

#### WATER RESOURCE MANAGEMENT:

- 1. WATER RESOURCE MANAGEMENT AREAS = SURFACE WATERSHED AREA, SURFACE MANAGEMENT ZONE WITH STREAM BUFFER.
- 2. TIER II CATCHMENTS NAME = MORGAN RUN, MD WATERSHED 02130907
- 3. THERE ARE REGULATED SUBSTANCE STORAGE ON SITE (FUEL TANKS). FUEL TANKS ARE CONTAINED AND UNDER ROOF. SEE PLAN VIEW FOR LOCATION AND
- 4. WATER RESOURCE PROTECTION EASEMENTS: DUE TO UNIQUE SITE CONDITIONS, STEEP SLOPES, ETC., ENTIRE SITE IS TO BE PLACED IN A WATER RESOURCE PROTECTION / FLOOD PLAIN EASEMENT EXCEPT AREAS NEEDED FOR USE, MAINTENANCE AND RECREATION, WHICH IS EXCLUDED FROM PROPOSED EASEMENT AREAS AS INSTRUCTED BY THE ENVIRONMENTAL REVIEW SUPERVISOR AT THE PRE-SUBMITTAL CONFERENCE.



ONSITE FUEL TANK STORAGE DETAIL

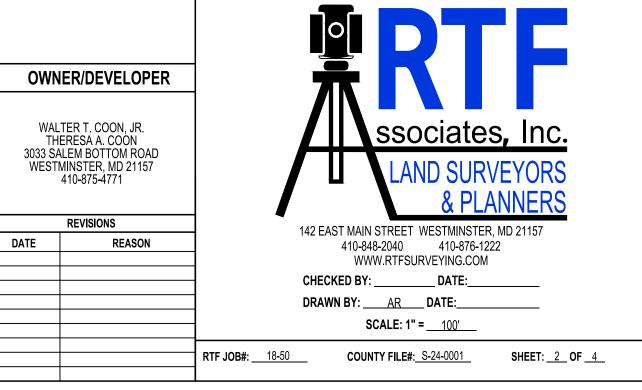
**ENVIRONMENTAL SITE DELINEATION &** WATER RESOURCE PROTECTION PLAN

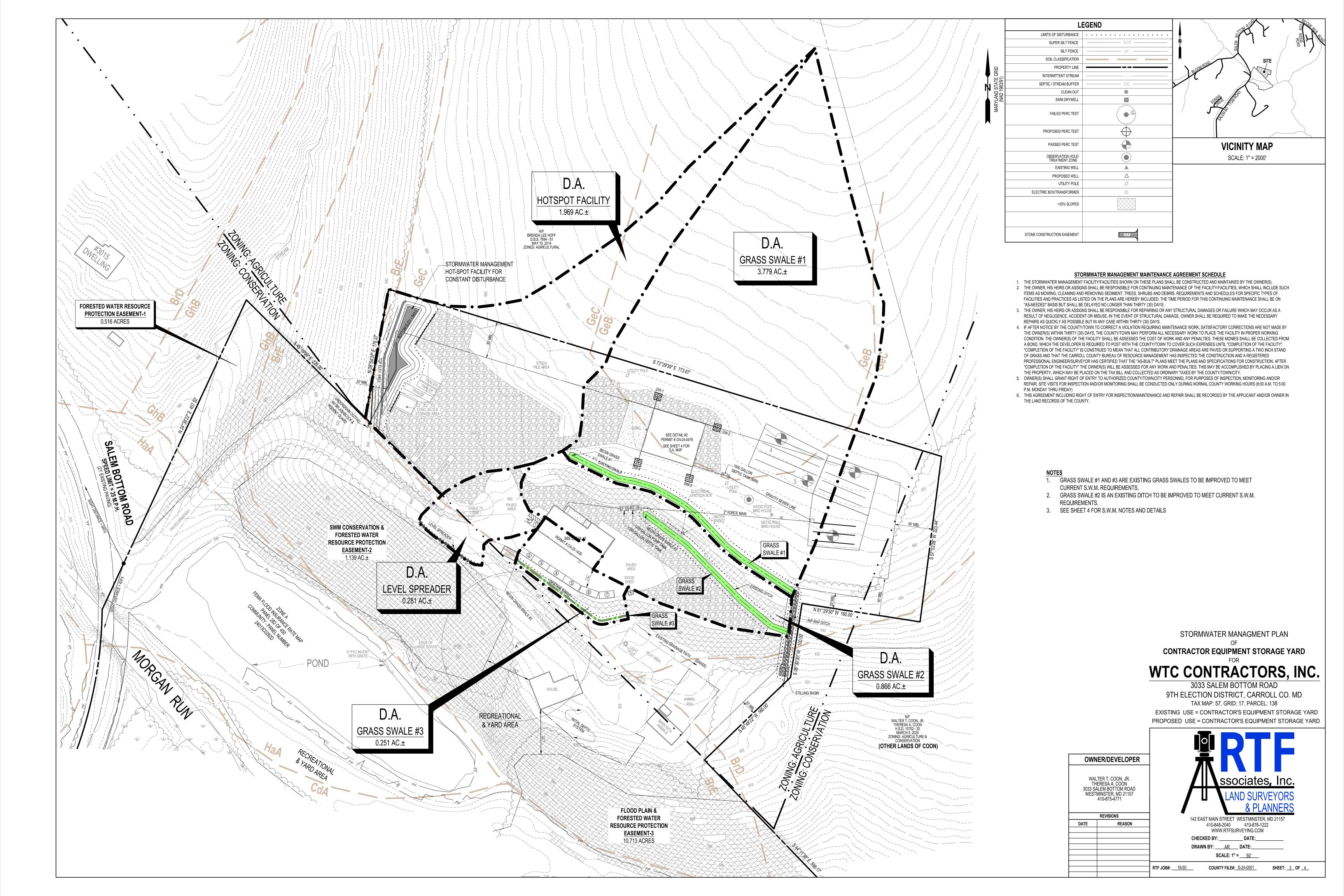
CONTRACTOR EQUIPMENT STORAGE YARD

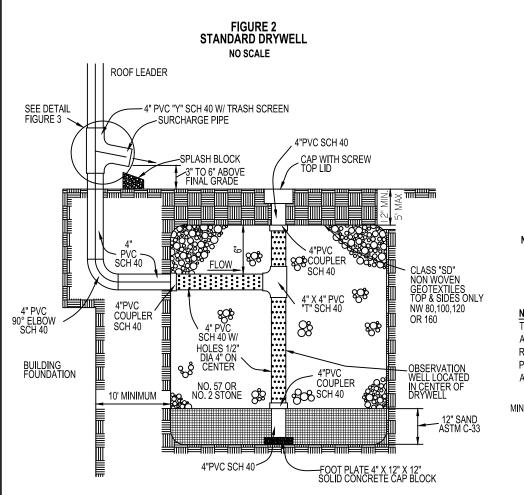
# WTC CONTRACTORS, INC.

3033 SALEM BOTTOM ROAD 9TH ELECTION DISTRICT, CARROLL CO. MD TAX MAP: 57, GRID: 17, PARCEL: 138

