

REVISION

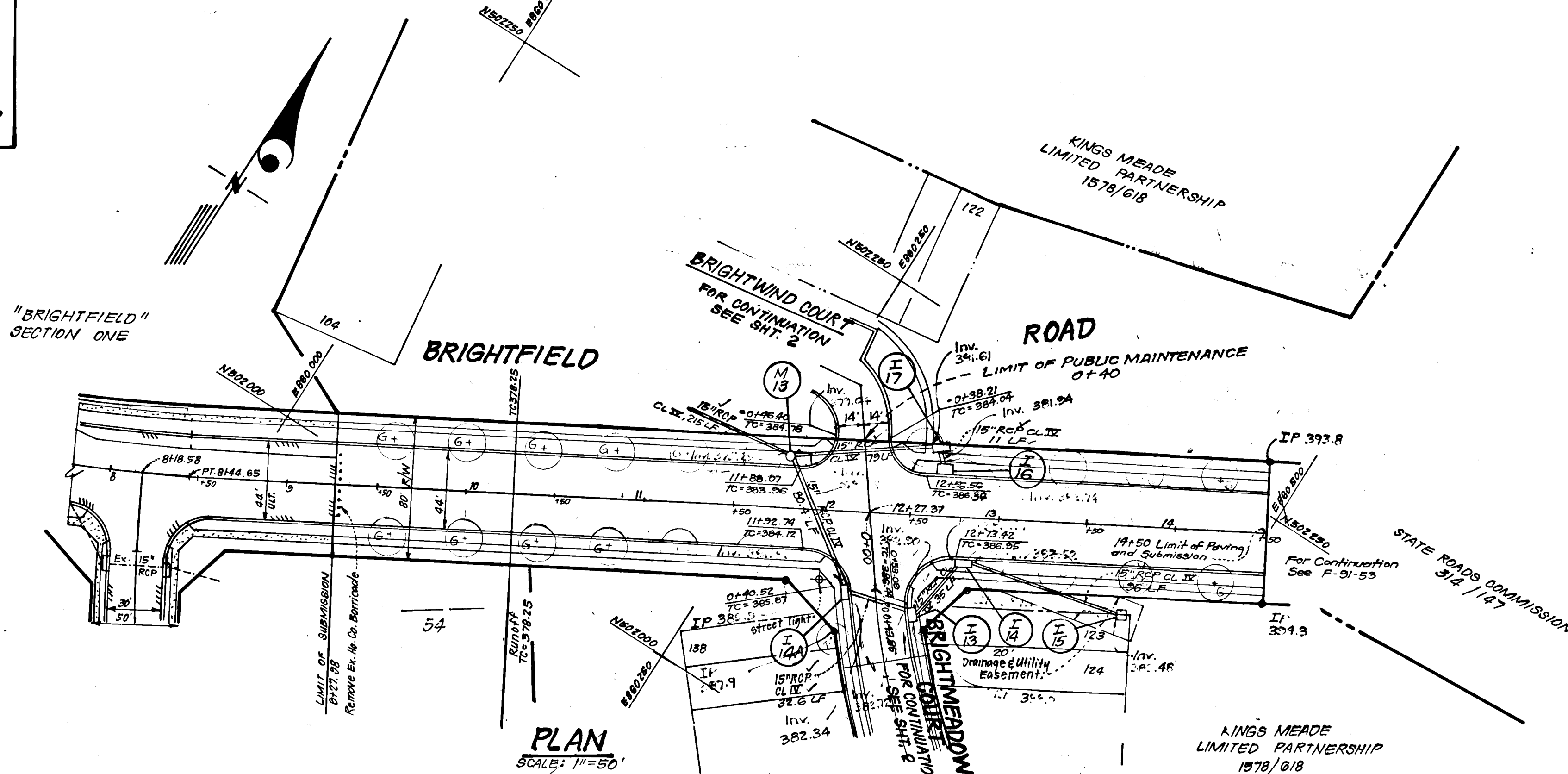
No.	Revision	Date
1	Rev. Alignment of Brightfield Road, Rev. Str. Trees	2-7-54

VICINITY MAP
SCALE: 1"=2000'

CURB & GUTTER LEGEND:

Std. 7" C & G	
Rev. 7" C & G	
Std. 6" C & G	
Rev. 6" C & G	
Modified C & G	

"BRIGHTFIELD" SECTION ONE



STREET LIGHT LEGEND:

- 150 Watt Sodium Vapor Lamp Pendant Mounted Fixture on 30' galv. steel pole.
- 175 Watt Mercury Vapor Lamp Post Top Fixture on 14' Grey Fiberglass Pole.

Note: Street lights to be placed 2'-10" behind curb in accordance with Ho. Co. Design Manual Vol. III.

STREET TREE TABLE

SYM.	TYPE	SIZE	QUANT.	REMARKS
(R)	Acer Rubrum October Glory "Red Maple"	2 1/2" DIA.	27	55 P. Heavy Heads
(G)	Acer Saccharum Green Mt. "Sugar Maple"	"	34	"

- Contractor shall verify location of underground utilities prior to digging.
- Final location of trees may be adjusted slightly to accommodate field conditions.
- The location, type and number of trees shown on this plan are the minimum required and are used for bond purposes only. The final location and variety of trees may vary to accommodate field conditions and builders' landscape program. Bond release is contingent upon section 16.181 of the Howard Co. Subdivision and Land Development Regulations, as approved by the Office of Planning and Zoning.

GENERAL NOTES

- All storm drain & paving shall be constructed in accordance with the latest edition and specifications of Howard County & MDSA.
- Types of storm drainage refer to the standard details of Ho. Co. & MDSA.
- Trench completion of storm drains within road or street right-of-way limits shall be in accordance with "Ho. Co. Design Manual, Vol. IX," Std. 6-2.0.
- 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," Sign and Crest Vertical Curves were designed in accordance with "Ho. Co. Design Manual, Vol. III."
- Provide Conc. Sidewalk Ramps, Ho. Co. Std. Type A "R40" where shown in plan.
- Design Speed: See table Sht. 4. Zoning: RSC.
- The contractor or developer shall contact the Construction Inspection Survey Division 24 hrs. in advance of commencement of work Ph. 792-7272.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Paul D. ... 5/1/88
Chief, Land Development Division
Date

Dr. ... 5/1/88
Chief, Bureau of Highways
Date

... 5-8-89
Chief, Bureau of Engineering
Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

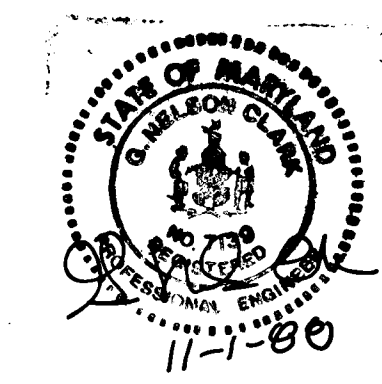
... 5/1/88
Chief, Division of Community Planning & Land Development
Date

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ENGINEERS • PLANNERS • SURVEYORS

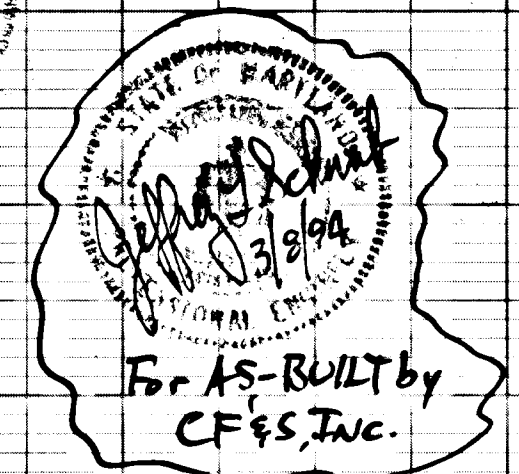
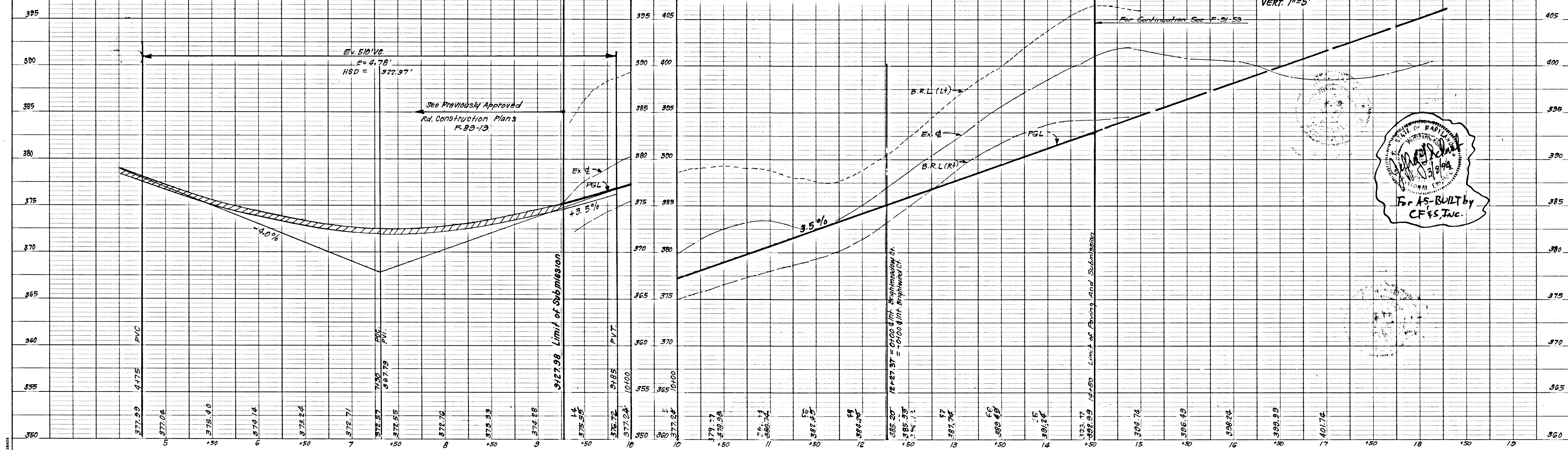
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED	DAB	ROAD CONSTRUCTION PLANS BRIGHTFIELD ROAD	SCALE	As Shown
DRAWN	KIW	BRIGHTFIELD SECTION ONE AREA TWO 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING	10F6
CHECKED	DAB		JOB NO.	85-053
DATE	10-31-88		FILE NO.	85-053-D

FOR: KINGS MEADE LIMITED PARTNERSHIP
9030 Red Branch Rd. #200
Columbia Md. 21045



PROFILE - BRIGHTFIELD ROAD



No	REVISIONS	Date
1	Regrade SWM Facility #2	10-31-91
2	Revise Brightfield Rd. alignment plan & profile	2-8-94

Reviewed for: *[Signature]* S.C.D.
 and Technical Requirements
 Date: 3-24-97
 Signature: *[Signature]*
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED
 FOR SOIL EROSION AND SEDIMENT
 CONTROL BY THE HOWARD SOIL
 CONSERVATION DISTRICT.

[Signature]
 Approved: 3-28-89
 Date

DEVELOPER'S/BUILDER'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."

[Signature] 11/2/88
 Signature of Developer/Builder Date

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 site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.



