

#### PERCOLATION TESTING

PERCOLATION TEST HOLE #1 TEST PIT: 40" X 40" X 20" DEEP PERCOLATION HOLE: 12" Ø X 36"

TOTAL DEPTH: 56" PRESOAK DATE: 6.19.2022 (24 HRS. PRIOR)\* PERCOLATION TEST DATE: 6.20.2022 SANDY LOAM PERCOLATION RATE: 1.0"/HOUR

SOIL FOUND: 0"-8" TOPSOIL

NO GROUNDWATER

NO LEDGE ROCK

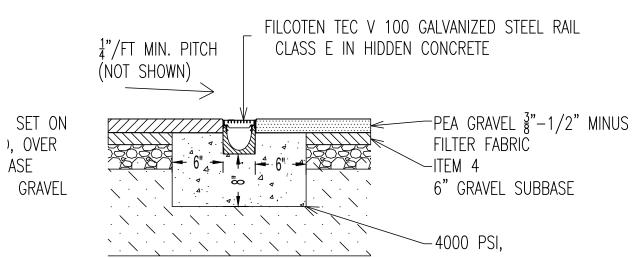
8"-24" SANDY LOAM 24"-56" GRAVELY SANDY LOAM

#### LAND DISTURBANCE

TEMPORARY LAND DISTURBANCE: 952 SF PERMANENT LAND DISTURBANCE: 503 SF



### LOCATION MAP



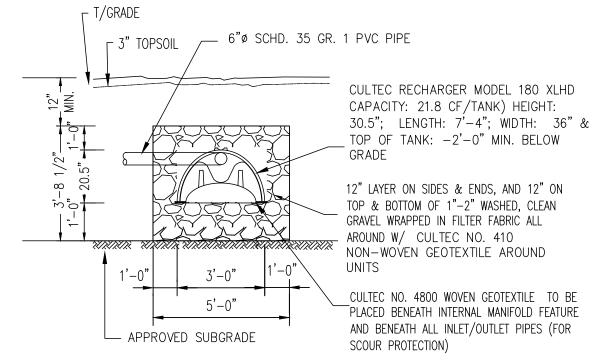
# FILCOTEN TRENCH DRAIN

NDS - FILCOTEN TEC V 100 GALVANIZED STEEL RAIL CLASS E IN HIDDEN CONCRETE

#### 9'-4" MINIMUM 12" LAYER ON SIDES & ENDS, AND 12" ON 7'-4" TOP & BOTTOM OF 1"-2" WASHED, CLEAN CULTEC RECHARGER \_ GRAVEL WRAPPED IN FILTER FABRIC ALL MODEL 180XLHD -AROUND W/ CULTEC NO. 410 END UNIT NON-WOVEN GEOTEXTILE AROUND PVC INFILTRATOR RECHARGER MODEL #180XLHD

#### REAR DRYWELL SECTION (PLAN)

ONE (1) CULTEC RECHARGER MODEL 180 XL HD



#### REAR DRYWELL SECTION

ONE (1) CULTEC RECHARGER MODEL 180 XL HD - END MODEL

### REAR DRYWELL CALCULATIONS:

DRAINAGE AREA (STONE PATIO ONLY AT RIGHT SIDE YARD) = 503 SF

TOTAL VOLUME OF WATER TO BE STORED PER DAY =  $503 \text{ SF } \times 6.4^{\circ}/12^{\circ}/\text{FT} = 268.3 \text{ CF/DAY}$ 

PERCOLATION RATE = 2 CF./SF./DAY

1 - CULTEC RECHARGERS MODEL 180XLHD, LENGTH ENCASED IN 12" ON SIDES & ENDS, AND 12" OF GRAVEL ON TOP & BOTTOM GRAVEL (OVERALL DIMENSIONS) = 9.33' X 5.0' X 3.71'

TOTAL VOLUME =  $9.33' \times 5.00' \times 3.71' - 1 \times 21.81 \text{ CF/UNIT} = 151.3 \text{ cf}$ 

VOLUME OF 1 UNITS = 1 X 21.81 CF/UNIT = 21.81 CF

VOLUME OF STONE AROUND UNITS = 188.5 CF

VOID = 1/3 X VOLUME OF STONE = 151.3 cf /3 = 50.4 CF

<u>UNIT PERCOLATION AREA =</u>

ENDS: 5.0' X 3.71' X 2 = 37.1 SF SIDES:  $9.33' \times 3.71' \times 2 = 69.2 \text{ SF}$ TOTAL PERCOLATION AREAS =

