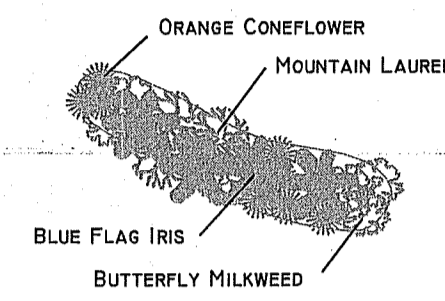


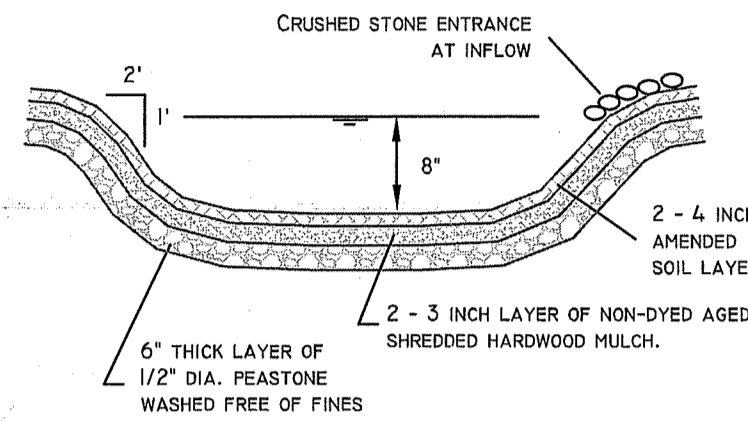
RAIN GARDEN
NOT TO SCALE

HOUSE ROOF AREA: 3,370 SF
RAIN GARDEN A AREA: 272 SF
68 PLANTS

BARN ROOF AREA: 4,800 SF
RAIN GARDEN B AREA: 384 SF
96 PLANTS



PLAN VIEW



CROSS-SECTION

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.

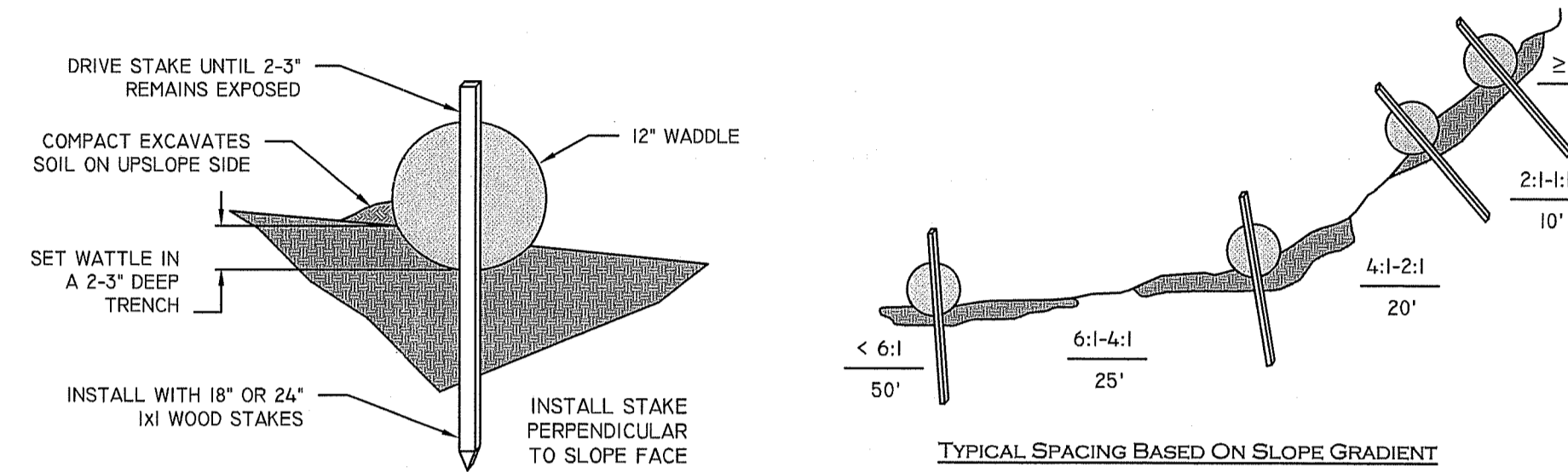
CONSTRUCTION:

1. A CRUSHED STONE ENTRANCE SHOULD BE INSTALLED AT THE INFLOW TO PREVENT CHANNELING.
2. A BERM TO DETAIN STORMWATER SHOULD BE CONSTRUCTED ALONG THE DOWNHILL SIDE OF THE RAIN GARDEN, PERPENDICULAR TO THE SLOPE OF THE LAWN.
3. 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

MAINTENANCE:

2. 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.
3. PRUNING OR REPLACEMENT OF WOODY VEGETATION SHALL OCCUR WHEN DEAD OR DYING VEGETATION IS OBSERVED.
4. SOIL EROSION GULLIES SHALL BE REPAIRED WHEN THEY OCCUR.
5. FERTILIZER OR PESTICIDES SHALL NOT BE APPLIED TO PLANTS WITHIN RAIN GARDENS.
6. 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.

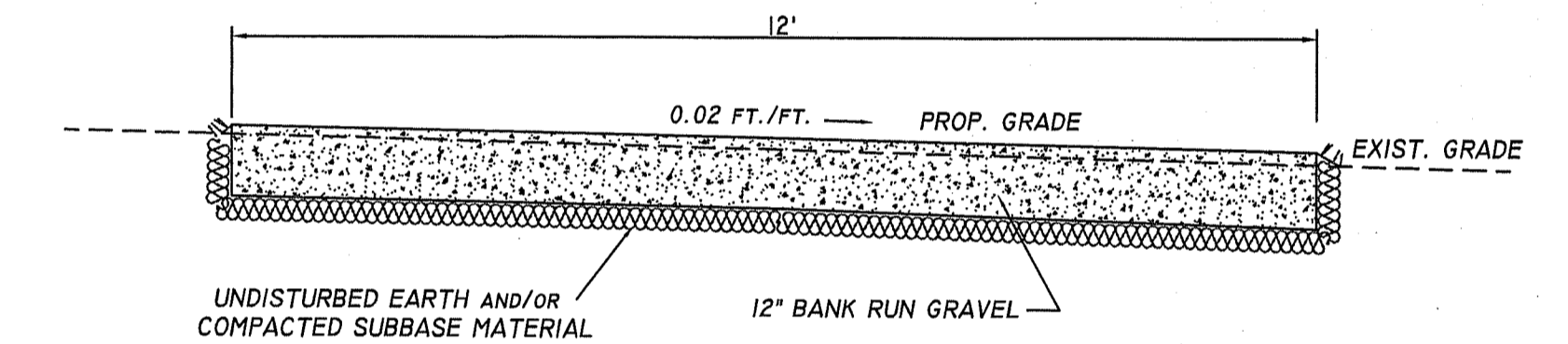
STRAW WATTLE (OR SILT SOCK) DETAIL
NOT TO SCALE



EROSION & SEDIMENTATION CONTROL:

1. 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.
2. 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 ADJUT.
3. 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 OF THE WATTLE LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.
4. CONTRACTOR IS RESPONSIBLE TO MAINTAIN INTEGRITY OF STRAW WATTLE FOR DURATION OF CONSTRUCTION.
5. EROSION CONTROLS TO REMAIN UNTIL SOIL CONDITIONS STABILIZE.
6. LOOSE HAY TO BE SPREAD ON AREAS OF EXPOSED LOAM & SEED UNTIL GERMINATION AND STABILIZATION OCCURS.

