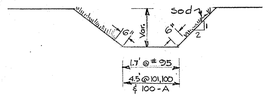
PIPE CURVE DATA					
Letter	Radius	Arc	Tangent	Chord	∠
A	1220.15	349.19	175.80	348.00	16°23'50"
B	105.00	34.66	17.49	34.50	18°54'42"
C	80.00	7.48	7.50	14.98	10°42'42"
D	80.00	60.03	31.50	58.62	42°59'02"



TYPICAL DITCH SECTION
No Scale

STRUCTURE SCHEDULE						
No.	Type		W	Top Down	Top Up	Remarks
122	B-15	Inlet	2.50	343.90	344.55	W.S.S.C. Standard
121	B-20	Inlet	2.50	343.90	347.77	" "
120	B-20	Inlet	3.92	336.03	336.90	" "
119	A-5	Inlet	2.50	334.97	335.16	" "
118	27" x 15" Field Connection					" "
115	B-10	Inlet	2.50	327.43	327.43	" "
114	A-10	Inlet	2.79	327.43	327.43	" "
112-111	Endwalls See Special Details					See details Sheet 3
110	B-10	Inlet	2.50	339.63	339.75	W.S.S.C. Standard
109	B-15	Inlet	2.50	340.09	340.74	" "
108	13	Manhole	48"sq.	338.90		" "
106	A-5	Inlet	2.50	337.92	337.92	" "
105	54" x 18" Field Connection					" "
104	B-10	Inlet	2.50	337.92	337.92	" "
103	54" x 15" Field Connection					" "
101	Endwall with 10' concrete paving					" "
100	Endwall, 15' concrete paving, vel. check					" " See sheet 4
99	B-10	Inlet	2.50	348.49	349.09	W.S.S.C. Standard
98	B-15	Inlet	2.50	348.49	349.33	" "
97	B-15	Inlet	2.50	346.97	347.15	" "
96	B-10	Inlet	2.50	347.23	347.33	" "
95	Cutoff wall with 10' paving					" "
113	Cutoff wall with 15' paving					" " For connection detail see sheet 4
* 100A	Flared End Section for 54" Pipe					Gray Conc. Co or equal

* Extension from #100 to #100A

PIPE SCHEDULE		
Size	Type	Length
15"	RCCP	145'
18"	RCCP	413'
18"	RCSP	57'
21"	RCCP	36'
21"	RCSP	190'
27"	RCCP	416'
27"	RCSP	50'
54"	RCCP	272'
7'-8"x5'-5"	CMMPA #8ga.	204'
* 54"	RCSP	157'

Bevel 68 Lin. ft. (17 Joints)
Drop = 3/8" per 4' length

General Notes
FOR STORM DRAIN CONSTRUCTION

1. All storm drains shall be constructed in accordance with the General Specifications of the Washington Suburban Sanitary Commission, adopted September 30, 1954.
2. Types of structures refer to the Washington Suburban Sanitary Commission's Standard Drainage Details unless otherwise noted.
3. 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 trenching. If clearances are less than shown on this plan or six (6) inches, whichever is less, contact the Storm Drain Section of the Washington Suburban Sanitary Commission before proceeding with construction.
4. All inlets are to be placed 3' off curb fillets unless otherwise shown.
5. Maximum length of pipe to be used on curve B is 4', Curve A max. of 8'
6. Storm drain construction shown on this plan to be maintained by Montgomery County Dept. of Public Works.

S.D.#D-28-62082-Y
WASHINGTON SUBURBAN SANITARY COMMISSION
*APPROVED June 4, 1962
FOR STORM DRAINS ONLY
SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY WS.S.C STRUCTURES AFFECTED.
THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.
SENIOR DESIGNING ENGINEER

Deletion of #100, extension of 54" pipe & addition of 100-A & outfall channel approved 3/26/63 dkw.

