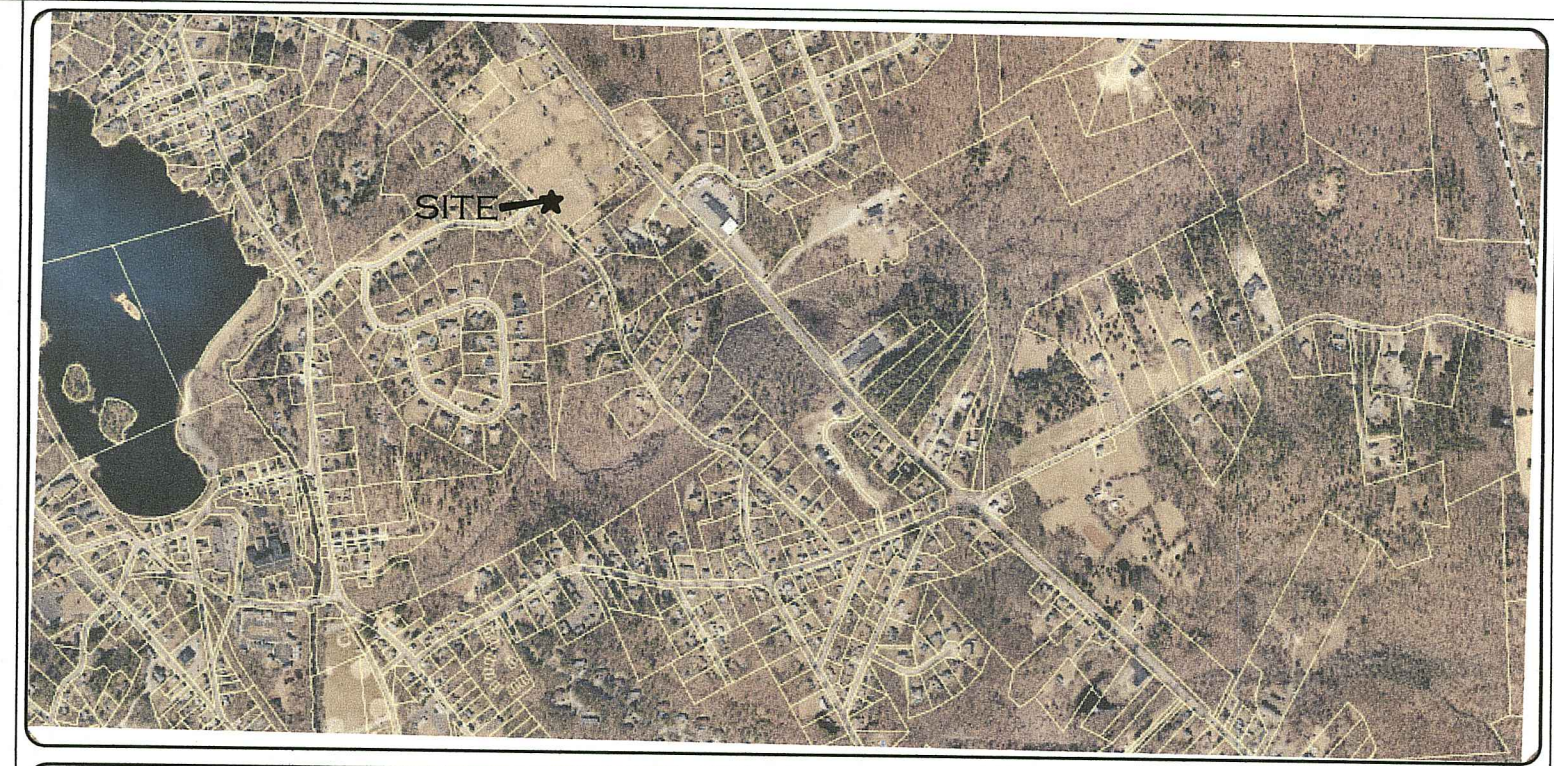
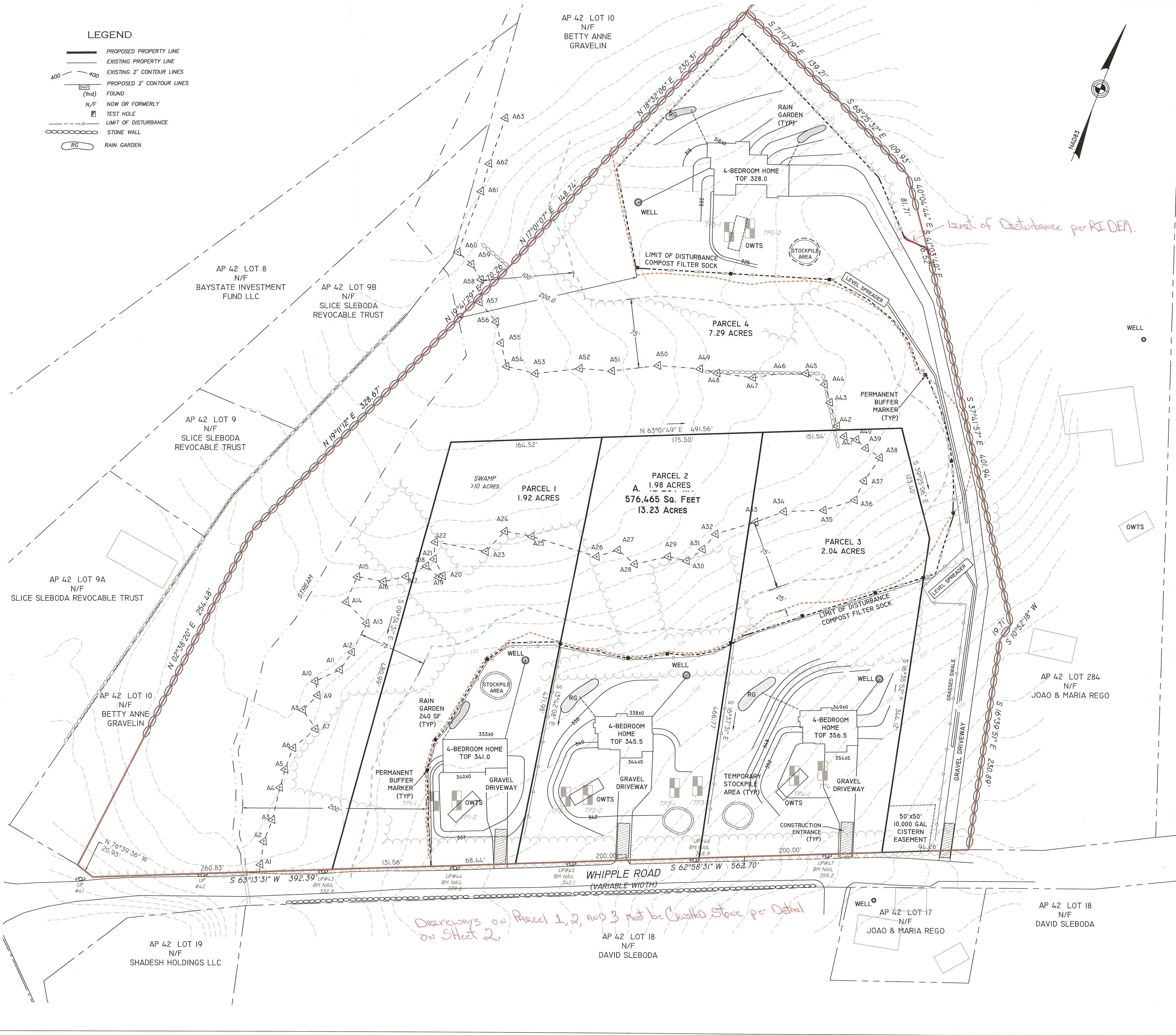