EXISTING USE = CONTRACTOR'S EQUIPMENT STORAGE YARD PROPOSED USE = CONTRACTOR'S EQUIPMENT STORAGE YARD







### FIGURE 3 STANDARD DRYWELL DOWNSPOUT FITTINGS INCOMING WATER FROM ROOFTOP 2" x 3" ROOF LEADER 2" x 3" x4" S&D DOWNSPOUT ADAPTER 4" PVC WYE 45° OVERFLOW WATER TO SPLASH BLOCK 4" PVC SNAP-IN DRAIN (SCREEN) 4" SCHEDULE 40 PVC **‡**O DRYWELL

1. THE SNAP IN SCREEN IS <u>REQUIRED</u> TO PREVENT CLOGGING OF THE DRYWELL WITH DEBRIS. 2. SEE FIGURE 3a "LIST OF POTENTIAL SUPPLIERS TO ACCOMPANY FIGURE 3 STANDARD DRYWELL DOWNSPOUT FITTINGS" FOR INFORMATION ON SOME LOCAL RETAILERS THAT SUPPLY COMPONENTS FOR THIS SYSTEM.

THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT OBTAINED THIS PART INFORMATION AFTER SENDING OUT A LETTER TO KNOWN LOCAL PLUMBING SUPPLY COMPANIES AND AFTER RECEIVING INFORMATION FROM EACH RESPECTIVE COMPANY. THE SUPPLIERS LISTED ABOVE ARE PROVIDED FOR REFERENCE PURPOSES ONLY. ANY EQUIVALENT SCHEDULE 40 PVC FITTINGS FROM ANY VENDOR MAY BE USED.