*See Montg. Co. Director of Public Works' letter dated Sept. 6, 1961 regarding elimination of protective Structure #113

MONTGOMERY COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS
* FINAL APPROVAL
DATE July 3 - 1962
BY D.T.E. - R.M. Linton
* Subject to necessary easements.
O approved drainage extension from 100 to 100A and ditch alignment from 100A to main channel 5/24/63 rmd.

PROPERTY OF MONTGOMERY COUNTY BOARD OF EDUCATION

P-2-49

DATE	REVISION
6-6-62	Driveway added
3-5-63	100A & Pipe added

Drafting: J.F. & [illegible]
Check:
Design: [illegible] & J.F.
Check: J.F.

Thomas G. Oyster & Associates, Inc.
Engineers & Surveyors
Wheaton, Maryland

REGENCY ESTATES ASSOC
8626 Fenton Street
Silver Spring, Maryland

PAVING AND STORM DRAINS
REGENCY ESTATES
MONTGOMERY COUNTY, MARYLAND

SCALE	DATE	SHEET	JOB No.
1" = 50'	October, 1961	1 of 4	1290 E-2

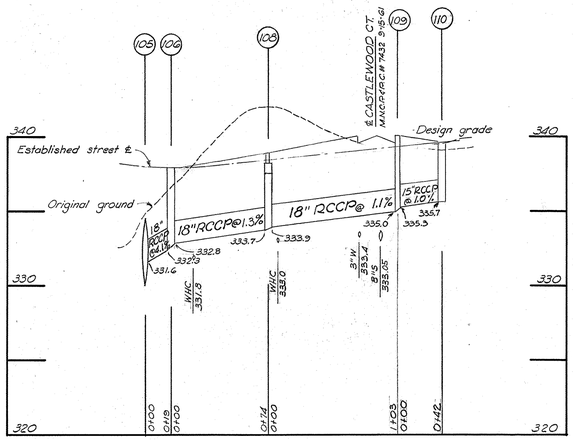
CE487-632-1

SD FILE NO. 683

Maryland State Archives

Enid Drive

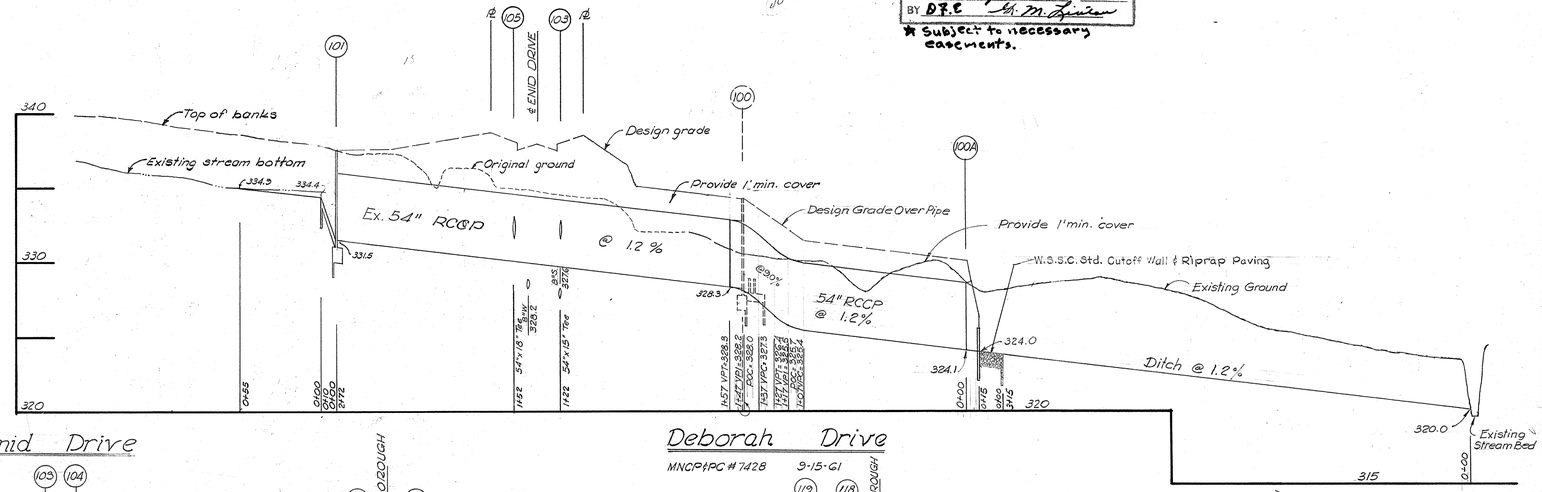
M.N.C.P.&P.C. # 7430 9-15-61



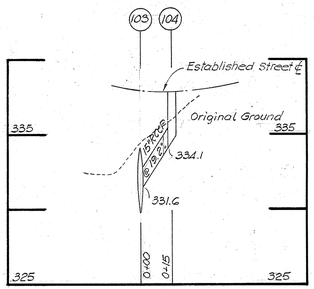
50' Easement Area

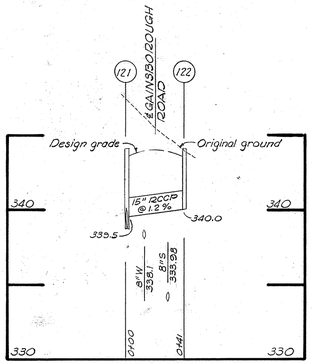
Easement Area

MONTGOMERY COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS
★ FINAL APPROVAL
DATE July 3 19 62
BY D.P.E H. M. Lee
★ Subject to necessary easements.



