

# 268 HERVEY STREET ROAD RAISED WWDS

**GENERAL NOTES:**

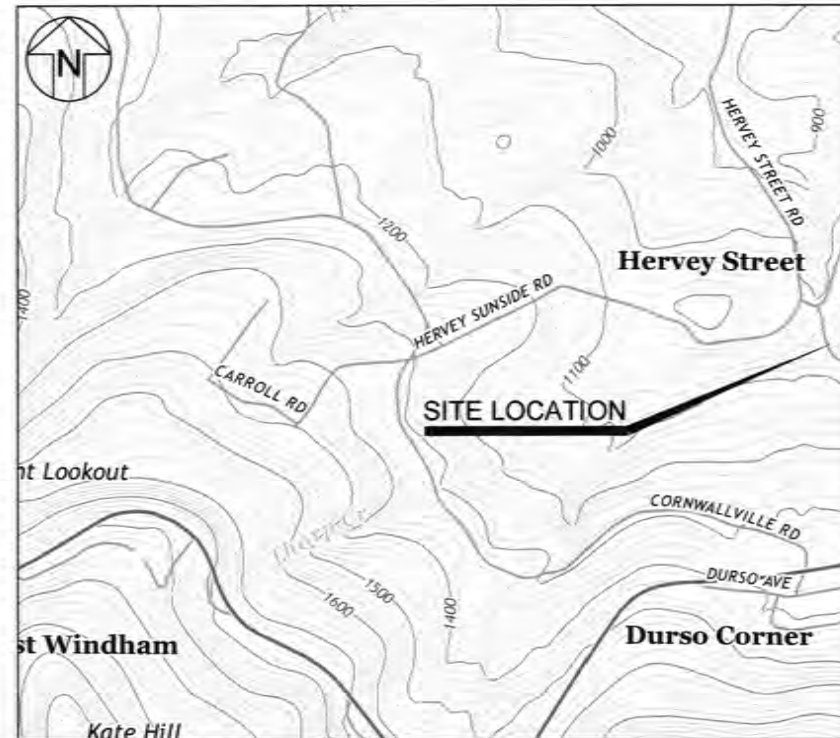
1. THERE SHALL BE NO DEVIATION FROM THESE PLANS DURING CONSTRUCTION WITHOUT PRIOR APPROVAL OF A LICENSED DESIGN PROFESSIONAL, AND TOWN REPRESENTATIVE.
2. THE MATERIALS AND SPECIFICATIONS NOTED ON THE PLANS MUST BE UTILIZED UNLESS ALTERNATES ARE ACCEPTED AND APPROVED IN WRITING BY A LICENSED DESIGN PROFESSIONAL AND TOWN REPRESENTATIVE.
3. FOLLOW ALL MANUFACTURER'S INSTRUCTIONS FOR COMPONENT INSTALLATION UNLESS OTHERWISE DIRECTED BY A LICENSED DESIGN PROFESSIONAL AND TOWN REPRESENTATIVE.
4. PRIOR TO EXCAVATING, CONSULT THE UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION.
5. ELECTRICAL EQUIPMENT INSTALLED IN ACCORDANCE WITH THE PLAN MUST BE NEW YORK STATE BOARD OF FIRE UNDERWRITERS CERTIFIED.
6. THIS PLAN REQUIRES APPROVALS FROM THE TOWN AND ALL INVOLVED REGULATORY AGENCIES.

**REQUIRED NOTES - ALL SEPTIC PLANS:**

1. SANITARY FACILITIES MAY BE CONSTRUCTED ONLY AFTER A TOWN "PERMIT TO CONSTRUCT" HAS BEEN ISSUED. THESE FACILITIES SHALL NOT BE PLACED IN OPERATION UNTIL A TOWN "CERTIFICATE OF COMPLETION" HAS BEEN ISSUED. CONTACT THE DESIGNATED TOWN REPRESENTATIVE REGARDING THE PROCEDURES INVOLVED.
2. A LICENSED DESIGN PROFESSIONAL SHALL SUPERVISE SYSTEM INSTALLATION; CERTIFY THAT CONSTRUCTION FOLLOWED THE APPROVED PLAN; FURNISH AN "AS-BUILT" PLAN; AND APPLY TO TOWN FOR A "CERTIFICATION OF COMPLETION".
3. INSPECTIONS OF SANITARY FACILITY CONSTRUCTION SHALL BE CONDUCTED JOINTLY BY A LICENSED PROFESSIONAL AND TOWN REPRESENTATIVE:
  - A. PRIOR TO SITE DEVELOPMENT;
  - B. AFTER SITE PREPARATION PRIOR TO FILL PLACEMENT (SYSTEMS IN FILL ONLY);
  - C. DURING PERCOLATION TESTING OF THE STABILIZED FILL (SYSTEMS IN FILL ONLY);
  - D. AFTER ADJUSTMENT OF THE PUMP OR SIPHON CHAMBER (DOSED SYSTEMS ONLY);
  - E. PRIOR TO BACKFILLING PIPES, TANKS, PITS, WELL SEALS, ETC.;
  - F. AFTER FINAL GRADING AND SEEDING.
4. NO EXISTING OR PROPOSED WATER SUPPLY OR SEWAGE TREATMENT FACILITIES ARE LOCATED WITHIN 100 FEET OFF THIS PROJECT EXCEPT AS SPECIFICALLY NOTED ON THE PLAN.
5. ROOF, FLOOR, FOOTING, COOLING WATER, BACKWASH DRAINS, ETC. SHALL BE DIRECTED AWAY FROM THE TREATMENT AREA.
6. NO VEHICULAR PARKING OR TRAFFIC SHALL BE ALLOWED ON ANY PORTION OF THE SEWAGE TREATMENT SYSTEM EXCEPT AS SHOWN.
7. THE OWNER SHALL FURNISH THE PURCHASER OF A LOT DEPICTED ON THIS PLAN WITH A COPY OF THE APPROVED PLAN, OR IF CONSTRUCTED, AN ACCURATE "AS-BUILT" PLAN DEPICTING INSTALLED FACILITIES.

