

- GENERAL NOTES:**
- All Storm Drain & Paving shall be constructed in accordance with the latest details and Specifications of Howard Co. & Md. S.H.A.
 - Types of storm drain structures refer to the Standard Details of Howard County & Maryland State Highway Administration.
 - Trench Compaction for storm Drains within Road or Street right of way limits shall be in accordance with the latest Howard Co. Road Code.
 - Information concerning underground utilities was obtained from available records, but the Contractor must determine the exact location and elevation of the 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 control services, parking and signing to be done in accordance with the Manual of Uniform Traffic Control Devices, 1971 Edition.
 - Sag and Crest Vertical Curves were designed in accordance with "A Policy on Geometric Design of Rural Highways," 1965, by A.A.S.H.O.
 - Provide Concrete side walk Ramps in curbs (Max. 12:1 Slope; 4 ft. wide) where shown in plan., See det. sht. 3.
 - Minimum Cover of 2' shall be provided over storm drain pipes in all areas not being Final graded by these plans.
 - Design Speed: All roads; 25 mph.
 - Zoning: New Town (Attached).
 - Sidewalks adjacent to parking areas to be 6' wide. All other sidewalks to be 4' wide. See details Sht. 3 of 5.

Reviewed for.....Howard.....S.C.D.
Name
and meets Technical Requirements
Signature
Date
U.S. Soil Conservation Service

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

William J. Paine
Approved
5-8-80
Date

DEVELOPER'S CERTIFICATE
I certify that all development and/or construction shall be done according to this plan of development and plan for Erosion and Sediment Control, and I am in the field on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

Walter E. Woodford
2/22/80
Date
WALTER E. WOODFORD
AS-BUILT SURVEY CERTIFIED BY
WALTER PARK, MD. LAND SURVEYOR
No. 5539



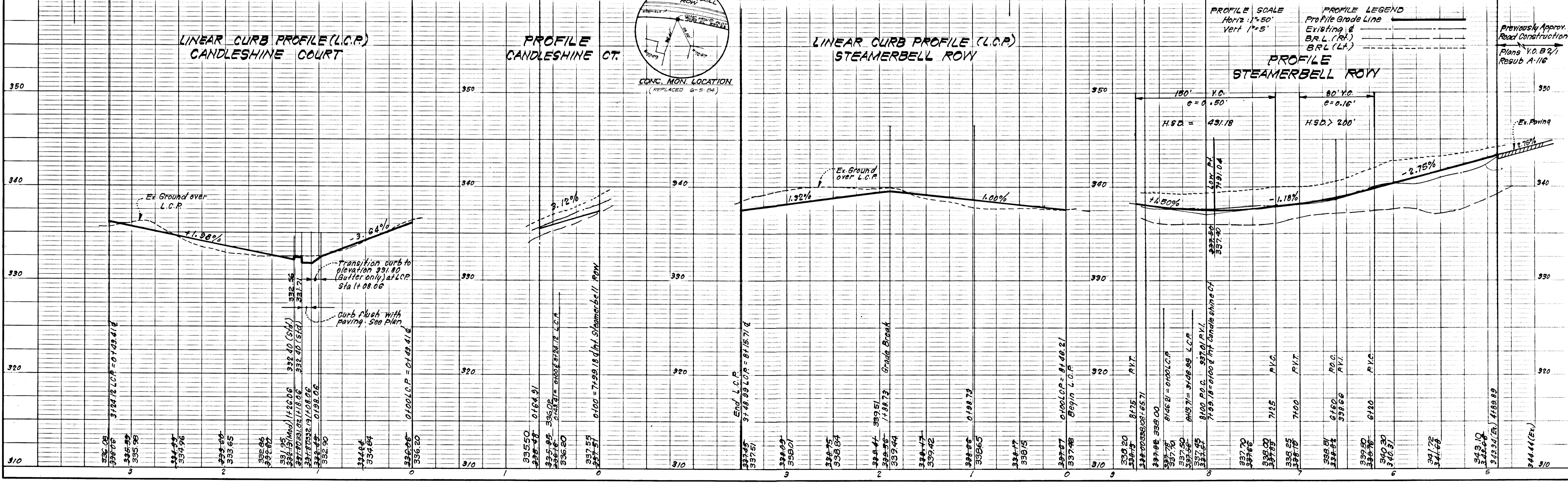
ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

G. Nelson Clark
1-8-80
Date

APPROVED: Department of Public Works
William E. Paine
5-13-80
Date
Chief, Bureau of Engineering
APPROVED: Howard County Office of Planning & Zoning
5-16-80
Date
Chief, Division of Land Development

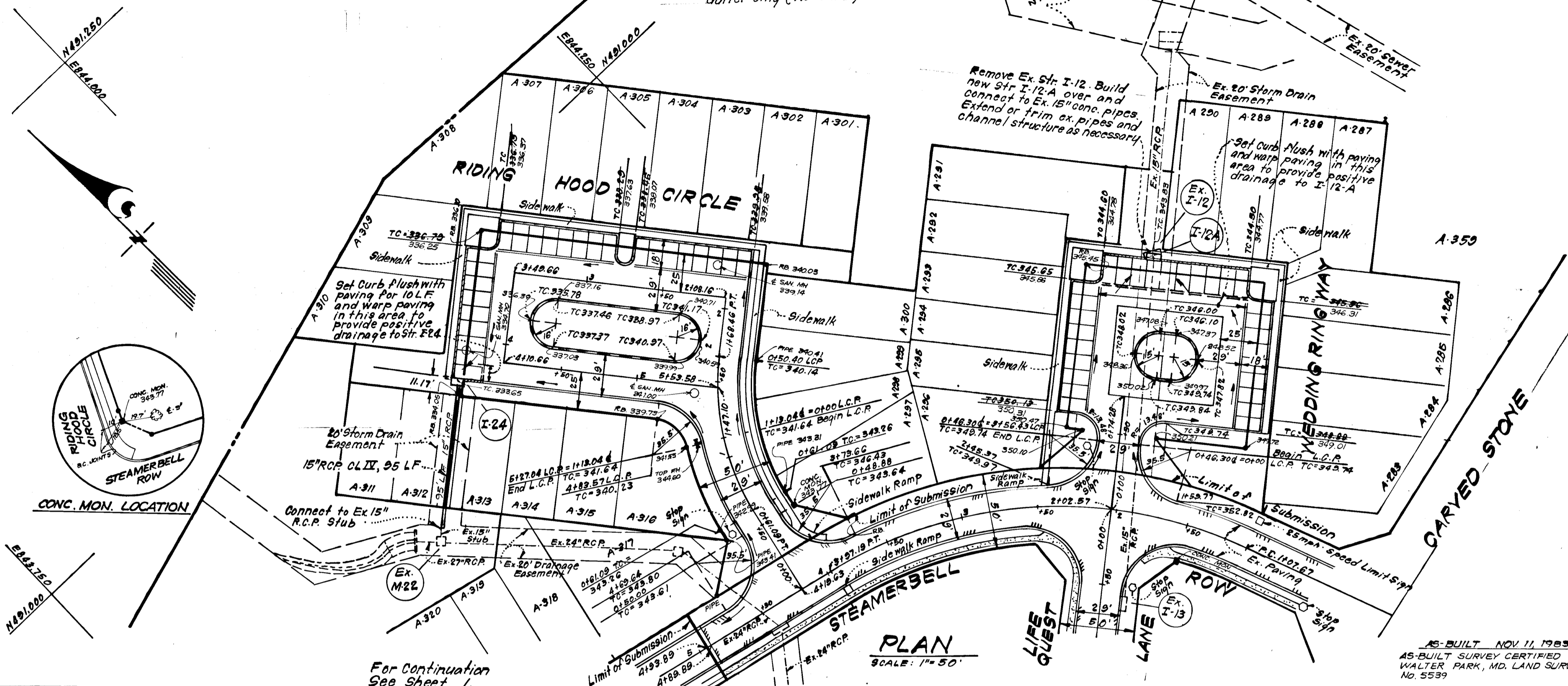
CLARK • FINEFRÖCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED R.J.S.	ROAD CONSTRUCTION PLANS A RESUBDIVISION OF LOT A-232 STEAMERBELL ROW & CANDLESHINE COURT	SCALE As Shown
DRAWN K.I.W.	COLUMBIA	DRAWING 10A5
CHECKED R.J.S.	VILLAGE OF OWEN BROWN SECTION 2 AREA 1 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 79-122
DATE Apr. 30, 1980	FOR: Howard Research & Development Corp. The Rouse Company Building Columbia, Md. 21044	FILE NO. 79-122-D



CURVE DATA
 P.C. 0161.09 to P.T. 1168.46
 R=160.00'
 Δ=39°27'00"
 L=107.37'
 T=55.80'

CURB & GUTTER LEGEND:
 Mod. Comb. Curb & Gutter
 Barrier Curb
 Std. 7" Comb. Curb of Gutter
 Reverse 7" Comb. Curb of Gutter
 Gutter Only (No Curb)



DEVELOPER'S CERTIFICATE
 I certify that all development and/or construction shown on this plan is in accordance with the provisions of the Subdivision and Sediment Control, and I also certify that the plan is based on a site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

[Signature]
 Walter E. Wood, P.E.
 Date: 2/22/80

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]
 G. Nelson Clark
 Date: 1-6-80

Reviewed for: HOWARD S.C.D.
 Name: [Signature]
 and meets Technical Requirements
 Signature: [Signature]
 Date: 5-9-80
 U.S. Soil Conservation Service

