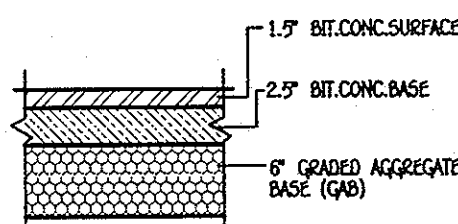


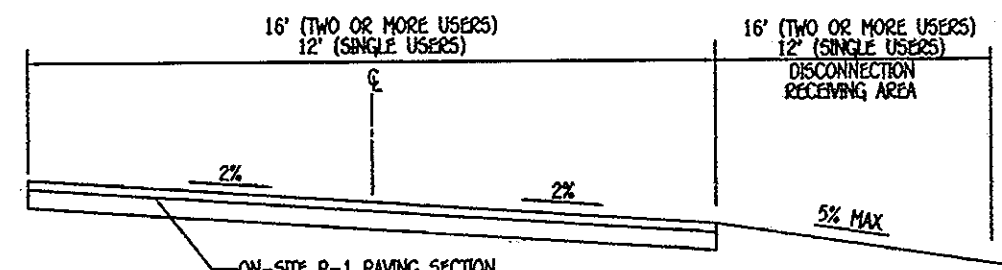
**GUTTER DRAIN FILTER DETAIL**  
NOT TO SCALE

**STORMWATER MANAGEMENT NOTES**

1. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 1,000 SQ. FT. OR LESS.
3. DOWNSPOUTS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5% SLOPE AND CONSTRUCTION OF THE DOWNSPOUT SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.
4. FINAL GRADING IS SHOWN ON THE SITE DEVELOPMENT PLAN.



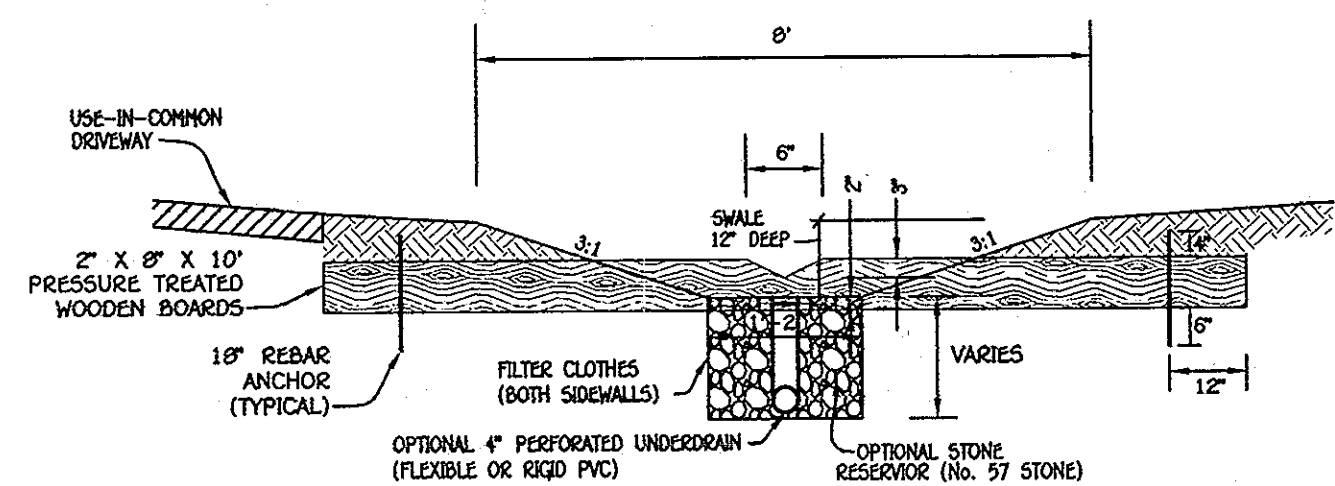
**P-1 DRIVEWAY PAVING SECTION**  
NOT TO SCALE



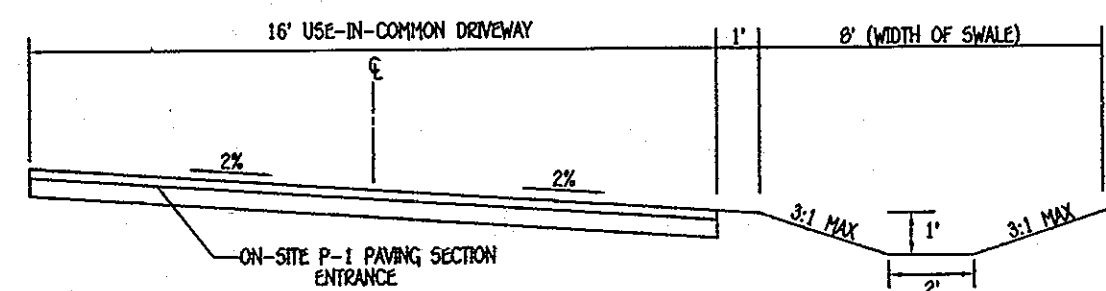
**TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION**  
NOT TO SCALE

**OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED, DISCONNECTION OF NONROOFTOP RUNOFF (N-2)**

1. MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.



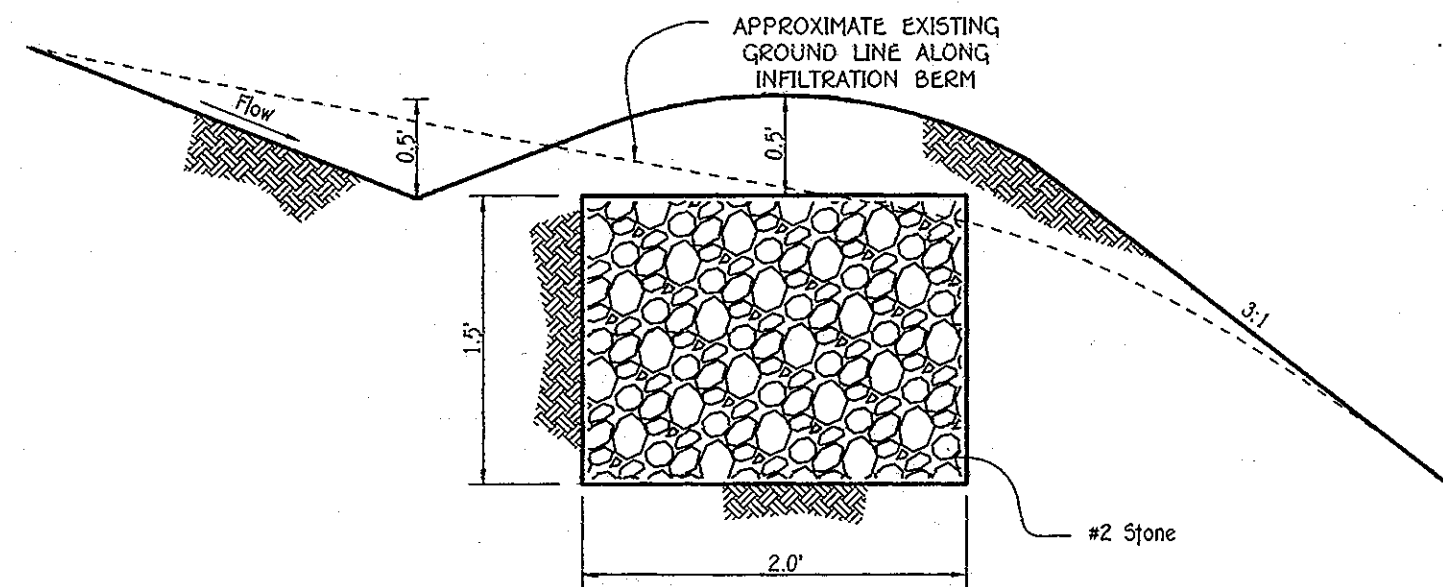
**GRASS SWALE & TIMBER CHECK DAM DETAIL**  
SECTION "A-A"  
NOT TO SCALE



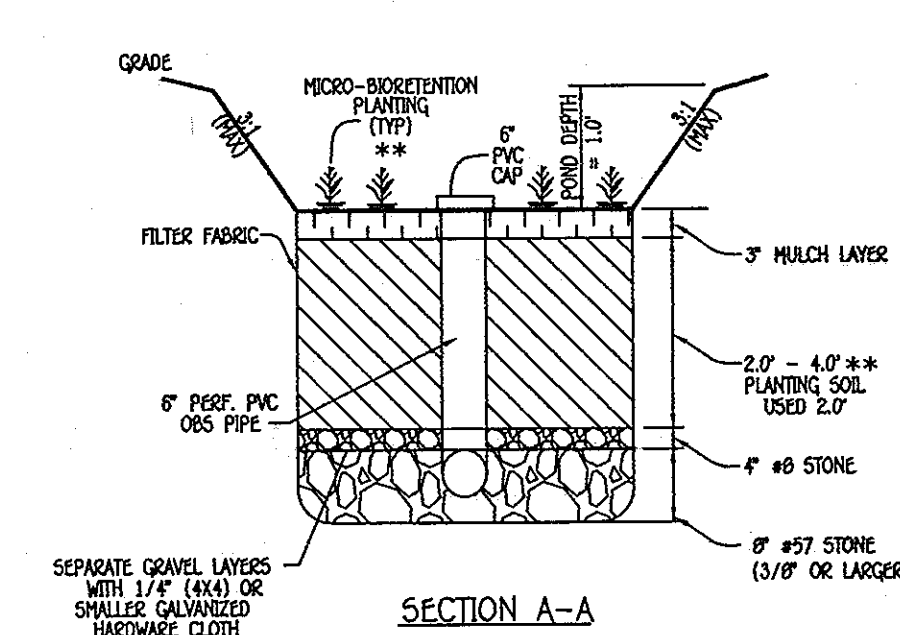
**USE-IN-COMMON DRIVEWAY & SWALE CROSS SLOPE SECTION**  
NOT TO SCALE

**OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED OPEN CHANNEL SYSTEMS - GRASS SWALES, (M-8)**

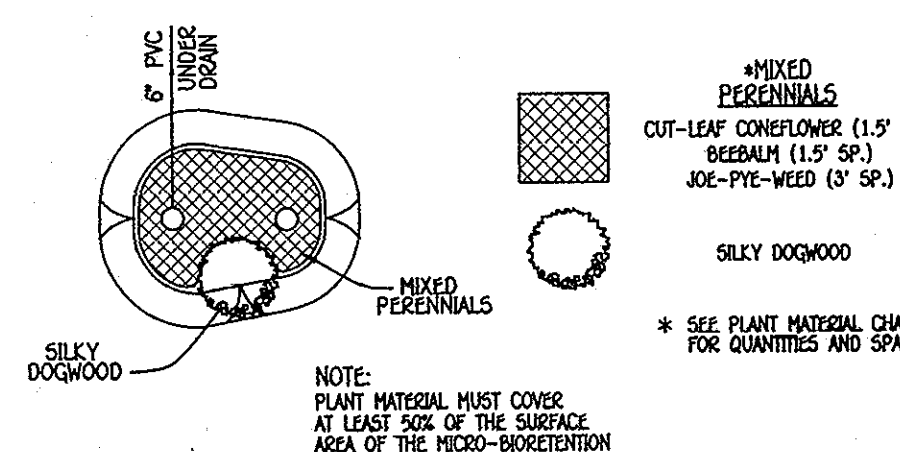
1. THE OPEN CHANNEL SYSTEM SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
2. THE OPEN CHANNEL SHALL BE MOWED A MINIMUM OF AS NEEDED DURING THE GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 6 INCHES.
3. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
4. VISIBLE SIGNS OF EROSION IN THE OPEN CHANNEL SYSTEM SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
5. REMOVING SILT IN THE OPEN CHANNEL SYSTEM WHEN IT EXCEEDS 25% OF THE ORIGINAL W/O.
6. INSPECT CHECK DAMS TWICE A YEAR FOR STRUCTURAL INTEGRITY. RESTORE CHECK DAMS TO ORIGINAL CONDITION AS APPLICABLE.



