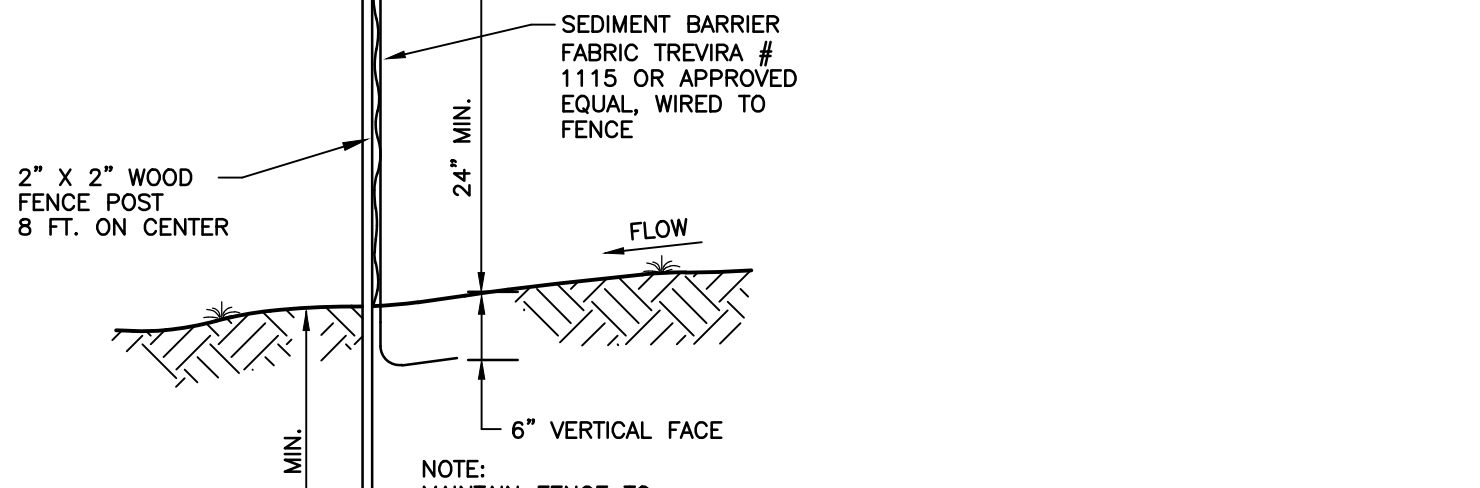


CONSTRUCTION ENTRANCE
SCALE: AS NOTED



SILT FENCE
SCALE: NTS

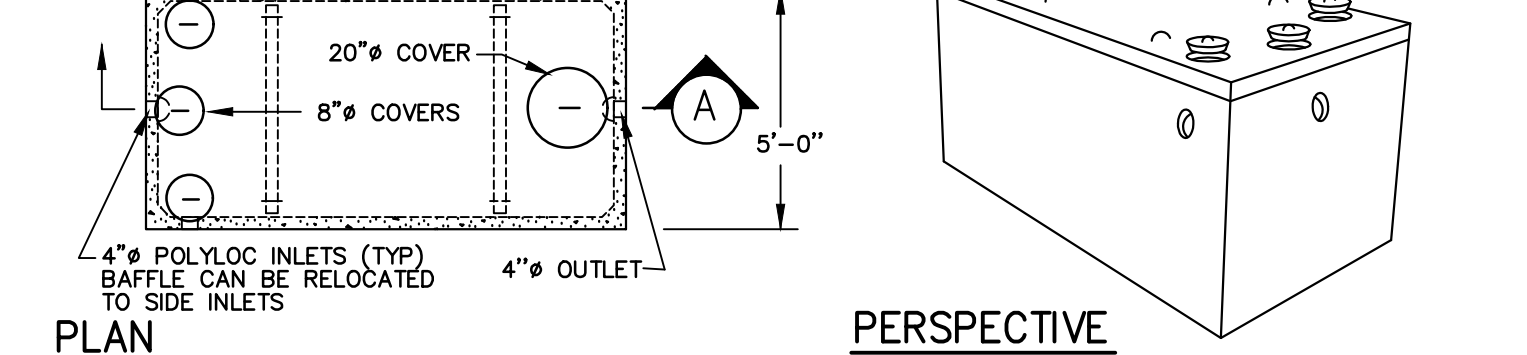


CURTAIN DRAIN
SCALE: 1/2" = 1'-0"