212.7 <u>CF/DAY</u> VOLUME OF PERCOLATION = 106.3 CF X 2.0 = VOLUME OF WATER STORED = 50.4 + 21.81 CF = TOTAL WATER STORED = 284.9 CF/DAY

REMOVE EXISTING REAR-RIGHT STONE PATIO AT PROPOSED PEA GRAVEL SEATING AREA, AND STACK USABLE STONES AS

INSTALL SILT & HAY FENCING AROUND PROPOSED REAR-YARD DRYWELL. CALL FOR TOWN'S INSPECTION OF SILT & HAY

REMOVE THE STONE PATIO WHERE PROPOSED NEW PEA GRAVEL SEATING AREA IS TO BE LOCATED, AND STACK USABLE

REMOVE AND RESET EXISTING STONE PATIO SLOPED AT 1/4"/FT (AT THE RIGHT-SIDE YARD) AS DIRECTED BY OWNER.

INSTALL SOLID 6"Ø PVC SCHEDULE 35 PVC DRAINAGE PIPING SLOPED AT 1/4"/FT. FROM DRYWELL TO STONE PATIO AND

CALL FOR BLDG. DEPT INSPECTION & G&D'S (ENGINEER) INSPECTION #2 OF ALL NEW DRAINAGE PIPING. NO DRAINAGE

15. CALL FOR FINAL INSPECTION BY BUILDING DEPT. INSPECTOR AND G&D'S (ENGINEER FINAL INSPECTION #3).

HAND DIG & WHEEL BARROW OUT SPOIL FOR INSTALLATION OF REAR DRYWELL. THERE IS VERY LIMITED ON SITE

REAR-YARD STOCK PILING. DRYWELL MUST BE MIN. 10' FROM PROPERTY LINES.

14. RESTORE ALL AFFECTED SITE FEATURES (CURB STONES, GRASS, GARDEN BEDS ETC.)

STONE FOR OWNER"S FUTURE USE AS DIRECTED BY OWNER

PIPING SHALL BE COVERED PRIOR TO INSPECTION & APPROVAL.

INSTALL NEW TRENCH DRAIN AT REAR-RIGHT PATIO.

CALL FOR BUILDING DEPT. INSPECTION #2 AND G&D'S (ENGINEER) INSPECTION #1.

DIG OUT DRYWELL, INSTALL FILTER FABRIC, STONE ALL AROUND CULTEC 180 XLHD DRYWELL.

284.9 CF/DAY (PROVIDED) > 268.3 CF/DAY (REQUIRED)

#### **ZONING COMPLIANCE TABLE**

(NYS LICENSED LAND SURVEYOR) SURVEY DATED 09.22.2015

11 BRAMLEY LANE – DOBBS FERRY, NY ZONE: OF-4 (ONE-FAMILY RESIDENTIAL DISTRICT 4) ZONE OF-4 | SECTION: 3.14 | BLOCK: 126 | LOT: 11 0.1885 ACRES - 8,211 SF (NON-CONFORMING LOT)

LOT INFORMATION	ALLOWED PER CODE	EXISTING	PROPOSED	COMP- LIANCE
Lot Area	10,000 SF	0.1885	No change	Non-
		Acres 8,211 sf		compliant
Minimum Lot Width	100 ft	70'	No change	Non- compliant
Minimum Lot Depth	100 ft	87.8 ft	No change	Non- compliant
Minimum Yards (Setb	acks):			•
Front yard	25 ft.	17.1 ft	No change	Non- compliant
Rear yard	25 ft	35 ft	No change	Compliant
Left yard	12'/30' (both)	11.1'/30'	No change	Non- Compliant
Right yard	12'/30'(both)	18.9'/30'	No change	Compliant
Minimum Coverage				
Principal building	22%	19%	No change	Compliant
Impervious surfaces	40%	38%	No change	Compliant
Maximum height:	2 1/2 stories	2.5 stories	No change	Compliant

#### LEGEND

— — — — — EXISTING BUILDING — – NFW CONSTRUCTION

- 1/4"/FT PROPOSED GRADE/PITCH == SILT & HAY == - SILT FENCE & STRAWBALE (SEE DWG. C1)

