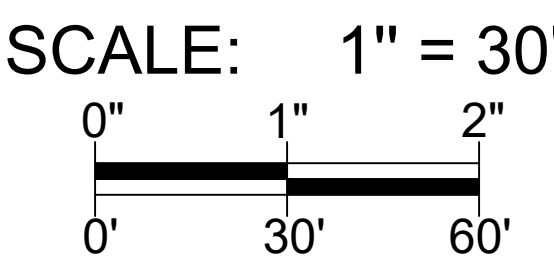
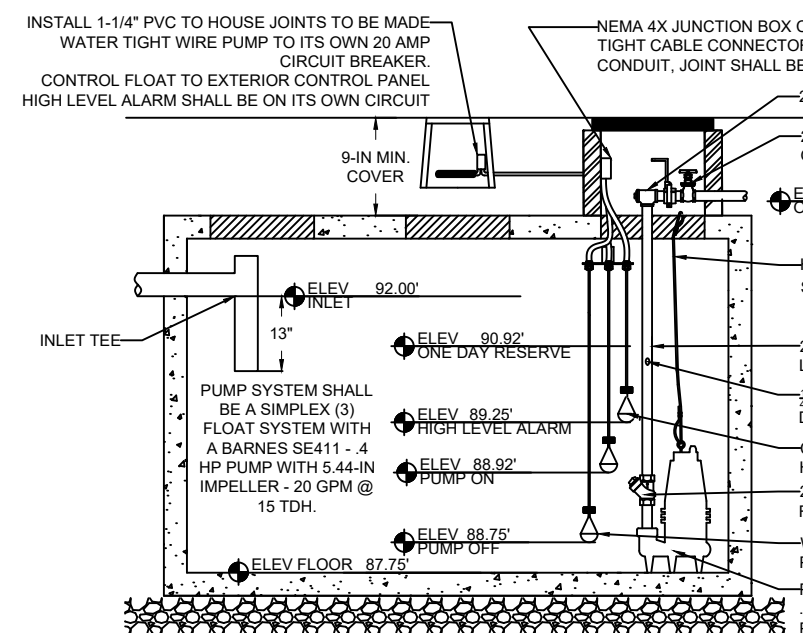


# PROPOSED SEPTIC SYSTEM SITE PLAN

SCALE: 1" = 30'



## PUMP CHAMBER

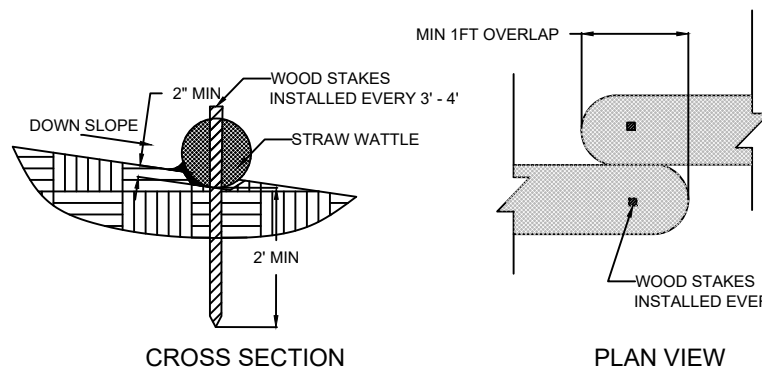


- 1. EXCAVATE A 2' DEEP BY 3' WIDE TRENCH ALONG THE CONTOUR OF WHERE THE STRAW WATTLE SHALL BE INSTALLED.
- 2. STAKE THE WATTLE IN ELEV. 3 TO 4 LINEAR FEET. USE 2" X 2" X 36" WOODEN STAKES.
- 3. WATTLE SHALL HAVE A MINIMUM OF A 2 FT OVERLAP BETWEEN EACH UNIT.
- 4. BACKFILL THE DOWN SLOPE SIDE OF THE WATTLE TRENCH.
- 5. IF ON PAVEMENT, PROVIDE SANDBAG ANCHORS.

