

VICINITY MAP

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
John P. Adams 12-2-77
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
James St. Amel 12-7-79
 PLANNING DIRECTOR DATE

A. J. Hines (acting Chief) 12/6/79
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
W. F. Nemeyer 12-3-79
 DIRECTOR DATE

W. O. Kellard 12-3-79
 CHIEF, BUREAU OF ENGINEERING DATE

SITE IMPROVEMENTS FOR COLUMBIA MALL EXPANSION COLUMBIA, MARYLAND

TOWN CENTER SECTION 2 AREA I
 LOTS 22, 23 & 25 PART II
 RECORDED IN PLAT BOOK # 4448

LIST OF DRAWINGS

GENERAL NOTES

1. LIMIT OF SUBMISSION IS LIMIT OF GRADING SHOWN ON ROUGH GRADING PLANS. TOTAL DISTURBED AREA 55.23 ACRES. Δ
2. TOPOGRAPHY TAKEN FROM AERIAL TOPO PREPARED BY MAPS INC. WITH FIELD VERIFICATION BY WHITMAN, REQUARDT AND ASSOCIATES.
3. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CODE AND SPECIFICATIONS.
4. PUBLIC WATER AND SEWER FACILITIES ARE TO BE UTILIZED.
5. ANY DAMAGE TO THE COUNTY OWNED RIGHT-OF-WAY OR PAVING SHALL BE CORRECTED AT THE DEVELOPERS' EXPENSE.
6. GRADE HAVE BEEN ESTABLISHED TO INSURE POSITIVE DRAINAGE.
7. SIDEWALKS SHALL BE SCORED OR OTHERWISE TEXTURED TO INDICATE TO BLIND PERSONS THE LOCATION OF DOORS AT BUILDING.
8. ALL LIGHT POLES AND FIXTURES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED AND SALVAGED AND RETURNED TO THE OWNER.
9. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.
10. ALL ELEVATIONS SHOWN ARE TO FINISHED GRADE.
11. THE OWNER WILL PROVIDE BENCHMARKS AND THE ORIGIN FOR HORIZONTAL CONTROLS TO BE USED DURING CONSTRUCTION.
12. ALL CONSTRUCTION STAKE-OUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
13. TRAFFIC CIRCULATIONS SHALL BE MAINTAINED AT ALL TIMES AND THE EXISTING PAVING SHALL NOT BE REMOVED UNTIL THE NEW RING ROAD IS PAVED.

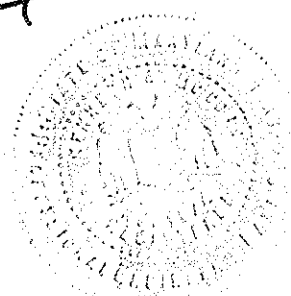
SHEET NO.	TITLE
1	TITLE SHEET
2	SITE LAYOUT PLAN
3	SITE LAYOUT PLAN
4	GRADING PLAN
5	GRADING PLAN
6	UTILITY PLAN
7	UTILITY PLAN
8	UTILITY PROFILES
9	UTILITY PROFILES
10	UTILITY PROFILES
11	DETAILS
12	DETAILS
13	DRAINAGE AREAS
14	DRAINAGE AREAS
15	PHASING PLAN
16	STREET PROFILES
17	STRIPING, SIGNING & LIGHTING LAYOUT
18	STRIPING, SIGNING & LIGHTING LAYOUT
19	LANDSCAPING PLAN
20-27	ROUGH GRADING PLAN (5H.1-8 of 8)

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

Kenneth A. McCord

KENNETH A. McCORD
 PROFESSIONAL ENGINEER
 MD. LICENSE No. 1974
 Date: July 2, 1979 Δ



APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY

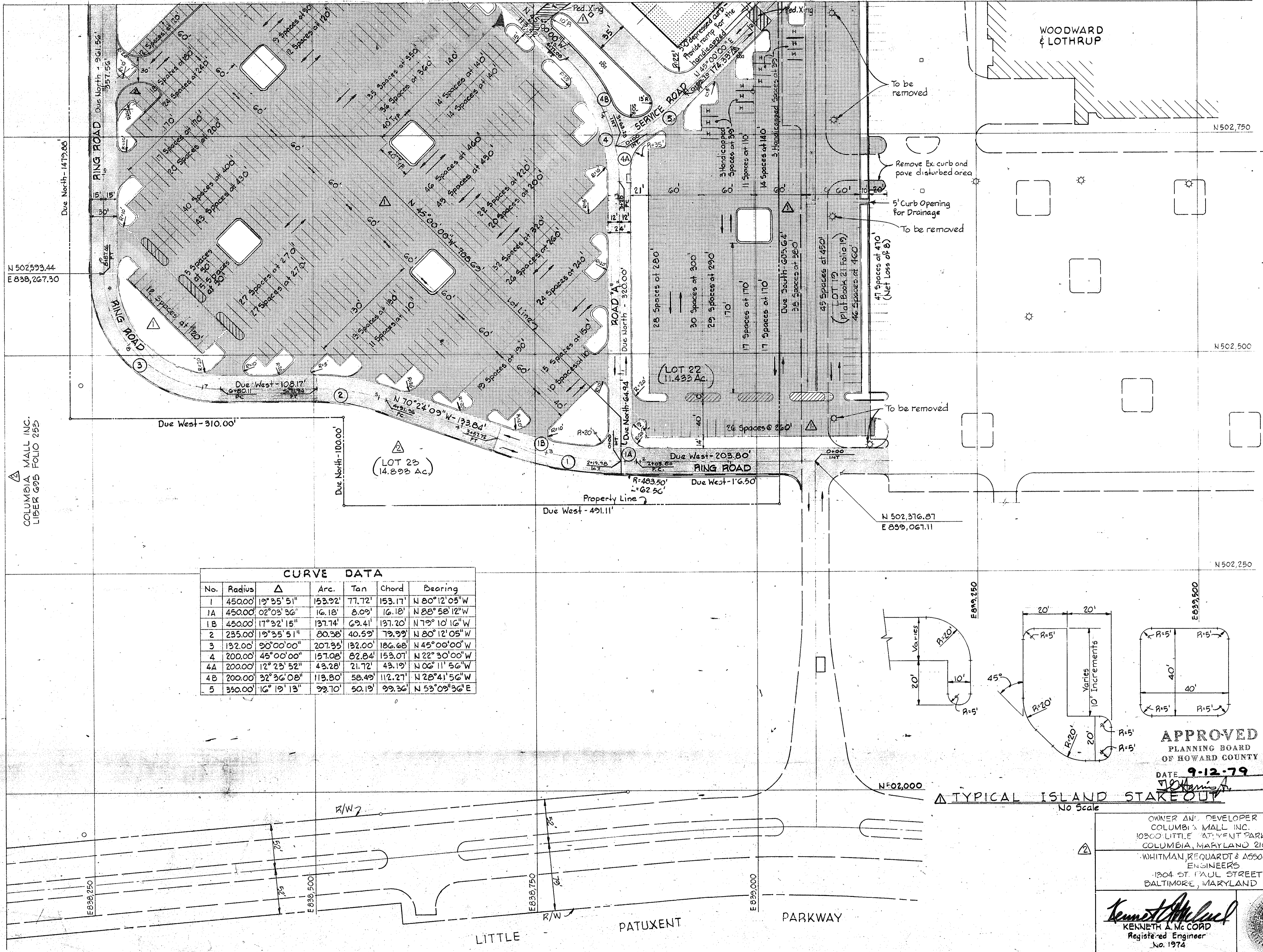
DATE 9-12-79
Whitman's

NO.	DATE	DESCRIPTION OF REVISIONS
Δ	8/16/79	Added Vicinity Map, Corrected Addresses
Δ	8/14/79	Added Plat References
Δ	8/14/79	Revised List of Drawings, Changed Date, Added Area

SHEET 1 OF (13) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER DATE
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR DATE
 CHIEF, BUREAU OF ENGINEERING DATE
 NO. DATE DESCRIPTION OF REVISION
 10/10/79 Revised Dimension on Service Road.

MATCH LINE - SEE SHEET 3 OF 18



PARKING REQUIREMENTS

REQUIRED:
 Mall Expansion : 137,700 #
 Sears Store : 152,000 #
 Future Expansion : 30,000 #
 Total : 319,700 #
 319,700 # at 5 spaces per 1000 # =
 1,600 Spaces Required

HANDICAPPED SPACES
 First 1000 Spaces = 20 Spaces
 Second 600 Spaces = 6 Spaces
 Total : 26 Spaces (27 Spaces Provided)

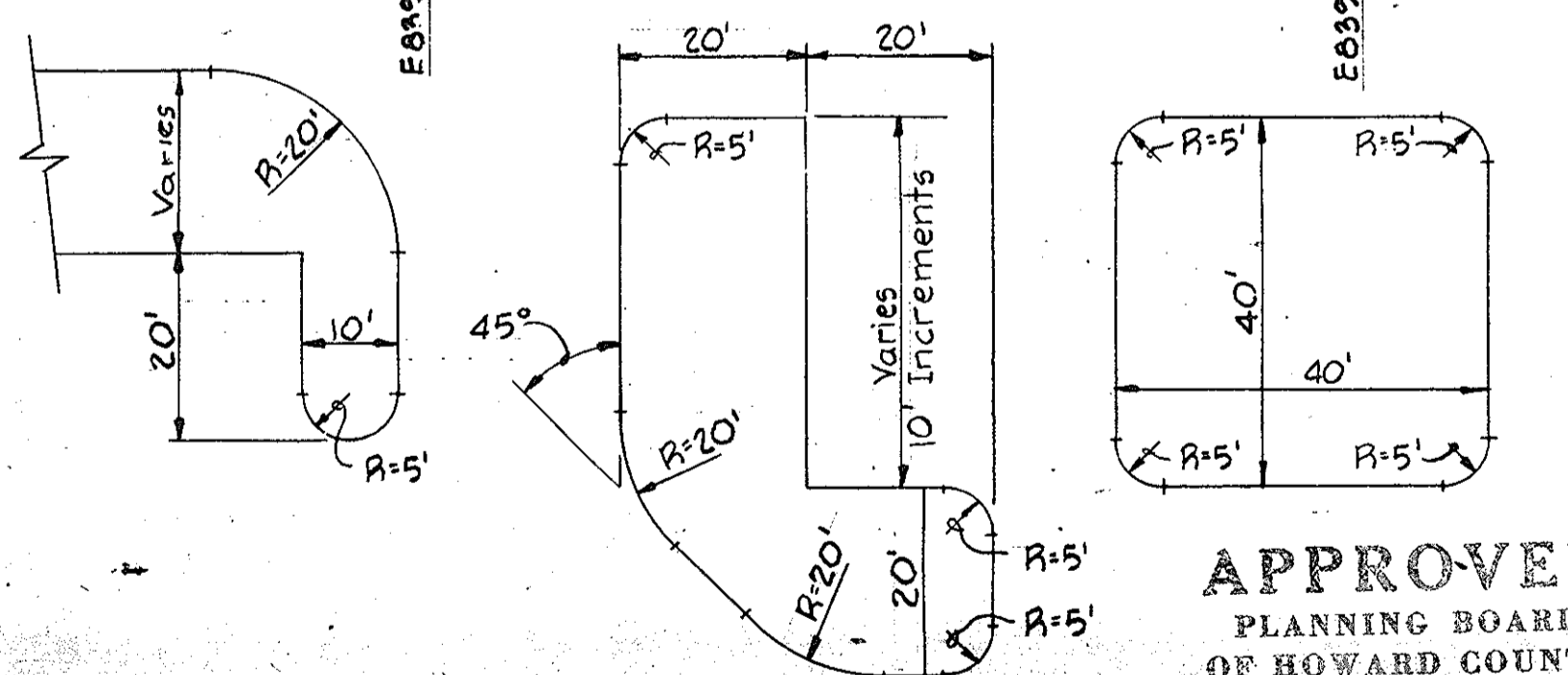
SPACES PROVIDED
 Total New Spaces = 2,342 (Includes 27 Handicapped spaces)
 Existing Spaces Lost = 739
 Total Net Gain = 1,603 (Includes 56 Spaces lost adjacent to Turner Tract.)
 Original Number of Spaces Provided = 3080

LEGEND

- Existing Building
- Proposed Building
- Existing Lights
- Concrete Curb
- Bituminous Concrete Curb
- Heavy Paving Area
- Light Paving Area
- Parking Island
- Painted Island
- Handicapped Parking Space

CURVE DATA

No.	Radius	Δ	Arc.	Tan	Chord	Bearing
1	450.00	19° 35' 51"	153.92'	77.72'	153.17'	N 80° 12' 05" W
1A	450.00	02° 03' 36"	16.18'	8.09'	16.18'	N 88° 58' 12" W
1B	450.00	17° 32' 15"	137.74'	69.41'	137.20'	N 79° 10' 16" W
2	235.00	19° 35' 51"	80.38'	40.59'	79.99'	N 80° 12' 05" W
3	132.00	90° 00' 00"	207.35'	132.00'	186.68'	N 45° 00' 00" W
4	200.00	45° 00' 00"	157.08'	82.84'	153.07'	N 22° 30' 00" W
4A	200.00	12° 23' 52"	43.28'	21.72'	43.19'	N 06° 11' 56" W
4B	200.00	32° 36' 08"	119.80'	58.49'	112.27'	N 28° 41' 56" W
5	350.00	16° 19' 13"	99.70'	50.19'	99.36'	N 53° 09' 36" E



NOTES:

- All standard parking spaces are 10' x 20'
- All handicapped parking spaces are 13' x 20'
- All streets, drives and parking facilities are private.
- All Property is zoned "Employment Center Commercial"
- The Final Development Plan number is 47A-IV.

9/2/79 Revised parking islands

8/16/79 Added Lot Nos. Added Notes 3, 4 & 5 Corrected Addresses & Title Block

8/14/79 Revised Survey Data, Revised Parking Spaces, Added Shading to Light Paving Areas, Added Details, Added Ped Xings, Revised Islands

NO. DATE DESCRIPTION OF REVISIONS

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

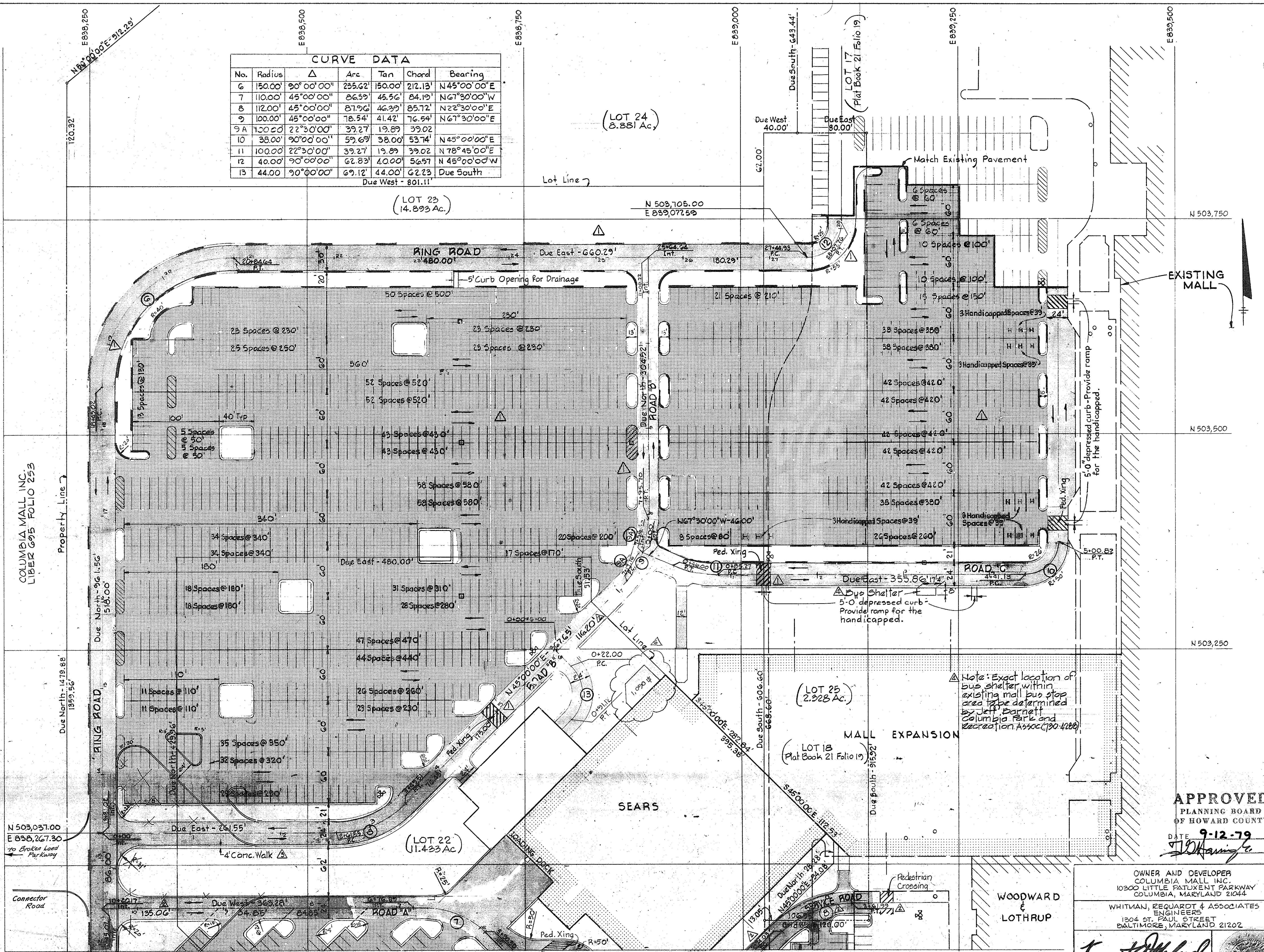
Kenneth A. Mc Cord
 KENNETH A. MC CORD
 Registered Engineer
 No. 1974

COLUMBIA TOWN CENTER
 SECTION 2 AREA 1
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION
SITE LAYOUT PLAN

SHEET 2 OF (18) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1"=50'

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICE DATE 12-5-79
 APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR DATE 12-7-79
 CHIEF DIVISION OF LAND DEVELOPMENT DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING DATE 12-3-79

CURVE DATA						
No.	Radius	Δ	Arc	Tan	Chord	Bearing
6	150.00'	90° 00' 00"	235.62'	150.00'	212.13'	N 45° 00' 00" E
7	110.00'	45° 00' 00"	86.39'	45.56'	84.19'	N 67° 30' 00" W
8	112.00'	45° 00' 00"	87.96'	46.39'	85.72'	N 22° 30' 00" E
9	100.00'	45° 00' 00"	78.54'	41.42'	76.54'	N 67° 30' 00" E
9A	150.00'	22° 30' 00"	39.27'	19.89'	39.02'	
10	38.00'	90° 00' 00"	59.69'	38.00'	53.74'	N 45° 00' 00" E
11	100.00'	22° 30' 00"	39.27'	19.89'	39.02'	N 78° 45' 00" E
12	40.00'	90° 00' 00"	62.83'	40.00'	56.57'	N 45° 00' 00" W
13	44.00'	90° 00' 00"	69.12'	44.00'	62.23'	Due South



10/7/92 REVISED FOR "RED-LINE REVISION PROCESS"

- LEGEND**
- Existing Building
 - Proposed Building
 - Existing Lights
 - Concrete Curb
 - Bituminous Concrete Curb
 - Heavy Paving Area
 - Light Paving Area
 - Parking Island
 - Painted Island
 - Handicapped Parking Space

- Notes:
1. All standard parking spaces are 10'x20'.
 2. All handicapped parking spaces are 19'x20'.
 3. All streets, drives, and parking facilities are private.
 4. All property is zoned "Employment Center Commercial."
 5. The Final Development Plan number is 47A-IV.

