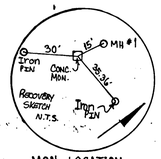
REVISIONS		
DATE	DESCRIPTION	BY
4-8-87	ADDED OPEN SECTION AREA, STORMDRAIN, COURSE, LIMIT OF DISTURBANCE, BOUNDARY	JCO

CURVE DATA CHART					
CURVE NO.	RADIAS	LENGTH	TANGENT	DELTA	CHORD BEARING & DISTANCE
1	1100.00'	175.00'	87.69'	09°06'55"	S 25°25'08" W,
2	600.00'	135.00'	67.70'	12°53'30"	S 23°31'45" W, 129.10'

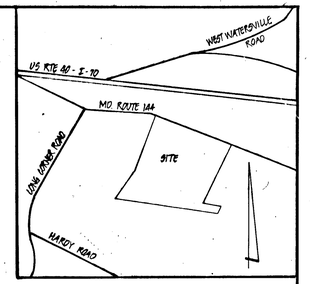
HORIZONTAL & VERTICAL DATUM BASED ON HOWARD COUNTY STA. 392.8002

GENERAL NOTES

SEE SHEET 2 OF 3



MON. LOCATION



VICINITY MAP
SCALE: 1" = 1200

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 4-10-87

THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

SOIL CONSERVATION DISTRICT — DATE

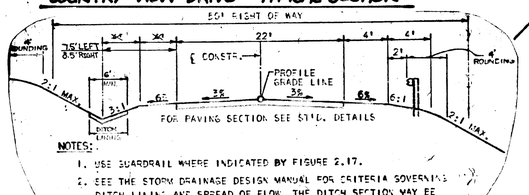
OWNER & DEVELOPER

RICHARD M. HOUGH
17691 ROUTE 144
MT. AIRY, MARYLAND 21771

PAVING SECTION : P-5

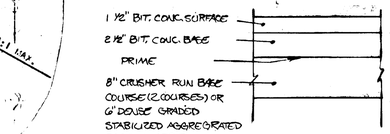
MD. RTE. 144 WIDENING AREA
2 COURSES 1.5" BIT. CONC. SURFACE
6" BIT. CONC. BASE
6" GRADED AGGREGATE BASE

COUNTRY VIEW DRIVE - TYPICAL SECTION



NOTES:
1. USE GUARDRAIL WHERE INDICATED BY FIGURE 2.17.
2. SEE THE STORM DRAINAGE DESIGN MANUAL FOR CRITERIA SOVERNING DITCH LINING AND SPREAD OF FLOW. THE DITCH SECTION MAY BE MODIFIED TO MEET THE SPREAD CRITERIA.
3. THIS SECTION APPLY ONLY TO CUL-DE-SAC STS. WITH A.D.T. OF 800 OR LESS.

OPEN SECTION - 'R' DISTRICT



PAVING SECTION - P-2
NOT TO SCALE

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY

DEVELOPER: Dennis M. Rush — DATE 2/2/87

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER: Walter Mirvat — DATE 4-8-87

STATE OF MARYLAND — WALTER NORVAL JOHNSON — NO. 7318 — REGISTERED PROFESSIONAL ENGINEER

APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 4-16-87

APPROVED: OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-13-87

TITLE: ROAD CONSTRUCTION PLAN
PROJECT: COUNTRY VIEW
LOCATION: TAX MAP: 2 ; PARCEL 124 ; GRID FILE NO.: 9-85-11
FOURTH ELECTION DISTRICT ; HOWARD COUNTY, MARYLAND