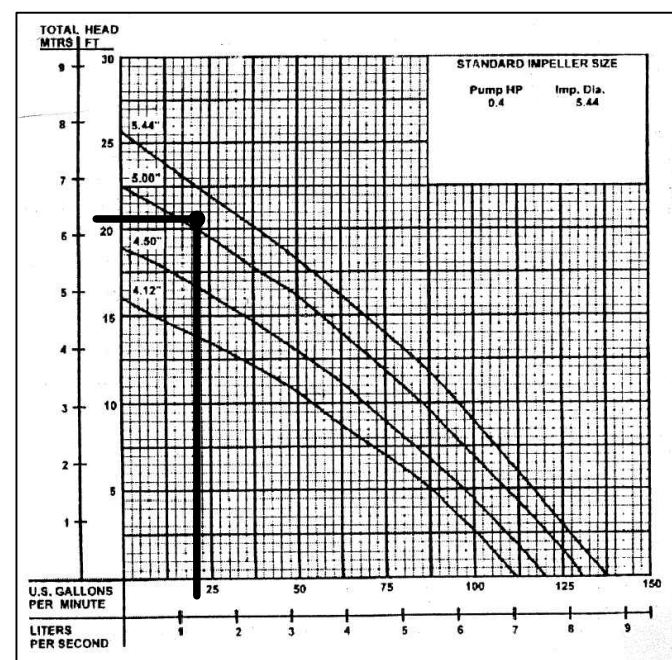
### NOTE:

- 1. THERE ARE NO PUBLIC WELLS WITHIN 500 FEET; PRIVATE WELLS WITHIN 100 FEET; SURFACE WATER WITHIN 150 FEET; SURFACE DRAINS WITHIN 50 FEET; OPEN SURFACE, SUBSURFACE OR FOUNDATION DRAINS WHICH INTERCEPT HIGH GROUND WATER WITHIN 50 FEET; VERNAL POOLS WITHIN 100 FEET; STORM DRAINAGE LEACHING CATCH BASINS OR DRY WELLS WITHIN 50 FEET; AND WITHIN THE BOUNDARY OF A 100 YEAR FLOOD, UNLESS SHOWN ON THIS PLAN SET.
- 2. I CERTIFY THAT THE PROPERTY IS ON A PRIVATE DOMESTIC WELL.
- 3. CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SIEVE ANALYSIS ON THE PROPOSED SAND TO BE USED ON THIS PROJECT.

## STRAW WATTLE



## PUMP CURVE



## SOIL SIEVE ANALYSIS RESULTS

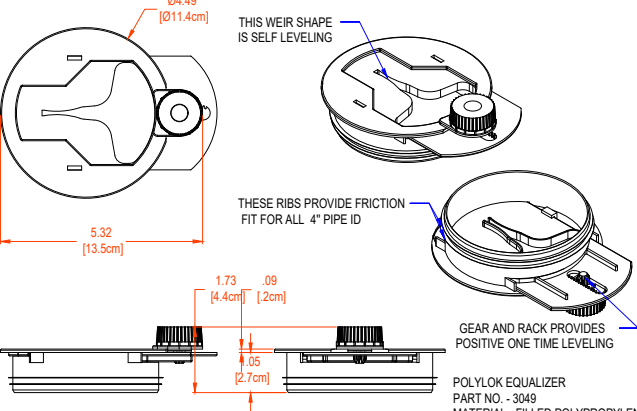
ANALYSIS PERFORMED BY:  
SW COLE ENGINEERING CORP.

DATE OF REPORT: 03/02/2021  
JOB NO: INST. 21-0081  
% SAND = 62.5%  
% SILT = 31.6%  
% CLAY = 5.9%

IN ACCORDANCE WITH 310 CMR 15.243:  
TYPE OF SOIL CLASSES:  
LOAMY SAND: CLASS II  
LOADING USE: 30 M.P.I.  
(MOST RESTRICTIVE IN CLASS II)

