

DRAINAGE AREA MAP
SCALE: 1"=200'

STORM DRAIN NOTES:

- 1) All Pipe R.C.C.P. Unless Otherwise Noted
- 2) Storm Drains From M-1 To M-5 Are "Possible Future" Drains And Are Shown For Informative Purposes Only.
- 3) Storm Drains From I-4 To M-1 Are Not Proposed Under This Contract.

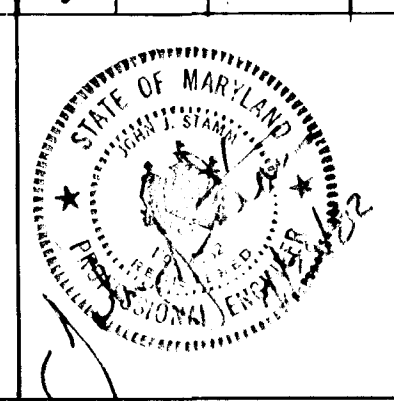
STORM FREQUENCY: 10 YR.

LOCATION		AREA	SUB	TOTAL	"C"	CA	CA	TIME	CONC.	MIN.	UTEN	AREA	PIPE (n=0.014)
FROM	TO							INLET	INLET	INLET	INLET	(C.F.S.)	SIZE
REV. M-5	A	7.35		7.35	0.82	6.03	10.0	10.0	10.0	10.0	6.5	39.20	27"
REV. M-4	A	5.05		5.05	0.82	4.14	10.0	10.0	10.0	10.0	6.5	26.91	36"
REV. M-3	A+B	12.40		12.40	0.82	10.17	10.0	0.7	10.0	10.0	6.5	65.09	36"
REV. M-2	C	2.16		2.16	0.82	1.77	10.0	10.0	10.0	10.0	6.5	11.51	42"
REV. M-1	A,B,C,D	14.56		14.56	0.82	11.94	10.0	0.7	11.4	10.0	6.5	74.03	42"
REV. M-1	A-D	16.85		16.85	0.82	13.4	10.0	0.6	12.0	10.0	6.5	80.46	48"
REV. M-1	E	4.23		4.23	0.82	3.52	10.0	10.0	10.0	10.0	6.5	22.84	48"
REV. I-8	A-E	22.44		22.44	0.82	16.93	10.0	1.1	13.1	10.0	6.5	99.32	48"
REV. I-8	F	0.80		0.80	0.49	0.39	10.0	10.0	10.0	10.0	6.5	4.25	
REV. I-8	G	2.29		2.29	0.82	2.37	10.0	10.0	10.0	10.0	6.5	15.41	
REV. I-9	H	2.48		2.48	0.82	2.30	10.0	10.0	10.0	10.0	6.5	17.04	
REV. I-9	I	3.21		3.21	0.82	2.71	10.0	10.0	10.0	10.0	6.5	17.62	
REV. I-8	H+I	3.79		3.79	0.82	3.01	10.0	10.0	10.0	10.0	6.5	19.57	24"
REV. I-8	H+I	28.12		28.12	0.82	22.70	10.0	0.5	13.6	10.0	6.5	129.39	48"
ROAD I-7	J	0.23		0.23	0.70	0.16	10.0	10.0	10.0	10.0	6.5	1.10	24"
ROAD I-7	J	0.23		0.23	0.70	0.16	10.0	10.0	10.0	10.0	6.5	1.10	24"
ROAD I-6	K	0.64		0.64	0.44	0.28	10.0	10.0	10.0	10.0	6.5	2.02	
ROAD I-5	A-K	28.99		28.99	0.44	23.14	10.0	0.5	14.1	10.0	6.5	129.58	48"
ROAD I-5	L	0.64		0.64	0.44	0.28	10.0	10.0	10.0	10.0	6.5	2.02	
ROAD I-4	A-L	29.63		29.63	0.44	23.42	10.0	0.1	14.2	10.0	6.5	131.60	48"
ROAD I-4	M	0.28		0.28	0.71	0.20	10.0	10.0	10.0	10.0	6.5	1.54	
ROAD I-4	M	23.91		23.91	0.71	19.62	10.0	0.1	14.3	10.0	6.5	122.27	54"
ROAD I-1	A-M	0.00		0.00	0.73	0.08	10.0	10.0	10.0	10.0	6.5	0.65	
ROAD I-1	N	2.10		2.10	0.82	0.81	10.0	10.0	10.0	10.0	6.5	13.56	24"
ROAD I-2	O	2.70		2.70	0.82	0.81	10.0	10.0	10.0	10.0	6.5	17.56	24"
ROAD I-2	P	2.65		2.65	0.82	0.81	10.0	10.0	10.0	10.0	6.5	17.44	24"
ROAD I-1	Q	5.35		5.35	0.82	1.61	10.0	0.3	15.2	10.0	6.5	27.08	24"
ROAD I-1	R	35.31		35.31	0.82	14.3	10.0	0.3	15.2	10.0	6.5	174.67	54"
ROAD I-1	S	6.00		6.00	0.82	4.8	10.0	10.0	10.0	10.0	6.5	41.80	36"
ROAD I-1	R	6.00		6.00	0.82	4.8	10.0	10.0	10.0	10.0	6.5	41.80	36"

VICINITY MAP
SCALE: 1"=600'

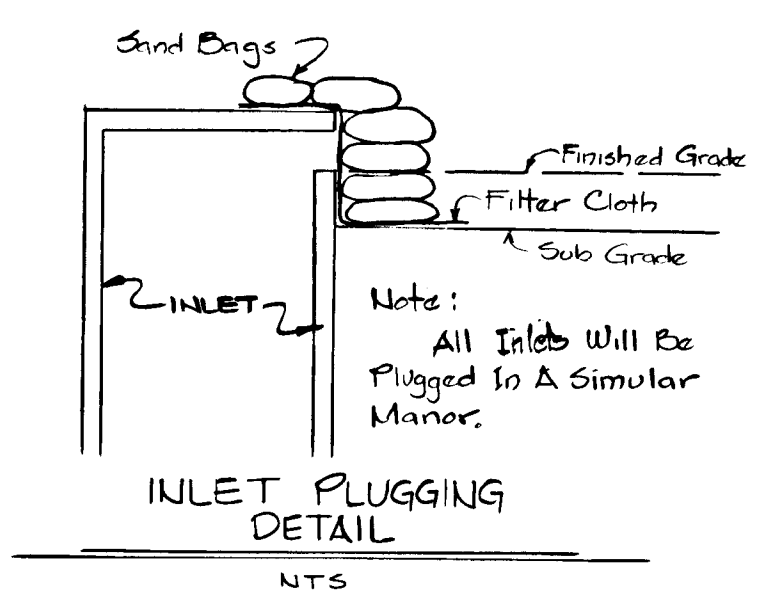
APPROVED: Department of Public Works
 Chief, Bureau of Engineering
 Date: 6-22-82
 APPROVED: Howard County Office of Planning and Zoning
 Planning Director:
 Chief of Land Development
 And Zoning Administration:
 Date: 6-17-82

ENGINEER
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND 21204
 301-825-8120

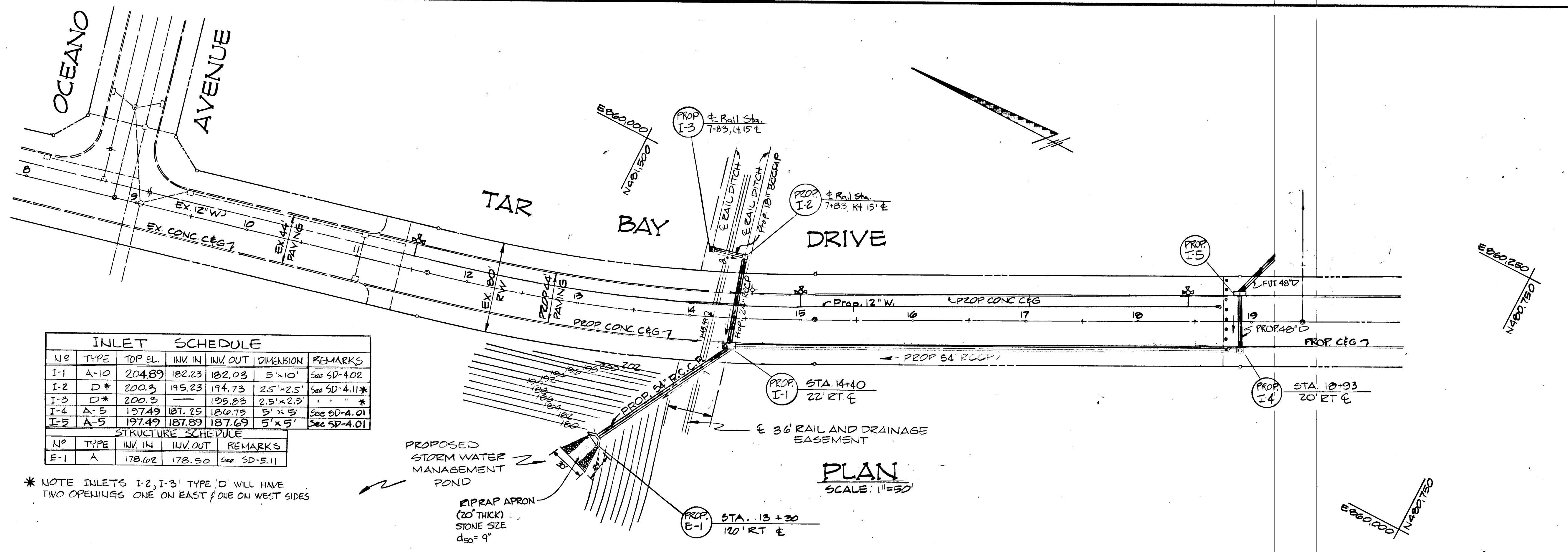


REVISIONS
 REVISED PER MEMO 5-18-83 - 8/26/88

VP-82-65 PRELIMINARY PLAN FOR PH. III - A WAIVED
MARYLAND
WHOLESALE FOOD CENTER
STORM DRAINS: DRAINAGE AREA MAP
TAR BAY DRIVE
 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
 SCALE: AS SHOWN UPDATED: MARCH 82 OCT. 1981
 SHEET 1 of 7
 VP-82-65

