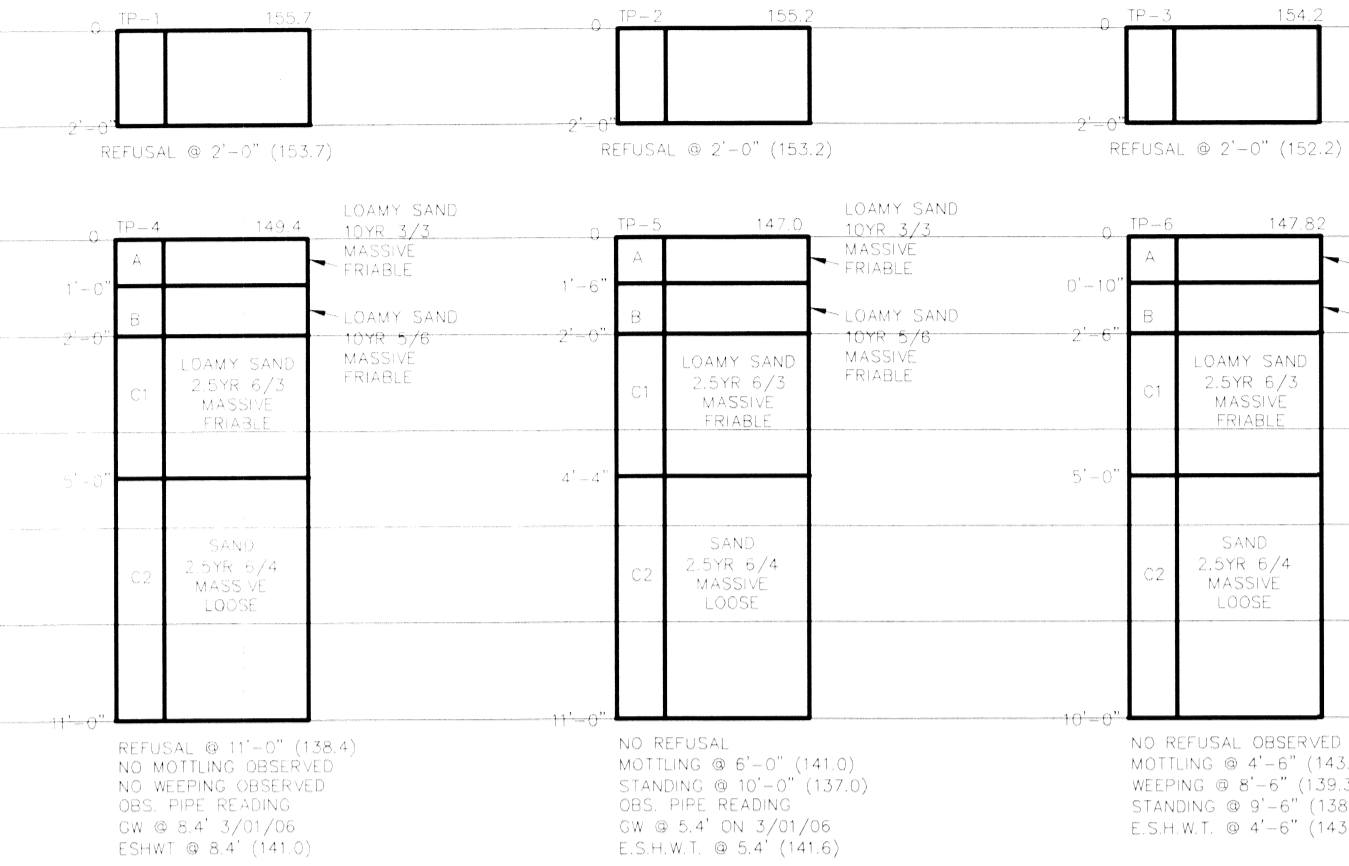


**TEST PIT DATA:**

DATE OF TESTING: 9/07/05  
 TEST BY: STAMSKI AND McNARY, INC.  
 CERT. SOIL EVAL.: TIM MCGIVERN  
 WITNESSED BY: ROB FRADO



