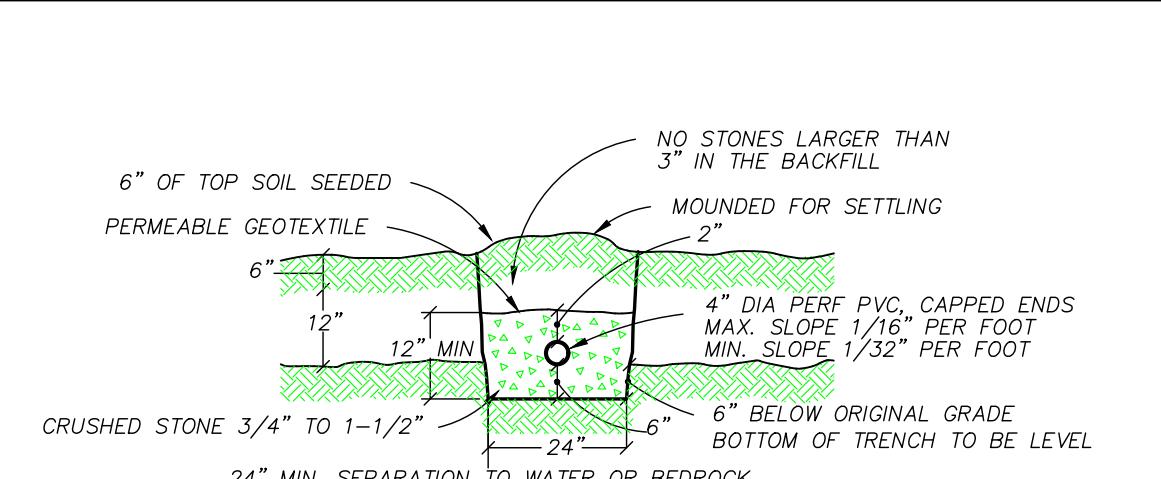
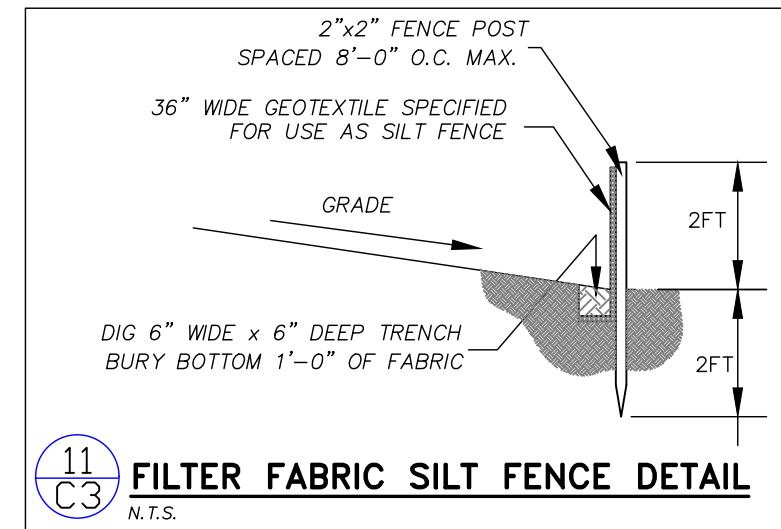


**SLOPE STABILIZATION, SEEDING METHOD & MULCHING**  
SLOPES OR 4:1 OR GREATER (HORIZONTAL : VERTICAL)  
SLOPES SHALL BE HYDROSEEDED WITH THE MIXTURES AND RATES INDICATED IN THE PERMANENT SEEDING MIXTURE SCHEDULE. STRAW OR HAY MULCH SHALL BE APPLIED AT A RATE OF 2,000 LBS./ACRE. STRAW OR HAY MULCH SHALL BE ANCHORED WITH Bio-Mesh60 NETTING AS MANUFACTURED BY ROLANKA INTERNATIONAL OR APPROVED EQUIVALENT. NETTING TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS. GENTLE SLOPE AND FLAT AREAS

AREA SHALL BE SEEDED BY HYDROSEEDING OR BROADCASTING WITH THE MIXTURES AND RATES INDICATED IN THE PERMANENT SEEDING MIXTURE SCHEDULE. HYDROSEEDED AREAS SHALL BE MULCHED WITH A WOOL FIBER MULCH APPLIED AT A RATE OF 500 LBS./ACRE. BROADCAST AREAS SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 2,000 LBS./ACRE. AREAS SEEDED BY BROADCASTING SHALL BE LIGHTLY RAKED AND PACED PRIOR TO PLACING MULCH.