NO.	DATE	DESCRIPTION OF REVISIONS
1	2/28/84	Added Bus Shelter & Note
2	11/6/79	Added Conc. Walk
3	10/12/79	Revised Dimensions Roads A, B & Service Road.
4	8/14/79	Revised Survey Data, Added Shading to Light Paving Areas, Added Ped. Xings Revised Street & Island Layout

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
 J. D. Manning

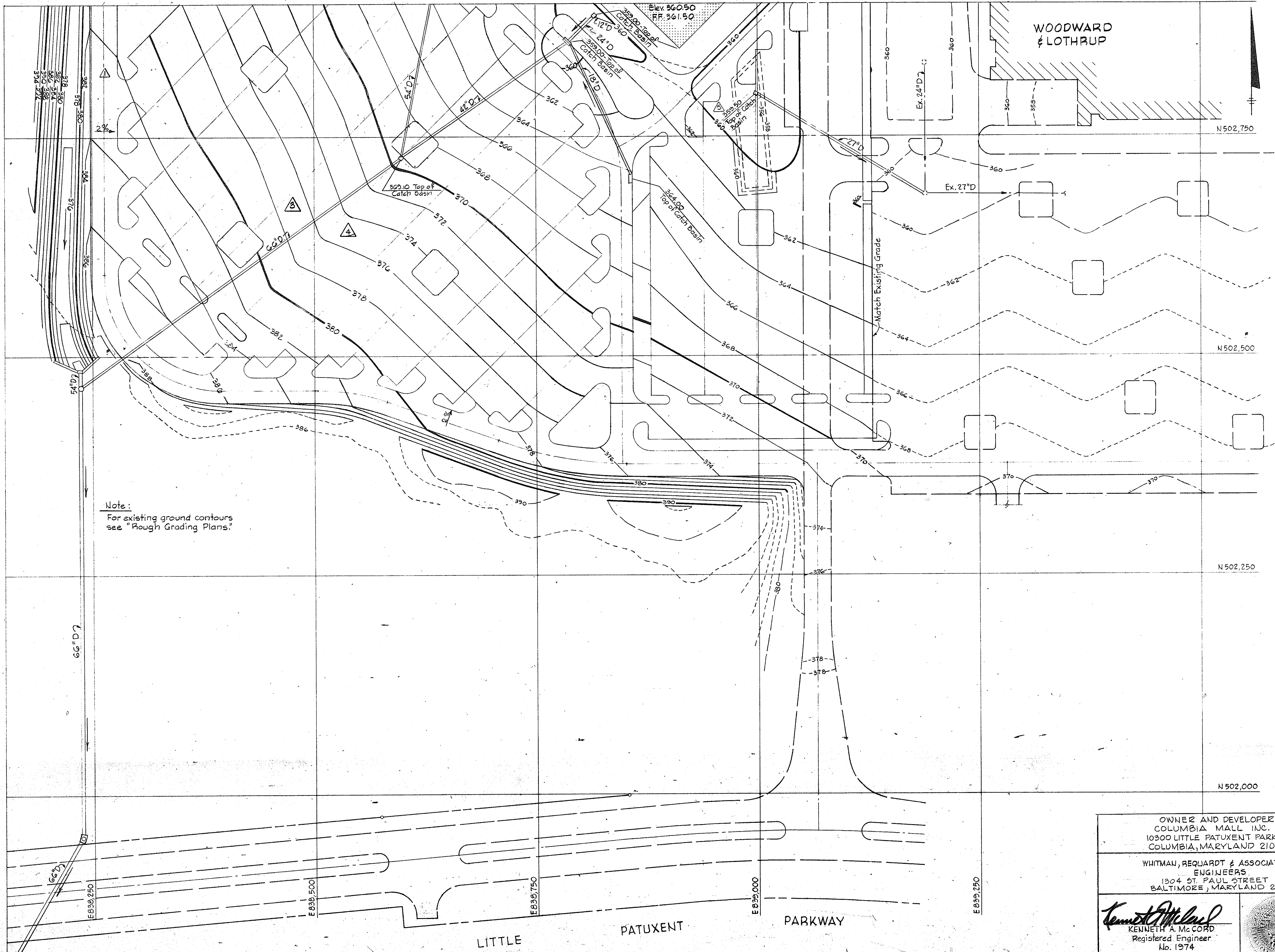
OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202
 Kenneth A. McCord
 Registered Engineer
 No. 1974

COLUMBIA TOWN CENTER
 SECTION 2 AREA I
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
COLUMBIA MALL EXPANSION
SITE LAYOUT PLAN
 SHEET 3 OF (19) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE July 2, 1979
 SCALE: 1" = 50'

MATCH LINE - SEE SHEET 2 OF 18

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER *James G. ...* DATE 12-5-79
 APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR *James G. ...* DATE 12-7-79
 CHIEF, DIVISION OF LAND DEVELOPMENT *J. ...* DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR *W. F. ...* DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING *W. F. ...* DATE 12-3-79

MATCH LINE- SEE SHEET 5 OF 18



Note:
 For existing ground contours see "Rough Grading Plans"

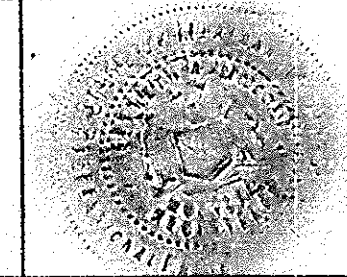
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
W. F. ...

NO.	DATE	DESCRIPTION OF REVISIONS
1	10/23/79	Revised Top Elevation
2	9/21/79	Revised Grades & Inlets
3	8/16/79	Corrected Parking Lot Contours
4	8/15/79	Added Lot Nos Added Notes 3, 4 & 5 Corrected Addresses & Title Block
5	8/14/79	Added Catch Basin Revised Grades

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

WHITMAN, REQUART & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

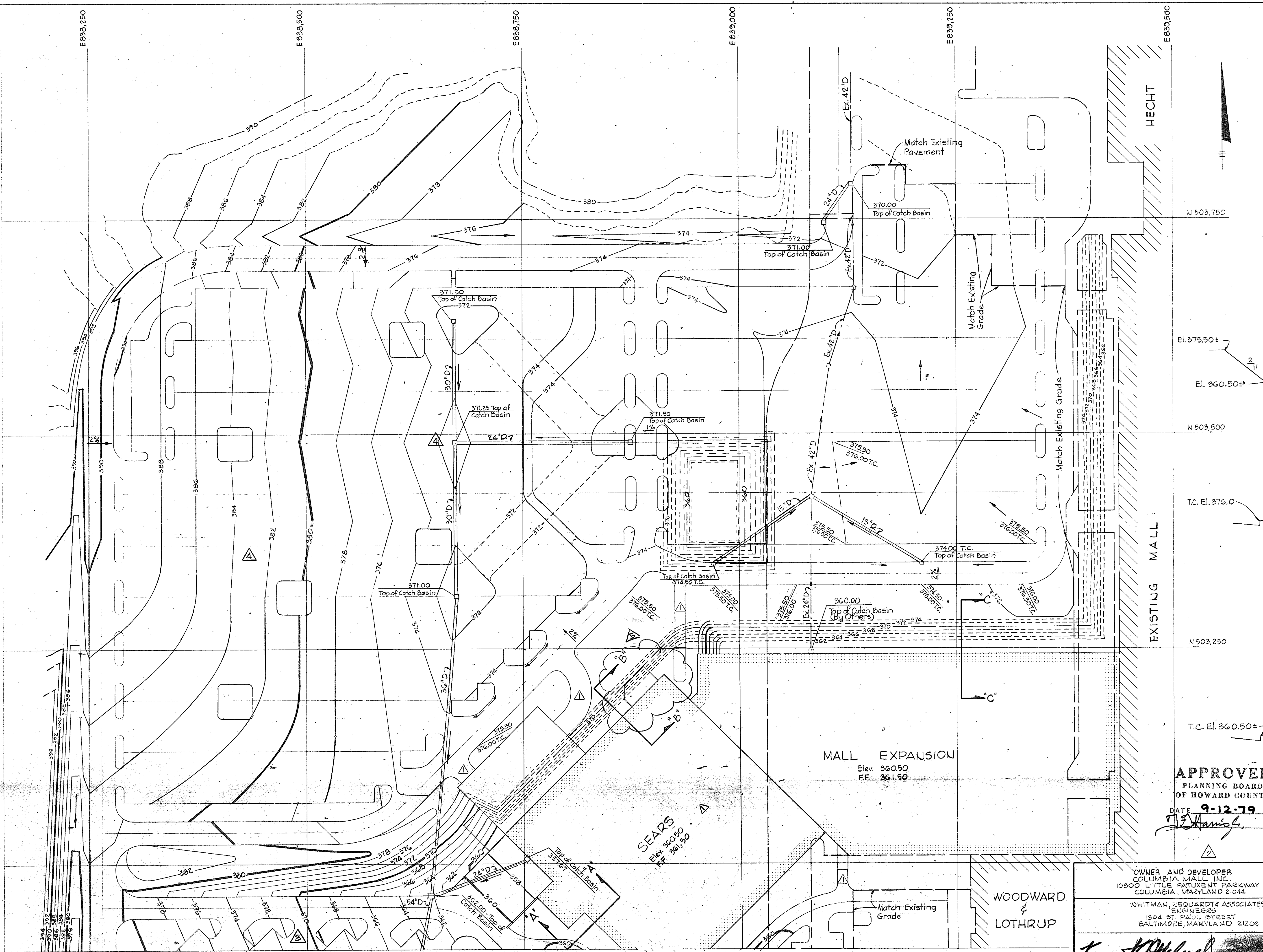
Kenneth A. McCord
 KENNETH A. McCORD
 Registered Engineer
 No. 1974



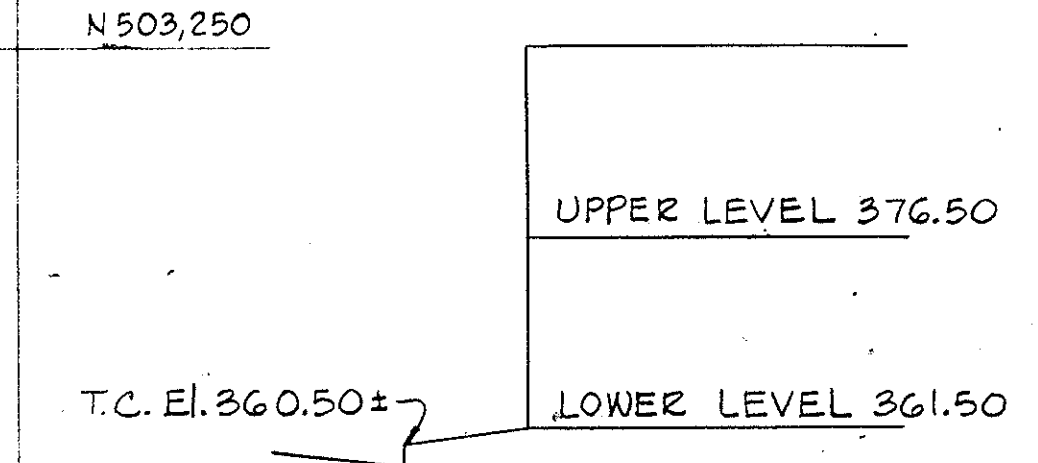
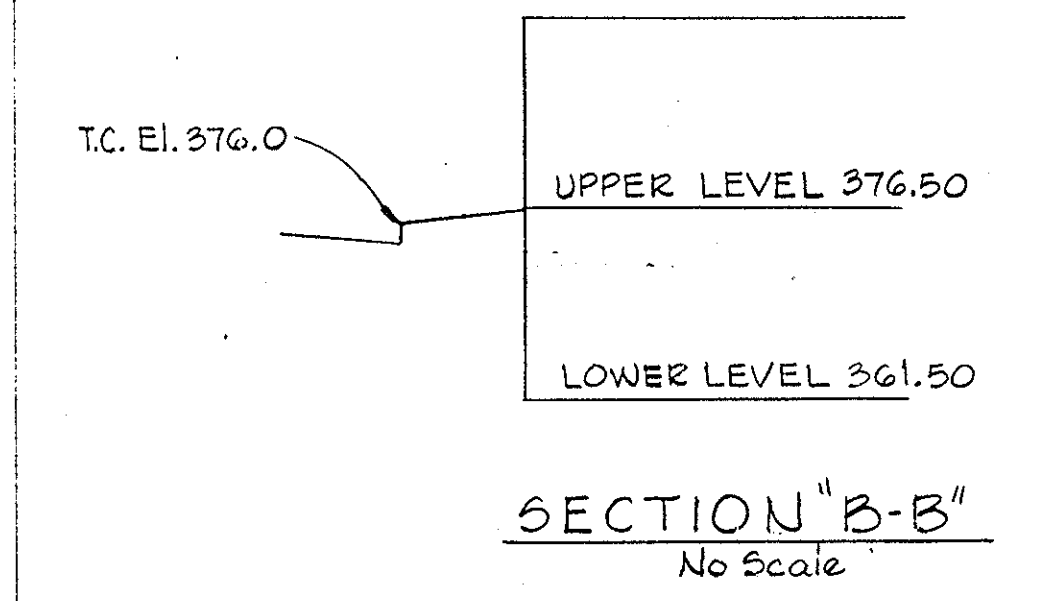
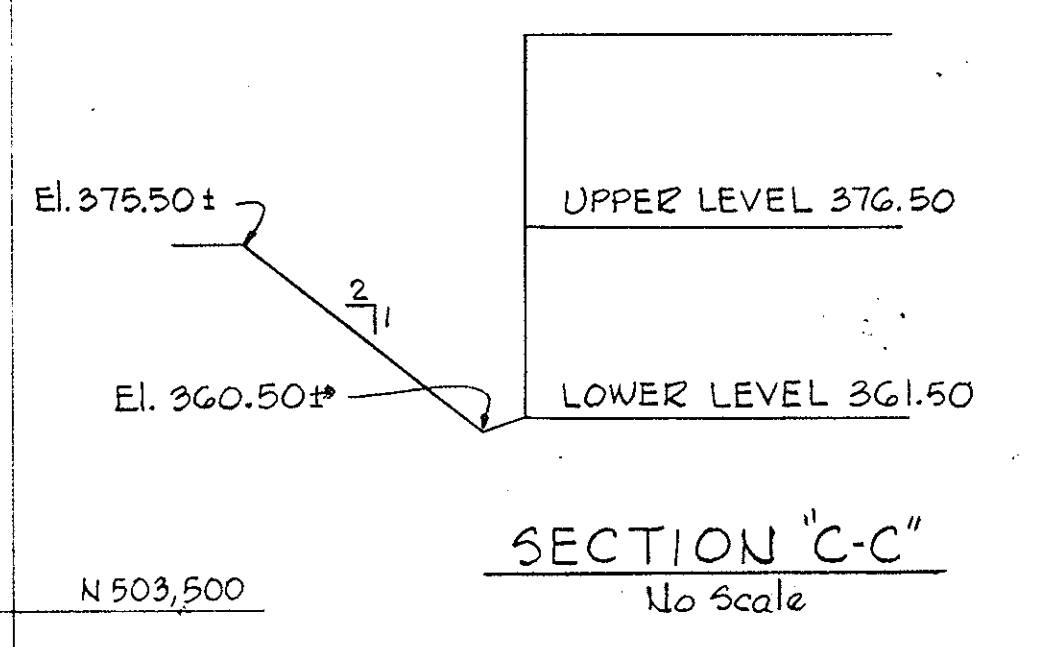
COLUMBIA TOWN CENTER
 SECTION 2 AREA I
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION
 GRADING PLAN

SHEET 4 OF (18) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1" = 50'

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER *[Signature]* 12-5-79 DATE
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR *[Signature]* 12-7-79 DATE
 CHIEF DIVISION OF LAND DEVELOPMENT *[Signature]* 12-6-79 DATE
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR *[Signature]* 12-3-79 DATE
 CHIEF, BUREAU OF ENGINEERING *[Signature]* 12-3-79 DATE



Note:
 For existing ground contours see "Rough Grading Plans."



APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
[Signature]

NO.	DATE	DESCRIPTION OF REVISIONS
1	10/9/79	REVISED FOR "RED-LINE REVISION PROCESS"
2	12/21/79	Revised Grades & Inlets
3	8/20/79	Corrected Parking Lot Contours
4	8/16/79	Added Lot Nos. Added Notes 3, 4 & 5. Corrected Addresses & Title Block
5	8/14/79	Revised Grade; Added Drives

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, LEQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

COLUMBIA TOWN CENTER
 SECTION 2 AREA 1
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION
 GRADING PLAN

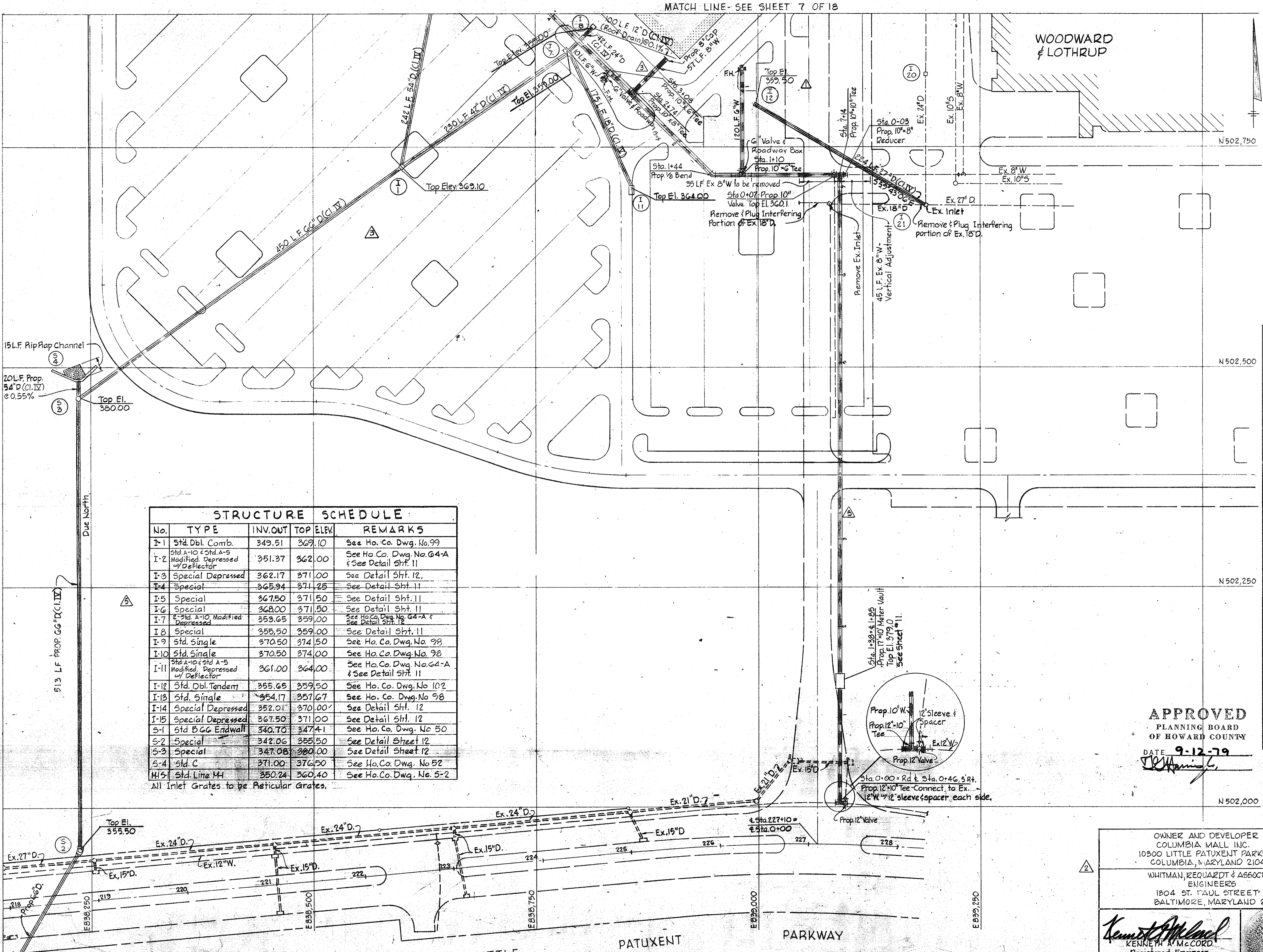
[Signature]
 KENNETH A. MC CORD
 Registered Engineer
 No. 1974