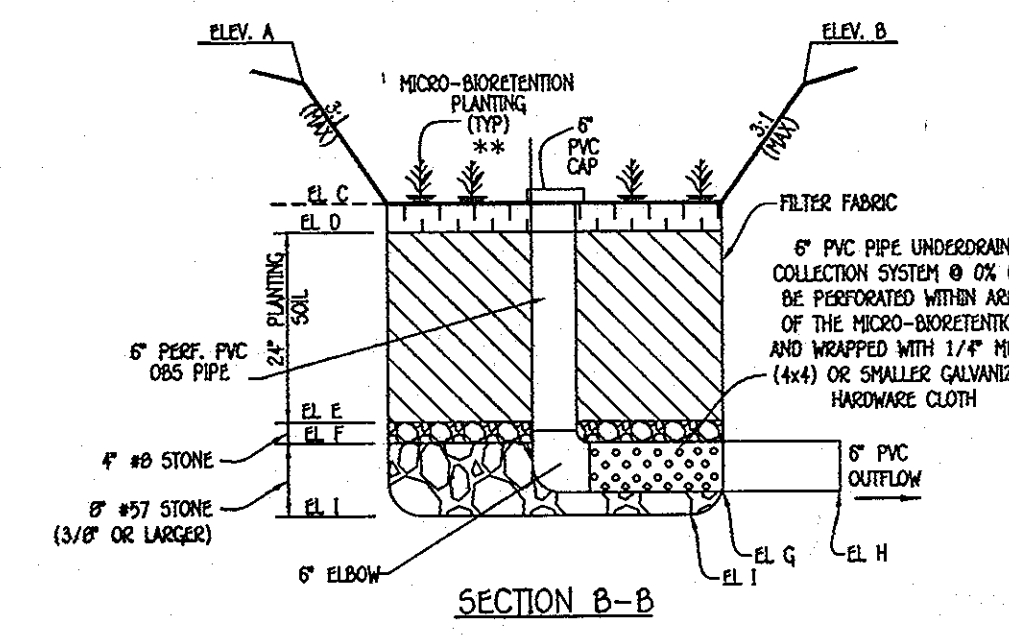
**INFILTRATION BERM**  
NOT TO SCALE



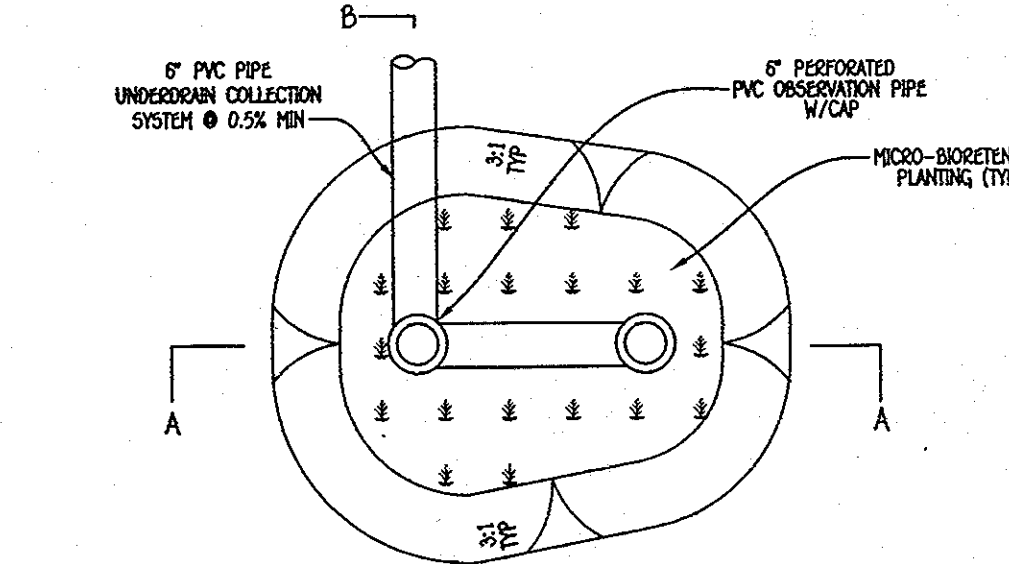
**MICRO-BIORETENTION DETAIL (M-6)**  
NOT TO SCALE



**MICRO-BIORETENTION PLANTING DETAIL**  
NOT TO SCALE



**MICRO-BIORETENTION DETAIL (M-6)**  
NOT TO SCALE



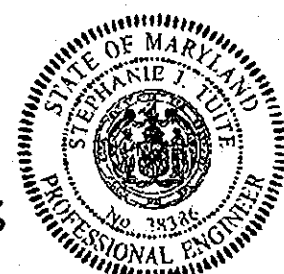
**MICRO-BIORETENTION PLANTING DETAIL**  
NOT TO SCALE

**OPERATION & MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)**

- A. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- B. THE OWNER SHALL PLANT A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS AND REPLACE ALL DEFICIENT STAKES AND WIPES.
- C. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
- D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PkE  
ELLCOTT CITY, MARYLAND 21042  
(410) 461-2095

**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36306, EXPIRATION DATE: 1/12/14.  
*Stephanie Tuite* 10/14/13  
Stephanie Tuite, Signature Of Professional Engineer DATE



**OWNER**  
ALFRED P. TURLEY &  
SUSAN M. TURLEY  
2018 127TH TERRACE E.  
PARROTT, FLORIDA 34219  
941-776-8615

**DEVELOPER**  
TW LAND, LLC  
8415 HORSESHOE ROAD  
ELLCOTT CITY, MARYLAND 21043  
443-974-8021  
ATTN: WALT WEISE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Kate Decker* 10/17/13  
Chief, Division of Land Development Date

*Phil Edmund* 10-27-13  
Chief, Development Engineering Division Date

PROJECT: TURLEY'S OVERLOOK PARCEL 739 SECTION: 1 PARCEL NO.: 739

DEED	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
1532 / 513	0016	R-20	0031	FIRST	601101

WATER CODE: SEWER CODE:

**STORMWATER MANAGEMENT DETAILS & NOTES**

**TURLEY'S OVERLOOK**  
LOTS 1 THRU 3  
ZONED R-20 TAX MAP NO.: 0031 GRID NO.: 0016  
PARCEL NO.: 7739  
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: OCTOBER, 2013  
SHEET 4 OF 4