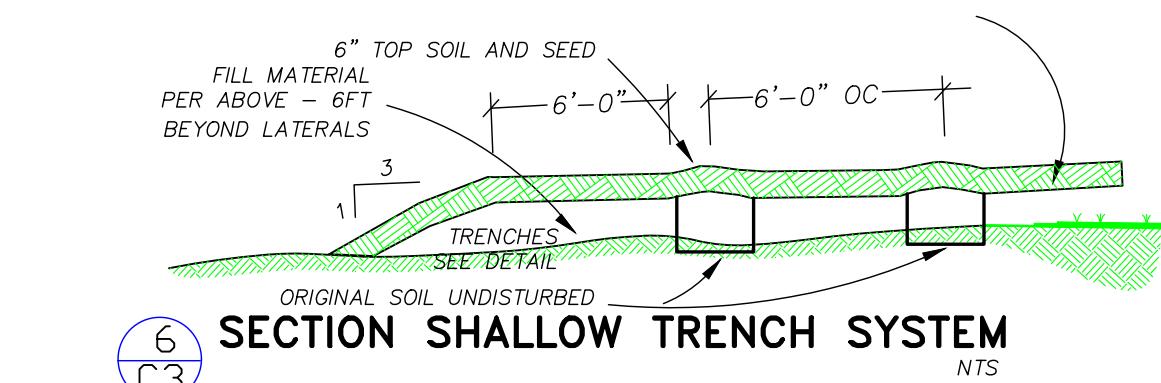
AREAS REMAINING DISTURBED FOR 20 DAYS OR MORE SHALL BE STABILIZED AS FOLLOWS:-



### TRENCH DETAIL - SHALLOW TRENCH SYSTEM

**NOTES:**  
TRENCHES TO BE CONSTRUCTED PARALLEL TO GROUND CONTOURS.  
LOCATION OF SURFACE RUNOFF AROUND THE FILL AREA BY MEANS OF DITCHING/BERMING MAY BE REQUIRED UPHILL ON SLOPED SITES.  
HEAVY EQUIPMENT SHALL NOT ENTER THE ABSORPTION AREA.  
GRADE STAKES MAY BE USED TO DELINATE THE LIMITS OF FILL AND PREVENT OVER-EXCAVATION IN ABSORPTION TRENCHES.  
REFUSED FILL MATERIAL, INCLUDING A SIX INCH TOPSOIL LAYER, SHALL NOT EXCEED 30 INCHES ABOVE ORIGINAL GROUND ELEVATION.  
ALL TREES SHALL BE CUT AT GRADE.