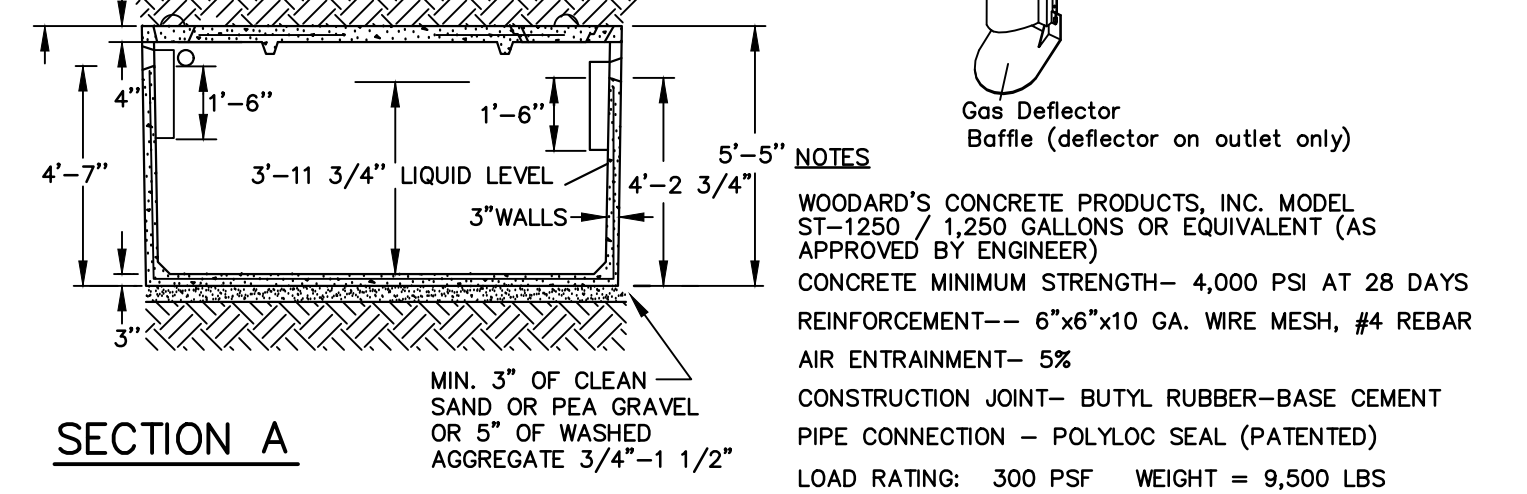
- SEPTIC DESIGN NOTES:**
- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WATER AND SEWER SYSTEMS) SHALL NOT BE CHANGED.
 - ALL WELLS WITHIN 300 FEET OF THIS PROJECT HAVE BEEN LOCATED AND ARE SHOWN ON THE PLANS.
 - TRENCHES SHALL NOT BE INSTALLED IN WET SOIL. THE SIDES AND BOTTOM OF TRENCHES MUST BE RAKED. THE ENDS OF THE LATERALS MUST BE CAPPED.
 - THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.
 - HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDESIRABLE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN WAS BASED.
 - NO SWIMMING POOLS, DRIVEWAYS, OR STRUCTURES THAT MAY COMPACT THE SOIL SHALL BE LOCATED OVER ANY PORTION OF THE ABSORPTION FIELD.
 - THIS SYSTEM WAS NOT DESIGNED TO ACCOMMODATE GARbage GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS, OR WATER CONDITIONERS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM AND REAPPROVED BY THE ORANGE COUNTY HEALTH DEPARTMENT.
 - THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE BUILDING, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.
 - THE OWNER/APPLICANT OF EACH LOT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES.
 - SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS. PUMP STATION/DOSING CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A PROPERLY TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING AND ANY PHYSICAL DAMAGE, DISTRIBUTION BOXES/ DROP BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.
 - INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED WITHIN 1 YEAR OF AVAILABILITY.
 - A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL AS ALLOWED BY THE NYS EDUCATION DEPARTMENT) SHALL INSPECT THE SANITARY FACILITIES AT THE TIME OF CONSTRUCTION. THE ENGINEER SHALL CERTIFY TO THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER TIGHTNESS.



