

CURB & CUTTER LEGEND

- Std. 7" C&G
- Rev. 7" C&G
- Std. 6" C&G
- Rev. 6" C&G
- Temp. Bit. Curb
- Modified C&G
- Rev. Mod. C&G

STREET TREE TABLE

SYM.	TYPE	SIZE	QUANT.	REMARKS
(+)	Shade Trees, 16' O.K.S. Maples to be specified by others	2 1/2" CAL	9G	Heavy Heads

STREET TREE NOTES:

- Contractor shall verify location of underground utilities prior to digging.
- Final location of trees may be adjusted slightly to accommodate field conditions.
- Planting procedure shall comply with "Landscape Specs. for Baltimore-Washington Metropolitan Area."
- Specification of the approved species may be permitted provided that the planting is in accordance with the street tree and landscape requirements as specified in Section 16.131 of the No. 24 Subdivision Regulations.
- Street trees to be planted 6' behind curb or 2' behind sidewalk typical.

Street Light Legend

- 250 Watt Mercury Vapor Lamp Pendant. Mounted fixtures on a 30 Ft. Galv. Pole.
- 250 Watt Mercury Vapor Lamp Pendant. Mounted fixtures on a 25 Ft. Steel Pole.
- 175 Watt Mercury Vapor Colonial Post top fixtures on 14' Fiberglass Pole.

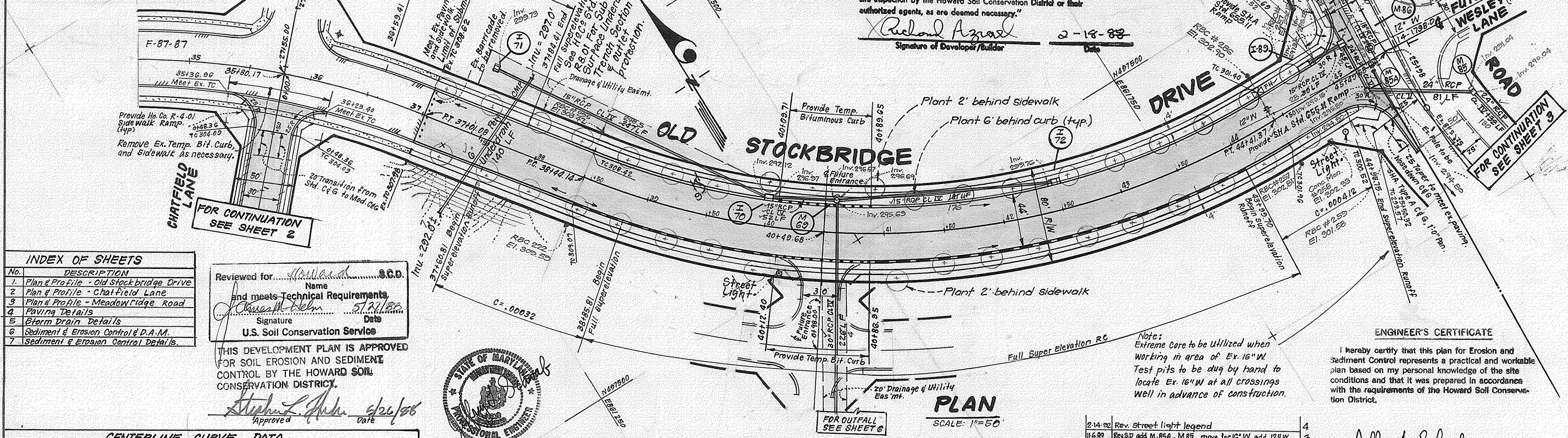
DEVELOPER'S CERTIFICATE

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.

Richard Agard
Signature of Developer/Builder

2-18-88
Date

- GENERAL NOTES**
- All storm drain paving shall be constructed in accordance with the latest edition and specifications of Howard County, MD SHA.
 - Types of storm drainage refer to the Standard Details of Ho. Co. of MD SHA.
 - Trench compaction for storm drains within road or street right of way limits shall be in accordance with "Ho. Co. Design Manual, Vol. II" Std. G-201.
 - Information concerning underground utilities was obtained from available records but the contractor must determine the exact location and elevation of mains by digging test pits, by hand at all utility crossings, well in advance of construction.
 - All utility companies shall be notified 24 hrs. in advance of construction.
 - All traffic services, parking and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices," 1978 Edition.
 - Sag and Crest Vertical Curves were designed in accordance with "Ho. Co. Design Manual," Vol. III.
 - Provide Conc. Sidewalk Ramps Ho. Co. Std. Type A R-4-01 where shown in plan.
 - Design Speed: See table sht. 5. Zoning: RSA-B.
 - The contractor or developer shall contact the Construction Inspection/Survey Division 24 hrs. in advance of commencement of work Ph. 792-7272.
 - Storm Water Management for this project has been waived per preliminary plan P-86-64.



INDEX OF SHEETS

No.	DESCRIPTION
1	Plan & Profile - Old Stockbridge Drive
2	Plan & Profile - Chatfield Lane
3	Plan & Profile - Meadowridge Road
4	Paving Details
5	Storm Drain Details
6	Sediment & Erosion Control & D.A.M.
7	Sediment & Erosion Control Details

Reviewed for *Richard Agard* S.C.D. Name and meets Technical Requirements

Richard Agard Signature Date

U.S. Soil Conservation Service

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

Stephen L. Adams Date 6/24/88



PLAN
SCALE: 1"=50'

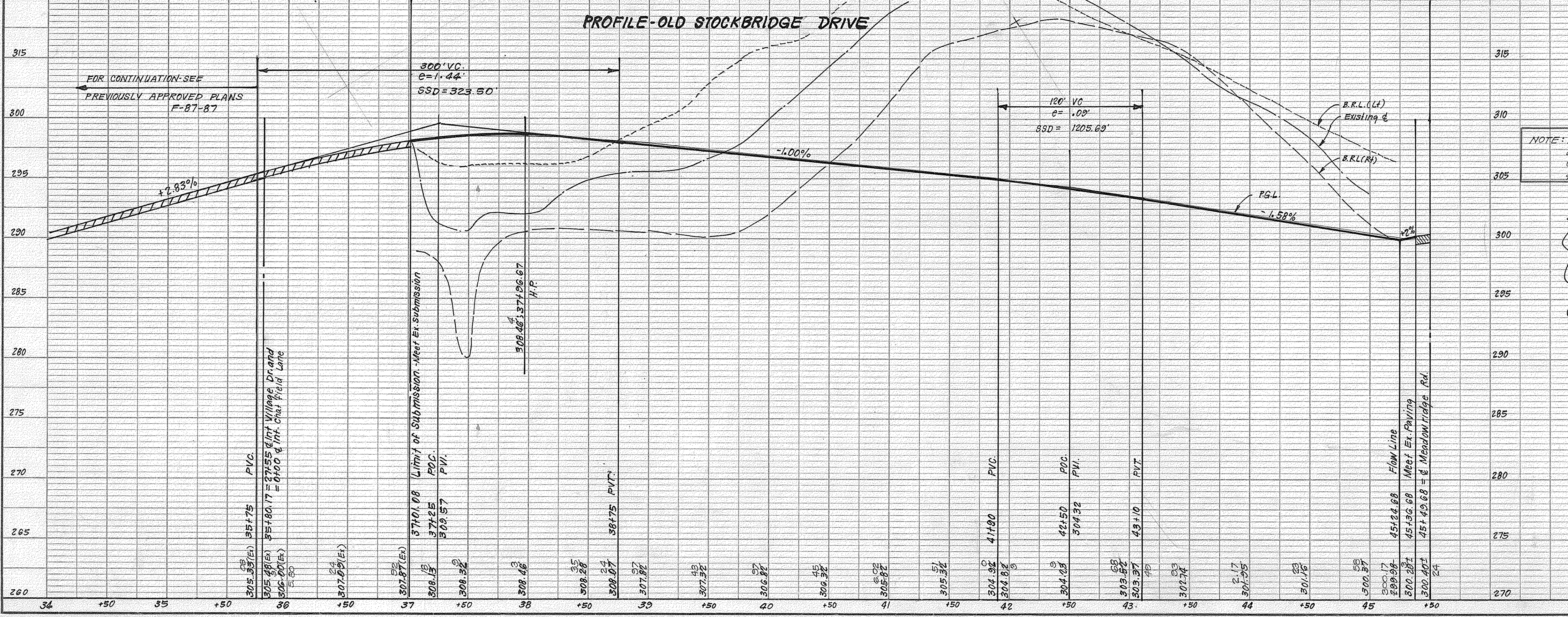
ENGINEER'S CERTIFICATE

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.

Jeffrey J. Schuch
Date 2-19-88

CENTERLINE CURVE DATA

STATIONS	RADIUS	Δ	ARC	TAN	CHORD & BEARING
PC 38+44.14 to PT 44+41.37	637.00'	53°43'06"	597.23'	322.60'	575.59' N62°55'03"W

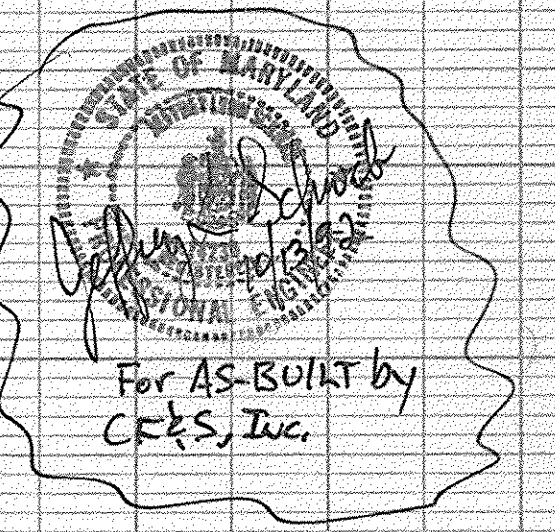


PROFILE SCALE
HORIZ. 1"=50'
VERT. 1"=5'

PROFILE LEGEND
Profile Grade Line
Existing &
B.R.L. (RT)
B.R.L. (LT)

SUPERELEVATION TABLE

STATION	E	TC (RA)	TC (LT)
30+58.41	307.26	307.36	308.30
31+01.08	307.88	307.98	308.62
31+25	308.13	308.23	308.71
31+50	308.32	308.42	308.72
31+80.81	308.38	308.48	308.71
31+84.41	308.45	308.78	308.61
32+00	308.46	308.90	308.56
32+25	308.47	309.02	308.51
32+44.14	308.32	309.07	308.42
32+50	308.28	309.07	308.38
32+75	308.07	309.03	308.17
32+85.81	307.90	309.00	308.06
33+09.70	301.95	302.99	302.05
33+25	301.56	302.13	301.66
33+41.37	301.30	301.96	301.40
33+75	300.77	301.12	300.87
34+06.75	300.42	300.52	300.52



1266

N/B	Revision	Date
1	Add underdrain, rev. 6" r.s. 1.61, 1.62, 1.65 & 1.64	7-27-87
2	Add Street Light	12-13-87

STATIONS	RADIUS	Δ	ARC	TAN.	CHORD & BEARING
PC 1130.89 to PT 1475.85	300.00'	89° 33' 31"	44.56'	22.32'	44.52' S 89° 48' 31" W
PC 3105.50 to PCC 4180.94	125.00'	85° 00' 00"	18.44'	11.23'	18.90' S 77° 03' 22" W
PCC 4180.94 to PT 6178.13	325.00'	59° 00' 00"	181.19'	36.27'	181.61' N 43° 56' 38" W

Reviewed for Howard S.C.D. Name
and meets Technical Requirements
James M. Schuch 5/21/88 Date
Signature
U.S. Soil Conservation Service

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 Sedimentation 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."
Richard R. Rasmussen 2-28-88
Signature of Developer/Builder Date

James M. Schuch 4/21/88
Approved Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Paul J. Hession 6/17/88
Chief, Land Development Division Date
Elizabeth C. Calver 6/27/88
Chief, Bureau of Highways Date
Elizabeth C. Calver 6/29/88
Chief, Bureau of Engineering (Acting) Date
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.
Janice J. J. J. J. 7-21-88
Chief, Division of Community Planning & Land Development. Date

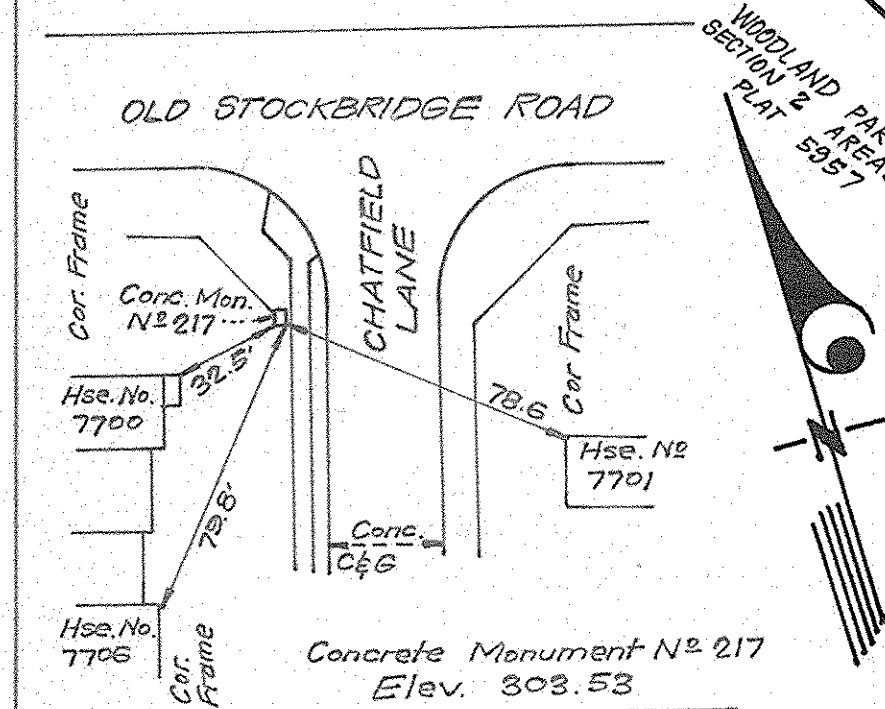


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I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation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

Jeffrey L. Schuch 2-19-88
Jeffrey L. Schuch Date

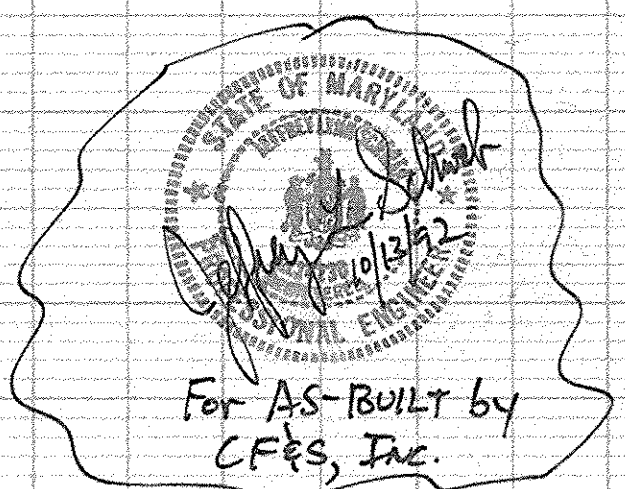
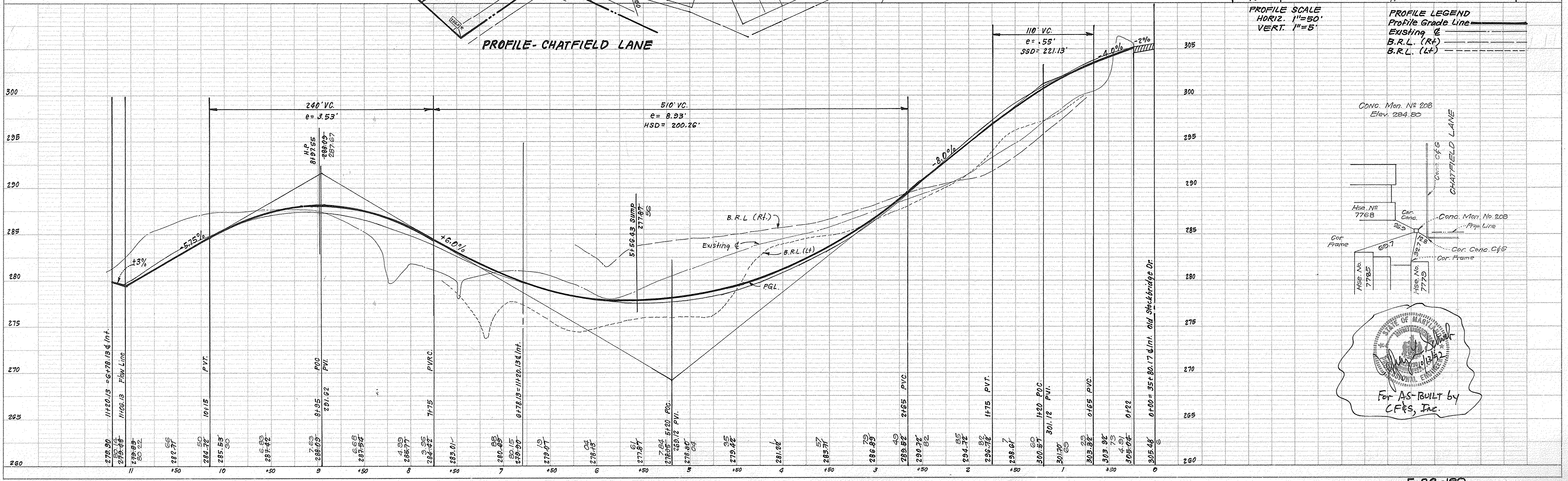
CLARK · FINEFROCK & SACKETT, INC.
ENGINEERS · PLANNERS · SURVEYORS
7135 MINSTREL WAY COLUMBIA, MARYLAND 21045 301-381-7500 301-621-8100

DESIGNED	JLS	ROAD CONSTRUCTION PLANS	SCALE
DRAWN	K/W	CHATFIELD LANE	As Shown
CHECKED	JLS	WOODLAND VILLAGE	DRAWING
DATE	2-19-88	SECTION 2 AREA 1	2 OF 7
		1ST ELECTION DISTRICT	JOB NO.
		HOWARD COUNTY, MARYLAND	85-148
		FOR: CHATEAU BUILDERS, INC.	FILE NO.
		8100 Wooded Glen Ct.	85-148-D
		Ellicott City, Md. 21043	



Note: Test pits to be dug by hand to locate ex. 12" well in advance of construction at all crossings.

Ungrouted Rip Rap 150' x 20" thick. See profile sheet 4.



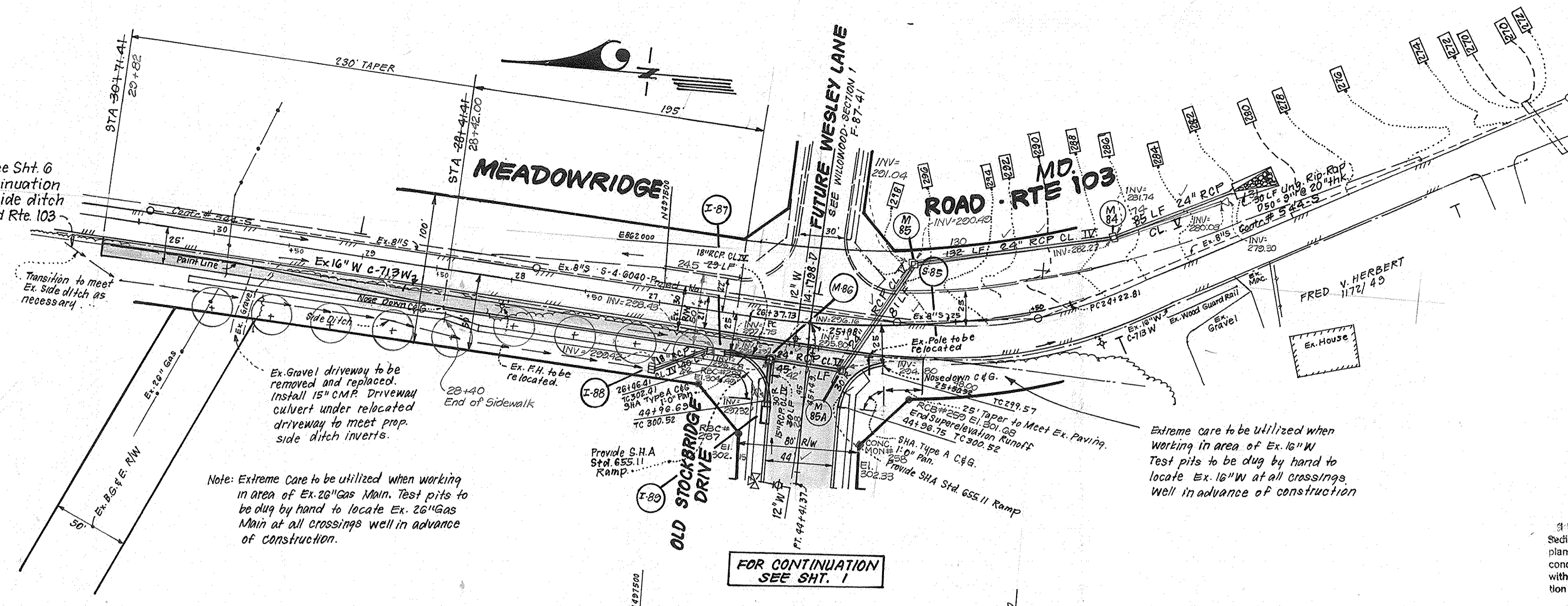
For AS-BUILT by
CF&S, Inc.