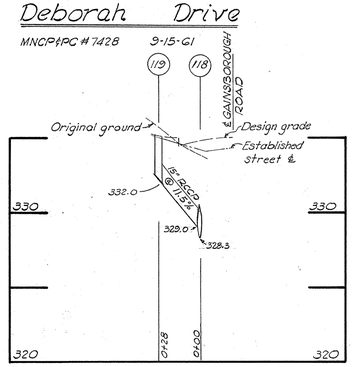
Enid Drive

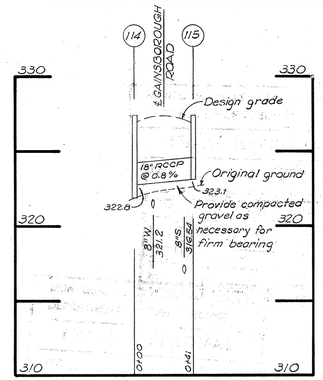




Deborah Drive

MNCP&PC # 7428 9-15-61

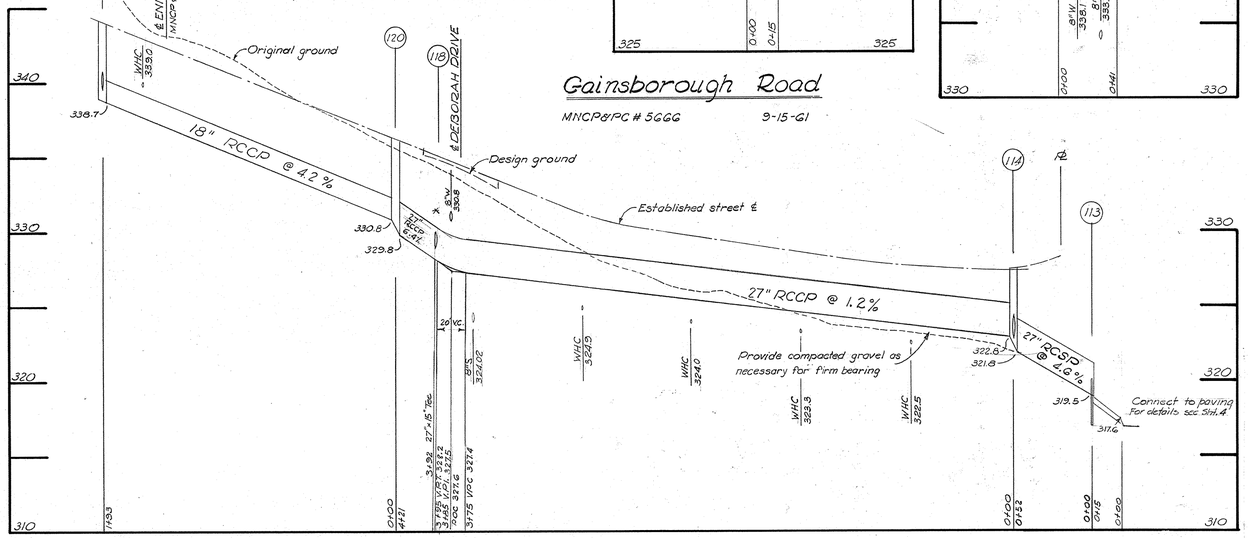


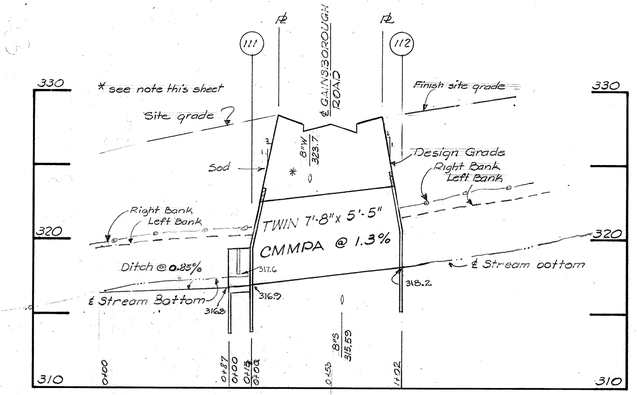


* Contact Mr. Lee (A.P. 7-7700) W.S.S.C. System Maintenance Engineer 48 hours before excavating in the vicinity of 8" water main. Backfill to be made under supervision of W.S.S.C. M.&O. Division.

Gainsborough Road

MNCP&PC # 5666 9-15-61





S.D. # D-28-62082-Y
WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED June 4, 1962
FOR STORM DRAINS ONLY
SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY W.S.S.C STRUCTURES AFFECTED.
THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.
Andrew O. Mark
SENIOR DESIGNING ENGINEER

Deletion of 100, extension of 54" pipe, addition of 100-A & outfall channel approved 3/13/63 JBM

P-2-49

DATE	REVISION

Drafting: JD
Check:
Design: JD & JJ
Check:

Thomas G. Oyster & Associates, Inc.
Engineers & Surveyors
Wheaton, Maryland

REGENCY ESTATES ASSOCIATES
8226 Fenton Street
Silver Spring, Maryland

PAVING AND STORM DRAINS
REGENCY ESTATES
MONTGOMERY COUNTY, MARYLAND

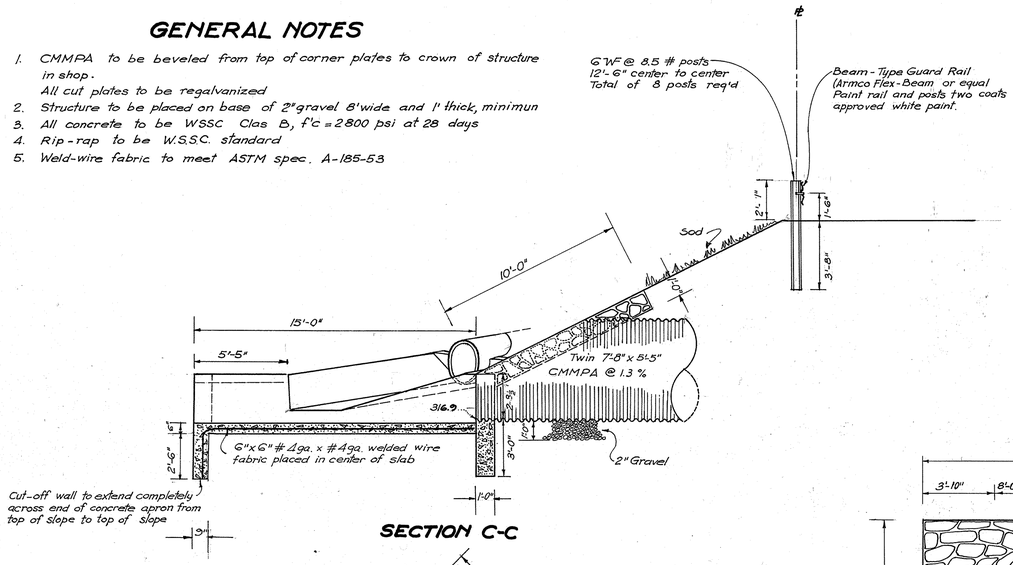
SCALE	DATE	SHEET	JOB NO.
Vert = 1"=5' Hor: 1"=50'	January, 1962	2 of 4	1290-E-2

CE 487-632-2

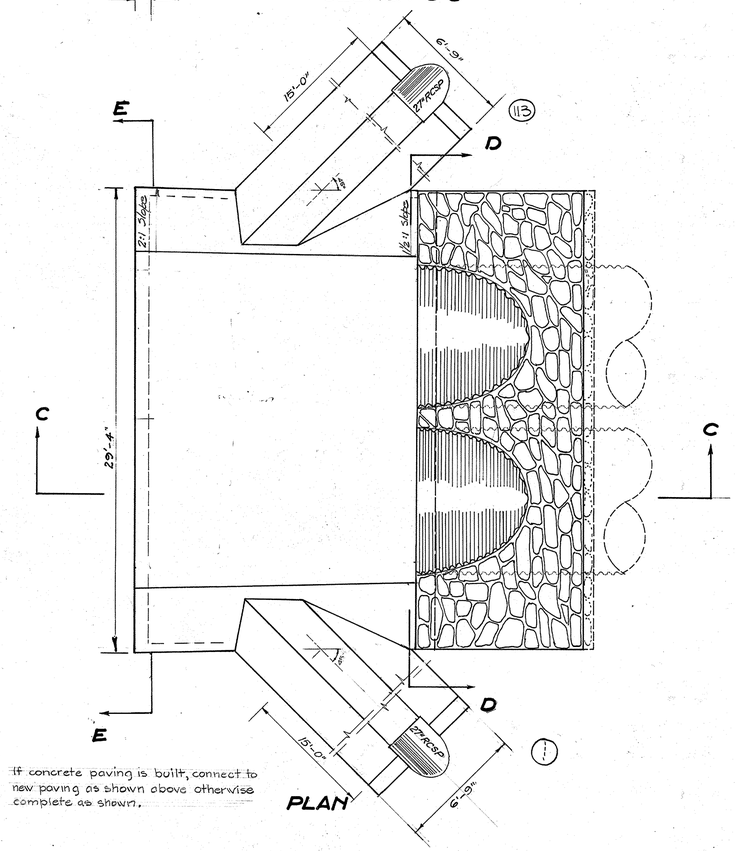
SD FILE NO. 643

GENERAL NOTES

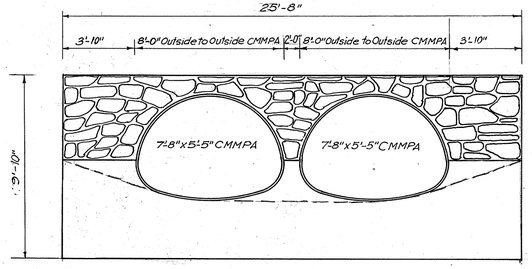
1. CMMPA to be beveled from top of corner plates to crown of structure in shop.
   All cut plates to be regalvanized
2. Structure to be placed on base of 2" gravel 8' wide and 1' thick, minimun
3. All concrete to be WSSC Clas B, f'c = 2800 psi at 28 days
4. Rip-rap to be W.S.S.C. standard
5. Weld-wire fabric to meet ASTM spec. A-185-53



