





SOIL EVALUATOR: DAVID D. COUGHANOWR, ASE #461  
WITNESSED BY: AROZANA DAVIS, HEALTH DEPT.

TEST PIT 1

NO GROUNDWATER ENCOUNTERED  
PERC AT 76 in - 2 MIN/INCH IN C SOILS

ELEVATION	DEPTH INCHES	SOIL HORIZON	USDA SOIL TEXTURE	SOIL COLOR (MUNSELL)	SOIL MOTTLES	OTHER
64.05	0-12	FILL				
	12-14	O	LOAM	10 YR 2/2	NONE	FRABLE
	14-15	E	LOAMY SAND	10 YR 3/1	NONE	FRABLE
	15-22	A	LOAMY SAND	10 YR 4/4	NONE	FRABLE
60.88	22-38	B	LOAMY SAND	10 YR 5/6	NONE	LOOSE
	38-122	C	MED-CSE SAND	10 YR 6/4	NONE	LOOSE

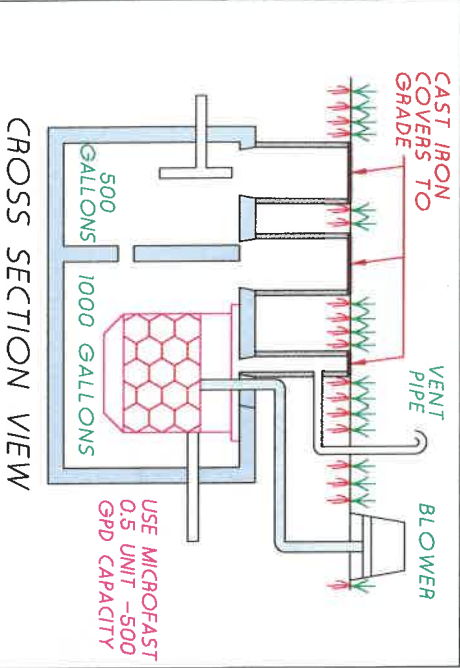
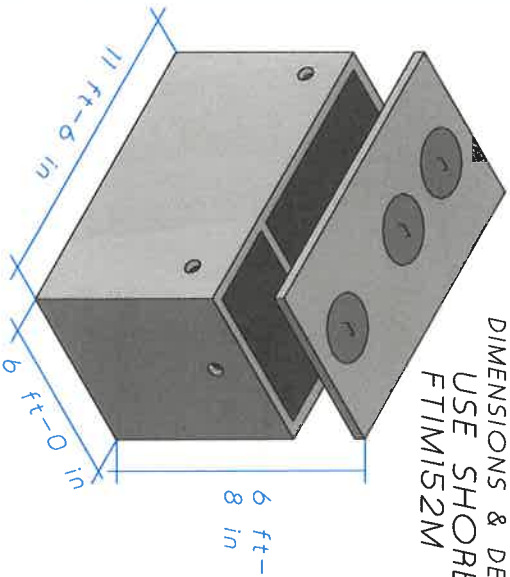
TEST PIT 2

NO GROUNDWATER ENCOUNTERED  
- 2 MIN/INCH IN C SOILS

ELEVATION	DEPTH INCHES	SOIL HORIZON	USDA SOIL TEXTURE	SOIL COLOR (MUNSELL)	SOIL MOTTLES	OTHER
64.00	0-10	FILL				
	10-12	O	LOAM	10 YR 2/2	NONE	FRABLE
	12-18	A	LOAMY SAND	10 YR 4/3	NONE	FRABLE
60.67	18-40	B	LOAMY SAND	10 YR 5/6	NONE	LOOSE
	40-132	C	MED-CSE SAND	10 YR 6/3	NONE	LOOSE

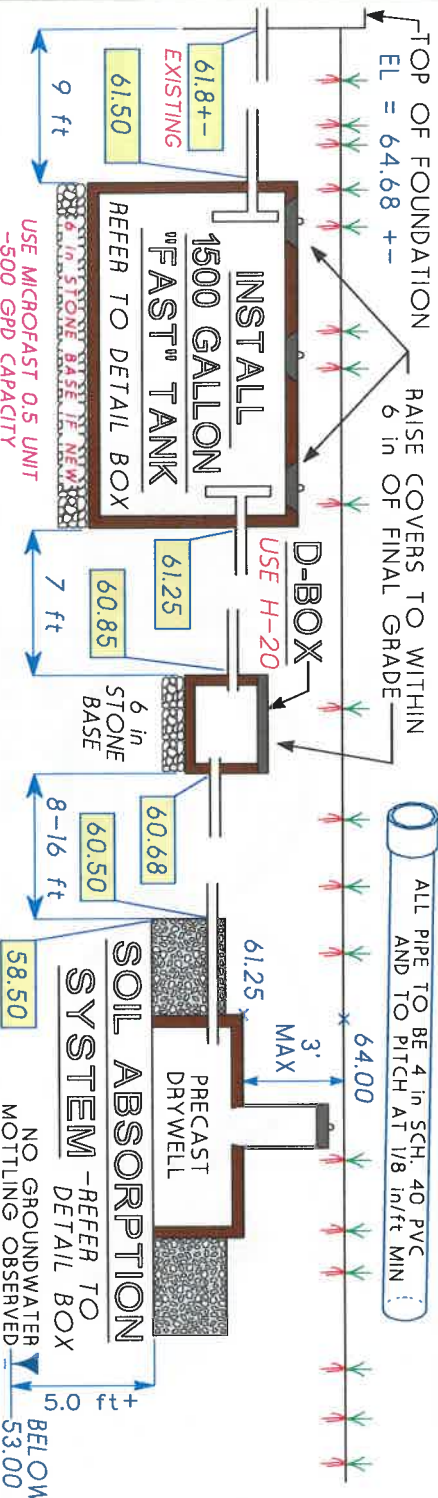
1500 GALLON "FAST" DUAL COMPARTMENT SEPTIC TANK