PRECAST SEPTIC TANK-1,250 GALLONS
SCALE: 1/4" = 1'-0"



PUMP CHAMBER PRECAST SEPTIC TANK-1,000 GALLONS
SCALE: NTS



PRECAST SEPTIC TANK-1,250 GALLONS
SCALE: 1/4" = 1'-0"

NOTES:

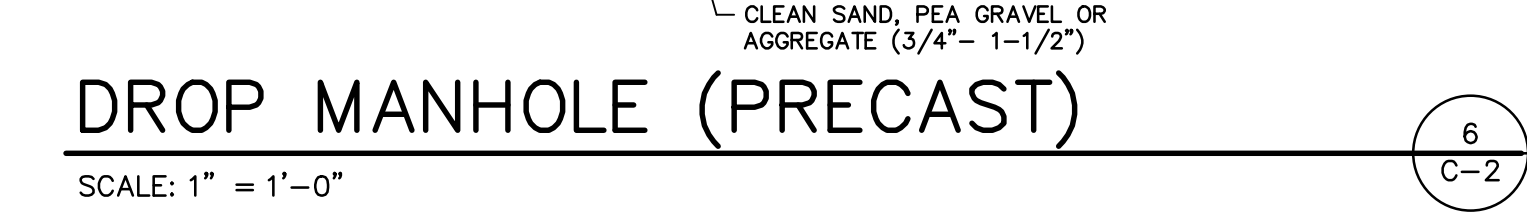
- WELL IS TO BE DRILLED TO A MINIMUM DEPTH OF 300'.
- OVERSIZED DRILL HOLE (FOR GROUTING) TO BE 10" IN DIAMETER & A MIN. OF 40' IN LENGTH.
- EXPECTED DEPTH OF OVERBURDEN = 110'.
- EXPECTED DEPTH OF WATER BEARING FORMATION = 140'.
- WELL CASING TO CONFORM TO AWWA STANDARD A-100 (CURRENT REQUIREMENTS).
- PITLESS ADAPTOR AND SANITARY WELL SEAL SHALL BE MONITOR MODEL NO. 5PL-6-UCL, MFG. BY BAKER MFG. CO.; EVANSVILLE, WISC.
- DISCHARGE PIPE: 1" MIN. OF HEAVY DUTY POLYETHYLENE MEETING THE REQUIREMENTS OF NSF.
- WATER SERVICE LINES UNDER PRESSURE SHALL NOT PASS CLOSER THAN 10' OF A SEPTIC TANK, TILE FIELD OR ANY OTHER PART OF THE SEWAGE DISPOSAL SYSTEM.
- CAST IRON PIPES WITH ELASTOMETRIC COMPRESSION JOINTS ARE REQUIRED FOR SEWAGE LINES WITHIN 50' OF ANY WELL.
- MIN. WELL CAPACITY TO BE 5 GPM.
- CEMENT GROUT SHALL BE A MIXTURE OF ONE BAG OF CEMENT AND 5 TO 5 1/2 GALLONS OF CLEAN WATER.
- ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS AS SET FORTH IN THE PUBLICATION "RURAL WATER SUPPLY", N.Y.S. DEPT. OF HEALTH, LATEST EDITION.
- LOTS TO BE LOCATED WITHIN A ONE HUNDRED (100) YEAR FLOOD LEVEL SHALL HAVE A TOP OF A WELL CASING 2' ABOVE THE LEVEL.



