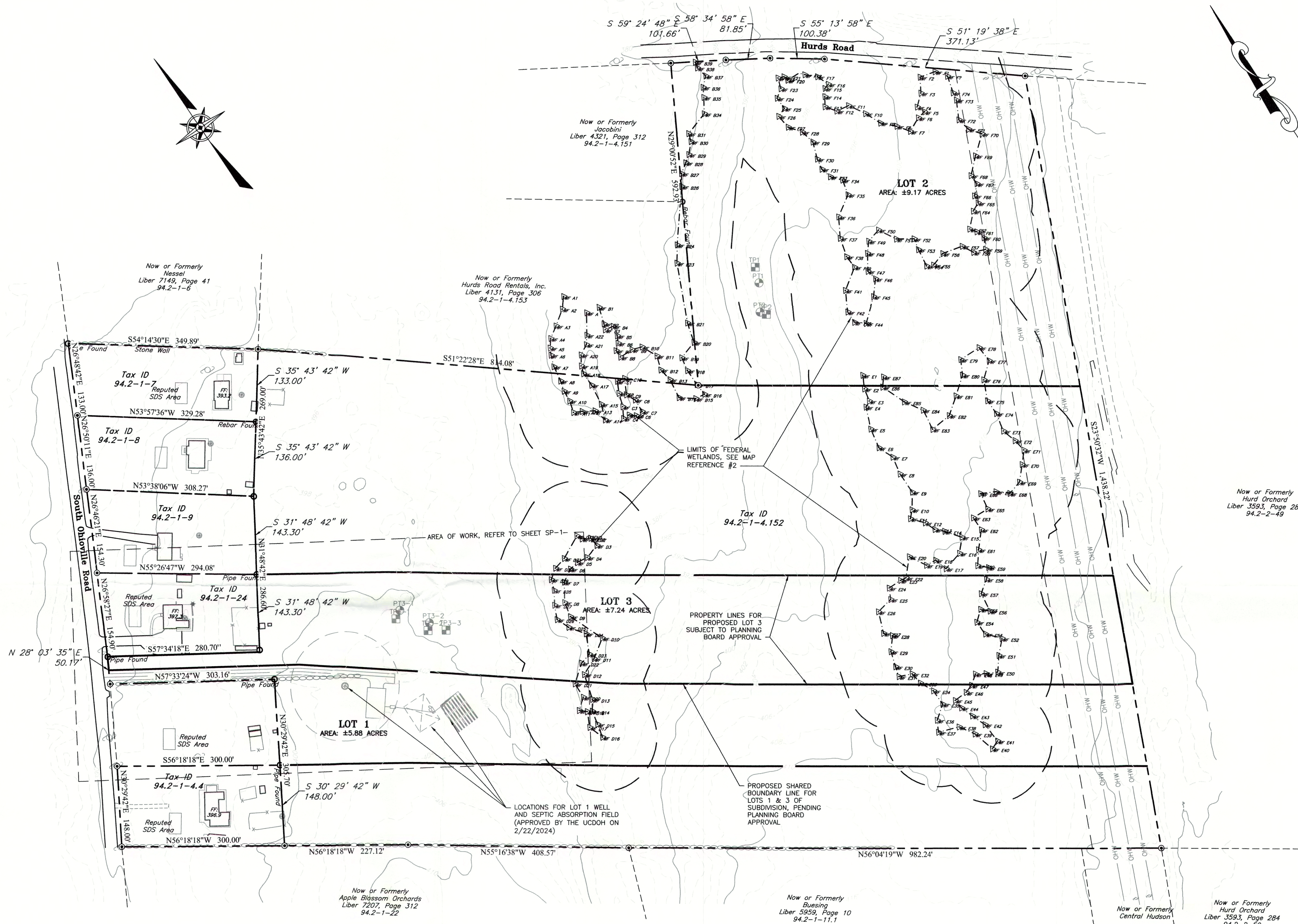




VICINITY MAP SCALE: 1" = 500'

PROJECT INFORMATION:	
PARCEL OWNER:	MARIA INFUSO: 191 BAY 13TH STREET, BROOKLYN, NY 11214-5805
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PROJECT SURVEYOR:	BRENDAN JOHNSON, L.S. 10 MEADOW LANE, PLEASANT VALLEY, NEW YORK 12569
PARCEL LOCATION:	SOUTH OHIOVILLE ROAD & HURDS ROAD, NEW PALTZ, NY 12561
TAX PARCEL IDS:	94.2-1-4.152 (42.5 AC)
PARCEL AREA:	±42.5 TOTAL ACRES
WATER SUPPLY:	PRIVATE WELLS (PROPOSED)
SEWAGE DISPOSAL:	PRIVATE SDS (PROPOSED)

MAP REFERENCES:
1. EXISTING FEATURES INCLUDING EXISTING SEPTIC SYSTEMS, STRUCTURES, DRIVEWAYS AND TOPOGRAPHY ON THE SUBJECT PARCELS AND THEIR LOCATION PER THE PROVIDED SURVEY MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR INFUSO: TOWN OF LLOYD, COUNTY OF ULSTER, STATE OF NEW YORK" PREPARED BY BRENDAN JOHNSON, P.L.S. AND DATED 5/1/2023.
2. WETLANDS AS DELINEATED BY HUDSON HIGHLANDS ENVIRONMENTAL CONSULTING ON OCTOBER 25, 2022. FLAGS SURVEY LOCATED BY BRENDAN JOHNSON, P.L.S.

TOTAL PROJECT SITE AREA:
±1,851,300 SQ.FT. OR ±42.5 ACRES

TAX MAP REFERENCE:
TOWN OF LLOYD, ULSTER COUNTY, NEW YORK; 94.2-1-4.152

LEGEND:

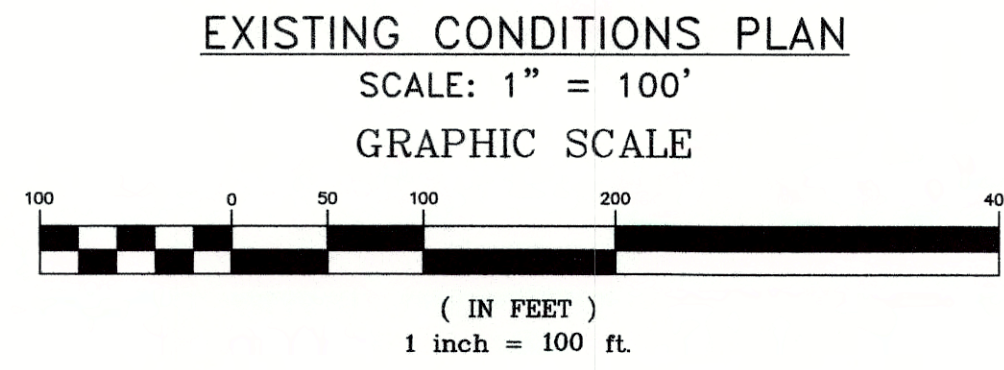
---	EXISTING PROPERTY LINE
---	ADJOINING PROPERTY LINE
---	EXISTING EASEMENT LINE
---	EXISTING STREAM
---	EXISTING WETLAND BOUNDARY
---	100' WETLAND BUFFER
---	EXISTING MAJOR CONTOUR
---	EXISTING MINOR CONTOUR
---	EXISTING TREE LINE
---	EXISTING OVER HEAD WIRE
---	PROPOSED PROPERTY LINE

TEST PIT LOCATION
PERCOLATION TEST LOCATION
PROPOSED YARD DRAIN

Recommended for Approval:
4/8/25
Public Health Director

DRAWING INDEX:

SHEET 1: EXISTING CONDITIONS PLAN - PROPOSED LOT 3 (XC-1)
SHEET 2: DEVELOPMENT PLAN-LOT 3 (SP-1)
SHEET 3: CONSTRUCTION DETAILS-LOT 3 (CD-1)
SHEET 4: CONSTRUCTION DETAILS-LOT 3 (CD-2)



DRAWN BY: LGP				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/21/25	PER UCDOH COMMENTS	LGP				
2	3/26/25	PER UCDOH COMMENTS	LGP				



HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

EXISTING CONDITIONS PLAN - PROPOSED LOT 3		JOB #: 2021-046A
INFUSO		DATE: 7/8/24
HURDS ROAD & SOUTH OHIOVILLE ROAD TOWN OF LLOYD ULSTER COUNTY, NEW YORK TAX ID: 94.2-1-4.152		SCALE: 1" = 100'
		TITLE: XC-1
		SHEET: 1 OF 4

SEWAGE DISPOSAL SYSTEM MAINTENANCE NOTES:

ADEQUATE MAINTENANCE OF THE SEWAGE DISPOSAL SYSTEM IS IMPERATIVE. UNATTENDED SYSTEMS WILL NOT FUNCTION PROPERLY. THE FOLLOWING ARE GENERAL GUIDELINES THAT SHOULD BE ADJUSTED BASED ON ACTUAL USAGE AND PERFORMANCE. NEVER ENTER ANY TANK.

1. SEPTIC TANKS: PUMP EVERY TWO TO THREE YEARS, OR WHENEVER:

- 1.1. THE TOTAL DEPTH OF SLUDGE AND SCUM EXCEEDS $\frac{1}{3}$ OF THE LIQUID DEPTH OF THE TANK
- 1.2. THE BOTTOM OF THE SCUM LAYER IS WITHIN THREE INCHES OF THE BOTTOM OF THE OUTLET BAFFLE
- 1.3. THE TOP OF THE SLUDGE LAYER IS WITHIN TEN INCHES OF THE BOTTOM OF THE BAFFLE.

2. DISTRIBUTION:

- 2.1. DISTRIBUTION BOXES: INSPECT PERIODICALLY TO ENSURE EQUAL FLOW TO ALL LINES AND CHECK FOR SOLIDS.

3. PUMP CHAMBERS:

- 3.1. THE EFFLUENT PUMP AND ALARM SHALL BE PERIODICALLY CHECKED FOR PROPER OPERATION.
- 3.2. FLOAT SWITCHES SHALL BE TESTED AND ADJUSTED FOR CORRECT DISCHARGE LEVEL PERIODICALLY.
- 3.3. PERIODICALLY CHECK FOR SOLIDS CARRYOVER FROM THE SEPTIC TANK.

4. ABSORPTION FACILITIES:

- 4.1. KEEP TREES AWAY FROM THE IMMEDIATE AREA OF THE ABSORPTION FIELD AS THEIR ROOTS MAY ENTER AND CLOG THE SYSTEM.
- 4.2. DO NOT PAVE OR BUILD STRUCTURES OVER AN ABSORPTION FACILITY.
- 4.3. RUNOFF TO THE ABSORPTION AREA SHOULD BE ELIMINATED BY REGRADING, DITCHING OR BERMING SURROUNDING AREAS.
- 4.4. PERIODICALLY OBSERVE THE ABSORPTION FACILITY FOR SURFACE DISCHARGE OR PONDING OF EFFLUENT.

