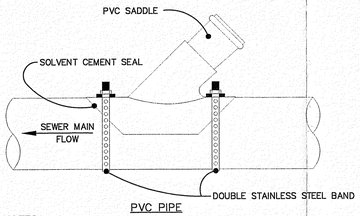
## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| 100 | CONTOUR | 100 |
| D | STORM DRAIN | |
| W | WATER | |
| | ELECTRIC MANHOLE | |
| E | ELECTRICAL | |
| G | GAS | |
| S | SANITARY SEWER | |
| | HYDRANT | |
| | SEWER MANHOLE | |
| | DRAIN MANHOLE | |
| | VALVE | |
| D | CATCH BASIN | |
| | CURB | |
| 429x5 | SPOT GRADE | 429.5 |
| | HP RAMP | |
| | SEDIMENTATION CONTROL BARRIER | |
| | LIGHT POLE | |
| | TREE | |
| | UTILITY POLE | |
| | POST INDICATOR VALVE | PIV |
| | TRAFFIC DIRECTION | |

## NOTES:

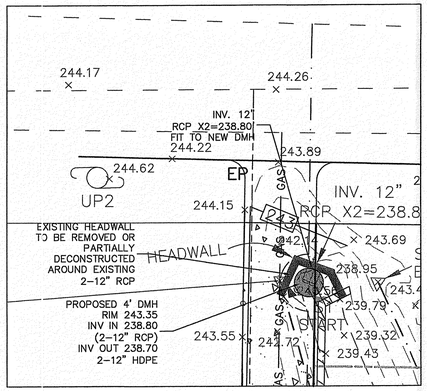
1. EXISTING CONDITIONS WERE OBTAINED FROM FIELD SURVEY PREPARED BY MARSH & LONG SURVEYING, INC. DATED FEBRUARY 21, 2019.RESOURCE AREAS WERE FLAGGED BY NATURAL RESOURCE SERVICES AT THE TIME OF THE SURVEY.
2. THE LOCATION OF EXISTING UTILITIES IS APPROXIMATE, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. NOTIFY "DIG-SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY SITE DEMOLITION OR EXCAVATION.



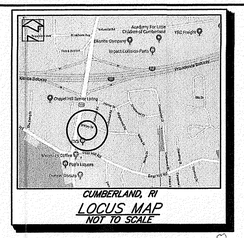

NOTES:

1. PVC SOLVENT CEMENT SHALL BE USED FOR PVC SADDLES.
2. NUTS AND BOLTS FOR SADDLE ASSEMBLY SHALL BE PROVIDED BY THE MANUFACTURER.
3. CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL AND STATE AGENCIES HAVING JURISDICTION.