1266

CENTERLINE CURVE DATA					
STATIONS	RADIUS	Δ	ARC	TAN	CHORD & BEARING
PC 24+22.81 to PT 26+37.73	800.00'	20°53'22"	214.52'	108.62'	213.77' N06°14'41"W

Note: Test pits to be dug by hand to locate ex. utilities well in advance of construction.

Note: See Sht. 6 for continuation of roadside ditch along Md Rte. 103



Note: Extreme Care to be utilized when working in area of Ex. 20" Gas Main. Test pits to be dug by hand to locate Ex. 20" Gas Main at all crossings well in advance of construction.

Extreme care to be utilized when working in area of Ex. 10" W. Test pits to be dug by hand to locate Ex. 10" W at all crossings well in advance of construction.

FOR CONTINUATION SEE SHT. 1

PLAN
SCALE: 1"=50'

Date	REVISION
11-6-88	Rev. S.D. Add M85A, M85, M84
7-27-81	Rev. sidewalk - add 9 trees
7-18-88	Add Sidewalk. Rev. S.D. loc. between str. I-87 & I-88

Reviewed for... Howard S.C.D.
Name
and meets Technical Requirements
John M. Schmitt 2/27/88
Signature Date
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.
Jeffrey L. Schwarz 2/19/88
Approved Date

DEVELOPER'S/BUILDER'S CERTIFICATE
"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."
Howard
Signature of Developer/Builder Date 2-18-88



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.
Jeffrey L. Schwarz 2-19-88
Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Paul J. ... 6/17/88
Date
Chief, Land Development Division
Lawrence W. ... 4/21/88
Date
Chief, Bureau of Highways
Elizabeth ... 4/29/88
Date
Chief, Bureau of Engineering (C-204)

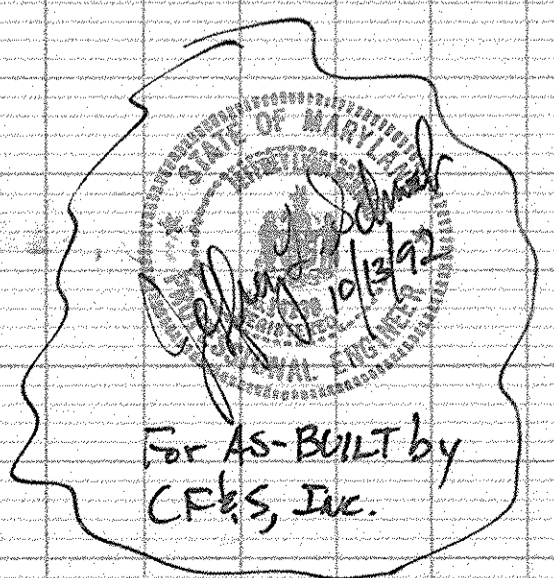
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.
Janice J. ... 7-21-88
Date
Chief, Division of Community Planning & Land Development

CLARK · FINEFROCK & SACKETT INC.
ENGINEERS PLANNERS SURVEYORS
7135 MINSTREL WAY COLUMBIA, MARYLAND 21045 301 381 7500 Baltimore 301 621 8100 Wash.

DESIGNED VLS	ROAD CONSTRUCTION PLANS MEADOWRIDGE ROAD WOODLAND VILLAGE SECTION 2 AREA 1 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE As Shown
DRAWN KIW		DRAWING 3 OF 7
CHECKED VLS		JOB NO. 85-148
DATE 2-19-88		FILE NO. 85-148-D
		FOR: CHATEAU BUILDERS, INC. 8100 Wooded Glen Dr. ELICOTT CITY, Md. 21043

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

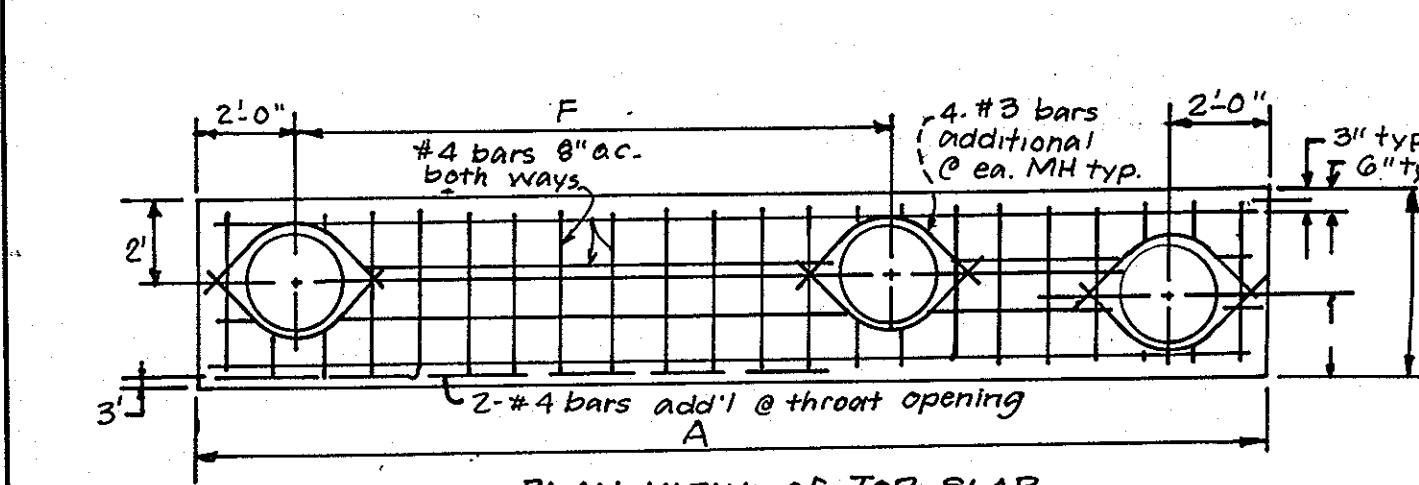
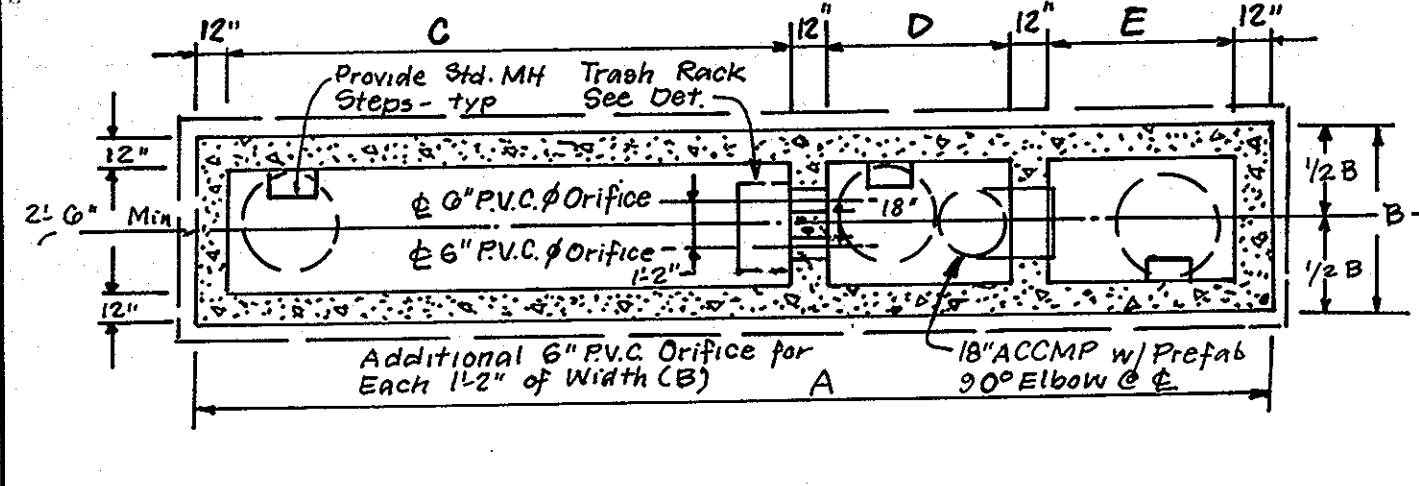
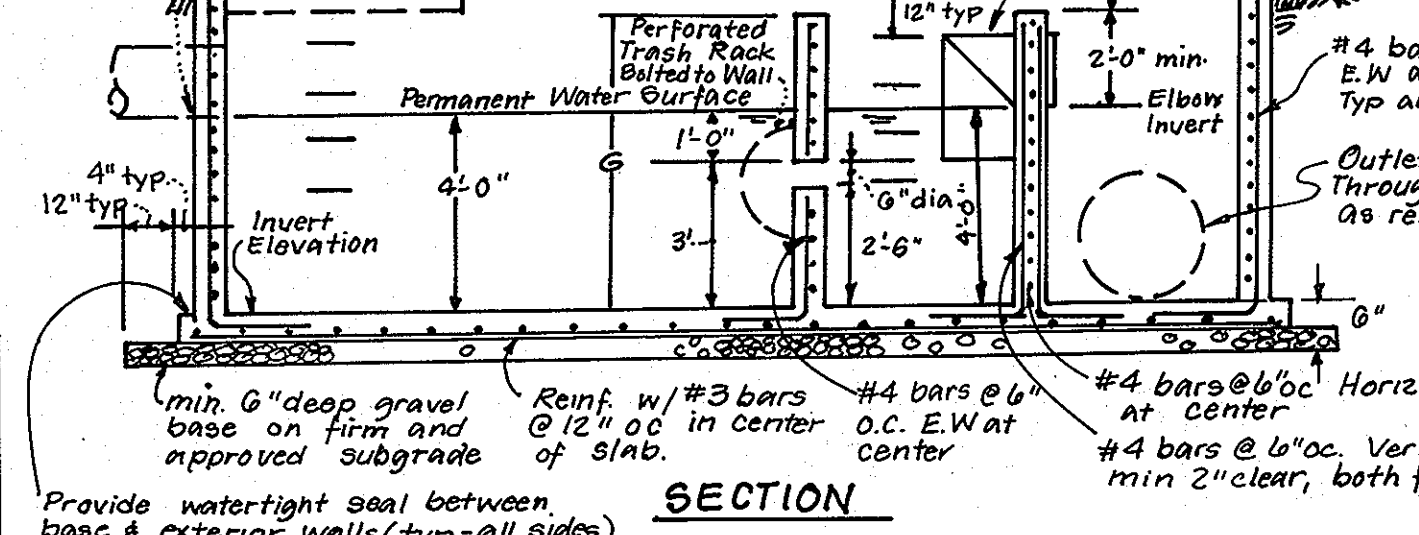
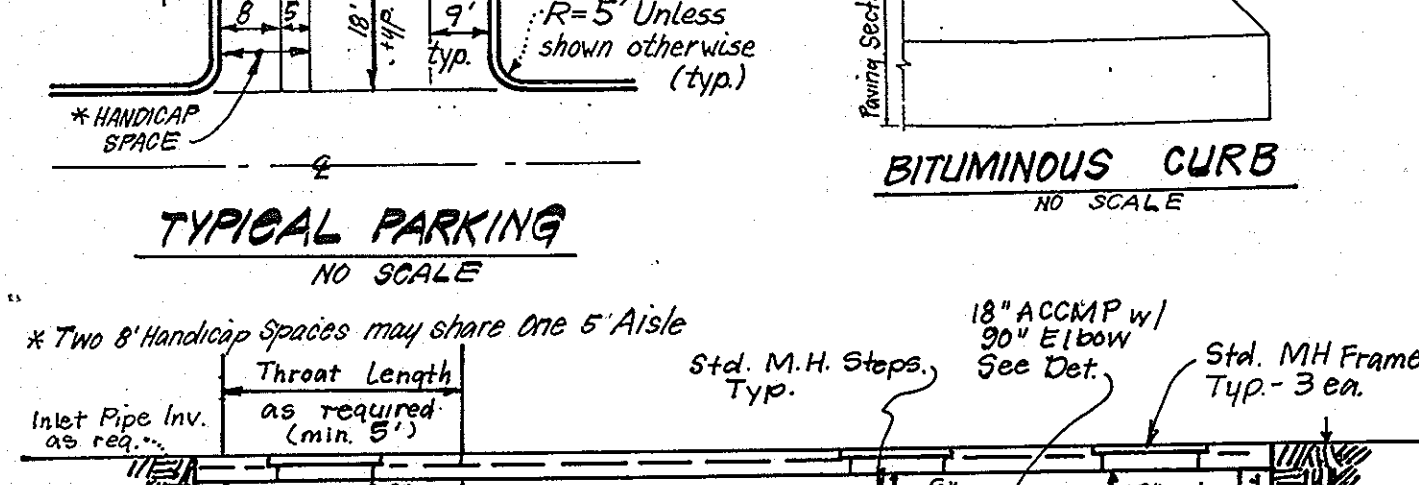
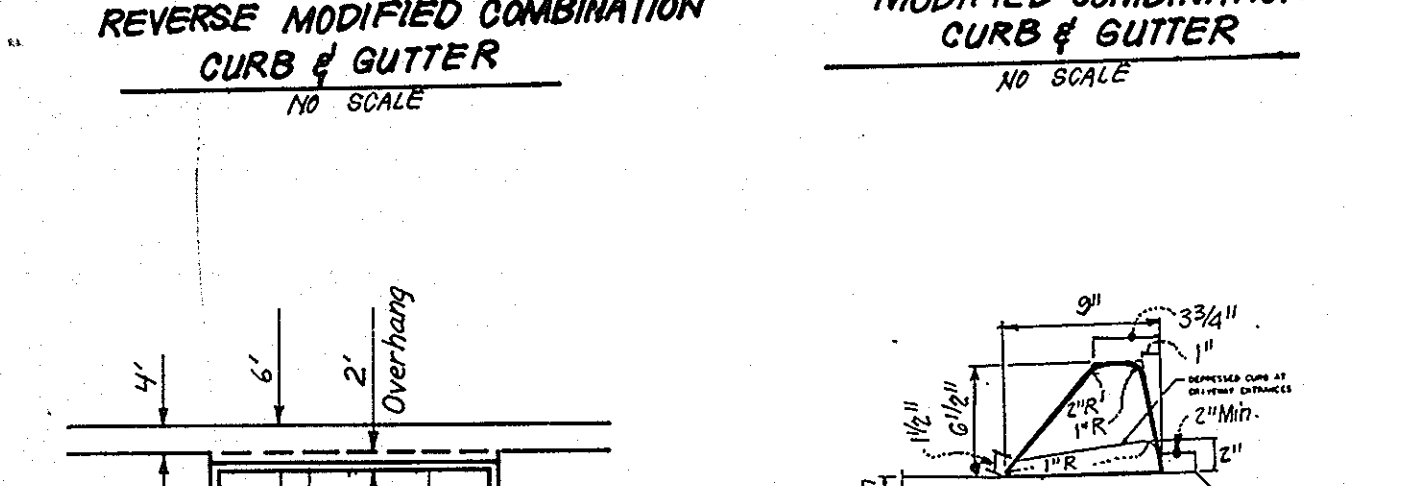
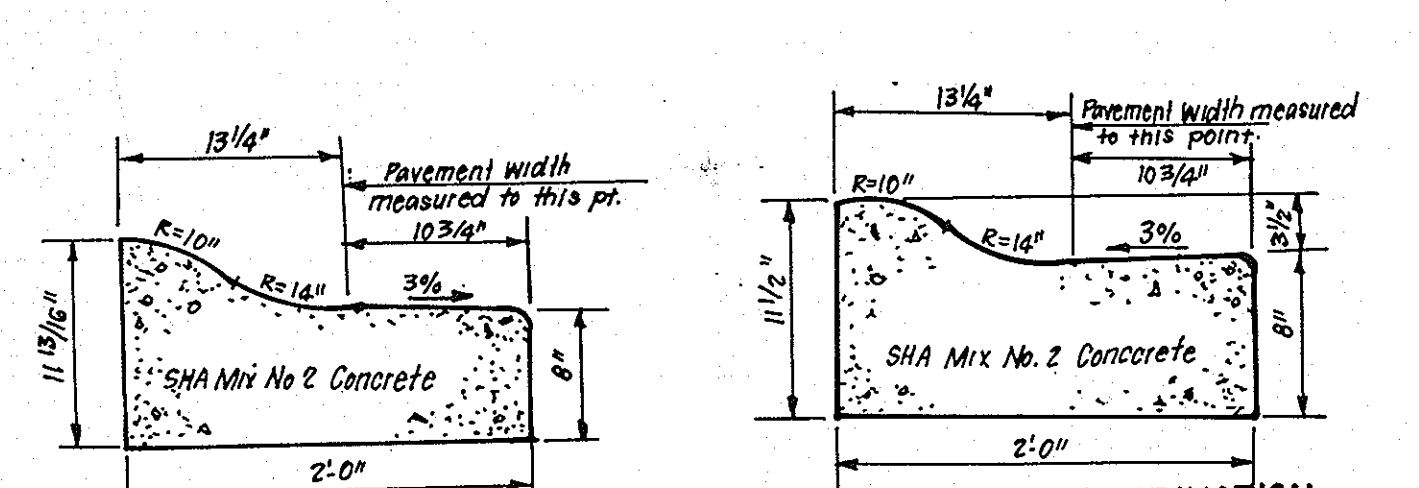
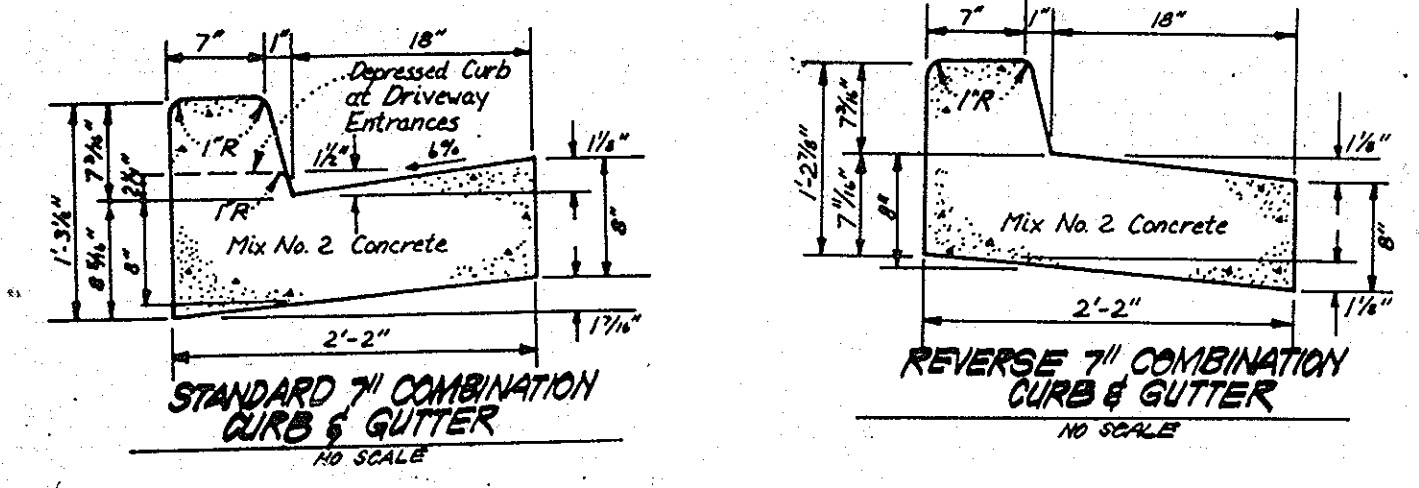
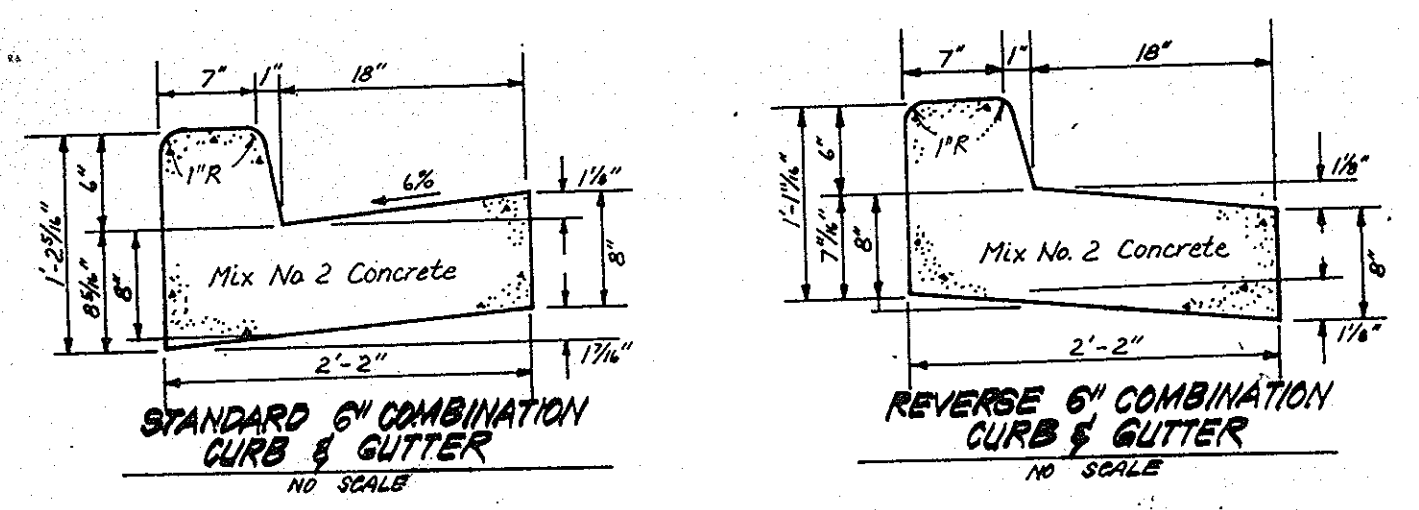
PROFILE LEGEND
Profile Grade Line
Existing & B.R.L. (R.L.)
B.R.L. (L.F.)