LEGEND:

---	EXISTING PROPERTY LINE
---	ADJOINING PROPERTY LINE
---	EXISTING EASEMENT LINE
---	EXISTING STREAM
---	EXISTING WETLAND BOUNDARY
---	100' WETLAND BUFFER
---	EXISTING MAJOR CONTOUR
---	EXISTING MINOR CONTOUR
---	EXISTING TREE LINE
---	EXISTING OVER HEAD WIRE
---	PROPOSED PROPERTY LINE
---	PROPOSED 4-BEDROOM RESIDENCE
---	PROPOSED DRIVEWAY E.O.P.
---	PROPOSED MAJOR CONTOUR
---	PROPOSED MINOR CONTOUR
---	PROPOSED SEWER CLEAN OUT (PRIMARY SDS)
---	PROPOSED SDS EFFLUENT LINE (PRIMARY SDS)
---	PROPOSED PRIMARY SDS LATERAL
---	PROPOSED TRENCH EDGES FOR LATERALS (PRIMARY SDS)
---	PROPOSED SEWER CLEAN OUT (RESERVE SDS)
---	PROPOSED SDS EFFLUENT LINE (RESERVE SDS)
---	PROPOSED RESERVE SDS FILL PAD
---	PROPOSED WATER SUPPLY LINE
---	PROPOSED SILT FENCE
---	TEST PIT LOCATION
---	PERCOLATION TEST LOCATION
---	PROPOSED YARD DRAIN

DEEP TEST HOLE TABLE:

DEEP TEST HOLE RESULTS ESTABLISHED ON MAY 14, 2024. TESTING WAS DIRECTED BY HLD AND INSPECTED BY UCDOH REPRESENTATIVE MICHAEL MCCLARY.

TP3-1: 6" TOPSOIL, 6"-18" DARK BROWN SILT LOAM, 18"-36" LIGHT BROWN SILT LOAM, 36"-52" HARDPAN W/ PATCHY MOTTLING. NO WATER, NO BEDROCK, MOTTLING @ 36".

TP3-2: 6" TOPSOIL, 6"-30" LIGHT BROWN SILT LOAM, 30"-56" HARDPAN W/ PATCHY MOTTLING. NO WATER, NO BEDROCK, MOTTLING @ 30".

TP3-3: 6" TOPSOIL, 6"-24" LIGHT BROWN SILT LOAM, 24"-58" HARDPAN W/ PATCHY MOTTLING. NO WATER, NO BEDROCK, MOTTLING @ 24".

PERC TEST TABLE:

PERC TESTS RESULTS ESTABLISHED ON MAY 15, 2024

PT3-1: 12" DEEP: 12 min/in; 13 min/in; 13 min/in; 13 min/in.

PT3-2: 13" DEEP: 5 min/in; 8 min/in; 8 min/in; 8 min/in.

LOT 3 SEWAGE DISPOSAL SYSTEM DESIGN NOTES:

1. FOR RESIDENTIAL DWELLINGS, SEWAGE DISPOSAL SYSTEM (SDS) DESIGN IS BASED ON THE NUMBER OF BEDROOMS IN THE DWELLING. A DESIGN FLOW OF 110 GALLONS PER DAY (GPD) PER BEDROOM IS UTILIZED, WHICH IS BASED ON WATER USAGE STANDARDS FOR NEW/POST-1994 WATER FIXTURES. THESE INCLUDE: 1.6 GPF (MAX) TOILETS, AND 2.5 GPM (MAX) FAUCETS & SHOWERHEADS.
2. NO FOOTING OR ROOF DRAINS, WATER SOFTENER BACKWASHES, ETC. SHALL BE DISCHARGED TO THE SEWAGE DISPOSAL SYSTEM.
3. NO KITCHEN SINK GARBAGE DISPOSAL SYSTEMS ARE PLANNED OR INCLUDED IN THE DESIGN.
4. SEPTIC SYSTEM LOCATIONS SHALL BE STAKED OUT PRIOR TO CONSTRUCTION BY A NEW YORK STATE LICENSED LAND SURVEYOR.

DESIGN FLOW = 110 GPD PER BEDROOM TIMES THE NUMBER OF BEDROOMS FOR THE PROPOSED RESIDENCE (4-BEDROOM MAXIMUM).

THEREFORE, 4 BEDROOMS @ 110 GPD/BEDROOM = 440 GPD

DESIGN FLOW FOR SDS = 440 GPD

PRIMARY SYSTEM SHALL BE A SHALLOW ABSORPTION SYSTEM.

THE PRIMARY SDS DESIGN IS BASED ON AN APPLICATION RATE OF 0.80 GPD/SF FOR A PERCOLATION RATE IN THE 11-15 MIN/IN RANGE. THIS EQUATES TO A MINIMUM OF 275 LF OF 2' WIDE CONVENTIONAL (PERFORATED PIPE LATERALS) ABSORPTION TRENCHES REQUIRED FOR THE ABSORPTION FIELD. THE DESIGN PROVIDES SEVEN (7) ROWS OF TRENCHES AT 40 LF EACH FOR 280 LF OF TRENCHES TOTAL. THE GRADING SHOWN ON THE PLAN CORRESPONDS TO THE FINAL GRADE ON THE ABSORPTION FIELD (SHALLOW ABSORPTION SYSTEM) AND ACCOUNTS FOR BOTH THE MINIMUM REQUIRED 12" OF R.O.B. FILL ABOVE THE EG AND THE 6" OF TOPSOIL FOR THE FINAL COVER.

A 1,250 GALLON PRE-CAST CONCRETE SEPTIC TANK SHALL BE PROVIDED TO SERVICE THE 4-BEDROOM RESIDENCE (NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK).

THE LOCATIONS FOR THE WELL AND THE SDS COMPONENTS, INCLUDING THE LIMITS OF THE ABSORPTION FIELD, SHALL BE STAKED OUT BY A NYS LICENSED SURVEYOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

RESERVE SYSTEM SHALL BE A SHALLOW ABSORPTION SYSTEM.

THE PRIMARY SDS DESIGN IS BASED ON AN APPLICATION RATE OF 0.80 GPD/SF FOR A PERCOLATION RATE IN THE 11-15 MIN/IN RANGE. THIS EQUATES TO A MINIMUM OF 275 LF OF 2' WIDE CONVENTIONAL (PERFORATED PIPE LATERALS) ABSORPTION TRENCHES REQUIRED FOR THE ABSORPTION FIELD. THE DESIGN PROVIDES FIVE (5) ROWS OF TRENCHES AT 55 LF EACH FOR 275 LF OF TRENCHES TOTAL. THE GRADING SHOWN ON THE PLAN CORRESPONDS TO THE FINAL GRADE ON THE ABSORPTION FIELD (SHALLOW ABSORPTION SYSTEM) AND ACCOUNTS FOR BOTH THE MINIMUM REQUIRED 12" OF R.O.B. FILL ABOVE THE EG AND THE 6" OF TOPSOIL FOR THE FINAL COVER.

DUE TO THE RESERVE ABSORPTION FIELD HAVING A HIGHER ELEVATION THAN THE OUTLET FOR THE PROPOSED SEPTIC TANK, A PUMPING SYSTEM WILL BE REQUIRED FOR THE CONVEYING OF EFFLUENT FROM THE SEPTIC TANK TO THE RESERVE ABSORPTION FIELD. PLEASE REFER TO THE SEWAGE DISPOSAL SYSTEM SCHEDULE IN THIS SHEET, THE PUMP CHAMBER DETAIL IN SHEET CD-2 OF THIS PLAN, AND THE PUMP CHAMBER DESIGN CALCULATIONS DEVELOPED FOR THIS PROJECT FOR DETAILS ON THE PROPOSED PUMPING/DOSING SYSTEM FOR THE RESERVE SDS. THE PUMPING SYSTEM SHALL ONLY BE CONSTRUCTED IF THE PRIMARY SDS FAILS.

THE LOCATIONS FOR THE RESERVE SDS COMPONENTS, INCLUDING ANY PUMP CHAMBERS, FORCEMAIN LINES AND THE LIMITS OF THE ABSORPTION FIELD, SHALL BE STAKED OUT BY A NYS LICENSED SURVEYOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

STANDARD NOTES FOR RESIDENTIAL PROJECTS (ONSITE WATER SOURCE & SEWAGE DISPOSAL)

THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:

"APPENDIX 75-A, WASTE TREATMENT - INDIVIDUAL HOUSEHOLD SYSTEMS, NEW YORK STATE SANITARY CODE."

"RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS, DESIGN HANDBOOK", NEW YORK STATE DEPARTMENT OF HEALTH.

"UCDOH SANITARY CODES."

THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND TREATMENT AND WATER SUPPLY FACILITIES; AND, UCDOH SHALL BE DONE TO DETERMINE THAT CONSTRUCTION AT THE TIME OF INSPECTION WAS COMPLETED IN GENERAL CONFORMANCE WITH THE APPROVED PLANS AND ANY AMENDMENT THEREOF.

THE UCDOH SHALL BE CONTACTED PRIOR TO THE COMMENCEMENT OF THE HOME CONSTRUCTION AND/OR ISSUANCE OF A BUILDING PERMIT FOR A PRE-CONSTRUCTION INSPECTION TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.

IF THE SEPTIC TANK IS DELIVERED TO THE SITE IN SECTIONS, THEN IT SHALL BE DEMONSTRATED BY THE CONTRACTOR, TO THE UCDOH FIELD INSPECTOR AND/OR DESIGN PROFESSIONAL, THAT THE TANK IS SEALED, WATERTIGHT AND ACCEPTABLE FOR USE. THIS SHALL REQUIRE, AT A MINIMUM, THE FILLING OF THE TANK WITH WATER TO OBSERVE IF IT IS IN FACT SEALED, WATERTIGHT AND ACCEPTABLE FOR USE. THE TANK MUST ALSO MEET ANY LOCAL TESTING REQUIREMENTS, INCLUDING POSSIBLE ELECTRICAL AND SAFETY STANDARDS.

ALL PROPOSED WELLS AND SERVICE LINES ON THIS PLAN ARE ACCESSIBLE FOR INSTALLATION AND PLACEMENT.

NO CELLAR, FOOTING, FLOOR, GARAGE, COOLER OR ROOF DRAINS SHALL BE DISCHARGED INTO THE ONSITE WASTEWATER TREATMENT SYSTEM OR WITHIN 50 FEET OF ANY WELL.

ALL BUILDINGS SHALL BE CONSTRUCTED AT AN ELEVATION HIGH ENOUGH TO ENSURE GRAVITY FLOW TO THE ONSITE WASTEWATER TREATMENT SYSTEM'S SEPTIC TANK.

