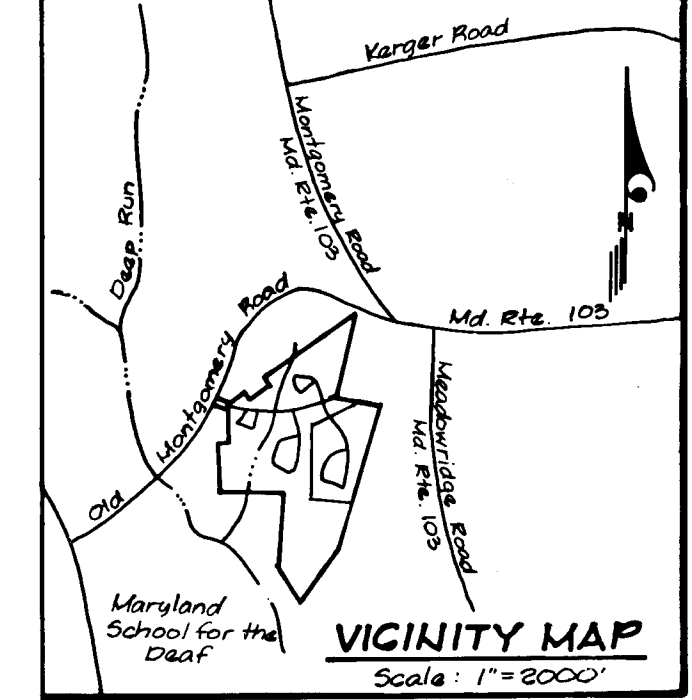


No	REVISION	Date
1	Revise storm drainage I-14 to M-12	4-9-91
2	Rev Curb & Gutter from Standard to Modified	7-9-91



Street Light - 100 watt High Pressure Sodium Vapor fixture on 14' Fiberglass Pole.

**ENGINEER'S CERTIFICATE**  
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Jeffery L. Schwab 4/17/89  
Jeffery L. Schwab Date



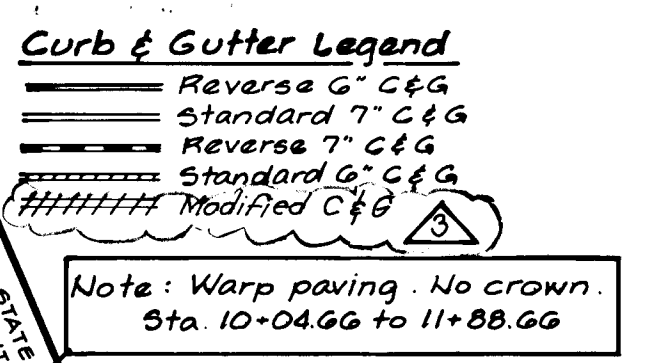
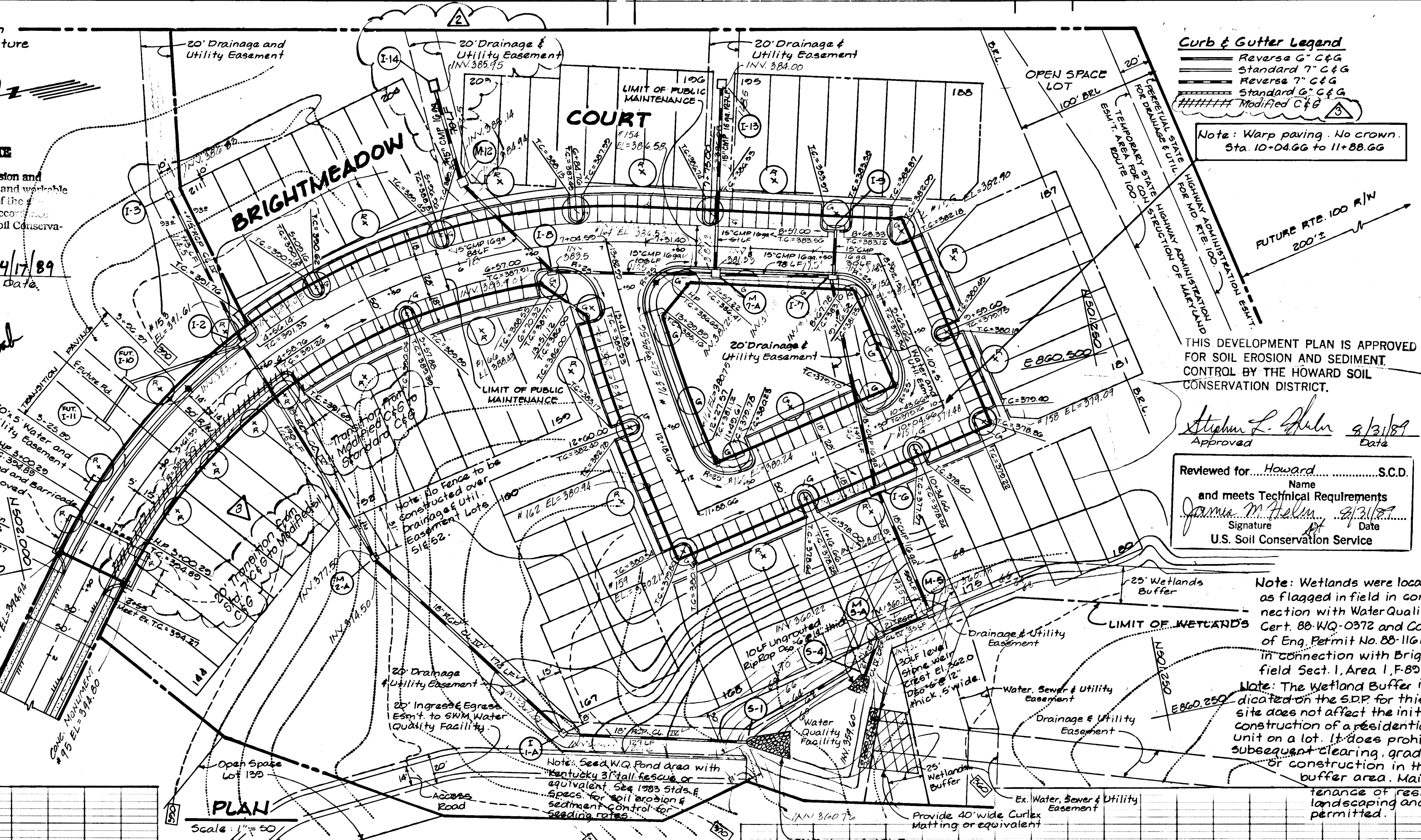
**DEVELOPER'S CERTIFICATE**  
I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Robert May 4/17/89  
Signature of Developer/Builder Date