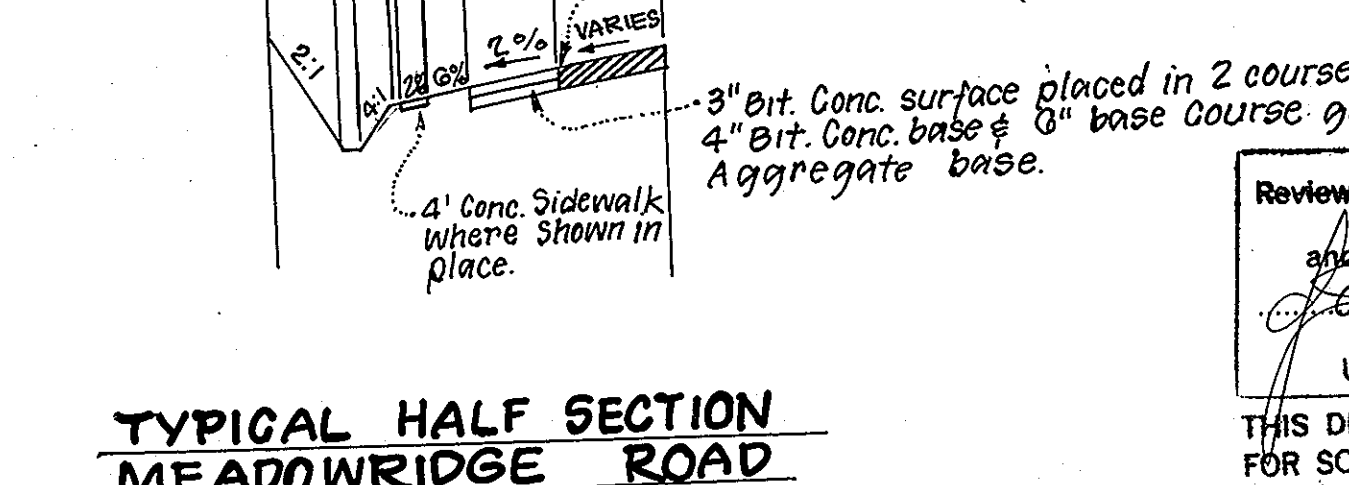
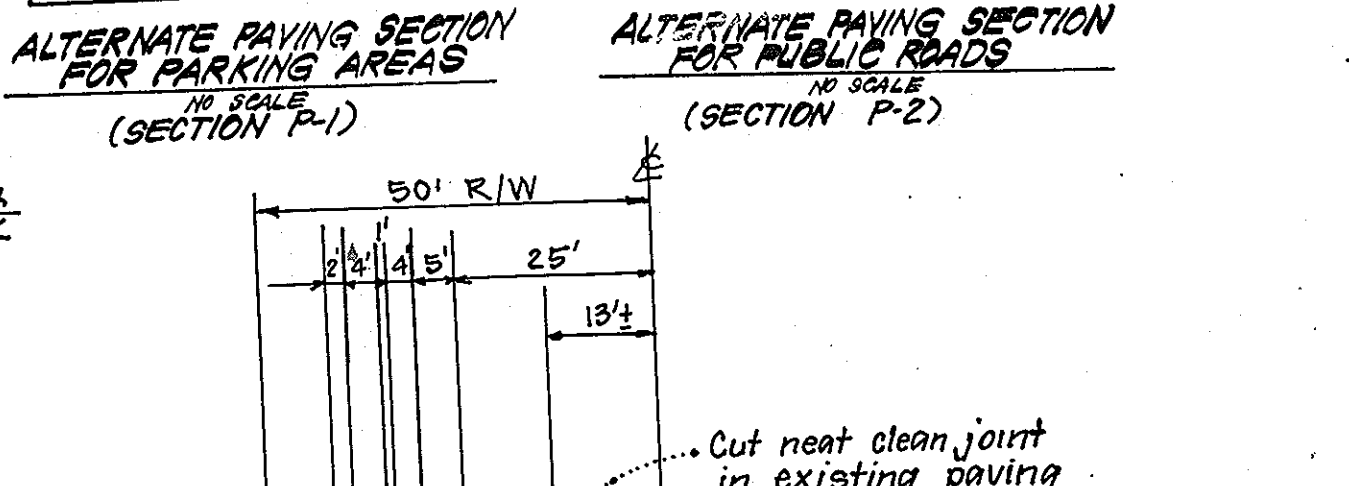
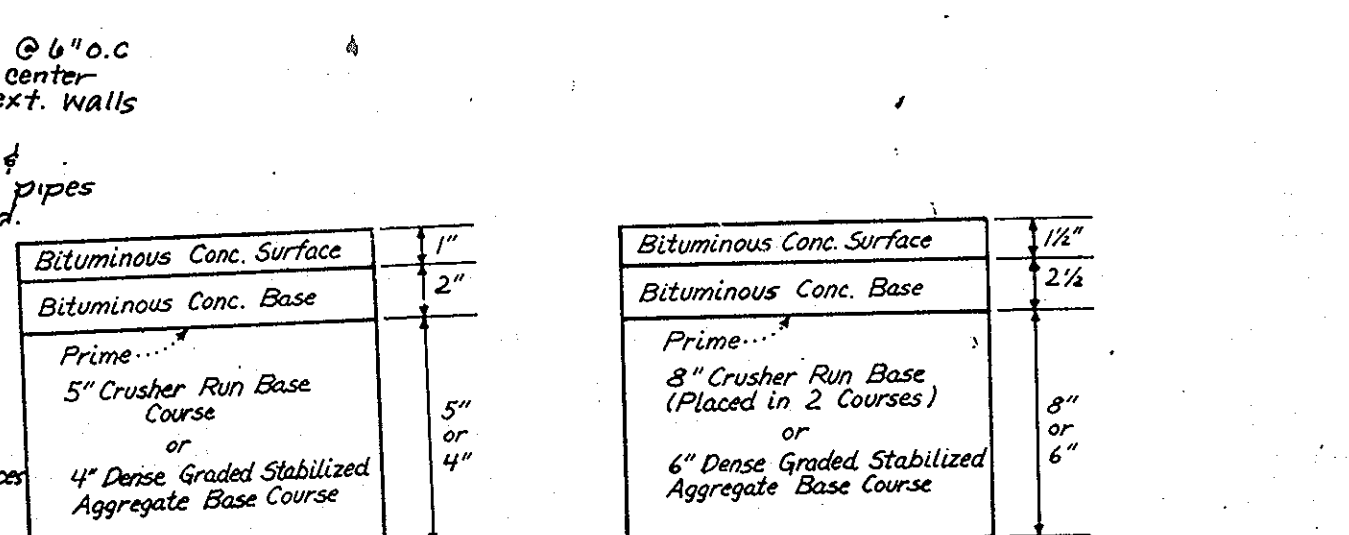
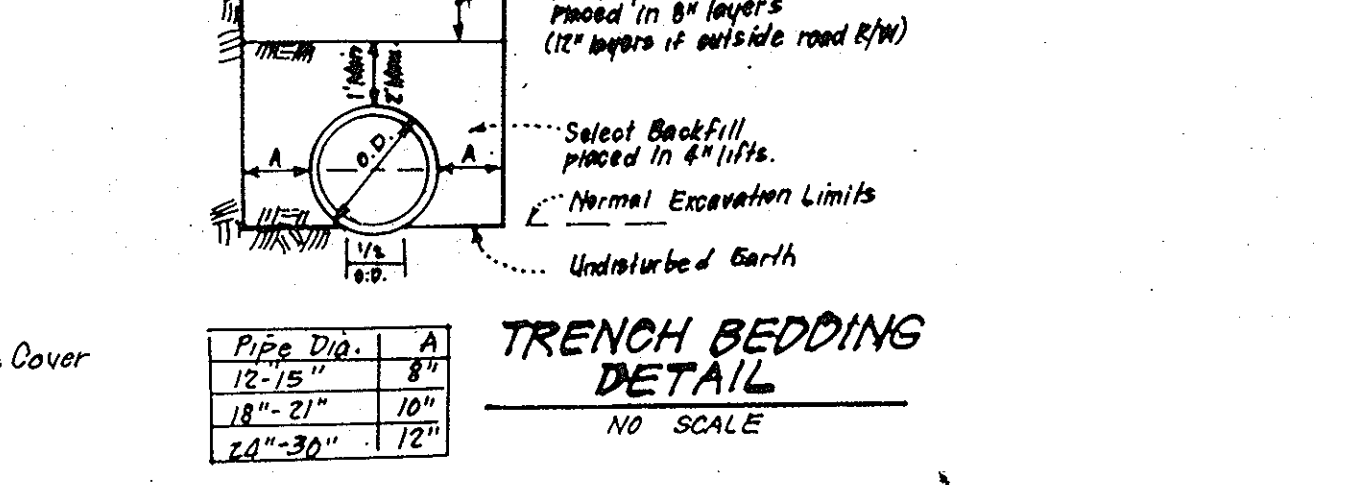
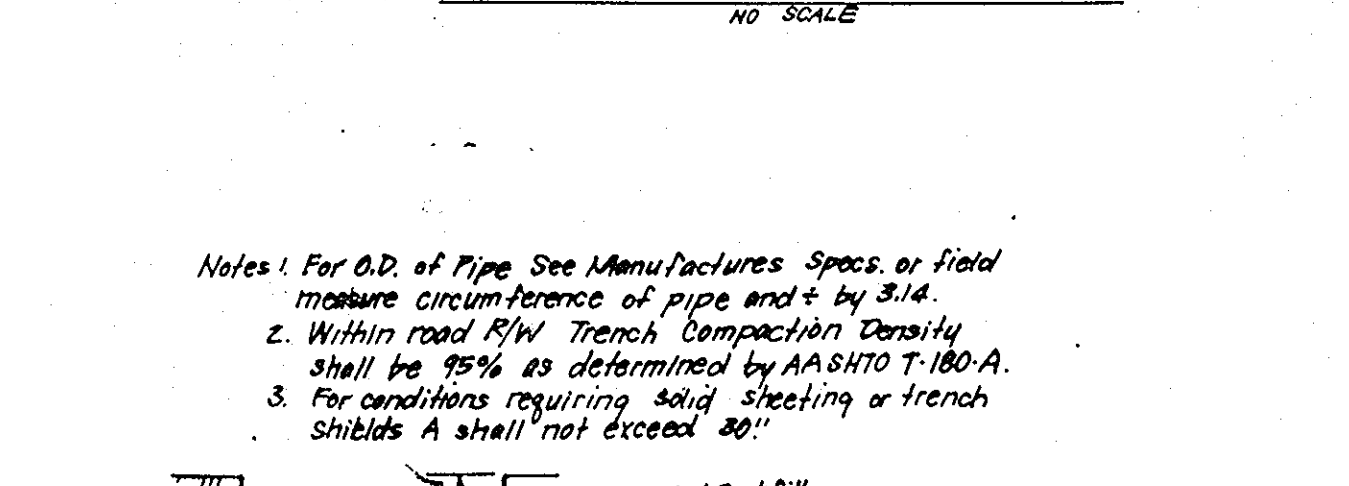
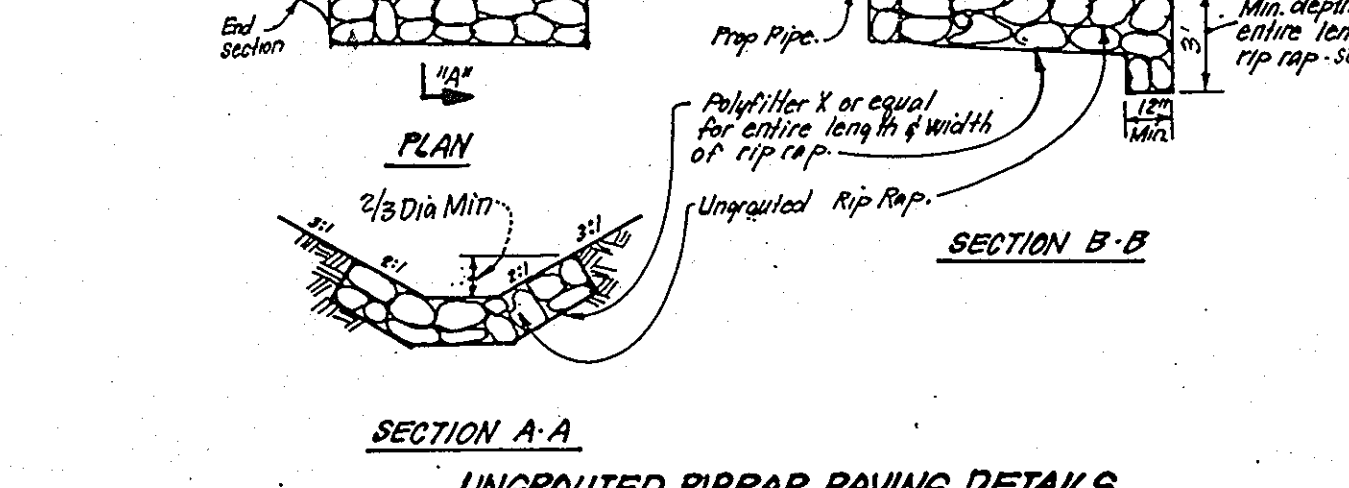
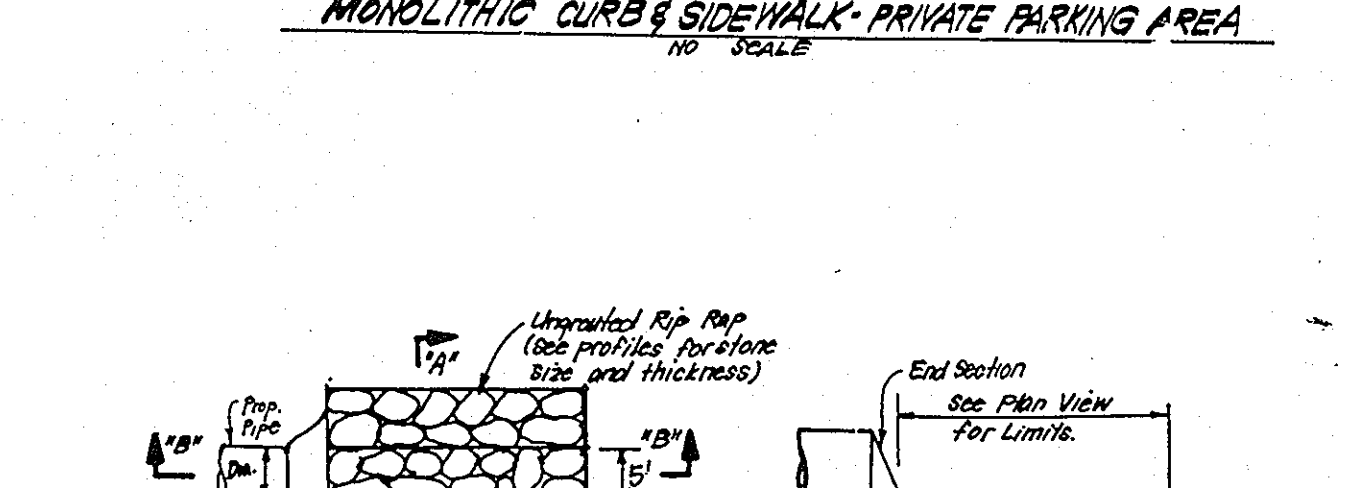
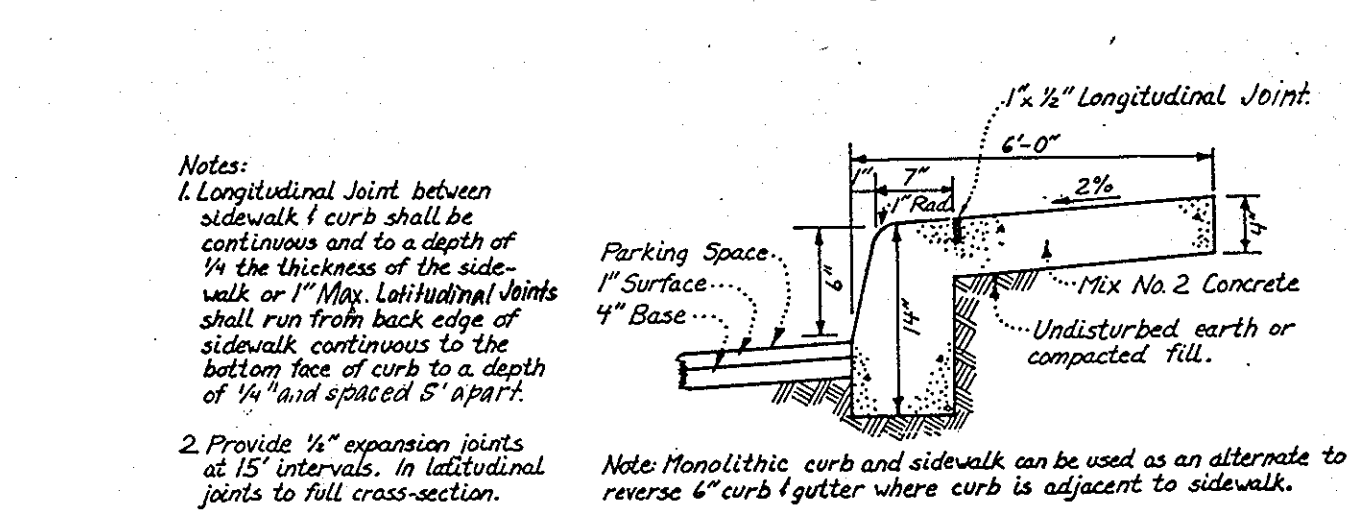
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85-148-D