THERE SHALL BE NO VEHICULAR TRAFFIC OVER THE ONSITE WASTEWATER TREATMENT SYSTEM. PRIOR TO CONSTRUCTION, THE AREA OF THE SYSTEM SHALL BE STAKED OUT AND FENCED OFF.

ONSITE WASTEWATER TREATMENT SYSTEMS SHALL NOT BE INSTALLED IN WET OR FROZEN SOIL.

ADDITIONAL NOTES FOR FILL SECTIONS

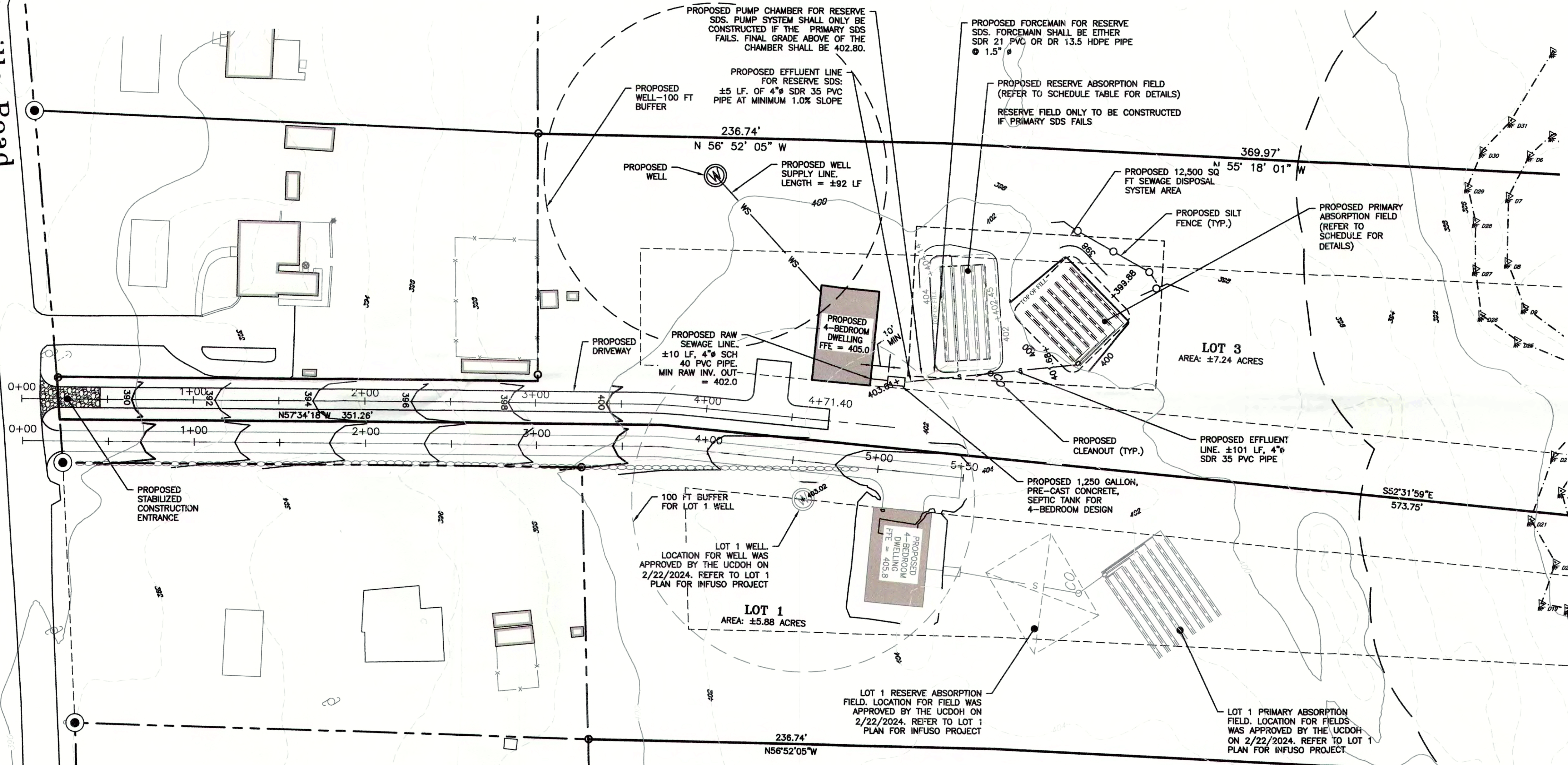
SEPTIC FILL SPECIFICATION: SAND AND GRAVEL FILL, WITH A STABILIZED PERCOLATION RATE SIMILAR, BUT NOT FASTER THAN, THE PERCOLATION RATE OF THE VIRGIN SOIL (NO GREATER THAN 13 MINUTES PER INCH).

THE ENGINEER SHALL PERFORM A PERCOLATION TEST PRIOR TO THE INSTALLATION OF THE TRENCHES TO VERIFY THE ADEQUACY OF THE FILL.

THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE FILL MATERIAL IS IN THE PROPER LOCATION, OF THE PROPER QUANTITY AND DIMENSIONS, AND OF PROPER QUALITY. PROPER QUALITY MUST BE DEMONSTRATED BY STABILIZED PERCOLATION TESTS, THE RESULTS OF WHICH SHALL BE SUBMITTED WITH THE ENGINEER'S CERTIFICATION.

SEE FIRST PAGE FOR APPROVAL

South Ohioville Road



SEWAGE DISPOSAL SYSTEM SCHEDULE FOR LOT 3 (4-BEDROOM MAXIMUM RESIDENCE)									
LOT#	MIN. RAW LINE INVERT OUT ELEV.	EFFLUENT LINE FROM HOUSE TO SEPTIC TANK*	SEPTIC TANK SIZE (GAL.)	SEPTIC TANK INVERT ELEV.		PORTION OF PROPOSED SDS SYSTEM	PUMP TANK INVERT ELEVATIONS		EFFLUENT LINE FROM SEPTIC TANK TO PUMP CHAMBER**
				IN	OUT		IN	OUT	
3	402.0	±10 LF @ 2.1%	1,250 GAL.	401.81	401.46	PRIMARY	N/A***	N/A***	N/A***
						RESERVE	401.40	401.02	±5 LF @ 1.0%***
									±101 LF @ 1.1%***
									±16 LF OF 1.5" @ FORCEMAIN****
									400.35 400.14
									403.09 402.92

* RAW LINE TO BE 4" CAST IRON OR SCH-40 PVC @ 2.0% MINIMUM SLOPE.

** SEPTIC TANK EFFLUENT LINE (TO PUMP CHAMBER OR PRIMARY SDS DISTRIBUTION BOX) SHALL BE 4" SDR-35 PVC @ 1.0% MINIMUM SLOPE. IN CASE THE PRIMARY SDS FAILS AND THE RESERVE SDS NEEDS TO BE CONSTRUCTED, THE PORTION OF THE PRIMARY EFFLUENT LINE (GOING FROM THE SEPTIC TANK TO THE PRIMARY ABSORPTION FIELD) ALONG THE AREA PROPOSED FOR THE RESERVE SYSTEM'S PUMP CHAMBER SHALL BE REMOVED TO ALLOW THE CHAMBER TO BE INSTALLED. A NEW EFFLUENT LINE WILL THEN BE INSTALLED BETWEEN THE SEPTIC TANK AND PUMP CHAMBER AND THE REMAINDER OF THE PRIMARY EFFLUENT LINE SHALL BE ABANDONED IN-PLACE.

*** THE PRIMARY SDS IS DESIGNED AS A FULLY GRAVITY DRIVEN SYSTEM (NO PUMPING/DOSING REQUIRED). IN THE EVENT THAT THE PRIMARY SYSTEM FAILS, A PUMP CHAMBER SHALL BE INSTALLED TO CONVEY EFFLUENT FROM THE SEPTIC TANK TO THE RESERVE ABSORPTION FIELD'S DISTRIBUTION BOX.

****FORCEMAIN TO BE USED SHALL BE EITHER 1.5" SDR 21 PVC OR 1.5" DR 13.5 HDPE PIPE TO BE DETERMINED PER THE OWNER'S/CONTRACTOR'S DISCRETION.

ABSORPTION FIELD SCHEDULE (MAX 4-BEDROOM DWELLING)									
LOT#	PORTION OF PROPOSED SDS SYSTEM	ABSORPTION FIELD TYPE	MINIMUM SAND & GRAVEL FILL ABOVE EG REQUIRED (IN INCHES)	MINIMUM REQUIRED LATERAL LENGTH (LF IN TOTAL)	FIELD CONFIGURATION FOR 4-BEDROOM RESIDENCE	DOSING/ PUMPING REQUIRED	ENERGY DISSIPATION BOX	CURTAIN DRAIN	
3	PRIMARY	S.A.S*	12"***	275 LINEAR FEET	7 LATS @ 40' EACH = 280 LF	NO	NO	NO	
	RESERVE	S.A.S*	12"***	275 LINEAR FEET	5 LATS @ 55' EACH = 275 LF	YES	NO	NO	

* S.A.S* = SHALLOW ABSORPTION SYSTEM.

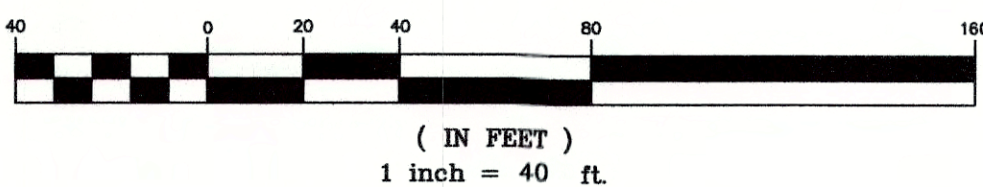
** THE MINIMUM SAND & GRAVEL FILL MEASUREMENT CORRESPONDS TO THE MINIMUM HEIGHT OF SELECT/IMPORTED FILL (SAND & GRAVEL) TO BE LAID ATOP OF THE EXISTING GRADE (EG) FOR THE CONSTRUCTION OF THE SHALLOW ABSORPTION FIELDS. THE FINAL COVERING FOR ALL ABSORPTION FIELDS SHALL CONSIST OF 6" OF TOPSOIL, COVERING THE IMPORTED FILL AND THE SLOPES OF THE FIELDS. THE PLAN SHOWS THE FINAL GRADING AT THE TOP OF THE FINAL TOPSOIL COVERING FOR THE SHALLOW ABSORPTION TRENCHES SYSTEM (TOTAL FILL INCLUDING THE SAND & GRAVEL FILL + 6" OF TOPSOIL).