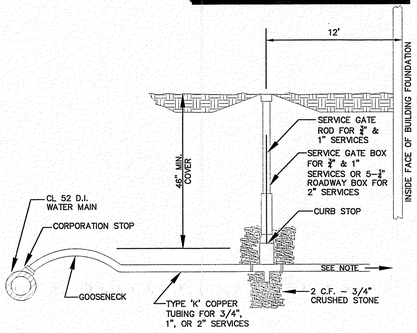
### STRAP-ON SEWER SADDLE
NOT TO SCALE




### HEADWALL INSET
1" = 10'

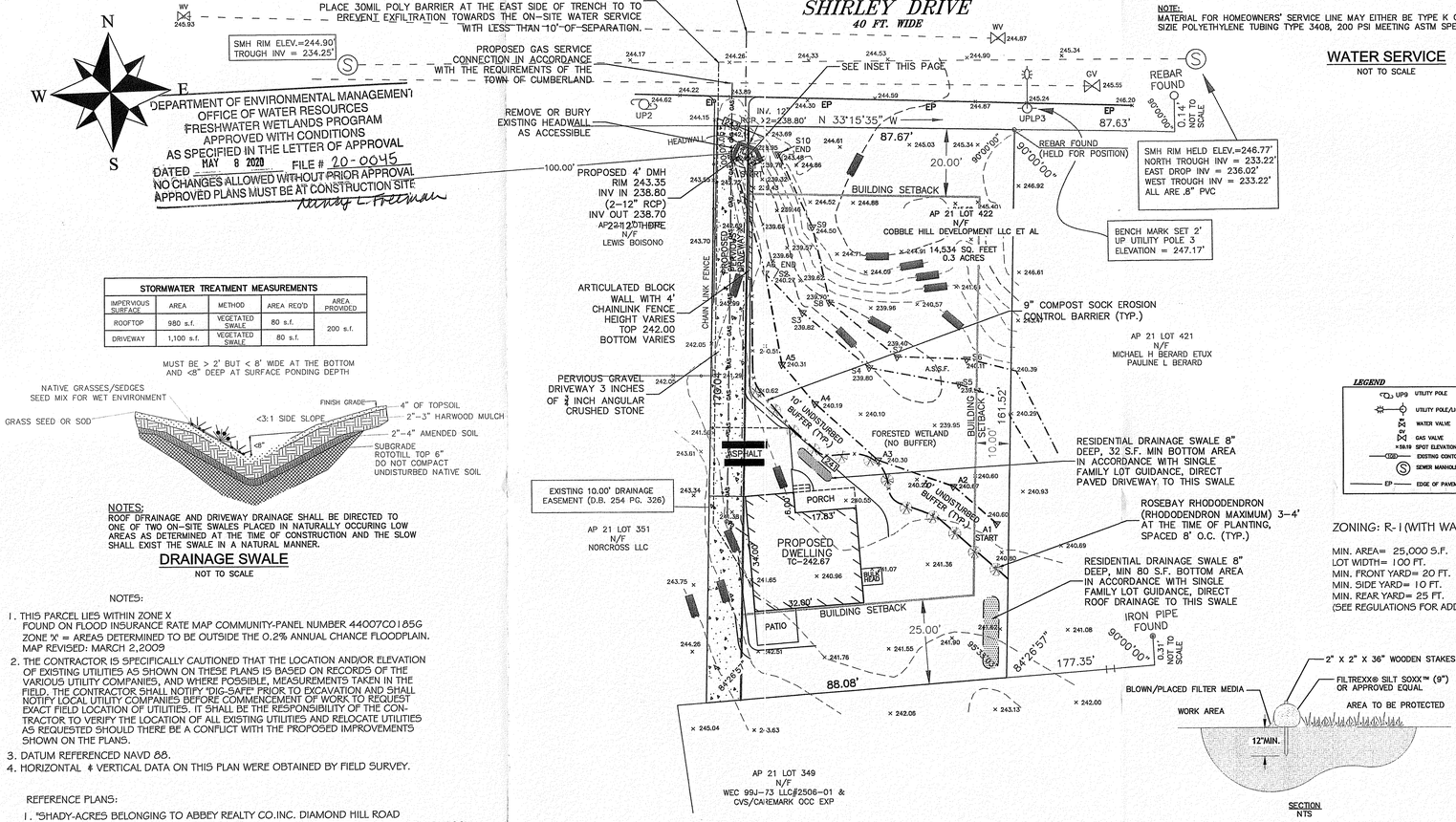



### LOCUS MAP
NOT TO SCALE




NOTE:
MATERIAL FOR HOMEOWNERS' SERVICE LINE MAY EITHER BE TYPE K COPPER OR COPPER PIPE SIZE POLYETHYLENE TUBING TYPE 3408, 200 PSI MEETING ASTM SPECIFICATIOS FOR D3350.

