

CURB & GUTTER LEGEND:
 Std. 7" Comb. Curb & Gutter
 Rev. 7" Comb. Curb & Gutter
 Std. 6" Comb. Curb & Gutter
 Rev. 6" Comb. Curb & Gutter

CURVE DATA
 PC: 9435.52 TO PT: 10166.39
 R = 200.00'
 Δ = 20° 18' 01"
 L = 70.86'
 T = 35.81'
 CHD = N 34° 57' 00" W 70.49'

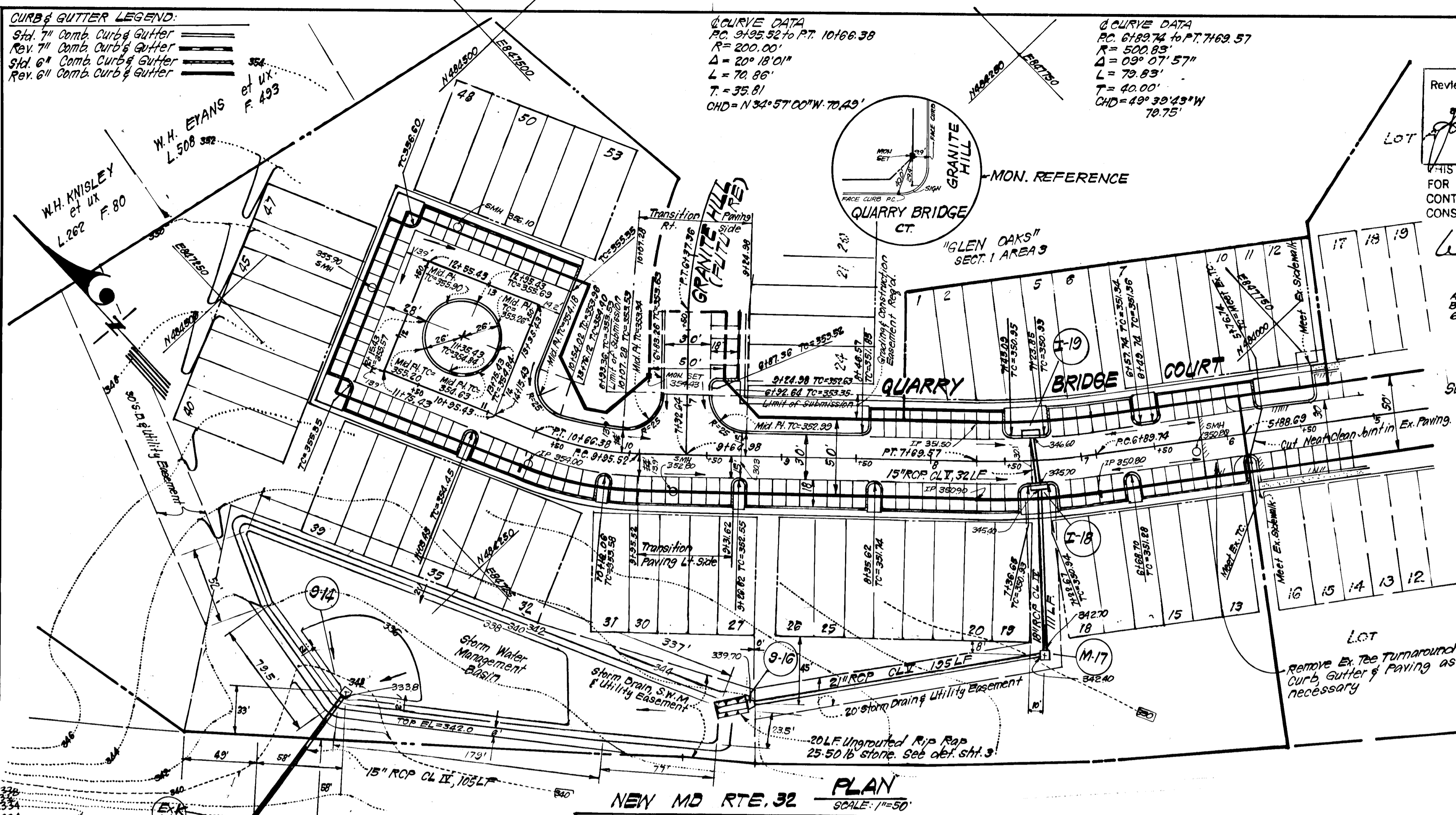
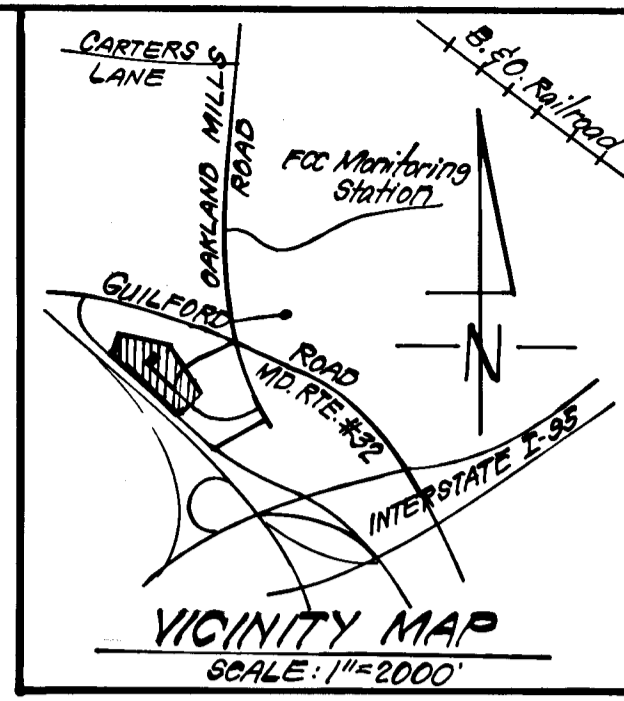
CURVE DATA
 PC: 6182.74 TO PT: 7169.57
 R = 500.85'
 Δ = 09° 07' 57"
 L = 79.83'
 T = 40.00'
 CHD = 49° 30' 43" W 70.75'

GENERAL NOTES:

- All storm Drain & Paving shall be constructed in accordance with the latest details and Specifications of Howard Co. of 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 Howard County Design Manual Vol. II.
- 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 Curb, where shown in plan. (Max. 12:1 Slope) See Ho. Co. Std. Sidewalk Ramp, Type A, R-401.
- Zoning: R.S.A.
- Design Speed: 30mph, 30' Paving & 25mph, 28' Paving.
- Class "C" Bedding shall be used for all storm drainage construction, unless otherwise noted. See Ho. Co. Std. sp. 2.03.
- Survey Based on Howard County Control Stations 2242001.R & 2242002.

Reviewed for: Howard Co. S.C.D.
 Name: Howard Co. S.C.D.
 Signature: James M. Nelson 8-5-82
 Date: 8-5-82
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved: William M. Nelson 8-5-82
 Date: 8-5-82
 AS-BUILT SURVEY CERTIFIED BY DONALD B. SACKETT, L.S. No. 6059 - Oct. 14, 1983



SECTION ONE
 "GLEN OAKS"
 SEE PREVIOUSLY APPROVED CONSTRUCTION PLANS ROAD F-82-67

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 persons 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: L. Earl Armiger
 Date: 6-4-82

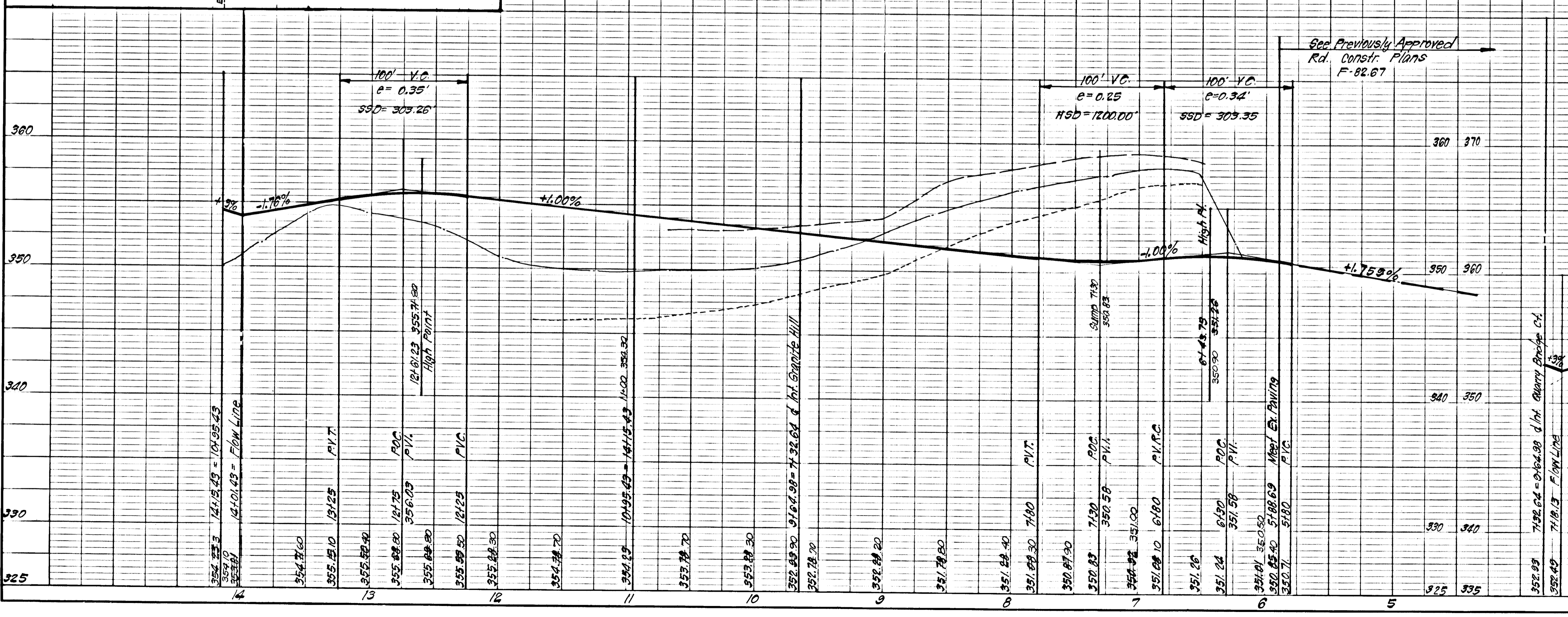
ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature: G. Nelson Clark 5-25-82
 Date: 5-25-82