DRAWN BY: LGP				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/21/25	PER UCDOH COMMENTS	LGP				
2	3/26/25	PER UCDOH COMMENTS	LGP				

LOT 3 DEVELOPMENT PLAN

SCALE: 1" = 40'

GRAPHIC SCALE



SEAL



HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING P.C.
174 MAIN ST., BEACON, NEW YORK 12508
13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926

DEVELOPMENT PLAN-LOT 3

INFUSO

HURDS ROAD & SOUTH OHIOVILLE ROAD
TOWN OF LLOYD
ULSTER COUNTY, NEW YORK
TAX ID: 94.2-1-4.152

JOB #: 2021-046

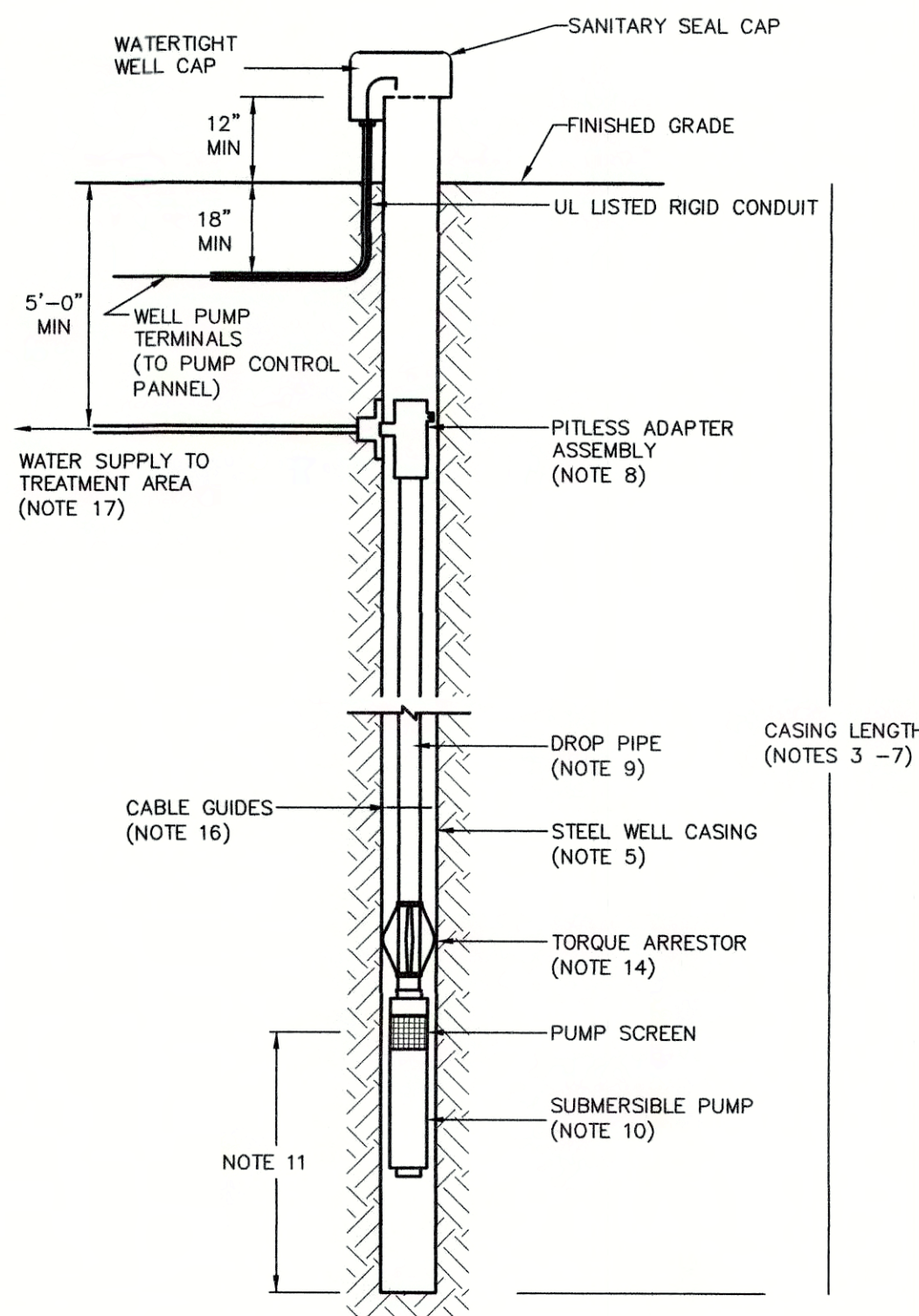
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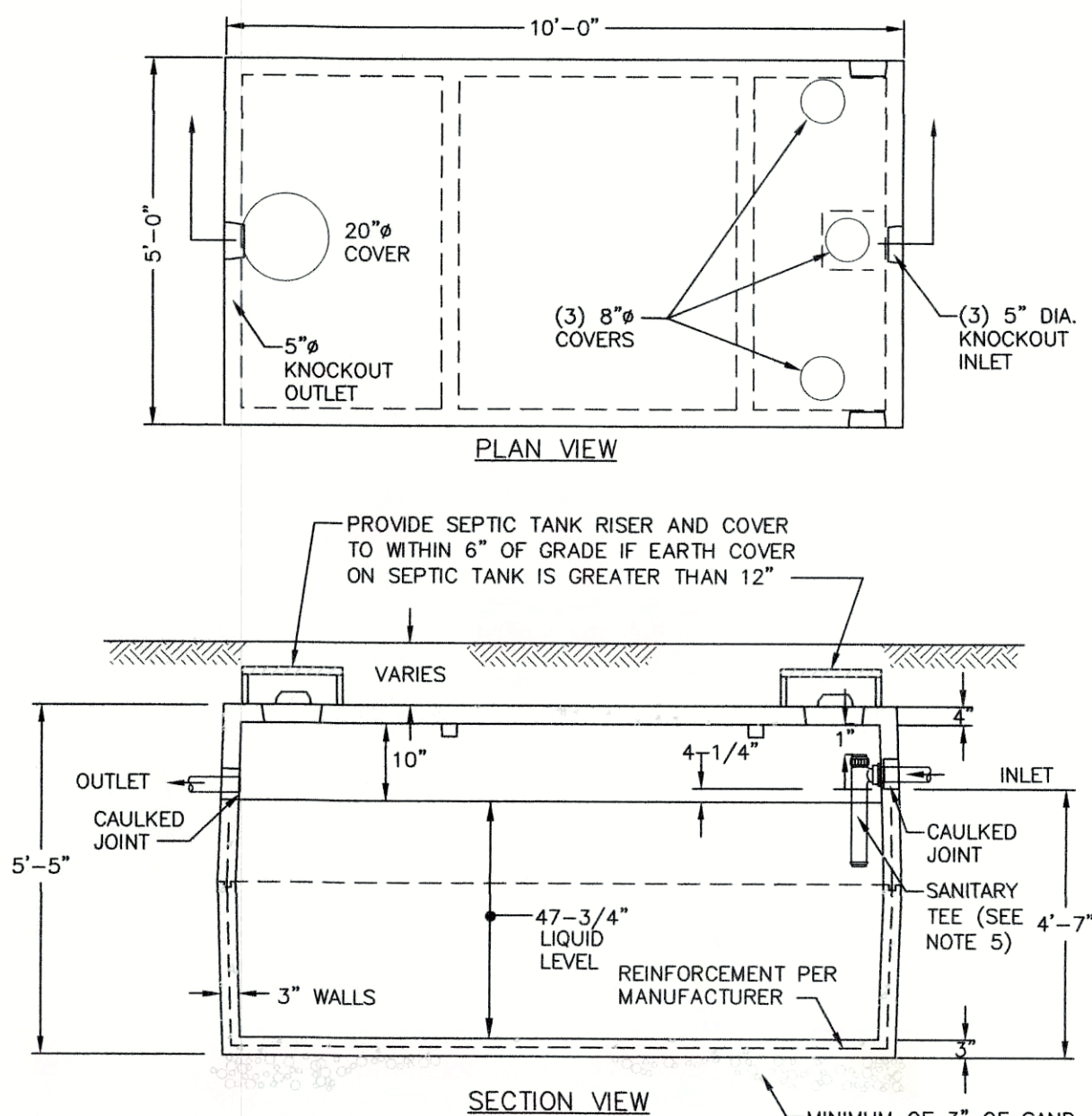
TITLE: SP-1

SHEET: 2 OF 4

1. THE WELL SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH), APPENDIX 5B, "STANDARDS FOR WATER WELLS".
2. COMPLETED WELL SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C654.
3. MINIMUM CASING LENGTH SHALL BE 19 FEET BELOW GRADE.
4. CASING LENGTH SHALL BE IN BASED ON THE WATER BEARING FORMATION ENCOUNTERED AND SHALL BE IN ACCORDANCE WITH NYSDOH, APPENDIX 5B, TABLE 2.
5. STEEL WELL CASING SHALL BE IN ACCORDANCE WITH AWWA A100.
6. FOR BEDROCK WELLS, THE STEEL CASING SHALL BE FITTED WITH A DRIVE SHOE AND PERMANENTLY SEATED INTO THE BEDROCK.
7. ANGULAR SPACE BETWEEN THE WELL CASING AND BOREHOLE SHALL BE GROUTED MINIMUM 10 FEET INTO BEDROCK IN ACCORDANCE WITH NYSDOH, APPENDIX 5B, TABLE 2.
8. INSTALL PITLESS ADAPTOR WITH ADEQUATE CLEARANCE WITHIN THE INTERNAL DIAMETER IF THE WELL CASING TO PERMIT INSERTION OR WITHDRAWAL OF WATER SYSTEM COMPONENTS. ADAPTOR SHALL BE THREADED TO ACCOMMODATE A LIFTING PIPE.
9. DROP PIPE SHALL HAVE A MINIMUM WORKING PRESSURE OF 160 PSI, AND:
 - a. CONTINUOUS, UN-SPLICED PLASTIC PIPE APPROVED FOR DRINKING WATER COMPLIANT WITH NSF OR UL, OR
 - b. THREADED AND COUPLED SCHEDULE 80 OR HEAVIER PVC PIPE COMPLIANT WITH NSF OR UL, OR
 - c. THREADED OR COUPLED GALVANIZED, STAINLESS STEEL OR COPPER PIPE.
10. PROVIDE SUBMERSIBLE PUMP WITH INTEGRAL CHECK VALVE.
11. WELL PUMP SHALL BE SET A MINIMUM OF 10 FEET ABOVE THE WELL BOTTOM, OR AT THE ELEVATION DETERMINED BY THE GEOLOGIST OR ENGINEER.
12. PUMP DISCHARGE SHALL NOT EXCEED THE DEPENDABLE YIELD OF THE WELL.
13. PROVIDE WATER TREATMENT AS REQUIRED.
14. PROVIDE TORQUE ARRESTOR IMMEDIATELY ABOVE WELL PUMP.
15. PROVIDE 1/4" TWISTED POLYPROPYLENE LIFTING ROPE, TIED OFF AT THE TOP OF THE WELL CASING.
16. PROVIDE CABLE GUIDES AT MINIMUM INTERVAL RECOMMENDED BY MANUFACTURER.
17. PROVIDE AND/OR REVISE TREATMENT SCHEME AS NECESSARY BASED ON RESULTS OF WATER QUALITY TESTING FOLLOWING WELL PUMP TEST.