SHEET 5 OF (19) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1"=50'

MATCH LINE - SEE SHEET 4 OF 18

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* 12-5-79 DATE
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR: *[Signature]* 12-7-79 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* 12-6-79 DATE
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR: *[Signature]* 12-3-79 DATE
 CHIEF, BUREAU OF ENGINEERING: *[Signature]* 12-3-79 DATE

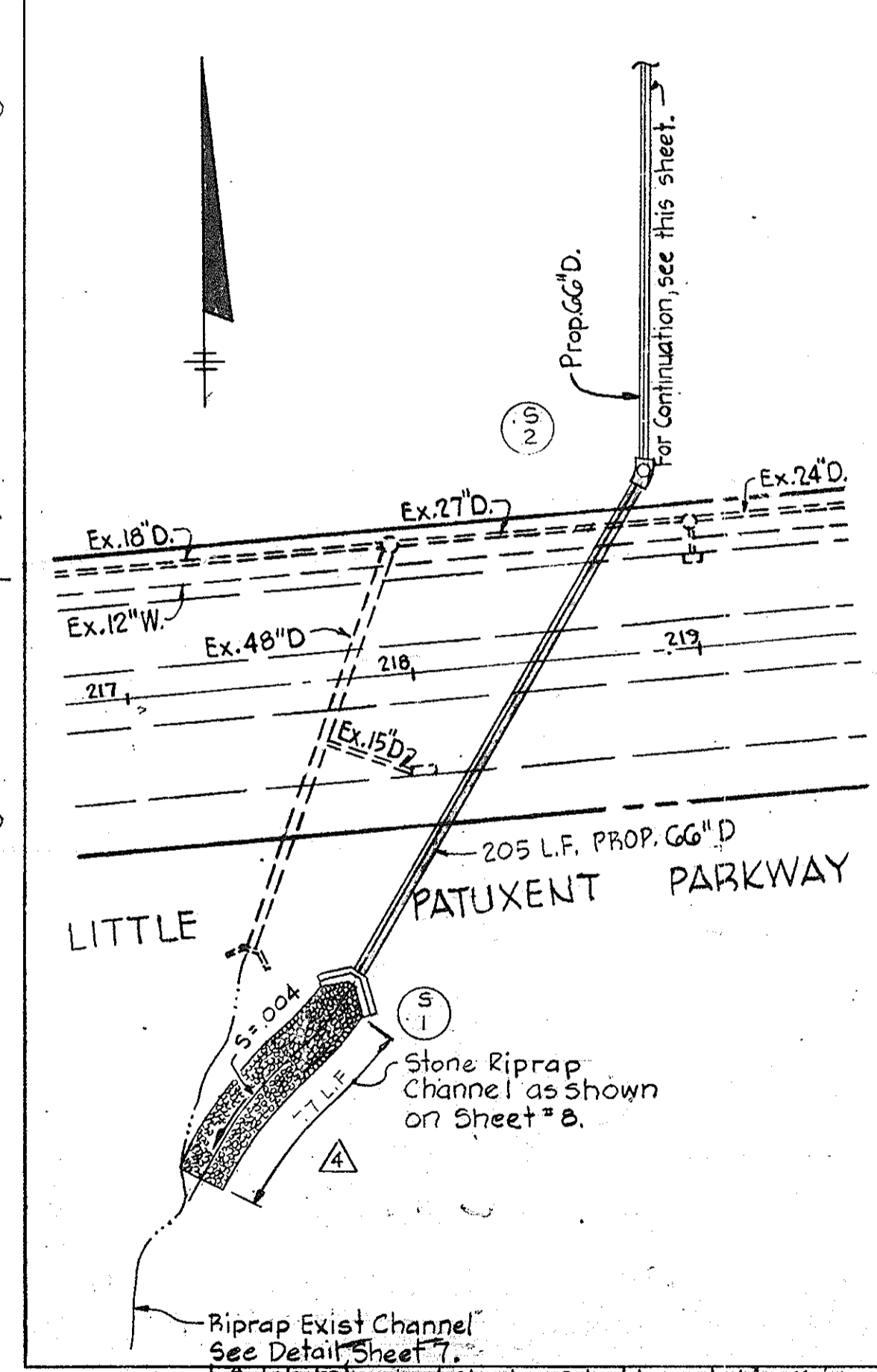
Note - Existing Electrical Conduits, Telephone Conduits and Gas Lines, if any, are not shown. It shall be the responsibility of the Contractor to locate these facilities prior to performing any work.



No.	TYPE	INV. OUT	TOP ELEV.	REMARKS
I-1	Std. Dbl. Comb.	349.51	369.10	See Ho. Co. Dwg. No. 99
I-2	Std. A-10 & Std. A-5 Modified Depressed w/ Deflector	351.37	362.00	See Ho. Co. Dwg. No. G4-A & See Detail Sht. 11
I-3	Special Depressed	362.17	371.00	See Detail Sht. 12.
I-4	Special	365.94	371.25	See Detail Sht. 11
I-5	Special	367.50	371.50	See Detail Sht. 11
I-6	Special	368.00	371.50	See Detail Sht. 11
I-7	Std. A-10 Modified Depressed	353.65	359.00	See Ho. Co. Dwg. No. G4-A & See Detail Sht. 12
I-8	Special	355.50	359.00	See Detail Sht. 11
I-9	Std. Single	370.50	374.50	See Ho. Co. Dwg. No. 98
I-10	Std. Single	370.50	374.00	See Ho. Co. Dwg. No. 98
I-11	Std. A-10 & Std. A-5 Modified Depressed w/ Deflector	361.00	364.00	See Ho. Co. Dwg. No. G4-A & See Detail Sht. 11
I-12	Std. Dbl. Tandem	355.65	359.50	See Ho. Co. Dwg. No. 102
I-13	Std. Single	354.17	351.67	See Ho. Co. Dwg. No. 98
I-14	Special Depressed	352.01	370.00	See Detail Sht. 12
I-15	Special Depressed	367.50	371.00	See Detail Sht. 12
S-1	Std. B.C.G. Endwall	340.70	347.41	See Ho. Co. Dwg. No. 50
S-2	Special	342.06	355.50	See Detail Sheet 12
S-3	Special	347.08	380.00	See Detail Sheet 12
S-4	Std. C	371.00	376.50	See Ho. Co. Dwg. No. 52
M-5	Std. Line MH	350.24	360.40	See Ho. Co. Dwg. No. 5-2

All Inlet Grates to be Articular Grates.

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE 9-12-79
[Signature]



NO.	DATE	DESCRIPTION OF REVISIONS
1	10/24/79	Revised Structure Schedule and Water Main
2	10/11/79	Revised Outfall Channel.
3	9/21/79	Added Water Service and Revised Storm Drain Layout. Revised Struct. Schedule
4	8/16/79	Added Lot Nos, Added Notes 3, 4 & 5 Corrected Addresses & Title Block
5	8/14/79	Revised Storm Drain Layout

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10500 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS
 1804 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

[Signature]
 KENNETH A. McCORD
 Registered Engineer
 No. 1974

COLUMBIA TOWN CENTER, SECTION 2 AREA I
 LOTS 22, 23, 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION

UTILITY PLAN

SHEET G OF (17) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1"=50'

E898,250

E898,500

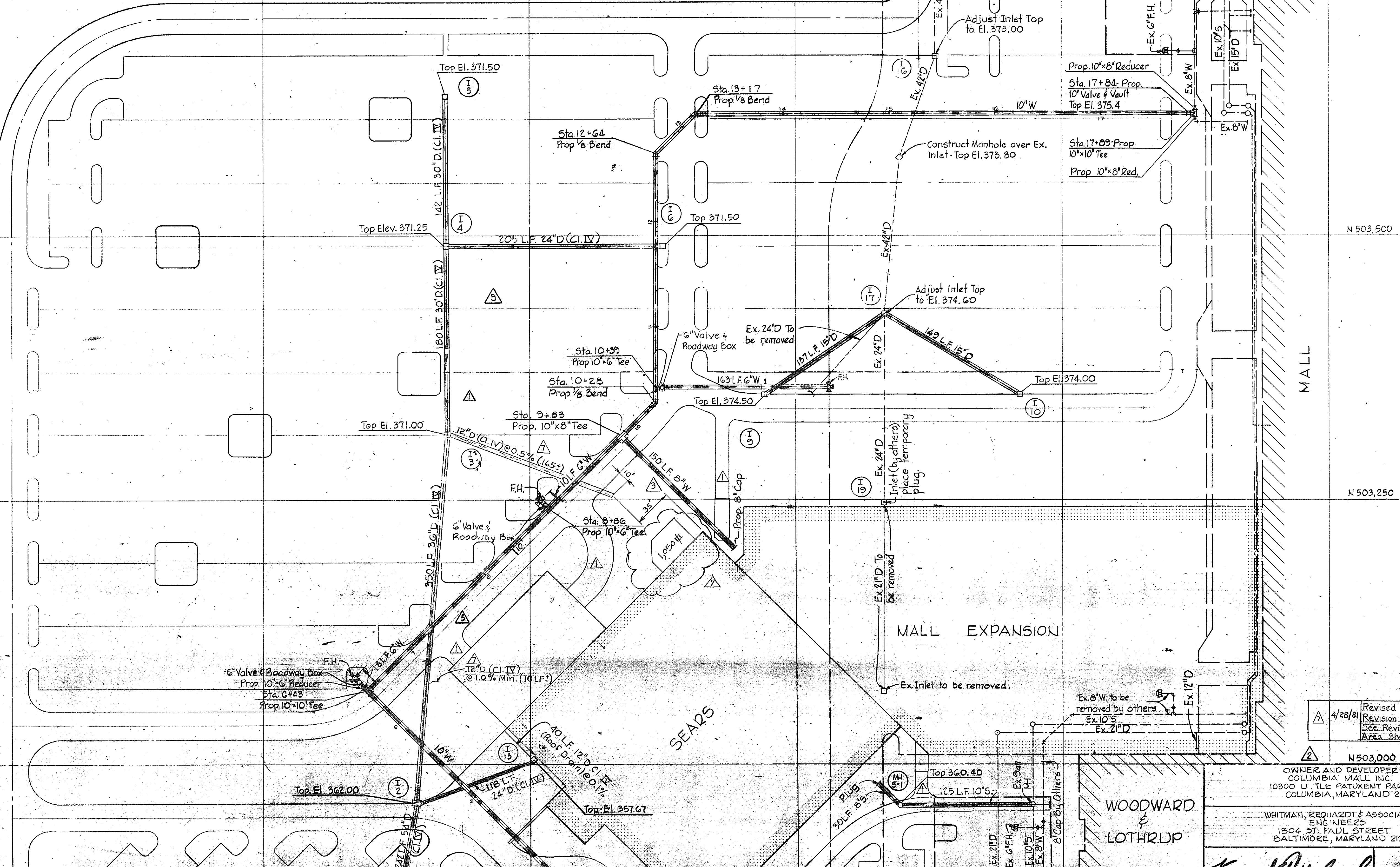
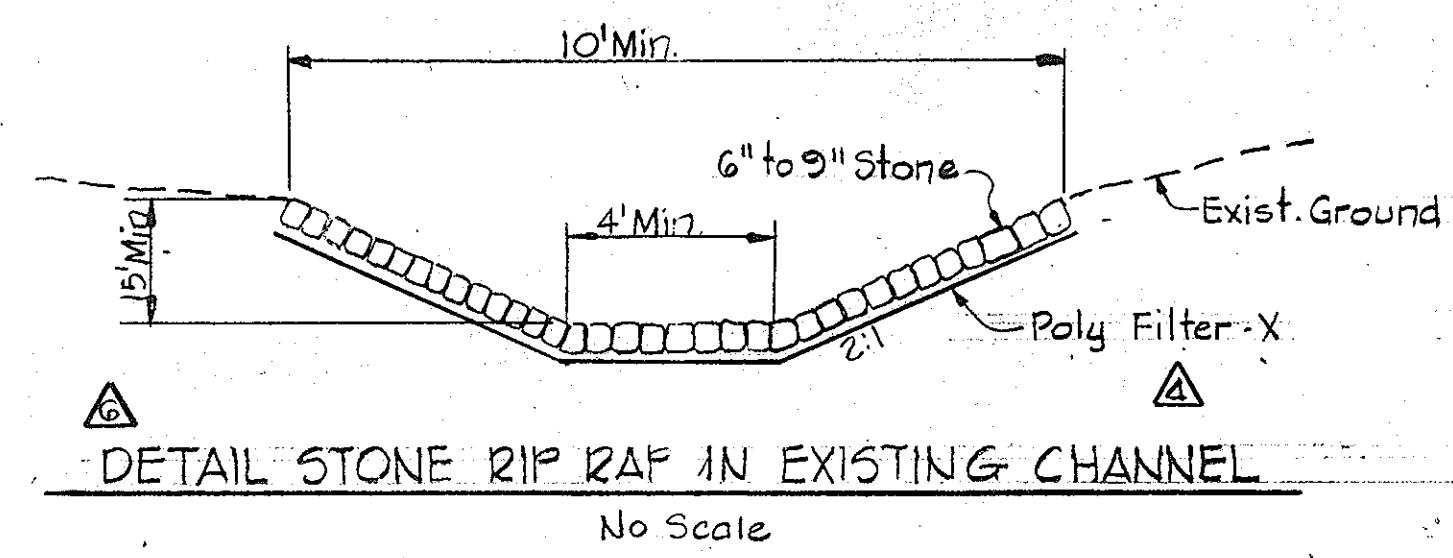
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E899,000

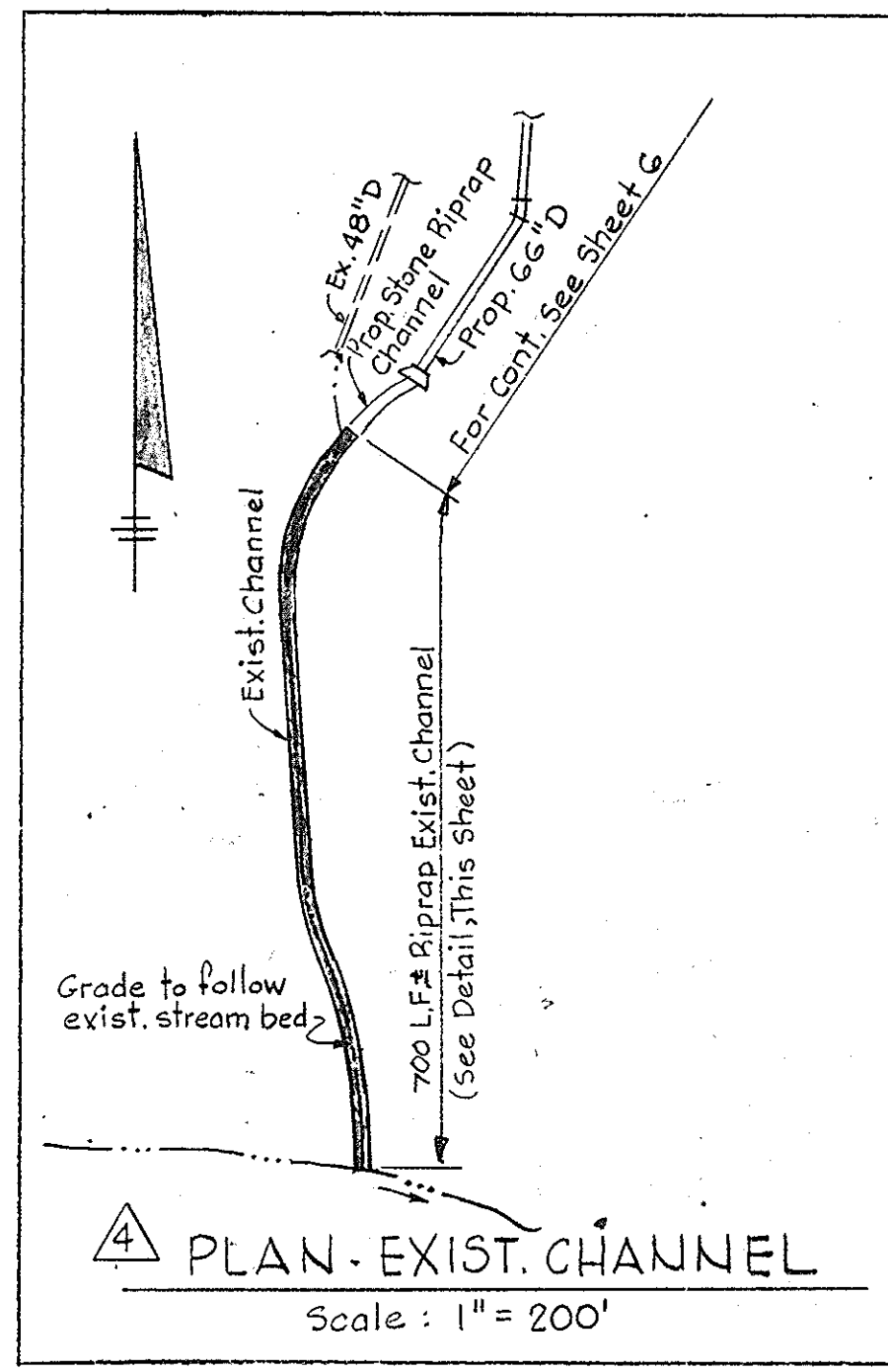
E899,250

E899,500

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER (12-5-79) DATE
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR (12-7-79) DATE
 CHIEF DIVISION OF LAND DEVELOPMENT (12-6-79) DATE
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR (12-3-79) DATE
 CHIEF, BUREAU OF ENGINEERING (12-3-79) DATE



Note - Existing Electrical Conduits, Telephone Conduits and Gas Lines, if any, are not shown. It shall be the responsibility of the Contractor to locate these facilities prior to performing any work.



APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79

NO.	DATE	DESCRIPTION OF REVISIONS
1	10/7/79	REVISED FOR "RED-LINE REVISION PROCESS"
2	11/6/79	Revised Channel Detail
3	01/23/79	Revised Water Stations
4	10/11/79	Added Exist. Channel - Plan and Detail. Revised Storm Drain Layout and Added Water Service.
5	9/21/79	Added Lot No's, Added Notes 3, 4 & 5. Corrected Addresses and Title Blocks. See Revision at Drainage Area Sheet 13.
6	8/14/79	Revised Storm Drain Layout. Added 1-13.

N503,000
 OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LEE PATENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
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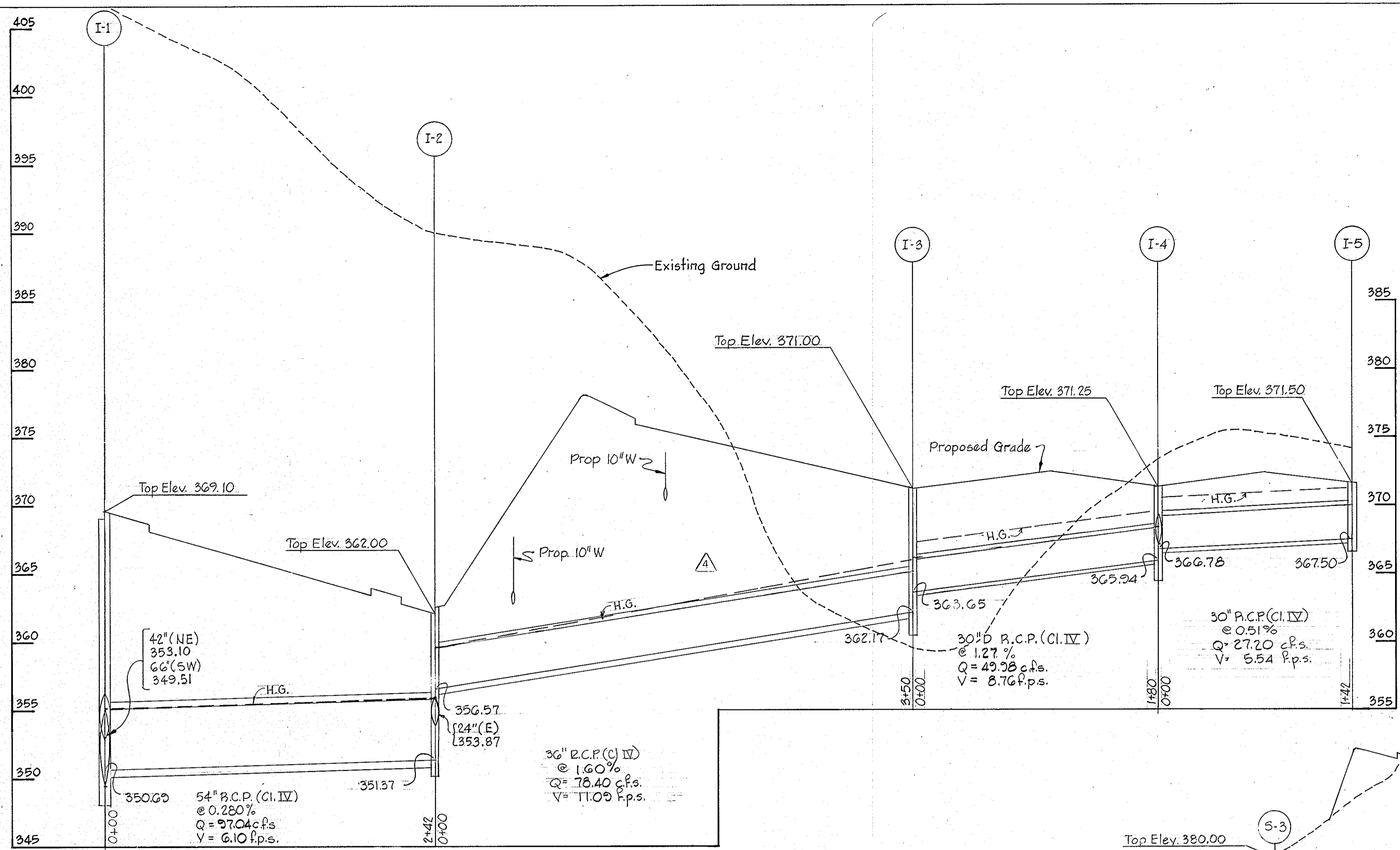
Registered Engineer
 No. 1974

COLUMBIA TOWN CENTER SECTION 2 AREA I LOTS 22, 23 & 25 PART II Recorded in Plat Book Folio COLUMBIA MALL EXPANSION UTILITY PLAN

SHEET 7 OF (19) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1" = 50' or As Shown

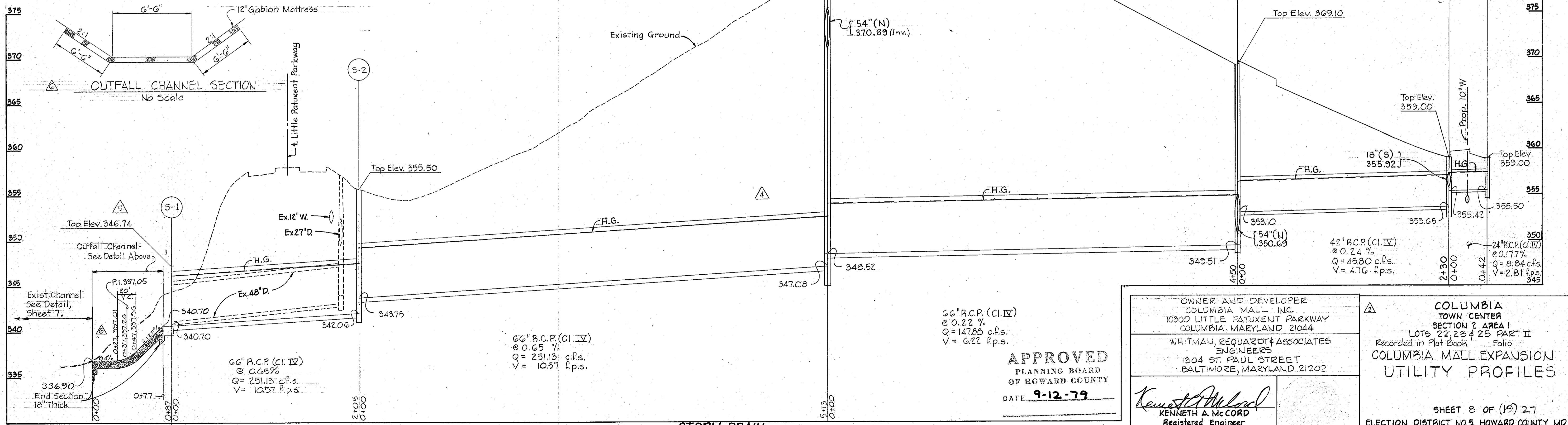
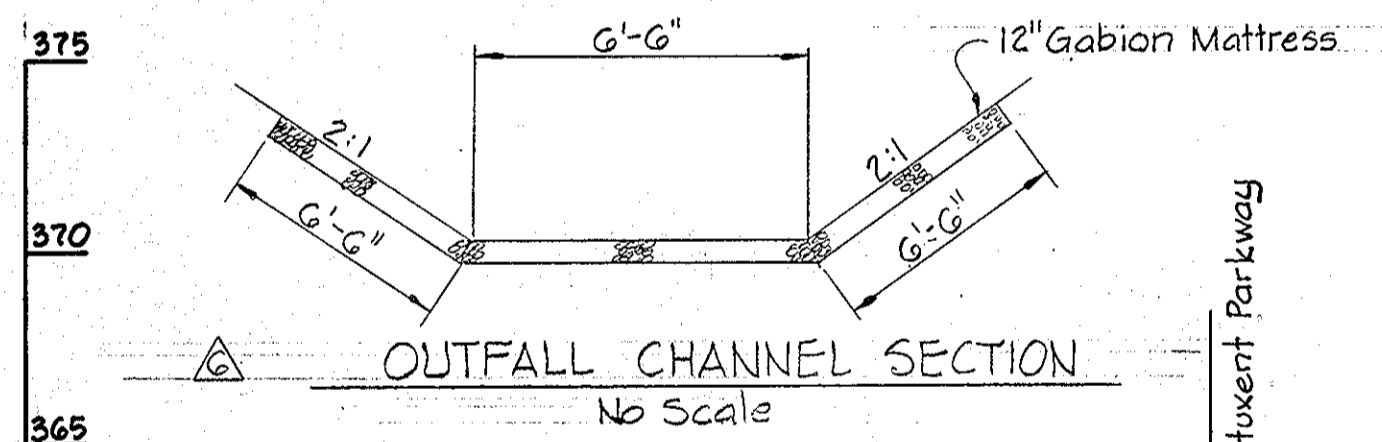
MATCH LINE - SEE SHEET 6-OF 18

No.	DATE	DESCRIPTION OF REVISIONS	APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
△	8-1-79	Redrafted.	<i>[Signature]</i> 12-3-79 DATE
△	8/16/79	Corrected Addresses & Title Block	COUNTY HEALTH OFFICER
△	8/20/79	Corrected Road Grades	APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
△	9/24/79	Revised Storm Drain Profiles	<i>[Signature]</i> 12-7-79 PLANNING DIRECTOR DATE
△	10/11/79	Revised Outfall Channel - Detail & Profile	<i>[Signature]</i> 12-6-79 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
△	11/6/79	Revised Outfall Channel - Detail & Profile	APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
			<i>[Signature]</i> 12-3-79 DIRECTOR DATE
			<i>[Signature]</i> 12-3-79 CHIEF, BUREAU OF ENGINEERING DATE



Note:
Top Elev. of inlets is design Elev.
All inlets are to be depressed 3/4" below Elev. given.

STORM DRAIN
Scale: Hor. 1" = 50'
Vert. 1" = 5'



STORM DRAIN
Scale: Hor. 1" = 50'
Vert. 1" = 5'

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 9-12-79

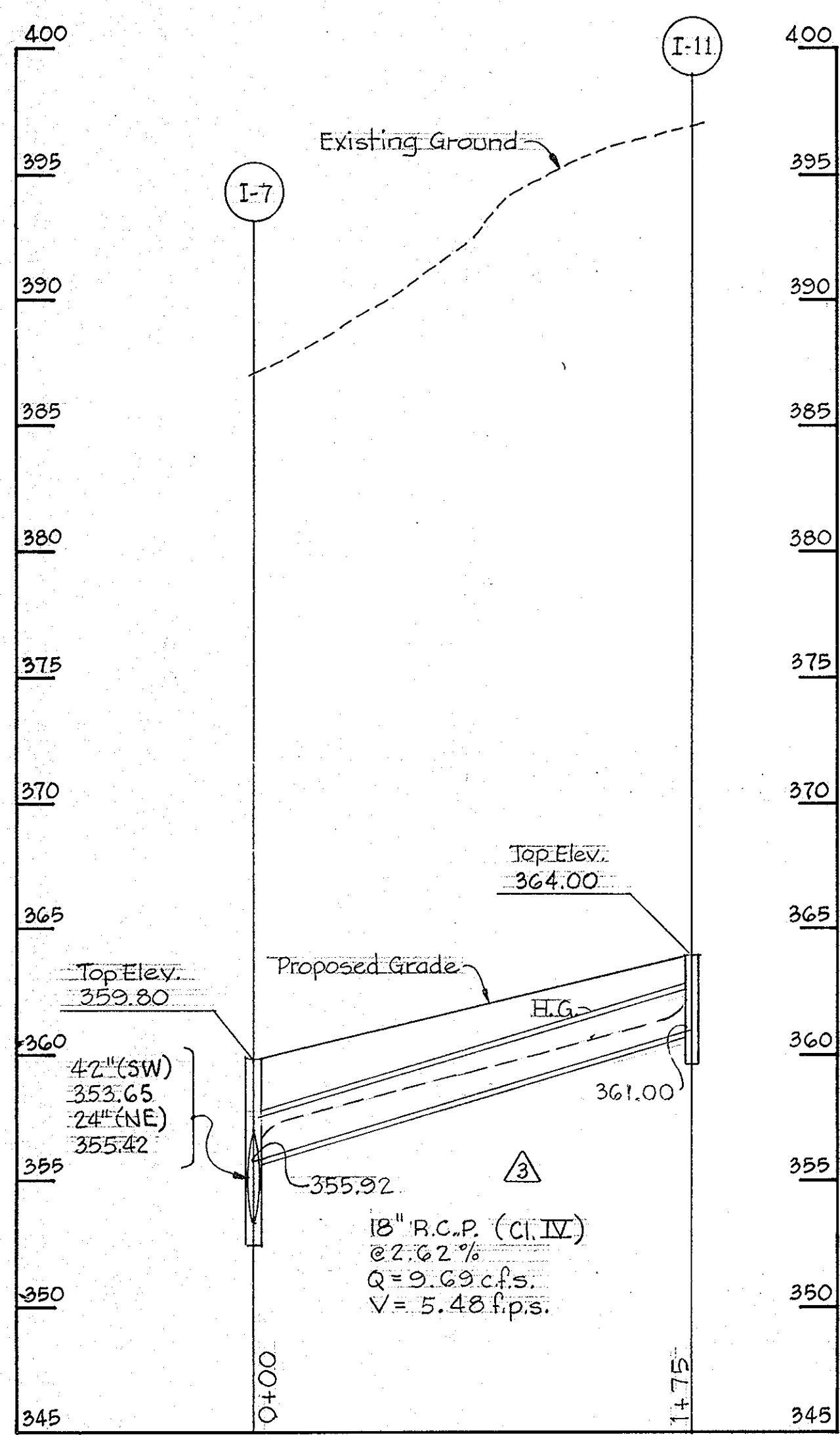
OWNER AND DEVELOPER
COLUMBIA MALL INC.
10300 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL STREET
BALTIMORE, MARYLAND 21202

[Signature]
KENNETH A. McCORD
Registered Engineer
No. 1974

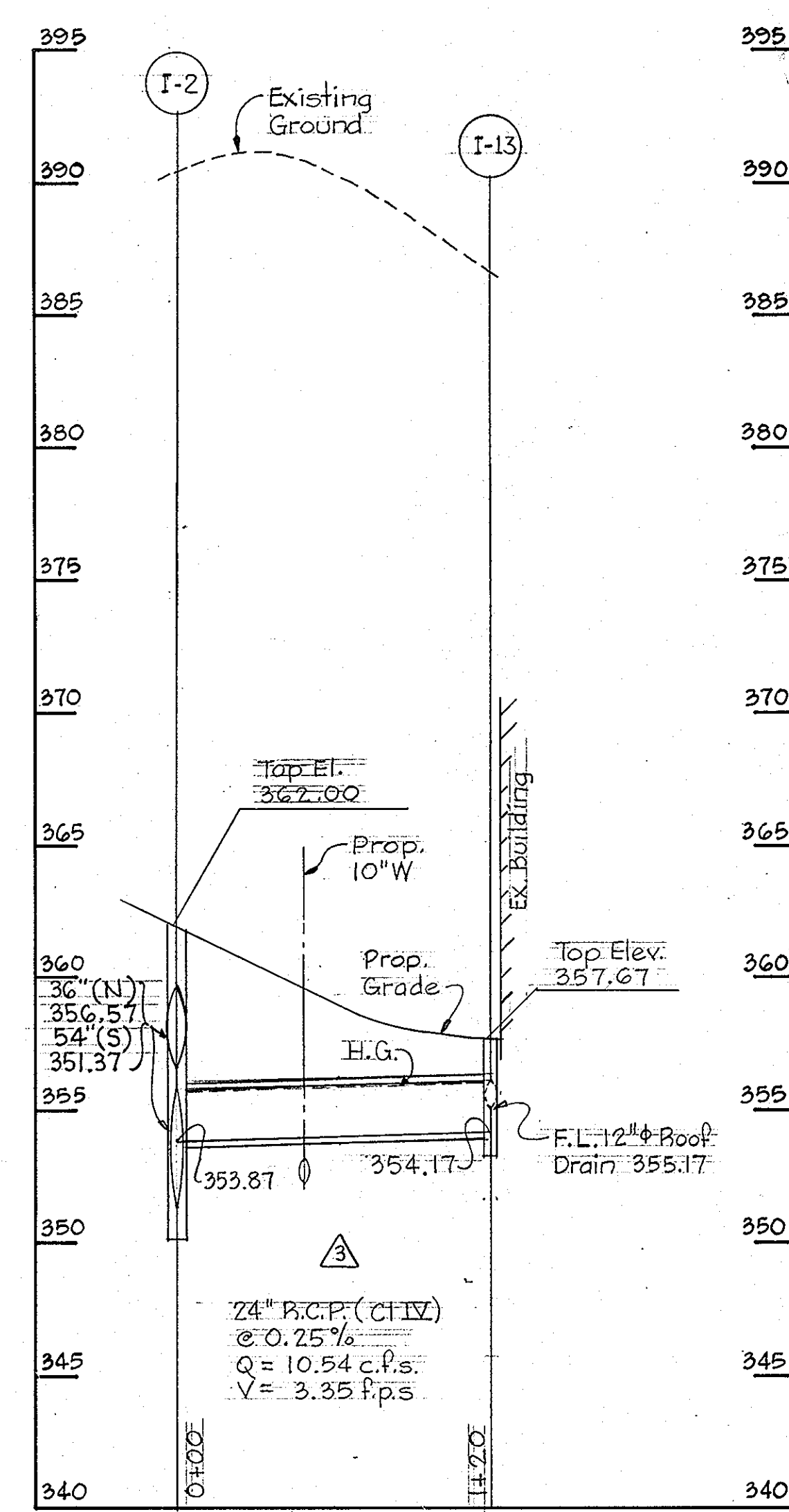
COLUMBIA TOWN CENTER
SECTION 2 AREA I
LOTS 22, 23 & 25 PART II
Recorded in Plat Book Folio
COLUMBIA MALL EXPANSION
UTILITY PROFILES

SHEET 8 OF (19) 2.7
ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
DATE: July 2, 1979 SCALE: AS SHOWN

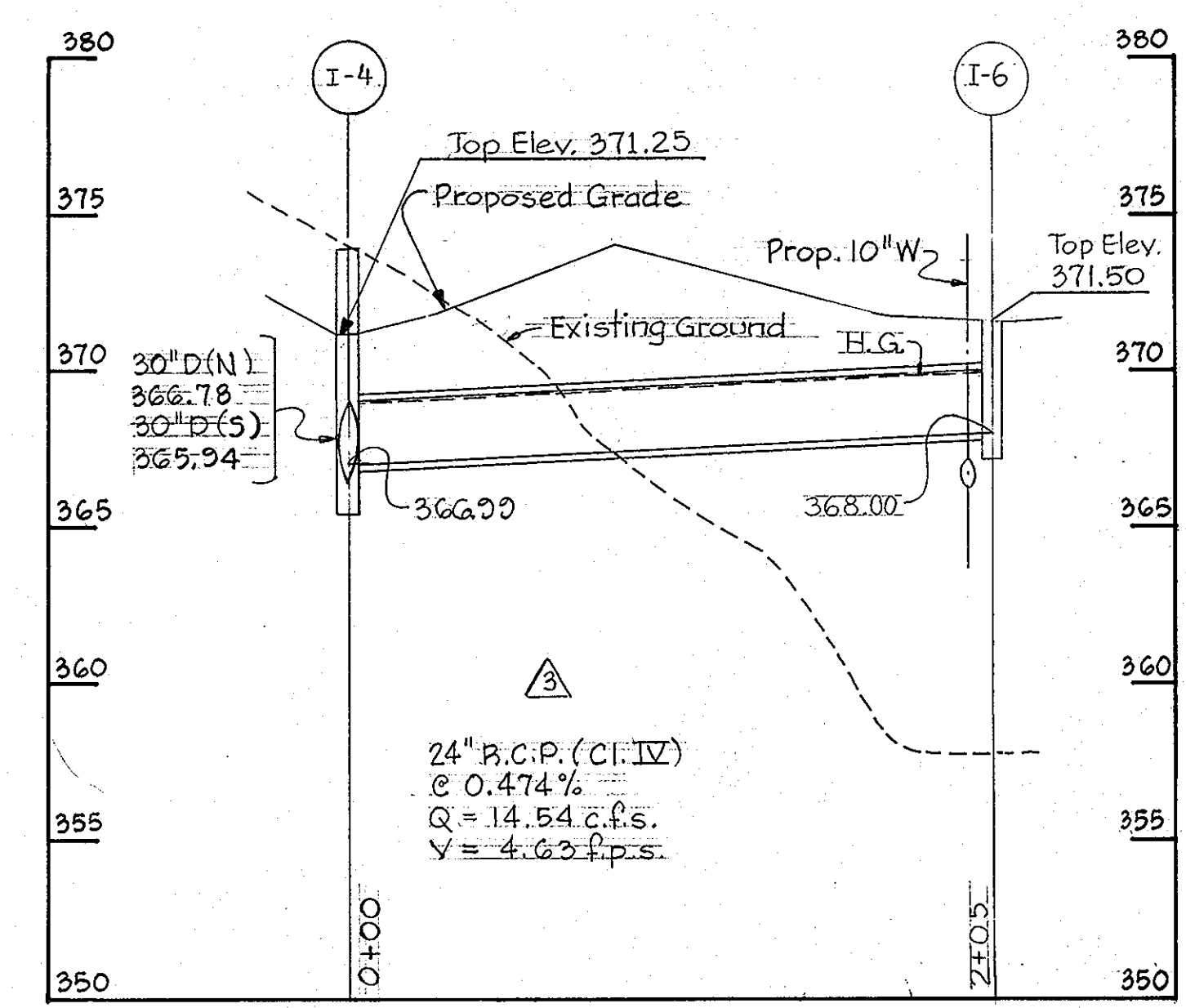
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER DATE 12-5-79
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR DATE 12-7-79
 CHIEF DIVISION OF LAND DEVELOPMENT DATE 12-6-79
 APPROVED: FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING DATE 12-3-79



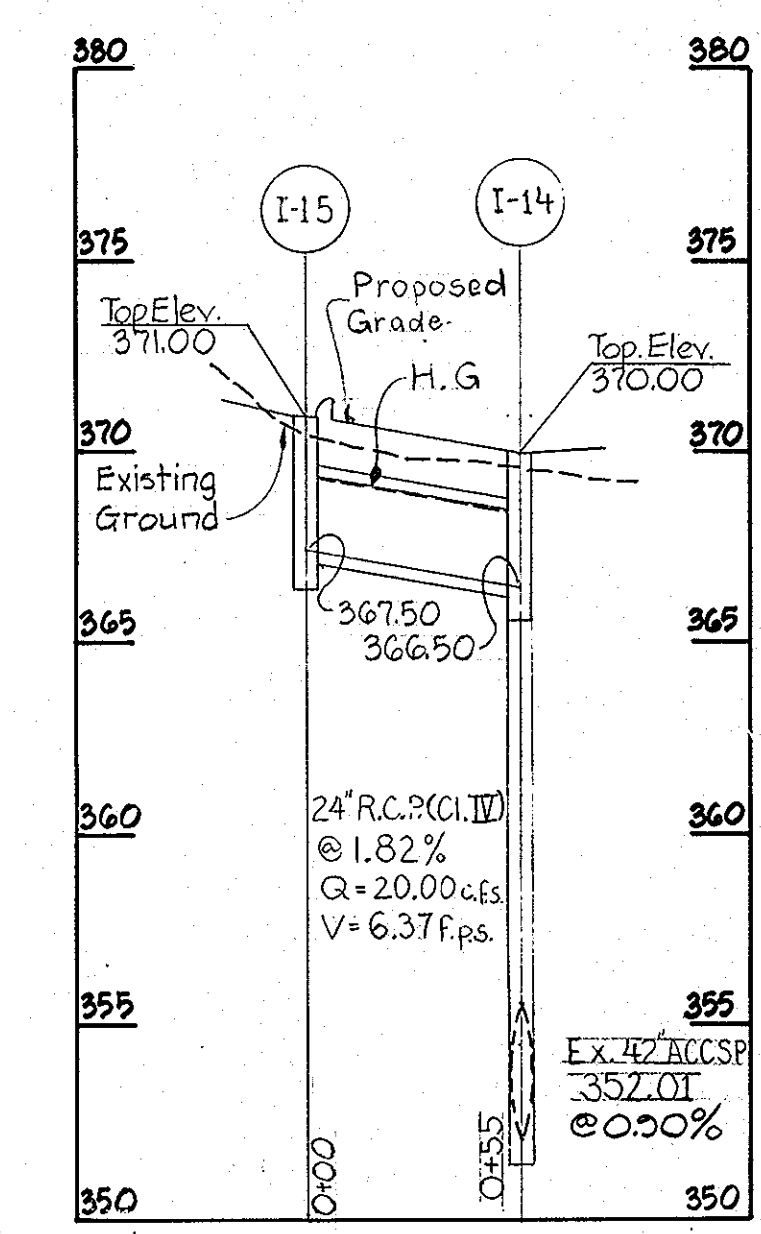
STORM DRAIN
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 Vert. 1" = 5'



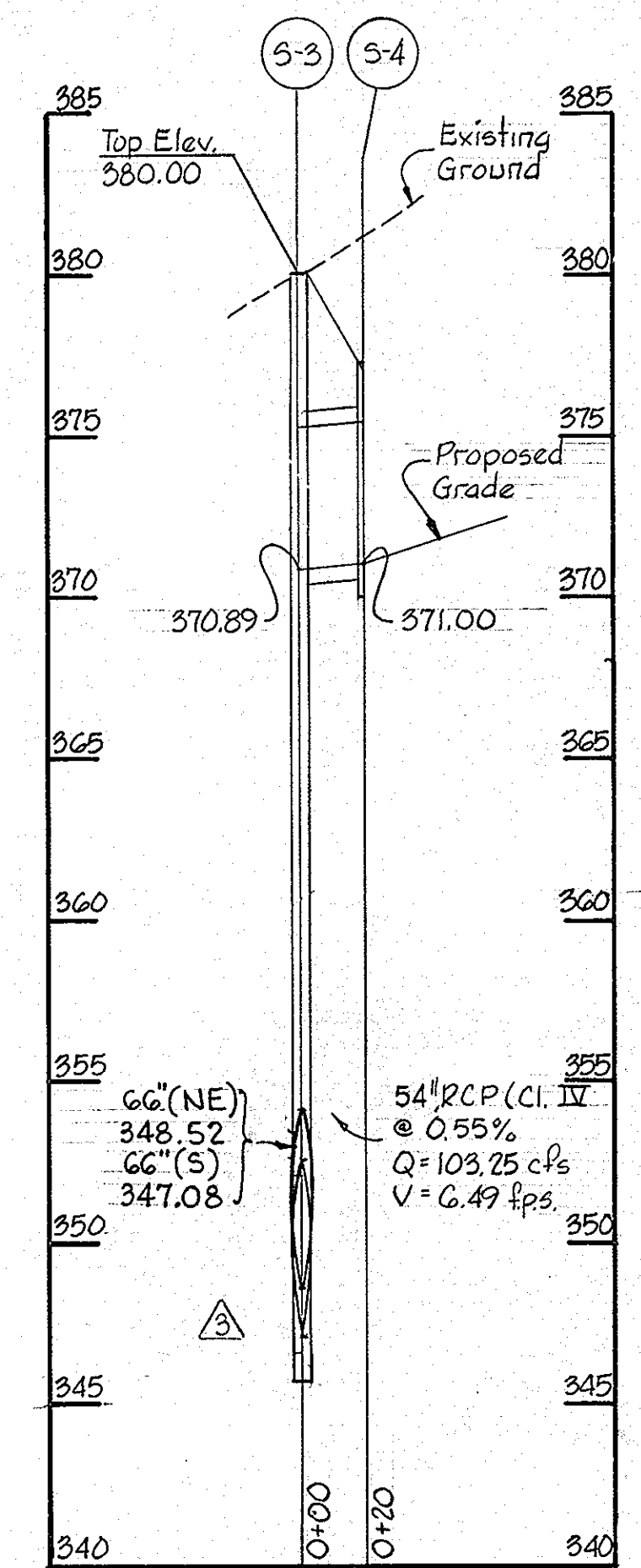
STORM DRAIN
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 Vert. 1" = 5'



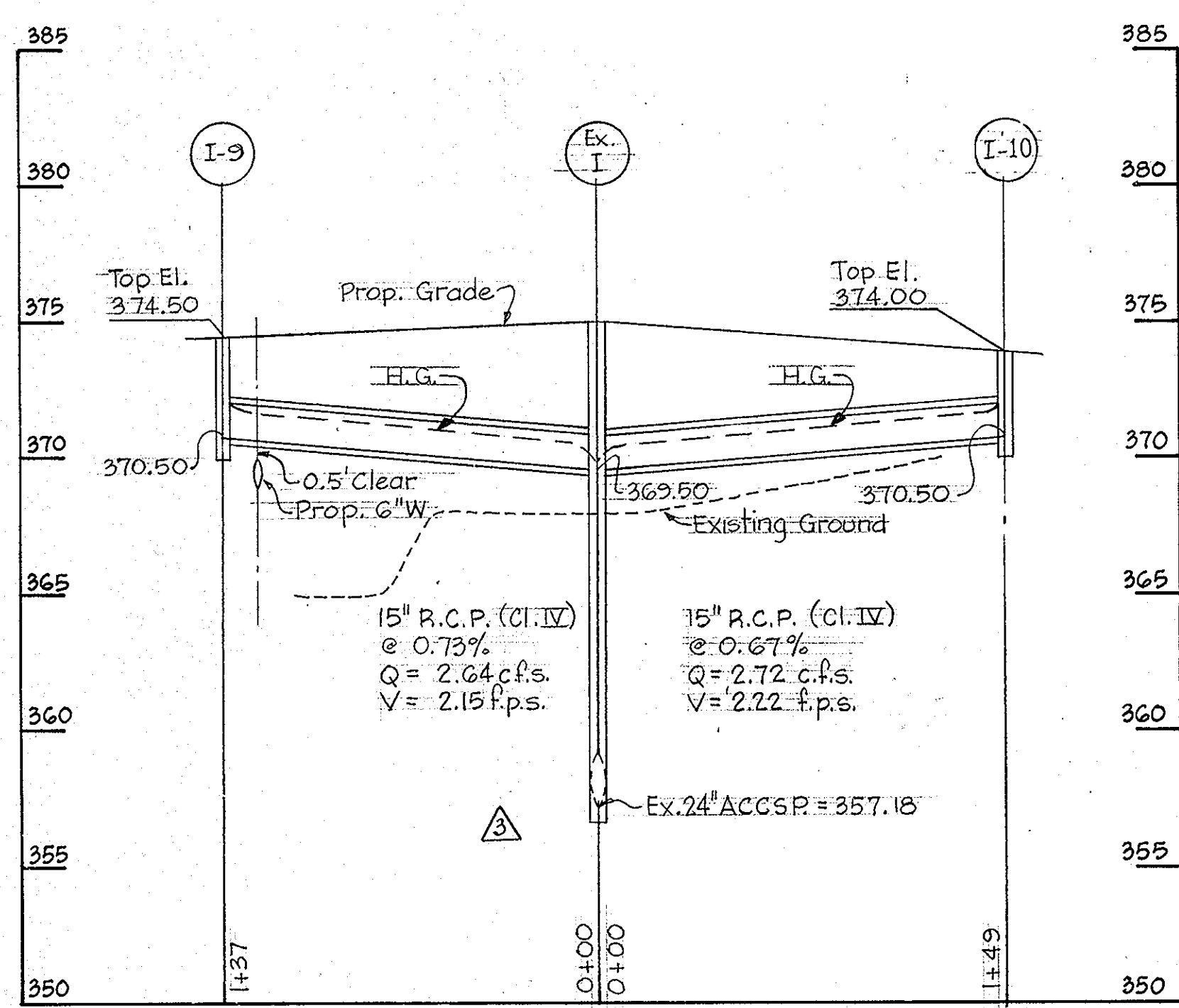
STORM DRAIN
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 Vert. 1" = 5'



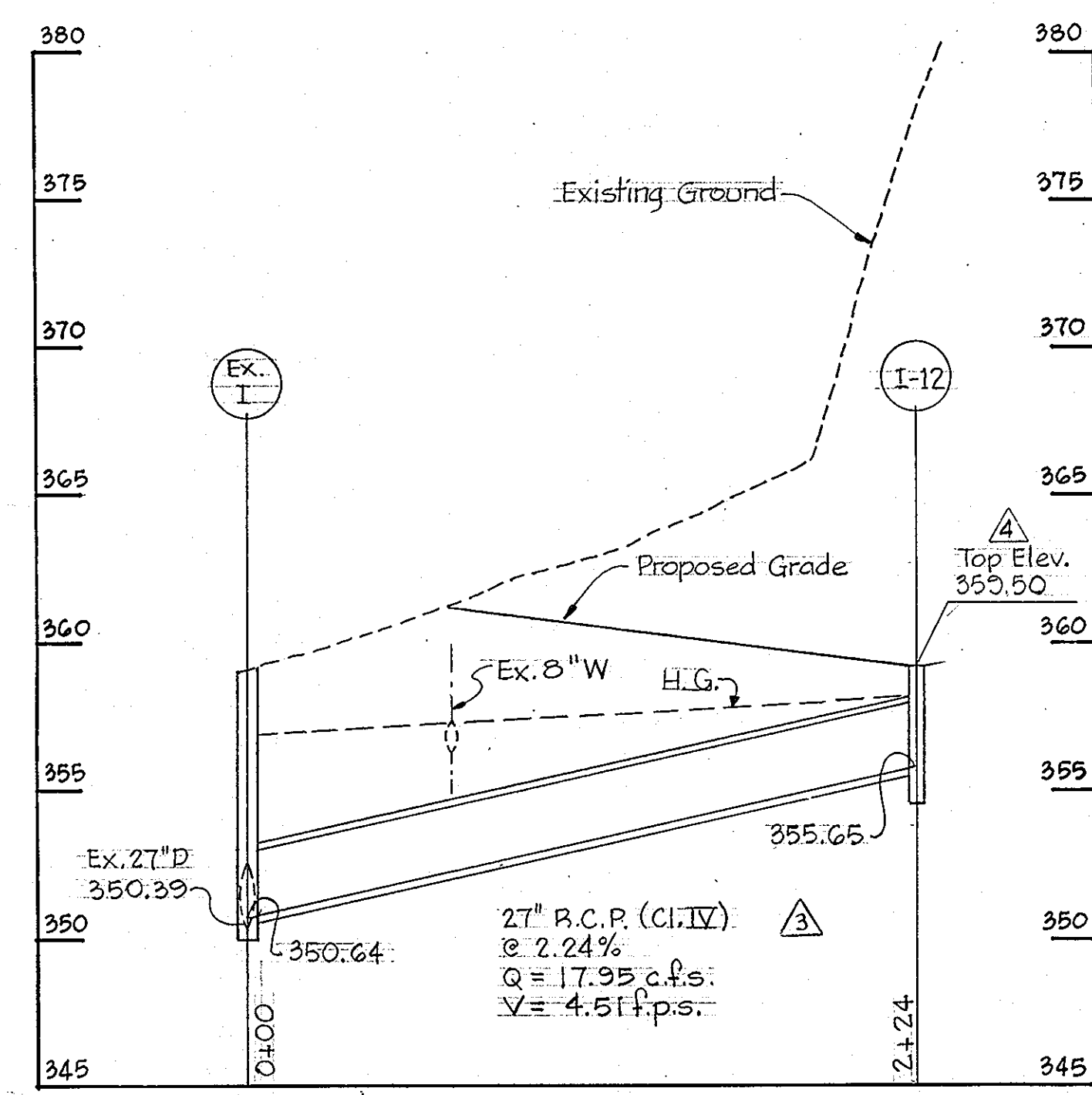
STORM DRAIN
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 Vert. 1" = 5'



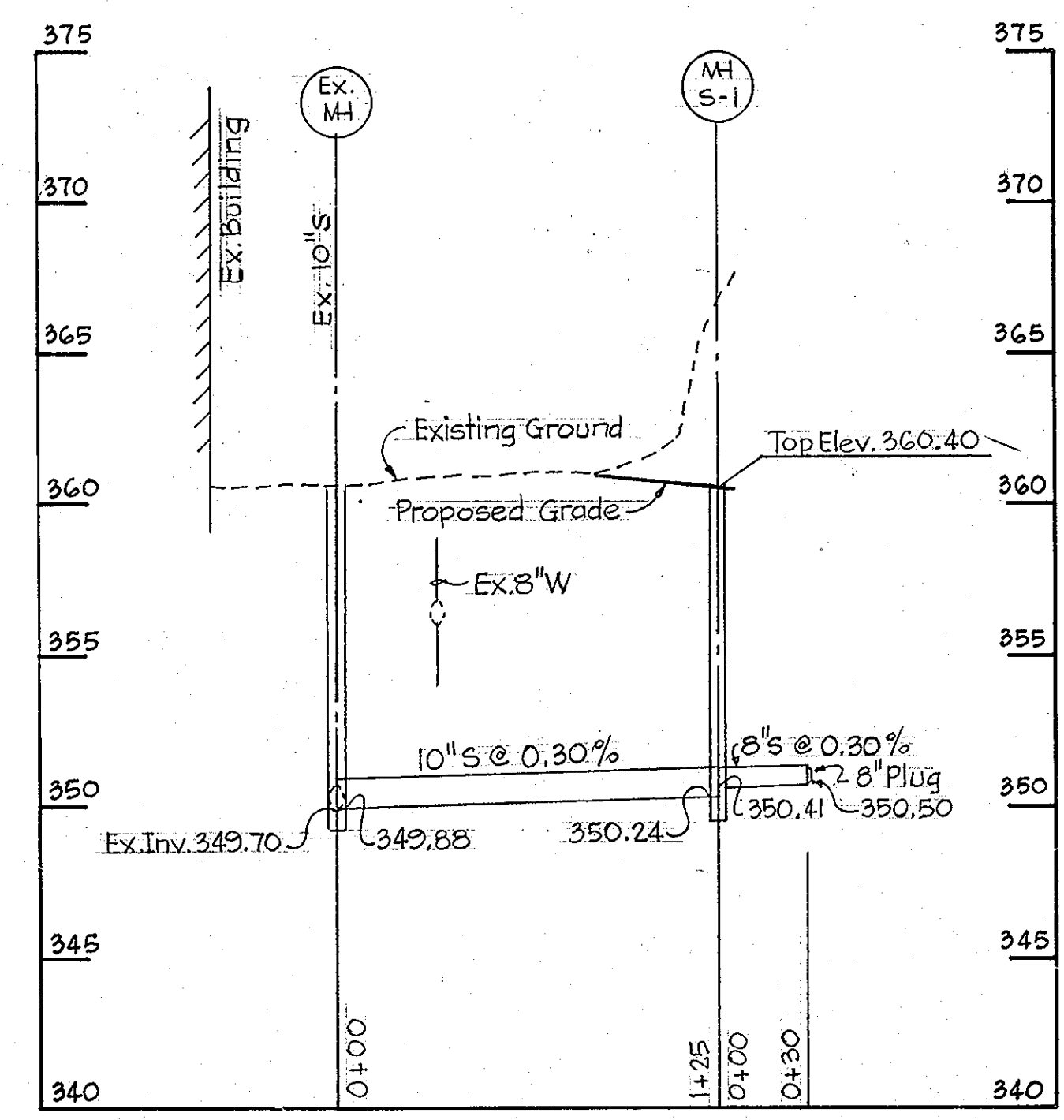
STORM DRAIN
 Scale: Hor. 1" = 50'
 Vert. 1" = 5'



STORM DRAIN
 Scale: Hor. 1" = 50'
 Vert. 1" = 5'



STORM DRAIN
 Scale: Hor. 1" = 50'
 Vert. 1" = 5'



SANITARY SEWER
 Scale: Hor. 1" = 50'
 Vert. 1" = 5'

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
 [Signature]

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 ENGINEERS
 WHITMAN, REQUARDT & ASSOCIATES
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

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

NO.	DATE	DESCRIPTION OF REVISIONS
1	10/23/79	Revised Top Elevation of I-12
2	9/24/79	Revised Storm Drain Profiles
3	8/16/79	Corrected Addresses & Title Block
4	8/14/79	Redrafted for New Storm Drains

COLUMBIA
 TOWN CENTER
 SECTION 2 AREA I
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION
 UTILITY PROFILES

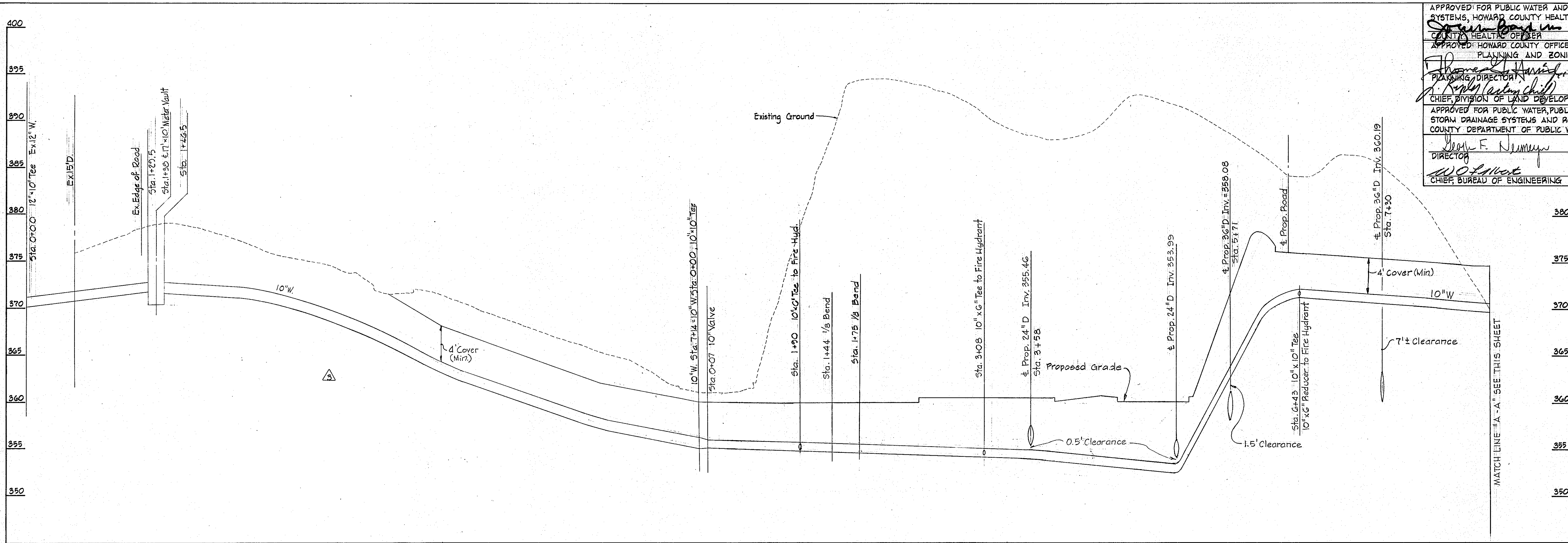
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Stephen Boyd 12-5-79
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Thomas A. Davis 12-7-79
 PLANNING DIRECTOR DATE

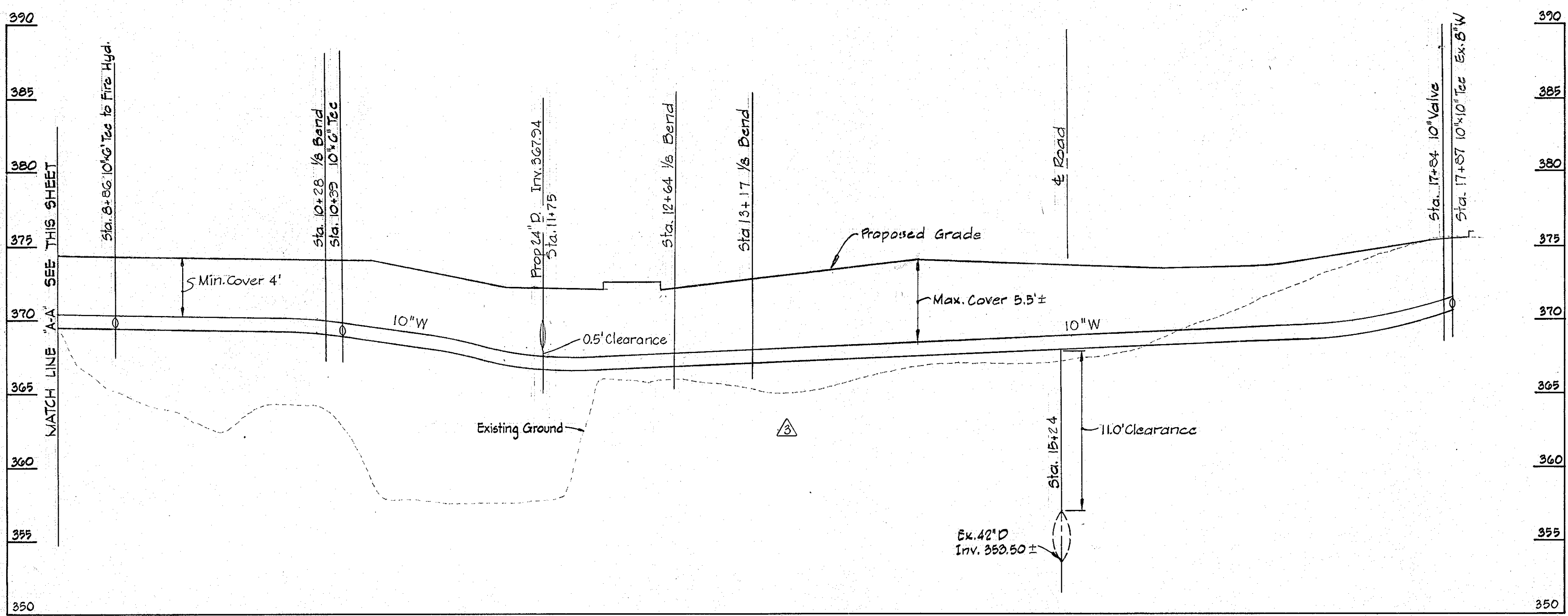
Robert L. Child 12-6-79
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
John F. Neuman 12-3-79
 DIRECTOR DATE

W. O. Smet 12-3-79
 CHIEF, BUREAU OF ENGINEERING DATE



WATER MAIN
 SCALE: Hor: 1" = 50'
 Vert: 1" = 5'



WATER MAIN
 SCALE: Hor: 1" = 50'
 Vert: 1" = 5'

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
W. O. Smet

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

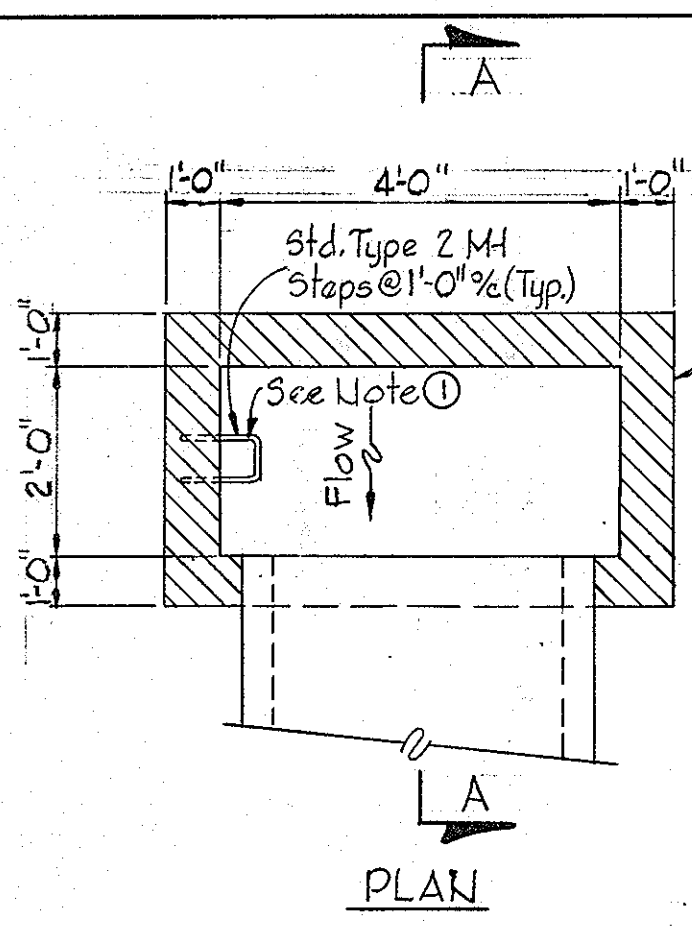
WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

Kenneth A. Mc Cord
 KENNETH A. MC CORD
 Registered Engineer
 No. 1974

NO.	DATE	DESCRIPTION OF REVISIONS
5	10/25/79	Revised Water Stations
2	8/16/79	Corrected Addresses & Title Block

COLUMBIA TOWN CENTER SECTION 2 AREA I
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION
 UTILITY PROFILES

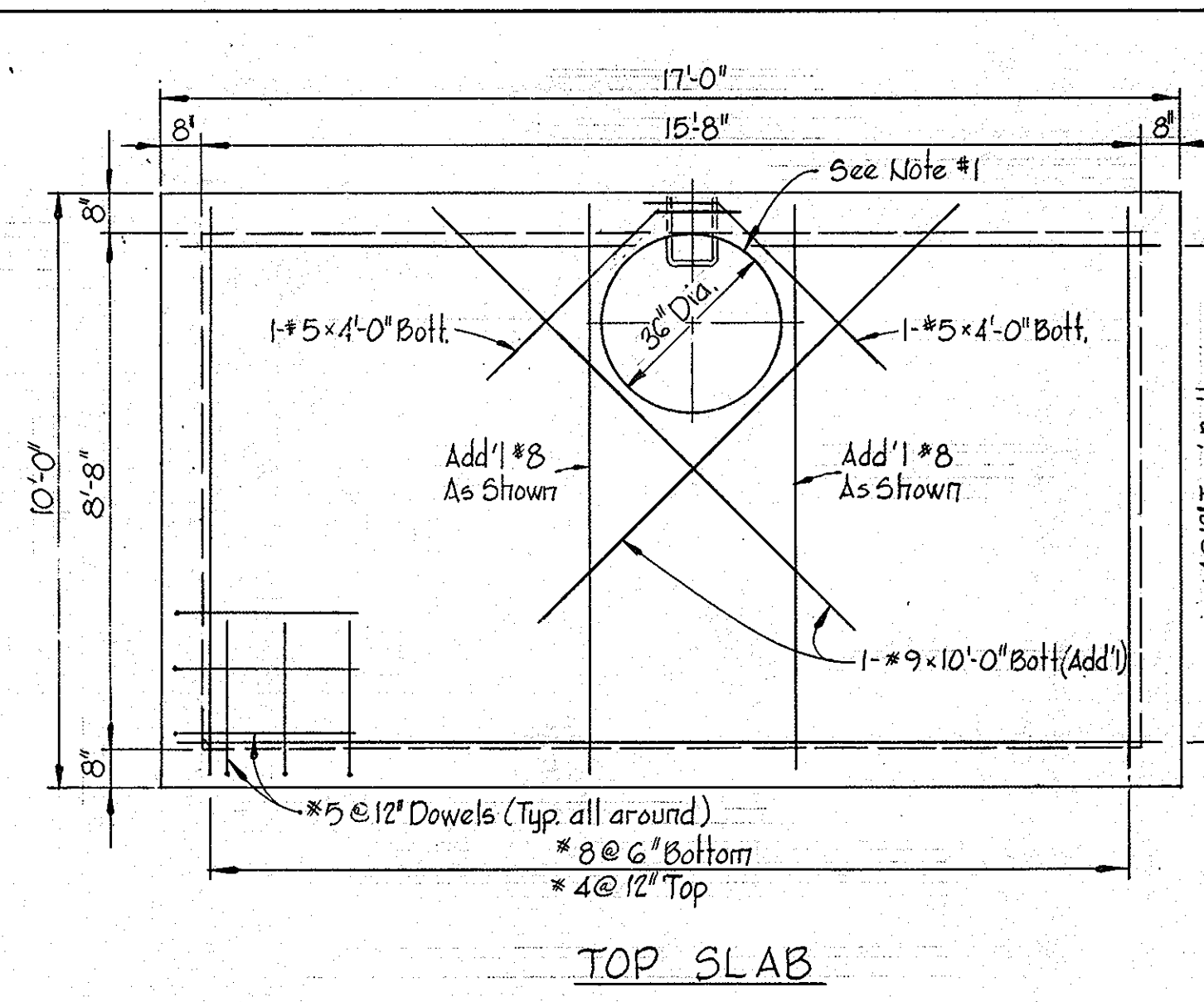
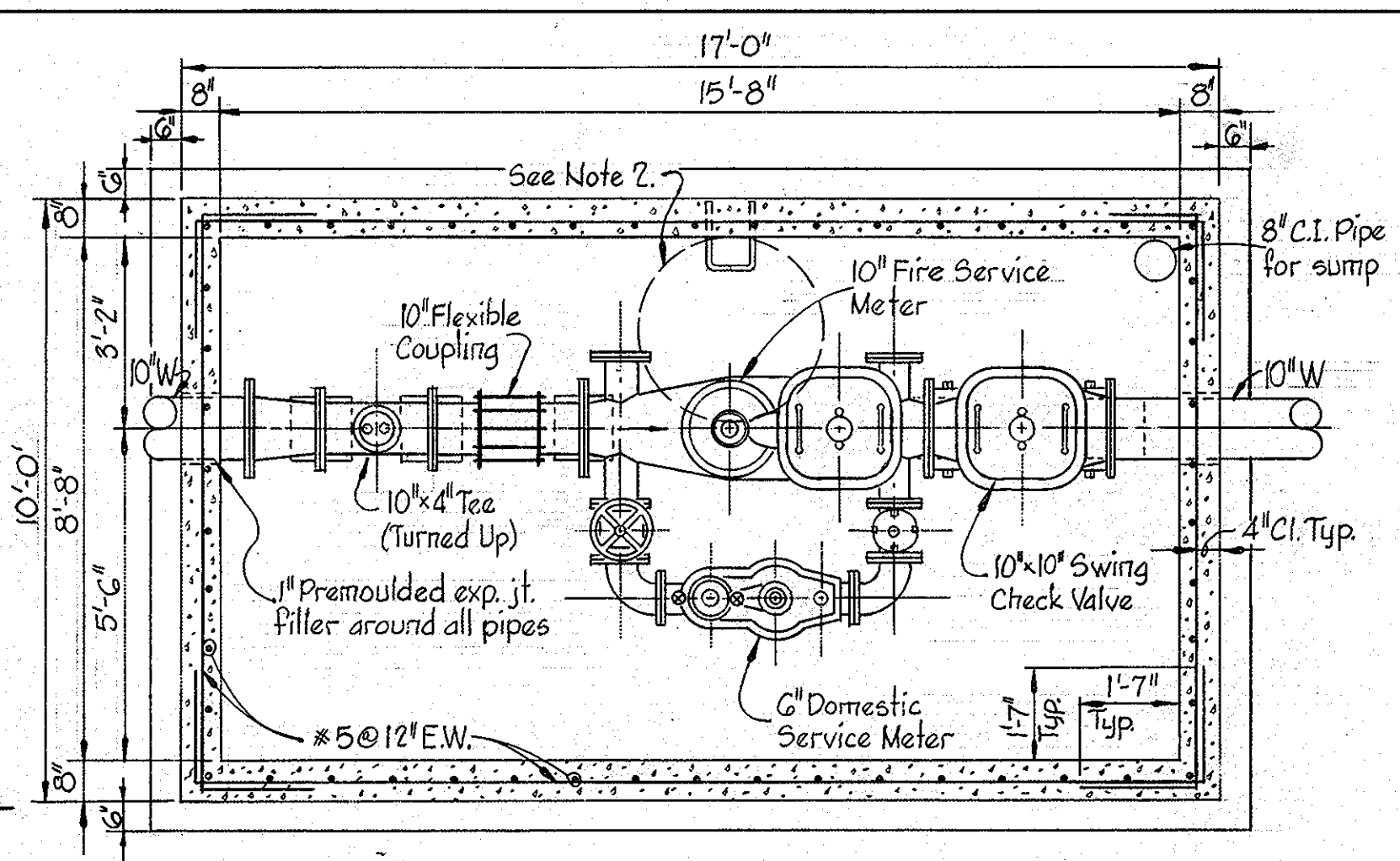
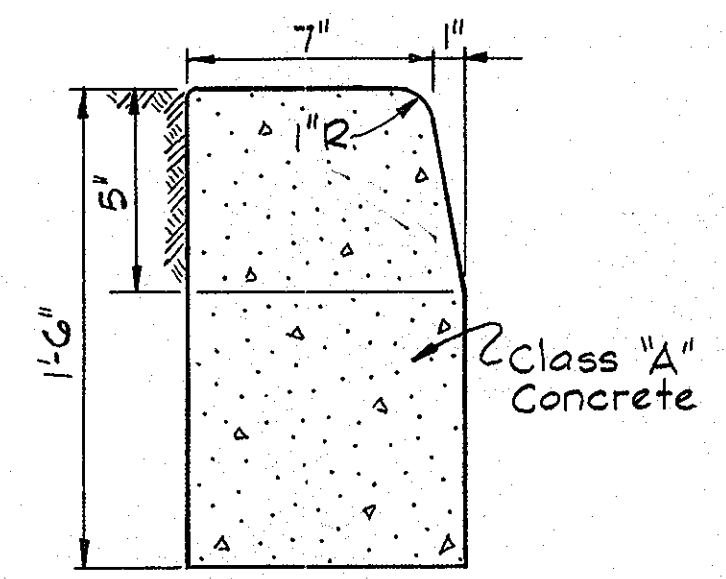
SHEET 10 OF (18) 2-7
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: As Shown



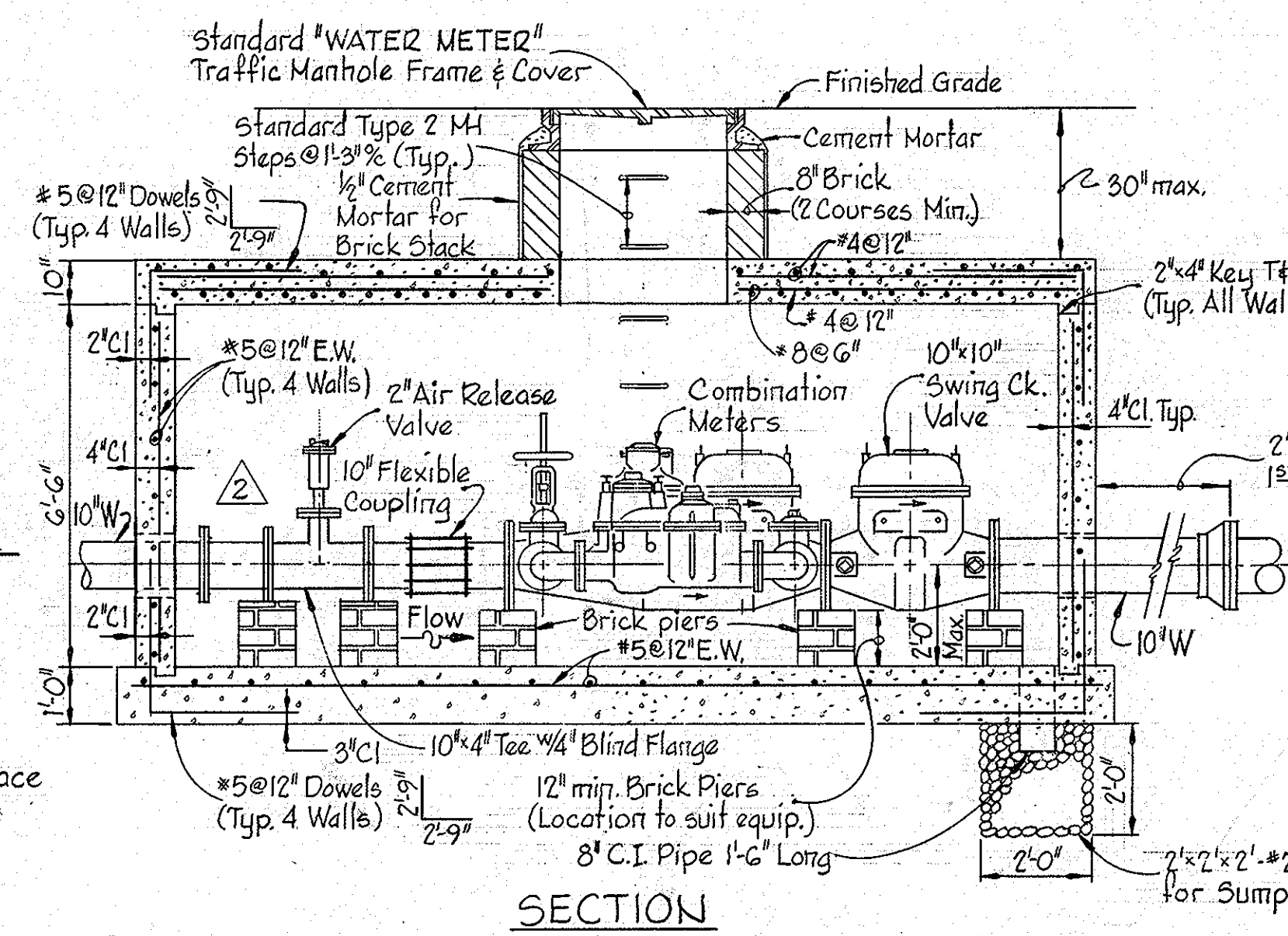
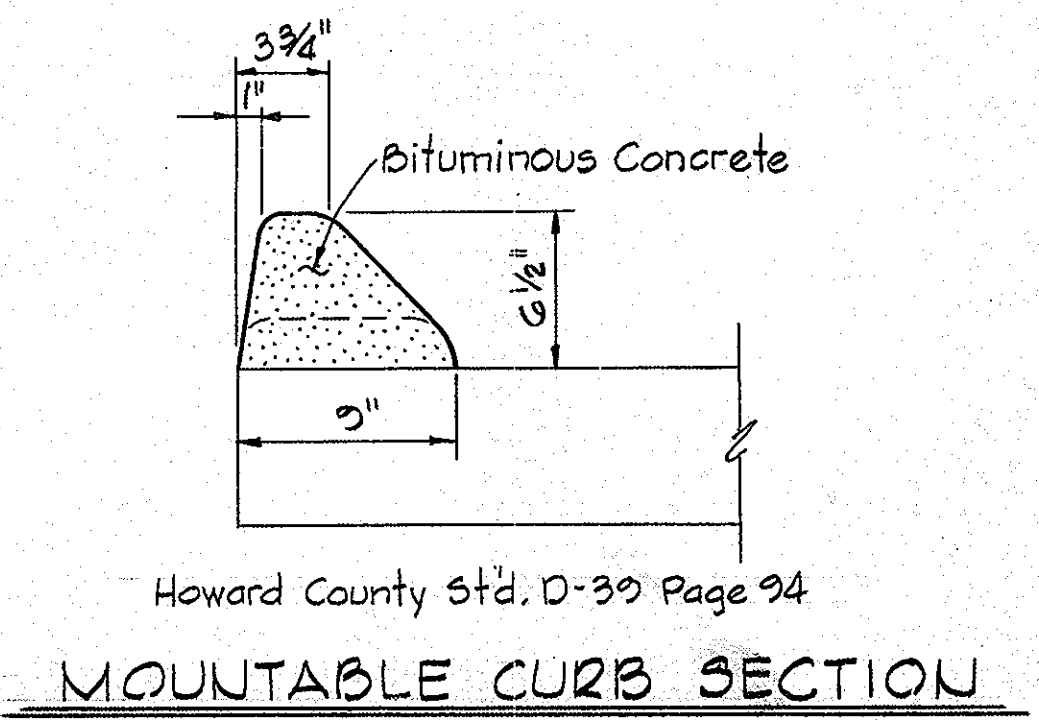
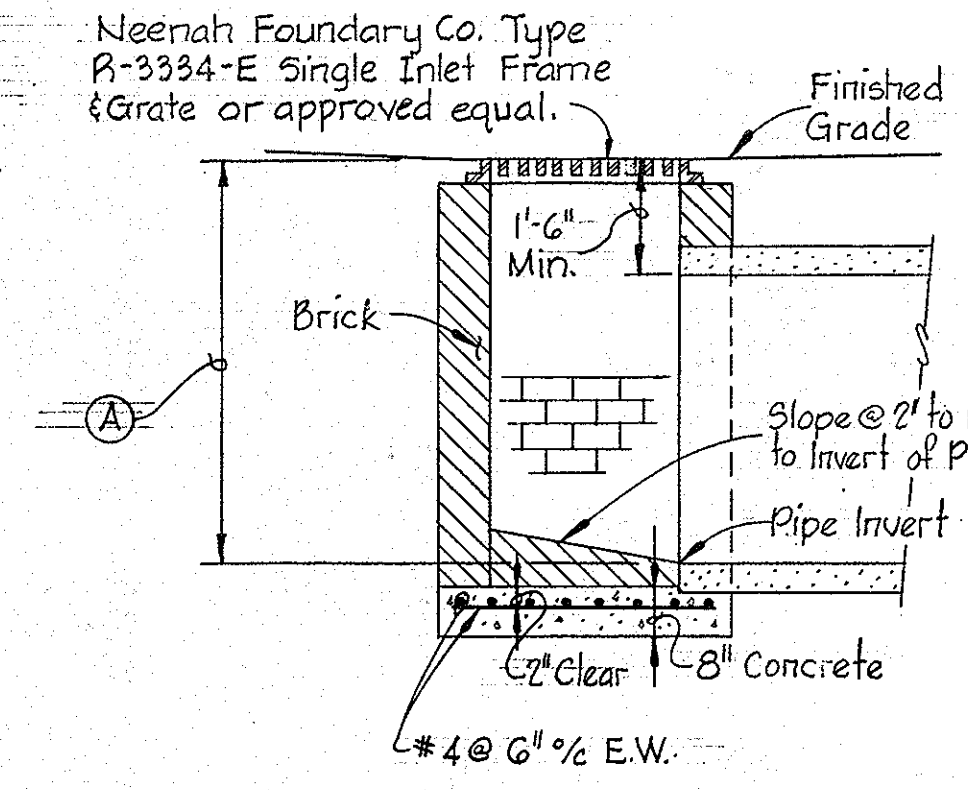
ALTERNATE: Reinforced Concrete Inlet

Note ①
Standard Type 2 MH Steps required where (A) is greater than 3'-6". See SECTION A-A.

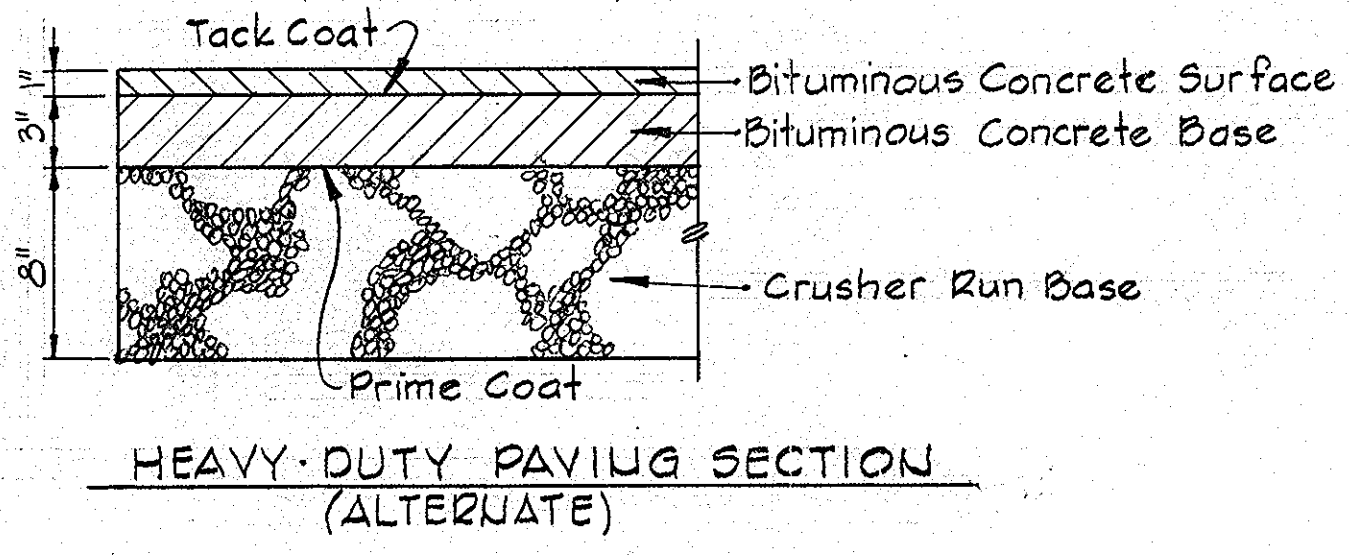
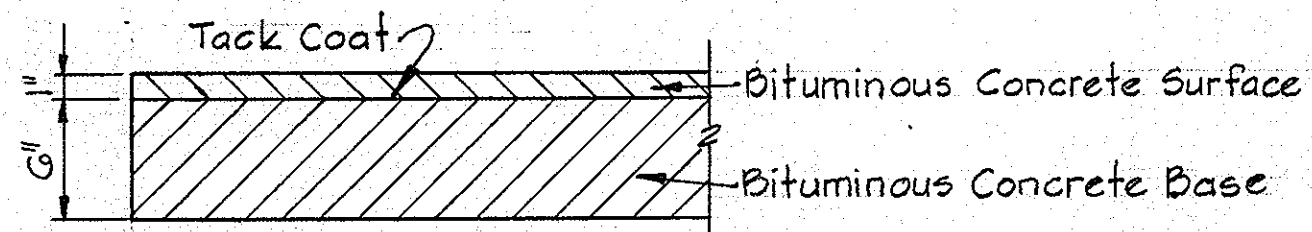
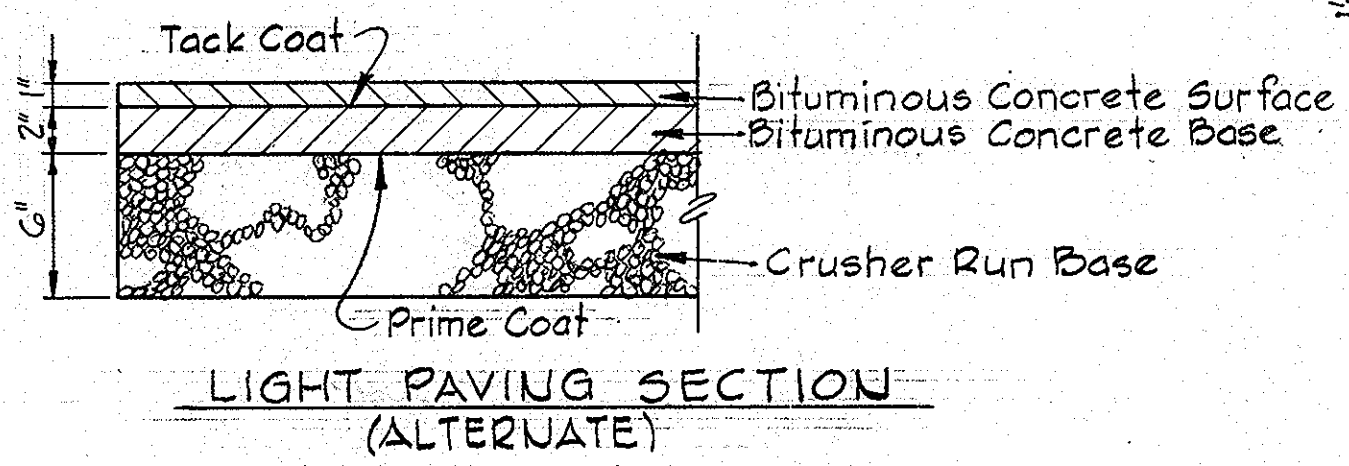
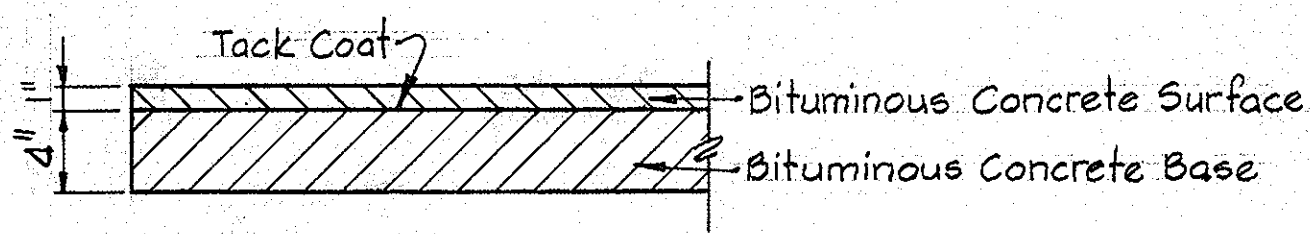
STANDARD BARRIER CURB



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER 12-5-79 DATE
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR 12-7-79 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT 12-6-79 DATE
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR 12-3-79 DATE
 CHIEF, BUREAU OF ENGINEERING 12-3-79 DATE

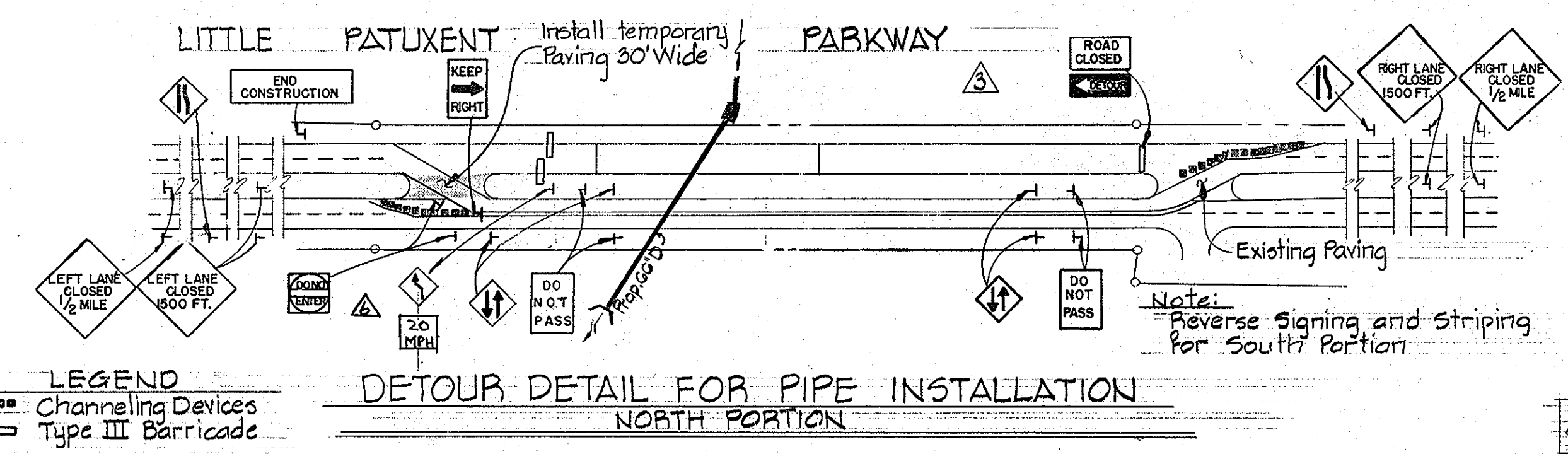


NOTES:
 1. For locations of all openings in vault, refer to Manufacturer's Specifications.
 2. Manhole opening to be located as to allow visual access of Meter gauge.
 3. All construction shall be in accordance with the Howard County Standard Details and Specifications.
 4. All concrete shall be 3,000 psi. min. strength @ 28 days.
 5. Reinforcing Bars - ASTM, A615 Grade 60.