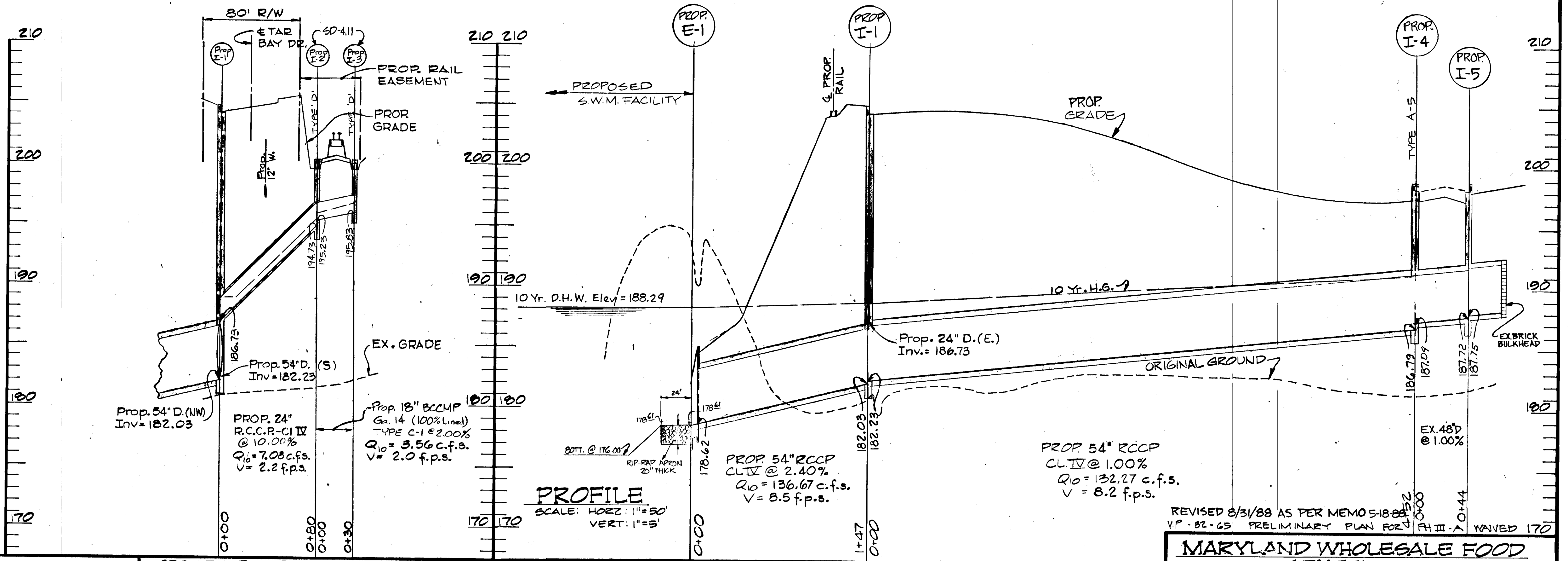


Note: Inlet Plugging Shall Remain In Place Until The Completion Of The Rail Spur And Road Construction Portions Of This Contract



INLET SCHEDULE						
N ^o	TYPE	TOP EL.	INV. IN	INV. OUT	DIMENSION	REMARKS
I-1	A-10	204.89	182.23	182.03	5'x10'	See SD-4.02
I-2	D*	200.3	195.23	194.73	2.5'x2.5'	See SD-4.11*
I-3	D*	200.3	195.83	195.83	2.5'x2.5'	" " " "
I-4	A-5	197.49	187.75	186.75	5'x5'	See SD-4.01
I-5	A-5	197.49	187.89	187.69	5'x5'	See SD-4.01
STRUCTURE SCHEDULE						
N ^o	TYPE	INV. IN	INV. OUT	REMARKS		
E-1	A	178.02	178.50	See SD-5.11		

* NOTE INLETS I-2, I-3 TYPE 'D' WILL HAVE TWO OPENINGS ONE ON EAST & ONE ON WEST SIDES



APPROVED: Department of Public Works

William S. Ray 6-22-82
Chief, Bureau of Engineering

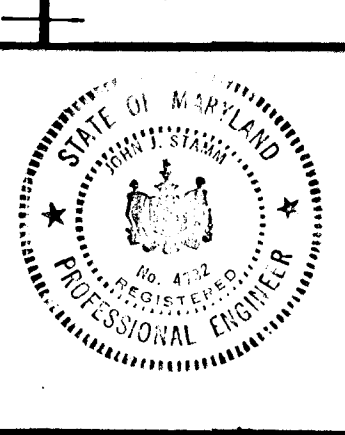
APPROVED: Howard County Office of Planning And Zoning

Planning Director: _____ Date: _____
Chief Of Land Development
And Zoning Administration: _____ Date: 6/27/82

ENGINEER:
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
303 ALLEGHENY AVE.
TOWSON, MARYLAND 21204
301-825-8120

CERTIFICATION BY THE ENGINEER:
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

John J. Stamm 4732 4/29/82
JOHN J. STAMM REG. NO. DATE



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

John J. Stamm 4/29/82
AUTHORIZED SIGNATURE DATE

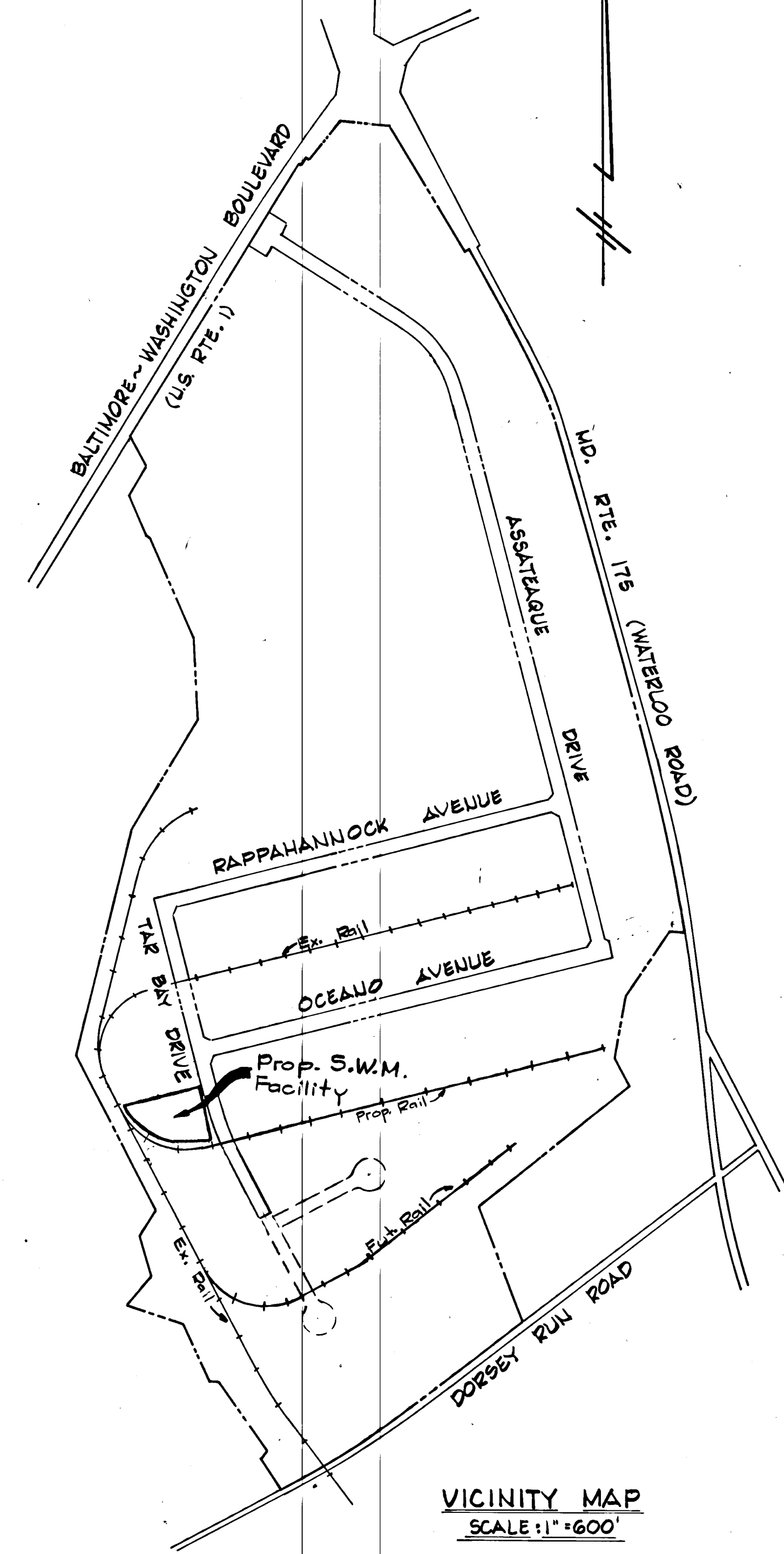
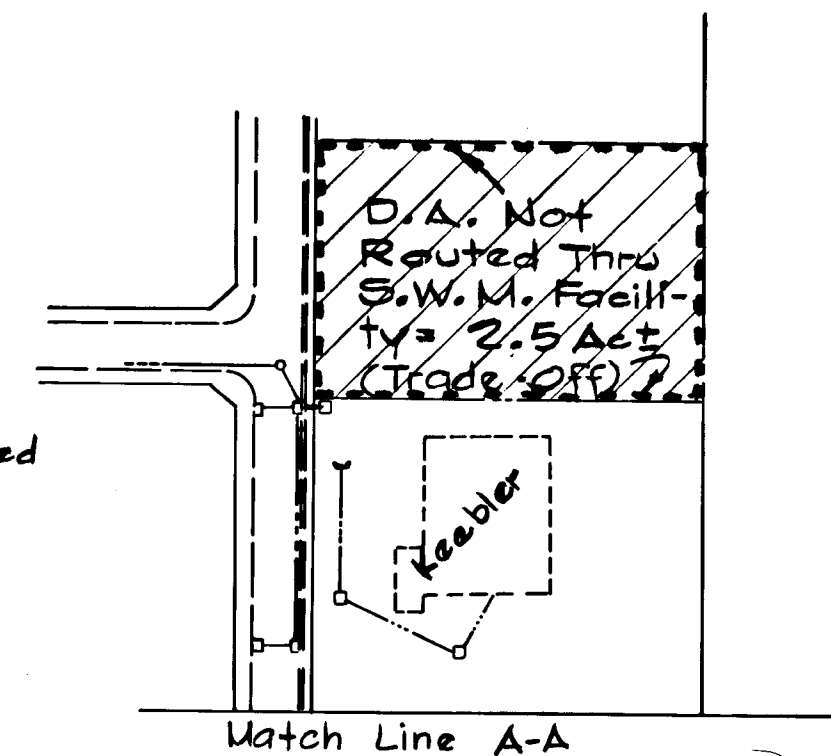
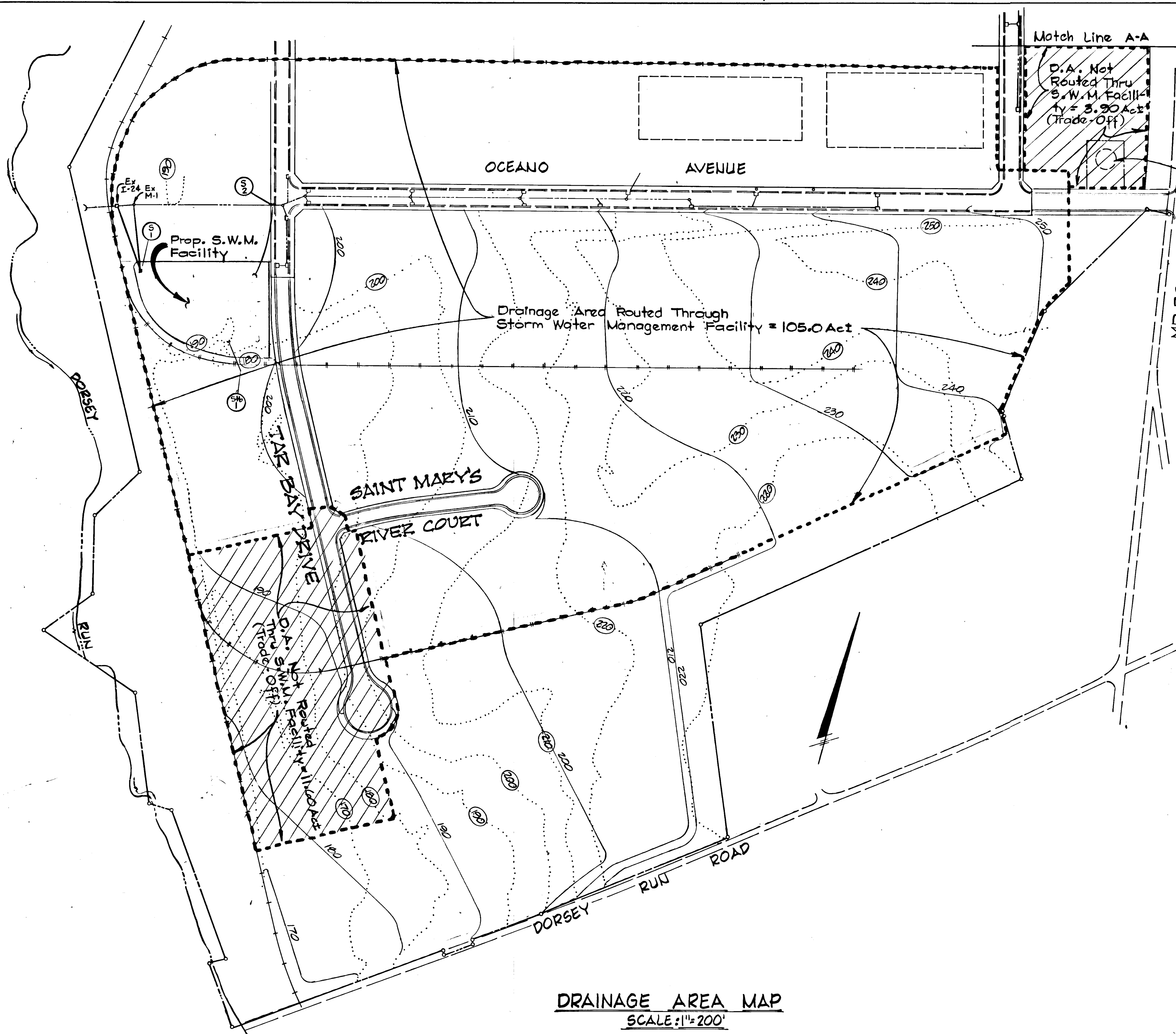
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

