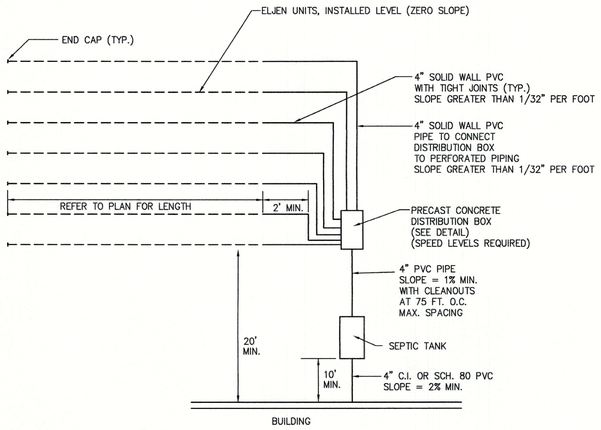
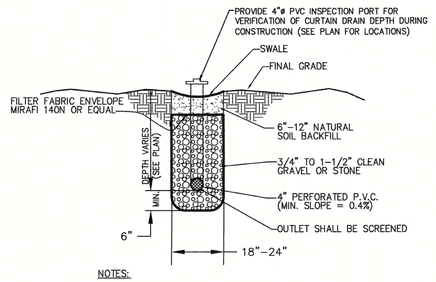
SSDS CONSTRUCTION NOTES:

1. SEWAGE DISPOSAL SYSTEMS SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK STATE HEALTH CODE, TO THE MAXIMUM EXTENT PRACTICABLE.
2. EROSION CONTROL MEASURES SHALL BE ESTABLISHED PRIOR TO THE START OF CONSTRUCTION AND BE MAINTAINED TO THE TOWN BUILDING INSPECTOR'S SATISFACTION UNTIL DISTURBED AREAS HAVE BEEN STABILIZED.
3. SEWAGE DISPOSAL LOCATIONS SHALL NOT BE CHANGED. "AS-BUILT" PLANS, CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED TO THE TOWN OF CHESTER UPON THE COMPLETION OF CONSTRUCTION.
4. CELLAR, ROOF AND FOOTING DRAINS SHALL NOT DISCHARGE TO THE SEWAGE DISPOSAL SYSTEMS, NOR TOWARDS THE SURFACE AREA OF THE ABSORPTION FIELD.
5. THE PROPOSED SEWAGE DISPOSAL SYSTEM LOCATIONS CONFORM TO THE REQUIRED SEPARATION DISTANCES WITH RESPECT TO THE LOCATION OF EXISTING WELLS ON THE SITE AND ON NEARBY LOTS.
6. THE SEWAGE DISPOSAL SYSTEM HAS BEEN DESIGNED FOR A FOUR-BEDROOM DWELLING.
7. SEWAGE DISPOSAL SYSTEMS MUST BE A MINIMUM 50 FEET FROM ANY STORMWATER DRAINAGE SYSTEMS.
8. SEWAGE DISPOSAL SYSTEM HAS BEEN DESIGNED BASED ON THE USE OF POST-1994 PLUMBING FIXTURES (1.6 GPF MAX. TOILET AND 2.5 GPM MAX. FAUCETS AND SHOWERHEADS).
9. ALL FOOTING DRAINS WITHIN 25 FEET OF A WELL MUST BE WATERTIGHT, AND WATER LINES SHALL BE LOCATED AT LEAST 10 FEET FROM ANY PART OF A SEWAGE DISPOSAL SYSTEM.
10. DRAINAGE DITCHES SHALL BE FREE FLOWING AND NOT LESS THAN 25 FEET FROM A WELL.
11. THERE SHALL BE NO REGRADING IN THE AREA OF THE ABSORPTION FIELDS.
12. HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREAS OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION OF THE FIELDS. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE AREAS OF THE PROPOSED FIELDS BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN WAS BASED.
13. NO SWIMMING POOLS, DRIVEWAYS OR STRUCTURES WHICH MAY COMPACT THE SOIL SHALL BE LOCATED OVER ANY PART OF THE ABSORPTION FIELDS.
14. THE SEWAGE DISPOSAL SYSTEMS HAVE NOT BEEN DESIGNED TO ACCOMMODATE GARBAGE GRINDERS, WATER SOFTENERS, OR "JACUZZI" TYPE SPA TUBS OVER 100 GALLONS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SEWAGE DISPOSAL SYSTEM IS REDESIGNED TO ACCOUNT FOR THEIR USE, AND RE-APPROVED BY THE TOWN OF CHESTER.
15. THE NYSDOH RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK, 2012, APPENDIX C IDENTIFIES THE LIST OF "ACCEPTED" GRAVELLESS PRODUCTS.

