

SOIL TEST DATA

2001 & 2004 SOIL TESTING DONE BY LAND ENGINEERING ASSOICATES, INC. DEEP TEST PIT #1 - JAN. 25, 2001 TOPSOIL 5-35" OB FINE SANDY LOAM WITH ROOTS 35-70" B-GB FINE SAND & SILT W/ COBBLES & STONES DRY, VERY TIGHT NO MOTTLING NO GROUNDWATER NO LEDGE REFUSAL AT 70" DEEP TEST PIT #2 - JAN. 25, 2001 0-4" TOPSOIL TB FINE SILTY LOAM WITH ROOTS B-GB COMPACT SILT W COBBLES & STONES POCKETS OF MICA AT 46" NO MOTTLING NO GROUNDWATER NO LEDGE DEEP TEST PIT #3 - JAN. 25, 2001 0-6" TOPSOIL 6-39" B FINE SILTY LOAM WITH ROOTS 39-84" B-GB FINE SAND & SILT W/ COBBLES & STONES ROOTS TO 84" NO MOTTLING NO GROUNDWATER NO LEDGE DEEP TEST PIT #4 - JAN. 25, 2001 0-5" TOPSOIL 5-32" B FINE SILTY LOAM W/ ROOTS 32-78" TB-GB FINE SAND & SILT W/ COBBLES & STONES NO MOTTLING NO GROUNDWATER NO LEDGE DEEP TEST PIT #5 - JAN. 25, 2001 0-6" TOPSOIL 6-36" OB-TB FINE SILTY LOAM W/ ROOTS 36-80" TB-GB FINE SAND & SILT W/ COBBLES & STONES MOTTLING AT 36" NO GROUNDWATER NO LEDGE DEEP TEST PIT #6 - JAN. 25, 2001 0-6" TOPSOIL 6-27" OB-TB FINE SILTY LOAM WITH ROOTS 27-82" B-GB FINE SAND & SILT (POCKETS OF MICA)

NO MOTTLING

NO LEDGE

NO GROUNDWATER

MANTIS 536-8

FASTEN FILTER
FABRIC W/NYLON
TWINE. FASTEN AT
TOP, CENTER, AND
BOTTOM. ALLOW 8"
OVERLAP AT JOINTS.

DIG TRENCH AND EXTEND FABRIC 6' INTO SOIL. CURL EDGE UPHILL, BACKFILL TRENCH AND COMPACT.

FLOW

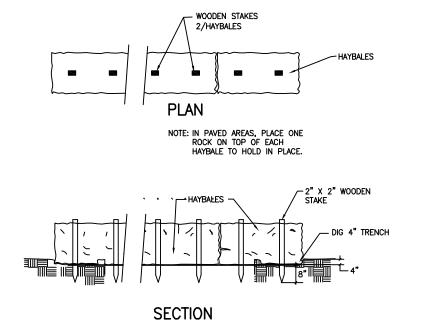
EXISTING GRADE——

DEEP TEST PIT #7 - JUNE 16, 2004 (HAND DUG HOLE) TOPSOIL BROWN SILTY LOAM WITH ROOTS 35-51" TB SANDY TILL W/ STONES & COBBLES SLIGHT MOTTLING AT 33" NO GROUNDWATER NO LEDGE PERCOLATION TEST #1 - JAN. 25, 2001 OBSERVED PERC. RATE = 10.1- 20 MINUTES PER INCH PERCOLATION TEST #2 - JAN. 25, 2001 OBSERVED PERC. RATE = 10.1- 20 MINUTES PER INCH DEEP TEST PIT #C-1 - NOV. 20, 2014 0-8" TOPSOIL ORANGE BROWN FINE SILTY LOAM 26-84" TAN FINE SAND & SILT WITH ANGULAR ROCK & MICA ROOTS TO 70" NO MOTTLING NO GROUNDWATER NO LEDGE DEEP TEST PIT #C-2 - NOV. 20, 2014 0-6" TOPSOIL 6-16" ORANGE BROWN FINE SILTY LOAM MODERATELY COMPACT LIGHT TAN FINE SAND & SILT NO MOTTLING NO GROUNDWATER NO LEDGE DEEP TEST PIT #C-3 - NOV. 20, 2014 0-8" TOPSOIL ORANGE BROWN FINE SILTY LOAM 23-84" MODERATELY COMPACT TAN FINE SANE & SILT WITH SOME ANGULAR ROCK ROOTS TO 70" NO MOTTLING NO GROUNDWATER NO LEDGE DEEP TEST PIT #C-4 - NOV. 20, 2014 0-9" TOPSOIL ORANGE BROWN FINE SILTY LOAM 24-84" TAN FINE SAND & SILT WITH ANGULAR ROCK & MICA NO MOTTLING NO GROUNDWATER NO LEDGE