APPROVED: Department of Public Works
 Signature: William E. P... 8-10-82
 Chief, Bureau of Engineering
 APPROVED: Howard County Office of Planning and Zoning
 Signature: William M. Nelson 8-9-82
 Chief, Division of Land Development & Zoning Administration

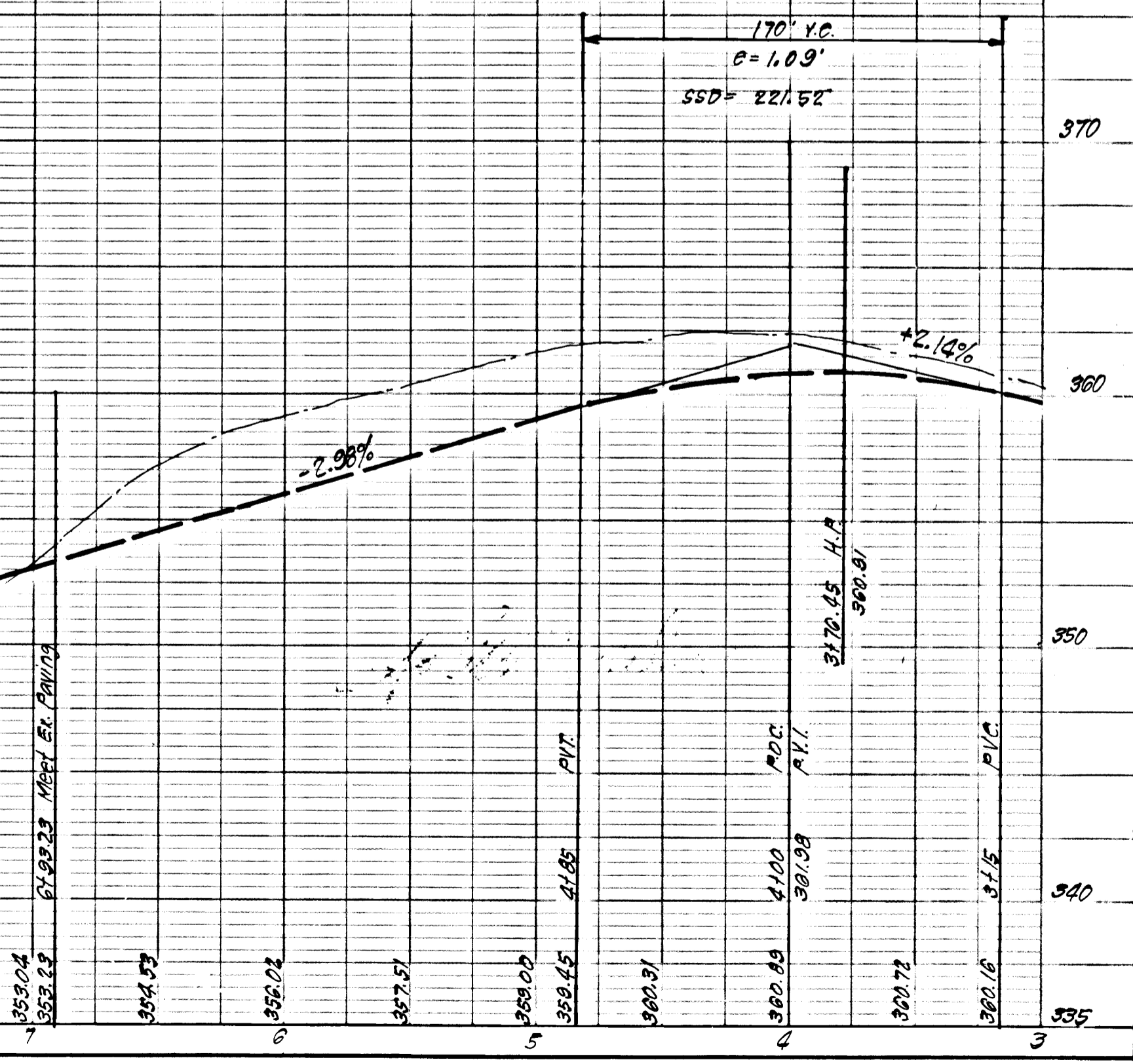
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 ENGINEERS • PLANNERS • SURVEYORS
 1135 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED: J.L.S.	ROAD CONSTRUCTION PLANS	SCALE: As Shown
DRAWN: K.I.W.	QUARRY BRIDGE COURT	DRAWING: 10 of 4
CHECKED: J.L.S.	GLEN OAKS	JOB NO: 81-079
DATE: 5-21-82	SECTION ONE AREA TWO	FILE NO: 81-079-D
	6TH ELECTION DISTRICT	
	HOWARD COUNTY, MARYLAND	
	FOR: EARL ARMIGER	
	3807 Ducks Foot Lane	
	Ellicott City, Md. 21043	

PROFILE - QUARRY BRIDGE CT.



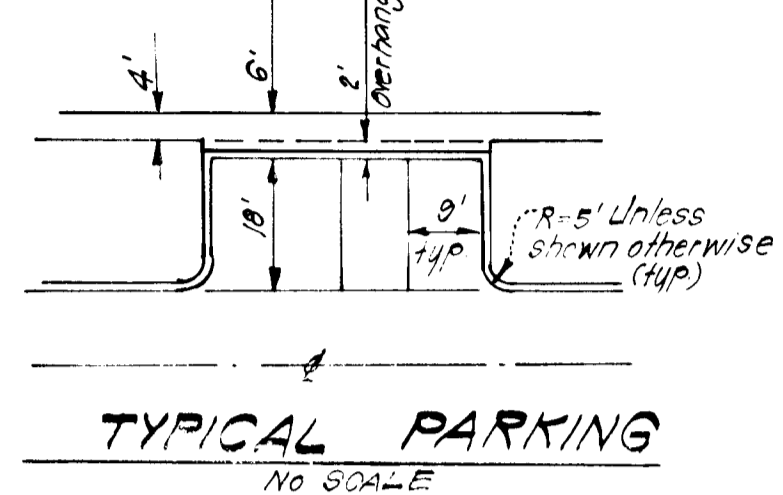
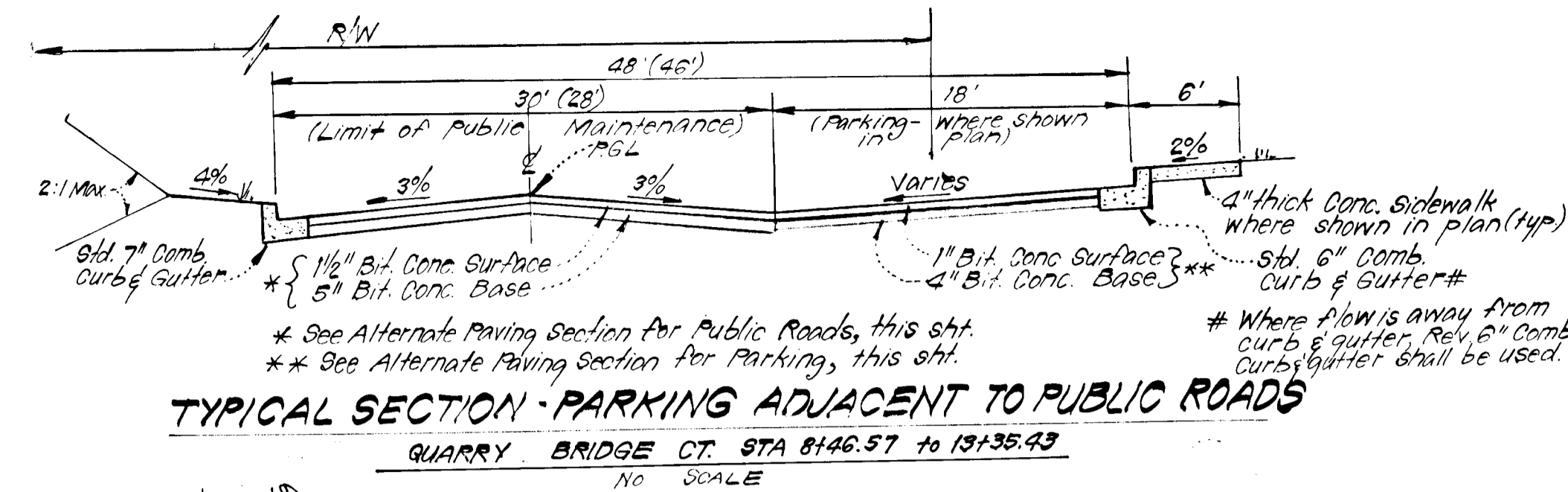
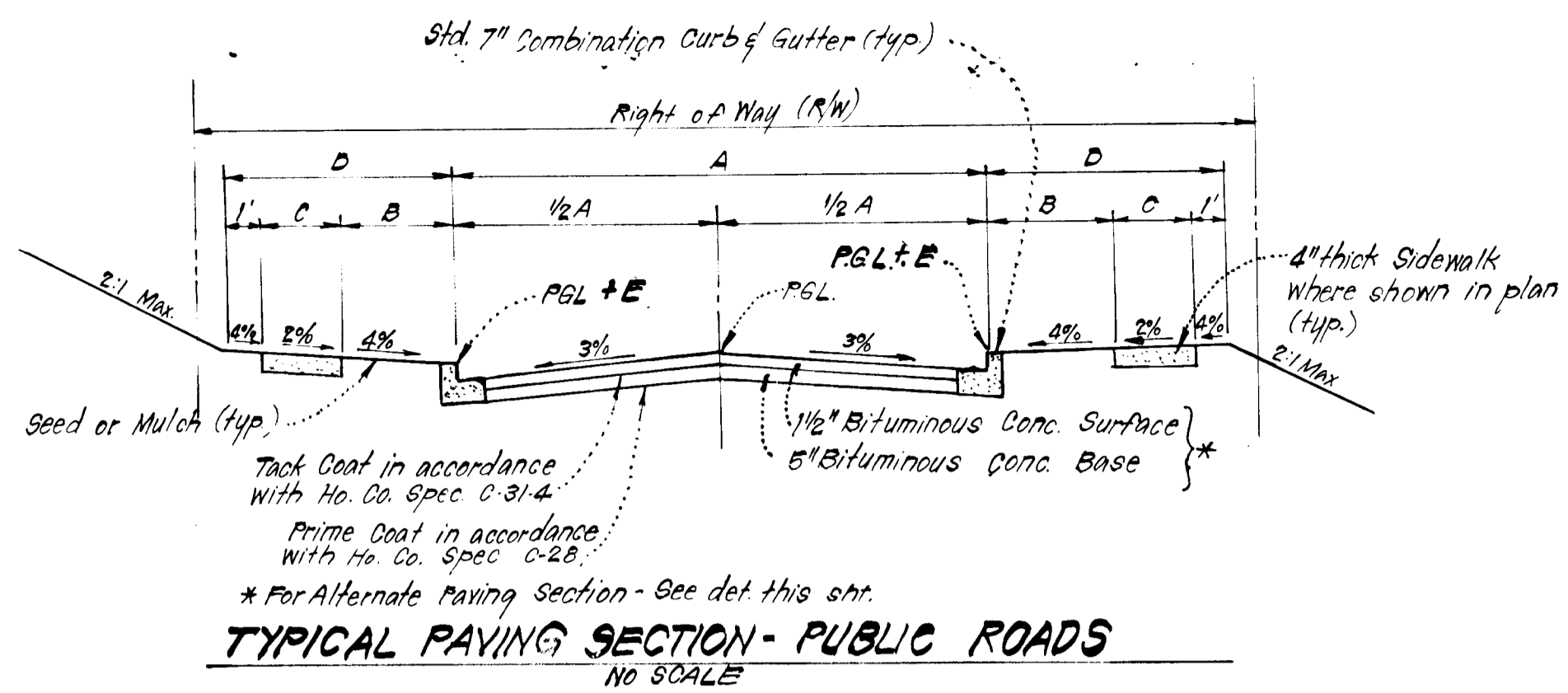
PROFILE - GRANITE HILL (FUTURE)