[Signature] 11-1-88
 G. Nelson Clark Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature] 5/1/89
 Chief, Land Development Division Date
[Signature] 5/4/89
 Chief, Bureau of Highways Date
[Signature] 5/18/89
 Chief, Bureau of Engineering Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

[Signature] 5/1/89
 Chief, Division of Community Planning & Land Development Date

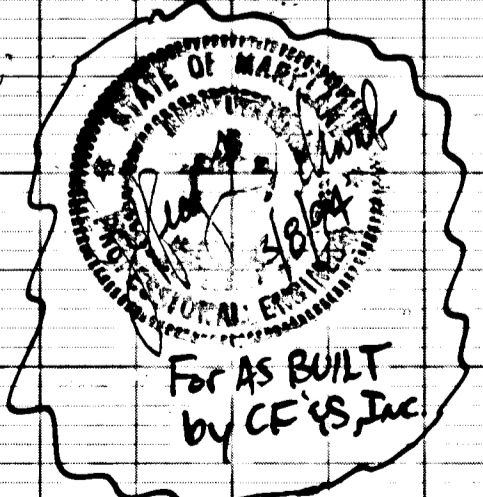
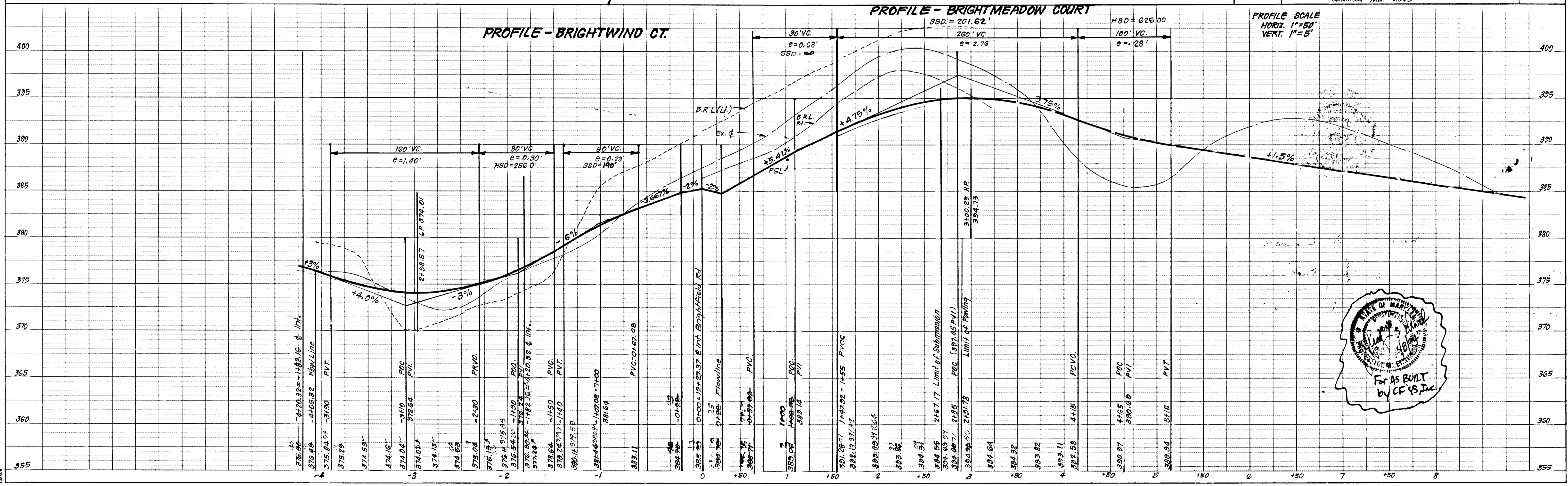


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 ENGINEERS • PLANNERS • SURVEYORS

DESIGNED	DAB	ROAD CONSTRUCTION PLANS BRIGHTMEADOW COURT & BRIGHTWIND COURT	SCALE As SHOWN
DRAWN	KIW	BRIGHTFIELD SECTION ONE AREA 2 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 2 OF 6
CHECKED	DAB		JOB NO. 85-053
DATE	10-31-88		FILE NO. 85-053-D

CENTERLINE CURVE DATA

NAME - PC to PT	RADIUS	DELTA	ARC	TAN	CHORD	BEARING
PC: 0150.33 to PT: 1162.63 BRIGHTMEADOW CT	400.00	16°00'00"	111.70'	56.22'	111.34'	S44°30'00"E
PC: 2147.50 to PT: 4420.32 BRIGHTWIND CT	50.00	83°06'28"	72.52'	44.32'	66.33'	N40°26'06"E

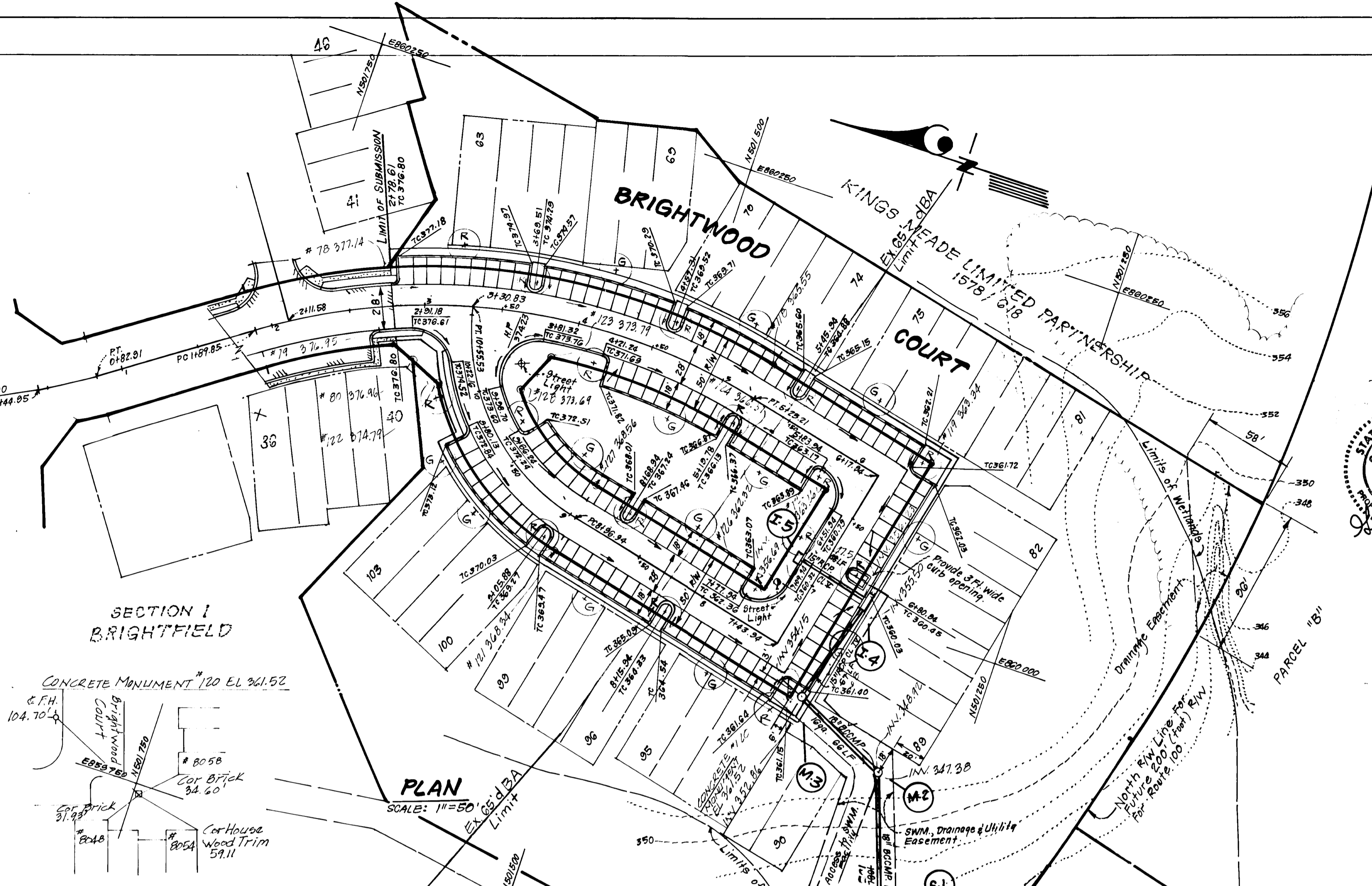


For AS BUILT
 by CE & S, Inc.

1382

CENTERLINE CURVE DATA						
NAME - PC to PT	RADIUS	DELTA	ARC	TAN	CHORD	BEARING
PC 1+89.85 to PT 5+29.21 BRIGHTWOOD COURT	400.00'	47°45'00"	311.63'	177.05'	323.79'	S10°52'30"E
PC 8+76.94 to PT 10+55.53 BRIGHTWOOD CT.	140.00'	64°54'15"	158.59'	89.02'	150.25'	N45°27'08"E

BRIGHTFIELD ROAD



DEVELOPER/BUILDER'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."

Signature of Developer/Builder 11/2/88 Date

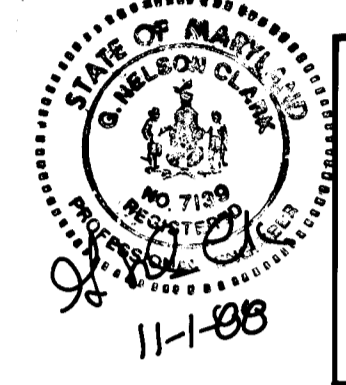
ENGINEER'S CERTIFICATE

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

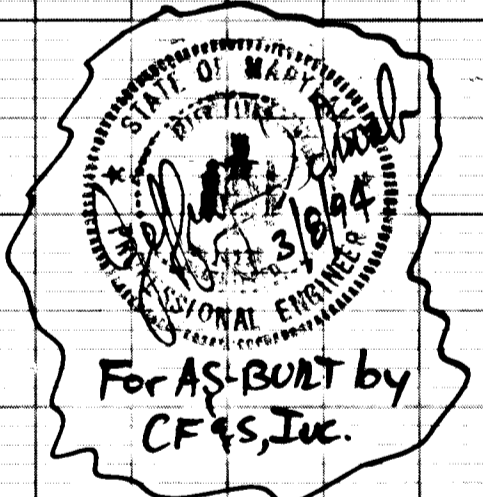
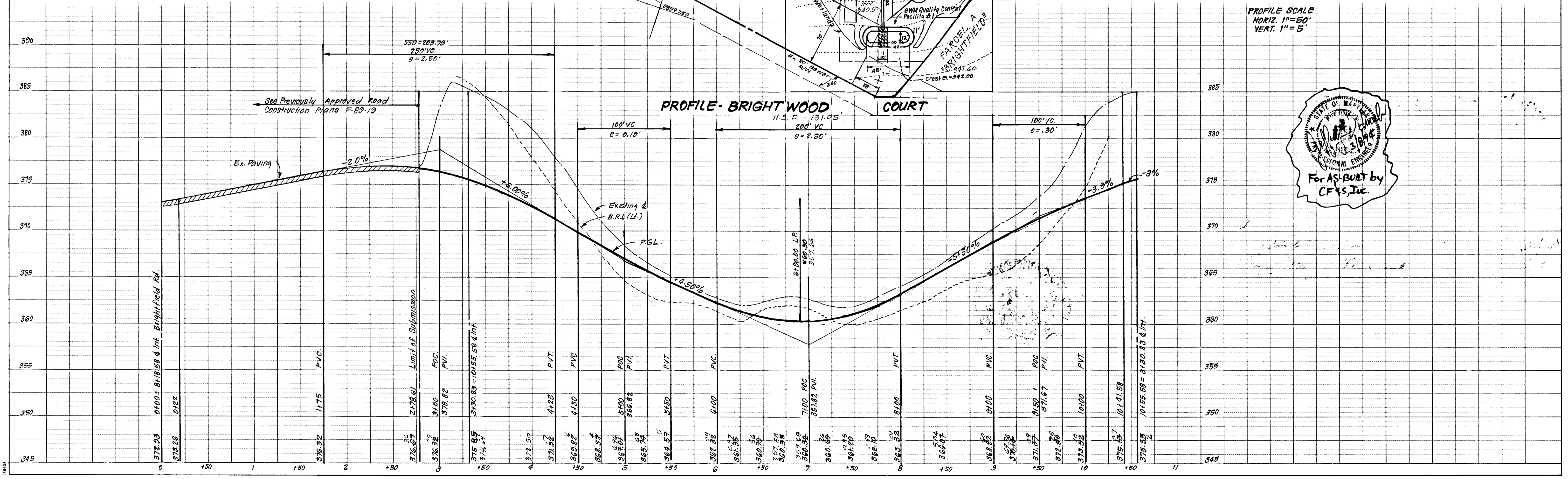
Reviewed for... *Howard S.C.D.*
Name
Signature
Date
U.S. Soil Conservation Service

