

Reviewed for HOWARD Co. S.C.D.
Name
and meets Technical Requirements
Signature: *James M. Kenna* 8/10/81
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. Davis 8-10-81
Approved Date

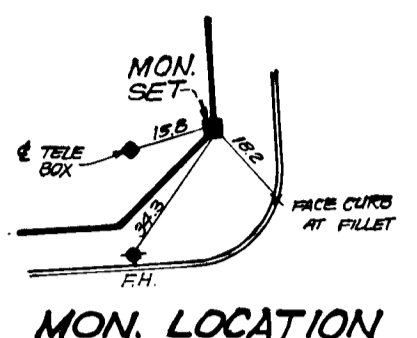
DEVELOPER/BUILDER'S CERTIFICATE

"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."

Dennis M. Rush
Signature of Developer/Builder
Dennis M. Rush

4/17/81
Date

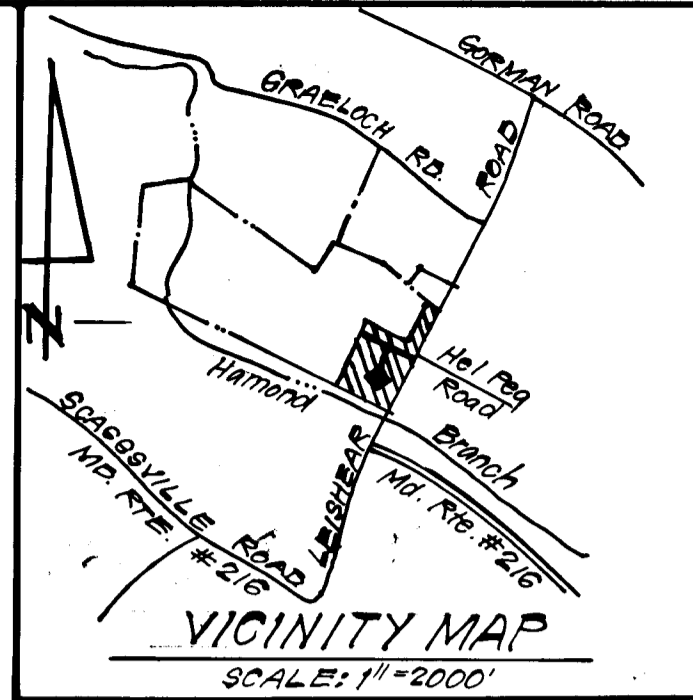
CURBS & GUTTER LEGEND:
Std. 7" Comb. Curb & Gutter
Rev. 7" Comb. Curb & Gutter
Reverse 6" Comb. Curb & Gutter
*Elev. indicates 100 Yr. Flood Plain Elevation.



PLAN
SCALE: 1"=50'

GENERAL NOTES

- All storm drain & paving shall be constructed in accordance with the latest details and specifications of Howard Co. & Md. SHA.
- 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 Sidewalk Ramps in Curbs, where shown in plan (Max. 12:1 Slope) See Ho. Co. Std. Sidewalk Ramp Type A-R-4.0.
- Minimum Cover of 1' shall be provided over storm drain pipes in all areas not being final graded by these plans.
- Design Speed: 40mph, Glen Hannah, 25mph Saddlebrook Ct.



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.
Dina Clark 6-17-81
6 Nelson Clark Date

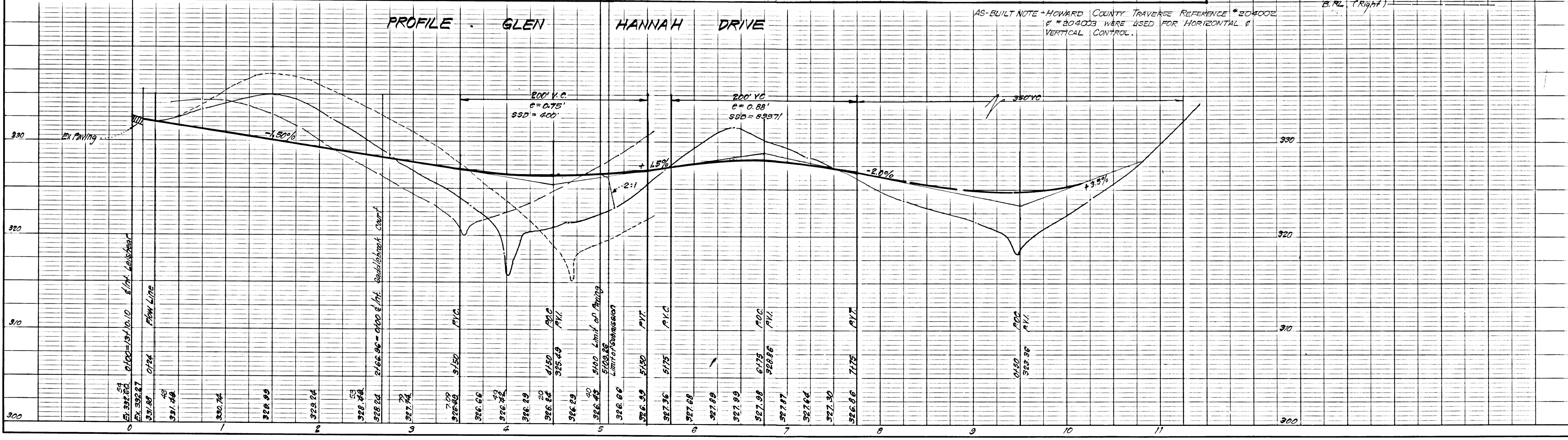
NO.	REVISIONS	DATE
1	Deleted Modified Curb & Gutter, and revised top of curb elevations.	11-9-81
APPROVED: Department of Public Works		
<i>Donald Sackett</i> 8-17-81 Chief, Bureau of Engineering		
APPROVED: Howard County Office of Planning and Zoning		
<i>John F. Traylor</i> 8-11-81 Chief, Division of Land/Development & Planning Administration		
 CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 1115 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400		
DESIGNED	ROAD CONSTRUCTION PLANS	SCALE
D.A.B.	GLEN HANNAH DRIVE AND LEISHEAR ROAD	As Shown
DRAWN	MURRAY HILL	DRAWING
K.I.W.		1 OF 5
CHECKED	SECTION TWO	JOB NO.
D.A.B.	6TH ELECTION DISTRICT	81-006
DATE	FOR: BRANTLY ASSOCIATES	FILE NO.
6-17-81	Teachers Building Suite 218	81-006-D
	Columbia, Md 21044	



AS-BUILT NOTE
AS-BUILT SURVEY CERTIFIED BY DONALD SACKETT, MD. LAND SURVEYOR-NO. 6059

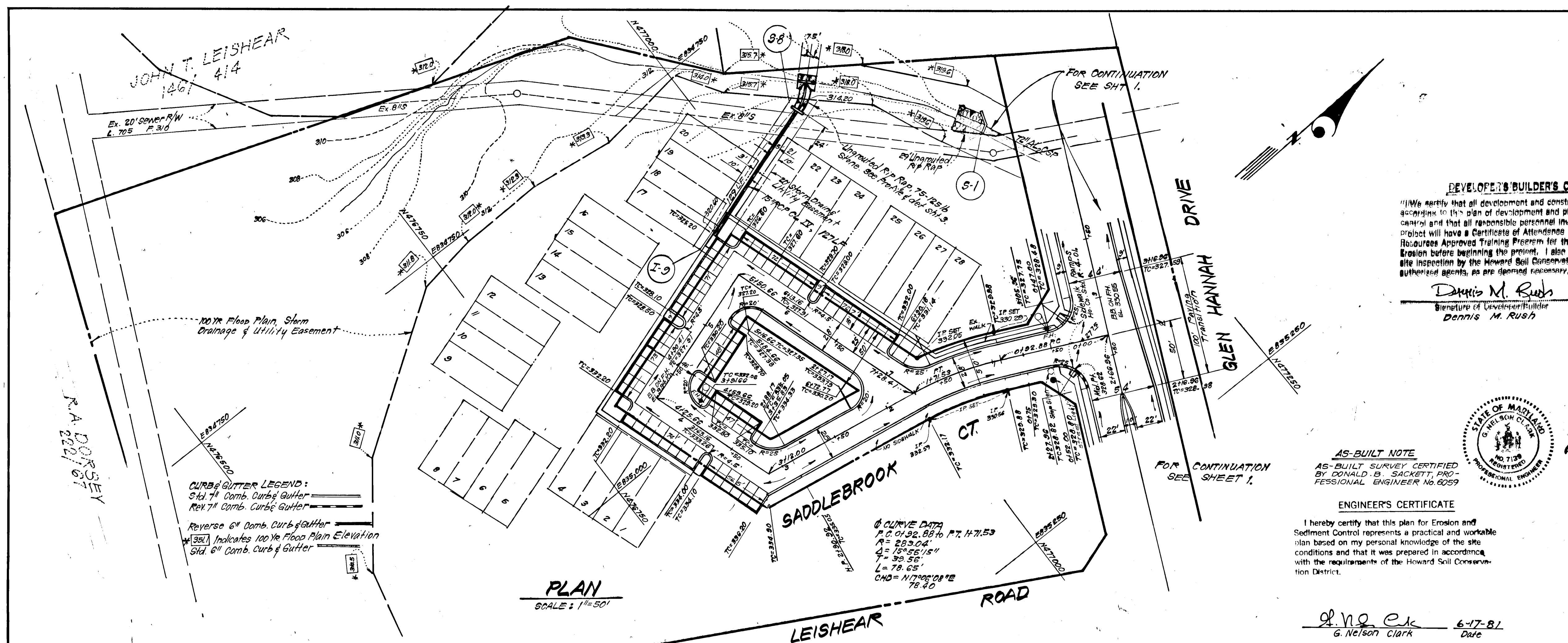
PROFILE SCALE
Hori: 1"=50'
Ver: 1"=5'

PROFILE LEGEND
EXISTING & B.R.L. (Left)
B.R.L. (Right)



AS-BUILT OCT, 1983

#908



NO.	REVISION	DATE
1	Deleted Modified Curb & Gutter, and revised top of curb elevations.	11-9-81
2	Deleted Sidewalk East Side Saddlebrook Court Sta. 0+00 to Sta. 3+70	7-15-83

DEVELOPER'S/BUILDER'S CERTIFICATE

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Dennis M. Rush
Signature of Developer/Builder
Dennis M. Rush

6/17/81
Date

Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
Jane Maloney 8/2/81
Signature
U.S. Soil Conservation Service

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

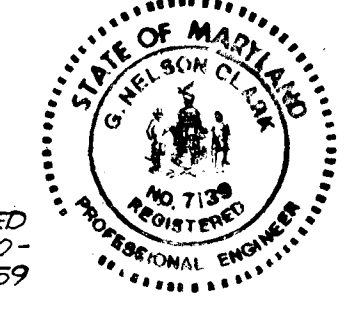
William Stone 8-10-81
Approved
Date

APPROVED: Department of Public Works

William S. Row 8-17-81
Chief, Bureau of Engineering
Date

APPROVED: Howard County Office of Planning and Zoning

J. F. Hughes (Acting Chief) 8-11-81
Chief, Division of Land Development & Zoning Administration
Date



AS-BUILT NOTE
AS-BUILT SURVEY CERTIFIED BY DONALD B. SACKETT, PROFESSIONAL ENGINEER NO. 6059

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 6-17-81
Date

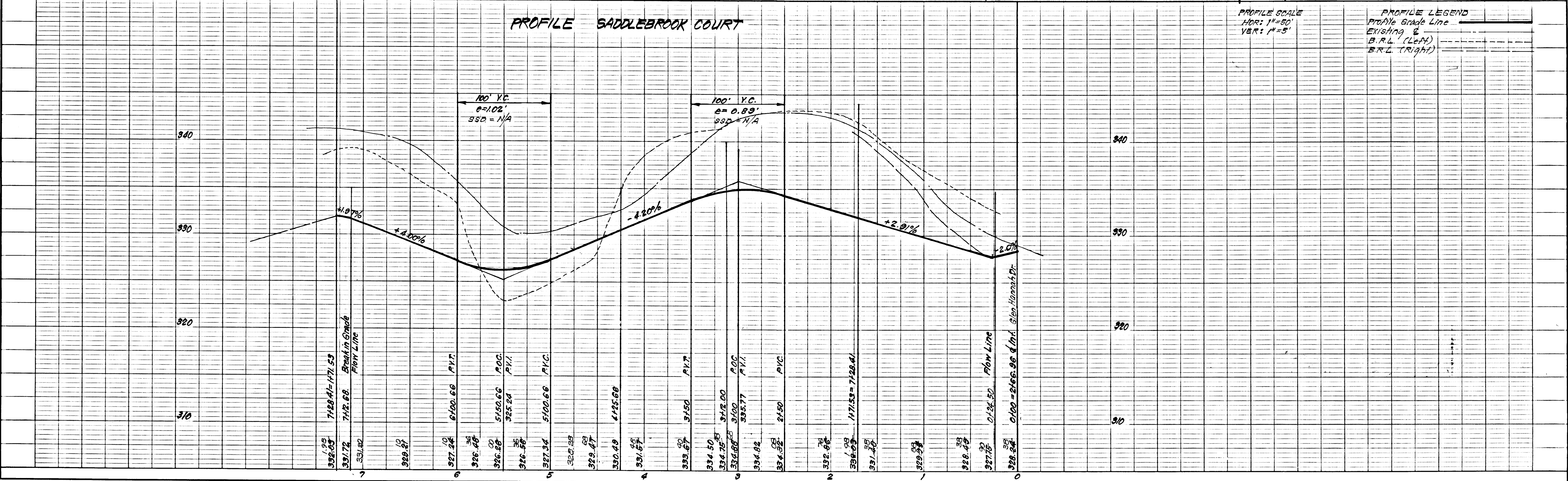
CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