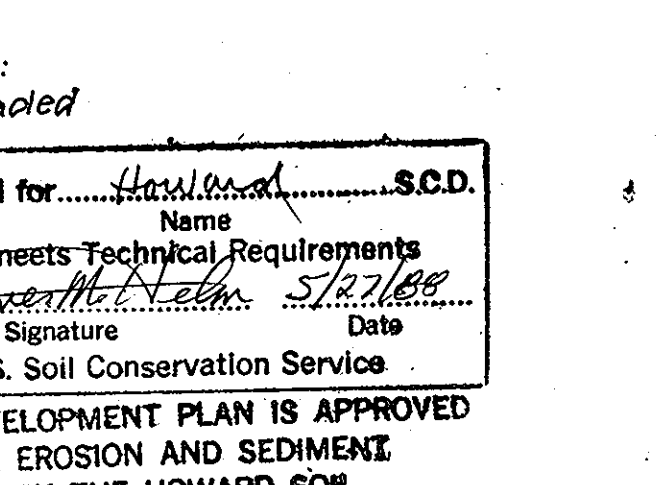
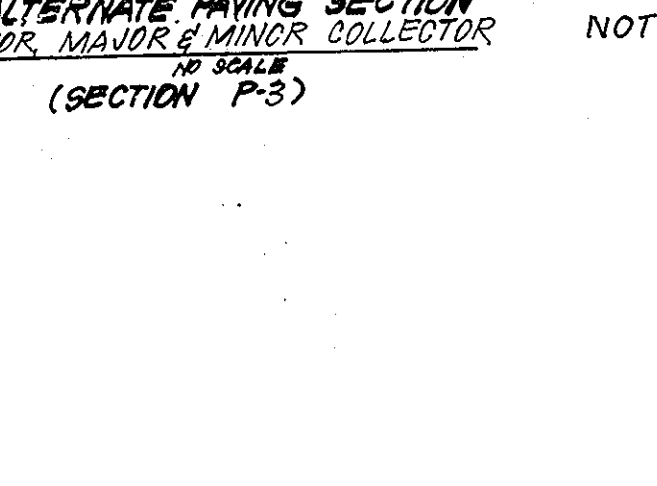
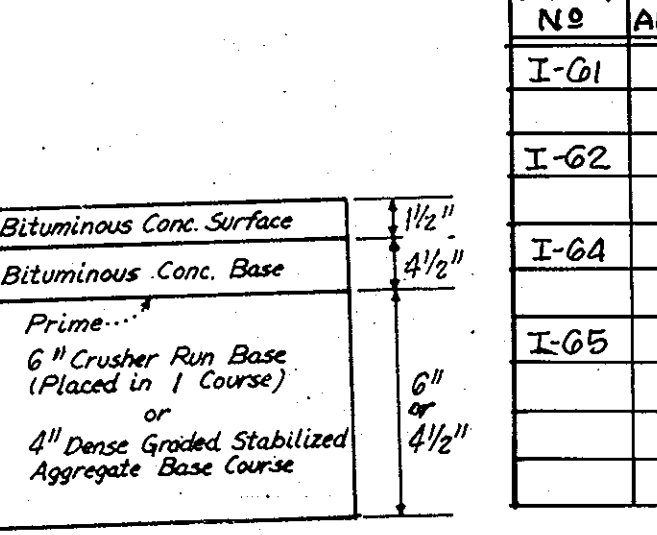
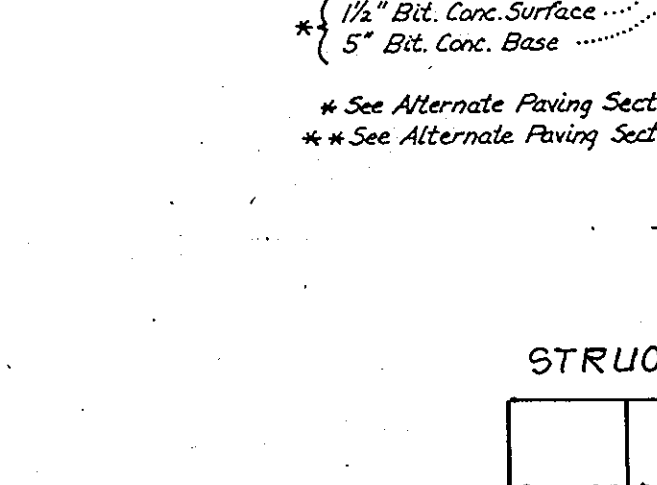
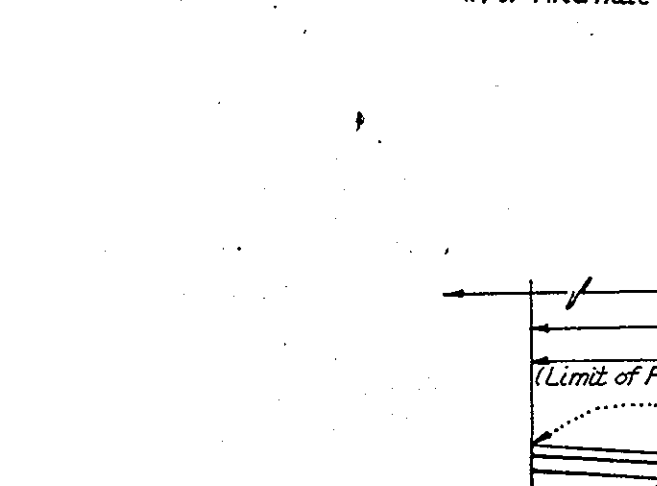
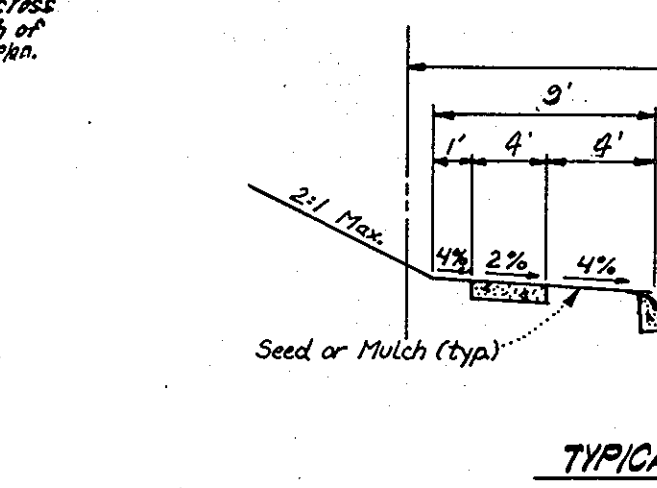
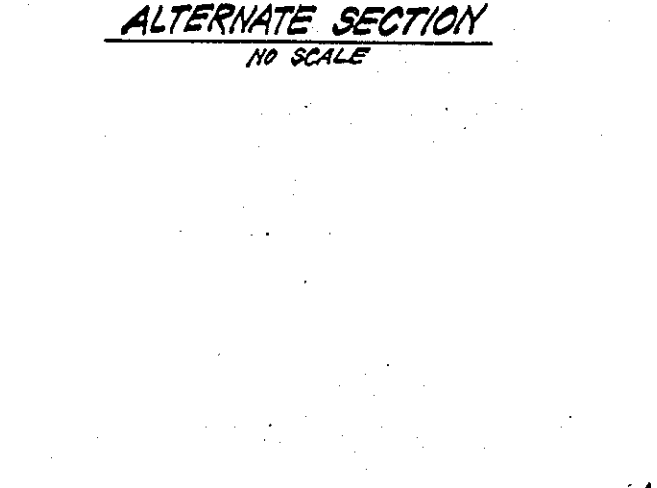
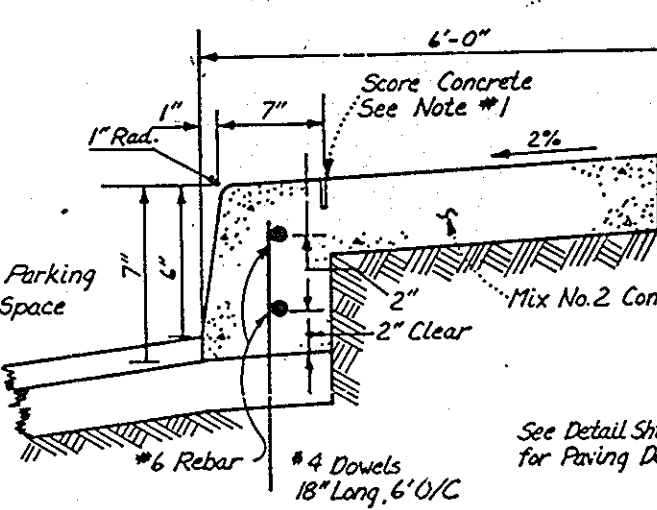
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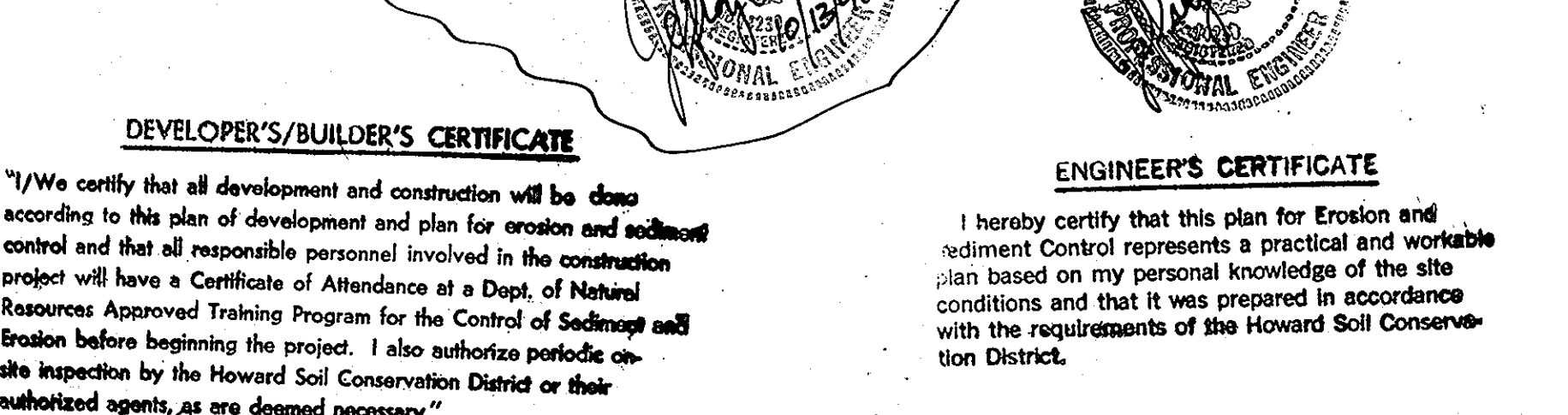
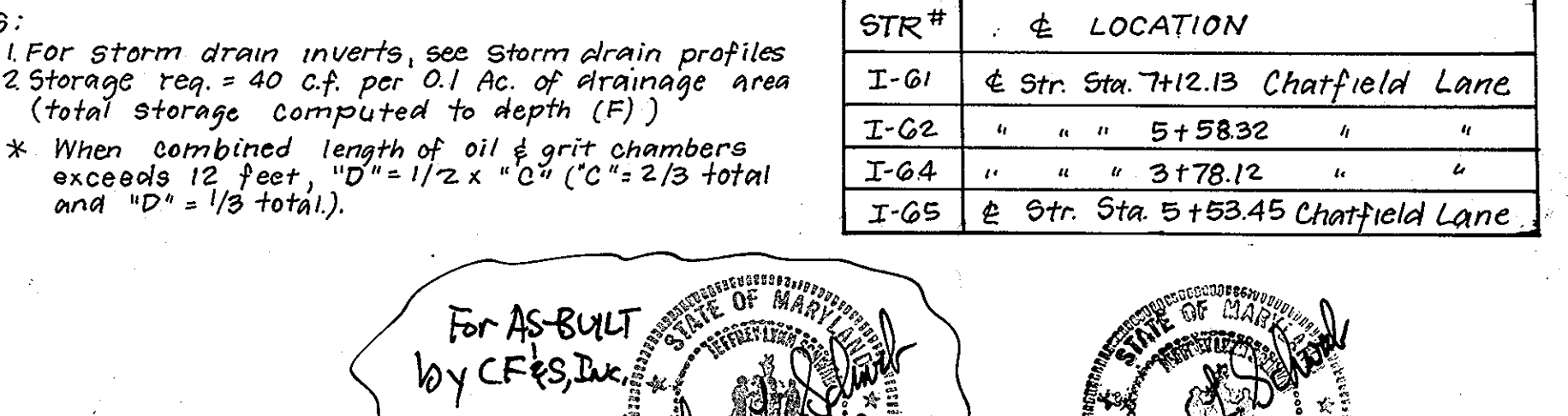
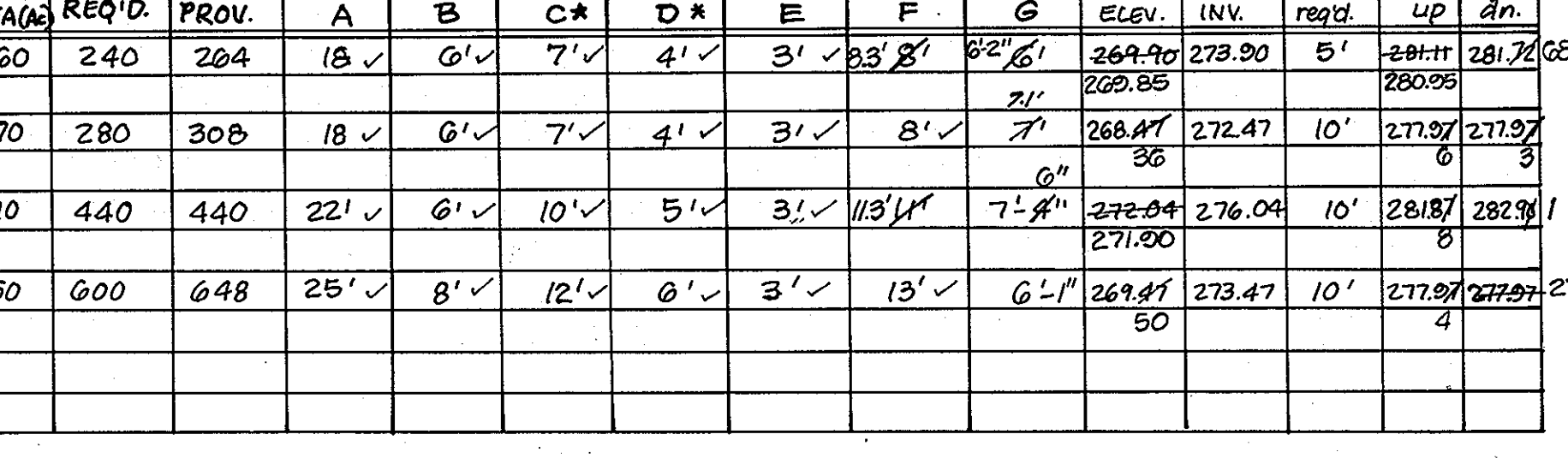
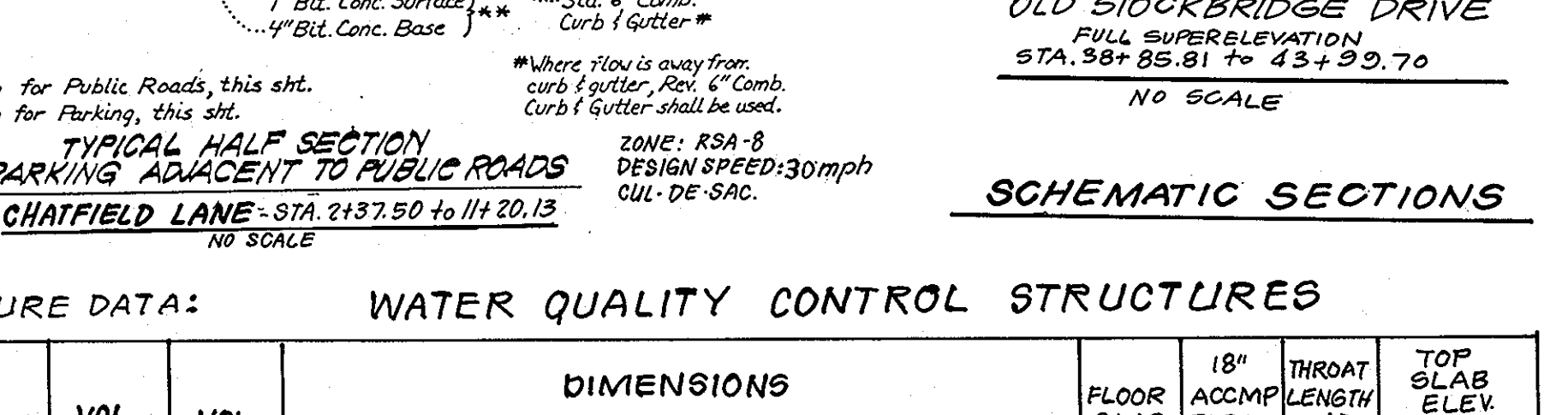
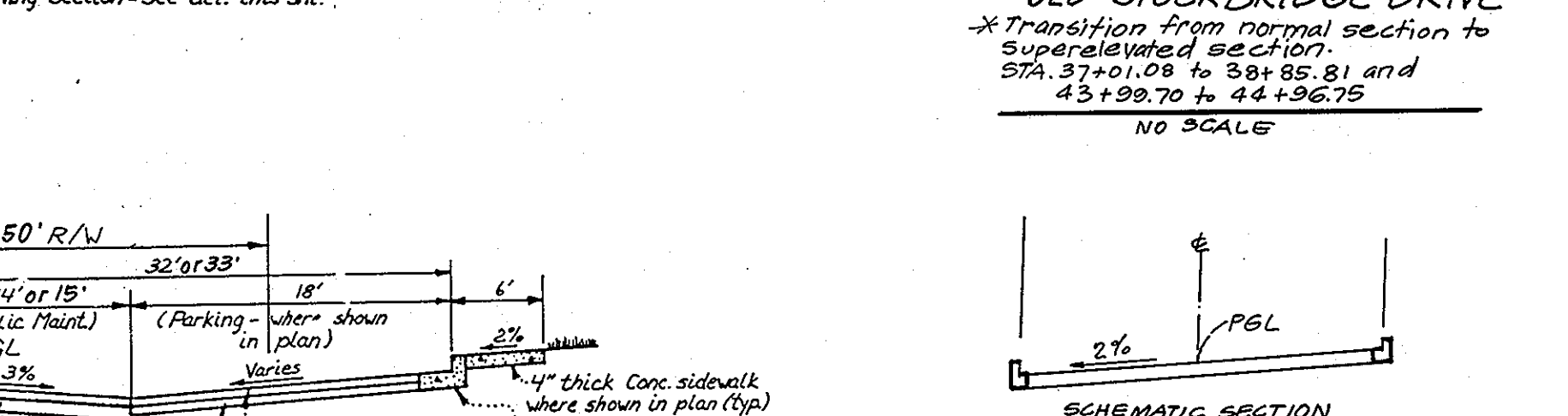
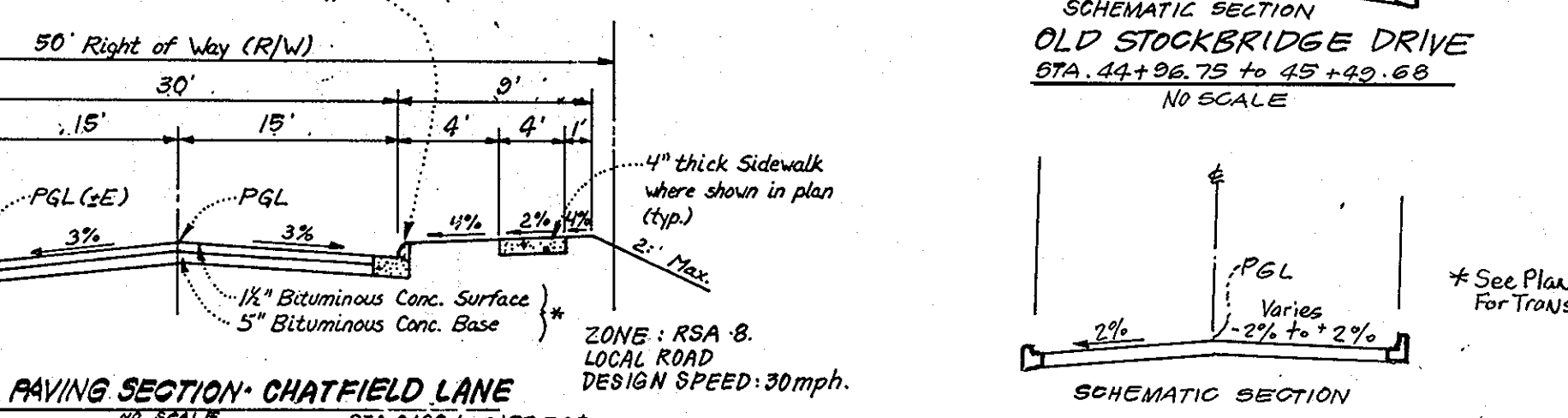
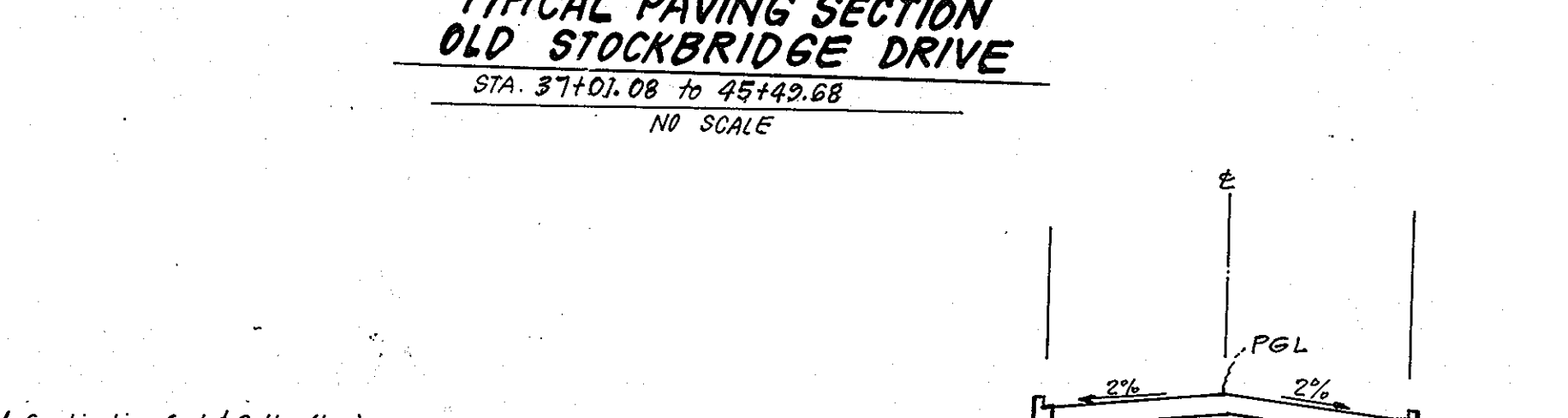
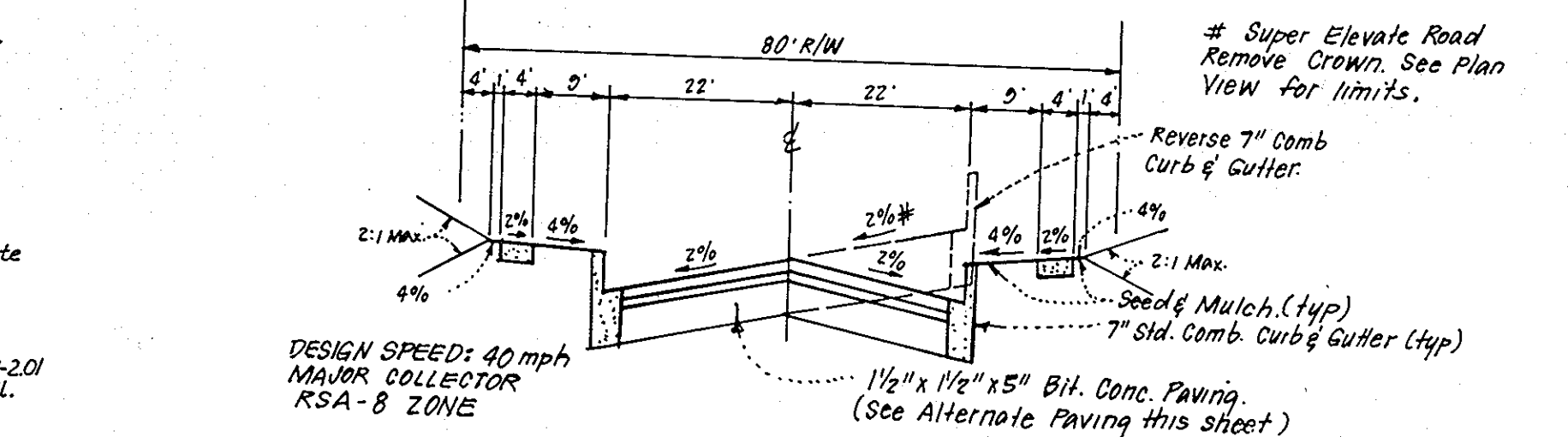
WATER QUALITY CONTROL STRUCTURE
SCALE: 1/4" = 1'-0"
STR Nos. I-61, I-62, I-64, I-65