100 FT. FROM WELLS 25 FT. FROM SEPTIC AREAS 10 FT. FROM BUILDINGS

CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR (JOHN E. LEMMERMAN, RTF ASSOCIATES, INC. 410-848-2040) A MINIMUM OF 24 HOURS PRIOR EXCAVATION OF GRASS SWALE TO INSPECT EXCAVATION SIZE AND LOCATION.

5. ONCE THE ENTIRE DRAINAGE AREA TO THE GRASS CHANNEL IS STABILIZED WITH PAVEMENT OR 2" STAND OF GRASS, SUBMIT AN AS-BUILT CERTIFICATION TO THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT FOR BOND RELEASE.

FROM THE DOWNSPOUT TO THE DRYWELL THE DRAIN PIPE MUST BE AT LEAST 6" BELOW GRADE. THESE GEOTEXTILES ARE AVAILABLE IN FINKSBURG @ ES&G DISTRIBUTORS 2601 EMORY RD. BLDG.8. 866-744-5001, ANY EQUIVALENT GEOTEXTILE IS ACCEPTABLE.

#### LIST OF POTENTIAL SUPPLIERS TO ACCOMPANY FIGURE 3 STANDARD DRYWELL DOWNSPOUT FITTINGS

FIGURE 3a

2" x 3" x 4" S&D DOWNSPOUT ADAPTER BT PLUMBING SUPPLY, INC., 486 LUCABAUGH MILL RD., WESTMINSTER, MD 21157; 410-876-2118-

PART NO. PSDDSA234 ERGUSON ENTERPRISES, INC., 900 WAKEFIELD VALLEY RD., NEW WINDSOR, MD 21776; 410-635-6682-

LOWES HOME IMPROVEMENT WAREHOUSE OF WESTMINSTER, 777 MARKET ST., WESTMINSTER, MD 21157; 410-857-7445- PART NO. NDS L9P04 THE PLUMBERY HOME CENTER (TWO LOCATIONS), 15 NORTH MAIN STREET, MT. AIRY, MD 21771; 301-829-1770 OR 410-751-1113; OR 418 E. BALTIMORE ST., TANEYTOWN, MD 21787; 410-751-1113- PART NO.-REQUIRES BUSHING

#### 4" PVC WYE 45°

BT PLUMBING SUPPLY, INC., 486 LUCABAUGH MILL RD., WESTMINSTER, MD 21157; 410-876-2118-

ERGUSON ENTERPRISES, INC., 900 WAKEFIELD VALLEY RD., NEW WINDSOR, MD 21776; 410-635-6682-

LOWES HOME IMPROVEMENT WAREHOUSE OF WESTMINSTER, 777 MARKET ST., WESTMINSTER, MD 21157; 410-857-7445- PART NO. CHARLOTTE CPF600 1400

#### 4" PVC SNAP-IN DRAIN SCREEN BT PLUMBING SUPPLY, INC., 486 LUCABAUGH MILL RD., WESTMINSTER, MD 21157; 410-876-2118-

JONES-STEPHENS CORP.; <u>WWW.PLUMBEST.COM</u>; 800-355-6637- PART NO. D42-004

THE PLUMBERY HOME CENTER (TWO LOCATIONS), 15 NORTH MAIN STREET, MT. AIRY, MD 21771; 301-829-770 OR 410-751-1113; OR 418 E. BALTIMORE ST., TANEYTOWN, MD 21787; 410-751-1113- PART NO.-

OWES HOME IMPROVEMENT WAREHOUSE OF WESTMINSTER, 777 MARKET ST., WESTMINSTER, MD 21157;

## **BUILDING #2**

	INS	PECTION CHAR	T FOR DRY WELL	. INSTALLATION (	M-5)			
STAGE	INSPECTOR'S DRY WELL APPROVAL #1 APPROVAL #2		INSPECTOR'S DRY WELL APPROVAL #3		INSPECTOR'S DRY WELL APPROVAL #4			
	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE
INDIVIDUAL HOUSE HAS BEEN CONSTRUCTED AND FINAL RADING IS COMPLETE., EXCAVATE TO REQUIRED SIZE & LOCATION								
PLACEMENT OF SAND & INSTALL GEOTEXTILE FABRIC ON SIDES								
INSTALL FOOT PLATE, 4" PVC AND WASHED NO. 2 STONE								
WRAP TOP OF STONE WITH GEOTEXTILE FABRIC & BACKFILL								
INSTALL & CONNECT DOWNSPOUTS TO FACILITY WITH SCREEN ITINGS AND SPLASH BLOCKS AT OVER FLOWS.								