G. Nelson Clark 11-1-88 Date

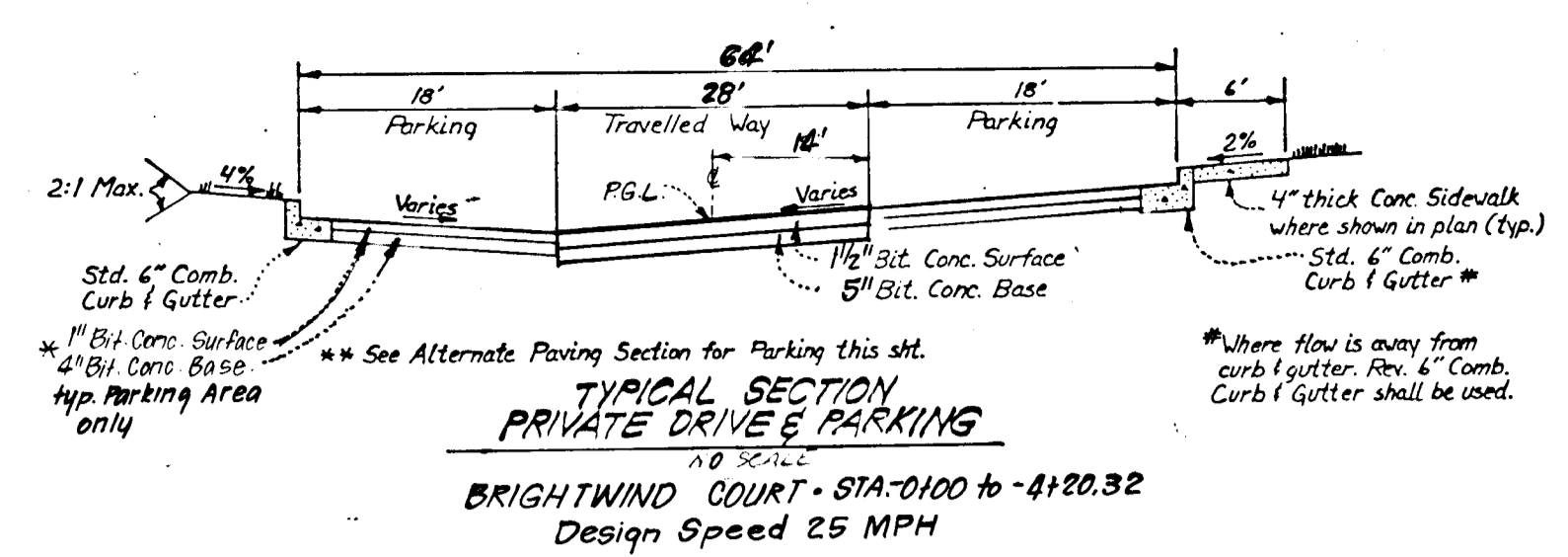
Stephen L. Fisher 3/28/89 Date
Approved



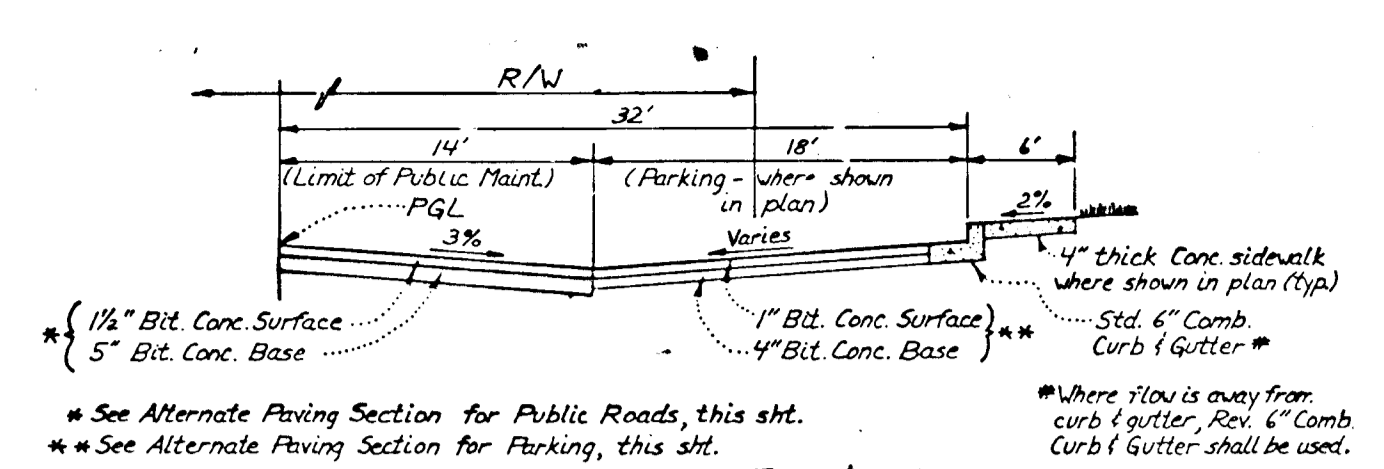
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		
<i>Signature</i> Chief, Land Development Division	5/2/89	Date
<i>Signature</i> Chief, Bureau of Highways	5/4/89	Date
<i>Signature</i> Chief, Bureau of Engineering	5-2-89	Date
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING		
<i>Signature</i> Chief, Division of Community Planning & Land Development	5/1/89	Date
CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.		
DESIGNED DAB	ROAD CONSTRUCTION PLANS BRIGHTWOOD COURT	SCALE As Shown
DRAWN KIW	BRIGHTFIELD	DRAWING 5 OF 6
CHECKED DAB	SECTION ONE AREA TWO	JOB NO. 85-053
DATE 10.31.88	1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FILE NO. 85-053-D
	FOR: KINGS MEADE LIMITED PARTNERSHIP 9030 Red Branch Rd. #200 Columbia, Md. 21045	



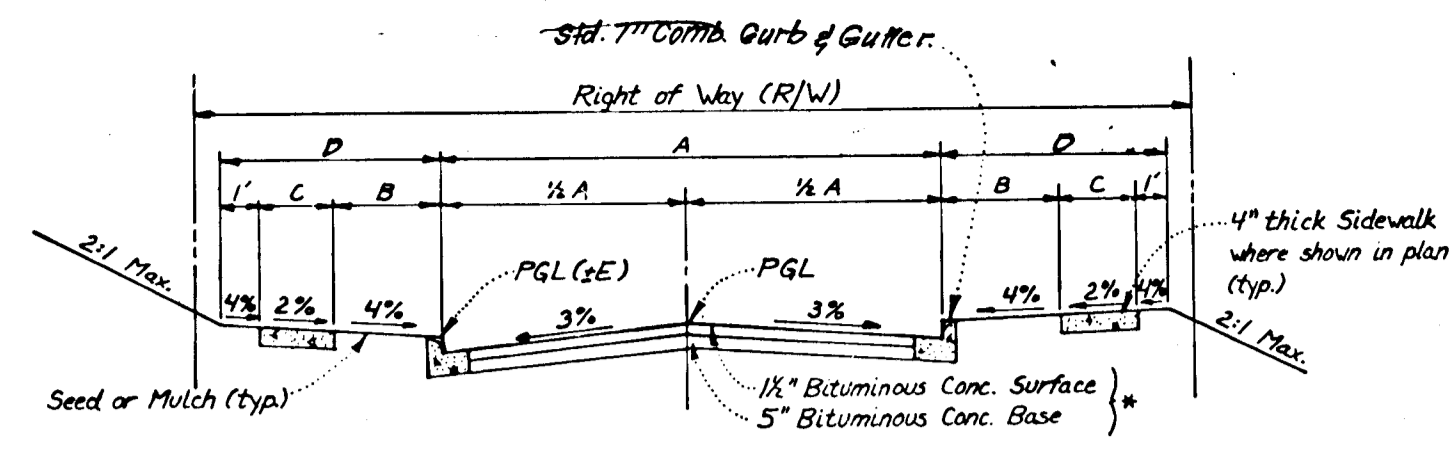
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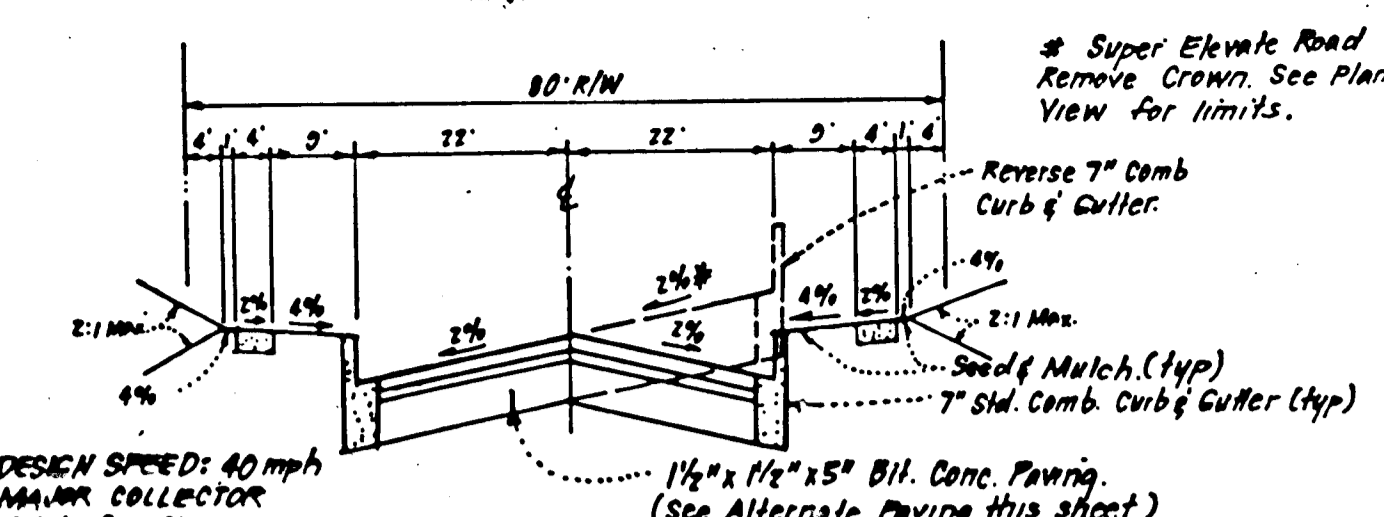
TYPICAL SECTION PRIVATE DRIVE & PARKING
NO SCALE
BRIGHTWIND COURT - STA 0+00 to 4+20.32
Design Speed 25 MPH



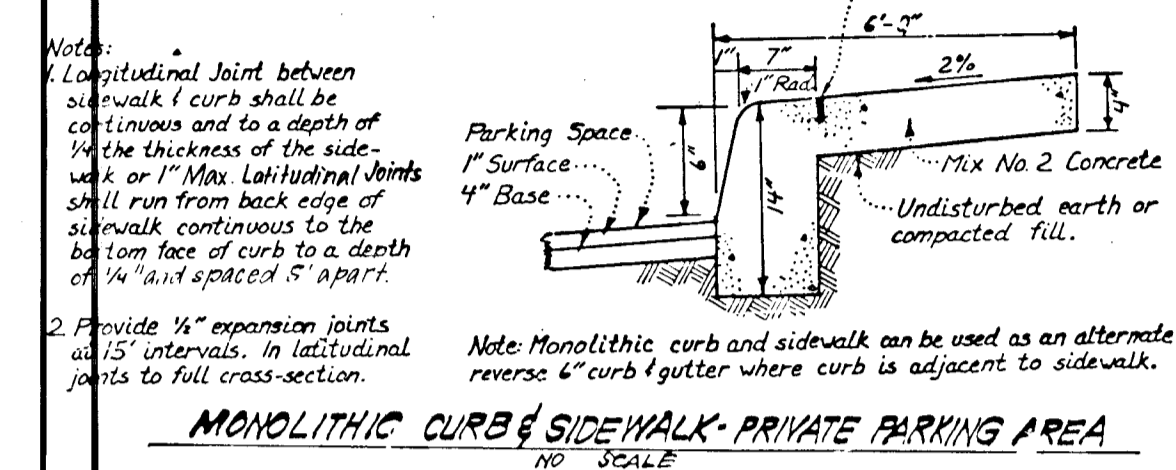
TYPICAL HALF SECTION PARKING ADJACENT TO PUBLIC ROADS
NO SCALE
BRIGHTWOOD COURT - STA 2+78.61 to 10+55.53
Design Speed 25 MPH