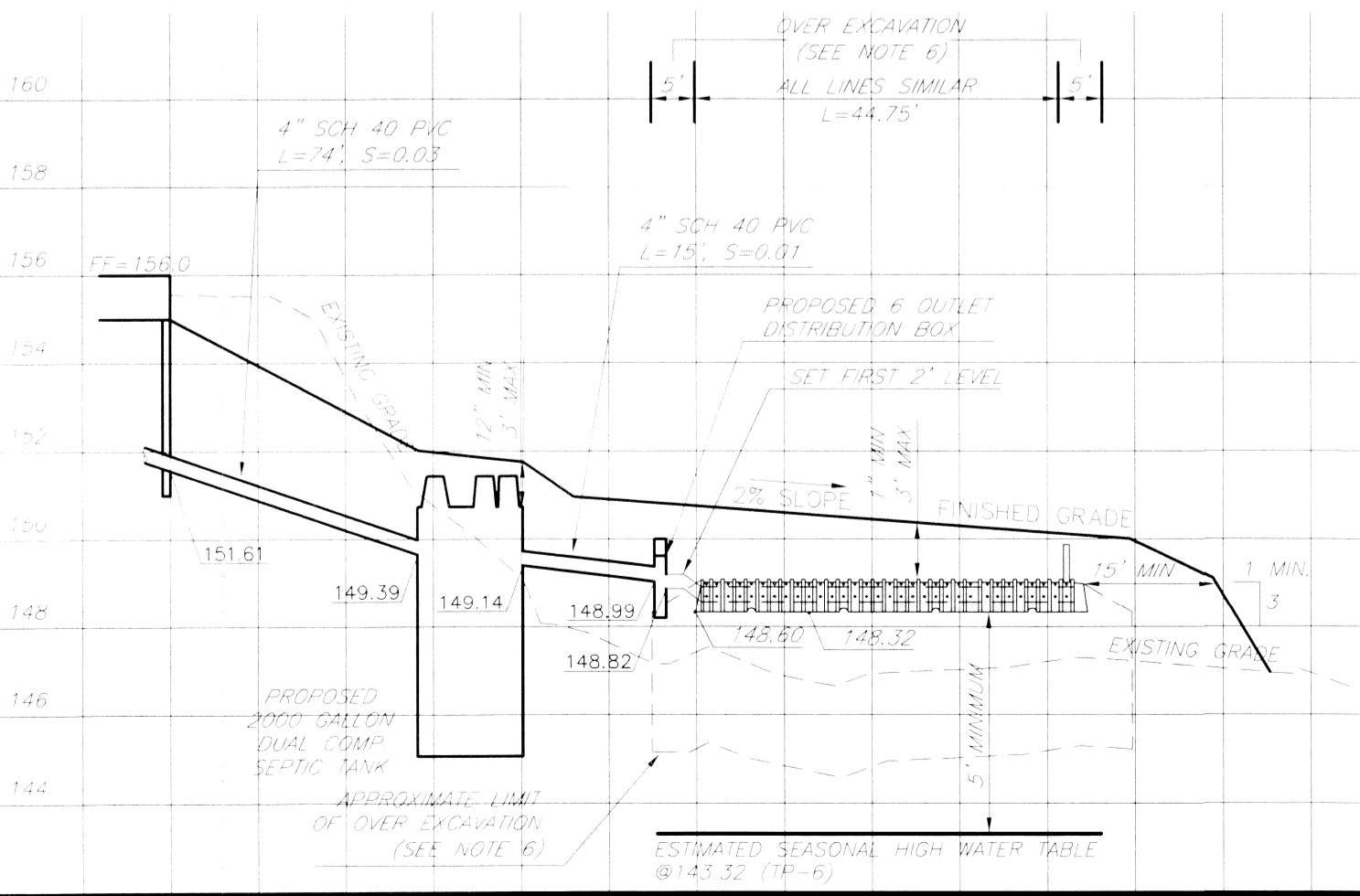
**NOTES:**

- THIS PLAN IS FOR THE DESIGN AND CONSTRUCTION OF A SEWAGE DISPOSAL FACILITY ONLY.
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO TITLE 5 AND THE CARLISLE BOARD OF HEALTH REGULATIONS.
- IF ALTERATIONS (REMOVAL OF VEGETATION, GRADING, EXCAVATIONS, ETC.) ARE TO BE MADE WITHIN 100 FEET OF WETLAND AREAS (PONDS, BROOKS, SWAMPS, ETC.) A REQUEST FOR DETERMINATION OF APPLICABILITY OF THE WETLANDS PROTECTION ACT (16131-840A) SHOULD BE FILED WITH THE TOWN'S CONSERVATION COMMISSION. THE FILING OF A NOTICE OF INTENT MAY BE REQUIRED AND LOCAL BYLAWS MAY APPLY.
- ACCEPTABLE MATERIAL SPECIFICATIONS FOR DISTRIBUTION LINES: PVC-SCHEDULE 40 (ASTM D 1785 & D 2451), SDR 35 (ASTM D 3034) ABS-SCHEDULE 40 (ASTM F 628) HOPE-SHALL MEET OR EXCEED ASTM F 810 FOR SMOOTH WALL POLYETHYLENE PIPE FOR USE IN DRAINAGE AND WASTE DISPOSAL FIELDS. SCHEDULE 40 PVC SHALL BE USED IN AREAS SUBJECT TO VEHICULAR TRAFFIC.
- UNLESS OTHERWISE SHOWN, THERE ARE NO KNOWN WELLS WITHIN 200' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM NOR ARE THERE ANY KNOWN SEWAGE DISPOSAL SYSTEMS WITHIN 100' OF THE PROPOSED WELL.
- ALL TOP, SUBSOIL, FILL, BOULDERS, AND OTHER MATERIALS UNDER AND WITHIN 5' OF THE PROPOSED LEACHING TRENCHES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL ACCORDING TO TITLE V(2006) SECTION 15.255 "CONSTRUCTION IN FILL".
- PER TITLE 5 REQUIREMENTS, THE DESIGN ENGINEER IS REQUIRED TO INSPECT THE CONSTRUCTION OF THE SEPTIC SYSTEM AND CERTIFY THAT THE SYSTEM IS CONSTRUCTED ACCORDING TO THE PLANS, LOCAL REGULATIONS, AND TITLE 5. IN MOST INSTANCES THE DESIGN ENGINEER IS ALSO REQUIRED TO PREPARE AN "AS-BUILT" PLAN. UNLESS OTHERWISE SPECIFICALLY STATED IN WRITING IN THE