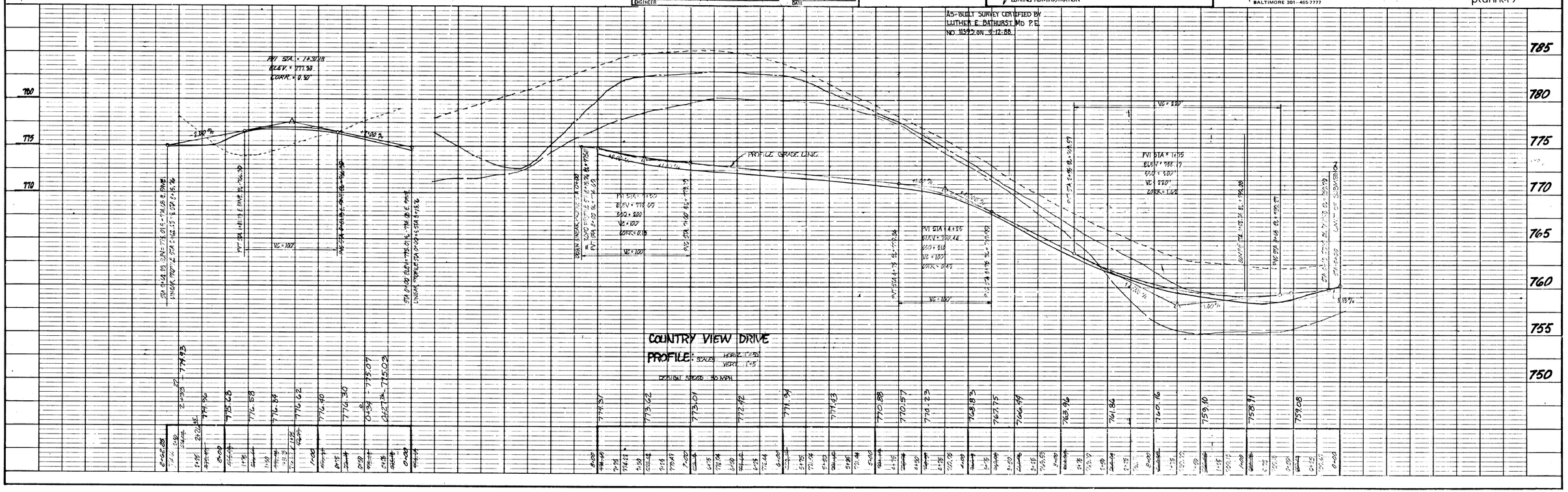
DATE:	DESIGN BY:	DRAWN BY:	CHECKED BY:
NOV., 1985	W N	JCO/DMP	WN
SCALE: 1"=50'	JOB NO.: 84198	DRAWING NO.: 1 OF 3	

boender associates
COURTHOUSE SQUARE
ELLICOTT CITY, MARYLAND 21043
BALTIMORE 301-465-7777

engineers
surveyors
planners

PLAN — SUBMITTED, PLOTTED, NOTE BOOK, No., GRADES CHECKED, ALIGNMENT CHECKED, RE. OF WAY CHECKED, STRUCTURE LOCATIONS CHECKED, BY, DATE

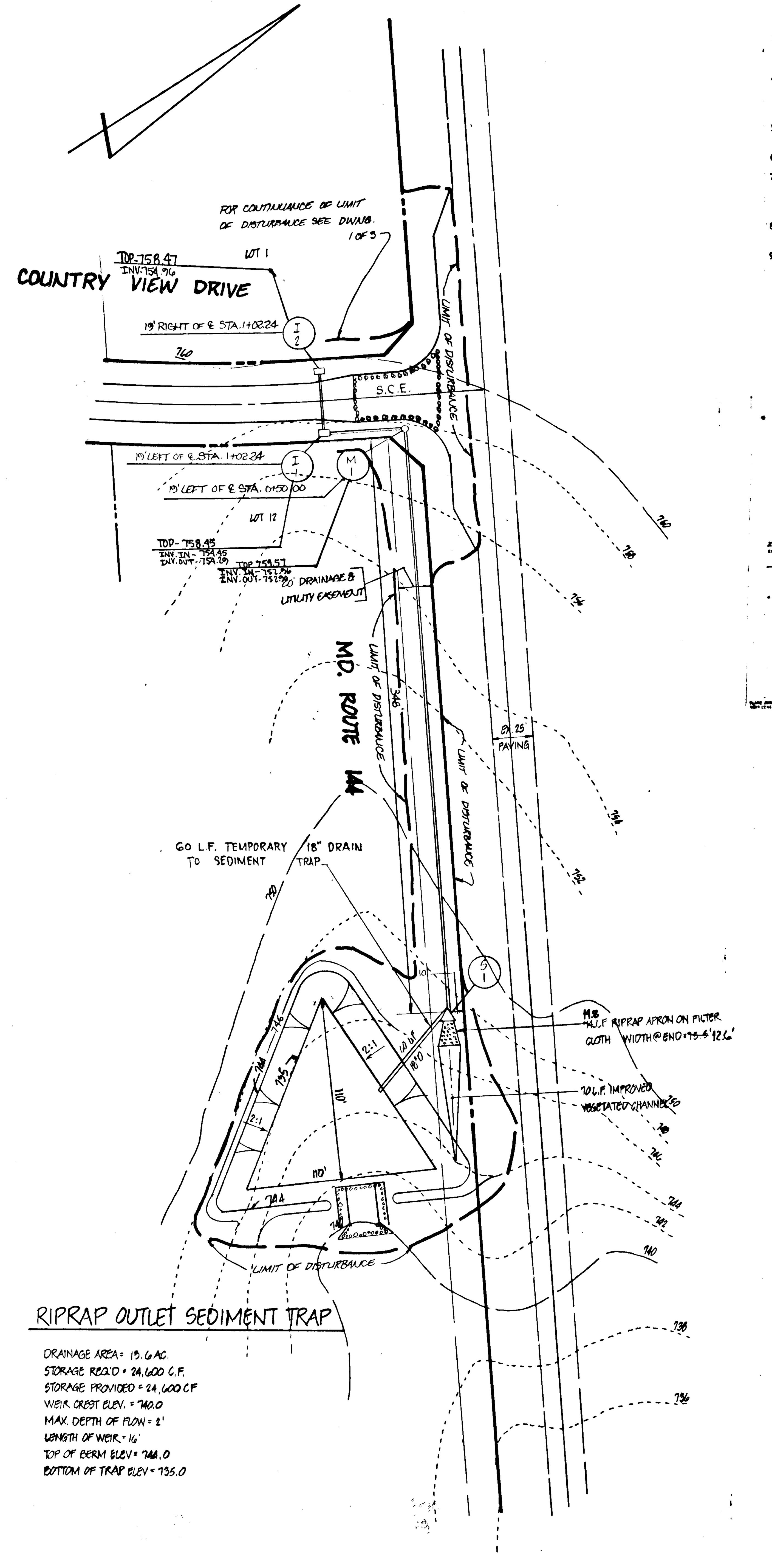
PROFILE — SUBMITTED, PLOTTED, NOTE BOOK, No., GRADES CHECKED, ALIGNMENT CHECKED, STRUCTURE LOCATIONS CHECKED, BY, DATE



