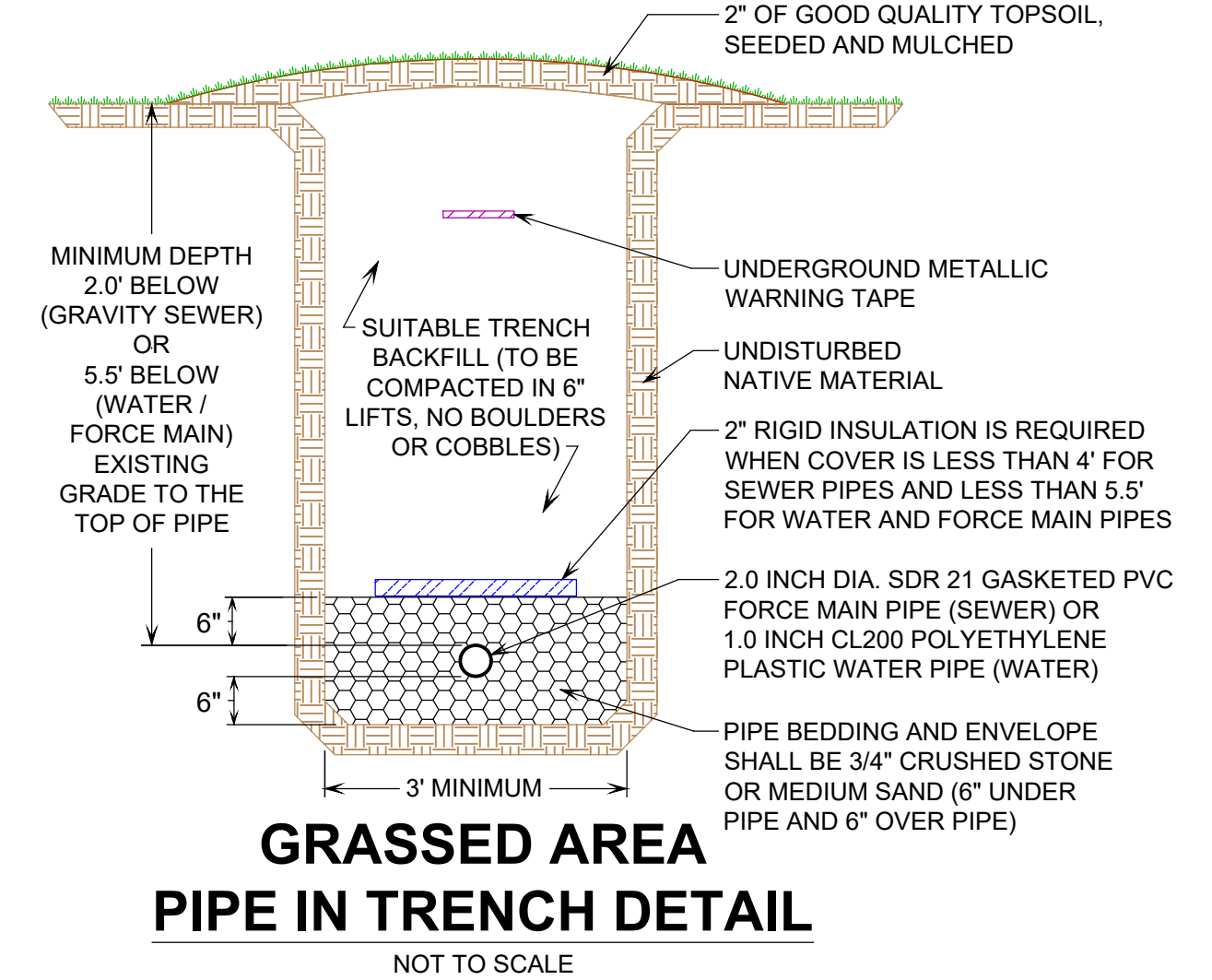
1. THE WASTEWATER DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STATE OF VERMONT, AGENCY OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION RULES, CHAPTER 1, WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES.
2. WASTEWATER DISPOSAL SYSTEM LOCATION SHALL BE STAKED OUT BY THE DESIGNER PRIOR TO START OF CONSTRUCTION.
3. ATTACHED MOUND SYSTEM CONSTRUCTION INSTRUCTIONS SHALL BE FOLLOWED DURING THE INSTALLATION OF THE REPLACEMENT MOUND-TYPE WASTEWATER SYSTEM.
4. THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR INSPECTIONS OF THE SEPTIC TANK, PUMP STATION, PLOWED LAYER, AND PLACEMENT OF THE MOUND SAND.
5. THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR A PRESSURE TEST OF THE MOUND SYSTEM PRESSURE DISTRIBUTION NETWORK.
6. WASTEWATER SYSTEM FINISH GRADES WILL VARY WITH NATURAL TOPOGRAPHY PRIORITY IS TO MAINTAIN 3 ON 1 MOUND TOE SLOPES.
7. SEPTIC TANK EFFLUENT FILTER SHOULD BE REMOVED AND RINSED BACK INTO THE SEPTIC TANK ANNUALLY.
8. THE SEPTIC TANK AND PUMP STATION SHOULD BE INSPECTED ANNUALLY AND PUMPED OUT AT LEAST EVERY THREE (3) YEARS OR AS NECESSARY TO PREVENT SOLIDS FROM CARRYING OVER TO THE DISPOSAL SYSTEM.
9. FOLLOWING THE MOUND WASTEWATER SYSTEM INSTALLATION, FINISH GRADE SHALL BE SEEDED AND MULCHED WITH A CONSERVATION GRASS SEED MIX.
10. WATER SOFTENER BACKWASH, SEPTIC TANK ADDITIVES, GREASE OR SANITIZERS SHALL NOT BE INTRODUCED INTO THE WASTEWATER DISPOSAL SYSTEM.

STATE OF VERMONT MOUND SAND SPECIFICATIONS

Fill Material: The fill material from the natural soil plowed surface to the top of the trench or bed shall be clean washed silica sand meeting one of the following sieve requirements:

(1)	Sieve Number	Opening (mm)	Percent Passing, by Weight
	3/8	2.500	85-100
	40	0.420	25-75
	60	0.240	0-30
	100	0.149	0-10
	200	0.074	0-5
(2)	Sieve Number	Opening (mm)	Percent Passing, by Weight
	4	4.750	95-100
	8	2.380	80-100
	16	1.190	50-85
	30	0.590	25-60
	50	0.297	10-30
	100	0.149	2-10
	200	0.074	0-3
(3)	Sieve Number	Opening (mm)	Percent Passing, by Weight
	3/8	2.500	85-100
	40	0.420	30-50
	200	0.074	0-5

The material must meet the specifications 1, 2, or 3 above. Interpolation of analyses is not permitted. Fill material 2 is ASTM Specification C-33 and is intended for manufactured material.

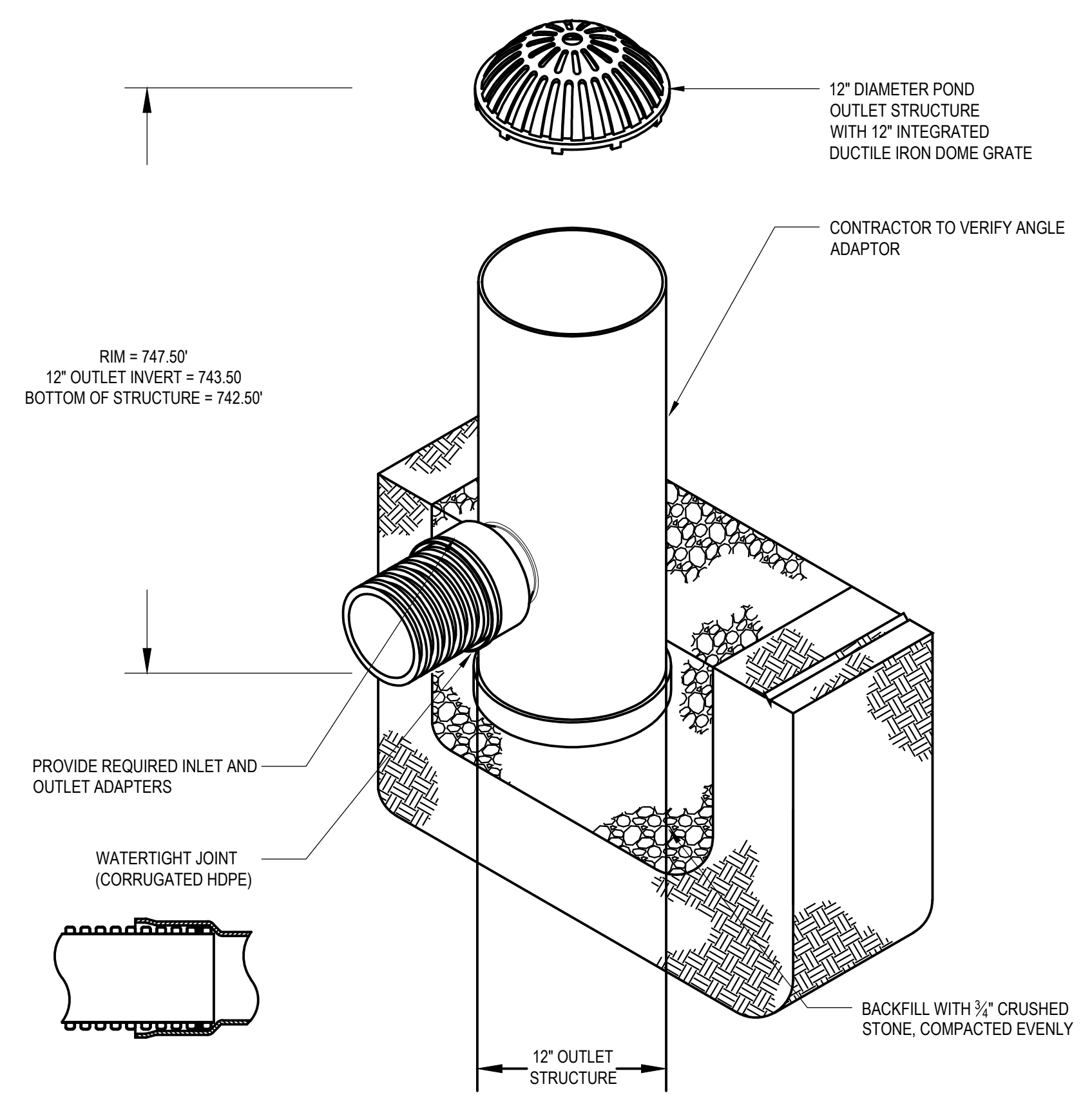
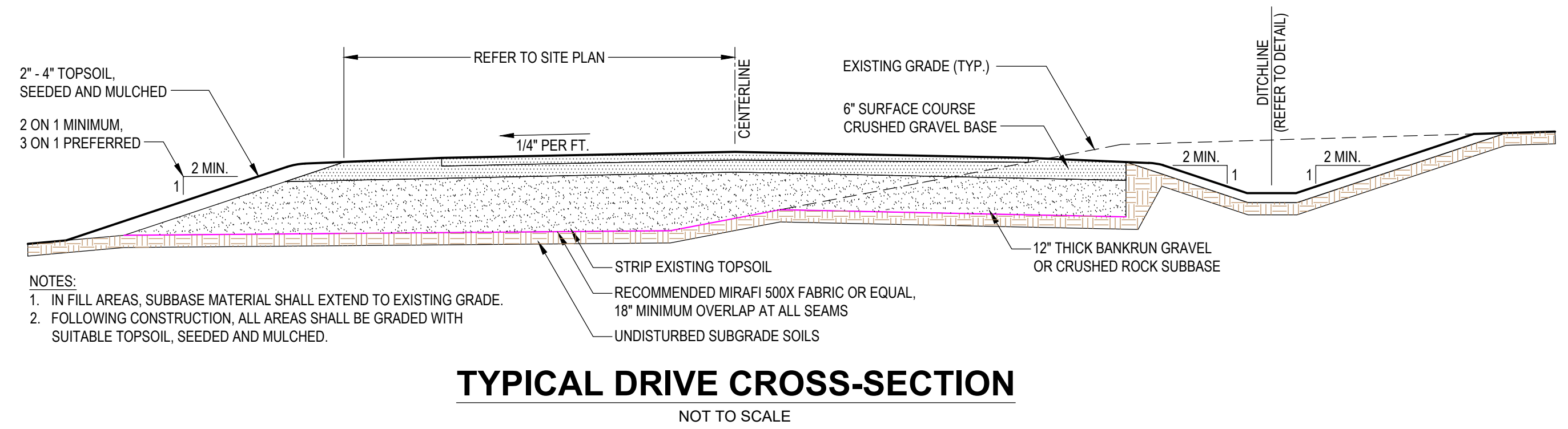
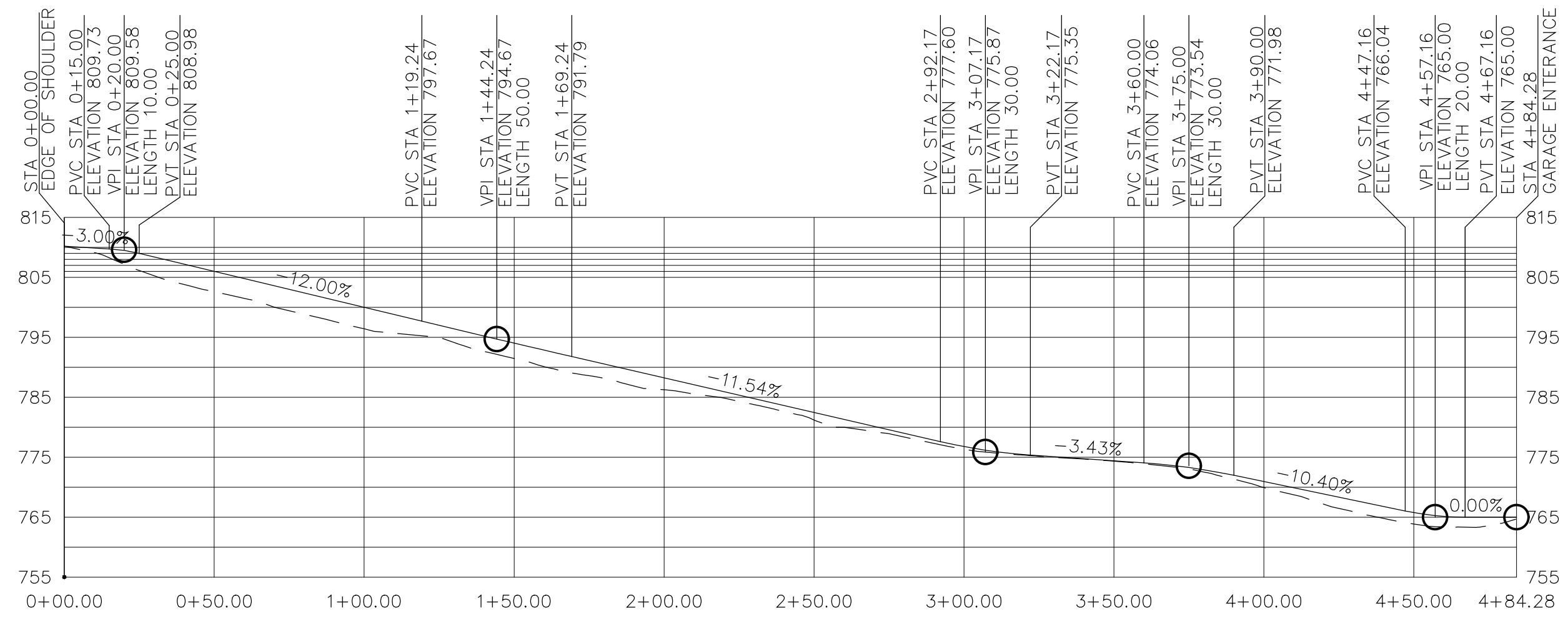


GRASSED AREA PIPE IN TRENCH DETAIL
NOT TO SCALE

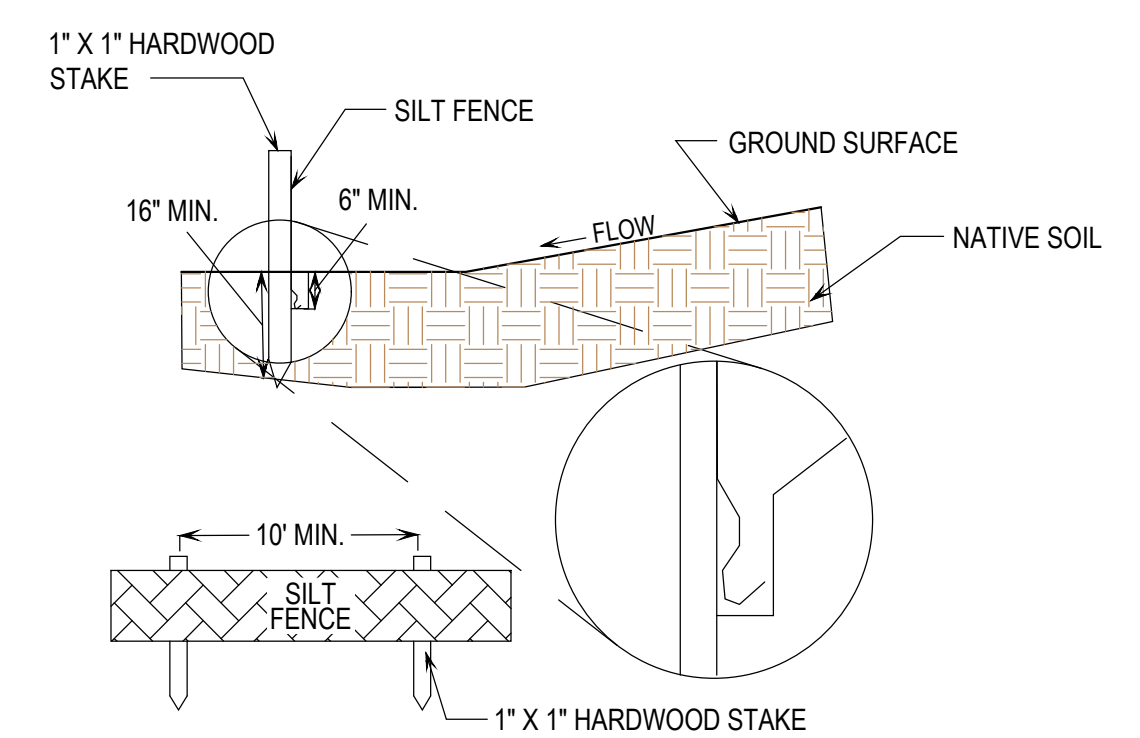
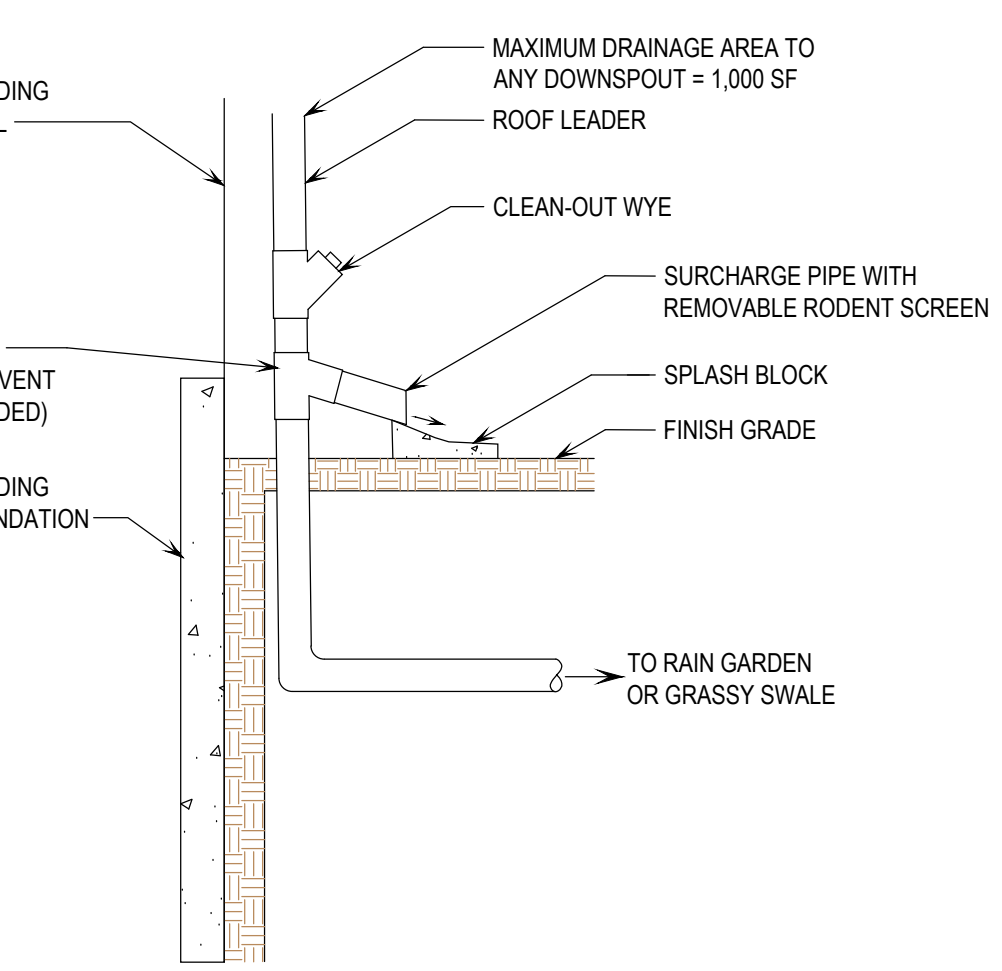
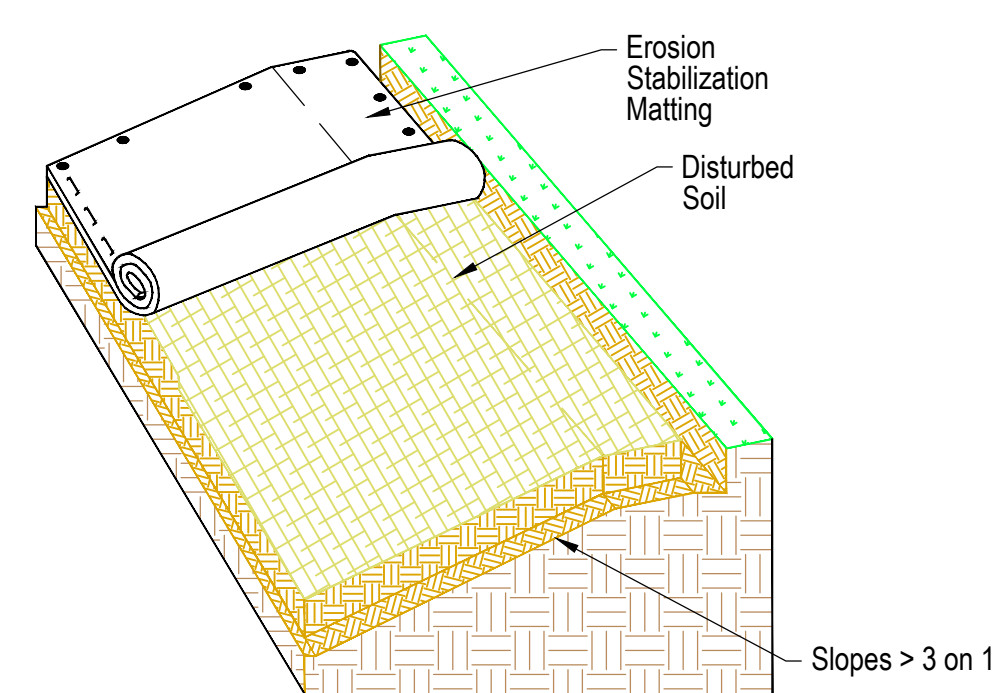
SIGNATURE:

 JASON S. BARNARD
 LICENSED DESIGNER #126178

DATE	DESCRIPTION	BY
REVISIONS		
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting 167 Main Street, P.O. Box 820, Enosburg Falls, VT 05450 Telephone: (802) 933-5168 10523 VT Route 116, P.O. Box 133, Hinsburg, VT 05641 Telephone: (802) 482-2597		
TWO LOT SUBDIVISION WASTEWATER DISPOSAL SYSTEM DESIGN BRADLEY JAY LAROSE KARIN C. LAROSE 156 WORTHIM ROAD, RICHMOND, VERMONT WASTEWATER SYSTEM DETAILS AND NOTES		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW: <input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		
PROJECT NO. 22356	DATE: 03-23-2023	SCALE: AS NOTED
SURVEY: AW, SR	DRAWN: RW	CHECKED: JB
DRAWING NO. D-1		SHEET 2 OF 3



- NOTES:**
1. DOME GRATE SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
 2. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR PVC-SEWER.
 3. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS, SEE MANUFACTURERS INSTALLATION GUIDE DRAWINGS.
 4. CONTACT ENGINEER REGARDING NEEDS FOR CONCRETE BASE TO PREVENT AGAINST FLOATING.



DATE	DESCRIPTION	BY
REVISIONS		
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting 167 Main Street, P.O. Box 820, Enosburg Falls, VT 05450 Telephone: (802) 933-5168		
TWO LOT SUBDIVISION WASTEWATER DISPOSAL SYSTEM DESIGN		
BRADLEY JAY LAROSE KARIN C. LAROSE		
156 WORTHEIM ROAD, RICHMOND, VERMONT		
DRIVEWAY PROFILE, SECTION & EROSION CONTROL DETAILS		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		
<input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		
PROJECT NO.	22356	
DATE:	03-23-2023	
SCALE:	AS NOTED	
SURVEY:	AW, SR	
DRAWN:	RW	
CHECKED:	JB	
DRAWING NO.	D-2	
SHEET 3 OF 3		

SIGNATURE:

JASON S. BARNARD
 LICENSED DESIGNER #126179



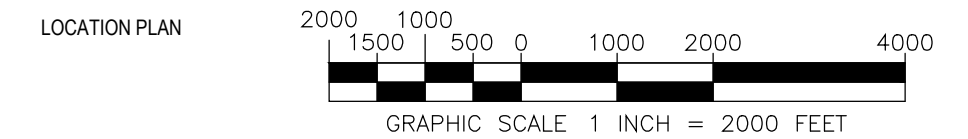
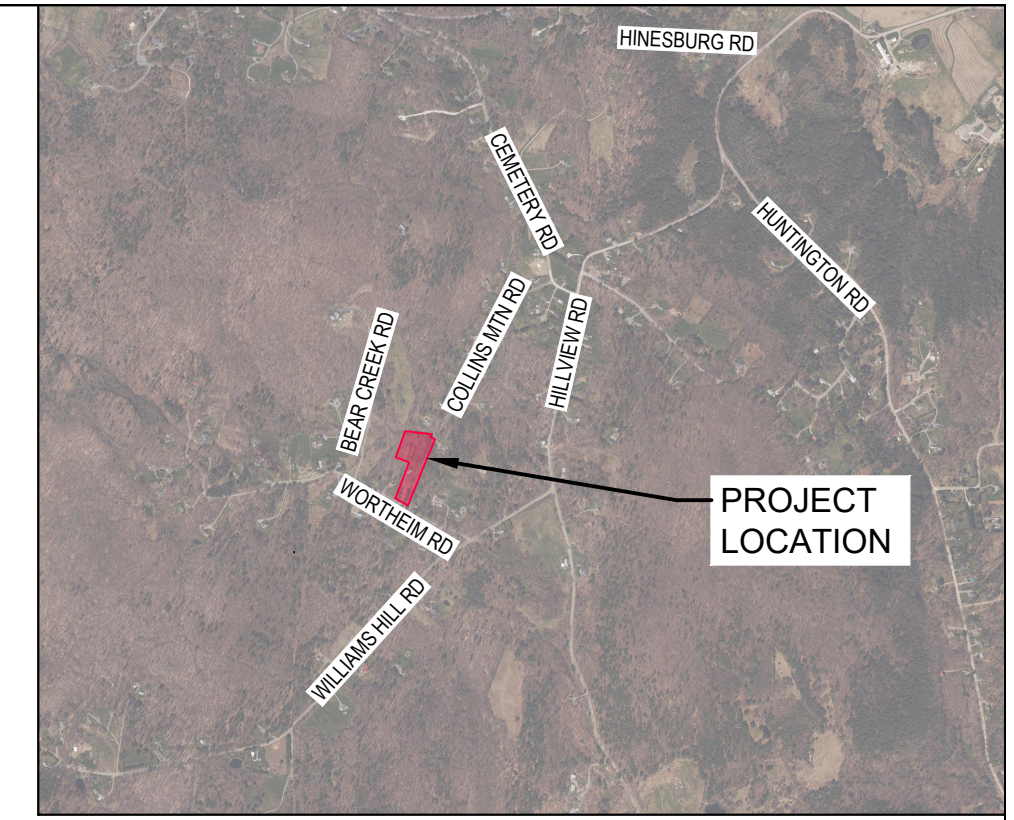
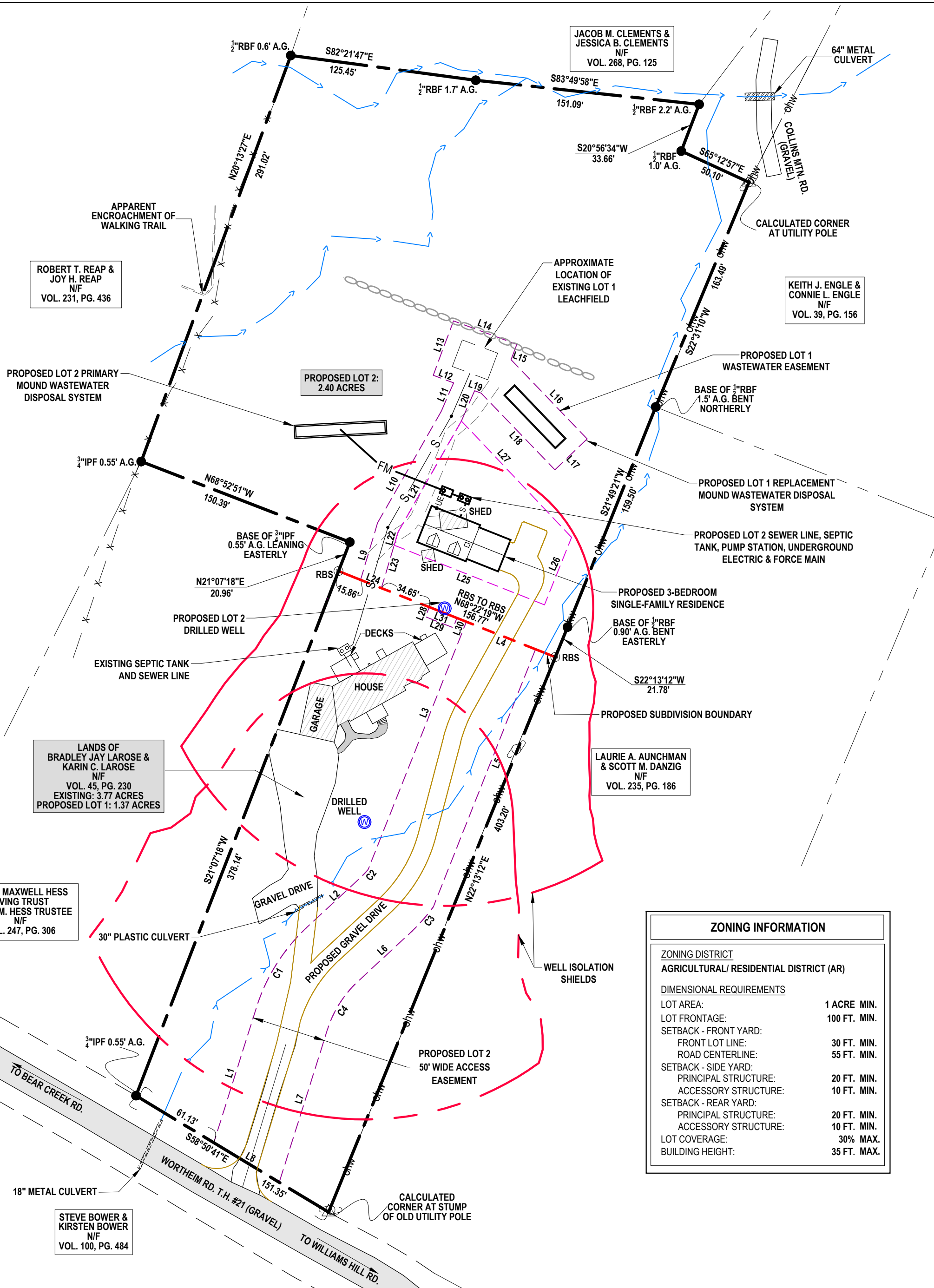
LINE	BEARING	LENGTH
L1	N17°30'51"E	95.57'
L2	N47°07'29"E	47.64'
L3	N21°37'41"E	179.11'
L4	S68°22'19"E	50.00'
L5	S21°37'41"W	186.33'
L6	S47°07'29"W	47.64'
L7	S17°30'51"W	107.70'
L8	N58°50'41"W	51.45'

CURVE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS
C1	N32°19'10"E	63.88'	64.60'	125.00'
C2	N43°48'17"E	8.69'	8.69'	75.00'
C3	S41°39'58"W	23.78'	23.82'	125.00'
C4	S32°19'10"W	38.33'	38.76'	75.00'

LINE	BEARING	LENGTH
L9	N16°37'48"E	39.91'
L10	N29°42'14"E	86.69'
L11	N23°28'51"E	20.62'
L12	N69°34'26"W	14.65'
L13	N20°25'34"E	39.06'
L14	S69°34'26"E	45.39'
L15	S20°25'34"W	11.00'
L16	S43°51'26"E	73.82'
L17	S46°08'34"W	30.05'
L18	N43°51'26"W	71.53'
L19	N69°34'26"W	4.74'
L20	S23°28'51"W	22.24'
L21	S29°42'14"W	85.78'
L22	S16°37'48"W	9.39'
L23	S16°37'48"W	30.12'
L24	N68°22'19"W	15.06'

LINE	BEARING	LENGTH
L25	S68°22'19"E	108.72'
L26	N21°49'21"E	48.86'
L27	N43°25'39"W	107.71'
L28	S29°42'14"W	85.78'
L29	S16°37'48"W	9.39'

LINE	BEARING	LENGTH
L30	N21°37'41"E	6.98'
L31	N68°22'19"W	20.00'



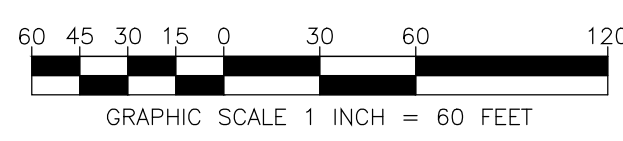
- SURVEY NOTES:**
1. BEARINGS SHOWN HEREON WERE GENERATED FROM SURVEY GRADE GPS READINGS COLLECTED WITH A TRIMBLE R12i GPS RECEIVER ON RANDOM CONTROL POINTS AND ADJUSTED TO VT GRID NAD83(2011) USING REAL TIME KINEMATIC CORRECTIONS FROM A VIRTUAL REFERENCE STATION GENERATED BY THE VERMONT CORS NETWORK.
 2. NO ATTEMPT HAS BEEN MADE TO LOCATE OR IDENTIFY ANY EASEMENTS OR RIGHTS OF WAYS UNLESS OTHERWISE SHOWN ON THIS PLAN.
 3. A CLOSED TRAVERSE SURVEY WAS COMPLETED IN MARCH, 2023 USING A LEICA TOTAL STATION. THE RESULTING ERROR MEETS OR EXCEEDS THE MINIMUM REQUIRED STANDARDS FOR A SUBURBAN SURVEY AS ESTABLISHED BY THE VERMONT BOARD OF LAND SURVEYORS.
 4. ALL EVIDENCE OF MONUMENTATION FOUND ON THE SURVEYED PREMISES IS SHOWN HEREON. MONUMENTATION FOUND IS CONSIDERED TO BE IN GOOD AND STABLE CONDITION UNLESS OTHERWISE NOTED. ALL IRON PIPE DIMENSIONS PERTAIN TO INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 5. THE RIGHT OF WAY WIDTH FOR WORTHEIM ROAD, TOWN HIGHWAY #21, OF 3 RODS (49.5') IS BASED ON PREVIOUS SURVEYS OF RECORD, MONUMENTATION FOUND, THE TRAVELED WAY AND VERMONT STATE STATUTE.
 6. ALL AREA CALCULATIONS ARE BASED ON THE EDGE OF THE RIGHTS OF WAY OF SAID ROAD AND NOT THE CENTERLINE THEREOF.
 7. ALL REBARS SET ARE 5/8" WITH A CAP STAMPED M.C. GAINES VTLS 024.0132673 AND ALL MONUMENTATION FOUND IS AS NOTED.
 8. UNAUTHORIZED ALTERATIONS AND/OR MODIFICATIONS TO THIS PLAN SHALL INVALIDATE ANY AND ALL CERTIFICATIONS MADE BY BARNARD & GERVAIS, LLC AND FURTHER ANY PARTIES INVOLVED IN SAID ALTERATIONS AND/OR MODIFICATIONS SHALL BE HELD LIABLE AND MAY BE PROSECUTED IN A COURT OF LAW.
 9. BARNARD AND GERVAIS, LLC MAKES NO WARRANTIES THAT ALL ENCUMBRANCES THAT EXIST FOR THE SUBJECT PARCEL ARE SHOWN HEREON. ADDITIONAL ENCUMBRANCES THAT MAY EXIST INCLUDE, BUT ARE NOT LIMITED TO, WETLANDS, WELL AND SEPTIC ISOLATION ZONES, HAZARDOUS WASTE SITES AND/OR BROWNFIELDS WITH ASSOCIATED ISOLATION ZONES.
 10. THIS SUBDIVISION PLAN IS NOT INTENDING TO CREATE ANY EASEMENTS OTHER THAN THOSE SPECIFICALLY LISTED AND DESCRIBED HEREON. ANY DRIVES, PATHS, TRAILS OR OTHER AMENITIES SHOWN HEREON ARE CONSIDERED PRIVATE UNLESS OTHERWISE NOTED.

