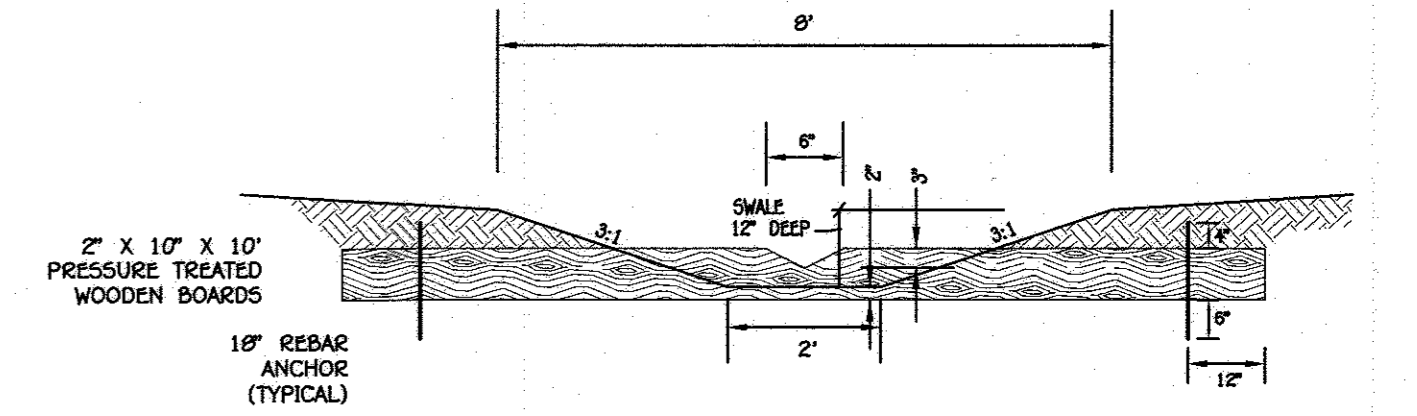


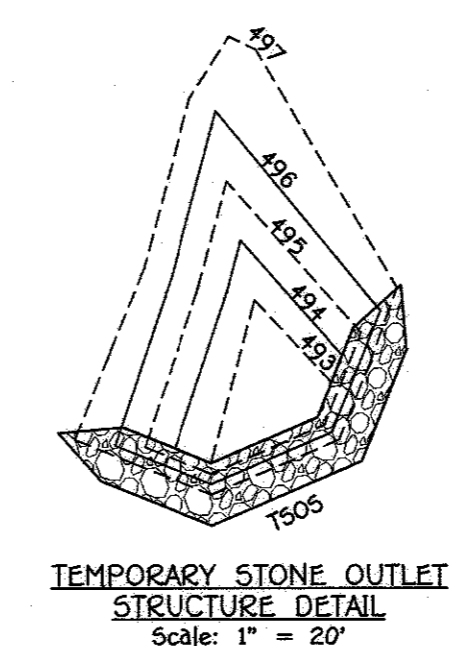
LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---492---	EXISTING 2' CONTOURS	---492---	PROPOSED CONTOUR
---490---	EXISTING 10' CONTOURS	+362.5	SPOT ELEVATION
GbB	SOILS LINES AND TYPE	---	LIMITS OF DISTURBANCE
GcC	EXISTING TREELINE	---	DRAINAGE AREA DIVIDE
○	INDIVIDUAL TREES & SHRUBS	---	SILT FENCE
---	ROOF LEADERS	---	PERMANENT SOIL STABILIZATION MATTING
---	PROPOSED PAVING	---	STABILIZES CONSTRUCTION ENTRANCE
T.B.R.	TO BE REMOVED	---	TEMPORARY STONE OUTLET STRUCT. (E.18)
CD	TIMBER CHECK DAM	S.T.#1	SPECIMEN TREE AND NUMBER

STORMWATER MANAGEMENT PRACTICES				
LOT NO.	DISCONNECTION OF ROOFTOP RUNOFF (N-1) Y/N, NUMBER	DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) Y/N	DRY WELLS (M-5) Y/N, NUMBER	GRASS SWALES (M-8) Y/N, NUMBER
3	YES (4)	NO	NO	YES (1)