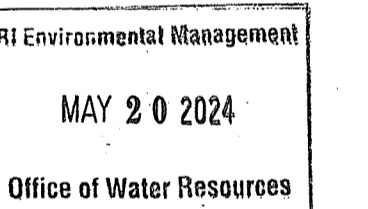
DRIVEWAY CROSS-SECTION
NOT TO SCALE



NOTES AND SPECIFICATIONS:

1. WETLAND DELINEATION BY NATURAL RESOURCE SERVICES, INC. ON 6-10-19 & 6-11-19.
2. A CONTINUOUS ROW OF STRAW WATTLE IS TO BE INSTALLED PRIOR TO START OF ANY CONSTRUCTION AND TO REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND AREA HAS STABILIZED. STRAW WATTLE TO BE INSPECTED PERIODICALLY OR AFTER SIGNIFICANT RAINFALL, AND REPAIRED OR REPLACED AS NECESSARY.
3. NO DISTURBANCE IS PROPOSED WITHIN BUFFER ZONE.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAY 23 2024 FILE #: 24-0068
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

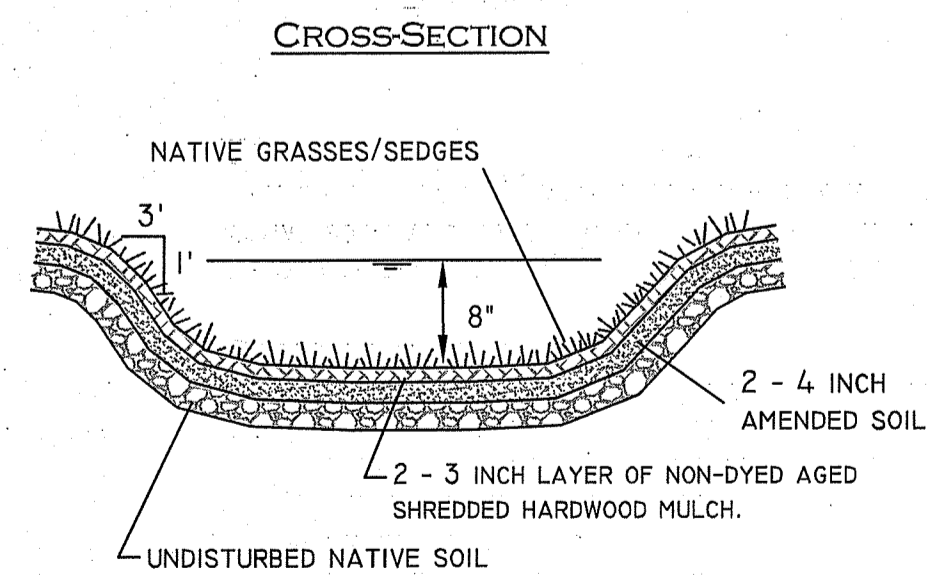


Only J. Freeman

VEGETATIVE SWALE
NOT TO SCALE

3,960 SF IMPERVIOUS DRIVEWAY
SWALE A: 660 SF
2' WIDE x 330' LONG

4,248 SF IMPERVIOUS DRIVEWAY
SWALE B: 704 SF
8' WIDE x 88' LONG



MAINTENANCE:

1. THE VEGETATED SWALE SHALL BE INSPECTED ANNUALLY AND AFTER LARGE STORM EVENTS.
2. ERODED SIDE SLOPES AND CHANNEL BOTTOM SHALL BE STABILIZED AS NECESSARY.
3. 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.
4. VEGETATION IN DRY SWALES SHALL BE MOWED AS REQUIRED TO MAINTAIN MINIMUM GRASS HEIGHTS IN THE 4-6 INCH RANGE.
5. 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.



DETAIL SHEET			
		ASSESSOR'S PLAT 15 LOT 74 PARCEL A IRON MINE HILL ROAD NORTH SMITHFIELD, RHODE ISLAND PREPARED FOR: MICHAEL ZUBA 445 SMITH ROAD, HARRISVILLE, RI 02830	
JOB # 20-017A	SCALE: N/A	DRAWN BY: LMB	DATE: 3-15-24
REVISED: 4-23-24			
		InSite Professional Complex, Suite 1 1539 Fall River Avenue, Seekonk, MA 02771 Phone: (508) 336-4500 Fax: (508) 336-4558 501 Great Road, Unit 104 North Smithfield, RI 02896 Phone: (401) 762-2870 Fax: (401) 762-2871 Web Address: InSiteEngineers.com	
PROFESSIONAL ENGINEERS LAND SURVEYORS Precision. Clarity. Certainty.		SHEET 2 OF 2	