### WATER SERVICE
NOT TO SCALE




### STORMWATER TREATMENT MEASUREMENTS

| IMPERVIOUS SURFACE | AREA | METHOD | AREA REQ'D | AREA PROVIDED |
|---|---|---|---|---|
| ROOFTOP | 980 s.f. | VEGETATED SWALE | 80 s.f. | 200 s.f. |
| DRIVEWAY | 1,100 s.f. | VEGETATED SWALE | 80 s.f. | |

MUST BE > 2' BUT < 8' WIDE AT THE BOTTOM AND <8" DEEP AT SURFACE PONDING DEPTH




NOTES:
ROOF DRAINAGE AND DRIVEWAY DRAINAGE SHALL BE DIRECTED TO ONE OF TWO ON-SITE SWALES PLACED IN NATURALLY OCCURING LOW AREAS AS DETERMINED AT THE TIME OF CONSTRUCTION AND THE SLOW SHALL EXIST THE SWALE IN A NATURAL MANNER.

### DRAINAGE SWALE
NOT TO SCALE

NOTES:

1. THIS PARCEL LIES WITHIN ZONE X FOUND ON FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 44007C0185G ZONE 'X' = AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. MAP REVISED: MARCH 2,2009
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE CONTRACTOR SHALL NOTIFY "DIG-SAFE" PRIOR TO EXCAVATION AND SHALL NOTIFY LOCAL UTILITY COMPANIES BEFORE COMMENCEMENT OF WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND RELOCATE UTILITIES AS REQUESTED SHOULD THERE BE A CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. DATUM REFERENCED NAVD 88.
4. HORIZONTAL & VERTICAL DATA ON THIS PLAN WERE OBTAINED BY FIELD SURVEY.

REFERENCE PLANS:

1. "SHADY-ACRES BELONGING TO ABBEY REALTY CO.INC. DIAMOND HILL ROAD CUMBERLAND RI. SURVEYED & PLATTED BY EDWARD J HAYDEN SEPT 1953. SCALE: 1"=100'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 8 2020 FILE # 20-0045
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Jeffrey L. Hoffman

*THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.*
*THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THIS PLAN IS AS FOLLOWS. DATA ACCUMULATION SURVEY COMPREHENSIVE BOUNDARY SURVEY- MEASUREMENT SPECIFICATION - 1 TOPOGRAPHIC SURVEY ACCURACY T-2*

BY: Stephen T. Long
STEPHEN T. LONG NO. 1930
C.O.A. LS-A538

STEPHEN T. LONG
No. 1930
REGISTERED PROFESSIONAL LAND SURVEYOR
4-14-20

## EROSION CONTROL NOTES

SILTATION CONTROL USING EROSION CONTROL FENCE WITH STRAW WATTLE, OR APPROVED EQUAL
EROSION CONTROL LINE IS TO BE VISUALLY INSPECTED AFTER EVERY RAIN FALL AND REPAIRS MADE AS REQUIRED TO THE SILTATION CONTROL FENCE AND STRAW WATTLE AFTER EACH RAIN FALL. CLEANOUT OF ACCUMULATED SEDIMENT BEHIND THE WATTLE IS NECESSARY IF ½ OF THE ORIGINAL HEIGHT OF THE WATTLE APPEARS TO HAVE BEEN INUNDATED WITH SEDIMENT.

PRESERVE TOPSOIL
SITE OWNERS AND OPERATORS MUST PRESERVE EXISTING TOPSOIL ON THE CONSTRUCTION SITE TO THE MAXIMUM EXTENT FEASIBLE AND AS NECESSARY TO SUPPORT HEALTHY VEGETATION, PROMOTE SOIL STABILIZATION, AND INCREASE STORMWATER INFILTRATION RATES IN THE POST-CONSTRUCTION PHASE OF THE PROJECT.

STABILIZATION OF SOILS
UPON COMPLETION AND ACCEPTANCE OF SITE PREPARATION AND INITIAL INSTALLATION OF EROSION, RUNOFF, AND SEDIMENT CONTROLS AND TEMPORARY POLLUTION PREVENTION MEASURES, THE OPERATOR SHALL INITIATE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION PRACTICES DURING ALL PHASES OF CONSTRUCTION ON ALL DISTURBED AREAS AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED. SLOPES IN EXCESS OF 3:1 SHALL HAVE 22 MONTH EROSION CONTROL FABRIC INSTALLED OVER A SLOPE MIX SEED MIX WITH TACKIFIER UNLESS OTHERWISE SPECIFIED.