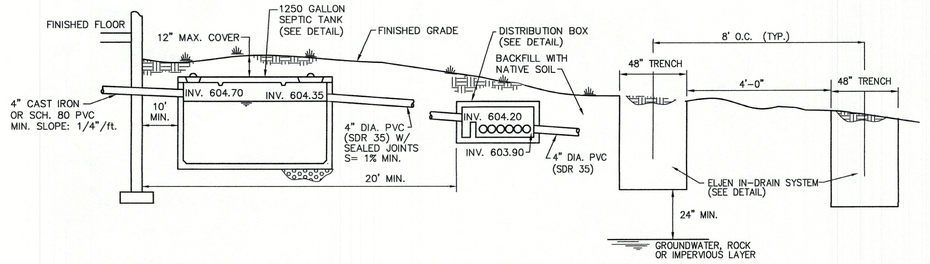


SCHEMATIC PLAN – ELJEN SYSTEM ABSORPTION FIELD AREA
N.T.S.



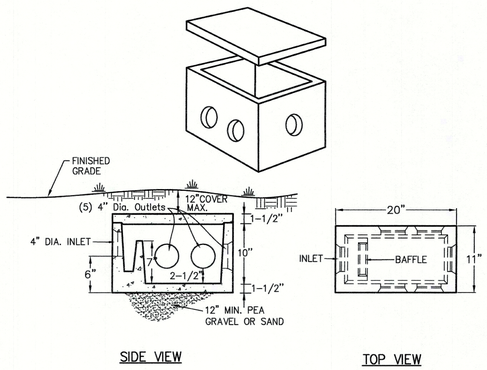
NOTES:
1. PERFORATIONS IN THE PIPE ARE TO FACE DOWNWARDS.
2. PERFORATED PIPE SHALL BE USED IN THE CURTAIN DRAIN AROUND THE ENTIRE SEPTIC SYSTEM WHICH INCLUDES THE EXPANSION AREA. AT THE END OF THE EXPANSION AREA THE PIPE SHALL BE CHANGED TO SOLID P.V.C. UNTIL THE OUTLET IS AT GRADE. (SEE PLANS FOR LOCATIONS.)

CURTAIN DRAIN
N.T.S.



SECTION – ELJEN SUBSURFACE SEWAGE DISPOSAL SYSTEM
N.T.S.

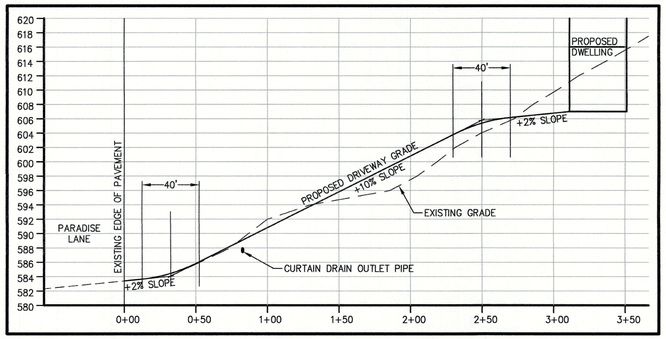
NOTES:
1. AS SHOWN ON THE PLANS, A DIVERSION SWALE SHALL BE CONSTRUCTED UPHILL FROM THE ABSORPTION FIELD AREA TO DIVERT SURFACE RUNOFF AND PREVENT IT FROM ENTERING THE TRENCHES.
2. TRENCHES SHALL NOT BE INSTALLED IN WET SOILS.
3. TRENCH BOTTOMS SHALL BE LEVEL. SIDES AND BOTTOM OF TRENCHES SHALL BE RAKED PRIOR TO PLACEMENT OF SAND.
4. AS SHOWN ON THE PLAN, TRENCHES SHALL BE INSTALLED PARALLEL TO THE GROUND CONTOURS.
5. A MINIMUM OF 4 FEET OF UNDISTURBED SOIL SHALL BE MAINTAINED BETWEEN TRENCHES.
6. LATERALS SHALL HAVE ZERO SLOPE.
7. A SECTION OF SOLID-WALLED PVC PIPE AT LEAST 2 FEET IN LENGTH SHALL BE INSTALLED TO PROVIDE THE CONNECTION FROM THE DISTRIBUTION BOX TO THE PERFORATED LATERAL. THIS 2-FOOT SECTION SHALL BE BACKFILLED WITH NATIVE SOIL.
8. REFER TO DETAIL (THIS SHEET) FOR BACKFILL REQUIREMENTS FOR ELJEN IN-DRAIN UNITS.
9. THE TERMINAL ENDS OF ALL LATERALS SHALL BE CAPPED.
10. PERFORATIONS IN THE PIPE ARE TO FACE DOWNWARDS.
11. THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE HOUSE, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.