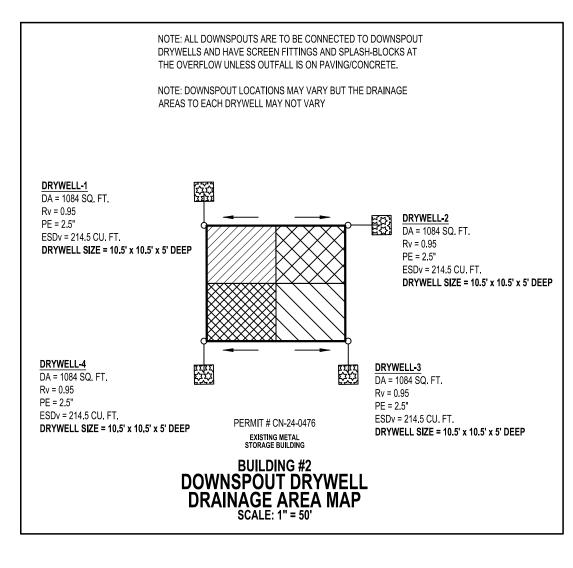
#### STORMWATER MANAGEMENT SEQUENCE OF CONSTRUCTION - DOWNSPOUT DRYWELLS

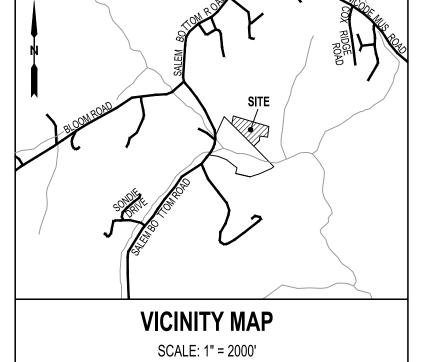
CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR (JOHN E. LEMMERMAN, RTF ASSOCIATES, INC. 410-848-2040) A MINIMUM OF 24 HOURS PRIOR EXCAVATION OF DRYWELLS TO INSPECT EXCAVATION SIZE AND LOCATION. HAVE ALL MATERIALS ON SITE.

ONCE INDIVIDUAL HOUSE IS FINAL GRADED, EXCAVATE DRYWELL TO REQUIRED SIZE AND LOCATION, ONCE SIZE AND LOCATION IS VERIFIED BY CERTIFYING PROFESSIONAL, INSTALL FOOTPLATE, GEOTEXTILE FABRIC ON TOP & SIDES ONLY, SAND AND STONE, WHILE CERTIFYING PROFESSIONAL IS ON SITE.

4. ONCE ALL DOWNSPOUTS ARE CONNECTED, HAVE SCREEN FITTINGS AND SPLASH BLOCKS DOWN AT ALL OVERFLOWS, CONTACT CERTIFYING PROFESSIONAL FOR FINAL INSPECTION.

SUBMIT AS-BUILT CERTIFICATION FOR BOND RELEASE.





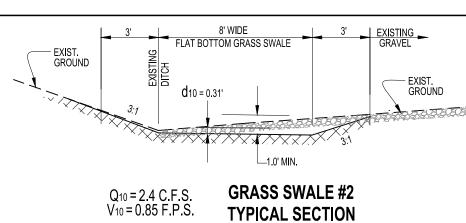
	8' WIDE FLAT BOTTOM GRASS SWALE  d10 = 0.57'  1.3' MIN.	4'  EXIST. GROUND	ALL SLOPES 2:1 OR GREATER TO BE STABILIZED WITH MATTING OR SOD.
Q <sub>10</sub> = 6.8 C.F.S. V <sub>10</sub> = 1.21 F.P.S.	GRASS SWALE #1 TYPICAL SECTION SCALE: 1" = 5'		

INSPECTION CHART FOR GRASS SWALE #	<sup>‡</sup> 1 (M-8)	
INSTALLATION	INSPECTOR'S	APPROVAL
STAGE	INITIALS	DATE
1. GRASS CHANNEL STAKED OUT PER PLAN LINE AND GRADE		
SWALE BOTTOM, SIDES AND UPPER DIVERSION BERM EXCAVATED TO SUBGRADE		
3. PLACEMENT OF 3" TOPSOIL, SEED & MULCH OR STABILIZATION MATTING IN GRASS SWALE.		
4. ALL VEGETATED DISTURBED AREAS ARE STABILIZED WITH A 2" STAND OF GRASS.		
5. SIGNED AND CERTIFIED AS-BUILT SUBMITTED TO THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT		