CONTRACT BETWEEN OWNER AND INSTALLER, THE INSTALLER SHALL BE RESPONSIBLE FOR COORDINATING INSPECTIONS WITH THE DESIGN ENGINEER AND PAY FOR THESE SERVICES. NOTIFYING THE DESIGN ENGINEER DOES NOT RELIEVE THE OWNER OR INSTALLER FROM THE RESPONSIBILITY OF HAVING THE REQUIRED INSPECTIONS ETC. BY THE BOARD OF HEALTH.
- FINISHED GRADE OVER THE LEACHING AREA SHALL HAVE A MINIMUM SLOPE OF 2
- THE FIRST TWO FOOT SECTIONS OF PIPE FROM THE D. BOX SHALL BE SET LEVEL.
- THE SYSTEM SHALL BE STAKED AND A BENCHMARK SHALL BE SET IN THE FIELD BY THE DESIGN ENGINEER WITHIN 100' OF THE SYSTEM PRIOR TO CONSTRUCTION.
- ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, EXCAVATING, GRADING, OR PAVEMENT RESTORATION OR REPAIR. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED, INCLUDING THOSE IN CONTROL OF UTILITIES. SEE CHAPTER 370, ACTS OF 1963 MASS., WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE APPROPRIATE UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. D.I.G. SAFE TELE. NO. 1-888-344-7233
- THERE ARE NO KNOWN SEWAGE DISPOSAL SYSTEMS WITHIN 100 FEET OF THE PROPOSED SEWAGE DISPOSAL SYSTEM UNLESS OTHERWISE SHOWN ON THE PLAN.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED. (SEE 310 CMR 15.222)
- ALL DISTURBED SURFACES SHALL BE RESTORED WITH 4" OF LOAM AND SEED.
- RETAINING WALLS ASSOCIATED WITH THE SEPTIC SYSTEM SHALL NOT EXCEED FIVE (5) FEET IN HEIGHT.
- SEWER MANHOLES BROUGHT TO FINISH GRADE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.
- IF ZABEL EFFLUENT TEE FILTER IS INSTALLED, IT SHALL BE IN COMPLIANCE WITH APPROVAL ISSUED AUGUST 11, 1992. ALL SEWER MANHOLES AT FINISHED GRADE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS. COVER SHALL BE PERMANENTLY MARKED "EFFLUENT TEE FILTER"