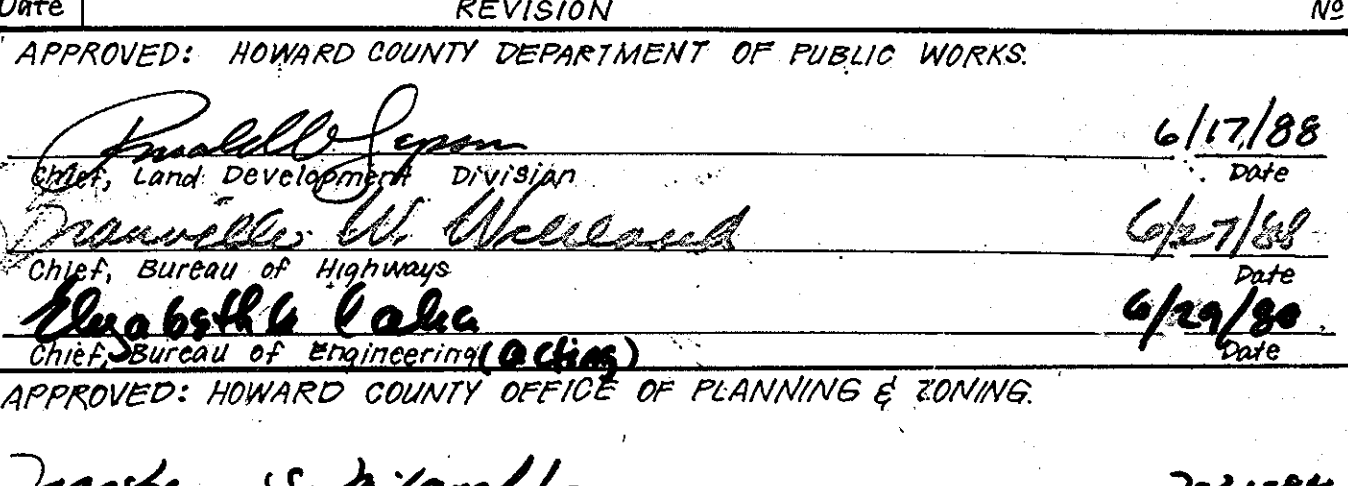
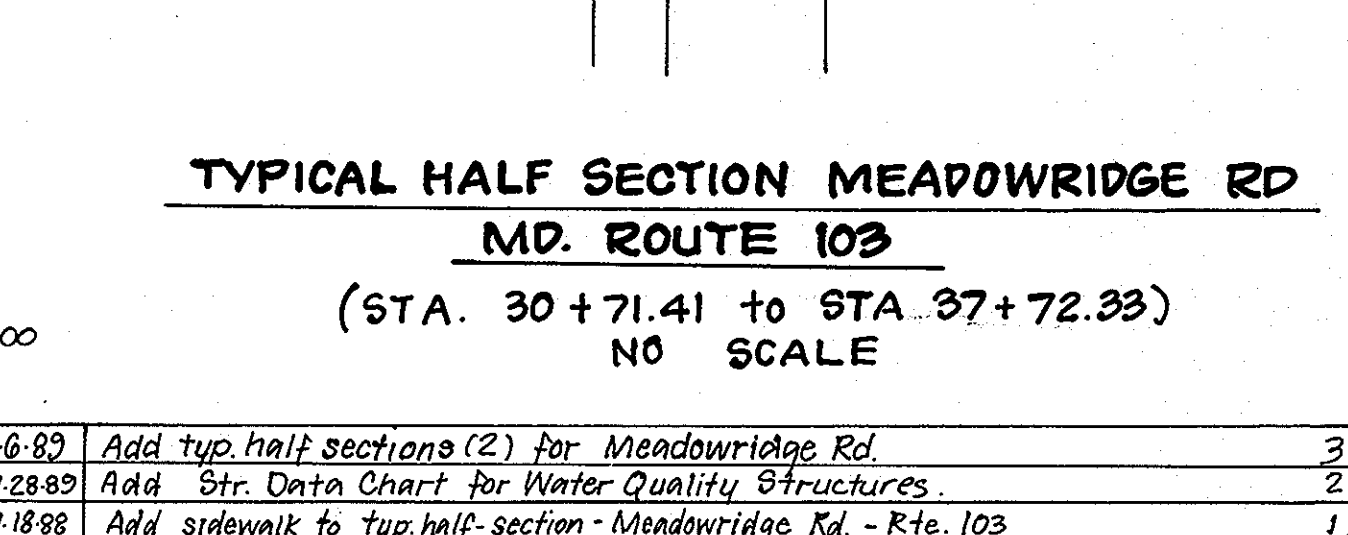
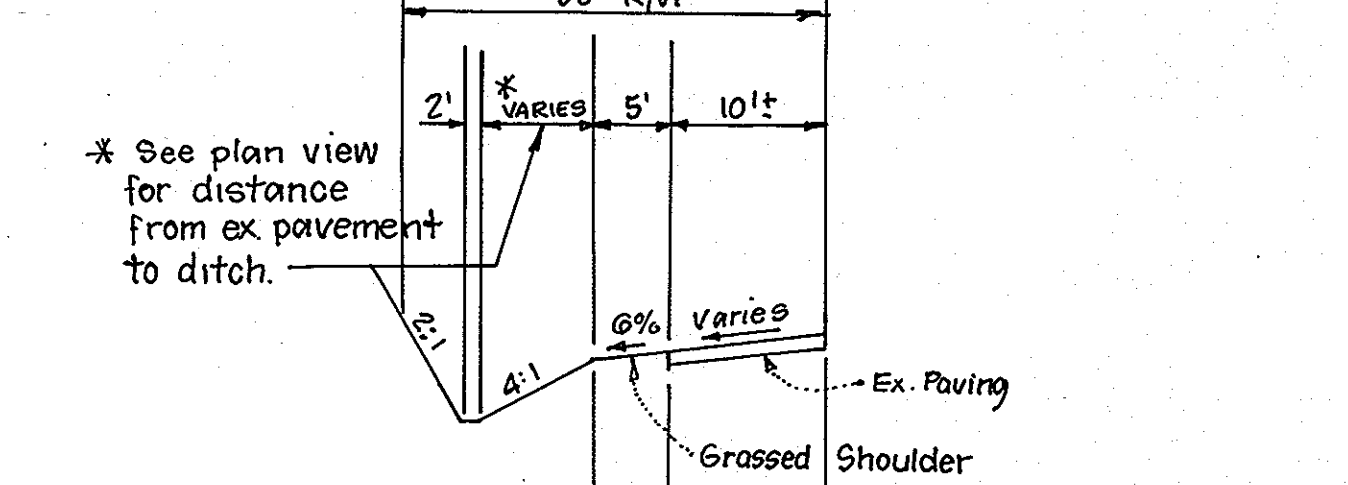
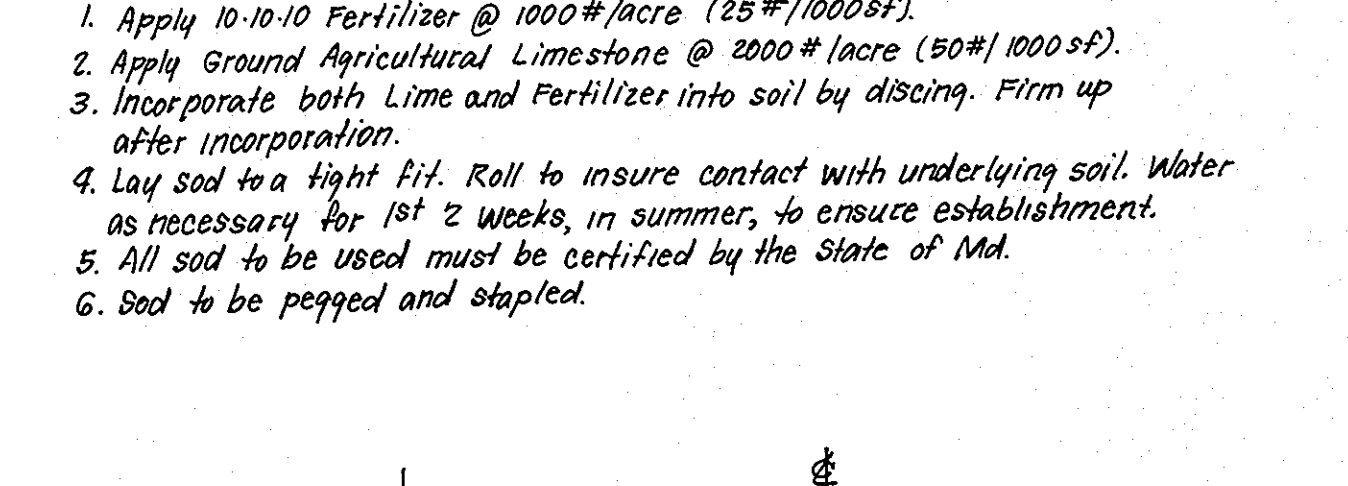
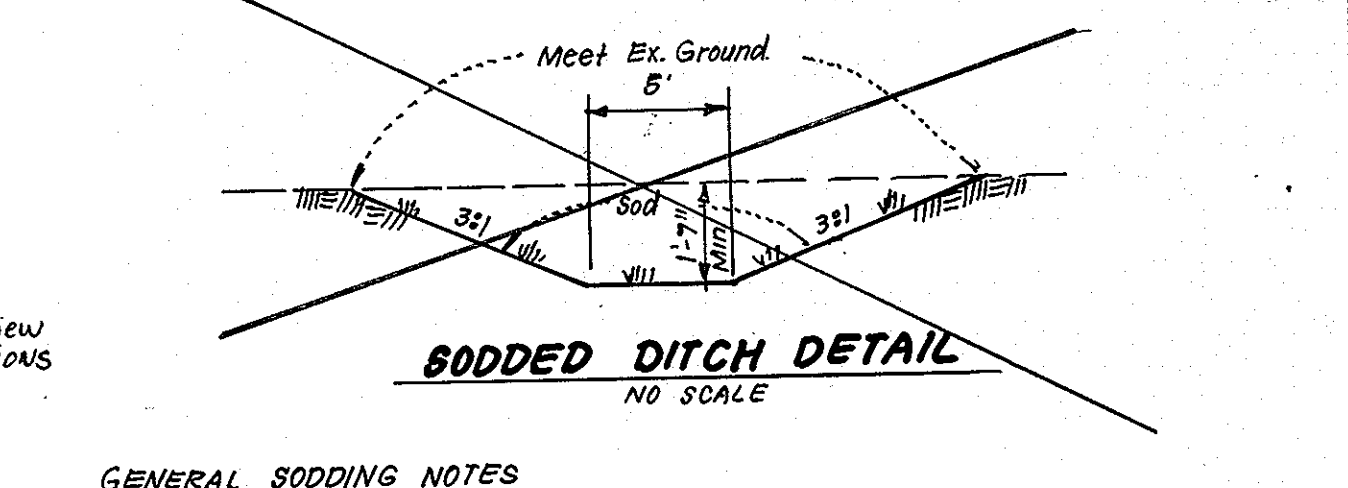
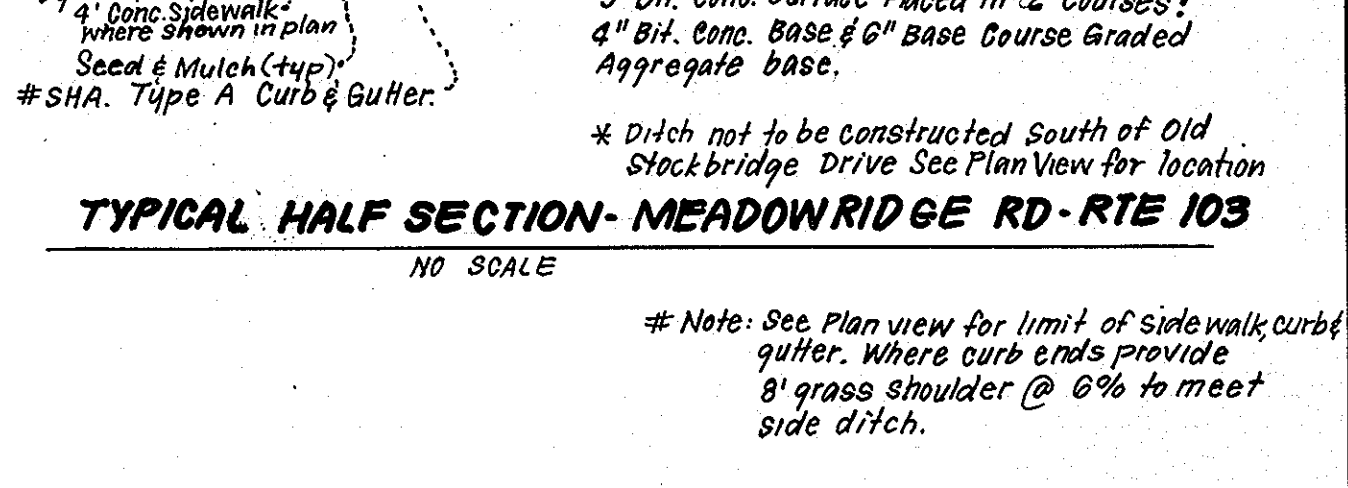
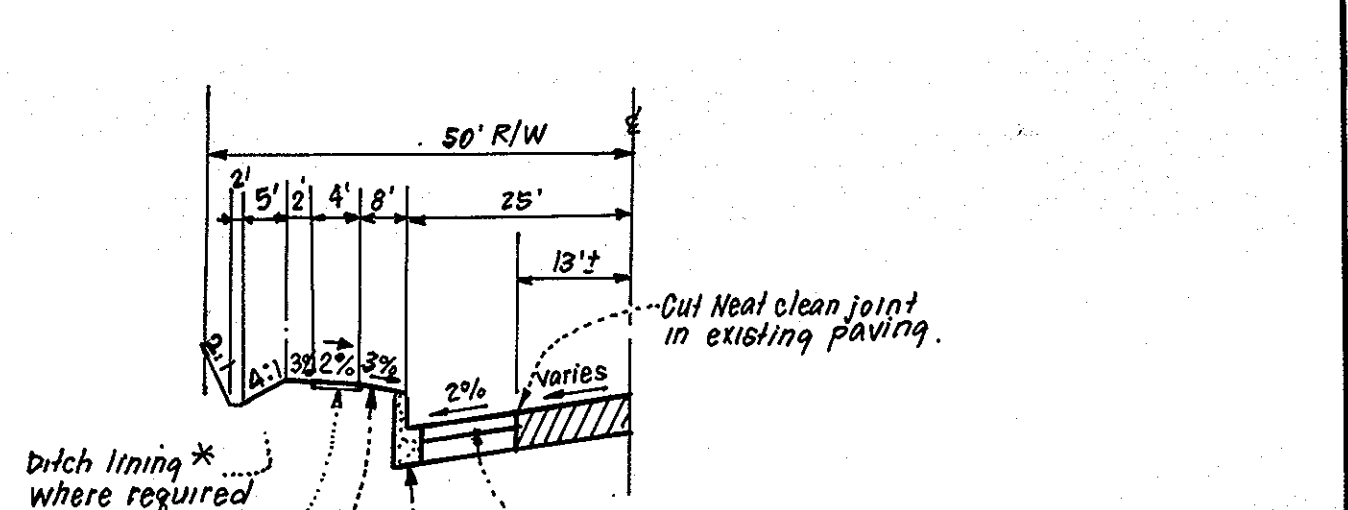
TYPICAL HALF SECTION
MEADOWRIDGE ROAD
MD. ROUTE 103
STA. 28 + 41.41 to STA 30 + 71.41
NO SCALE



WATER QUALITY CONTROL STRUCTURE
SCALE: 1/4" = 1'-0"
STR Nos. I-61, I-62, I-64, I-65



TYPICAL HALF SECTION
MEADOWRIDGE RD - RTE 103
NO SCALE



TYPICAL HALF SECTION
MEADOWRIDGE RD - RTE 103
NO SCALE

NOTE: See schematic sections this sheet.

Notes:
1. Longitudinal joint between sidewalk curb shall be continuous and to a depth of 1/4 the thickness of the sidewalk or 1" Max. Longitudinal joints shall run from back edge of sidewalk continuous to the bottom face of curb to a depth of 1/4" and spaced 5' apart.
2. Provide 1/4" expansion joints at 15' intervals. In longitudinal joints to full cross-section.
Note: Monolithic curb and sidewalk can be used as an alternate to reverse 6" curb & gutter where curb is adjacent to sidewalk.

Notes:
1. For O.D. of Pipe See Manufacturers Specs. or field measure circumference of pipe and + by 3/16".
2. Within road R/W Trench Compaction Density shall be 95% as determined by AASHTO T-180-A.
3. For conditions requiring solid sheeting or trench shields A shall not exceed 30'.

Notes:
1. For storm drain inverts, see storm drain profiles
2. Storage req. = 40 c.f. per 0.1 Ac. of drainage area (total storage computed to depth (F))
* When combined length of oil & grit chambers exceeds 12 feet, "D" = 1/2 x "C" ("C" = 2/3 total and "D" = 1/3 total).

GENERAL SODDING NOTES
1. Apply 10-10-10 Fertilizer @ 1000#/acre (25#/1000sf).
2. Apply Ground Agricultural Limestone @ 2000#/acre (50#/1000sf).
3. Incorporate both Lime and Fertilizer into soil by discing. Firm up after incorporation.
4. Lay sod to a tight fit. Roll to insure contact with underlying soil. Water as necessary for 1st 2 Weeks, in summer, to ensure establishment.
5. All sod to be used must be certified by the State of Md.
6. Sod to be pegged and stapled.

STRUCTURE DATA: WATER QUALITY CONTROL STRUCTURES

STRUCT. NO.	DRAIN AREA (Ac)	VOL. REQ'D.	VOL. PROV.	DIMENSIONS							FLOOR SLAB ELEV.	18" ACCOMP ELBOW INV.	THROAT LENGTH IF req'd.	TOP SLAB ELEV. up an.	
				A	B	C*	D*	E	F	G					
I-61	.60	240	264	18	6	7	4	3	3	2	269.40	273.90	5'	281.11	281.32
I-62	.70	280	308	18	6	7	4	3	8	7	268.47	272.47	10'	271.97	271.97
I-64	1.10	440	440	22	6	10	5	3	11	7	274.04	276.04	10'	281.87	282.91
I-65	1.50	600	648	25	8	12	6	3	13	6	269.47	273.47	10'	277.97	278.97

NOTES:
1. For storm drain inverts, see storm drain profiles
2. Storage req. = 40 c.f. per 0.1 Ac. of drainage area (total storage computed to depth (F))
* When combined length of oil & grit chambers exceeds 12 feet, "D" = 1/2 x "C" ("C" = 2/3 total and "D" = 1/3 total).