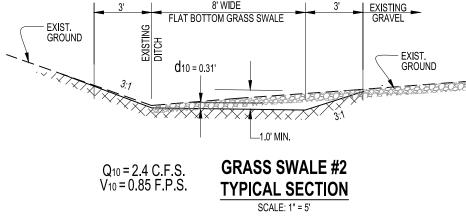
EXCAVATE THE SWALE AND DIVERSION BERM TO APPROVED PLAN SUBGRADE.

(M-8) GRASS SWALE - STORMWATER MANAGEMENT SEQUENCE OF CONSTRUCTION

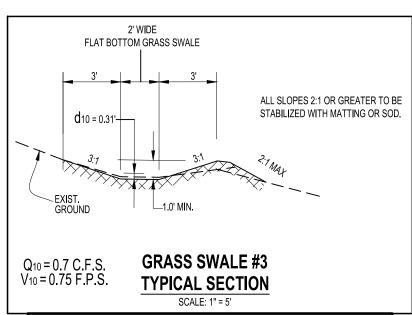
PLACE 3" TOPSOIL ON SWALE BOTTOM AND SIDE SLOPES AND STABILIZE WITH PERMANENT GRASS SEED AND MULCH.



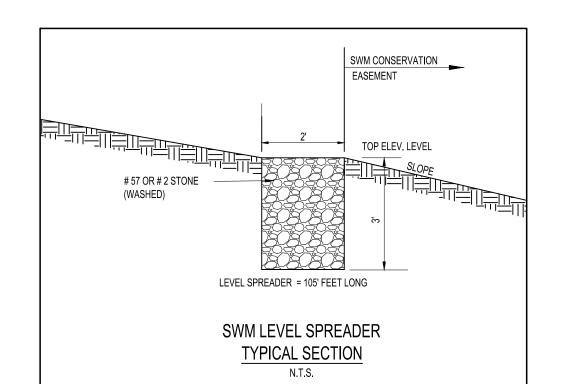
INSPECTION CHART FOR GRASS SWALE #	2 (M-8)	
INSTALLATION	INSPECTOR'S	APPROVAL
STAGE	INITIALS	DATE
1. GRASS CHANNEL STAKED OUT PER PLAN LINE AND GRADE		
SWALE BOTTOM, SIDES AND UPPER DIVERSION BERM EXCAVATED TO SUBGRADE		
3. PLACEMENT OF 3" TOPSOIL, SEED & MULCH OR STABILIZATION MATTING IN GRASS SWALE.		
4. ALL VEGETATED DISTURBED AREAS ARE STABILIZED WITH A 2" STAND OF GRASS.		
5. SIGNED AND CERTIFIED AS-BUILT SUBMITTED TO THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT		



INSTALLATION	INSPECTOR'S	APPROVAL
STAGE	INITIALS	DATE
1. GRASS CHANNEL STAKED OUT PER PLAN LINE AND GRADE		
2. SWALE BOTTOM, SIDES AND UPPER DIVERSION BERM EXCAVATED TO SUBGRADE		
3. PLACEMENT OF 3" TOPSOIL, SEED & MULCH OR STABILIZATION MATTING IN GRASS SWALE.		
4. ALL VEGETATED DISTURBED AREAS ARE STABILIZED WITH A 2" STAND OF GRASS.		
5. SIGNED AND CERTIFIED AS-BUILT SUBMITTED TO THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT		