K&E PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.
48 7024 MADE IN U.S.A.

#1255

F-87-124 AS-BUILT 9-1288



RIPRAP OUTLET SEDIMENT TRAP

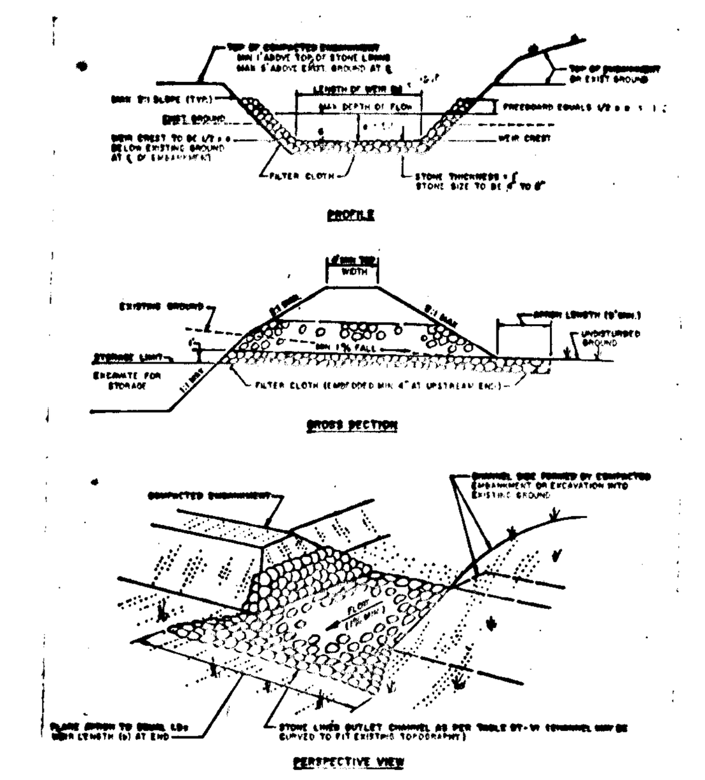
DRAINAGE AREA: 13.6 AC.
STORAGE REQ'D = 24,600 C.F.
STORAGE PROVIDED = 24,600 CF
WEIR CREST ELEV. = 740.0
MAX. DEPTH OF FLOW = 1'
LENGTH OF WEIR = 16'
TOP OF BERM ELEV = 748.0
BOTTOM OF TRAP ELEV = 735.0