**CONSTRUCTION SEQUENCE:**

- THE SILTATION BARRIER SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
- A STILLING BASIN SHALL BE EXCAVATED ADJACENT TO THE PROPOSED WELL LOCATION. THE WELL SHALL THEN BE DRILLED WITH THE TAILINGS DIRECTED TO THE STILLING BASIN.
- THE CONSTRUCTION AREA SHALL THEN BE CLEARED AND GRUBBED. EXCAVATION FOR THE FOUNDATION WILL BE PERFORMED. SOIL STOCKPILES SHALL BE KEPT AS FAR FROM THE WETLAND AS POSSIBLE.
- THE HOUSE FOUNDATION WILL THEN BE CONSTRUCTED AND BACKFILLED AND FRAMING CAN COMMENCE.
- THE SITE WILL BE ROUGH GRADED AND THE SEPTIC SYSTEM WILL BE INSTALLED.
- ALL PAVING AND WALKS SHALL BE CONSTRUCTED.
- THE SITE SHALL BE LOAMED AND SEEDED. SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED IN ACCORDANCE WITH THE SLOPE STABILIZATION DETAIL.

**PROFILE:** SCALE: 1" = 20' H., 1" = 4' V.



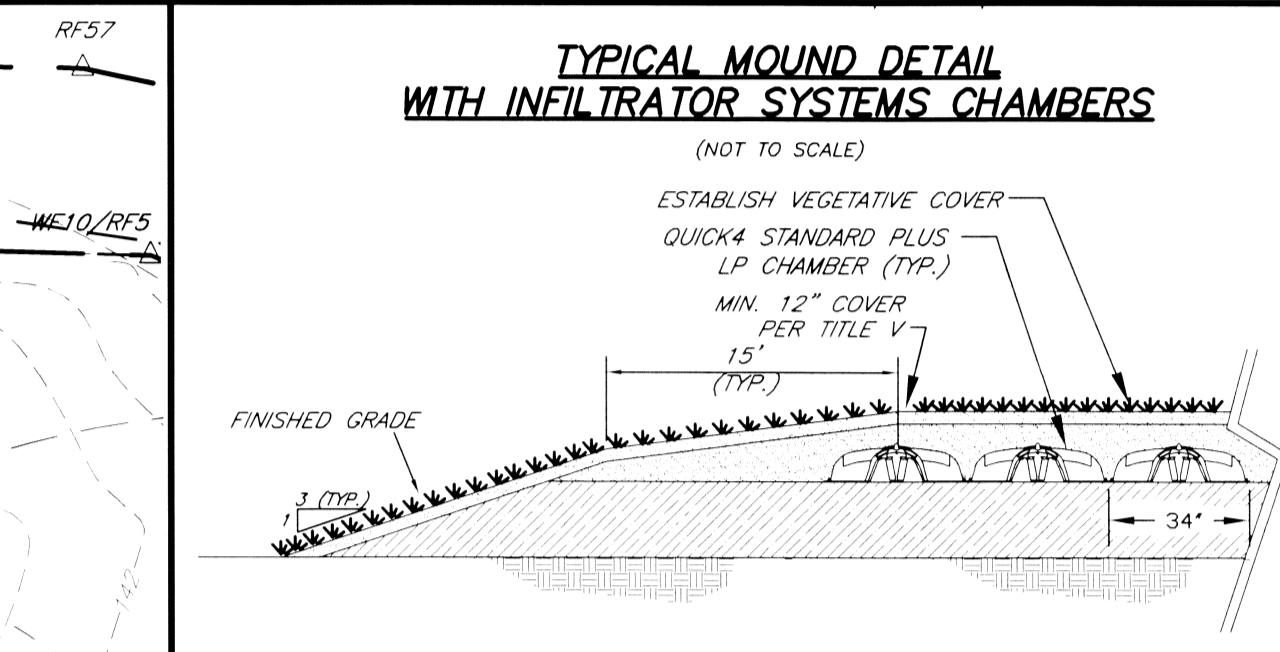
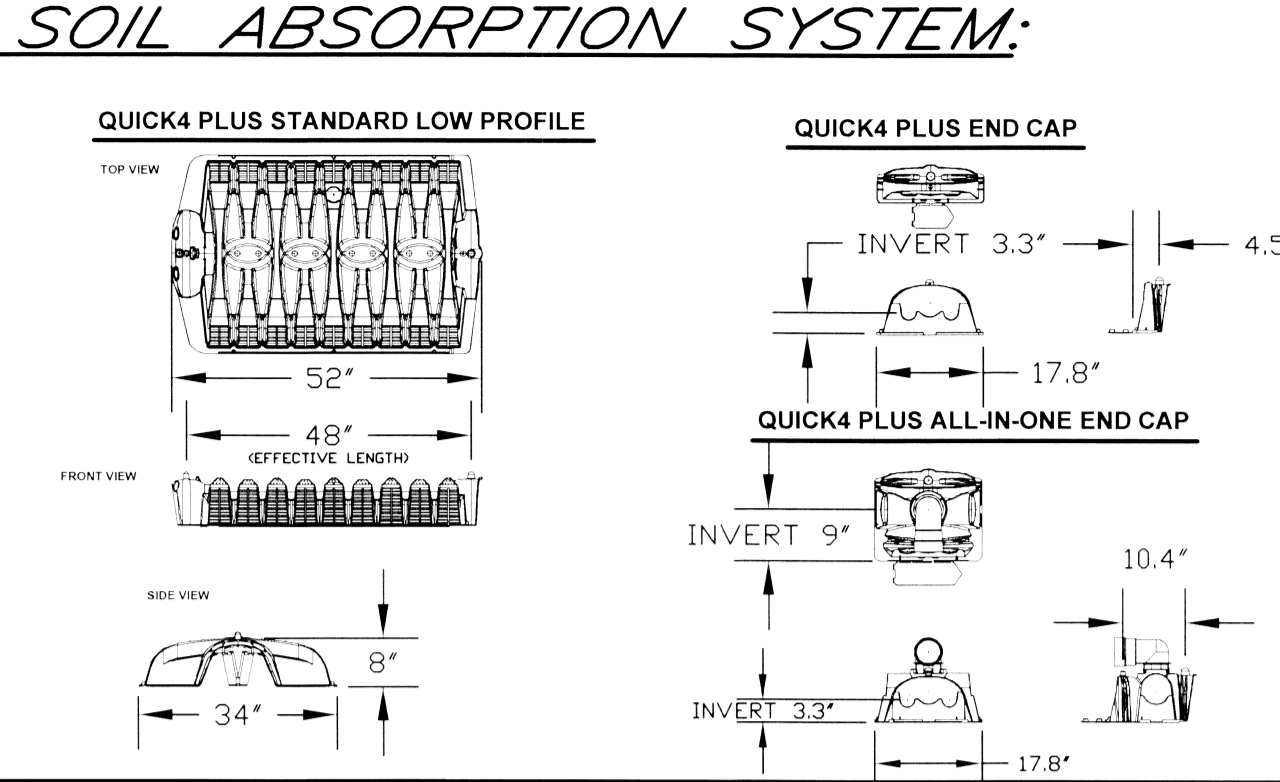
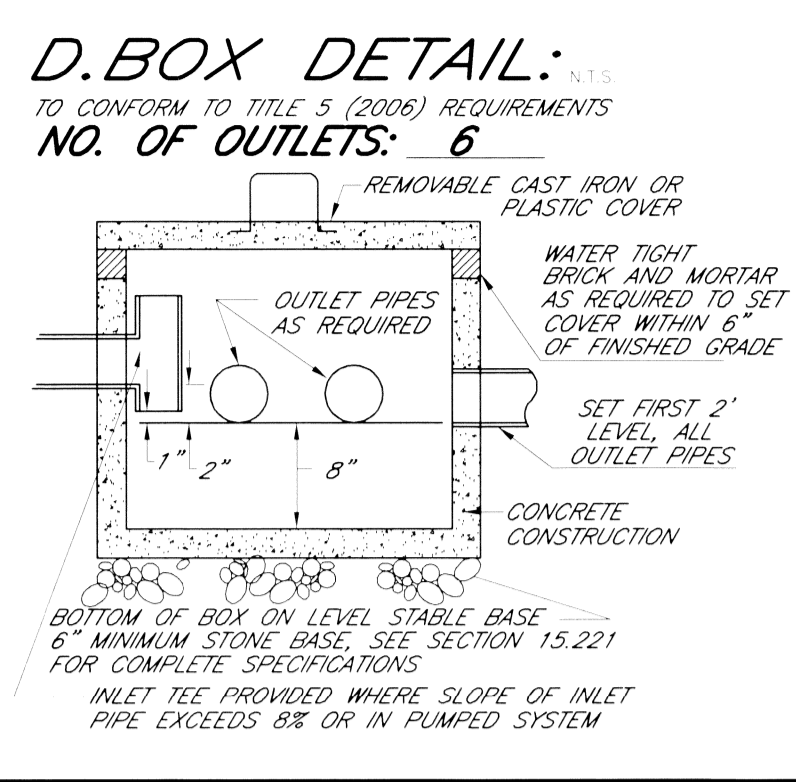
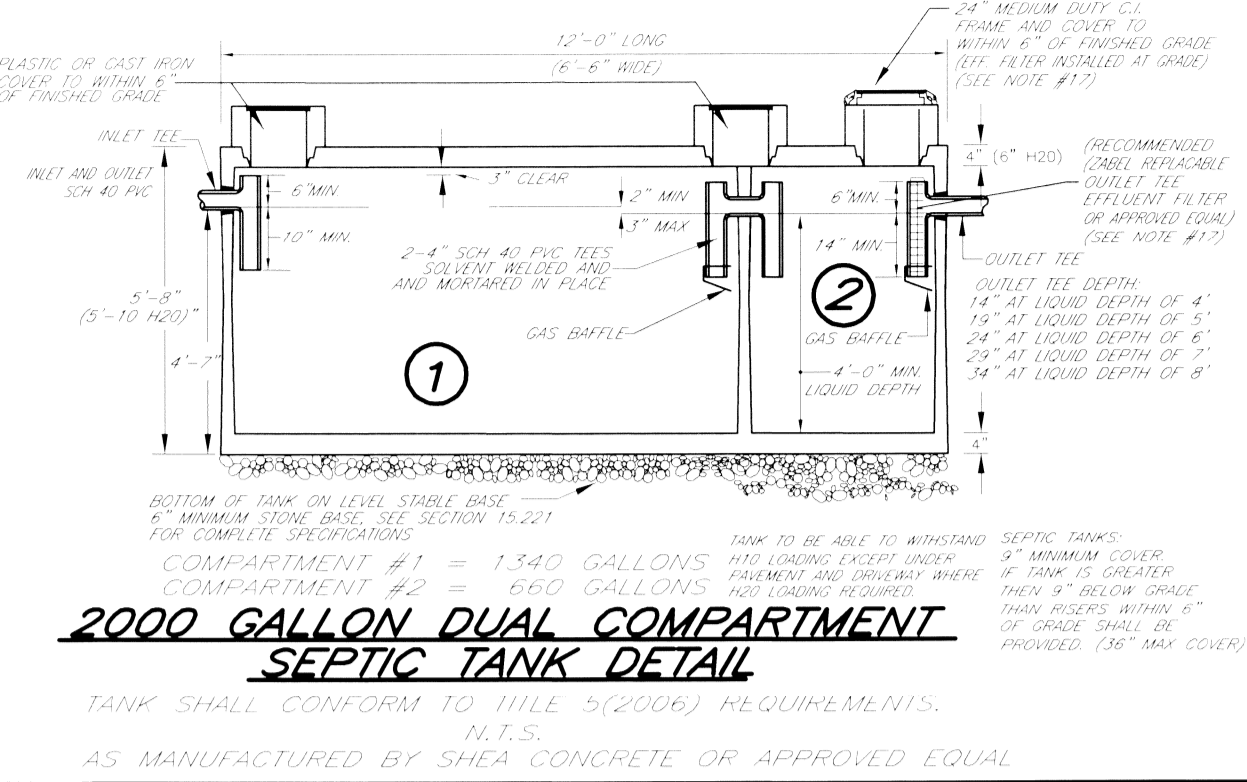
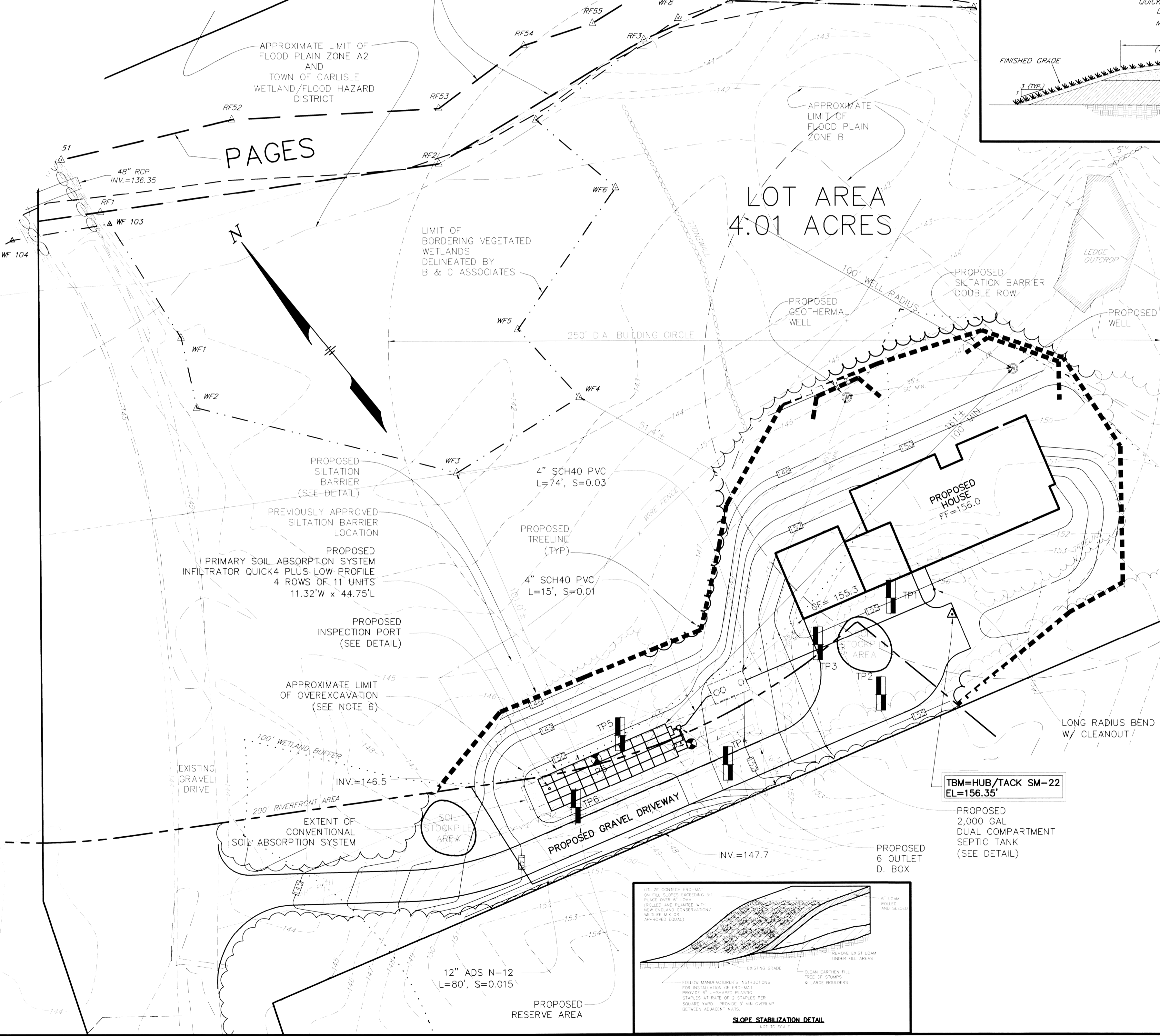
**PERC. TEST DATA:**