APPROVED: _____ DATE: _____
REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
James H. Nicks 6-17-82
SIGNATURE DATE: _____
U.S. SOIL CONSERVATION SERVICE

REVISED 8/31/88 AS PER MEMO 5-18-88
VP-82-65 PRELIMINARY PLAN FOR PH III-A MAILED 170

MARYLAND WHOLESALE FOOD CENTER
STORM DRAIN CONSTRUCTION PLANS
TAR BAY DRIVE

HOWARD COUNTY, MD ELECT. DISTRICT #6
SCALE: AS SHOWN UPDATED: MARCH '82 OCT. 1981



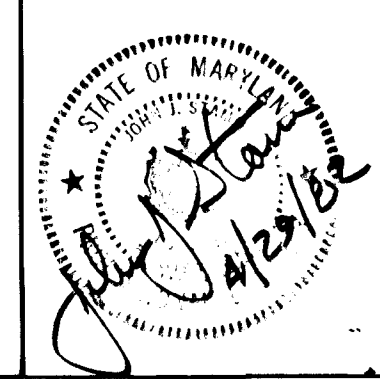
VP-82-65 PRELIMINARY PLAN FOR PHASE-A WAIVED

**MARYLAND
WHOLESALE FOOD CENTER
STORM WATER MANAGEMENT
DRAINAGE AREA MAP**

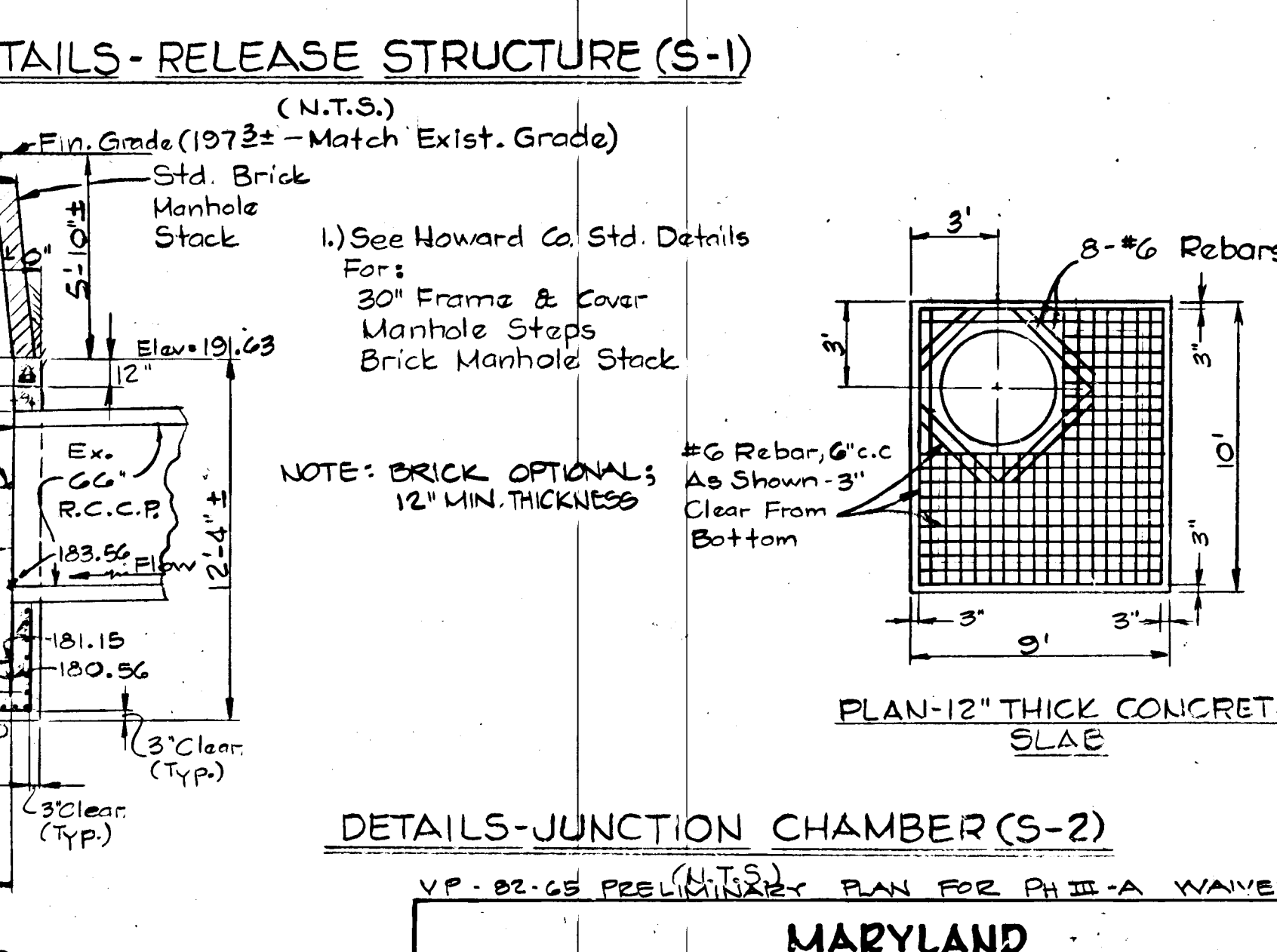
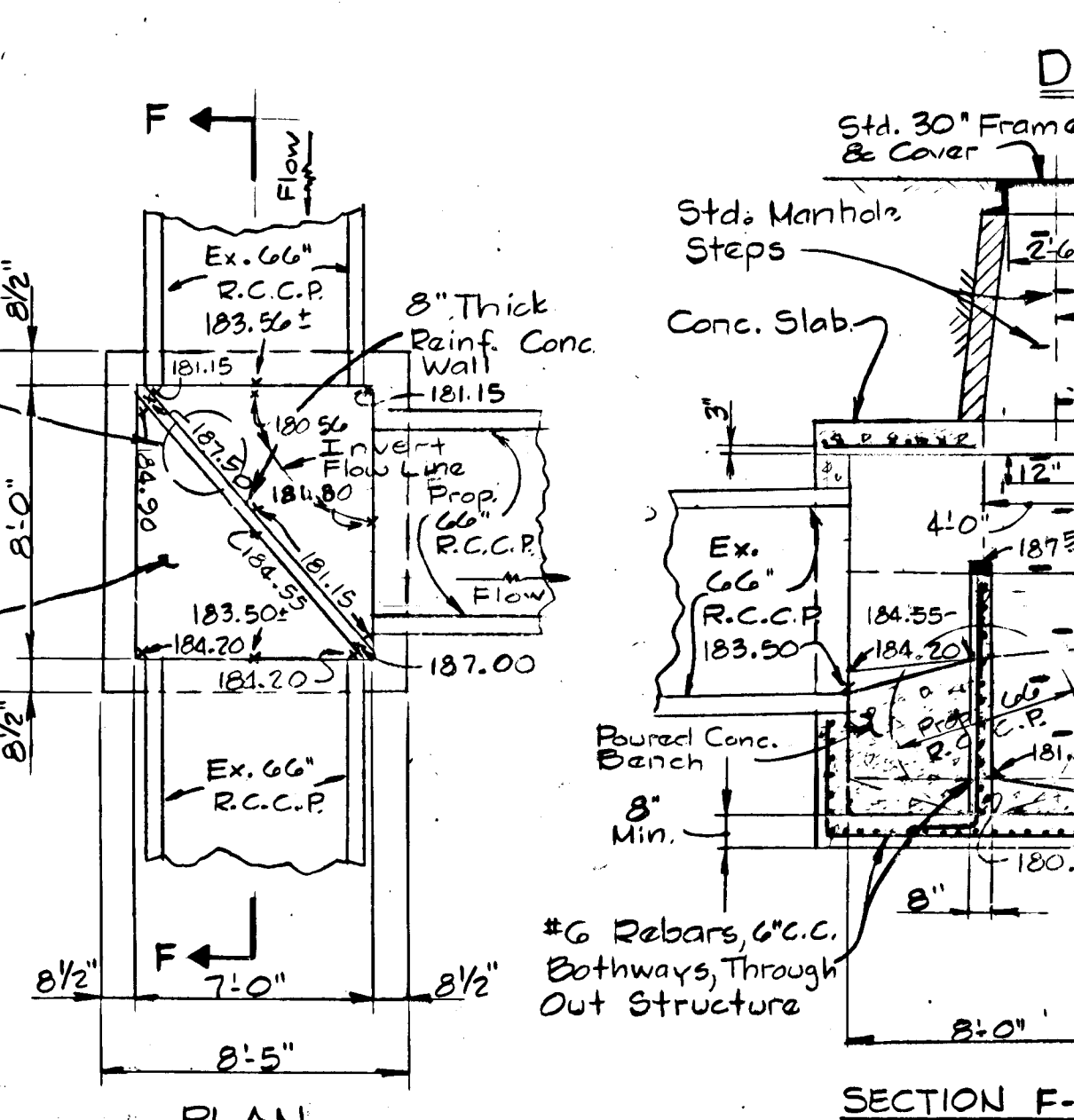