MINIMUM SEPARATION DISTANCES	
HOUSE TO SEPTIC TANK/DOSING TANK	10' MIN.
HOUSE TO TOE OF FILL OR ABSORPTION FIELD	20' MIN.
WELL TO TOE OF FILL OR ABS. FIELD	200' MIN.
WELL TO SEPTIC TANK	50' MIN.
PROPERTY LINE TO TOE OF FILL OR ABS. FIELD	10' MIN.

NEIGHBORING WELLS ARE OVER 100' AWAY FROM ABSORPTION AREA



**SITE LOCATION MAP**  
SCALE: 1"=2000'

**SYSTEM DATA**

**DESIGN CRITERIA**

THE PROPOSED SITE WILL CONTAIN (2) 1-BEDROOM HOMES / CABINS WITH A TOTAL DESIGN FLOW RATE OF 520 GALLONS PER DAY. BASED ON THE INSTALLATION OF WATER SAVING FIXTURES, THE SITE SHALL HAVE (2) 1,000 GALLON SEPTIC TANKS. THE SITE CONDITIONS REQUIRE THE CONSTRUCTION OF A RAISED SYSTEM. BASED ON THE STABILIZED PERC. RATE 5-30 MINUTES PER INCH FOR THE FILL MATERIAL, THE REQUIRED LENGTH OF LATERALS IS 433 LF. THE PROPOSED SYSTEM SHALL HAVE 450 LF OF LATERALS. THE REQUIRED BASAL AREA FOR THIS SYSTEM, BASED ON A LOADING RATE OF 0.2 GPD/SQ. FT, IS 2,600 SF. THE BASAL AREA PROVIDED FOR THIS SYSTEM IS 2,960 SF.

**PIPING**

HOUSE TO SEPTIC TANK:  
4" PVC SCHEDULE 40 WITH TIGHT JOINTS, MINIMUM SLOPE: 1/4" PER FOOT

SEPTIC TANK TO PUMP TANK:  
4" PVC SDR 35, MINIMUM SLOPE: 1/8" PER FOOT

PUMP TANK TO DISTRIBUTION BOX  
1.5" PVC SCH 40 SLOPED BACK TO PUMP TANK WITH WEEP HOLE FOR FREEZE PROTECTION

DISTRIBUTION BOX TO LATERALS:  
4" ASTM F810, MINIMUM SLOPE 1/16 TO 1/32 INCH PER FOOT

LATERALS:  
4" ASTM F810 PERFORATED PIPE, MINIMUM SLOPE 1/16 TO 1/32 INCH PER FOOT

**REQUIRED NOTES - SYSTEMS IN FILL:**

1. SITE PREPARATION:
  - A. WHERE SOIL ABSORPTION AREA PREPARATION FOR RAISED SYSTEMS REQUIRES THE REMOVAL OF TREES. STUMPS ARE TO BE CUT FLUSH TO GRADE AND ROOTS NOT REMOVED. ROOTS MUST BE REMOVED WHEN PREPARING THE SOIL ABSORPTION AREA FOR SHALLOW TRENCH SYSTEMS.
  - B. WHERE THE SOIL ABSORPTION AREA CONTAINS SOD, THE AREA IS TO BE PLOWED PARALLEL TO SITE CONTOURS WITH AT LEAST A DOUBLE BOTTOMED BLADE AND THE FURROWS TURNED UPSLOPE.
2. FILL SPECIFICATIONS AND PLACEMENT:
  - A. MATERIAL USED FOR FILL SHALL BE HOMOGENEOUS WITH NO STONES LARGER THAN 4 INCHES IN DIAMETER.
  - B. TRAFFIC WITHIN THE SOIL ABSORPTION AREA SHALL BE MINIMIZED BY PLACING FILL ON THE UPSLOPE EDGE AND MOVED INTO PLACE DOWNSLOPE WITH A SMALL TRACK BULLDOZER.
  - C. FILL MATERIAL WITH PERMEABILITY CHARACTERISTICS WHICH MAY CHANGE SIGNIFICANTLY UPON STABILIZATION (I.E. SOIL CONTAINING CLAY OR SILT) MUST BE ALLOWED TO SETTLE NATURALLY FOR SIX MONTHS AND INCLUDE A FREEZE-THAW WEATHER CYCLE. FILL WITH PERMEABILITY CHARACTERISTICS WHICH WILL NOT CHANGE SIGNIFICANTLY UPON STABILIZATION (I.E. SAND AND SANDY LOAM) MAY BE MECHANICALLY COMPACTED IN SIX INCH LIFTS OR ALLOWED TO SETTLE NATURALLY AS ABOVE.
  - D. A LICENSED PROFESSIONAL SHALL PERFORM AT LEAST TWO PERCOLATION TESTS IN THE STABILIZED FILL. FILL MATERIAL USED IN SHALLOW TRENCH SYSTEMS MUST NOT BE MORE PERMEABLE THAN SOIL NATIVE TO THE ABSORPTION AREA. FILL MATERIAL USED FOR RAISED SYSTEMS SHALL HAVE A PERMEABILITY RANGE BETWEEN 5 AND 20 MINUTES PER INCH.