LEGEND

- PROPOSED PROPERTY LINE
- EXISTING PROPERTY LINE
- EXISTING 2' CONTOUR LINES
- PROPOSED 2' CONTOUR LINES
- FOUND
- NOW OR FORMERLY
- TEST HOLE
- LIMIT OF DISTURBANCE
- STONE WALL
- RAIN GARDEN



LOCATION MAP (NOT TO SCALE)

GENERAL NOTES:

1. LOT SHOWN IS DESIGNATED AS LOT 11A ON ASSESSORS MAP 42.
2. OWNER OF RECORD: MICHAEL AND MONIQUE
48 TAFT AVE
PROVIDENCE, RI 02906
3. WETLANDS FLAGGED BY NRS LLC.
4. PROPERTY DOES LIE WITHIN THE WATERSHED OR ZONE OF CONTRIBUTION OF A POND OR WATER SUPPLY WELL.
5. FEMA REFERENCE: SITE IS LOCATED IN ZONE X AS DEPICTED UPON FIRM MAP 440700186H WITH AN EFFECTIVE DATE OF OCTOBER 2, 2015.
6. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE FINDINGS SUCH A REPORT MIGHT DISCLOSE. PROPERTY LINES SHOWN ON THIS SURVEY PLAT REPRESENT CURRENT PHYSICAL FIELD CONDITIONS AND EVIDENCE OF APPARENT POSSIBLE POSSESSION. ANY REFERENCES TO PUBLIC RECORDS HEREON REFLECTS TO THOSE RECORDS NECESSARY TO ESTABLISH THE BOUNDARIES SHOWN HEREON AND REFERENCE TO THE SAME DOES NOT, AND IS NOT INTENDED TO CONSTITUTE A TITLE SEARCH OR TITLE OPINION.
7. THE PROJECT IS PROPOSED TO BE SERVICES BY PRIVATE WELLS, ON-SITE WATERWATER TREATMENT SYSTEMS (OWTS), ELECTRIC AND TELECOMMUNICATIONS.