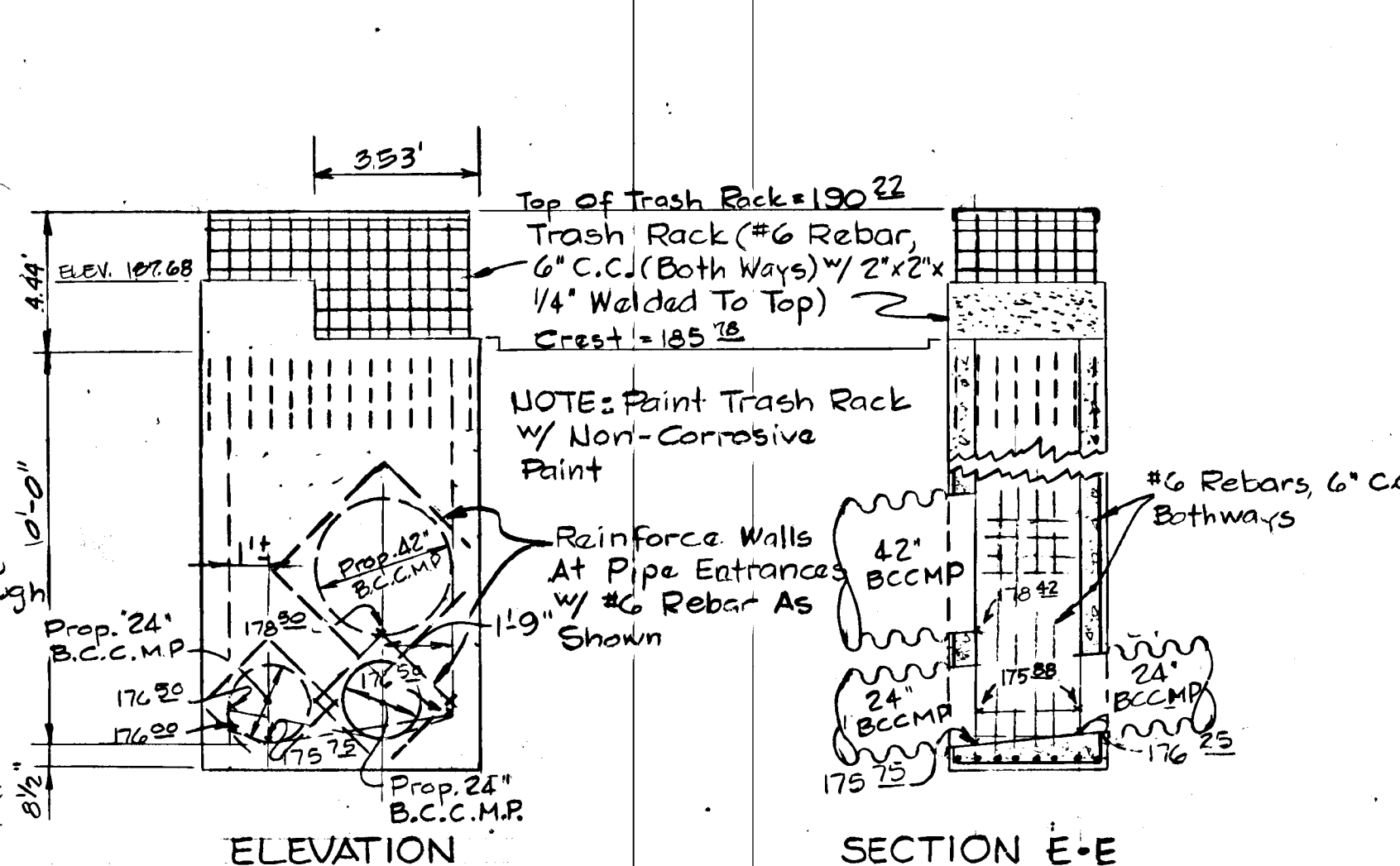
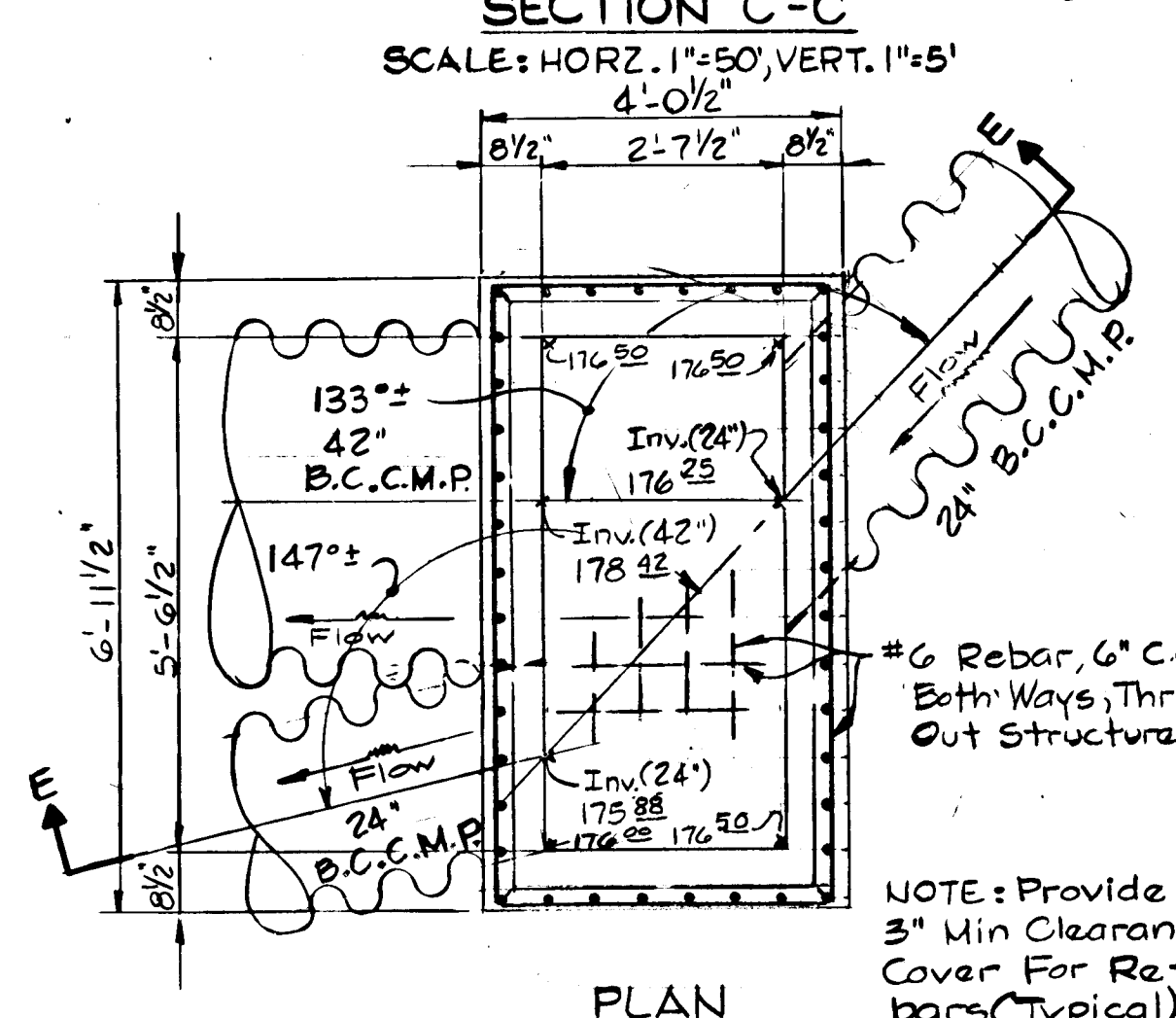
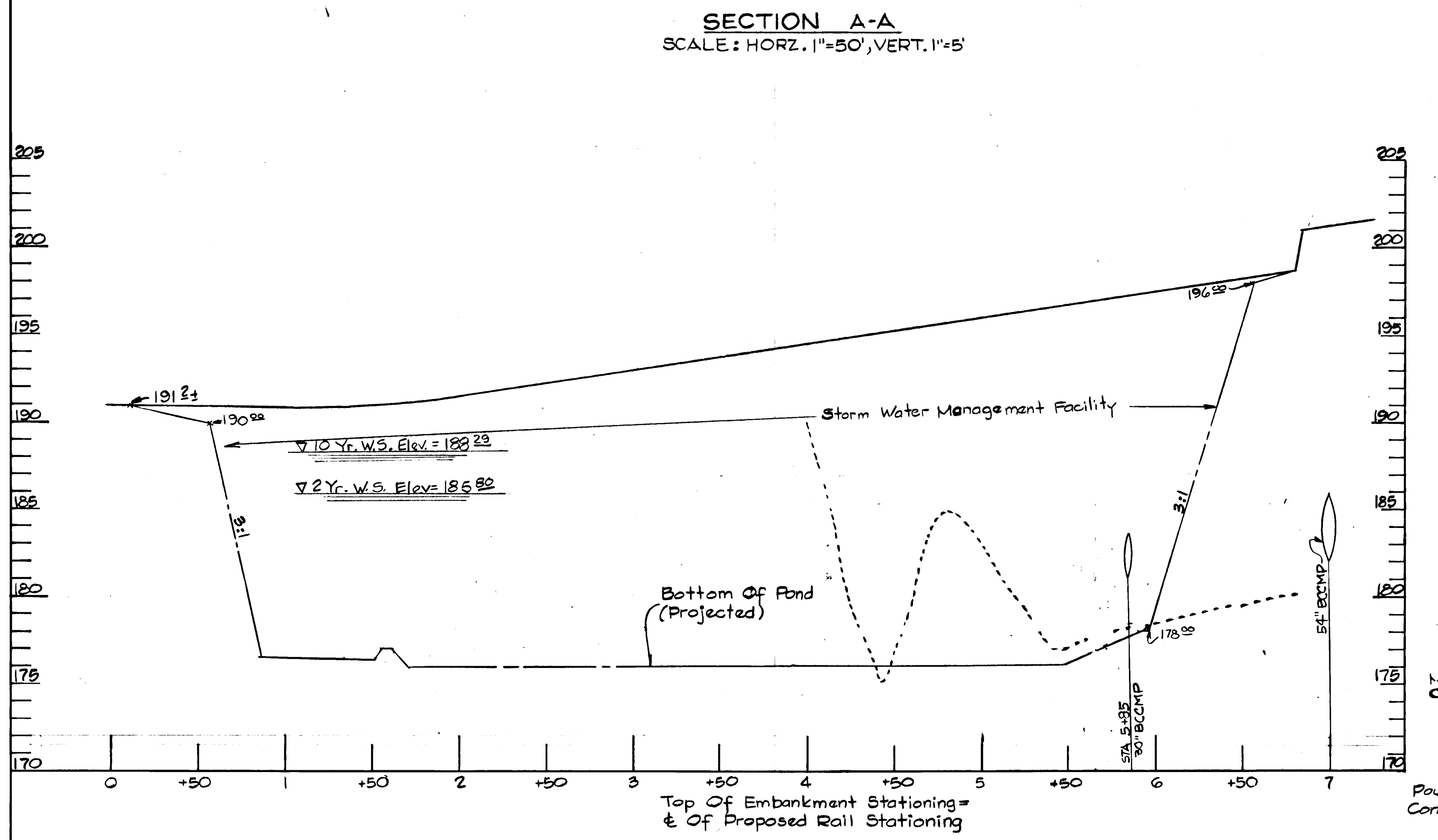
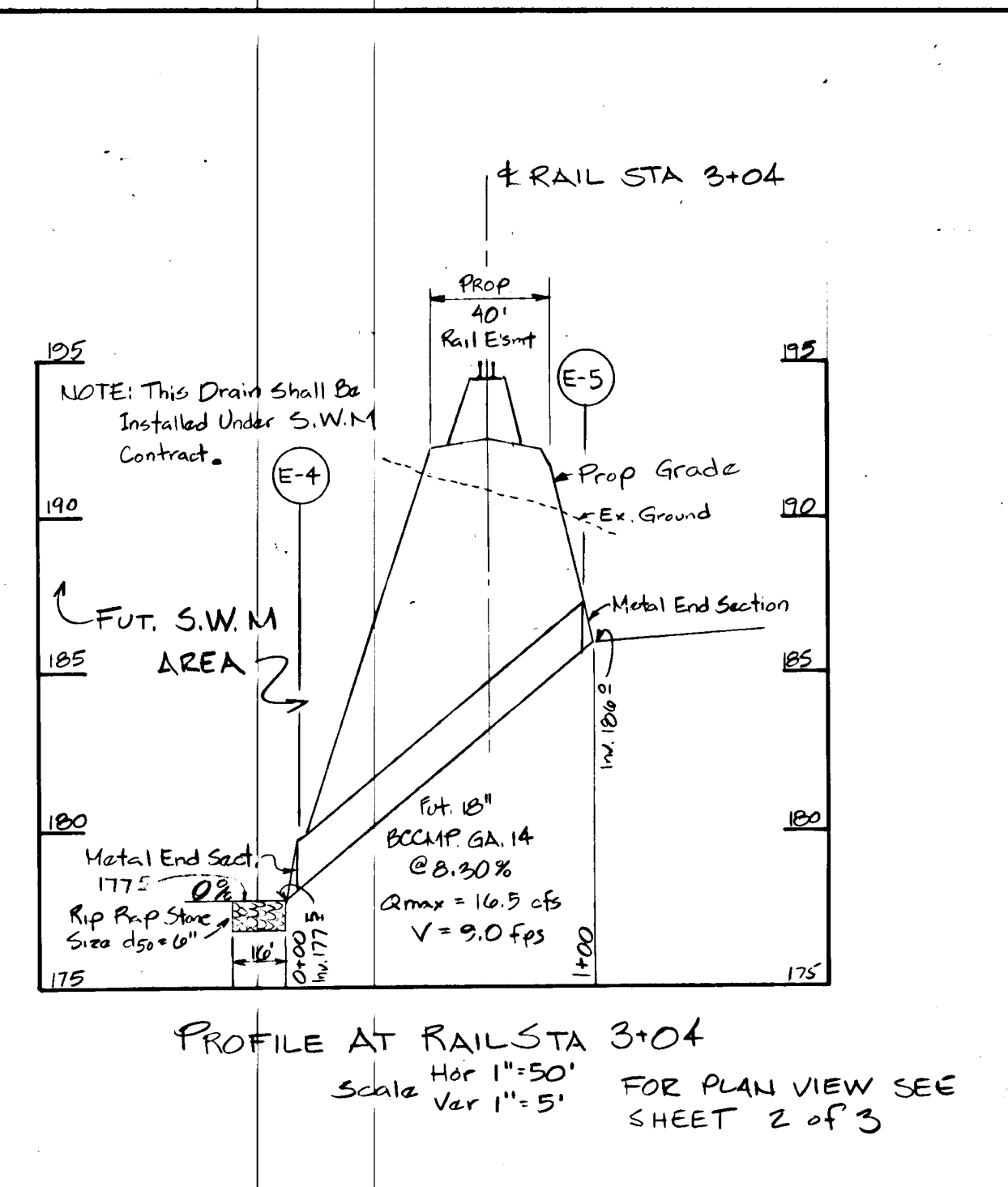
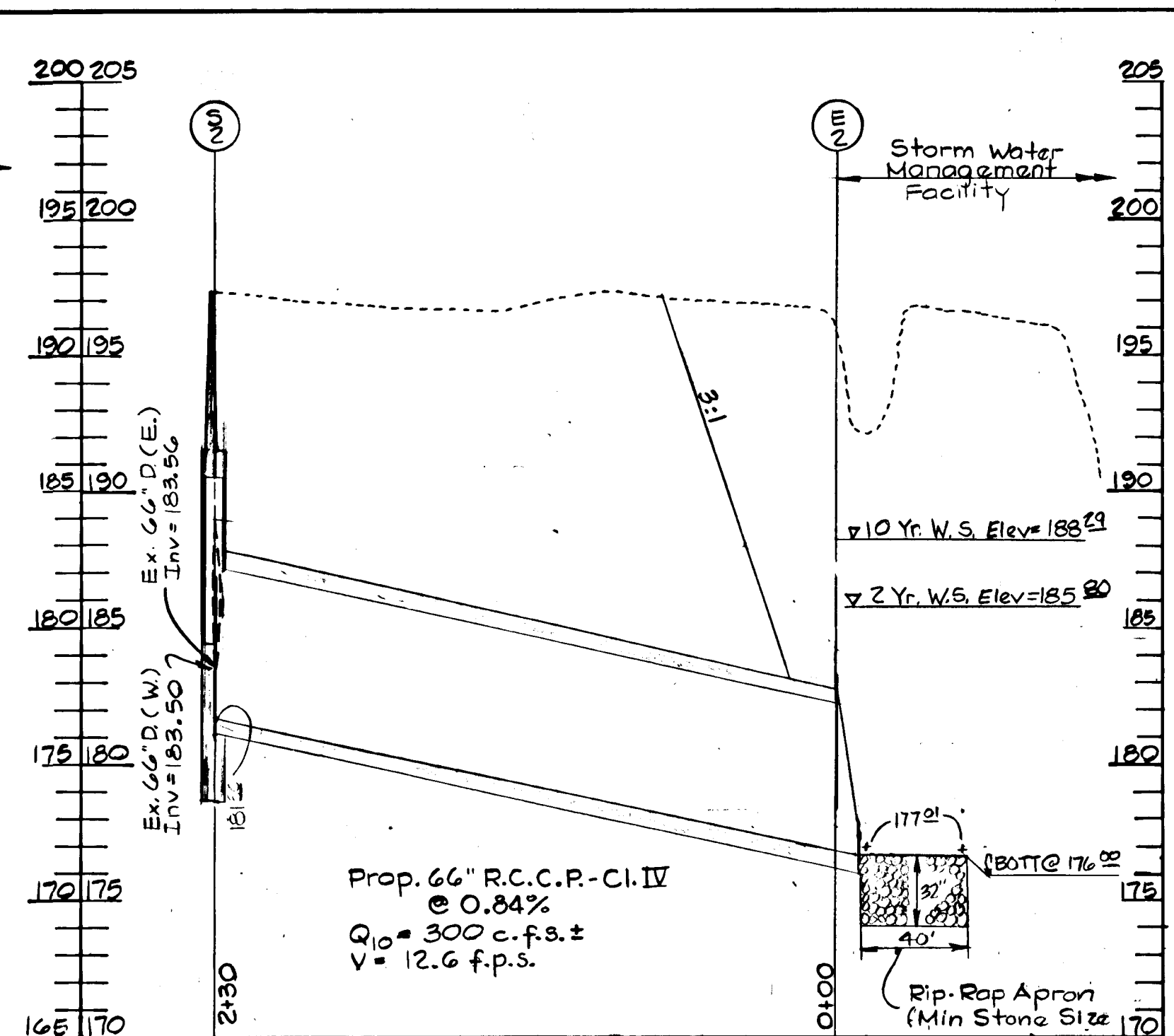
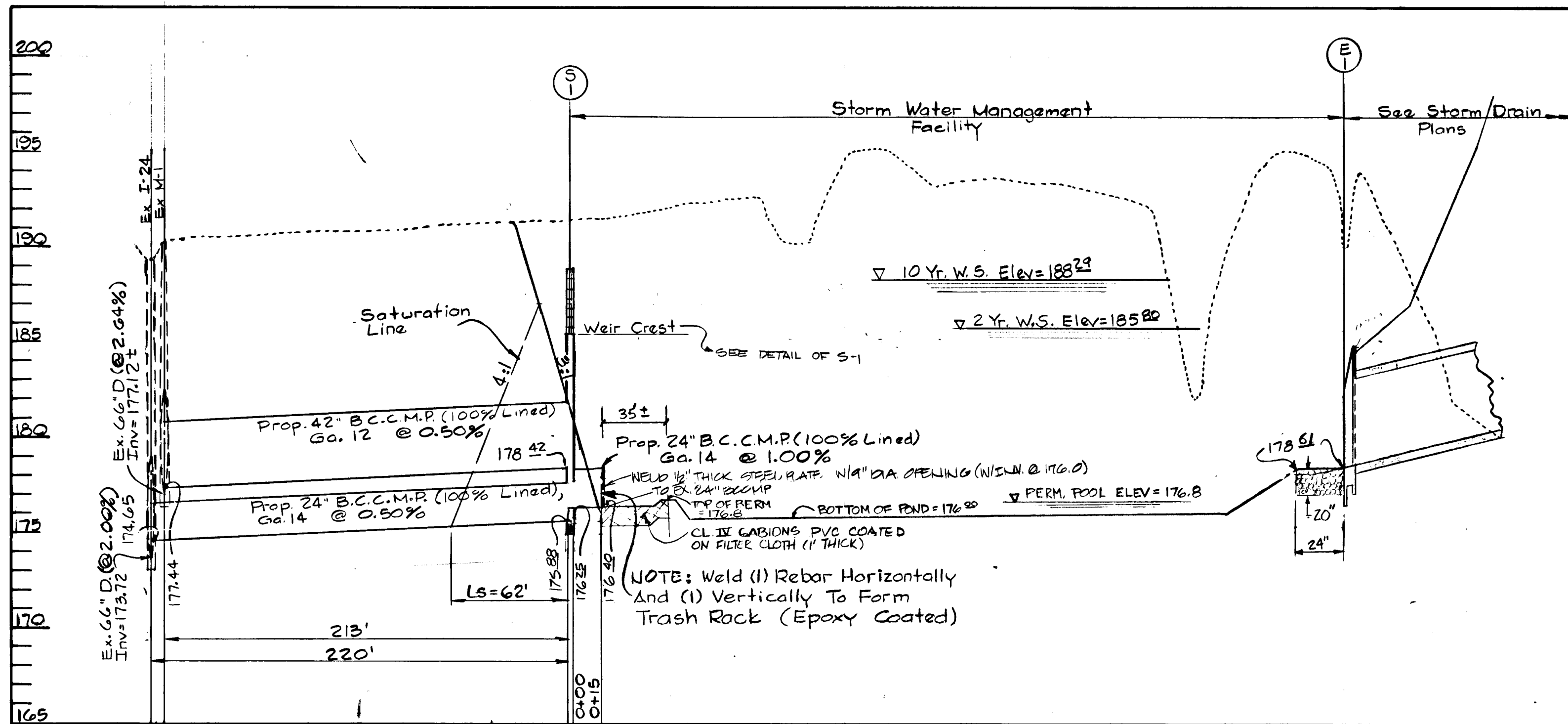
APPROVED: Department Of Public Works
William S. Riley 6-22-82
Chief, Bureau Of Engineering Date