SOIL APPRAISAL PERFORMED BY BY FRANK ENGINEERING 1/18/23

TEST HOLE DESIGNATION	STABILIZED PERC RATE
PT1 - PERCOLATION TEST NO. 1	43 MIN./INCH - 12" DEEP
PT2 - PERCOLATION TEST NO. 2	47 MIN./INCH - 12" DEEP
DH1 - DEEP HOLE NO. 1	0-20" SILT / CLAY LOAM 20"-48" DENSE CLAY, SOME COBBLES NO GW, MOTTLING @12", ROOTS @ 20"
DH2 - DEEP HOLE NO. 2	0-18" SILT / CLAY LOAM 18"-48" DENSE CLAY, SOME COBBLES NO GW, MOTTLING @14", ROOTS @ 20"
DH3 - DEEP HOLE NO. 3	0-18" SILT / CLAY LOAM 18"-30" DENSE CLAY, SOME COBBLES NO GW, MOTTLING @14", ROOTS @ 20"
DH4 - DEEP HOLE NO. 4	0-20" SILT / CLAY LOAM 20"-48" DENSE CLAY, SOME COBBLES NO GW, MOTTLING @14", ROOTS @ 20"

PERCOLATION TEST PERFORMED IN ACCORDANCE TO WASTEWATER TREATMENT STANDARDS FOR INDIVIDUAL HOUSEHOLD SYSTEMS. APPROXIMATE LOCATION OF TESTS SHOWN ON SITE PLAN.

TAX MAP #: 64.00-2-6



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**268 HERVEY STREET  
ROAD RAISED WWDS**

DATE: 3-14-23  
TOWN OF DURHAM  
GREENE COUNTY  
NEW YORK STATE

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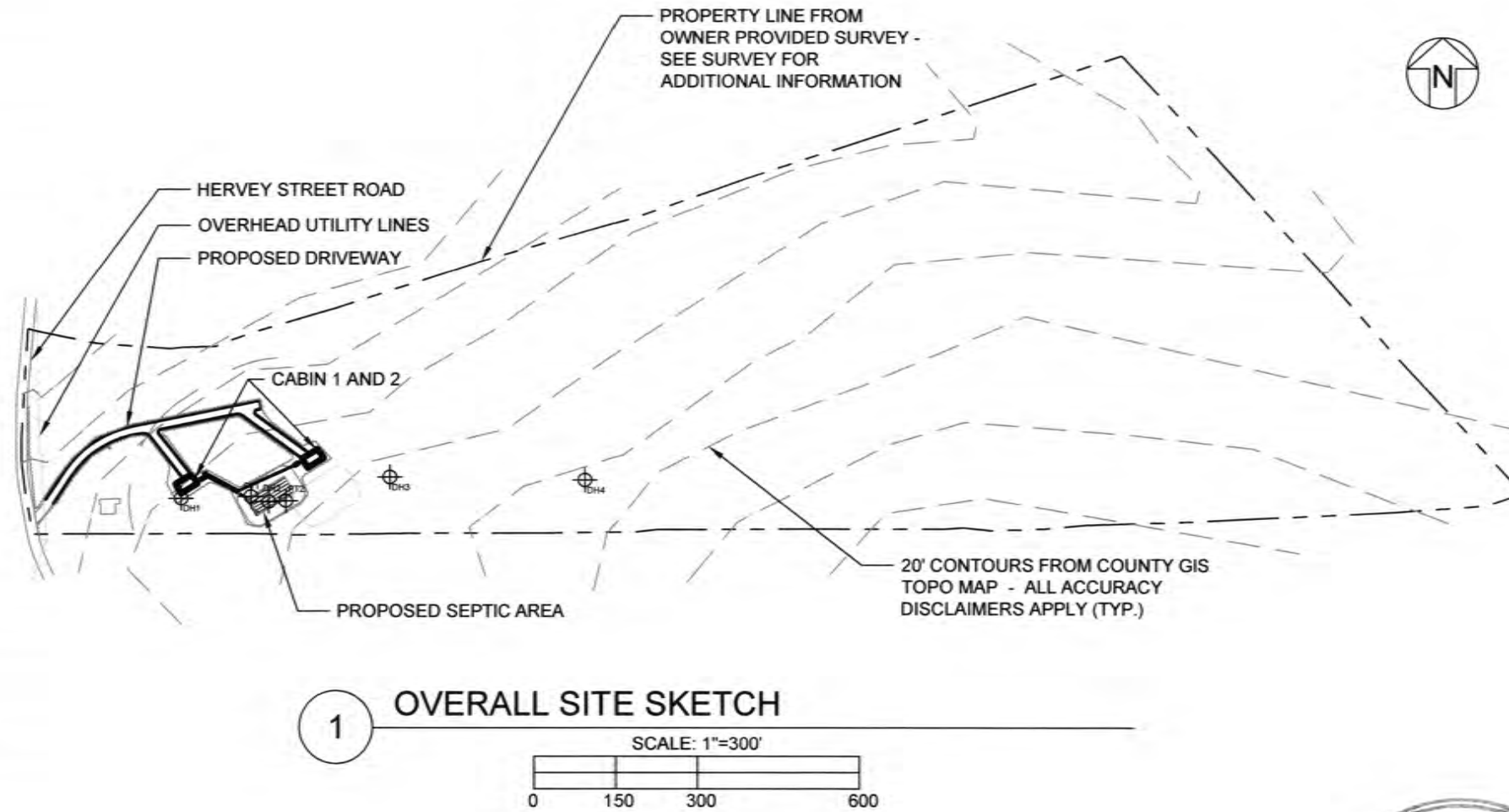
COVER SHEET CV1, SHEET 1 OF 5