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

[Signature]
 Approved: 5-9-80
 DATE

APPROVED: Department of Public Works

[Signature]
 Chief, Bureau of Engineering
 Date: 5-13-80

APPROVED: Howard County Office of Planning & Zoning

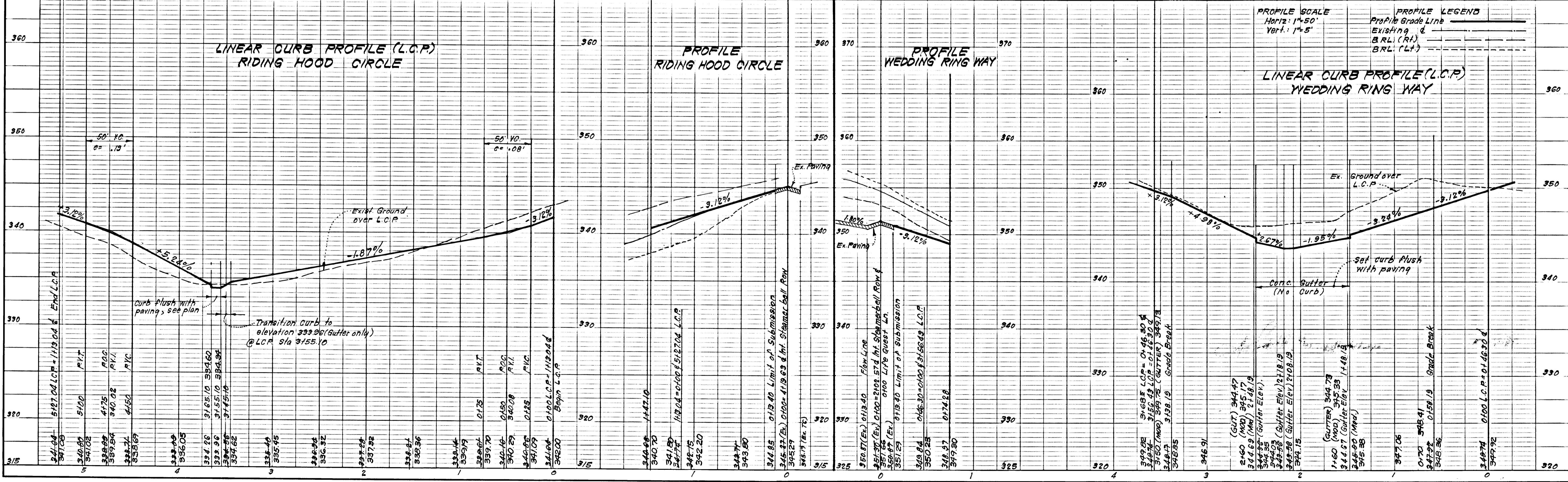
[Signature]
 Chief, Division of Land Development
 Date: 5-6-80

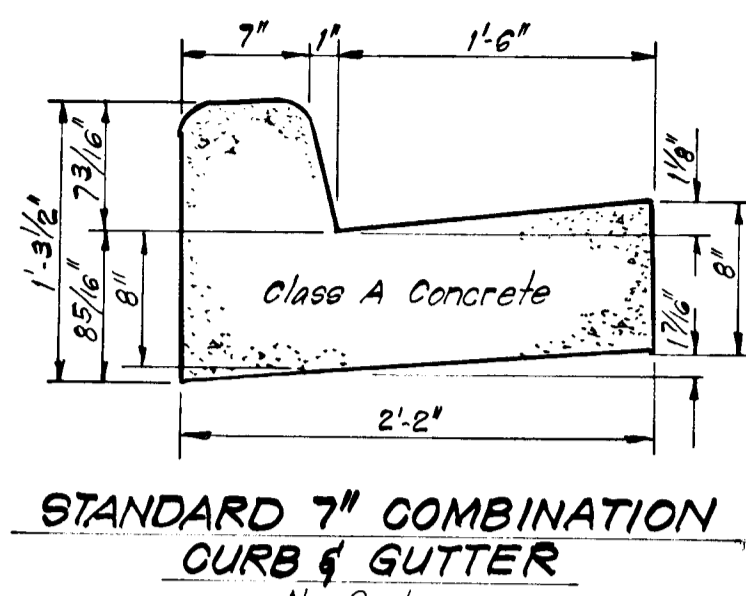
CLARK • FINEFROCK & SACKETT
 ENGINEERS PLANNERS SURVEYORS
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED	R.J.S.	SCALE	As Shown
DRAWN	K.J.W.	DRAWING	2 of 5
CHECKED	R.J.S.	JOB NO.	79-122
DATE	Apr. 30, 1980	FILE NO.	79-122-D

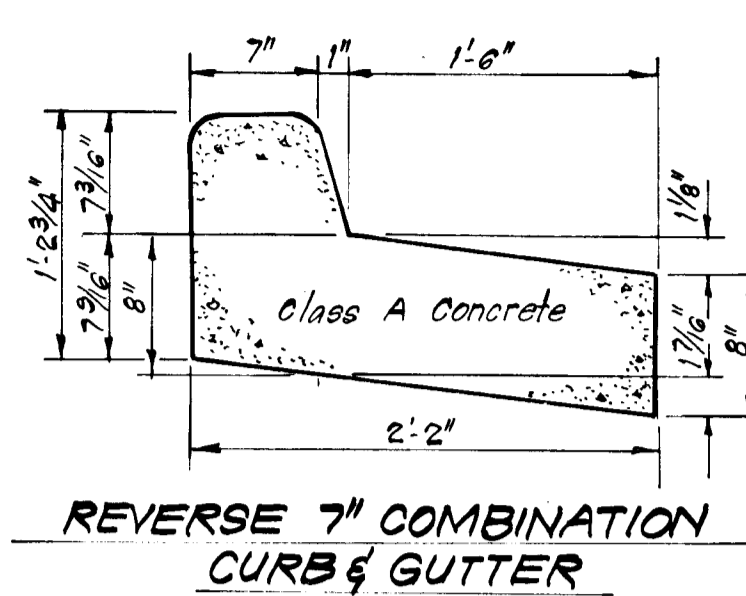


AS-BUILT NOV. 11, 1989
 AS-BUILT SURVEY CERTIFIED BY
 WALTER PARK, MD. LAND SURVEYOR
 No. 5539

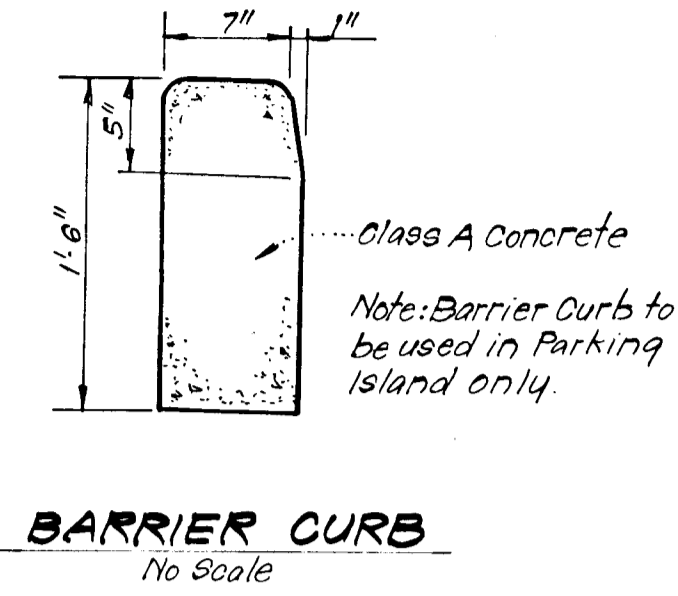




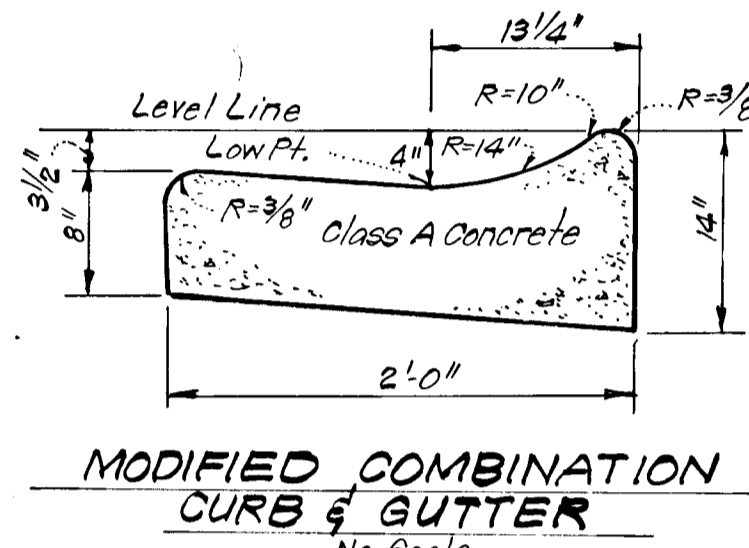
STANDARD 7" COMBINATION CURB & GUTTER
No Scale



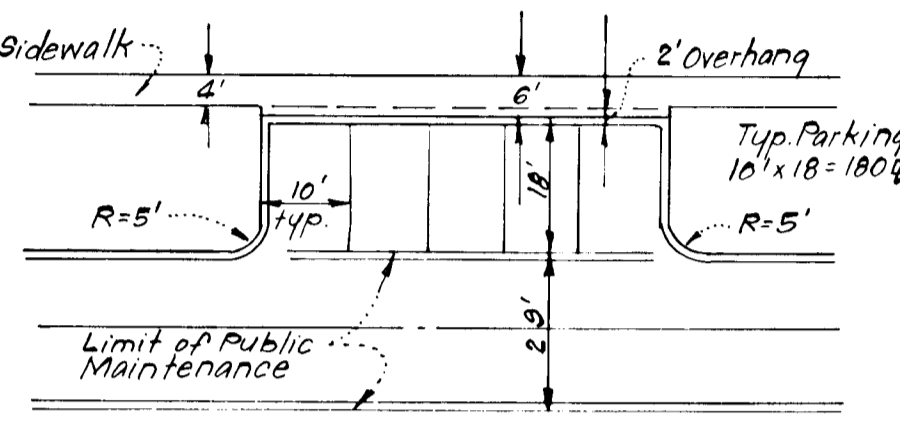
REVERSE 7" COMBINATION CURB & GUTTER
No Scale