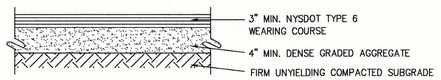
SIDE VIEW TOP VIEW

5-WAY DISTRIBUTION BOX WITH BAFFLE
N.T.S.

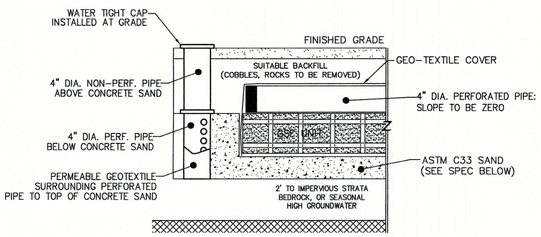
NOTES:
1. DISTRIBUTION BOX SHALL BE MODEL DB-6WB AS MANUFACTURED BY WOODARD'S CONCRETE PRODUCTS, INC. OF BULLVILLE , N.Y. OR APPROVED EQUAL.
2. MINIMUM CONCRETE STRENGTH: 4,000 PSI AT 28 DAYS
3. PIPE CONNECTIONS SHALL BE WATERTIGHT
4. UNUSED OUTLETS TO BE PLUGGED OR CAPPED
5. A SPEED LEVELER SHALL BE INSTALLED ON EACH OUTLET
6. OUTLETS MUST BE USED IN A MANNER THAT WILL ALLOW ACCESS FOR EXPANSION WITHOUT DISTURBING EXISTING PIPING.
7. THE DISTRIBUTION BOX SHOULD BE INSPECTED PERIODICALLY TO ASSURE IT IS LEVEL AND OPERATING PROPERLY.
8. ALL OUTLET INVERTS MUST BE SET AT THE SAME ELEVATION.



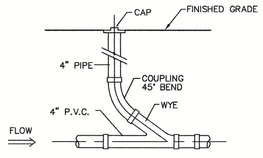
LOT #2 DRIVEWAY PROFILE
SCALE: 1" = 10' VERT.
1" = 50' HORZ.



DRIVEWAY PAVEMENT SECTION (FIRST 25 FEET, MINIMUM)
N.T.S.



OBSERVATION PORT
N.T.S.



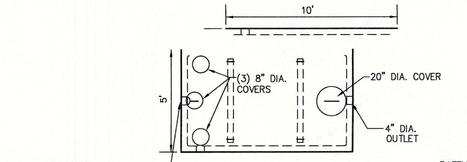
CLEANOUT DETAIL
N.T.S.

CLEANOUTS SHALL BE PROVIDED WHERE INDICATED ON THE DESIGN DRAWINGS OR AS ORDERED BY THE ENGINEER

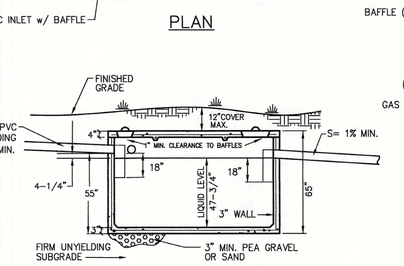
SPEED LEVELER DETAIL FSL-4
N.T.S.