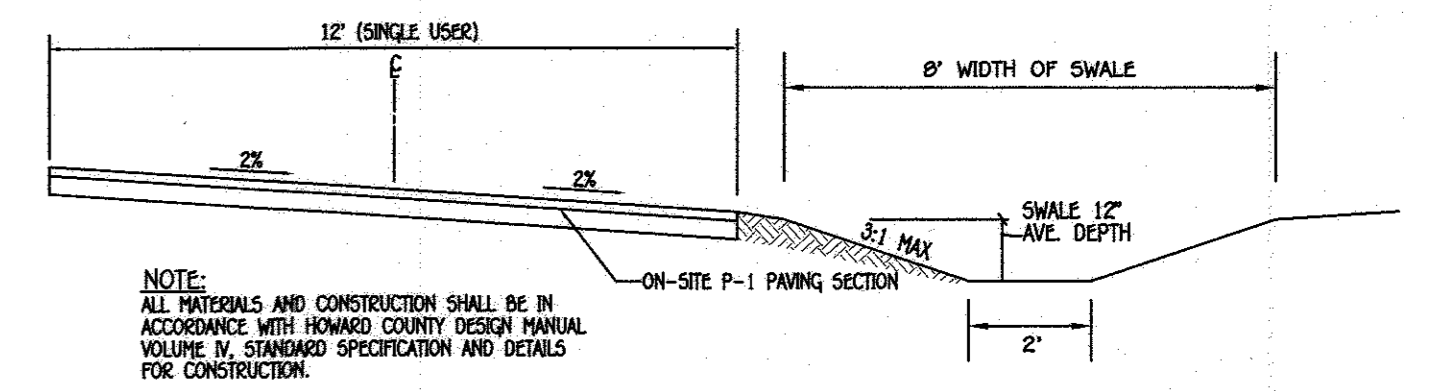
DRAINAGE AREA CHART					
AREA NO.	DRAINAGE AREA	TREATMENT	AREA NO.	DRAINAGE AREA	TREATMENT
#1	17,162 SQ.FT.	GRASS SWALE (M-8)	#4	323 SQ.FT.	DISCONNECTION OF ROOFTOP (N-1)
#2	186 SQ.FT.	DISCONNECTION OF ROOFTOP (N-1)	#5	+453 SQ.FT.	DISCONNECTION OF ROOFTOP (N-1)
#3	489 SQ.FT.	DISCONNECTION OF ROOFTOP (N-1)			



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



TEMPORARY STONE OUTLET STRUCTURE DETAIL
Scale: 1" = 20'



TYPICAL PRIVATE DRIVE & SWALE SECTION
NOT TO SCALE

DESIGN NARRATIVE

Introduction:
This report will demonstrate how the criteria set forth in the Maryland Stormwater Design Manual, Volumes I and II (effective October 2000, revised May 2009) will be satisfied on this project. The goal of creating hydrology similar to that of "Woods in Good Condition" will be accomplished through the use of the practices contained within Chapter 5 of said manual. The achievement of this goal will remove the requirement of providing Channel Protection Volume.

General Site Conditions:
12021 Triadelphia Road is zoned RC-DEO and is located on Tax Map 23, Parcel No.118 of the Howard County, Maryland Tax Map Database System. The property is a Childs Lot within a 717 acre + farm in agricultural preservation. The site is currently a wooded area. Forest conservation requirement for the project will be addressed and the final plan stage. The proposed house will be served by a private well and septic system. The runoff from the lot is mostly from northeast to the southwest corner of the new lot. Disconnection of rooftop runoff will be utilized to treat the majority of rooftop and a grass swale to treat the driveway runoff. Per the 2004 Web Soil Survey, soils on-site consist of "GbA, GbB and GbC" Gladstone Loam, type A soil.

- Natural Resource Protection:**
Environmentally sensitive areas do not exist on-site, therefore no special effort is required to protect natural resource on-site.
- Maintenance of Natural Flow Patterns:**
It is the intent of the proposed design to discharge runoff similar to the characteristics and direction of this site prior to any of the proposed improvements.
- Reduction of Impervious Areas through better site design, alternative surfaces and Nonstructural Practices:**
The design of this project utilizes a common driveways for a portion, then a single driveway treated by a Grass Swale (M-8). Non-Structural practices as permitted in Chapter 5, four (4) Disconnection of Rooftop Runoff (N-1) will be used to address ESD to the MEP requirements.
- Integration of Erosion and Sediment Controls into Stormwater Strategy:**
Since this is a small drainage area (site sheet flows from the northeastern property line to southwestern property line, silt fence, super silt fence, and erosion control matting will be utilized for erosion & sediment control. There is no direct discharge of runoff directly to a stream. All site runoff will discharge to the existing ground then eventually to the Middle Patuxent River. No drainage easements will be required. It is anticipated that all cut will be utilized on-site for construction at time of Site Development Plans.
- Implementation of ESD Planning Techniques and practices to the Maximum Extent Practicable (MEP)**
The full required ESD volume is being provided.
- Request for a Design Manual Waiver:**
No stormwater management waivers are required.

SPECIMEN TREE TABLE				
KEY	SPECIES	SIZE (DBH)	CRZ (FT RADIUS)	COMMENTS
1	TULIP POPLAR	31"	46.5'	TO REMAIN
2	TULIP POPLAR	31"	46.5'	TO REMAIN
3	BLACK OAK	30.5"	45.8'	TO REMAIN

FISHER, COLLINS & CARTEE, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2299

NO.	REVISION	DATE

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. 21351, EXPIRATION DATE: 07/15/2017.

[Signature]
Signature of Professional Land Surveyor

12/06/2016
Date

OWNER/DEVELOPER
HOLLY HOUSE FARM, LLC
ATTN: WALTER W. BECK
3500 FOLLY QUARTER ROAD
ELICOTT CITY, MARYLAND 21042
410-531-6035

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 12-08-16
Chief, Division of Land Development Date

[Signature] 12-8-16
Chief, Development Engineering Division Date

PROJECT	SECTION	PARCEL NO.			
HOLLY HOUSE FARM, LOT 3		118			
PLAT NO.	GRID NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
N/A	03	RC-DEO	23	THIRD	603004

ENVIRONMENTAL CONCEPT PLAN

HOLLY HOUSE FARM,
LOT 3
12021 TRIADELPHIA ROAD
ZONED RC-DEO
TAX MAP No. 23 GRID No. 03 PARCEL No. 118
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: DECEMBER, 2016
SHEET 2 OF 2

ECP-17-012