DESIGNED DAB	ROAD CONSTRUCTION PLANS SADDLEBROOK COURT	SCALE As Shown
DRAWN K.I.W.	MURRAY HILL	DRAWING 20F5
CHECKED DAB	SECTION TWO 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 81-006
DATE 6-17-81	FOR: BRANTLY ASSOCIATES Teachers Building, Suite 218 Columbia, Maryland 21044	FILE NO. 81-006-D

CURB & GUTTER LEGEND:
Std. 4" Comb. Curb & Gutter
Rev. 7" Comb. Curb & Gutter
Reverse 6" Comb. Curb & Gutter
*30" Indicates 100 Yr. Flood Plain Elevation
Std. 6" Comb. Curb & Gutter

PLAN
SCALE: 1/4"=50'

PROFILE SADDLEBROOK COURT



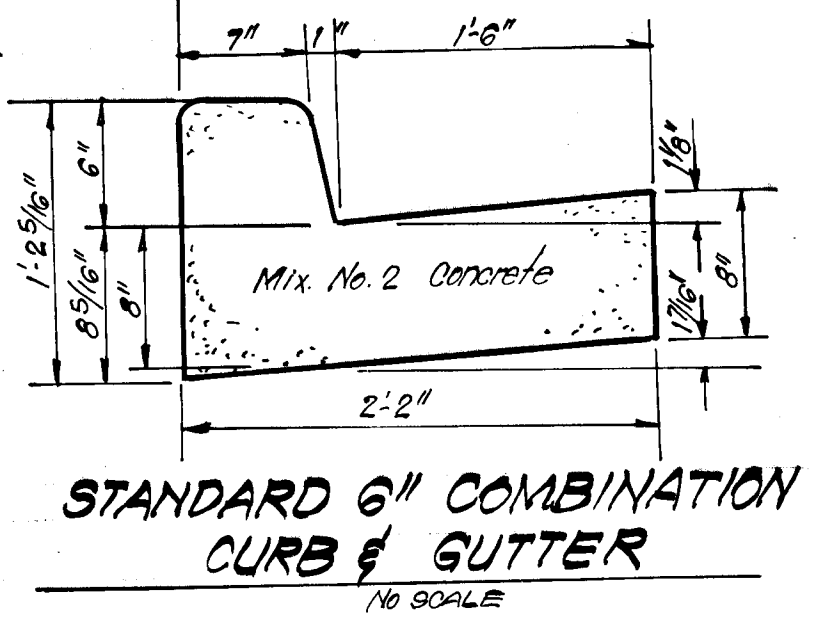
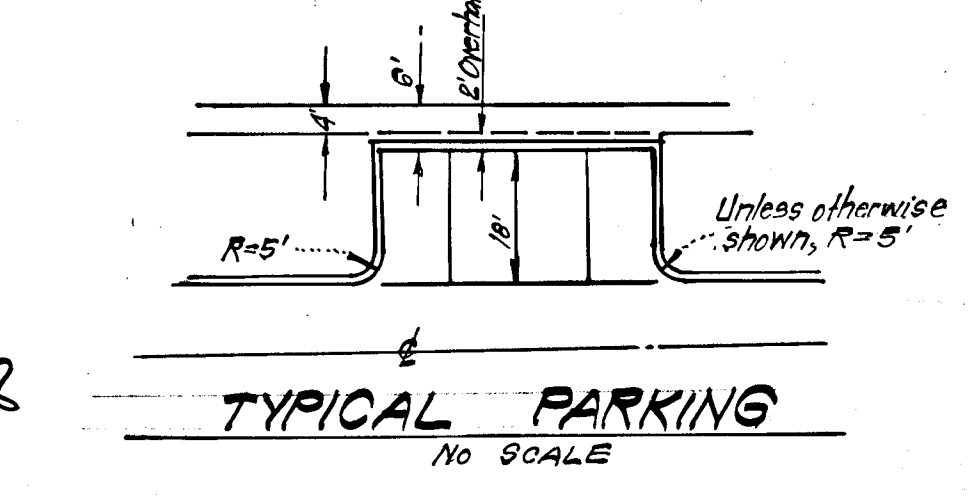
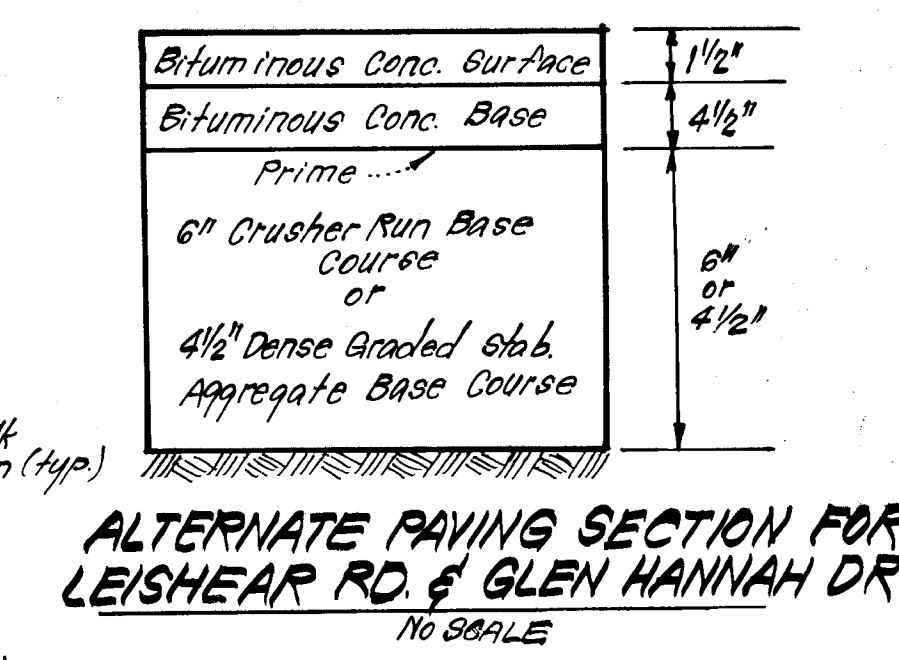
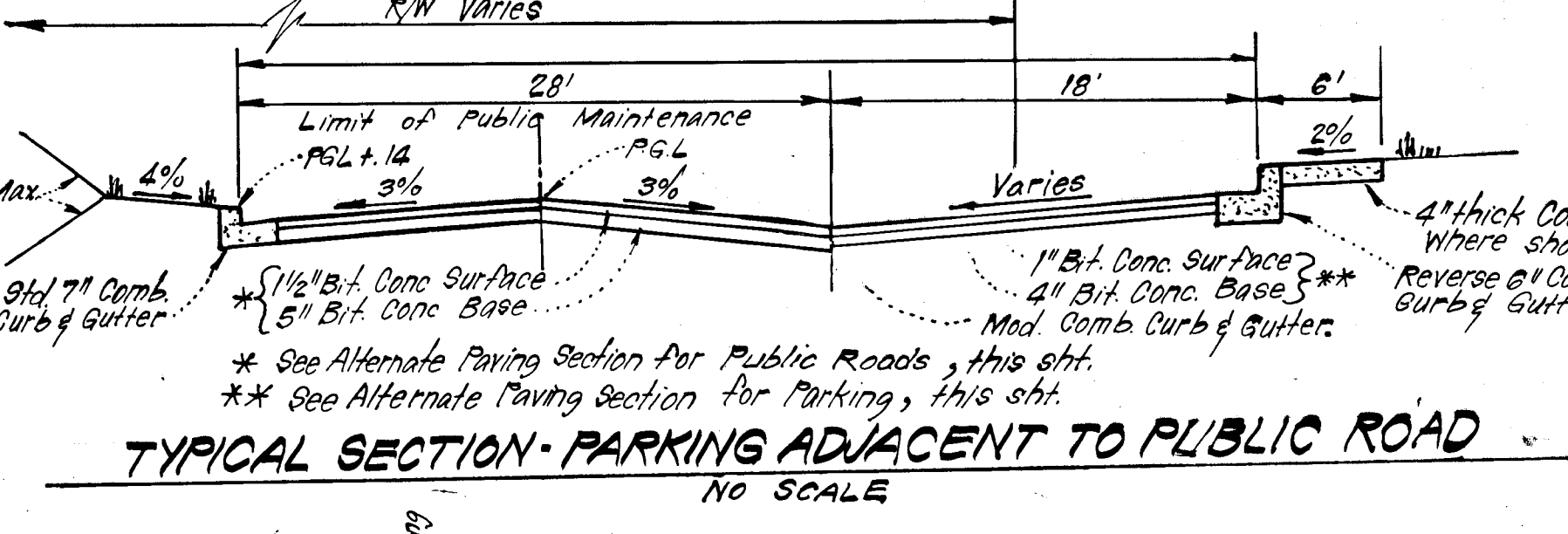
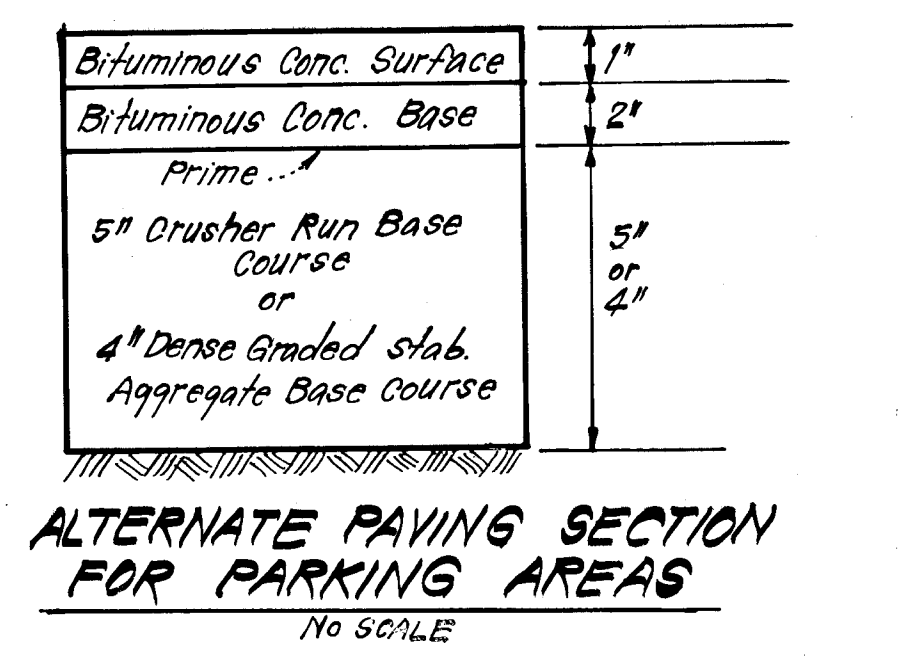
