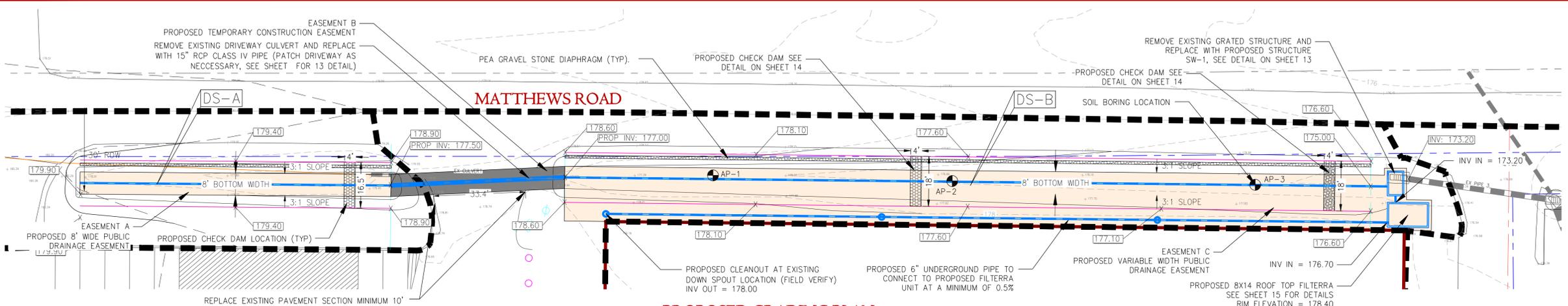


**DRAINAGE DIVIDE MAP**  
SCALE 1" = 40'



**PROPOSED GRADING PLAN**  
SCALE 1" = 20'



**PROFESSIONAL CERTIFICATION:**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NO: 36310, EXPIRATION DATE: 11/17/2012

**SWALE DETAILS:**

Watershed	C	D	E	F	G	H	I	J	K	L	V10	Q10 Flow (cfs)
SW-A	112	178.60	177.50	0.98%	3	8	11.40	2	1.35	16.07	1.58	2.58
SW-B	297	177.00	175.00	0.67%	3	8	13.20	2	1.60	17.58	1.84	5.40

FOR PROPOSED EXPLANATION OF ALL DRY SWALE DETAILS, PLEASE REFER TO TYPICAL SWALE DETAIL ON SHEET 13

- NOTES:**
- CONTRACTOR SHALL REVIEW EXISTING CULVERT TO DETERMINE IF IT IS SUITABLE FOR REUSE AT INVERTS INDICATED ON THE PLANS. OTHERWISE, A NEW CULVERT SHALL BE INSTALLED PER THE PROFILE ON THIS SHEET.
  - FOR DITCH SIZING COMPUTATIONS PLEASE SEE ENGINEERING REPORT.
  - CONTRACTOR TO MAINTAIN ACCESS TO SHOPPING CENTER AT ALL TIMES.
  - REFER TO SHEET 14 FOR CHECK DAM DETAIL.
  - ALL PROPOSED SWALES TO BE LINED WITH A GRASS-LEGUME OR TALL FESCUE MIXTURE. PLEASE REFER TO THE ENGINEERING REPORT FOR 2-YEAR VELOCITY CALCULATIONS.

**CHARLES COUNTY GOVERNMENT**  
DEPARTMENT OF PLANNING AND GROWTH MANAGEMENT  
DEVELOPMENT SERVICES DEPARTMENT

ACTIVITY	CONSTRUCTION	AS-BUILT	REMARKS OR CONDITIONS
GRADING			
ROADS			
STORM DRAINAGE			
STORMWATER MANAGEMENT			
WATER			
SEWER			
OTHER			

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
THIS PERMIT EXPIRES ON: \_\_\_\_\_

**NOTE:**  
This drawing, specifications, and work produced by Vista Design, Inc. (VDI) for this project are instruments of service for this project only, and remains the copyrighted property of VDI. Reuse or reproduction of any of the instruments of service of VDI by the Client or assignees without the written permission of VDI will be at the Client's risk and be a violation of the copyright laws of the United States of America and the respective state within which the work was completed.  
**NOTE:**  
This Drawing does not include necessary components for construction safety. All construction must be done in compliance with the occupational safety and health act of 1970 and all rules and regulations thereto appurtenant.



REV. NO.	CONSTRUCTION REVISION	DATE

**PROPOSED STORMWATER SWALE PLAN**

**VISTA DESIGN, INC.**  
Landscape Architects, Land Planning Consultants, Engineers & Surveyors  
11634 Worcester Hwy, Shovell, MD 21862  
ph 410-352-3874 fax 410-352-3875 email vista@vistadesigninc.com

PROJECT DATA		09-047
DRAWN BY: RB	PROJ. NO.	09-047
CHECK BY: RP	FILE NAME:	CE 012210.dwg
CHARLES COUNTY RYANS ROAD, MARYLAND	SHEET NO.	7
DATE: 05/20/10	SCALE: AS SHOWN	