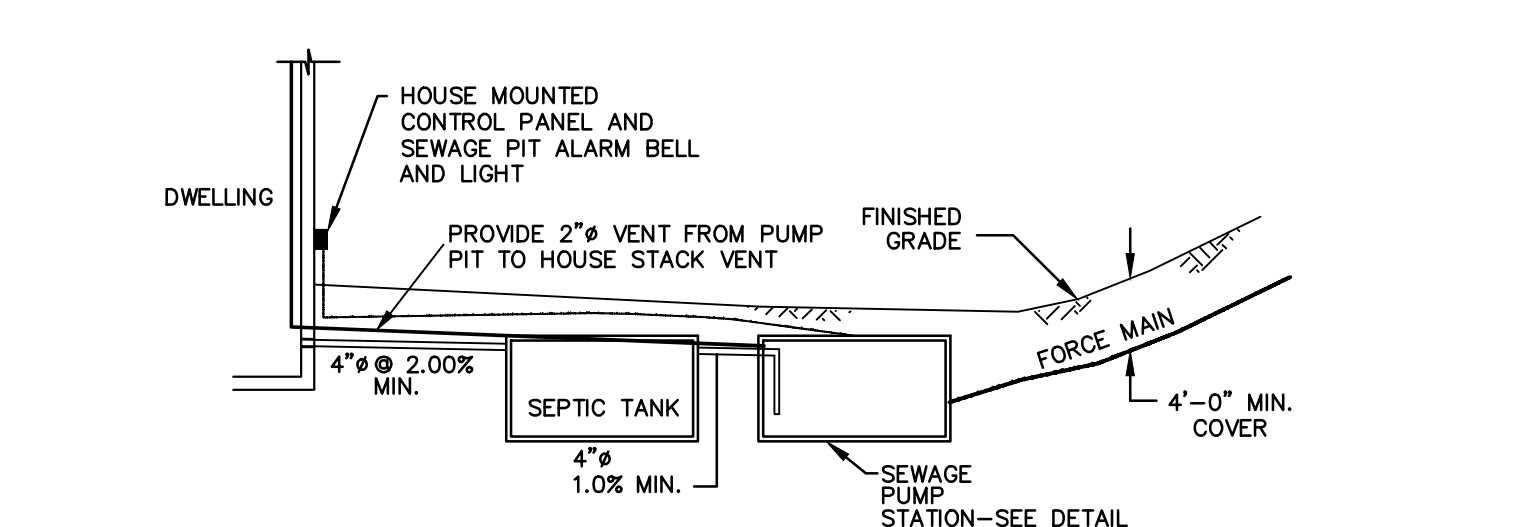
DRILLED ROCK WELL
SCALE: NTS

NOTES:

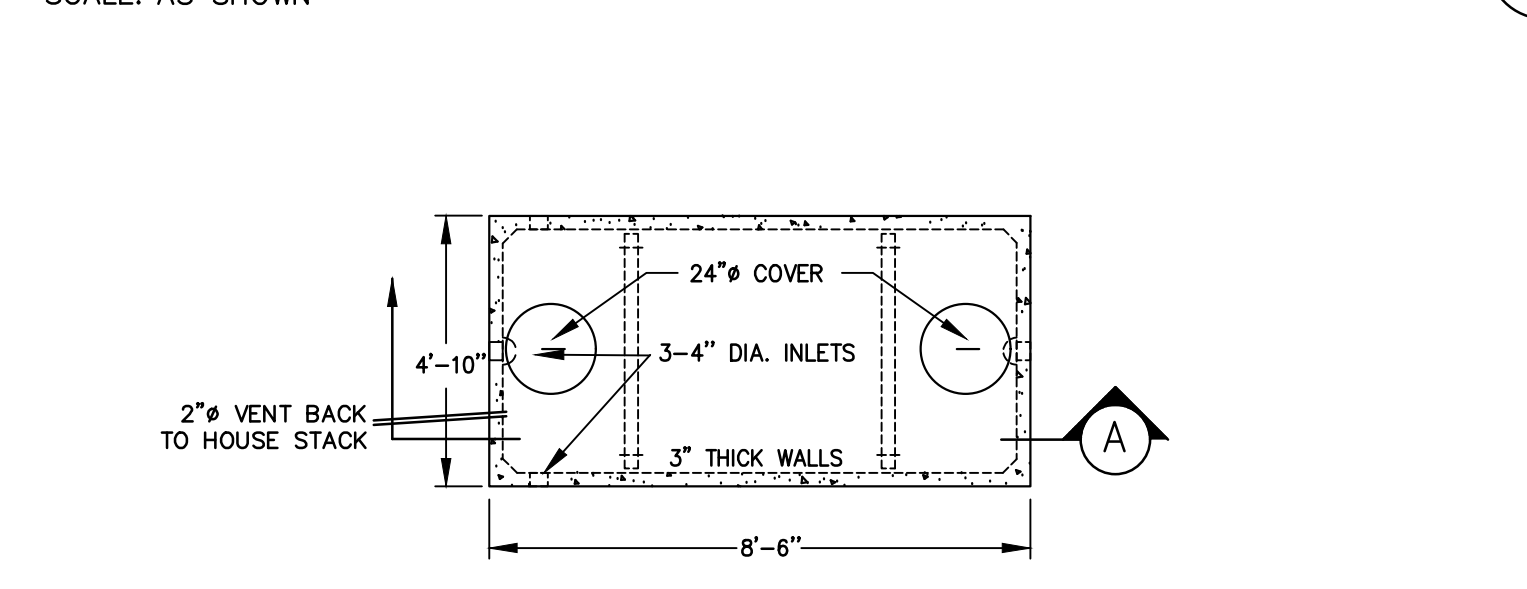
- AS PER WOODWARD'S CONCRETE PRODUCTS; BULLVILLE, NY; NO. DB-60B.
- INLET AND OUTLET TO BE 4" SOLID PVC, SCHED. 40 MIN. SLOPE 1%.
- DROPOUT SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.