APPROVED: Howard County Office Of Planning And Zoning
Planning Director: _____ Date: _____
Chief Of Land Development
And Zoning Administration: *William S. Riley* Date: 6-22-82

ENGINEER
**GEORGE W. STEPHENS, JR. &
ASSOCIATES, INC.**
303 ALLEGHENY AVENUE
TOWSON, MARYLAND
21204
301-825-8120



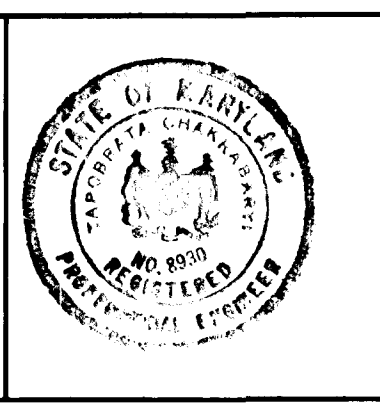
HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
SCALE: AS SHOWN UPDATED-MARCH '82 OCT. 1981



APPROVED: Department Of Public Works
 Chief, Bureau Of Engineering
 APPROVED: Howard County Office Of Planning And Zoning
 Planning Director:
 Chief Of Land Development
 And Zoning Administrations

ENGINEER
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND
 21204
 301-825-8120

J. J. ...
 REG # 8930

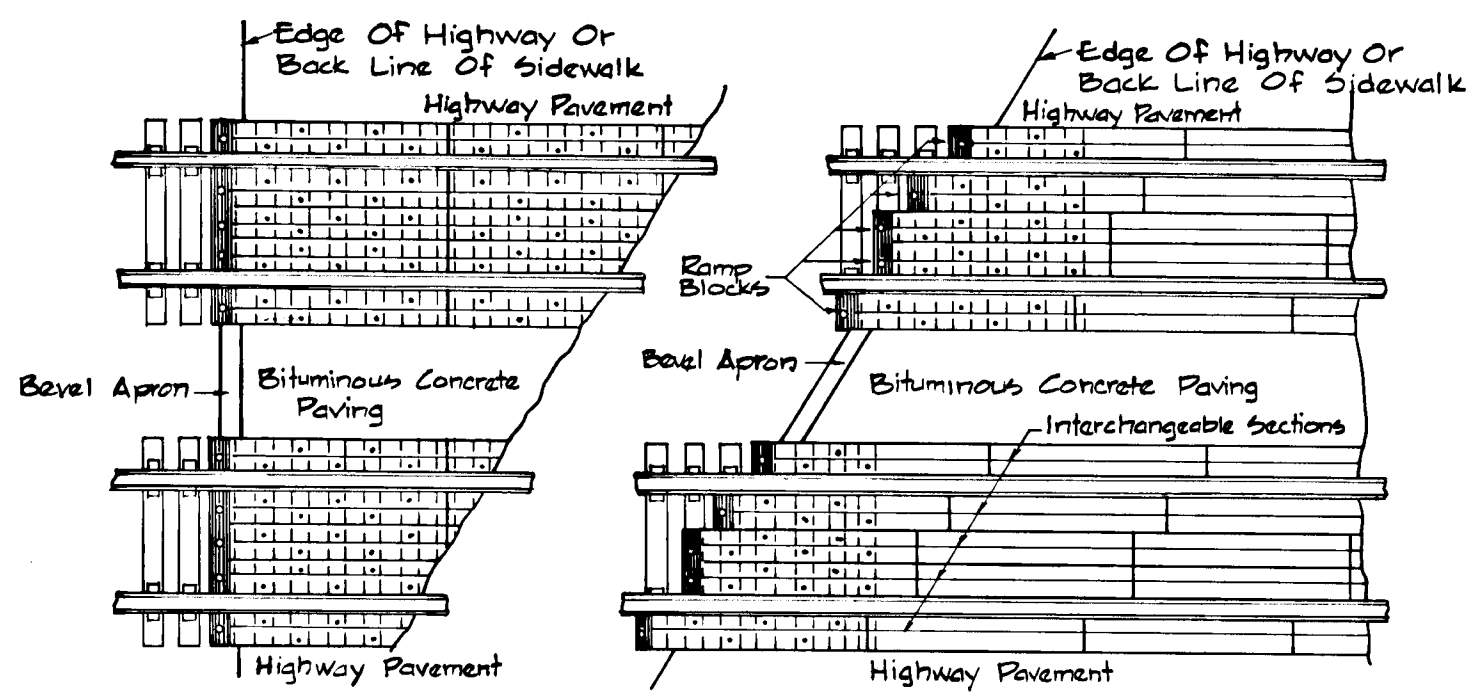


REVISIONS:
 1) ELEVATION IN SECTION C-C (SEE SECTION F-F)
 2) ADDED 1/2" STEEL PLATE WITH DIA OPENING TO EXIST. MANHOLE
 3/1/80 - W.S. ELEV. FOR 2 YR. & 10 YR. STORM REVISED
 - INVERTS OF DRAINS INCOMING TO POND CHANGED
 - ELEV. ON THE REL. STRUCTURE (S-1) DETAIL REVISED
 - BOTTOM OF POND LOWERED
 - BENCH NEXT TO S-1 ADDED & GABIONS
 - RIP-RAP APRONS AT THE END OF S-1 DRAINS ADDED