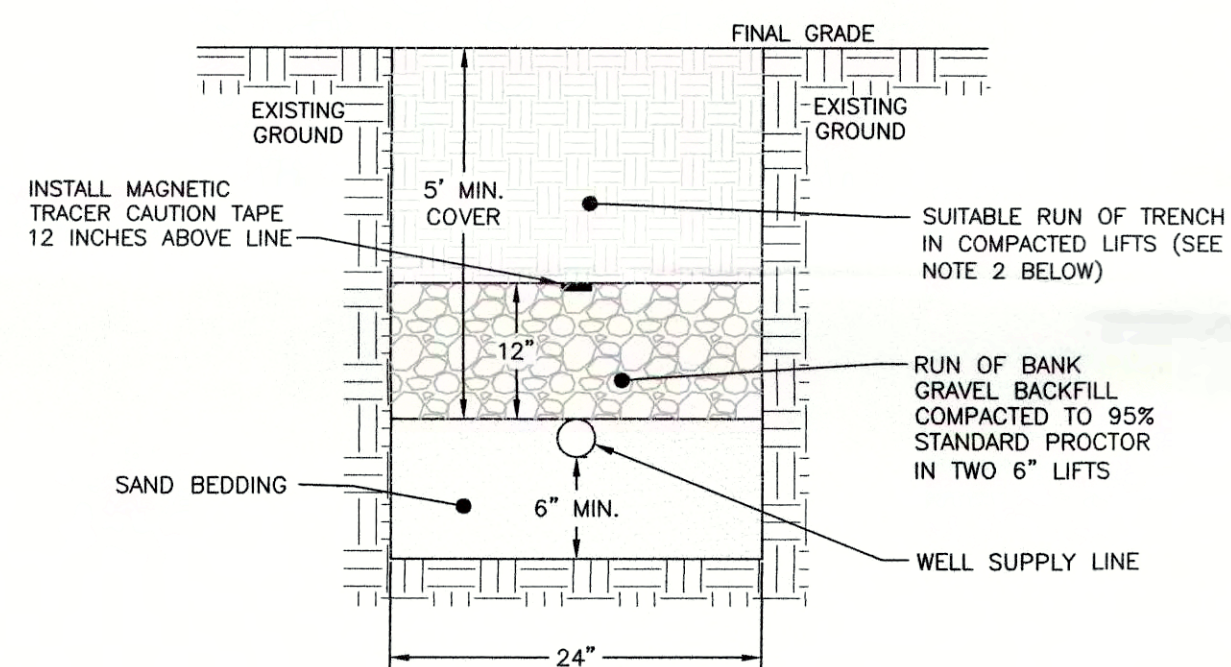


WELL DETAIL
NOT TO SCALE



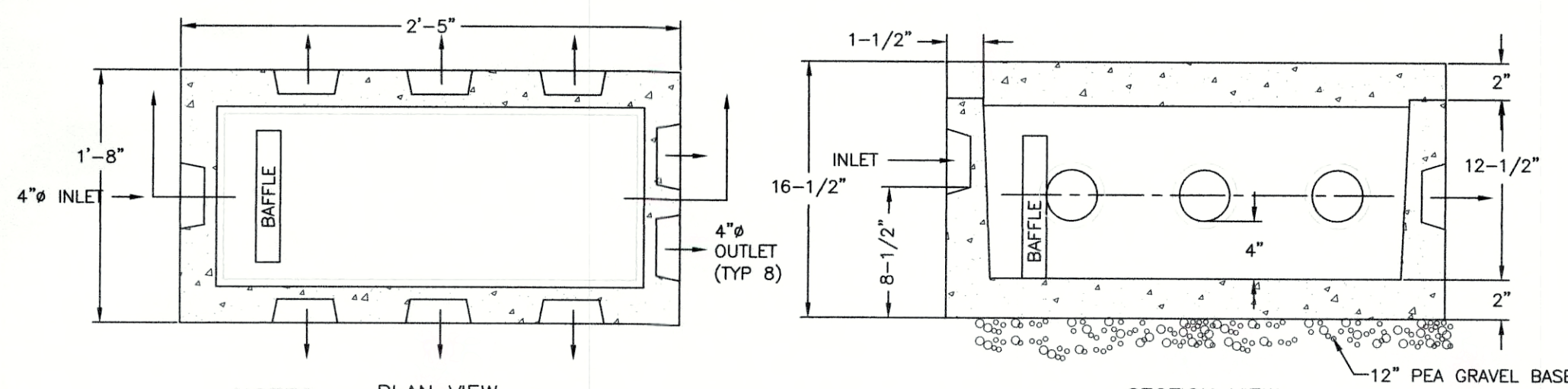
- NOTES:**
1. IF TANK IS DELIVERED TO THE SITE IN SECTIONS, THE CONTRACTOR SHALL MAKE IT WATER TIGHT. A WATER TIGHTNESS TEST SHALL BE COMPLETED BY THE CONTRACTOR, WITNESSED BY THE OWNER, AND SHALL INCLUDE FILLING THE TANK AND MEASURING WATER LEVEL OVER A 24-HOUR PERIOD.
 2. ALL JOINTS SHALL BE CAULKED.
 3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
 4. PRECAST SEPTIC TANK (SHOWN IS MODEL ST-1250 BY WOODARD'S CONCRETE PRODUCTS, INC. 629 LYBOLT ROAD, BULLVILLE, NY, 10915 (845) 361-3471).
 5. SANITARY TEE SHALL BE USED ON INLET SIDE TO MEET REQUIRED 16" BAFFLE DEPTH BELOW LIQUID LEVEL.
 6. THE DISTANCE FROM THE TOP OF TANK AND THE TOP OF THE BAFFLES SHALL HAVE A MINIMUM OF 1" OF CLEARANCE.

PRECAST CONCRETE 1,250 GALLON
SEPTIC TANK SDS DETAIL
NOT TO SCALE



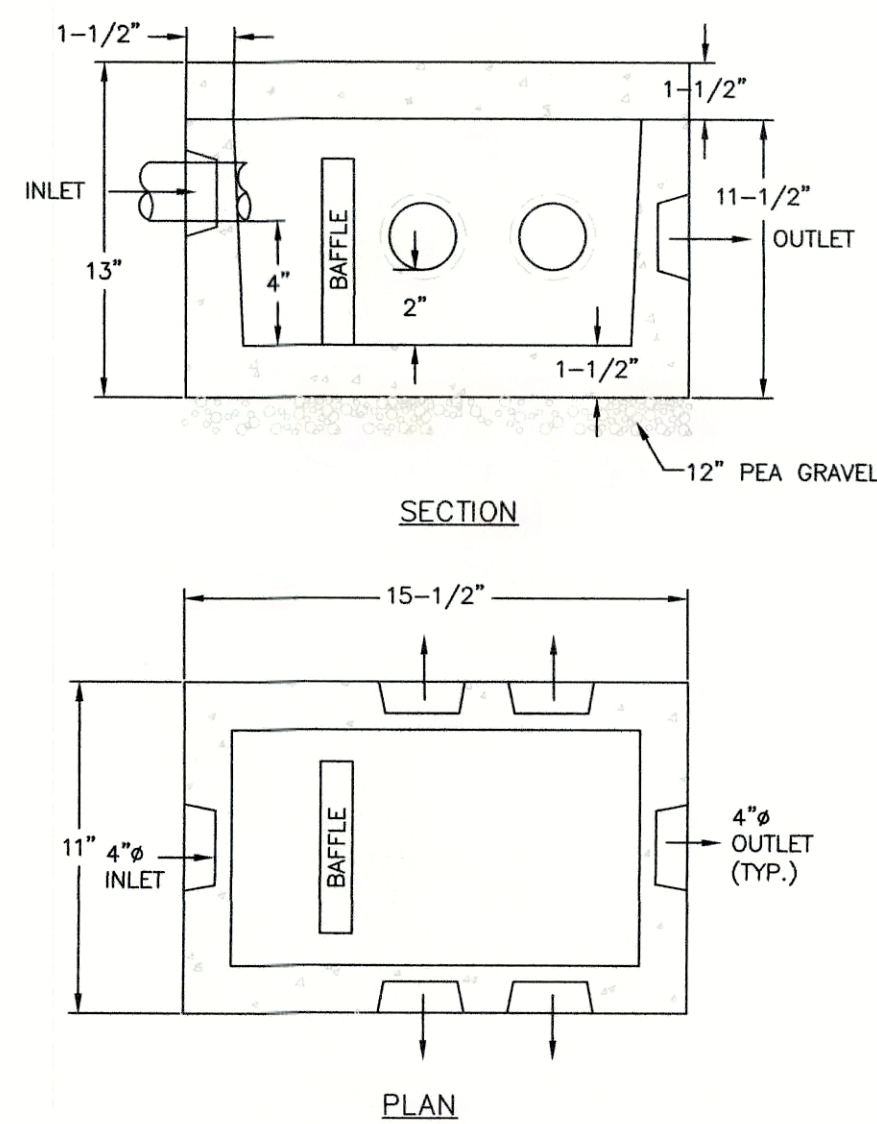
- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