SYM	TYPE	SIZE	QUANT.	REMARKS
1	Acer Rubrum, October Glory, October Glory, Red Maple	2 1/2" Cal, 12' Ht	21	5 & 8 Heavy Heads
2	Acer Saccharum, Green Mountain, Green Mountain, Sugar Maple	2 1/2" Cal, 12' Ht	25	

- Contractor shall verify location of underground utilities prior to digging.
- Final location of trees may be adjusted slightly to accommodate field cond.
- The location, type and number of trees shown on plan are the minimum req. and are used for bond purposes only. The final location and variety of trees may vary to accommodate field cond. and builders landscape program. Bond release is contingent upon section 16.131 of the Ho.Co. Subdivision and Land Development Regulations, as approved by the Office of Planning and Zoning.

NAME - PC to PT	RADIUS	DELTA	ARC	TAN	CHORD BEARING
PC 2+67.14 to PT 7+31.40	400'	66°30'00"	464.26'	262.25'	458.63° 51°15'00"E
PC 12+18.16 to PT 13+82.92	500'	10°25'37"	164.83'	82.66'	164.60° N83°14'49"E



Note: Warp paving. No crown. Sta. 10+04.66 to 11+88.66

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

Approved: Stephen L. Schwab 4/31/89  
Name and meets Technical Requirements  
Signature Date  
U.S. Soil Conservation Service

- GENERAL NOTES**
- All storm drain & paving shall be constructed in accordance with the latest edition of Standards and Specifications of Howard County and MDSHA.
  - Types of Storm drainage refer to the standard details of Ho.Co. & MDSHA.
  - Trench compaction for storm drains within road or street right of way limits shall be in accordance with the Ho.Co. Design Manual, vol. IX std. G-2.01.
  - Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of mains by digging test pits, by hand, at all utility crossings well in advance of construction.
  - All utility companies shall be notified 24 hrs. in advance of construction.
  - All traffic services, parking and signing to be done in accordance with "The Manual of Uniform Traffic Control Devices", 1984 revised edition.
  - Sag and crest vertical curves were designed in accordance with "Ho. Co. Design Manual" vol. III.
  - Provide conc. sidewalk ramps Ho.Co. std. type A R-4.01 where shown in plan.
  - Design speed: See table on sheet. Zoning R-3C.
  - The contractor or developer shall contact the Construction Inspection/ Survey Division 24 hrs. in advance of commencement of work 702-7872.
  - Stormwater Management quantity control provided in F-89-19 Brightfield Section 1 Area 1.

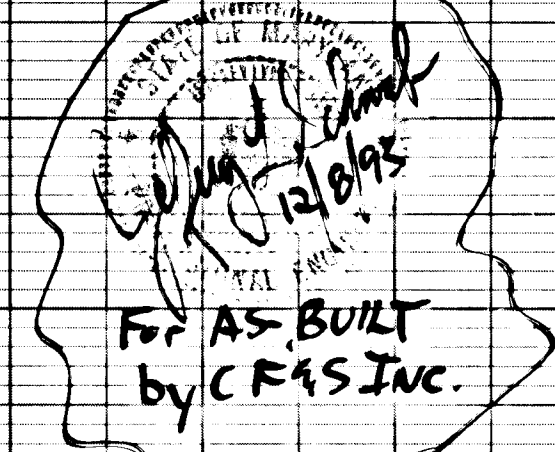
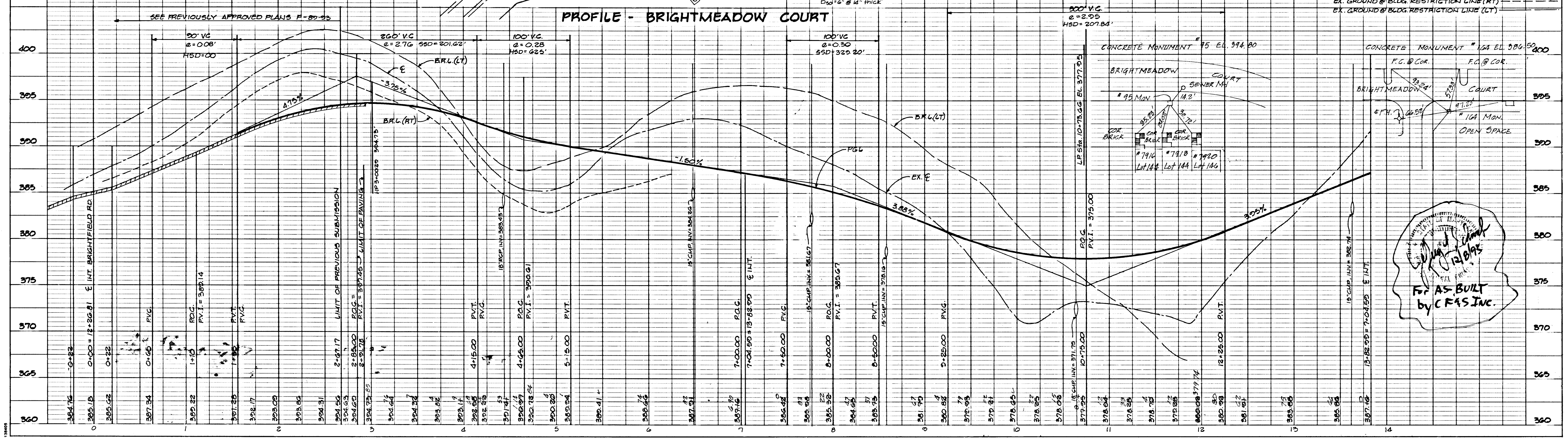
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
Chief, Land Development Division  
Date: 10/4/89  
Chief, Bureau of Highways  
Date: 10/4/89  
Chief, Bureau of Engineering  
Date: 10/4/89  
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING.  
Chief, Division of Community Planning & Land Dev.  
Date: 10/12/89

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7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