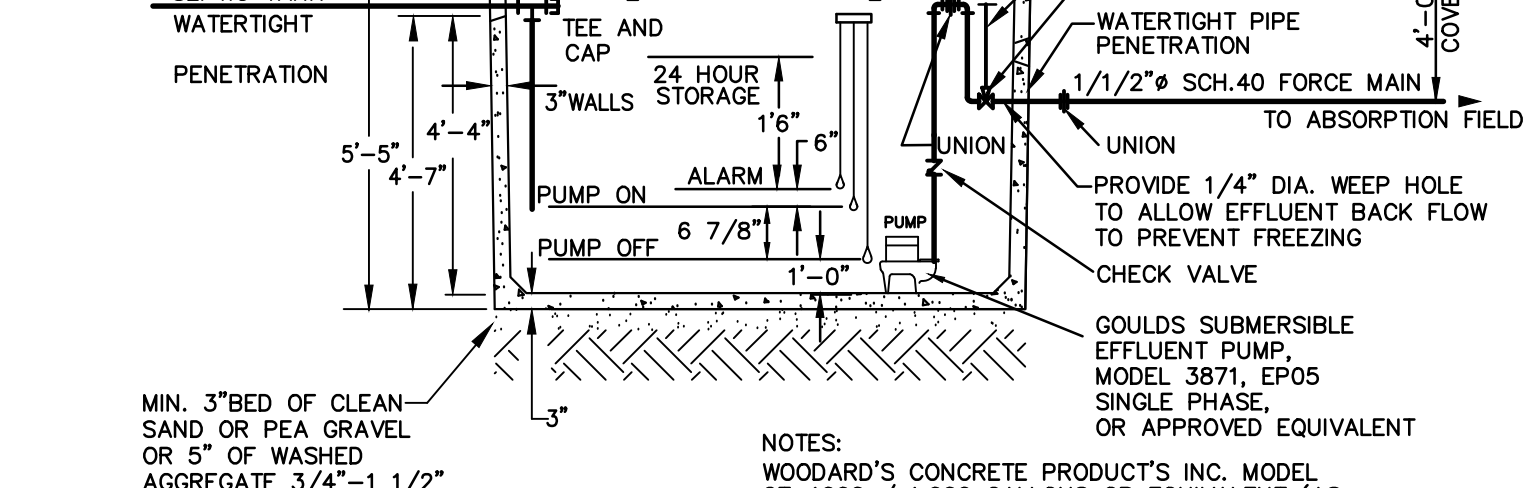
DROP MANHOLE (PRECAST)
SCALE: 1" = 1'-0"



FORCE MAIN & PUMP CHAMBER PROFILE
SCALE: AS SHOWN



SECTION A



NOTES:

- WOODWARD'S CONCRETE PRODUCTS INC. MODEL GT-1000 / 1,000 GALLONS OR EQUIVALENT (AS APPROVED BY ENGINEER)
- CONCRETE MINIMUM STRENGTH- 4,000 PSI AT 28 DAYS
- REINFORCEMENT- 6"x6"x10 GA. WIRE MESH, #4 REBAR
- AIR ENTRAINMENT- 5%
- CONSTRUCTION JOINT- BUTYL RUBBER-BASE CEMENT
- PIPE CONNECTION - POLYLOC SEAL (PATENTED)
- LOAD RATING: 300 PSF WEIGHT = 8700 LBS

PUMP CHAMBER PRECAST SEPTIC TANK-1,000 GALLONS
SCALE: NTS

NOTES:

- SEPARATION WELL TO SWALE, STREAM, OR WATER COURSE - 25 FEET.
- SEPARATION ABSORPTION FIELD TO THE HIGH HIGH WATER LINE OF A WET POND- 100'
- SEPARATION ABSORPTION FIELD TO INTERMITTENT STREAM, DRY WELL, CULVERT OR STORM SEWER (NON-GASKETED PIPE), OR CATCH BASIN - 50'.
- SEPARATION ABSORPTION FIELD TO CULVERT OR STORM SEWER (GASKETED, TIGHT PIPE) - 35'.
- SEPARATION ABSORPTION FIELD TO CURTAIN DRAIN - 15'.
- SEPARATION ABSORPTION FIELD, PITS, EXPANSION AREA, TO TOP OF EMBANKMENT OR STEEP (1 ON 3) SLOPE - 25'.
- SEPARATION: ABSORPTION FIELD TO SOLID CURTAIN DRAIN, ROOF OR FOOTING PIPES, SNOW STORAGE ESMT - 10'
- DRAINAGE PIPES WITHIN 25' OF ANY WELL MUST BE WATER TIGHT.
- SEPARATION: WELL TO CEMETERY PROPERTY LINE - 100'.
- SEPARATION: WELL TO SUBDIVISION BOUNDARY - 50'.



ABSORPTION TRENCH SYSTEM DETAIL
SCALE: 1/2" = 1'-0"

REQUIRED SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS:

SYSTEM COMPONENTS	WELL (f) OR SUCTION LINE	TO STREAM, LAKE OR WATER COURSE (d)	OR NYSDEC WETLAND	DWELLING	PROPERTY DRAINAGE LINE	DITCH (b), (g)
HOUSE SEWER (WATERTIGHT JOINTS)	25' IF CAST IRON OR PVC WITH O-RING JOINTS, 50' OTHERWISE	25'	25'	3'	10'	10'
SEPTIC TANK	50'	50'	50'	10'	10'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	50'	50'	10'	10'	10'
DISTRIBUTION BOX	100'	100'	100'	20'	10'	20'
ABSORPTION FIELD	100' (a)	100'	100'	20'	10'	50'
SEEPAGE PIT	150' (a)	100'	100'	20'	10'	50'
RAISED SYSTEM OR MOUND (c)(d)	100' (a)	100'	100'	20'	10'	50'
INTERMITTENT SAND FILTER (d)	100' (a)(f)	100'(f)	100'(f)	20'	10'	50'
NON-WATERBORNE SYSTEMS WITH OFFSITE RESIDUAL DISPOSAL	50	50'	50'	20'	10'	10'
NON-WATERBORNE SYSTEMS WITH ONSITE DISPOSAL	100	50'	50'	20'	10'	20'

NOTES:

- WHEN WASTEWATER TREATMENT SYSTEMS ARE LOCATED UPGRADE AND IN THE DIRECT PATH OF SURFACE WATER DRAINAGE TO A WELL, THE CLOSEST PART OF THE TREATMENT SYSTEM SHALL BE AT LEAST 200 FEET AWAY FROM THE WELL.
- MEAN HIGH WATER MARK, WETLAND OR WATERCOURSE DETERMINATIONS SHOULD BE ADDRESS WITH THE L.H.D. OR OTHER AGENCY HAVING JURISDICTION AND THE APPLICABLE NYSDEC REGIONAL OFFICE.
- FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF SLOPE OF THE FILL, EXCEPT FOR SOME SHALLOW ABSORPTION TRENCH SYSTEMS AS DESCRIBED IN SECTION 9.12.2 OF THE HANDBOOK.
- SEPARATION DISTANCES SHALL ALSO BE MEASURED FROM THE EDGE OF THE DESIGNATED USEABLE AREA (i.e., RESERVE AREA), WHEN AVAILABLE.
- THE CLOSEST PART OF THE WASTEWATER TREATMENT SYSTEM SHALL BE AT LEAST TEN FEET FROM ANY WATER SERVICE LINE (e.g., PUBLIC WATER SUPPLY MAIN, PUBLIC WATER SERVICE LINE OR RESIDENTIAL WELL SERVICE LINE).
- WHEN INTERMITTENT SAND FILTERS ARE DESIGNED TO BE WATER TIGHT AND COLLECT ALL EFFLUENT, THE SEPARATION DISTANCE CAN BE REDUCED TO 50 FEET.
- THE LISTED WATER WELL SEPARATION DISTANCES FROM CONTAMINANT SOURCES SHALL BE INCREASED BY 50% WHENEVER AQUIFER WATER ENTERS THE WATER WELL AT LESS THAN 50 FEET BELOW GRADE. IF A 50% INCREASE CAN NOT BE ACHIEVED, THEN THE GREATEST POSSIBLE INCREASE IN SEPARATION DISTANCE SHALL BE PROVIDED WITH SUCH ADDITIONAL MEASURES AS NEEDED TO PREVENT CONTAMINATION.
- RECOMMENDED: USE SITE EVALUATION TO AVOID O.W.T.S. SHORT-CIRCUITING TO THE SURFACE OR GROUNDWATER AND TO MINIMIZE IMPACTS ON O.W.T.S. FUNCTIONALITY.