WELL SUPPLY LINE TRENCH DETAIL
NOT TO SCALE



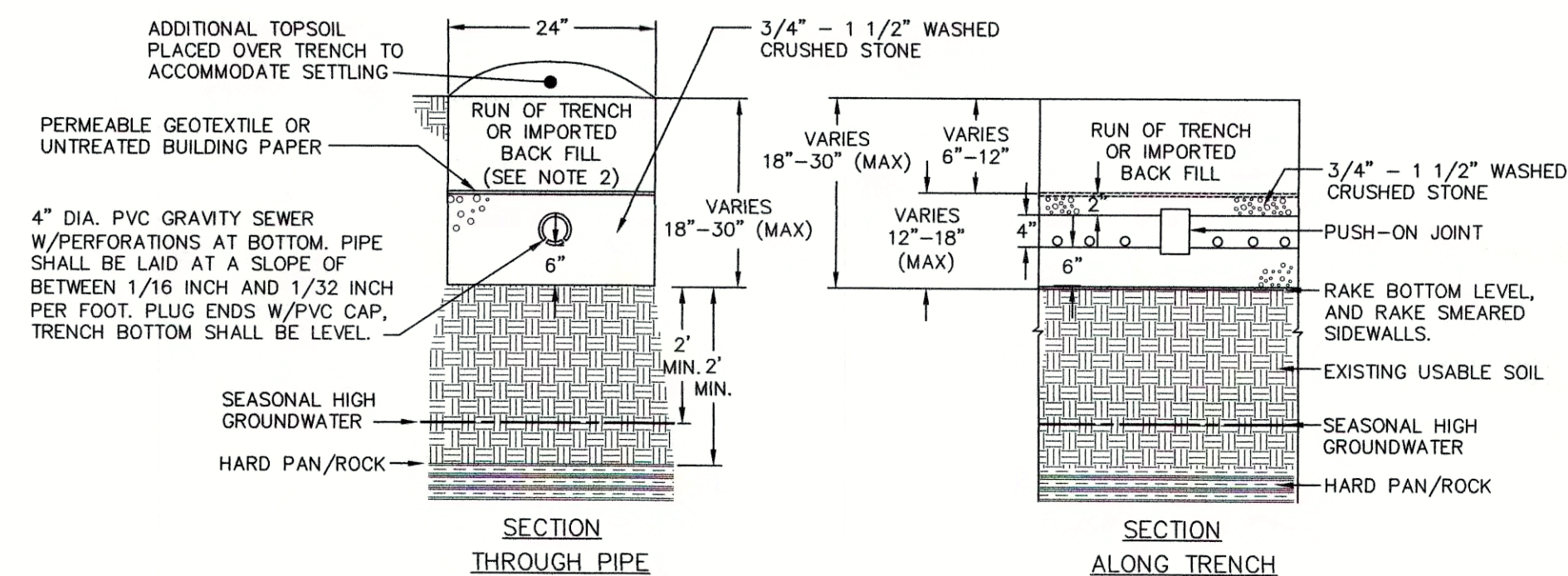
- NOTES:** PLAN VIEW SECTION VIEW
1. ALL OUTLETS SHALL BE SET AT THE SAME ELEVATION. DISTRIBUTION BOX SHALL BE SET LEVEL AND ALL UNUSED OUTLETS SHALL BE PLUGGED.
 2. PRE-CAST DISTRIBUTION BOX SHOWN IS MODEL DB-9 / 8 OUTLET BOX BY WOODARD'S CONCRETE PRODUCTS, INC. 629 LYBOLT ROAD BULLVILLE, NY 10915 (845) 361-3471
 3. BAFFLE SHALL BE PROVIDED BY CONTRACTOR.
 4. MAXIMUM EARTH COVERAGE ABOVE DISTRIBUTION BOX SHALL NOT EXCEED 12".

8-OUTLET, PRECAST CONCRETE, DISTRIBUTION BOX WITH BAFFLE DETAIL
(FOR PRIMARY SDS)
NOT TO SCALE



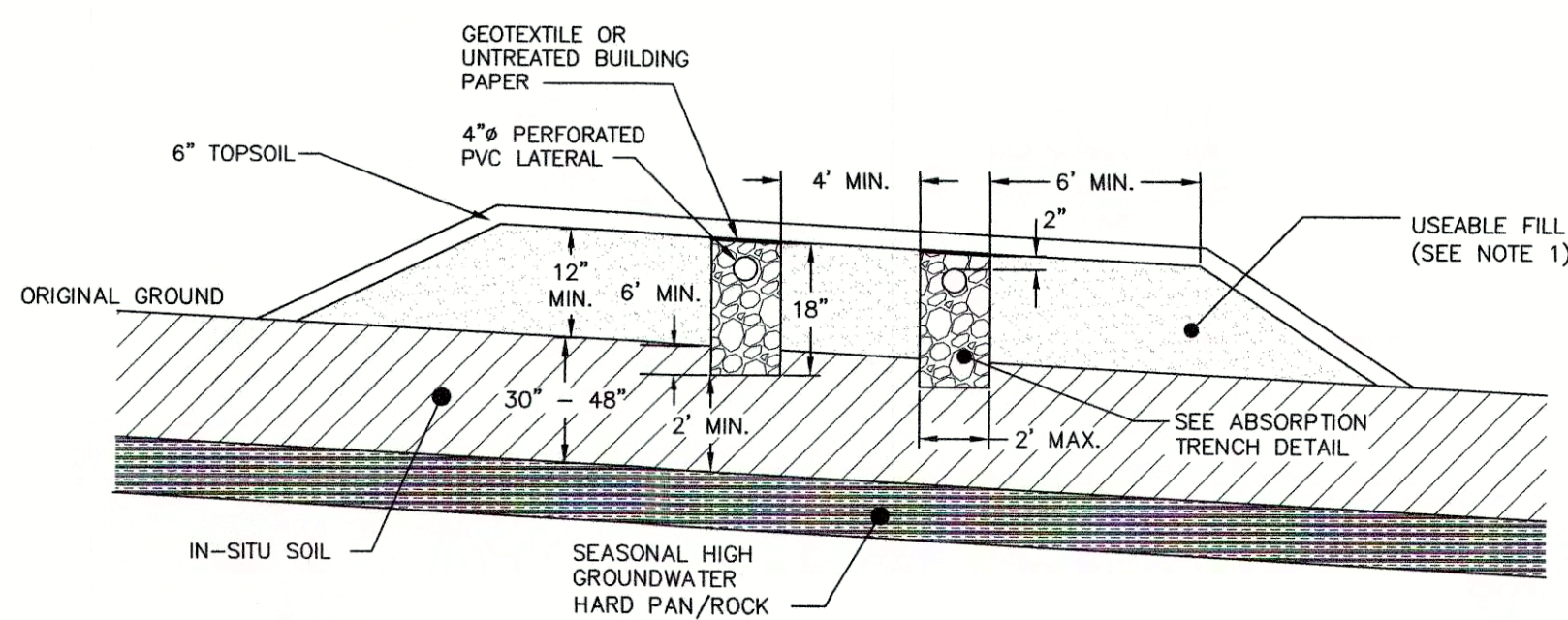
5-OUTLET, PRECAST CONCRETE,
DISTRIBUTION BOX WITH BAFFLE DETAIL
(FOR RESERVE SDS)
NOT TO SCALE

1. ALL OUTLETS SHALL BE SET AT THE SAME ELEVATION. DISTRIBUTION BOX SHALL BE SET LEVEL AND ALL UNUSED INLETS/OUTLETS SHALL BE PLUGGED.
2. PRE-CAST DISTRIBUTION BOX SHOWN IS MODEL DB-6 / 5-OUTLET BOX, BY WOODARDS CONCRETE PRODUCTS, INC. 629 LYBOLT RD, BULLVILLE, NY (845) 361-3471.
3. Baffle SHALL BE PROVIDED BY CONTRACTOR.
4. A MINIMUM OF 2' SOUD PIPE MUST BE PROVIDED BETWEEN THE DISTRIBUTION BOX AND PERFORATED LATERALS.
5. COVER OVER THE DISTRIBUTION BOX IS TO BE A MAXIMUM OF 12".



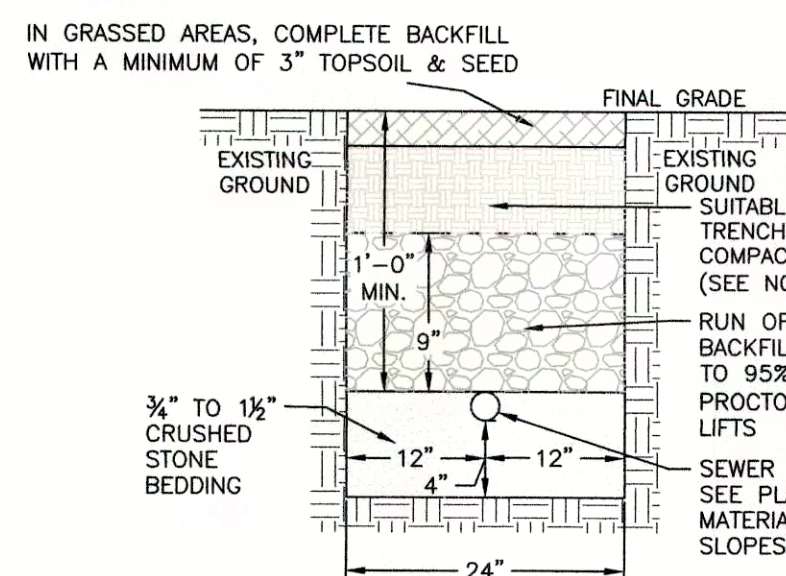
- NOTES:**
1. SPACING BETWEEN ABSORPTION FIELD TRENCHES IS 6' O.C.
 2. FOR INGROUND SYSTEM, BACKFILL TRENCH WITH RUN OF TRENCH BACKFILL. FOR FILL SYSTEMS, THE BACKFILL SHALL MATCH THE QUALITY OF THE SAND AND GRAVEL FILL. THE FINAL 6" FOR A FILL SYSTEM SHALL BE TOPSOIL.
 3. TOTAL TRENCH DEPTH NOT TO EXCEED 30".
 4. IF DOSING/PUMPING IS USED FOR CONVEYING EFFLUENT TO AN ABSORPTION FIELD, THE LATERALS (PERFORATED PIPES) IN THE RECEIVING FIELD SHALL BE SET/INSTALLED LEVEL ALONG THEIR FULL LENGTHS (FOR RESERVE SDS).

CONVENTIONAL ABSORPTION TRENCH DETAIL
NOT TO SCALE



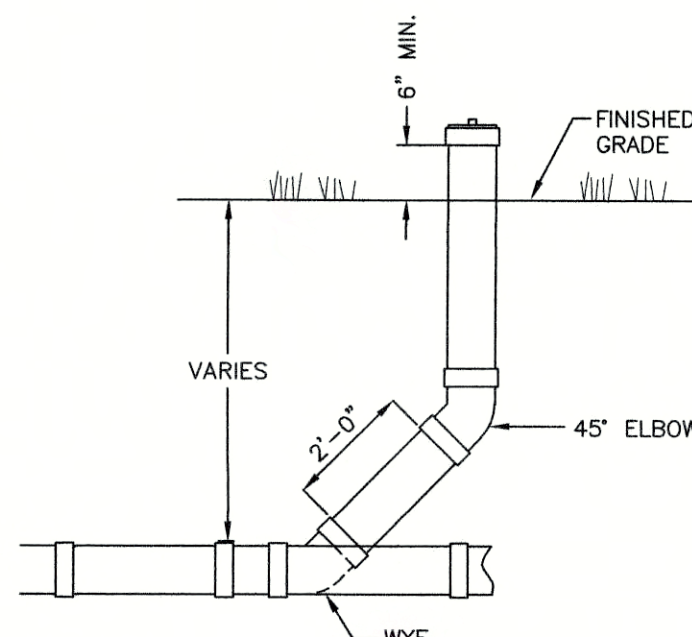
- NOTES:**
1. USEABLE FILL MATERIAL SHALL HAVE A PERCOLATION RATE SIMILAR TO BUT NOT FASTER THAN THE ORIGINAL USEABLE SOIL PERCOLATION RATE. THE FILL MATERIAL SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS.
 2. ONE DIVERSION DITCH SHALL BE CONSTRUCTED UPHILL FROM THE FILL TO PREVENT SURFACE RUNOFF FROM ENTERING THE FILL.
 3. IF DOSING/PUMPING IS USED, THE LATERALS (PERFORATE PIPE) IN THE FIELDS SHALL BE INSTALLED LEVEL.