- 6" Ø GASKETTED, PVC SCHD. 35 / 40 SOLID STORM DRAINAGE PIPE SLOPED 1/4"/FT, MIN., UON. ALL FITTINGS MUST BE

GASKETTED AND MATCHING RATING

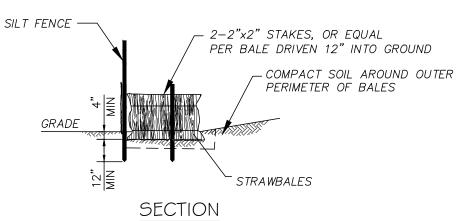
HAND DIG NEW 1 - 180XLHD CULTEC RECHARGER SURROUNDED IN 1-2" GRAVEL OF 12" THICK ON SIDES & ENDS, AND 12" THICK ON TOP & BOTTOM, WRAPPED IN FILTER FABRIC. PROVIDE POPUP IN MIDDLE OF

- NEW 4" NDS TRENCH DRAIN SET IN CONCRETE - GAS - - EX'G GAS SUBSURFACE PIPING (VIF)

—— SEWER —— – EX'G SEWER LINE (VIF)

\_\_\_\_\_\_ - EX'G FENCING

# ---- SILT FENCE — STRAWBALES COMPACT SUBGRADE



#### SILT AND HALE BALE DETAIL NOT TO SCALE

## MATERIAL--PLASTIC COVER BALE AND MATERIAL STOCKPILE SHALL BE COVERED ENTIRELY BY AN ANCHORED PLASTIC COVER OR

STOCKPILE ISO-DETAIL'

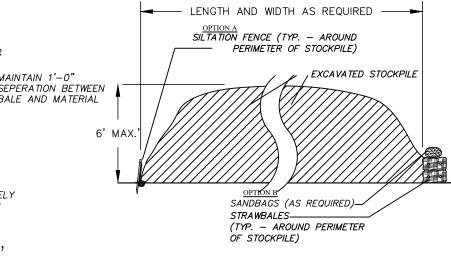
RESTORE GRASSY AREAS.

13. REINSTALL FENCES.

SCOPE OF WORK

VERIFY ALL EXISTING UTILITIES.

REMOVE EXISTING FRONT FENCE.



STOCKPILE SECTION

Property Owner & Address: UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF THE NEW YORK STATE MICHAEL FORD, MD EDUCATION LAW. ONLY COPIES WITH A SIGNED SEAL 1 BRAMLEY LANE -SHALL BE CONSIDERED TO BE VALID TRUE COPIES. OBBS FERRY, NY 10522 INGINEER OF RECORD SEAL: M: 347-306-1073 RIVERTOWNSMD@GMAIL.COM SECTION 3.14 | BLOCK 126 | Lot 11 DATE | REV. # | ISSUE FOR: 04.07.22 ISSUED FOR PERMITTING 06.20.22 REVISION 1 - PB REVIEW COMMENT Grigg, PE Louise J. NYS PE LICENSE #062513-

GENERAL NOTES:

- 1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "BUILDING CODE OF NEW YORK STATE" AND LATEST THE LOCAL BUILDING CODES.
- 2. THE CONTRACTOR SHALL NOT SUBSTITUTE ANY MATERIAL SPECIFIED WITHOUT ENGINEER'S PRIOR
- 3. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, TECHNIQUES, SEQUENCES. AND
- METHODS OF CONSTRUCTION. 4. PRIOR TO THE START OF WORK, THE CONTRACTOR VERIFY THE FOLLOWING:
  - ALL DIMENSIONS AND ELEVATIONS;
  - THE EXISTING CONDITIONS,
  - DETERMINE ANY SITE OR BUILDING RESTRICTIONS.
- REPORT ANY DEFICIENCIES TO THE ARCHITECT-ENGINEER. 5. THE CONTRACTOR SHALL CONTINUOUSLY PROTECT THE EXISTING STRUCTURE DURING THE COURSE OF WORK. THIS PROTECTION SHALL REMAIN IN PLACE UNTIL ALL WORK IN A GIVEN AREA IS COMPLETED. IF ANY DAMAGE TO THE EXISTING STRUCTURE OCCURS IT SHALL BE
- REPAIRED BY THE CONTRACTOR WITHOUT CHARGE TO THE OWNER 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING, PROTECTING, AND WAREHOUSING ALL
- MATERIALS NEEDED FOR THE PROJECT. 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AT THE JOB SITE, INCLUDING THE
- EFFECT CONSTRUCTION PROCEDURES MAY HAVE ON PROPERTY AND PERSONS AT THE JOB SITE. 8. THE CONTRACTOR SHALL MAINTAIN CLEAN AND SAFE WORKING CONDITIONS. HE SHALL BE RESPONSIBLE FOR REMOVAL OF ALL
- 9. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT-ENGINEER IMMEDIATELY IF THEY CANNOT COMPLY WITH ANY NOTES ON THIS SHEET OR ANY OTHER SHEET IN THIS SET OF CONTRACT DOCUMENTS/ OR IF THERE IS A
- 10. THE CONTRACTOR SHALL PROVIDE FIRE EXTINGUISHERS ON THE JOBSITE DURING ALL PHASES OF CONSTRUCTION. 11. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK FOR WHICH HE EXPECTS ADDITIONAL
- COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT THE ENGINEERS' WRITTEN **AUTHORIZATION** 12. ALL NEW WORK SHALL MATCH THE EXISTING FINISHES AS CLOSELY AS POSSIBLE, WOOD BASE,
- 13. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS TO MAINTAIN TEMPORARY ELECTRIC, LIGHTING, AND WATER DURING CONSTRUCTION.
- 14. GUARANTEE: ALL WORK INCLUDED IN THE CONTRACT DOCUMENTS SHALL BE GUARANTEED AGAINST DETECTS OR MATERIALS AND WORKMANSHIP FOR THE PERIOD SPECIFIED BY THE MANUFACTURER OR ONE YEAR. WHICHEVER IS

DOOR AND WINDOW CASING, CROWN MOLDING & MISCELLANEOUS TRIM AND WOODWORK SHALL MATCH EXISTING

- LONGER, FROM THE DATE OF OCCUPANCY 15. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FIRE EXITS AT ALL TIMES. 16. THE CONTRACTOR SHALL SUBMIT A COMPLETE LIST OF ALL SUBCONTRACTORS TO BE USED ON THIS PROJECT.
- 17. THE CONTRACTOR IS REQUIRED TO HAVE A COMPETENT SUPERINTENDENT ON THE SITE WHEN WORK IS IN
- 18. THE CONTRACTOR SHALL BE COMPETENTLY REPRESENTED AT EVERY WEEKLY JOB MEETING. THE SCHEDULING OF THESE WEEKLY JOB MEETINGS SHALL BE JOINTLY AGREED UPON AT THE BEGINNING OF CONSTRUCTION. 19. THE FINISHED JOB SHALL BE DELIVERED IN A FINISHED AND CLEAN MANNER. INCLUDING POLISHING
- COUNTERTOPS, AND CLEANING WINDOWS AND FLOORS. 20. DEMOLITION: ALL DEBRIS REMOVAL AND ABATEMENT TO BE PERFORMED IN ACCORDANCE WITH ALL LOCAL,
- STATE, FEDERAL & OSHA GUIDELINES & LAWS. THE CONTRACTOR SHAD MAINTAIN THE STRUCTURAL INTEGRITY OF THE BUILDING AT ALL TIMES. THE ARCHITECT - ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR ANY UNFORESEEN PROBLEMS. THE CONTRACTOR SHALL PROTECT THE BUILDING DURING DEMOLITION. DEBRIS CHUTES SHALL BE INSTALLED AS PER CODES.