SECTION 75.4 (A-5) ACCEPTED AS ORANGE COUNTY HEALTH DEPARTMENT POLICY AND STANDARD WITH THE FOLLOWING ADDITIONS:

- SEPARATION WELL TO SWALE, STREAM, OR WATER COURSE - 25 FEET.
- SEPARATION ABSORPTION FIELD TO THE HIGH HIGH WATER LINE OF A WET POND- 100'
- SEPARATION ABSORPTION FIELD TO INTERMITTENT STREAM, DRY WELL, CULVERT OR STORM SEWER (NON-GASKETED PIPE), OR CATCH BASIN - 50'.
- SEPARATION ABSORPTION FIELD TO CULVERT OR STORM SEWER (GASKETED, TIGHT PIPE) - 35'.
- SEPARATION ABSORPTION FIELD TO CURTAIN DRAIN - 15'.
- SEPARATION ABSORPTION FIELD, PITS, EXPANSION AREA, TO TOP OF EMBANKMENT OR STEEP (1 ON 3) SLOPE - 25'.
- SEPARATION: ABSORPTION FIELD TO SOLID CURTAIN DRAIN, ROOF OR FOOTING PIPES, SNOW STORAGE ESMT - 10'
- DRAINAGE PIPES WITHIN 25' OF ANY WELL MUST BE WATER TIGHT.
- SEPARATION: WELL TO CEMETERY PROPERTY LINE - 100'.
- SEPARATION: WELL TO SUBDIVISION BOUNDARY - 50'.

PERCOLATION TEST RESULTS

LOT #1
TEST HOLE #1, STABILIZED RATE 1 INCH DROP IN 5 MIN.11 SEC.
TEST HOLE #2, STABILIZED RATE 1 INCH DROP IN 8 MIN.06 SEC.

LOT #2
TEST HOLE #1, STABILIZED RATE 1 INCH DROP IN 7 MIN.50 SEC.
TEST HOLE #2, STABILIZED RATE 1 INCH DROP IN 2 MIN.50 SEC.

SEPTIC DESIGN BASIS LOT #1
PROPOSED: 4 BEDROOM DWELLING
FLOW: (4 BR) 110 GPD/BR = 440 GPD
PERCOLATION DESIGN RATE: 16-20 MIN./INCH
APPLICATION RATE: 0.70 GPD/SF
AREA REQUIRED: 440/0.70 = 629 SF
LINEAR FEET TRENCH REQUIRED: 629/2 = 315 LF
USE 6 TRENCHES AT 53 FT. = 318 LF

SEPTIC DESIGN BASIS LOT #2
PROPOSED: 4 BEDROOM DWELLING
FLOW: (4 BR) 110 GPD/BR = 440 GPD
PERCOLATION DESIGN RATE: 16-20 MIN./INCH
APPLICATION RATE: 0.70 GPD/SF
AREA REQUIRED: 440/0.70 = 629 SF
LINEAR FEET TRENCH REQUIRED: 629/2 = 315 LF
USE 6 TRENCHES AT 53 FT. = 318 LF

A:\V0225\100225P.dwg 24-03 PLOT PLAN (48) 5/2

NO.	DATE	REVISION	BY	CK.
B	09/05/19	SUBMITTED TO PLANNING BOARD	BGC	M.S.
A	08/08/19	SUBMITTED TO PLANNING BOARD	BGC	M.S.

MICHAEL J. SANDOR PE
NY PROFESSIONAL ENGINEER NO. 60445

DRAWN BY: P HUTTON
DEPT. CK. M. SANDOR
DEP. APPR.
COORD. CK.
P.M. APPR.
CLIENT APPR.

MJS ENGINEERING & LAND SURVEYING, PC
261 Greenwich Ave
Goshen, NY 10924
845-291-8650
Fax 845-291-8657

SHEET TITLE:
CONSTRUCTION DETAILS

JOB NAME:
CLIFFORD RYAN
TOWN OF GOSHEN, ORANGE COUNTY, NEW YORK

DATE: 08/08/19
JOB NO. 190122
SCALE: AS SHOWN
REV. NO. B
DWG. NO. C-2
SHEET 2 OF 2