REV. DATE COMMENTS  
1 4-20-23 LAYOUT CHANGES

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**GENERAL NOTES**

- 1.) LIMITS OF THE SYSTEM TO BE ROPED OFF PRIOR TO AND AFTER SYSTEM INSTALLATION TO PREVENT HEAVY EQUIPMENT FROM COMPACTING THE NATURAL USABLE SOIL AND DAMAGE TO THE ABSORPTION TRENCHES.
- 2.) ALL SEPTIC SYSTEMS ARE TO BE DESIGNED AND CONSTRUCTED IN COMPLIANCE WITH N.Y.S. HEALTH CODE PART 75A AND NYSDEC STANDARDS.
- 3.) NO EXISTING WELLS, PONDS, WATER COURSES OR WETLANDS SHALL EXIST WITHIN 100 FEET OF PROPOSED SEWAGE DISPOSAL SYSTEM.
- 4.) NO ROOF, FOOTING, COOLING WATER, BACKWASH DRAINS ETC. SHALL BE CONNECTED TO THE SEPTIC SYSTEM.
- 5.) THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF CONSTRUCTION PROGRESS REQUIRING INSPECTIONS AS NOTED IN THIS PLAN SET WITH A MINIMUM OF 48 HOUR NOTICE.
6. THIS SITE PLAN HAS BEEN CREATED USING AERIAL IMAGERY, OWNER PROVIDED MAPPING, AND ONSITE OBSERVATIONS. THIS PLAN INDICATES APPROXIMATE OBJECT LOCATIONS. OWNER SHALL BE RESPONSIBLE TO VERIFY OBJECT LOCATIONS AND CONTACT ENGINEER PRIOR TO CONSTRUCTION IF ANY CONFLICTS OR LAND CONSTRAINTS EXIST.
7. HOUSE LOCATIONS AND FOOTPRINTS ARE SCHEMATIC AND ACTUAL LOCATION SHALL BE APPROVED BY THE TOWN PRIOR TO CONSTRUCTION.
8. IT IS THE OWNER'S RESPONSIBILITY TO DETERMINE IF WETLANDS ARE ON THE SITE OR ADJACENT AND, IF FOUND, OBTAIN ANY RELATED PERMITTING PRIOR TO THE START OF WORK.
9. THE ENGINEER AND OWNER LOOKED FOR WELLS ON AN ADJACENT TO THE PROPERTY WITHIN THE AREA OF THE PROPOSED SEPTIC SYSTEM. NONE WERE FOUND WITHIN 200' OF THE PROPOSED SEPTIC SYSTEM. IT IS THE OWNER'S RESPONSIBILITY TO VERIFY THIS PRIOR TO THE START OF CONSTRUCTION.
10. THERE IS LIMITED SIGHT DISTANCE AT THE EXISTING DRIVEWAY. THE OWNER SHALL OBTAIN PERMISSION TO CLEAR THE AREA AROUND THE DRIVEWAY TO INCREASE THE SIGHT DISTANCE TO A SAFE DISTANCE. THE PROPOSED DRIVEWAY REQUIRES APPROVAL FROM THE TOWN. THE DRIVEWAY AREAS MAY NEED TO BE REGRADED TO LESSEN THE SLOPE.



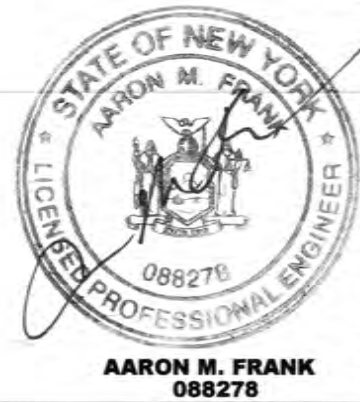
**1 OVERALL SITE SKETCH**

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**268 HERVEY STREET  
ROAD RAISED WWDs**

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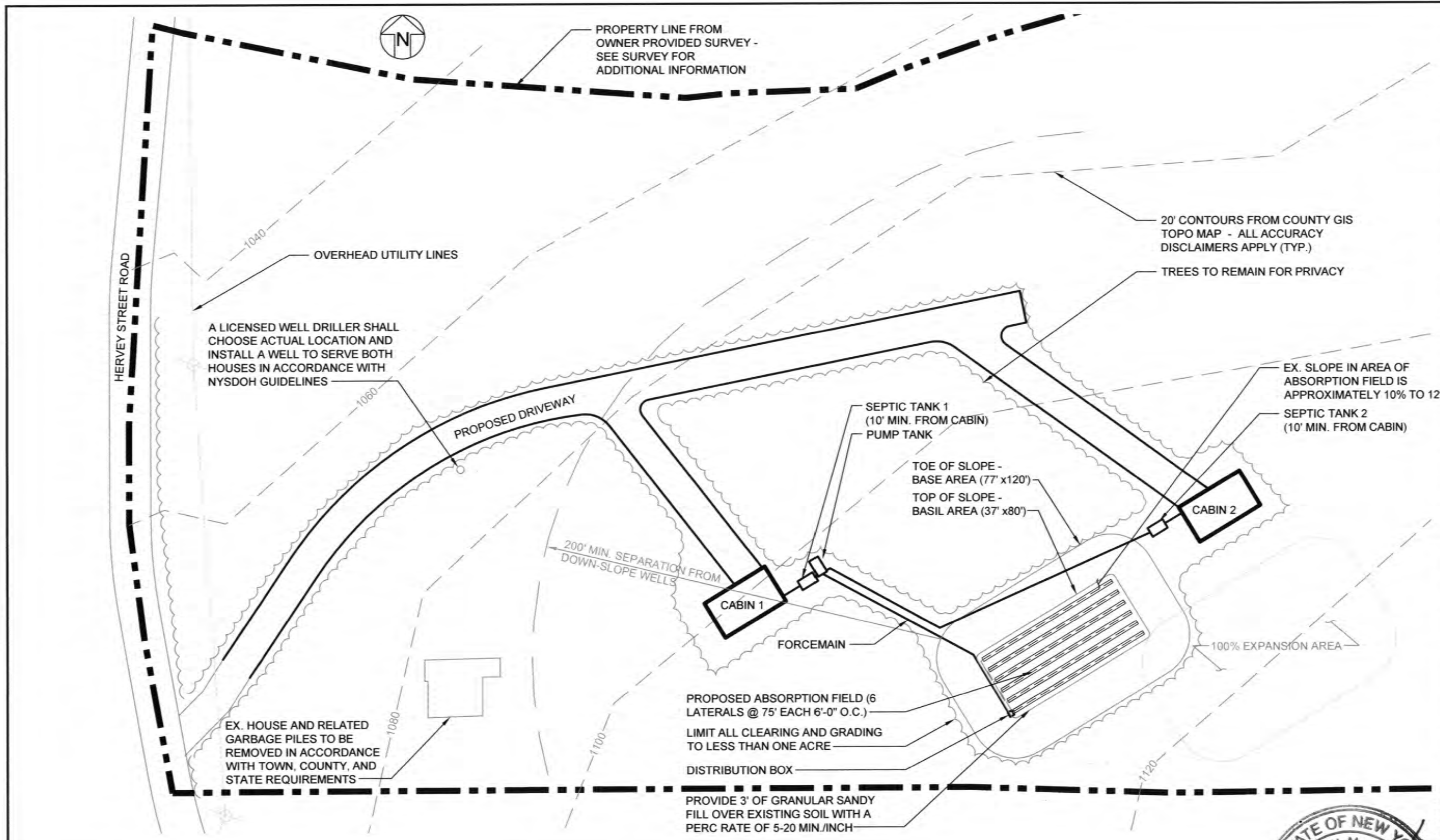
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OVERALL SITE SKETCH OSS1, SHEET 2 OF 5