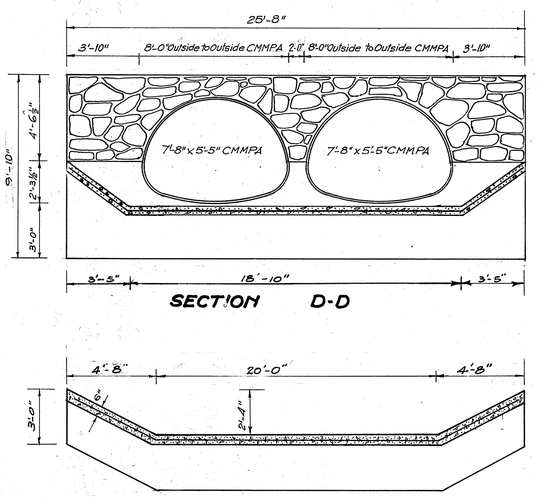
SECTION C-C



ENDWALL No. 111

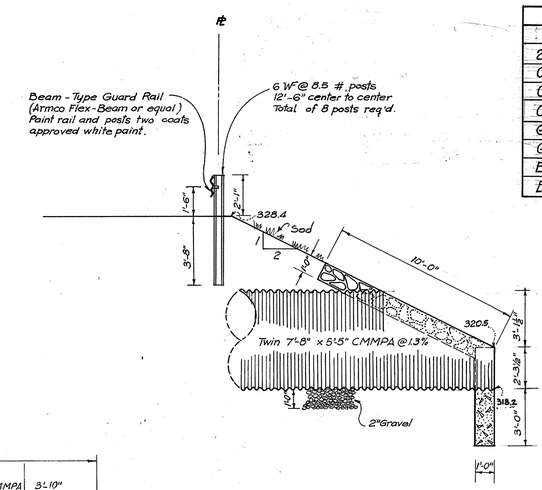


SECTION B-B



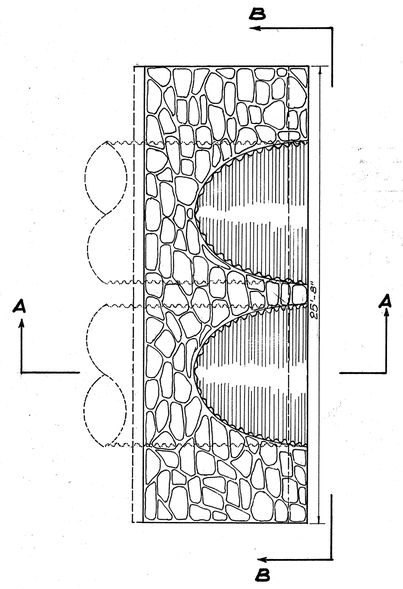
SECTION D-D

SECTION E-E



SECTION A-A

QUANTITIES		
ITEM	UNIT	TOTAL QUANTITY
2 7'-8"x 5'-5" CMMPA #8 ga. spec. bevel	Lin. Ft.	204
Conc. Cut-off walls on C.M.M.P.A. (2)	Cu. Yds.	5
Conc. Apron reinf. w/wire mesh	Sq. Yds.	45
Conc. Cut-off wall for apron	Cu. Yds.	20
Grouted Rip Rap	Sq. Yds.	38
Gravel under C.M.M.P.A	Cu. Yds.	80
Excav. for C.M.M.P.A	Cu. Yds.	400
Excav. for aprons & stream channel	Cu. Yds.	86



ENDWALL No. 112

MONTGOMERY COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS
★ FINAL APPROVAL
DATE July 3 19 62
BY O.T.E. L.M. Gordon
★Subject to necessary easements.