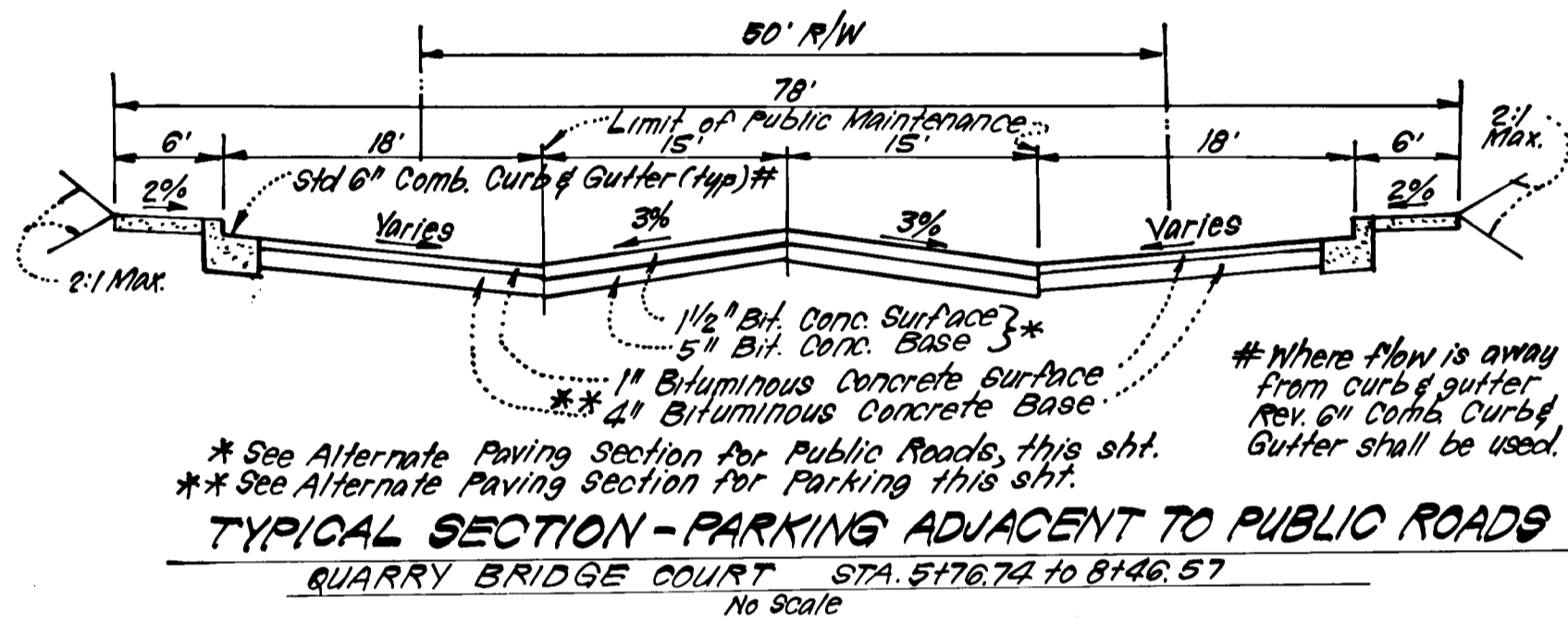
#933

F-82-137

AS-BUILT 10-14-83



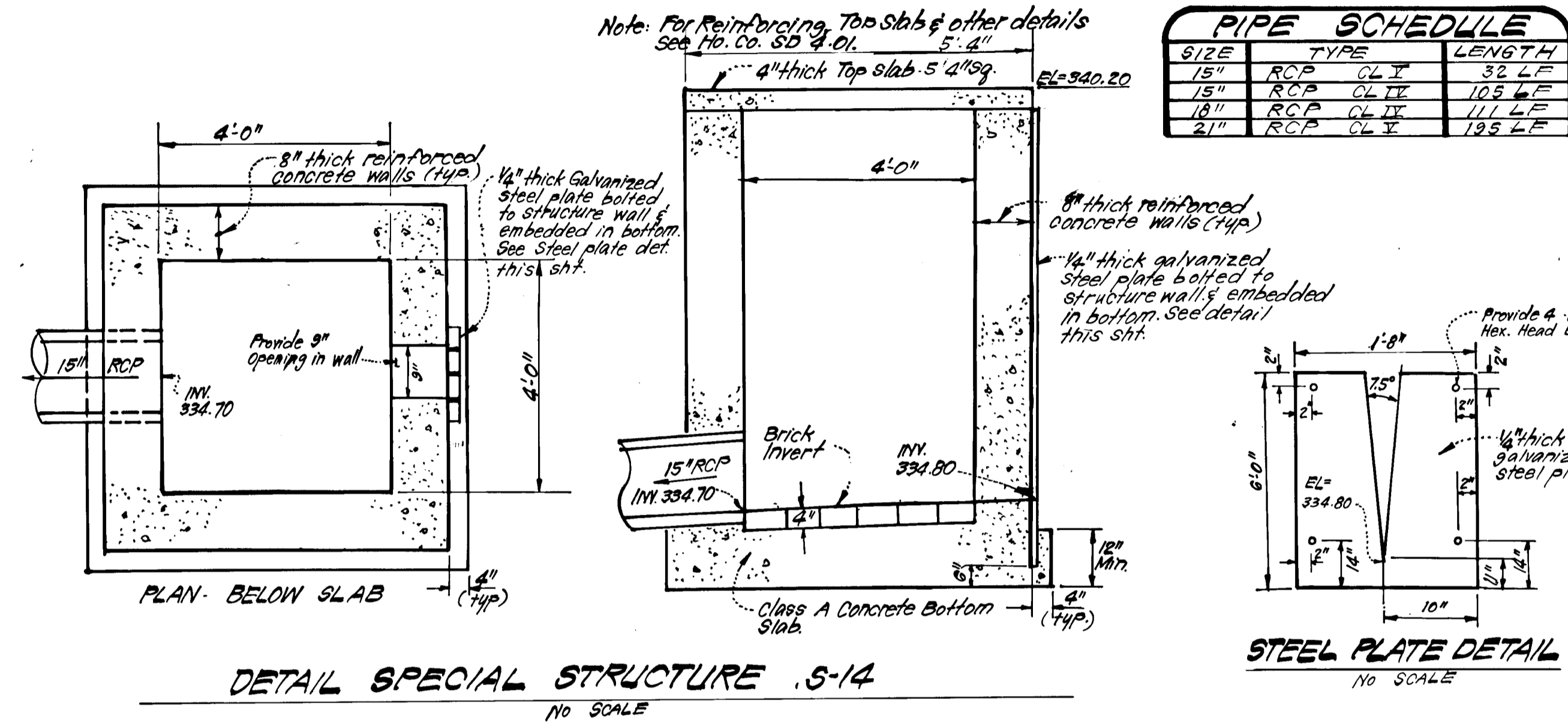
STREET NAME & STATION	TYPE OF TRAFFIC	A	B	C	D	R/W	ZONING	DESIGN SPEED	E
QUARRY BRIDGE CT. STA. 13+35.43 to 14+15.43	CUL DE SAC	28'	4'	0'	9'	50'	RSA	25 mph	14
GRANITE HILL STA. 7+32.64 to 8+39.36	LOCAL	30'	4'	4'	9'	50'	RSA	30 mph	10



STRUCTURE SCHEDULE #							
No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				Upper	Lower		
S-14	Special	334.80	334.70	340.20		See det. this sht.	See Plan
S-16	End Section	340.18	340.10			No. Co. Std. SD/5.52 Dia=21"	See Plan
M-17	B Manhole	343.00	342.75	349.20		No. Co. Std. SD/3.03 48" Sp.	See Plan
I-18	A-10 Inlet	346.00	345.57	350.93	350.93	No. Co. Std. SD/4.02 W=2'-6"	451A+49.66 Quarry Bridge 15' LT
I-19	A-10 Inlet		346.80	350.93	350.93	No. Co. Std. SD/4.02 W=2'-6"	451A+32.35 Quarry Bridge 15' RT

All Inverts to be fully developed.

