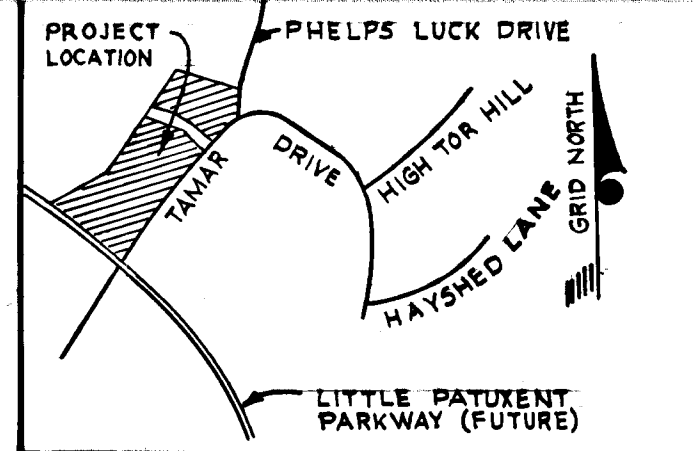


STORM DRAIN STRUCTURE SCHEDULE			
No.	Type	Top Elev./Inlet	Location
I-10	Special "K" Inlet See Detail sht. G	408.42/404.41	± Inlet 65.00' left of station 8+75
I-11	"A-10" width = 2'-6"	403.25/398.62	± Inlet 15.92' left of station 0+68
I-12	"A-10" width = 2'-6"	402.88/398.78	± Inlet 15.92' right of station 0+68
MH-4	Type "B" MH See Detail sht. G	407.2/402.53	± Manhole 10.50' right of station 1+61.50
MH-5	Type "B" MH See Detail sht. G	418.20/414.12	± Manhole 5.0' right of station 2+97.76
MH-6	Type "B" MH See Detail sht. G	420.60/415.72	± Manhole 152.41' right of station 2+97.76
I-13	"A-5" width = 2'-6"	431.00/427.01	± Inlet 1.25' back of Linear Profile sta. 1+83

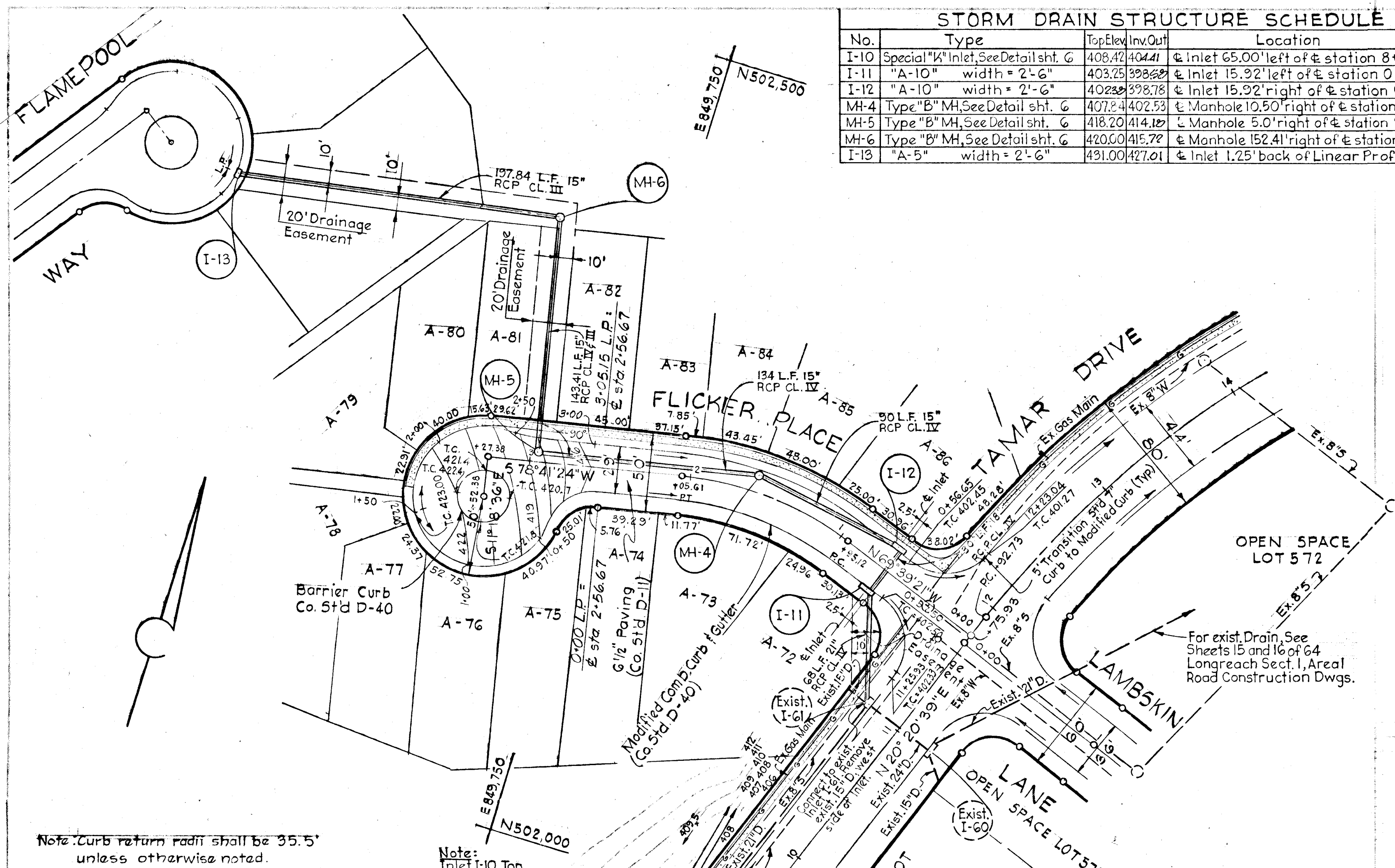
GENERAL NOTES

1. Bench Mark W-556 Elev. 405.08'
Iron pipe 145' left of centerline station 8+05 on Tamar Drive (South of Future Little Patuxent Parkway)
2. All work shall be performed in accordance with the Howard County Road Construction Code and Standard Specifications.
3. All utility companies shall be notified 24 hours in advance of construction.
4. Secondary residential streets are designed for 25 M.P.H. traffic speed in accordance with AASHTO standards.
5. All inlets shall be Howard County Standards unless otherwise shown.
6. For stakeout details of standard cul-de-sacs see Howard County Standard D-33A, page 88a.
7. Storm Drain trenches within road rights-of-way shall be backfilled and compacted in accordance with Howard County Road Code.
8. Proposed grading as shown is required to allow proper drainage to all sumped Special "K" Inlets.



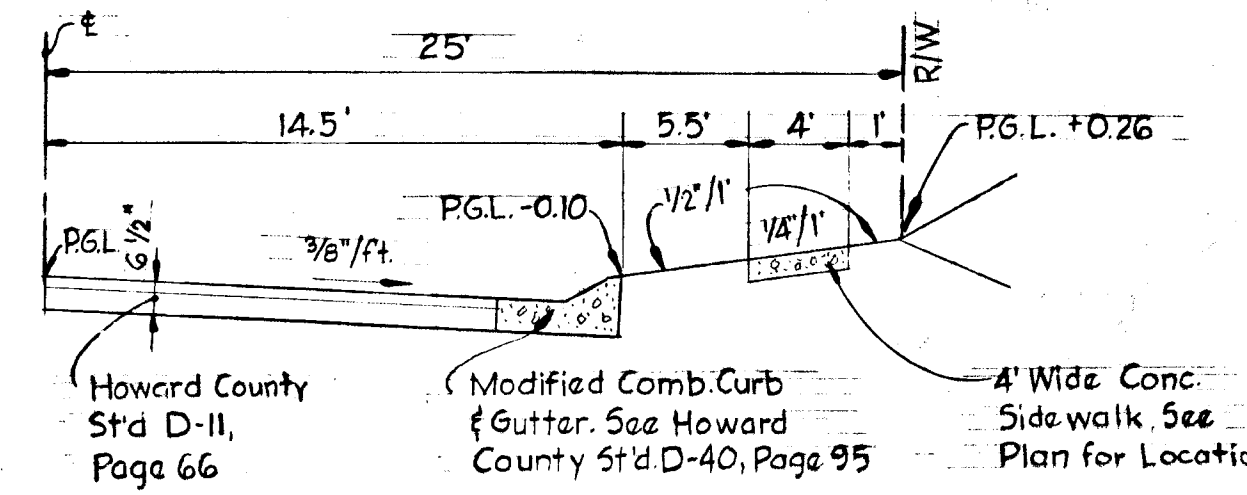
VICINITY MAP
Scale 1" = 2,000'

DEPARTMENT OF PUBLIC WORKS
Drainville N. McLeod 5/2/77
 CHIEF BUREAU OF HIGHWAYS DATE
 OFFICE OF PLANNING AND ZONING
 CHIEF DIVISION OF LAND DEVELOPMENT & TRANSPORTATION PLANNING DATE



CURVE DATA

RC. 0+95.12 to P.T. 2+05.61
 $\Delta = 31^{\circ}39'15''$
 R. = 200'
 Arc = 110.49'
 Tan. = 56.70'
 Ch. = 109.09'
 Brg. = N85°28'58"W



TYPICAL HALF SECTION
 50' R/W - 29' ROADWAY
 No Scale

WARNING
 GAS AND/OR ELECTRIC FACILITIES
 IN THIS AREA BEFORE YOU DIG,
 DRILL, BLAST ETC.
CALL
 BALTIMORE GAS & ELECTRIC CO.
234-5691

Rev. No.	Revision Description
4-15-77 / 1	Relocation of 15" Storm Drainage Pipe

COLUMBIA
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP.

PROJECT AREA
VILLAGE OF LONG REACH
 SECTION I, AREA I
 RESUBDIVISION OF PARCELS "A" & "M"

PROJECT TITLE
 PLAN AND PROFILE
 - FLICKER PLACE

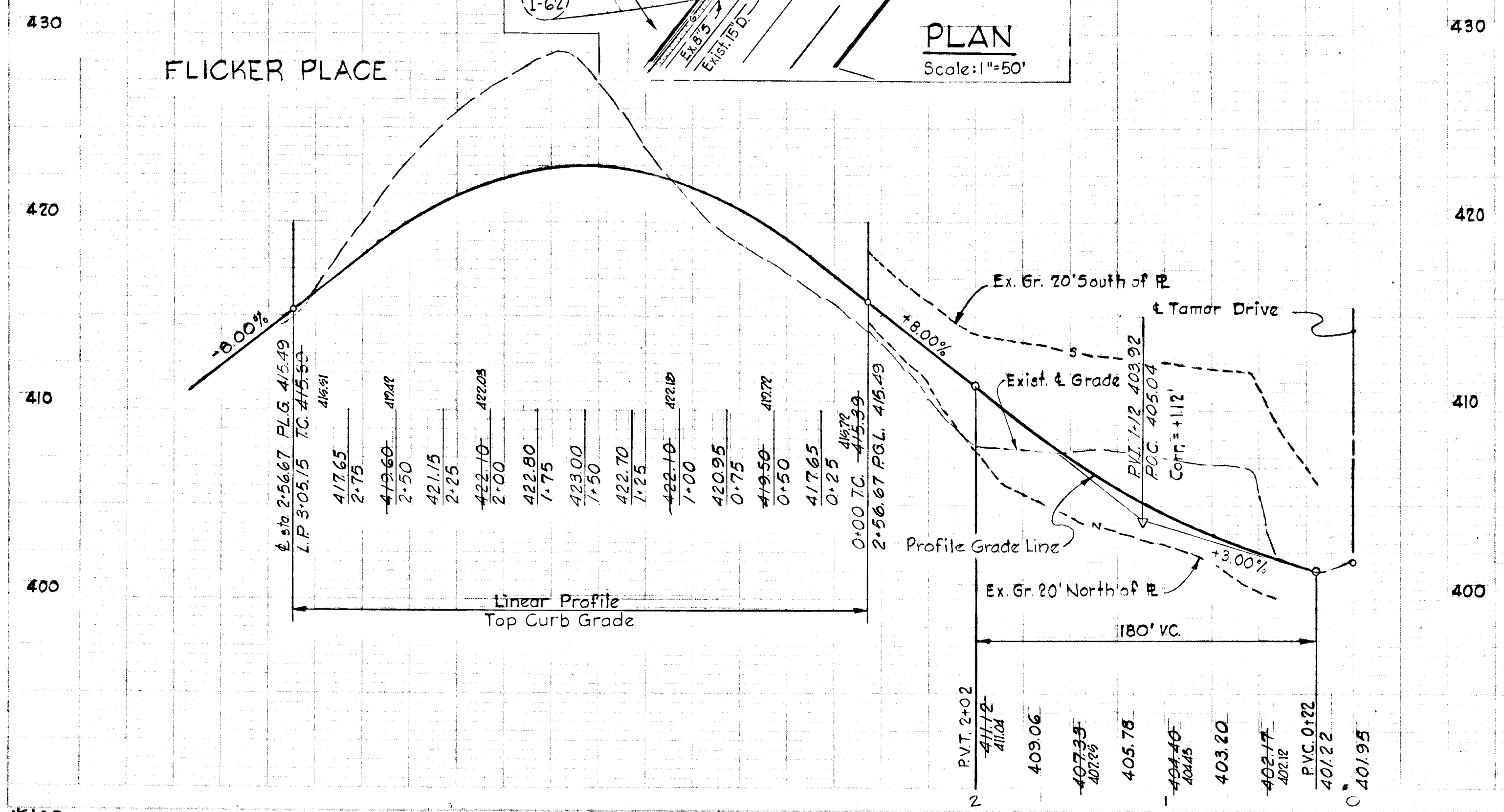
SCALE: AS SHOWN DATE MARCH 26, 1977

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No 1974

PROFILE

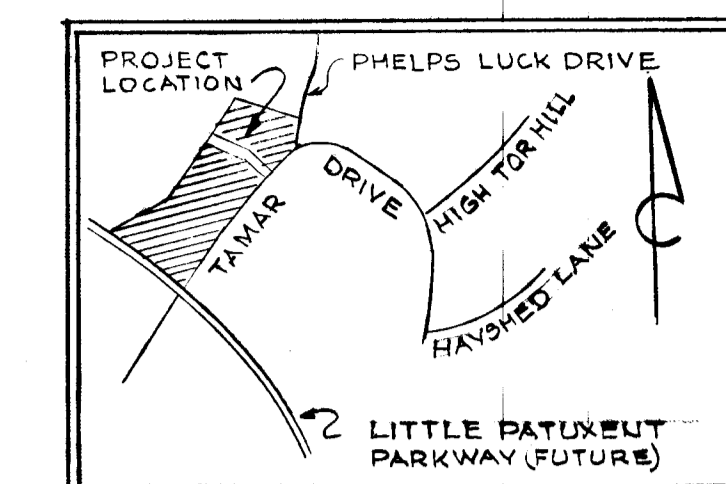
Scale: Hor. 1" = 50'
 Ver. 1" = 5'



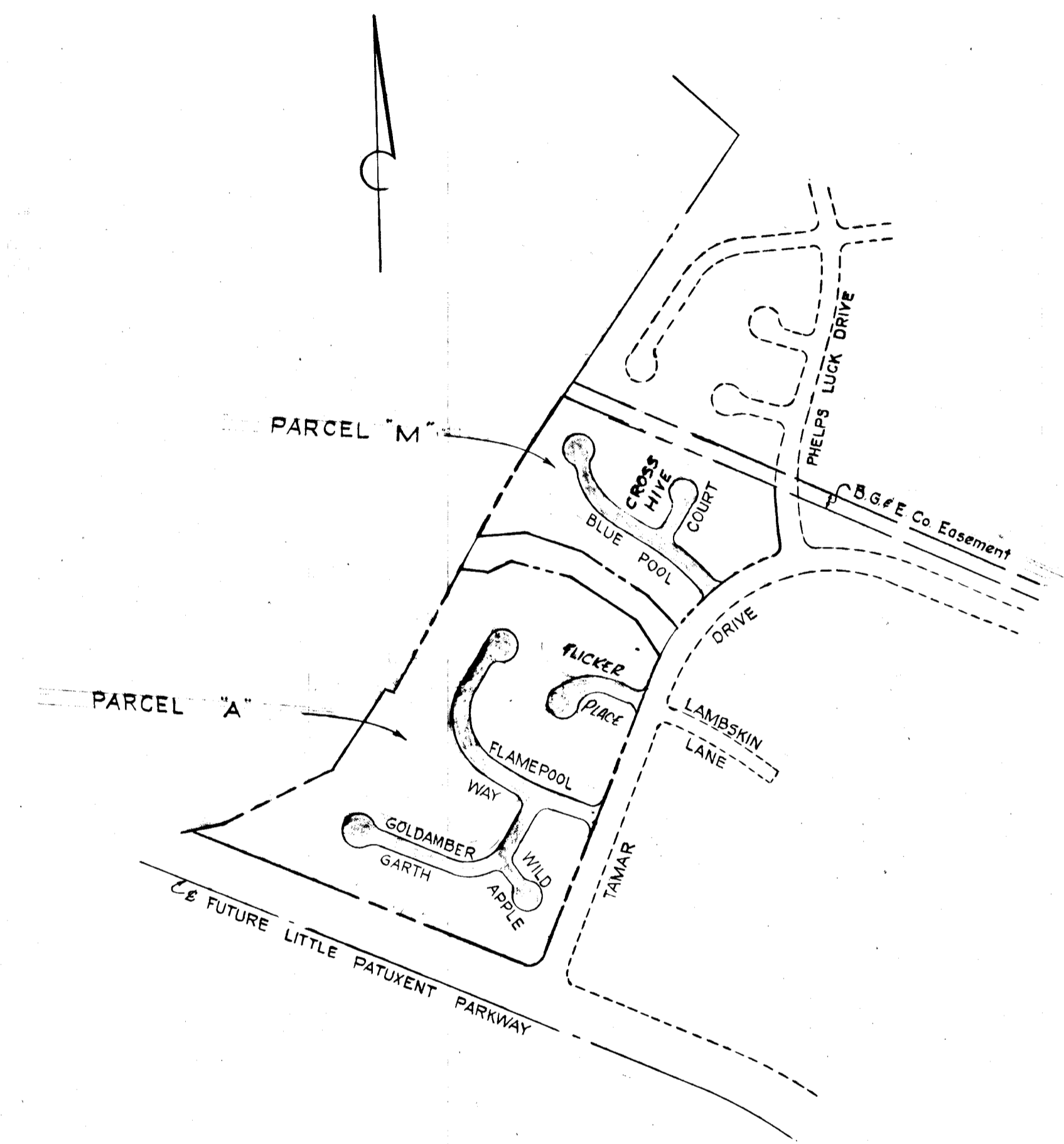
#100
 W.O. 6448

APPROVED
 OFFICE OF PLANNING
 AND ZONING OF
 HOWARD COUNTY
 DATE: 5/4/77
J.H.C.

SHEET INDEX	
SHEET NO.	DESCRIPTION
1A	Title Sheet
1	Plan and Profile - Flicker Place
2	" " " - Flamepool Way
3	" " " - Goldamber Garth and Wild Apple
4	" " " - Blue Pool and Cross Hive Court
5	Storm Drains - Profiles and Details
6	" " " " " " "



VICINITY MAP
Scale: 1"=2,000'



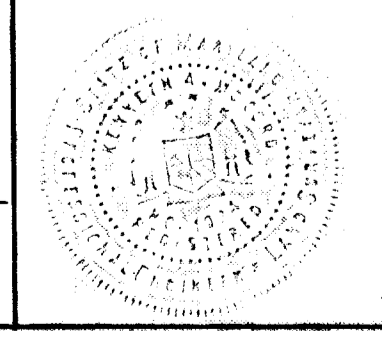
LOCATION PLAN
Scale: 1"=400'

GENERAL NOTES

1. Bench Mark W-556 Elev 405.08' Ironpipe 1.45' left of centerline station 6+05 on Tamar Drive (South of Future Little Patuxent Parkway)
2. All work shall be performed in accordance with the Howard County Road Construction Code and Standard Specification.
3. All utilities companies shall be notified 24 hours in advance of constructions
4. Secondary residential street are designed for 25 M.P.H. traffic speed in accordance with I.A.S.H.O. standards.
5. All inlets shall be Howard County Standard unless otherwise shown.
6. For stakeout details of standard cul-de-sacs see Howard County Standard D-33A, page 88a.
7. Storm Draintranches within road rights-of-way shall be back filled and compacted in accordance with Howard County Road Code.
8. Proposed grading as shown in required to allow proper drainage to all sumped Special "K" Inlets.

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
BALTIMORE, MARYLAND 21202

Kenneth A. McCord
KENNETH A. McCORD
Registered Engineer
No 1974



DEPARTMENT OF PUBLIC WORKS

Branimir M. Mehland 5/5/71
CHIEF, BUREAU OF HIGHWAYS DATE

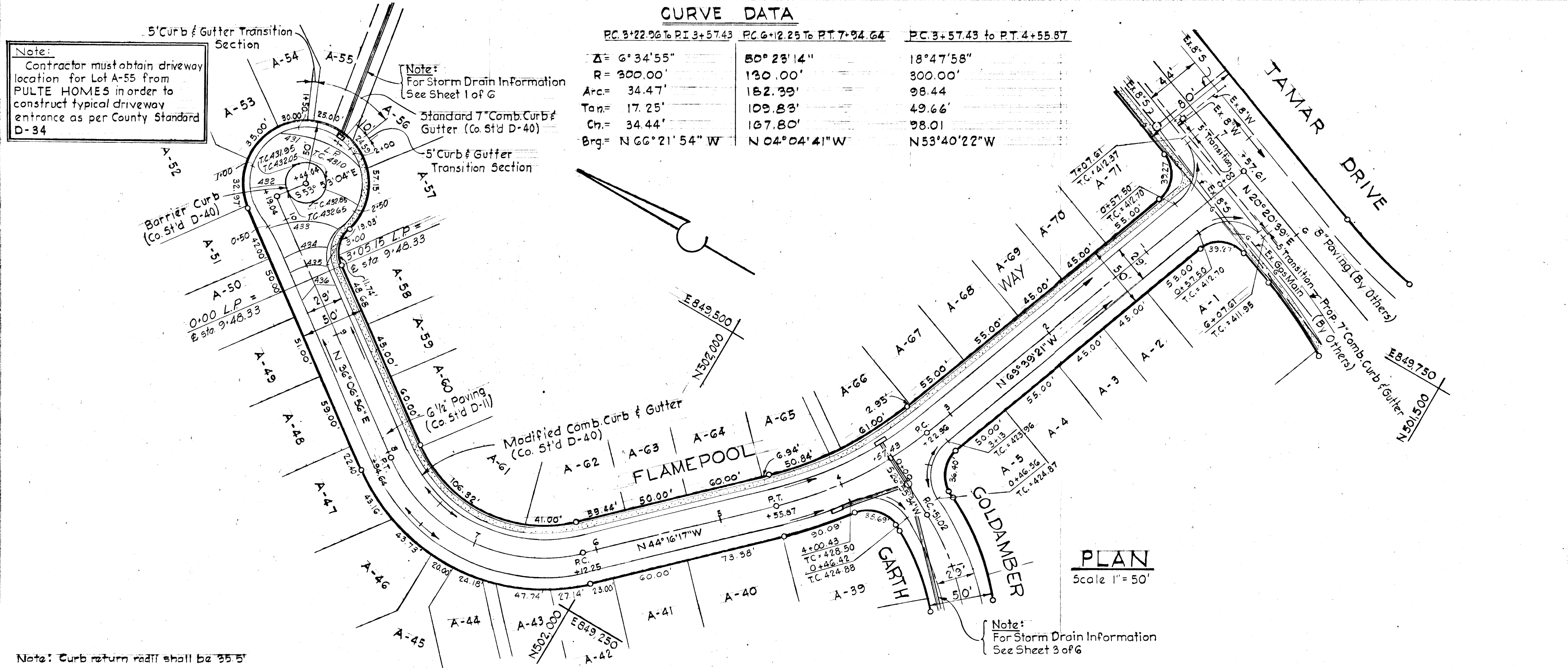
J. H. Clawson, Jr. 5/4/71
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
TRANSPORTATION PLANNING

OWNER AND DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP.
COLUMBIA, MARYLAND

#100

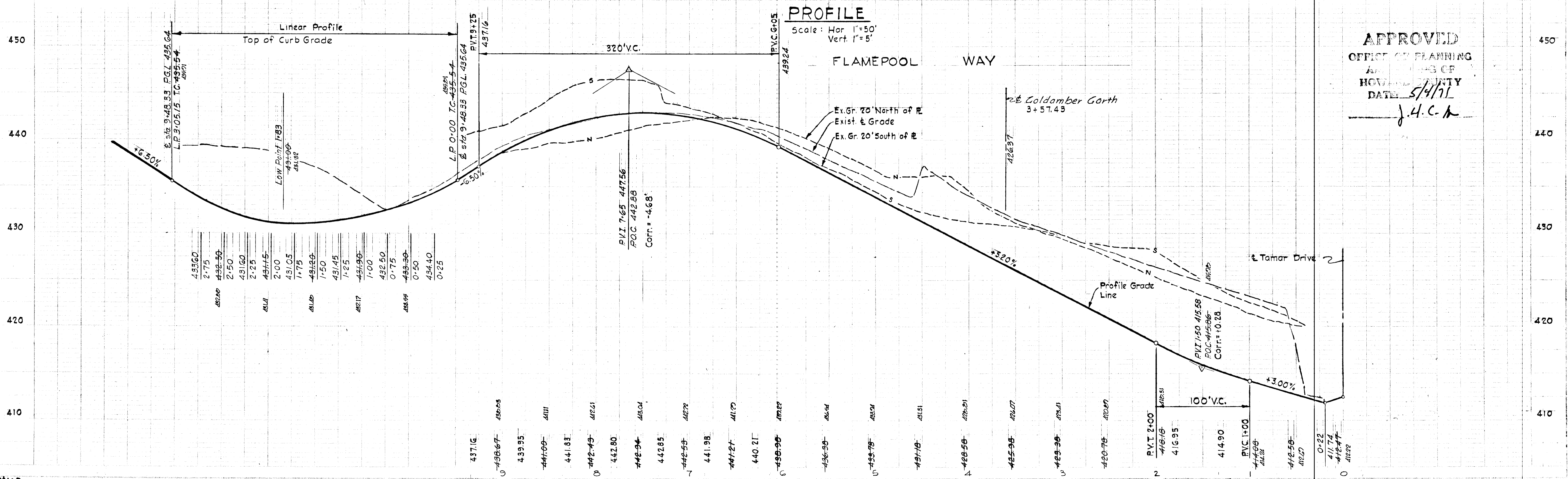
SECTION I AREA I
COLUMBIA
VILLAGE OF LONGREACH
RESUBDIVISION OF PARCELS "A" AND "M"
HOWARD COUNTY, MARYLAND
6TH ELECTION DISTRICT
DATE MAY 3, 1971 SCALE: AS SHOWN
SHEET 1A OF 6



DEPARTMENT OF PUBLIC WORKS
Kenneth A. McCord 5/4/71
 CHIEF BUREAU OF HIGHWAYS DATE
 OFFICE OF PLANNING AND ZONING
 CHIEF DIVISION OF LAND DEVELOPMENT & TRANSPORTATION PLANNING DATE

Rev. Date	Rev. No.	Revision Description
COLUMBIA		
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP.		
PROJECT AREA VILLAGE OF LONG REACH SECTION I, AREA I RESUBDIVISION OF PARCELS "A" & "M"		
PROJECT TITLE: PLAN AND PROFILE FLAMEPOOL WAY		
SCALE: AS SHOWN		DATE: MARCH 26, 1971
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202		
<i>Kenneth A. McCord</i> KENNETH A. MCCORD Registered Engineer No. 1974		

WARNING
 GAS AND/OR ELECTRIC FACILITIES
 IN THIS AREA. BEFORE YOU DIG,
 DRILL, BLAST ETC.
CALL
 BALTIMORE GAS & ELECTRIC CO.
 234-5691

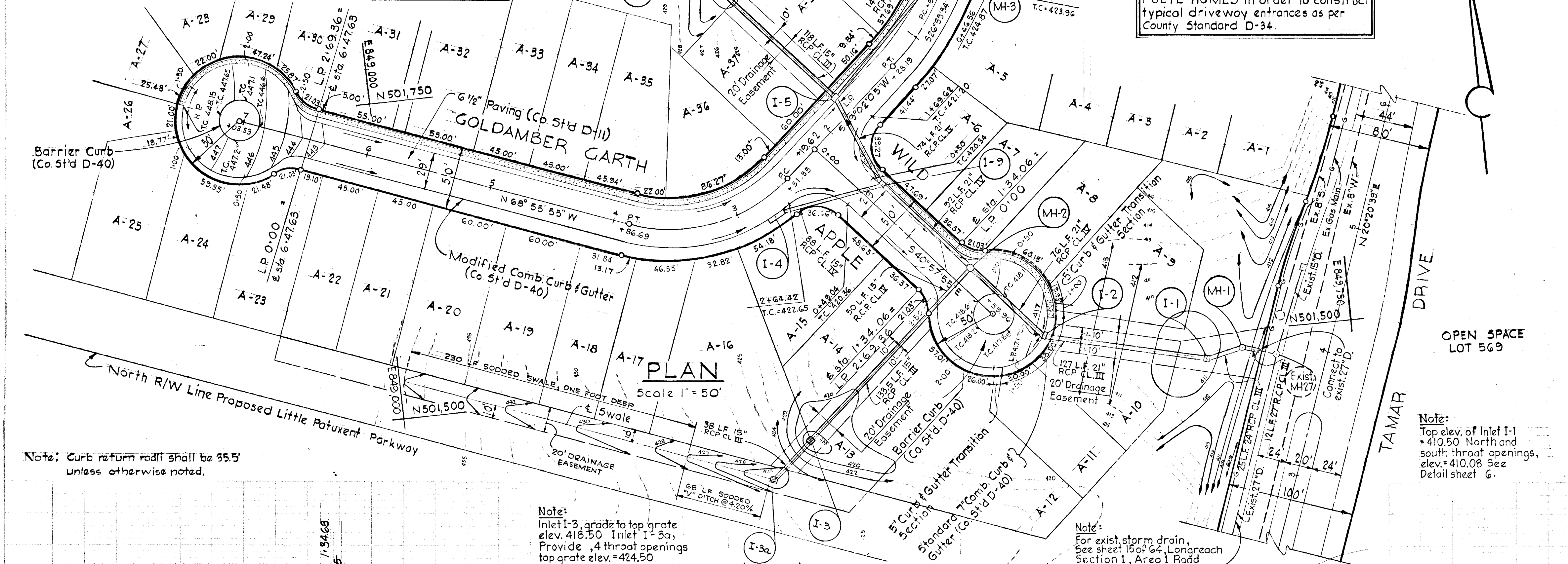


APPROVED
 OFFICE OF PLANNING
 AND ZONING OF
 HOWARD COUNTY
 DATE: 5/4/71
J. H. C. H.

No.	Type	Top Elev.	Inv. Out.	Location
MH-1	Standard Manhole	411.50	404.84	Manhole 66' left of Sta. 3+87
I-1	Special "K" Inlet, See Detail Sht. G	410.50	405.64	See Plan and Profile
I-2	"A-5" width = 2'-6"	417.10	410.49	Inlet 1.25' back of Linear Profile Sta. 1+18
MH-2	Type "B" MH, See Detail Sht. G	418.50	412.77	Manhole 16.0' left of Sta. 1+52.69
I-3	Special "K" Inlet, See Detail Sht. G	418.50	415.01	Inlet 187.24' right of Sta. 1+52.69
I-3a	Special "K" Inlet, See Detail Sht. G	424.50	419.06	Inlet 228.56' right of Sta. 1+52.69
I-9	"A-5" width = 2'-6"	420.45	415.03	Inlet 16.00' left of Sta. 0+56.69
I-4	"A-5" width = 2'-6"	423.36	418.34	Inlet 15.92' left of Sta. 0+27.6
I-5	"A-5" width = 2'-6"	421.21	416.30	Inlet 15.92' right of Sta. 1+78.35
I-6	Special "K" Inlet, See Detail Sht. G	424.50	420.84	See Plan and Profile
MH-3	Type "B" MH, See Detail Sht. G	425.64	422.07	Manhole = Sta. 0+25
I-7	"A-10" width = 2'-6"	426.48	422.40	Inlet 15.92' right of Sta. 3+57.43
I-8	"A-10" width = 2'-6"	429.31	424.34	Inlet 15.92' left of Sta. 4+12

CURVE DATA	
PC 0+51.02 To PT 1+28.19	RC 2+51.35 To PT 3+56.69
$\Delta = 22^\circ 06' 30''$	$62^\circ 02' 00''$
$R = 200.00'$	$125.00'$
$Arc = 77.17'$	$135.34'$
$Tan = 39.07'$	$75.16'$
$Ch = 76.70'$	$128.82'$
$Brg = 537^\circ 58' 49'' W$	$580^\circ 03' 05'' W$

DEPARTMENT OF PUBLIC WORKS
Draville N. Hall 5/15/71
 CHIEF BUREAU OF HIGHWAYS DATE
 OFFICE OF PLANNING AND ZONING
 CHIEF DIVISION OF LAND DEVELOPMENT & TRANSPORTATION PLANNING DATE



WARNING
 GAS AND/OR ELECTRIC FACILITIES IN THIS AREA. BEFORE YOU DIG, DRILL, BLAST ETC.
CALL
 BALTIMORE GAS & ELECTRIC CO.
234-5691

Rev. Date	Rev. No.	Revision Description

COLUMBIA
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP.

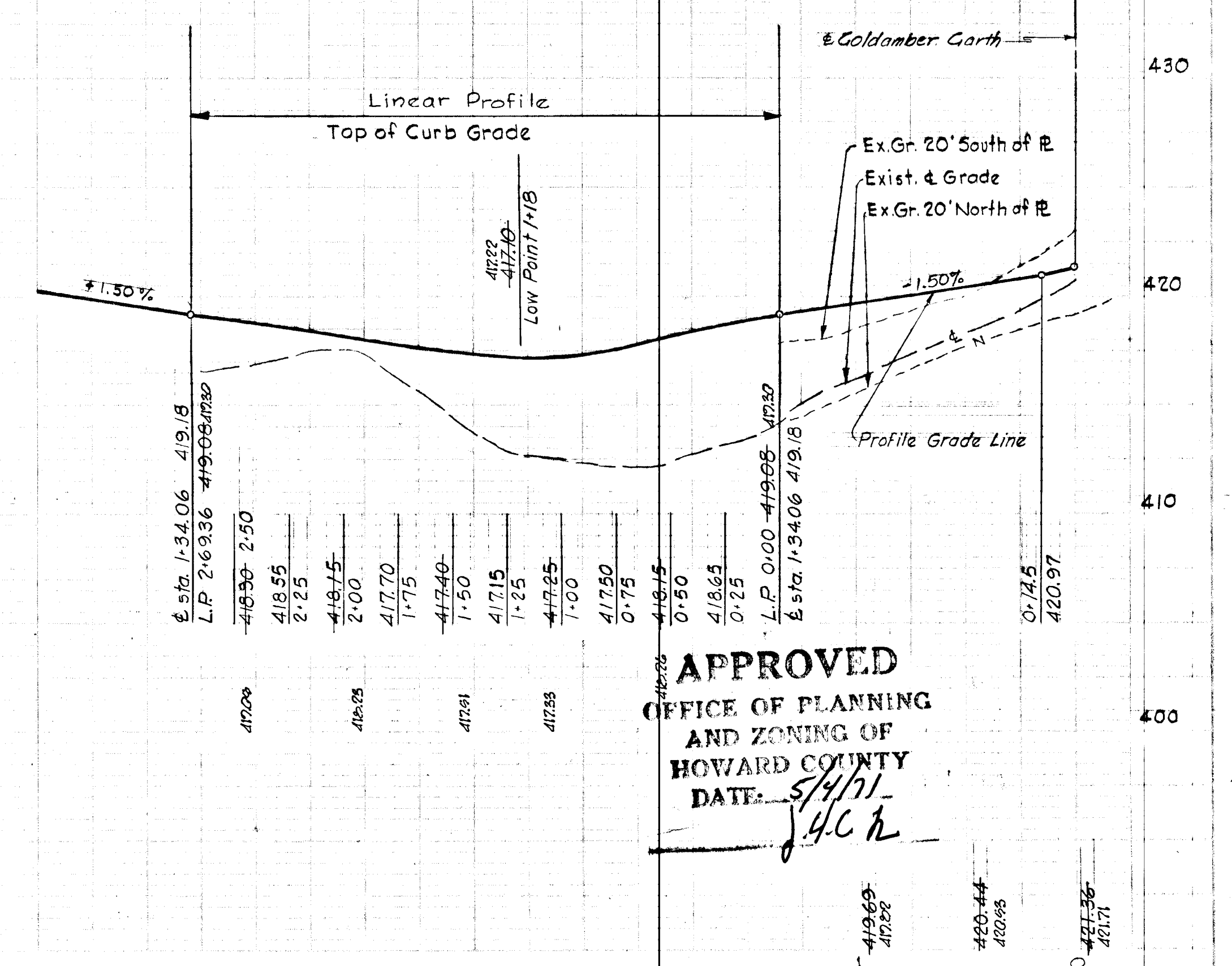
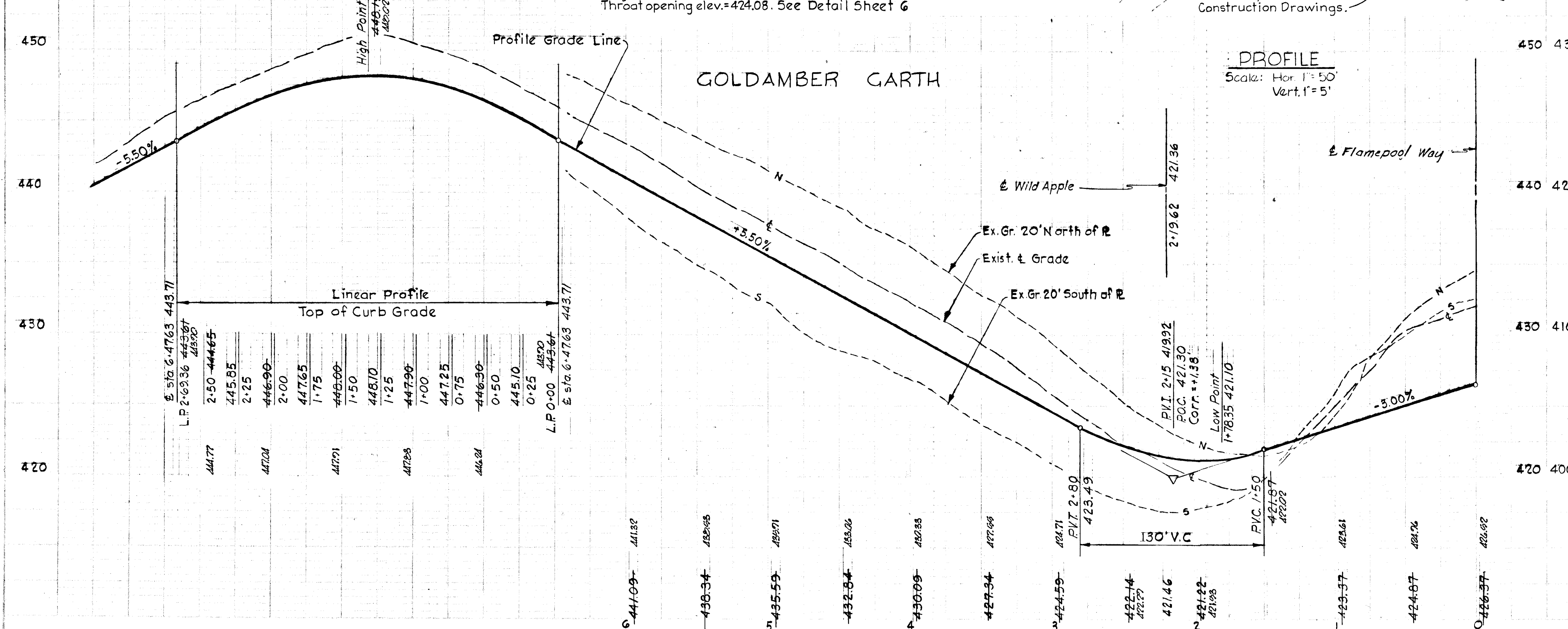
PROJECT AREA
VILLAGE OF LONG REACH
 SECTION I, AREA I
 RESUBDIVISION OF PARCELS 'A' & 'M'

PROJECT TITLE
 PLAN AND PROFILE
 GOLDAMMER GARTH AND WILD APPLE

SCALE: AS SHOWN DATE: MARCH 26, 1971

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

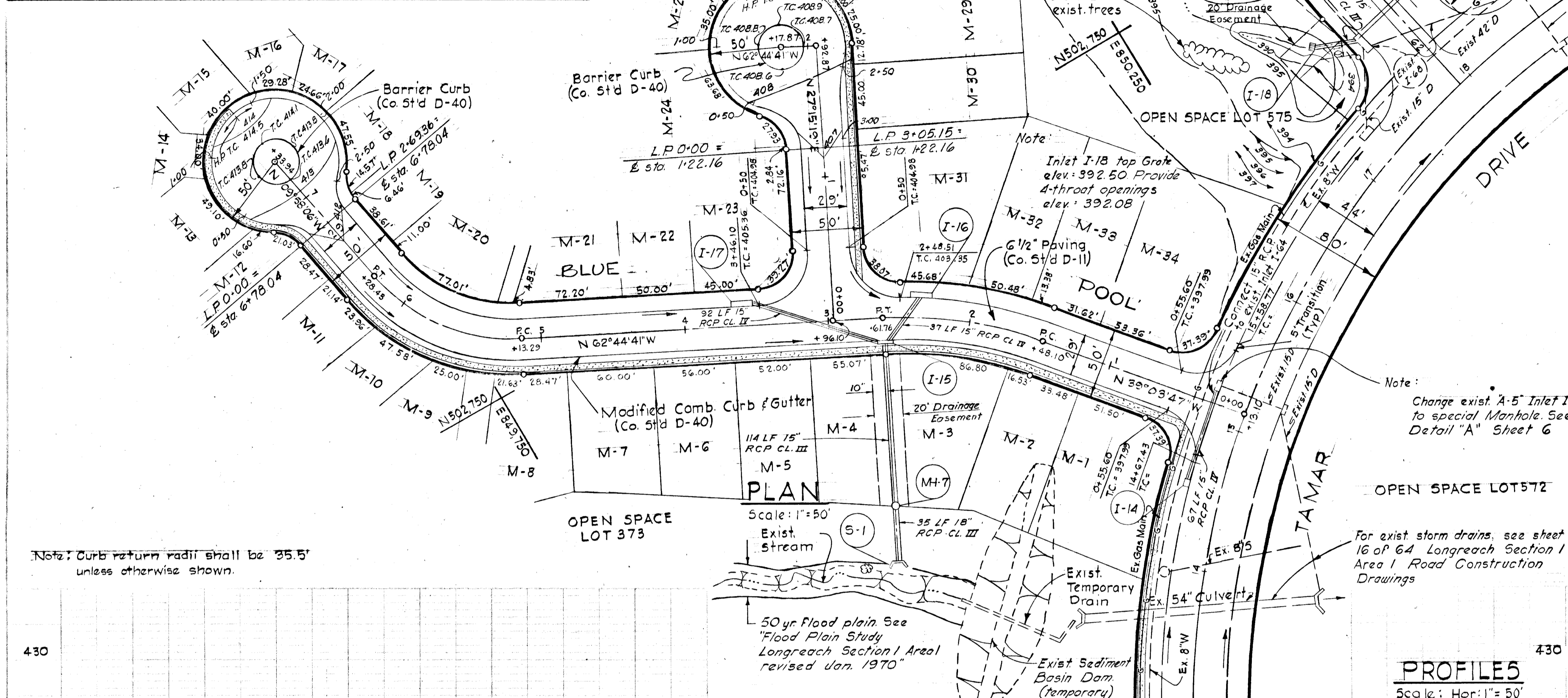
Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No. 1974



APPROVED
 OFFICE OF PLANNING
 AND ZONING OF
 HOWARD COUNTY
 DATE: 5/14/71
JAC

No.	Type	Top El./Inlet	Location
S-1	Endwall, See Detail sht G	391.16/389.08	Face of HW 170.50' left of & sta. 2+61.76
M-7	B'MH See Detail sht G	394.70/389.22	Manhole 133.5' left of & sta. 2+61.76
I-15	A-10' width = 3'-0"	403.81/396.84	Inlet 16.17' left of & sta. 2+61.76
I-16	A-15' width = 2'-6"	403.26/399.04	Inlet 15.92' right of & sta. 2+36
I-17	A-15' width = 2'-6"	405.66/401.29	Inlet 15.92' right of & sta. 3+60
I-14	A-5' width = 2'-6"	398.63/394.11	Inlet 23.92' left of & sta. 14+56
I-18	Special 'K' See Detail sht G	392.50/388.73	Inlet 59.00' right of & sta. 6+44
I-64	Exist. Inlet, change to manhole. See Detail sht G	396.85/392.54	Existing Inlet

DEPARTMENT OF PUBLIC WORKS,
Manville W. Dehland 5/17/71
 CHIEF BUREAU OF HIGHWAYS DATE
 OFFICE OF PLANNING AND ZONING
 CHIEF DIVISION OF LAND DEVELOPMENT TRANSPORTATION PLANNING DATE

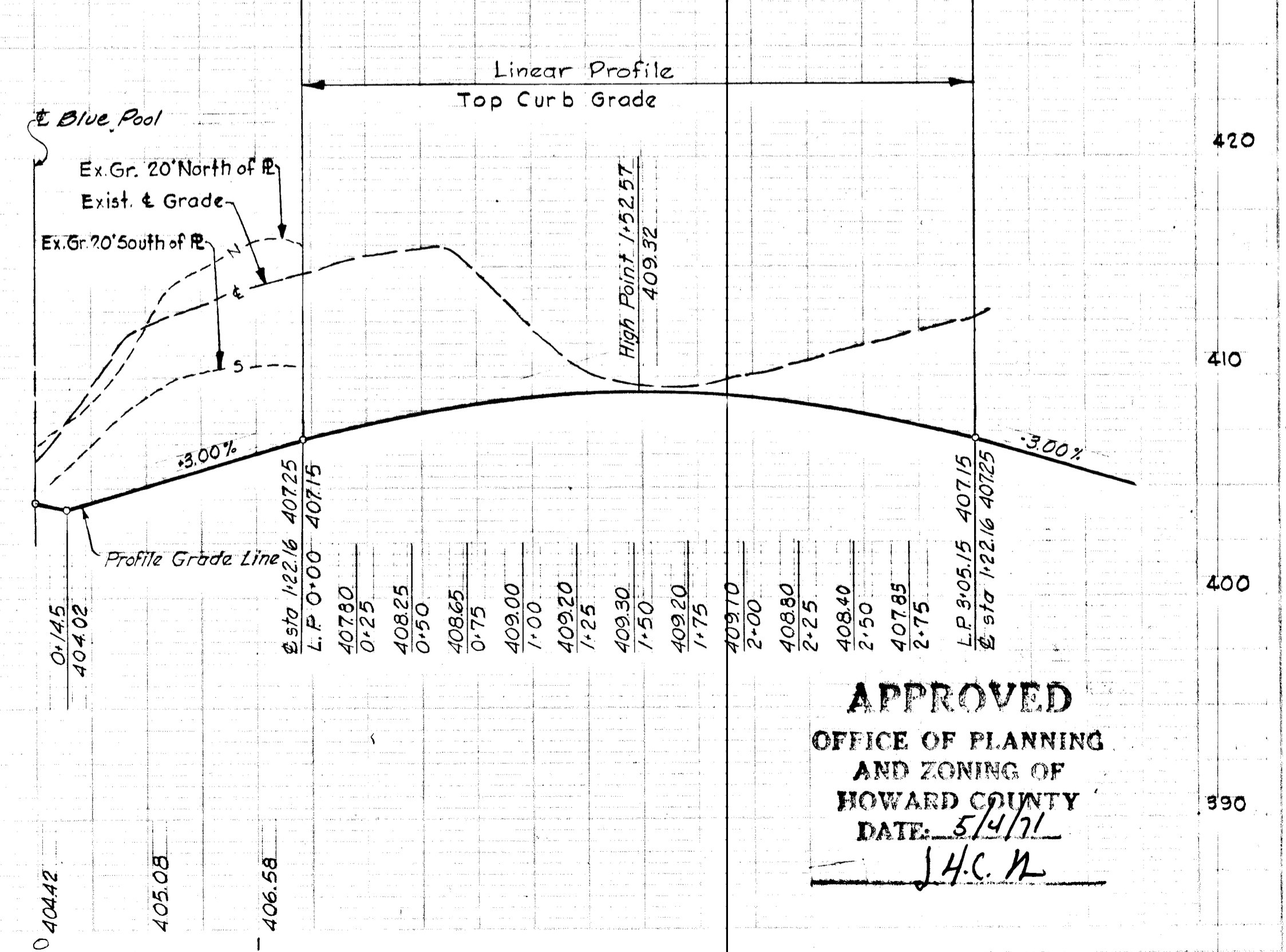
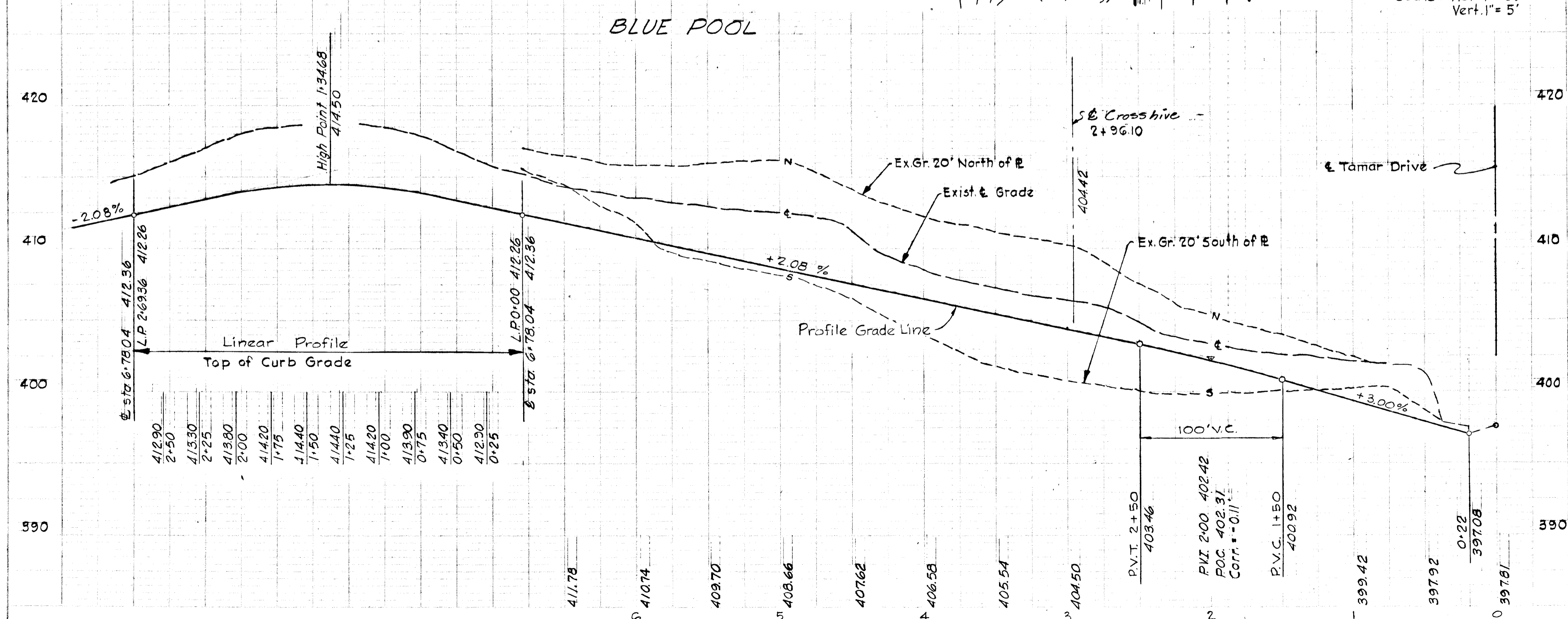


For exist storm drains See Longreach Section I Areal Road Construction Drawings Sheet 16 of 64

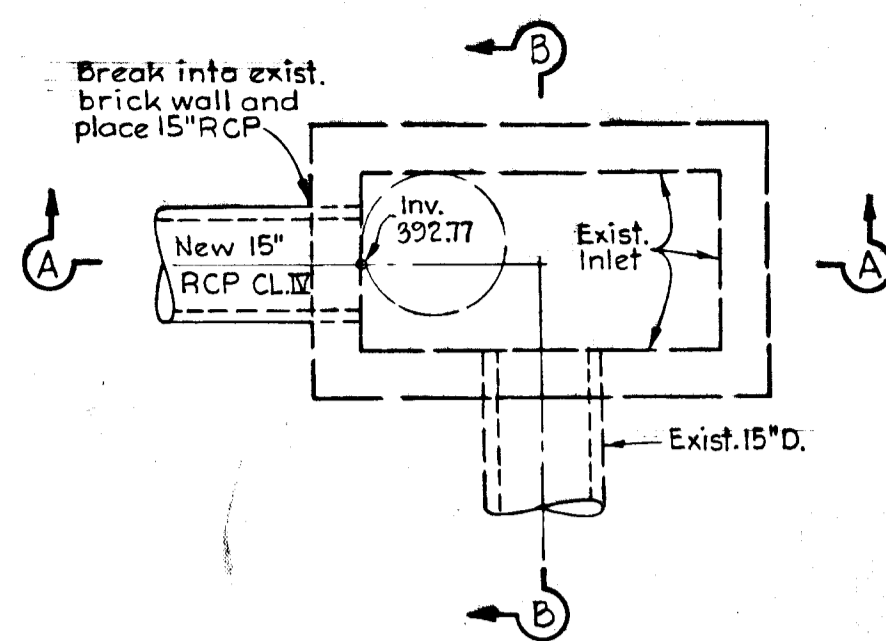
WARNING
 GAS AND/OR ELECTRIC FACILITIES IN THIS AREA. BEFORE YOU DIG, DRILL, BLAST ETC.
CALL
 BALTIMORE GAS & ELECTRIC CO.
 234-5691

CURVE DATA

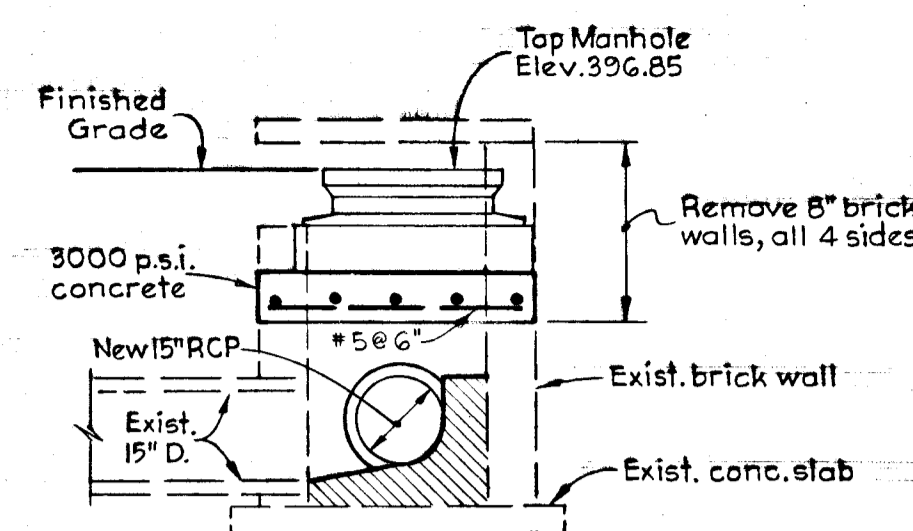
PC 1+28.10 to PT 2+61.76	PC 5+18.22 to PT 6+28.43
$\Delta = 23^{\circ}40'54''$	$52^{\circ}46'35''$
$R = 275.00'$	$125.00'$
$Arc = 113.66'$	$115.14'$
$Tan = 57.66'$	$62.02'$
$Ch = 112.86'$	$111.11'$
$Brg. = N 50^{\circ}54' 14'' W$	$N 36^{\circ}21' 23'' W$



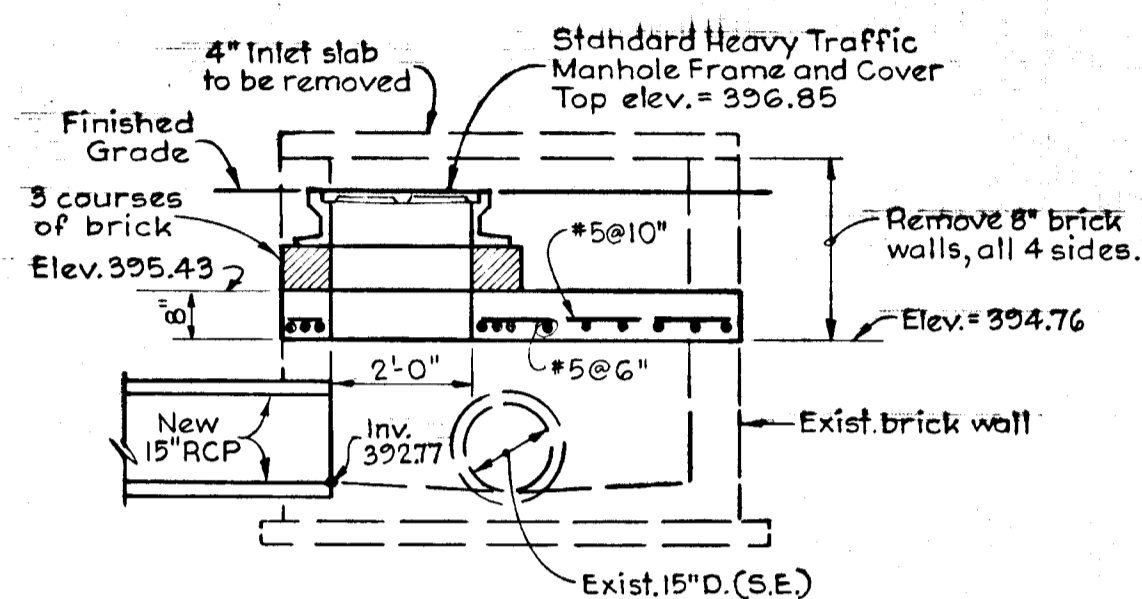
APPROVED
 OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY
 DATE: *5/17/71*
J.H.C. II



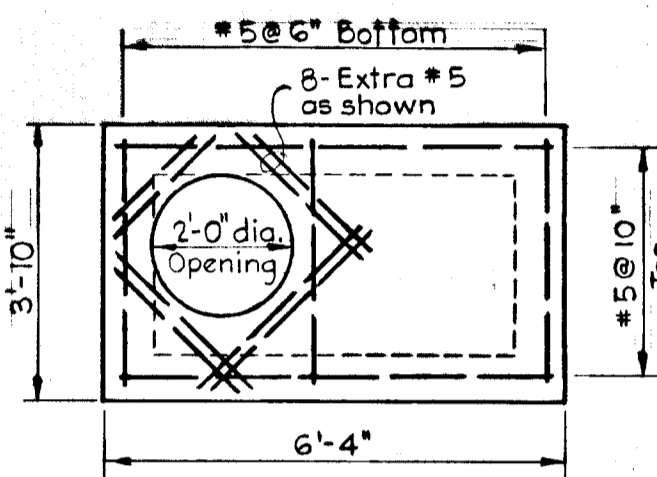
PLAN
(ELEV. 394.73)



SECTION "B-B"



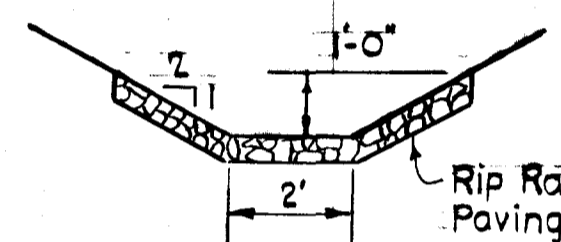
SECTION "A-A"



PLAN - CONC. SLAB
(ELEV. 395.43)

DETAIL "A"-EXISTING INLET I-64

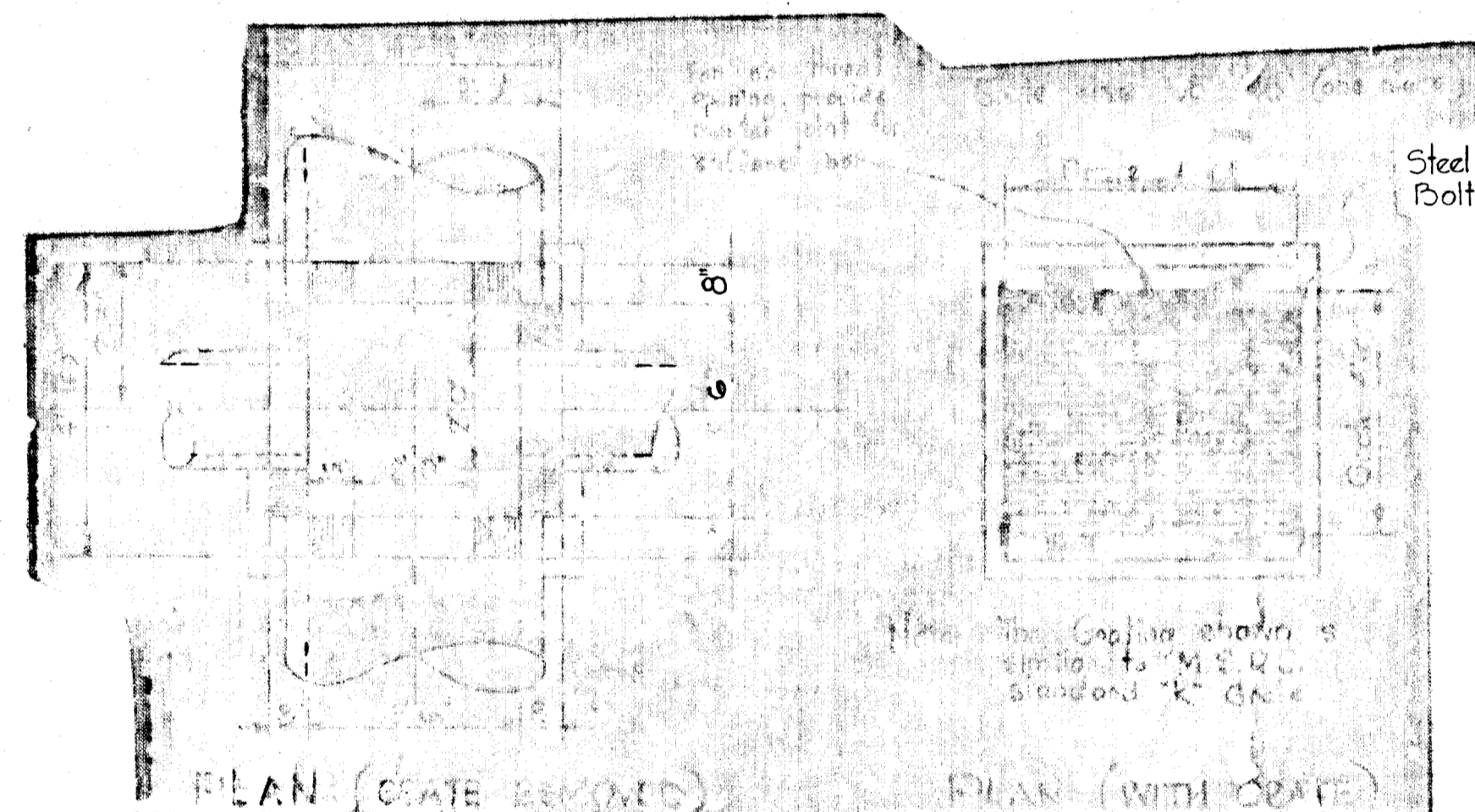
Scale: 3/8"=1'-0"



OUTFALL CHANNEL @ 5-T

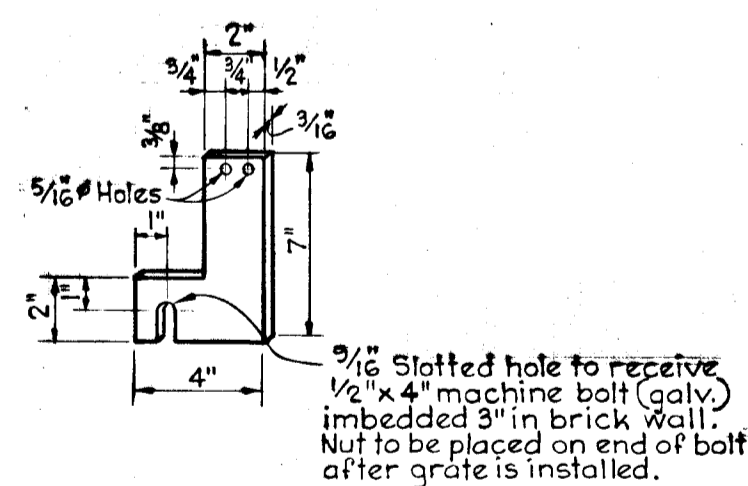
No Scale

APPROVED
OFFICE OF PLANNING
AND ZONING OF
HOWARD COUNTY
DATE: 5/4/71
J.H.C.N.



PLAN (GRATE REMOVED)

PLAN (WITH GRATE)



STRAP DETAIL

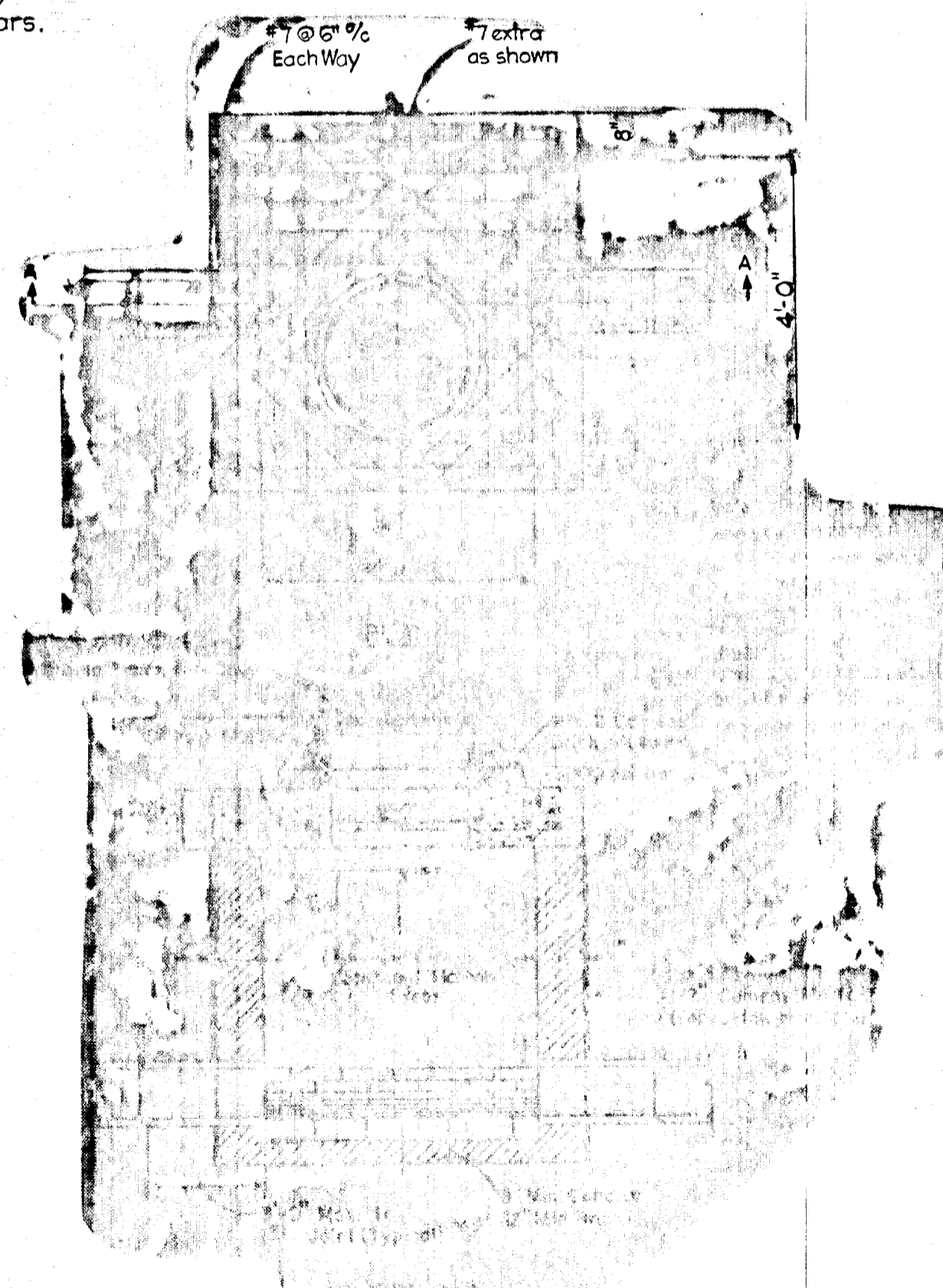
No Scale

NOTES:

1. Gratings are subject to approval for each job. Any type of substantial transverse bars may be used which will support a minimum uniform load of 150 lbs./sq.ft. The transverse bars shall be held rigid by spacer bars.
2. All material to be hot dipped galvanized.

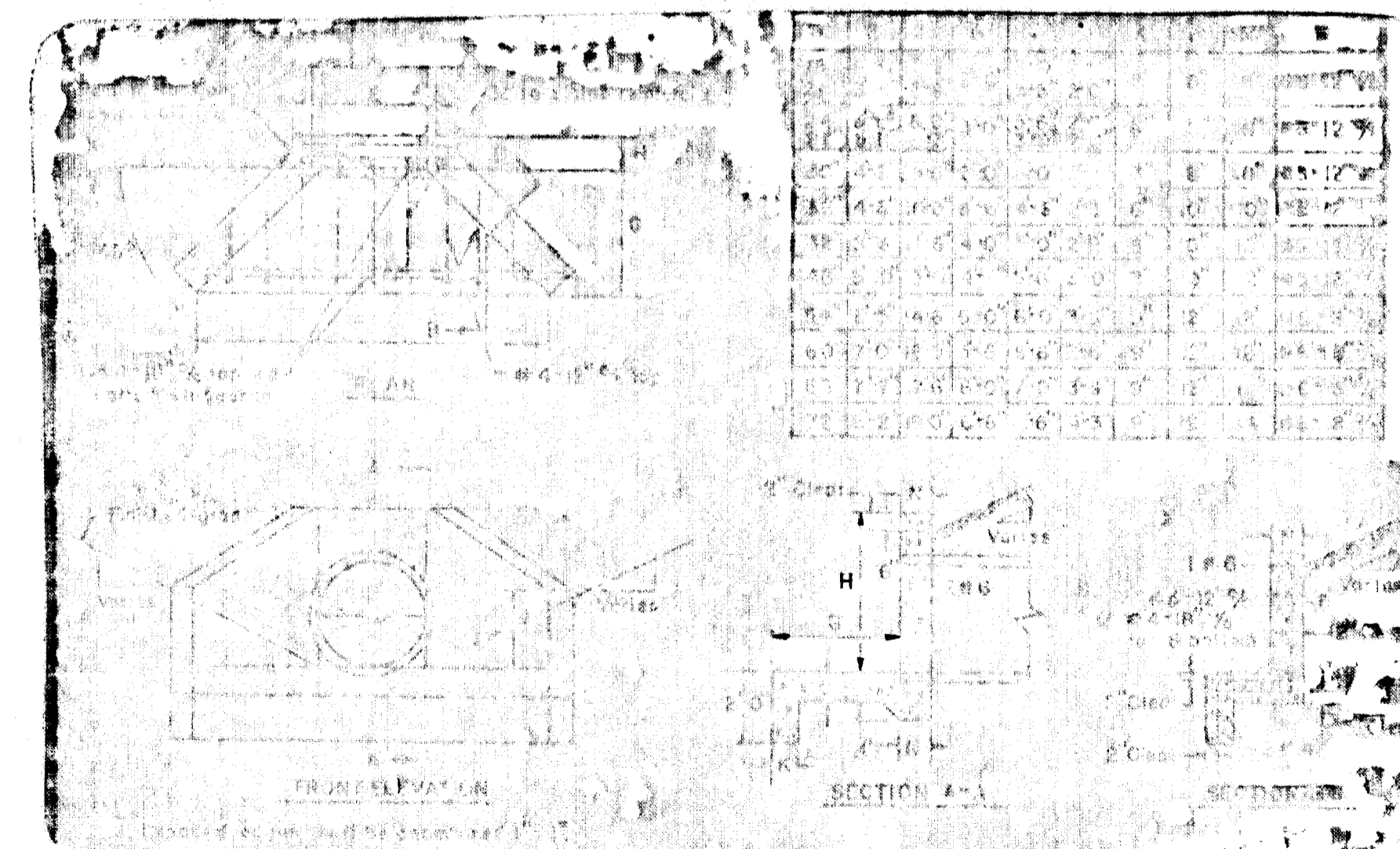
MODIFIED "K" INLET

Scale: 3/8"=1'-0"



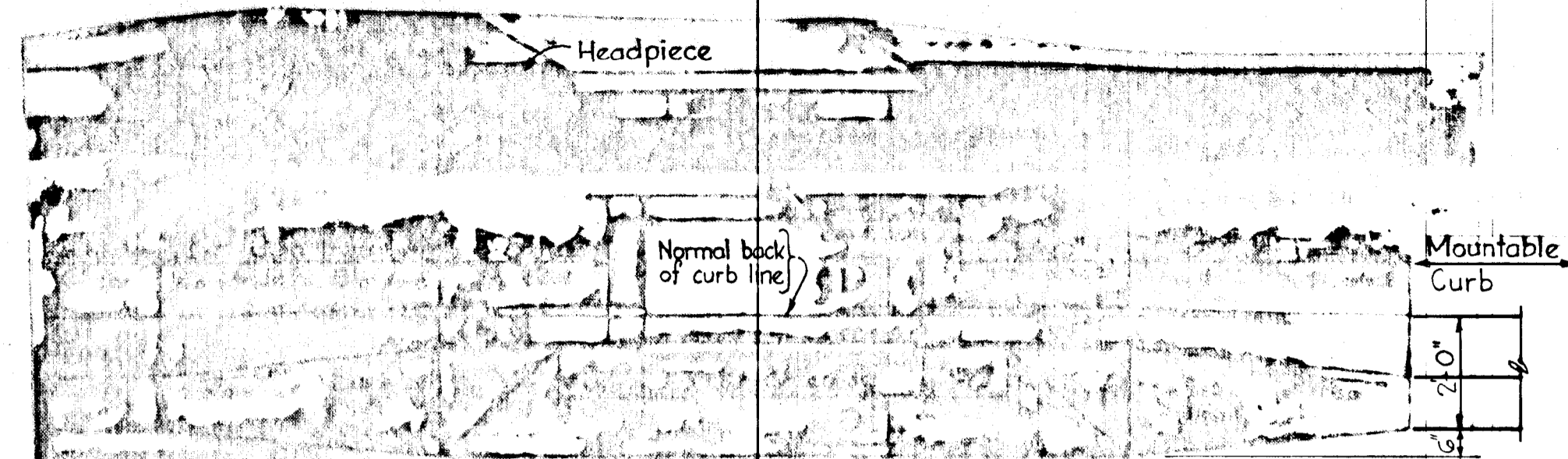
TYPE "B" MANHOLE

No Scale



ENDWALL S-1

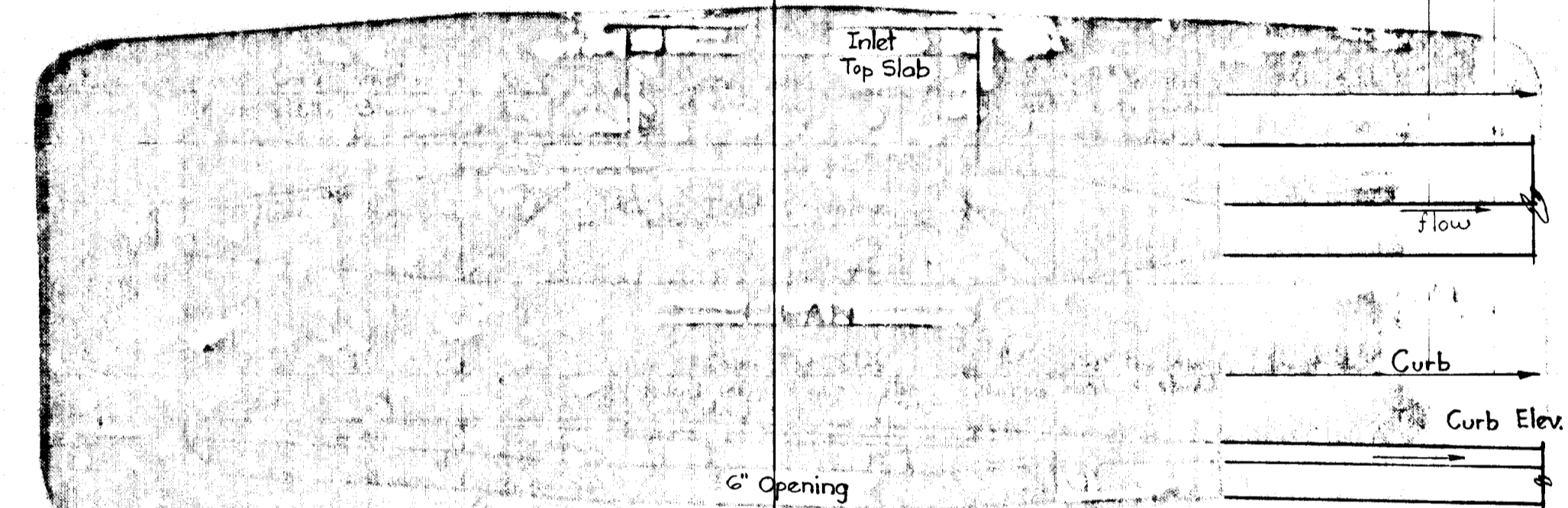
No Scale



PLAN

SECTION ALONG FLOW LINE

SUMPED "A" INLETS - MOUNTABLE CURB

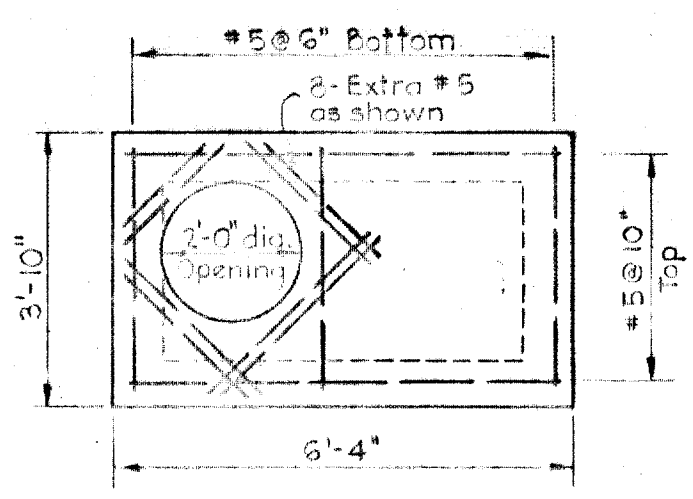
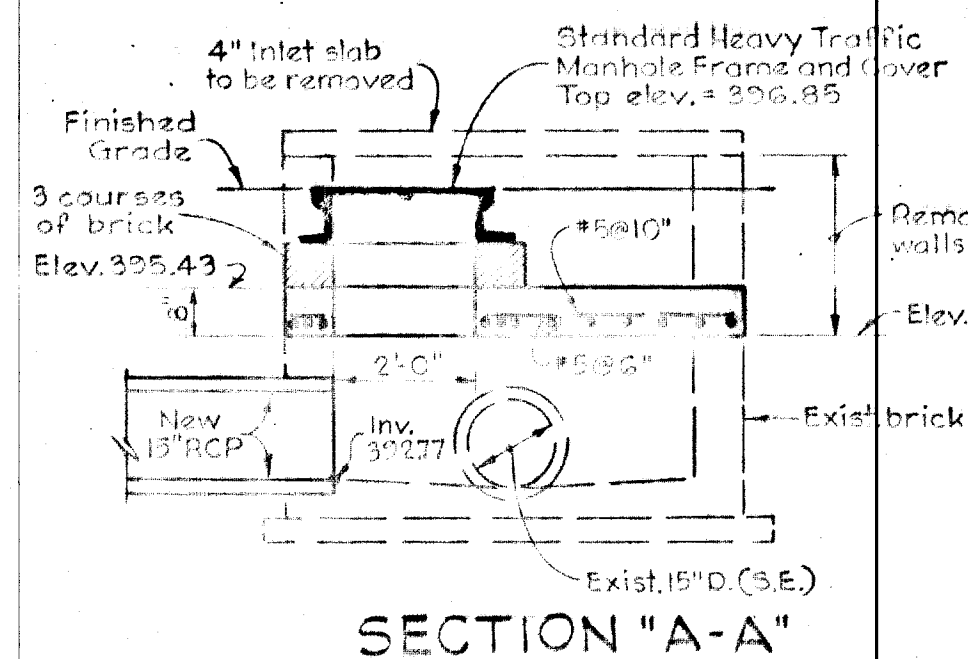
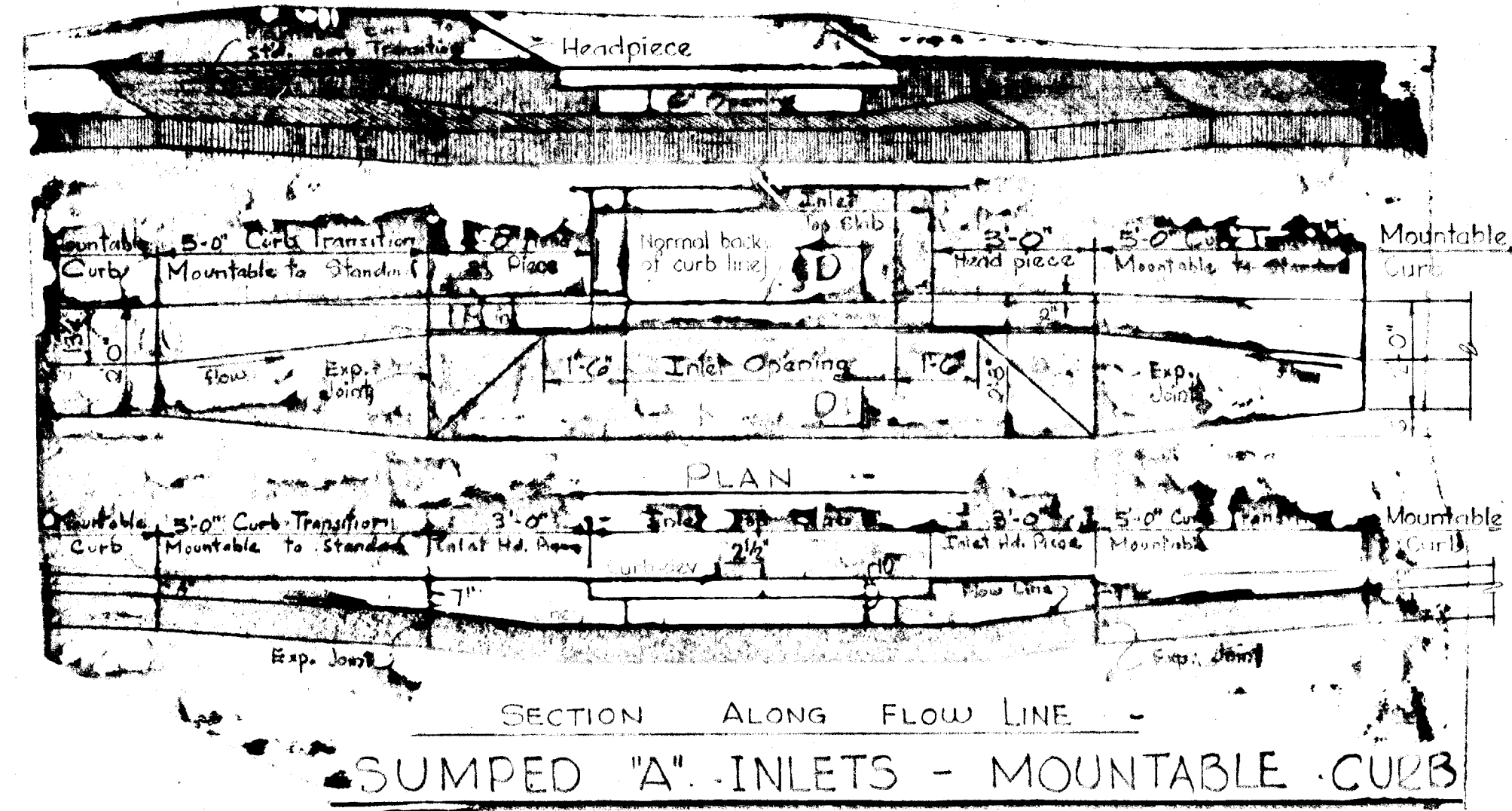
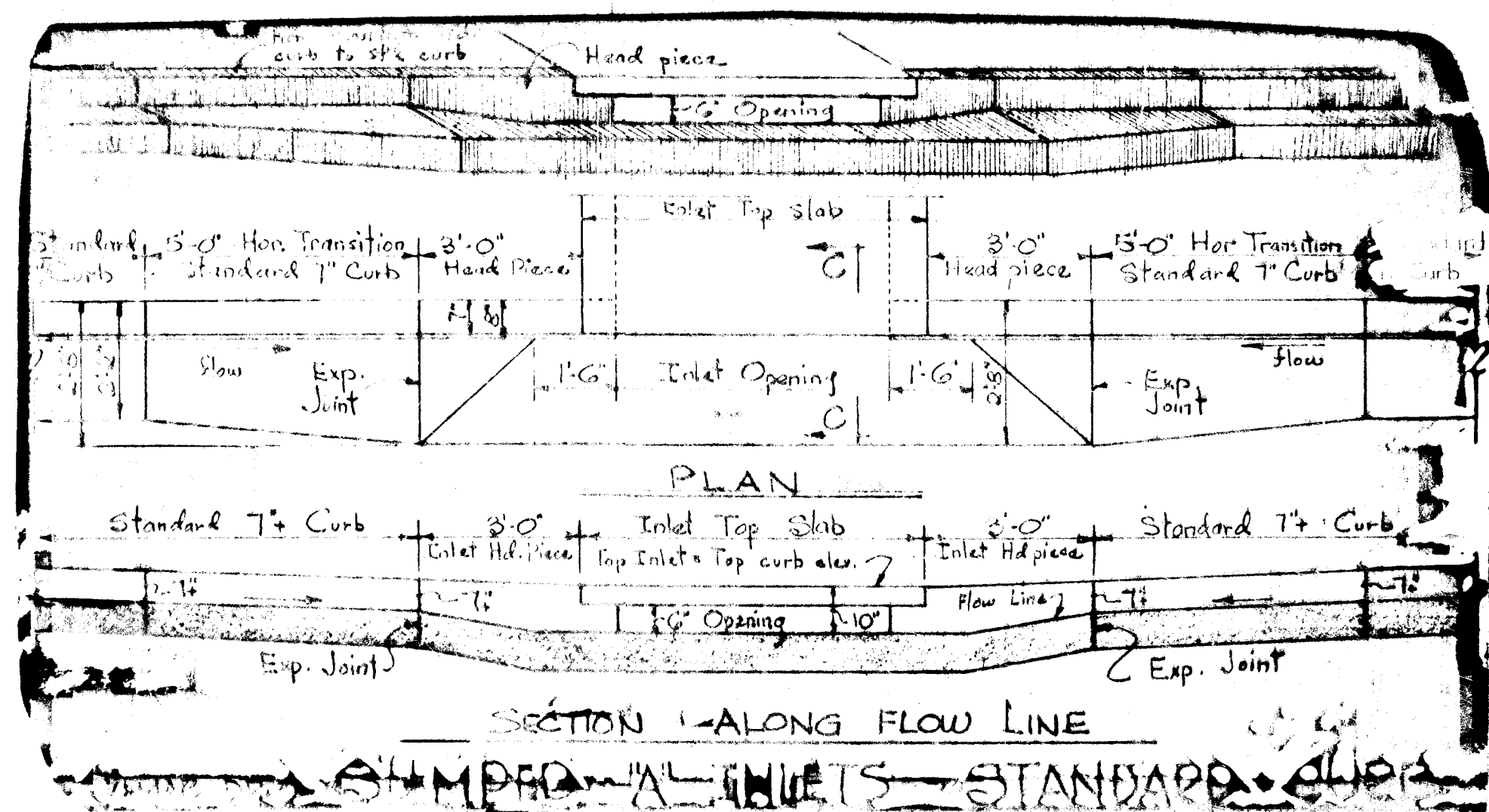
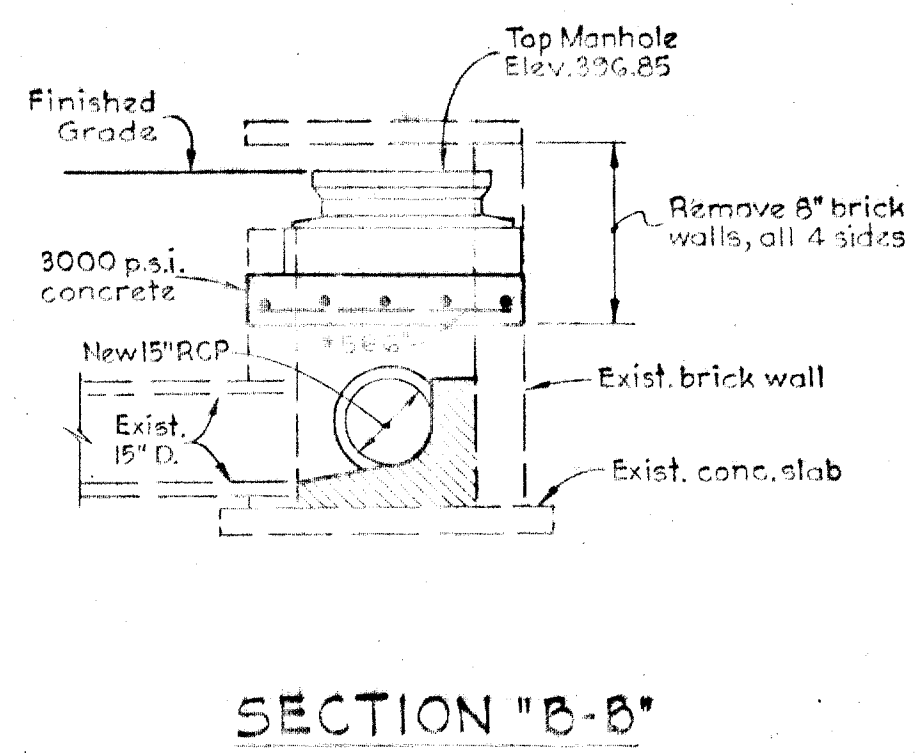
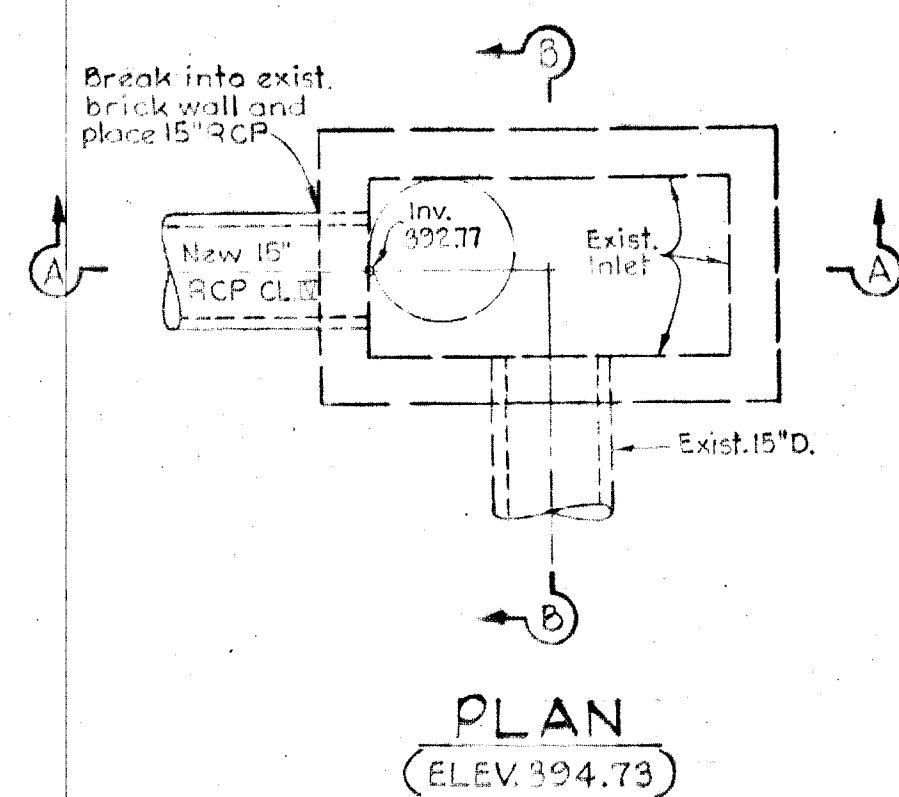


SECTION ALONG FLOW LINE

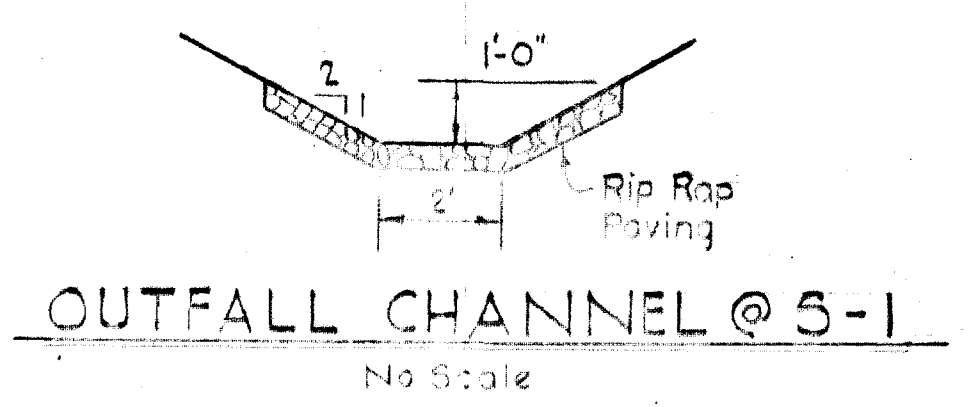
SUMPED "A" INLETS - MOUNTABLE CURB

WARNING
GAS AND/OR ELECTRIC FACILITIES
IN THIS AREA. BEFORE YOU DIG,
DRILL, BLAST ETC.
CALL
BALTIMORE GAS & ELECTRIC CO.
234-5691

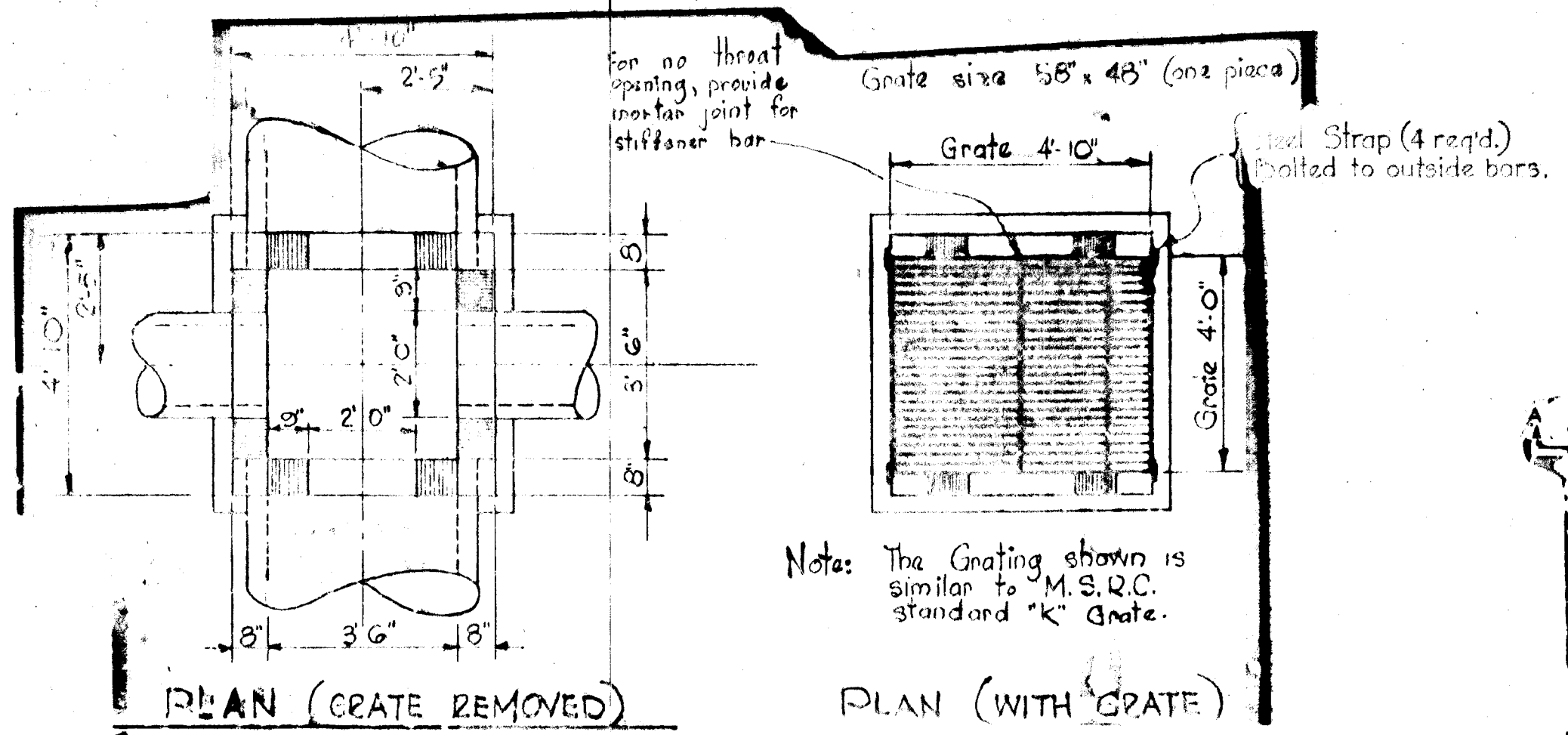
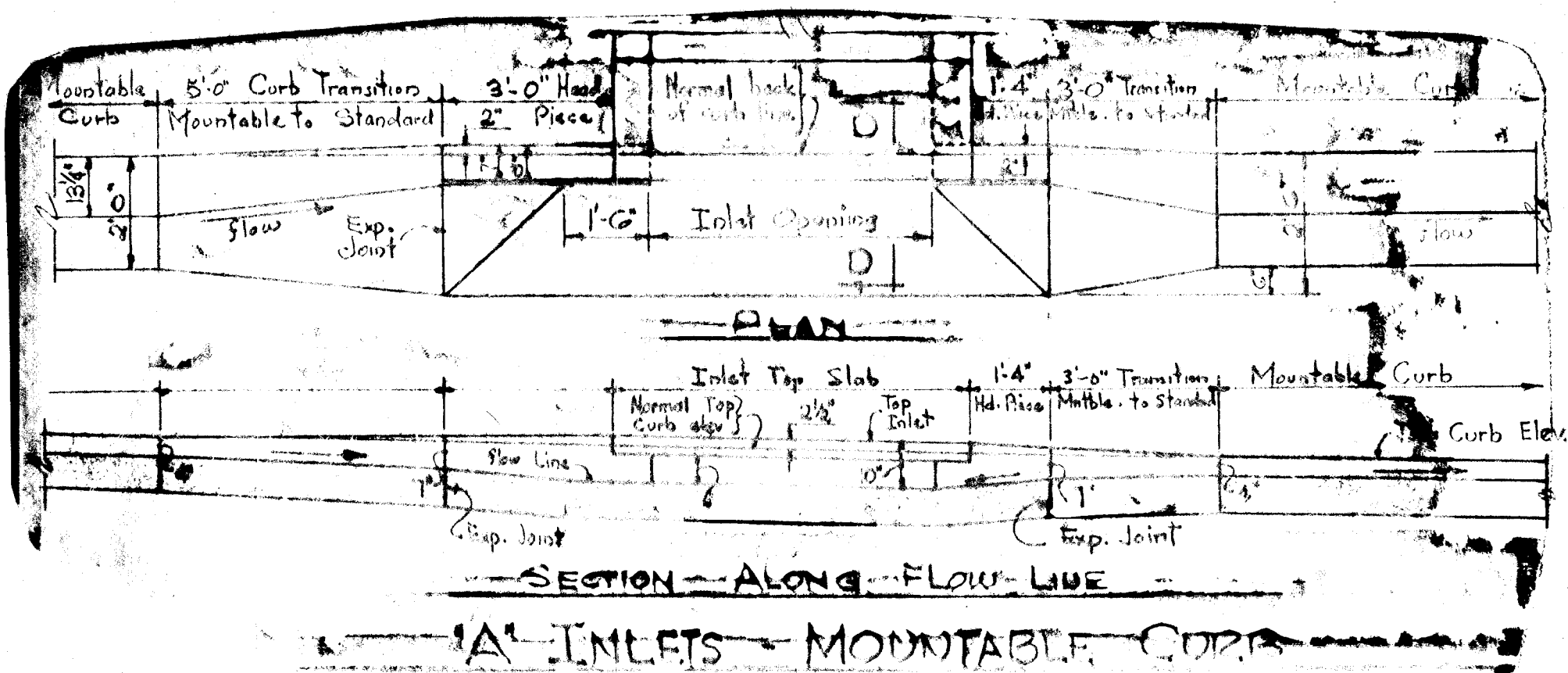
Rev/Date	Rev/No	Revision Description
COLUMBIA		
6TH ELECTION DISTRICT		
HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP.		
PROJECT AREA		
VILLAGE OF LONGREACH		
SECTION I, AREA I		
RESUBDIVISION OF PARCEL "A"		
PROJECT TITLE		
STORM DRAINS-PROFILES AND DETAILS		
SCALE: As Shown DATE: March 26, 1971		
WHITMAN, REQUARDT & ASSOCIATES		
ENGINEERS		
BALTIMORE, MARYLAND 21202		
DEPARTMENT OF PUBLIC WORKS CHIEF BUREAU OF HIGHWAYS OFFICE OF PLANNING AND ZONING CHIEF DIVISION OF LAND DEVELOPMENT (TRANSPORTATION PLANNING)		DATE: 5/15/71 KENNETH A. MCCORD Registered Engineer No. 1974



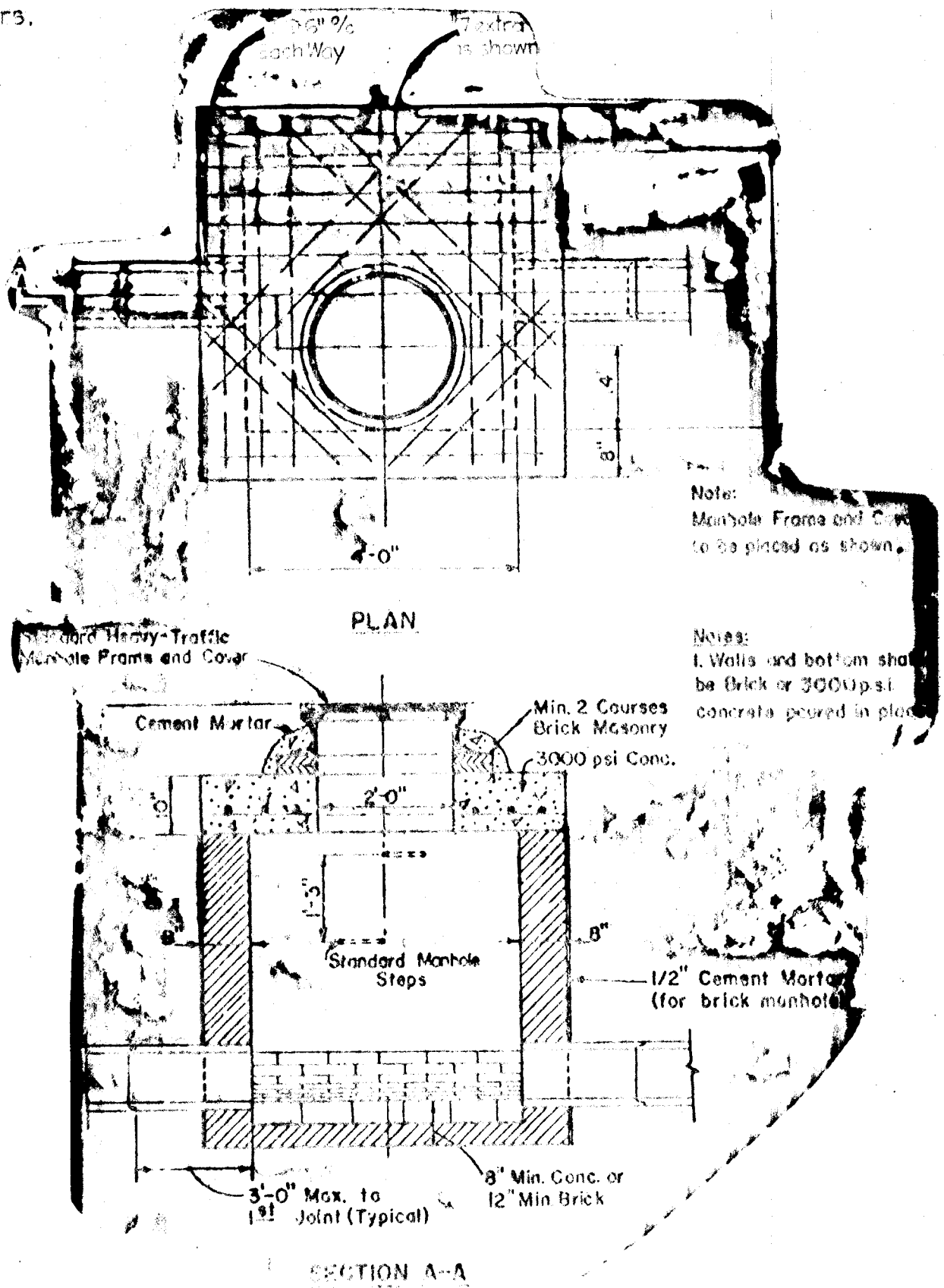
DETAIL "A"-EXISTING INLET I-64
Scale: 3/8" = 1'-0"



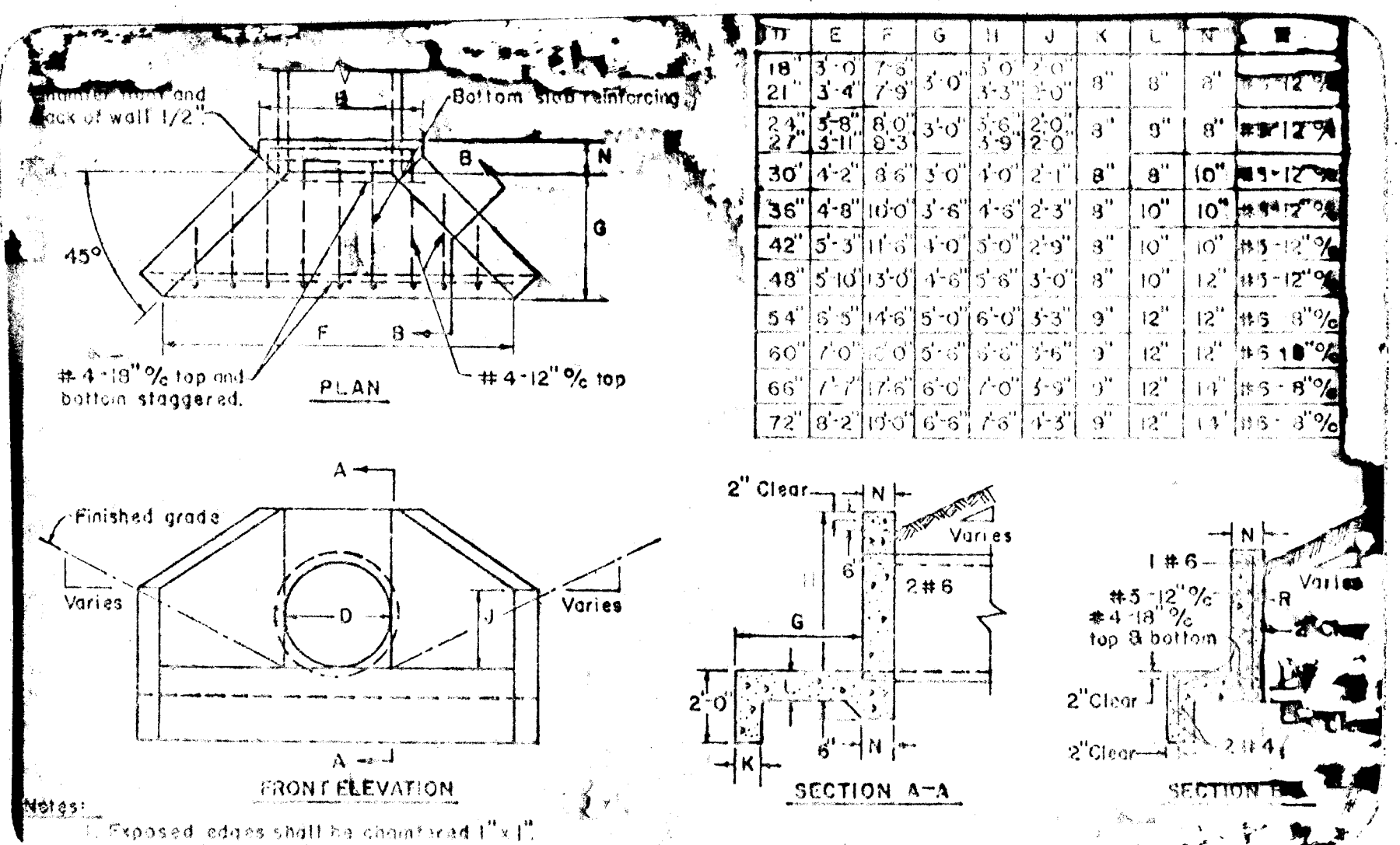
APPROVED
OFFICE OF PLANNING
AND ZONING OF
HOWARD COUNTY
DATE: 5/4/71
J.H.C.N.



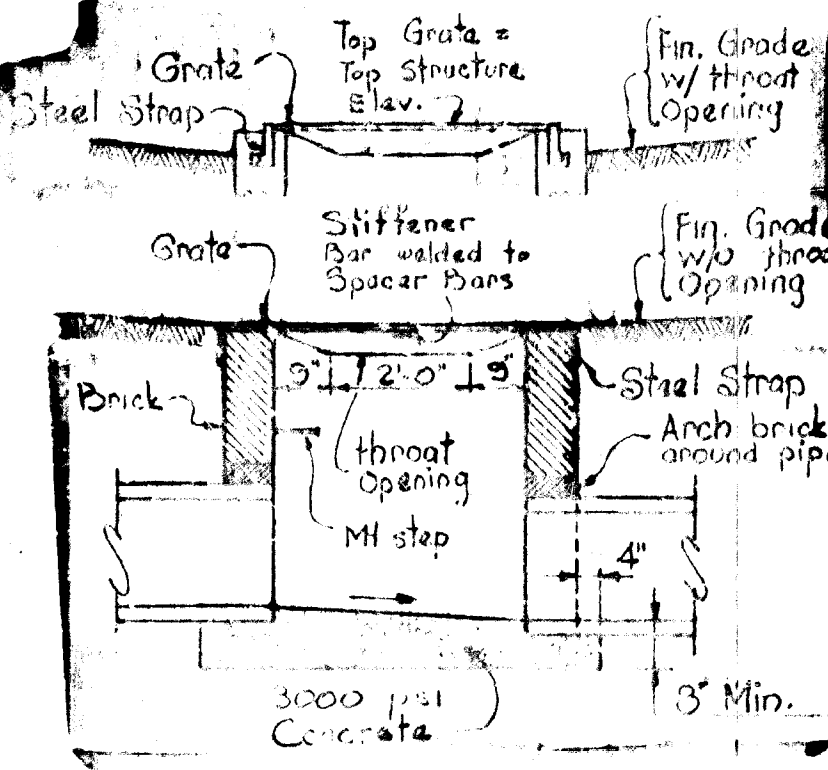
Note: The Grating shown is similar to "M.S.Q.C." standard "K" Grate.



TYPE "B" MANHOLE
No Scale



ENDWALL S-1
No Scale



MODIFIED "K" INLET
Scale: 3/8" = 1'-0"

- NOTES:
1. Gratings are subject to approval for each job. Any type of substantial transverse bars may be used which will support a minimum uniform load of 150 lbs./sq.ft. The transverse bars shall be held rigid by spacer bars.
 2. All material to be hot dipped galvanized.

WARNING
GAS AND/OR ELECTRIC FACILITIES
IN THIS AREA. BEFORE YOU DIG,
DRILL, BLAST ETC.
CALL
BALTIMORE GAS & ELECTRIC CO.
234-5691

RevDate	RevNo	Revision Description
COLUMBIA		
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP.		
PROJECT AREA VILLAGE OF LONGREACH		
SECTION I, AREA I RESUBDIVISION OF PARCEL "A"		
PROJECT TITLE STORM DRAINS-PROFILES AND DETAILS		
SCALE: As Shown		DATE: March 26, 1971
WHITMAN, REDJARD & ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202		
DEPARTMENT OF PUBLIC WORKS CHIEF BUREAU OF HIGHWAYS OFFICE OF PLANNING AND ZONING CHIEF DIVISION OF LAND DEVELOPMENT (TRANS PORTATION PLANNING)		DATE: 5/15/71 KENNETH A. McCORD Registered Engineer No. 1974