INSERT A SPEED LEVELER™ IN THE END OF ALL OUTLET PIPES IN THE DISTRIBUTION BOX. ROTATE UNTIL EFFLUENT ENTERS ALL OUTLETS EQUALLY. COMPENSATES FOR UP TO 1-1/4" DIFFERENCE IN PIPE END ELEVATIONS. FITS ALL 4" SMOOTH WALL AND CORRUGATED PIPES.

MFG.: WOODARD'S CONCRETE PRODUCTS, INC. (OR EQUAL)
629 LYBOLT ROAD, BULLVILLE NY 10915 (914) 361-3471



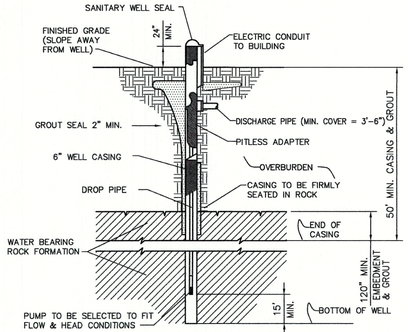
PLAN



SECTION

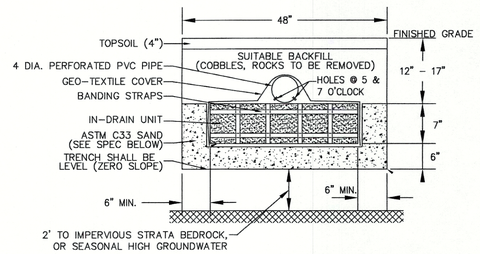
1250 GALLON SEPTIC TANK (4-BR DESIGN)
N.T.S.

NOTES:
1. TANK SHALL BE PRECAST TANK MODEL ST-1250 AS MANUFACTURED BY WOODARD'S CONCRETE PRODUCTS, INC. OR APPROVED EQUAL.
2. CONCRETE MINIMUM STRENGTH: 4,000 PSI AT 28 DAYS
3. STEEL REINFORCEMENT: 6"x6"x10 GA STEEL WIRE MESH
4. CONSTRUCTION JOINT: SEALED WITH BUTYL RUBBER SEALANT OR EQUIVALENT
5. SEPTIC TANKS SHALL BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.



DRILLED WELL DETAIL
N.T.S.

NOTES:
1. WELL IS TO BE CASED AND GROUTED FOR A MIN. OF 40 FT. IN LENGTH.
2. OVERSIZE DRILL HOLE (FOR GROUTING) TO BE 10" IN DIAMETER AND A MINIMUM OF 40 FT. IN LENGTH.
3. EXPECTED DEPTH OF OVERBURDEN = 90 FT.
4. EXPECTED DEPTH OF WATER BEARING FORMATION = 140 FT.
5. WELL CASING TO CONFORM TO AWWA STANDARD A100, LATEST, EDITION.
6. PITLESS ADAPTER AND SANITARY WELL SEAL SHALL BE MONITOR MODEL NO. SPL-6-U-CL, MFG. BY THE BAKER MFG. CO.; EVANSVILLE, WISC.
7. DISCHARGE PIPE: HEAVY DUTY POLYBUTYLENE 160, AWWA C902.
8. WATER SERVICE LINES UNDER PRESSURE SHALL NOT PASS CLOSER THAN 10 FT. TO A SEPTIC TANK, TILE FIELD OR ANY OTHER PART OF A SEWAGE DISPOSAL SYSTEM.
9. CAST IRON PIPES WITH WATERTIGHT JOINTS SHALL BE PROVIDED FOR SEWAGE LINES WITHIN 50 FT. OF ANY WELL.
10. MINIMUM WELL YIELD SHALL BE 5.0 GPM.
11. CEMENT GROUT SHALL BE A MIXTURE OF 1 BAG CEMENT (94 LBS.) AND 5 TO 5-1/2 GALLONS OF CLEAN WATER.
12. ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, LATEST EDITION.
13. CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS AS SET FORTH IN THE PUBLICATION RURAL WATER SUPPLY, NYS DEPT. OF HEALTH, LATEST EDITION.
14. THE PUMP AND DISCHARGE PIPING SELECTED MUST BE CAPABLE OF DELIVERING THE REQUIRED FLOW RATE TO MEET WELL DEPTH AND SYSTEM REQUIREMENTS.
15. THE WELL CASING SHALL EXTEND A MINIMUM OF 24 INCHES ABOVE THE FINAL GROUND ELEVATION AND NOT LESS THAN 24 INCHES ABOVE THE 100-YEAR FLOOD LEVEL.
16. IF THE DEPTH AT WHICH WATER ENTERS THE WELL IS LESS THAN 50 FEET BELOW GRADE, EITHER THERE MUST BE A MINIMUM OF 50 FEET OF PROPERLY GROUTED CASING INSTALLED OR SEPARATIONS MUST BE INCREASED BY 50% IN ACCORDANCE WITH APPENDIX 5-B, TABLE 1, NOTE 1.