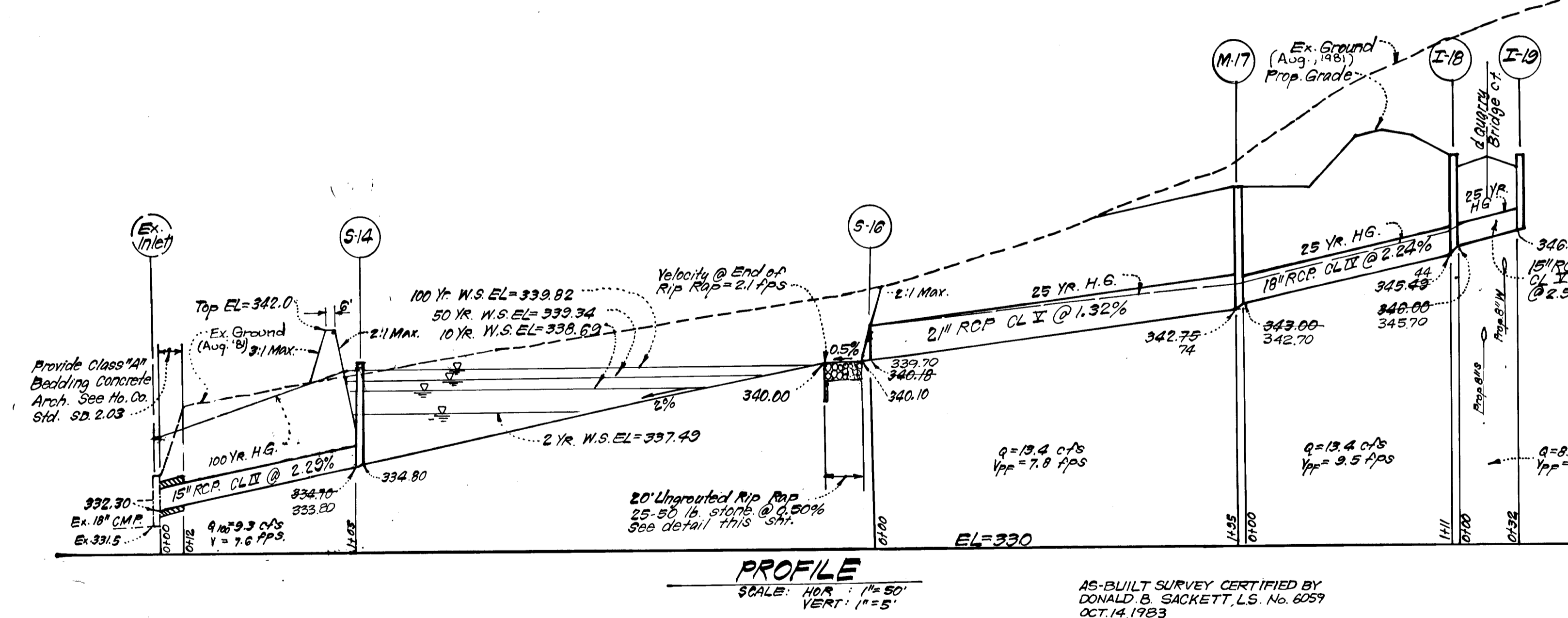
PIPE SCHEDULE		
SIZE	TYPE	LENGTH
15"	RCP CL I	32 LF
15"	RCP CL II	105 LF
18"	RCP CL I	111 LF
21"	RCP CL I	195 LF