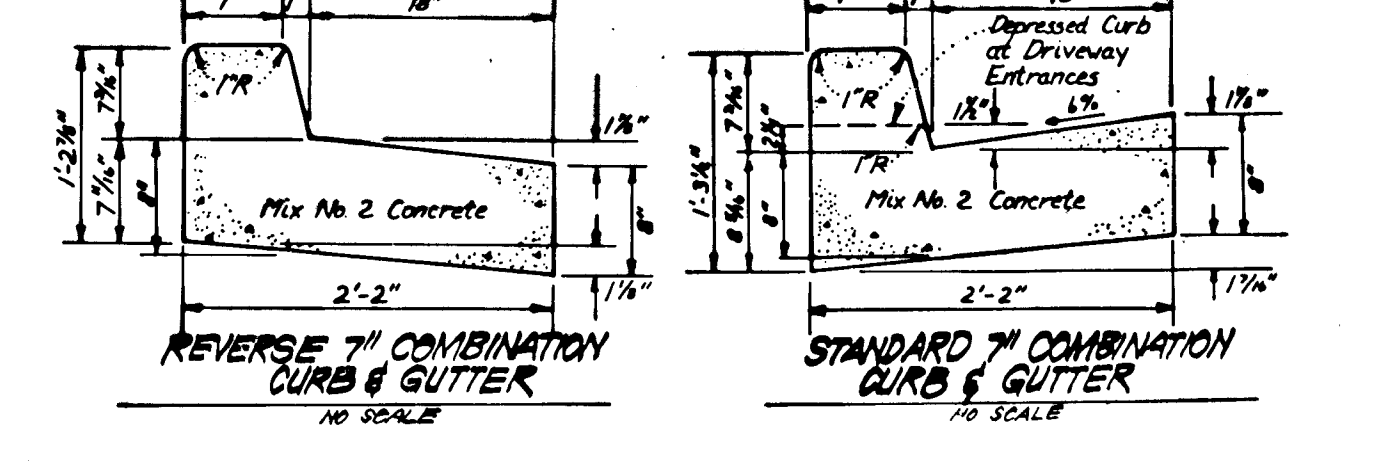
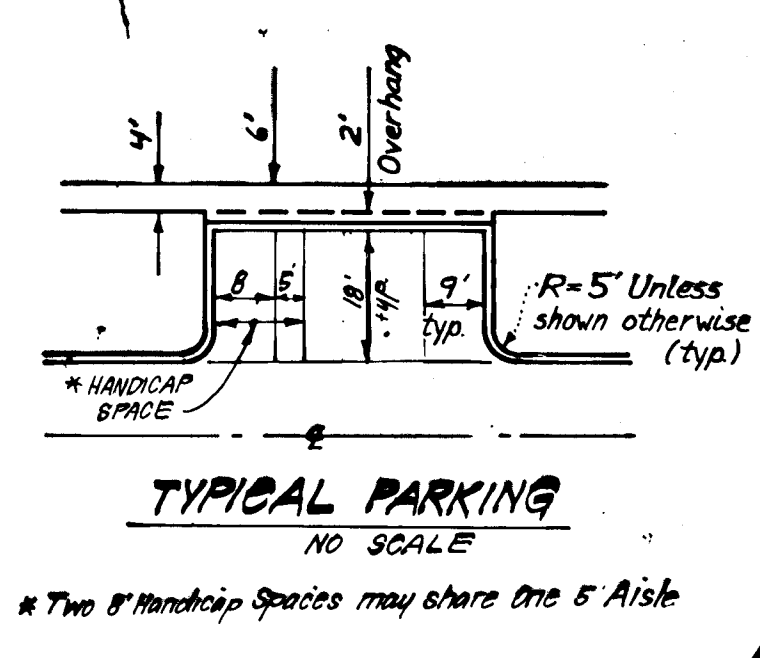
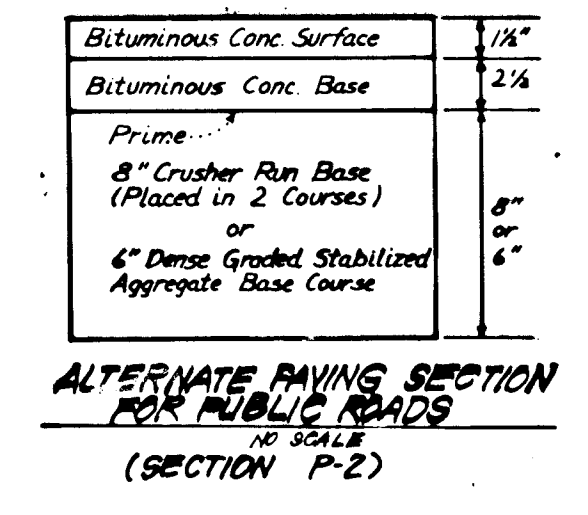
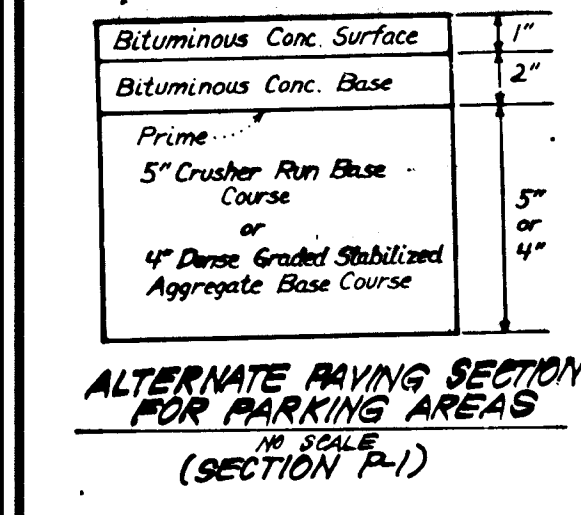