PLAN

SCALE: 1" = 50'

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.
2. Notify the Howard County Bureau of Licenses, Inspections and Permits and the Construction/Inspections/Surveys Division at 792-7272 at least 24 hours before beginning grading operations.
3. Clear and grub for sediment control devices. Construct stabilized construction entrance and sediment trap. — 1 week
4. Grade as necessary and construct the storm drain system to the location of S-1. Provide 60 linear feet of temporary drain into the sediment trap. — 2 weeks
5. Clear as necessary and grade for road construction. Pave the road and install driveway culverts. — 2 weeks
6. Vegetatively stabilize all disturbed areas. — 3 days
7. Flush out the storm drain system. Remove the temporary drain and complete construction of the rip rap apron and the improved vegetated channel. — 3 days
8. Fill in the sediment trap and vegetatively stabilize all disturbed areas. — 3 days
9. With the grading inspector's approval, remove remaining sediment control devices and stabilize all disturbed areas. — 3 days

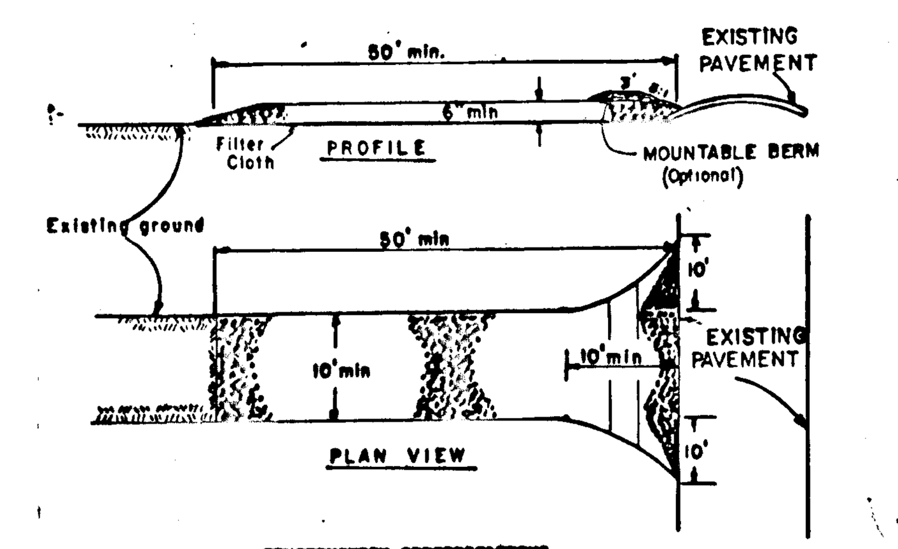


CONSTRUCTION SPECIFICATIONS

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be five (5) feet, measured at centerline of embankment.
3. All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed the height of embankment.
5. Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest.
6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel.
7. Stone used in the outlet channel shall be four (4) to eight(8) inches (riprap). To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet.
8. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
9. The structure shall be inspected after each rain and repaired as needed.
10. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
11. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
12. Drainage area for this practice is limited to 15 acres or less.

RIPRAP OUTLET SEDIMENT TRAP

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE - S.C.E.

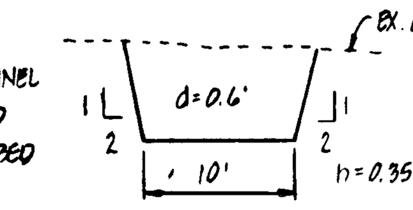
NOT TO SCALE

STRUCTURE SCHEDULE			
NO.	TYPE	INV. OUT	TOP ELEV.
1	18" CONC. END SECTION	744.47	746.20

MANHOLE SCHEDULE					
NO.	TYPE	SIZE	INV. IN	INV. OUT	TOP ELEV.
M-1	STD. PRECAST	4'-0"	~~753.00~~ 752.96	752.90	759.57

INLET SCHEDULE				
NO.	TYPE	INV. IN	INV. OUT	TOP ELEV.
I-1	K	754.45	754.29	~~758.96~~ 758.45
I-2	K	-	754.96	~~758.96~~ 758.47