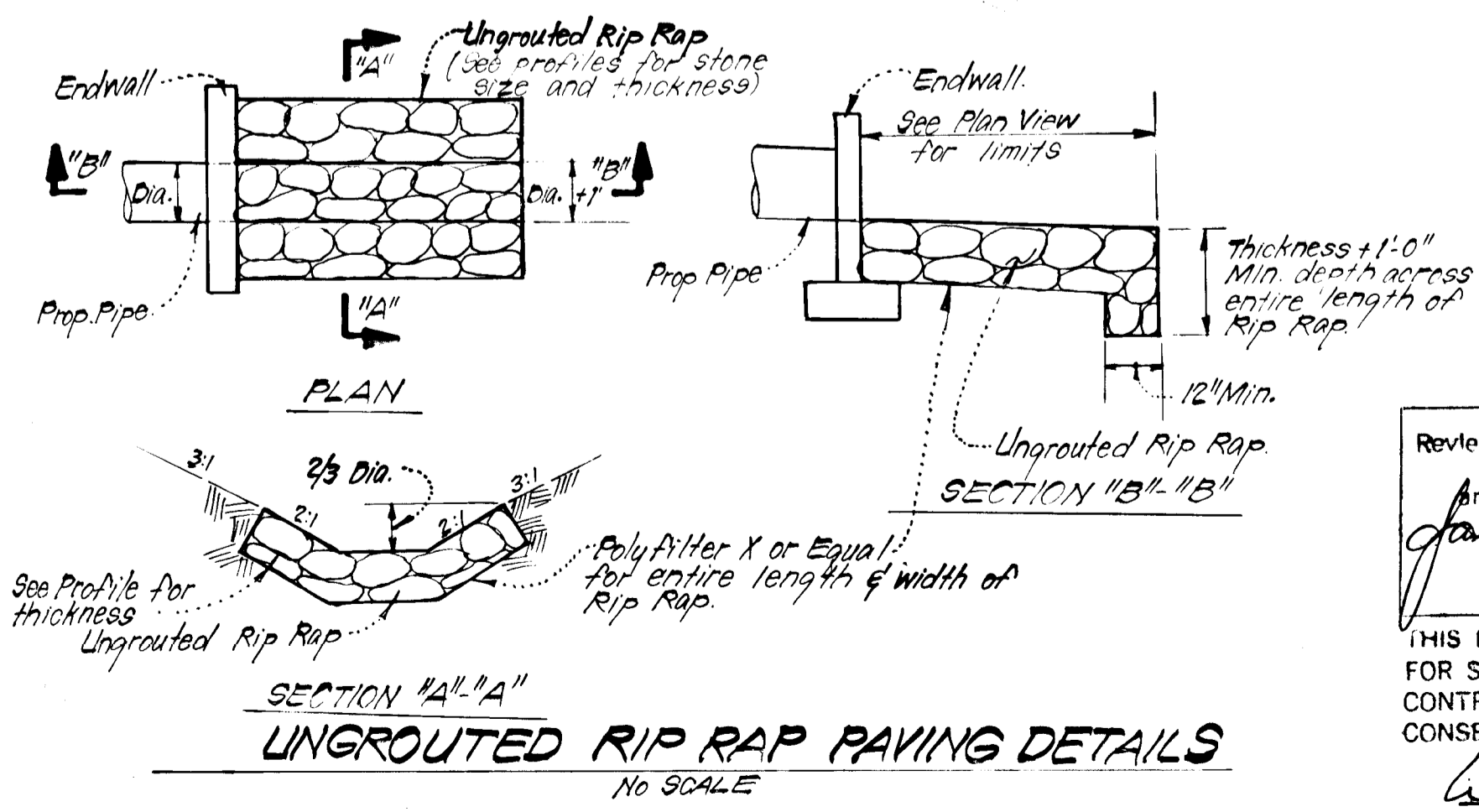
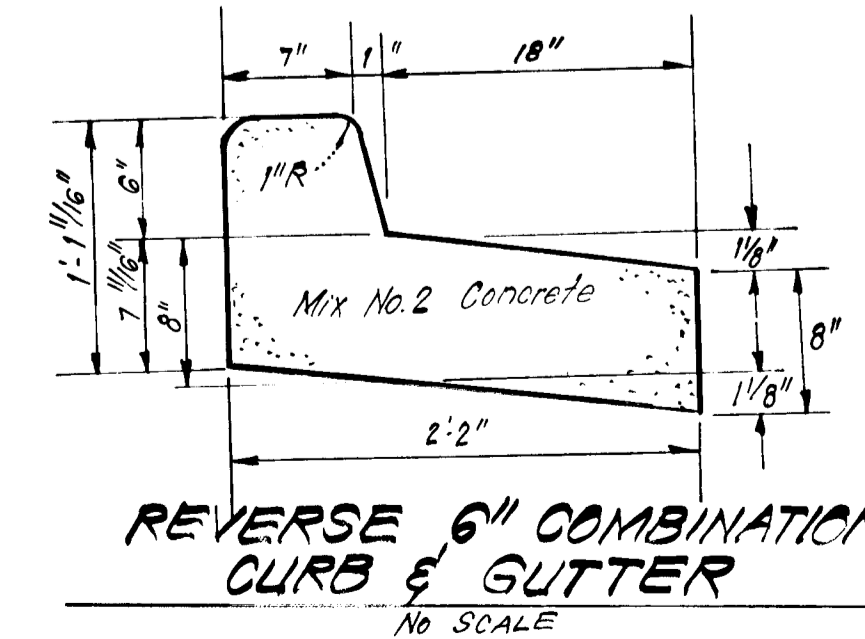
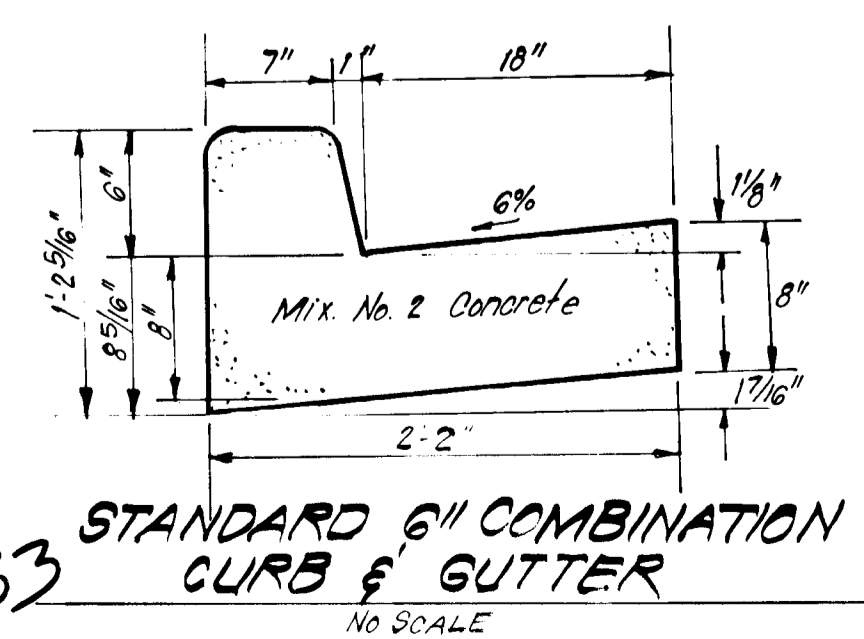
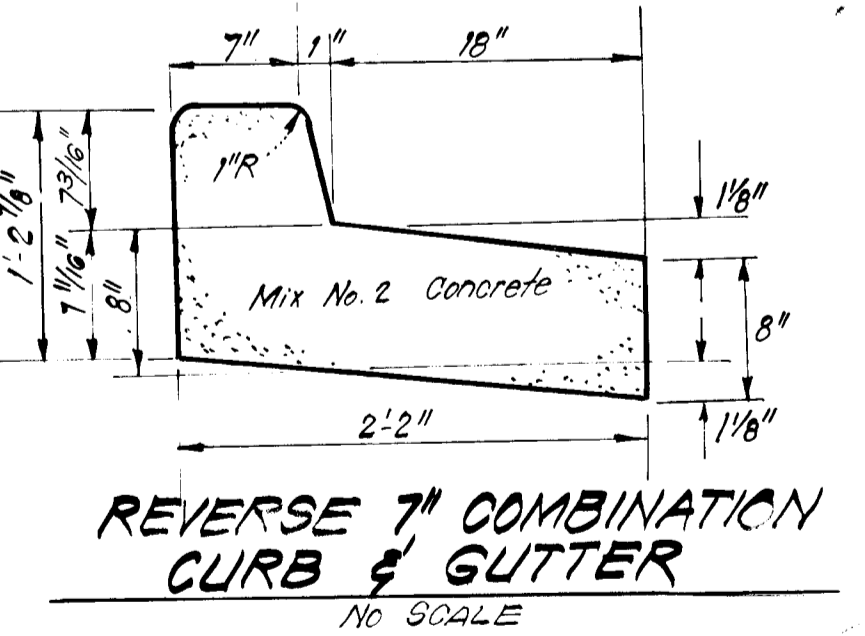
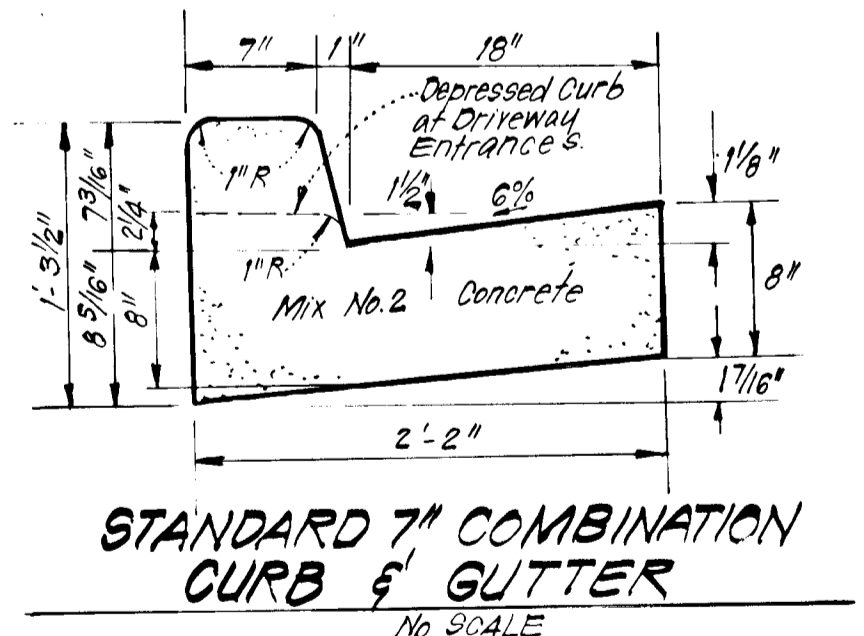
Layer	Thickness
Bituminous Conc. Surface	1 1/2"
Bituminous Conc. Base	2"
Prime	
1" Crusher Run Base (Placed in 2 Courses) or 4" Dense Graded Stabilized Aggregate Base Course	8" or 6"
Bituminous Conc. Surface	1"
Bituminous Conc. Base	2"
Prime	
5" Crusher Run Base Course or 4" Dense Graded Stabilized Aggregate Base Course	5" or 4"

ALTERNATE PAVING SECTION FOR PUBLIC ROADS

ALTERNATE PAVING SECTION FOR PARKING AREAS



AS-BUILT SURVEY CERTIFIED BY DONALD B. SACKETT, L.S. No. 6057 OCT. 14, 1983



DEVELOPER'S/BUILDER'S CERTIFICATE
"I/we certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."
Signature of Developer/Builder: L. Earl Armer
Date: 6-4-82

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: 5-25-82

Reviewed for: Howard S.C.D.
Name: Howard
Signature: G. Nelson Clark
Date: 5-25-82
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Signature: L. Earl Armer
Date: 6-4-82

APPROVED: Department of Public Works
Chief, Bureau of Engineering: [Signature] Date: 8-10-82
APPROVED: Howard County Office of Planning and Zoning
Chief, Division of Land Development & Zoning Administration: [Signature] Date: 8-9-82

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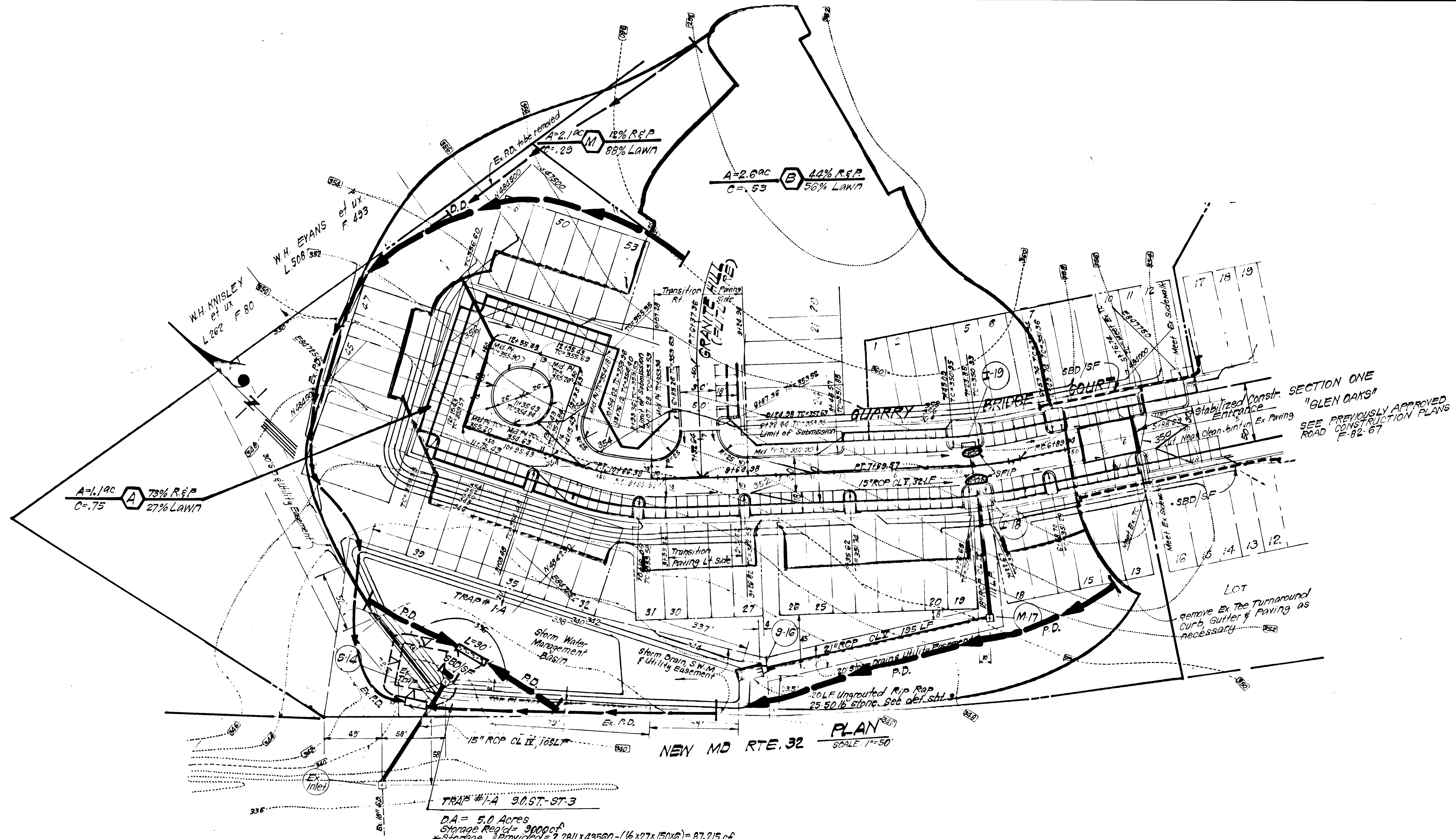
DESIGNED: JLS
DRAWN: K/M
CHECKED: JLS
DATE: 5-21-82