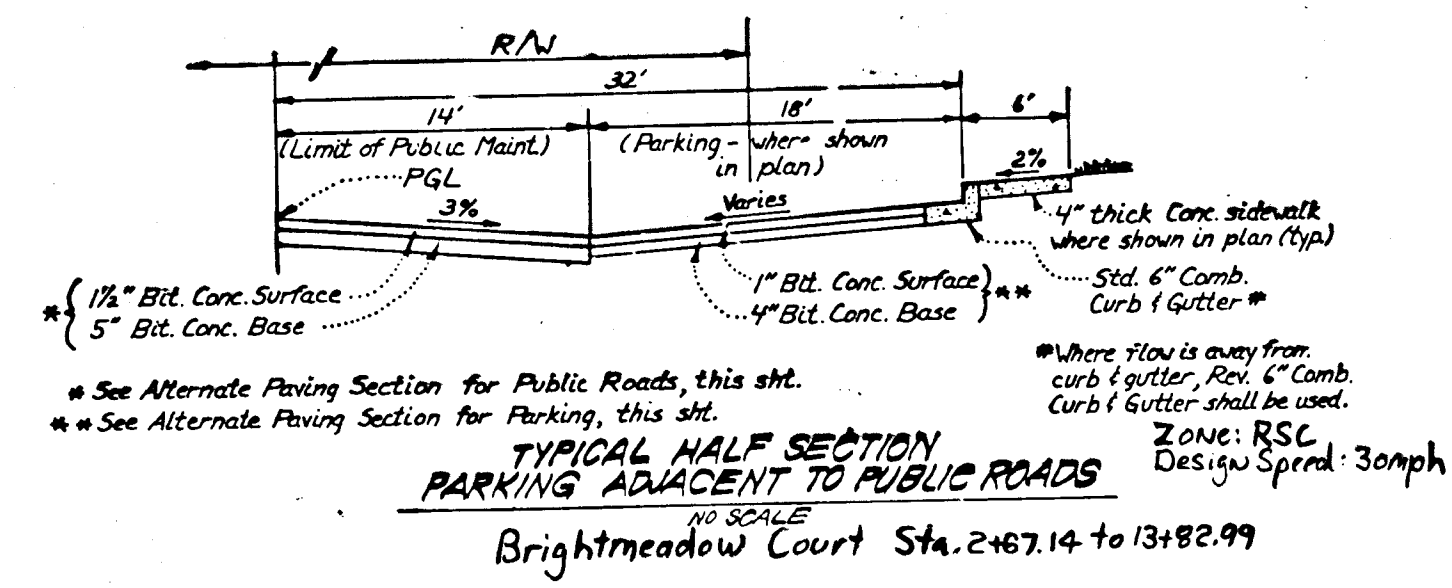
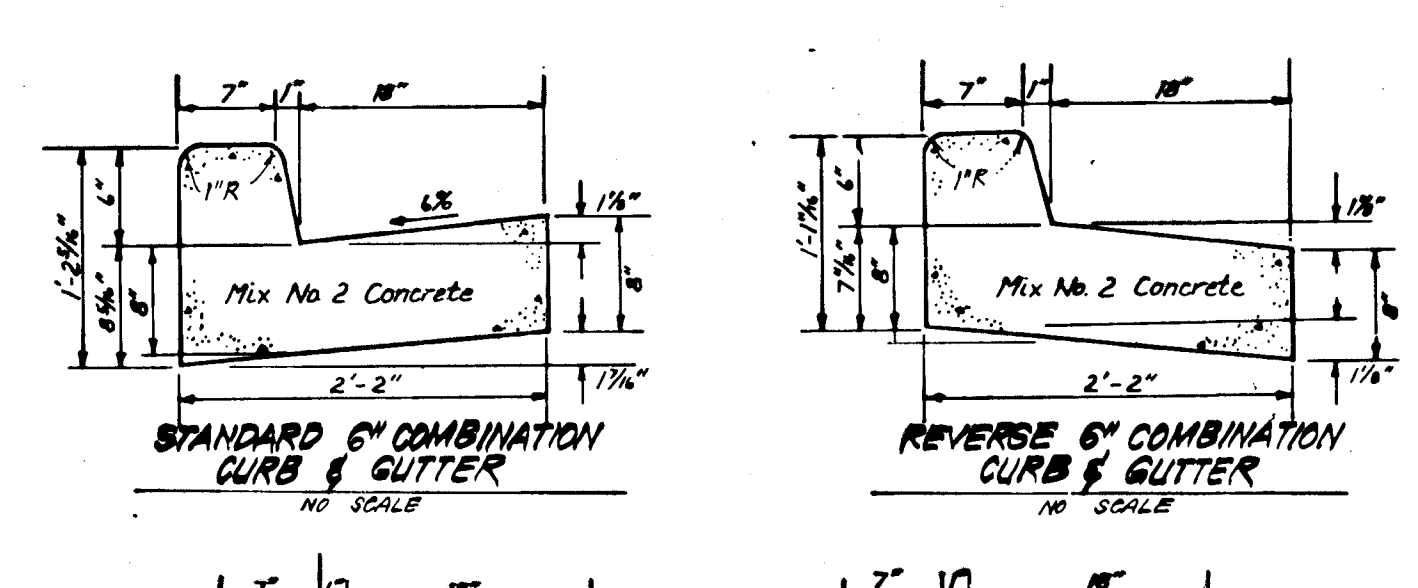
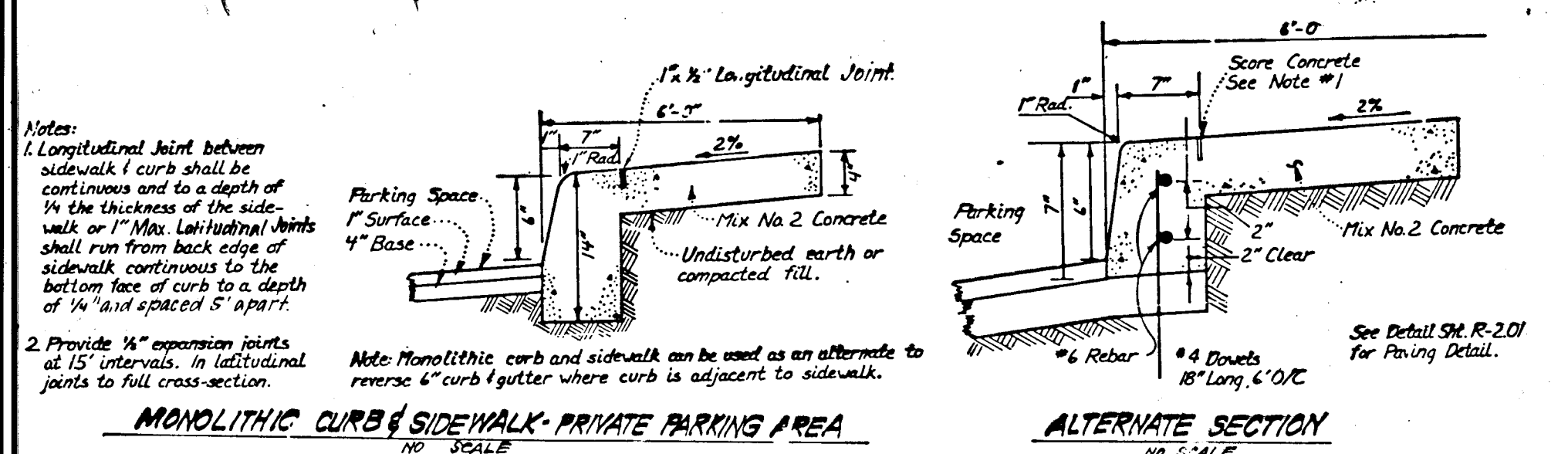
DESIGNED: JLS  
DRAWN: PER  
CHECKED: JLS  
DATE: 4-14-89