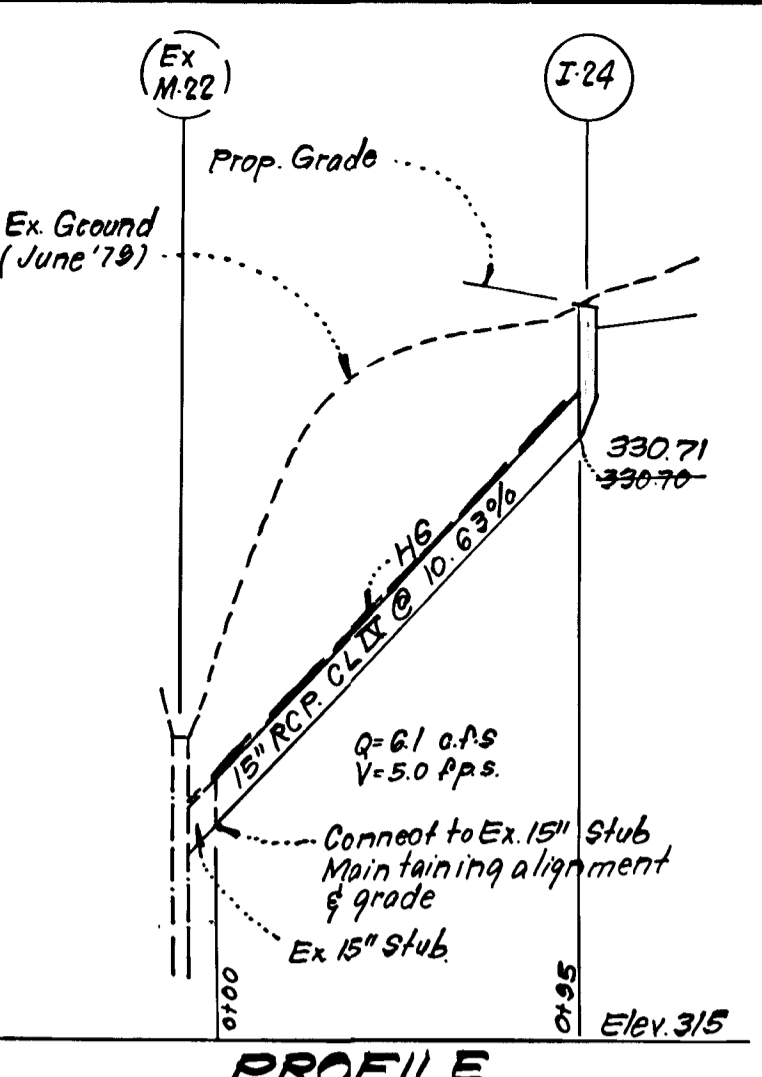
BARRIER CURB
No Scale



MODIFIED COMBINATION CURB & GUTTER
No Scale



TYPICAL PARKING ADJACENT TO PUBLIC ROADS
No Scale

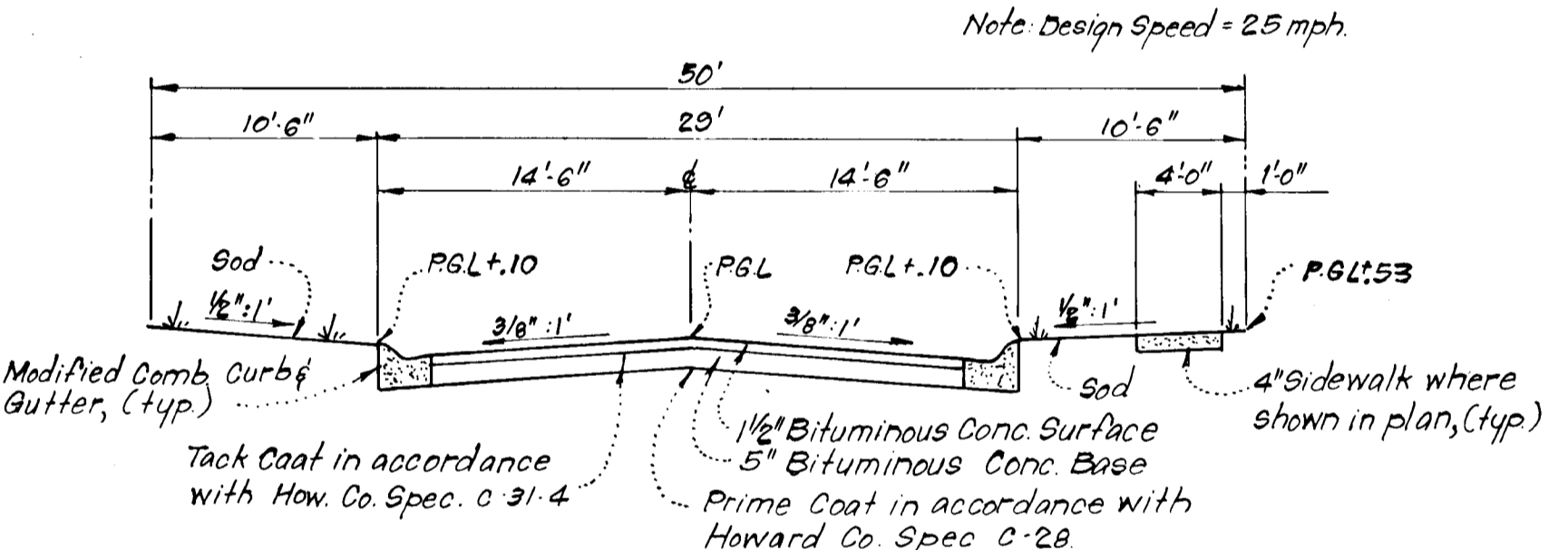


PROFILE
SCALE: Horiz. 1"=50'
Vert. 1"=5'

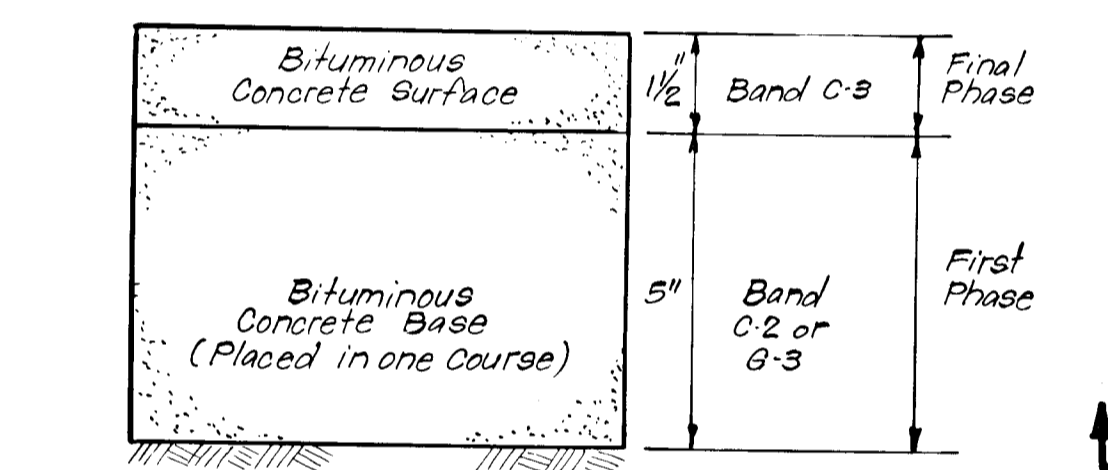
STRUCTURE SCHEDULE							
Nº	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				Upper	Lower		
I-2A	A-10 Inlet	Exist	Exist	349.75	-	Ho. Co. Std. Dwg. 64 App. 19-A W=2'-6"	See Plan
2-13	C-Endwall	301.50	-	-	-	Ho. Co. Std. Dwg. 62 pg. 107 W=18" Dia	See Plan
M-14	B-Manhole	303.60	301.80	Exist Ground	-	See det. this sht. 48" dia	See Plan
M-15	B-Manhole	324.48	323.12	328.00	-	See det. this sht. 48" dia	See Plan
I-17	A-5 Inlet	327.90	327.70	332.00	-	Ho. Co. Std. Dwg. 64-A W=2'-6"	See Plan
I-23	A-10 Inlet	-	333.30	337.40	-	Ho. Co. Std. Dwg. 64-A W=2'-6"	Sta 71+91.04 13.83 LF
I-24	A-5 Inlet	-	330.70	334.17	-	Ho. Co. Std. Dwg. 64-A W=2'-6"	See Plan

* Increase H dimension by 12" for Rip Rap Construction
Note: All structures to have brick channelling to crown of pipes (fully developed inverts).