VP-82-65 PRELIMINARY PLAN FOR PHASE A WAIVED

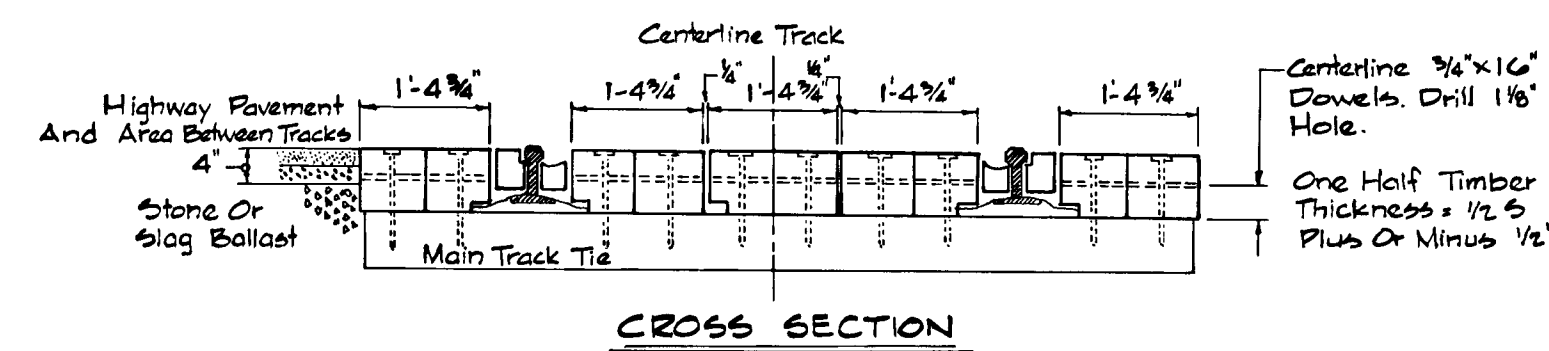
MARYLAND WHOLESALE FOOD CENTER STORM WATER MANAGEMENT PROFILES & DETAILS
 HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO 6
 SCALE: AS SHOWN UPDATED: MARCH 82 OCT 1981

**PREFABRICATED TIMBER SLAB
HIGHWAY CROSSING DETAILS**

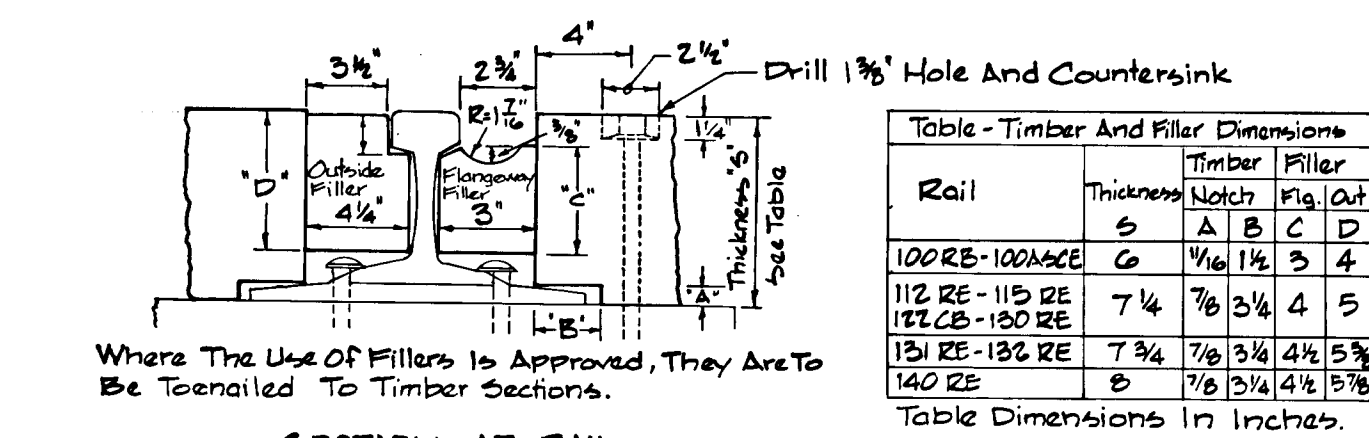


RIGHT ANGLE CROSSING

ACUTE ANGLE CROSSING



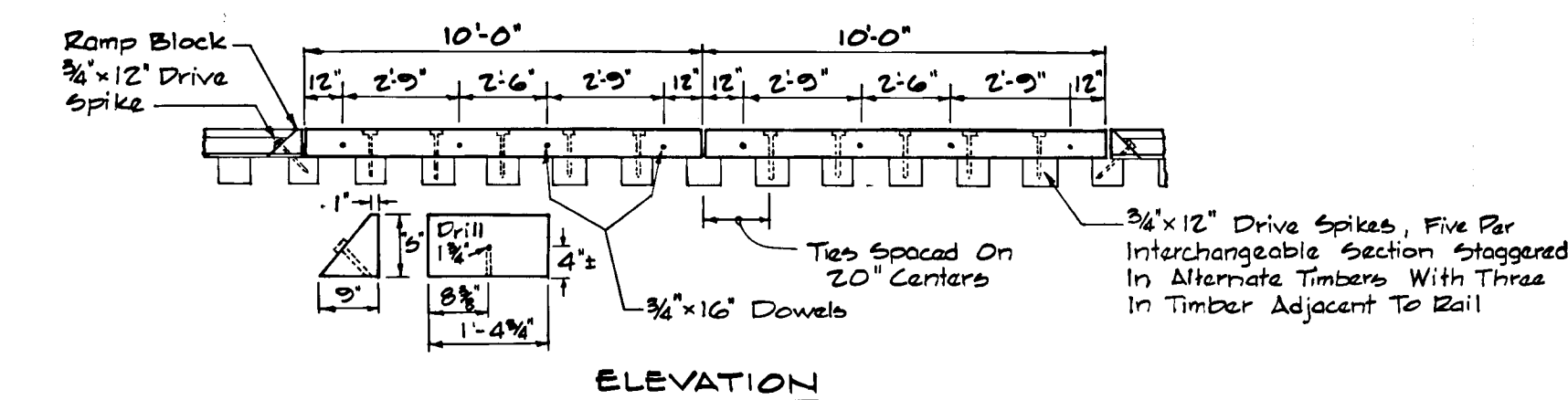
CROSS SECTION



SECTION AT RAIL

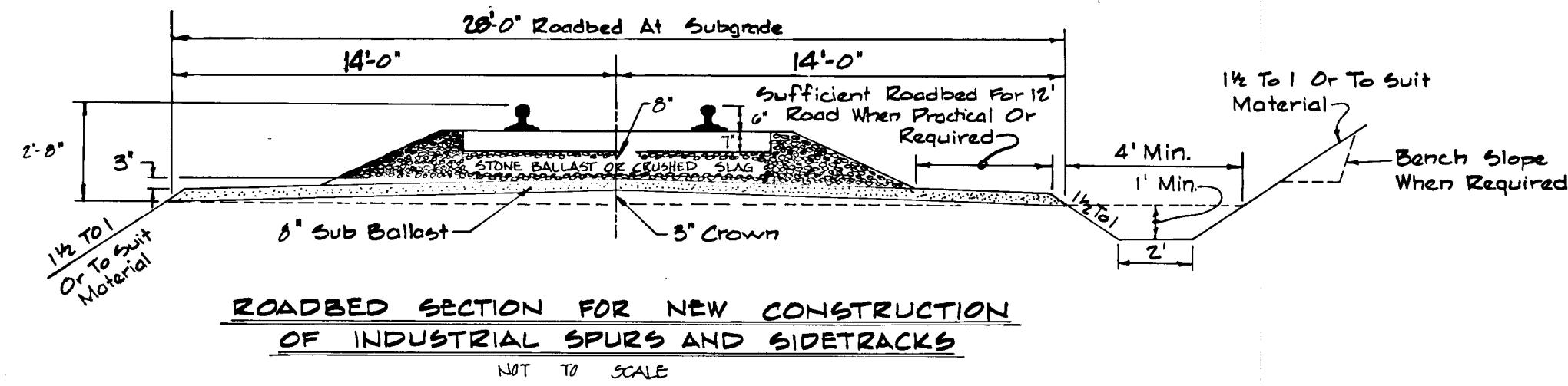
Table - Timber And Filler Dimensions			
Rail	Thickness	Timber Notch	Filler
		A	B C D
100RE-100ACE	6	1/4	1 1/2 3 4
112 RE - 115 RE	7 1/4	3/8	2 1/4 4 5
122 RE - 130 RE	7 3/4	7/8	3 1/4 4 5 5 1/2
132 RE - 132 RE	7 3/4	7/8	3 1/4 4 5 5 1/2
140 RE	8	7/8	3 1/4 4 5 5 1/2

Table Dimensions In Inches.