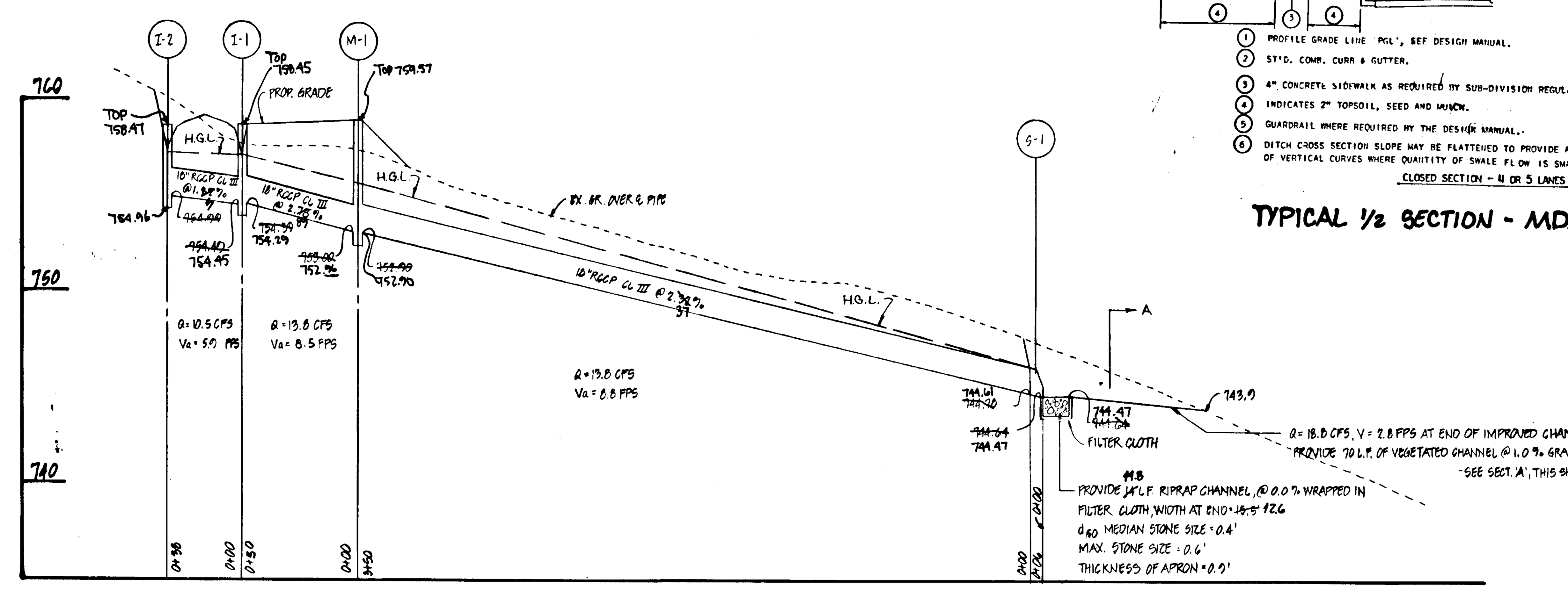
PROVIDE VEGETATED CHANNEL TO EXISTING GROUND, SEED AND MULCH ALL DISTURBED AREAS.



d = 0.6 FT.
A = 6.72 S.F.
Wp = 12.68 S.F.
R = 0.530 $R^{2/3} = 0.655$
S = .010 $S^{1/2} = .100$
V = 1.486/.035 × .655 × .100 = 2.8 FPS
Q = 18.8 CFS = 18.8 CFS

SECTION 'A'

NOT TO SCALE



Q = 18.8 CFS, V = 2.8 FPS AT END OF IMPROVED CHANNEL
PROVIDE 70 L.F. OF VEGETATED CHANNEL @ 1.0% GRADE SEE SECT. 'A', THIS SHEET

PROVIDE 14' LF RIPRAP CHANNEL @ 0.0% WRAPPED IN FILTER CLOTH, WIDTH AT END = 12.6
d_{50} MEDIAN STONE SIZE = 0.4'
MAX. STONE SIZE = 0.6'
THICKNESS OF APRON = 0.9'

PROFILE

SCALE: HORIZ.: 1" = 50' VERT.: 1" = 5'

AS-BUILT SURVEY CERTIFIED BY LUTHER E. BATHURST MD P.E. NO. 11393 ON 9-12-88.

