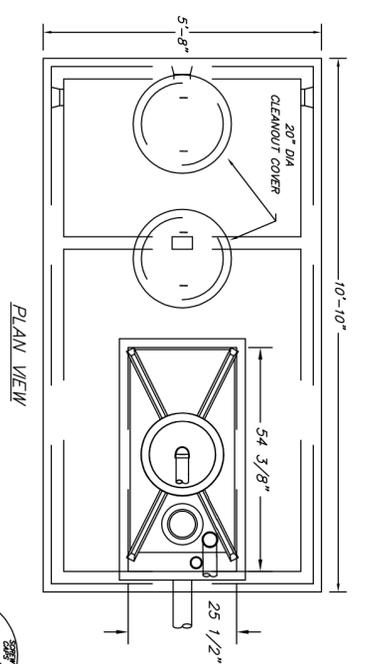
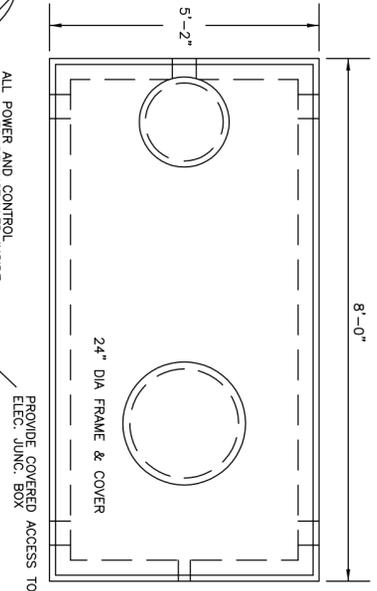


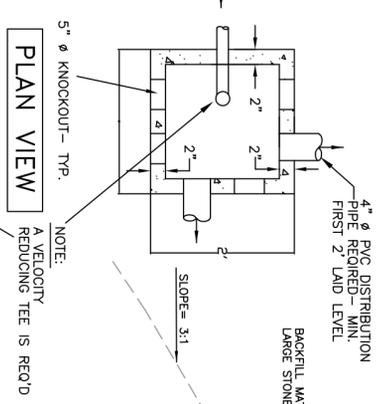
NITRI-FAST 0.5 TANK
1,500 GAL. - 2 COMP. TANK
 UNIT WEIGHT=11,900#



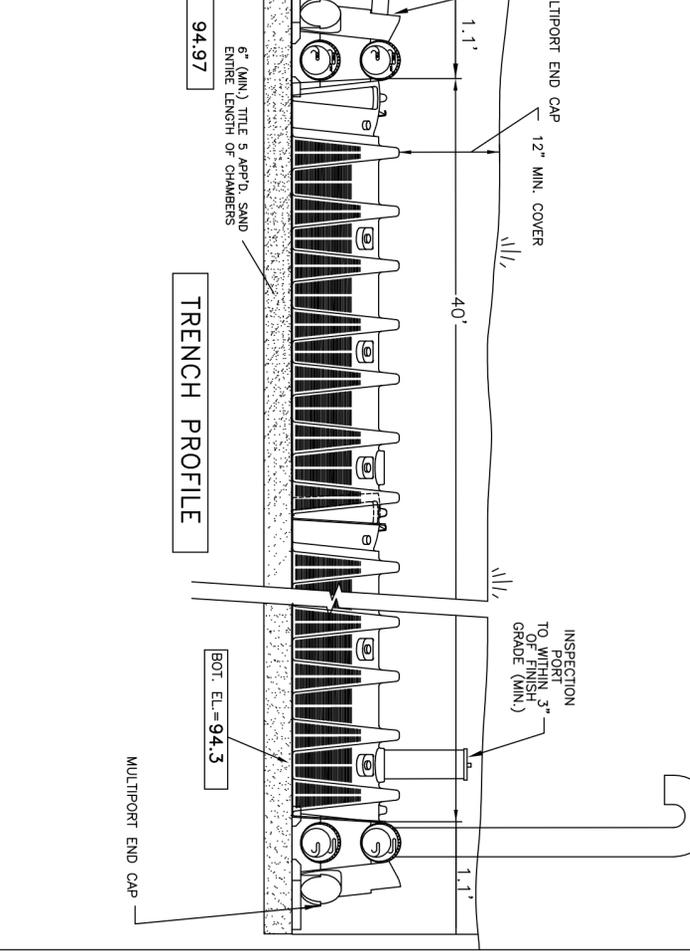
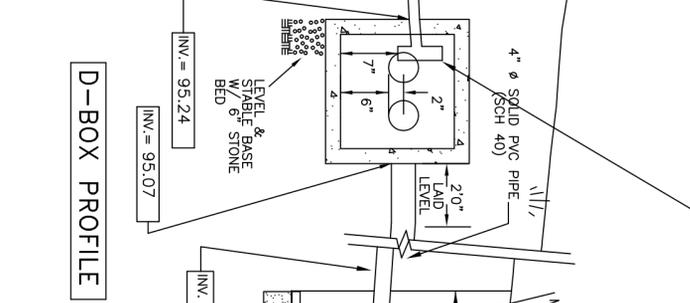
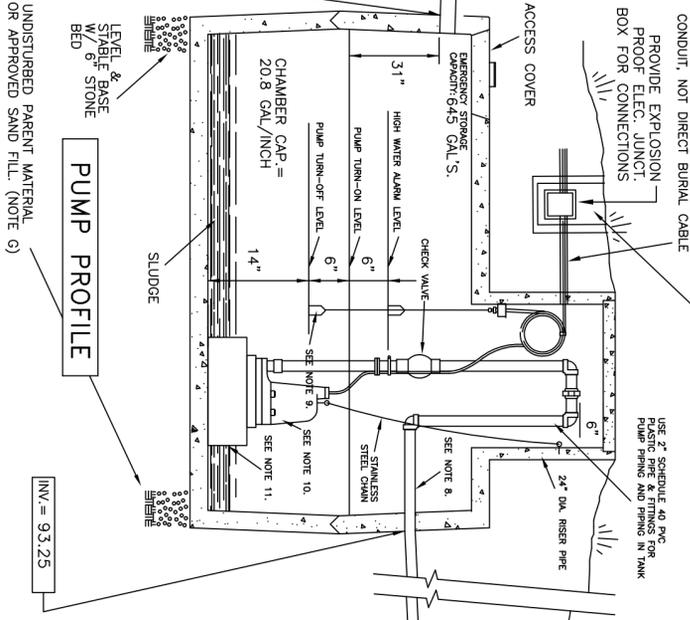
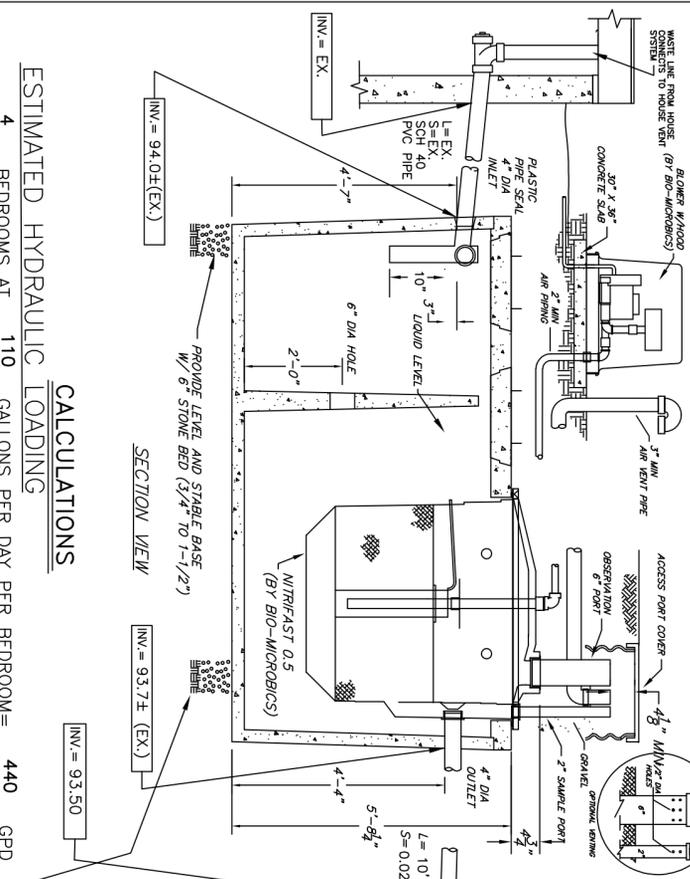
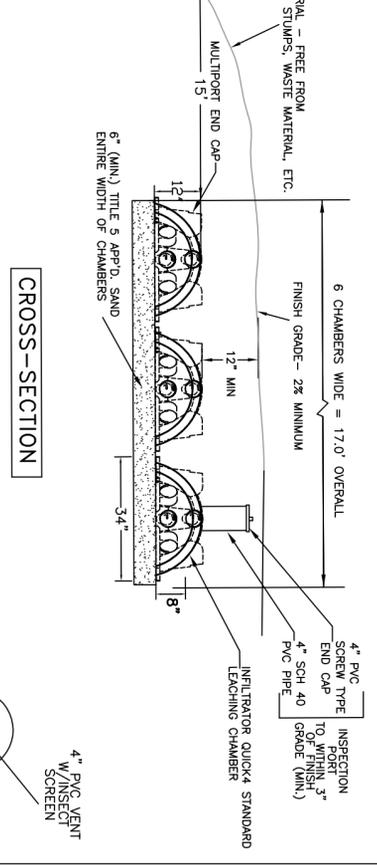
PUMP CHAMBER DETAILS
1000 GALLON



D-BOX DETAILS



BED DETAILS



CALCULATIONS

ESTIMATED HYDRAULIC LOADING
 4 BEDROOMS AT 110 GALLONS PER DAY PER BEDROOM = 440 GPD

SEPTIC TANK
 AVERAGE DAILY FLOW = 440 GALLONS PER DAY X 200% = 880 GAL. MIN.
 SEPTIC TANK PROVIDED = NITRIFAST 0.5, 2 COMP. TANK

DESIGN CRITERIA

PERCOLATION RATE = 25 MINUTES PER INCH (CLASS II)
 INFILTRATOR "QUICK4 STANDARD" LEACH CHAMBER-EFFECTIVE LEACHING AREA IS EQUAL TO 1.67 TIMES BOTTOM WIDTH ONLY (BED CONFIGURATION)
 LEACHING CAPACITY = 1.67 x (2.83 WIDE x 42.2' LONG) = 1,195 S.F.
 x 0.40 GAL./S.F. = 478 G.P.D. TOTAL

GENERAL

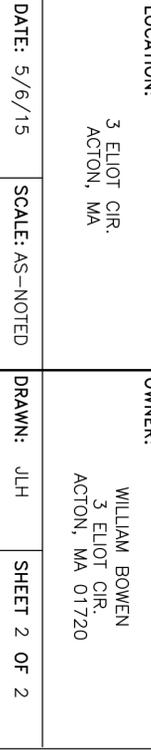
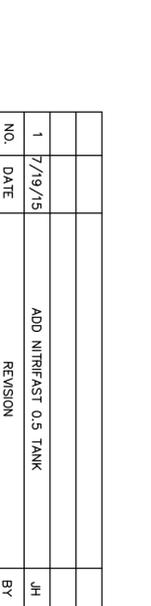
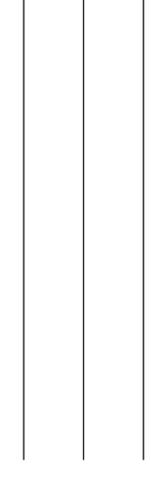
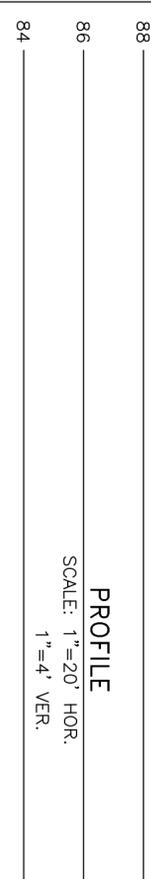
- ANY WETLANDS SHOWN HAVE BEEN DELINEATED IN ACCORDANCE WITH THE WETLANDS PROTECTION ACT.
- ANY WELLS OR WATER SUPPLIES WITHIN 200 FEET OF THE SYSTEM HAVE BEEN SHOWN ON THE PLAN.
- NO PERMANENT STRUCTURES ALLOWED ON RESERVE AREA.
- NO GARAGE GRINDERS ALLOWED.
- CELLAR DRAINS ARE N/A ALLOWED.
- ALL SOIL TESTS HAVE BEEN PERFORMED IN ACCORDANCE WITH TITLE 5 OF THE STATE ENVIRONMENTAL CODE.
- IT IS THE RESPONSIBILITY OF THE OWNER TO ENSURE COMPLIANCE OF THIS DESIGN WITH ALL LOCAL ZONING REGULATIONS.
- 2" SCH 40 PVC PLASTIC PIPE FROM PUMP CHAMBER TO LEACH AREA PIPE MUST SLOPE FROM FIELD TO TANK SO THE LINE WILL DRAIN OR THE LINE MUST BE 4" BELOW GRADE TO PREVENT FREEZING. DRILL 3/16" DIA. HOLE IN BOTTOM OF PIPE IN PUMP CHAMBER SO THAT THE FORCE MAIN WILL DRAIN BACK TO PUMP CHAMBER. PLACE CHECK VALVE IN DISCHARGE LINE FROM PUMP ON RISER PIPE BEFORE DRAIN HOLE.
- FLICK-HIGH WATER ALARM CONTROL. MERCURY TUBE SWITCH SEALED IN SOLID POLYURETHANE FLOAT BALL.
- LIBERTY LEAD SUBMERSIBLE EFFLUENT PUMP, 0.4 HORSEPOWER 115 VOLTS
- CONCRETE BLOCK TO KEEP PUMP INLET OUT OF SLUDGE

CONSTRUCTION

- ELEVATIONS REFER TO BENCHMARK ON PLAN. ELEVATION = 101.26 (TOP FNDN)
- ALL TOPSOIL, SUBSOIL, AND ORGANIC MATERIALS TO BE REMOVED FOR FIVE FEET AROUND SYSTEM
- NO HEAVY EQUIPMENT TO BE ALLOWED OVER INSTALLED SYSTEM
- FINISH GRADE AS PER PLAN
- IF FIELD CONDITIONS VARY FROM PLAN, NOTIFY DESIGNER IMMEDIATELY
- ALL PIPE HAS TO BE 4" DIA. TIGHT JOINTED POLYVINYL CHLORIDE UNLESS OTHERWISE NOTED
- FILL SHALL BE COMPRISED OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER & DELETERIOUS SUBSTANCES. (REFER TO 310CMR 15.255)

NOTES

- SIMPLEX PUMP TO BE INSTALLED
- PUMP SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. PUMPS FOR SETTLED SEWAGE SHALL BE CAPABLE OF PASSING AT LEAST 1 1/4 INCH SOLIDS. (The specified pump, LE40 is capable of passing 2" inch solids.)
- DOSEING REQUIREMENTS:
 CLASS SOIL DOSES(S) = 4 DOSE(S) PER DAY.
 CLASS G.P.D. SOIL DOSES(S) = 110 GALS PER DOSE (MIN.)
- PUMP CONTROLS SHALL BE MOISTURE PROOF AND OPERATE IN THE FOLLOWING SEQUENCE AS MEASURED FROM THE BOTTOM OF THE PUMP CHAMBER.
 a. Pump off (14")
 b. Lead pump on (20" or 416 gal's.)
 c. Alarm on (26" or 540 gal's.)
 5) SYSTEM SHALL BE EQUIPPED WITH AN ALARM THAT IS BOTH AUDIBLE AND VISUAL. ALARM TO BE POWERED BY SEPARATE CIRCUIT WHICH IS INDEPENDANT OF THE PUMP CIRCUITS.
 ADDITIONAL REQUIREMENTS:
 CONTROL BOX AND ELECTRICAL WIRING SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS AND IN COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS
 SYSTEM MAINTENANCE
 PUMPS AND CONTROLS TO BE INSPECTED ANNUALLY TO INSURE CORRECT OPERATION
 CONTROLS AND WIRING SHALL BE INSPECTED MONTHLY
 THE ENTIRE SYSTEM SHALL BE TESTED WITH CLEAR WATER BY THE BOARD OF HEALTH PRIOR TO OPERATIONAL APPROVAL.



ND&S *North Design Services Inc.*
 3 Pondview Pl. Stoughton, MA 01720
 (978) 649-1986
 nds@verizon.net

OWNER:
 WILLIAM BOWEN
 3 ELIOT CIR.
 ACTON, MA 01720

LOCATION:
 3 ELIOT CIR.
 ACTON, MA

DATE: 5/6/15 **SCALE:** AS-NOTED **DRAWN:** JLH **SHEET** 2 OF 2

NO.	DATE	REVISION	BY
1	7/19/15	ADD NITRIFAST 0.5 TANK	JLH

84
 86
 88
 90
 92
 94
 96
 98
 100
 102

SCALE: 1"=20' HOR.
 1"=4' VER.