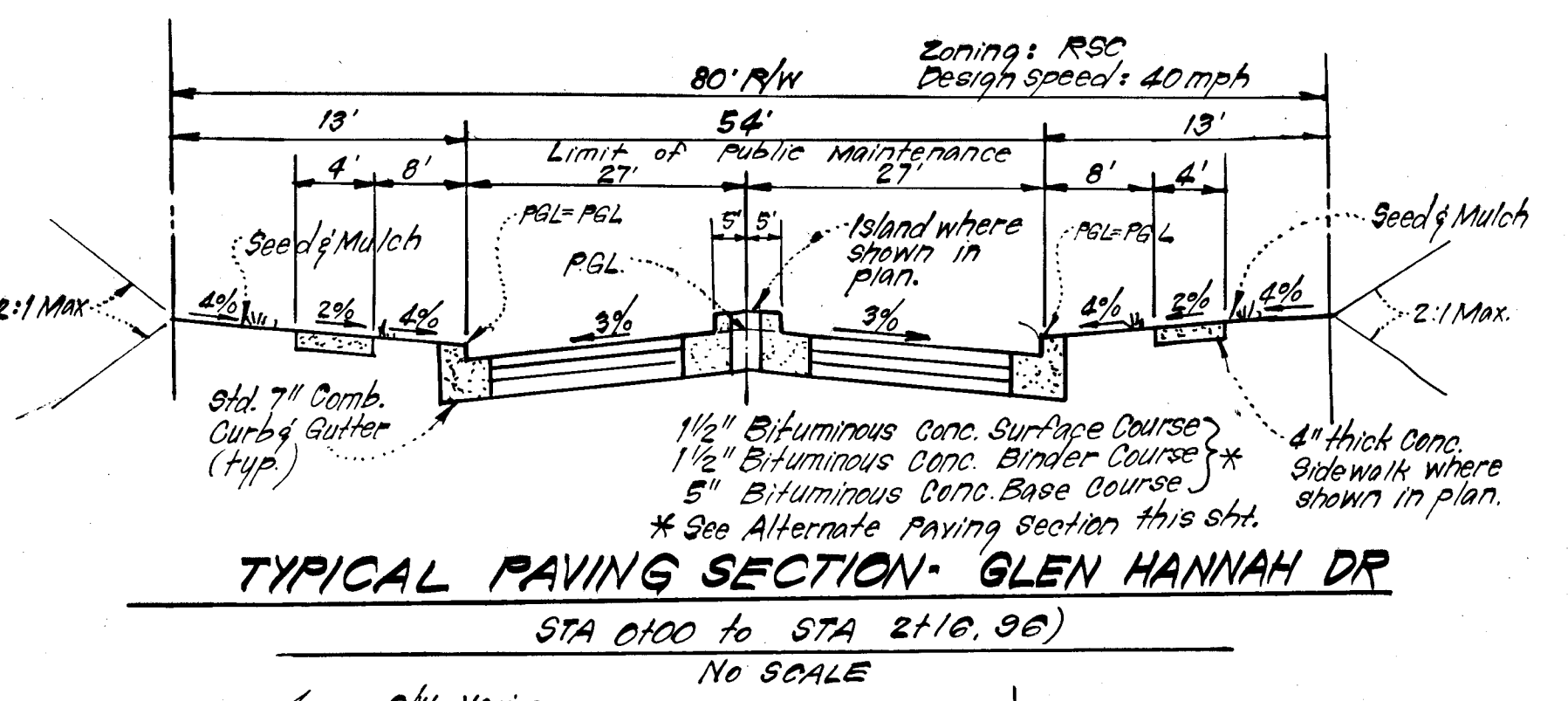
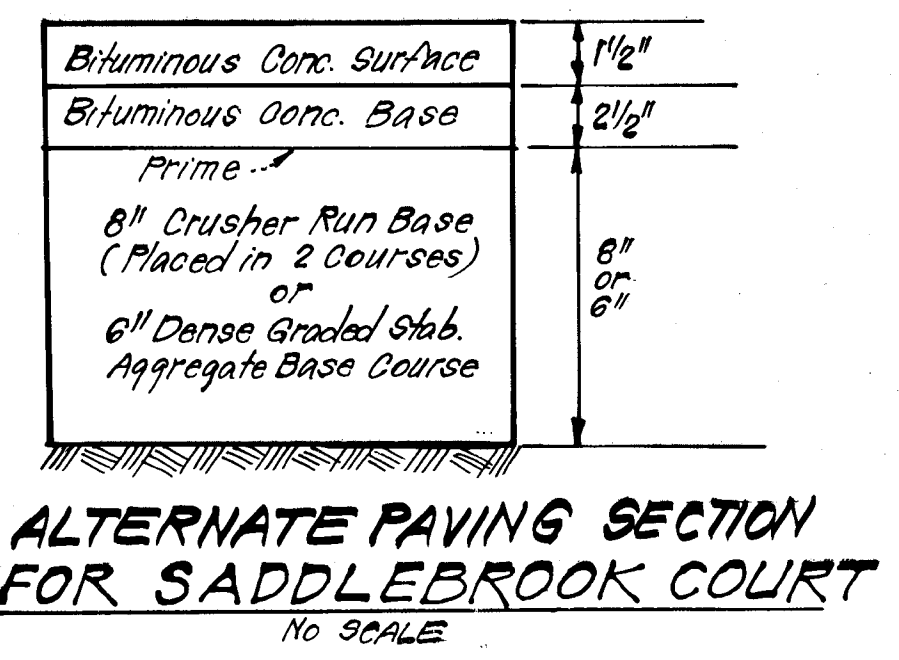
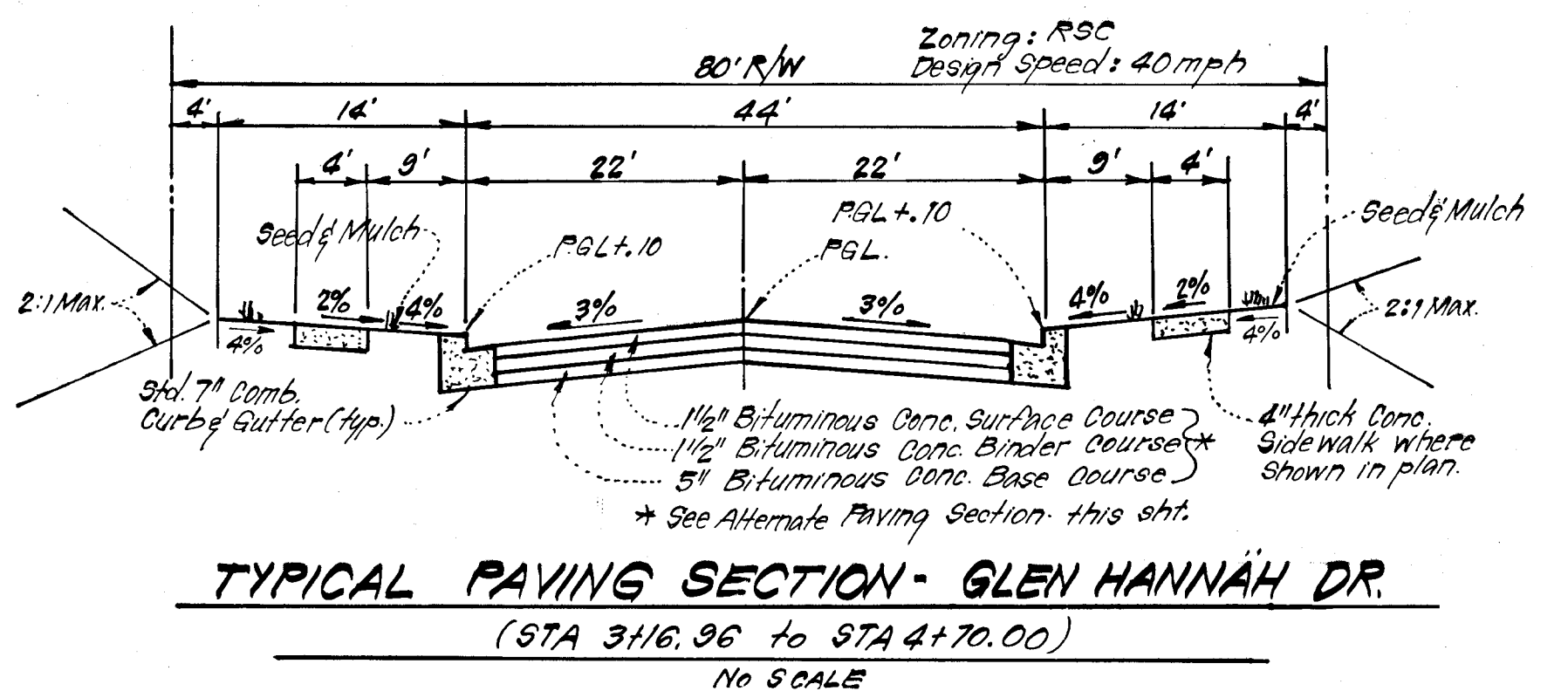
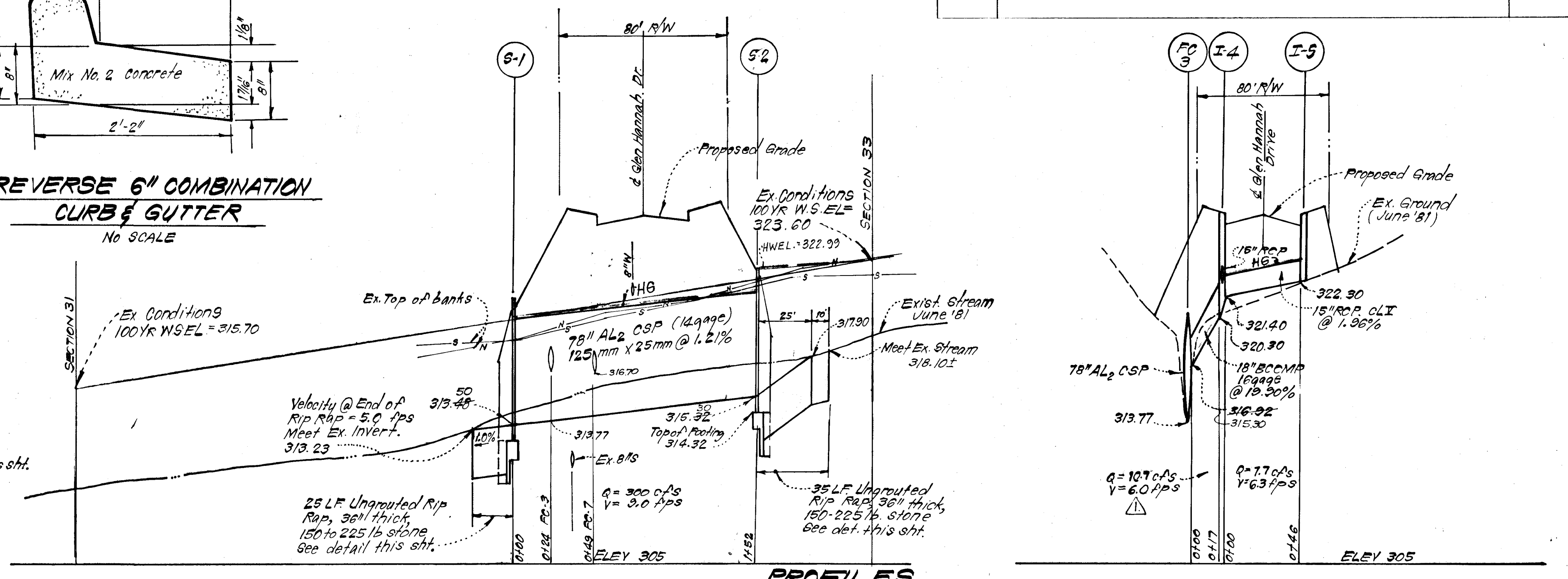
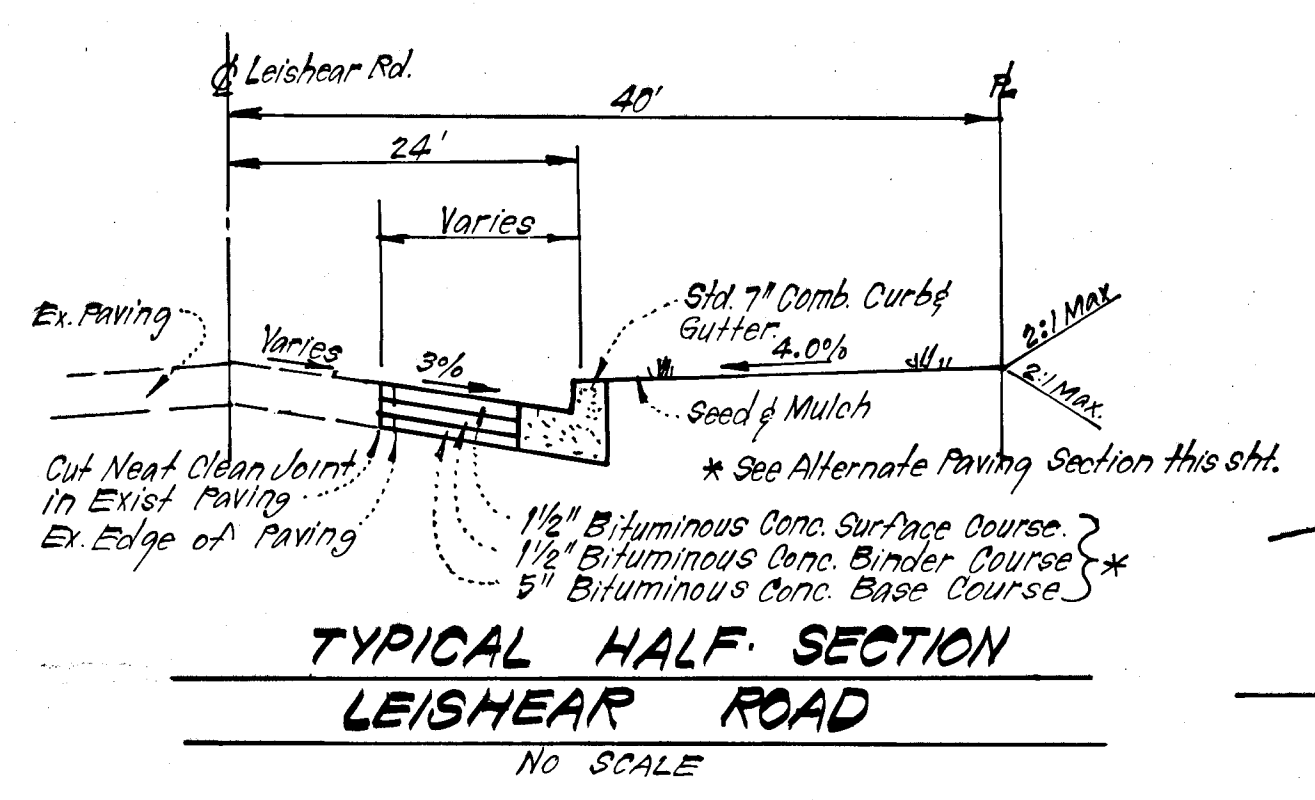
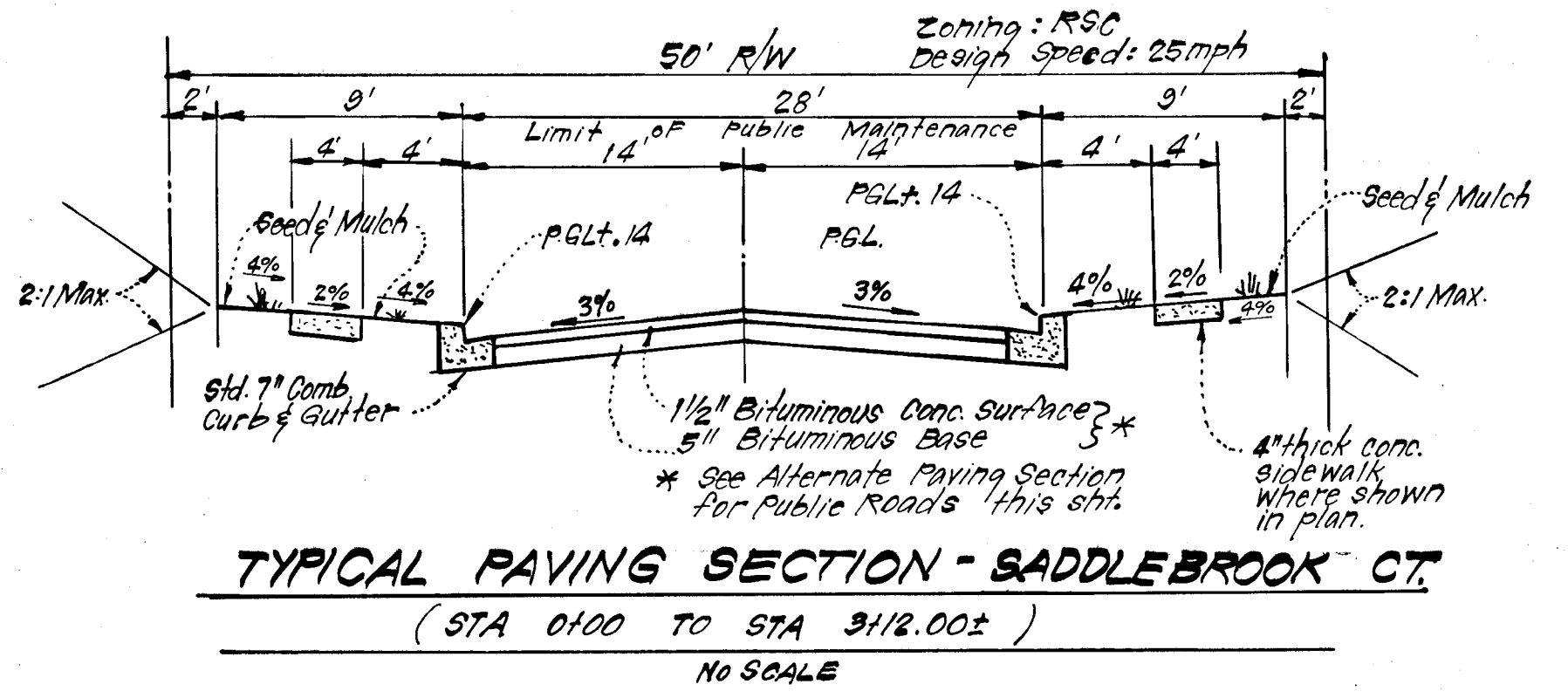
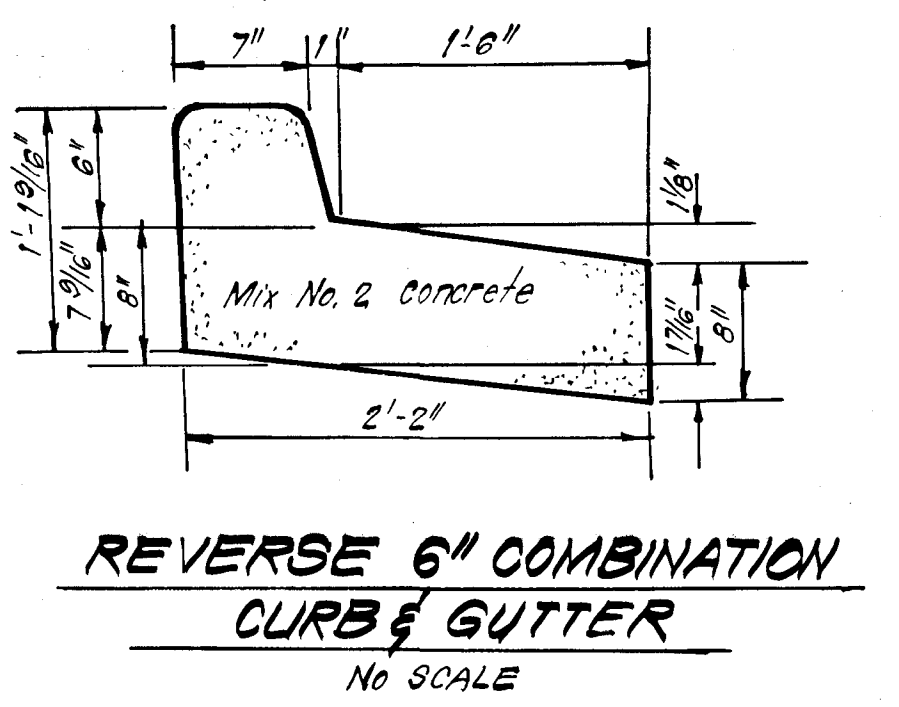
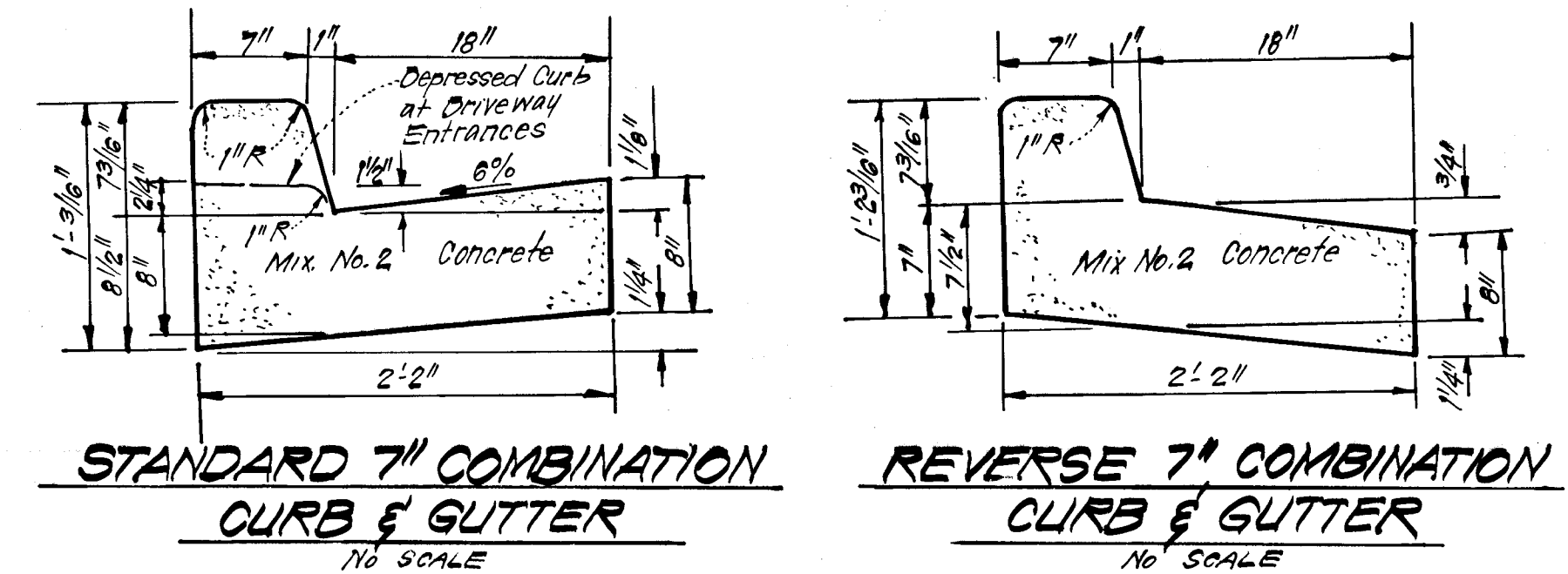
PROFILE SCALE
HOR: 1"=50'
VER: 1"=5'