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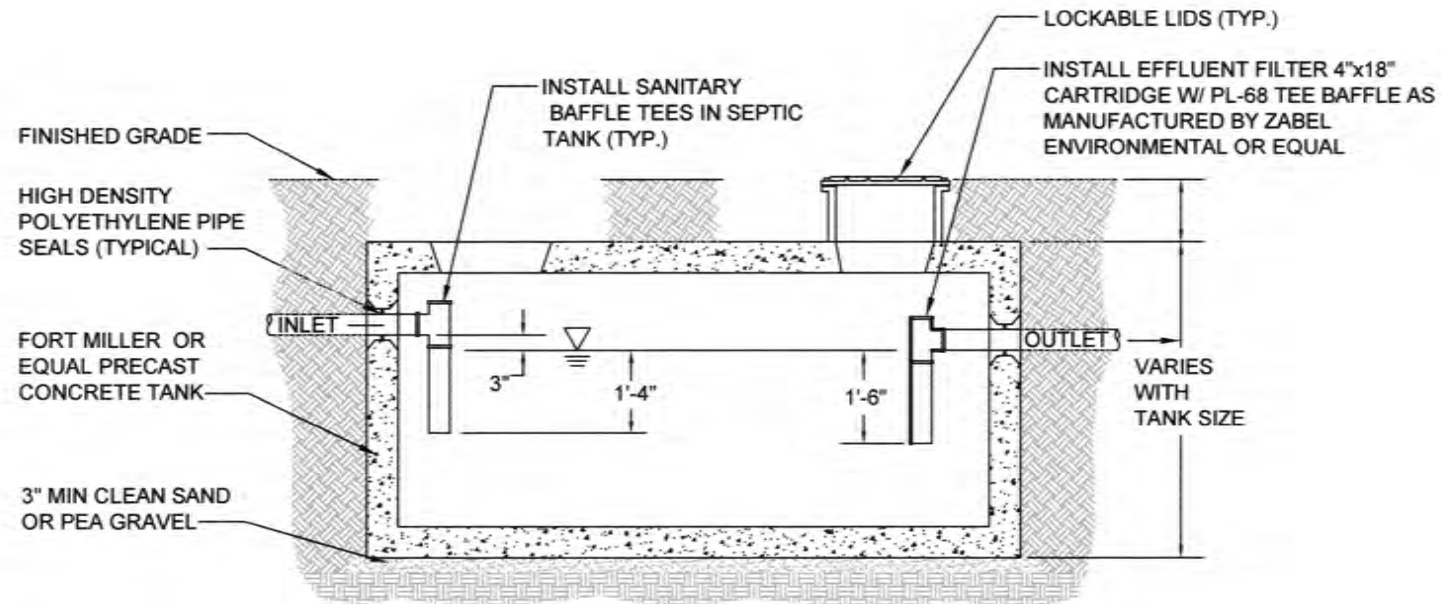


1 **WWDS IMPROVEMENTS SKETCH**  
 SCALE: 1"=50'  
 0 25 50 100

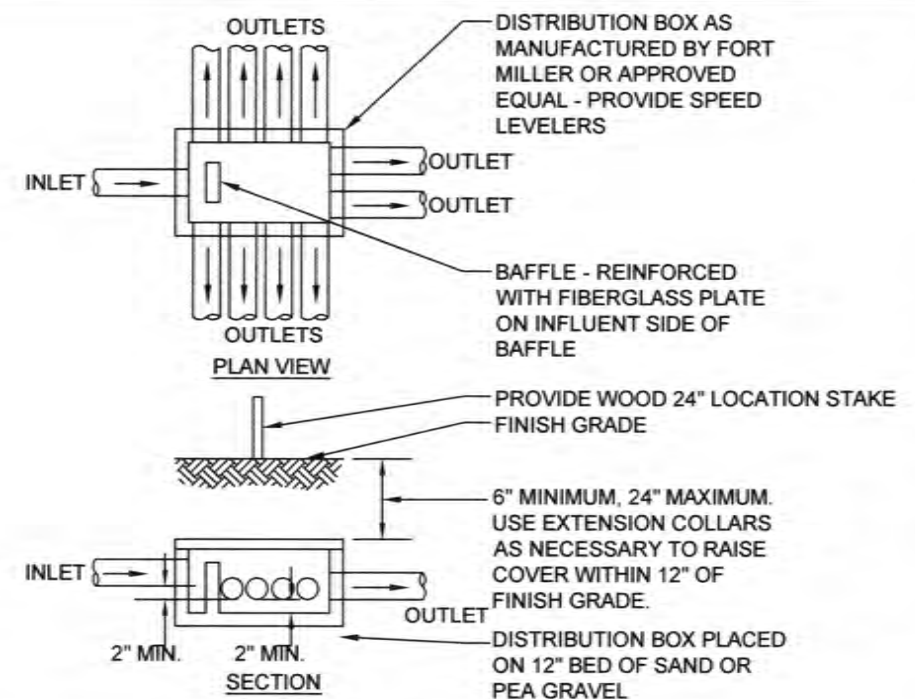


SITE SKETCH SP1, SHEET 3 OF 5

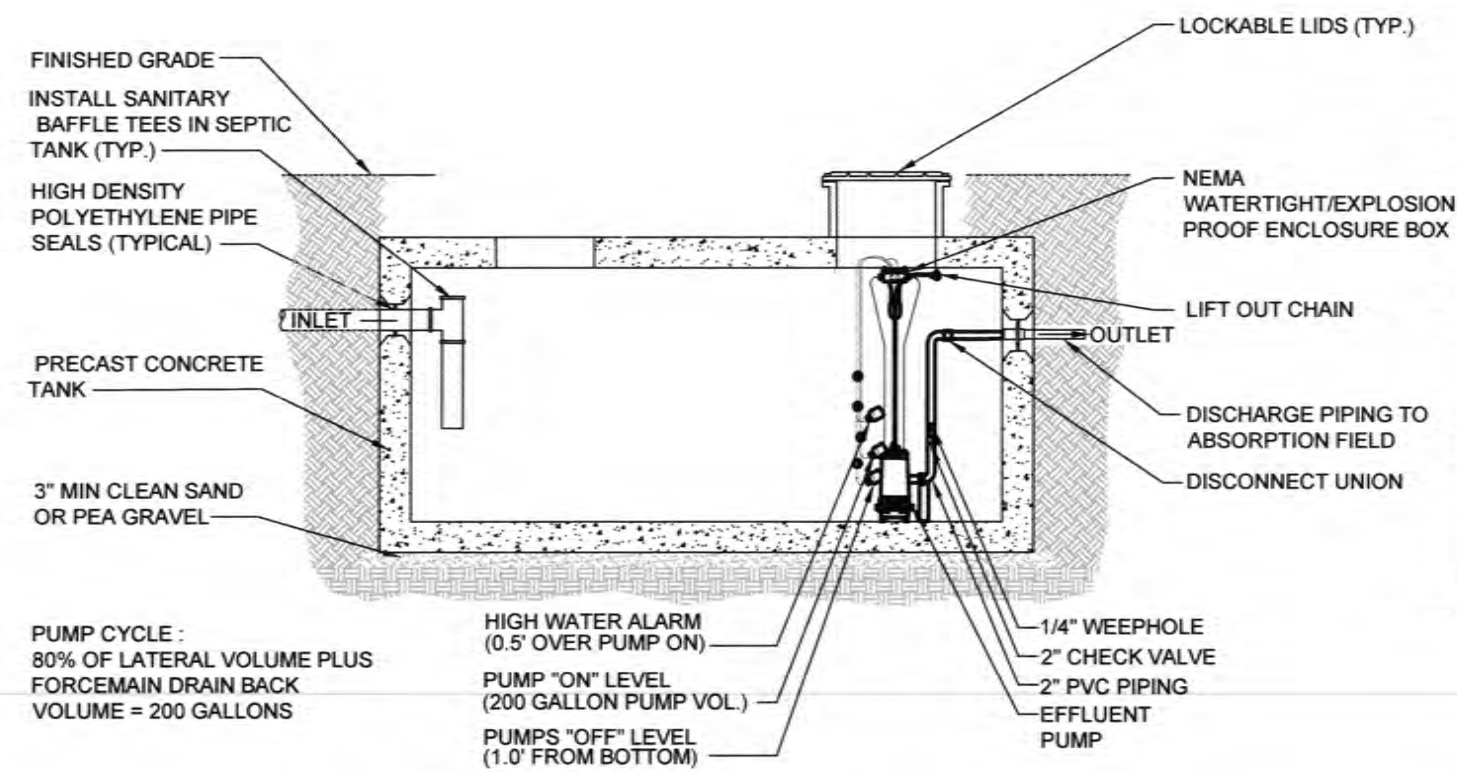
<b>FRANK ENGINEERING, PLLC</b> COMMERCIAL, RESIDENTIAL, AND MUNICIPAL SERVICES 498 ROWE ROAD FEURA BUSH, NY 12067 PHONE: (518) 848-5851 WEB: FRANKENGINEERING.COM		DATE: 3-14-23 TOWN OF DURHAM GREENE COUNTY NEW YORK STATE	<b>268 HERVEY STREET          ROAD RAISED WWDS</b>	UNAUTHORIZED ALTERATION AND/OR ADDITION FOR THIS PROJECT IS PROHIBITED. UNAUTHORIZED USE OR REUSE OF THIS DOCUMENT ON A PROJECT OTHER THAN THAT INDICATED ON THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE CONTRACT LAW AND THE PROFESSIONAL SERVICES AND IS THEREFORE PROHIBITED.
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1	4-20-23			