**ROAD CONSTRUCTION PLANS**  
BRIGHTMEADOW COURT  
SCALE: As Shown  
DRAWING: 1 of 4  
JOB NO: 85-053  
FILE NO: 85-053 D

For: Kings Meads Limited Partnership  
2030 Red Branch Road #200  
Columbia, Maryland, 21045



1302



**STRUCTURE SCHEDULE**

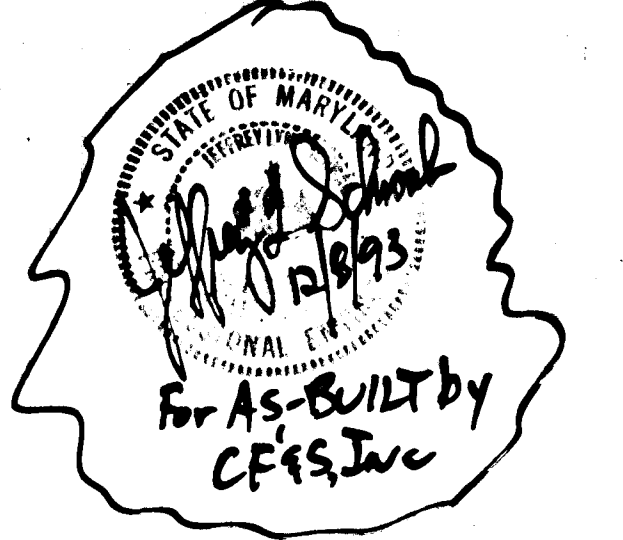
No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
S-1	Concrete End Sect.	360.90	360.00			Ho. Co. Std. 50 6.51 18" Dia.	See Plan
I-2	A-5 with Defl.	364.57	364.33	351.04	351.31	SD 4.01 w=2'-6"	Sta. 4+49.28
I-3	D-Inlet	364.00	364.00	352.85		SD 4.11 2'-6" Sq.	See Plan
S-4	Concrete End Sect.	360.07	360.00			SD 5.51 21" Ø	See Plan
M-5	Shallow Manhole	361.30	360.87	368.00		G 5.05 48" Sq.	See Plan
I-6	A-10 Inlet	370.00	369.46	377.44	36	SD 4.02 w=2'-6"	Sta. 10+70.66
I-7	A-5 Inlet	378.00	377.57	383.07	383.36	SD 4.01 w=2'-6"	Sta. 8+61.62
I-8	A-5 with Defl.	384.9	383.50	387.64	387.77	SD 4.01 w=2'-6"	Sta. 6+63.16
I-9	A-10 with Defl.	378.33	378.33	383.64	383.18	SD 4.02 w=2'-6"	Sta. 8+62.67
M-12	Shallow Manhole	385.25	385.08	389.50		G 5.05 48" Sq.	Sta. Sta. 6+16 53' Lt.
I-10	D-Inlet		384.00	387.83		SD 4.11 2'-6" Sq.	Sta. Sta. 7+050 112' Lt.
M-7A	Shallow Manhole	381.5	381.25	386.10		G 5.05 48" Sq.	Sta. Sta. 7+050 19' Rt.
M-2A	Brick Manhole	377.5	374.50	382.60	38	G 5.01 48" Rcl	See Plan
I-1A	D-Inlet	367.30	366.83	371.83		SD 4.11 2'-6" Sq.	See Plan
M-5A	Shallow Manhole	360.48	360.38	364.00		G 5.05 48" Sq.	See Plan
I-14	D-Inlet		386.00	389.83		SD 4.11 2'-6" Sq.	"

- All inverts to be fully developed except where noted.
- Slots on all four sides.
- See Ho. Co. Std. 4.83 for Inlet Deflectors.
- Non-Developed Invert - Provide granite block bottom.

**PIPE SCHEDULE**

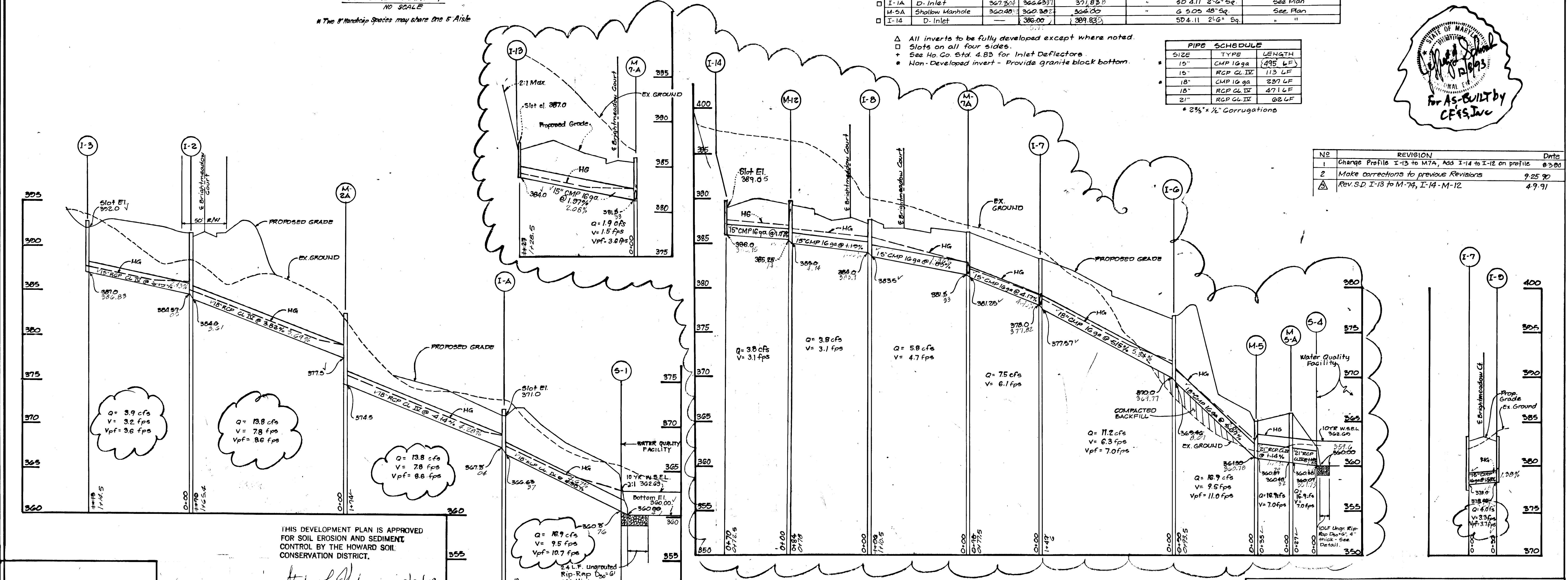
SIZE	TYPE	LENGTH
15"	CMP 16 ga	495 LF
15"	RCP CL IV	113 LF
18"	CMP 16 ga	237 LF
18"	RCP CL IV	471 LF
21"	RCP CL IV	62 LF