STR #	LOCATION
I-61	Str. Sta. 7412.13 Chatfield Lane
I-62	" " " 5+58.32 " "
I-64	" " " 3+78.12 " "
I-65	Str. Sta. 5+53.45 Chatfield Lane

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 silt inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

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

Reviewed for... S.C.D. Name: [Signature] Date: 5/22/88
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Signature: [Signature] Date: 5/26/88

Signature: [Signature] Date: 2-19-88
Jeffrey J. Schwab

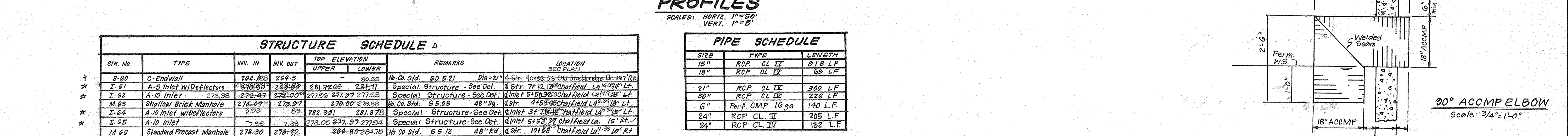
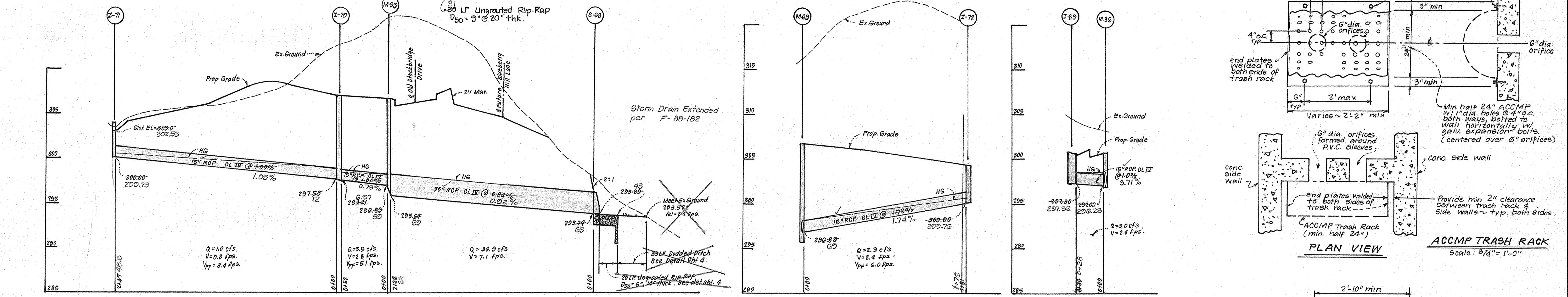
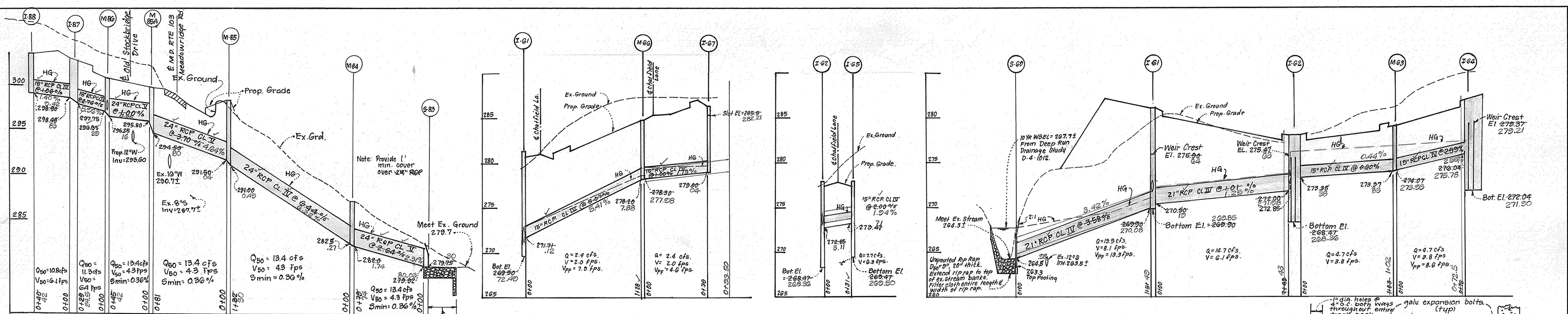
TYPICAL HALF SECTION MEADOWRIDGE RD MD. ROUTE 103 (STA. 30 + 71.41 to STA. 37 + 72.33) NO SCALE

Date	REVISION	NO.
11-6-87	Add top half sections (2) for Meadowridge Rd	3
2-28-89	Add Str. Data Chart for Water Quality Structures	2
7-18-88	Add sidewalk to top half-section - Meadowridge Rd. - Rte. 103	1

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] Date: 6/17/88
[Signature] Date: 6/27/88
[Signature] Date: 6/29/88
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[Signature] Date: 7-21-88

CLARK · FINEFROCK & SACKETT INC.
ENGINEERS · PLANNERS · SURVEYORS
7135 MINSTREL WAY COLUMBIA, MARYLAND 21045 301-381-7500 Bldg. 301 621-8100 Wash.
DESIGNED: JLS
DRAWN: KIW
CHECKED: JLS
DATE: 2-10-88
ROAD CONSTRUCTION PLANS
STORM DRAIN & PAVING DETAILS
SCALE: As Shown
DRAWING: 40F7
JOB NO.: 85-148
FILE NO.: 85-148-D
WOODLAND VILLAGE
SECTION 2 AREA 1
1ST ELECTION DISTRICT
HOWARD COUNTY MARYLAND
FOR: CHATEAU BUILDERS, INC.
8100 Woodloch Glen Ct.
Ellicott City, Md 21043

1266



STRUCTURE SCHEDULE Δ

STR. No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
I-60	C. Endwall	264.800	264.3	-	20.25	Ho. Co. Std. SD 5.21 Dia=21"	Str. 40+66.58 Old Stockbridge Dr. 197' Rt.
I-61	A-5 Inlet w/ Deflectors	278.88	269.88	281.22	281.11	Special Structure - See Det.	Str. 7+12.15 Chatfield La. 1034' Lt.
I-62	A-10 Inlet	272.38	272.47	277.06	277.03	Special Structure - See Det.	Inlet 5+58.30 Chatfield La. 1034' Lt.
M-63	Shallow Brick Manhole	274.07	273.97	278.00	278.88	Ho. Co. Std. G 5.05 48" Sq.	Str. 4+53.88 Chatfield La. 1034' Lt.
I-64	A-10 Inlet w/ Deflectors	272.38	272.38	282.99	281.878	Special Structure - See Det.	Inlet 3+78.18 Chatfield La. 1034' Lt.
I-65	A-10 Inlet	272.38	272.38	278.00	277.97	Special Structure - See Det.	Inlet 5+53.72 Chatfield La. 15' Rt.
M-66	Standard Precast Manhole	278.20	278.20	284.80	284.78	Ho. Co. Std. G 5.12 48" Rd.	Str. 10+88.88 Chatfield La. 1034' Rt.
I-67	D. Inlet	273.74	273.74	280.33	283.16	Ho. Co. Std. SD 4.11 24" Sq.	See Plan
M-68	Concrete End Section	293.74	293.604	-	-	Ho. Co. Std. SD 5.51 Dia=30"	See Plan 50.12
M-69	Std. Precast Manhole	296.87	296.87	306.55	305.00	Ho. Co. Std. G 5.13 5' Rd.	Str. 40+58.88 Old Stockbridge Dr. 28' Lt.
I-70	A-5 Inlet	297.53	297.37	306.95	306.88	Ho. Co. Std. SD 4.01 W=2' 6"	Inlet 40+100 Old Stockbridge Dr. 22' Lt.
I-71	D. Inlet	297.37	297.37	303.83	303	Ho. Co. Std. SD 4.11 24" Sq.	Inlet 37+42.22 Old Stockbridge Dr. 28' Lt.
I-72	A-5 Inlet	297.37	297.37	304.37	304.287	Ho. Co. Std. SD 4.01 W=2' 6"	Inlet 42+50 Old Stockbridge Dr. 22' Lt.
M-83	Concrete End Section	299.92	299.92	-	-	SHA Std. MD 368.01 24" Dia.	Str. Sta. 23+00 Rte. 103 38.2 39' Rt.
M-86	SHA Shallow Manhole	299.92	299.92	300.60	300.78	SHA Std. MD 383.00 48" Sq.	Str. 45+22 Old Stockbridge Dr. 25' Lt.
I-87	SHA 10" CG Inlet	298.48	297.75	302.76	302.53	SHA Std. MD 374.31 W=3' 0"	Inlet 26+82 Rte. 103 25.2 28' Lt.
I-88	SHA K DGI Inlet	298.48	298.48	303.27	302.67	SHA Std. MD 378.02	Inlet 26+77 Rte. 103 44.8 45' Lt.
I-89	SHA 15" CG Inlet	298.48	297.36	300.83	301.03	SHA Std. MD 374.31 W=3' 0"	Inlet 4+85.28 Old Stockbridge Dr. 22' Lt.
M-84	SHA Shallow MH	282.50	282.50	287.00	287	SHA Std. MD 383.00 48" Sq.	Str. Sta. 23+88 Rte. 103 31.0 29' Rt.
M-85	SHA Shallow MH	291.50	291.00	298.00	297.89	SHA Std. MD 383.00 48" Sq.	Str. Sta. 25+20 Rte. 103 1.39' Rt.
M-85A	SHA Shallow MH	295.80	295.80	299.60	299.57	SHA Std. MD 383.00 48" Sq.	Str. Sta. 45+20 OSD 28' Rt.

PROFILES
 SCALES: HORIZ. 1"=50'
 VERT. 1"=5'

PIPE SCHEDULE

SIZE	TYPE	LENGTH
15"	RCP CL II	918 LF
18"	RCP CL III	69 LF
21"	RCP CL IV	300 LF
30"	RCP CL IV	226 LF
6"	Perf. CMP 16 ga	140 LF
24"	RCP CL II	205 LF
24"	RCP CL IV	132 LF

- # See H902 Std. SD 4.93 for Inlet Deflections.
- * Provide Slots in N.E. of S. Sides
- + Use dimensions for 24" Dia. Increase H Dimension 1' to allow for rip-rap construction
- Provide opening in N side of Manhole for Future 24" RCP. Inv=296.14 & brick shut.
- △ All Inverts to be fully developed.
- * Water Quality Control Structure... See Detail

Reviewed for... *Howard*... S.C.D.
 and meets Technical Requirements
John M. DeM... 5/27/88
 Signature Date
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Stephen L. Hub... 5/26/88
 Signature Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."
James A. Arzuel 2-16-88
 Signature of Developer/Builder Date

ENGINEER'S CERTIFICATE

"I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Jeffrey F. Schwas 2-19-88
 Signature Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Paul H. Seaman 6/17/88
 Chief, Land Development Division Date
James W. McDonald 6/27/88
 Chief, Bureau of Highways Date
Christopher P. Davis 6/27/88
 Chief, Bureau of Engineering & Plans Date
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.
Janice S. DeLong 2-21-88
 Chief, Division of Community Planning & Land Development. Date

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MISTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7200 - BALTO. • (301) 621-8100 - WASH.

DESIGNED: JLS
 DRAWN: KIW
 CHECKED: JLS
 DATE: 2-19-88

ROAD CONSTRUCTION PLANS
STORM DRAINAGE PROFILES
WOODLAND VILLAGE
 SECTION 2 AREA 1
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND.
 FOR: CHATEAU BUILDERS, INC.
 8100 Wooded Glen Ct.
 Ellicott City, Md. 21043

SCALE: As Shown
 DRAWING: 5 of 7
 JOB NO.: 85-148
 FILE NO.: 85-148-D

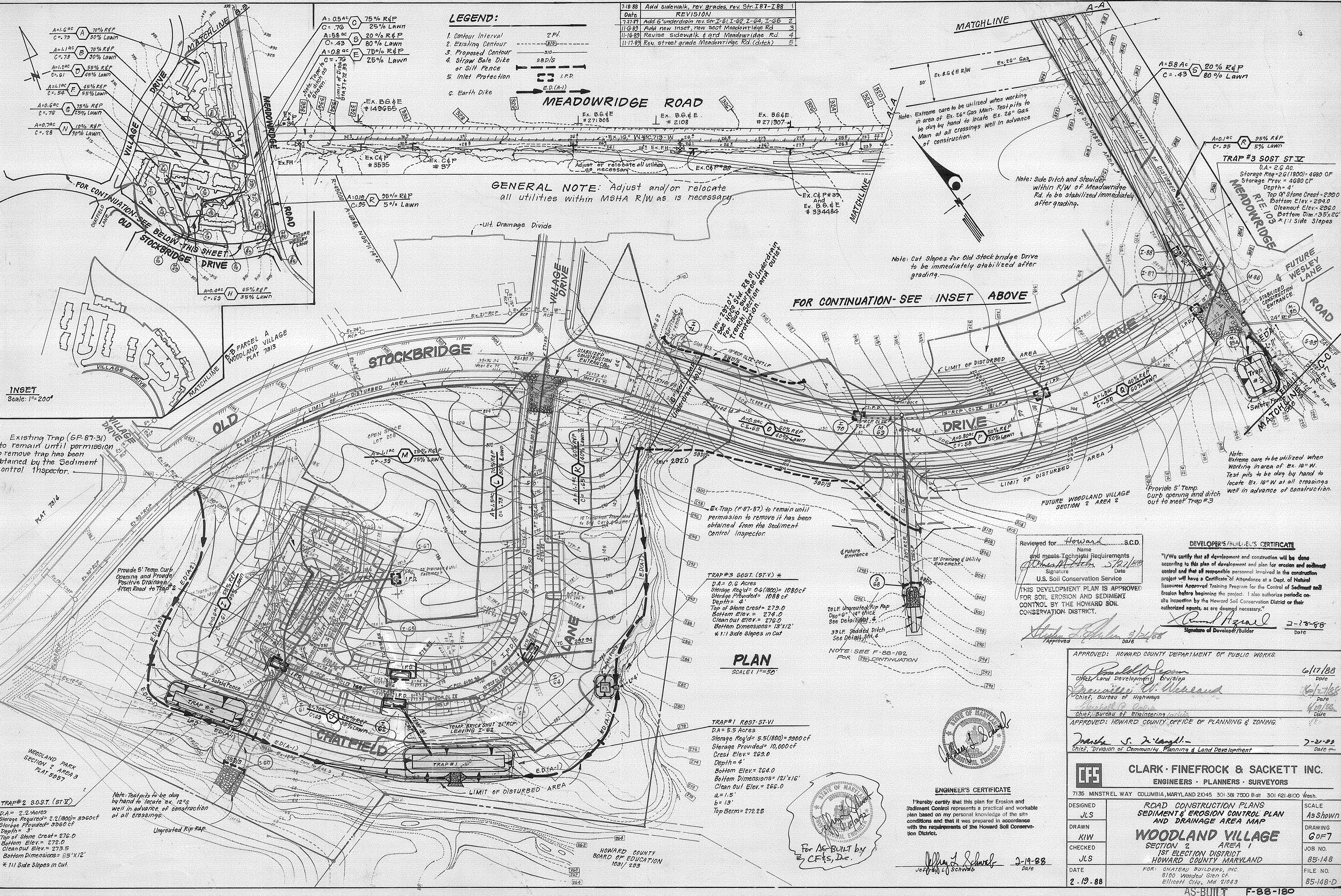
Date	REVISION
7-18-88	Add sidewalk, rev. grades, rev. Str. I-87-I-88
7-27-87	Add 6" underdrain rev. Str. I-87, I-88, I-89, I-90, I-91
11-6-87	Add new inset, new sect. Meadowridge Rd.
11-16-87	Revise sidewalk & grd. Meadowridge Rd.
11-17-87	Rev. street grade Meadowridge Rd. (ditch)

LEGEND:

- Contour Interval 2 Ft.
- Existing Contour - - - - -
- Proposed Contour - - - - -
- Straw Bale Dike or Silt Fence
- Inlet Protection
- Earth Dike

MEADOWRIDGE ROAD

GENERAL NOTE: Adjust and/or relocate all utilities within MSHA R/W as is necessary.



INSET
Scale: 1"=200'

Existing Trap (GP-87-31) to remain until permission to remove trap has been obtained by the Sediment Control Inspector.

Provide 5' Temp. Curb Opening and Provide Positive Drainage from Road to Trap #2

TRAP #2 S.O.S.T. (ST.V)
D.A. = 2.2 Acres
Storage Required = 2,218,000 = 3360cf
Storage Provided = 3360cf
Depth = 3'
Top of Stone Crest = 276.0
Bottom Elev. = 272.0
Cleanout Elev. = 273.5
Bottom Dimensions = 85'x12'
* 1:1 Side Slopes in Cut.

TRAP #3 SOST. (ST.V) *
D.A. = 0.6 Acres
Storage Req'd = 0.6(1800) = 1080cf
Storage Provided = 1088cf
Depth = 4'
Top of Stone Crest = 279.0
Bottom Elev. = 274.0
Cleanout Elev. = 276.0
Bottom Dimensions = 13'x12'
* 1:1 Side Slopes in Cut

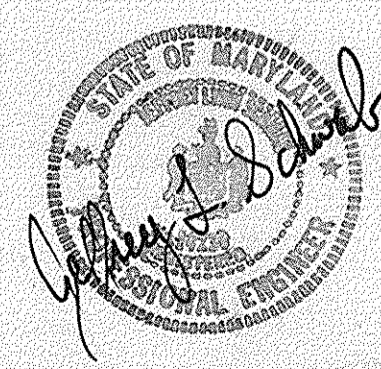
PLAN
SCALE: 1"=50'

TRAP #1 ROST-ST.VI
D.A. = 5.5 Acres
Storage Req'd = 5.5(1800) = 9900cf
Storage Provided = 10,000cf
Crest Elev. = 263.0
Depth = 4'
Bottom Elev. = 264.0
Bottom Dimensions = 121'x16'
Cleanout Elev. = 266.0
a = 1.5'
b = 13'
Top Berm = 272.25

Reviewed for: Howard S.C.D.
and meets Technical Requirements
Name: Howard Date: 5/18/88
Signature: [Signature]
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S/BUILDER'S CERTIFICATE
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Howard 5/18/88
Signature of Developer/Builder Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Donald J. Dean 6/17/88
Chief, Land Development Division Date
James W. Woodard 6/17/88
Chief, Bureau of Highways Date
Harold D. Dean 6/17/88
Chief, Bureau of Engineering Date
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Frank S. Langh 7-21-88
Chief, Division of Community, Planning & Land Development Date

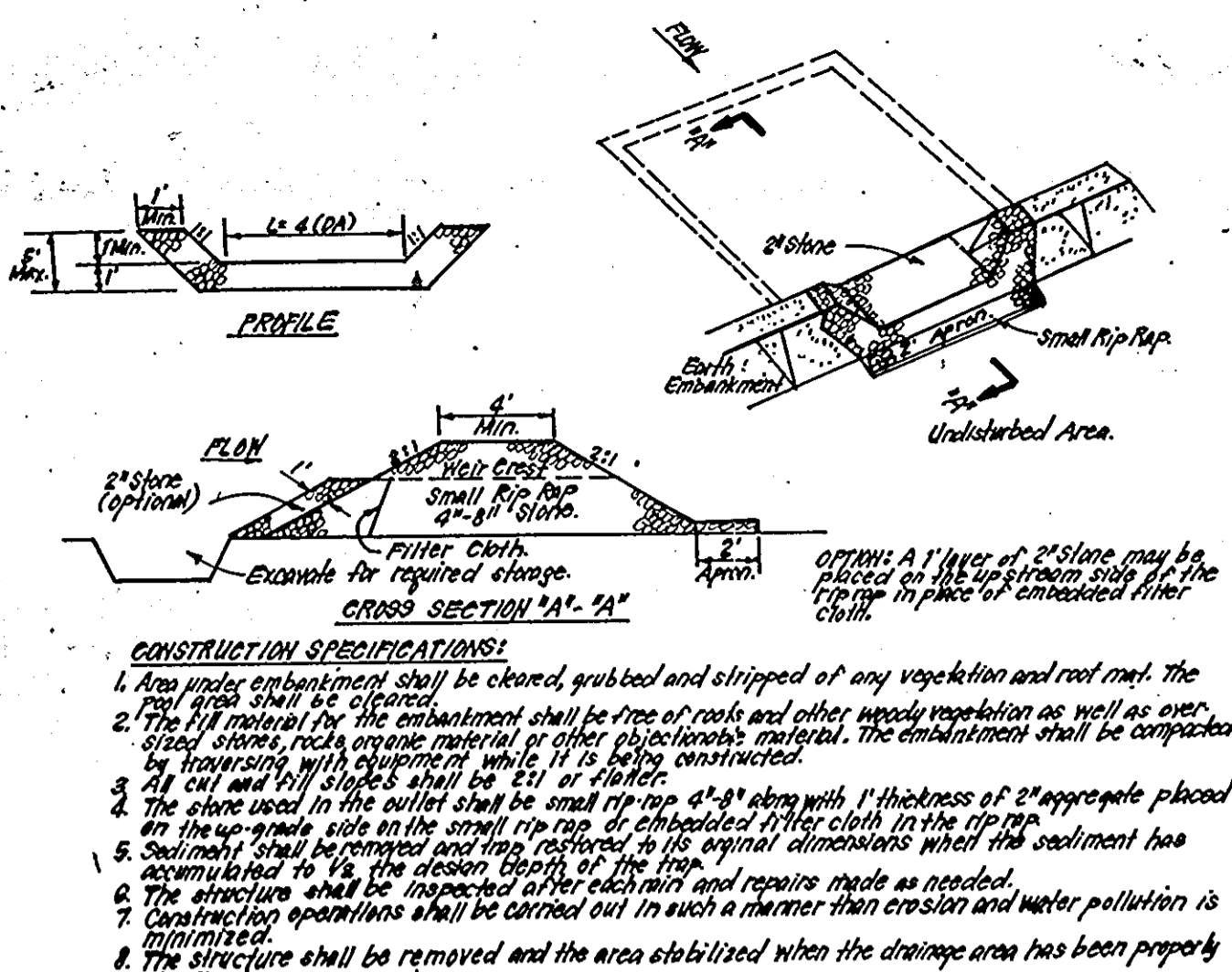
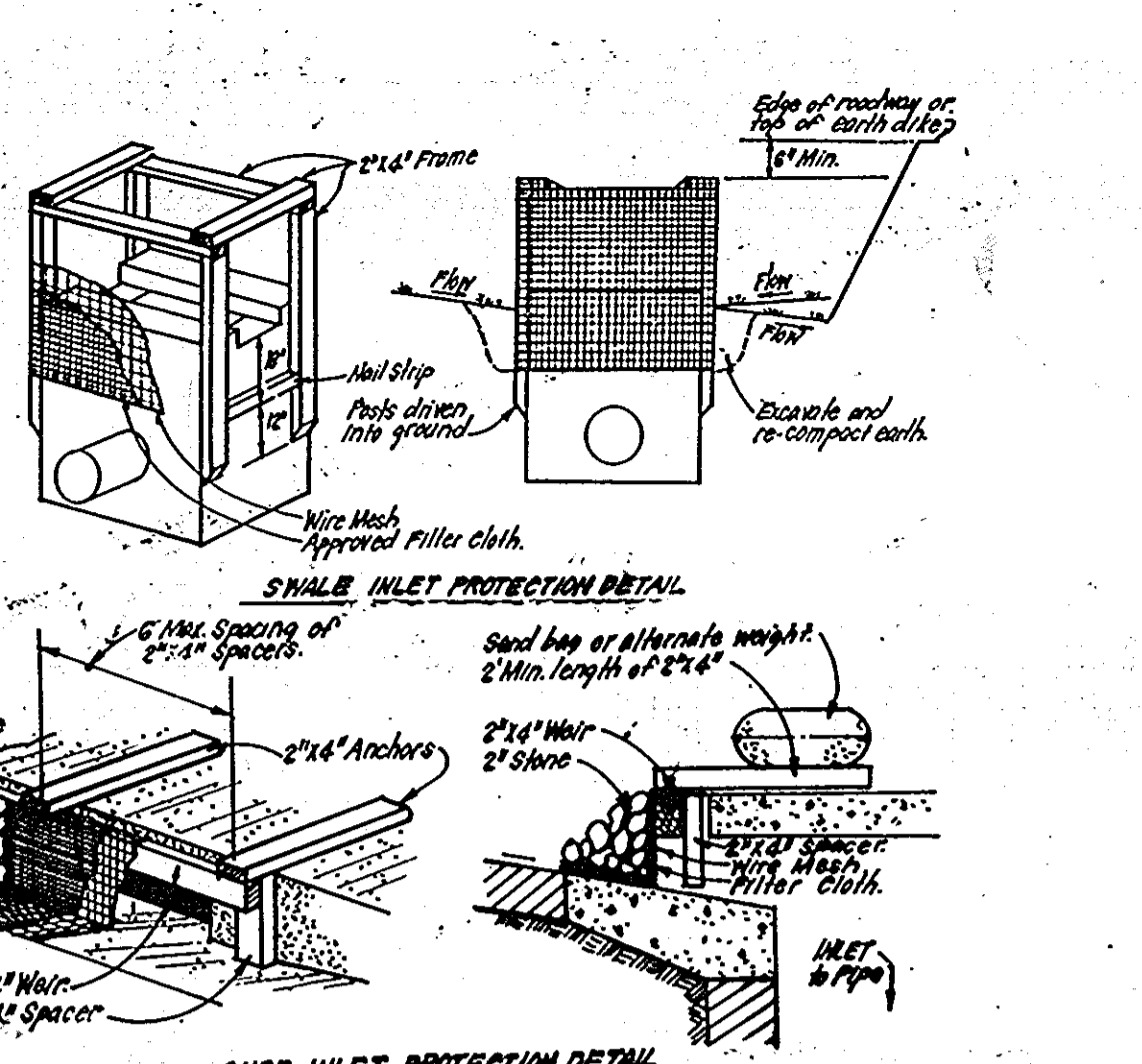


ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Jeffrey L. Schwab 2-19-88
Date

CLARK · FINEFROCK & SACKETT INC.
ENGINEERS · PLANNERS · SURVEYORS
7135 MINSTREL WAY COLUMBIA, MARYLAND 21045 301-361-7500 Rm 41 301-621-8100 Wash.

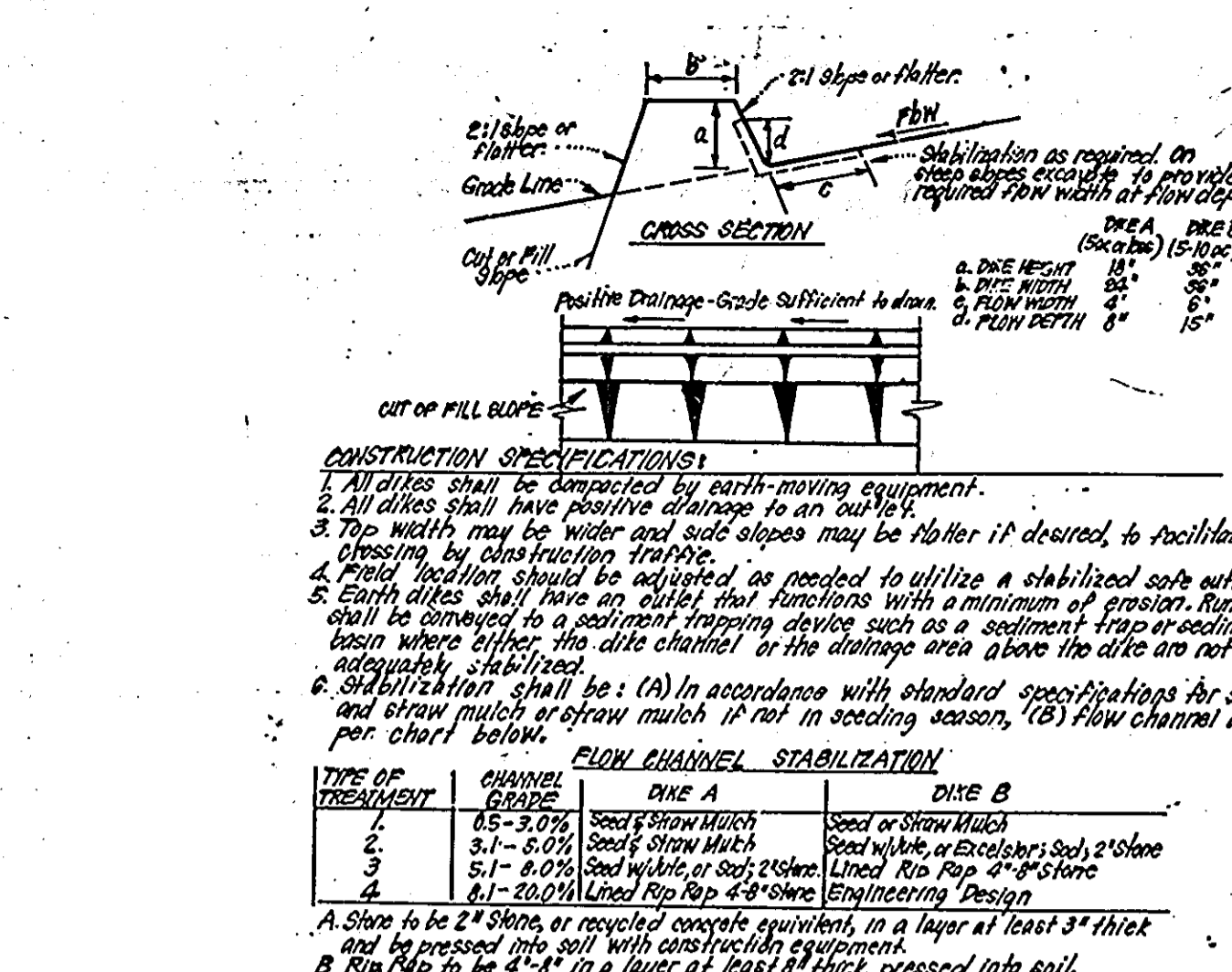
DESIGNED	JLS	ROAD CONSTRUCTION PLANS	SCALE
DRAWN	KIW	SEDIMENT & EROSION CONTROL PLAN	As Shown
CHECKED	JLS	AND DRAINAGE AREA MAP	DRAWING
DATE	2-19-88	WOODLAND VILLAGE	G0F7
		SECTION 2 AREA 1	JOB NO.
		1ST ELECTION DISTRICT	85-148
		HOWARD COUNTY MARYLAND	FILE NO.
		FOR: CHATEAU BUILDERS, INC.	85-148-D
		8100 Wooded Glen Ct.	
		Ellicott City, Md 21043	

For AS-BUILT by CF&S, Inc.

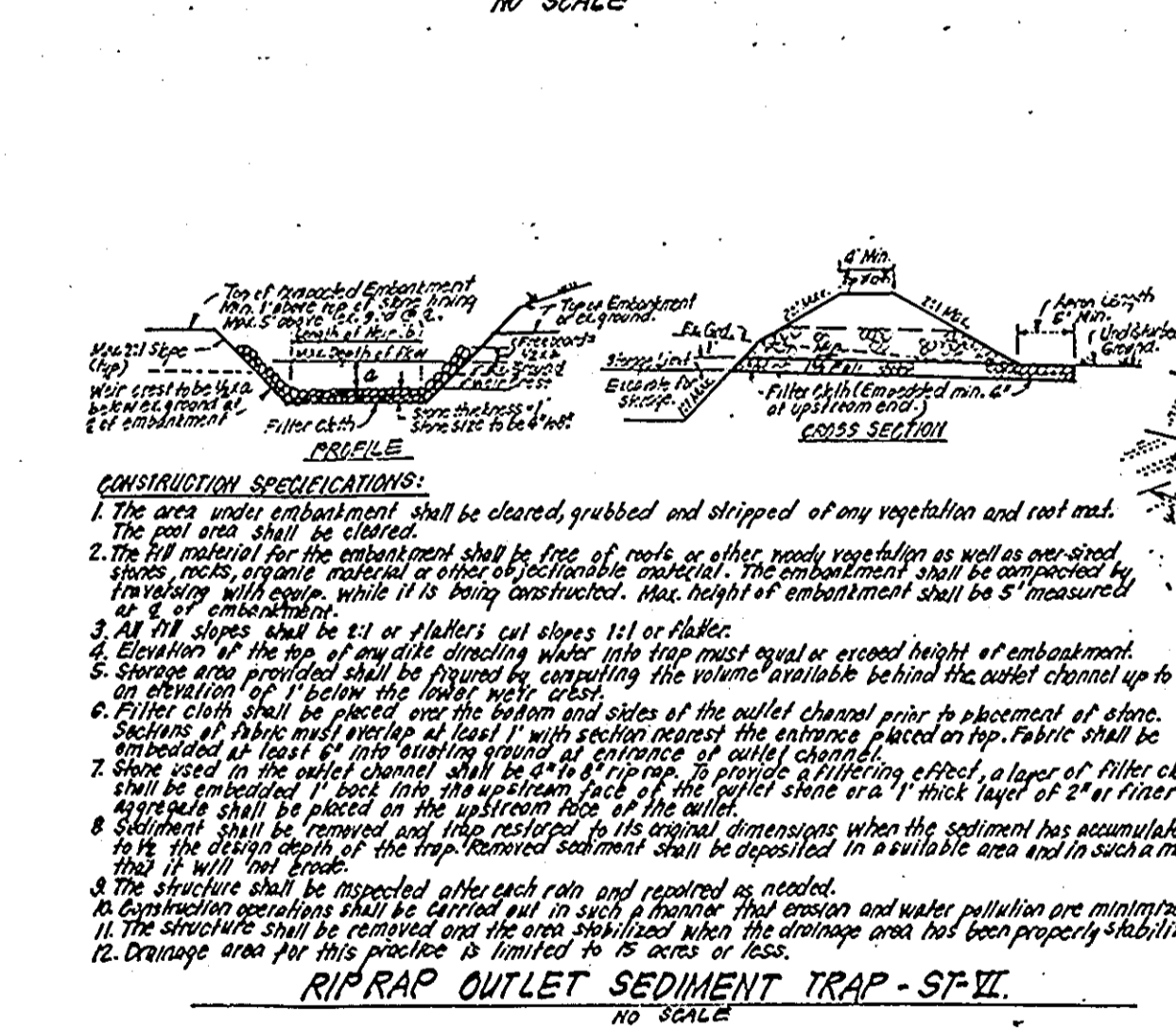


SMALL INLET PROTECTION DETAIL
 CONSTRUCTION SPECIFICATIONS:
 1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat.
 2. The fill material for the embankment shall be free of rocks, or other woody vegetation as well as over-sized stones, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
 3. All dikes shall have a minimum top width of 2' and a minimum height of 2'.
 4. The slope shall be 1:1 on both sides.
 5. The dike shall be constructed of 2' concrete grade lumber.
 6. The dike shall be constructed of 2' concrete grade lumber.
 7. The dike shall be constructed of 2' concrete grade lumber.
 8. The dike shall be constructed of 2' concrete grade lumber.

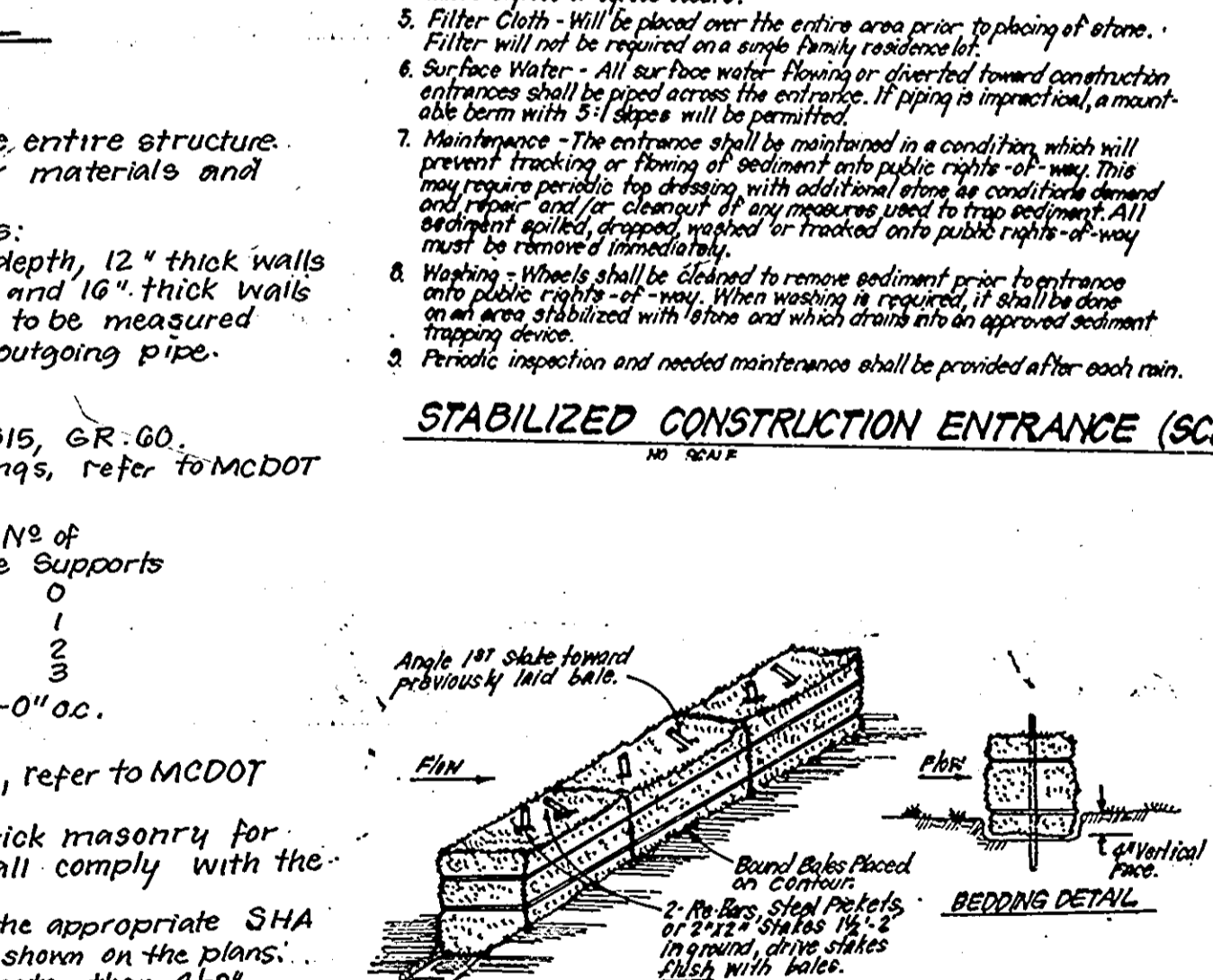
STONE OUTLET SEDIMENT TRAP (S.O.S.T.) DETAIL
 CONSTRUCTION SPECIFICATIONS:
 1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat.
 2. The fill material for the embankment shall be free of rocks, or other woody vegetation as well as over-sized stones, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
 3. All dikes shall have a minimum top width of 2' and a minimum height of 2'.
 4. The slope shall be 1:1 on both sides.
 5. The dike shall be constructed of 2' concrete grade lumber.
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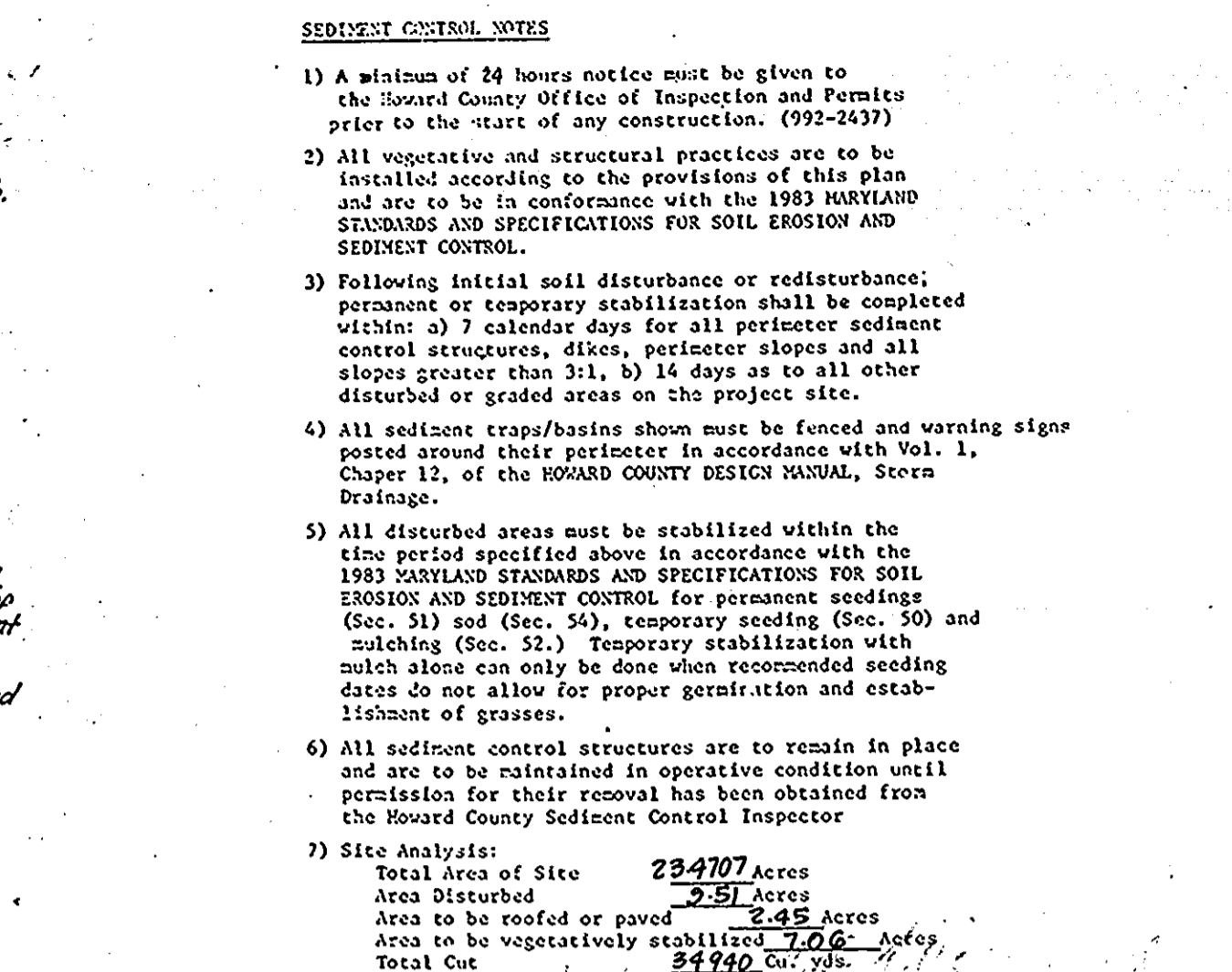
RIPRAP OUTLET SEDIMENT TRAP - S.F.V.
 CONSTRUCTION SPECIFICATIONS:
 1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat.
 2. The fill material for the embankment shall be free of rocks, or other woody vegetation as well as over-sized stones, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
 3. All dikes shall have a minimum top width of 2' and a minimum height of 2'.
 4. The slope shall be 1:1 on both sides.
 5. The dike shall be constructed of 2' concrete grade lumber.
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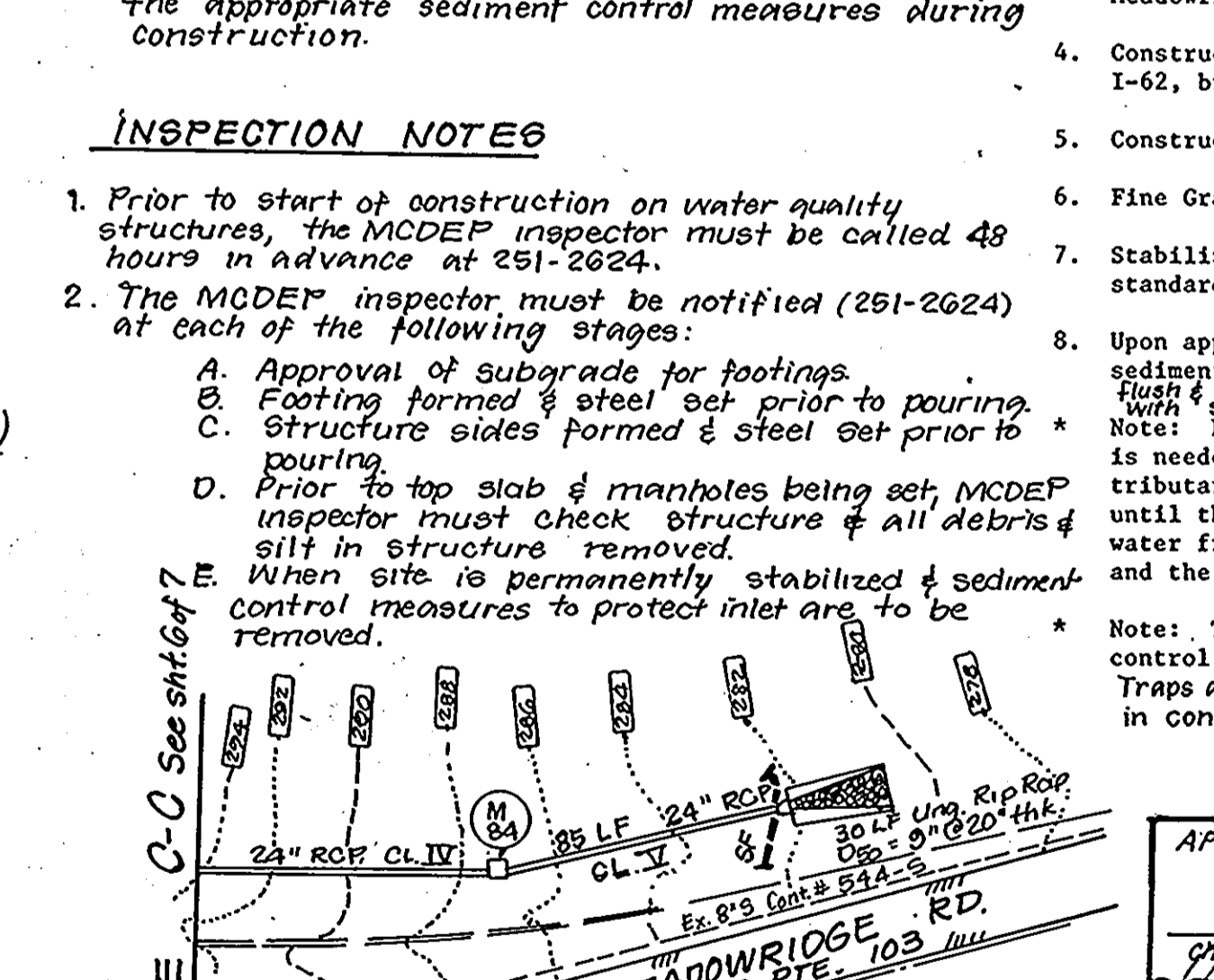
WATER QUALITY STRUCTURES
 DESIGN & GENERAL NOTES
 1. Use poured-in-place concrete for the entire structure.
 2. Refer to Md. State Highway Admin. for materials and methods of construction.
 3. Wall thickness should be as follows:
 Min. 8" thk. for the first 8'-0" of depth, 12" thick walls between 8'-0" and 12'-0" of depth and 16" thick walls for depth greater than 12'-0". Depth to be measured from top of top slab to crown of outgoing pipe.
 4. Fc = 3,500 psi @ 28 days.
 5. All reinforcing steel to be ASTM A615, GR-60.
 6. For details concerning throat openings, refer to MCDOT Std. No. 55.