DEEP TEST PIT #C-5 - NOV. 20, 2014 0-9" TOPSOIL 9-30" ORNAGE BROWN FINE SANDY LOAM 30-80" GREY-BROWN FINE SAND & SILT WITH SOME ANGULAR ROCK ROOTS TO 55" NO MOTTLING NO GROUNDWATER NO LEDGE PERCOLATION TEST #C-1 - NOV. 20, 2014 DEPTH = 26" PRE-SOAK 9:00 READING 10" 10:55 12.75" 15" 11:05 11:15 11:25 11:35 17.25" 11:45 18.25" 11:55 19.25**"** PERCOLATION RATE = 10-20 MINUTES PER INCH PERCOLATION TEST #C-2 - NOV. 20, 2014 DEPTH = 28" PRE-SOAK 9:00 READING 10.5**"** 10:56 13.75 11:06 11:16 11:26 16.375 11:36 17.375" 11:46 18.35**"** 11:56 19.125" PERCOLATION RATE = 10.1-20 MINUTES PER INCH PERCOLATION TEST #C-3 - NOV. 20, 2014 DEPTH = 28"PRE-SOAK 9:00 TIME READING 10:57 7.625" 11:07 8.5" 11:17 11:27 9.75" 11:37 10.25" 11:47 10.75" 11:57 PERCOLATION RATE = 10.1-20 MINUTES PER INCH

SEDIMENTATION AND EROSION CONTROL NOTES

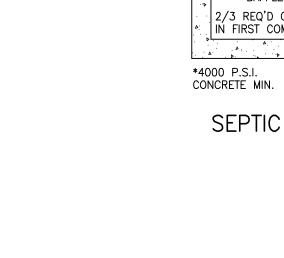
- 1. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM. PERMANENT STABILIZATION SHALL BE SCHEDULED AS SOON AS FINAL GRADES ARE ESTABLISHED.
- 2. ALL DISTURBED AREAS SHALL BE FINE GRADED AND SEEDED WITH AN APPROVED SEED MIXTURE. COVER NEWLY SEEDED AREAS WITH MULCH HAY OR SALT HAY.
- 3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE 2002 CONNECTICUT 'GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL' HANDBOOK.
- 4. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. CHECK AFTER EACH STORM EVENT.
- 5. ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF REQUIRED BY TOWN AUTHORITIES.
- 6. SEDIMENT DEPOSITS REMOVED FROM FILTER BARRIERS SHALL BE PLACED IN FILL AREAS OR SPREAD WHERE THERE IS PROPOSED VEGETATIVE COVER. ANY SEDIMENT DEPOSITS REMAINING AFTER THE FILTER BARRIER IS REMOVED SHALL BE FINE GRADED AND PLANTED ACCORDING TO PLAN.
- 7. THE SITE CONSTRUCTION CONTRACTOR IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, NOTIFYING THE PLANNING AND ZONING OFFICE (AND/OR THE CONSERVATION COMMISSION) OF ANY TRANSFER OF THIS RESPONSIBILITY AND CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED TO A NEW OWNER.