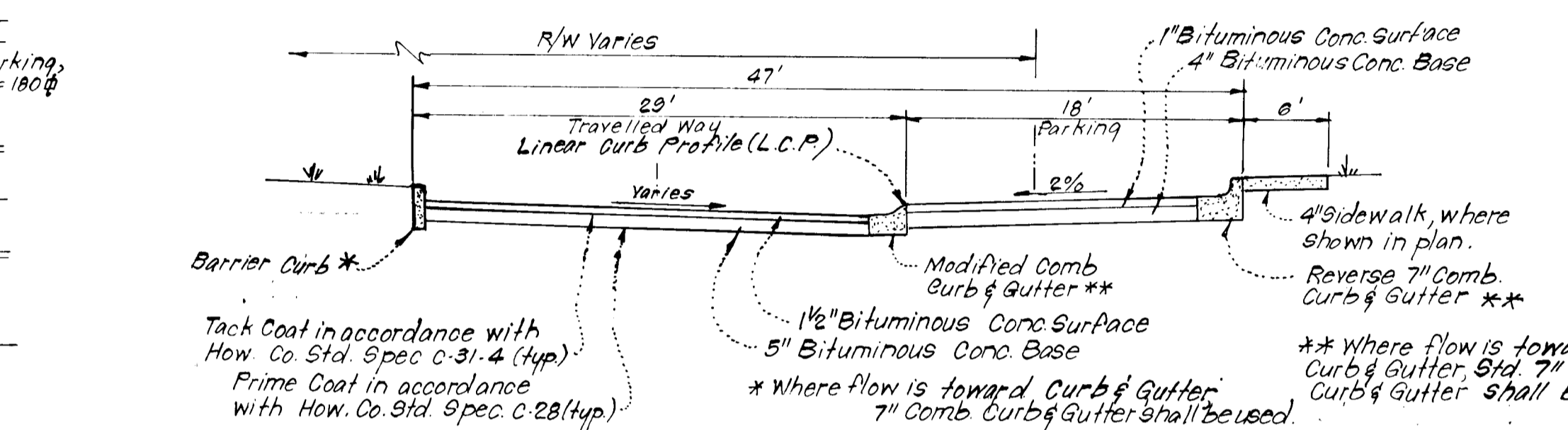
PIPE SCHEDULE		
SIZE	TYPE	LENGTH
15"	R.C.P. CL II	223 LF
15"	R.C.P. CL I	163 LF
18"	R.C.P. CL II	23 LF



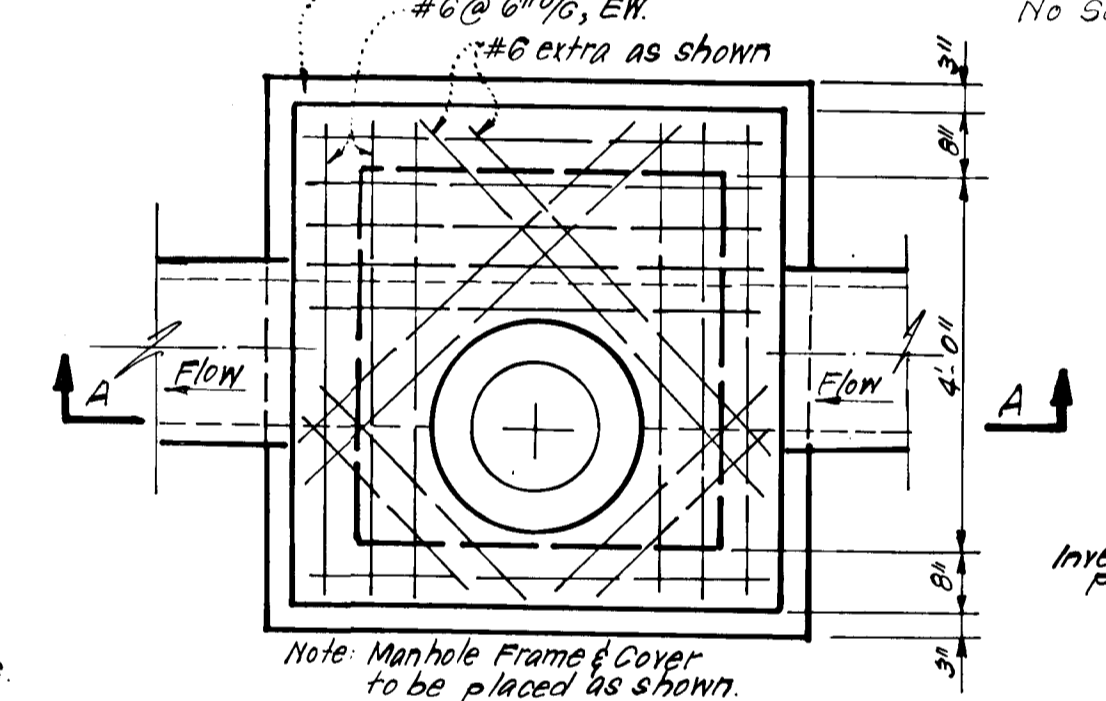
TYPICAL PAVING SECTION
STEAMERBELL ROW - 4189.89 to 8115.71
RIDING HOOD CIRCLE 0+00 to 1+13.04
WEDDING RING WAY - 0+00 to 0+46.30
CANDLE SHINE COURT 0+00 to 0+43.41
No Scale



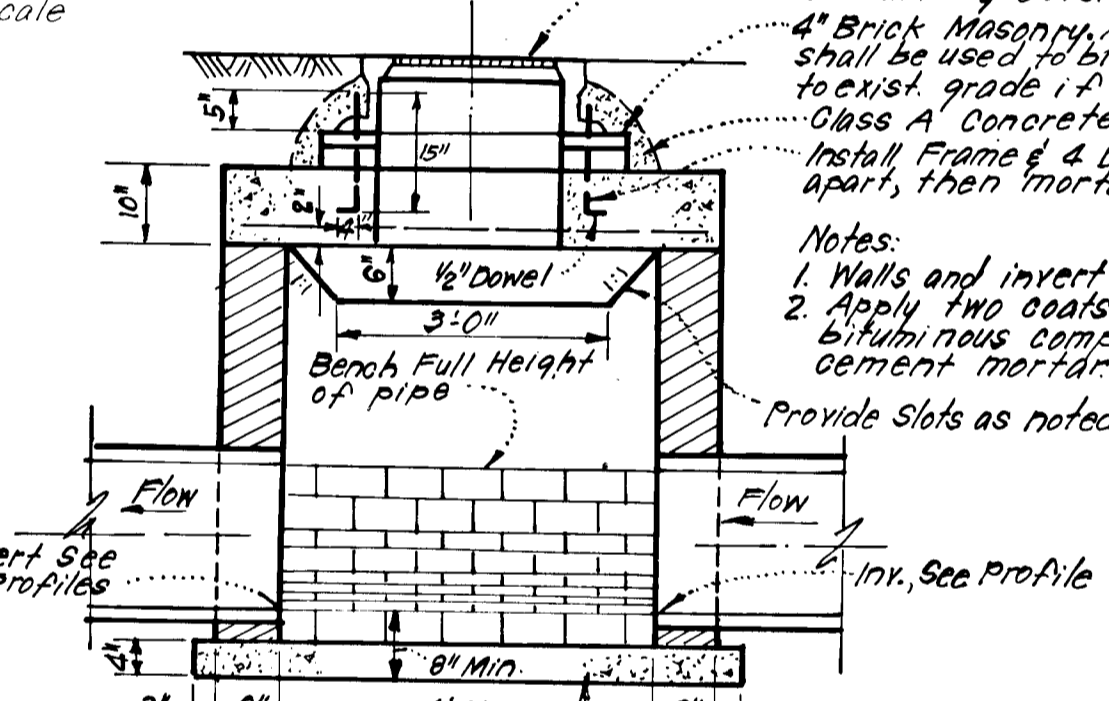
PAVING SECTION FOR PUBLIC ROADS AND ENTRANCES TO PUBLIC ROADS
No Scale



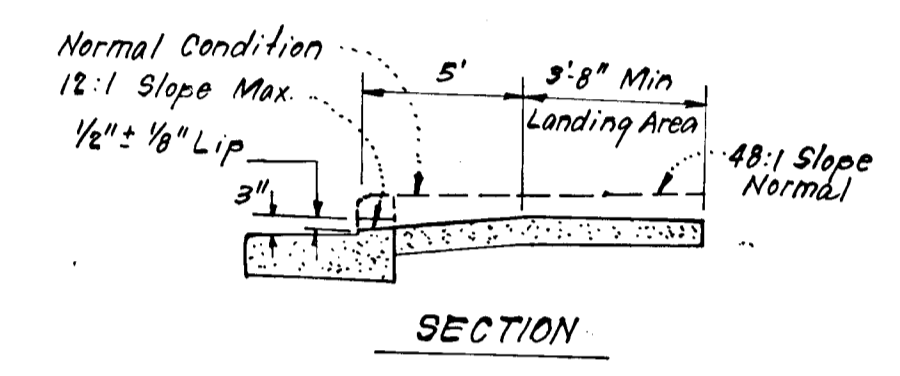
TYPICAL PAVING SECTION - PUBLIC DRIVE AND PRIVATE PARKING
No Scale