ZONING DISTRICT:

CONVENTIONAL ZONING	
"RESIDENTIAL R-80"	= 200'
MINIMUM FRONTAGE	= 40'
MINIMUM AREA	= 80,000 S.F.
MINIMUM SETBACKS -	FRONT = 25'
	SIDE = 75'
	REAR = 10%
MAXIMUM LOT COVERAGE	= 10%

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

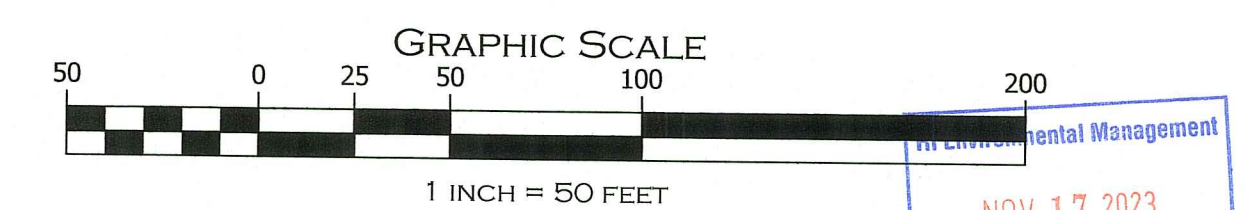
NOTE PER DEM:

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: JAN - 8 2023 FILE #: 23-0166
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Andy Clayton

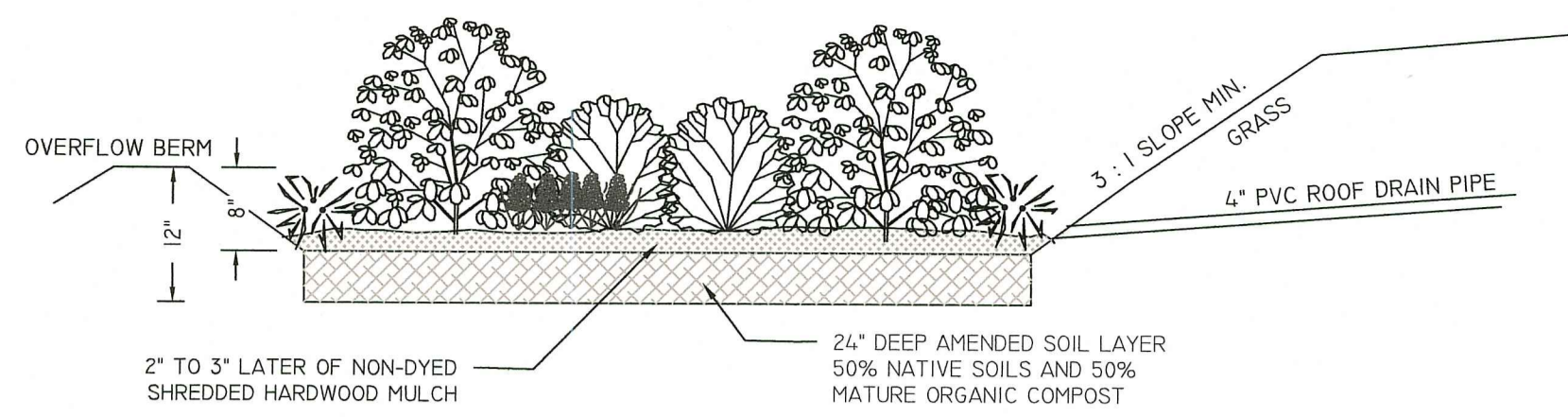


SOIL EROSION AND SEDIMENT CONTROL PLAN

PAUL D. CARLSON No. 7142 REGISTERED PROFESSIONAL ENGINEER CIVIL 	"WHIPPLE FARM" AP 42 LOT 11A WHIPPLE ROAD, SMITHFIELD, RI		
	MICHAEL & MONIQUE SABATINO 24 ONADEGA ROAD, NARRAGANSETT, RI		
JOB # 22-122	SCALE: 1" = 50'	DRAWN BY: PDC	DATE: 7/15/23
REVISED: 11/15/23			

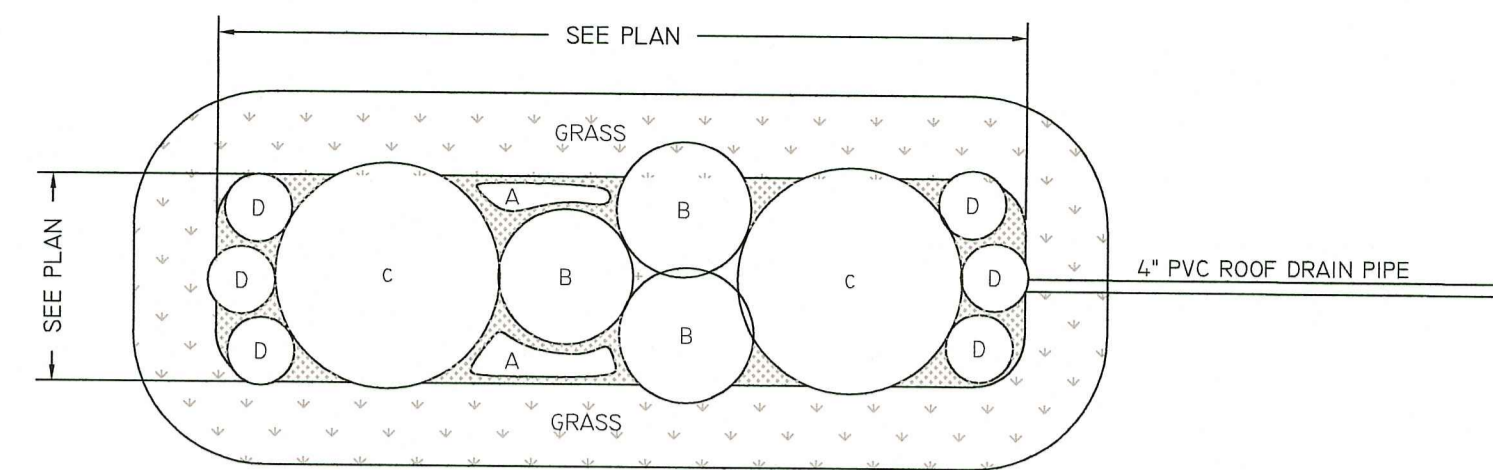
Driveways on Parcel 1, 2, and 3 must be Constructed Stone per Detail on Sheet 2.