\* 2% x 1/2" Corrugations



**REVISION**

NO.	REVISION	Date
1	Change Profile I-13 to M-7A, Add I-14 to I-12 on profile	8-3-89
2	Make corrections to previous revisions	9-25-90
3	Rev. S.D. I-13 to M-7A, I-14 - M-12	4-9-91



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Charles W. Weisand* Chief, Bureau of Highways Date: 10/4/89

*John S. D. Taylor* Chief, Bureau of Engineering Date: 10-6-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

*John S. D. Taylor* Chief, Division of Community Planning & Land Devel Date: 10/16/89

Reviewed for: *Howard* S.C.D. Name and meets Technical Requirements

*John S. D. Taylor* Signature Date: 10/16/89

U.S. Soil Conservation Service

**DEVELOPER CERTIFICATE**

I, *Jeffrey J. Schwab*, certify that all development and construction will be done according to this plan of development and plans for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on site inspection by the Howard Soil Conservation District or their authorized agents, as may be deemed necessary.

*Jeffrey J. Schwab* Signature of Developer/Builder Date: April 17, 1989



**ENGINEER CERTIFICATE**

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

*Jeffrey J. Schwab* Date: 9/17/89

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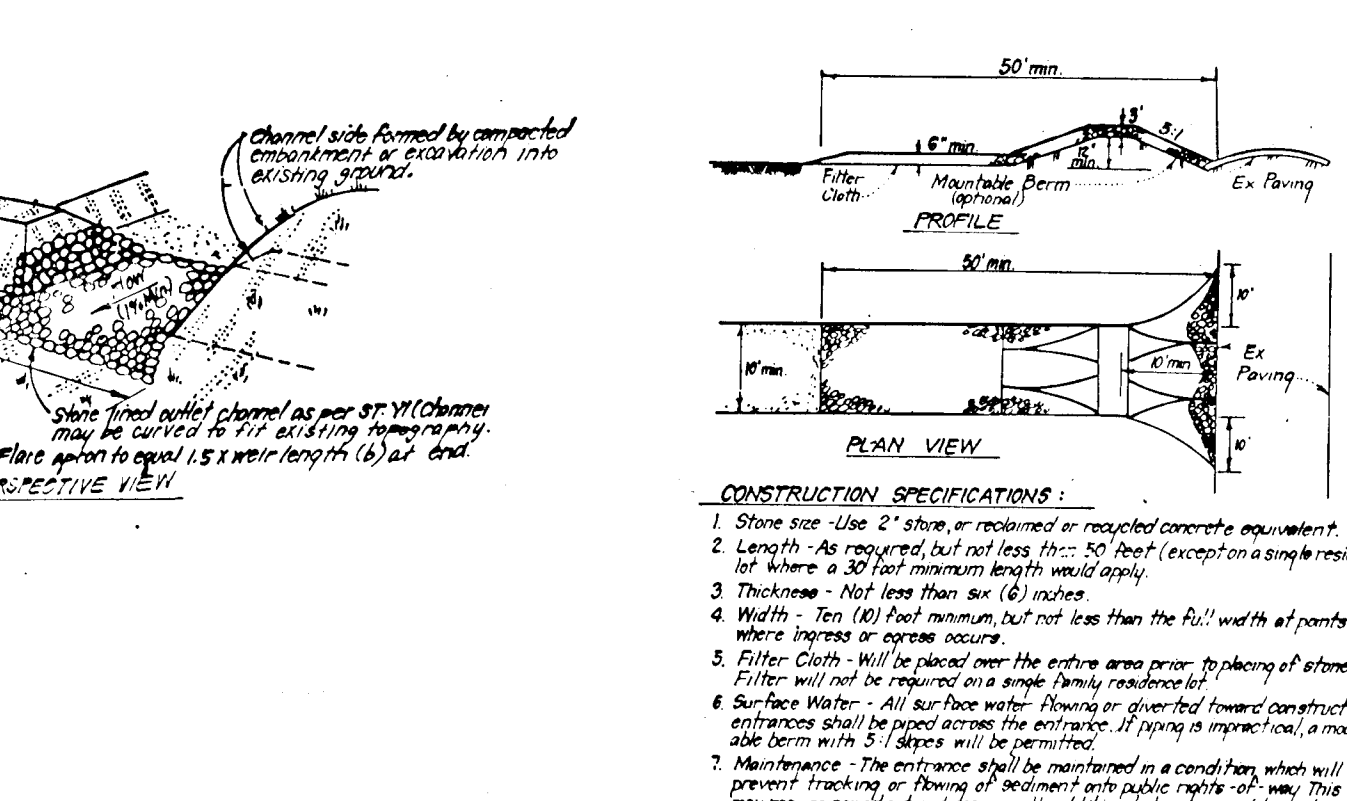
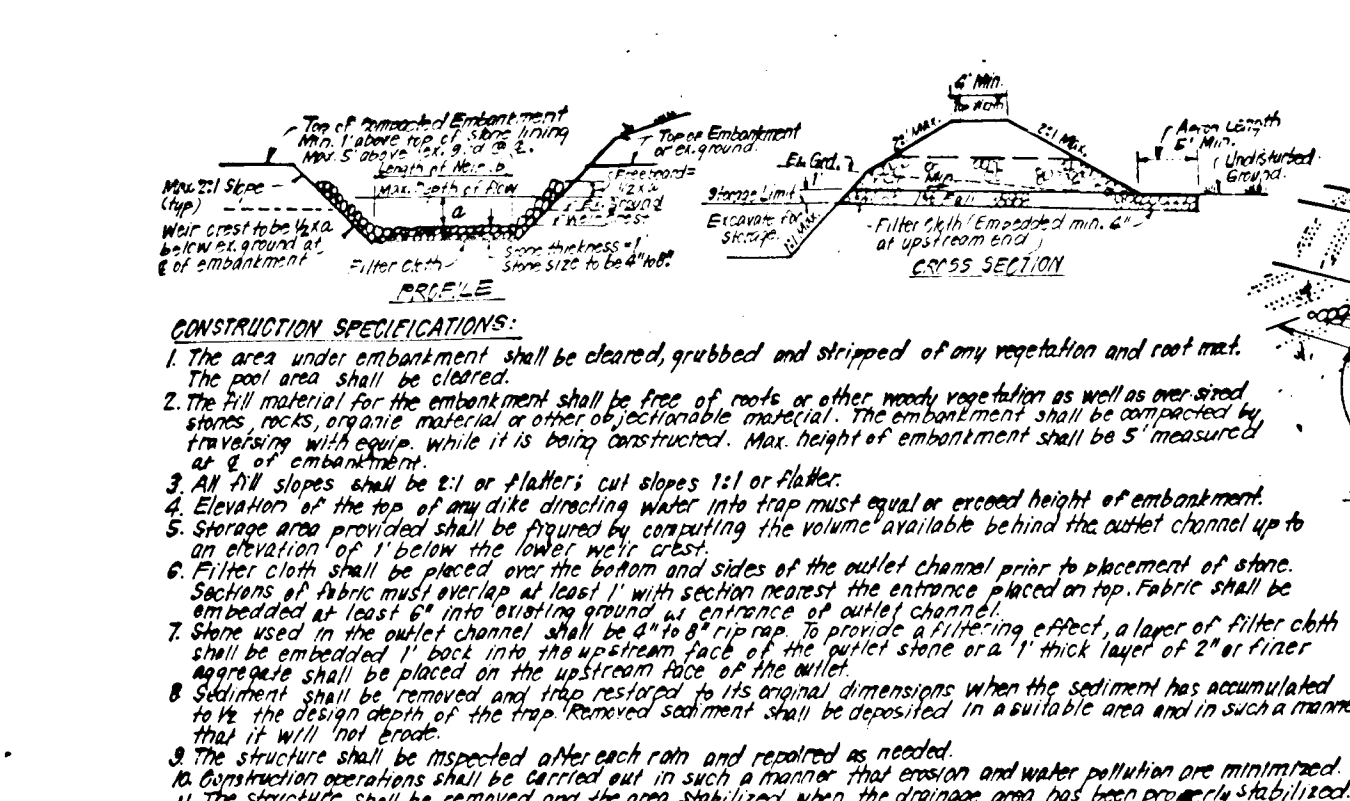
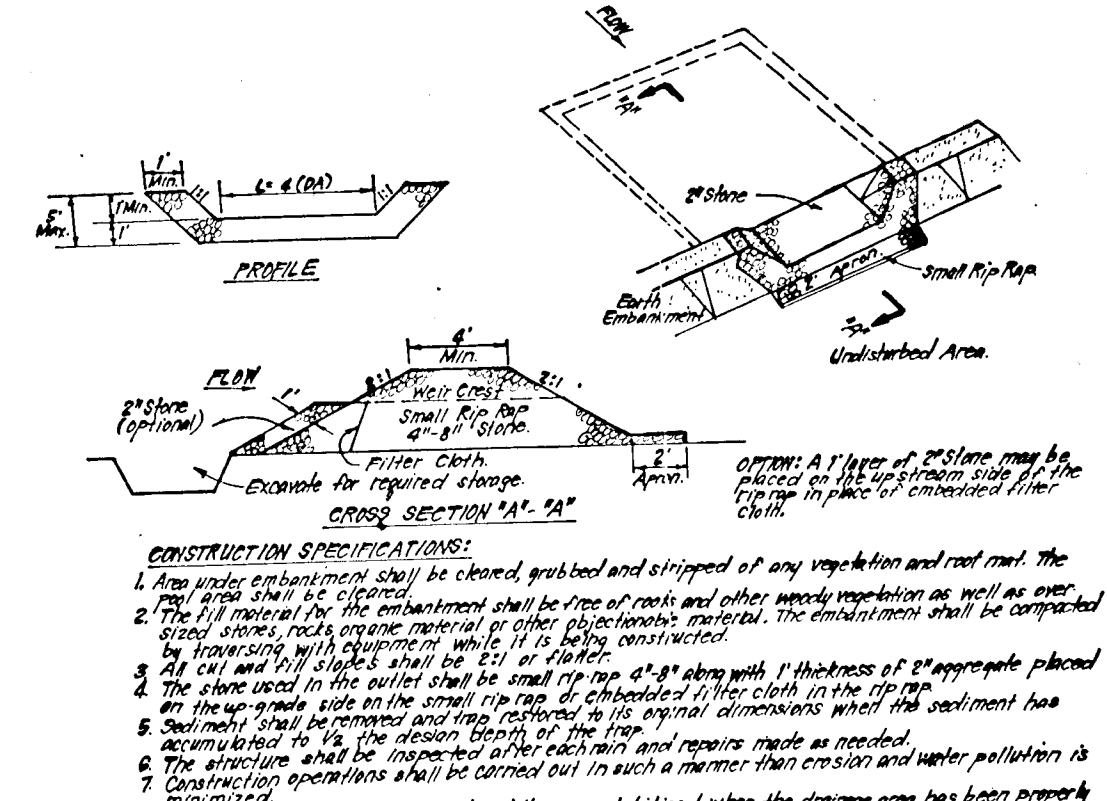
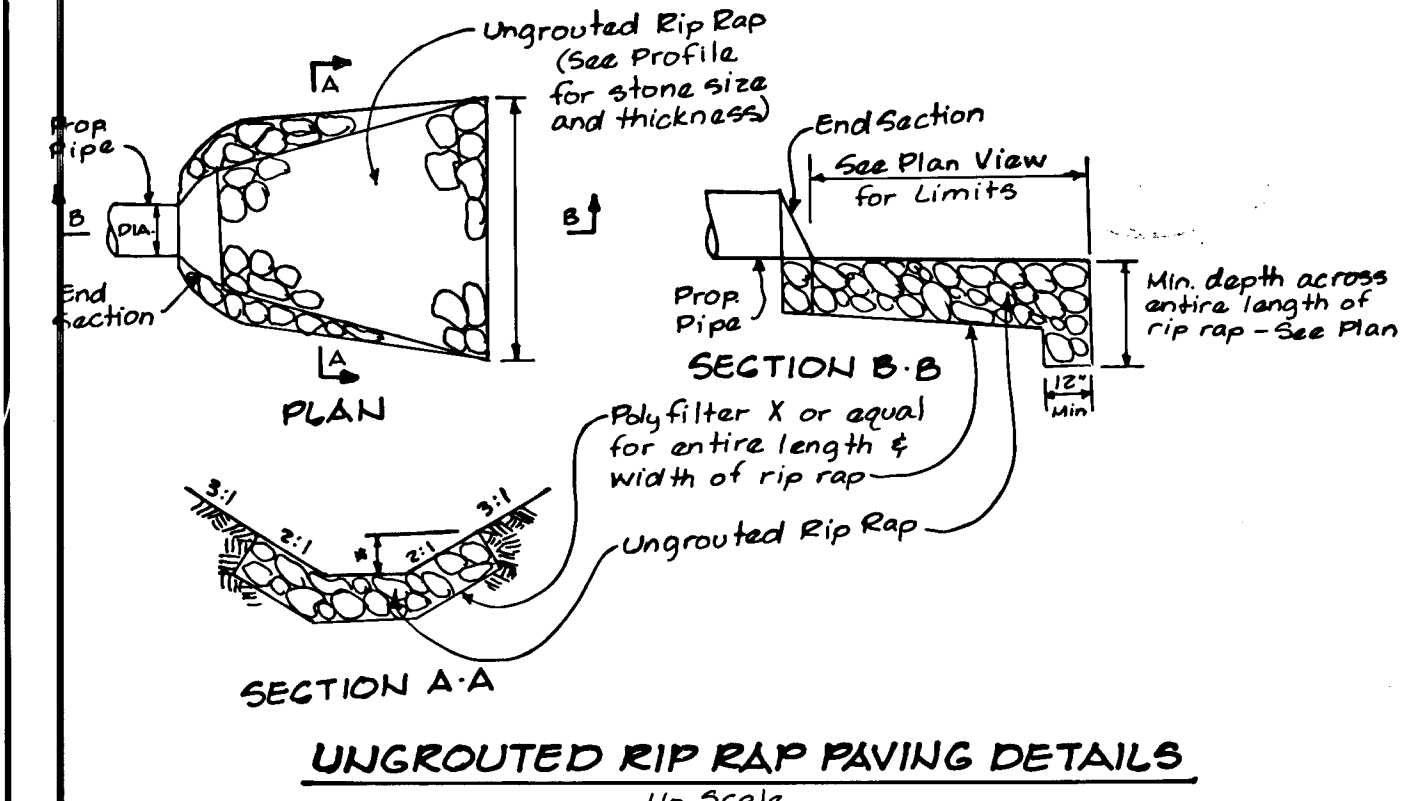
DESIGNED: JLS  
 DRAWN: PER  
 CHECKED: JLS  
 DATE: 4-14-89