DATE OF TESTING: 9/07/05  
 CERT. SOIL EVAL.: TIM MCGIVERN  
 TEST BY: STAMSKI AND McNARY, INC.  
 WITNESSED BY: ROB FRADO

- PT-4 DEPTH OF TEST: 42" RATE: < 2 MIN/IN
- PT-5 DEPTH OF TEST: 48" RATE: < 2 MIN/IN

**PLAN VIEW:**

SCALE: 1" = 20'  
 ZONE: RESIDENCE B



**INVERT ELEVATIONS:**

4" INV. @ BUILDING	= 151.61
4" INV. @ SEPTIC TANK (IN)	= 149.39
4" INV. @ SEPTIC TANK (OUT)	= 149.14
4" INV. @ D.BOX (IN)	= 148.99
4" INV. @ D.BOX (OUT)	= 148.82

**AT LEACHING FACILITY:**

PRIMARY (SET LEVEL)	
TOP CHAMBERS	= 148.99
4" INV. @ BEGIN CHAMBERS	= 148.60
BOTTOM CHAMBERS	= 148.32

**DESIGN DATA:**

**DESIGN FLOW:**

- 5 BR. X 110 GPD/BR = 550 GPD
- PER CARLISLE BOH:
- 5 BR. X 125 GPD/BR = 625 GPD

**REQUIRED SEPTIC TANK:**

- REQUIRED: 1100 & 550 GAL = 1650 GAL
- PROVIDED: 1340 & 660 GAL = 2000 GAL

**REQUIRED SIZE SOIL ABSORPTION SYSTEM:**

- @ 2 MIN/INCH
- TITLE 5: CLASS 1 SOIL
- 625 GPD/0.74 GPD/SF = 845 SF MIN.
- PER CARLISLE BOH (NO GARBAGE GRINDER ALLOWED)
- TYPE OF SOIL ABSORPTION SYSTEM PROVIDED:

**TITLE 5 CAPACITY: (PRIMARY)**

- INFILTRATOR QUICK4 PLUS STANDARD LP BED CONFIGURATION
- 44 SECTIONS x 4 LF/SECTION = 176 LF
- 176 LF x 8 END CAPS x 0.375/CAP = 179 S.F.
- 179 LF x 4.73 SF/LF = 847 S.F.
- 847 S.F. > 845 S.F. O.K.

**RESERVE:**

- TRENCHES: 2' W x 2' D = 6 SF/LF
- 4 TRENCHES x 36.5 LF x 6" = 842 SF
- 842 SF > 845 SF O.K.

**SEWAGE DISPOSAL PLAN**

PREPARED FOR: NICHOLAS FOHL  
 ADDRESS: 250 KING STREET, #422  
 SAN FRANCISCO, CA 94107  
 415-760-7548

LOCATION: BEDFORD ROAD  
 ASSESSORS MAP 22, PARCEL 88-1  
 CARLISLE, MA 01741

SCALE: AS SHOWN  
 DATE: MAY 10, 2006  
 REV: JULY 20, 2006 (HOUSE BOX)  
 SEPT. 27, 2007 (BOH)  
 SEPT. 2, 2010 (UPDATED SDS)  
 JULY 3, 2011 (REVISED SIGN)

PREPARED BY:  
**STAMSKI AND McNARY, INC.**  
 CIVIL ENGINEERS LAND SURVEYORS  
 1000 MAIN STREET - ACTON, MA 01720  
 PH.: (978) 263-8585

DESIGNED BY: BRE DRAWN BY: BRE JOB NO. SM-458A FILE: 458A.DWG