DIMENSIONS & DETAIL  
USE SHOREY  
FTIM152M



- NOTES**
- INSTALLER TO OBTAIN DISPOSAL WORKS PERMIT BEFORE STARTING WORK.
  - ALL COMPONENTS INSTALLED SHALL MEET THE MINIMUM REQUIREMENTS OF MASSACHUSETTS TITLE 5 SEPTIC CODE (310 CMR 15).
  - ECO-TECH RAPID RESPONSE RECOMMENDS THE INSTALLATION OF LOW FLOW FIXTURES & APPLIANCES, AND PERIODIC PUMPING OF THE SEPTIC TANK.
  - SYSTEM IS NOT DESIGNED TO WITHSTAND VEHICULAR LOADING. DO NOT PARK OR DRIVE VEHICLES OVER SEPTIC SYSTEM.

FLOW PROFILE



DESIGN CALCULATIONS

DESIGN FLOW: 3 BEDROOMS X 110 GPD = 330 GPD  
SEPTIC TANK: 330 GPD X 2 DAYS = 660 GALLONS  
REMOVE EXISTING 1000 GALLON SEPTIC TANK. INSTALL NEW 1500 GALLON "FAST COMPATIBLE" SEPTIC TANK.  
DISTRIBUTION BOX: INSTALL 3 OUTLET H-20 D-BOX

SOIL ABSORPTION SYSTEM:

THE LONG TERM ACCEPTANCE RATE FOR A CLASS ONE SOIL WITH A PERCOLATION RATE BELOW 5 MINUTES PER INCH = 0.74 GALLONS PER DAY PER SQUARE FOOT. THE LEACHING GALLERY DEPICTED BELOW CAN LEACH:

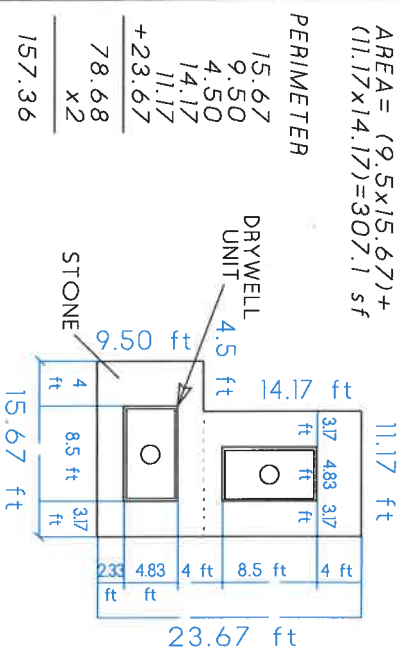
BOTTOM AREA + SIDEWALL AREA = 464.4 sf

FLOW CAPACITY = 0.74 x 464 = 343 gal/day

INSTALL THE LEACHING GALLERY AS CONFIGURED BELOW. FLOW CAPACITY = 343 gal/day WHICH EXCEEDS THE 330 gal/day REQUIRED FOR A THREE BEDROOM DESIGN.

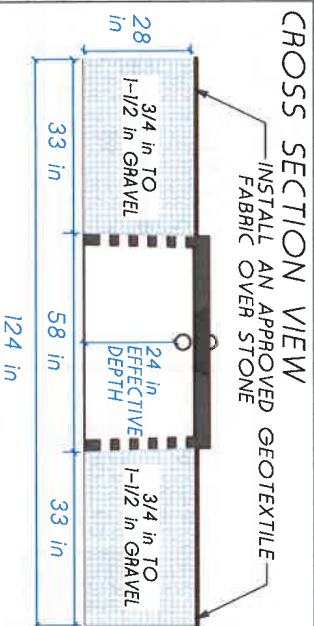
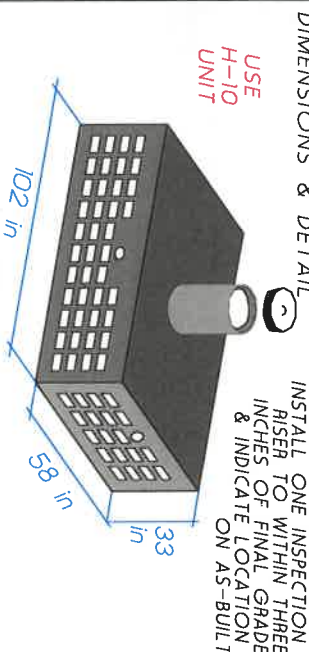
SOIL ABSORPTION SYSTEM CONSTRUCTION DETAIL

USE SHOREY PRECAST 500 GALLON LEACHING DRYWELL



500 GALLON DRYWELL

DIMENSIONS & DETAIL



ALL STONE TO BE DOUBLE WASHED AND FREE OF IRONS, DUST AND FINES IN PLACE