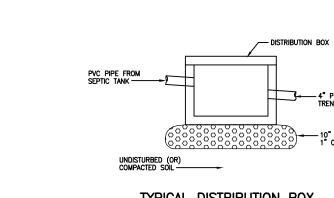


HAYBALE SEDIMENT PROTECTION

- STEPPED CONCRETE MANHOLE INSPECTION ACCESS ----COVER TO GRADE RISER AND LID (AT OR NEAR GROUND SURFACE) (MIN. 59 LBS. OR WITH OPTIONAL SLOPE GROUND AWAY LOCKING MECHANISM) FROM RISER INSPECTION - PVC RISERS OPENING -RISERS REQUIRED ON TANKS DEEPER THAN 12" (2' DIAMETER RISER ON TANKS DEEPER THAN 24") SEWER -POLYETHYLENE STATE APPROVED GASKET (TYP.) 6" OUTLET FILTER - INLET DEPTH - CONNECT. DEFLECTOR 2/3 REQ'D CAPACITY MID DEPTH IN FIRST COMPARTMENT *4000 P.S.I. CONCRETE MIN.

SEPTIC TANK (<2000 GAL)
NOT TO SCALE





DRIVEWAY PAVEMENT

NOT TO SCALE

TYPICAL DISTRIBUTION BOX

NOT TO SCALE

1"X1"X48" HARDWOOD

POST AT 10' O.C.

TILT UPHILL 10'

1" FINE BITUMINOUS

1/2" COARSE BITUMINOUS

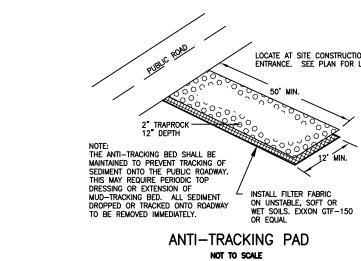
6" PROCESSED AGGREGATE

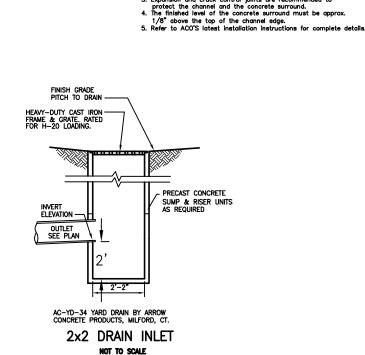
COMPACTED SUBGRADE

WORK SEQUENCE:

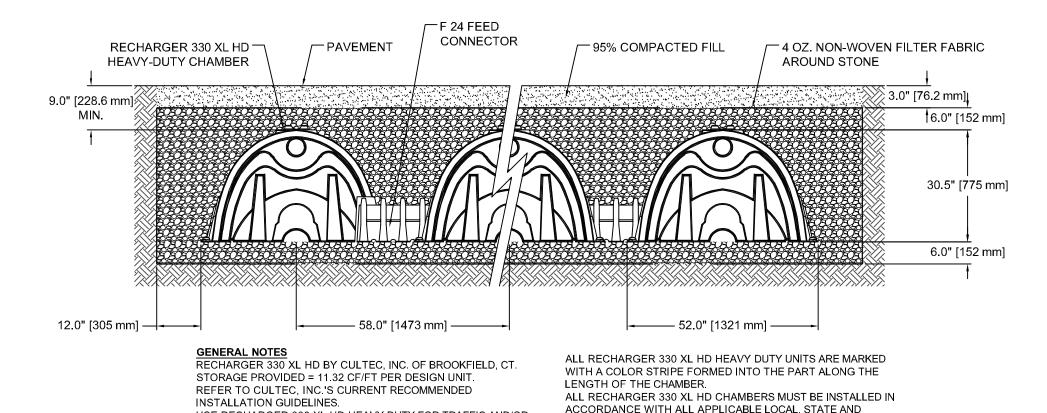
SILT FENCE

NOT TO SCALE

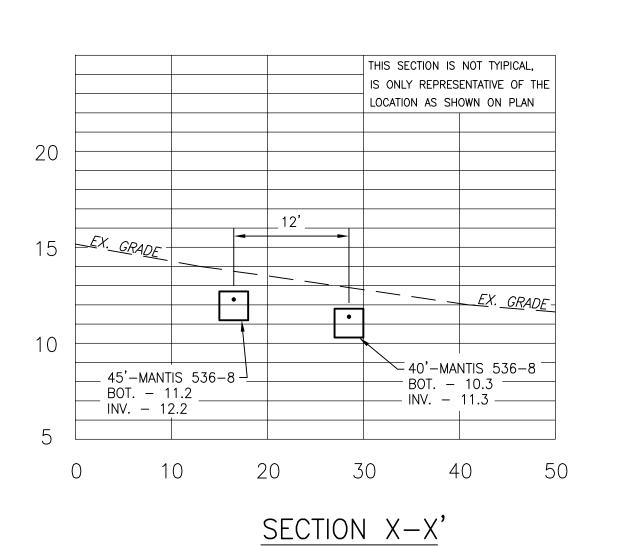




ACO TRENCH DRAIN



FEDERAL REGULATIONS.



SCALE- H: 1"-10'

V: 1"-5'

USE RECHARGER 330 XL HD HEAVY DUTY FOR TRAFFIC AND/OR

H20 APPLICATIONS.

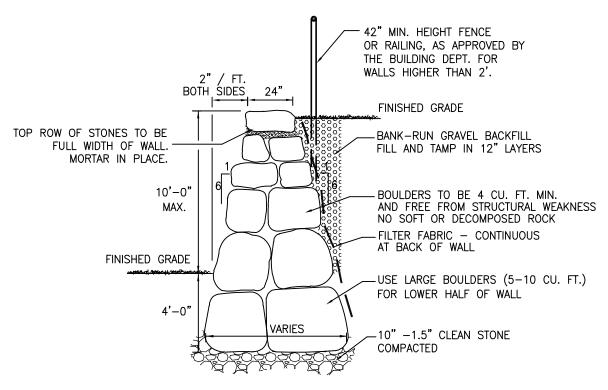
TRASSED CHARGE

TO O.C. (TYP.)