- LEGEND**
- PROJECT BOUNDARY LINES
 - - - PROPOSED BOUNDARY LINES
 - - - ABUTTING BOUNDARY LINES
 - - - EXISTING EASEMENT / RIGHT-OF-WAY
 - - - PROPOSED RIGHT-OF-WAY
 - - - PROPOSED BUILDING ENVELOPE
 - RBF REBAR FOUND
 - IPF IRON PIPE FOUND
 - ⊙ RBS REBAR SET
 - △ CALCULATED CORNER
 - A.G. ABOVE GRADE
 - B.G. BELOW GRADE
 - N/F NOW OR FORMERLY
 - ohw / ohw UTILITY POLE & OVERHEAD WIRES
 - X-X-X BARBED WIRE FENCE
 - ⊖ STONE WALL
 - ← BROOK

ZONING INFORMATION	
ZONING DISTRICT AGRICULTURAL/ RESIDENTIAL DISTRICT (AR)	
DIMENSIONAL REQUIREMENTS	
LOT AREA:	1 ACRE MIN.
LOT FRONTAGE:	100 FT. MIN.
SETBACK - FRONT YARD:	30 FT. MIN.
FRONT LOT LINE:	55 FT. MIN.
ROAD CENTERLINE:	20 FT. MIN.
SETBACK - SIDE YARD:	10 FT. MIN.
PRINCIPAL STRUCTURE:	20 FT. MIN.
ACCESSORY STRUCTURE:	10 FT. MIN.
SETBACK - REAR YARD:	20 FT. MIN.
PRINCIPAL STRUCTURE:	10 FT. MIN.
ACCESSORY STRUCTURE:	10 FT. MIN.
LOT COVERAGE:	30% MAX.
BUILDING HEIGHT:	35 FT. MAX.

SURVEY REFERENCES:

1. "A PORTION OF THE FORMER ASA RANDALL FARM FOR SUMNER FARR RICHMOND, VT." DATED 2/9/79 BY NEWTON SURVEYORS, INC. AND RECORDED IN THE TOWN OF RICHMOND MAP RECORDS MAP SLIDE #31.5.
2. "PART OF 2-LOT SUBDIVISION SHOWING LANDS OF ROBERT & JOY REAP 258 WORTHEIM ROAD RICHMOND, VERMONT" DATED JANUARY 7, 2019 BY BUTTON PROFESSIONAL LAND SURVEYORS, PC AND RECORDED IN THE TOWN OF RICHMOND MAP RECORDS MAP SLIDE #151 MAP #3.



I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THIS PLAN IS BASED ON INFORMATION ABSTRACTED FROM PERTINENT DEEDS AND/OR OTHER OFFICIAL RECORDS AND CONFORMS TO THE REQUIREMENTS OF 27 VSA § 1403.

DATED THIS _____ DAY OF _____, 20____.

L.S. 024.0132673

RECEIVED FOR RECORD IN THE TOWN OF RICHMOND

THIS _____ DAY OF _____, 20____.

MAP BOOK # _____ PAGE # _____ SLIDE # _____

AT _____ O'CLOCK _____ MINUTES _____ M

AND RECORDED IN RICHMOND, VERMONT

ATTEST _____ TOWN CLERK

THIS IS A PRELIMINARY PLAN AND SHOULD NOT BE USED FOR CONVEYANCES.

PARCEL INFORMATION
OWNER: BRADLEY JAY LAROSE & KARIN C. LAROSE
VOL. 45, PG. 230
SPAN: 519-163-10861
PARCEL ID: W00156

DATE	DESCRIPTION	BY
REVISIONS		
BARNARD & GERVAIS, LLC		
Land Surveying Water & Wastewater Environmental Consulting		
167 Main Street, P.O. Box 820 Eroburg Falls, VT 05450 Telephone: (802) 858-5188		
10523 VT Route 116, P.O. Box 133 Hinesburg, VT 05461 Telephone: (802) 482-2597		
LANDS OF BRADLEY JAY LAROSE & KARIN C. LAROSE		PROJECT NO. 22356
156 WORTHEIM ROAD, RICHMOND, VERMONT		DATE: 03-15-2023
LAROSE LOT 2 SUBDIVISION SURVEY PLAT		SCALE: 1" = 60'
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		SURVEY: AW,SR
<input type="checkbox"/> SKETCH/CONCEPT <input checked="" type="checkbox"/> PRELIMINARY <input type="checkbox"/> FINAL LOCAL REVIEW		DRAWN: AW
SHEET 1 OF 1		CHECKED: MCG
DRAWING NO. PL-1		