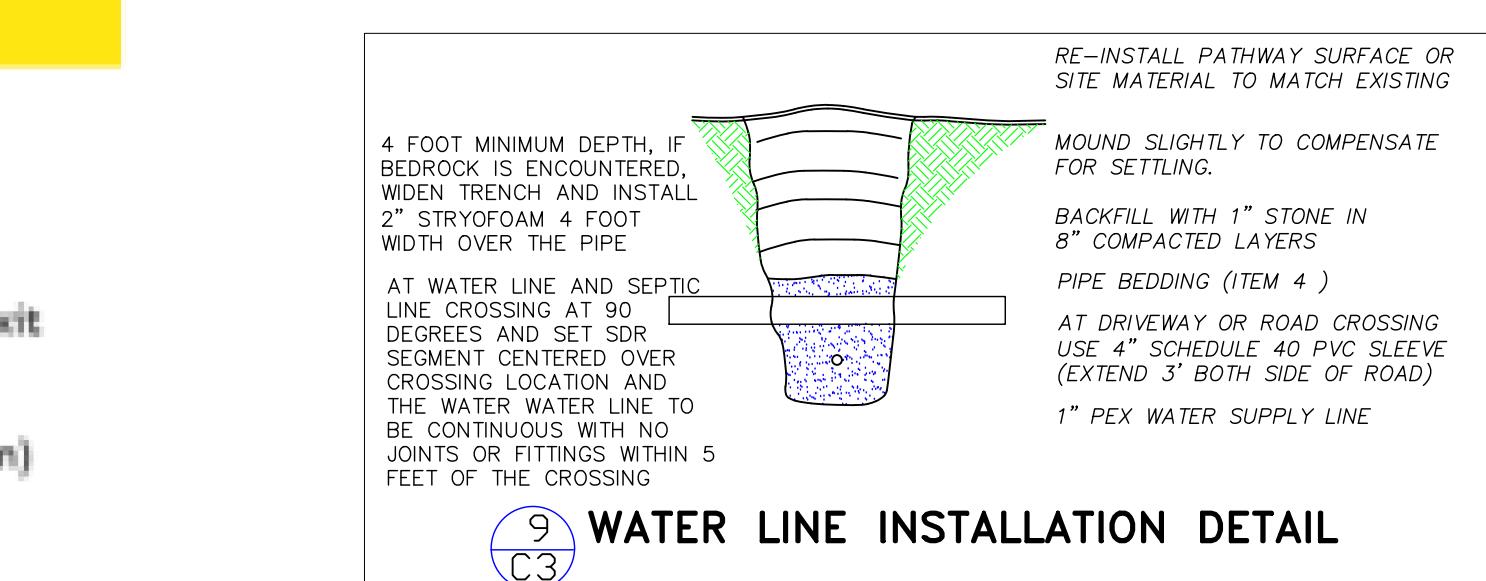
FILL SHOULD HAVE A PERCOLATION RATE SIMILAR TO, BUT NOT FASTER THAN, THE EXISTING SOIL PERCOLATION RATE.  
MAX 15% SLOPE



### REQUIRED SEPTIC SYSTEM INSPECTIONS

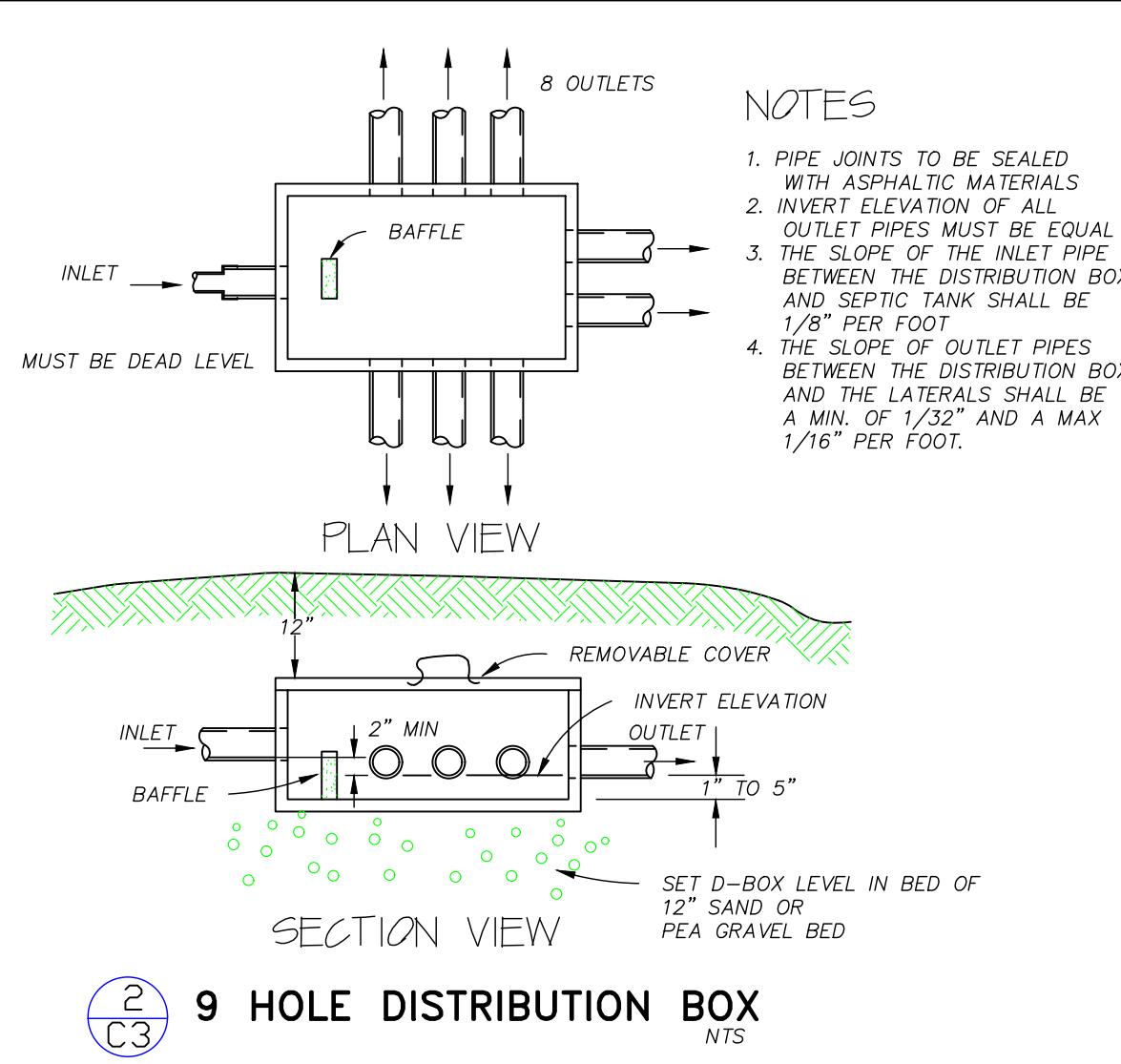
THE SYSTEM MUST BE INSTALLED IN ACCORDANCE WITH THE APPROVED DRAWINGS.  
THE ENGINEER MUST INSPECT THE SITE AT EACH OF THE FOLLOWING POINTS DURING THE SYSTEM INSTALLATION AND GRANT APPROVAL FOR CONTINUING WITH THE NEXT STAGE OF WORK.  
NYS SHALLOW TRENCH SYSTEMS ARE ENGINEERED SYSTEMS THAT REQUIRE INSPECTION, VERIFICATION AND A LETTER OF COMPLETION BY A LICENSED ENGINEER.