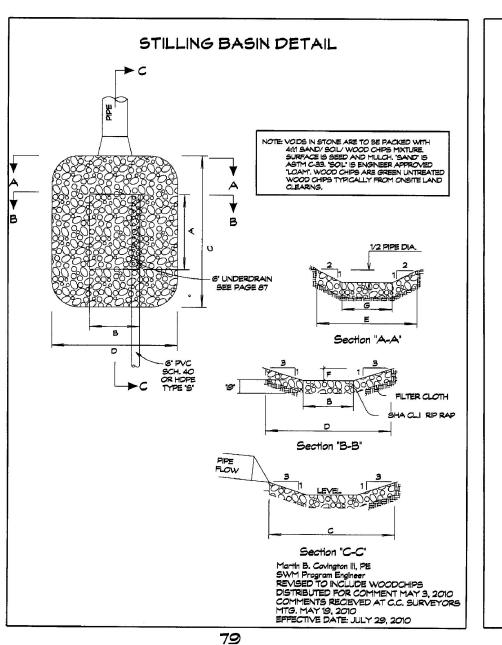
INSPECTION CHART FOR GRASS SWALE #3	3 (M-8)	
INSTALLATION	INSPECTOR'S	APPROVAL
STAGE	INITIALS	DATE
1. GRASS CHANNEL STAKED OUT PER PLAN LINE AND GRADE		
2. SWALE BOTTOM, SIDES AND UPPER DIVERSION BERM EXCAVATED TO SUBGRADE		
3. PLACEMENT OF 3" TOPSOIL, SEED & MULCH OR STABILIZATION MATTING IN GRASS SWALE.		
4. ALL VEGETATED DISTURBED AREAS ARE STABILIZED WITH A 2" STAND OF GRASS.		
5. SIGNED AND CERTIFIED AS-BUILT SUBMITTED TO THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT		

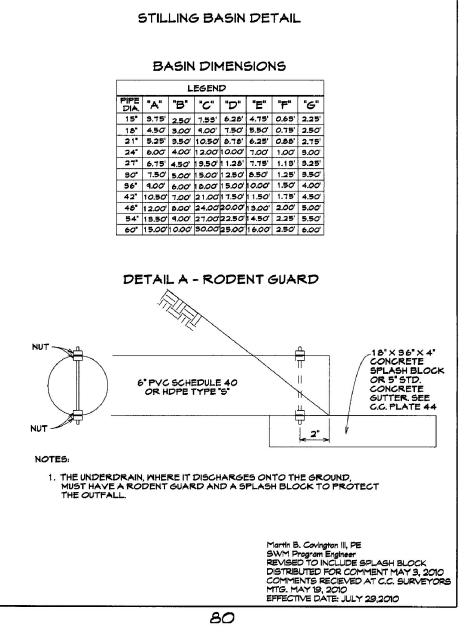


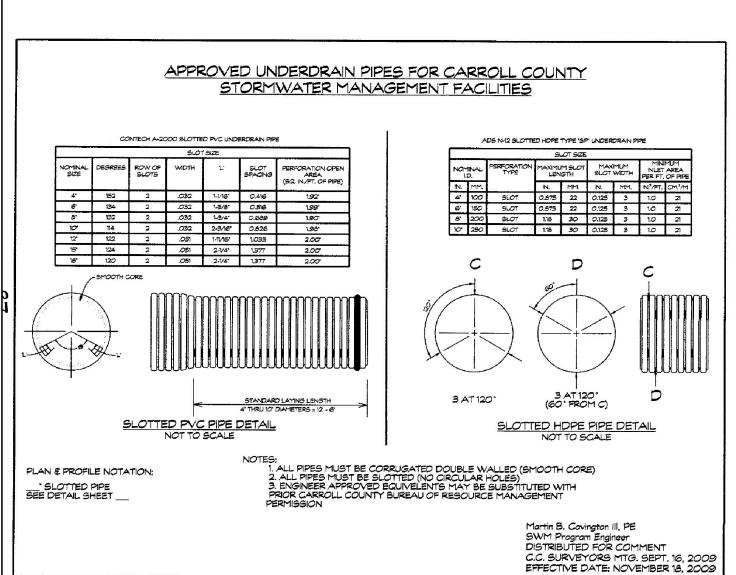
INSPECTION CHART FOR LEVEL SPREADER	R INSTALLATION	
STAGE	INSPECTOR'S DR STAGE APPROVAL	
	INITIALS	DATE
1. VERIFY DRAINAGE AREA TO LEVEL SPREADER IS STABILIZED WITH A VEGETATION OR A 2" STAND OF GRASS		
2. EXCAVATE LEVEL SPREADER TO THE REQUIRED SIZE/LOCATION		
3. INSTALL STONE		
4. REMOVE/STABILIZE EXCESS MATERIAL		
5. SUBMIT SWM AS-BUILT CERTIFICATION FOR BOND RELEASE		