ELEVATION

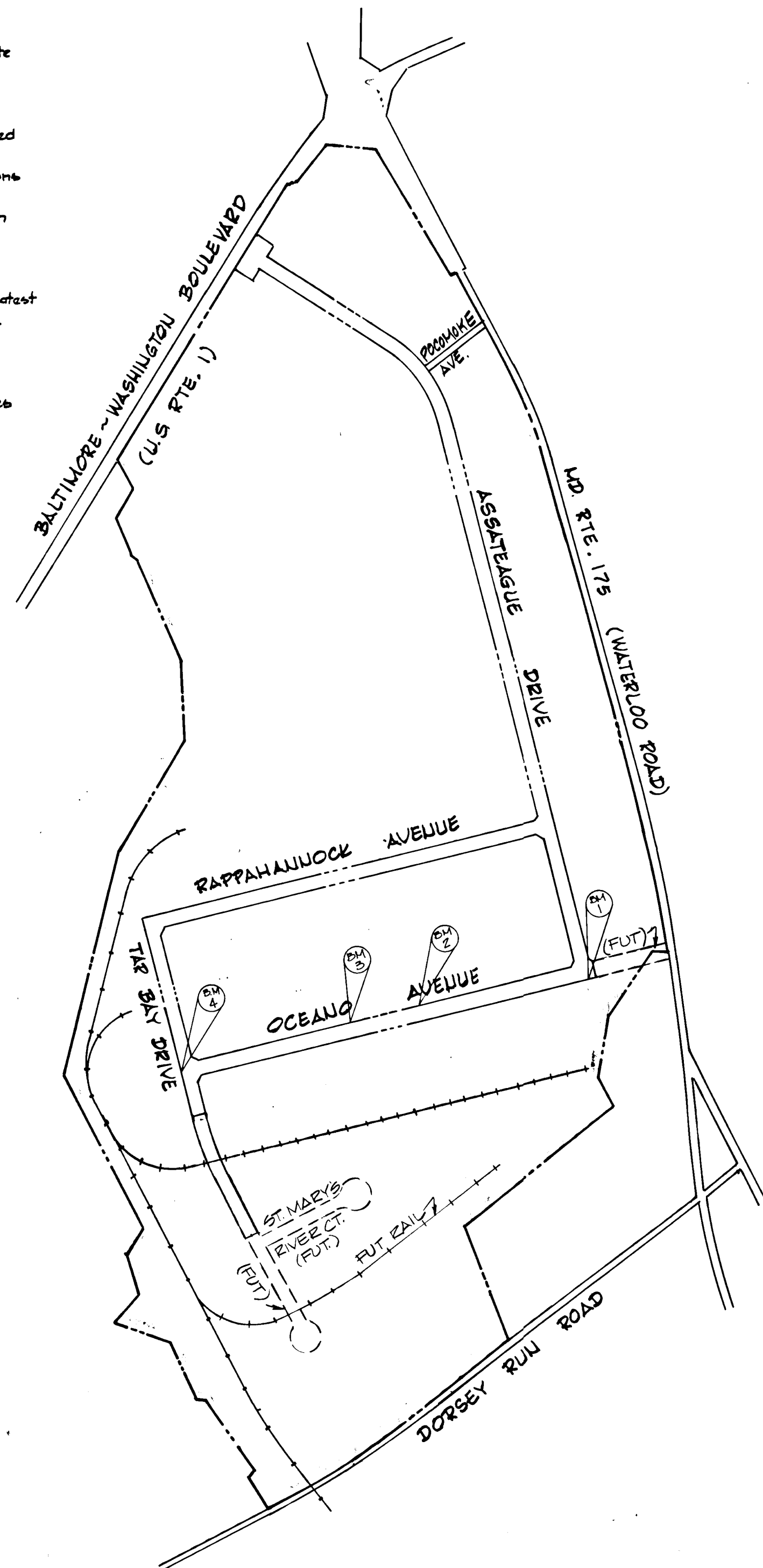
WASHER HEAD DRIVE SPIKE



**ROADBED SECTION FOR NEW CONSTRUCTION
OF INDUSTRIAL SPURS AND SIDETRACKS**

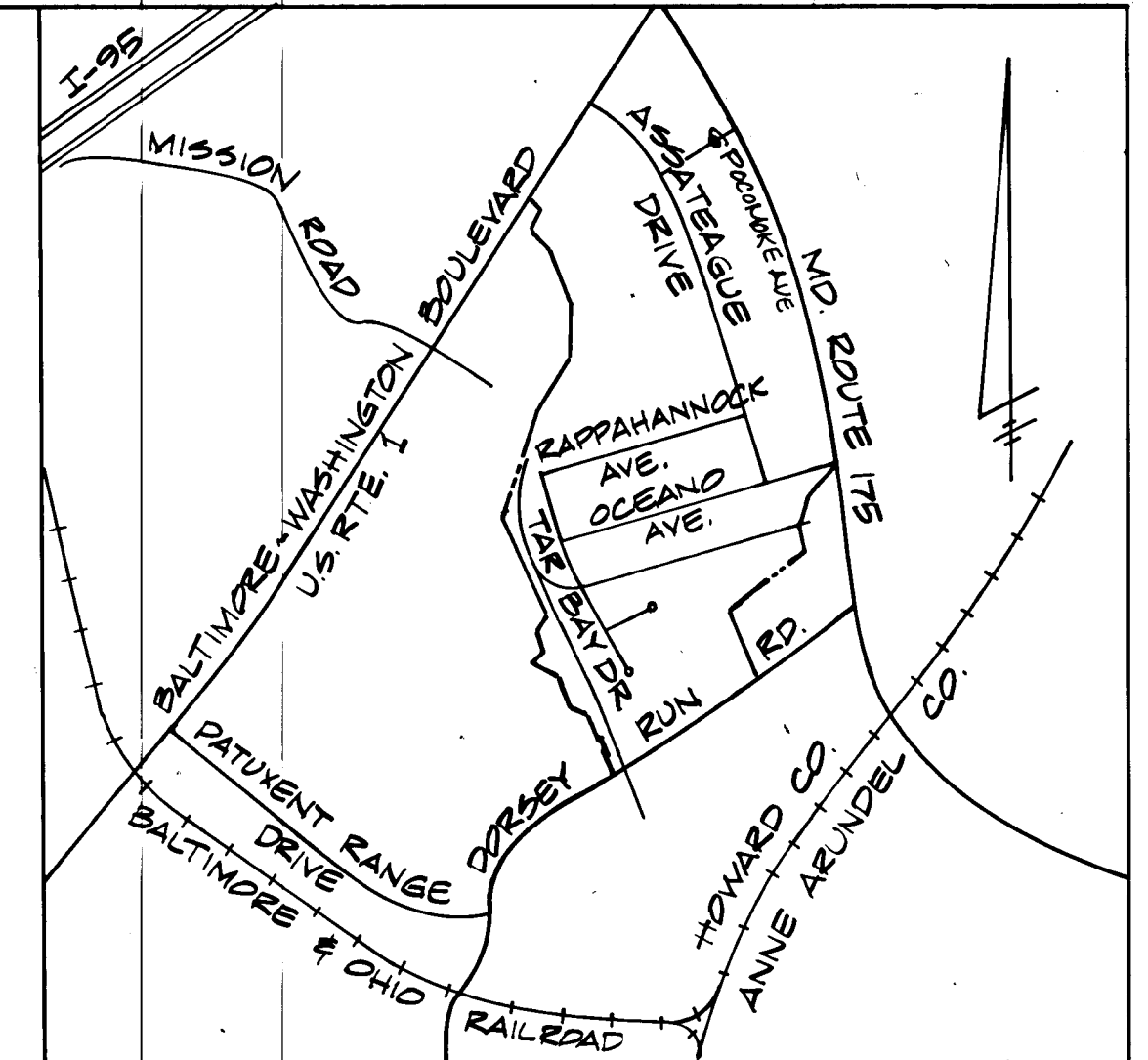
NOTES:

1. Where Highway Or Street Has Separate Sidewalks, The Entire Area Including Sidewalks Will Be Paved.
2. Timber Sections Will Be Furnished In 10'-0" Lengths. Crossings To Be Ordered And Installed In Multiples Of 10'-0".
3. Filler Blocks Will Be Used Only At Locations Approved By The Chief Engineer.
4. Main Track Ties Will Be Used Through The Crossing Limits.
5. Ties To Be Spaced On 20' Centers Throughout The Crossing.
6. Crossing Timbers To Be Treated Per Latest Revision Of A.W.P.A. Specification No. 4.
7. For Dimension Details Of Washer Head Drive Spikes See AREA Plan 2M-63 Except For Head Size.
8. Prebore Ties In Field For Drive Spikes To Prevent Tie Splitting.



LOCATION MAP

SCALE: 1"=1000'



VICINITY MAP
SCALE: 1"=2000'

BENCH MARK: 203 RESET ELEVATION: 253.94
DESCRIPTION: B.R.C. Brass Marker Set Concrete, East Side Rte. 175, 45' From Edge Of Paving, And 30' From The South Curb Of The North Entrance To The Patuxent Institute.

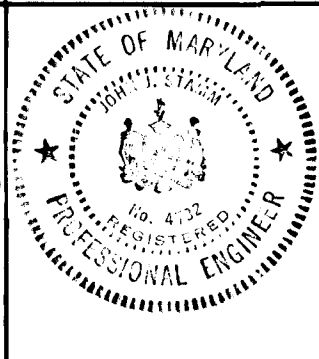
- BM #1 X-Cut @ 24.25' Lt. @ B+20.95 Ocean Ave. Elev. 252.59'
- BM #2 X-Cut In Hydrant Hold-Down Bolt 15+00 Ocean Ave. Elev. 232.55
- BM #3 X-Cut @ 24.25' Lt. @ 19+00 Ocean Ave. Elev. 218.73
- BM #4 X-Cut @ 22.25' Rt. @ B+50 Tar Bay Dr. @ P.I. Elev. 197.36

VP-82-65 PRELIMINARY PLAN FOR PH III-A WAIVED

APPROVED: Department of Public Works
William D. Riley C-22-82
Chief, Bureau Of Engineering
APPROVED: Howard County Office of Planning And Zoning
Planning Director: _____ Date: _____
Chief of Land Development
And Zoning Administration: *William D. Riley* Date: 6/17/82

ENGINEER
GEORGE W. STEPHENS, JR. & ASSOCIATES, INC.
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
301-825-8120

CERTIFICATION BY ENGINEER:
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
John J. Stamm 4732 4/29/82
JOHN J. STAMM REG. NO. DATE:



CERTIFICATION BY THE DEVELOPER:
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF THE PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
William D. Riley
AUTHORIZED SIGNATURE: DATE:

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
William D. Riley 6-17-82
APPROVED: DATE
REVIEWED FOR HOWARD SCD AND METS TECHNICAL REQUIREMENTS
William D. Riley 6-17-82
SIGNATURE DATE
US SOIL CONSERVATION SERVICE

**MARYLAND
WHOLESALE FOOD CENTER
ROAD CONSTRUCTION PLANS FOR
TAR BAY DRIVE**
HOWARD COUNTY, MARYLAND ELECTION DISTRICT NO. 6
SCALE: AS SHOWN UPDATED: MARCH 82 DATE: OCT. 1981
SHEET 6 of 7
F - 82 - 120 V.P. - 82 - 65