S.D.# D-28-62089-Y
WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED June 4, 1962
FOR STORM DRAINS ONLY
SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY WS.SC STRUCTURES AFFECTED.
THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.
SENIOR DESIGNING ENGINEER

11+65 ℄ Gainsborough Road Sept. 15, 1961
M.N.C.P.& P.C. 5666

P-2-49

DATE	REVISION

Thomas G. Oyster & Associates, Inc.
Engineers & Surveyors
Wheaton, Maryland

REGENCY ESTATES ASSOC.
8226 Fenton Street
Silver Spring, Maryland

PAVING AND STORM DRAINS
REGENCY ESTATES
MONTGOMERY COUNTY, MARYLAND

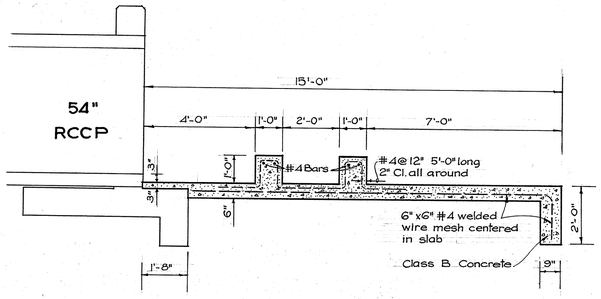
SCALE	DATE	SHEET	JOB No.
No Scale	February, 1962	3 OF 4	1290 - E-2

CE487-632-3

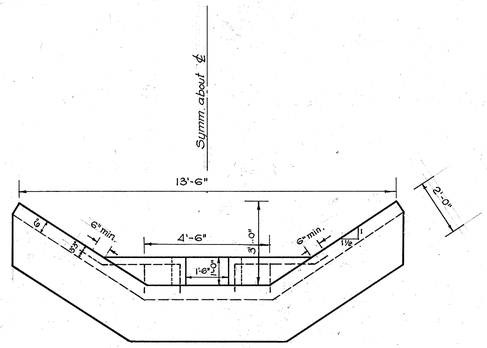
SD FILE NO 643

Maryland State Archives

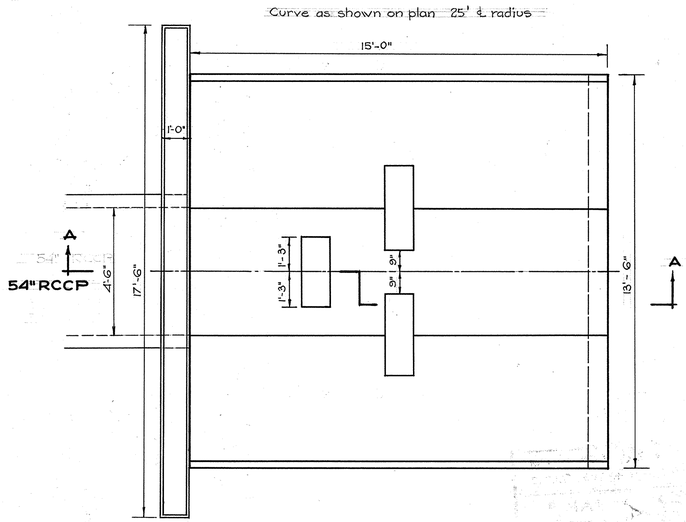
MONTGOMERY COUNTY MARYLAND
DEPARTMENT OF PUBLIC WORKS
★ FINAL APPROVAL
DATE July 3 1962
BY DFC G.M. Linton
★ Subject to necessary easements.