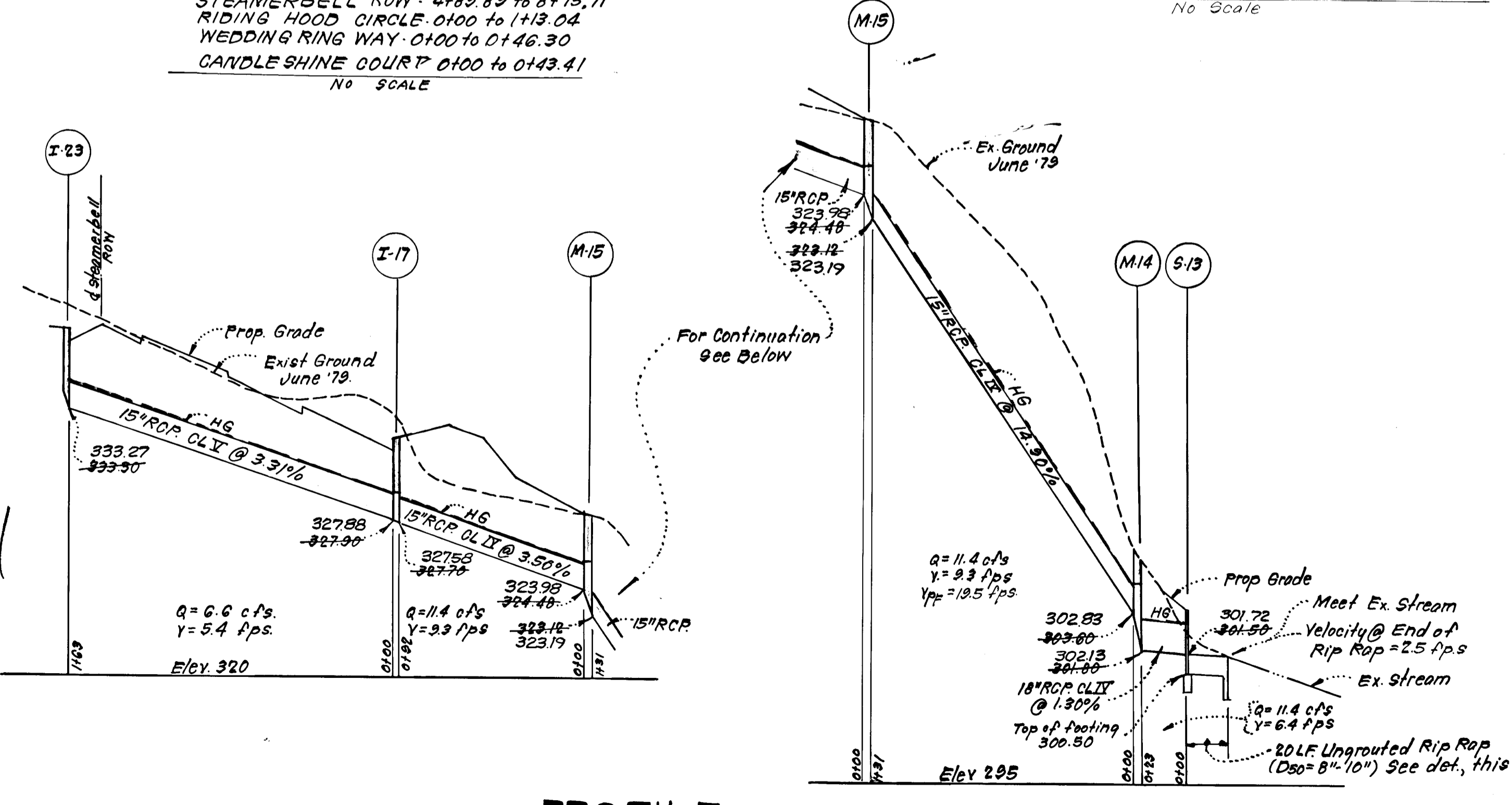
B-MANHOLE DETAIL
No Scale



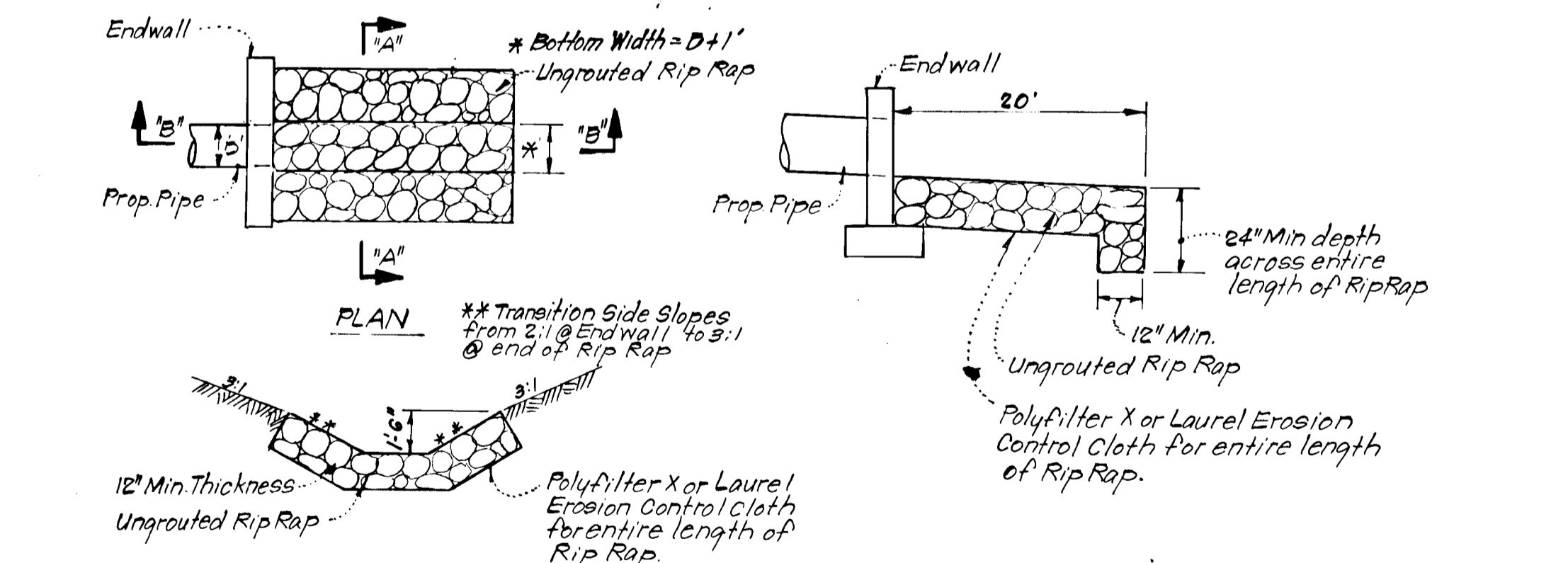
SECTION "A" "A"
No Scale



SIDEWALK RAMP DETAILS
No Scale



PROFILE
SCALE: Horiz. 1"=50'
Vert. 1"=5'



RIP RAP PAVING DETAILS AT S-13
No Scale

DEVELOPER'S CERTIFICATE
I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

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
and meets Technical Requirements
Signature
Date
U.S. Soil Conservation Service

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

William J. ... Approved
5-13-80

APPROVED: Department of Public Works

Chief Bureau of Engineering
APPROVED: Howard County Office of Planning and Zoning
SMBL Division of Land Development

CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

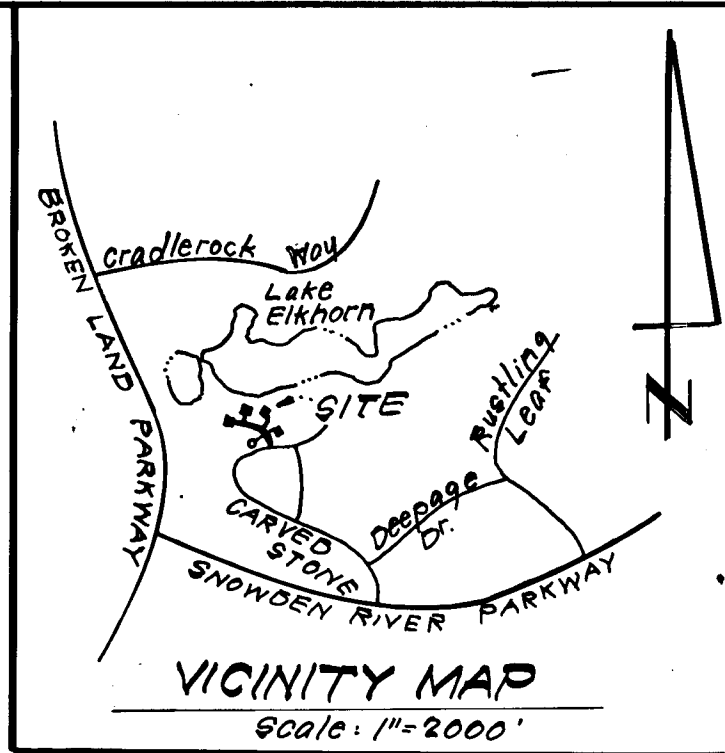
DESIGNED: R.J.S.
DRAWN: K.T.W.
CHECKED: R.J.S.
DATE: Apr 30, 1980

SCALE: As Shown
DRAWING: 3015
JOB NO.: 79-122
FILE NO.: 79-122-D

ROAD CONSTRUCTION PLAN
STORM DRAIN AND PAVING DETAILS
A RESUBDIVISION OF LOT A-232
COLUMBIA
VILLAGE OF OWEN BROWN
SECTION 2 AREA 1
8th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOR: Howard Research & Development Corp.
The Rouse Company Building
Columbia, Maryland 21044
AS-BUILT 11-11-83



Walter E. ... 2/22/80
Walter E. ...
G. Nelson Clark 1-6-80
G. Nelson Clark



- LEGEND:**
- 1. Existing Diversion Dike ——— D.D. ———
 - 2. Existing Straw Bale Dike or Silt Fence ——— S.B.D./S.F. ———
 - 3. Existing Stone Filter Inlet Protection (Symbol) S.F.I.P.
 - 4. Stone Filter Inlet Protection (Symbol) S.F.I.P.
 - 5. Existing Sediment Trap (Symbol)
 - 6. Prop. Contours 40'
 - 7. Existing Contour ——— 20' ———
- NOTE: EXISTING SEDIMENT CONTROL IS APPROVED UNDER F-79-20.

Ex. Trap #3 (ST-3)
 DA = 1.9 Acres
 Vol. Req'd: 3440 c.f.
 Vol. Provided: 3450 c.f.
 Bottom Elev. 327.0
 Crest Elev. 332.0
 Bottom Dimensions: 19'x40'

NOTE: Future Houses shown to justify ultimate drainage ridge lines.