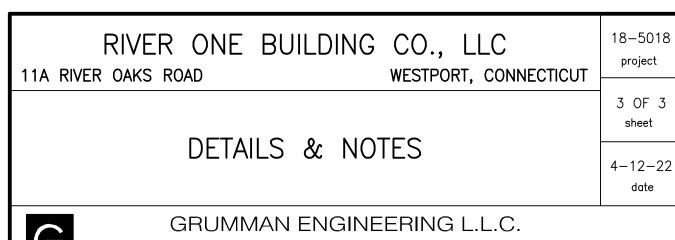
PLAN VIEW

SEWAGE DISPOSAL SYSTEM NOTES

- 1. THE PROPOSED SEWAGE DISPOSAL SYSTEM SHALL CONFORM TO SECTIONS 19-13-B103d THROUGH 19-13-B104d OF THE CONNECTICUT STATE HEALTH CODE.
- 2. THE WESTPORT WESTON HEALTH DISTRICT AND THE ENGINEER OF RECORD SHALL BE NOTIFIED THREE DAYS PRIOR TO COMMENCEMENT OF EACH PHASE OF CONSTRUCTION.
 - 3. NO CERTIFICATE OF CONFORMANCE TO STANDARDS SHALL BE ISSUED BY THE DESIGN ENGINEER IF PROPER NOTICE IS NOT PROVIDED FOR INSPECTIONS OR IF INSPECTIONS ARE NOT MADE PRIOR TO BACKFILLING OF BELOW GROUND STRUCTURES AND APPURTENANCES.
 - 4. ALL EXISTING SITE AND UTILITY LOCATIONS ARE AS TAKEN FROM A 'PROPOSED SUBSURFACE DISPOSAL SYSTEM, GRADING PLAN & EROSION CONTROL PLAN, 11A RIVEROAKS ROAD, WESTPORT, CT' BY CIVIL 1, DATED FEB. 10, 2015. TOPOGRAPHIC DATUM NAVD 1988.
 - 5. THE PROPOSED STRUCTURE IS A FIVE-BEDROOM DWELLING. THE REQUIRED EFFECTIVE LEACHING AREA FOR THIS HOUSE, WHICH IS BASED UPON A FILL SOIL PERCOLATION RATE OF 1"/10.1-20 MINUTES IS 900 SQUARE FEET.
- 6. THE PROPOSED LEACHING AREA CONSISTS OF 85 LINEAR FEET OF 18"
 MANTIS 536-8 TRENCH, WHICH WILL PROVIDE 935 S.F. EFFECTIVE
 LEACHING AREA, (85 x 11.0 = 935). ANY SECTIONS TO BE LOCATED
 UNDER THE DRIVEWAY SHALL BE DESIGNED TO WITHSTAND H-20
 LOADINGS.
- '. THE PROPOSED SEPTIC SYSTEM SHALL UTILIZE A NEW 1500-GALLON SEPTIC TANK THAT CONFORMS TO THE SPECIFICATIONS OUTLINED IN THE STATE OF CONNECTICUT TECHNICAL STANDARDS.
- 8. THE PROPOSED DWELLING WILL BE SERVICED BY PUBLIC WATER SUPPLY. FIELD INVESTIGATIONS VERIFY THERE ARE NO EXISTING WELLS WITHIN 75' OF THE PROPOSED SEPTIC SYSTEM LOCATION.
- 9. A MINIMUM SETBACK DISTANCE OF 50' SHALL BE MAINTAINED BETWEEN ANY LEACHING AREA AND WETLAND OR WATERCOURSE.
- 10. A BENCHMARK HAS BEEN ESTABLISHED IN THE FIELD TO ASSURE PROPER SYSTEM INSTALLATION AS SHOWN ON PLAN.
- 11. DISTRIBUTION BOXES SHALL BE ON STABLE FOOTING, CONSISTING OF 10" CRUSHED STONE.
- 12. ALL LOCATIONS OF INLETS AND OUTLETS FROM THE SEPTIC TANK AND
- DISTRIBUTION BOXES SHALL BE GASKETED.
- 13. THE CONTRACTOR SHALL REMOVE ALL TREES, STUMPS, AND LARGE STONES WITHIN LIMITS OF THE SEWAGE DISPOSAL SYSTEM.
- 14. THE CONTRACTOR SHALL STRIP AND STOCKPILE TOPSOIL OUTSIDE THE LIMITS OF SEWAGE DISPOSAL SYSTEM AND REUSE IT TO FINISH GRADE THE AREA OF DISTURBANCE, ADDITIONAL TOPSOIL, IF REQUIRED TO COVER DISTURBED AREAS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 15. THE CONTRACTOR SHALL TOPSOIL, FINE RAKE, SEED AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION.
- 16. ALL UTILITY LOCATIONS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THE LOCATION OF THE UTILITIES IN THE FIELD BY WHATEVER MEANS HE DEEMS
- 17. THIS SYSTEM IS NOT DESIGNED TO ACCEPT WASTE FROM GARBAGE DISPOSAL UNITS, BACKWASH FROM WATER SOFTENER UNITS OR DISCHARGE FROM JACUZZI TYPE HOT TUBS (> 100 GALLONS).
- 18. CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING "CALL BEFORE YOU DIG", 1-800-922-4455, PRIOR TO START OF ANY EXCAVATION WORK
- 19. THIS DESIGN CONFORMS TO ALL APPLICABLE CODES AND ACCEPTED PRACTICE. NO OTHER WARRANTY IS EXPRESSED OR IMPLIED.
- 20. THERE ARE NO EXISTING STORMWATER RETENTION SYSTEMS ON ADJACENT PROPERTIES WITHIN 50 FT. OF THE PROPOSED SEPTICE
- 21. MLSS REQUIREMENTS: FF = 2.0
 PF = 1.25
 RL > 60" MLSS NOT REQUIRED.



BOULDER RETAINING WALL



GRUMMAN ENGINEERING L.L.C.
CONSULTING CIVIL ENGINEERS

20 KNIGHT STREET, NORWALK, CONNECTICUT 06851
PH: (203) 853–3833 FAX: (203) 286–5057