SECTION A-A



FRONT ELEVATION

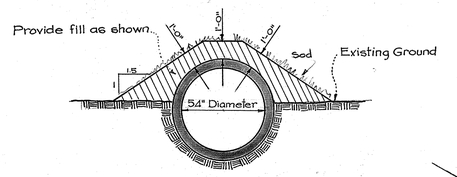


PLAN

S.D # D-28-62089.Y
WASHINGTON SUBURBAN SANITARY COMMISSION
APPROVED June 4, 1962
FOR STORM DRAINS ONLY
SUBJECT TO PRIOR INSTALLATION OF WATER & SEWER AND PAYMENT FOR MOVING ANY WS.SC STRUCTURES AFFECTED.
THE STORM DRAINAGE STRUCTURES SHOWN ON THIS PLAN ARE APPROVED AS TO DESIGN AS A COMPONENT PART OF THE STORM DRAINAGE SYSTEM FOR THIS DRAINAGE AREA. THIS COMMISSION ASSUMES NO RESPONSIBILITY WHATSOEVER FOR ANY DAMAGE WHICH MAY BE CAUSED TO ADJACENT PROPERTY OWNERS, OR TO OWNERS DOWNSTREAM, BY REASON OF THE INSTALLATION OF THE DRAINAGE STRUCTURES SHOWN HEREON.
John A. Marx
SENIOR DESIGNING ENGINEER

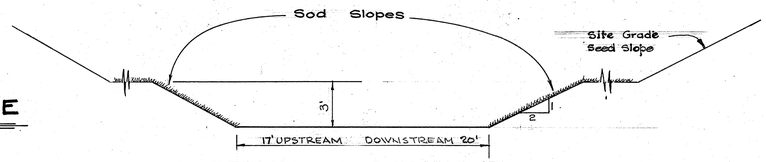
VELOCITY CHECK FOR STRUCTURE 100

Scale: 3/8" = 1'

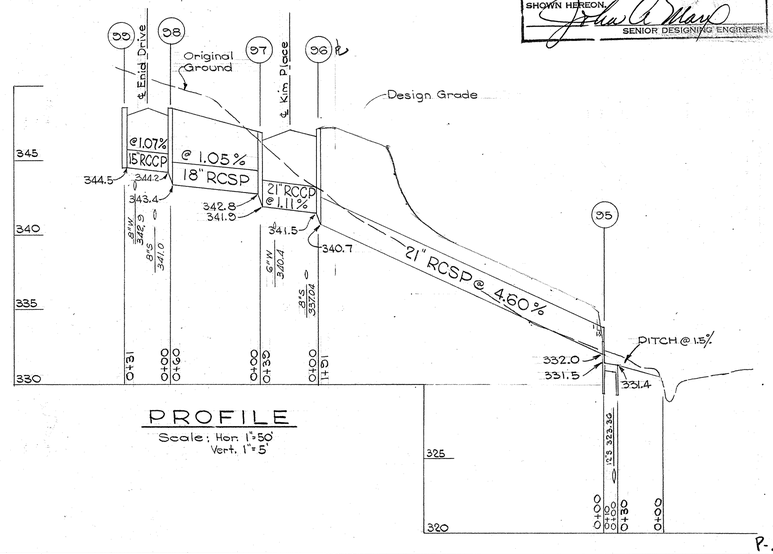


DETAIL OF FILL OVER PIPE

Scale: 1" = 4'



STREAM IMPROVEMENT
UPSTREAM AND DOWNSTREAM
FROM GAINSBOROUGH ROAD CULVERT
NO SCALE



PROFILE
Scale: Hor. 1" = 50'
Vert. 1" = 5'

P-2-49

DATE	REVISION	Drafting: Check: Design: Check:	Thomas G. Oyster & Associates, Inc. Engineers & Surveyors Wheaton, Maryland	REGENCY ESTATES ASSOCIATES 8226 Fenton Street Silver Spring, Maryland	PAVING AND STORM DRAINS REGENCY ESTATES MONTGOMERY COUNTY MARYLAND	SCALE As Shown	DATE March, 1962	SHEET 4 OF 4	JOB No. 1290 E-2

CE487-632-4

SD FILE NO. 643