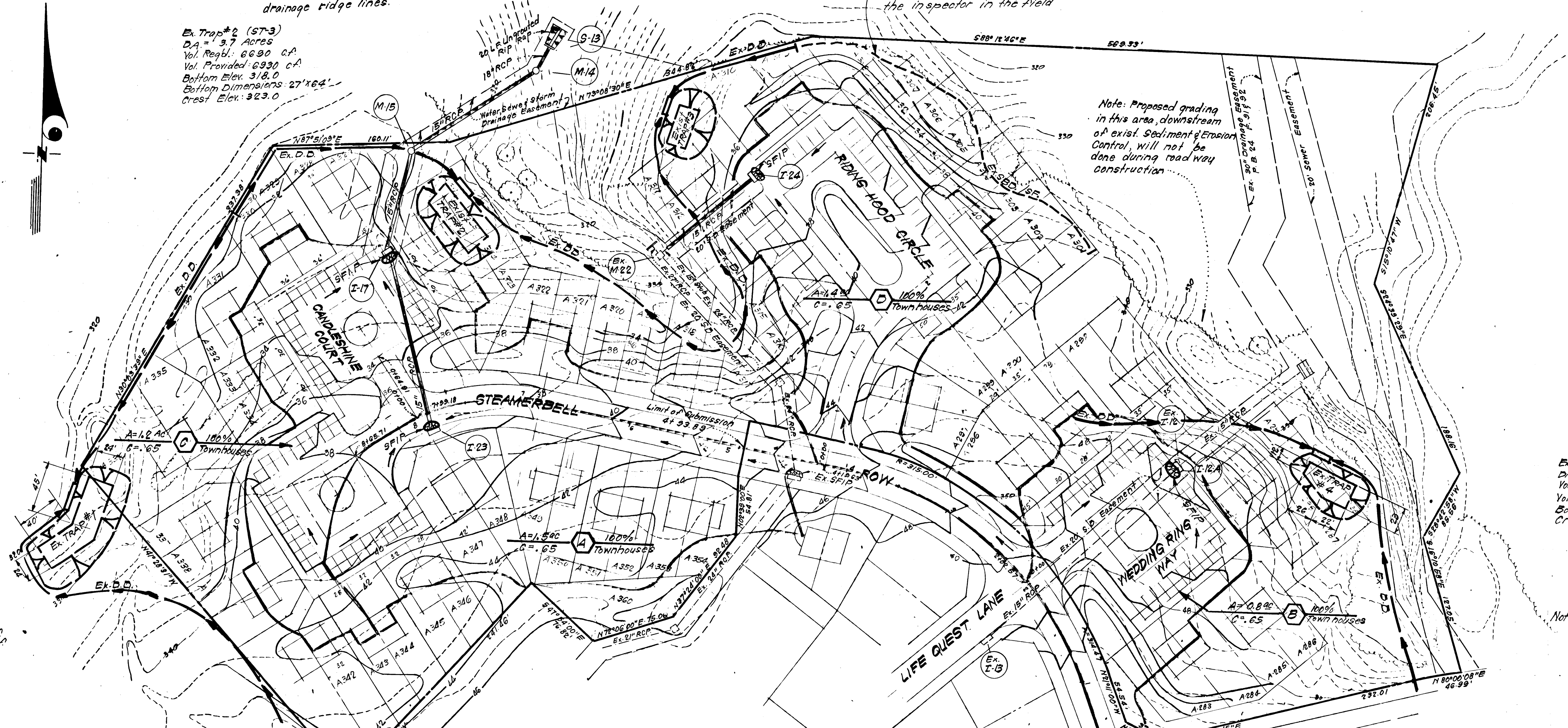
Note: Ex. S.B.D./S.F. will be replaced if required by the inspector in the field.

Note: Proposed grading in this area, downstream of exist. Sediment & Erosion Control, will not be done during road way construction.

Ex. Trap #4 (ST-3)
 DA = 3.6 Acres
 Vol. Req'd = 6510 c.f.
 Vol. Provided = 7250 c.f.
 Bottom Elev. = 328.0
 Crest Elev. = 333.0

Note: Ex. Sediment & Erosion Control Facilities shown, and to be used for the prop. construction, was approved under File No. F-79-20.

Ex. Trap #1 (ST-3)
 DA = 4.3 Acres
 Vol. Req'd = 7780 c.f.
 Vol. Provided = 8190 c.f.
 Bottom Elev. = 318.0



Reviewed for Howard E.C.D.
 Name
 and meets Technical Requirements
 Signature William T. Rouse Date 5/8/80
 U.S. Soil Conservation Service

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

DEVELOPER'S CERTIFICATE

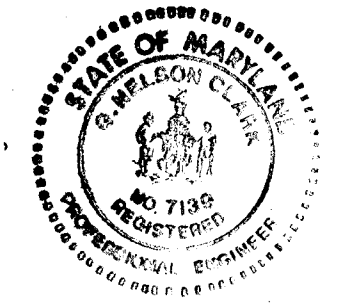
I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also certify that the plan has been inspected by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

Joseph H. Neckel, Jr. 2-22-80
 Joseph H. Neckel, Jr. 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.

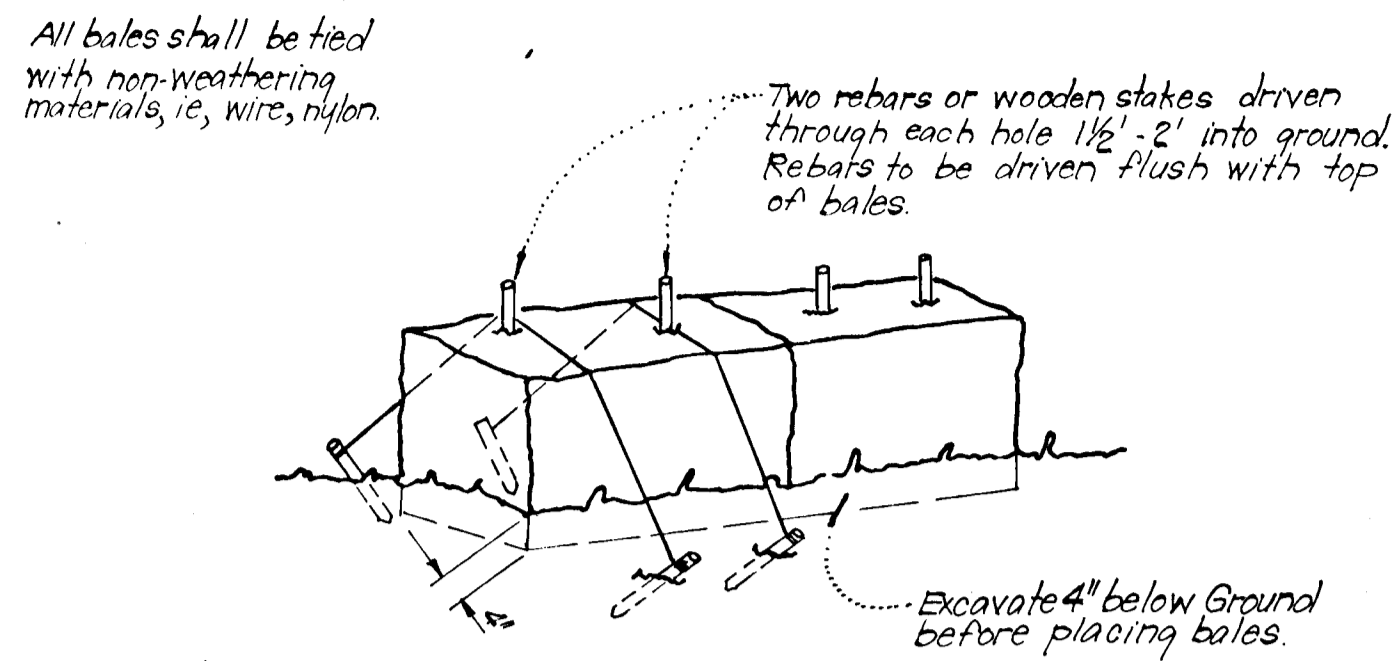
G. Nelson Clark 1-6-80
 G. Nelson Clark Date



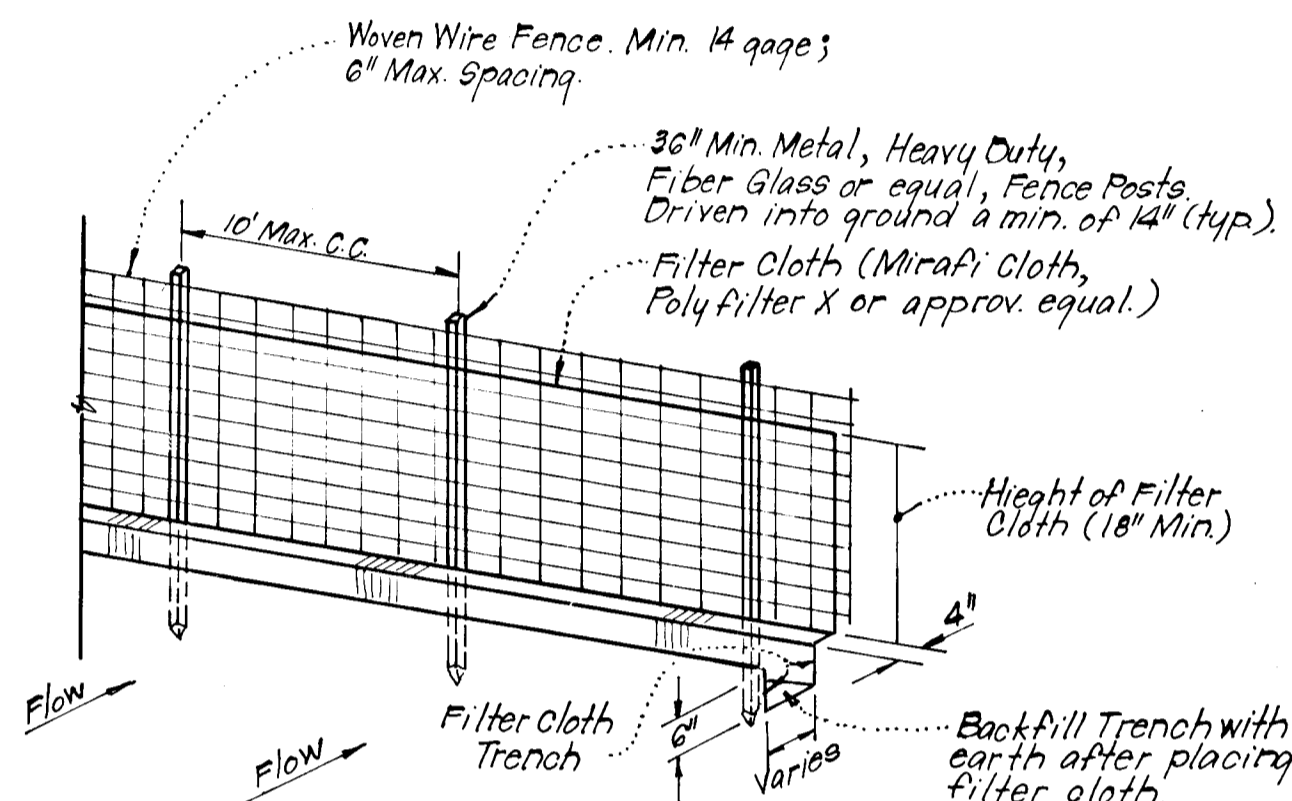
APPROVED: Department of Public Works		
<u>William E. Rouse</u> Chief, Bureau of Engineering		S-13-80 Date
APPROVED: Howard County Office of Planning and Zoning		
<u>Howard County</u> Chief, Division of Land Development		Date
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS		
11135 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593 3400		
DESIGNED	R.O.S.	SCALE 1"=50'
DRAWN	R.O.S.	DRAWING 4015
CHECKED	K.I.W.	JOB NO. 79-122
DATE	R.O.S.	FILE NO. 79-122-D
ROAD CONSTRUCTION PLANS DRAINAGE AREA MAP & SEDIMENT & EROSION CONTROL PLAN A RESUBDIVISION OF LOT A-232 COLUMBIA VILLAGE OF OWEN BROWN SECTION 2 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: THE Howard Research & Development Corp. The Rouse Company Building Columbia, Maryland 21044		