4-8-87	ENTRANCE GRADE LINE ADDED, LIMIT OF DISTURBANCE	JBO
DATE	DESCRIPTION	BY
	REVISIONS	

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thre July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Matinenance - Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft)

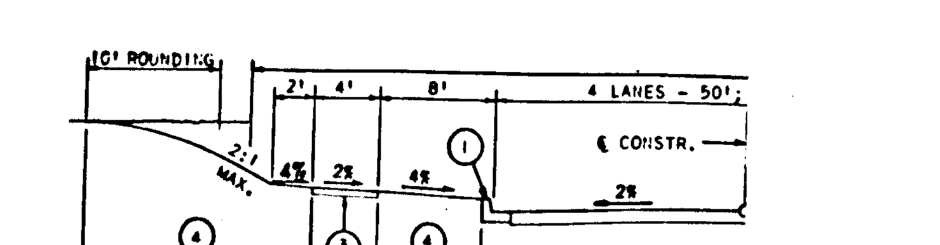
Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For ther period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1½ to 2 tons per acre 670 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT CONTROL NOTES

1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437).
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in-place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7) Site Analysis:
   - Total Area of Site 4.19 Acres
   - Area Disturbed [illegible] Acres
   - Area to be roofed or paved [illegible] Acres
   - Area to be vegetatively stabilized [illegible] Acres
   - Total Cut [illegible] Cu.Yds.
   - Total Fill [illegible] Cu.Yds.
   - Offsite waste/borrow area location —
8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.



1. PROFILE GRADE LINE 'PGL', SEE DESIGN MANUAL.
2. STD. COMB. CURB & GUTTER.
3. 4" CONCRETE SIDEWALK AS REQUIRED BY SUB-DIVISION REGULATIONS.
4. INDICATES 2" TOPSOIL, SEED AND MULCH.
5. GUARDRAIL WHERE REQUIRED BY THE DESIGN MANUAL.
6. DITCH CROSS SECTION SLOPE MAY BE FLATTENED TO PROVIDE A SWALE AT OR NEAR THE CREST OF VERTICAL CURVES WHERE QUANTITY OF SWALE FLOW IS SMALL, AS APPROVED BY DPW.

NOTE: NORMAL CROWN SECTIONS ARE SHOWN. SEE DESIGN MANUAL FOR SUPERELEVATION REQUIREMENTS.

CLOSED SECTION - 4 OR 5 LANES

TYPICAL 1/2 SECTION - MD. ROUTE 144

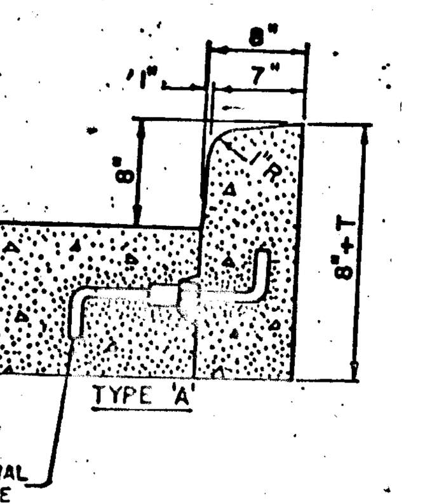
GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, i.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTER SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL TEST PIT FOR EXISTING UTILITIES AT LEAST FIVE (5) DAYS PRIOR TO STARTING WORK SHOWN ON THESE DRAWINGS.
4. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAY PRIOR TO BEGINNING WORK SHOWN ON THESE DRAWINGS.
   - MISS UTILITY....................559-0100
   - BELL TELEPHONE SYSTEM....................393-3649
   - LONG DISTANCE CABLE DIVISION....................393-3553/3554
   - BALTIMORE GAS & ELECTRIC COMPANY....................539-8000
   - HOWARD COUNTY BUREAU OF UTILITIES....................992-2366
   - HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR OF COMMENCEMENT OF WORK)....................792-7272
5. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
6. ALL STREET CURB RETURNS SHALL HAVE 30' RADII UNLESS OTHERWISE NOTED.
7. STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOL. IV, i.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
8. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1978 EDITION (REVISED).
9. PIPE SHALL NOT BE INSTALLED BY CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
10. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS.
    - MD RTE 144: MINOR ARTERIAL, DESIGN SPEED = 40 M.P.H.
    - COUNTRY VIEW DRIVE: CUL-DE-SAC, DESIGN SPEED = 30 M.P.H.
11. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
12. ALL FILL AREAS WITHIN ROADWAYS AND/OR UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% COMPACTION.
13. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
15. SUBJECT PROPERTY ZONED "R" PER 08-02-85 COMPREHENSIVE ZONING PLAN.
16. TOPO SHOWN HEREON IS BASED ON HO. CO. 1"=200' AERIAL PHOTOGRAMMETRIC MAPS.
17. NO PIPE SHALL BE LAID IN PLACE UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO WITHIN SIX (6) INCHES OF FINISHED GRADE ELEVATIONS.
18. ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "B" AS SHOWN IN FIG. 11.4 OF THE HOWARD COUNTY DESIGN MANUAL, VOL. I, UNLESS OTHERWISE NOTED.