#### STORMWATER NOTES:

- RECHARGER 180 XLHD MANUF. BY CULTEC, INC. OF BROOKFIELD, CT. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
- 3. THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS
- 4. INSTALL CULTEC "RECHARGER DRYWELLS AS SHOWN IN STORM DRAINAGE PLAN, LOCATED AT A MINIMUM of 10' FROM THE PROPERTY LINES.
- 5. THE CONTRACTOR SHALL ENCASE THESE STORMWATER DETENTION/RETENTION CHAMBERS IN A MINIMUM OF 1-2" GRAVEL ALL AROUND THE TOP, SIDES, ENDS (FRONT), AND THE BOTTOM OF THE DRYWELLS TO THICKNESSES SHOWN IN SITE PLAN.
- SOLID DRAINAGE PIPING TO BE 6" Ø NON-GASKETTED, SCHEDULE 35, TYPE 1, GRADE 1 PVC <u>PIPING FROM DRYWELL TO FACE OF RIGHT-SIDE STONE PATIO. AT SOUTHERLY FACE OF PATIO,</u>
- PROVIDE SCHEDULE 35 PVC SOLID DRAINAGE PIPING AND SCHEDULE 35 PVC PIPING FITTINGS CONTRACTOR TO PROVIDE EROSION CONTROL SILT FENCING ALONG ALL SIDES OF THE PROPERTY AS
- 8. ADD 3" TOP SOIL TO DISTURBED AREAS & RESTORE EXISTING SITE FEATURES IN KIND.
- 9. TO AVOID FUTURE SINKHOLES, ALL BACKFILLED GRAVEL AND SOIL SHALL BE THOROUGHLY COMPACTED
- & TAMPED IN MAXIMUM HEIGHTS OF SIX (6") INCH LIFTS.
- 10. THE CONTRACTOR SHALL BACKFILL THE TOP THREE (3") INCHES WITH TOPSOIL. 11. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL SILT FENCES, AS SHOWN ON
- THE EROSION CONTROL PLAN.
- 12. THE CONTRACTOR SHALL COMPLY WITH ALL MUNICIPAL & COUNTY OF WESTCHESTER SILT EROSION
- CONTROL REQUIREMENTS.
- 13. AFTER ANY RAIN, THE CONTRACTOR SHALL INSPECT SILT FENCES, AND REMOVE ANY SEDIMENT.
- 14. THE CONTRACTOR SHALL RESTORE ALL EFFECTED AREAS DISTURBED BY THE CONSTRUCTION TO
- MATCH EXISTING, UNLESS OTHERWISE SHOWN. PRICE TO BE INCLUDED IN LUMPSUM BID.
- 15. THE CONTRACTOR SHALL RESEED AND COVER WITH SALT HAY ALL DISTURBED AREAS, AND RELOCATE ANY PLANTING. AS DIRECTED BY OWNER.
- 16. THE CONTRACTOR SHALL REMOVE & REINSTALL ANY AFFECTED PLANTINGS, FENCES, WALKWAY,
- CURBING, DRIVEWAYS AND OTHER EXISTING SITE FEATURES TO MATCH EXISTING. 17. SHOULD ANY CONFLICTS ARISE BETWEEN THE PROPOSED PLANS AND EXIST, UTILITIES, THE
- CONTRACTOR SHALL NOTIFY THE ENGINEER.
- 18. CONTRACTOR TO IDENTIFY ALL BURIED UTILITIES PRIOR TO DIGGING.
- 19. CONTRACTOR SHALL LOCATE ALL ELECTRICAL, GAS, WATER, SEWER, AND SPRINKLER LINES. 20. BAG & BALL ALL SHRUBBERY & PLANTS FOR REPLANTING, AS DIRECTED BY BY OWNER/ENGINEER.
- 21. STOCK PILE SPOIL FOR REUSE AS DIRECTED BY OWNER.
- 22. CONTRACTOR TO CONDUCT REQUIRED INSPECTIONS AS PER THE BUILDING PERMIT.
- 23. AS SHOWN ON DWG. C1, CONTRACTOR SHALL INSTALL 6" DIA. DIA. SOLID DRAINAGE PIPING: NON GASKETTED, SCHD. 35 PVC PIPE, SLOPED A MIN. 1/4"/FT. INSTALL STORM DRAINAGE
- 24. PROVIDE DRYWELL SHORING SIDE-WALL EXCAVATION REINFORCEMENT OR LAYBACK THE EXCAVATION
- IN ACCORDANCE WITH OSHA REGULATIONS.
- 25. STOCK PILE SPOIL FOR REUSE AS DIRECTED BY ENGINEER/OWNER.
- 26. GRIGG & DAVIS ENGINEERS TO INSPECT AND CERTIFY ALL DRAINAGE PIPING INSTALLATIONS & DRYWELL INSTALLATIONS. CONTRACTOR TO ALLOW 24 HOUR NOTIFICATION TO ENGINEER TO INSPECT ALL PIPING & DRYWELL PRIOR TO BACKFILLING. ALL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE EROSION CONTROL SCHEDULE.

**Engineer of Record:** 

725-7986

GRIGG & DAVIS ENGINEERS, P.C.

Attn. Louise Grigg, PE

Project Title & Sheet Title:

DATE: 04-07-2022

**SCALE:** AS NOTED

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**EROSION CONTROL & DRAINAGE** 

DRAWING - REAR DRYWELL

27. FOR DRYWELL DETAILS, CALCULATIONS, SEE DWG. C1