GENERAL NOTES

- Grading Permits shall be obtained prior to installation of Sediment Control & Grading.
- All Sediment and Erosion Control Measures will be installed and stabilized according to this plan prior to any other grading, clearing or disturbance of the existing surface of the site. See note #6 for stabilization except that the seed mixture will be annual rye applied at a rate of 1.4 lbs/1000 sq ft.
- Notify the Bureau of Inspections and Permits at least 24 hrs before starting any work.
- All Sediment Control Practices to conform to the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" and shall be adjusted to meet actual field conditions.
- Stabilization of Disturbed ground to be done as soon after construction as possible.
- All grading shall be treated in accordance with the following Specifications:
 - Seed - certified 85% germination applied at the rate of 9 lbs/1000 sq ft. Mixture - 40% Kentucky Blue, 20% Chewing Fescue, 20% Kentucky 31 and 20% annual rye.
 - Fertilizer - 10-10-10 applied at a rate of 23 lbs/1000 sq ft. Ground Agricultural Lime or Dolomitic Lime applied at a rate of 90 lbs/1000 sq ft.
 - Mulch - Weed free grain straw applied at a rate of 70 lbs/1000 sq ft. Mulch shall be secured to the ground by any approved method i.e.; asphalt tacks, chemical binder, etc.
 - All Sod used shall be Maryland State Certified.
- All Structural Sediment Control Measures are to remain in place until permission for their removal has been obtained from the Bureau of Inspections and Permits.
- On-Site Inspection and Maintenance of all Sediment Control Measures including clean out of Sediment Traps and dikes, and proper establishment of all planned vegetative measures will be the responsibility of the developer or his representative on the site, on a continuing day to day basis.
- It will be the developers responsibility to provide additional Sediment & Erosion Control Devices to protect stabilized areas during construction.
- The Contractor shall keep all public roads free of sediment deposits left from traffic leaving construction site.
- Stabilized Construction Entrances shall be placed at all construction entrances.
- CONSTRUCTION SEQUENCE:**
 - Grading Permits shall be obtained prior to any installation of Sediment Control or Grading.
 - All existing sediment control shall be maintained to insure their intended purpose is accomplished.
 - Grade roadways as necessary to properly install storm drainage.
 - Install utilities, storm drainage and block inlets with S.F.I.P's.
 - Fine Grade and Pave roadways and parking areas.
 - Stabilize all disturbed areas in accordance with note #6.
 - Remove sediment and erosion control devices after all areas draining to them have been stabilized.
- Approval of this plan is conditional upon the approval of Sediment Control Plan for the off-site waste or borrow area prior to the import of any borrow or export of waste to or from this site.

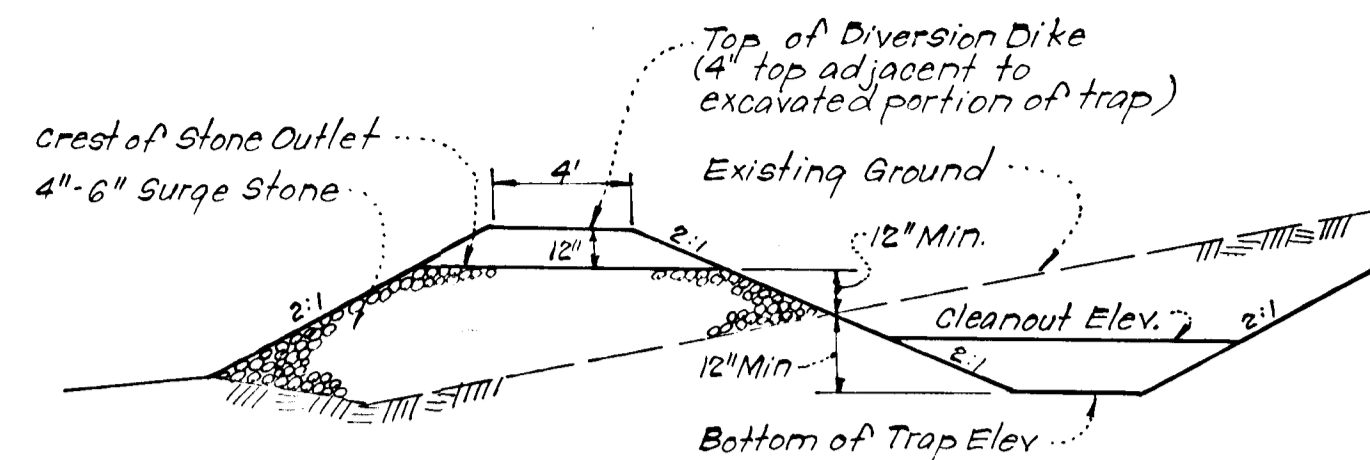


TYPICAL STRAW BALE DIKE DETAIL (S.B.D.)
No Scale



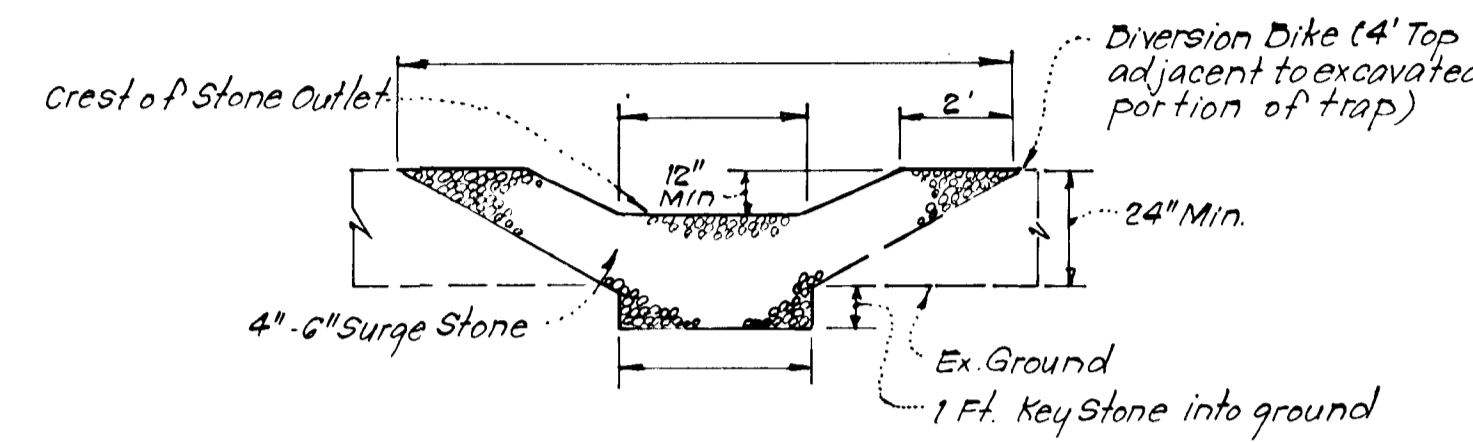
- Notes:
- Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
 - Filter Cloth to be fastened securely to Woven Wire, by use of wire ties spaced every 24"x24"

TYPICAL SILT FENCE DETAIL (S.F.)
No Scale



Note: For Dimensions not shown, see plan.

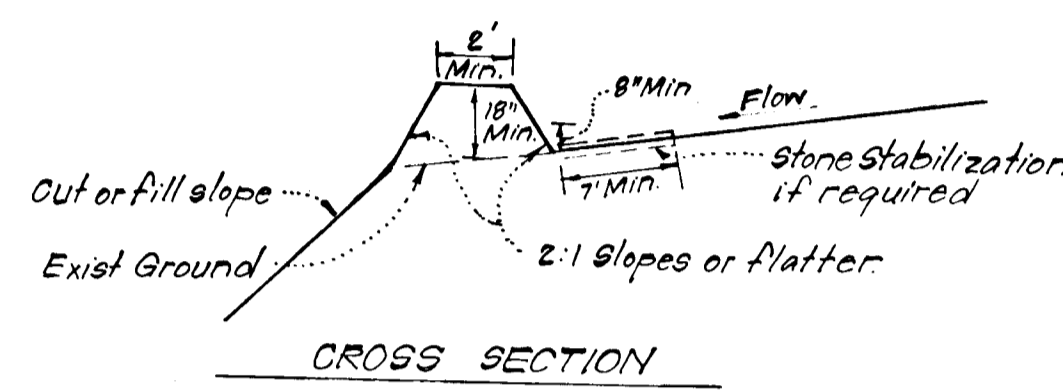
PROFILE



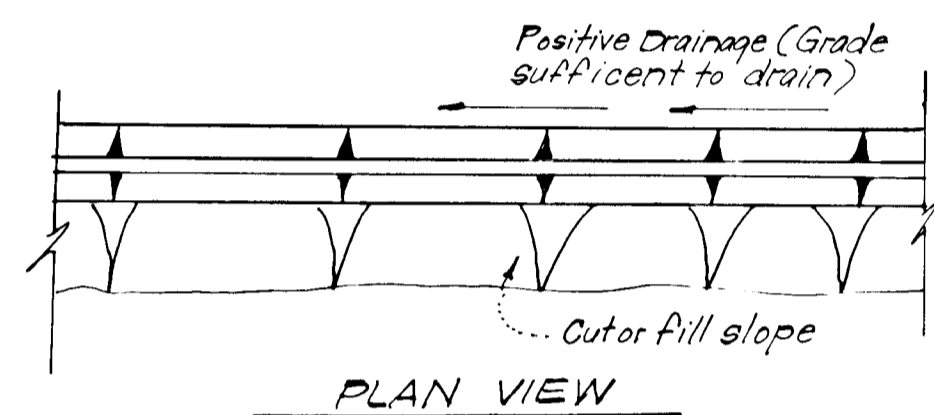
CROSS SECTION

- Notes:
- Sediment Trap to be cleaned out when sediment reaches a level of 1 ft below crest of stone outlet.
 - Bottom of Sediment Trap to be level and constructed to the dimensions shown on plan.
 - Stone Outlet to be constructed through diversion dike adjacent to excavated portion of sediment trap.