1. SITE MEETING WITH CONTRACTOR
2. INSPECTION OF THE FILL IN PLACE. PERC TEST TO BE DONE BY THE ENGINEER PRIOR TO TRENCH INSTALLATION AT THE ENGINEER'S DISCRETION.
3. INSPECTION BY ENGINEER OF LATERALS IN PLACE.
4. INSPECTION BY ENGINEER OF TANK(S) IN PLACE.
5. INSPECTION BY ENGINEER OF FINISHED SYSTEM.
1. LOCATE AND PLACE CORNER STAKES FOR FIELD.
2. TRENCHES TO BE CUT INTO FILL MATERIAL AND EXISTING GRADE. SEE DETAIL FOR DEPTH.
3. CONTRACTOR SHALL OBTAIN A PERC RATE TEST OF ACCEPTABLE RANGE FROM THE SOURCE PIT OF THE INTENDED FILL MATERIAL -PRIOR TO EXCAVATION AT THE PIT AND DELIVERY TO THE SITE.
4. FILL MATERIAL TO BE PLACED ON SEPTIC FIELD SITE ACCORDING TO GUIDELINES PER THIS DESIGN AND DETAILS.
5. TRENCHES TO BE CUT INTO FILL MATERIAL AND EXISTING GRADE. SEE DETAIL FOR DEPTH.
6. BASE AGGREGATE TO BE PLACED IN TRENCHES. SEE PLAN FOR DEPTH.
7. LATERAL DISTRIBUTION PIPES AND DISTRIBUTION BOX TO BE INSTALLED AND LEFT EXPOSED.
8. AGGREGATE COVER LAYER AND FILTER CLOTH COVER TO BE INSTALLED OVER LATERALS IN TRENCHES. SEE PLAN FOR DEPTH OF AGGREGATE COVER LAYER.
9. SEPTIC TANK TO BE SET IN HOLE AND LEFT EXPOSED.
10. INLET AND OUTLET LINES TO TANK TO BE INSTALLED AND LEFT EXPOSED.
11. COVER TANKS, LINES AND SEPTIC FIELD WITH FINISH COVER MATERIAL.
12. FINISH GRADING AND SEEDING.