PROFILE LEGEND
Profile Grade Line
Existing G.
B.R.L. (Left)
B.R.L. (Right)

AS-BUILT OCT, 1983

F-81-143

NO.	REVISION	DATE
1	Deleted Modified Curb & Gutter, and revised top of curb elevations.	11-9-81

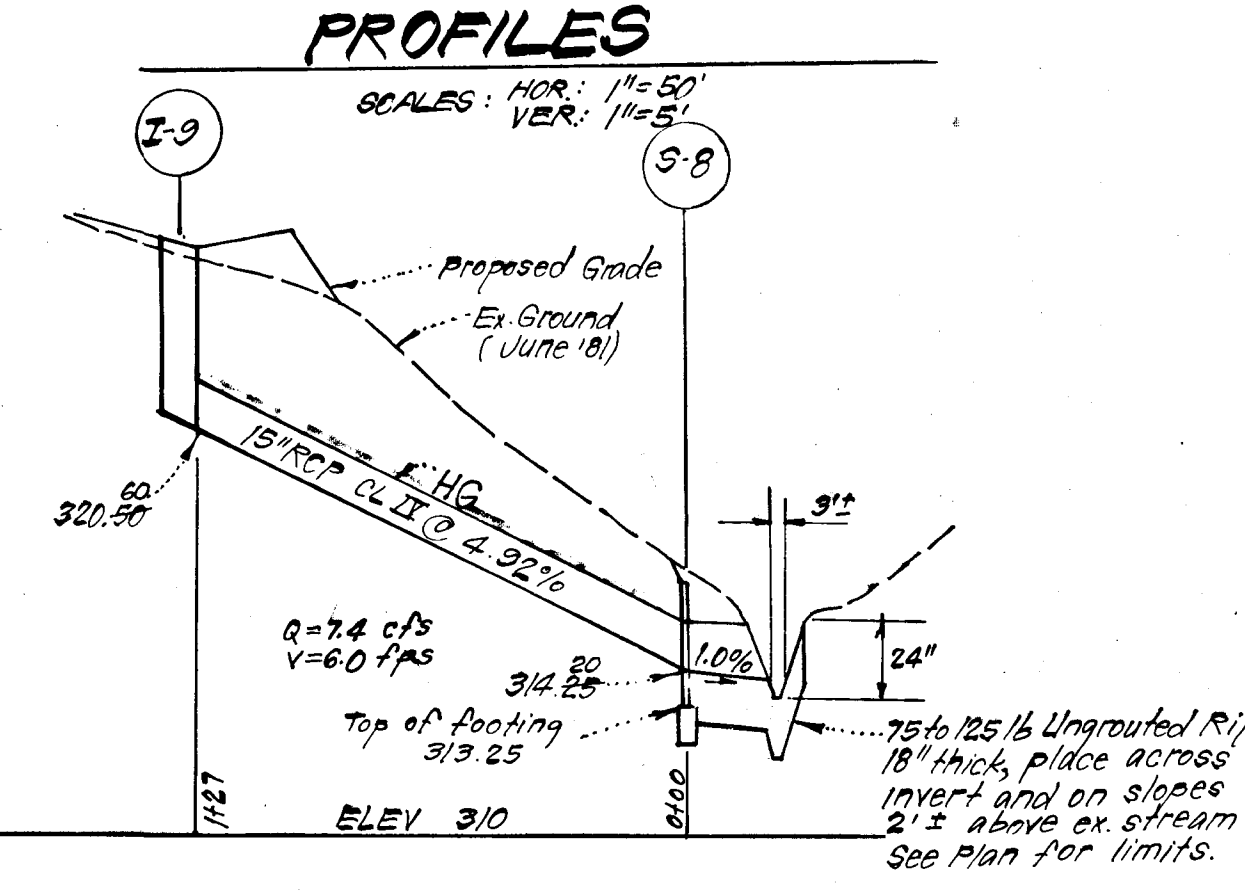
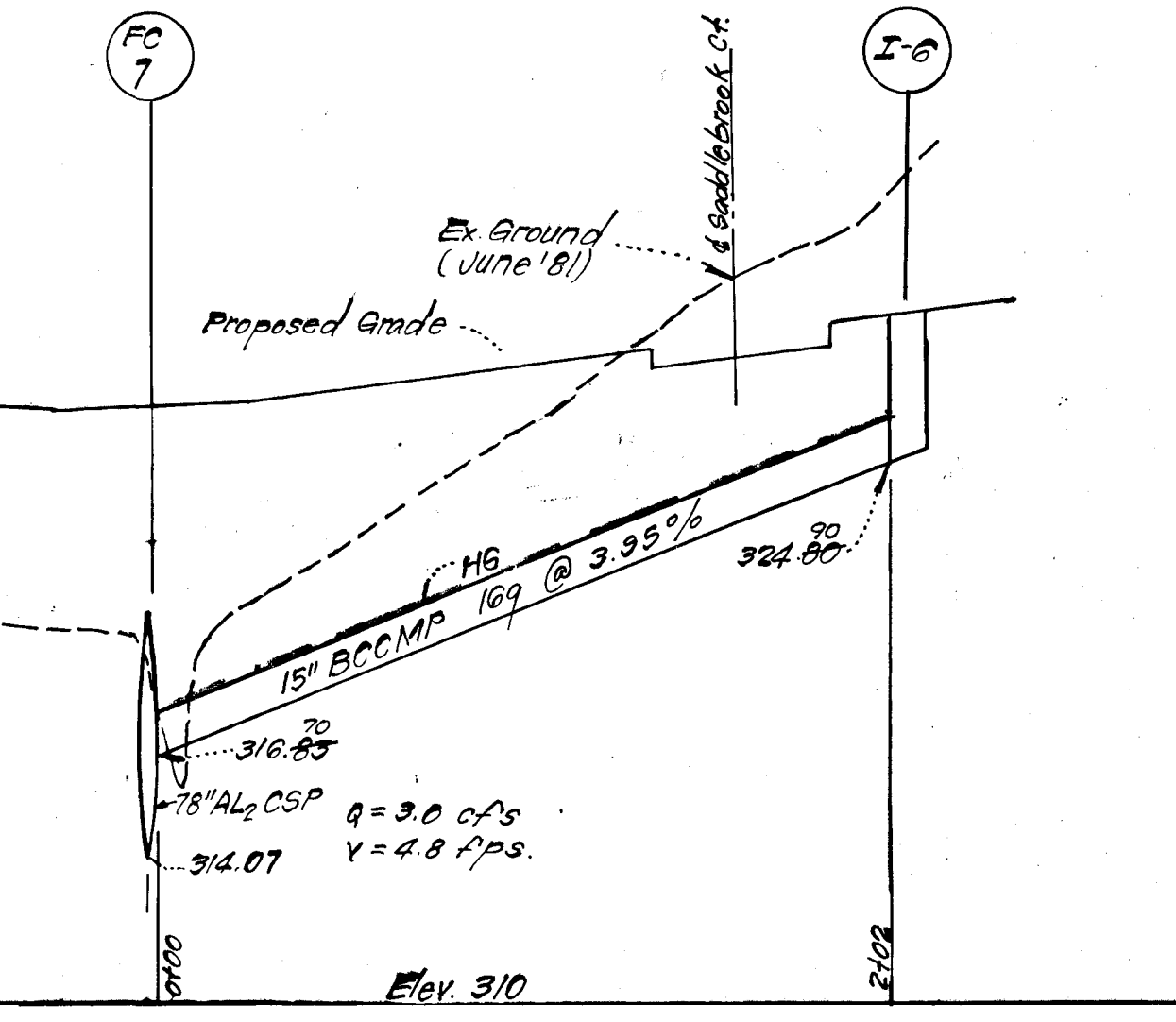
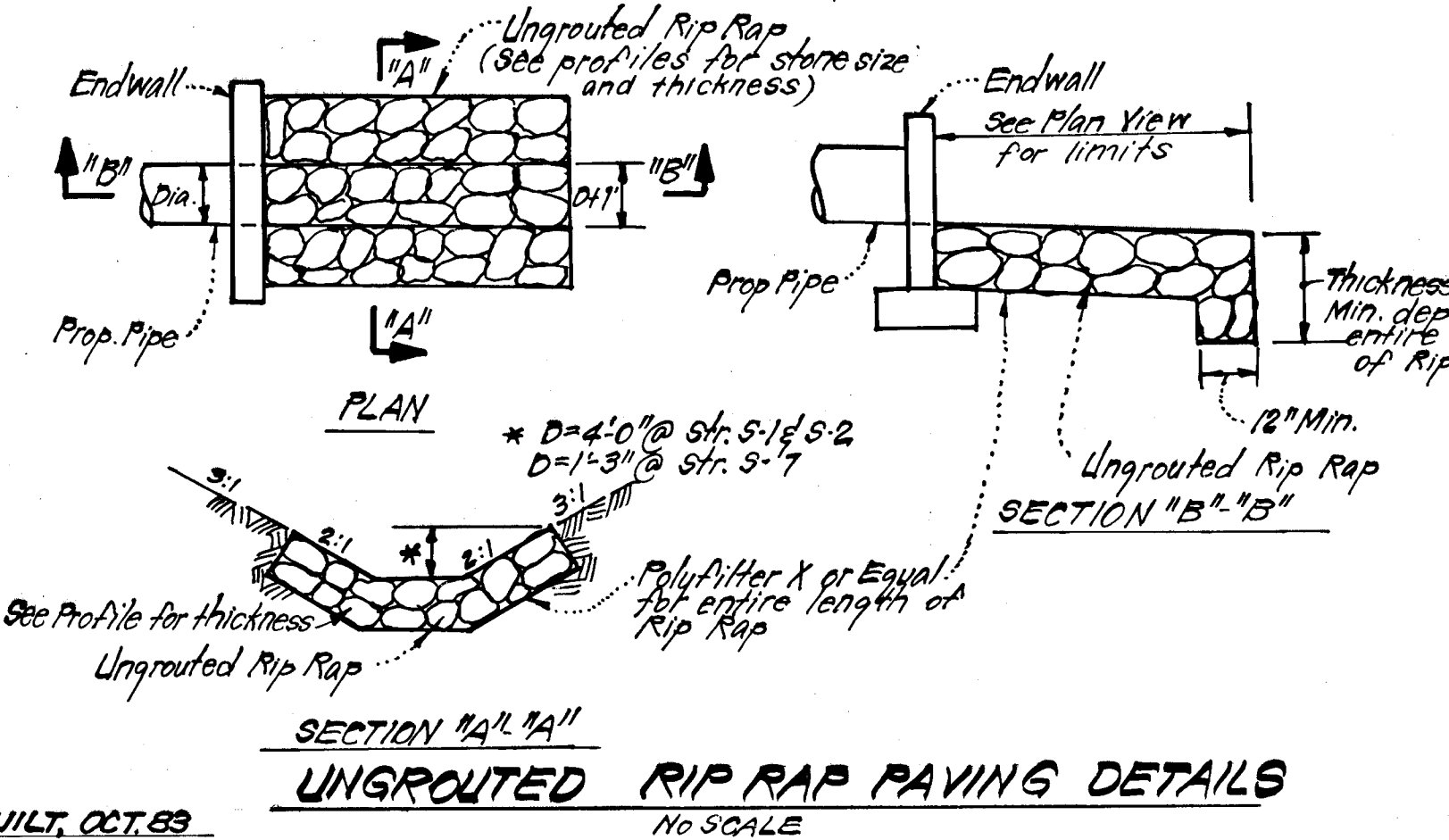


No	TYPE	INV		TOP ELEVATION		REMARKS	LOCATION
		IN	OUT	UPPER	LOWER		
* S-1	A-Headwall	313.48	313.48			Ho. Co. Std. No. SD-5.11	4+458, 616' Lt. & Glen Hannah Dr.
* S-2	A-Headwall	315.32	315.32			Ho. Co. Std. No. SD-5.11	4+162, 571' Rd. & Glen Hannah Dr.
FC-3	Field Connection	316.92	316.92			As Per Manufacturer	4+445, 41' Lt. & Glen Hannah Dr.
T-4	A-10 Inlet	321.40	320.75	326.34	326.34	Ho. Co. Std. No. SD-4.02 W=2'6"	4+180, 22' Lt. & Glen Hannah Dr.
T-5	A-10 Inlet	322.30	322.30	326.34	326.34	Ho. Co. Std. No. SD-4.02 W=3'0"	4+150, 22' Lt. & Glen Hannah Dr.
T-6	A-10 Inlet	324.80	324.80	329.03	328.86	Ho. Co. Std. No. SD-4.02 W=2'6"	4+118, 30' Lt. & Glen Hannah Dr.
FC-7	Field Connection	316.83	316.83			As Per Manufacturer	See Profile
S-8	C-End Wall	314.25	314.25			Ho. Co. Std. No. SD-5.21	15' Dia. See Plan
T-9	A-10 Inlet	320.50	320.50	325.50	325.20	Ho. Co. Std. No. SD-4.02 W=2'6"	See Plan

* See Ho. Co. detail SD-5.11 and the following Dimensions: D=78", E=81.9", F=20'6", G=7'0", H=9'0", J=5'7", K=3", L=12", N=14", R=46'-8 1/2".

SIZE	RC TYPE	LENGTH
18"	BCOMP 1/2" @ 3.9%	173 LF
18"	BCOMP 1/2" @ 3.9%	17 LF
* 7.8"	AL2 CSP 1/2" @ 3.9%	152 LF
15"	BCOMP 1/2" @ 3.9%	127 LF
15"	BCOMP 1/2" @ 3.9%	202 LF

* 125 mm x 25 mm



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

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

William V. Stone 8/10/81
Approved Date

DEVELOPER'S/BUILDER'S CERTIFICATE

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Dennis M. Rush 6/17/81
Signature of Developer/Builder Date
Dennis M. Rush

ENGINEER'S CERTIFICATE

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G. Nelson 6-17-81
Signature Date
G. Nelson