ELJEN IN-DRAIN CROSS SECTION
N.T.S.

ASTM C33 SAND

SIEVE SIZE	SIEVE SQUARE OPENING SIZE	SPECIFICATION % PASSING (WET)
0.375 INCH	9.5mm	100-100
NO. 4	4.75mm	95.0-100.0
NO. 8	2.36mm	80.0-100.0
NO. 16	1.18mm	50.0-85.0
NO. 30	600um	25.0-60.0
NO. 50	300um	5.0-30.0
NO. 100	150um	<10.0
NO. 200	75um	<5.0

ELJEN CONSTRUCTION NOTES:

1. THIS DESIGN COMPLIES WITH AND MUST BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT ELJEN NEW YORK DESIGN AND INSTALLATION MANUAL.
2. ELJEN PROVIDED GEOTEXTILE COVER FABRIC SHALL PROVIDE PROPER TENSION AND ORIENTATION OF THE FABRIC AROUND THE SIDES OF THE PERFORATED PIPE ON TOP OF THE GSF MODULES. FABRIC SHALL BE NEITHER TOO LOOSE, NOR TOO TIGHT. THE CORRECT TENSION OF THE COVER FABRIC IS SET BY:
   A. SPREADING THE COVER FABRIC OVER THE TOP OF THE MODULE AND DOWN BOTH SIDES OF THE MODULE WITH THE COVER FABRIC TENTED OVER THE TOP OF THE PERFORATED DISTRIBUTION PIPE.
   B. PLACE SHOVELFULLS OF SPECIFIED SAND DIRECTLY OVER THE PIPE AREA ALLOWING THE COVER FABRIC TO FORM A MOSTLY VERTICAL ORIENTATION ALONG THE SIDES OF THE PIPE. REPEAT THIS STEP MOVING DOWN THE PIPE.
3. BACKFILL MATERIAL SHALL BE CLEAN WITH NO ROOTS OR STONES LARGER THAN 2 INCHES IN ANY DIMENSION TO A MINIMUM DEPTH OF 8 INCHES OVER THE GSF MODULES AND FINAL COVER FOR VEGETATION OF 4 INCHES TO 6 INCHES OF CLEAN LOAM.
4. ANY SYSTEM WHICH IS MORE THAN 18" BELOW FINISH GRADE AS MEASURED FROM THE TOP OF THE MODULE SHALL BE VENTED.

ISSUE	DATE	DESCRIPTION
2	1/22/20	FOR PLANNING BOARD REVIEW

KNEBEL SUBDIVISION

SECTION 17, BLOCK 1, LOT 41
TOWN OF CHESTER
ORANGE COUNTY, NEW YORK

PROFILES & DETAILS

LEHMAN & GETZ, P.C.
CONSULTING ENGINEERS
PH. 845-986-7737 FAX 845-986-0245
17 RIVER STREET WARWICK, NEW YORK 10990
DAVID A. GETZ, P.E.
N.Y.S. LIC. No. 61266

DRAWN BY	CHECKED BY	SCALE	JOB NO.	SHEET NO.
P.R.P.	D.A.G.	AS SHOWN	480.17	3 OF 3