ROAD CONSTRUCTION PLANS
STORM DRAIN & PAVING DETAILS
GLEN OAKS
SECTION ONE AREA TWO
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOR: EARL ARMISER
3967 DUCKS FOOT LANE
EHLICOTT CITY, MD 21043

SCALE: AS SHOWN
DRAWING: 20-F
JOB NO: 81-079
FILE NO: 81-079-D

AS-BUILT 10-14-83

F-82-137

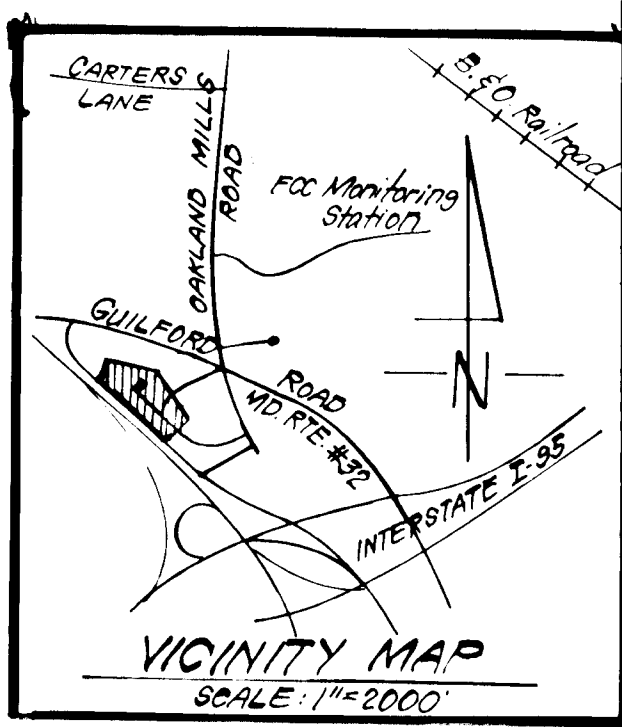


- CONSTRUCTION SEQUENCE:**
1. Rough Grade that portion of S.W.M. Pond above Trap #1A as shown and construct D.D. & P.D. and adjust Ex. P.D. as necessary.
 2. Remove Ex. Trap #1 as shown on G.P. 82-18 and construct storm drainage S-15 thru Ex. Inlet.
 3. Construct Utilities
 4. Construct remainder of storm drainage & install S.F.I.P.s.
 5. Fine grade & construct paving, houses, etc.
 6. Stabilize all other disturbed areas onsite in accordance with Sigs. & Specs.
 7. Remove Sediment & Erosion Control measures after all areas draining to them have been stabilized.

- LEGEND:**
1. Existing Contour ——— 660
 2. Proposed Contour ——— 360
 3. Perimeter Dike ——— P.P. ———>
 4. Diversion Dike ——— D.D. ———>
 5. Straw Bale Dike/Silt Fence ——— S.B.D./S.F. ———>
 6. Stone Filter Inlet Protection ——— S.F.I.P. ———>
 7. Stabilized Construction Entrance ———>
 8. Existing Perimeter Dike ——— Ex. P.D. ———>

TRAP #1-A 90 ST - ST 3
 DA = 5.0 Acres
 Storage Req'd = 90000 cf
 * Storage Provided = $2.2811 \times 123560 - (1/2 \times 127 \times 150 \times 6) = 87,215$ cf
 Top of Stone Crest = 342.0
 Bottom Elevation = 335.5
 Bottom Dimensions = see Plan
 Depth = 6.5
 * Storage @ Elev. 342.0 from S.W.M. Comps.

PLAN
 SCALE 1"=50'



933

Reviewed for Howard S.C.D.
 Name
 Signature [Signature] Date 6-5-82
 U.S. Soil Conservation Service

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

[Signature] Approved Date 6-4-82

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Signature of Developer/Builder [Signature] Date 6-4-82
 L. Earl Armiger

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

Signature [Signature] Date 5-25-82
 G. Nelson Clark



APPROVED: Department of Public Works
[Signature] 8-16-82
 Chief, Bureau of Engineering
 APPROVED: Howard County Office of Planning and Zoning
[Signature] 8-9-82
 Chief, Division of Land Development & Zoning Administration

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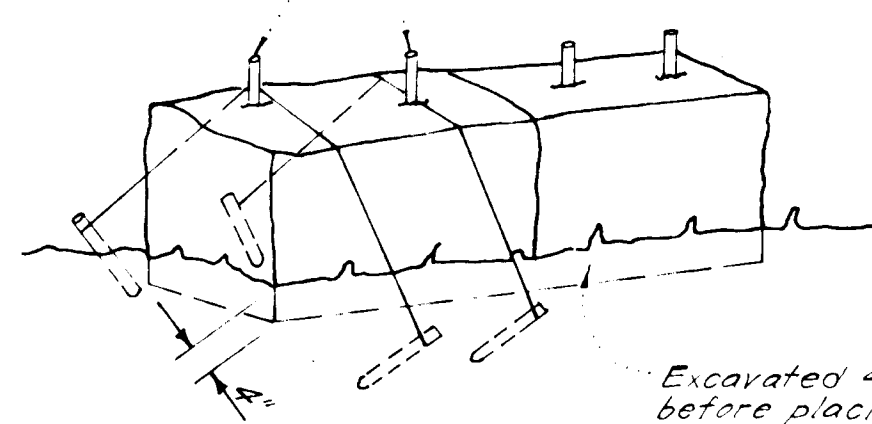
DESIGNED J.L.S.	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN & DRAINAGE AREA MAP GLEN OAKS	SCALE AS SHOWN
DRAWN K.I.W.		DRAWING 3 OF 4
CHECKED J.L.S.	SECTION ONE AREA TWO 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 81-079
DATE 5-21-82	FOR: EARL ARMIGER 3987 Ducks Foot Lane Ellicott City, Md. 21023	FILE NO. 81-079-D

F-82-137 AS-BUILT 10-14-83

GENERAL NOTES

All bales shall be tied with non-weathering materials, i.e. wire, nylon

Two re-bars or wooden stakes driven through each hole 1/2"-2" into ground. Rebars to be 3" or less flush with top of bales



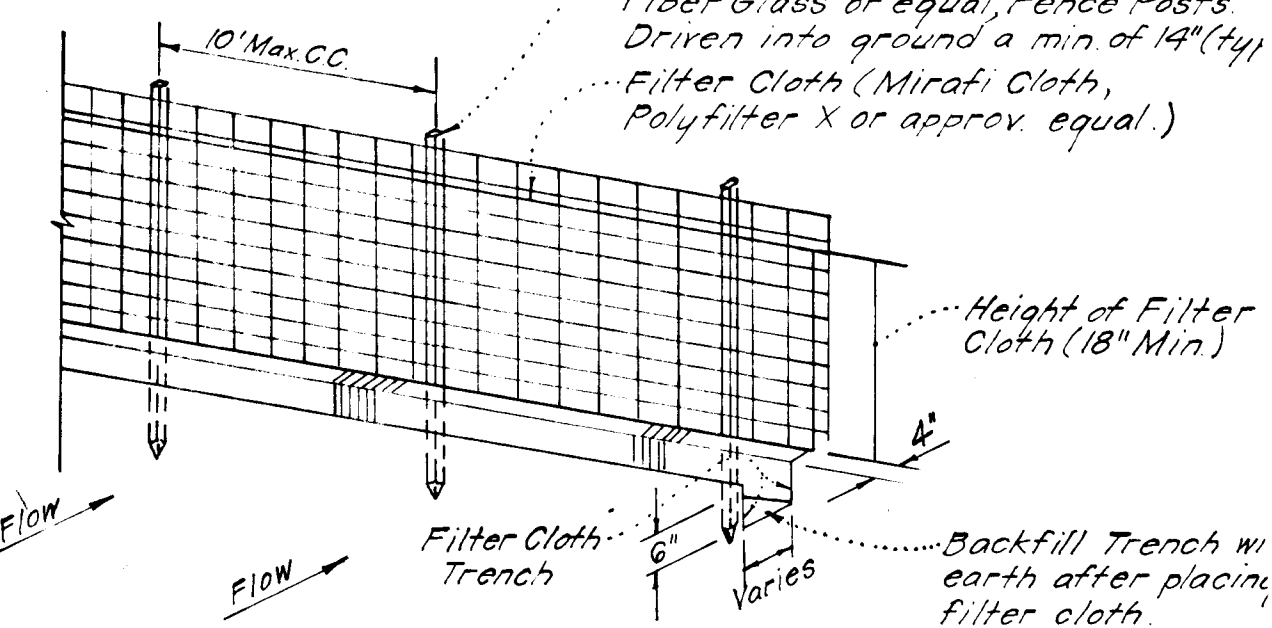
Excavated 4" below ground before placing bales

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

STRAW BALE DIKE DETAIL (S.B.D.)