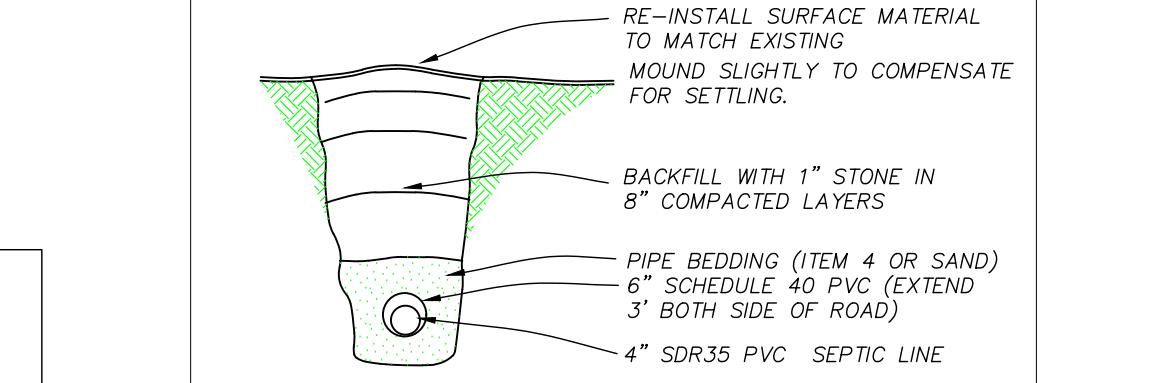


### WATER LINE INSTALLATION DETAIL

### 8 (C3) TYPICAL WELL DETAIL



### SECTION VIEW



### 6 (C3) SEPTIC ROAD CROSSING DETAIL

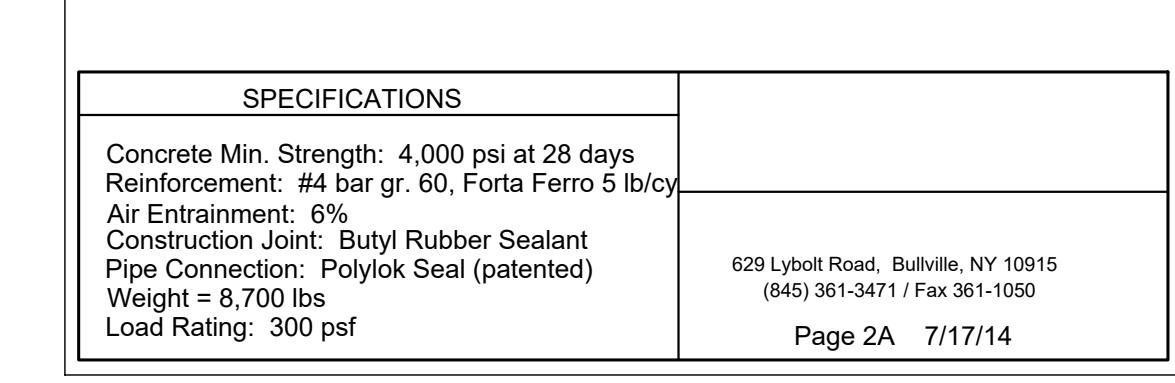
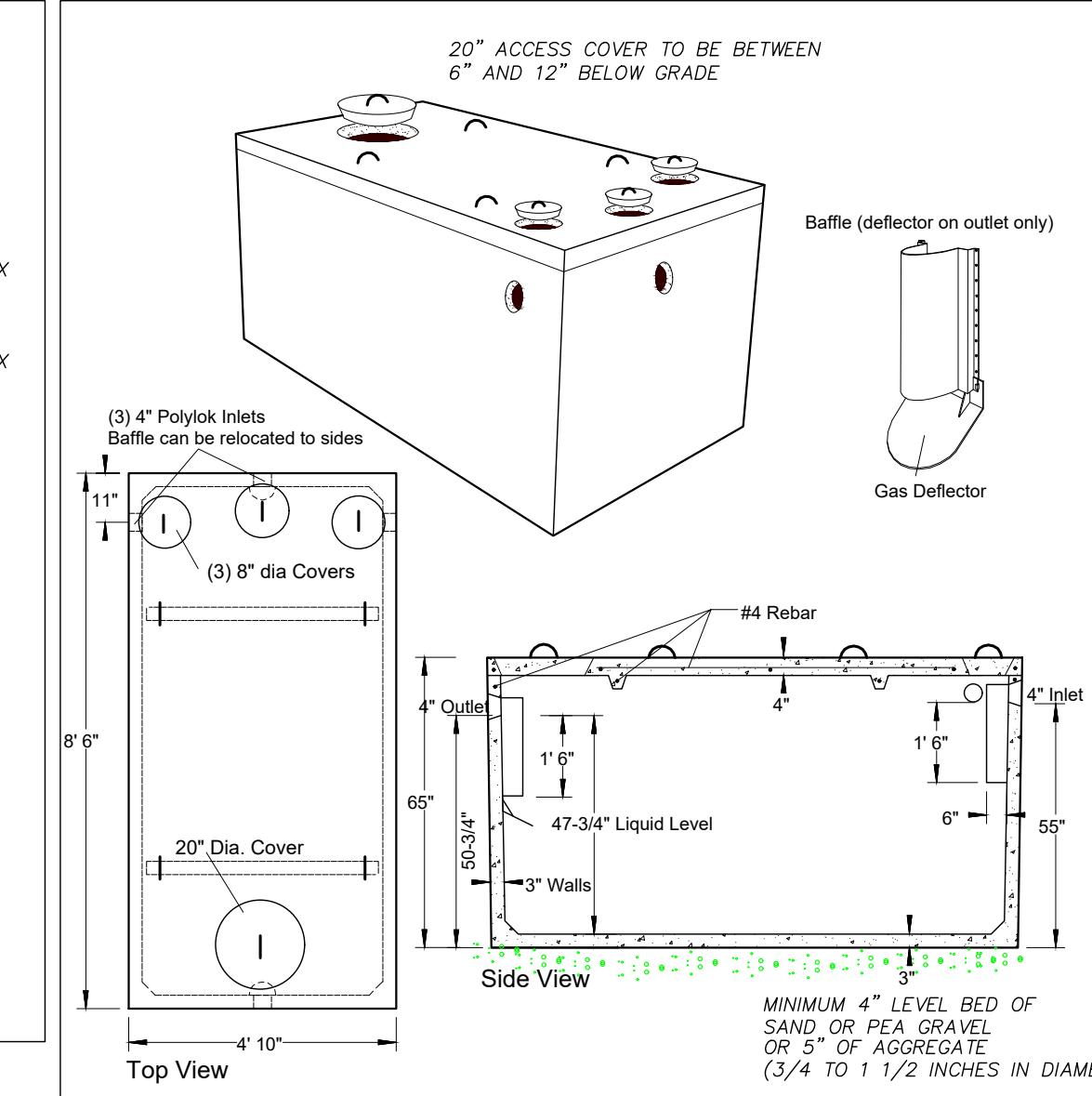
RE-INSTALL SURFACE MATERIAL TO MATCH EXISTING.  
MOUND SLIGHTLY TO COMPENSATE FOR SETTLING.

BACKFILL WITH 1" STONE IN 8" COMPACTED LAYERS.

PIPE BEDDING (ITEM 4 OR SAND)