**1** TYPICAL 1,000 GALLON SEPTIC TANK DETAIL  
SCALE: N.T.S.

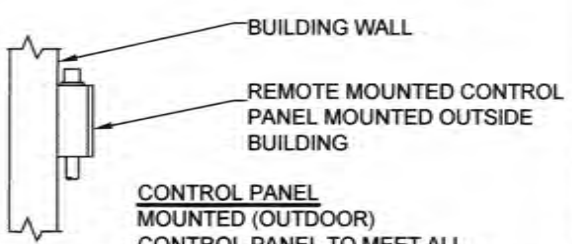


**2** PRECAST DISTRIBUTION BOX  
SCALE: N.T.S.

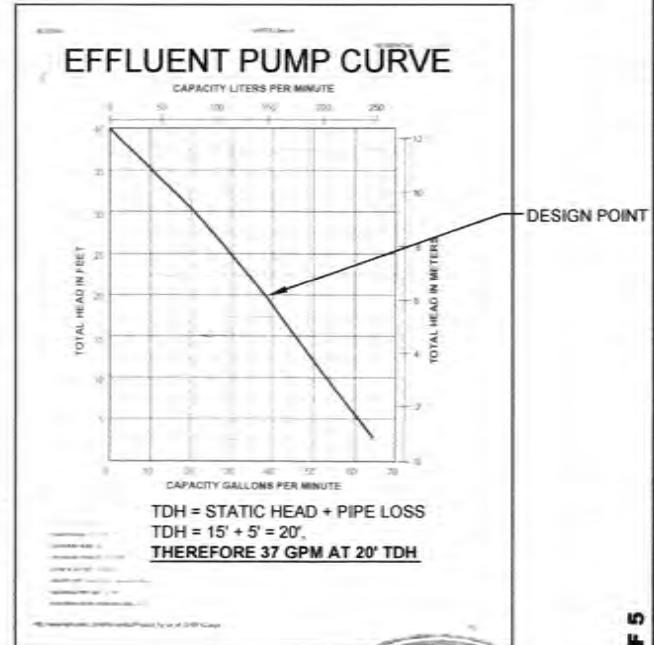


**3** 1,000 GALLON PUMP TANK BY GUARDIAN CONCRETE PRODUCTS INC. OR APPROVED EQUAL  
SCALE: N.T.S.

**NOTES:**  
 1.) CONTRACTOR SHALL ANCHOR PUMP STATION AS NECESSARY TO PREVENT THE STRUCTURE FROM FLOATING.  
 2.) CONTRACTOR SHALL FOLLOW PUMP MANUFACTURER INSTALLATION INSTRUCTIONS.  
 3.) PUMP STATION SHALL MEET THE FOLLOWING CRITERIA:  
 (2) PUMPS: MODEL # SHEF42 SERIES AS MANUFACTURED BY HYDROMATIC PUMPS OR EQUAL  
 CONTRACTOR SHALL VERIFY COMPONENT DIMENSIONS TO ENSURE ALL ITEMS FIT.



**CONTROL PANEL MOUNTED (OUTDOOR)**  
 CONTROL PANEL TO MEET ALL NECESSARY LOCAL, FEDERAL, AND NEW YORK STATE CODE REQUIREMENTS AND STANDARDS  
**CONTROL REQUIREMENTS:**  
 FLASHING RED ALARM LIGHT  
 ALARM SWITCH ( ON - OFF - TEST )  
 PUMP SWITCH ( HAND - OFF - AUTO )  
 PUMP BREAKER  
 ALARM CIRCUIT BREAKER  
**PUMP OPERATION REQUIREMENTS:**  
 LEAD / LAG ALTERNATION  
 PUMP ON AND OFF CONTROL  
 HIGH WATER ALARM