No SCALE

Woven wire fence - Min 14 gage; 6" Max spacing



36" Min Metal, Heavy Duty Fiber Glass or equal, Fence Posts Driven into ground a min of 14" (4y). Filter Cloth (Mirafi Cloth, Polyfilter X or approved equal.)

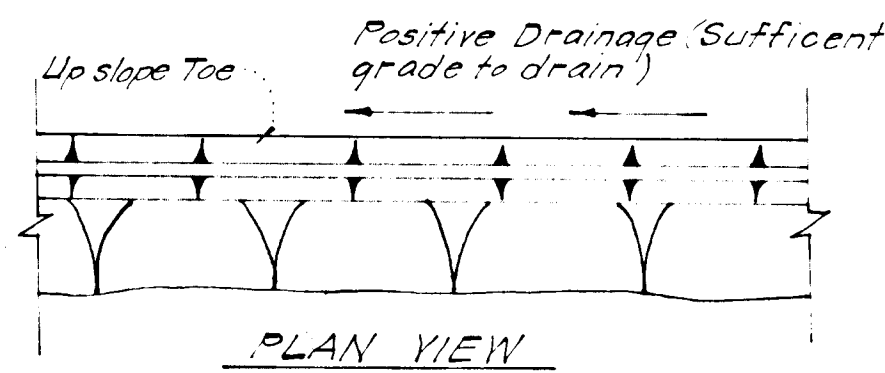
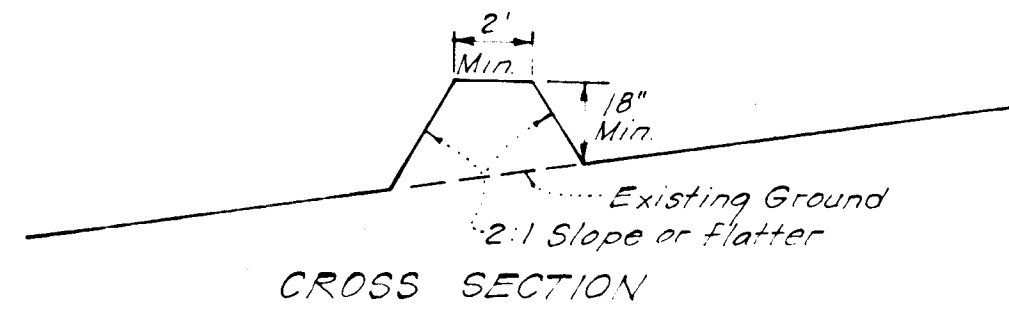
Height of Filter Cloth (18" Min)

Backfill Trench w/ earth after placing filter cloth.

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".

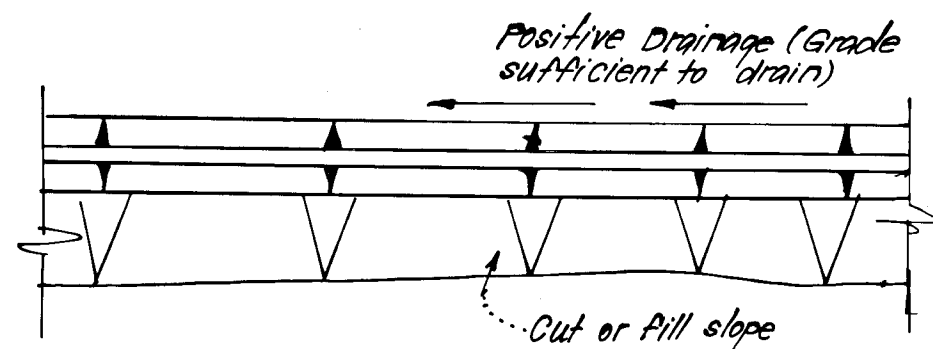
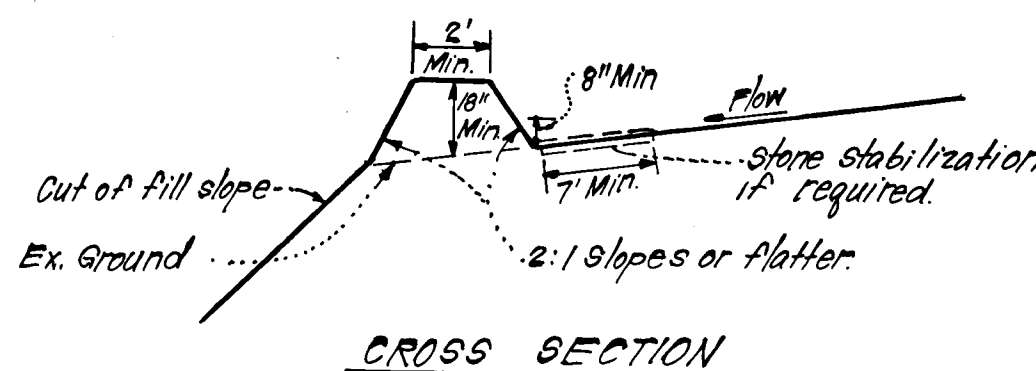
SILT FENCE DETAIL (S.F.)

No SCALE



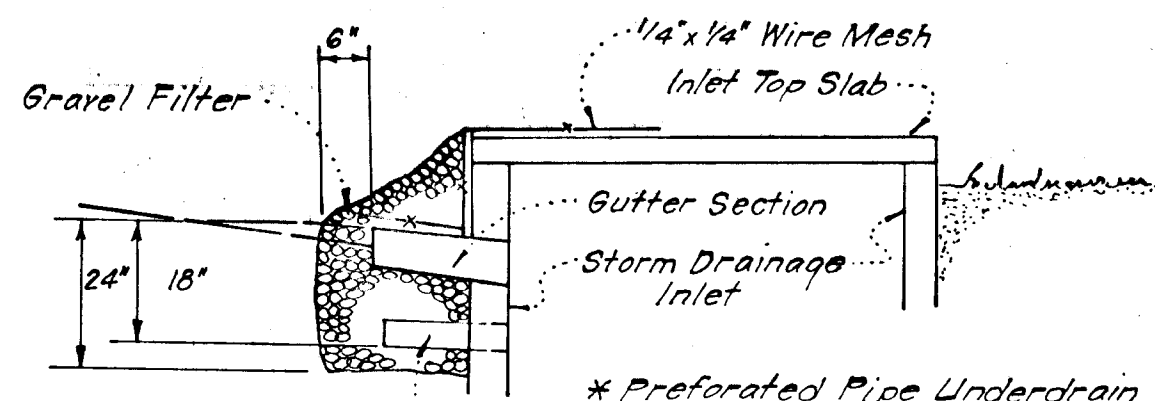
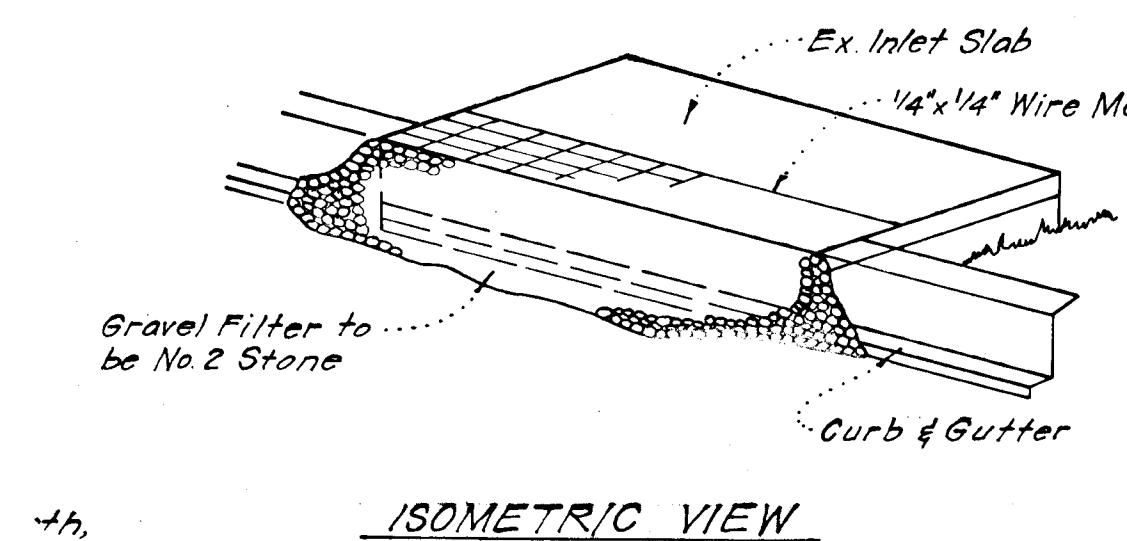
PERIMETER DIKE (P.D.)