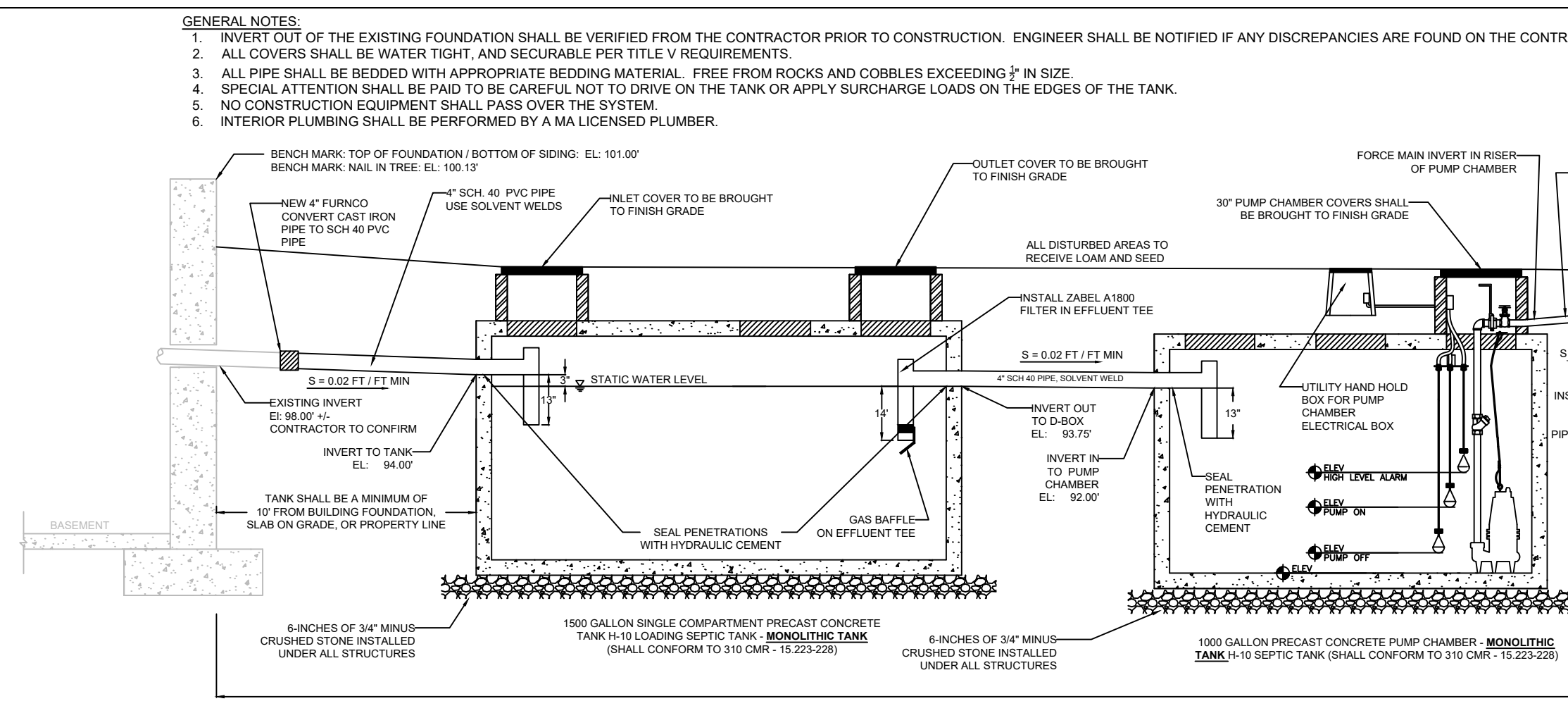
## POLYLOK EQUALIZER

REQUIRED AT ALL OUTLET INVERTS TO PRESBY TUBES

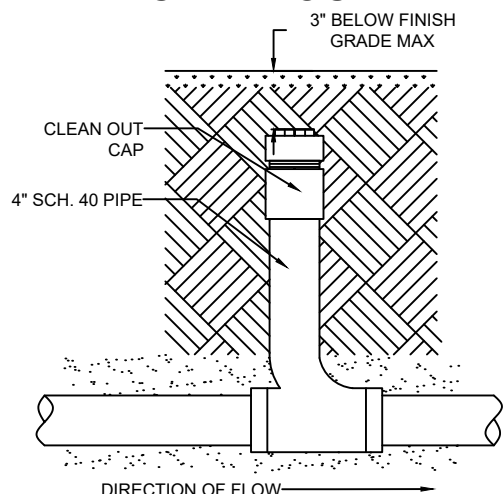


## PROPOSED SEPTIC SYSTEM PROFILE AND NOTES

NOT TO SCALE

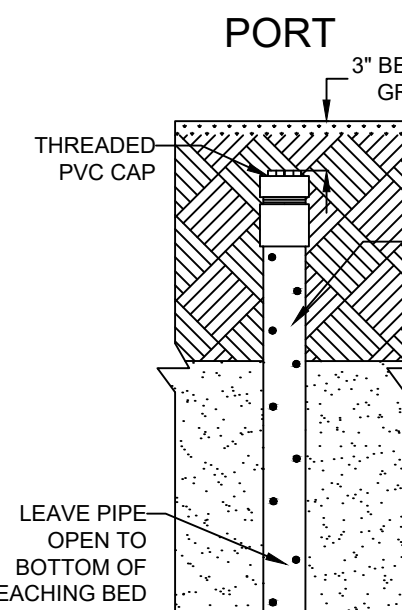


## CLEAN OUT



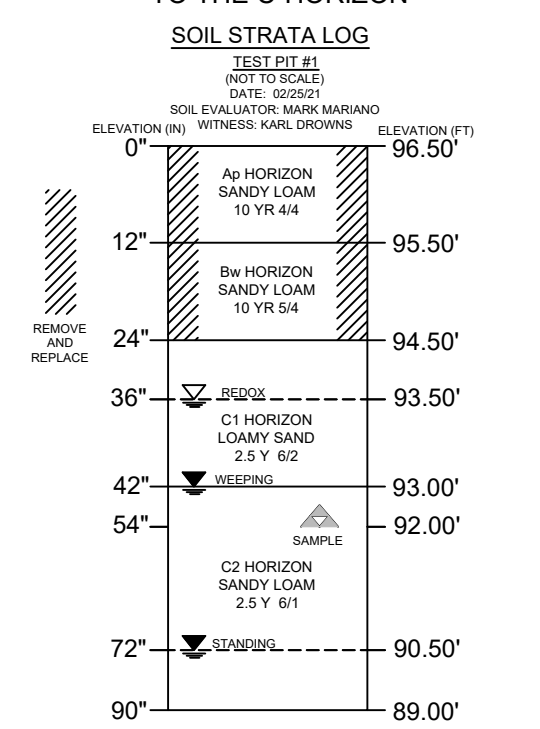
SCALE: NOT TO SCALE

## INSPECTION PORT



SCALE: NOT TO SCALE

NOTE: REMOVE FILL, Ap&B, Bw LAYERS TO THE C-HORIZON



## LEGEND

- ADJUSTED WATER TABLE
- OBSERVED WATER TABLE
- TEST PIT
- EXISTING GRADE
- PROPOSED GRADE
- WATER LINE
- FENCE LINE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELECOM
- OVERHEAD ELECTRICAL
- UTILITY POLE
- HYDRANT
- BURIED VALVE