ANY DISTURBED AREAS THAT WILL NOT HAVE ACTIVE CONSTRUCTION ACTIVITY OCCURRING WITHIN 14 DAYS MUST BE STABILIZED USING THE CONTROL MEASURES DEPICTED IN SITE PLANS, IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN, AND PER MANUFACTURER PRODUCT SPECIFICATIONS.

ONLY AREAS THAT CAN BE REASONABLY EXPECTED TO HAVE ACTIVE CONSTRUCTION WORK BEING PERFORMED WITHIN 14 DAYS OF DISTURBANCE WILL BE CLEARED/GRUBBED AT ANY ONE TIME. IT IS NOT ACCEPTABLE TO CLEAR AND GRUB THE ENTIRE CONSTRUCTION SITE IF PORTIONS WILL NOT BE ACTIVE WITHIN THE 14-DAY TIME FRAME. PROPER PHASING OF CLEARING AND GRUBBING ACTIVITIES SHALL INCLUDE TEMPORARY STABILIZATION TECHNIQUES FOR AREAS CLEARED AND GRUBBED THAT WILL NOT BE ACTIVE WITHIN THE 14-DAY TIME FRAME.

STORMWATER INLET PROTECTION
INLET PROTECTION - WILL BE UTILIZED TO PREVENT SOIL AND DEBRIS FROM ENTERING STORM DRAIN INLETS AND SHALL BE INSTALLED WITHIN BASINS DOWNSTREAM OF DISTURBANCE WITHIN 200' OF THE PROPOSED DISTURBANCE. THESE MEASURES ARE USUALLY TEMPORARY AND ARE IMPLEMENTED BEFORE A SITE IS DISTURBED.

MAINTENANCE - THE OPERATOR MUST CLEAN, OR REMOVE AND REPLACE THE INLET PROTECTION MEASURES AS SEDIMENT ACCUMULATES, THE FILTER BECOMES CLOGGED, AND/OR AS PERFORMANCE IS COMPROMISED. ACCUMULATED SEDIMENT ADJACENT TO THE INLET PROTECTION MEASURES SHOULD BE REMOVED BY THE END OF THE SAME WORK DAY IN WHICH IT IS FOUND OR BY THE END OF THE FOLLOWING WORK DAY IF REMOVAL BY THE SAME WORK DAY IS NOT FEASIBLE.

STORMWATER BASINS - ALL AREAS CONTAINING STORMWATER BASINS (ABOVE OR BELOW GROUND) SHALL BE PROTECTED THROUGHOUT CONSTRUCTION. THESE ARES ARE NOT BE USED FOR MATERIAL STOCKPILES OR FOR PARKING EQUIPMENT. SURFACE BASINS ARE TO BE ROUGH GRADED AND PROTECTED UNTIL STABILIZED AND BROUGHT ON-LINE FOR STORMWATER MANAGEMENT OF THE STABILIZED SITE.

CONSTRUCTION ENTRANCES
CONSTRUCTION ENTRANCES SHALL BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF SEDIMENT TRACKING OFF THE PROJECT. ANY CONSTRUCTION SITE ACCESS POINT MUST EMPLOY THE CONTROL MEASURES ON THE APPROVED SITE PLANS AND IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN. CONSTRUCTION ENTRANCES SHALL BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY CONSTRUCTION VEHICLES. ALL CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.