No SCALE



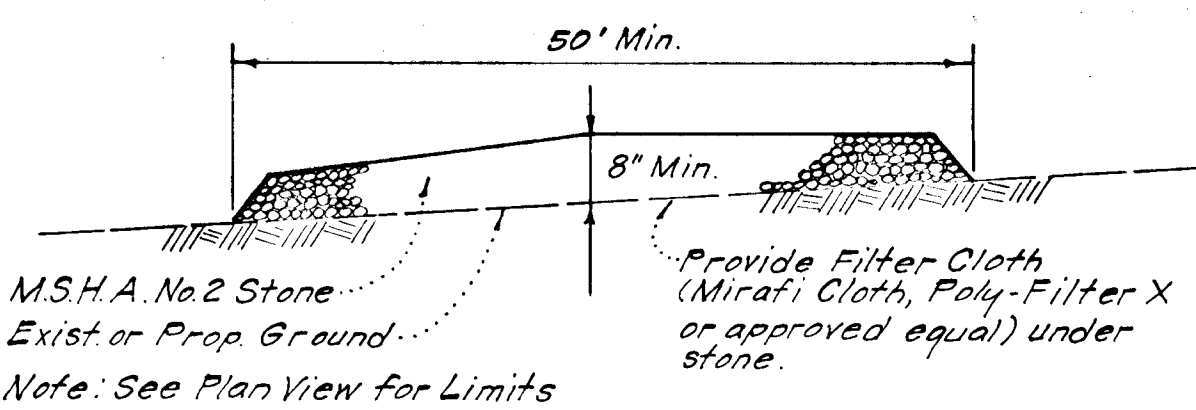
DIVERSION DIKE (D.D.)

No SCALE



STONE FILTER INLET PROTECTION (S.F.I.P.)

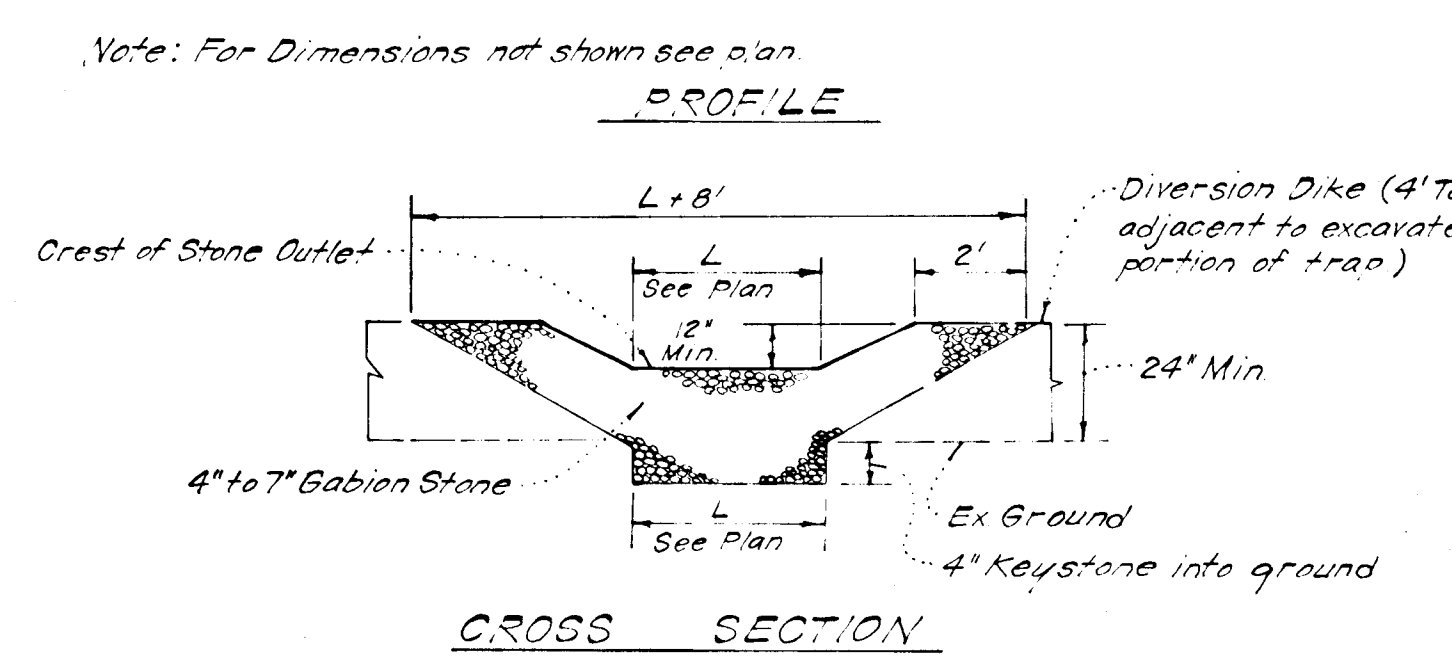
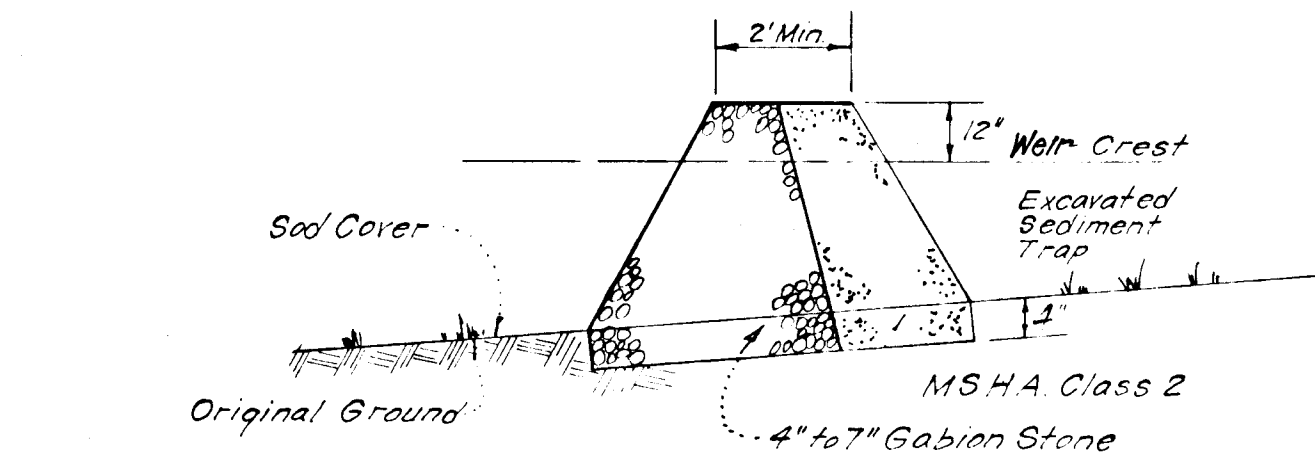
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STABILIZED CONSTRUCTION ENTRANCE

No SCALE

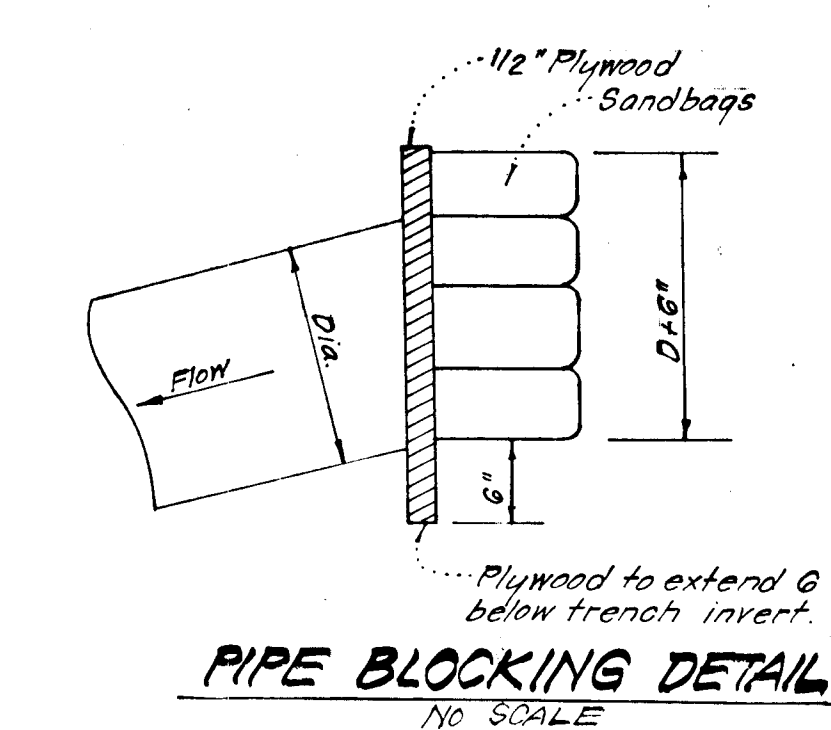
Provide Filter Cloth (Mirafi Cloth, Poly-Filter X or approved equal) under stone.
Note: See Plan View for Limits



Notes:
1. Sediment Trap to be cleaned out when sediment reaches a level of 1ft 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 trap.

DETAILS OF STONE FILTER OUTLET FOR STONE OUTLET SEDIMENT TRAP

No SCALE



PIPE BLOCKING DETAIL

No SCALE

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
Approved Date

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Signature of Developer/Builder Date
L. Earl Armiger 6-4-82

ENGINEER'S CERTIFICATE
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Signature Date
G. Nelson Clark 5-25-82

APPROVED: Department of Public Works
Armed & Ready 8-10-82
Chief, Bureau of Engineering
APPROVED: **William P. ...**
Chief, Division of Land Development & Zoning Administration Date
8-9-82

CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LUXWOOD DRIVE BELLEVILLE, MARYLAND 20804 301-593-3474

DESIGNED JLS	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL DETAILS	SCALE As Shown
DRAWN K.I.W.	GLEN OAKS	DRAWING 4024
CHECKED JLS	SECTION ONE AREA TWO 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 81-079
DATE 5-21-82	FOR: EARL ARMIGER 5907 Ducks Foot Lane Ellicott City, Md 21043	DATE 81-079-D

933