SCALE: As Shown  
 DRAWING: 2 of 4  
 JOB NO.: 85-053  
 FILE NO.: 85-053 D

**BRIGHTFIELD SECTION ONE, AREA THREE 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND**

For: Kings Meade Limited Partnership  
 9030 Red Branch Road # 200  
 Columbia, Maryland 21046





**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, disking or other acceptable means before seeding, if not previously loosened.

**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 sq ft) and 400 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 thru 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 1 1/2 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 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.

**Maintenance:** Inspect all seeded areas and make needed repairs, replacements and reseedings.

**CONSTRUCTION SPECIFICATIONS:**

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil area shall be cleared.
2. The fill material for the embankment shall be free of rocks or other woody vegetation as well as any stumps, roots, organic material or other obstructions. The embankment shall be compacted close to the rock surface or other obstructions removed. The embankment shall be compacted close to the rock surface or other obstructions removed.
3. All fill slopes shall be 1:1 or flatter. Call slopes 1:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed height of embankment.
5. Storage area provided shall be planned by computing the volume available behind the water control up to an elevation of 1 foot below the top of dike.
6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must extend at least 1 foot beyond the entrance placed on top. Fabric shall be embedded at least 6" into existing surface at entrance of outlet channel.
7. Stone used in the outlet channel shall be 4" to 8" rip rap to provide a filtering effect. A layer of filter cloth shall be embedded 1 foot into the upstream back of the filter stone area. 1" thick layer of 2" or finer aggregate shall be placed on the upstream face of the filter.
8. Sediment shall be removed and deposited in its original dimensions when the sediment has accumulated to 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 1/2 acre or less.

**CONSTRUCTION SPECIFICATIONS:**

1. Stone size shall be 2" stone or equivalent to required coverage.
2. Length - As required, but not less than 30 feet (except in single residence where a 20 foot minimum length would apply).
3. Thickness - Not less than 12 inches.
4. Width - Ten (10) feet minimum, but not less than the full width of points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placement of stone. Filter will not be required on a single family residence.
6. Surface Water - All surface water flowing on or over the stabilized construction entrance shall be piped across the entrance. If piping is required, a sound side drain with 3" pipes will be provided.
7. Maintenance - The entrance shall be maintained in a condition, when will prevent tracking or blowing of sediment with public rights of way. This may require periodic top dressing, or additional stone to be replaced. Top dressing and repair work for clearing of any impurities used in trap structure. All structural repairs required to maintain only public rights of way must be removed immediately.
8. Weeding - Weeds shall be cleared to remove sediment from impurities and public rights of way. When weeding is required, it shall be done in a manner which will not disturb the structure or its operation.
9. Periodic inspection and repair maintenance shall be provided after each rain.