THE SITE OWNER AND OPERATOR MUST WILL RESTRICT VEHICLE USE TO PROPERLY DESIGNATED EXIT POINTS, USE PROPERLY DESIGNED AND CONSTRUCTED CONSTRUCTION ENTRANCES AT ALL POINTS THAT EXIT ONTO PAVED ROADS SO THAT SEDIMENT REMOVAL OCCURS PRIOR TO VEHICLE EXIT. WHEN AND WHERE NECESSARY, USE ADDITIONAL CONTROLS TO REMOVE SEDIMENT FROM VEHICLE TIRES PRIOR TO EXIT (I.E. WHEEL WASHING RACKS, RUMBLE STRIPS, AND RATTLE PLATES). WHERE SEDIMENT HAS BEEN TRACKED OUT FROM THE CONSTRUCTION SITE ONTO THE SURFACE OF OFF-SITE STREETS, OTHER PAVED AREAS, AND SIDEWALKS, THE DEPOSITED SEDIMENT MUST BE REMOVED BY THE END OF THE SAME WORK DAY IN WHICH THE TRACK OUT OCCURS. TRACK-OUT MUST BE REMOVED BY SWEEPING, SHOVELING, OR VACUUMING THESE SURFACES, OR BY USING OTHER SIMILARLY EFFECTIVE MEANS OF SEDIMENT REMOVAL.

STOCKPILE CONTAINMENT
SHALL BE USED ONSITE TO MINIMIZE OR ELIMINATE THE DISCHARGE OF SOIL, TOPSOIL, BASE MATERIAL OR RUBBLE, FROM ENTERING DRAINAGE SYSTEMS OR SURFACE WATERS. ALL STOCKPILES MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE, PROTECTED FROM RUN-ON WITH THE USE OF TEMPORARY SEDIMENT BARRIERS AND PROVIDED WITH COVER OR STABILIZATION TO AVOID CONTACT WITH PRECIPITATION AND WIND WHERE AND WHEN PRACTICAL. STOCK PILE MANAGEMENT CONSISTS OF PROCEDURES AND PRACTICES DESIGNED TO MINIMIZE OR ELIMINATE THE DISCHARGE OF STOCKPILED MATERIAL (SOIL, TOPSOIL, BASE MATERIAL, RUBBLE) FROM ENTERING DRAINAGE SYSTEMS OR SURFACE WATERS.

FOR ANY STOCKPILES OR LAND CLEARING DEBRIS COMPOSED, IN WHOLE OR IN PART, OF SEDIMENT OR SOIL, YOU MUST COMPLY WITH THE FOLLOWING REQUIREMENTS - LOCATE PILES WITHIN THE DESIGNATED LIMITS OF DISTURBANCE OUTSIDE OF THE 100-FOOT BUFFER ZONE, PROTECT FROM CONTACT WITH STORMWATER (INCLUDING RUN-ON) USING A TEMPORARY PERIMETER SEDIMENT BARRIER; WHERE PRACTICABLE, PROVIDE COVER OR APPROPRIATE TEMPORARY VEGETATIVE OR STRUCTURAL STABILIZATION TO AVOID DIRECT CONTACT WITH PRECIPITATION OR TO MINIMIZE SEDIMENT DISCHARGE; NEVER HOSE DOWN OR SWEEP SOIL OR SEDIMENT ACCUMULATED ON PAVEMENT OR OTHER IMPERVIOUS SURFACES INTO ANY STORMWATER CONVEYANCE, STORM DRAIN INLET, OR SURFACE WATER; TO THE MAXIMUM EXTENT PRACTICABLE, CONTAIN AND SECURELY PROTECT FROM WIND.