DETAILS OF STONE FILTER OUTLET (FOR STONE OUTLET SEDIMENT TRAP)
No Scale

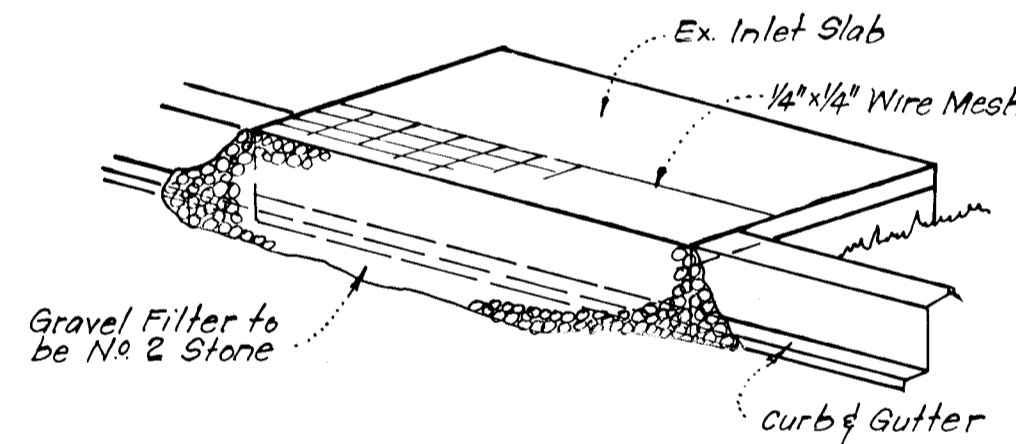


CROSS SECTION

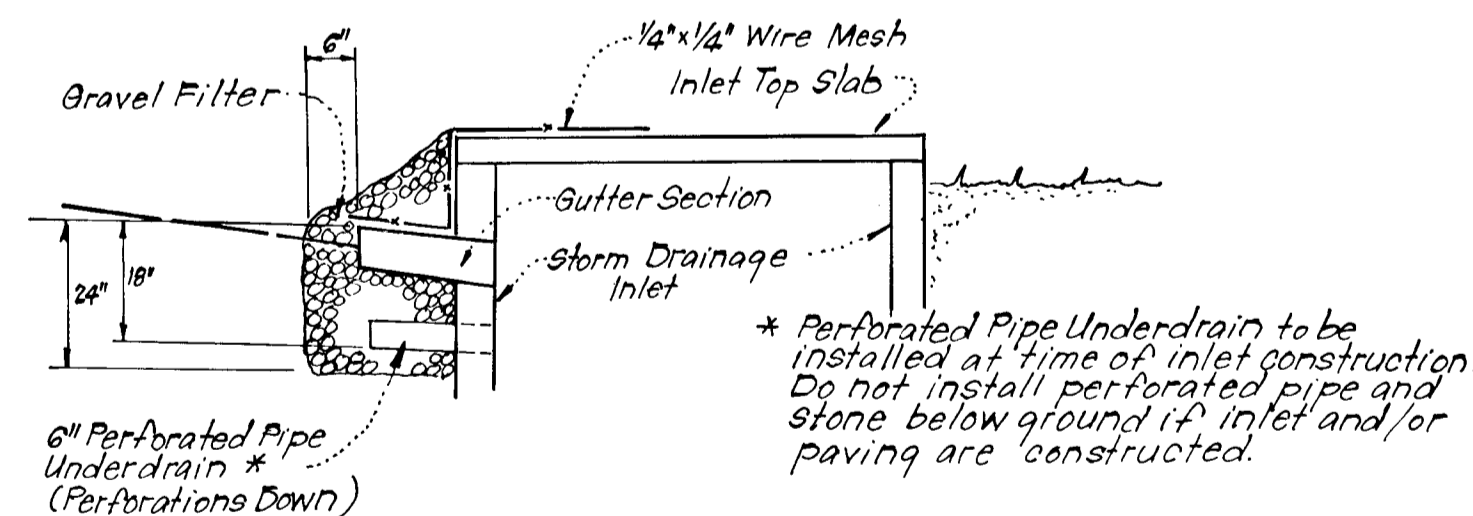


PLAN VIEW

TYPICAL DIVERSION DIKE DETAIL (D.D.)
No Scale

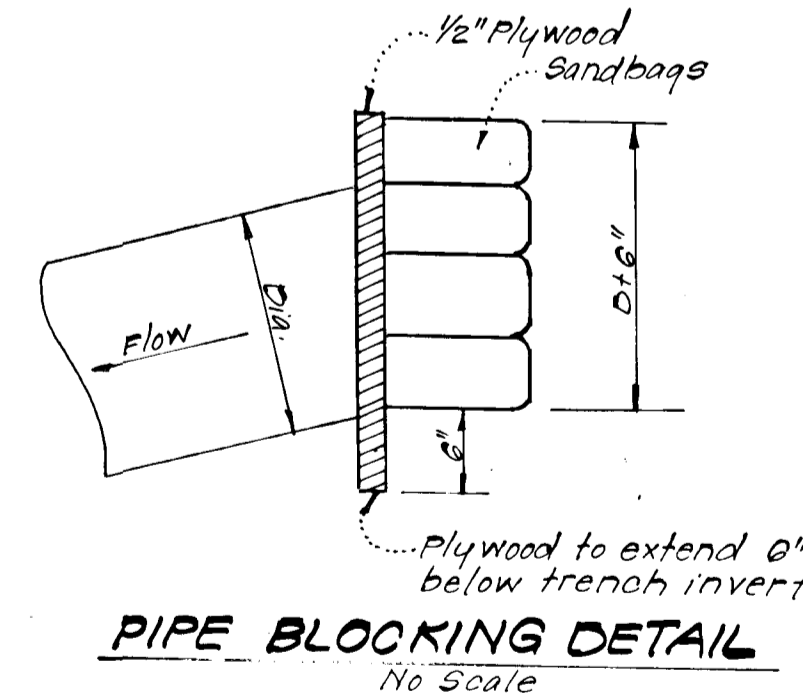


ISOMETRIC VIEW

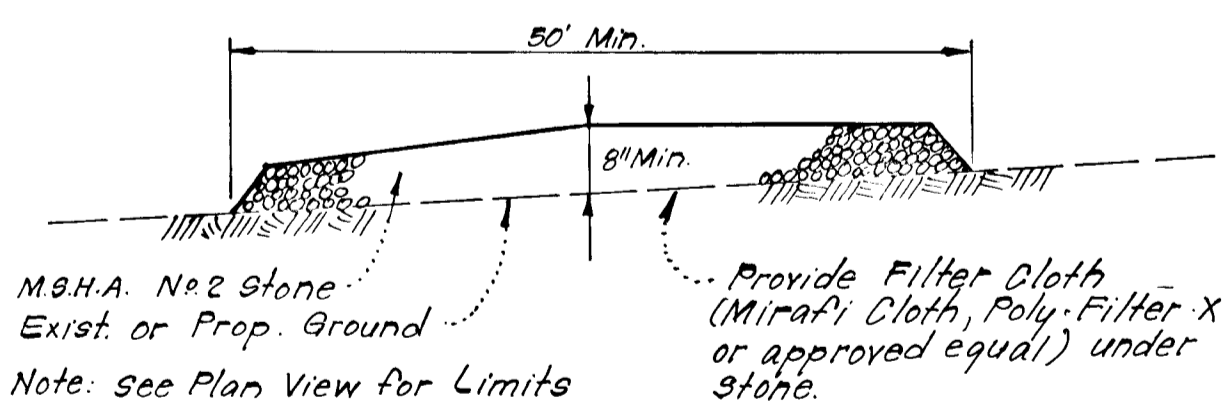


SECTION VIEW

STONE FILTER INLET PROTECTION (S.F.I.P.)
No Scale



PIPE BLOCKING DETAIL
No Scale



SECTION VIEW

STABILIZED CONSTRUCTION ENTRANCE
No Scale

Reviewed for: HOWARD S.C.D.
Name
and meets Technical Requirements
William E. Woodford 5-8-80
Signature Date
U.S. Soil Conservation Service

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

William E. Woodford 5-8-80
Approved Date

DEVELOPER'S CERTIFICATE

I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

William E. Woodford 2/22/80
Signature Date
Walter E. Woodford

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.

G. Nelson Clark 1-6-80
Signature Date
G. Nelson Clark



APPROVED: Department of Public Works

William E. Woodford 5-13-80
Chief, Bureau of Engineering Date

APPROVED: Howard County Office of Planning and Zoning

William E. Woodford 5-13-80
Chief, Division of Land Development Date

CLARK • FINEROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593 3400

DESIGNED R.J.S.	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL DETAILS A RESUBDIVISION OF LOT A 232	SCALE As Shown
DRAWN K.I.W.		5 of 5
CHECKED R.J.S.	COLUMBIA VILLAGE OF OWEN BROWN SECTION 2 AREA ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 79-122
DATE Apr 30, 1980		FILE NO. 79-122-D