NOTE:- UNLESS OTHERWISE SPECIFIED, LONGITUDINAL TIE BAR DEVICE; TYPE 'A' OR TYPE 'B'; PLACED AT MIDDLE OF KEYWAY (NOT SHOWN) & SPACED ACCORDING TO SPECIFICATIONS FOR CONCRETE PAVEMENT SHALL BE USED AT CONSTRUCTION JOINT BETWEEN COMBINATION CURB & GUTTER AND RIGID PAVEMENT. SEE STANDARD MD-572.61.

NOTE:- JOINT SPACING FOR CONCRETE CURB AND COMB. CURB & GUTTER = 10'. SEE SPECIFICATIONS FOR LOCATION AND DESCRIPTION OF TREATMENT FOR THE TYPES OF JOINTS USED.

MD. SHA CURB & GUTTER TYPE 'A'



APPROVED: DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 4-16-87

APPROVED: OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-13-87

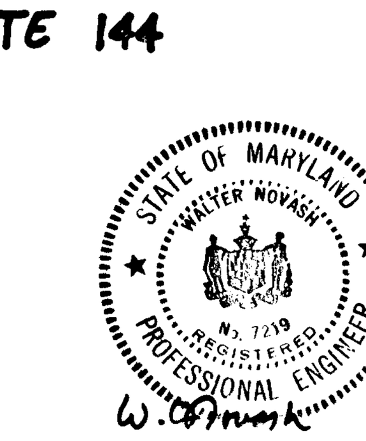
REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
U.S. SOIL CONSERVATION SERVICE — DATE 4-10-87

THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
SOIL CONSERVATION DISTRICT — DATE

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY

DEVELOPER — DATE 1-29-87



ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Walter Novash
ENGINEER — DATE 4-8-87

OWNER & DEVELOPER

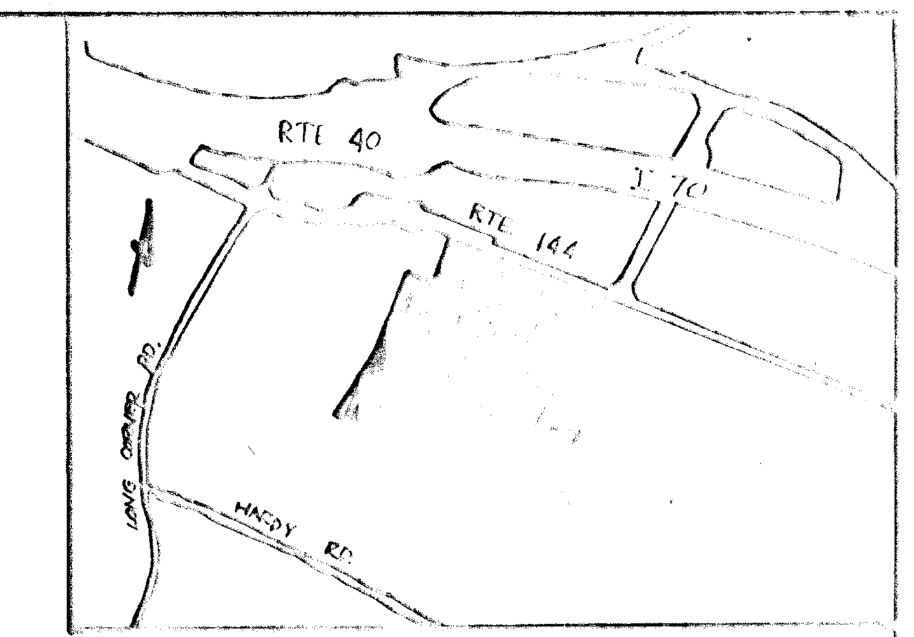
RICHARD M. HOUGH
17591 ROUTE 144
MT AIRY, MARYLAND 21771