SHALLOW ABSORPTION TRENCH SYSTEM DETAIL
W/CONVENTIONAL TRENCHES
NOT TO SCALE



- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SEWER LINE TRENCH DETAIL
NOT TO SCALE



- NOTES:**
1. SEWER PIPE AND FITTINGS SHALL BE ASTM D-3033 OR D-3034 SDR-35.
 2. CLEANOUT SHALL BE INSTALLED UPSTREAM OF THE PROPOSED 45° ANGLE.

CLEANOUT DETAIL
NOT TO SCALE

DRAWN BY: LGP				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/21/25	PER UCDOH COMMENTS	LGP				
2	3/26/25	PER UCDOH COMMENTS	LGP				



SEAL



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CONSTRUCTION DETAILS—LOT 3

INFUSO

HURDS ROAD & SOUTH OHIOVILLE ROAD
TOWN OF LLOYD
ULSTER COUNTY, NEW YORK
TAX ID: 94.2-1-4.152

JOB #: 2021:046A

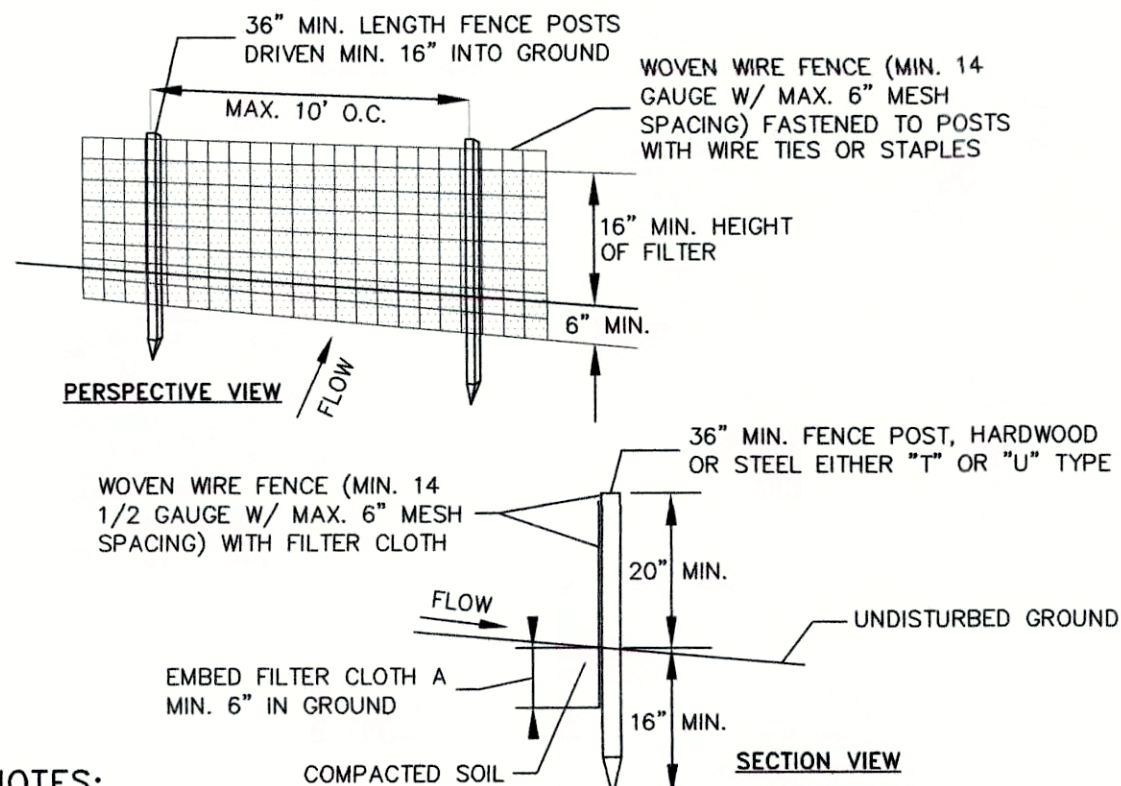
DATE: 7/8/24

SCALE: AS SHOWN

TITLE: CD-1

SHEET: 3 OF 4

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



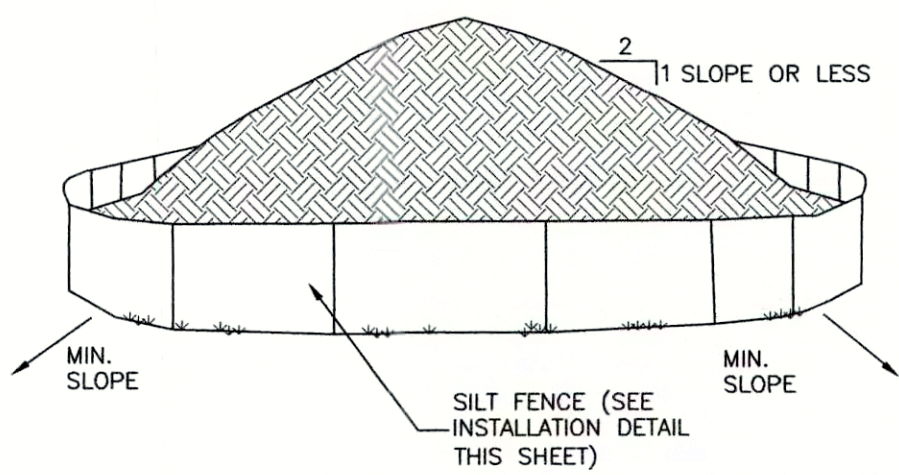
NOTES:
 1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
 3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE



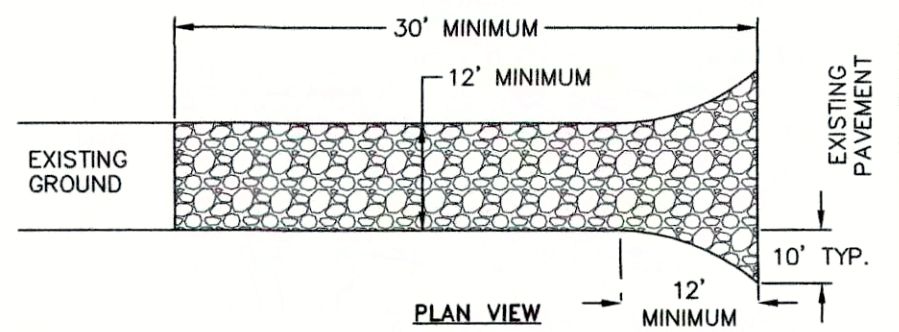
NOTES:
 1. TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
 2. SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:
 65% KENTUCKY BLUE GRASS BLEND 114 POUNDS PER ACRE
 20% PERENNIAL RYEGRASS 35 POUNDS PER ACRE
 15% FINE FESCUE 26 POUNDS PER ACRE
 3. SEED MIXTURE FOR USE IN SHADY AREAS:
 80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS 138 POUNDS PER ACRE
 20% FINE FESCUE 37 POUNDS PER ACRE
 4. SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
 5. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20% TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE



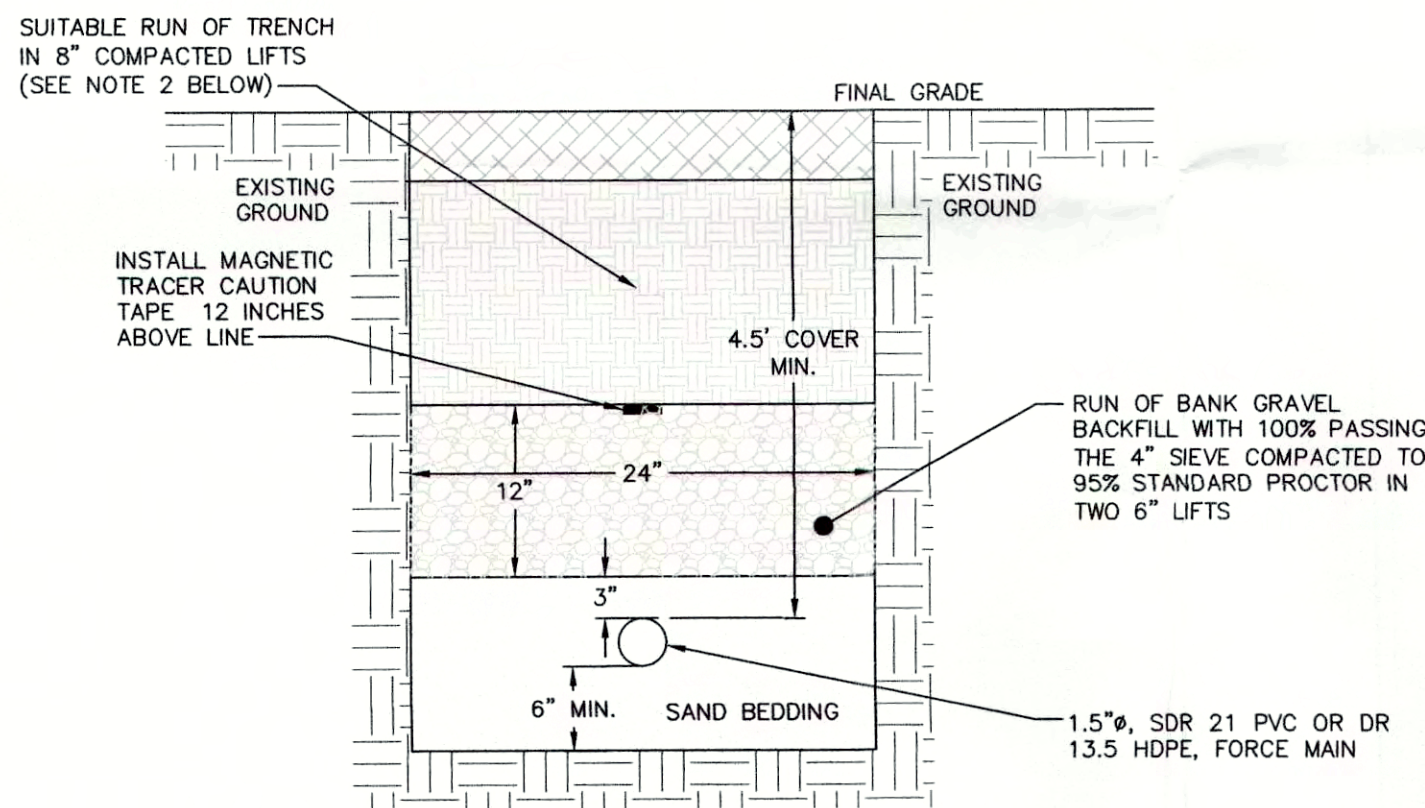
NOTES:
 1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
 2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