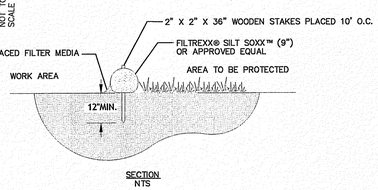
TEMPORARY SEDIMENT BASINS
**IF REQUIRED,** ADDITIONAL TEMPORARY SEDIMENT BASINS SHALL BE CONSTRUCTED TO MITIGATE THE POTENTIAL SEDIMENT LOADING TO THE ADJACENT RESOURCE AREAS. TEMPORARY SEDIMENT BASINS ARE TO BE LOCATED OUTSIDE OF THE 50-FOOT BUFFER ZONE TO THE BORDERING VEGETATED WETLANDS AND SHALL NOT BE LOCATED IN AN AREA WHERE AN INFILTRATION BASIN IS PROPOSED. TEMPORARY SEDIMENT BASIN GRADING LOCATION SHALL BE DICTATED BY THE DESIGN ENGINEER. AT A MINIMUM THE THE VOLUME OF THE TEMPORARY SEDIMENT BASIN, AS MEASURED FROM THE BOTTOM OF THE BASE TO THE ELEVATION OF THE CREST OF THE PRINCIPAL SPILLWAY SHALL BE AT LEAST 3,600 CUBIC FEET PER ACRE OF DRAINAGE AREA. THIS 3,600 CUBIC FEET IS EQUIVALENT TO 1.0 INCH OF SEDIMENT PER ACRE OF DRAINAGE AREA. ADDITIONAL STORAGE IN THE FORM OF A PERMANENT WET POOL SHALL BE PROVIDED WHENEVER PRACTICABLE, BUT MAY NOT BE USED TO FULFILL THE TEMPORARY STORAGE VOLUME REQUIREMENT.

SEDIMENT BASINS SHALL BE CLEANED OUT WHEN THE VOLUME REMAINING AS DESCRIBED ABOVE IS REDUCED BY SEDIMENTATION TO 1,800 CUBIC FEET PER ACRE OF DRAINAGE AREA (50 PERCENT FULL). IN NO CASE SHALL THE SEDIMENT LEVEL BE PERMITTED TO BUILD UP HIGHER THAN ONE FOOT BELOW THE PRINCIPAL SPILLWAY CREST. AT THIS ELEVATION, CLEANOUT SHALL BE PERFORMED TO RESTORE THE ORIGINAL DESIGN VOLUME TO THE SEDIMENT BASIN. THE ELEVATION OF THE MAXIMUM ALLOWABLE SEDIMENT LEVEL SHALL BE DETERMINED AND SHALL BE STATED IN THE DESIGN DATA AS A DISTANCE BELOW THE TOP OF THE RISER AND BE CLEARLY MARKED ON THE RISER. NO AREA OF DETENTION SHALL BE UTILIZED FOR TEMPORARY EROSION CONTROL OR DEWATERING ACTIVITIES.




ZONING: R-1 (WITH WATER & SEWER)

MIN. AREA= 25,000 S.F.
LOT WIDTH= 100 FT.
MIN. FRONT YARD= 20 FT.
MIN. SIDE YARD= 10 FT.
MIN. REAR YARD= 25 FT.
(SEE REGULATIONS FOR ADDITIONAL INF..)




SECTION
NTS

NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. SILT SOXX™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE.

### FILTREXX SILT SOXX
NOT TO SCALE

### GRAPHIC SCALE

20 0 10 20 40 80
( IN FEET )
1 inch = 20 ft.

| NO | DATE | REVISIONS |
|---|---|---|
| 1 | 10/31/2019 | DEM SUBMISSION |
| 2 | 04/07/2020 | COMMENT RESPONSE |

SEAL
DANIEL R CAMPBELL
4/7/2020
No 8393
REGISTERED PROFESSIONAL ENGINEER
CIVIL

DATE : OCTOBER 31, 2019
DRAWN : DRC
SCALE : AS SHOWN

# COBBLE HILL DEVELOPMENT, LLC ET AL

SINGLE FAMILY HOUSE CONSTRUCTION
AP 21, LOT 422
SHIRLEY DRIVE
CUMBERLAND, RHODE ISLAND

APR 2 2 2020


LEVEL DESIGN GROUP
CIVIL ENGINEERING
249 SOUTH STREET
UNIT 1
PLAINVILLE, MA 02762
TEL. (508) 695-2221 FAX. (508) 695-2219


SITE PLAN

C-1.0
SHEET 1 OF 1

0' 10' 20' 40'

1715.00

*THIS PLAN TO BE INDEXED BY THE FOLLOWING: SHIRLEY DRIVE*