TITLE: STORM DRAIN & SEDIMENT CONTROL PLAN				
PROJECT: COUNTRY VIEW				
LOCATION: 4TH ELECTION DISTRICT TAX MAP: 2 HOWARD CO., MD.				
SCALE: AS SHOWN	DESIGNED BY: WN	DRAWN BY: D.P.	CHECKED BY: WN	DATE: DEC., 1986
FIELD BOOK: —	PAGE NO.: —	JOB NO.: 84138	DRAWING NO.: 2 OF 3	

boender associates inc.
consulting engineers
land surveyors
land planners
COURTHOUSE SQUARE
3565 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MD. 21043
(301) 465-7777

F-87-124 AS-BUILT 9-12-88

#1255

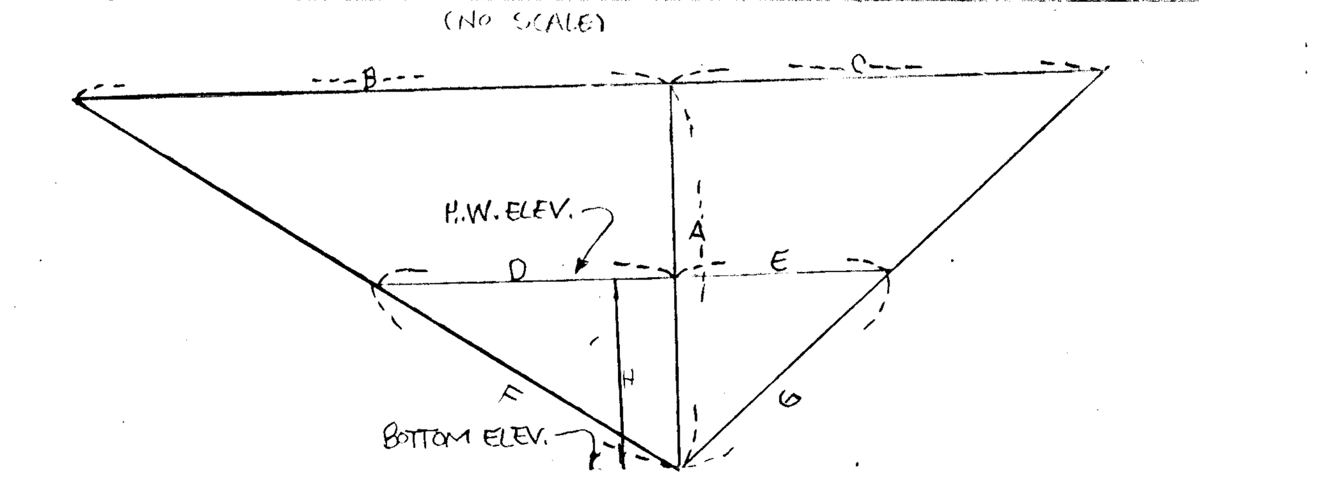


VICINITY MAP

GENERAL NOTES

TYPICAL CROSS SECTION FOR 100 YR. FLOODPLAIN

(NO SCALE)



CROSS SECTION	A	B	C	H	Q	Vel
3	1.11'	34'	50'	0.81'	113.2	4.56
6	4.07'	59'	72'	1.22'	134.6	5.62
7	4.47'	50'	48'	1.47'	166.1	7.01
8	5.00	140'	115'	1.20'	173.5	4.72
9	3.48	91'	94'	1.38'	247.0	4.88

OWNER / DEVELOPER

RICHARD M. HOUGH
17591 RTE. 144
MT. AIRY, MD. 21771

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 4-10-87

THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

SOIL CONSERVATION DISTRICT — DATE

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

DEVELOPER — DATE 4/2/87

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER Walter Nowak — DATE 4-8-87

APPROVED: DEPARTMENT OF PUBLIC WORKS

William E. Riley — 4-16-87

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

TITLE	DRAINAGE AREA MAP					
PROJECT	COUNTRY VIEW					
LOCATION	TAX MAP: 8 ; PARCEL 124 ; OPZ FILE NO.: S-85-11 FOURTH ELECTION DISTRICT ; HOWARD COUNTY, MARYLAND					
DATE	SCALE	DESIGN BY	DRAWN BY	CHECKED BY	DRAWING NO.	JOB NO.
NOV., 1985	1" = 100'	D.P.	S.D.K.	JAB	3 OF 3	84138

boender associates — engineers, surveyors, planners
3565 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MARYLAND 21043
301-465-7777

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