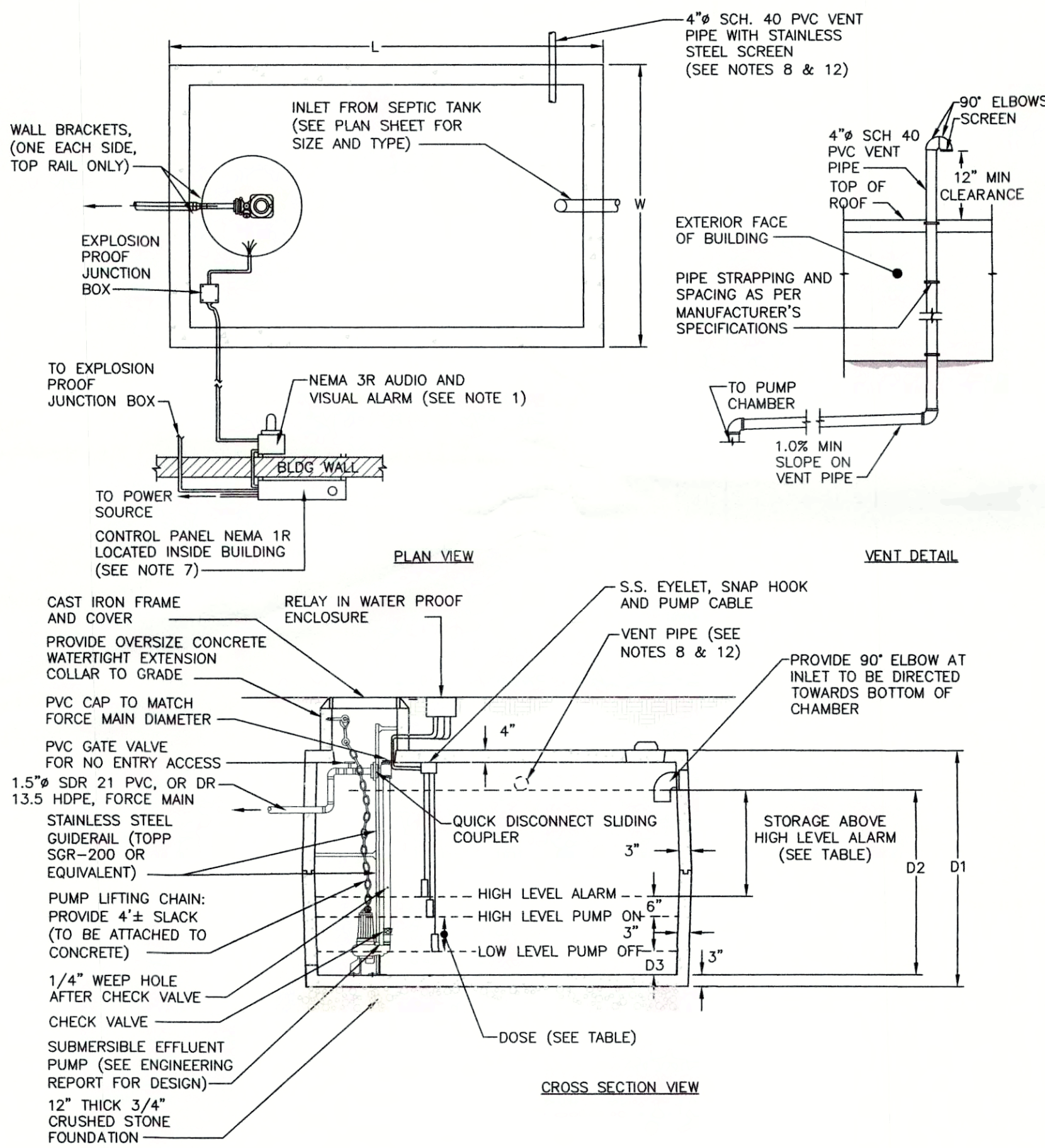
NOTES:
 1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 2. LENGTH - NOT LESS THAN 30 FEET FOR A SINGLE RESIDENCE LOT.
 3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
 4. WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
 5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
 6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



NOTES:
 1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
 2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SEWER FORCEMAIN TRENCH DETAIL
NOT TO SCALE



PUMP CHAMBER NOTES:

- THREE FLOAT SWITCHES SHALL BE INSTALLED:
PUMP ON, PUMP OFF, AND HIGH ALARM. VISIBLE AND AUDIBLE ALARMS SHALL BE PROVIDED. THE ALARM SHALL BE LOCATED IN A CONSPICUOUS PLACE, CLEARLY VISIBLE AND AUDIBLE, TO ALERT THE HOMEOWNER OF PUMP MALFUNCTION. EXTERIOR ALARMS SHALL BE RATED NEMA 3R FOR WEATHERPROOF LOCATIONS.
- ELECTRICAL EQUIPMENT IN WET WELLS OR IN ENCLOSED SPACES WHERE EXPLOSIVE GASES MAY ACCUMULATE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE FOR CLASS I, DIVISION I, GROUP C OR D LOCATIONS. THERE SHALL BE NO ELECTRICAL SPLICES, JUNCTION BOXES OR CONNECTIONS OF ANY NEC RATING IN THE PUMP CHAMBER.
- EFFLUENT PUMP SIZE AND TYPE AS PER TABLE BELOW.
- THERE SHALL BE A MINIMUM OF 2.5' COVER OVER THE CONDUIT CONVEYING THE FLOAT PUMP CABLES AND CONTROL WIRING. CONDUITS FROM ALARM BOX AND CONTROL PANEL TO RELAY PANEL AT PUMP CHAMBER SHALL SHARE THE SAME TRENCH.
- PROVIDE ADDITIONAL CONDUIT FOR CONTROL WIRING AS PER THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM COVER SHALL BE 2.5'.
- AN ALUMINUM WARNING PLATE SHALL BE RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE CHAMBER COVER. THE PLATE SHALL BE A MINIMUM OF 12"x12" AND SHALL BE ENGRAVED WITH THE FOLLOWING LANGUAGE: "WARNING - CONFINED SPACE - ENTRY PROHIBITED WITHOUT AUTHORIZATION - CALL OWNER FOR APPROVAL TO ACCESS".
- CONTROL PANELS SHALL BE LOCATED WITHIN THE HOME.
- 4" SDR PVC SCREENED VENT SHALL EXTEND TO BUILDING ROOF LINE OR AS APPROVED BY THE OWNER, ARCHITECT, AND ENGINEER.
- A WATER TIGHTNESS TEST SHALL BE COMPLETED BY THE CONTRACTOR, WITNESSED BY THE ENGINEER, AND SHALL INCLUDE FILLING THE TANK AND MEASURING WATER LEVEL.
- CONTRACTOR SHALL CAULK INLET AND OUTLET JOINTS AND OTHER CONDUIT PENETRATIONS.
- INSTALL STAINLESS STEEL GUIDE RAIL FOR PUMP REMOVAL AND MAINTENANCE.
- LOCATION OF 4" DIA. SDR PVC VENTILATION PIPE SHALL BE APPROVED BY THE OWNER AND SHALL PROVIDE POSITIVE SLOPE TO SURFACE (IE: NO DIPS OR SAGS ALLOWED). THE INVERT OF THE VENT PIPE SHALL MATCH INLET INVERT. THE VENT PIPE SHALL BE SECURELY MOUNTED TO THE EXTERIOR OF THE BUILDING AND SHALL VENT A MINIMUM OF 12" ABOVE ROOF LINE. VENT PIPE AND BRACKETS TO MATCH EXTERIOR BUILDING COLOR IF RUN UP THE BUILDING.
- ALL ELECTRIC SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION.
- A PROFESSIONAL ENGINEER SHALL CERTIFY INSTALLATION AND TESTING OF PUMP CHAMBER.
- PUMP CHAMBER SHOWN IS A 1,000-GALLON RESIDENTIAL PUMP CHAMBER TANK (MODEL GT-1000) BY WOODARD'S PRECAST CONCRETE PRODUCTS, 629 LYBOLT ROAD BULLVILLE, NY 10915, (845) 361-3471. PUMPING/DOSING IS ONLY REQUIRED FOR THE RESERVE SDS ON LOT 3. THE PUMP CHAMBER SHALL ONLY BE INSTALLED IF THE PRIMARY SDS FAILS.

SYSTEM		PUMP CHAMBER DIMENSIONS					DOSE*		STORAGE			PUMP MAKE AND MODEL	FORCE MAIN SIZE (IN)	NO. OF PUMPS
RIM ELEVATION	REQ'D DOSE RANGE (GAL)	W	L	D1	D2	D3	DEPTH (IN)	VOLUME (GAL)	REQ'D (GAL)	DEPTH PROVIDED (IN)	VOLUME PROVIDED (GAL)			
±402.75	132-149**	4'-10"	8'-6"	5'-5"	4'-4"	11.0"	6.6	141.9	440	25.4	549.6	GOULDS, EP04 MODEL 3871	1.5	1

*DOSE PROPOSED INCLUDES THE VOLUME OF THE EFFLUENT TO BE DELIVERED TO THE ABSORPTION FIELDS PLUS THE VOLUME OF EFFLUENT WITHIN THE FORCE MAIN THAT WILL FLOW BACK INTO THE PUMP CHAMBER ONCE THE PUMP TURNS OFF. VOLUME OF EFFLUENT THAT WILL REACH THE FIELD PER DOSING CYCLE IS 140.5 GALLONS (TOTAL DOSAGE 141.9 GALLONS = 140.5 GALLONS THAT WILL REACH THE SDS FIELD + 1.4 GALLONS THAT WILL REMAIN IN FORCEMAIN AND DRAIN BACK TO THE PUMP CHAMBER).
 ** DOSE BASED ON 75-85% OF THE CAPACITY WITHIN THE 4" PERFORATED PIPE USED FOR THE RESERVE ABSORPTION FIELD.

PUMP CHAMBER DETAIL
(FOR RESERVE SDS ONLY)
NOT TO SCALE

DRAWN BY: LGP				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	2/21/25	PER UCDOH COMMENTS	LGP				
2	3/26/25	PER UCDOH COMMENTS	LGP				



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CONSTRUCTION DETAILS-LOT 3

INFUSO

HURDS ROAD & SOUTH OHIOVILLE ROAD
 TOWN OF LLOYD
 ULSTER COUNTY, NEW YORK
 TAX ID: 94.2-1-4.152

JOB #: 2021-046A

DATE: 2/13/25

SCALE: AS SHOWN

TITLE: CD-2

SHEET: 4 OF 4