



SOIL DATA
INSPECTOR: CATHERINE HASSETT
DATE: 5/19/10
PERFORMED BY: DARREN MICHAELS

TEST PIT # 1: EL. TOP = 100.5 EL. WATER = 90.5 DRY PERC RATE = < 2 MPI DEPTH OF PERC = 32-50"	TEST PIT # 2: EL. TOP = 100.3 EL. WATER = 90.5 DRY PERC RATE = NO TEST
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0" - 12" A SANDY LOAM 10YR 3/2	0" - 12" A SANDY LOAM 10YR 3/2
12" - 36" B SANDY LOAM 10YR 6/8	12" - 26" B LOAMY SANDS 10YR 6/8
36" - 120" C1 MED. SANDS 2.5Y 6/8 VERIGATED	26" - 84" C1 MED. SANDS 2.5Y 6/8 VERIGATED

- GENERAL NOTES**
- THIS SEWAGE DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE REGULATIONS OF TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND THE REGULATIONS OF THE LOCAL BOARD OF HEALTH.
 - THE LOCAL BOARD OF HEALTH AND THIS FIRM ARE TO BE NOTIFIED:
 - PRIOR TO BEGINNING CONSTRUCTION IN THE EXCAVATION FOR THE PURPOSE OF SOIL EXAMINATION TO INSURE CONTINUITY OF PERMEABLE MATERIAL.
 - PRIOR TO BACKFILLING THE COMPLETED SYSTEM FOR THE PURPOSE OF PERFORMING AN AS-BUILT INSPECTION.
 - PRIOR TO CONSTRUCTING THE SYSTEM IN A MANNER OTHER THAN SHOWN ON THIS DESIGN.
 - CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION THROUGH DIG SAFE AND OTHER APPROPRIATE AGENCIES. REPORT ANY DISCREPANCIES TO THE ENGINEER.
 - ALL SEPTIC SYSTEM COMPONENTS SHALL WITHSTAND H-10 LOADING UNLESS LOCATED IN AREAS UNDER PAVEMENT, DRIVES OR TRAVELED WAY IN WHICH CASE THEY SHALL WITHSTAND H-20 LOADING.
 - WHERE REQUIRED CONTRACTOR WILL REMOVE ALL LOAM, SUBSOIL AND OTHER UNSUITABLE MATERIAL IN THE AREA BENEATH AND FOR 5 FEET ON ALL SIDES OF THE LEACHING FACILITY. THE CONTRACTOR SHALL REPLACE ALL UNSUITABLE MATERIAL WITH CLEAN COARSE SAND FREE FROM CLAY, FINES OR OTHER UNSUITABLE MATERIAL. REPLACEMENT MATERIAL TO HAVE AN INPLACE PERC RATE OF TWO MINUTES.
 - 4" SCHEDULE 40 PVC PIPE WITH TIGHT JOINTS TO BE USED IN DISPOSAL SYSTEM UNLESS OTHERWISE NOTED.
 - THIS SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE DISPOSAL OR WATER CONDITIONERS. WATER CONDITIONERS SHALL DISCHARGE TO A DRYWELL.
 - CONTRACTOR IS TO VERIFY BENCH MARK, EXISTING INVERTS, AND TOP OF FOUNDATION PRIOR TO ANY EXCAVATION AND REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER.
 - CONTRACTOR IS TO MARK ALL ELBOWS AND INSPECTION PORT WITH MAGNETIC TAPE.
 - ALL COVERS TO GRADE ARE TO BE WATER TIGHT AND SECURABLE.
 - THE EFFLUENT FILTER INSTALLED REQUIRES ROUTINE MAINTENANCE TO PREVENT BACKUP.

- LOCAL UPGRADE REQUESTS:**
- A REDUCTION OF THE SETBACK OF THE PROPOSED LEACH FIELD FROM THE LOCUS WELL FROM 100' TO 50' MINIMUM PER 310CMR SECTION 15.405(1)(g).
 - A REDUCTION OF THE SETBACK OF THE PROPOSED LEACH FIELD FROM AN ABUTTING WELL (1572) FROM 100' TO 80' MINIMUM PER 310CMR SECTION 15.405(1)(g).
 - A REDUCTION OF THE SETBACK OF THE PROPOSED LEACH FIELD FROM AN ABUTTING WELL (1571) FROM 100' TO 75' MINIMUM PER 310CMR SECTION 15.405(1)(g).
 - A REDUCTION OF THE SETBACK OF THE PROPOSED LEACH FIELD FROM THE PROPERTY LINE FROM 10' TO A MINIMUM OF 2' PER 310CMR SECTION 15.405(1)(c).
- LOCAL BOARD OF HEALTH REGULATION VARIANCE REQUESTS:**
- A REDUCTION OF THE SETBACK OF THE PROPOSED LEACH FIELD WITH A PERCOLATION RATE OF < 5MPI FROM THE FOLLOWING ABUTTING WELLS FROM 200' TO DISTANCE SHOWN: (1581) 105', (1544) 145', (1517) 145', AND (1527) 190'. IN ALL CASES THEIR OWN SEPTIC SYSTEMS ARE ALSO WITHIN THE 200' RADIUS.

LEGEND

--- 100 ---	EXISTING CONTOUR
--- 100 ---	PROPOSED CONTOUR
⊕	TEST PIT
□	SEPTIC TANK
□	PUMP CHAMBER
□	DIST. BOX
⊙	WELL
---	LIMIT OF WETLAND
W	WATER LINE

DESIGN CAPACITY REQUIRED
1 BEDROOMS* AT 110 GAL./DAY/BDRM. = 110
*SEE DEFINITION OF BEDROOM PER 310CMR 15.002 DEED RESTRICTION REQUIRED

SEPTIC TANK VOLUME
110 GALS X 200% = 220 GALS. DESIGN CAPACITY
MINIMUM OF 1500 GALLON TANK REQUIRED

SYSTEM CAPACITY PROVIDED
ADS ARC CAPACITY = 4.80 S.F./L.F.
CAPACITY REQUIRED = 110 GPD / 0.74 GPD/SF = 150 S.F.
150 S.F. / 4.80 S.F./L.F. = 32 L.F.
32 L.F. / 3 ROWS = 11' = 3 ROWS OF (3) 5' CHAMBERS + (2) .2' ENDCAPS/ROW
PROPOSED LEACH FIELD = 13'D x 9' W x 17'L = 158 SF
CAPACITY PROVIDED = (9) 5' CHAMBERS + (6) .2' ENDCAPS = 46 L.F.
46 L.F. (4.80 S.F./L.F.) = 221 S.F. x 0.74 GPD/S.F. = 164 GPD

PROPERTY INFORMATION
DEED BOOK/PAGE: 9084 / 193
ASSESSORS MAP/LOT: 61D/1545

SEWAGE DISPOSAL SYSTEM UPGRADE DESIGN
ADS ARC36 CHAMBERS GENERAL USE APPROVAL

PREPARED FOR: **DEBRA CORROW**
20 PINE GROVE AVENUE
MIDDLEBORO, MA 02846

LOCATED AT: **20 PINE GROVE AVE**
MIDDLEBORO, MASSACHUSETTS

DATE: 6/22/10 SCALE: 1" = 20' DESIGN ENG: DJM P.E. REVIEW: KIT JOB NO.: FS10-075 DWG. NO.: FS10-075SDS

FORESIGHT ENGINEERING INC.
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