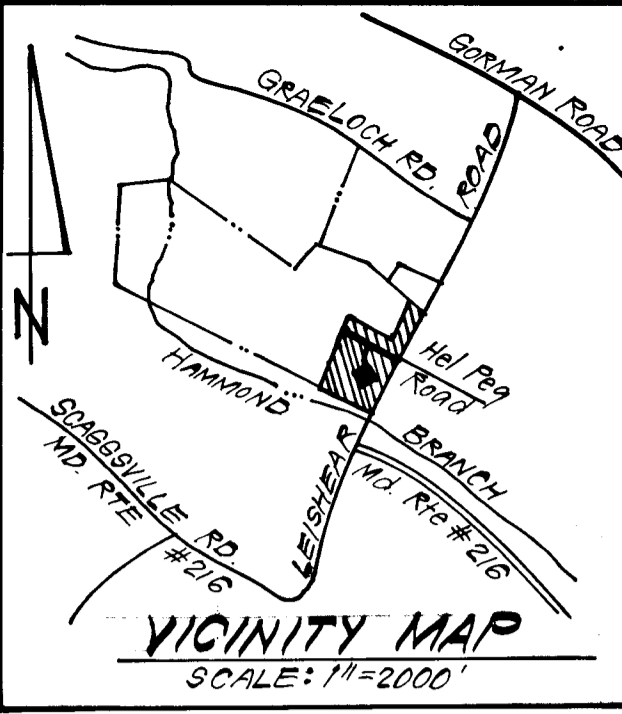
APPROVED: Department of Public Works

William S. R. ... 8-17-81
Chief, Bureau of Engineering

Howard County Office of Planning and Zoning

J. K. ... 8-11-81
Chief, Division of Land Development & Zoning Administration

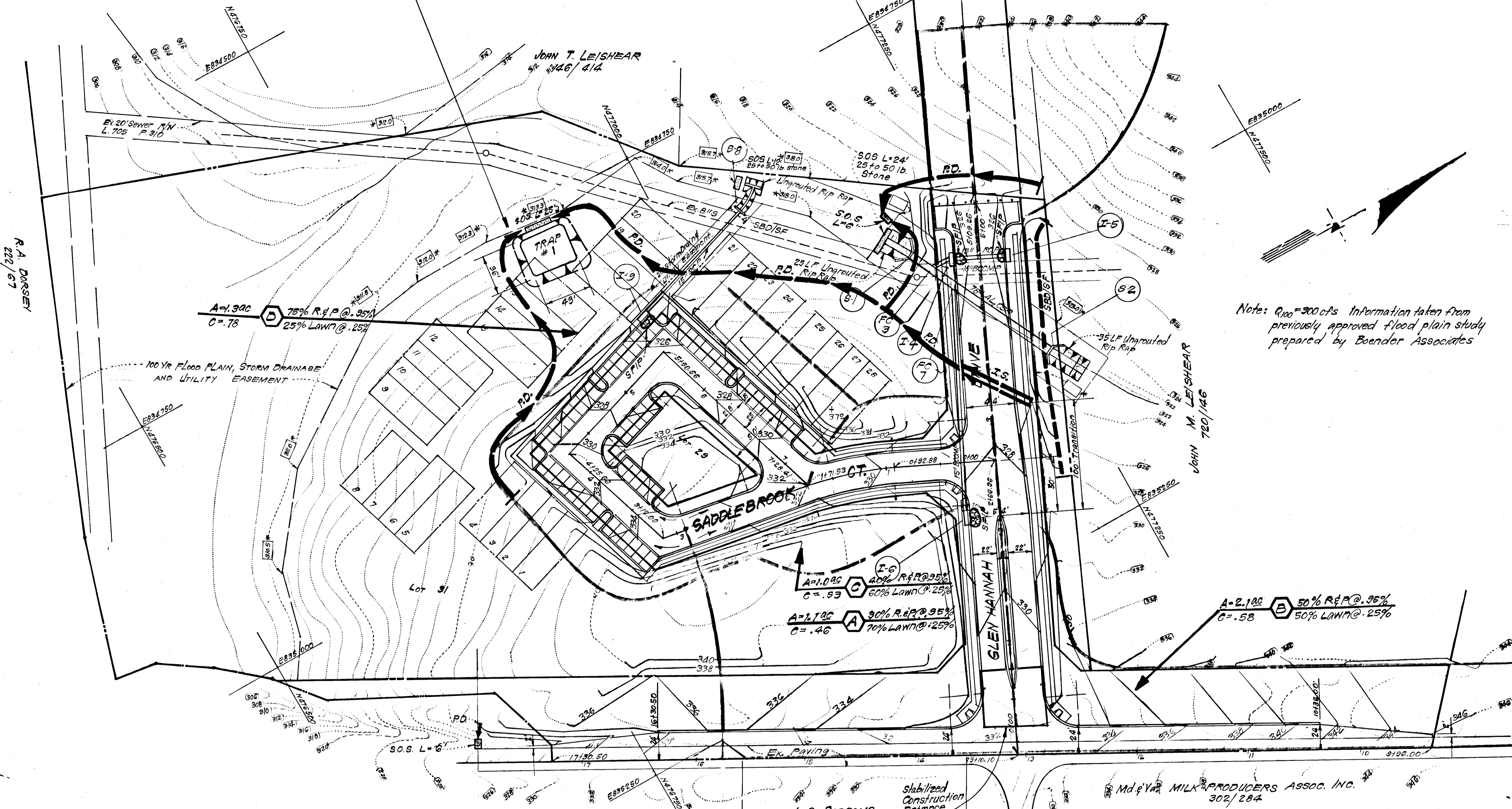
CLARK · FINEFROCK & SACKETT ENGINEERS · PLANNERS · SURVEYORS		SCALE
11314 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400		AS SHOWN
DESIGNED	ROAD CONSTRUCTION PLANS	DRAWING
D.A.B.	DETAILS & PROFILES	30F 5
DRAWN		JOB NO.
K.I.W.		81-006
CHECKED		FILE NO.
D.A.B.		81-006
DATE	FOR: BRANTLY ASSOCIATES Teachers Bldg., Suite 210 Columbia, Maryland 21044	
6-17-81		



TRAP #1 S.O.S. (S7.9)
 DA = 4.1 ACRES
 Storage Required: 4'x1800 = 7200 c.f.
 Storage Provided: 74 250 c.f.
 Top 6" Stone Crest = 314.5
 Bottom Elevation = 311.0
 Bottom Dimensions = 43'x36'x35' Deep.

- LEGEND:**
- Existing Contour (2 ft Interval) ———
 - Proposed Contour ———
 - Proposed Storm Drain ———
 - Perimeter Dike ——— P.D. ———
 - Straw Bale Dike or Silt Fence ——— SBD/SF ———
 - Stabilized Construction Entrance ———
 - Stone Filter Inlet Protection ——— S.F.I.P. ———
 - Interceptor Swale ——— I.S. ———

Note: $Q_{100} = 300$ c.f.s. Information taken from previously approved flood plain study prepared by Boender Associates



R.A. DORSEY
2/22/67

JOHN T. LEISHEAR
SR. 146/414

JOHN M. LEISHEAR
720/146

BALTIMORE GAS & ELECTRIC
423/269

L.G. PARSONS
734/512

Md & Va MILK PRODUCERS ASSOC. INC.
302/284

LEISHEAR

ROAD

Reviewed for... HOWARD... S.C.D.
 Name
 and meets Technical Requirements
 Signature: *James M. Helms* Date: 8/11/81
 U.S. Soil Conservation Service

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

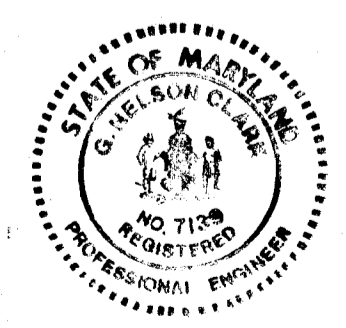
Signature: *William J. Name* Date: 8-10-81
 Approved

DEVELOPER'S/BUILDER'S CERTIFICATE
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Signature of Developer/Builder: *Dennis M. Rush* Date: 6/17/81

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: 6-17-81



APPROVED: Department of Public Works
 Signature: *Richard E. P...* Date: 8-17-81
 Chief, Bureau of Engineering
 APPROVED: Howard County Office of Planning and Zoning
 Signature: *L. J. K... (Acting Chief)* Date: 8-11-81
 Chief, Division of Land Development & Zoning Administration

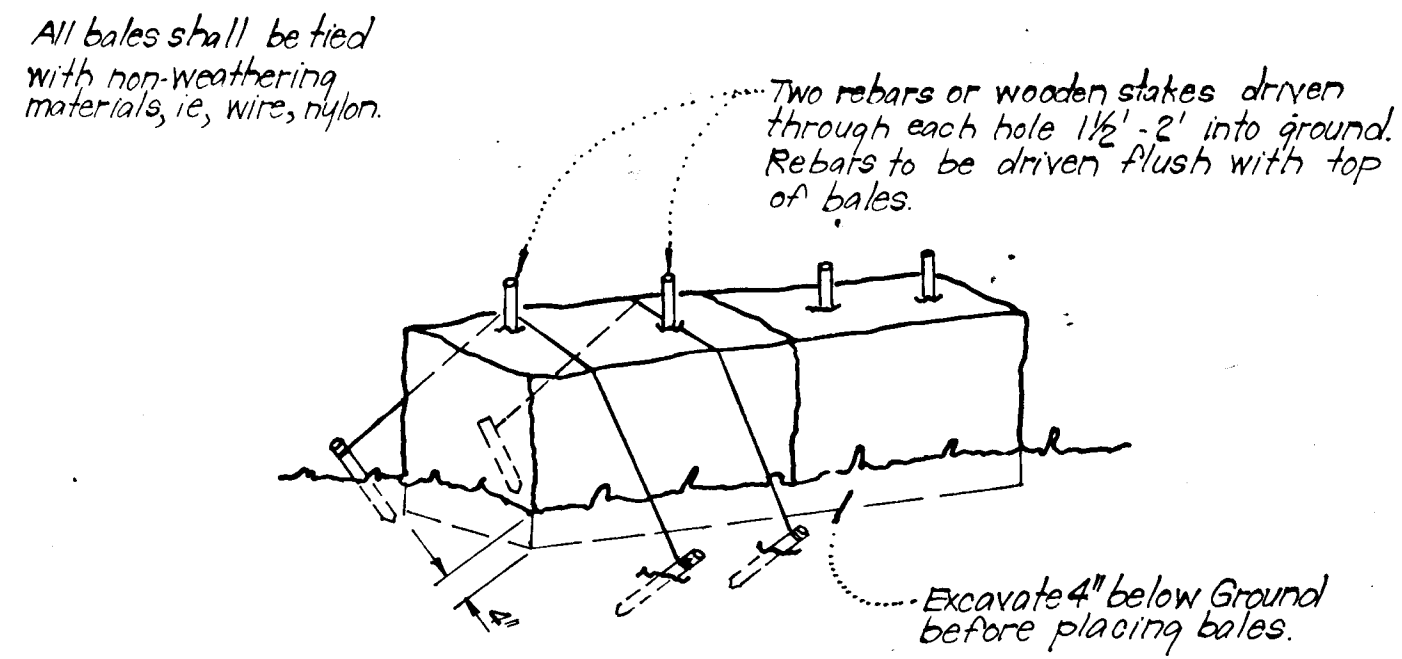
CLARK · FINEFROCK & SACKETT ENGINEERS · PLANNERS · SURVEYORS 11314 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400	
DESIGNED	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLANS AND DRAINAGE AREA MAP
DRAWN	MURRAY HILL
CHECKED	SECTION TWO 8TH ELECTION DISTRICT
DATE	FOR: BRANTLY ASSOCIATES Teachers Building, Suite 218 Columbia, Md 21044
DAB	HOWARD COUNTY, MARYLAND
FILE NO.	81-006
JOB NO.	81-006
SCALE	1" = 50'
DRAWING	4 OF 5

#908

GENERAL NOTES

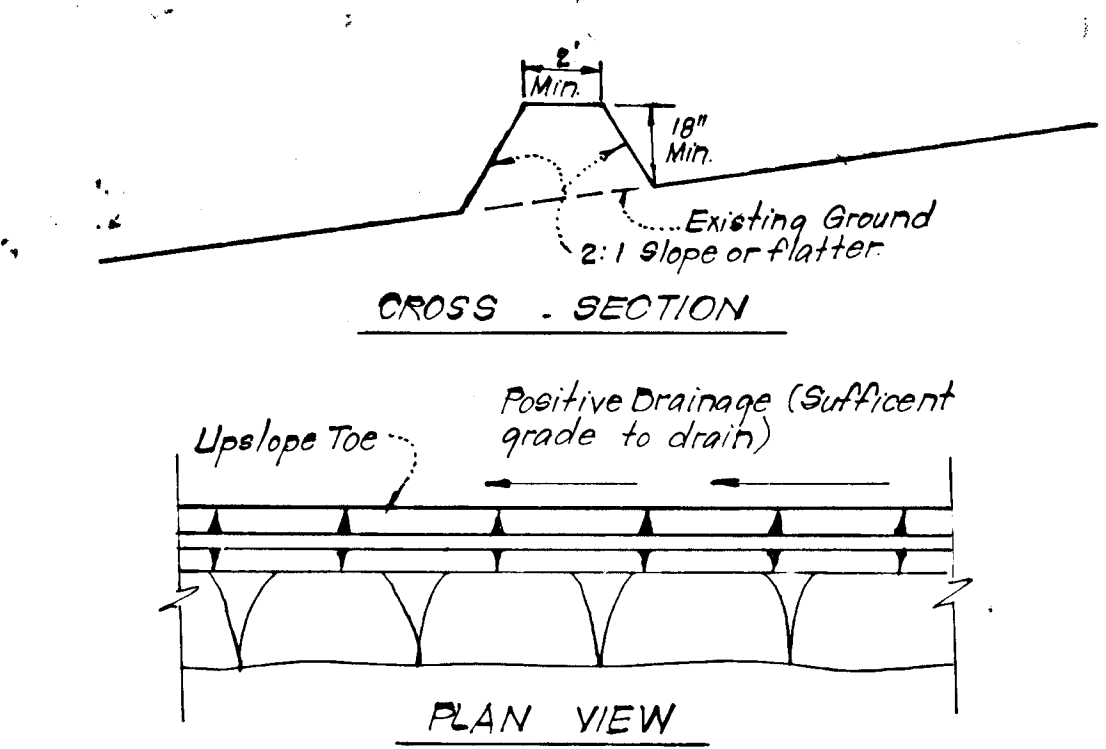
- Grading Permits shall be obtained prior to installation of Sediment Control & Grading.
- All Sediment and Erosion Control Measures will be installed and stabilized according to this plan prior to any other grading, clearing or disturbance of the existing surface of the site. See note #6 for stabilization except that the seed mixture will be annual rye applied at a rate of 1.4 lbs/1000 s.f.
- 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 disturbed area to be stabilized in accordance with the following Specifications:
 - Seed - certified 85% germination applied at the rate of 3 lbs/1000 s.f. 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 s.f. Ground Agricultural Lime or Dolomitic Lime applied at a rate of 30 lbs/1000 s.f.
 - Mulch - Weed free grain straw applied at a rate of 70-90 lbs/1000 s.f. 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.
- 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.
- SITE ANALYSIS:**

TOTAL AREA:	10.78 Acres
AREA TO BE PAVED:	1.60 Acres
AREA TO BE SEEDED:	2.50 Acres
AREA UNDISTURBED:	6.68 Acres
- All pipes to be blocked at the end of each day. see detail this sheet.
- CONSTRUCTION SEQUENCE:**
 - Install Stabilized Construction Entrance on Glen Hannah Drive.
 - Install Storm Drainage S-1 to S-2 and Construct Sediment Trap #1.
 - Install all Perimeter Dike, Interceptor Swale, SBD/SP.
 - Rough Grade Roadways and complete Storm Drainage.
 - Provide S.F.I.P. at Str. #1-4, I-5, I-6 & I-8 in accordance with plan.
 - Construct Curb & Gutter, Paving & Sidewalks.
 - Final Grade and Stabilize in accordance with note #6.
- Total length of Straw Bale Dike or Silt Fence = 240 LF
- Sediment & Erosion Control notes for Storm Drain Construction:
 - All excavation to be placed on upstream side of trench.
 - All areas disturbed during outfall construction to be immediately stabilized.