DETAIL SHEET DT1, SHEET 4 OF 5

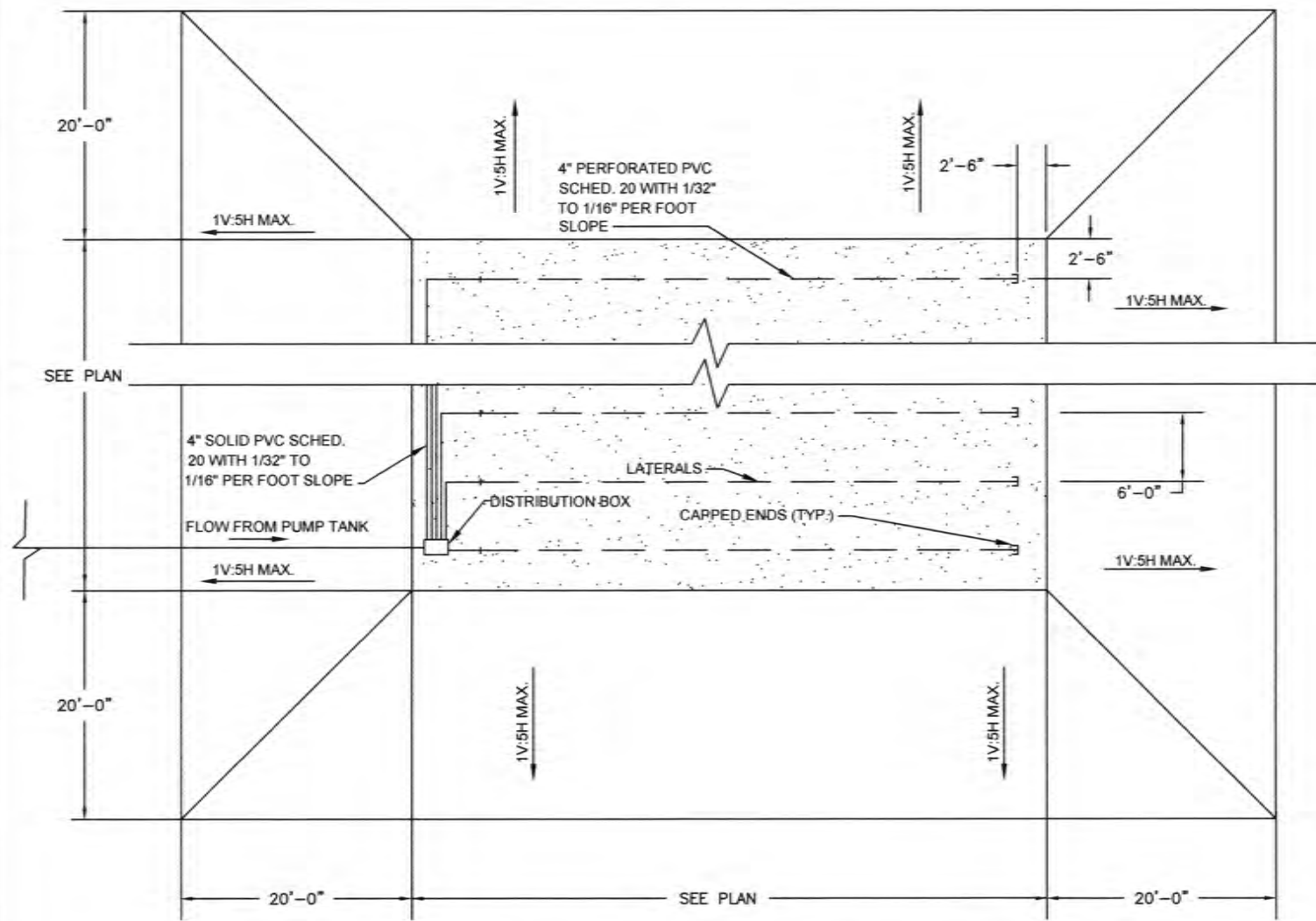
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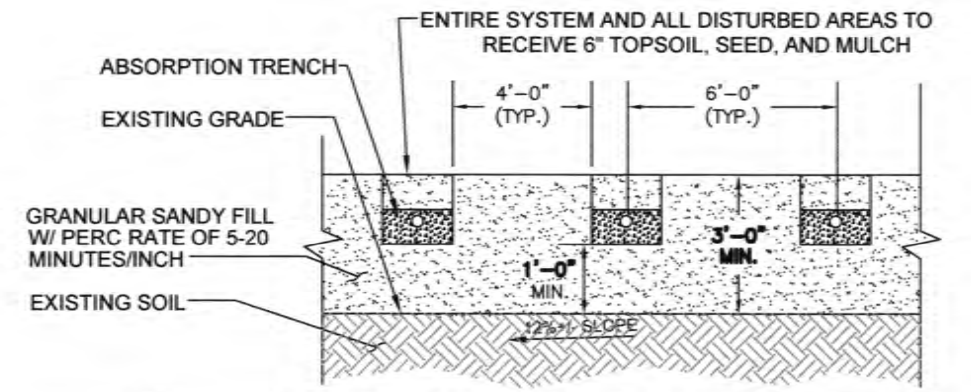
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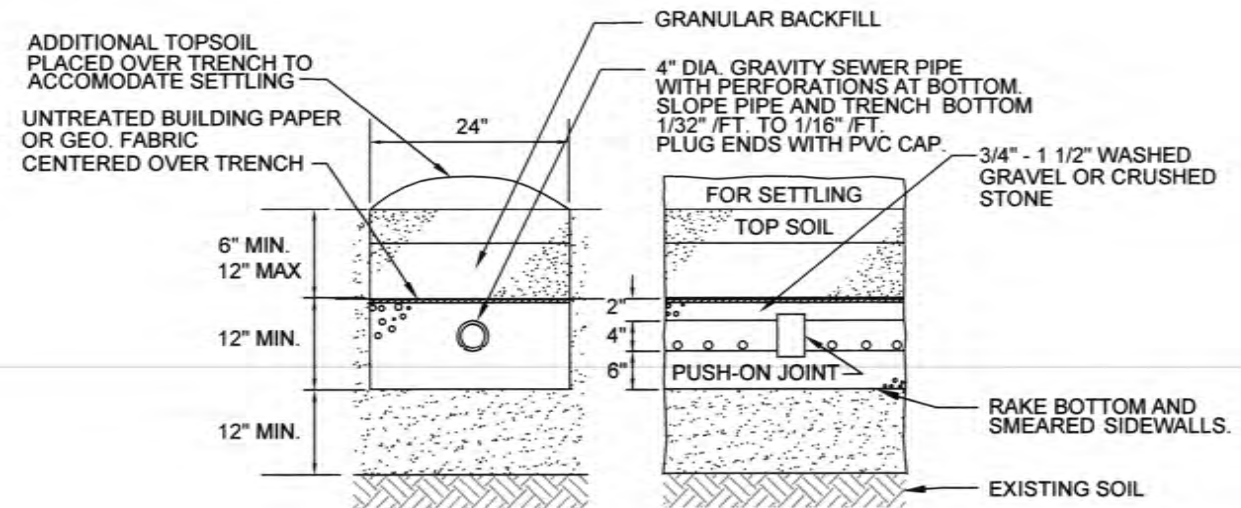
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**1** TYPICAL RAISED SYSTEM - PLAN VIEW DETAIL  
SCALE: N.T.S.



**2** TYPICAL SYSTEM - CROSS SECTION  
SCALE: N.T.S.



**3** ABSORPTION TRENCH DETAIL  
SCALE: N.T.S.

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DETAIL SHEET DT2, SHEET 5 OF 5

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