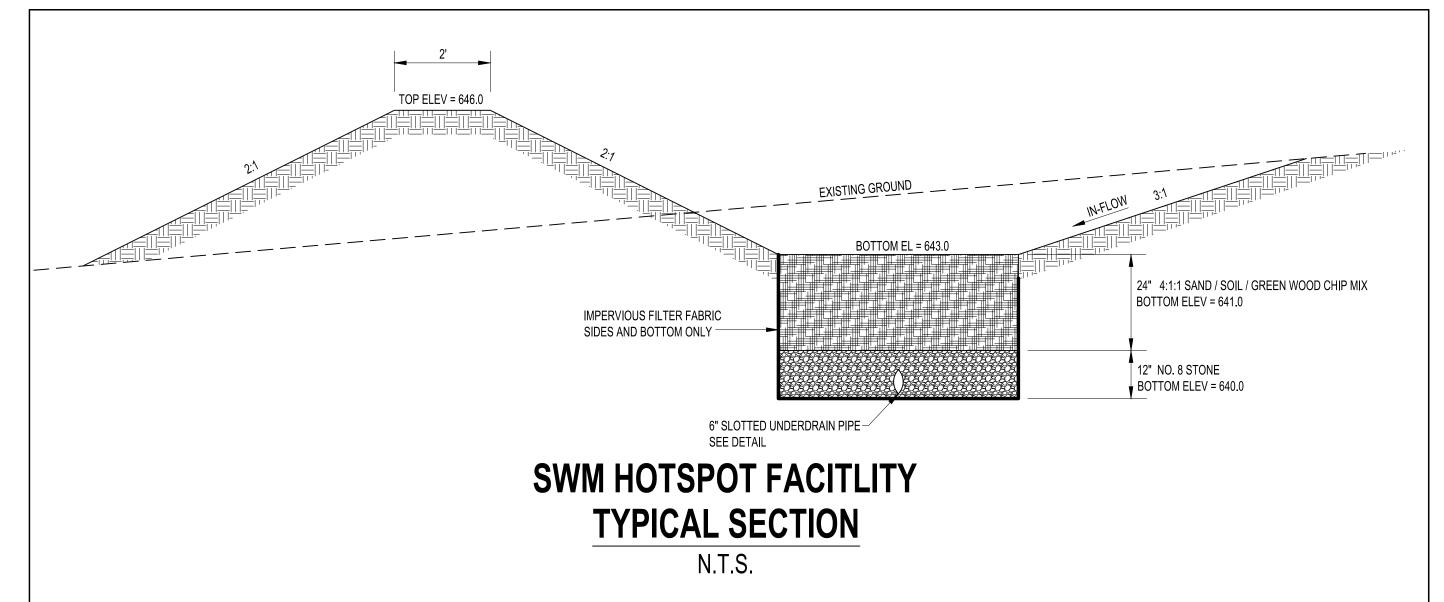
#### STORMWATER MANAGEMENT SEQUENCE OF CONSTRUCTION -LEVEL SPREADER CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR (JOHN E. LEMMERMAN, RTF ASSOCIATES, INC. 410-848-2040) A MINIMUM OF 24 HOURS PRIOR EXCAVATION OF DRYWELLS TO INSPECT EXCAVATION SIZE AND LOCATION. HAVE ALL MATERIALS ON SITE. 2. ONCE DRAINAGE AREA TO LEVEL SPREADER IS STABILIZED WITH VEGETATION OR IF PREVIOOUSLY DISTURBED, A 2" STAND OF GRASS, EXCAVATE LEVEL SPREADER TO THE REQUIRED SIZE AND LOCATION.

3. ONCE SIZE AND LOCATION IS VERIFIED BY CERTIFYING PROFESSIONAL, INSTALL STONE WHILE CERTIFYING PROFESSIONAL IS ON SITE. 4. ONCE ALL EXCESS MATERIAL IS REMOVED OR STABILIZED, CONTACT CERTIFYING PROFESSIONAL FOR FINAL INSPECTION. 5. SUBMIT AS-BUILT CERTIFICATION FOR BOND RELEASE.











STORMWATER MANAGMENT DETAILS CONTRACTOR EQUIPMENT STORAGE YARD WTC CONTRACTORS, INC.

3033 SALEM BOTTOM ROAD 9TH ELECTION DISTRICT, CARROLL CO. MD TAX MAP: 57, GRID: 17, PARCEL: 138

EXISTING USE = CONTRACTOR'S EQUIPMENT STORAGE YARD PROPOSED USE = CONTRACTOR'S EQUIPMENT STORAGE YARD