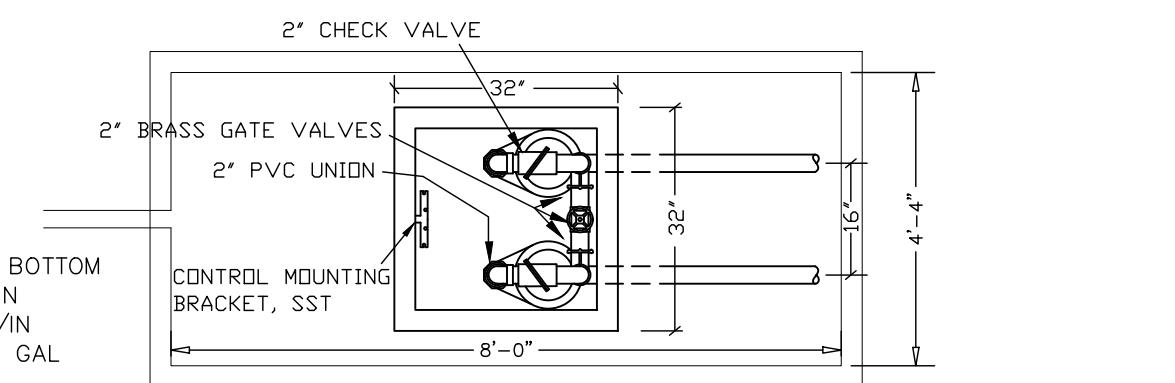
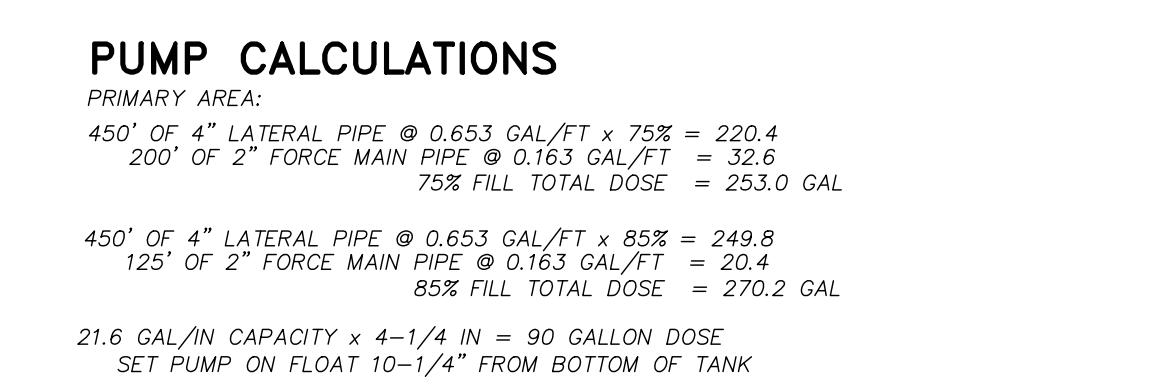
6" SCHEDULE 40 PVC (EXTEND 3' BOTH SIDE OF ROAD)

4" SDR35 PVC SEPTIC LINE

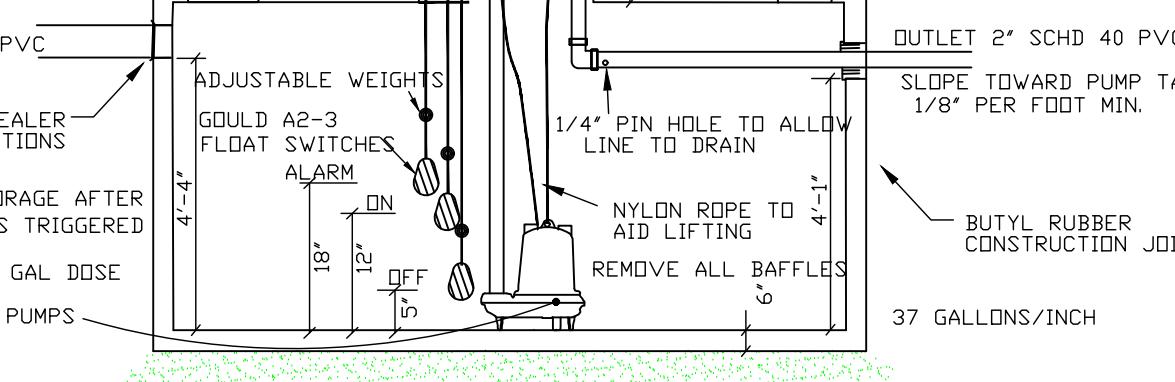
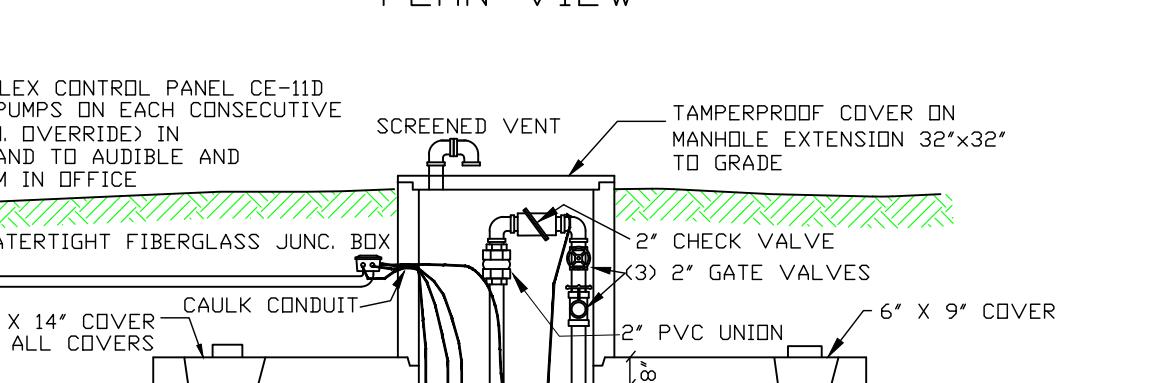