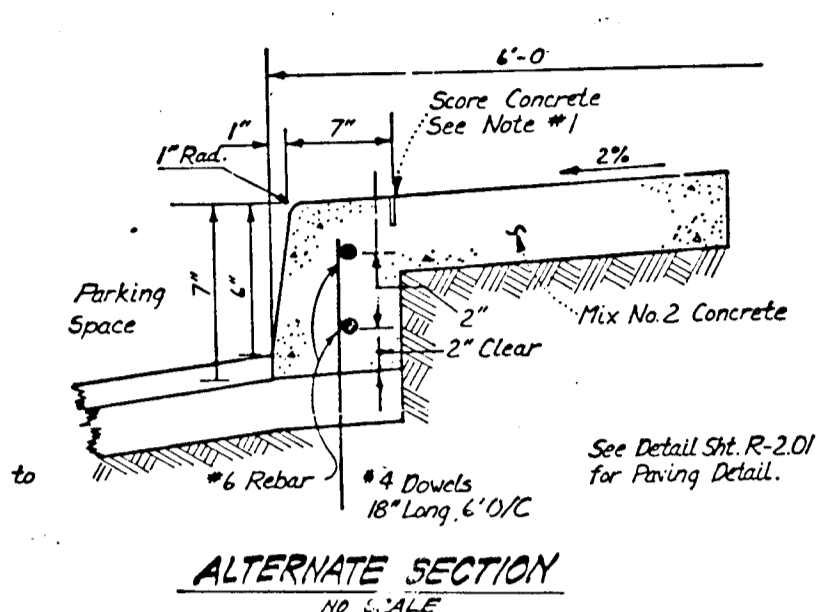
TYPICAL PAVING SECTION BRIGHT MEADOW COURT
NO SCALE
For Alternate Paving Section - See det. this sheet.
DESIGN SPEED : 30 MPH



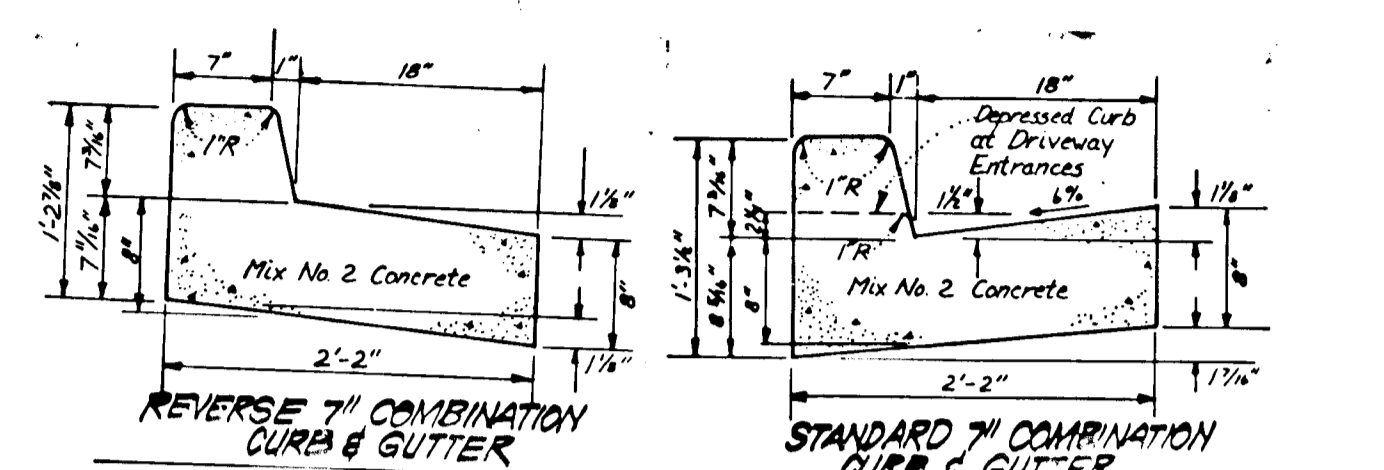
PAVING SECTION - BRIGHTFIELD ROAD
NO SCALE
STA. 3+27.98 to 14+54.50



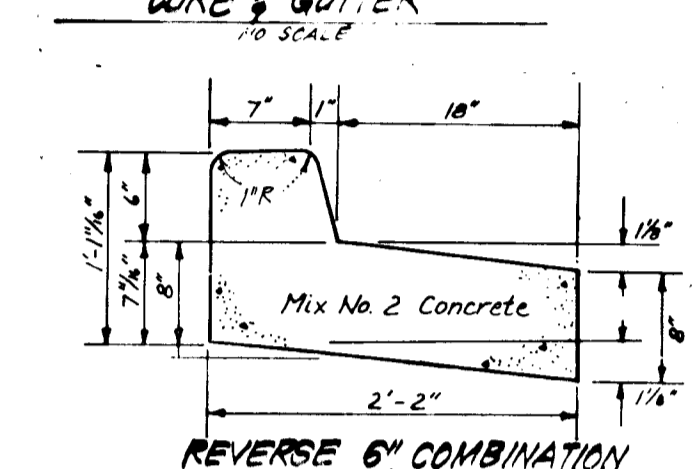
MONOLITHIC CURB & SIDEWALK - PRIVATE PARKING AREA
NO SCALE



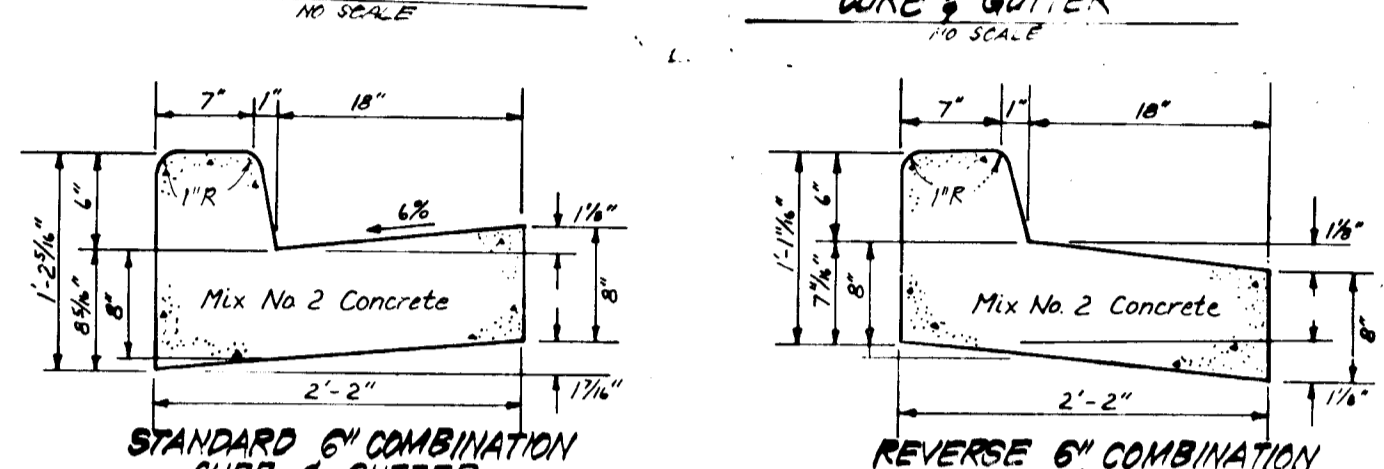
ALTERNATE SECTION
NO SCALE



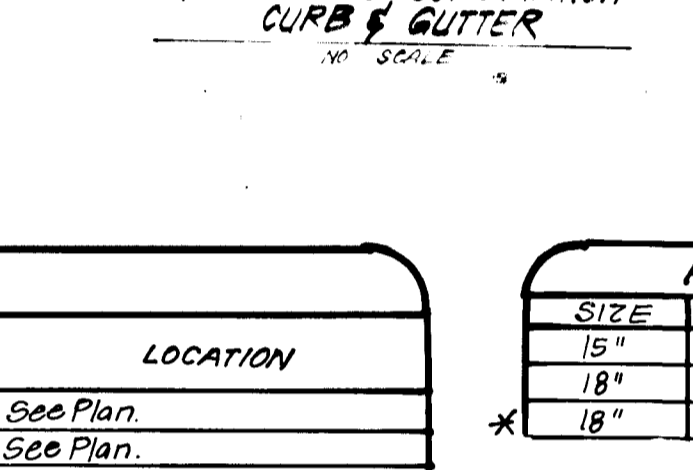
REVERSE 7\"/>



STANDARD 7\"/>



STANDARD 6\"/>



REVERSE 6\"/>

STREET NAME & STATION	TYPE OF TRAFFIC	A	B	C	D	R/W	ZONING	DESIGN SPEED	E
BRIGHT MEADOW CT 0+00 to 4+20.32	LOCAL	30'	4'	4'	9'	50'	RGB	30	10

Bituminous Conc Surface	1"
Bituminous Conc Base	2"
Prime	
5" Crusher Run Base Course	5"
4" Dense Graded Stabilized Aggregate Base Course	4"

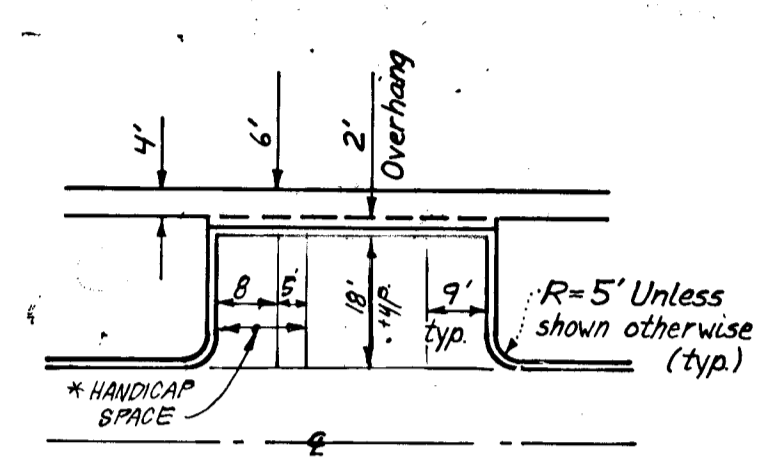
ALTERNATE PAVING SECTION FOR PARKING AREAS
NO SCALE
(SECTION P-1)

Bituminous Conc Surface	1 1/2"
Bituminous Conc Base	4 1/2"
Prime	
8" Crusher Run Base (Placed in 2 Courses)	8"
4" Dense Graded Stabilized Aggregate Base Course	4"

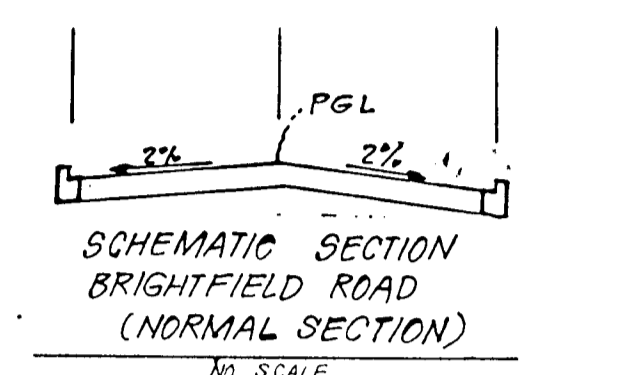
ALTERNATE PAVING SECTION FOR PUBLIC ROADS
NO SCALE
(SECTION P-2)

Bituminous Conc Surface	1 1/2"
Bituminous Conc Base	4 1/2"
Prime	
6" Crusher Run Base (Placed in 1 Course)	6"
4" Dense Graded Stabilized Aggregate Base Course	4"

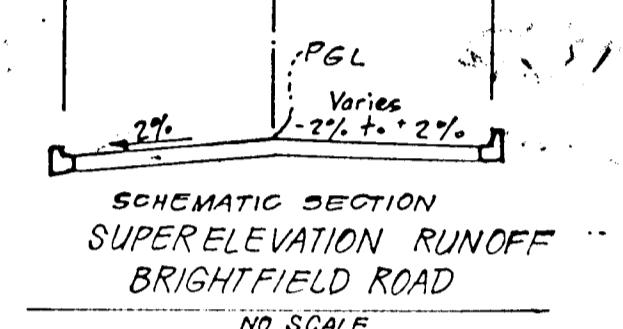
ALTERNATE PAVING SECTION FOR MAJOR & MINOR COLLECTOR
NO SCALE
(SECTION P-3)



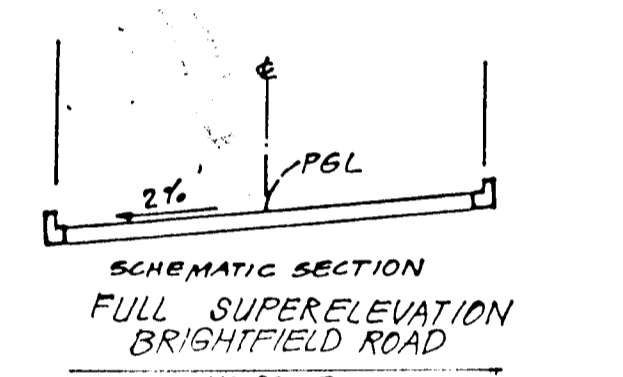
TYPICAL PARKING
NO SCALE



SCHEMATIC SECTION BRIGHTFIELD ROAD (NORMAL SECTION)
NO SCALE

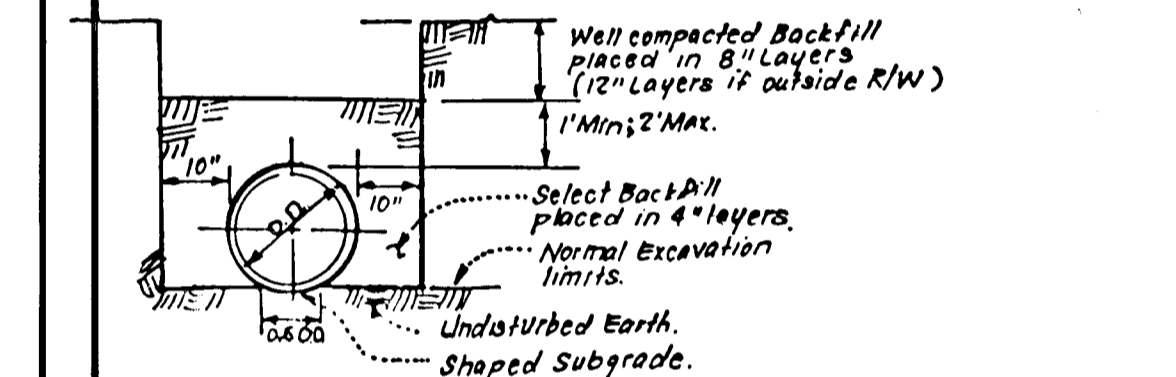


SCHEMATIC SECTION SUPER ELEVATION RUNOFF BRIGHTFIELD ROAD
NO SCALE



SCHEMATIC SECTION FULL SUPER ELEVATION BRIGHTFIELD ROAD
NO SCALE

Notes:
1. Longitudinal joint between sidewalk & curb shall be continuous and to a depth of 1/2 the thickness of the sidewalk or 1" Min. Longitudinal joints shall run from back edge of sidewalk continuous to the bottom face of curb to a depth of 1/2 in. spaced 5' apart.
2. Provide 1/4" expansion joints at 15' intervals in individual joints to full cross-section.



TRENCH COMPACTION DETAIL
NO SCALE

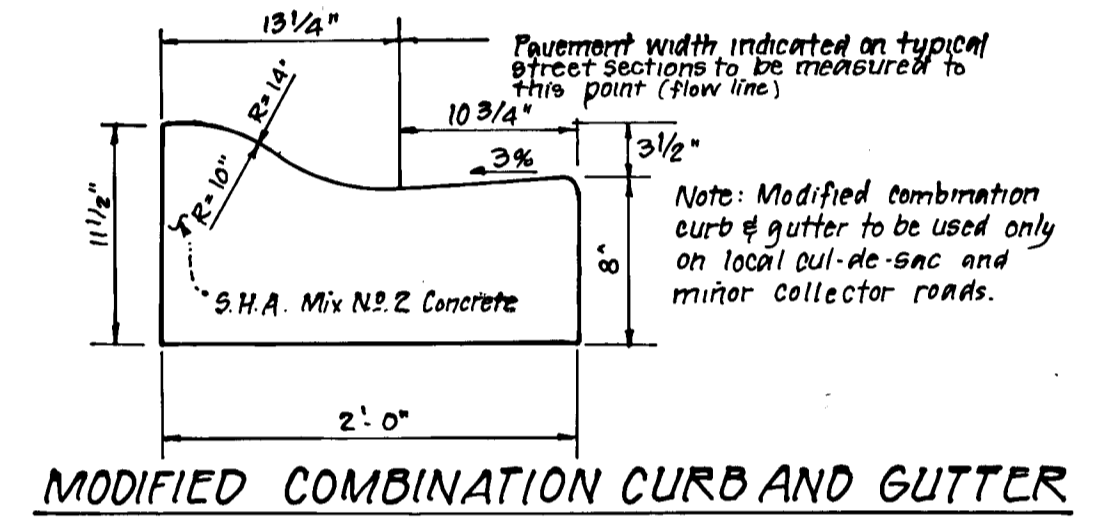
NO.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
S-1	Metal End Section	340.90	340.50			Ho Co. Std. SD5.61 18" Dia.	See Plan.
M-2	Manhole	349.00	347.50	356.2		Ho Co. Std. G-6.01 48" Dia.	See Plan.
M-3	Manhole	354.25	353.00	361.5		Ho Co. Std. G-5.01 48" Dia.	See Plan.
I-4	A-10 Inlet	356.25	355.50	360.03	360.03	Ho Co. Std. SD4.02 W-3'-0"	E. Sta. 6+90.94
I-5	A-5 Inlet	356.75	356.75	360.43	360.43	Ho Co. Std. SD4.01 W-2'-6"	E. Sta. 6+90.94
S-10	Metal End Section	363.02	363.02			Ho Co. Std. SD5.61 18" Dia.	See Plan.
M-11	Shallow Brick Manhole	365.73	364.50	371.0		Ho Co. Std. G5.05 48" Sq.	See Plan.
I-12	A-10 Inlet	367.75	367.30	373.48	373.48	Ho Co. Std. SD4.02 W-3'-0"	See Plan.
M-13	Shallow Brick Manhole	375.25	375.25	383.7		Ho Co. Std. G5.05 48" Sq.	E. Sta. 11+83
I-14	A-5 w/Def.	383.52	383.97	387.37	387.75	Ho Co. Std. SD4.01 W-3'-0"	E. Sta. 0+55
I-13	A-5 w/Def.	382.90	382.72	386.76	386.44	Ho Co. Std. SD4.01 W-2'-6"	E. Sta. 0+55
I-15	D-Inlet		385.48	382.64		Ho Co. Std. SD4.11 30" Sq.	E. Sta. 13+09
I-17	A-10 Inlet	381.94	381.61	386.92	386.90	Ho Co. Std. SD4.02 W-2'-6"	E. Sta. 12+71.20
I-14A	A-5 w/Def.	382.94	381.86	386.24	386.24	Ho Co. Std. SD4.01 W-2'-6"	See Plan.
I-16	A-5 w/Def.		382.74	386.98	386.64	Ho Co. Std. SD4.01 W-2'-6"	See Plan.

SIZE	TYPE	LENGTH
15"	RCP CL IV	586 L.F.
18"	RCP CL IV	131 L.F.
18"	BCCMP 16 ga.	201 L.F.

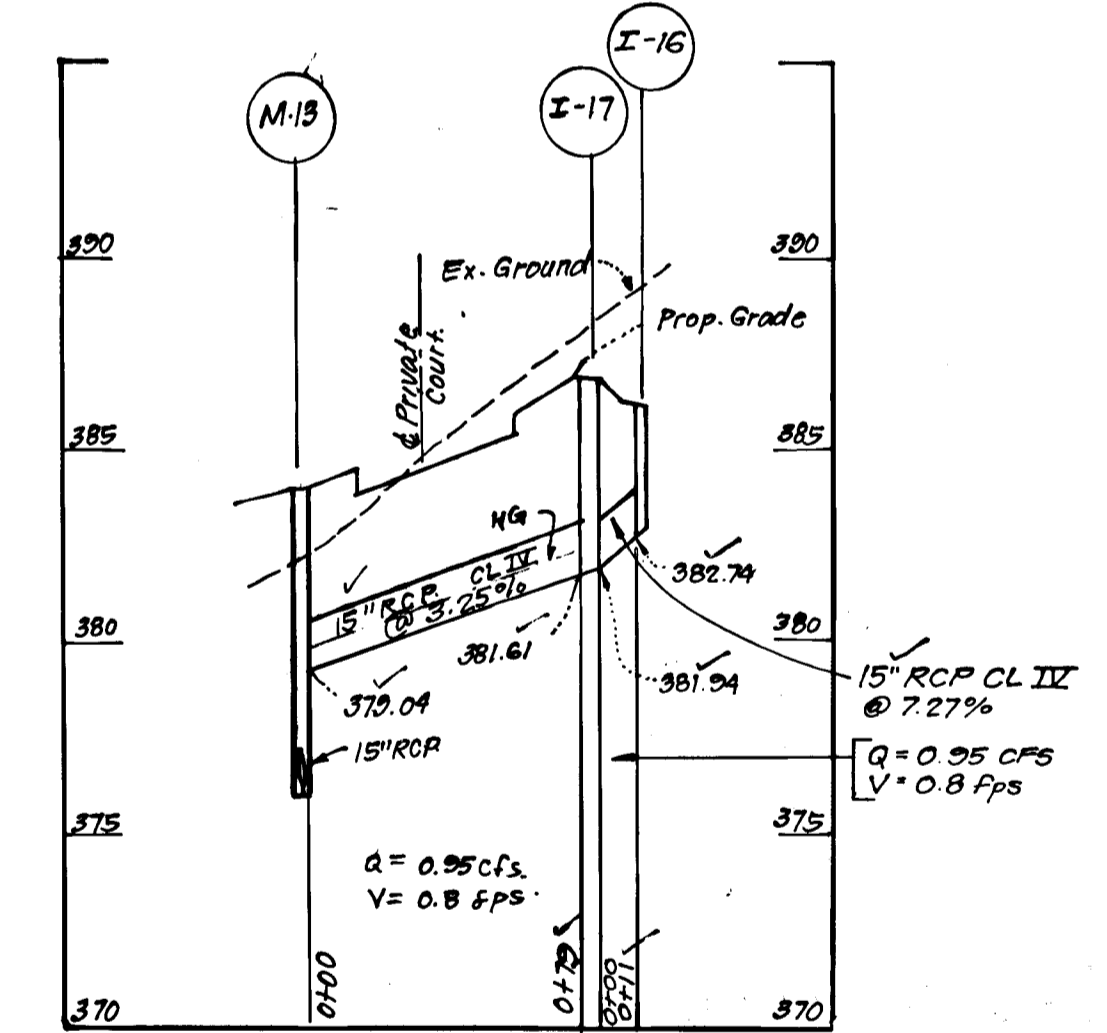
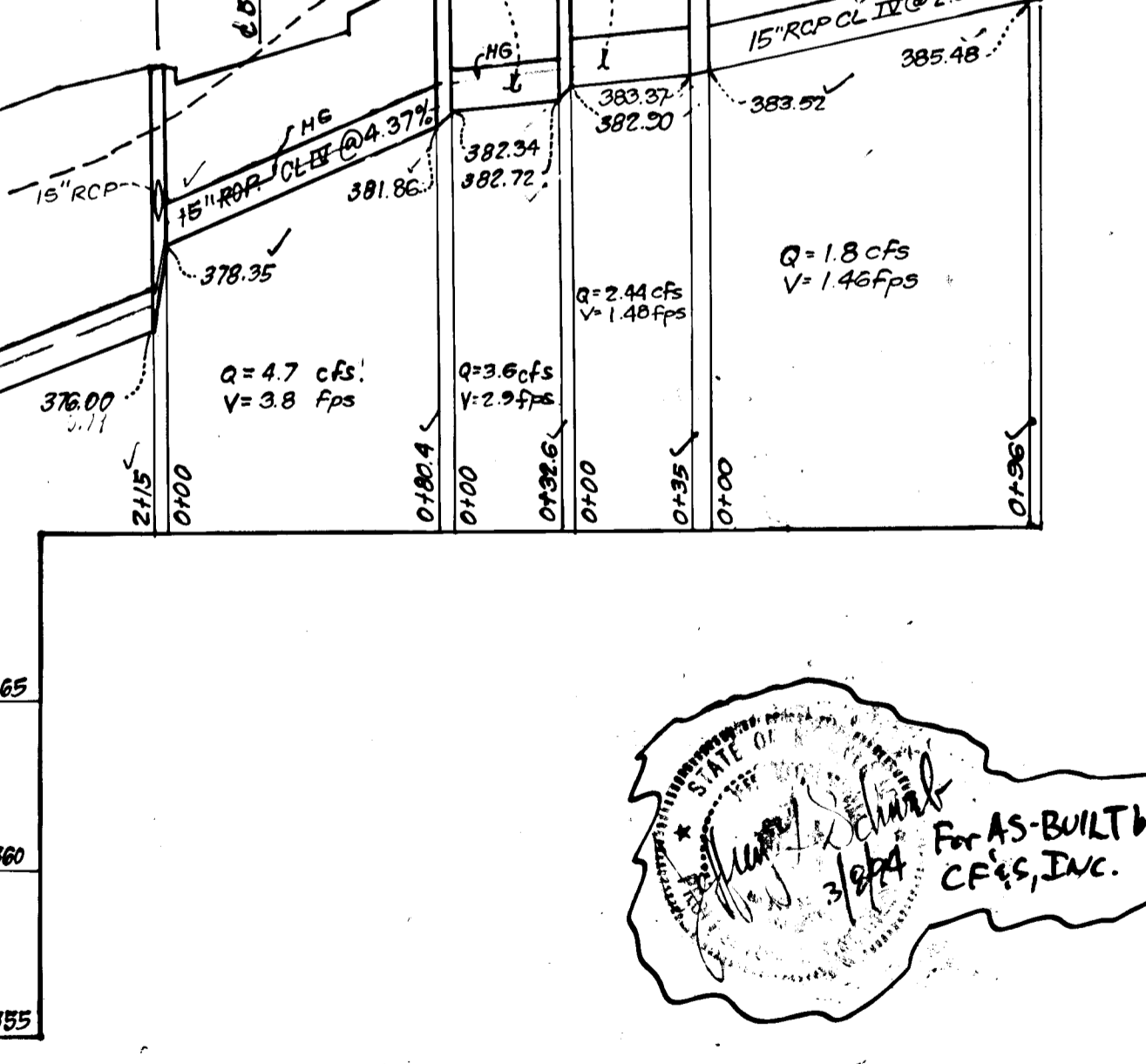
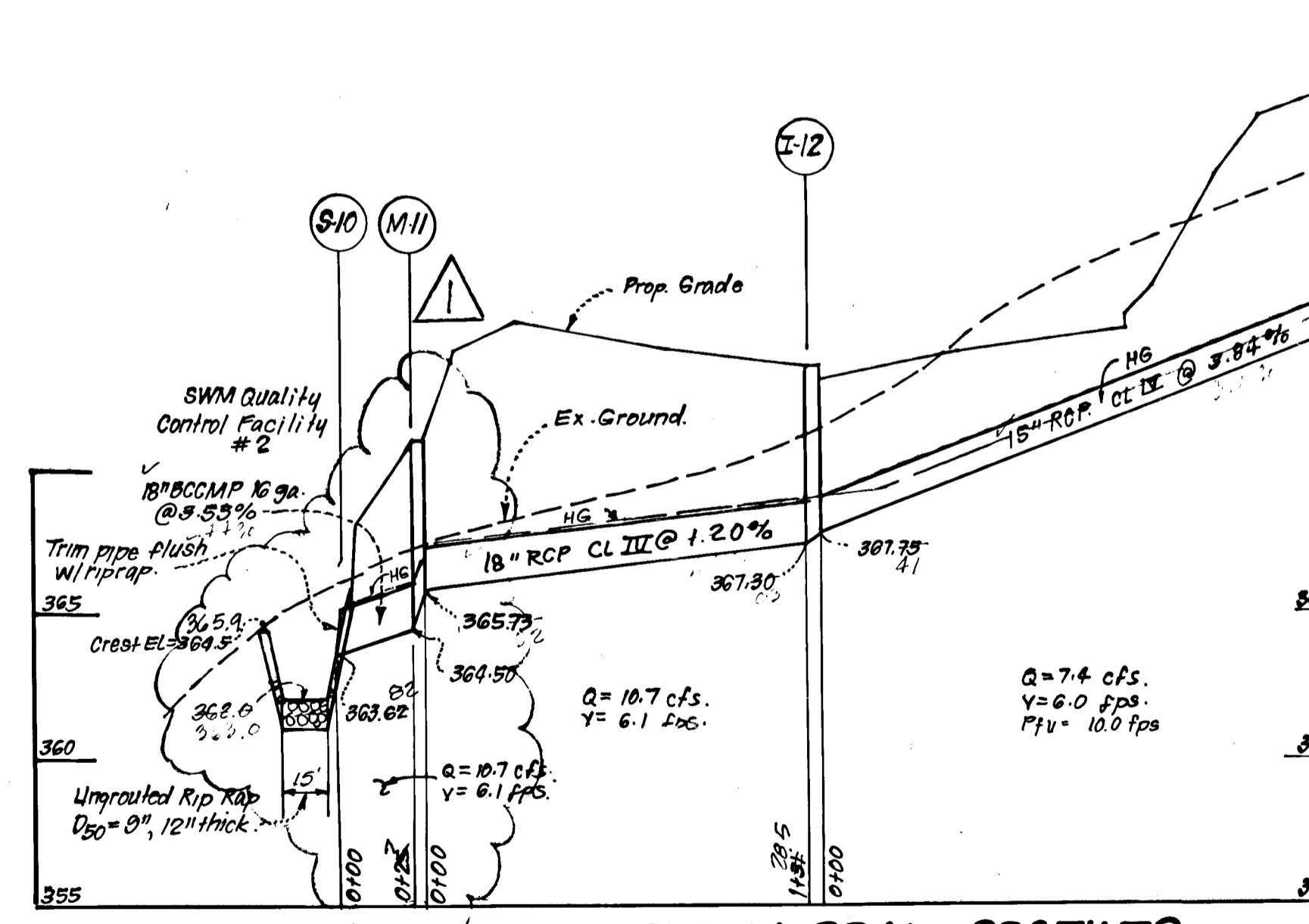
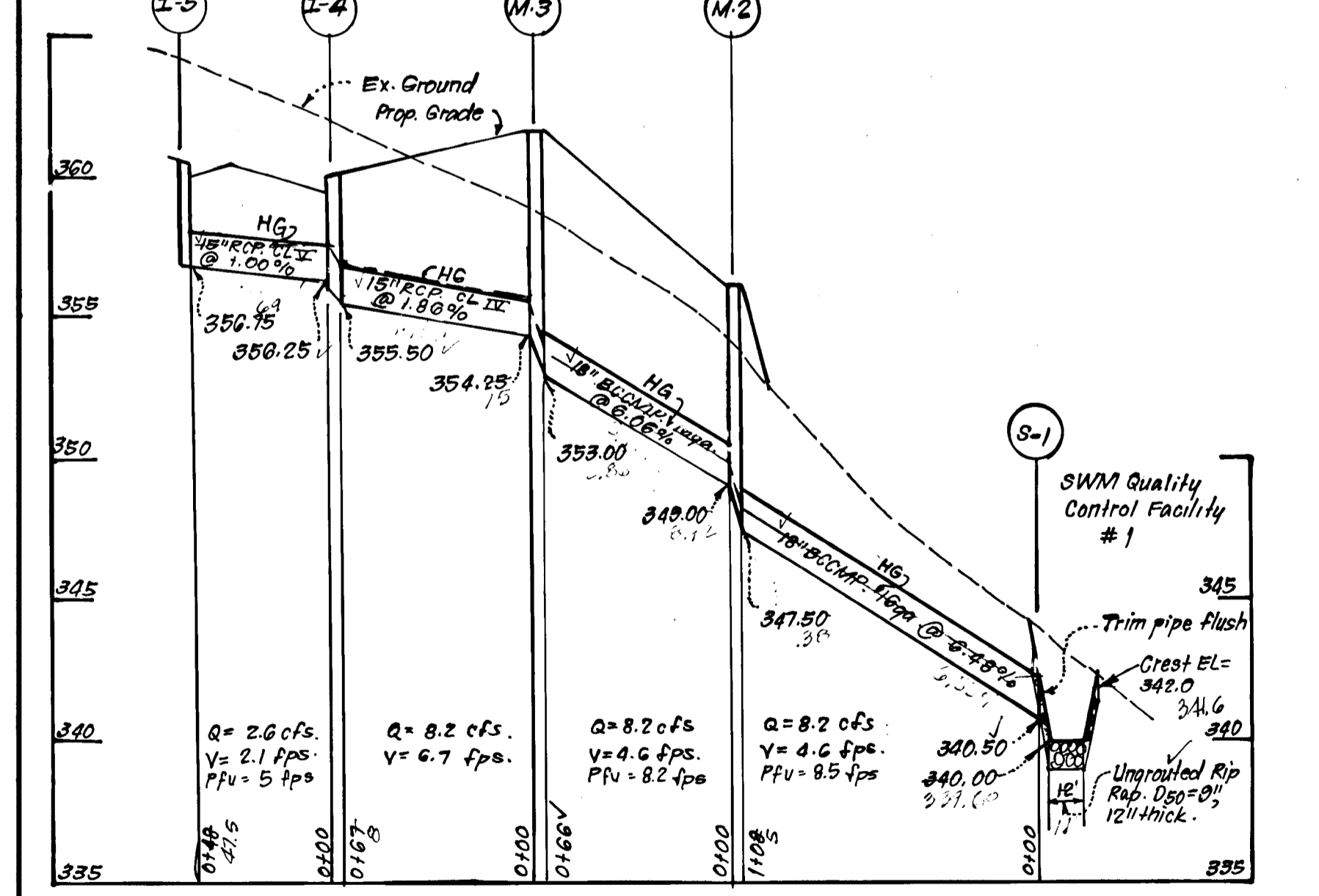
* 2 3/8 x 1/2" Corrugations

TYPE	BRICK STR. STD.	PRECAST SUBSTITUTE STD.
A-5 Inlet	SD 4.01	SD 4.40
A-10 Inlet	SD 4.02	SD 4.41
D-Inlet	SD 4.11	SD 4.37
Brick Manhole	G-5.01	G-5.11
Shallow Brick MH	G-5.05	G-5.12

* See Structure Schedule for additional information



MODIFIED COMBINATION CURB AND GUTTER



STORM DRAIN PROFILES

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

DEVELOPER'S/BUILDER'S CERTIFICATE

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Signature of Developer/Builder: *[Signature]* Date: 11/18/88

ENGINEER'S CERTIFICATE



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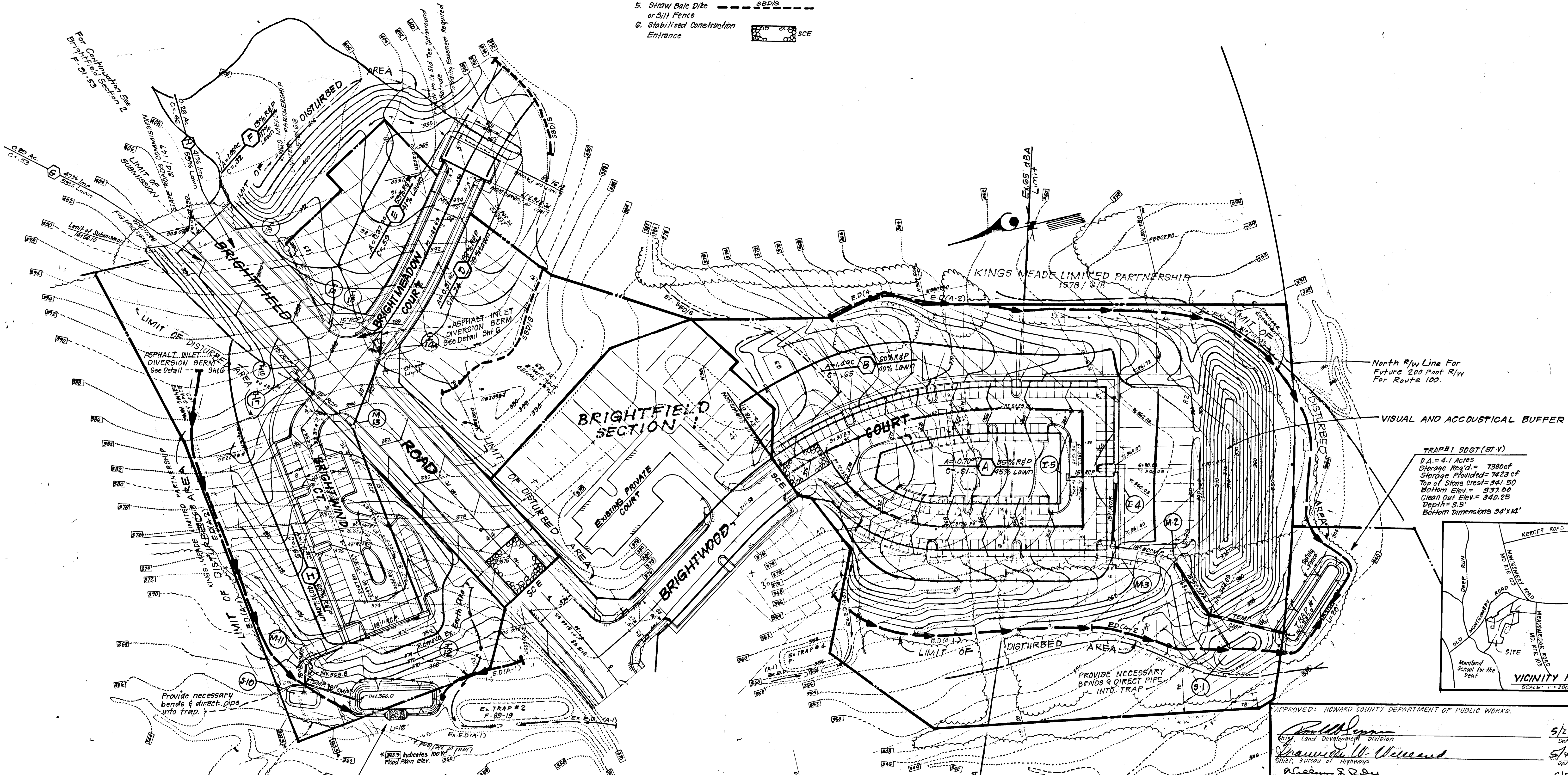
Signature: *[Signature]* Date: 11-18-88
G. Nelson Clark

Reviewed for: *[Signature]* S.C.D.
Name: *[Name]*
Signature: *[Signature]* Date: 3/29/89
U.S. Soil Conservation Service
THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved: *[Signature]* Date: 3/29/89

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
[Signature] Date: 5/11/89
[Signature] Date: 5/14/89
[Signature] Date: 5-8-89
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.
[Signature] Date: 5/11/89

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7335 MINSWELL WAY • COLUMBIA, MD 21045 • (301) 381-7600 - BALTO • (301) 621-6100 - WASH
DESIGNED: DAB
DRAWN: DAB
CHECKED: DAB
DATE: 10-31-88
**ROAD CONSTRUCTION PLANS
STORM DRAINAGE & PAVING DETAILS**
SCALE: As Shown
DRAWING: 4 OF 6
JOB NO.: 85-053
FILE NO.: 85-053 D
FOR: KINGS MEADE LIMITED PARTNERSHIP
9030 Rpt. Branch Rd. #200

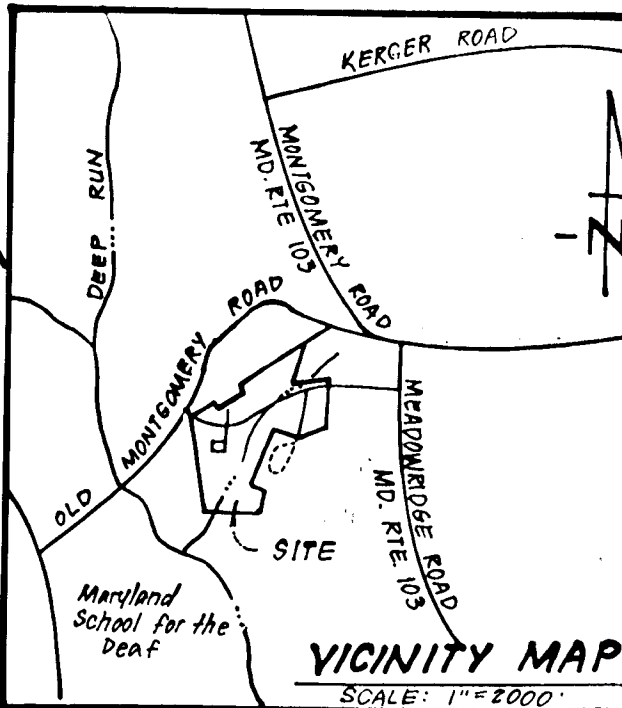
- LEGEND:**
- 1. Contour Interval 2 Ft.
 - 2. Existing Contour
 - 3. Proposed Contour
 - 4. Earth Dike
 - 5. Straw Bale Dike or Silt Fence
 - 6. Stabilized Construction Entrance



North R/W Line For Future 200 Foot R/W For Route 100.

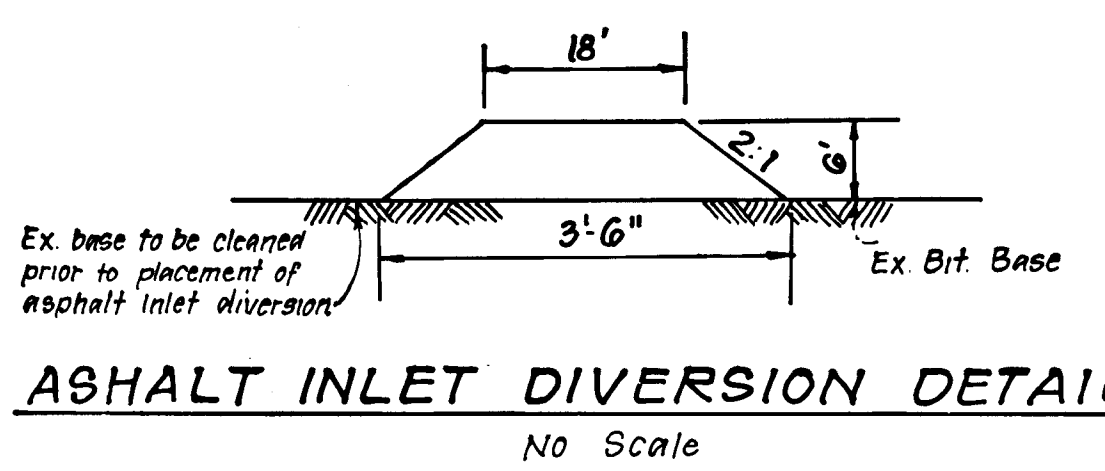
VISUAL AND ACCOUSTICAL BUFFER

TRAP#1 SDST (ST-V)
 D.A. = 4.1 Acres
 Storage Req'd = 7380cf
 Storage Provided = 7423cf
 Top of Stone Crest = 341.50
 Bottom Elev. = 337.00
 Clean Out Elev. = 340.25
 Depth = 3.5'
 Bottom Dimensions 34'x14'



Provide necessary bends & direct pipe into trap.

TRAP#2 SDST (ST-V)
 D.A. = 3.7 Acres
 Storage Req'd = 6660cf
 Storage Provided = 6868cf
 Stone Crest Elev. = 364.50
 Bottom Elev. = 360.00
 Clean Out Elev. = 361.75
 Depth = 3.5'
 Bottom Dimensions = 80'x20'
 1:1 Side Slopes in Cut.



Reviewed for... *Howard*... S.C.D.
 Name
 Signature
 Date
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S/BUILDER'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.



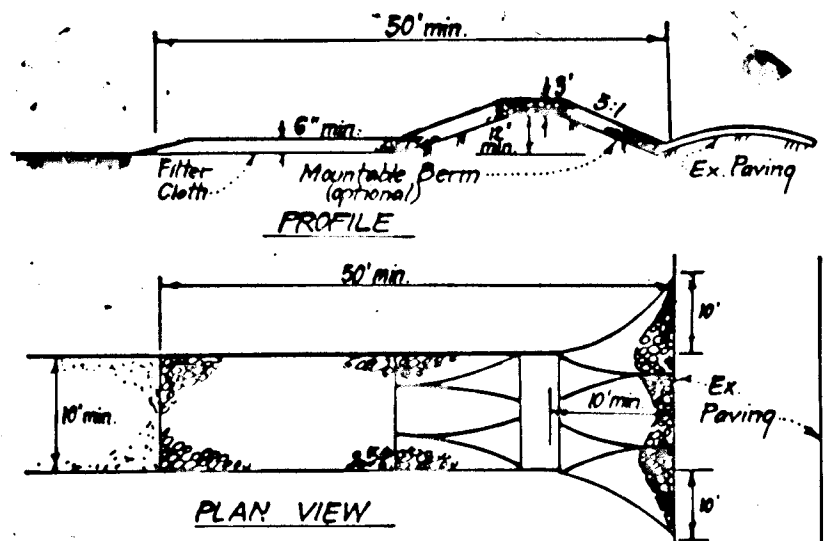
ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Paul W. Penn
 Chief, Land Development Division
 Date: 5/2/89
Shawna M. Wilcox
 Chief, Bureau of Highway
 Date: 5/4/89
William S. Reid
 Chief, Bureau of Engineering
 Date: 5/18/89
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Mark V. Z. Long
 Chief, Division of Community Planning & Land Development
 Date: 5/1/89

CLARK • FINEROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH	
DESIGNED DAB	SCALE As Shown
DRAWN KIW	DRAWING 5 OF 6
CHECKED DAB	JOB NO. 85-053
DATE 10-31-88	FILE NO. 85-053-D

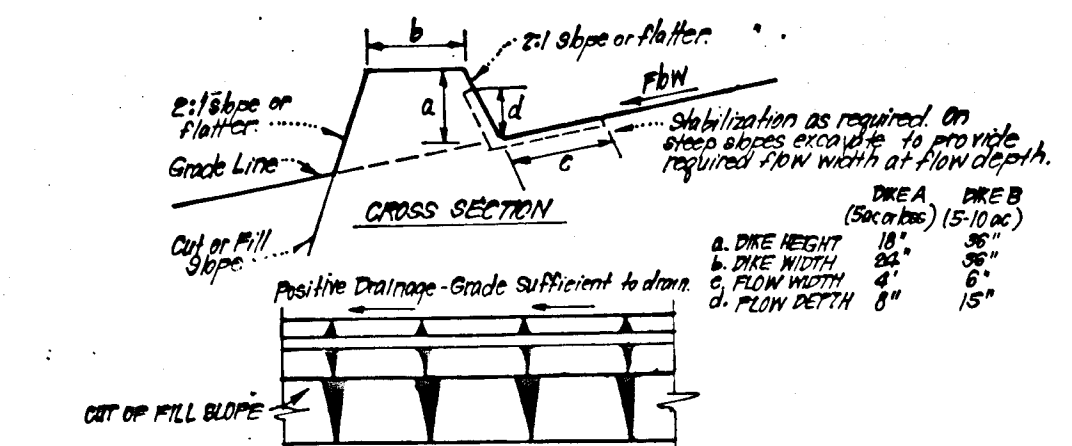
1. Revise Drainage Area Map, Brightfield Rd Alignment 2-B-24
 2. REVISIONS

1382



- CONSTRUCTION SPECIFICATIONS:**
1. Stone size - Use 2" stone or rounded 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 mounted curb with 5" depth 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/or cleanup of any measures used to trap sediment. All sediment applied, graded, 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 (SCE)
NO SCALE



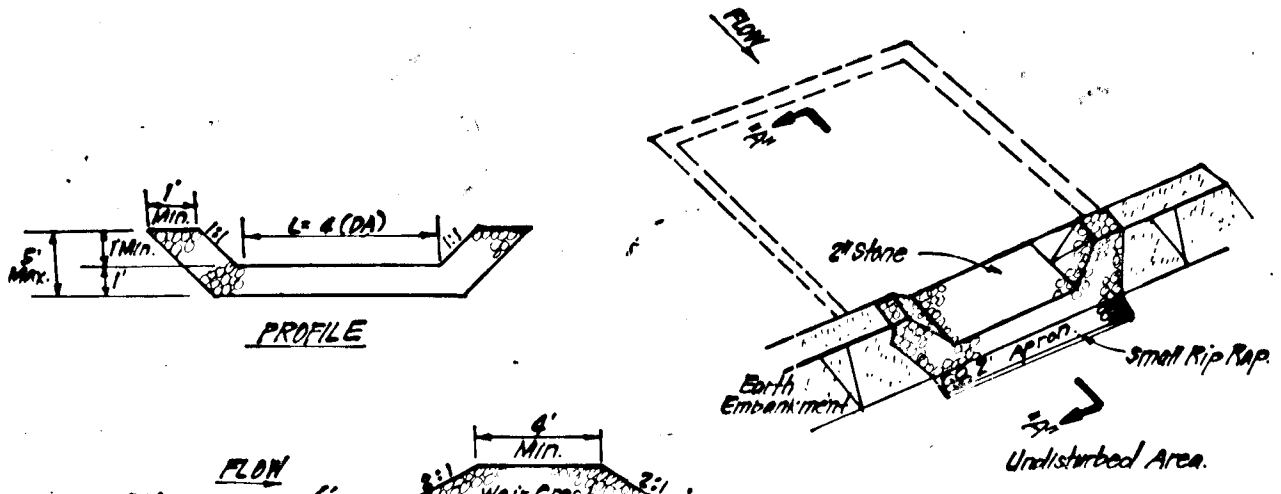
- CONSTRUCTION SPECIFICATIONS:**
1. All dikes shall be constructed by earth-moving equipment.
 2. All dikes shall have positive drainage to an outlet.
 3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
 4. Final location should be adjusted as needed to utilize a stabilized safe outlet crossing by construction traffic.
 5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the site channel or the drainage area above the dike are not adequately stabilized.
 6. Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per chart below.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	15-3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2	3.1-5.0%	Seed & Straw Mulch	Seed & Straw Mulch or Excavator Soil 2" Stone
3	5.1-8.0%	Seed & Straw Mulch or 2" Stone	Lined Rip Rap 4" Stone
4	8.1-20.0%	Lined Rip Rap 4" Stone	Engineering Design

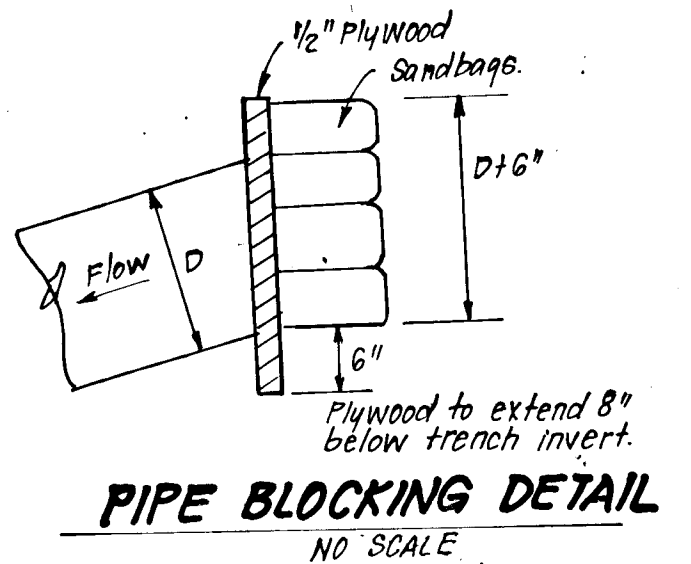
- A. Stone to be 2" Stone, or recycled concrete equivalent, in a layer at least 3" thick may be pressed into soil with construction equipment.
 B. Rip Rap to be 4-1/2" in a layer at least 3" thick, pressed into soil.
 C. Approved equivalents can be substituted for any of the above materials.
 7. Periodic inspection and Required Maintenance must be provided after each rain.

EARTH DIKE DETAIL (E.D.)
NO SCALE

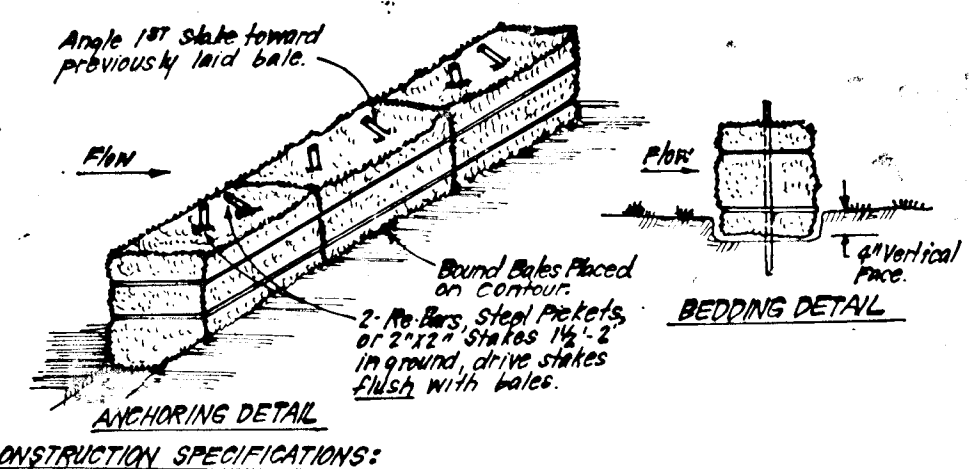


- CONSTRUCTION SPECIFICATIONS:**
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top soil shall be cleaned.
 2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over sized stones, rocks, organic material or other phytotoxic material. The embankment shall be compacted by traversing with equipment while it is being constructed.
 3. All cut and fill slopes shall be 2:1 or flatter.
 4. The stone used in the outlet shall be small rip rap 4"-8" stone with a thickness of 2" aggregate placed on the up-slope side on the small rip rap or crushed filter cloth in the rip rap.
 5. 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.
 6. The structure shall be inspected after each rain and repairs made as needed.
 7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) STV.
NO SCALE

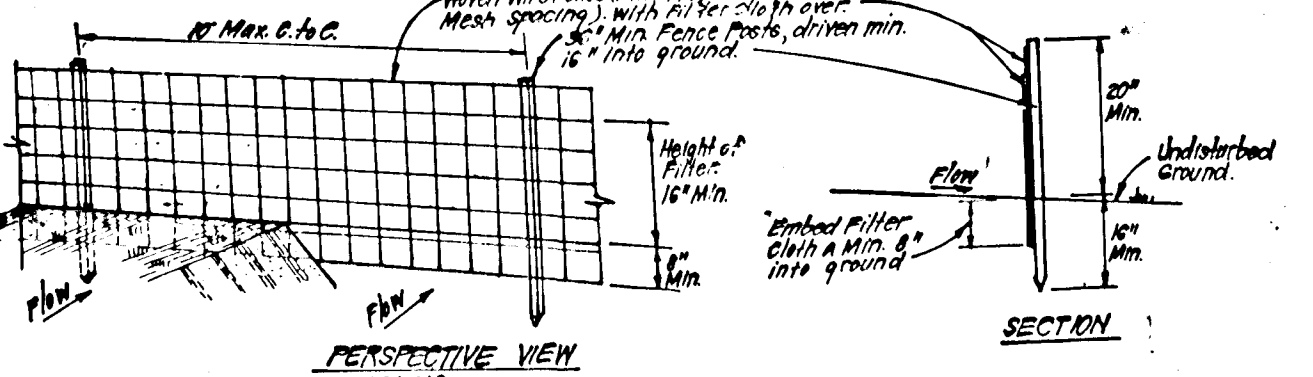


PIPE BLOCKING DETAIL
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
1. Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
 2. Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
 3. Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale.
 4. The 1st stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.
 5. Inspection shall be frequent and repair/replacement shall be made promptly as needed.
 6. Bales shall be removed when they have served their usefulness as well as not to block or impede storm flow or drainage.

STRAW BALE DIKE DETAIL (SBD)
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
1. When wire fence is fastened securely to fence posts with wire ties or staples.
 2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 4' at top and mid section.
 3. When 2 sections of filter cloth adjoin each other they shall be fastened by 6" and staples.
 4. Maintenance shall be performed as needed and material removed when "pulpies" develop in silt fence.

SILT FENCE DETAIL (S)
NO SCALE

SEDIMENT CONTROL NOTES

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permitting prior to the start of any construction. (192-2437)
- 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 redistribution, 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) and (Sec. 52), temporary seeding (Sec. 50) and mulching (Sec. 51). 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	24.7 Acres
Area Disturbed	8.7 Acres
Area to be seeded or paved	2.5 Acres
Area to be vegetatively stabilized	2.2 Acres
Total Cut	2939 Cu. Yds
Total Fill	26700 Cu. Yds
Off-site waste/borrow area location	N/A
- 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 control must be provided, if deemed necessary by the Howard County DWM 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.
- 11) If houses are to be constructed on an "As-Built" basis, at a minimum, Single Lot Sediment Control as shown below shall be implemented.
- 12) All pipes to be blocked at the end of each day (see detail below).
- 13) The total amount of straw bale dikes/silt fence equals 1.1 F.

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, if not previously inspected.
- 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 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 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 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.
- Maintenance:** Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

- Apply to graded or cleared areas likely to be redistributed 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, if not previously inspected.
- 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 25 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 the 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 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.
- Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

CONSTRUCTION SEQUENCE:

1. Obtain Grading Permit. 1
2. Install Sediment Traps 1 & 2, E.D.'s, SBD's and Storm Construction Entrances. 3
3. Clear and Grade Site. 45
4. Install storm drain and Temporary pipe connections to Sediment Control Traps. 15
5. All inlets to be kept open so as to drain into Sediment Traps 1 & 2. 1
6. Construct Curb & Gutter, Sidewalk & Paving. 40
7. Final grade and stabilize all disturbed areas. 15
8. Remove temporary sediment control devices with approval of County Sediment Control Inspector. 5
9. Excavate and install water quality facilities 1 & 2 in accordance with these plans. 10

Reviewed for... Howard... S.C.D.
 Name: [Signature]
 Signature: [Signature]
 Date: 3/29/89
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Approved: [Signature] Date: 3/29/89

DEVELOPER'S/BUILDER'S CERTIFICATE

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Signature of Developer/Builder: [Signature] Date: 1/1/89

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 site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature: [Signature] Date: 11-1-88
 G. Nelson Clark

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 [Signature] Date: 5/2/89
 [Signature] Date: 5/4/89
 [Signature] Date: 5/18/89
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.
 [Signature] Date: 5/1/89

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DESIGNED	RJS	SCALE	As Shown
DRAWN	RIW	DRAWING	6 OF 6
CHECKED	RJS	JOB NO.	85-053
DATE	10-31-88	FILE NO.	85-053-D

FOR: KINGS MEADE LIMITED PARTNERSHIP
 2030 E. J. Branch Rd. # 200

1382