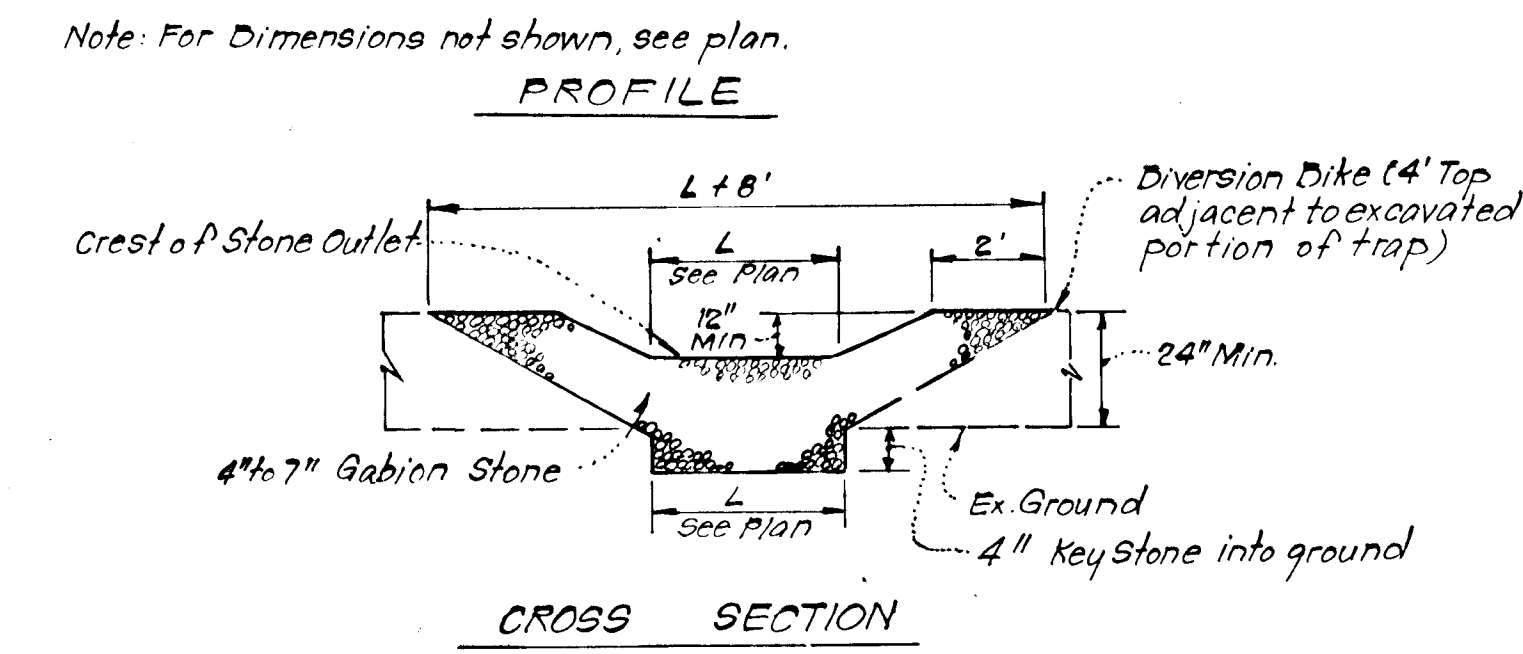
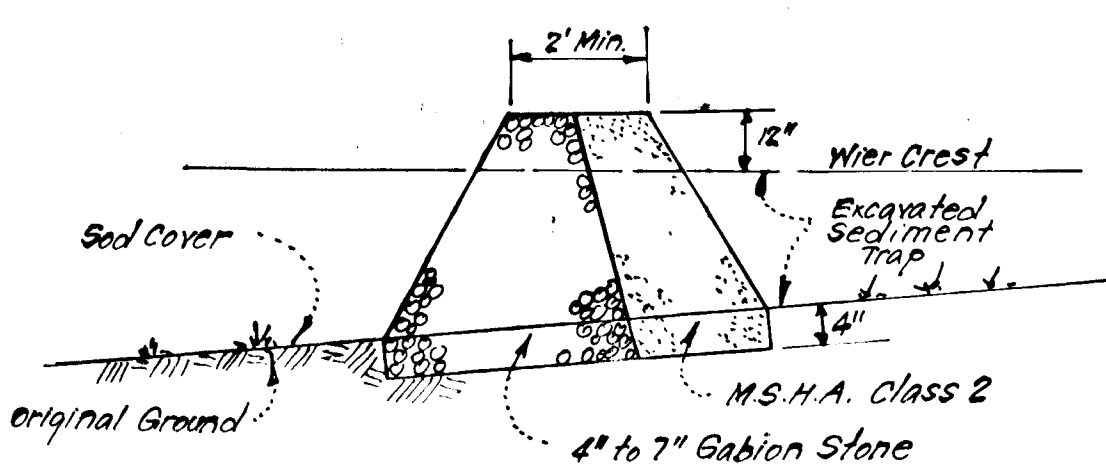


Note:
1. In lieu of the use of rebar each straw bale may be fastened to ground with pegs (4 per bale and wire or nylon as shown above.)

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

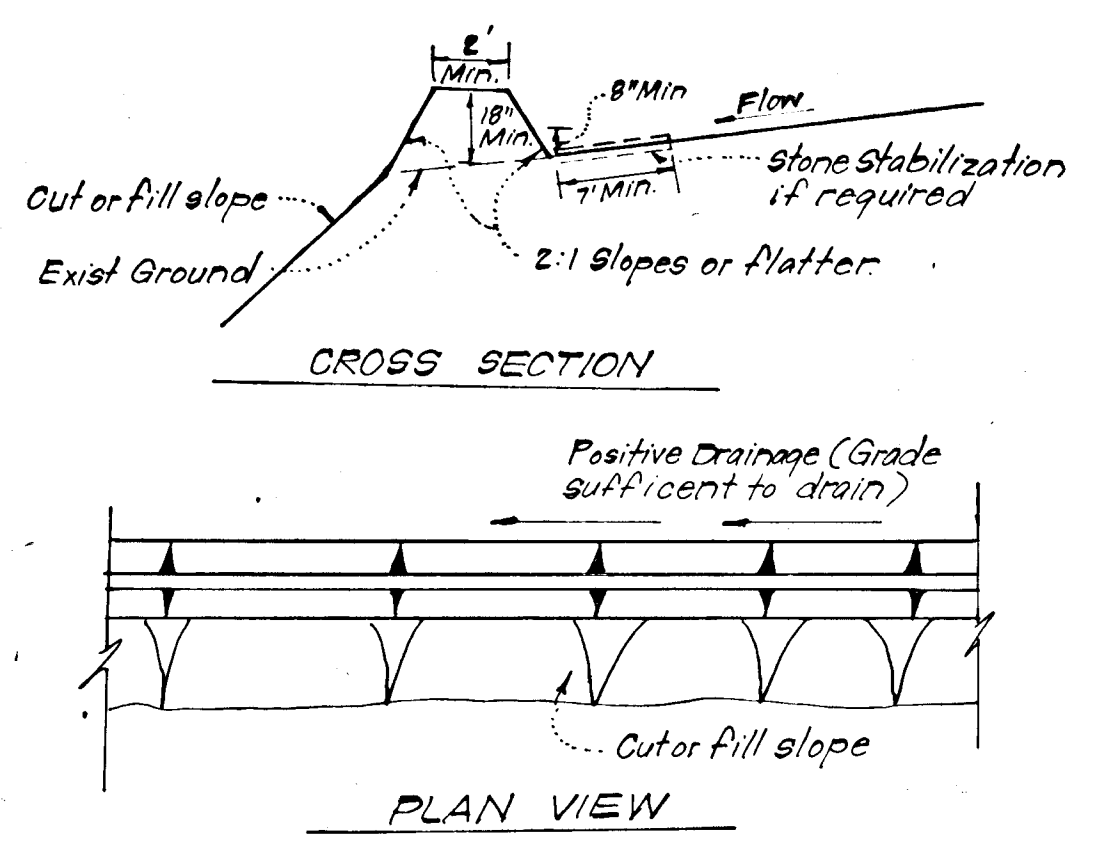


TYPICAL PERIMETER DIKE DETAIL (P.D.)
No Scale

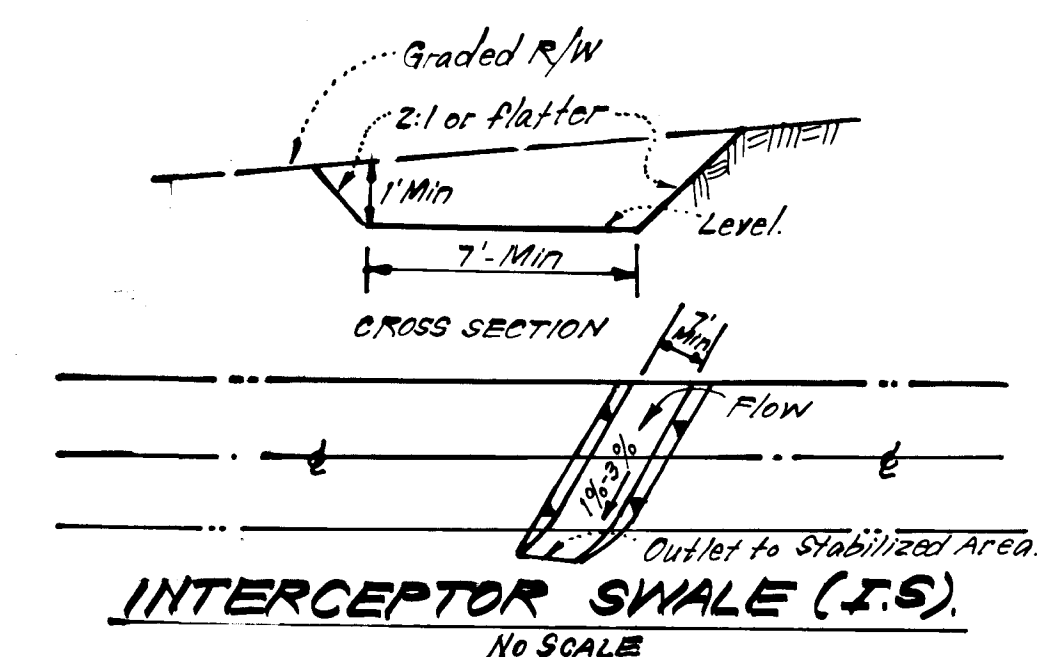


Notes:
1. Sediment Trap to be cleaned out when sediment reaches a level of 1 ft. below crest of stone outlet.
2. Bottom of Sediment Trap to be level and constructed to the dimensions shown on plan.
3. Stone Outlet to be constructed through diversion dike adjacent to excavated portion of sediment trap.