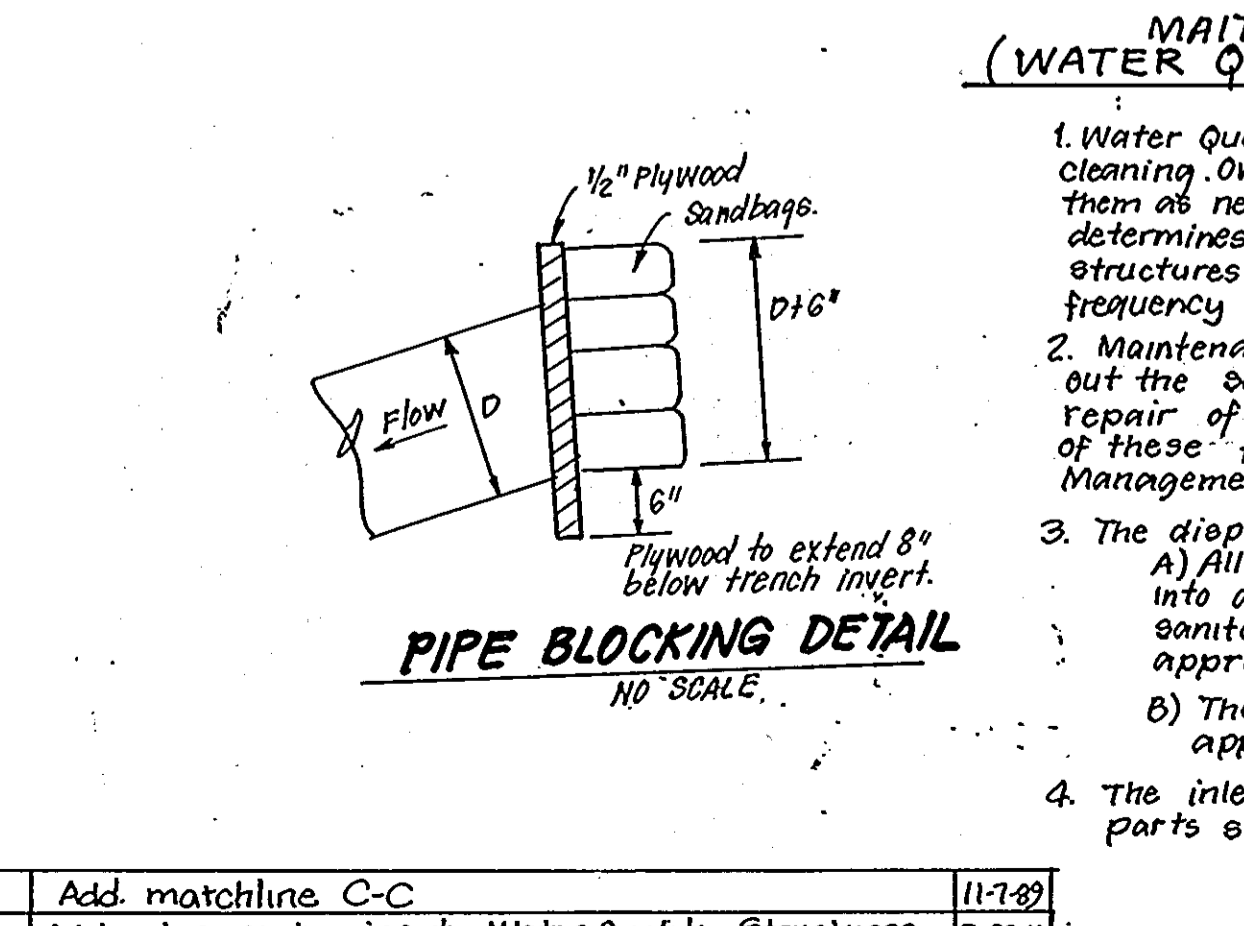
WATER QUALITY STRUCTURES
 INSPECTION NOTES
 1. Prior to start of construction on water quality structures, the MCDOT inspector must be called 48 hours in advance at 251-2624.
 2. The MCDOT inspector must be notified (251-2624) at each of the following stages:
 A. Approval of subgrade for footings.
 B. Footing formed & steel set prior to pouring.
 C. Structure sides formed & steel set prior to pouring.
 D. Prior to top slab & manholes being set, MCDOT inspector must check structure & all debris & silt in structure removed.
 E. When site is permanently stabilized & sediment control measures to protect inlet are to be removed.



WATER QUALITY STRUCTURES
 CONSTRUCTION SEQUENCE
 1. Obtain Grading Permit - 7 days
 2. Install Sediment & Erosion control measures. - 21 days
 3. Clear and Rough Grade site. Immediately stabilize cut slopes along Old Stockbridge Drive and side ditch and shoulder along Meadowridge Road after grading. - 30 days
 4. Construct Storm Drainage. Install temporary 18" CHP at Str. I-62, brick shut 21" RCP leaving Str. I-62 and install IP's. - 60 days
 5. Construct Utilities. - 90 days
 6. Fine Grade and Construct Paving. - 90 days
 7. Stabilize all disturbed areas onsite in accordance with standards and specifications. - 30 days
 8. Upon approval of the Sediment Control Inspector remove sediment & erosion control measures and stabilize. Thoroughly flush & remove all sediment that may have accumulated with S.D. system. Note: Permission to remove the two (2) existing traps is needed prior to grading Chatfield Lane. Any Grading tributary to Sediment trap #1 will not be permitted until the drainage area to existing trap G87-31 receiving water from the temp. 30" CHP is completely stabilized and the storm drain diversion removed. - 30 days



WATER QUALITY STRUCTURES
 MATCHLINE C-C See sheet 607
 CONSTRUCTION SPECIFICATIONS:
 1. Bales shall be placed at the top of a slope or on the contour and in a row with ends.
 2. Each bale shall be embedded in the soil a minimum of 4" and placed so the bindings are horizontal.
 3. Bales shall be secured together in place by either 2 straps or rebar driven thru the bale.
 4. The 10' slabs in each side shall be driven through the bales & rebar driven thru the bales.
 5. Inspection shall be frequent and repair replacement shall be made promptly as needed.
 6. Bales shall be removed when they have served their usefulness as not to block or impede storm flow or drainage.

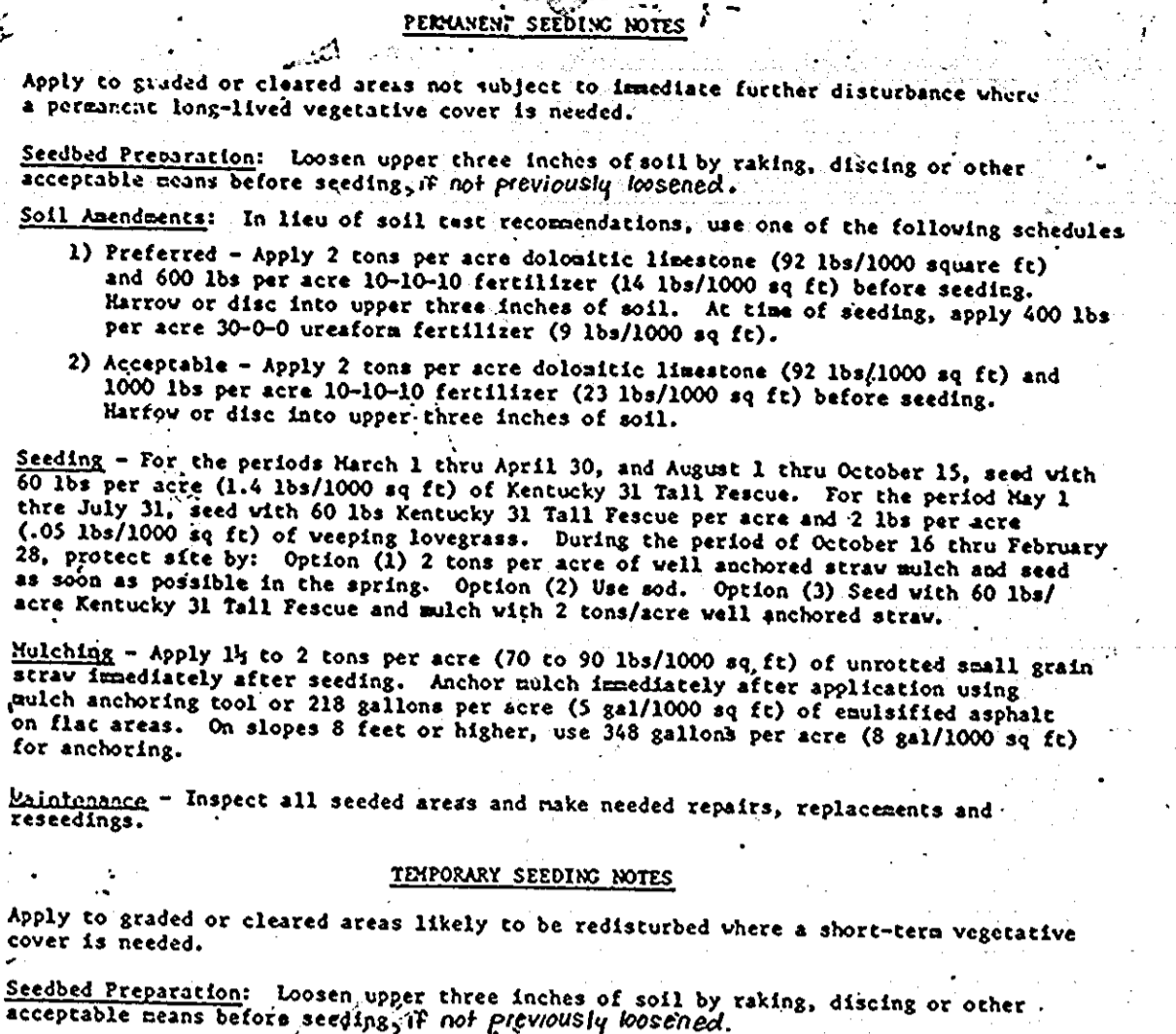


NO.	REVISION	DATE
2	Add matchline C-C	11-7-89
1	Add notes pertaining to Water Quality Structures	7-28-88

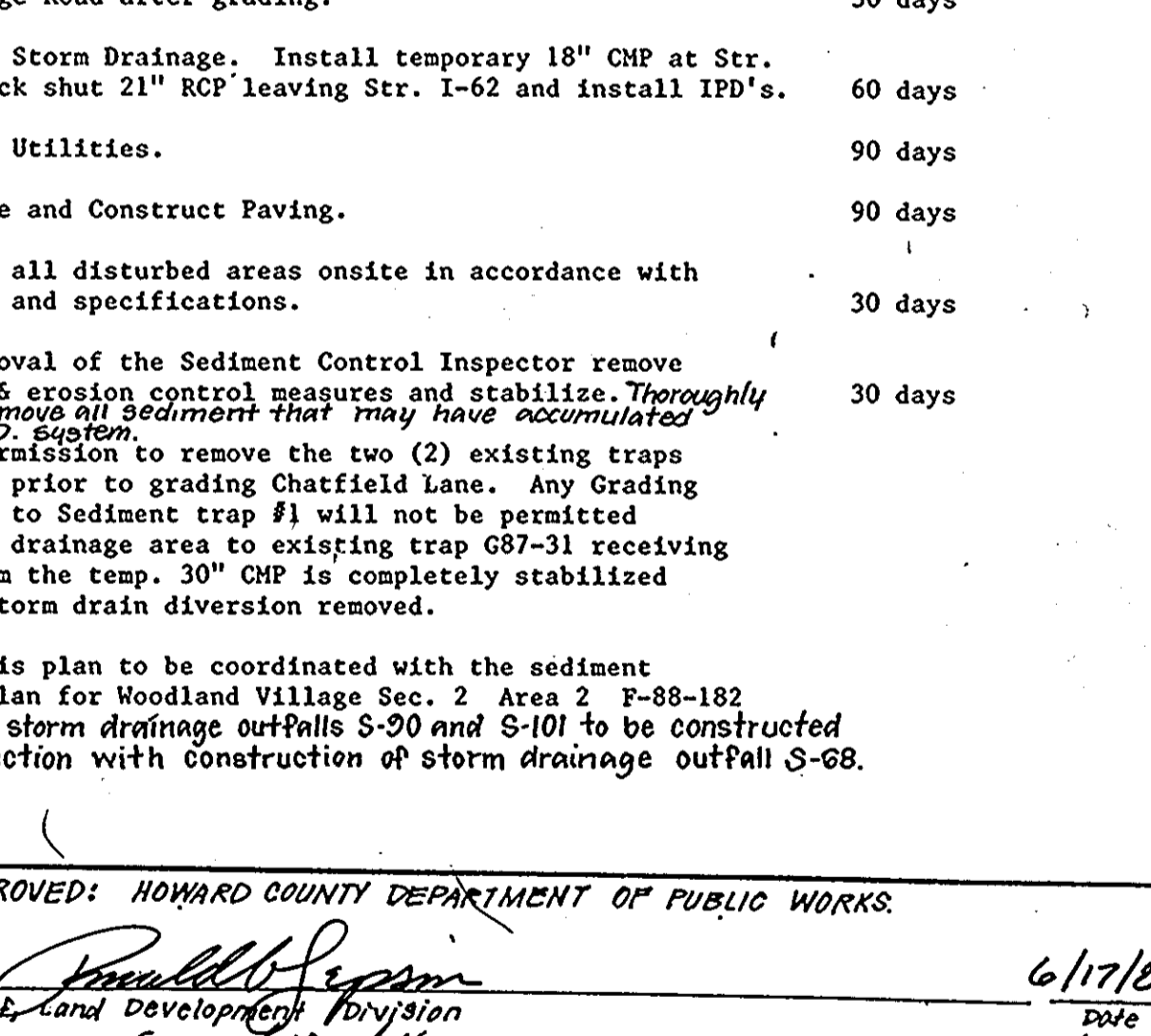
WATER QUALITY STRUCTURES
 MAINTENANCE NOTES
 (WATER QUALITY STRUCTURE WASTE)
 1. Water Quality Structures will require periodic cleaning. Owners of these facilities will have to clean them as needed or on a frequency that the county determines is appropriate. Owners of water quality structures will be notified by the County of the frequency of maintenance.
 2. Maintenance of these facilities will consist of cleaning out the separator & disposal of the waste and the repair of the facility as needed. Periodic inspections of these facilities will be made by the County Stormwater Management Group.
 3. The disposal of the liquid & solid matter should be as follows:
 A) All liquid material in the separator inlet shall be pumped into a suitable tank truck & disposed of at an approved sanitary district discharge manhole or be taken to an approved sewage treatment plant for discharge.
 B) The solid material shall be landfilled in an approved sanitary landfill.
 4. The inlet pipes, trash racks, gates and structural parts shall be repaired as needed.

WATER QUALITY STRUCTURES
 DEVELOPER'S AND OWNER'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 so deemed necessary.

WATER QUALITY STRUCTURES
 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.



PERMANENT SEEDING 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. (992-2477)
 2) All vegetative and structural practices shown on this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 3) Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, ditches, 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 seeding (Sec. 51) and 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: 23,970 Acres
 Area Disturbed: 2.51 Acres
 Area to be seeded or paved: 2.45 Acres
 Area to be vegetatively stabilized: 7.06 Acres
 Total Seed: 3,940 Cu. Yds.
 Total Fertilizer: 2,785 Cu. Yds.
 Offsite waste/borrow area location: N/A
 8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 9) Additional sediment control must be provided, if deemed necessary by the Howard County DEM sediment control inspector.
 10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
 11) If houses are to be constructed on an "As-Built" basis, at random, single lot Sediment Control as shown below shall be implemented.
 12) All pipes to be blocked at the end of each day (see detail below).
 13) The total amount of straw bale dikes/silt fence equals 845 L.F.



PERMANENT SEEDING NOTES
 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 urea 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 80 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 creeping 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 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 galtons per acre (5 gal/1000 sq ft) of ensulfated asphalt on flat areas. On slopes 8 feet or higher, use 343 gal 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 re-disturbed where a short-term vegetative cover is needed.
SEEDING - For periods March 1 thru April 30, and August 15 thru November 15, seed with 20 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of creeping lovegrass (0.15 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 ensulfated asphalt on flat areas. On slopes 8 ft or higher, use 343 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.

DESIGNED	JLS	SCALE	AS SHOWN
DRAWN	KIW	DRAWING	7 OF 7
CHECKED	JLS	JOB NO.	85-148
DATE	2-19-88	FILE NO.	85-148-D

CLARK · FINEFROCK & SACKETT INC.
 ENGINEERS · PLANNERS · SURVEYORS
 7135 MINSTREL WAY COLUMBIA, MARYLAND 21045 301-381-7500 Bldg 301-621-8100 Wash.
WOODLAND VILLAGE
 SECTION 2 AREA 1
 1ST ELECTION DISTRICT
 HOWARD COUNTY MARYLAND
 FOR: CHATEAU BUILDERS, INC
 8100 Wooded Glen Ct
 Ellicott City, Md 21030
 AS-BUILT F-88-180