 INSITE Engineering Services, LLC PROFESSIONAL ENGINEERS LAND SURVEYORS Precision. Clarity. Certainty.	501 Great Road, Unit 104 North Smithfield, Rhode Island Phone: (401) 762-2870 Fax: (401) 762-2871 Web Address: InsiteEngineers.com	SHEET 1 OF 2
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SECTION VIEW

ROOF AREA (TYP): 3,000 SF (TYP)
SOIL TEXTURE: SANDY
RAIN GARDEN AREA: 240 SF - 40 PLANTS



PLAN VIEW

PLANT LETTER	SPECIES	COMMON NAME
A	IRIS VERSICOLOR	BLUE FLAG IRIS
B	COMPTONIA PEREGRINA	SWEET FERN
C	MORELLA (MYRICA) PENNSYLVANICA	BAYBERRY
D	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED

TREATMENT

RAIN GARDEN TO BE 8" DEEP WITH A 2 - 4 INCH AMENDED SOIL LAYER (50/50 MIXTURE OF THE EXCAVATED NATIVE SOILS AND MATURE ORGANIC COMPOST) AND A 2 - 3 INCH LAYER OF NON-DYED AGED SHREDDED HARDWOOD MULCH.

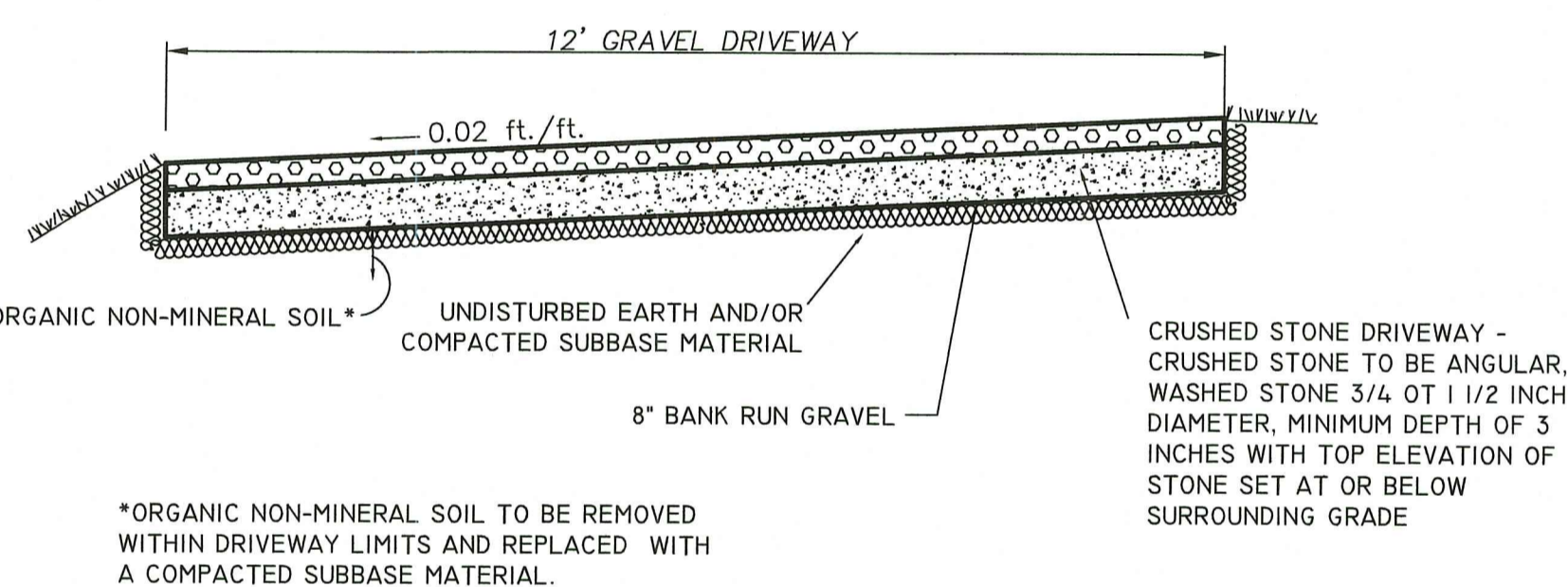
CONSTRUCTION

- A CRUSHED STONE ENTRANCE SHOULD BE INSTALLED AT THE INFLOW TO PREVENT CHANNELING.
- A BERM TO DETAIN STORMWATER SHOULD BE CONSTRUCTED ALONG THE DOWNHILL SIDE OF THE RAIN GARDEN, PERPENDICULAR TO THE SLOPE OF THE LAWN.
- BE SURE THAT THE SOIL WITHIN THE RAIN GARDEN AREA DOES NOT BECOME COMPACTED BY CONSTRUCTION ACTIVITIES (I.E. HEAVY MACHINERY). IF SOIL BECOMES SEVERELY COMPACTED IT MAY NEED TO BE TILLED AND AMENDED TO MAINTAIN PROPER DRAINAGE.

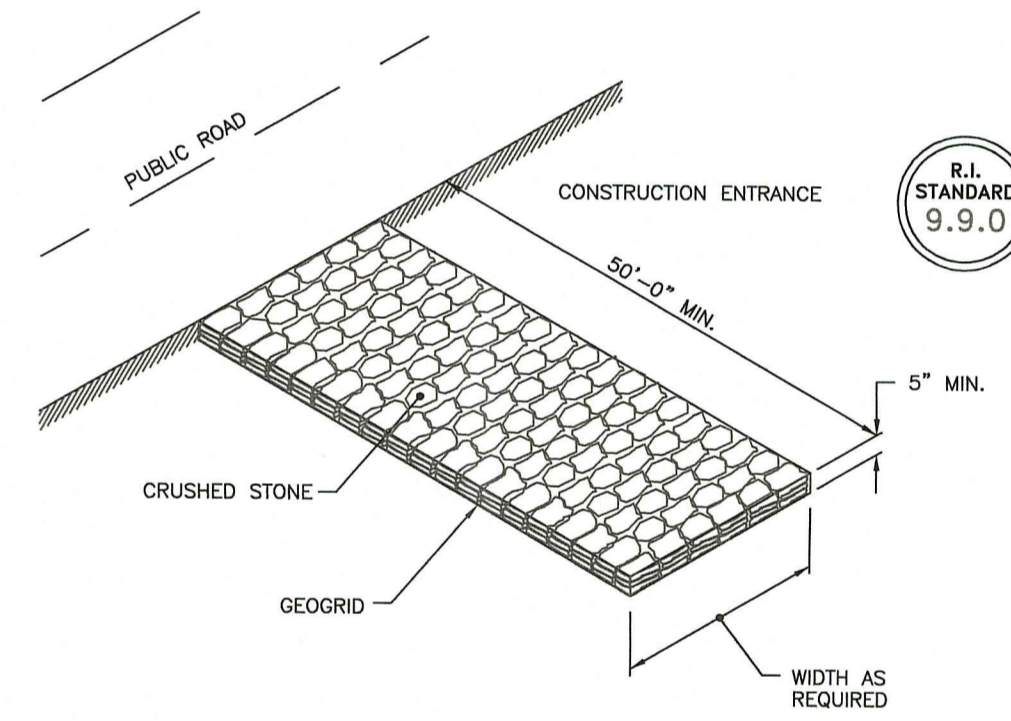
MAINTENANCE

- THE RAIN GARDEN SHALL BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE RAIN GARDEN SHALL BE MONITORED AND MAINTAINED TO ASSURE PROPER FUNCTIONING, PLANT GROWTH AND SURVIVAL. PLANTS SHALL BE REPLACED ON AN AS-NEEDED BASIS DURING THE GROWING SEASON.
- SILT/SEDIMENT SHALL BE REMOVED FROM THE RAIN GARDEN WHEN THE ACCUMULATION EXCEEDS ONE INCH, OR WHEN WATER PONDS ON THE SURFACE OF THE RAIN GARDEN FOR MORE THAN 48 HOURS. THE TOP FEW INCHES OF MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH SOIL MIXTURE AND MULCH.
- PRUNING OR REPLACEMENT OF WOODY VEGETATION SHALL OCCUR WHEN DEAD OR DYING VEGETATION IS OBSERVED.
- SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
- FERTILIZER OR PESTICIDES SHALL NOT BE APPLIED TO PLANTS WITHIN RAIN GARDENS.
- PERENNIAL PLANTS AND GROUND COVERS SHALL BE REPLACED AS NECESSARY TO MAINTAIN AN ADEQUATE VEGETATED GROUND COVER. ANNUAL PLANTS MAY ALSO BE USED TO MAINTAIN GROUND COVER.

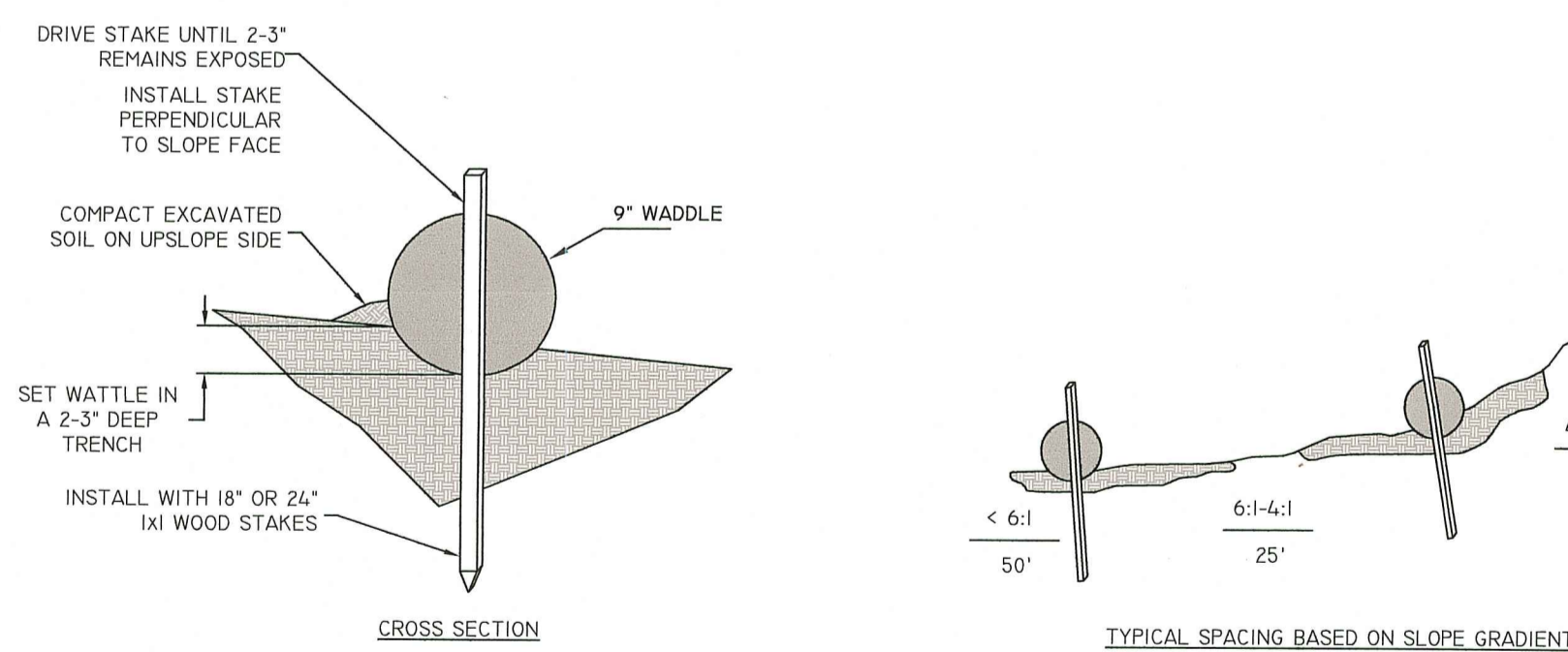
RAIN GARDEN DETAIL
NOT TO SCALE



DRIVEWAY DETAIL
NOT TO SCALE



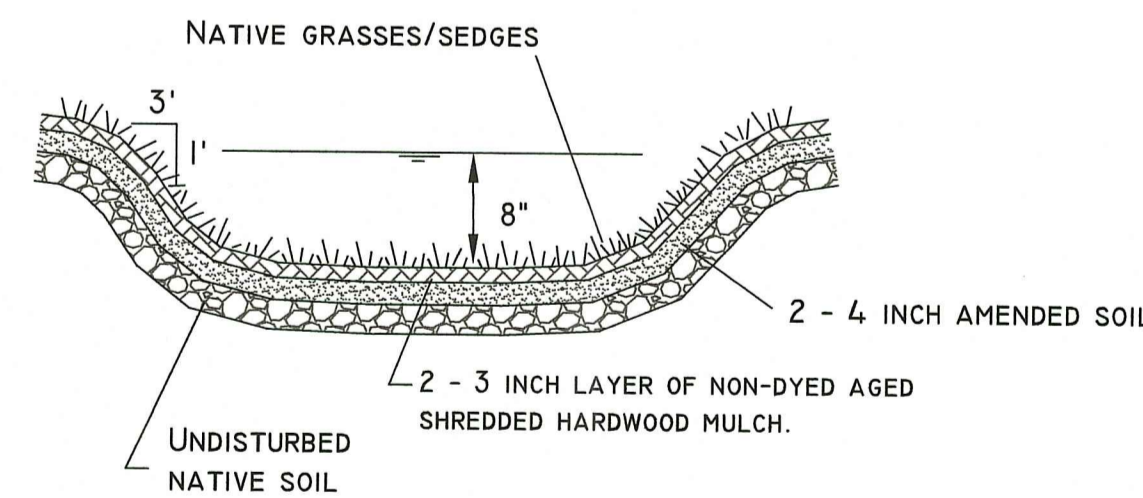
CONSTRUCTION ACCESS
NOT TO SCALE



STRAW WATTLE (OR SILT SOCK) DETAIL
NOT TO SCALE

GENERAL NOTES

- BEGIN AT THE LOCATION WHERE WATTLE IS TO BE INSTALLED BY EXCAVATING 2-3" DEEP x 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP SLOPE FROM THE ANCHOR TRENCH.
- PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
- SECURE THE WATTLE WITH 18-24" STAKES EVERY 3'-4" AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2-3' OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN INTEGRITY OF STRAW WATTLE FOR DURATION OF CONSTRUCTION.
- EROSION CONTROLS TO REMAIN UNTIL SOIL CONDITIONS STABILIZE.
- LOOSE HAY TO BE SPREAD ON AREAS OF EXPOSED LOAM & SEED UNTIL GERMINATION AND STABILIZATION OCCURS.



VEGETATED SWALE DETAIL
NOT TO SCALE

MAINTENANCE

- THE VEGETATED SWALE SHALL BE INSPECTED ANNUALLY AND AFTER LARGE STORM EVENTS.
- ERODED SIDE SLOPES AND CHANNEL BOTTOM SHALL BE STABILIZED AS NECESSARY.
- IF THE SURFACE OF THE DRY SWALE BECOMES CLOGGED TO THE POINT THAT STANDING WATER IS OBSERVED ON THE SURFACE 48 HOURS AFTER PRECIPITATION EVENTS, THE BOTTOM SHALL BE ROTO-TILLED OR CULTIVATED TO BREAK UP ANY HARD-PACKED SEDIMENT, AND THEN RESEEDED.
- VEGETATION IN DRY SWALES SHALL BE MOWED AS REQUIRED TO MAINTAIN MINIMUM GRASS HEIGHTS IN THE 4-6 INCH RANGE.
- EVERY FIVE YEARS, THE CHANNEL BOTTOM OF DRY SWALES SHOULD BE SCRAPED TO REMOVE SEDIMENT AND TO RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE, AND SHOULD BE SEED TO RESTORE GROUND COVER, WHERE NECESSARY.

CONSTRUCTION PROCEDURES AND SEQUENCING

- THE ENGINEER SHALL HAVE THE SOLE RESPONSIBILITY FOR THE DESIGN IMPLEMENTATION. HE SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONTRACTORS AND SUBCONTRACTORS ARE AWARE OF THE PROVISIONS ON THE PLANS.
- THE CONTRACTOR SHALL ORGANIZE SITE CONSTRUCTION IN A MANNER WHICH WILL ENSURE THE IMMEDIATE STABILIZATION OF SURFACES. PERIMETER CONTROLS EQUAL APPROVED PROJECT LIMITS.
- PRIOR TO ANY CONSTRUCTION ON SITE, THE CONTRACTOR SHALL SETUP PRE-CONSTRUCTION MEETING WITH OWNER, ENGINEER, MUNICIPAL PLANNING AND DPW PERSONAL.
- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, A LINE STRAW WATTLES, WILL BE PLACED AT ALL CONSTRUCTION TOE OF SLOPES IN THE AREA OF ROADWAY, PONDS, LANDSCAPED AREAS, AND ALONG PERIMETER OF PROJECT LIMIT OF DISTURBANCE WHERE INDICATED ON PROJECT PLANS.
- RESERVE EROSION CONTROL DEVICES SHALL BE STOCKPILED ON SITE IN THE EVENT OF EMERGENCIES. AND SHALL BE LOCATED 100' FROM REGULATED WETLAND RESOURCE AREAS.
- THE CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS FOR THE PROPER STORAGE AND/OR REMOVAL OF DEBRIS ON SITE TO AVOID UNNECESSARY ACCUMULATION ON SITE.
- DRAINAGE STRUCTURES SHALL BE CONSTRUCTED FROM DOWNSTREAM UP AND CONSTRUCTION SHALL INCLUDE THE PLACEMENT OF STONE AT THE FLARED PIPE ENDS AND OUTLET STRUCTURE INLETS AND OUTLETS AS SHOWN ON PROJECT PLANS.
- IN STREAM CONTROLS SUCH AS HAY BALE CHECK DAMS SHALL BE ESTABLISHED PRIOR TO CONSTRUCTION IF NEEDED.

INFILTRATION SURFACE PROTECTION

TO PROTECT THE INFILTRATION SURFACES (BENEATH AND ADJACENT TO THE RECHARGE SYSTEMS) FROM DEGRADATION BY CONSTRUCTION ACTIVITIES INCLUDE:

- PROVIDE DEEP ROTOTILLING OF VAIN FLOOR IMMEDIATELY PRIOR TO SEEDING WITH NO SUBSEQUENT TRAFFICKING ON SURFACE.
- PREVENTION OF CONTAMINATION OF THE EXPOSED SUBGRADE BY CONSTRUCTION VEHICLES.
- PREVENTION OF EXCESSIVE COMPACTION BY CONSTRUCTION VEHICLES.
- PREVENTION OF THE DISCHARGE OF WATER FROM CONSTRUCTION DEWATERING ACTIVITIES INTO THESE FACILITIES.
- PREVENTION OF DISCHARGE OF STORMWATER INTO THESE FACILITIES UNTIL THE CONTRIBUTING AREAS ARE STABILIZED, UNLESS SPECIFIC MEASURES ARE PROVIDED FOR PROTECTING AND RESTORING THE INFILTRATION SURFACE.

CONSTRUCTION INSPECTION

THE ENGINEER SHALL BE CALLED ON SITE DURING THE CONSTRUCTION OF THE DRAINAGE STRUCTURES. THE ENGINEER SHALL BE ON SITE DURING THE CONSTRUCTION AND LAYOUT OF ALL OUTLET STRUCTURES.

THE ENGINEER SHALL PERFORM FREQUENT INSPECTION OF THE STORMWATER SYSTEM DURING CONSTRUCTION, WITH CLEANING AND MAINTENANCE AS WARRANTED. DURING ACTIVE CONSTRUCTION PERIODS, WEEKLY INSPECTION IS REQUIRED.

IF CONSTRUCTION IS SUSPENDED (E.G., OVER THE WINTER), THEN MONTHLY INSPECTIONS ARE REQUIRED. IN ADDITION, THE SYSTEM SHOULD BE CHECKED AFTER ANY SIGNIFICANT RAINFALL, TO INSURE IT IS FUNCTIONING CORRECTLY AND TO MONITOR SEDIMENT ACCUMULATION FROM THE DISTURBED AREAS OF THE SITE.

ROUGH GRADING

DURING GRADING, THE POTENTIAL FOR EROSION IS HIGH. DURING GRADING OPERATIONS, DISTURBED SLOPES WILL BE MULCHED AND VEGETATION ESTABLISHED TO PREVENT SEDIMENT EROSION TO THE SATISFACTION OF THE ENGINEER.

EROSION & SEDIMENT CONTROL NOTES:

- EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. GRAVEL CONSTRUCTION ENTRANCE WILL BE INSTALLED BEFORE CONSTRUCTION TRAFFIC INTO AND OUT OF PROJECT AREA BEGINS. STABILIZATION OF ALL REGRADED AND STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
- ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE MUNICIPAL REGULATIONS. EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION.
- ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE ENGINEER OR TOWN AGENCIES.
- THE LOT SHALL BE REQUIRED TO MAINTAIN EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. ADDITIONAL MEASURES WILL BE REQUIRED TO PREVENT SEDIMENT DISCHARGE INTO THE STREET, AND DRAINAGE SYSTEMS.
- SEEDING MIXTURE FOR FINISHED GRASSED AREAS WILL BE AS FOLLOWS:
KENTUCKY BLUE GRASS = 45
PERENNIAL RED FESCUE = 45
PERENNIAL RYE GRASS = 10
SEED TO APPLIED AT A RATE OF 4 LBS / 1000 S.F. FERTILIZER SHALL BE APPLIED AT A RATE OF 2 LBS / 1000 S.F. PLANTING SEASON SHALL BE APRIL 1 TO OCTOBER 15. AFTER OCTOBER 15 AREAS NOT SEEDED SHALL BE STABILIZED WITH STRAW WATTLES, HAY BALE CHECK DAMS, FILTER FABRIC OR WOODEN MULCH AS REQUIRED TO CONTROL EROSION.
- AREAS LEFT BARE BEFORE FINISH GRADING AND SEEDING IS ACHIEVED, SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYE GRASS APPLIED TO A RATE OF 2 LBS / 1000 S.F. AT A DEPTH OF 1/2". LIMESTONE (EQUIVALENT TO BE 50% CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDBED PREPARATION AT A RATE OF 90 LBS / 1000 S.F. WHERE GRASS PREDOMINATES, FERTILIZE ACCORDING TO A SOIL TEST AT A MINIMUM APPLICATION RATE OF 1 LB OF NITROGEN PER 1000 S.F. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRIED WOOD CHIP MULCH, FREE OF COURSE MATTER, TREATED WITH 12 LBS NITROGEN PER TON, APPLIED AT A RATE OF 185-275 LBS / 1000 S.F.
- CONTRACTOR SHALL BE 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, AND NOTIFY THE PROPER TOWN AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
- THE CONTRACTOR SHALL REQUEST THE APPROPRIATE TOWNS AGENCIES TO INSPECT AND APPROVE THE INSTALLATION OF ALL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION. PERIODIC INSPECTIONS OF EROSION CONTROL MEASURES MAY BE PERFORMED BY THE AGENCIES, THE CONTRACTOR SHALL REPAIR, UPGRADE OR REPAIR ANY MEASURES THE AGENT MAY FEEL ARE IN NEED OF SUCH.
- STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN FIFTEEN (15) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH, IF STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF HAY BALES. SIDE SLOPES SHALL NOT EXCEED 2:1.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC ON ADJACENT ROADWAYS.
- SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF THE SILT FENCE OR HAY BALE, OR SILT SOCK.
- ALL STOCKPILES SHALL BE SURROUNDED BY SEDIMENT BARRIERS.
- DISTURBED AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED.
- ALL FACILITIES USED AS TEMPORARY MEASURES SHALL BE CLEANED PRIOR TO BEING PUT INTO FINAL OPERATION.
- PER THE RISWM, BMP'S ARE NOT TO BE USED FOR TEMPORARY STORMWATER RUNOFF COLLECTION DURING THE PROJECTS CONSTRUCTION.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL

RI Environmental Management
NOV 17 2023
Office of Water Resources

DATED: JAN - 8 2023 FILE #: 25 OF 66

NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

	<p>"WHIPPLE FARM" AP 42 LOT 11A WHIPPLE ROAD, SMITHFIELD, RI</p>		
	<p>MICHAEL & MONIQUE SABATINO 24 ONADEGA ROAD, NARRAGANSETT, RI</p>		
JOB # 22-122	SCALE: 1" = 50"	DRAWN BY: PDC	DATE: 7/10/23
REVISED: 11/15/23			
		<p>501 Great Road, Unit 104 North Smithfield, Rhode Island Phone: (401) 782-2870 Fax: (401) 782-2871 Web Address: InsiteEngineers.com</p>	
PROFESSIONAL ENGINEERS LAND SURVEYORS		Precision. Clarity. Certainty.	