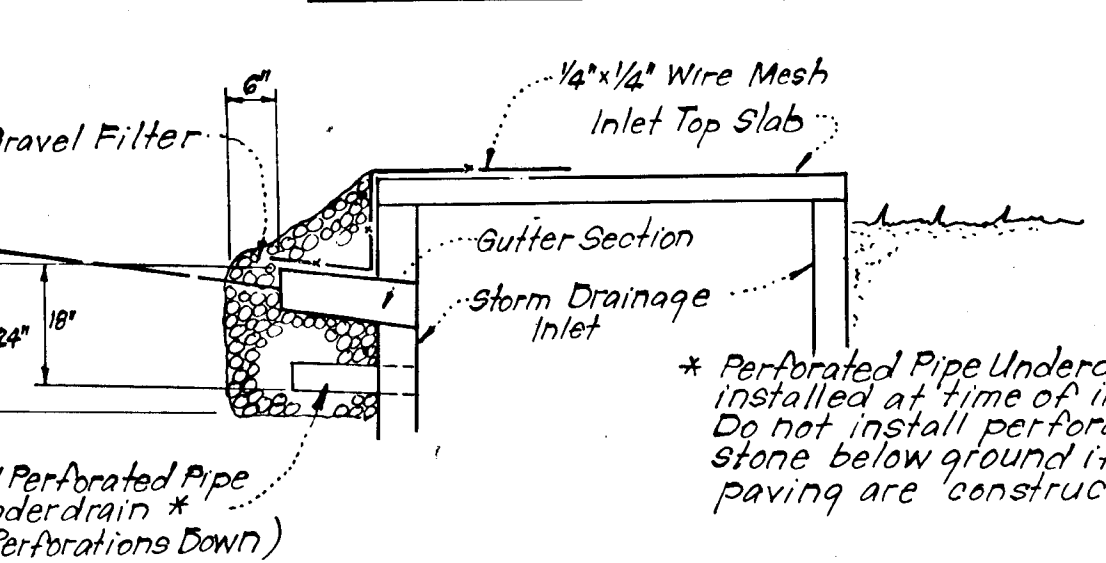
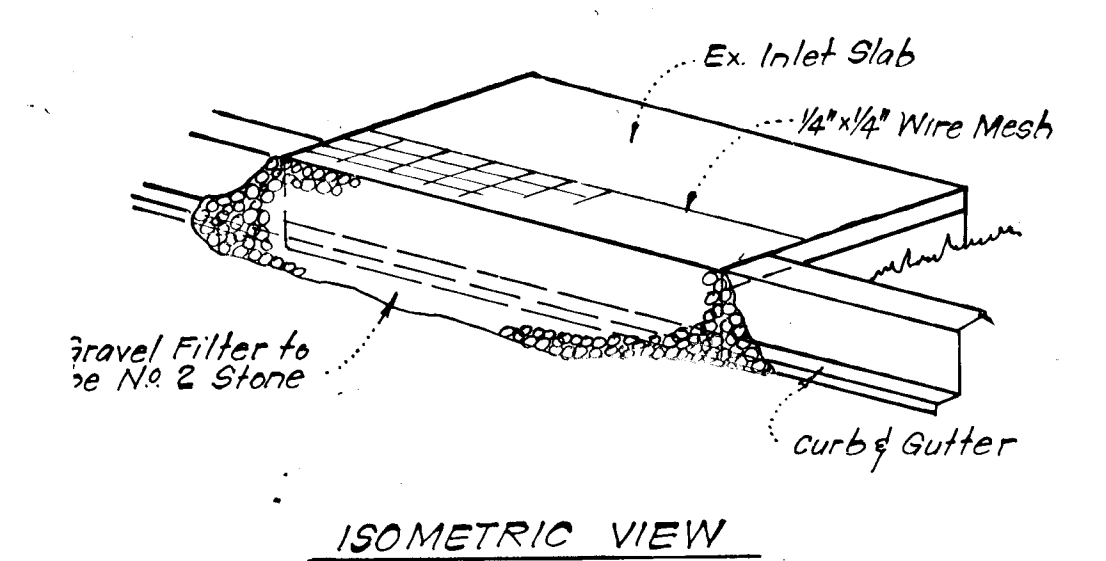
DETAILS OF STONE FILTER OUTLET (S.F.O.)
(SEE STONE OUTLET SEDIMENT TRAP)



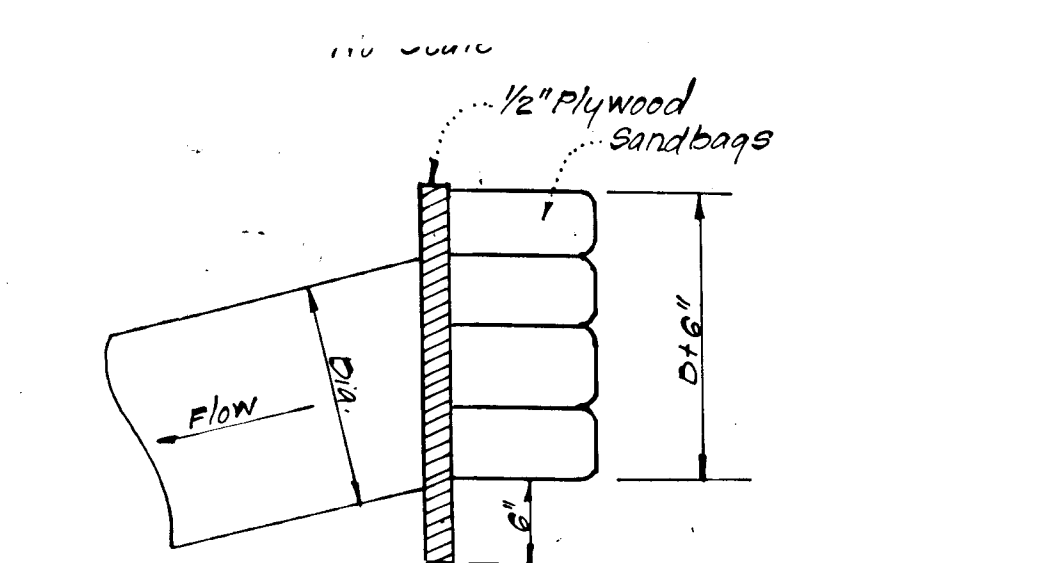
TYPICAL DIVERSION DIKE DETAIL (D.D.)
No Scale



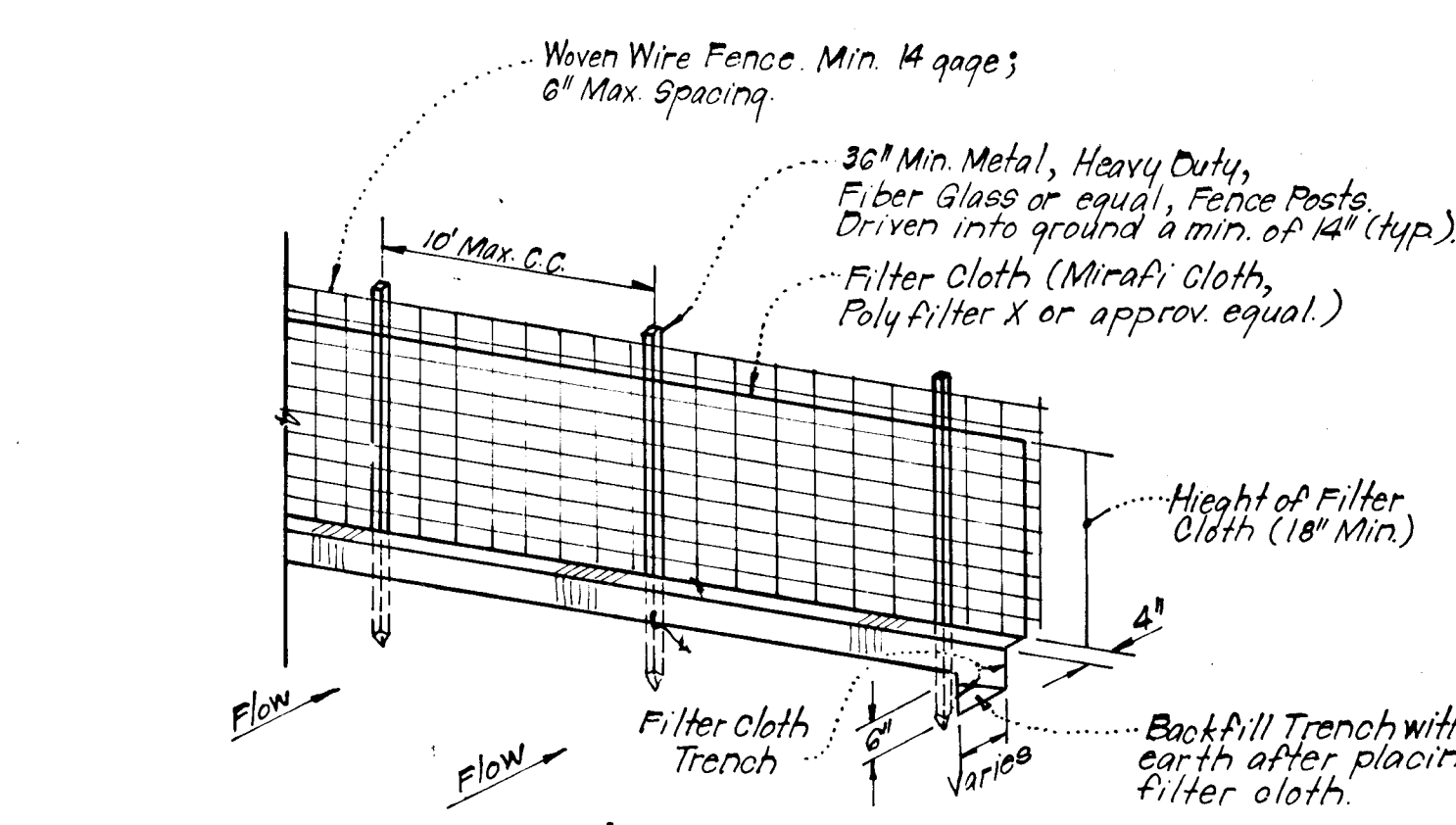
INTERCEPTOR SWALE (I.S.)
No Scale



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

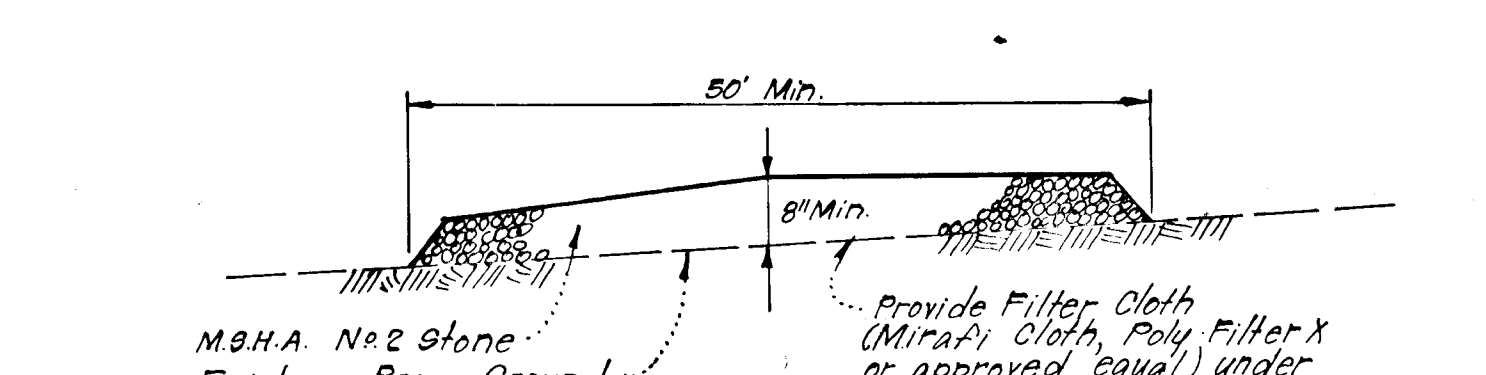


PIPE BLOCKING DETAIL
No Scale



Notes:
1. Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
2. 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



STABILIZED CONSTRUCTION ENTRANCE
No Scale

Reviewed for: **HOWARD, S.C.D.**
Name
and meets Technical Requirements
Signature: *Jack Helmer* Date: *7/1/81*
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Signature: *Dennis M. Rush* Date: *8/16/81*
Approved

DEVELOPER'S/BUILDER'S CERTIFICATE
"I hereby 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: *Dennis M. Rush* Date: *8/17/81*

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: *8-17-81*



APPROVED: Department of Public Works
Signature: *Richard E. Kelly* Date: *8-17-81*
Chief, Bureau of Engineering
APPROVED: Howard County Office of Planning and Zoning
Signature: *J. L. Kaplan* Date: *8-11-81*
Chief, Division of Land Development & Zoning Administration

CLARK • FINEPROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593 3400	
DESIGNED DAB	SCALE As Shown
DRAWN K.I.W.	JOB NO. 81-006
CHECKED DAB	FILE NO. 81-006-D
DATE 6-17-81	FOR: BRANTLY ASSOCIATES Teachers Building Columbia, Md. 21044

#908