## DESIGN CALCULATIONS / DESIGN PARAMETERS:

- ESTIMATED DESIGN FLOW:  
3 BEDROOMS X 110 GPD / BEDROOM = 330 GPD  
REHOBOTH BY LAW = 25% INCREASE = 330 GPD X 1.25 = 413 GPD
- SEPTIC TANK REQUIRED CAPACITY = 413 GPD X 200% DAILY FLOW = 826 GALLONS  
USE = 1500 GALLON SINGLE COMPARTMENT TANK
- LEACHING AREA REQUIREMENTS: USE 30 M.P.I. (4 FT SEPARATION)  
EFFLUENT LOADING RATING = 0.33 GPD/S.F. (CLASS II)  
WITH A LEACHING FIELD AREA REQUIRED:  
413 GPD / 0.33 GPD / S.F. = 1,252 S.F.
- CEMENT PROVIDED:  
GEOMAT PROVIDED:  
LOADING RATE FROM MANUAL: 0.67 GPD / SF  
413 GPD / 0.67 GPD / SF = 617 SF OF GEOMAT  
USE: GEOMAT 3900 = 3.42 SF / LF  
617 SF / 3.42 SF / LF = 181 LF REQUIRED  
(4) LANES X 50 LF / LANE = 200 LF PROVIDED  
200 LF X 3.42 SF / LF X 0.67 GPD / SF = 458 GPD PROVIDED > 413 GPD REQUIRED
- SAND BED:  
MINIMUM AREA = ALLOW UP TO 60% AGGREGATE BED SIZE  
AGGREGATE BED SIZE = 1,251 S.F. REQUIRED  
GEOMAT BED MIN = 1,251 S.F. X .60 = 751 SF REQ  
MASSACHUSETTS MIN BED SIZE = 400 S.F. REQUIRED  
PROPOSED SAND BED SIZE = 52 LF X 17 FT = 884 SF PROVIDED > 751 S.F. REQUIRED
- PUMPING CHAMBER:  
CHAMBER CAPACITY: 1000 GALLONS  
USE 20 GAL TOTAL DOSE  
DEPTH OF DOSE = 0.17  
RESERVE VOLUME REQUIRED = 440 GALLONS  
RESERVE PROVIDED = (7.33' X 4.5' X 2.39' = 77.48 FT<sup>3</sup>/GAL) = 589 GALLONS > 413 GALLONS

NO PRODUCT SUBSTITUTIONS WILL BE PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER AND THE LOCAL APPROVING AGENT. CHANGE IN SYSTEM PRODUCT MAY BE SUBJECT TO REDESIGN.

## CONTRACTOR NOTES / GENERAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION SANITARY CODE, TITLE 5, AND LOCAL MUNICIPAL BOARD OF HEALTH CODES, AND REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE BOARD OF HEALTH AGENT AND THE DESIGN ENGINEER WITHIN A TIMELY MANNER TO ALLOW FOR INSPECTIONS OF ALL CONSTRUCTION PHASES, INCLUDING BUT NOT LIMITED TO, OBSERVATION OF THE OPEN HOLE PRIOR TO THE PLACEMENT OF FILL MATERIAL AND THE COMPLETION OF THE SYSTEM PRIOR TO FINAL COVER.
- THERE ARE NO KNOWN WELLS WITHIN 100 FEET OF THE PROPOSED LEACHING FIELD.
- SEPTIC TANK SHALL BE H-10 DESIGN WITH A MINIMUM CAPACITY OF 1500 GALLONS, SINGLE COMPARTMENT TANK. IF VEHICLE TRAFFIC IS PRESENT USE H-20 LOADED CAPACITY TANK.
- USE OF A DOMESTIC GARBAGE GRINDER IS PROHIBITED WITH THIS DESIGN.
- DISTRIBUTION BOX TO BE H-20 DESIGN, IF VEHICLE TRAFFIC IS PRESENT, USE H-20 LOADING CAPACITY TANK.
- ALL DESIGN COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR APPROVED EQUAL PER 310 CMR 15.221 (12).
- PER 310 CMR 15.242(2), FROM THE DATE OF INSTALLATION OF THE SOIL ABSORPTION SYSTEM UNTIL RECEIPT OF A CERTIFICATE OF COMPLIANCE FROM THE APPROVING AUTHORITY IN ACCORDANCE WITH 310 CMR 15.021, THE PERIMETER OF THE SOIL ABSORPTION SYSTEM SHALL BE STAKED AND FLAGGED TO PREVENT THE USE OF SUCH AREA FOR ALL ACTIVITIES WHICH MIGHT DAMAGE THE SOIL ABSORPTION SYSTEM. SUCH FLAGGING IS INTENDED TO PREVENT HEAVY EQUIPMENT FROM COMPROMISING THE SYSTEM.
- LOCATION OF UTILITIES IS APPROXIMATE AND CONTRACTORS SHALL NOTIFY DIGSAFE, (811) AT LEAST 72 HOURS PRIOR TO THE ONSET OF CONSTRUCTION TO HAVE ALL EXISTING UTILITIES LOCATED AND CLEARLY MARKED.
- UNSATURABLE SOIL AS INDICATED ON THE CONTRACT PLANS, SUCH AS TOPSOIL, SUBSOIL, AND OTHER IMPERVIOUS MATERIALS SHALL BE REMOVED AND REPLACED WITH CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES GRADE AS FOLLOWS:
- NO MATERIAL LARGER THAN 2 INCHES.
- UP TO 45% BY WEIGHT MAY BE RETAINED ON A #4 SIEVE.
- OF THE FRACTION PASSING THE #4 SIEVE, THE FOLLOWING CRITERIA APPLY:

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS
#4	4.75 mm	95% - 100%
#10	0.30 mm	5% - 30%
#20	0.075 mm	0% - 10%
#40	0.075 mm	0% - 2%
- A SIEVE ANALYSIS OF THE MATERIAL SHALL BE PERFORMED TO DETERMINE THAT IT MEETS THE GRADATION REQUIREMENTS NOTED ABOVE. THE INSTALLER SHALL PROVIDE A COPY OF THE SIEVE ANALYSIS RESULTS TO THE DESIGN ENGINEER.
- ALL PIPING COMPONENTS IN THIS PROPOSED SYSTEM SHALL BE SOLID SCHEDULE 40 PVC, PIPE SIZE INSTALLED IN ACCORDANCE WITH PLANS. PIPING SHALL BE SOLVENT WELDED WITH APPROPRIATE GLUE.
- SEPTIC SYSTEM OWNER SHALL HAVE THE SEPTIC TANK AND OUTLET FIELD INSPECTED ANNUALLY AND CLEANED AND PUMPED AS NECESSARY.
- DESIGN ENGINEER ASSUMES NO LIABILITY FOR DAMAGES AS A RESULT OF FAULTY CONSTRUCTION OR ANY DEVIATION OF ALIGNMENT AND GRADE SPECIFIED HEREIN WITHOUT PRIOR WRITTEN NOTIFICATION AND WRITTEN APPROVAL FROM THE DESIGN ENGINEER.
- SEPTIC TANK SHALL HAVE A ZABEL 1800 FILTER OR APPROVED EQUIVALENT INSTALLED IN OUTLET TEE.
- TOPOGRAPHIC INFORMATION TAKEN FROM FIELD SURVEY BY OAKHILL ENGINEERING IN FEB 2021. THIS DOES NOT CONSTITUTE A PROPERTY BOUNDS SURVEY.
- WETLAND AREA FOUND ON THIS PROPERTY OR WITHIN 100 FT OF THIS PROPOSED WORK. SEE CONSERVATION PLAN FOR DETAILS.
- CONTRACTOR TO PERFORM DUE DILIGENCE ON LOCATING BURIED UTILITIES, BURIED STRUCTURES, OVERHEAD WIRES, AND OBSTRUCTIONS. CONTRACTOR SHALL FOLLOW ALL OSHA, LOCAL, AND STATE REGULATIONS.
- NO CONSTRUCTION EQUIPMENT SHALL PASS OVER THE SYSTEM.
- CONTRACTOR SHALL FINISH GRADE SURFACE RUNOFF AWAY FROM THE SYSTEM, STRUCTURES AND PROPERTY LINES.
- OWNER OR FUTURE OWNER SHALL TEST WELL WATER FOR CONTAMINATION.



**APPLICANT:**  
MANUEL PARECE  
510 WINTHROP STREET  
REHOBOTH, MA 02769

**OWNER:**  
MANUEL PARECE  
510 WINTHROP STREET  
REHOBOTH, MA 02769

**REPAIR**  
SANITARY SEWERAGE  
DISPOSAL SYSTEM  
  
510 WINTHROP STREET  
REHOBOTH, MA 02769  
MAP: 031  
LOT: 069

OAKHILL ENGINEERING LLC  
75 OAK HILL AVE; 2ND FL  
SEEKONK, MA 02771

401-574-0871  
MARK0426@GMAIL.COM

SHEET NUMBER: C-1  
SCALE = 1" = 30'  
DATE: 03/12/21

DRAWN BY: MPM  
CHECKED BY: MPM

ENGINEER STAMP:

