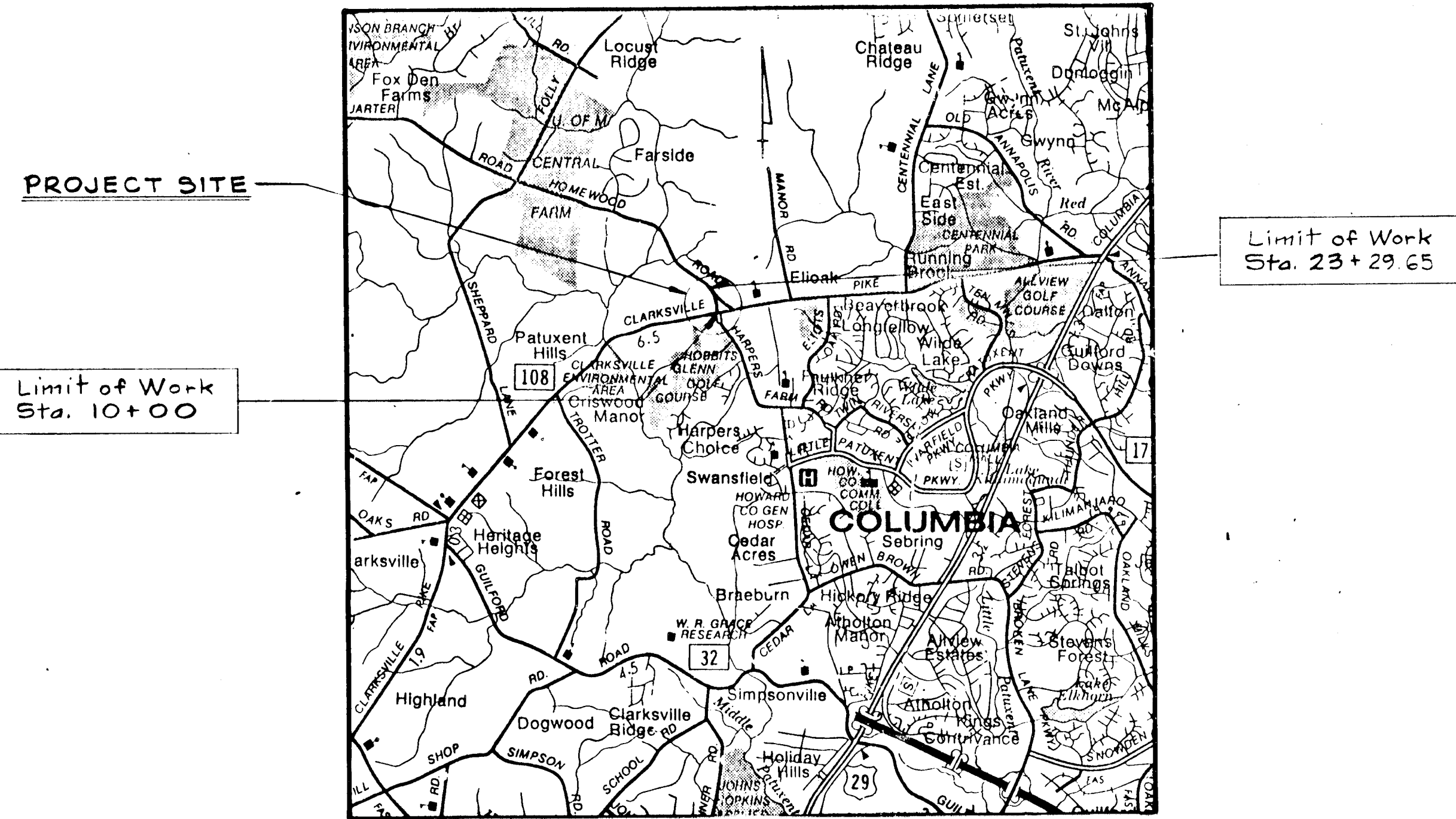


HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
HOMEWOOD ROAD RELOCATION
MARYLAND ROUTE 108 TO HOMEWOOD ROAD

INDEX OF SHEETS

NUMBER	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	GEOMETRY LAYOUT, DETAILS & GENERAL NOTES
4	PLAN
5	PROFILE
6	SEDIMENT & EROSION CONTROL PLAN
6A	SEDIMENT & EROSION CONTROL PLAN SUPPLEMENT PLAN
7	SEDIMENT CONTROL NOTES & DETAILS & STORMWATER MANAGEMENT
8	TRAFFIC CONTROL PLAN
9	EARTHWORK SUMMARY & GRADING TABLE



LOCATION MAP
 Scale 1" = 1 Mile

CAPITAL PROJECT T - 7035
 PROJECT LENGTH: 0.252 MILE
 ROAD CLASSIFICATION: MAJOR COLLECTOR
 DESIGN SPEED: 40 M.P.H.
 1986 A.D.T. = 3670
 2007 A.D.T. = 8880

CERTIFICATION BY THE DEVELOPER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT THE RESPONSIBLE PERSONAL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE OF DEVELOPER

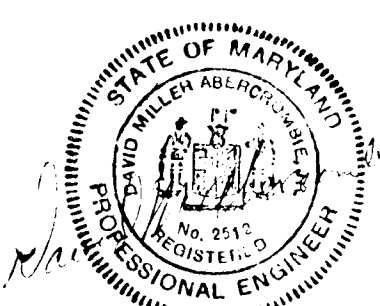
C-12-87
DATE

CERTIFICATION BY THE ENGINEER

"I 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"

David M. Chiswick
SIGNATURE OF ENGINEER

8/16/87
DATE

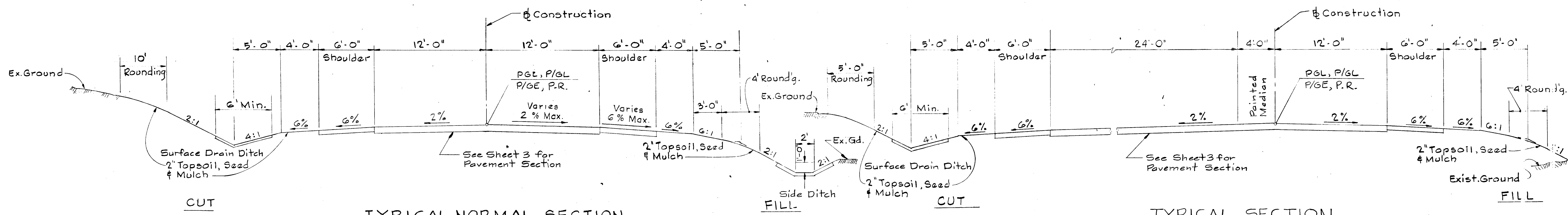


REVIEWED FOR HOWARD C.D.
NAME
AND MEETS TECHNICAL REQUIREMENTS

James M. Helms DATE: 8-17-87
SIGNATURE
U.S. SOIL CONSERVATION SERVICE

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

APPROVED: _____ DATE: 8/17/87
HOWARD S.C.D.

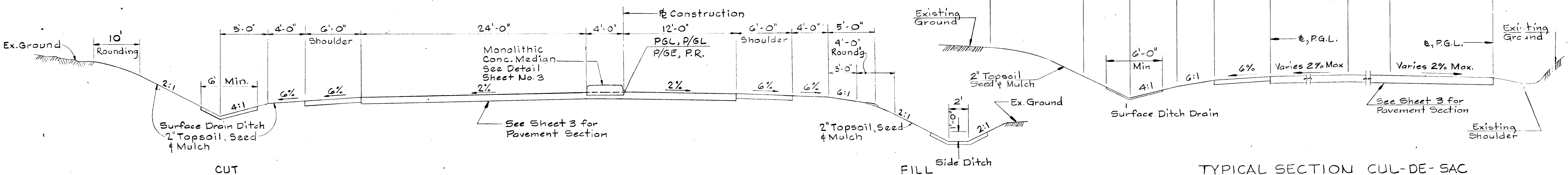


TYPICAL NORMAL SECTION

Scale: 1" = 5'-0"
Sta. 22 + 21.50 to Sta. 23 + 29.65

TYPICAL SECTION

Scale: 1" = 5'
Sta. 11 + 60 to Sta. 15 + 20.26

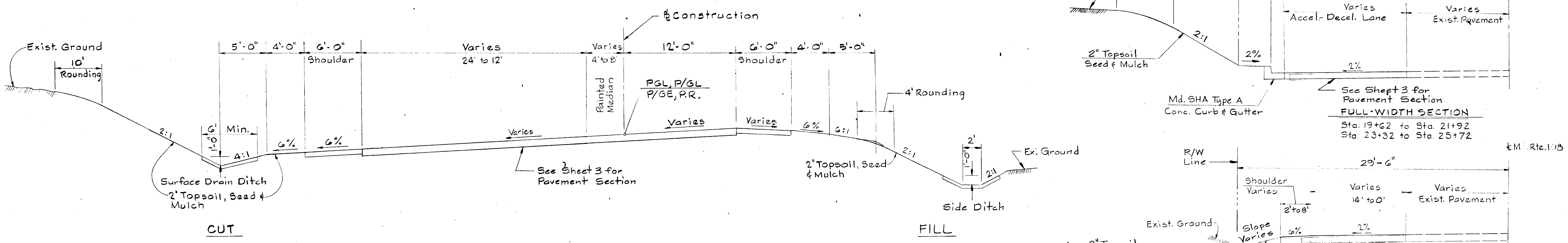


TYPICAL SECTION ~ RAISED MEDIAN

Scale: 1" = 5'-0"
Sta. 10 + 50 to Sta. 11 + 60

TYPICAL SECTION CUL-DE-SAC

Scale: 1" = 5'



TYPICAL SUPERELEVATED SECTION

Scale: 1" = 5'-0"
Sta. 15 + 20.26 to Sta. 22 + 21.50

TYPICAL SECTIONS - MD. RTE 108

Scale: 1" = 5'

General Note:
See Plan for Ditch Stabilization

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS: *[Signature]* DATE: 4-12-87
CHIEF, BUREAU OF ENGINEERING: *[Signature]* DATE: 4-12-87

WALLACE MONTGOMERY & ASSOCIATES
9 W 29TH STREET
BALTIMORE, MD. 21218
301-235-7600

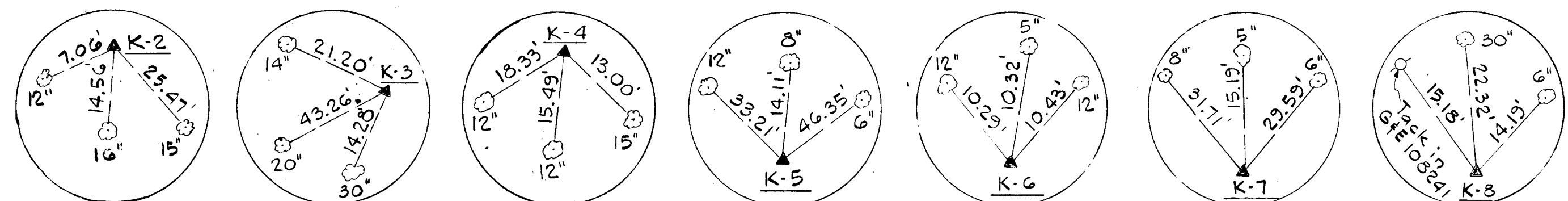
DES: H.K.			
DRN: P.N.B.			
CHK: D.M.A.			
DATE: 5/27/87	BY: NO.	REVISION	DATE

TYPICAL SECTIONS

HOMEROD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMEROD ROAD

SCALE AS SHOWN
SHEET 2 OF 2

Bench Mark
Control Station # 2839005
Conc. Mon. 8'± S. of Edge of
Md. Rte. 108
Elev. 466.54



CONTROL POINTS

Bench Mark
PK Nail in BG & E Pole # 814579
C&P # 7, 35'± Rt. of K-7
Elev. 429.15

Homewood Road
Sta. 19+50 to Sta. 21+20 Lt.
Construct 160LF Infiltration
Trench See Detail Sheet No. 7
Sta. 20+75 Lt.
1- Observation Well
See Detail Sheet No. 7

CONSTRUCTION CURVE DATA

R = 850'
Δ = 34° 20' 10"
Dc = 6° 44' 26"
T = 263.63'
L = 509.38'
E = 39.64'

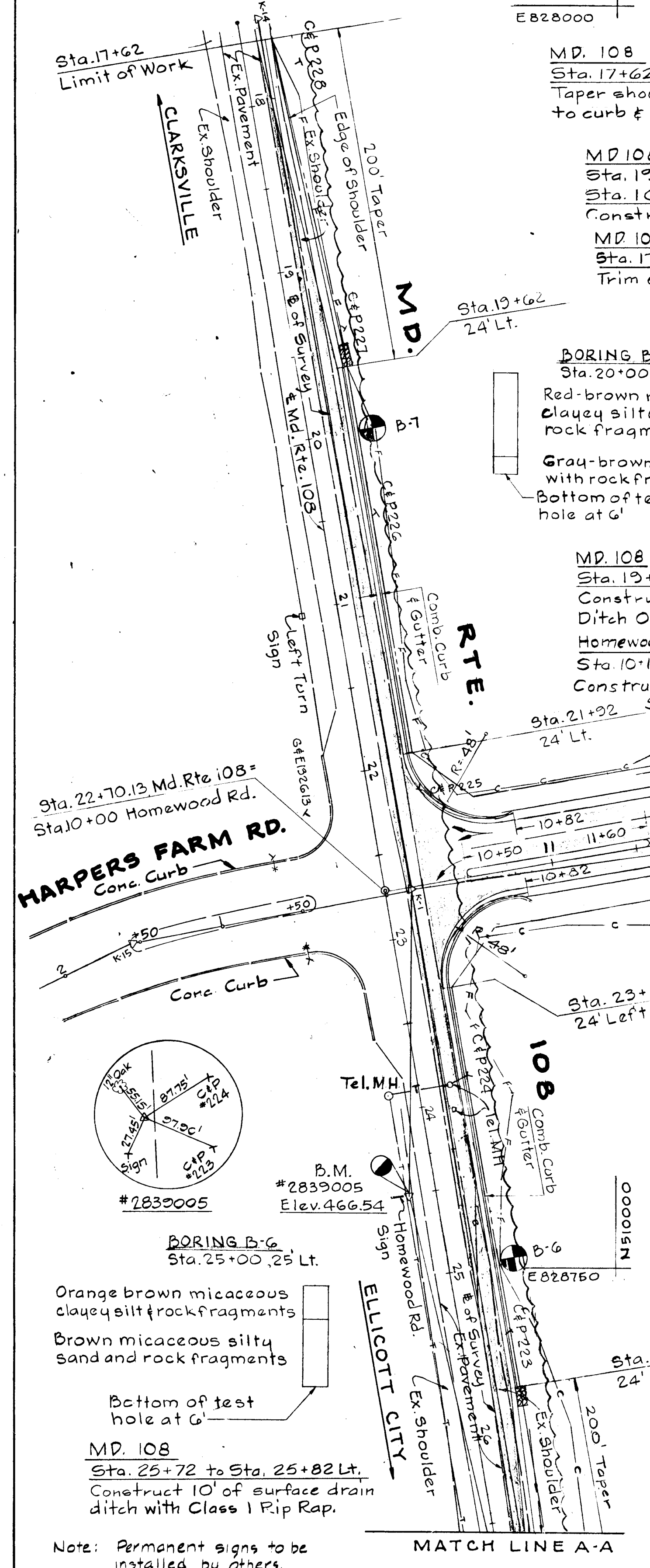
Homewood Road
Sta. 18+95 to Sta. 19+50 Lt.
Construct 2' side ditch
with Jute Matting
See Typical Section Sheet 2.

CURVE 'A'

R = 900'
Δ = 34° 20' 09"
Dc = 6° 21' 58"
T = 278.04'
L = 539.34'
E = 41.97'

Homewood Road

Sta. 21+20 Lt.
Tie side ditches to existing
ditch as directed by the
Engineer.



MD 108
Sta. 17+62 to Sta. 19+62 Md. Route 108
Taper shoulder from existing shoulder
to curb & gutter.

MD 108
Sta. 19+62 Md. Route 108 to
Sta. 10+82 Relocated Homewood Road
Construct comb. curb & gutter.

MD 108
Sta. 17+62 to Sta. 19+50 Lt.
Trim existing ditch.

BORING B-7
Sta. 20+00, 25' Lt.
Red-brown micaceous
clayey silty sand and
rock fragments
Gray-brown clayey silt
with rock fragments
Bottom of test
hole at G'

MD 108
Sta. 19+50 to Sta. 19+62 Lt
Construct 12' of Rip Rap
Ditch Outlet.

Homewood Road
Sta. 10+12 to Sta. 10+82
Construct Pavement using "Pavement
Section, MD Rte 108"

Sta. 21+92
24' Lt.

NINA R. CARROLL
R.L.P. 11/303

Homewood Road
Sta. 11+40 to Sta. 16+62
Paint median as shown on plans

Sta. 17+22 to Sta. 20+42
Paint median as shown on plans.

Homewood Road
Sta. 11+40 to Sta. 16+30 Lt.
Construct surface drain ditch
with Jute Matting
See Typical Section Sheet 2

Homewood Road
Sta. 11+40 to Sta. 16+50 Rt.
Construct surface drain ditch
with Jute Matting
See Typical Section Sheet 2.

CURVE 'B'
CURVE DATA
R = 41.00'
Δ = 59° 01' 01"
Dc = 139° 44' 45"
T = 23.20'
L = 42.22'
E = 6.11'

Homewood Road
Sta. 10+50 to Sta. 11+60
Construct Monolithic Conc. Median
See Detail Sheet 3

NINA R. CARROLL
R.L.P. 11/303

MD 108
Sta. 10+82 Relocated Homewood Road to
Sta. 25+72 Md. Route 108
Construct comb. curb & gutter.

MD 108
Sta. 25+72 to Sta. 27+72 Md. Route 108
Taper shoulder from curb & gutter
to existing shoulder.

MD 108
Sta. 25+82 to Sta. 27+00 Lt.
Md. Route 108
Construct surface drain ditch
with sod. See Typical Section,
Sheet 2

PLAN
Scale: 1" = 50'

HOMWOOD LOTS 1 THRU 10
TAX MAP # 29
PARCEL NO 279

Homewood Road
Sta. 17+10 to Sta. 18+84.5 Rt.
Construct 2' side ditch with
Jute Matting. See Typical Section
Sheet 2.

Homewood Road
Sta. 18+84.5 Rt.
Tie Proposed Side Ditch into the
Existing Surface Drain Ditch as
directed by the Engineer.

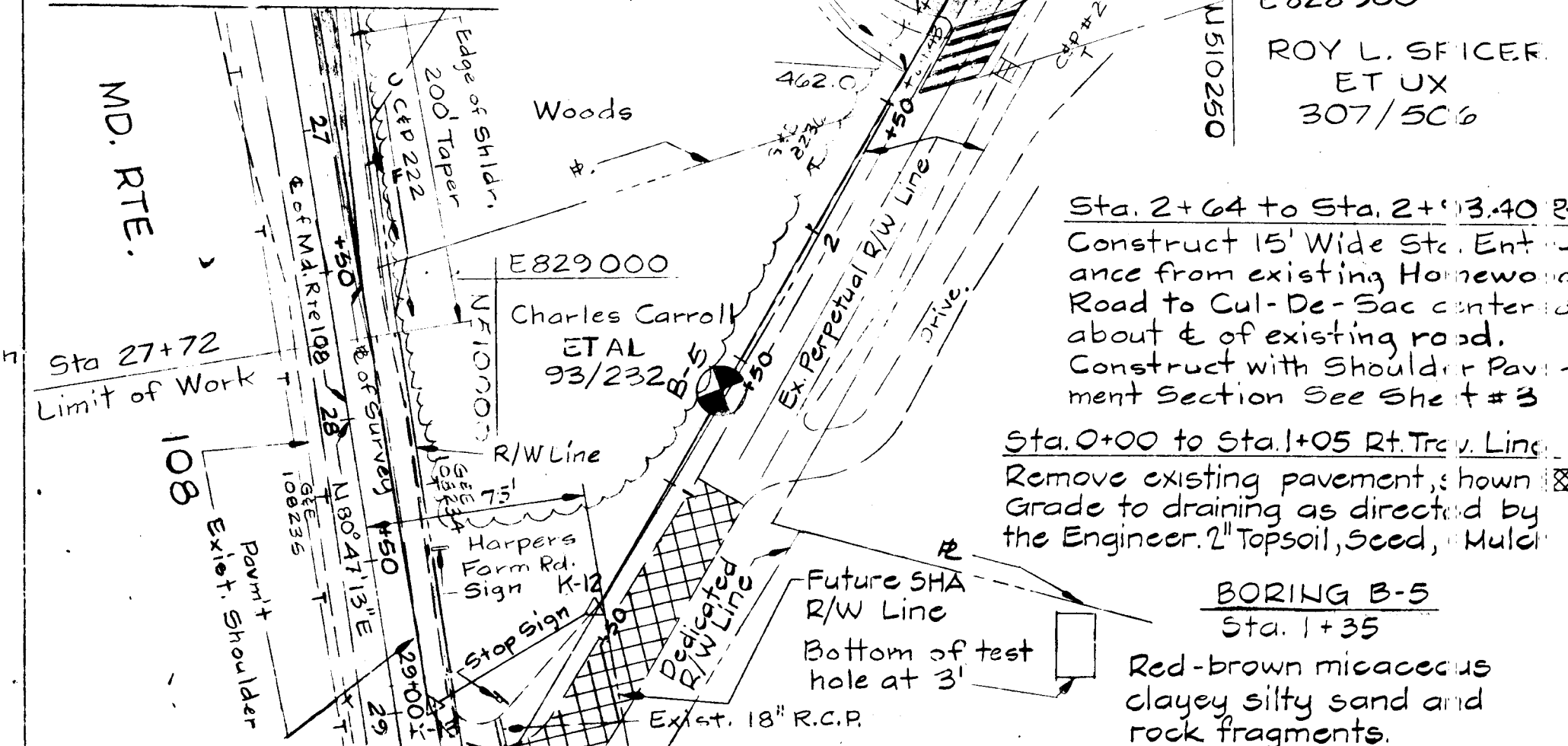
P.G./L. Stations NINA R. CARROLL
R.L.P. 11/303
P.C. = Sta. 0+27.02
P.R.C. = Sta. 0+72.07
P.T. = Sta. 2+53.55

Note: Existing Homewood Rd between the
Cul-De-Sac and 75' from E. Md 108
will revert to the adjacent owners.

Sta. 2+64 to Sta. 4+20
Remove existing pavement.

Sta. 2+64 to Sta. 4+20 Lt.
Construct surface drain ditch
with Jute Matting
Tie to existing ditch.
See typical section, Sheet # 2

MATCH LINE A-A



HOMWOOD LOTS 1 THRU 10
TAX MAP # 29
PARCEL # 279

ROY L. SFICER
ET UX
307/506

Sta. 2+64 to Sta. 2+13.40 Rt
Construct 15' Wide St. Ent-
rance from existing Homewood
Road to Cul-De-Sac centered
about E. of existing road.
Construct with Shoulder Pav-
ment Section See She t # 3

Sta. 0+00 to Sta. 1+05 Rt. Trcv. Line.
Remove existing pavement, show
Grade to draining as directed by
the Engineer. 2' Topsoil, Seed, Mulch

BORING B-5
Sta. 1+35
Red-brown micaceous
clayey silty sand and
rock fragments.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS
DATE
6/10/87

CHIEF, BUREAU OF ENGINEERING
DATE
6-12-87

WALLACE MONTGOMERY
& ASSOCIATES
9 W 29TH STREET
BALTIMORE, MD. 21218
301-235-7600

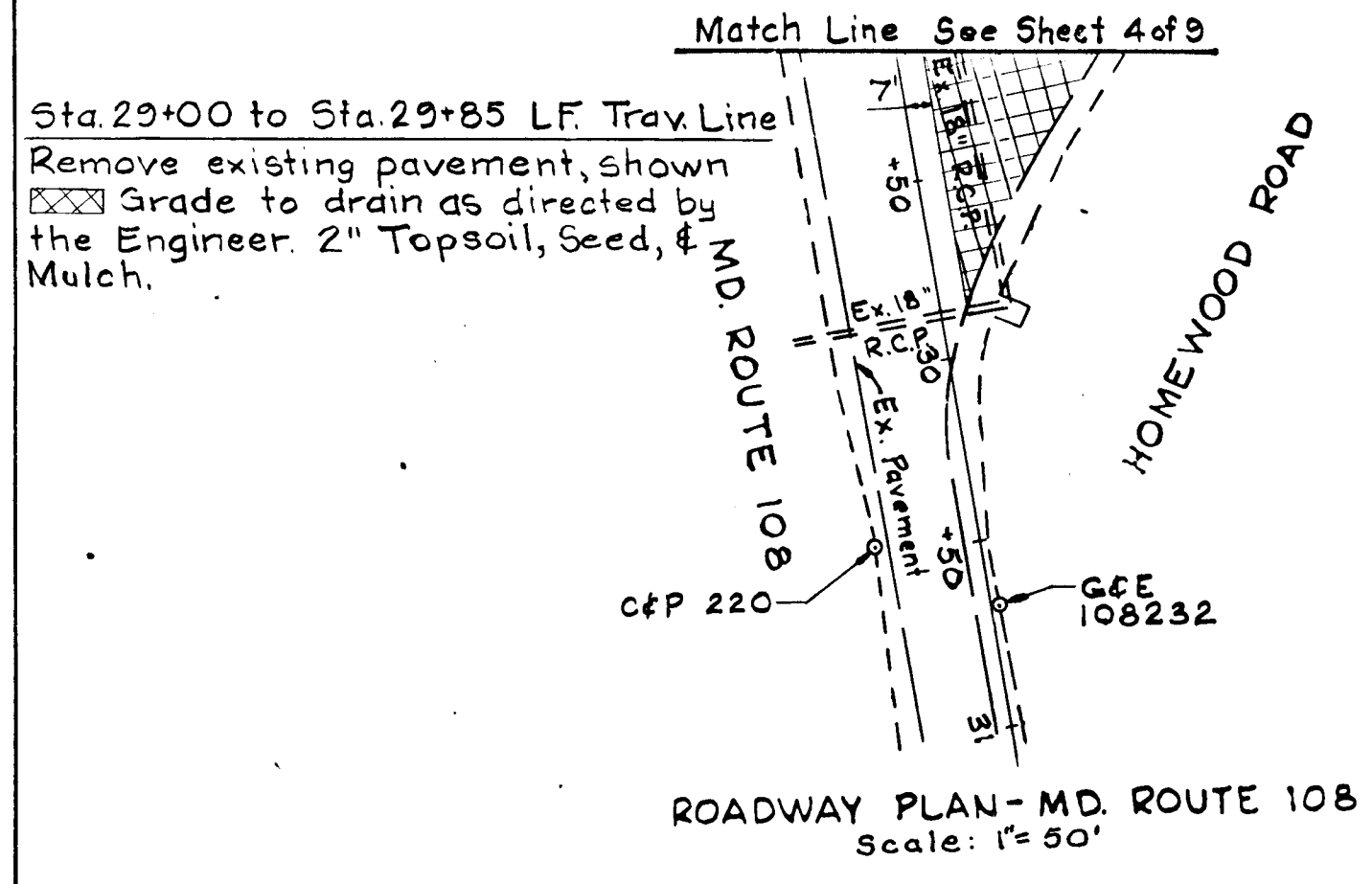
DES: H.L.
DRN: P.N.B.
CHK: D.M.A.
DATE: 5/27/87

ROADWAY PLAN

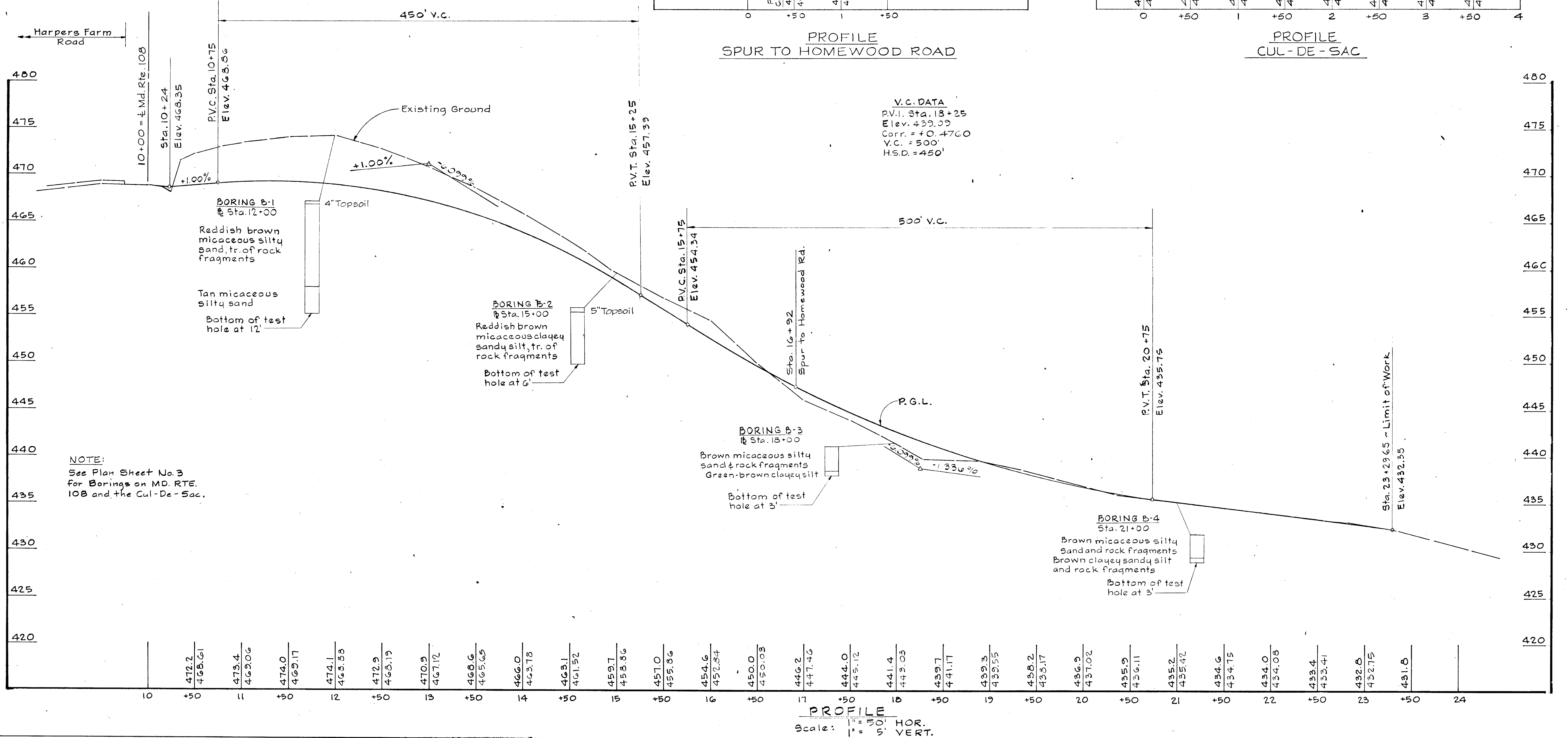
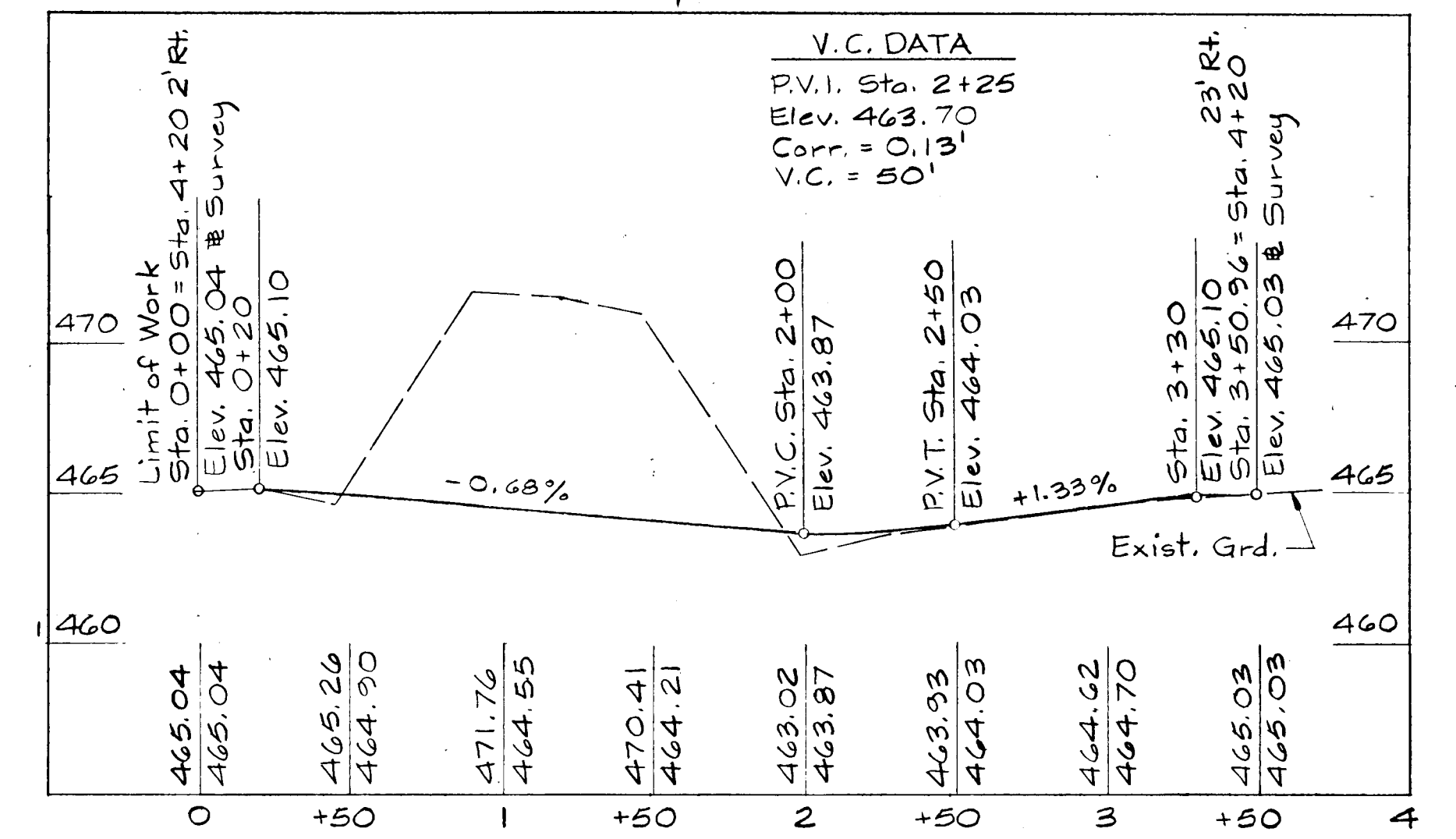
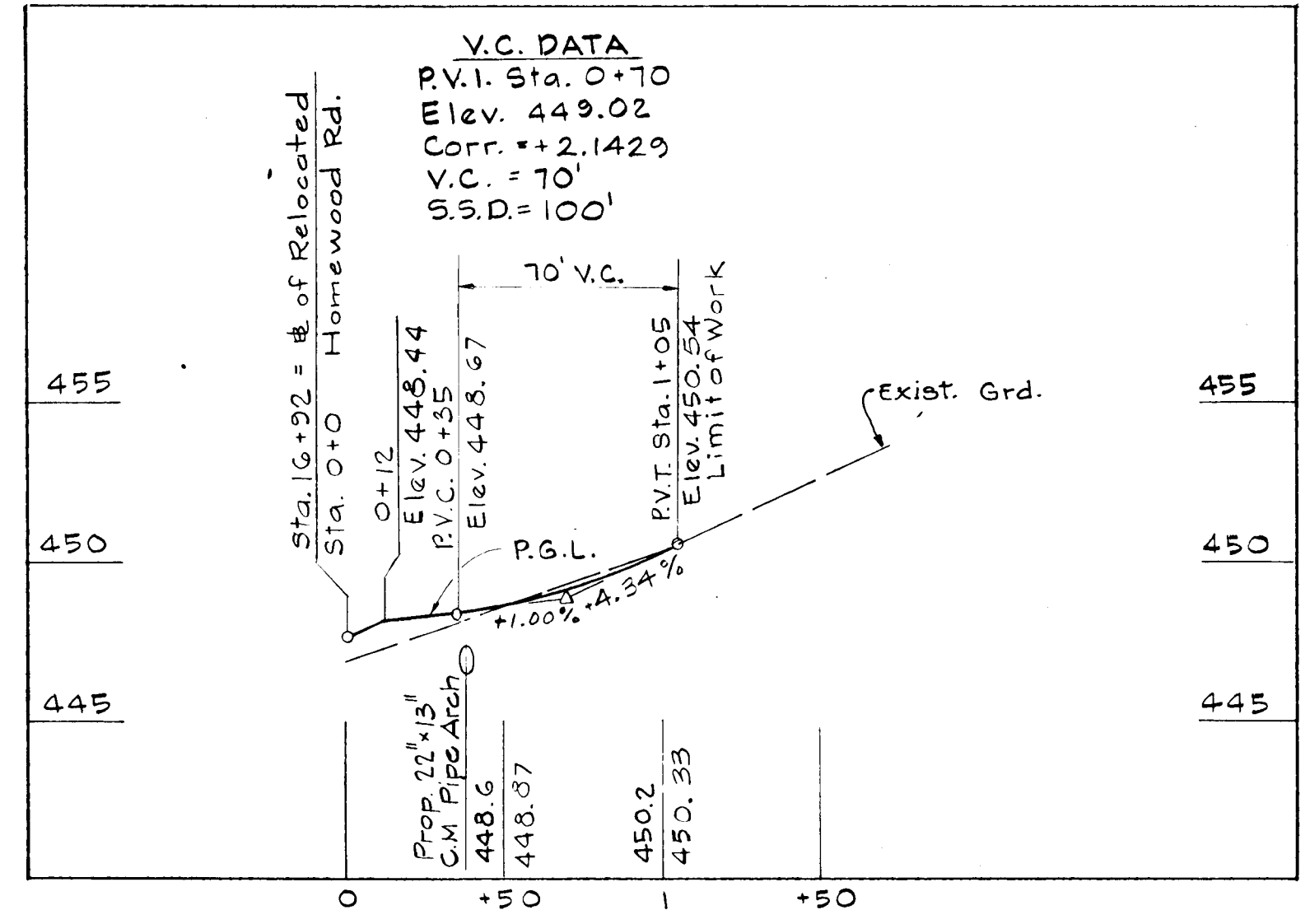
Match Line See Sheet 5 of 9

HOMWOOD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMWOOD ROAD

SCALE
AS
SHOWN
SHEET
4 OF 2



V.C. DATA
 P.V.I. Sta. 13+00
 Elev. 471.11
 Corr. = -0.7889
 V.C. = 450'
 S.S.D. = 300'



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS
 DATE: 4/15/87

CHIEF, BUREAU OF ENGINEERING
 DATE: 4/15/87

WALLACE MONTGOMERY
 & ASSOCIATES
 9 W 29 TH STREET
 BALTIMORE, MD. 21218
 301-235-7600

DES: H.K.
 DRN: P.N.B.
 CHK: D.M.A.
 DATE: 5/27/87

BY: NO. REVISION DATE

ROADWAY PROFILE

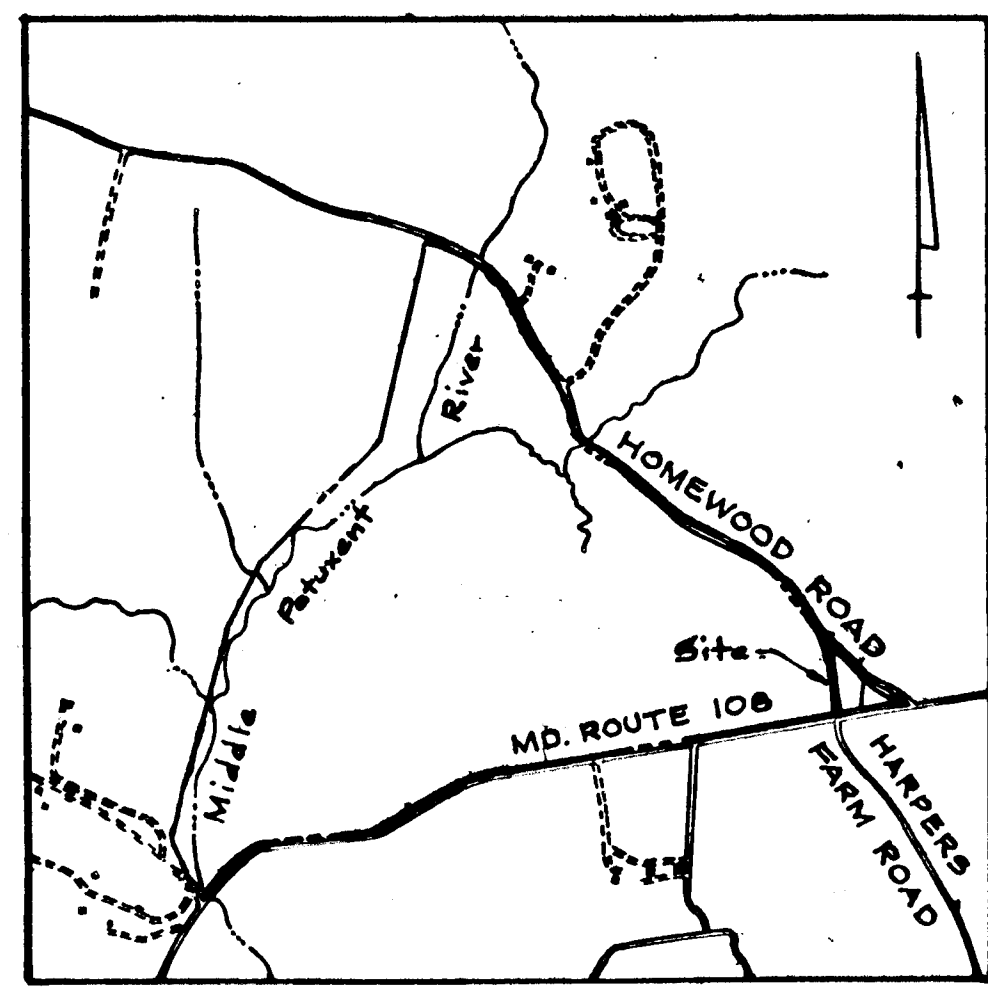
600' SCALE MAP NO. BLOCK NO.

HOMWOOD ROAD RELOCATION
 CAPITAL PROJECT T-7035
 MD. ROUTE 108 TO HOMEWOOD ROAD

SCALE AS SHOWN
 SHEET 5 OF 9

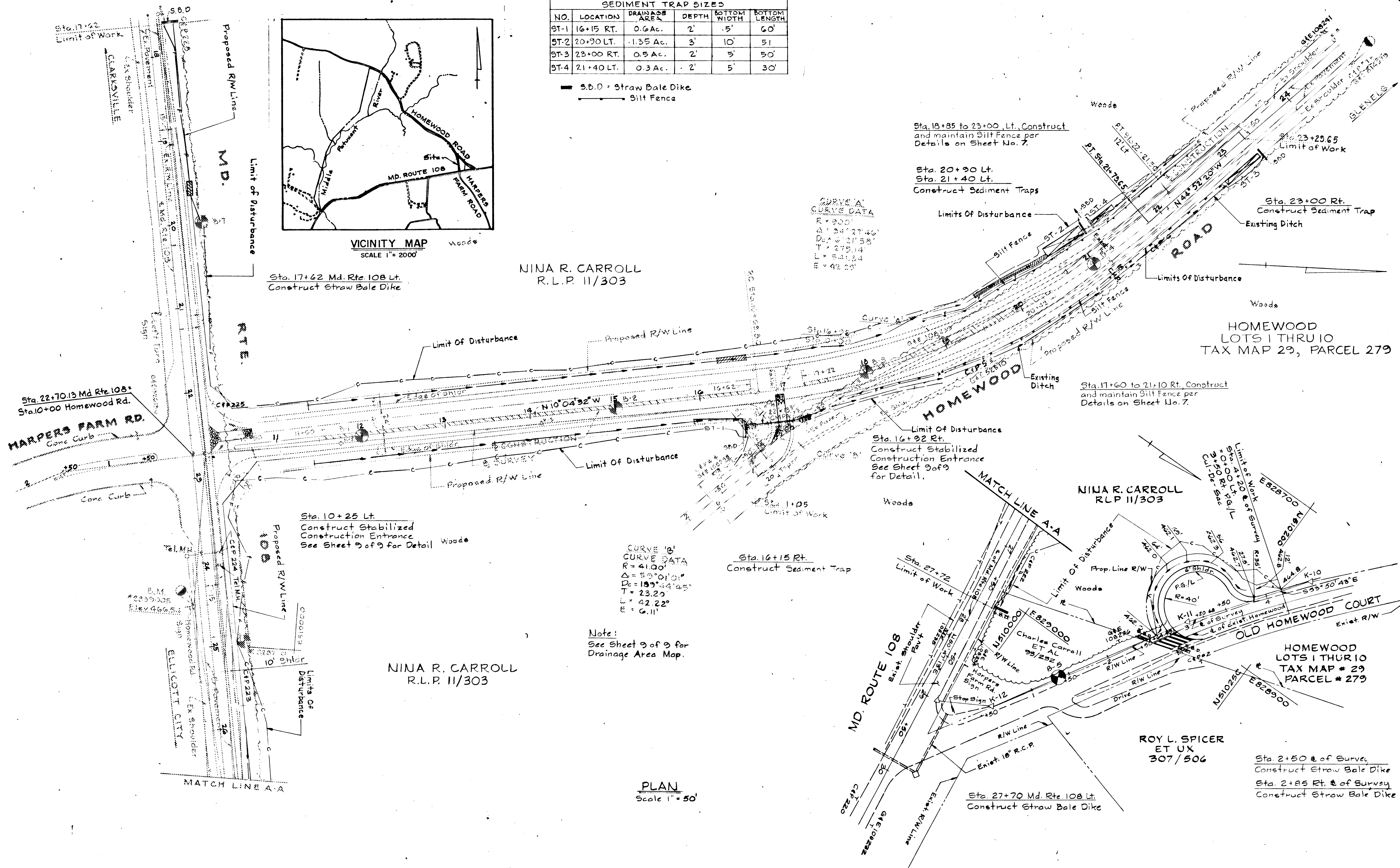
SEDIMENT TRAP SIZES					
NO.	LOCATION	DRAINAGE AREA	DEPTH	BOTTOM WIDTH	BOTTOM LENGTH
ST-1	16+15 RT.	0.6 Ac.	2'	5'	60'
ST-2	20+90 LT.	1.35 Ac.	3'	10'	51'
ST-3	23+00 RT.	0.5 Ac.	2'	5'	50'
ST-4	21+40 LT.	0.3 Ac.	2'	5'	30'

— S.B.D. = Straw Bale Dike
 - - - Silt Fence



VICINITY MAP
 SCALE 1" = 2000'

NINA R. CARROLL
 R.L.P. 11/303



PLAN
 Scale 1" = 50'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS DATE
 CHIEF, BUREAU OF ENGINEERING DATE

WALLACE MONTGOMERY
 & ASSOCIATES
 9 W 29TH STREET
 BALTIMORE, MD. 21218
 301-235-7600



DES: DP					
DRN: P.N.B.					
CHK: D.M.A.					
DATE: 5/27/87	BY NO.	REVISION	D-T	600' SCALE MAP NO.	BLOCK NO.

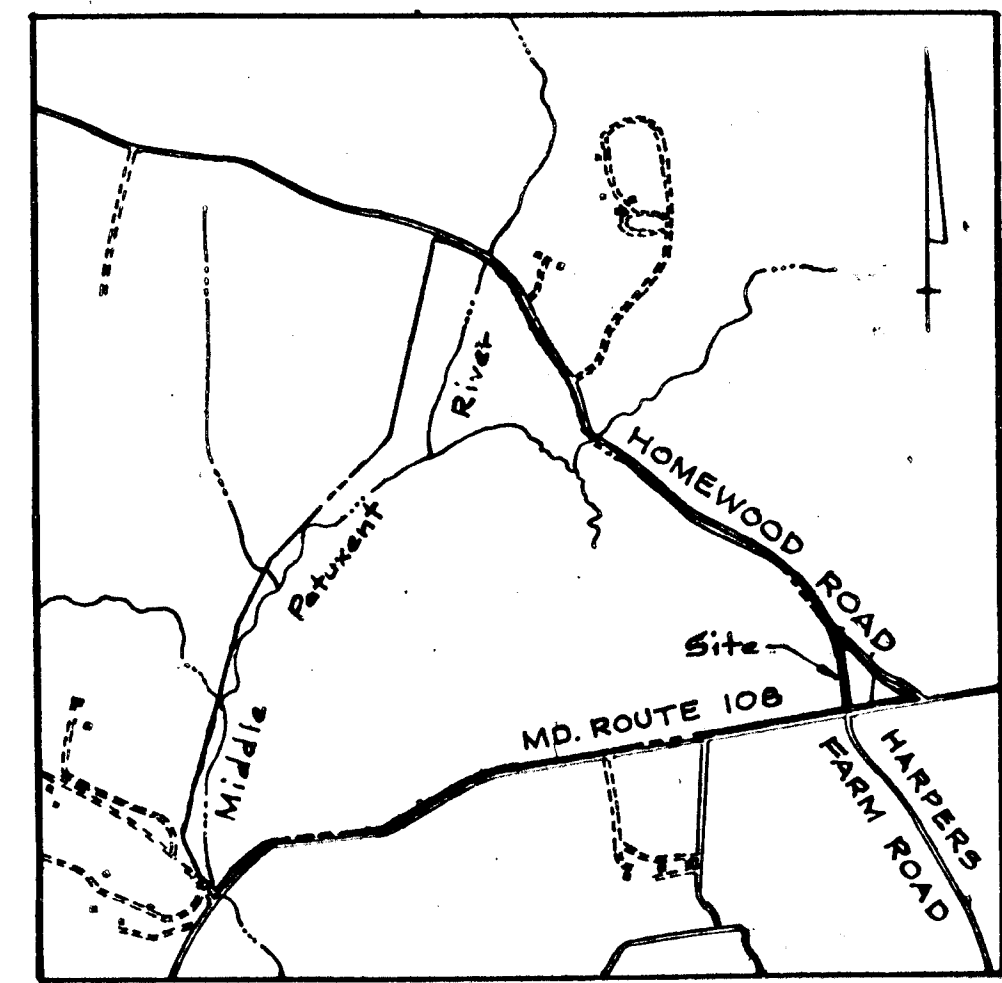
SEDIMENT & EROSION
 CONTROL PLAN

HOMEWOOD ROAD RELOCATION
 CAPITAL PROJECT T-7035
 MD. ROUTE 108 TO HOMEWOOD ROAD

SCALE AS SHOWN
 SHEET 6 OF 9

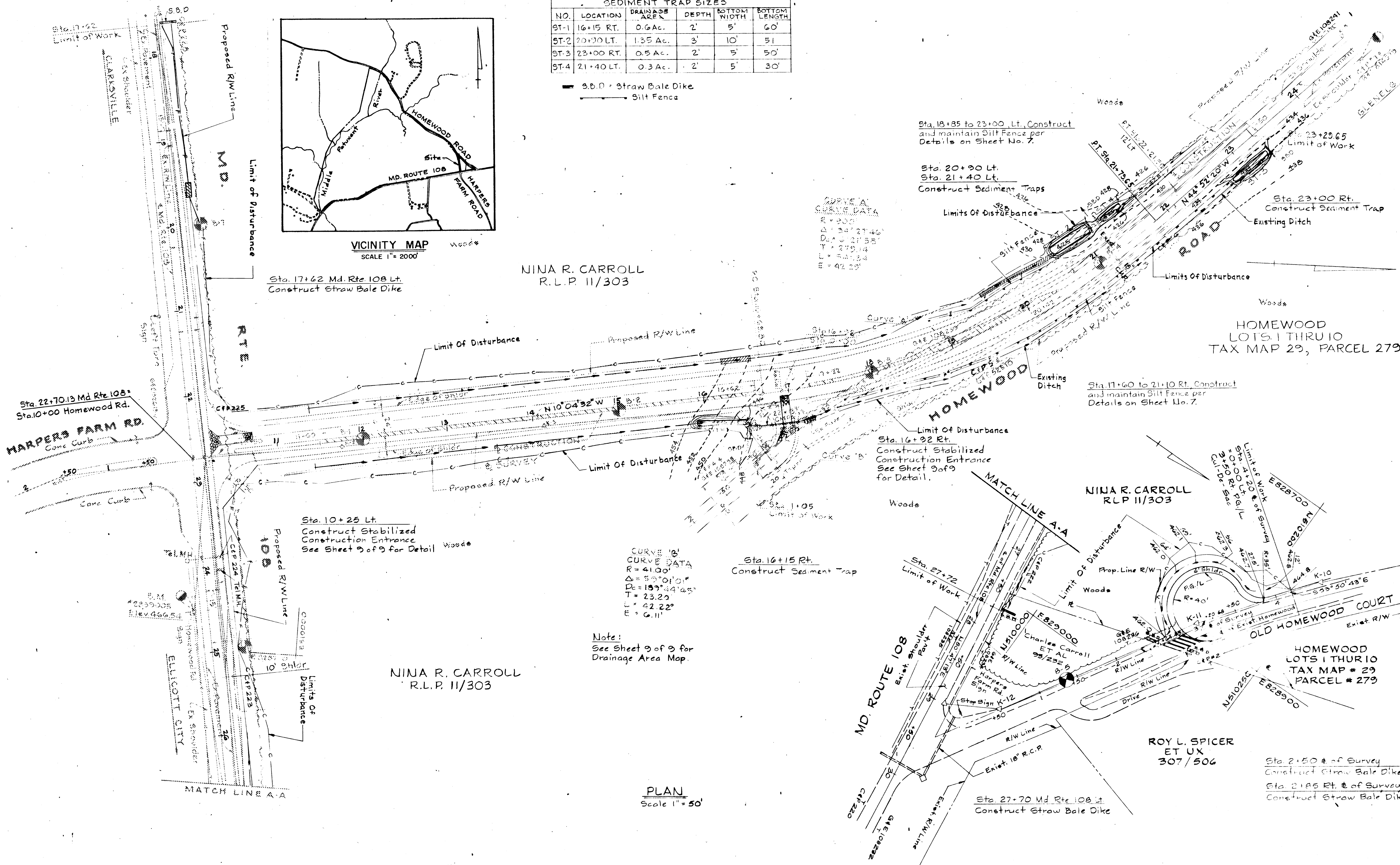
SEDIMENT TRAP SIZES					
NO.	LOCATION	DRAINAGE AREA	DEPTH	BOTTOM WIDTH	BOTTOM LENGTH
ST-1	16+15 RT.	0.6 Ac.	2'	5'	60'
ST-2	20+30 LT.	1.35 Ac.	3'	10'	51'
ST-3	23+00 RT.	0.5 Ac.	2'	5'	50'
ST-4	21+40 LT.	0.3 Ac.	2'	5'	30'

— S.B.D. = Straw Bale Dike
 - - - Silt Fence



VICINITY MAP
 SCALE 1" = 2000'

NINA R. CARROLL
 R.L.P. 11/303



PLAN
 Scale 1" = 50'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE
 CHIEF, BUREAU OF ENGINEERING DATE
 6/12/87

DES: D.P.	
DRN: P.N.B.	
CHK: D.M.A.	
DATE: 5/27/87	
BY: NO.	REVISION

SEDIMENT & EROSION
 CONTROL PLAN
 SUPPLEMENTAL PLAN

HOMEWOOD ROAD RELOCATION
 CAPITAL PROJECT T-7035
 MD. ROUTE 108 TO HOMEWOOD ROAD

SCALE AS SHOWN
 SHEET 3A OF 3

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 seedings (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	3.25 Acres
Area Disturbed	0.25 Acres
Area to be roofed or paved	0.278 Acres
Area to be vegetatively stabilized	1.74 Acres
Total Cut	11,730 Cu. yds
Total Fill	1,622 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.

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 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 reseeding.

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 60 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 24 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 grass. 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.

Sequence Of Construction

1. Obtain Grading Permit.
2. Clear For And Construct All Sediment And Erosion Controls For Phase I + II. Grade Temporary Swales To insure Drainage To Traps.
3. Clear And Grub Roadway And Brain Grading.
4. Stabilize Disturbed Perimeter Slopes In Accordance With Note # 5. Of The Sediment Control Notes.
5. Construct Utilities And Pave. Stabilize Disturbed Areas.
6. Construct Infiltration Trench.
7. Remove Sediment Controls And Stabilize.

Construction Specification For Infiltration Structures

I. Timing
Infiltration Trench Shall Not Be Constructed Until Area Has Been Stabilized And Approved By County Inspector.

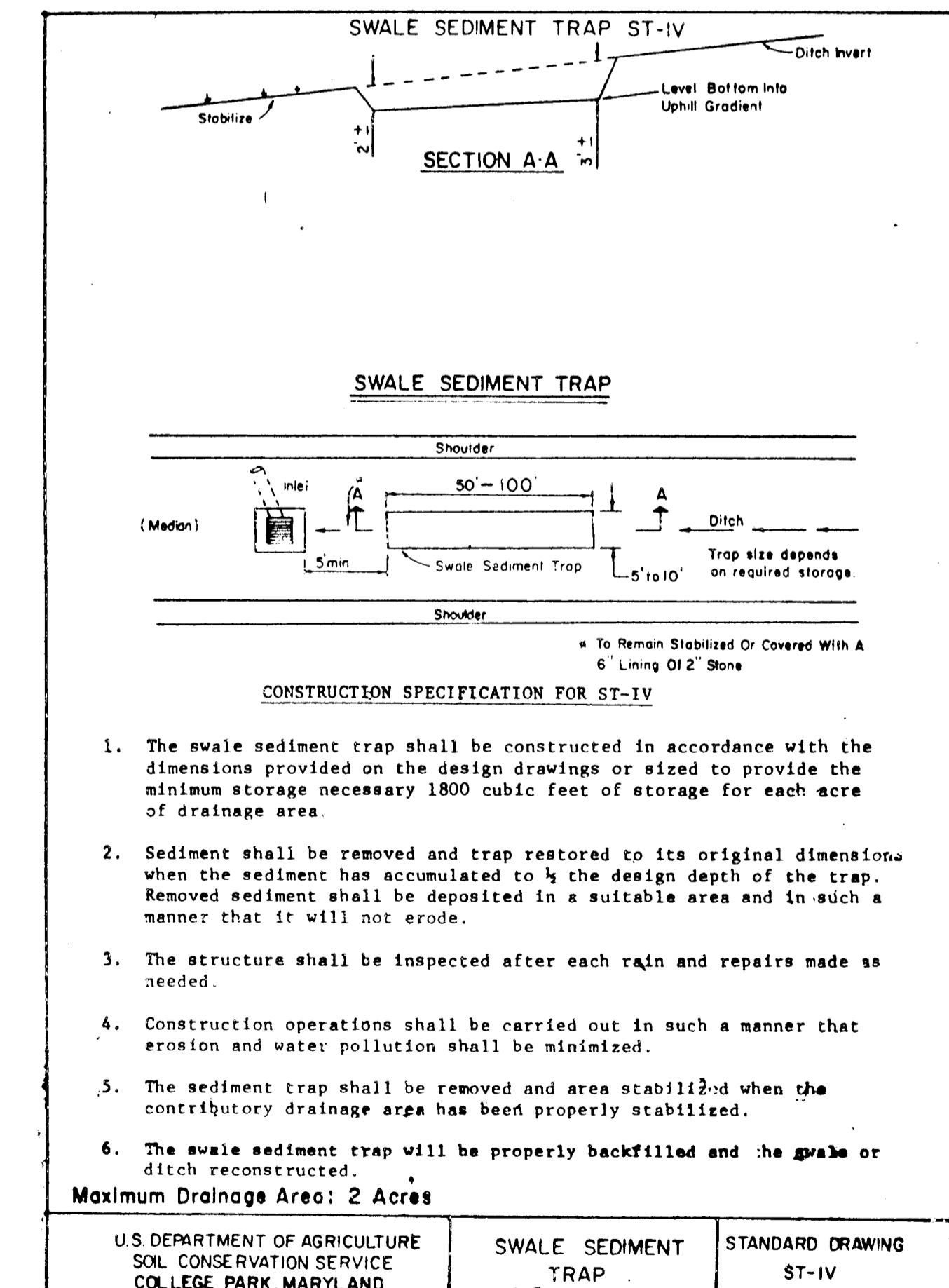
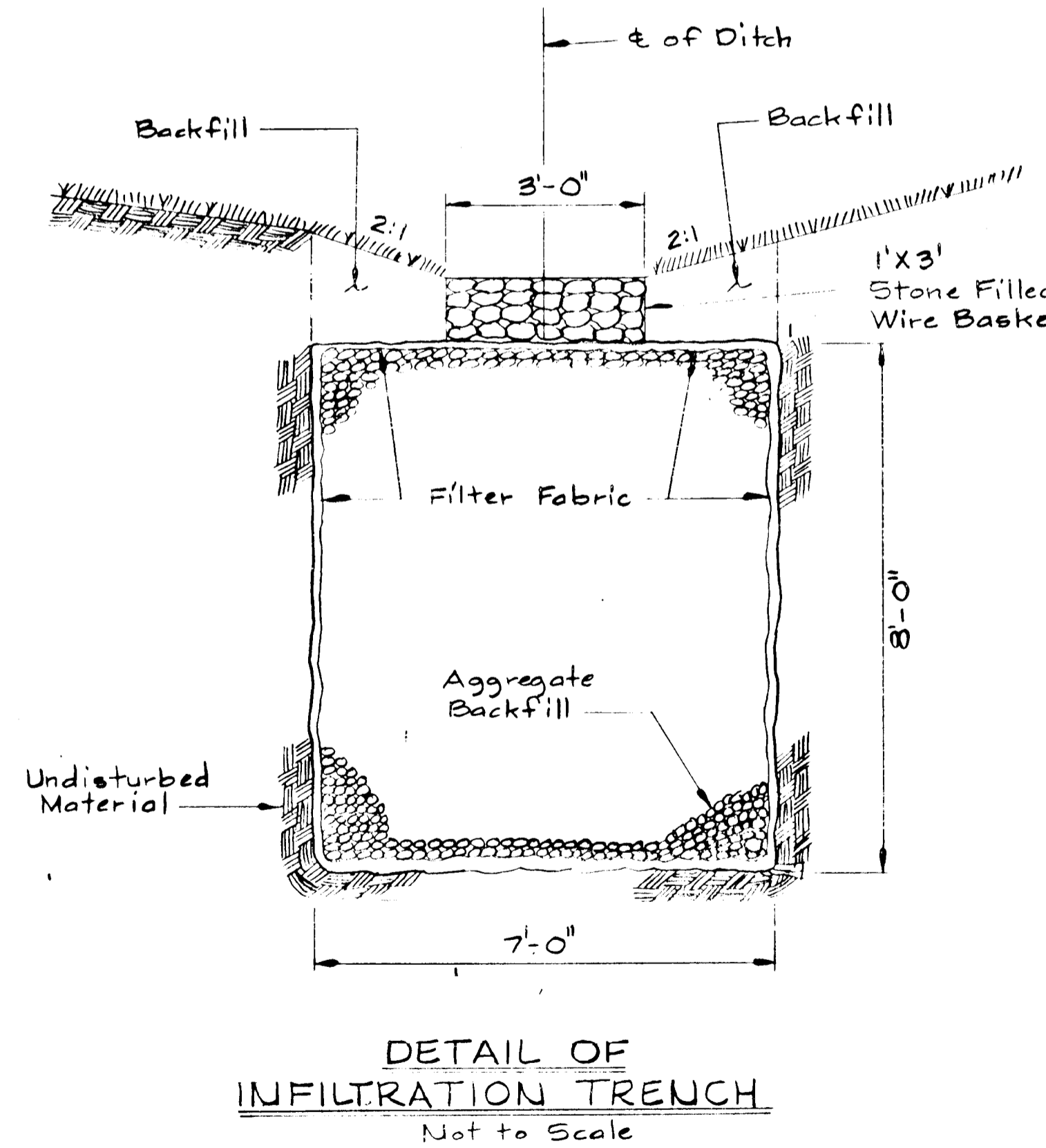
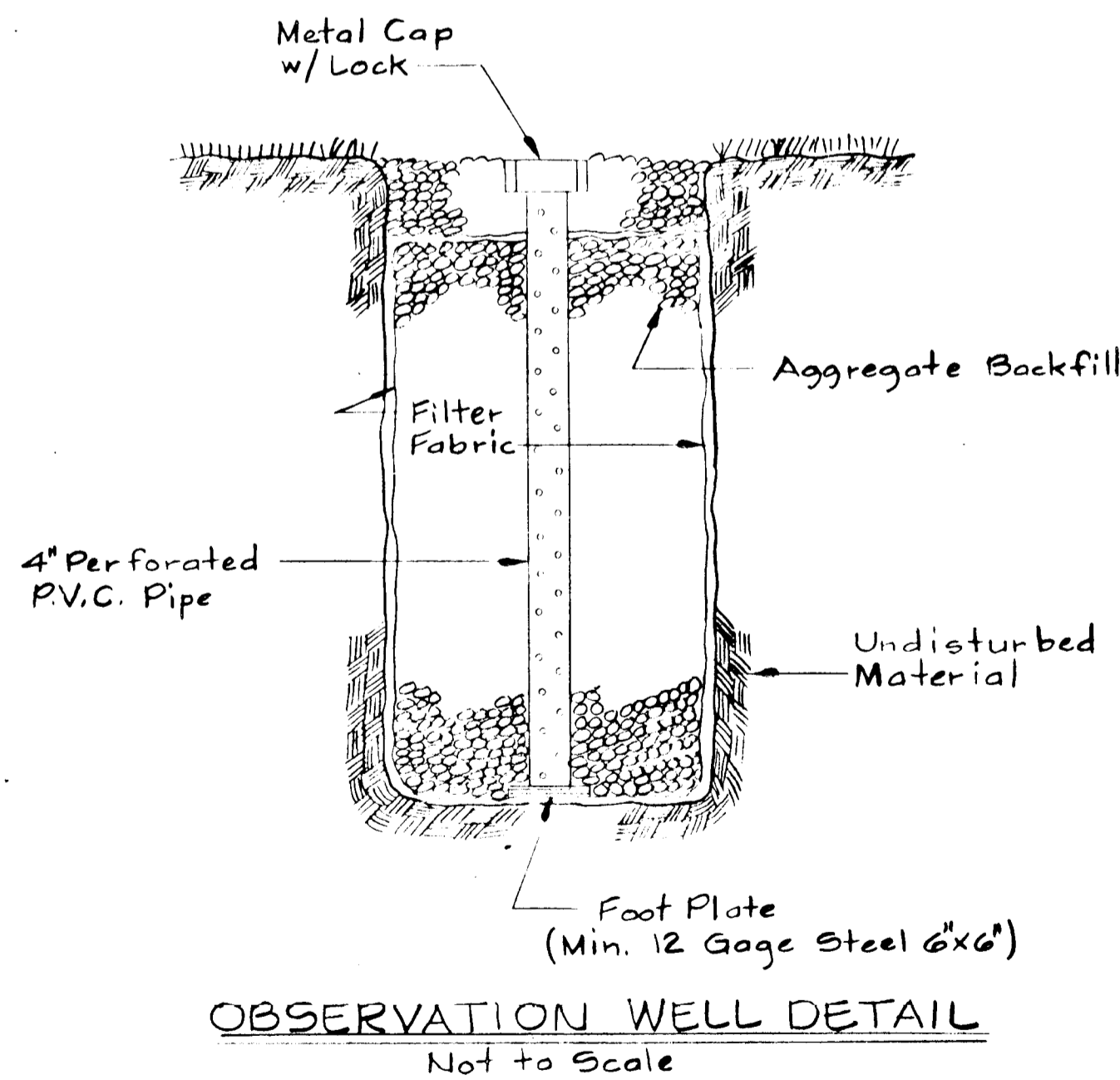
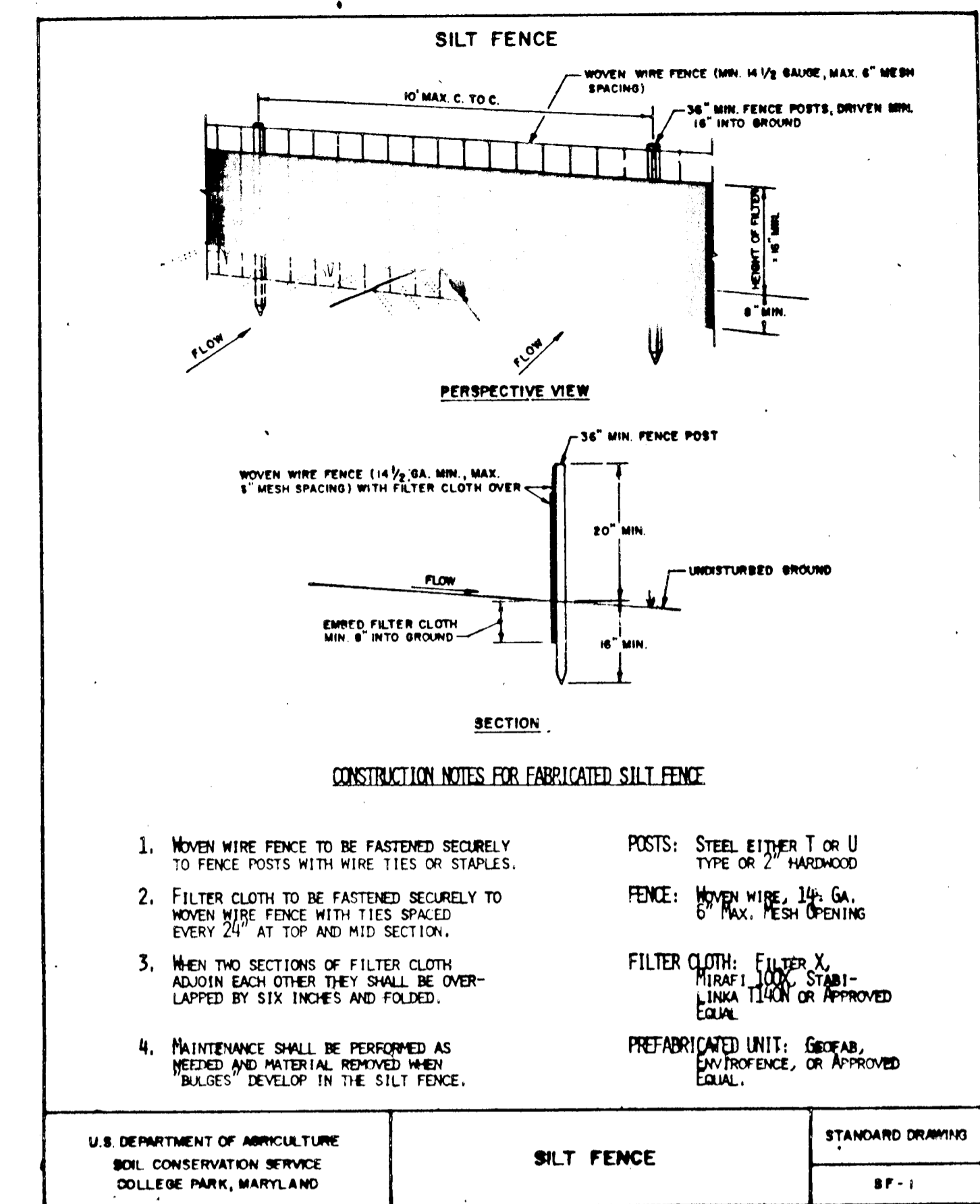
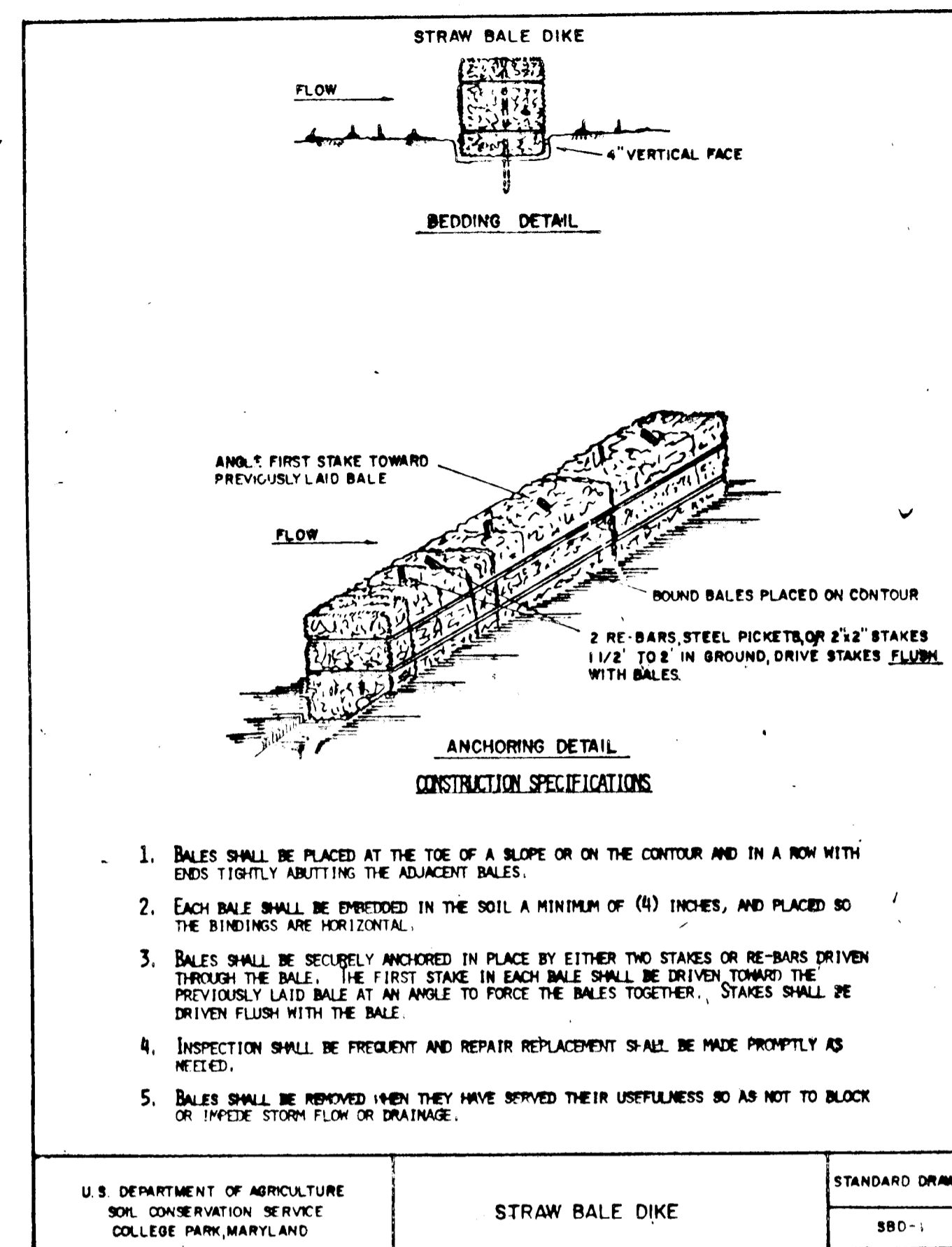
II. Trench Preparation
Excavate Trench To Design Dimensions. Place Excavated Material At A Sufficient Distance To Prevent Trench Collapse. Trim Tree Roots Flush With Sides. Roughen Sides Of Trench Where Polished Smooth By Digging Equip. In The Event Of Trench Collapse, All Design Dimensions Shall Be Held, Filling In Excess Areas With Aggregate.

III. Stone Aggregate And Placement

1. Aggregate Material Shall Be Clean, With A Max. Dia. Of 3" And Min. Dia. 1/2". The Aggregate Should Be Graded Such That There Will Be Few Smaller Than The Selected Sizes. Void Ratios Shall Be No Less Than 4.0 When Compacted.
2. The Aggregate Material Shall Be Enclosed In Filter Fabric Such As Miraf 140's Or App. Eq. Precut Material And Provide For A 6" Min. Top Overlap When Overlaps Are Required. The Upstream Roll Should Overlap The Downstream Roll By 2" To Provide A Shingled Effect.
3. Place Aggregate In 12" Lifts, Compacting With Mechanical Tamper.
4. Following Aggregate Placement, Fold Over The Longitudinal Lap (6") To Form A Complete Enclosure.
5. Backfill With Specified Aggregate Or Topsoil.

IV. Observation Well

1. Observation Well Shall Be Located In The Center Of Each Structure. Construct Per Detail This Sheet.



STORMWATER MANAGEMENT

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS: [Signature] DATE: 4/12/87 CHIEF ROAD BRIDGES AND STORM DRAINAGE DIVISION: [Signature] DATE: 4/12/87	WALLACE, MONTGOMERY & ASSOCIATES 9 W. 29 TH STREET BALTIMORE, MD. 21218 301-235-7600	DES: K.C.	SEDIMENT CONTROL NOTES & DETAILS	SCALE AS SHOWN SHEET 2 OF 9
		DRN: P.B.	STORMWATER MANAGEMENT	
		CHK: D.A.		
		DATE: 5/27/87	REVISION	
		BY NO.	DATE	
			600' SCALE MAP NO.	BLOCK NO.

HOMWOOD ROAD RELOCATION
 CAPITAL PROJECT T-7035
 MD. ROUTE 108 TO HOMWOOD ROAD

Note:
Use Modified Standard No MD 104.02G
if a lane needs to be closed along MD. 108.

Note:
Pavement to be removed
from Sta. 0+00 to Sta. 1+05

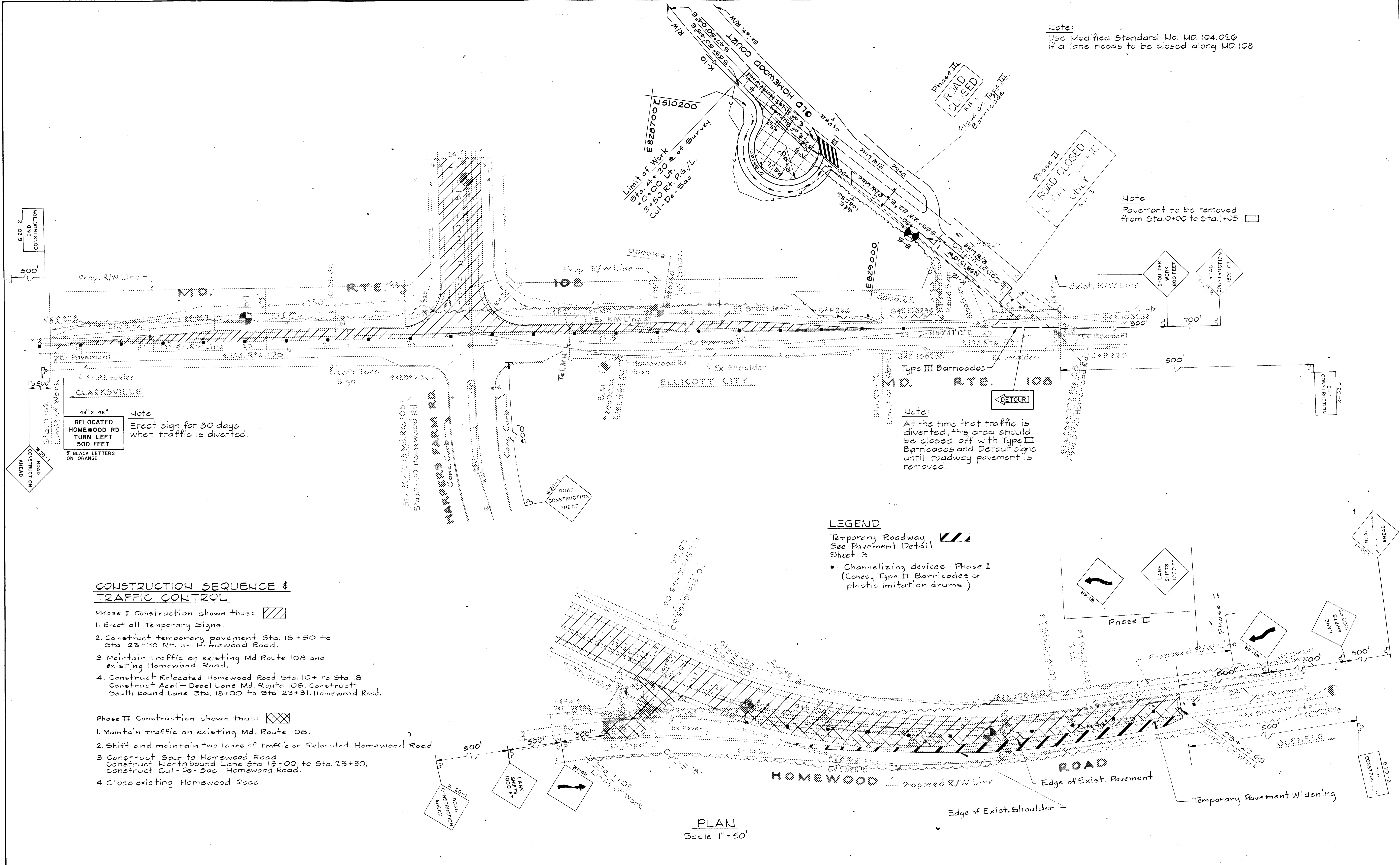
Note:
At the time that traffic is
diverted, this area should
be closed off with Type III
Barricades and Detour signs
until roadway pavement is
removed.

LEGEND

- Temporary Roadway See Pavement Detail Sheet 3
- Channelizing devices - Phase I (Cones, Type II Barricades or plastic imitation drums.)

CONSTRUCTION SEQUENCE & TRAFFIC CONTROL

- Phase I Construction shown thus:
1. Erect all Temporary Signs.
 2. Construct temporary pavement Sta. 18+50 to Sta. 23+30 Rt. on Homewood Road.
 3. Maintain traffic on existing Md Route 108 and existing Homewood Road.
 4. Construct Relocated Homewood Road Sta. 10+ to Sta. 18 Construct Azel - Dezel Lane Md. Route 108. Construct South bound Lane Sta. 18+00 to Sta. 23+31. Homewood Road.
- Phase II Construction shown thus:
1. Maintain traffic on existing Md. Route 108.
 2. Shift and maintain two lanes of traffic on Relocated Homewood Road
 3. Construct Spur to Homewood Road. Construct Northbound Lane Sta. 18+00 to Sta. 23+30, Construct Cul-De-Sac Homewood Road.
 4. Close existing Homewood Road.



PLAN
Scale 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE
CHIEF, BUREAU OF ENGINEERING DATE

CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DIVISION DATE

WALLACE MONTGOMERY & ASSOCIATES
9 W 29TH STREET
BALTIMORE, MD. 21218
301-235-7600

DES: K.C.			
DRN: P.N.B.			
CHK: D.M.A.			
DATE: 5/27/87	BY	NO.	REVISION

TRAFFIC CONTROL PLAN

HOMEWOOD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMEWOOD ROAD

SCALE AS SHOWN
SHEET 1 OF 2

GRADING TABLE

STATION		CUT	FILL	CLASS 2 EXCAVATION	CUT ADJUSTED	SHRINKAGE FACTOR	CUT DENSIFIED	REMARKS
FROM	TO							
18+00	27+50	1415 C.Y.			1415	0.90	1274	Md. Route 108
18+00	24+50		127 C.Y.					"
0+24	7+50	10,418			10,418	0.90	9376	Homewood Road
6+50	7+50		46	3	3	0.75	7	Ditch Rt.
7+00	"		40					Turn Off
K50+00	5+38	739	788		739	0.90	665	Ditch, Lt. & Rt.
"	"			120	120	0.75	90	"
2+64	4+20	1647			1647	0.90	1482	Cul-De-Sac
				120	120	0.75	90	Sediment Trap
Totals		14,219	1022	249	14,468		12,984	

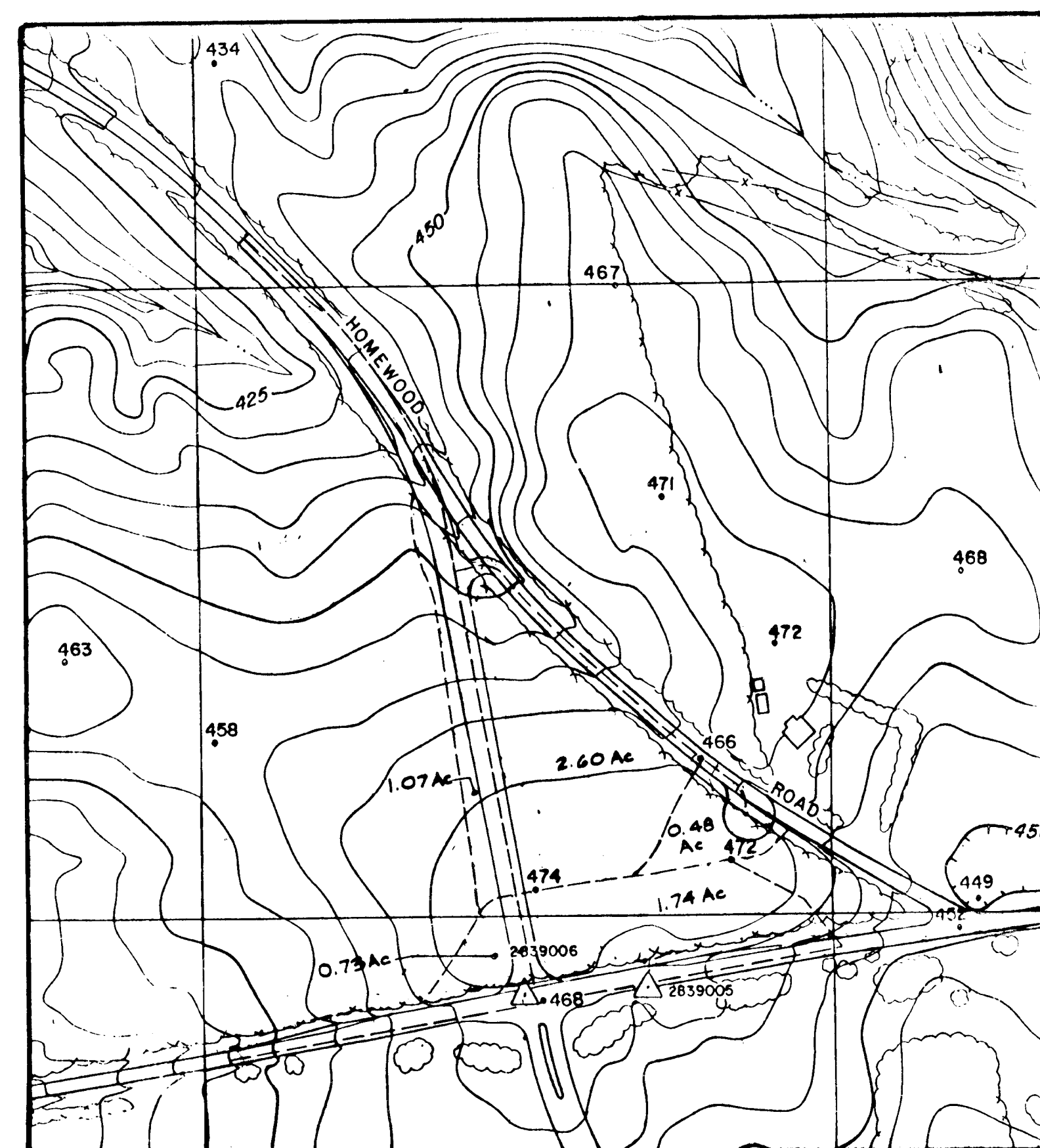
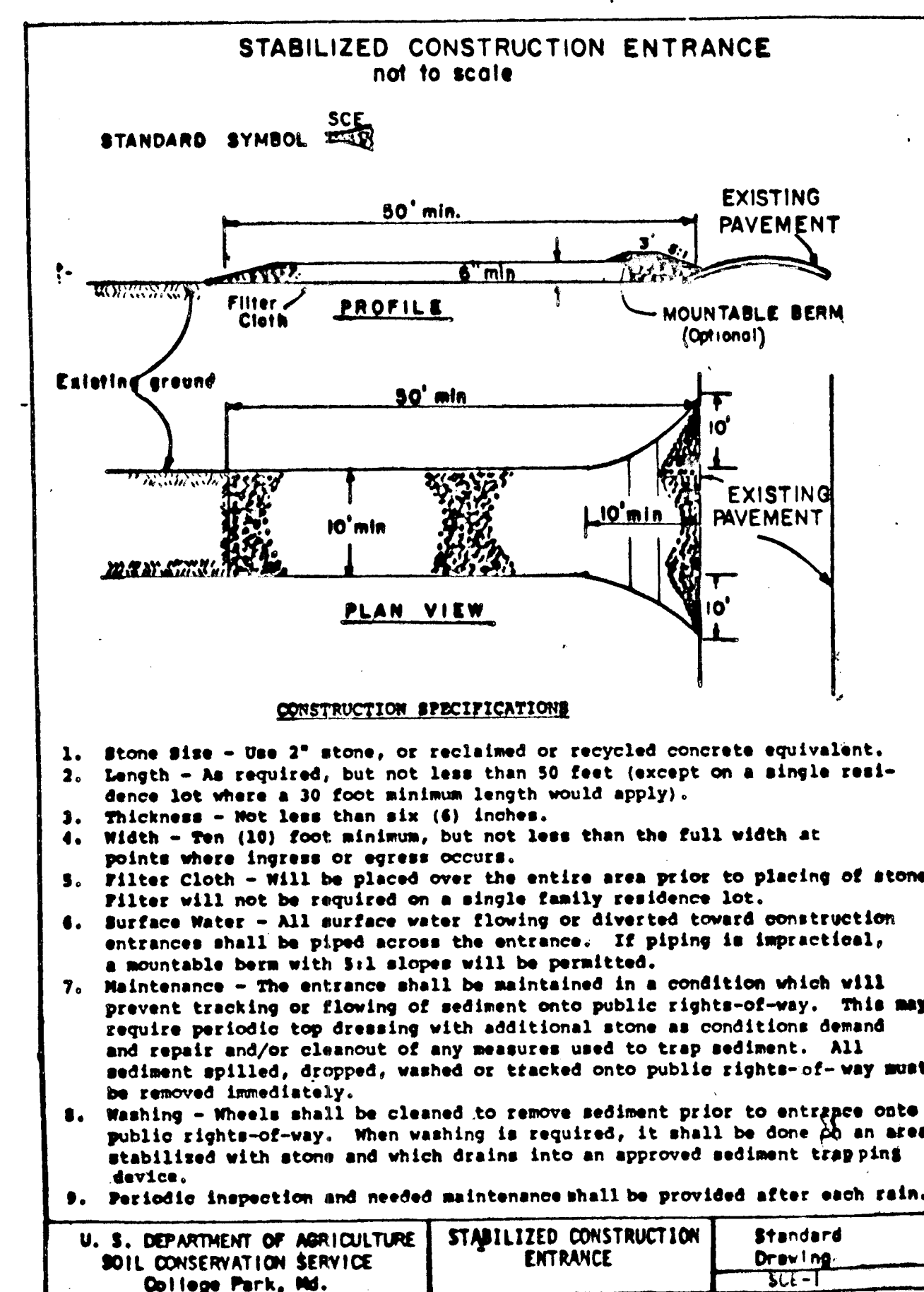
SUMMARY OF EARTHWORK

CLASS 1 EXCAVATION		
Cut: Homewood Road	11,157	C.Y.
Md Route 108	+1415	C.Y.
Cul-de-Sac	+1647	C.Y.
	14,219	C.Y.
Plus Root Mat Removed Under Fill	+463	C.Y.
Total Class 1 Excavation	14,682	C.Y.

EXCAVATION AVAILABLE FOR EMBANKMENT		
Total Class 1 Excavation	14,682	C.Y.
Minus Root Mat in Cut	- 245	C.Y.
Minus Root Mat in Fill	- 463	C.Y.
Cut Adjusted	13,974	C.Y.
Cut Densified (0.90%)	12,577	C.Y.
Plus Class 2 Excavation	+ 187	C.Y.
Total Excavation Available For Embankment	12,764	C.Y.

CLASS 2 EXCAVATION		
Ditches	129	C.Y.
Sediment Traps	+120	C.Y.
	249	C.Y.
Loss Due to Densification (25%)	- 62	C.Y.
Excavation Available For Embankment	187	C.Y.

EMBANKMENT REQUIRED		
Embankment	1022	C.Y.
Plus Root Mat Removed under Fill	+463	C.Y.
Total Embankment	1485	C.Y.
Excavation Available For Embankment	12,764	C.Y.
Waste	11,279	C.Y.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

WALLACE, MONTGOMERY
& ASSOCIATES
9 W. 29 TH STREET
BALTIMORE, MD. 21218
301-235-7600

DES: K.C.
DRN: P.N.B.
CHK: D.M.A.
DATE: 5/27/87

EARTHWORK SUMMARY
& GRADING TABLE

HOMWOOD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMWOOD ROAD

SCALE
AS
SHOWN
SHEET
3 OF 9

DIRECTOR OF PUBLIC WORKS DATE: 6/12/87
CHIEF, BUREAU OF ENGINEERING DATE: 6/12/87
CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DIVISION

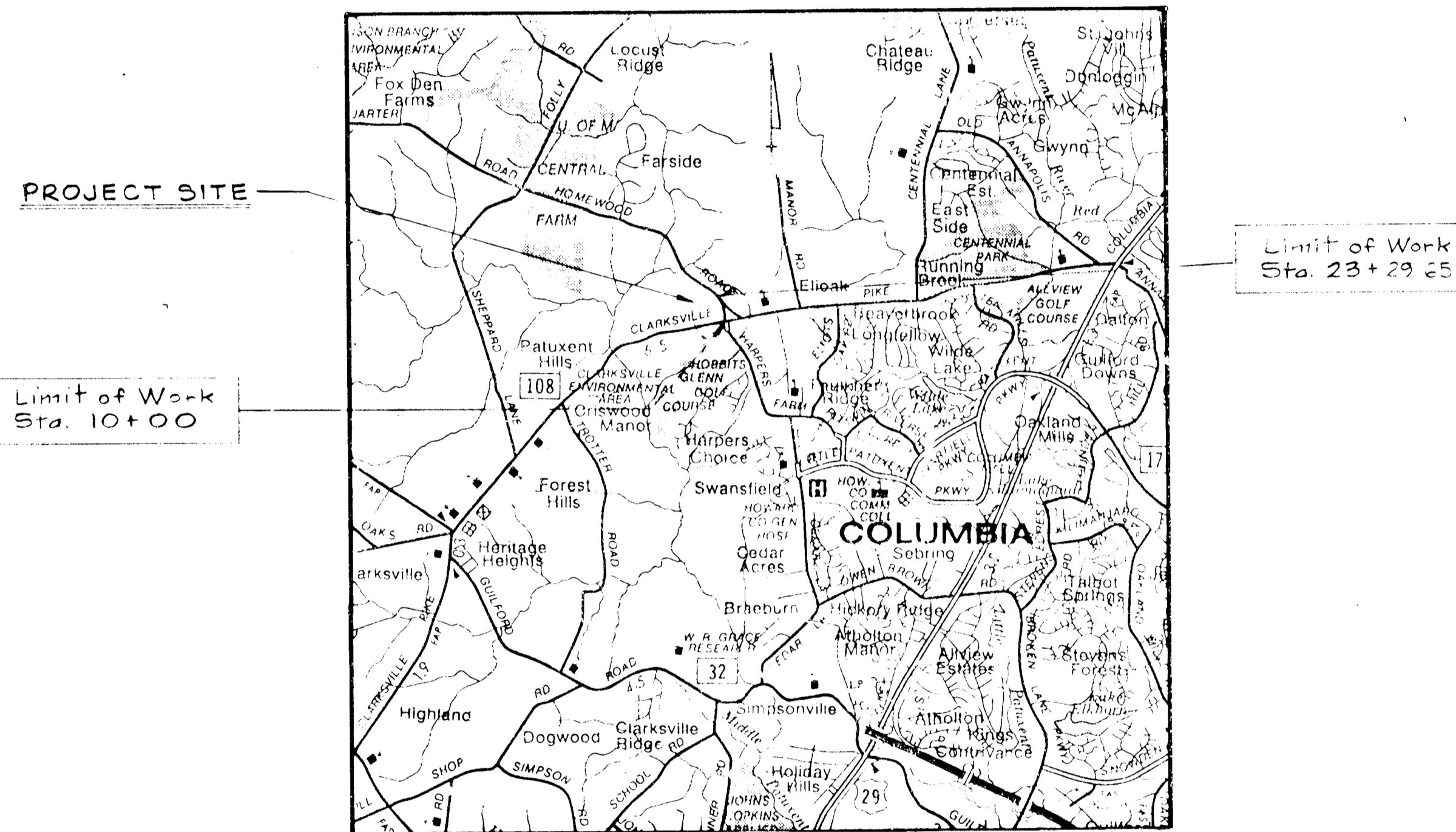
600' SCALE MAP NO. _____ BLOCK NO. _____

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING

HOMEWOOD ROAD RELOCATION MARYLAND ROUTE 108 TO HOMEWOOD ROAD

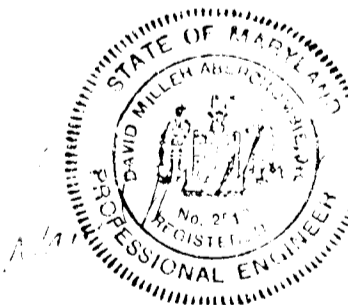
INDEX OF SHEETS

NUMBER	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	GEOMETRY LAYOUT, DETAILS & GENERAL NOTES
4	PLAN
5	PROFILE
6	SEDIMENT & EROSION CONTROL PLAN
6A	SEDIMENT & EROSION CONTROL PLAN SUPPLEMENT PLAN
7	SEDIMENT CONTROL NOTES & DETAILS & STORMWATER MANAGEMENT
8	TRAFFIC CONTROL PLAN
9	EARTHWORK SUMMARY & GRADING TABLE



LOCATION MAP
Scale 1" = 1 Mile

CAPITAL PROJECT T - 7035
PROJECT LENGTH: 0.252 MILE
ROAD CLASSIFICATION: MAJOR COLLECTOR
DESIGN SPEED: 40 M.P.H.
1986 A.D.T. = 3670
2007 A.D.T. = 8880



CERTIFICATION BY THE DEVELOPER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT THE RESPONSIBLE PERSONAL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

SIGNATURE OF DEVELOPER _____ DATE _____

CERTIFICATION BY THE ENGINEER

"I 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"

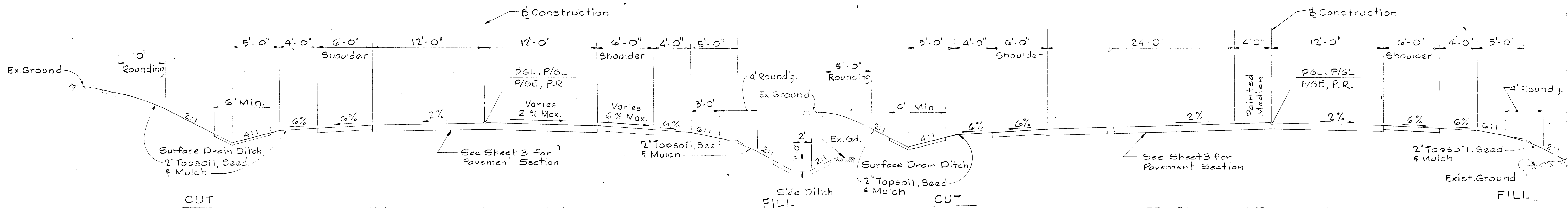
Paul M. [Signature]
SIGNATURE OF ENGINEER _____ DATE _____

REVIEWED FOR _____ S.C.D.
NAME _____
AND MEETS TECHNICAL REQUIREMENTS

DATE: 5/17/87
SIGNATURE _____
U.S. SOIL CONSERVATION SERVICE

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

APPROVED: _____ DATE: 5/17/87
HOWARD S.C.D.

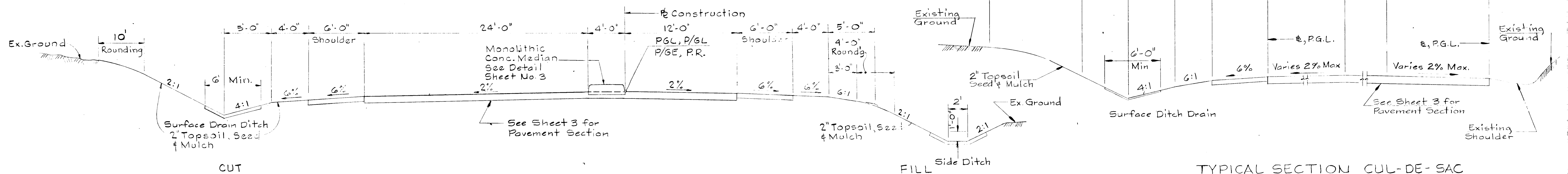


TYPICAL NORMAL SECTION

Scale: 1" = 5'-0"
Sta. 22 + 21.50 to Sta. 23 + 29.65

TYPICAL SECTION

Scale: 1" = 5'-0"
Sta. 11 + 60 to Sta. 15 + 20.26

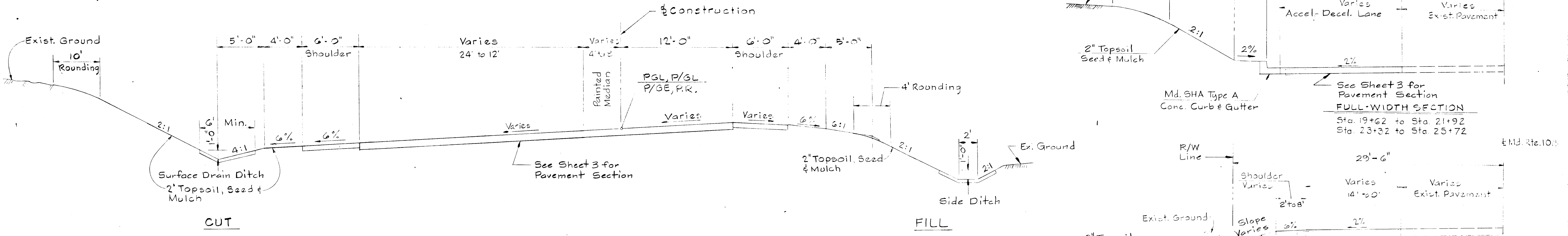


TYPICAL SECTION ~ RAISED MEDIAN

Scale: 1" = 5'-0"
Sta. 10 + 50 to Sta. 11 + 60

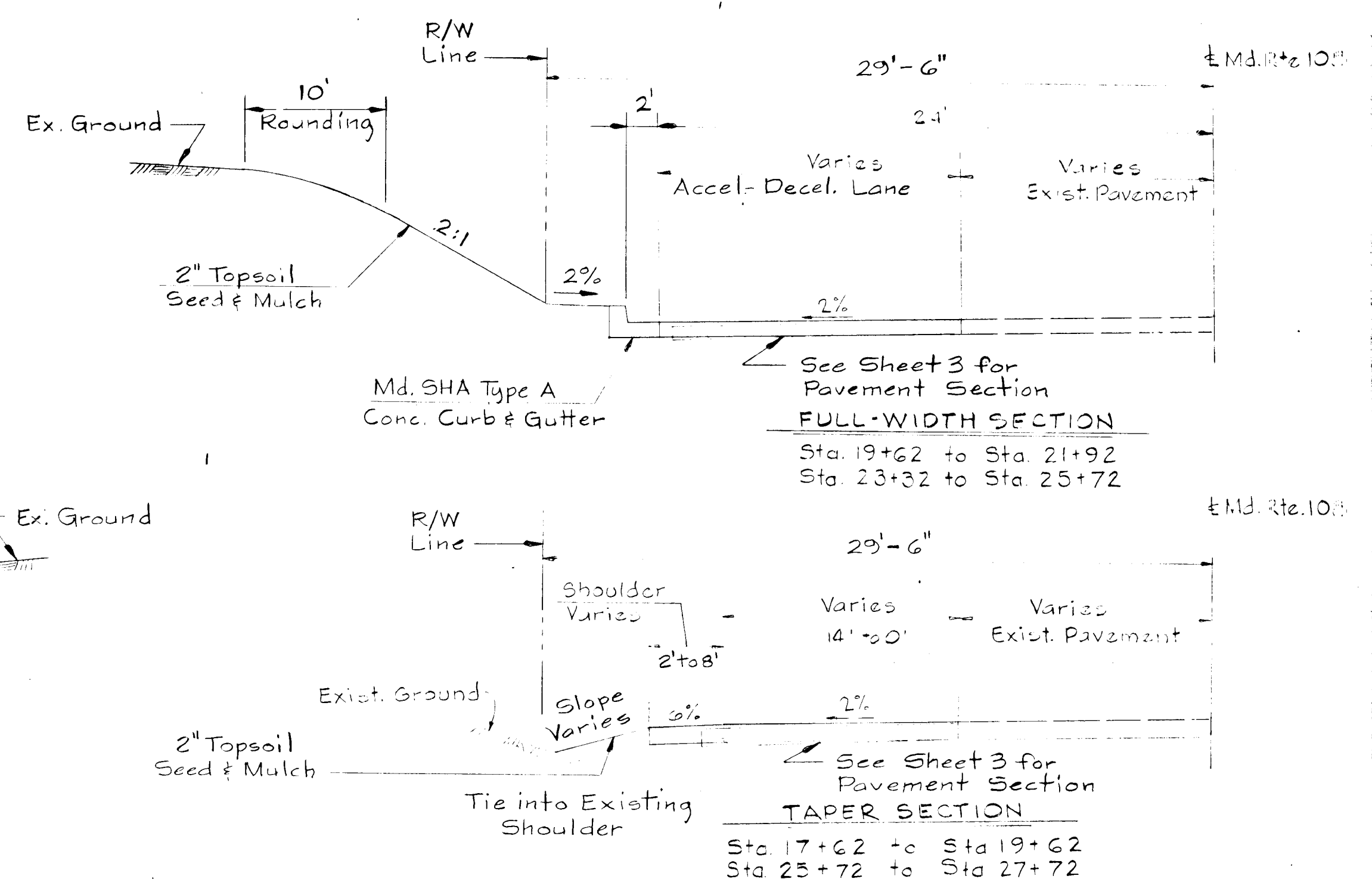
TYPICAL SECTION CUL-DE-SAC

Scale 1" = 5'



TYPICAL SUPERELEVATED SECTION

Scale: 1" = 5'-0"
Sta. 15 + 20.26 to Sta. 22 + 21.50



TYPICAL SECTIONS - MD. RTE 103

Scale: 1" = 5'

General Note:
See Plan for Ditch Stabilization

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

WALLACE MONTGOMERY & ASSOCIATES
9 W 29TH STREET
BALTIMORE, MD. 21218
301-235-7600

DES: W.K.			
DRN: P.N.B.			
CHK: D.M.A.			
DATE: 5/27/87	BY: NO.	REVISION	DATE

TYPICAL SECTIONS

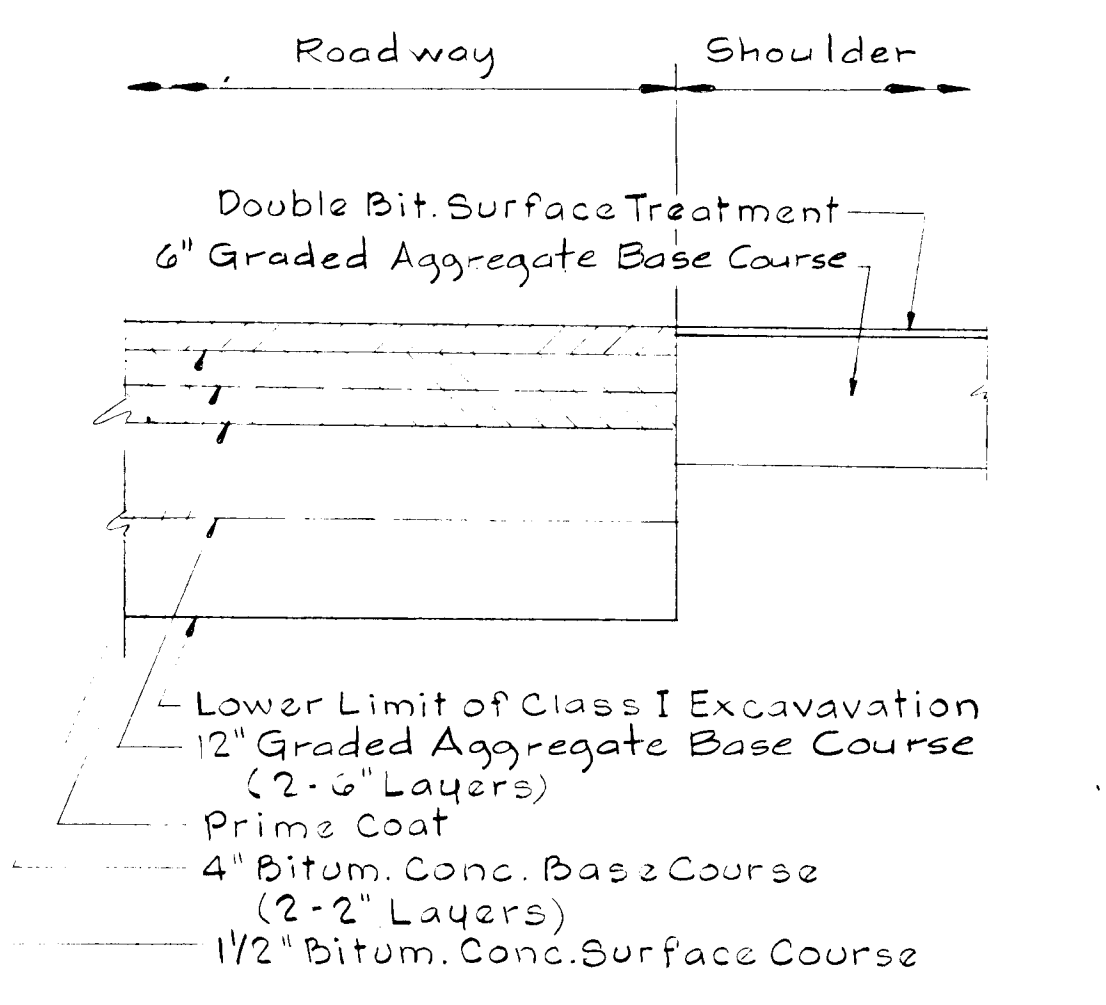
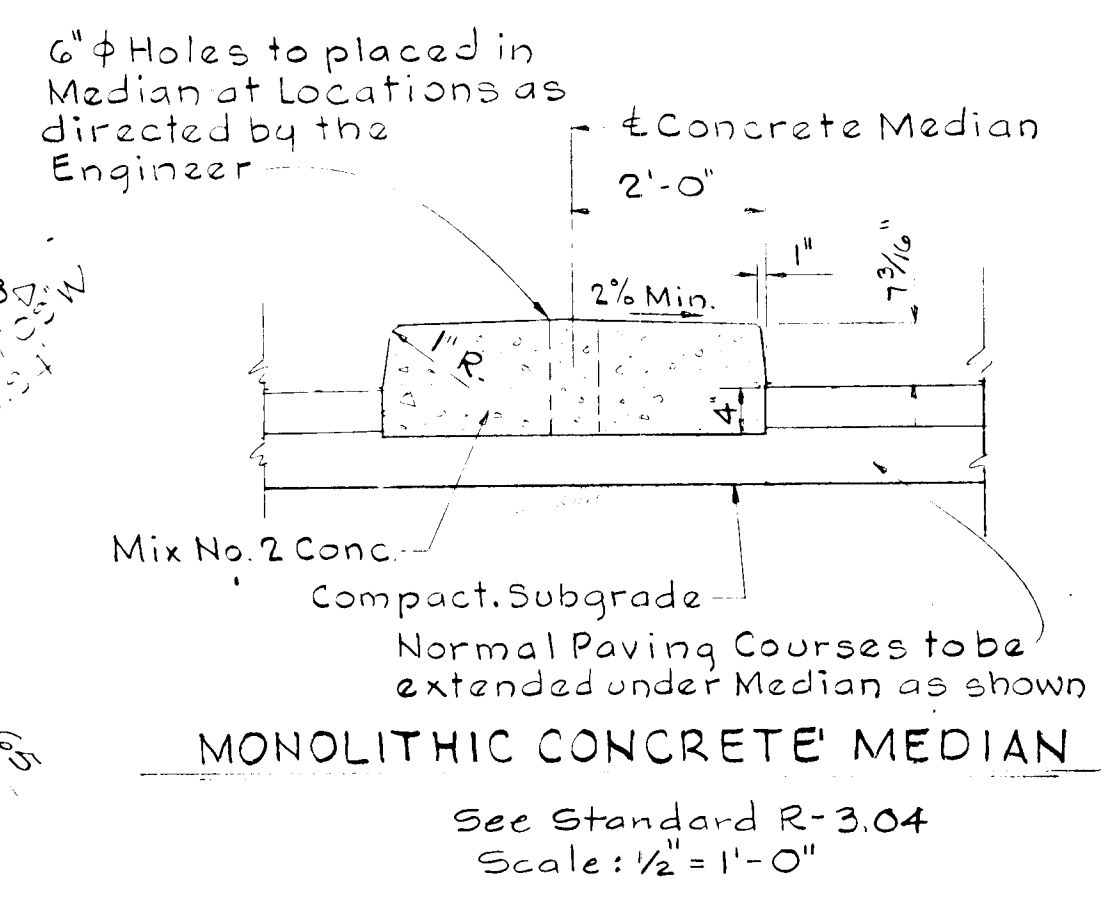
HOMEROD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMEROD ROAD

SCALE AS SHOWN
SHEET 2 OF 2

Note: Joints shall be spaced 10' on Centers in accordance with the Specifications for Conc. Curb & Gutter.

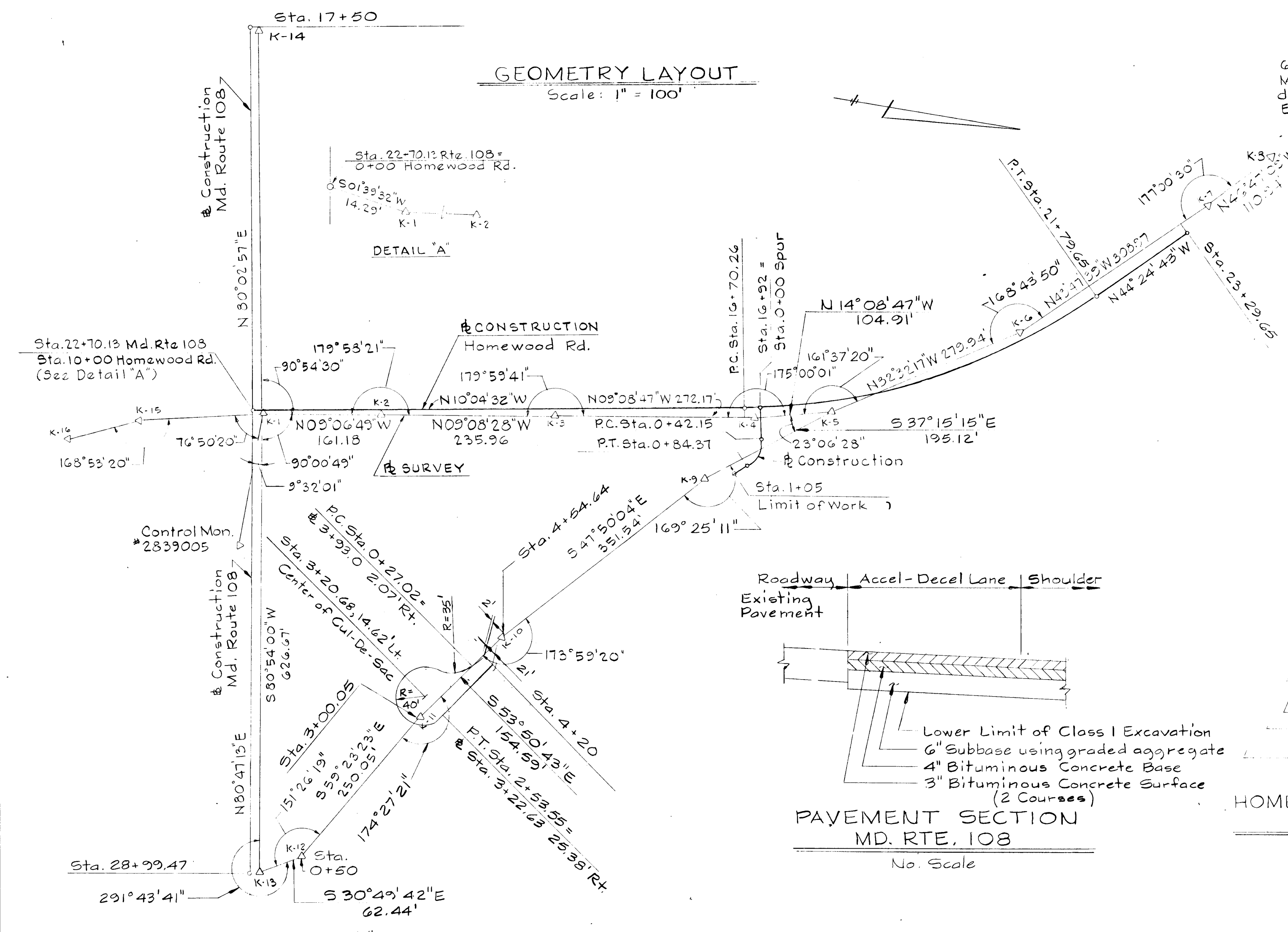
GENERAL NOTES

- RIGHT OF WAY LINES SHOWN ON THESE PLANS ARE FOR ASSISTANCE IN INTERPRETING THE PLANS. FOR ANY RIGHT OF WAY AND EASEMENT INFORMATION, SEE RIGHT OF WAY PLAT.
- ALL SLOPES AND/OR DISTURBED AREAS SHALL RECEIVE 2" TOPSOIL SEED AND MULCH EXCEPT WHERE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL TEMPORARY SEDIMENT CONTROL MEASURES AS SHOWN ON THE DRAWINGS. HOWEVER, ANY SEDIMENT CONTROL MEASURES NOT SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS, BUT REQUIRED AS A RESULT OF CONTRACTOR'S EXCAVATION OR ACTIVITIES SHALL NOT BE CAUSE FOR EXTRA PAYMENT.
- STANDARD DETAILS FOR THIS CONTRACT SHALL BE THE HOWARD COUNTY DESIGN MANUAL VOLUME II STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR CLEARING AND GRUBBING.
- PLACE REGULATION WARNING SIGNS AS REQUIRED TO COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES DATED 1978 AND ALL SUPPLEMENTAL APPENDIX.
- APPROXIMATE LOCATION OF EXISTING UTILITIES IS SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES & TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 SHA 531-5533
 BG&E - UNDERGROUND DAMAGE CONTROL 234-5621
 BG&E - CONTRACTOR SERVICES 561-2585
 MISS UTILITY 1-559-0100
 BUREAU OF UTILITIES, HOWARD COUNTY DPW 992-2366
- EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATIONS BY TEST PITS AND OTHER METHODS PRIOR TO COMMENCING WORK.
- HORIZONTAL & VERTICAL CONTROLS ARE BASED ON MARYLAND STATE GRID SYSTEM.



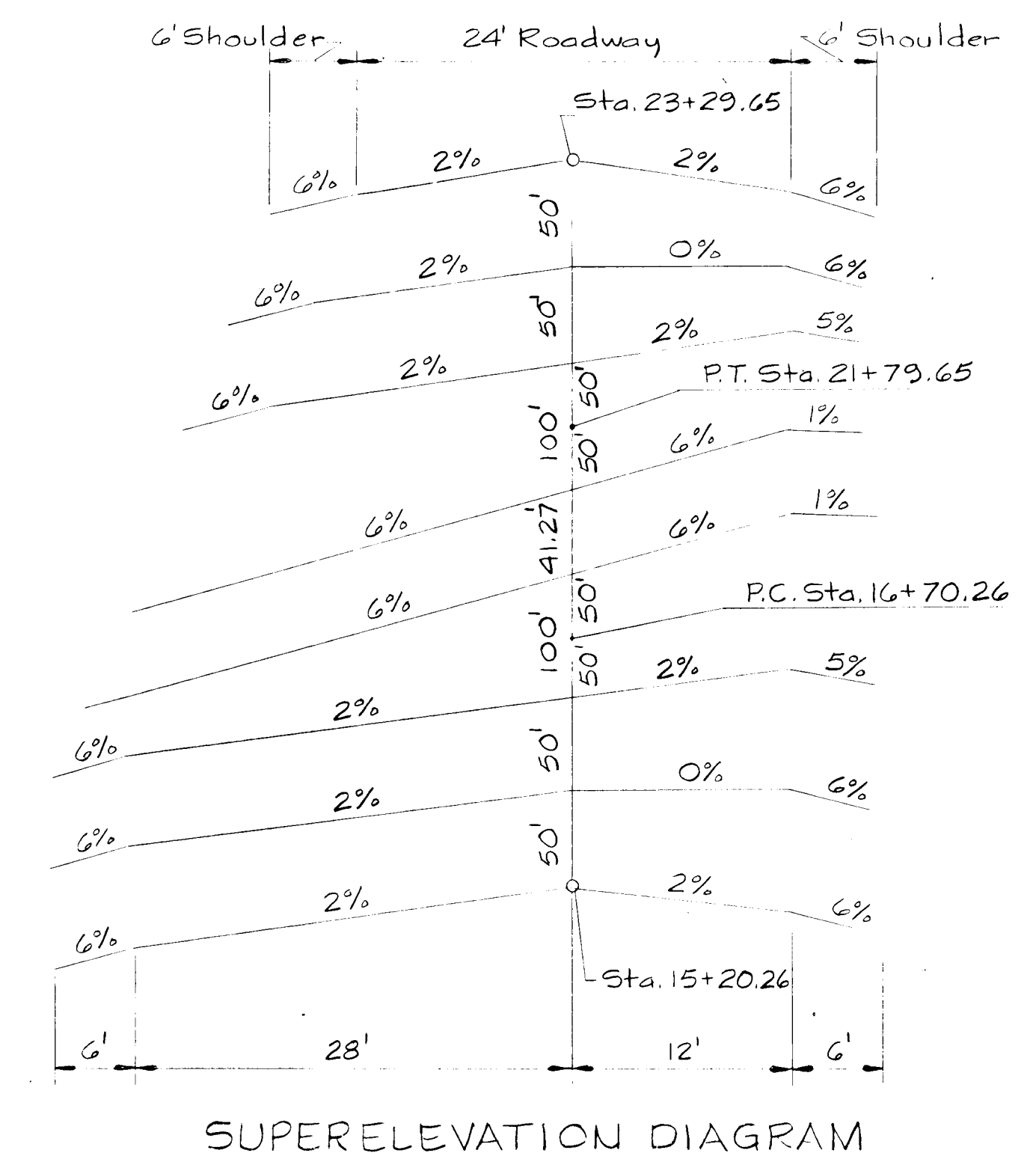
HOMEWOOD RD.; SPUR TO HOMEWOOD RD. AND CUL-DE-SAC
 No. Scale

GEOMETRY LAYOUT
 Scale: 1" = 100'

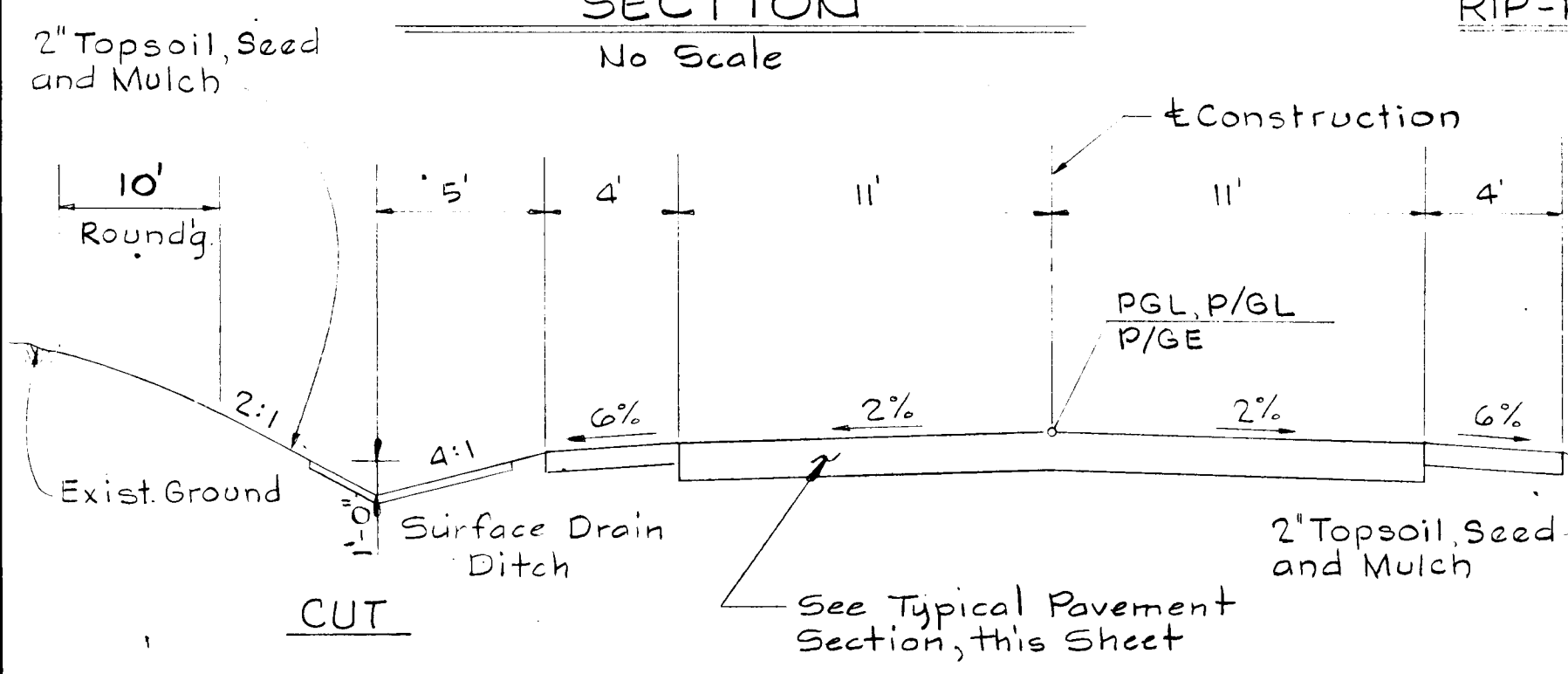


STAKEOUT COORDINATES

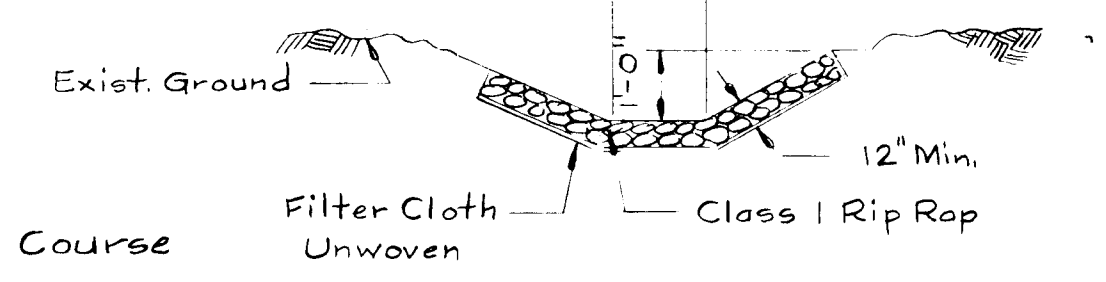
SURVEY		CONSTRUCTION	
No.	STATION	NORTH	EAST
K-1	10+00	509379.35	823525.72
K-2	10+00	510038.50	823500.19
K-3	10+00	510271.47	823462.71
K-4	10+00	510540.17	823419.44
K-5	10+00	510641.90	823393.30
K-6	16+92	510875.06	823243.21
K-7	17+50	511101.03	823209.39
K-8	17+50	511177.06	827949.53
K-9	17+50	510486.59	823511.92
K-10	17+50	510250.61	823772.48
K-11	17+50	510159.41	823397.30
K-12	17+50	510032.29	829112.51
K-13	17+50	509978.47	829144.51
K-14	28+99.47	509739.34	828010.68
	10+00	509865.07	823525.31
	P.C. 16+70.26	510524.99	823403.05
	P.I.	510733.54	823362.10
	P.T. 21+79.65	510971.13	823178.33
	0+00-16+92	510546.34	823403.95
	P.C. 0+42.15	510554.79	823445.25
	P.I.	510559.45	823467.98
	P.T. 0+84.37	510542.36	823483.67
	C.C. 3+20.68	510169.79	823872.01
	Md. 108	509775.19	828013.01
	Md. 108	509965.89	829146.53



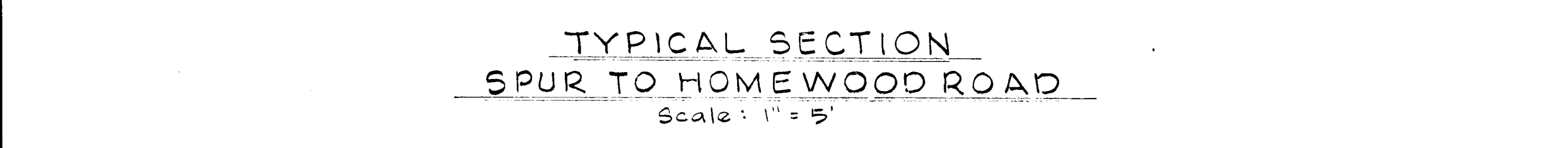
TEMPORARY PAVEMENT SECTION
 No Scale



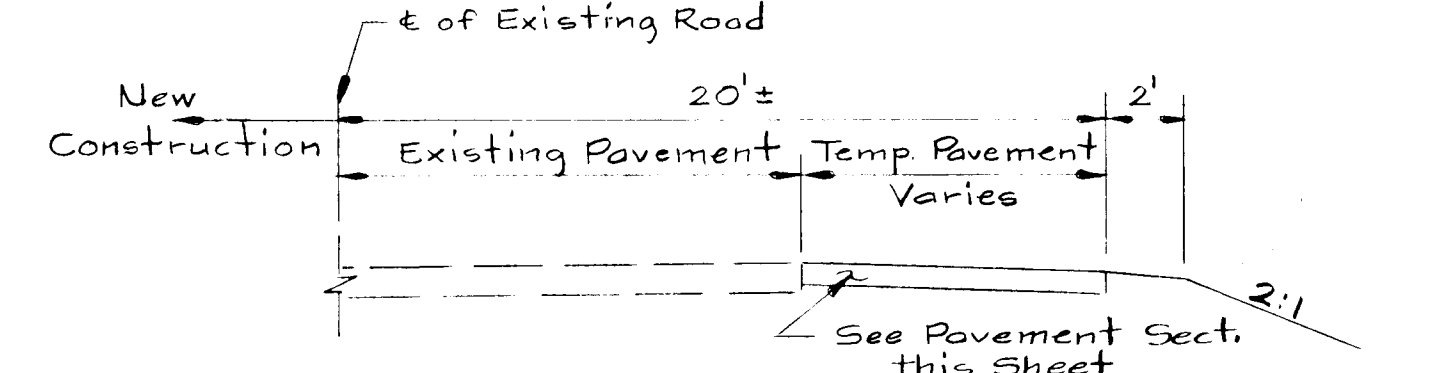
RIP-RAP DITCH OUTLET DETAIL
 No Scale



TYPICAL SECTION SPUR TO HOMEWOOD ROAD
 Scale: 1" = 5'



TEMPORARY PAVEMENT SECTION STA. 19+00 TO STA. 23+31
 Scale 1" = 5'



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

WALLACE MONTGOMERY & ASSOCIATES
 9 W 29TH STREET
 BALTIMORE, MD. 21218
 301-235-7600

DES: H.K.
 DRN: P.N.B.
 CHK: D.M.A.
 DATE: 5/27/87

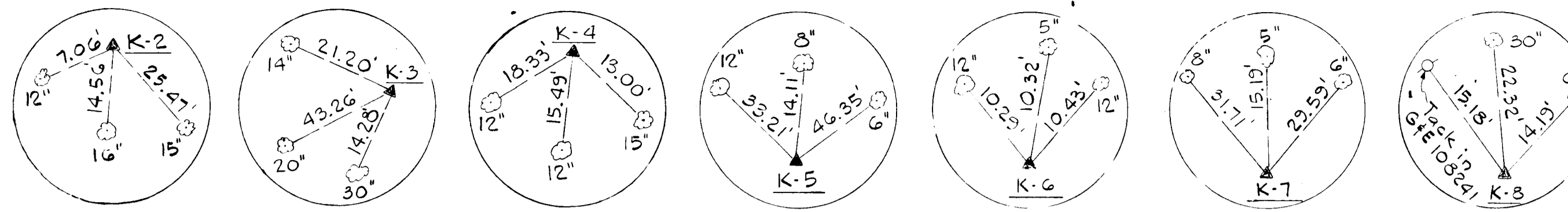
GEOMETRY LAYOUT
 DETAILS
 AND GENERAL NOTES

HOMEWOOD ROAD RELOCATION
 CAPITAL PROJECT T-7035
 MD. ROUTE 108 TO HOMEWOOD ROAD

SCALE AS SHOWN
 SHEET 3 OF 3

Bench Mark
Control Station # 2839005
Conc. Mon. 8'± S. of Edge of
Md. Rte. 108
Elev. 466.54

Bench Mark
PK Nail in BG & E Pole # 814579
C & P # 7, 35'± Rt. of K-7
Elev. 429.15



CONTROL POINTS

CONSTRUCTION CURVE DATA

R = 850'
Δ = 34° 20' 10"
Dc = 6' 44' 26"
T = 233.33'
L = 509.38'
E = 39.64'

Homewood Road
Sta. 18+25 to Sta. 19+50 Lt.
Construct 2' side ditch
with Jute Matting
See Typical Section Sheet 2.

CURVE A' CURVE DATA

R = 900'
Δ = 34° 20' 09"
Dc = 6° 21' 53"
T = 278.04'
L = 539.34'
E = 41.97'

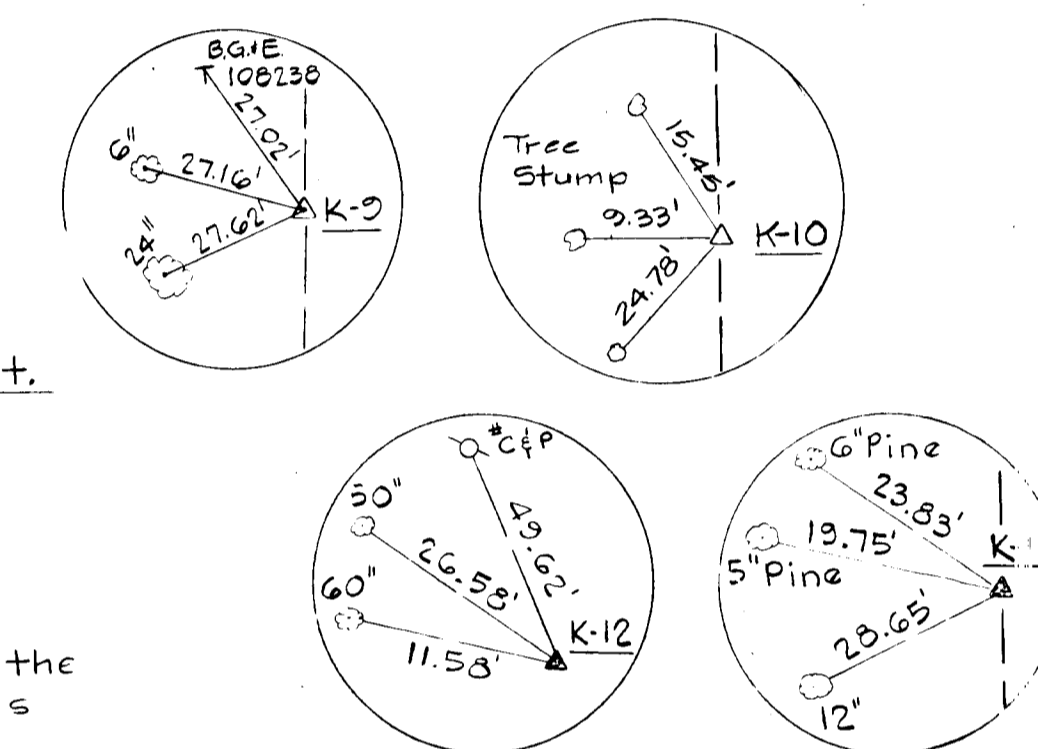
Homewood Road

Sta. 18+25 to Sta. 19+50 Lt.
Construct 2' side ditch
with Jute Matting
See Typical Section Sheet 2.

Homewood Road
Sta. 17+10 to Sta. 18+84.5 Rt.
Construct 2' side ditch with
Jute Matting. See Typical Section
Sheet 2.

Homewood Road
Sta. 18+84.5 Rt.
Tie Proposed Side Ditch into the
Existing Surface Drain Ditch as
directed by the Engineer.

CONTROL POINTS



MD 108
Sta. 17+62 to Sta. 19+62 Md. Route 108
Taper shoulder from existing shoulder
to curb & gutter.

MD 108
Sta. 19+62 Md. Route 108 to
Sta. 10+82 Relocated Homewood Road
Construct comb. curb & gutter.

MD 108
Sta. 17+62 to Sta. 19+50 Lt.
Trim existing ditch.

NINA R. CARROLL
R.L.P. 11/303

Homewood Road

Sta. 16+30 to Sta. 18+25 Lt.
Construct surface drain ditch
with Class 1 Rip Rap
See Typical Section Sheet 2.

Homewood Road
Sta. 17-22 to Sta. 20+42
Part median as shown on plans

Homewood Road
Sta. 11+40 to Sta. 16+30 Lt.
Construct surface drain ditch
with Jute Matting
See Typical Section Sheet 2

Homewood Road
Sta. 11+40 to Sta. 16+50 Rt.
Construct surface drain ditch
with Jute Matting
See Typical Section Sheet 2.

Homewood Road
Sta. 10+50 to Sta. 11+80
Woods construct Monolithic Concrete Median
Parcel 20 Detail Sheet 3

MD 108
Sta. 25+72 to Sta. 27+72 Md. Route 108
Taper shoulder from curb & gutter
to existing shoulder.

MD 108
Sta. 25+82 to Sta. 27+00 Lt.
Md. Route 108
Construct surface drain ditch
with sod. See Typical Section,
Sheet 2

PLAN

Scale: 1" = 50'

Spur
Sta. 16+92 Rt.
Construct connection to existing
Homewood Road. See Profile Sheet 5

Spur
Sta. 0+40 Road Connection
55 LF. 22" X 13" C.M.P. Arch.
2- End Sections
Inv. In - 446.9
Inv. Out - 446.3

Spur
Sta. 0+84.3 to Sta. 1+05, Road Connection Lt. & Rt
Taper Shoulder from proposed to existing as shown
on the Plans.

Curve Data for
R.G./L. - Cul-De-Sac

Curve #1 R = 35.00' Δ = 73° 45' 01" T = 26.26' L = 45.05'	Curve #2 R = 40.00' Δ = 259° 53' 00" L = 181.48'
---	---

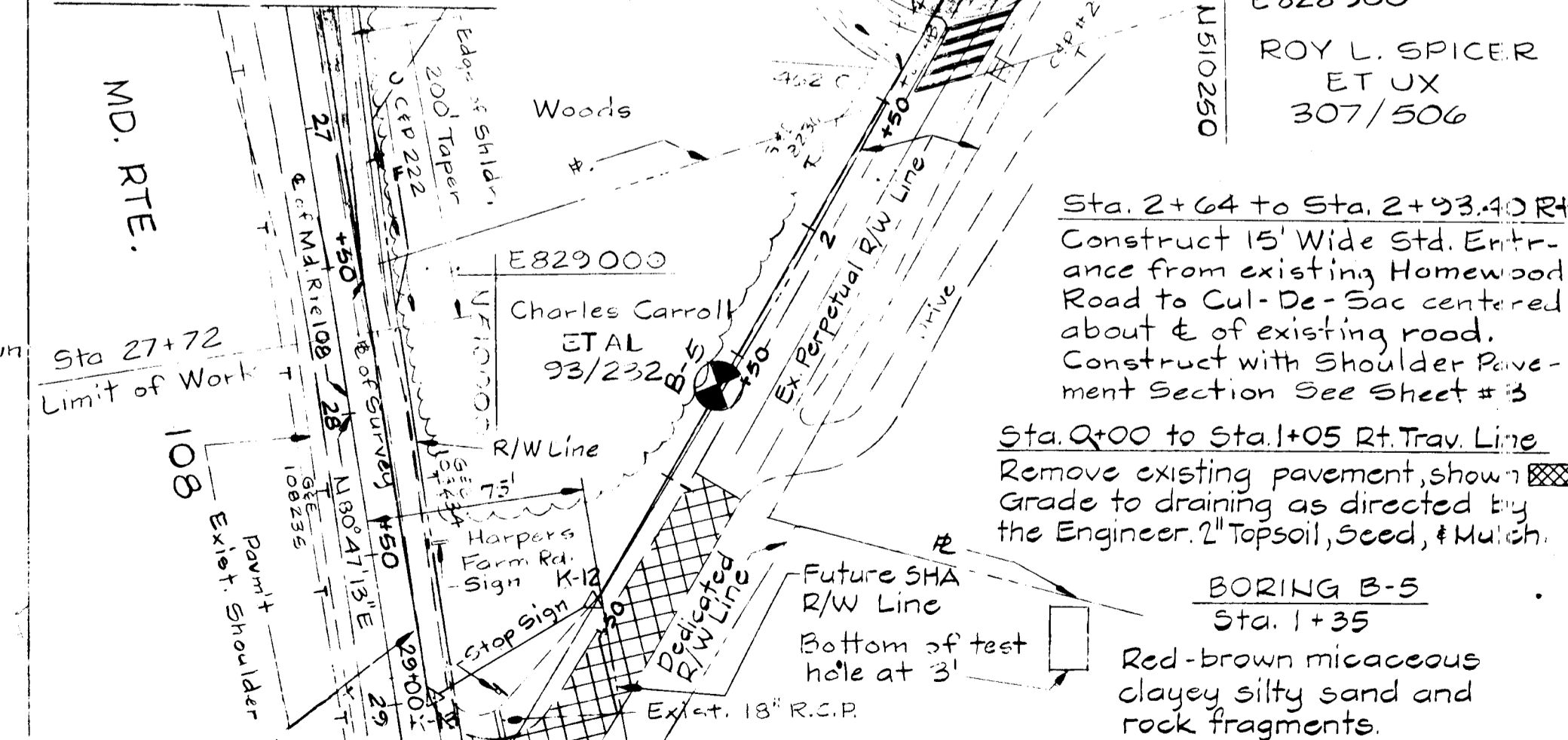
R.G./L. Stations
P.C. = Sta. 0+27.02
P.R.C. = Sta. 0+72.07
P.T. = Sta. 2+53.55

Note: Existing Homewood Rd. between the
Cul-De-Sac and 75' from E Md 108
will revert to the adjacent owners.

Sta. 2+64 to Sta. 4+20
Remove existing pavement.

Sta. 2+64 to Sta. 4+20 Lt.
Construct surface drain ditch
with Jute Matting
Tie to existing ditch.
See typical section, Sheet # 2

MATCH LINE A-A

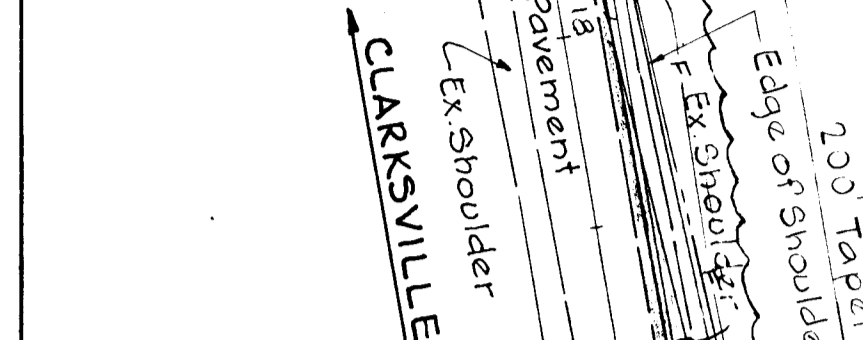


Sta. 2+64 to Sta. 2+93.40 Rt.
Construct 15' Wide Std. Entrance
from existing Homewood
Road to Cul-De-Sac centered
about E of existing road.
Construct with Shoulder Pavement
Section See Sheet # 3

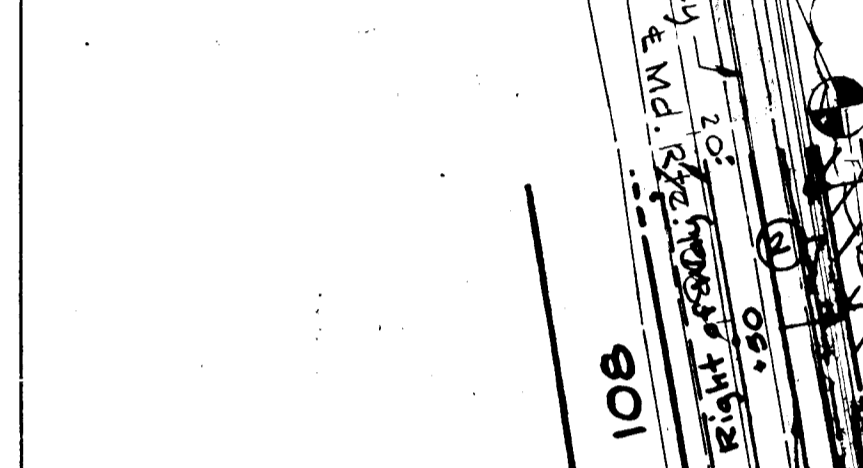
Sta. 0+00 to Sta. 1+05 Rt. Trav. Line
Remove existing pavement, show
Grade to draining as directed by
the Engineer. 2" Topsoil, Seed, & Mulch.

BORING B-5
Sta. 1+35
Red-brown micaceous
clayey silty sand and
rock fragments.

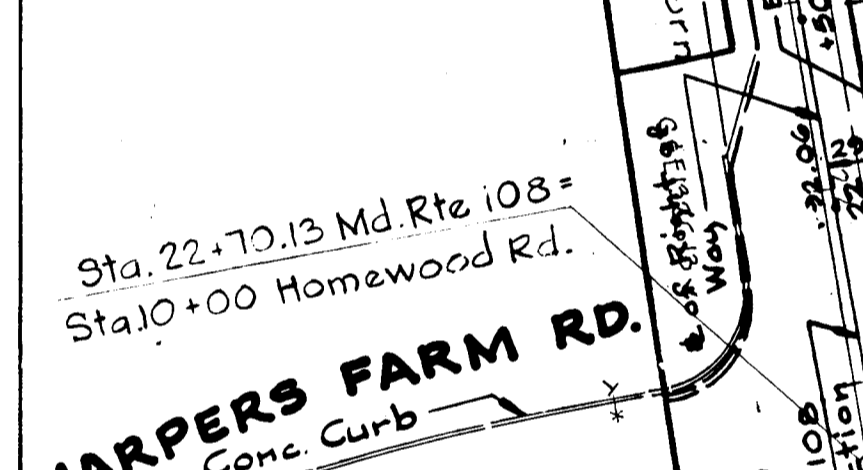
Sta. 17+62
Limit of Work



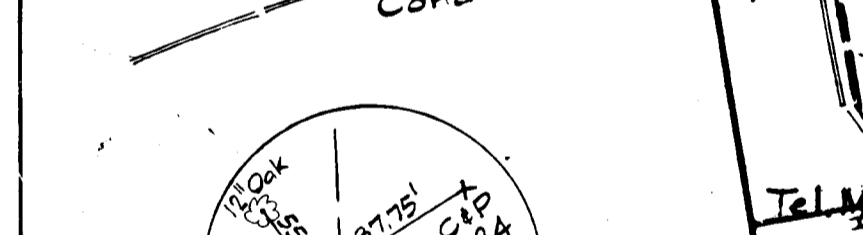
CLARKSVILLE
Ex. Shoulder
Ex. Pavement
200' Taper
Edge of Shoulder
Edge of Shoulder
200' Taper
Left Turn
Right Turn



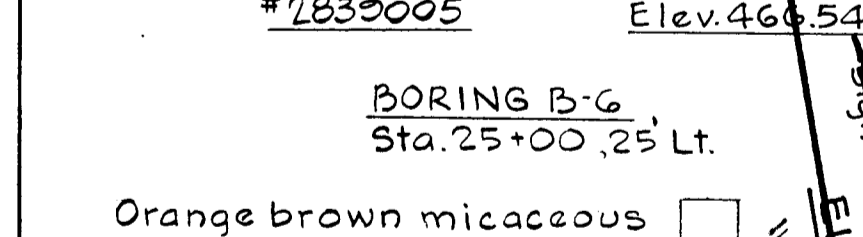
MD 108
Sta. 22+70.13 Md. Rte 108 =
Sta. 10+00 Homewood Rd.



HARPERS FARM RD.
Conc. Curb



MD 108
Sta. 25+72 to Sta. 25+82 Lt.
Construct 10' of surface drain
ditch with Class 1 Rip Rap.



Orange brown micaceous
clayey silt & rock fragments
Brown micaceous silty
sand and rock fragments
Bottom of test
hole at 6'

MD 108
Sta. 25+72 to Sta. 25+82 Lt.
Construct 10' of surface drain
ditch with Class 1 Rip Rap.

Note: Permanent signs to be
installed by others.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS
DATE: 5/27/87

CHIEF, BUREAU OF ENGINEERING
DATE: 5/27/87

WALLACE MONTGOMERY
& ASSOCIATES
9 W 29TH STREET
BALTIMORE, MD. 21218
301-235-7600

DES: H.V.	DRN: P.N.B.	CHK: D.M.A.	DATE: 5/27/87
BY: NO.	REVISION	DATE	600' SCALE MAP NO. BLOCK NO.

Match Line See Sheet 5 of 9

ROADWAY PLAN

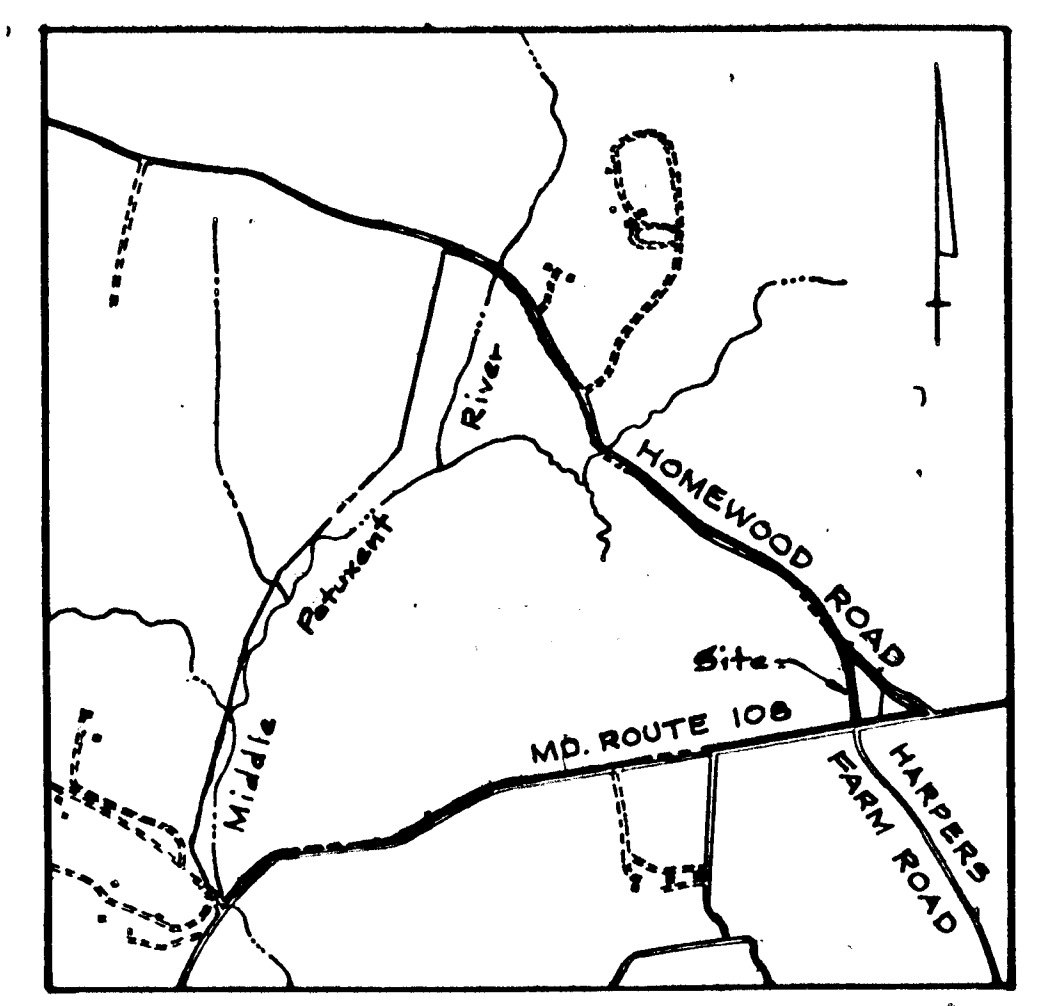
HOMWOOD ROAD RELOCATION
CAPITAL PROJECT T-7035
Md. ROUTE 108 TO HOMWOOD ROAD

SCALE
AS
SHOWN

SHEET
4 OF 9

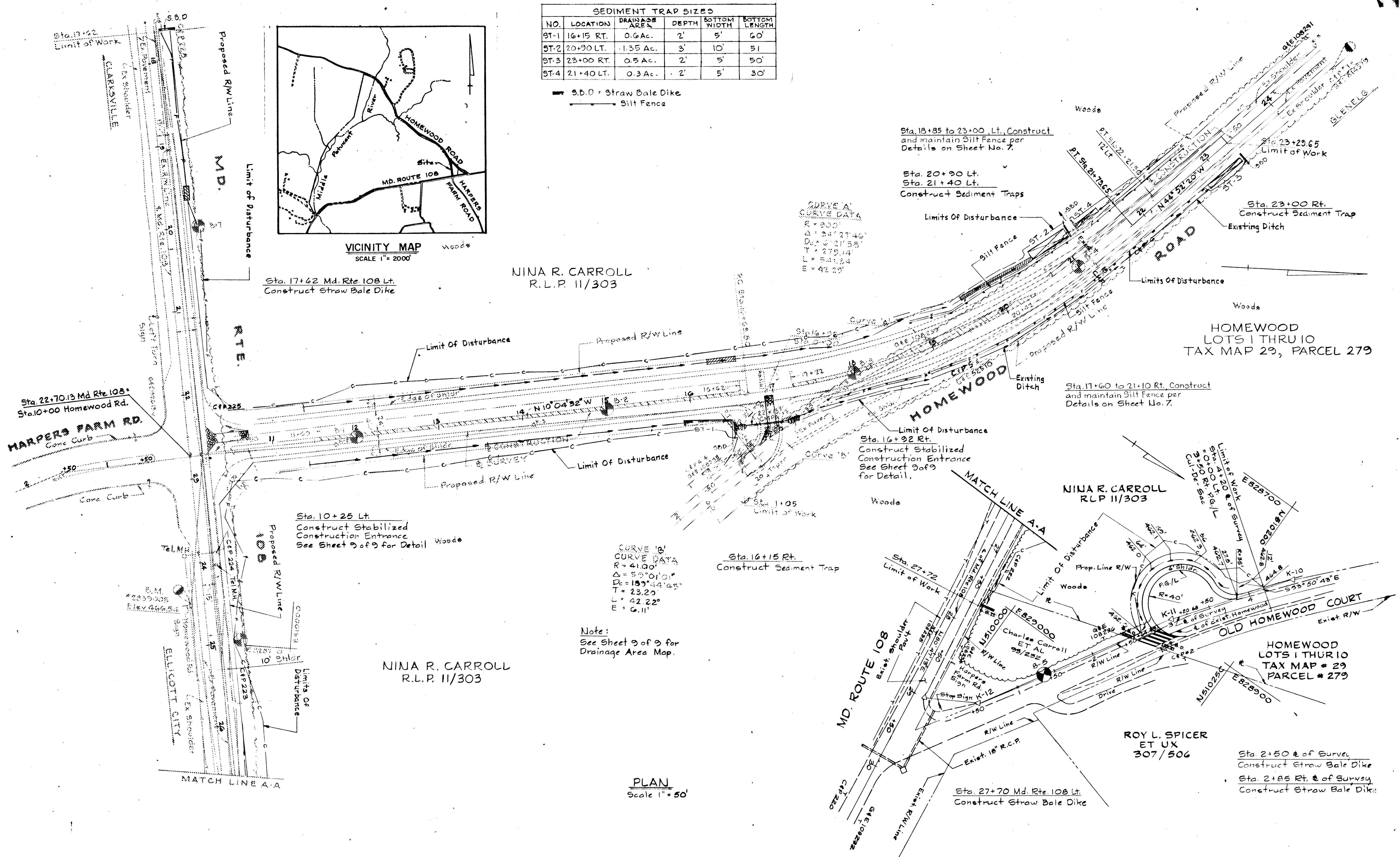
SEDIMENT TRAP SIZES					
NO.	LOCATION	DRAINAGE AREA	DEPTH	BOTTOM WIDTH	BOTTOM LENGTH
ST-1	16+15 RT.	0.6 Ac.	2'	5'	60'
ST-2	20+90 LT.	1.35 Ac.	3'	10'	51'
ST-3	23+00 RT.	0.5 Ac.	2'	5'	50'
ST-4	21+40 LT.	0.3 Ac.	2'	5'	30'

S.B.D. - Straw Bale Dike
 Silt Fence



VICINITY MAP
SCALE 1" = 2000'

NINA R. CARROLL
R.L.P. 11/303



PLAN
Scale 1" = 50'

NINA R. CARROLL
R.L.P. 11/303

NINA R. CARROLL
R.L.P. 11/303

HOMWOOD LOTS 1 THRU 10
TAX MAP # 29
PARCEL # 279

ROY L. SPICER
ET UX
307/506

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS
DATE: 6/12/87
CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DIVISION

CHIEF, BUREAU OF ENGINEERING
DATE: 6/12/87

WALLACE MONTGOMERY & ASSOCIATES
9 W 29 TH STREET
BALTIMORE, MD. 21218
301-235-7600



DES: DP					
DRN: P.N.B.					
CHK: D.M.A.					
DATE: 5/27/87	BY	NO.	REVISION	D.T.E.	

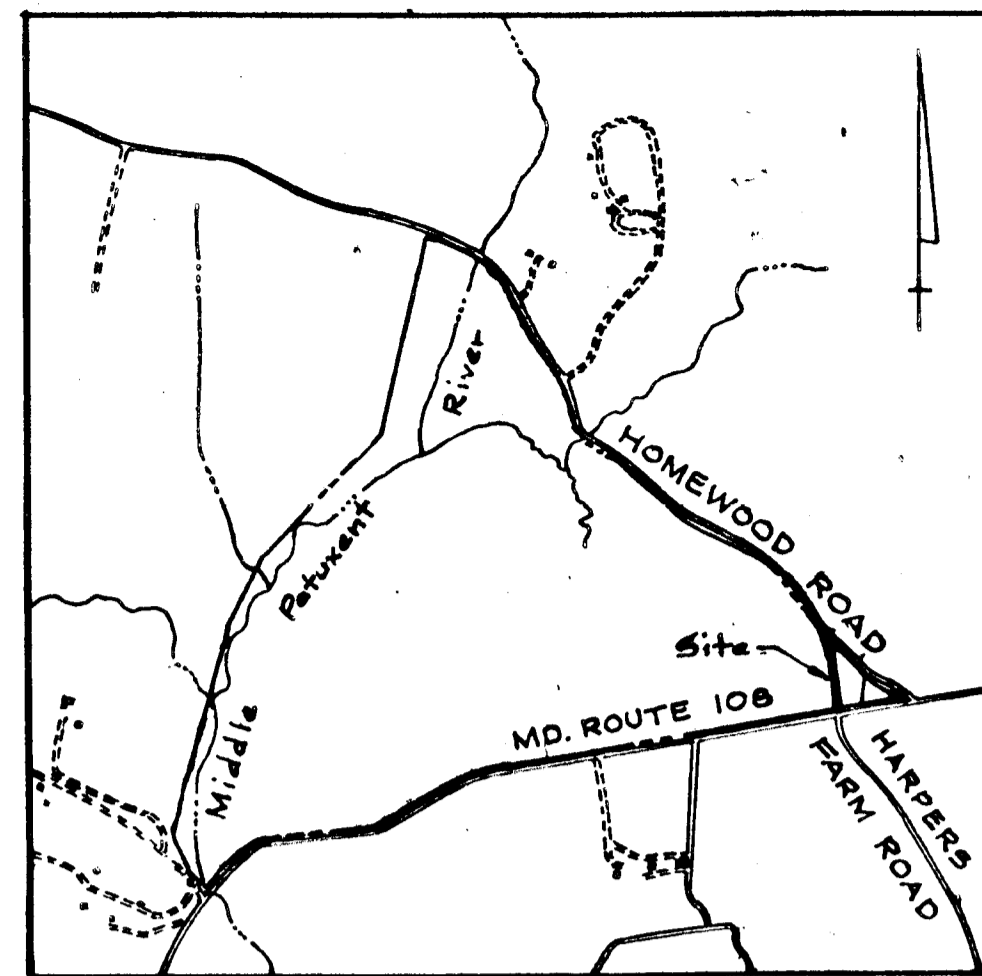
SEDIMENT & EROSION CONTROL PLAN

HOMWOOD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMWOOD ROAD

SCALE AS SHOWN
SHEET 16 OF 19

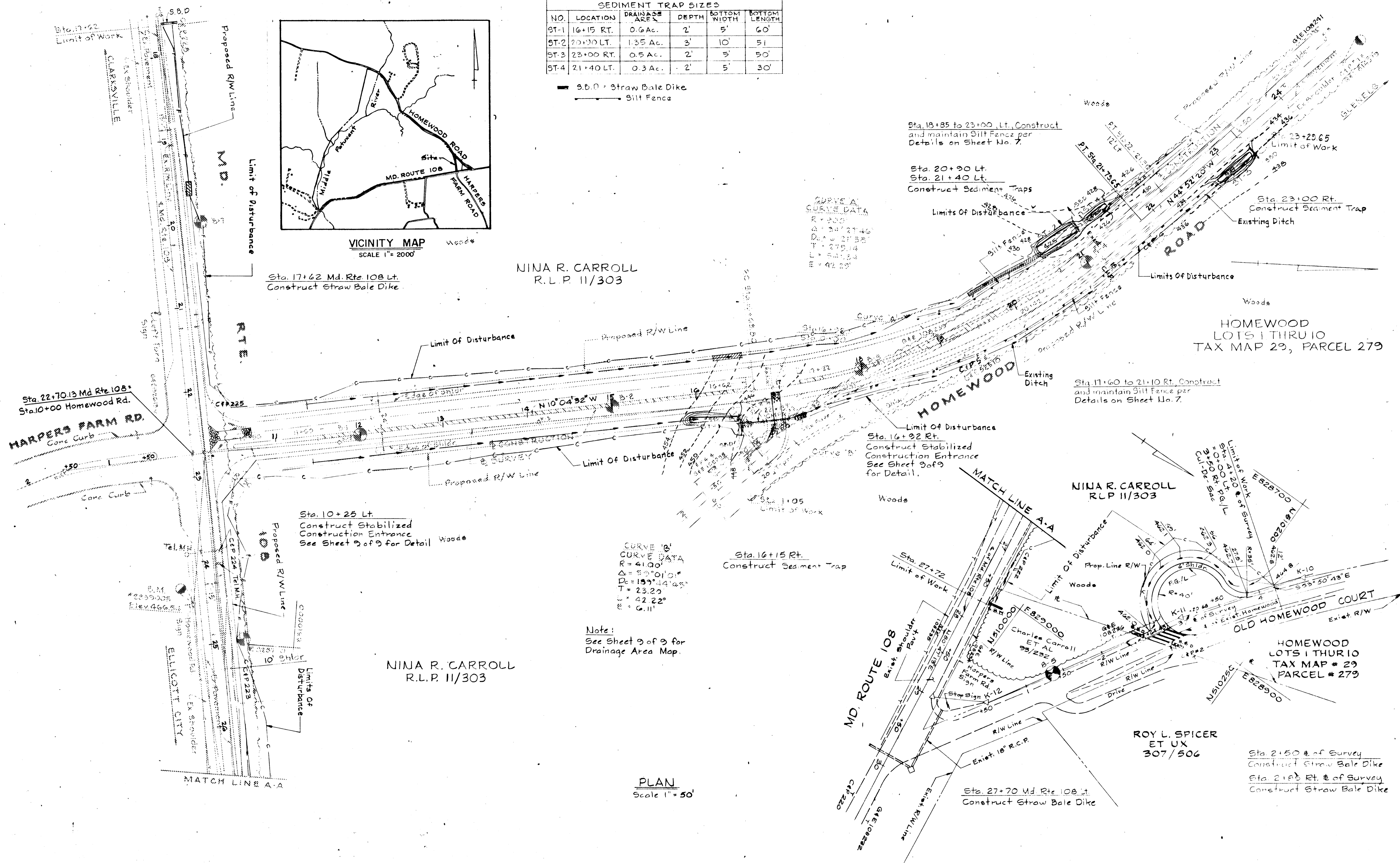
SEDIMENT TRAP SIZES					
NO.	LOCATION	DRAINAGE AREA	DEPTH	BOTTOM WIDTH	BOTTOM LENGTH
ST-1	16+15 RT.	0.6 Ac.	2'	5'	60'
ST-2	20+30 LT.	1.35 Ac.	3'	10'	51'
ST-3	23+00 RT.	0.5 Ac.	2'	5'	50'
ST-4	21+40 LT.	0.3 Ac.	2'	5'	30'

— S.B.D. = Straw Bale Dike
 - - - Silt Fence



VICINITY MAP
 SCALE 1" = 2000'

NINA R. CARROLL
 R.L.P. 11/303



PLAN
 Scale 1" = 50'

Note:
 See Sheet 9 of 9 for
 Drainage Area Map.

NINA R. CARROLL
 R.L.P. 11/303

NINA R. CARROLL
 R.L.P. 11/303

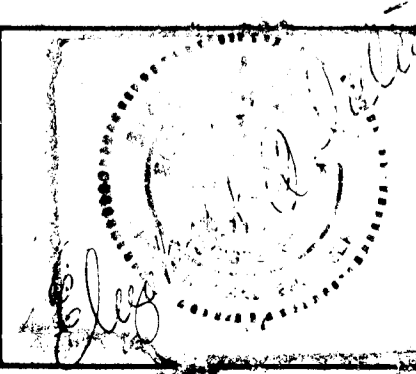
HOMWOOD LOTS 1 THRU 10
 TAX MAP # 29
 PARCEL # 279

ROY L. SPICER
 ET UX
 307/506

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS
 DATE: 6/12/87
 CHIEF OF STORM DRAINAGE DIVISION

CHIEF, BUREAU OF ENGINEERING
 DATE: 6/12/87



DES: DP					
DRN: P.N.B					
CHK: D.M.A					
DATE: 5/27/87	BY:	NO.	REVISION	DATE	

SEDIMENT & EROSION
 CONTROL PLAN
 SUPPLEMENTAL PLAN

HOMWOOD ROAD RELOCATION
 CAPITAL PROJECT T-7035
 MD. ROUTE 108 TO HOMWOOD ROAD

SCALE AS SHOWN
 SHEET 6A OF 9

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) and (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	3.25 Acres
Area Disturbed	3.25 Acres
Area to be roofed or paved	0.274 Acres
Area to be vegetatively stabilized	1.74 Acres
Total Cut	11,730 Cu. yds
Total Fill	1,522 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 DPM 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.

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.

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 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 redisturbed where a short-term vegetative cover is needed.

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

Soil Amendments: Apply 60 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 24 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.

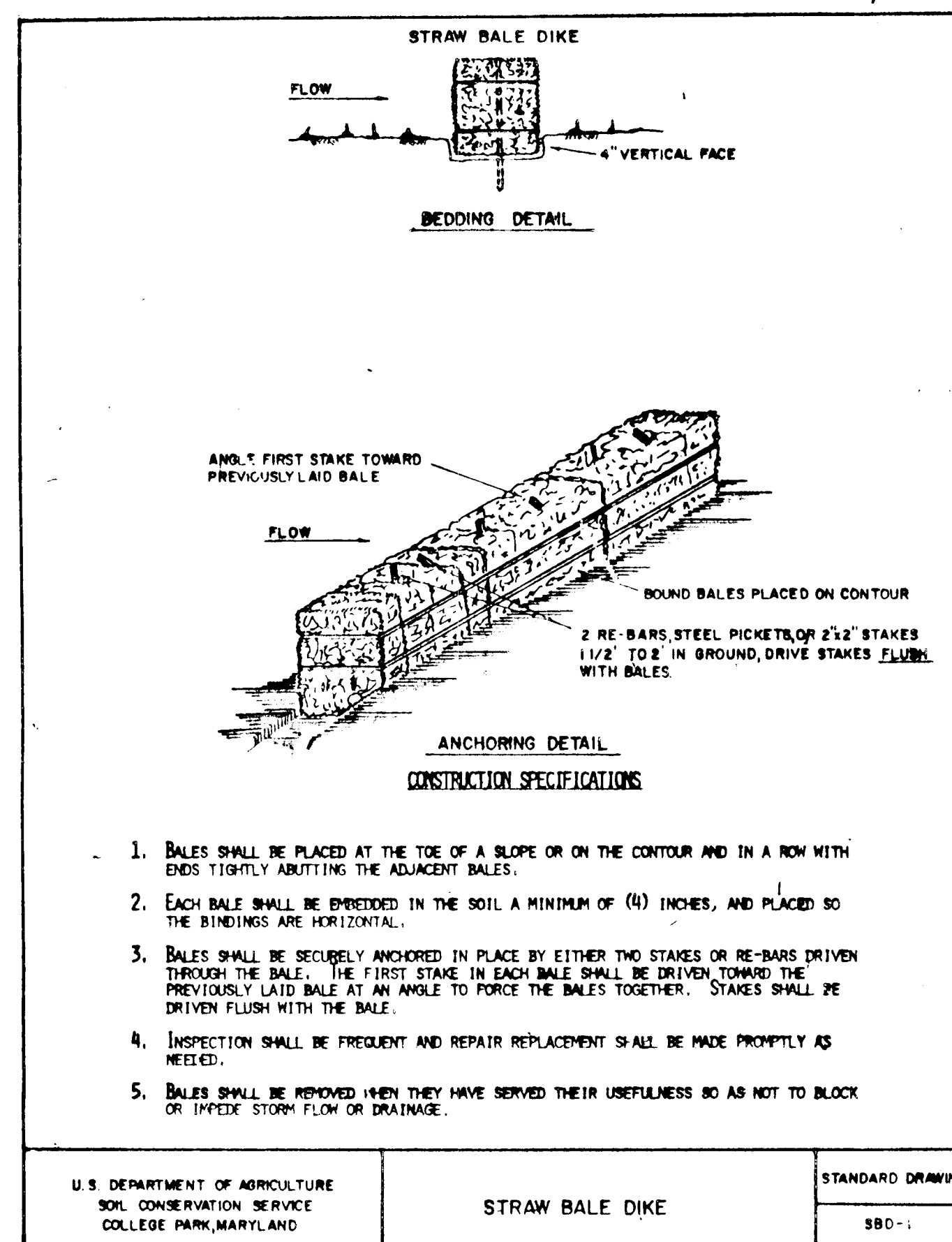
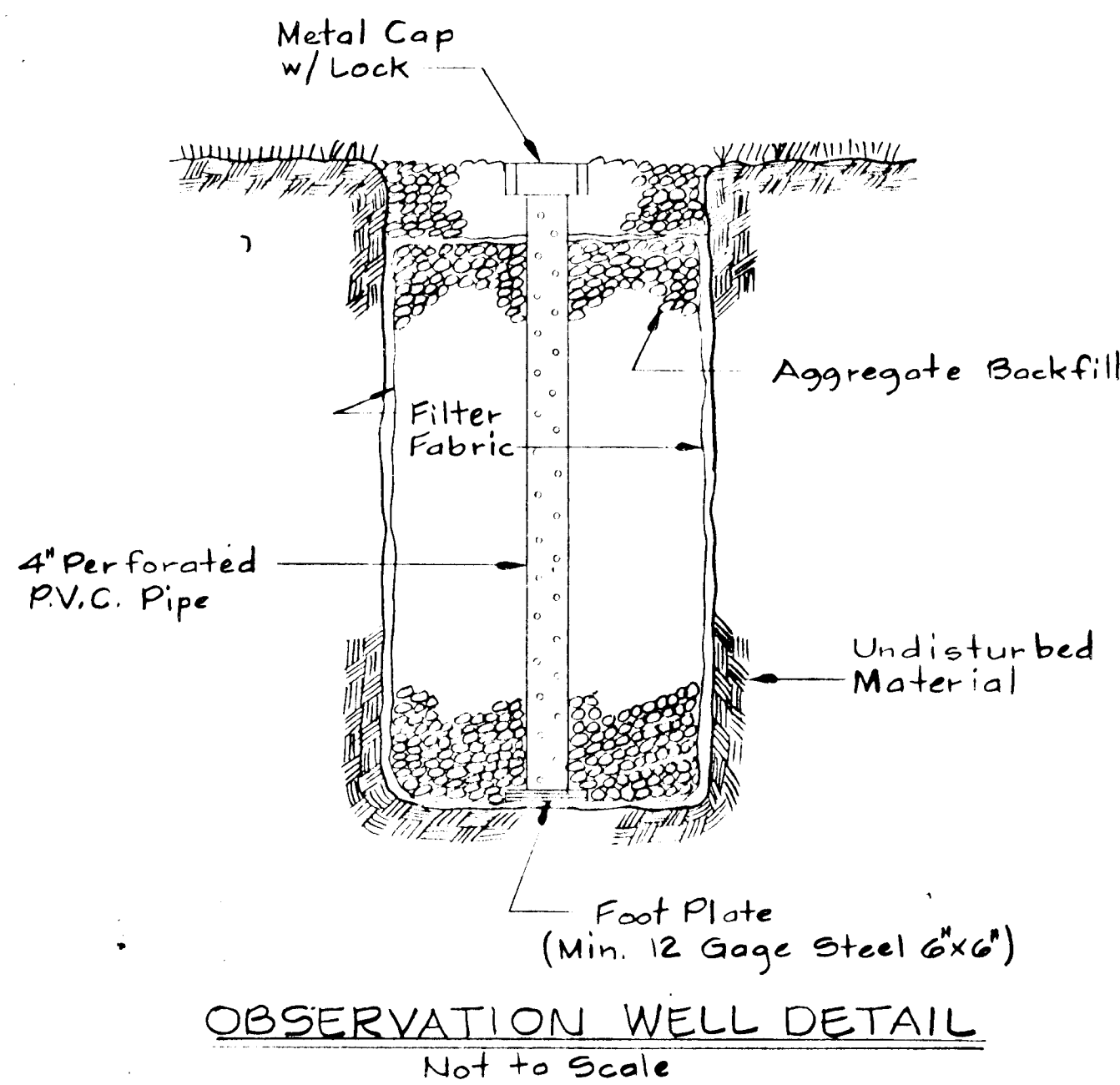
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

Sequence Of Construction

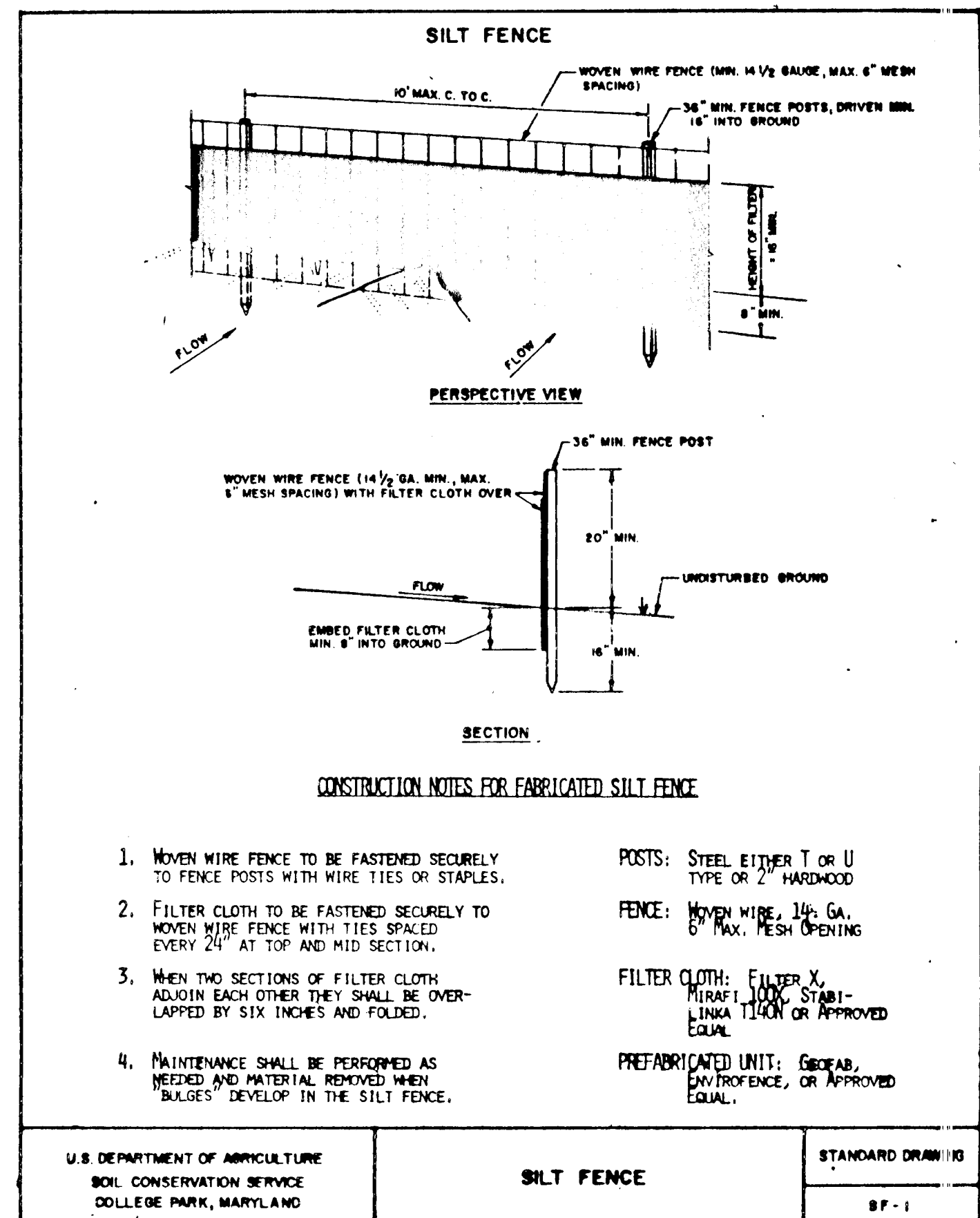
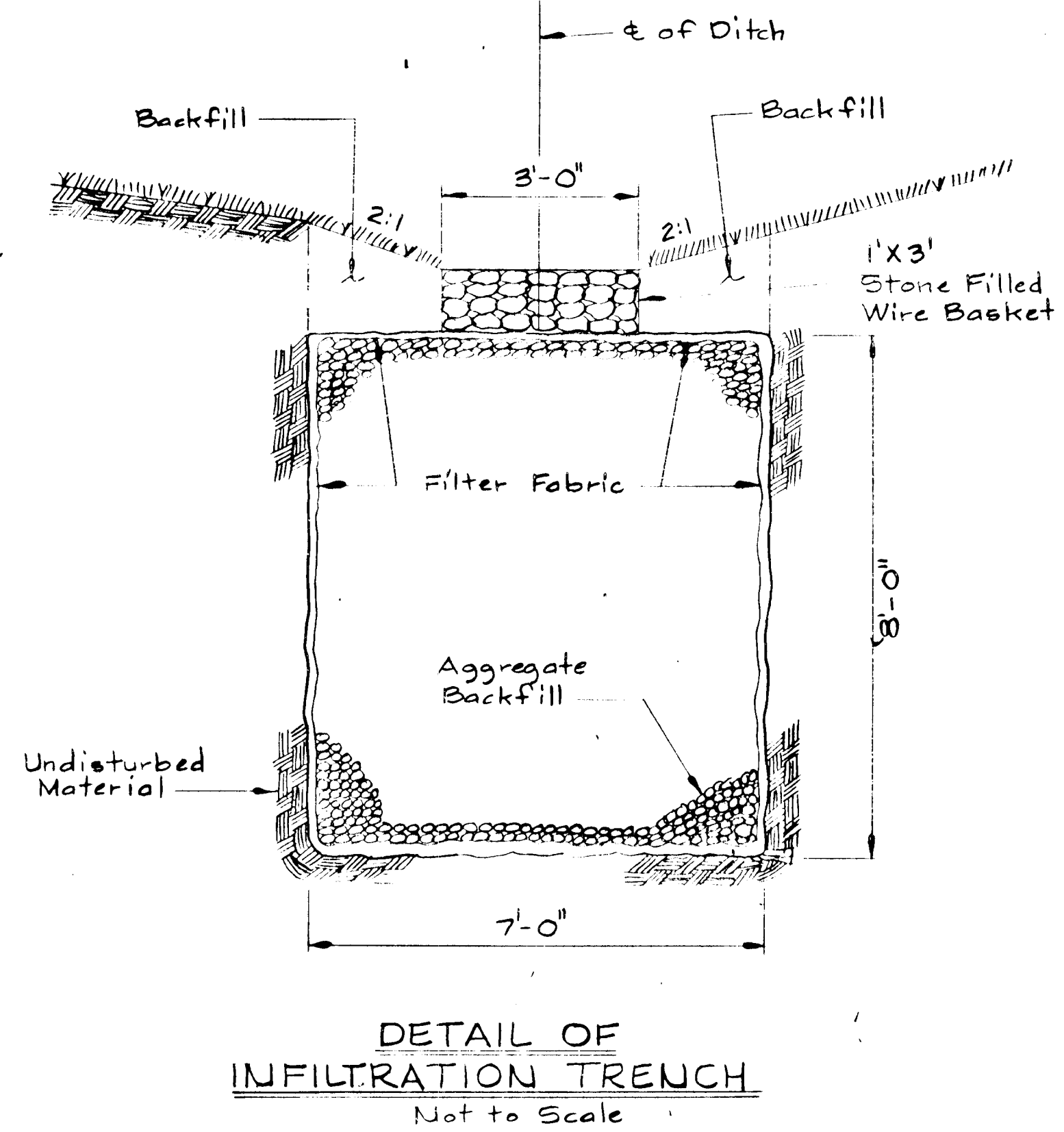
1. Obtain Grading Permit.
2. Clear For And Construct All Sediment And Erosion Controls For Phase I + II. Grade Temporary Swales To Insure Drainage To Traps.
3. Clear And Grub Roadway And Brain Grading.
4. Stabilize Disturbed Perimeter Slopes In Accordance With Note # 5. Of The Sediment Control Notes.
5. Construct Utilities And Pave. Stabilize Disturbed Areas.
6. Construct Infiltration Trench.
7. Remove Sediment Controls And Stabilize.

Construction Specification For Infiltration Structures

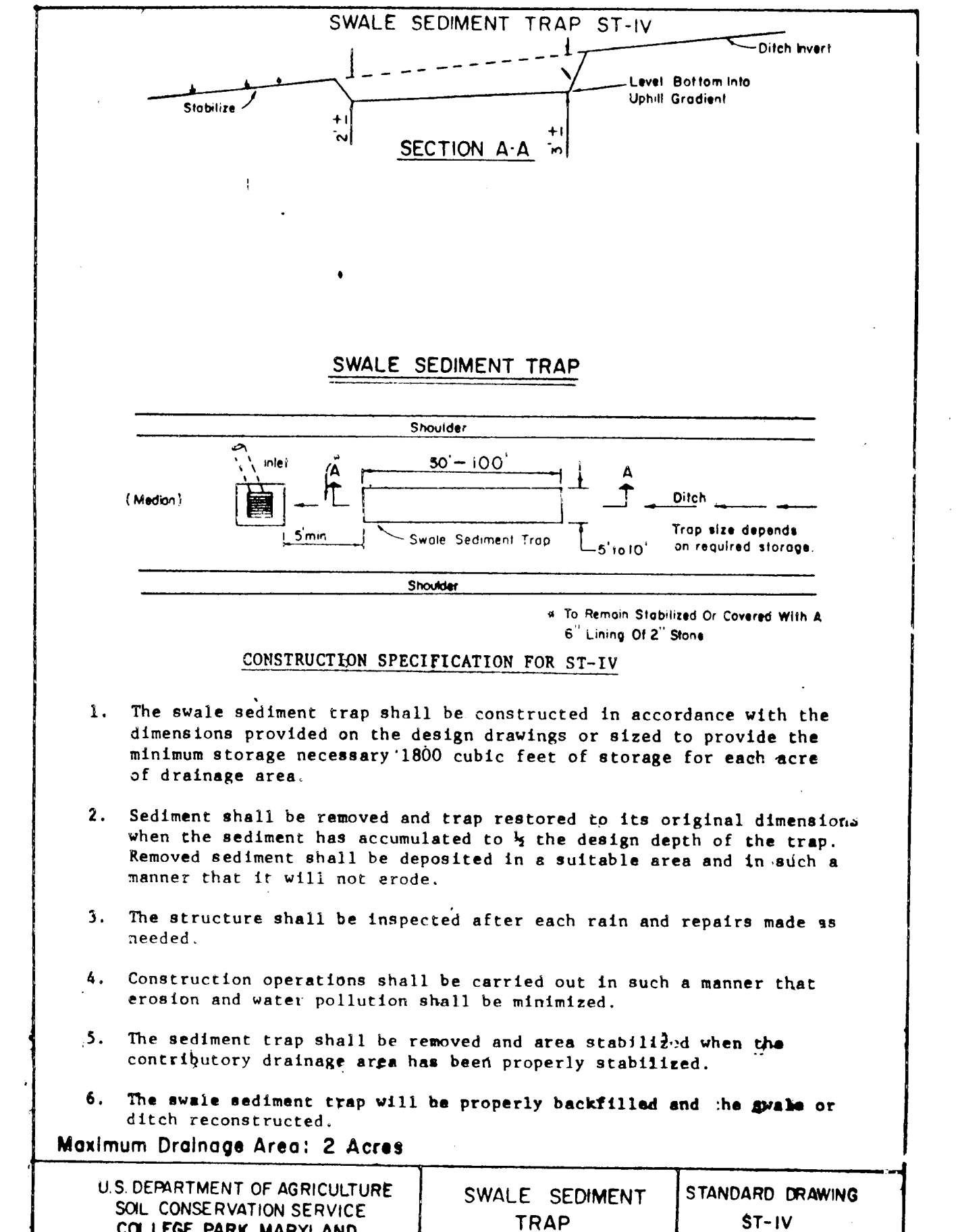
- I Timing**
Infiltration Trench Shall Not Be Constructed Until Area Has Been Stabilized And Approved By County Inspector.
- II Trench Preparation**
Excavate Trench To Design Dimensions. Place Excavated Material At A Sufficient Distance To Prevent Trench Collapse. Trim Tree Roots Flush With Sides. Roughen Sides Of Trench Where Polished Smooth By Digging Equip. In The Event Of Trench Collapse, All Design Dimensions Shall Be Held, Filling In Excess Areas With Aggregate.
- III Stone Aggregate And Placement**
1. Aggregate Material Shall Be Clean, With A Max Dia. Of 3" And Min. Dia 1/2". The Aggregate Should Be Graded Such That There Will Be Few Smaller Than The Selected Sizes. Void Ratios Shall Be No Less Than 4.0 When Compacted.
 2. The Aggregate Material Shall Be Enclosed In Filter Fabric Such As Mirafil 1405 Or App Eq. Precut Material And Provide For A 6" Min. Top Overlap When Overlaps Are Required. The Upstream Roll Should Overlap The Downstream Roll By 2' To Provide A Shingled Effect.
 3. Place Aggregate In 12" Lifts, Compacting With Mechanical Tamper.
 4. Following Aggregate Placement, Fold Over The Longitudinal Lap (6") To Form A Complete Enclosure.
 5. Backfill With Specified Aggregate Or Topsoil.
- IV Observation Well**
1. Observation Shall Be Located In The Center Of Each Structure. Construct Per Detail This Sheet.



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	STRAW BALE DIKE	STANDARD DRAWING SBD-1
---	-----------------	---------------------------



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	SILT FENCE	STANDARD DRAWING SF-1
---	------------	--------------------------



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	SWALE SEDIMENT TRAP	STANDARD DRAWING ST-IV
---	---------------------	---------------------------

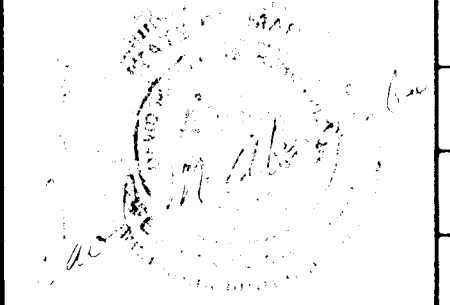
STORMWATER MANAGEMENT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS: *Stephen Q. Calvo* DATE: 4/2/87
CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DIVISION

DATE: 4/2/87

WALLACE, MONTGOMERY & ASSOCIATES
9 W. 29 TH STREET
BALTIMORE, MD. 21218
301-235-7600



DES: K.C.					
DRN: P.B.					
CHK: D.A.					
DATE: 5/27/87	BY	NO.	REVISION	DATE	

SEDIMENT CONTROL NOTES & DETAILS

STORMWATER MANAGEMENT

600' SCALE MAP NO. _____ BLOCK NO. _____

HOMWOOD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMWOOD ROAD

SCALE: AS SHOWN
SHEET 7 OF 9

Note:
Use Modified Standard No. MD 104.02G
if a lane needs to be closed along MD.108.

Note
Pavement to be removed
from Sta. 0+00 to Sta. 1+05.

Note:
At the time that traffic is
diverted, this area should
be closed off with Type III
Barricades and Detour signs
until roadway pavement is
removed.

LEGEND

Temporary Roadway See Pavement Detail Sheet 3

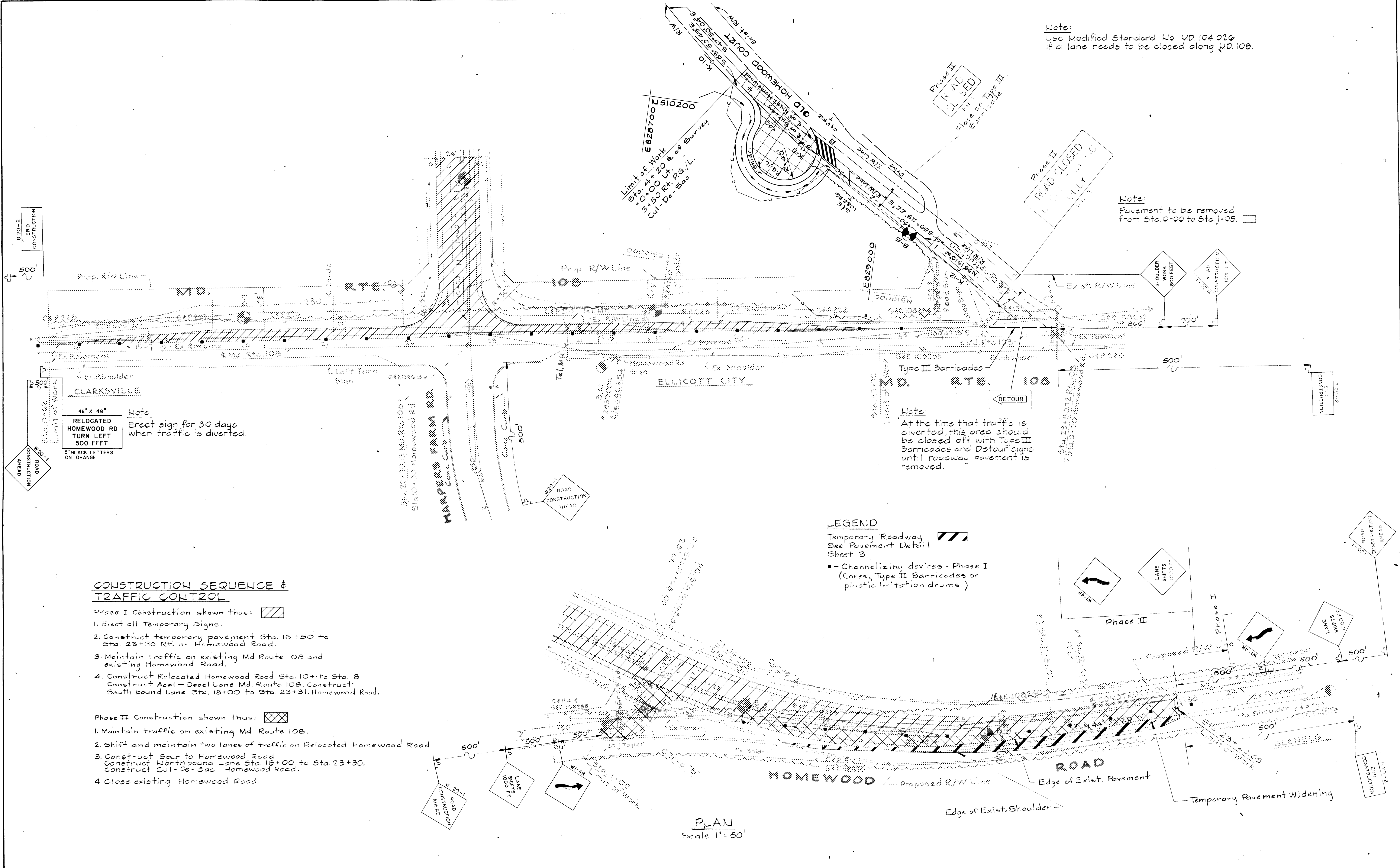
■ - Channelizing devices - Phase I (Cones, Type II Barricades or plastic imitation drums)

CONSTRUCTION SEQUENCE & TRAFFIC CONTROL

- Phase I Construction shown thus:
1. Erect all Temporary Signs.
 2. Construct temporary pavement Sta. 18+50 to Sta. 23+30 Rt. on Homewood Road.
 3. Maintain traffic on existing Md Route 108 and existing Homewood Road.
 4. Construct Relocated Homewood Road Sta. 10+ to Sta. 18 Construct Acel - Decel Lane Md. Route 108. Construct South bound Lane Sta. 18+00 to Sta. 23+31. Homewood Road.

- Phase II Construction shown thus:
1. Maintain traffic on existing Md. Route 108.
 2. Shift and maintain two lanes of traffic on Relocated Homewood Road
 3. Construct Spur to Homewood Road. Construct Northbound Lane Sta 18+00 to Sta 23+30, Construct Cul-De-Sac Homewood Road.
 4. Close existing Homewood Road.

PLAN
Scale 1" = 50'



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS _____ DATE _____
CHIEF, BUREAU OF ENGINEERING _____ DATE _____

CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DIVISION _____ DATE _____

WALLACE MONTGOMERY & ASSOCIATES
9 W 29TH STREET
BALTIMORE, MD. 21218
301-235-7600

DES: K C					
DRN: P N B					
CHK: D M A					
DATE: 5/27/87	BY	NO.	REVISION	DATE	600' SCALE MAP NO. _____ BLOCK NO. _____

TRAFFIC CONTROL PLAN

HOMEWOOD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMEWOOD ROAD

SCALE AS SHOWN
SHEET 3 OF 2

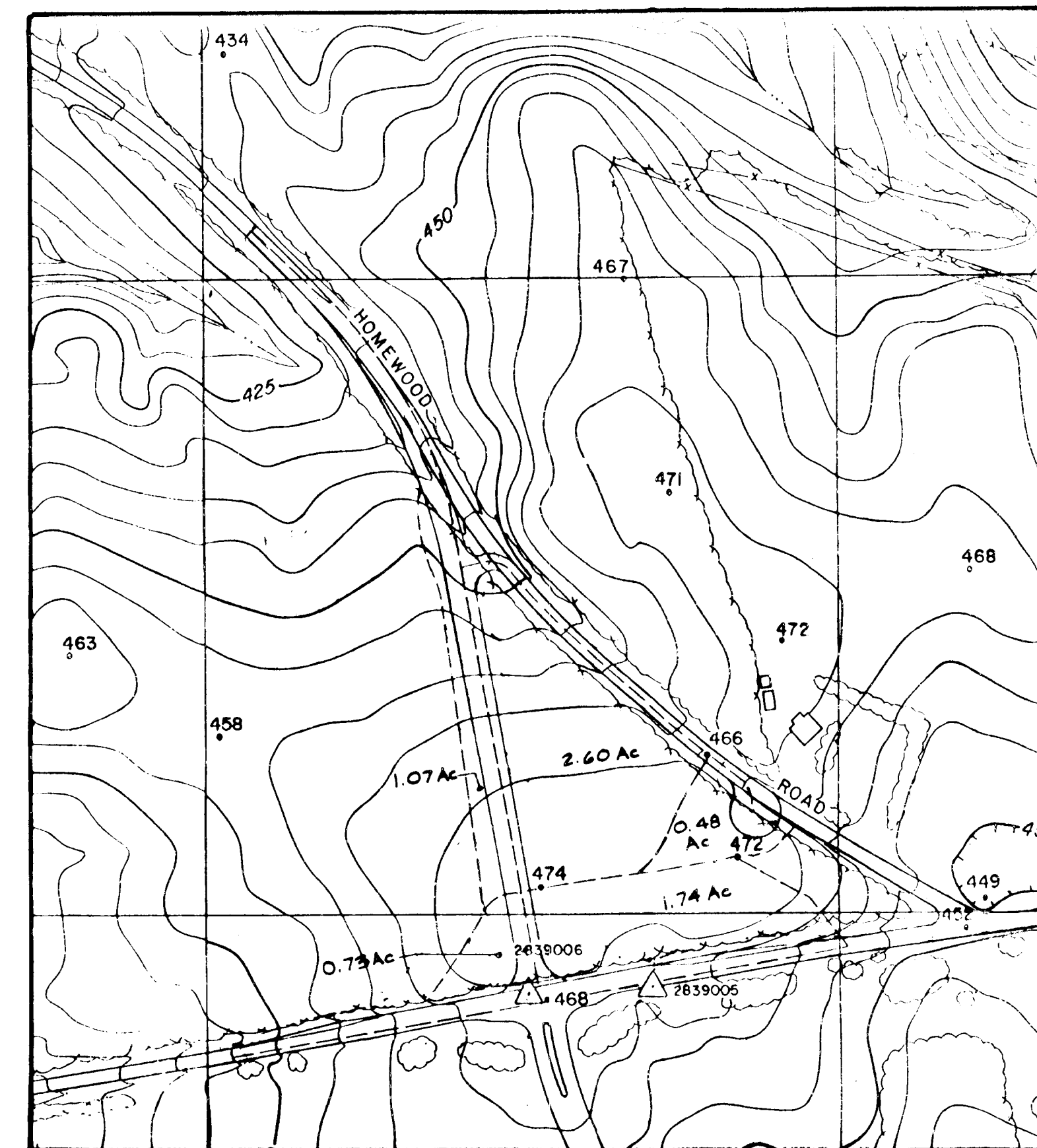
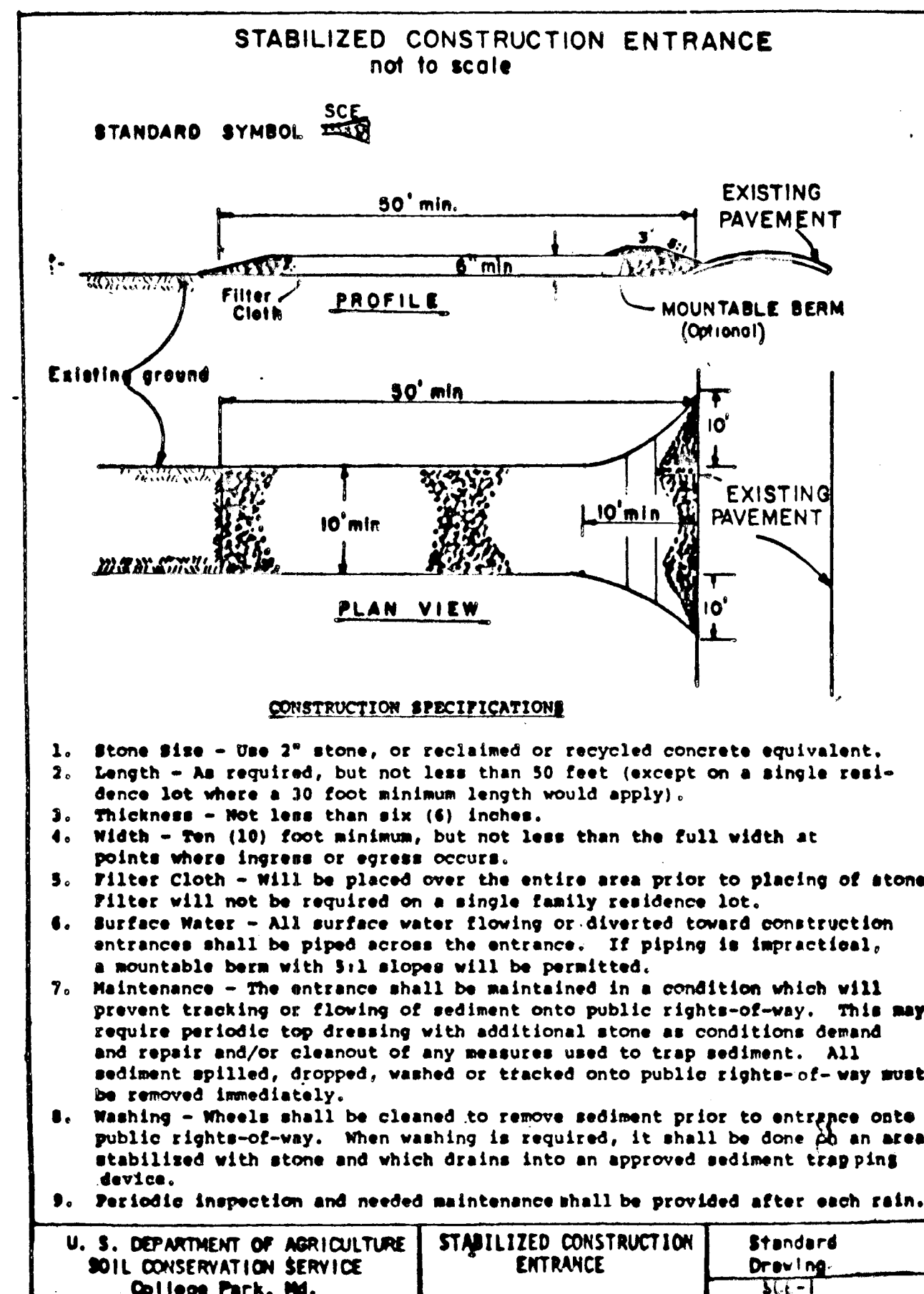
GRADING TABLE

STATION		CUT	FILL	CLASS 2 EXCAVATION	CUT ADJUSTED	SHRINKAGE FACTOR	CUT DENSIFIED	REMARKS
FROM	TO							
18+00	27+50	1415 C.Y.			1415	0.90	1274	Md. Route 108
18+00	24+50		127 C.Y.					"
0+24	7+50	10,418			10,418	0.90	9376	Homewood Road
6+50	7+50		66	3	3	0.75	7	Ditch Rt.
7+00	"		40					Turn Off
K 50+00	5+38	739	788		739	0.90	665	Ditch, Lt. & Rt.
"	"			120	120	0.75	90	"
2+64	4+20	1647			1647	0.90	1482	Cut-De-Sac
				120	120	0.75	90	Sediment Trap
Totals		14,219	1022	243	14,468		12,984	

SUMMARY OF EARTHWORK

CLASS 1 EXCAVATION		
Cut: Homewood Road		11,157 C.Y.
Md Route 108		+1415 C.Y.
Cut-de-Sac		+1647 C.Y.
Plus Root Mat Removed Under Fill		+463 C.Y.
Total Class 1 Excavation		14,219 C.Y.
EXCAVATION AVAILABLE FOR EMBANKMENT		
Total Class 1 Excavation		14,219 C.Y.
Minus Root Mat in Cut		- 245 C.Y.
Minus Root Mat in Fill		- 463 C.Y.
Cut Adjusted		13,974 C.Y.
Cut Densified (0.90%)		12,977 C.Y.
Plus Class 2 Excavation		+ 187 C.Y.
Total Excavation Available For Embankment		12,764 C.Y.
CLASS 2 EXCAVATION		
Ditches		129 C.Y.
Sediment Traps		+120 C.Y.
		249 C.Y.
Loss Due to Densification (25%)		- 62 C.Y.
Excavation Available For Embankment		187 C.Y.

EMBANKMENT REQUIRED		
Embankment		1022 C.Y.
Plus Root Mat Removed under Fill		+463 C.Y.
Total Embankment		1485 C.Y.
Excavation Available For Embankment		12,764 C.Y.
Waste		11,279 C.Y.



DRAINAGE AREA MAP
SCALE 1" = 200'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

WALLACE, MONTGOMERY
& ASSOCIATES
9 W. 29TH STREET
BALTIMORE, MD. 21218
301-235-7600

DES: K. C.
DRN: P. N. B.
CHK: D. M. A.
DATE: 5/27/87

EARTHWORK SUMMARY
& GRADING TABLE

HOMEWOOD ROAD RELOCATION
CAPITAL PROJECT T-7035
MD. ROUTE 108 TO HOMEWOOD ROAD

SCALE
AS
SHOWN
SHEET
9 OF 9

DIRECTOR OF PUBLIC WORKS DATE
CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DIVISION DATE
4/12/87

BY NO REVISION DATE 600' SCALE MAP NO. BLOCK NO.