### SEPTIC TANK DETAIL

1 (C3) NTS



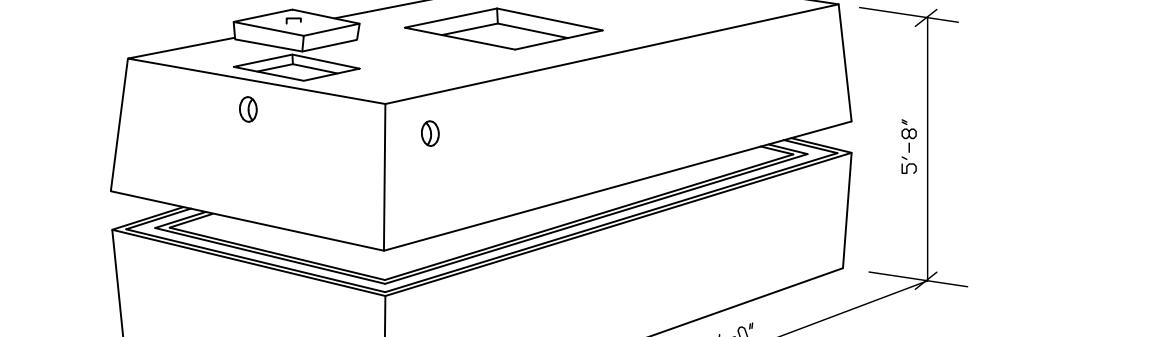
### PLAN VIEW



### SECTION THROUGH TANK

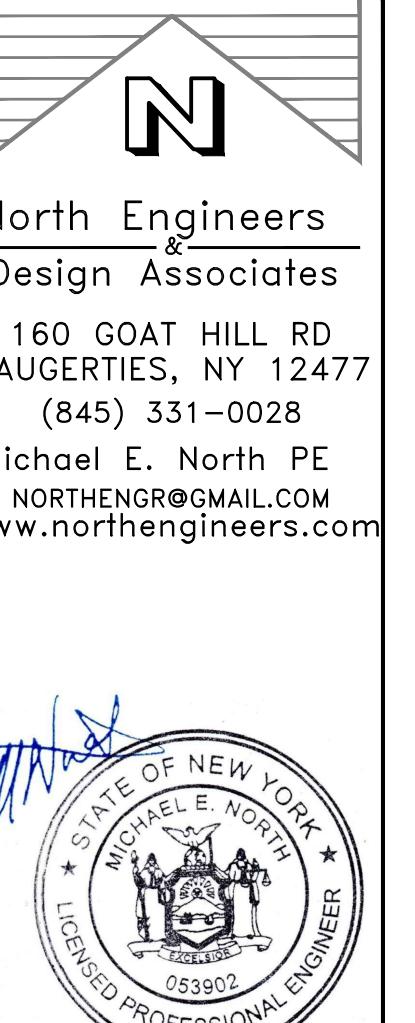
SET TANK LEVEL IN 3' BED OF SAND OR PEA GRAVEL

NTS



### PUMP TANK DETAIL

3 (C3) NTS



Michael E. North PE  
NORTHENGR@mail.com  
www.northengineers.com

629 Lybold Road, Buhlville, NY 10915  
(845) 361-3471 / Fax 361-1050

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