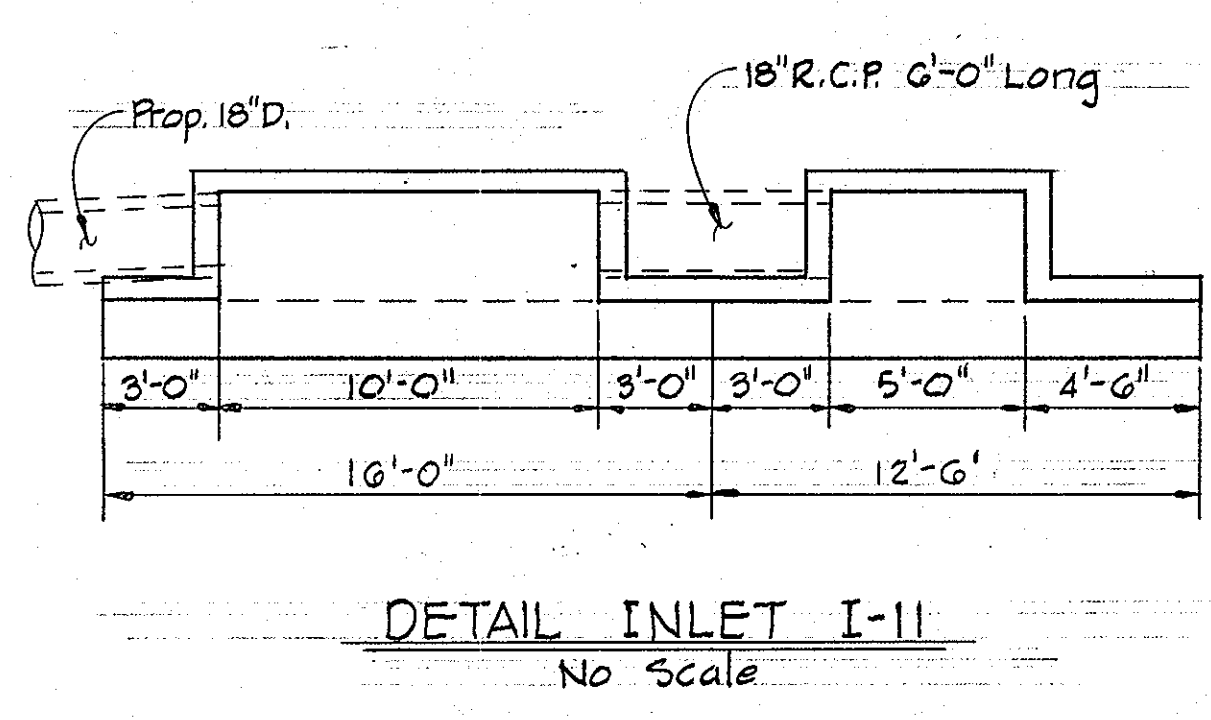
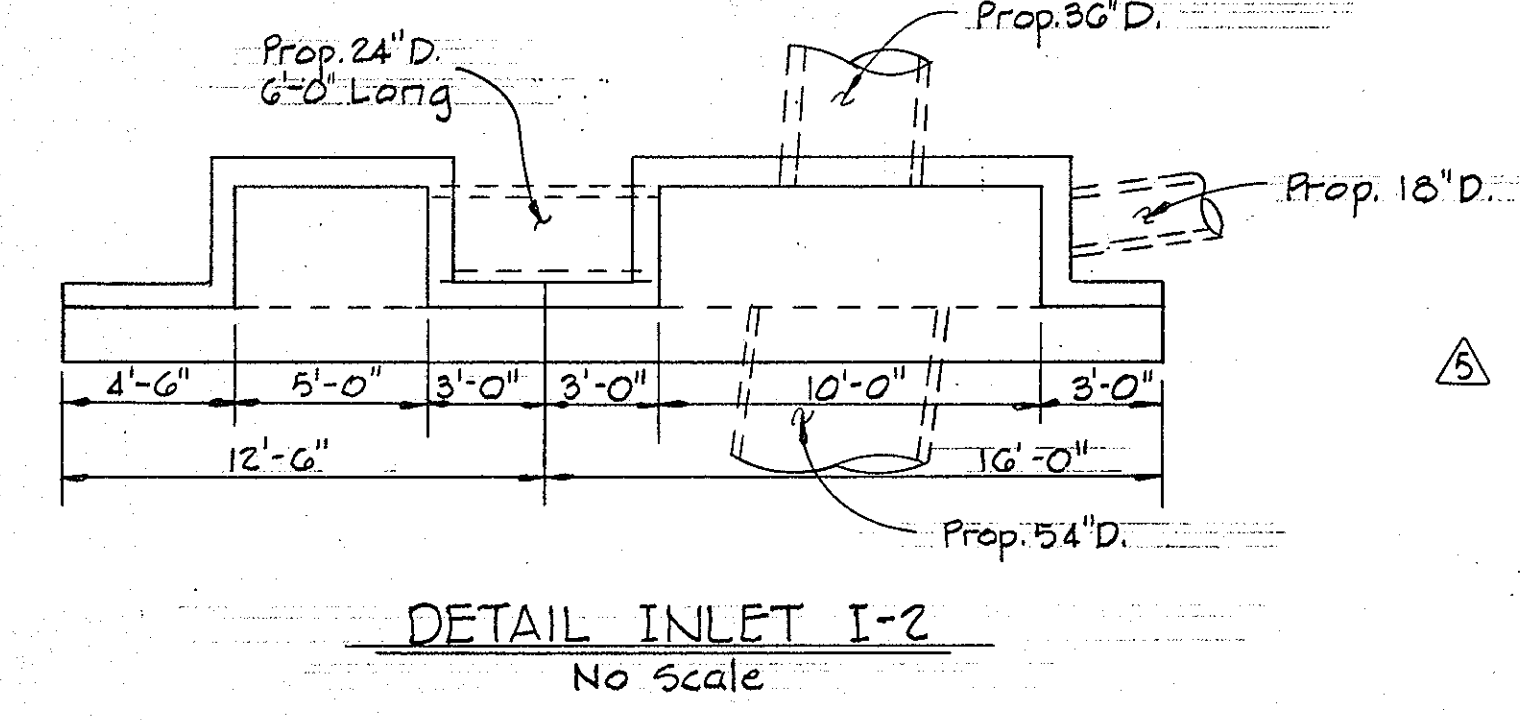
Notes:
 1. Tack Coat is required in accordance with Section C-31-4 of the Howard County Road Construction Code and Standard Specifications.
 2. Base will be primed (where applicable) in accordance with Section C-30-3 provided in the Howard County Road Construction Code and Standard Specifications.

PAVING DETAILS



LEGEND
 Type II Barricade
 Channelling Devices
 Type III Barricade

SEQUENCE OF CONSTRUCTION FOR PIPE INSTALLATION
 1. Install temporary paving, and place signs, barricades, and striping as shown.
 2. Install north half of 66" R.C.P. from center line of Little Patuxent Parkway
 3. Upon completion of backfill, replace paving and reverse signing and striping.
 4. Install south portion of 66" R.C.P.
 5. Upon replacement of paving in south, remove temporary paving and striping and all signing.



APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY

DATE 9-12-79

11/24/79	Added Sign #1 Type of Barricade
1/25/79	Added Sequence of Construction, Added Details I-2 & I-11
10/1/79	Revised Paving Section
2/25/79	Revised Inlet Numbers, Added Detour Detail
2/25/79	Corrected Addresses & Title Block

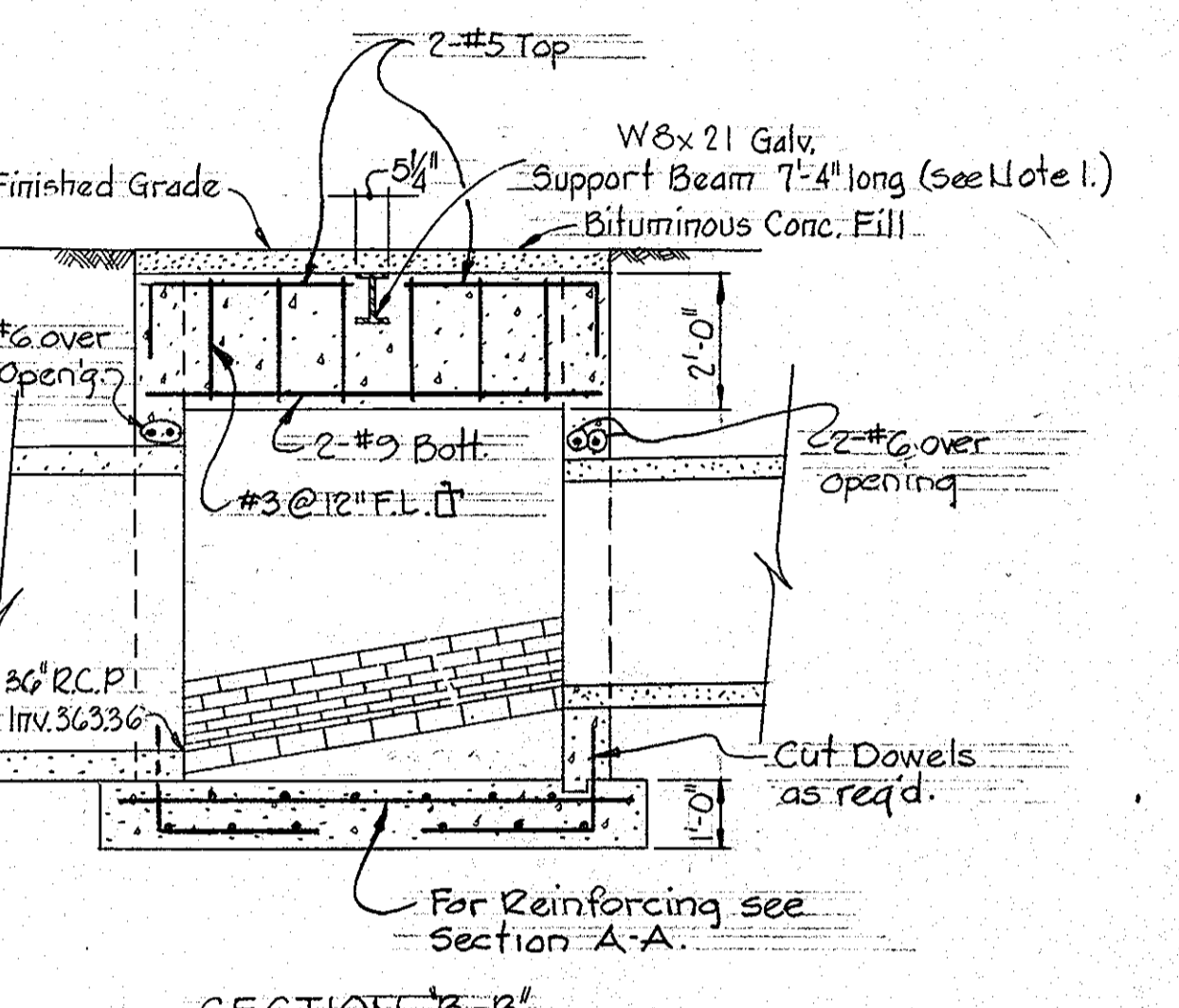
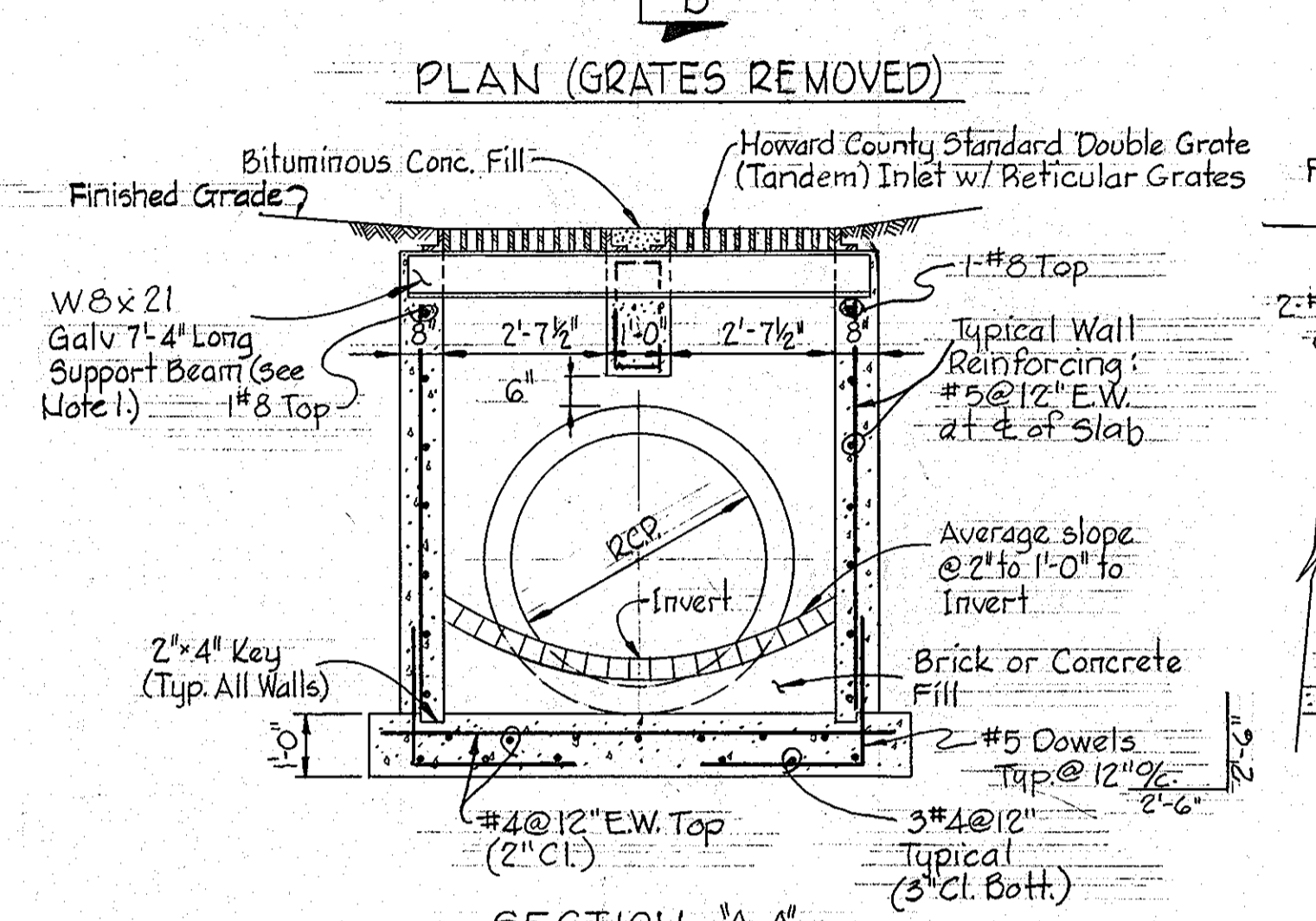
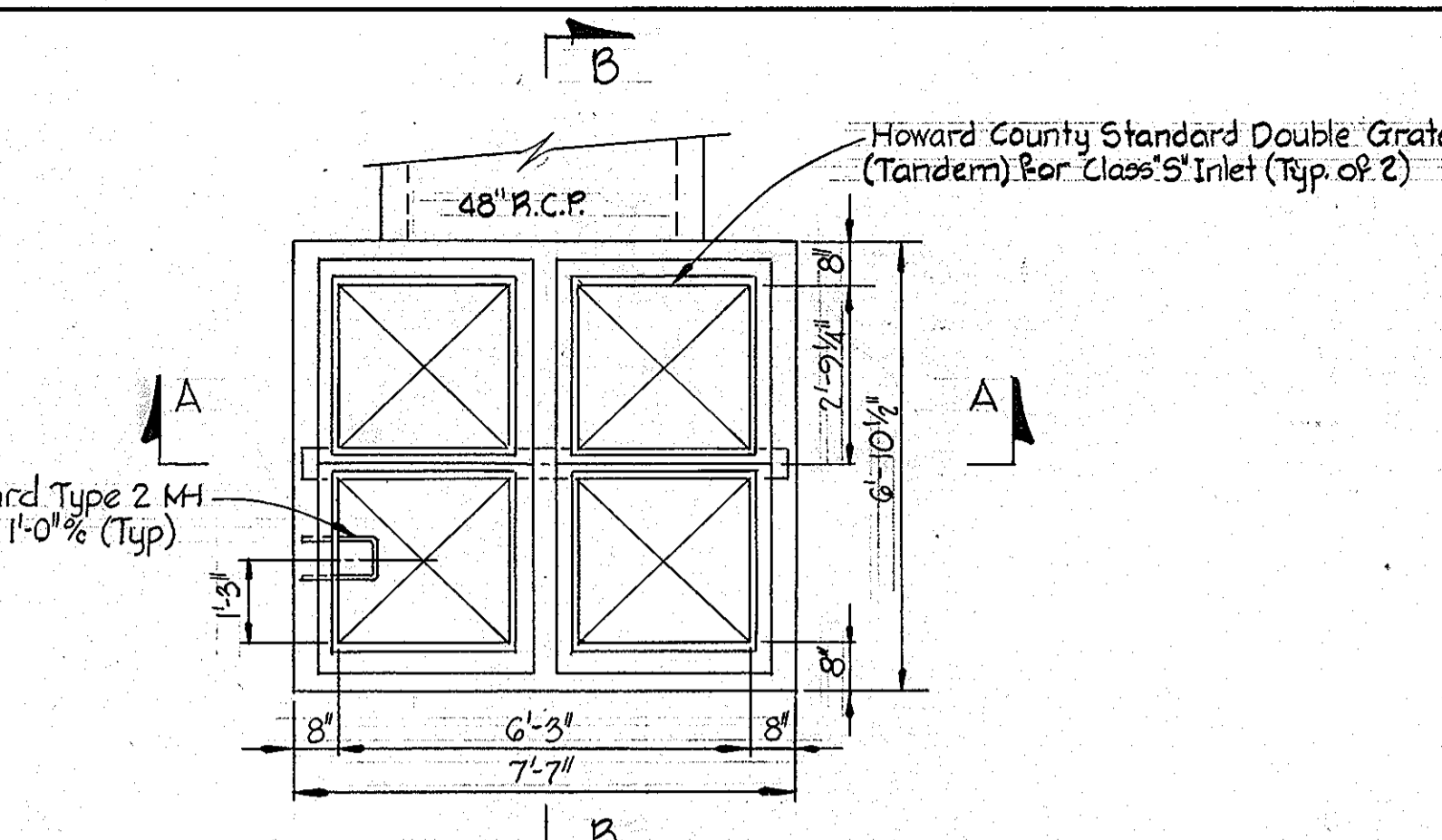
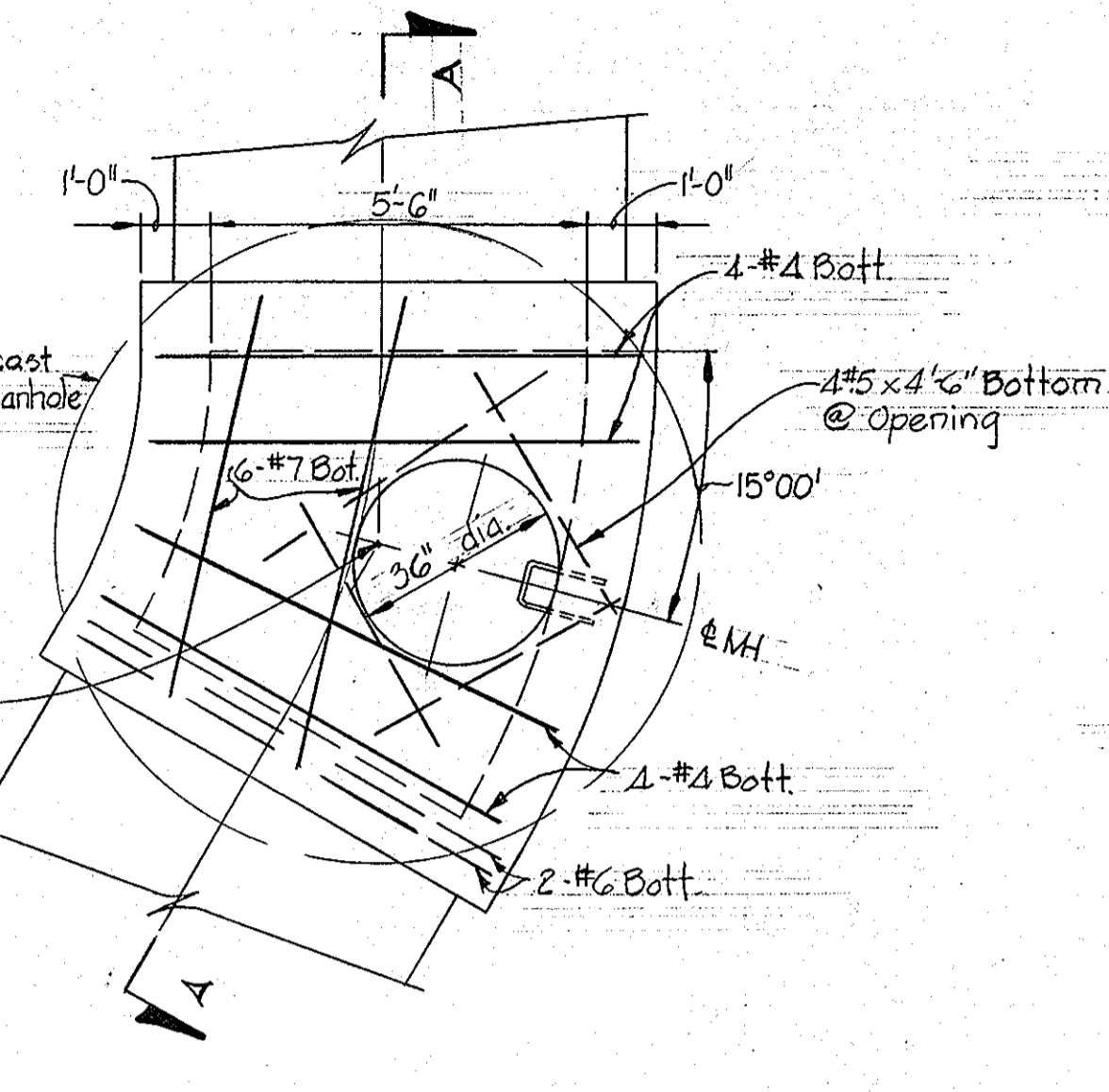
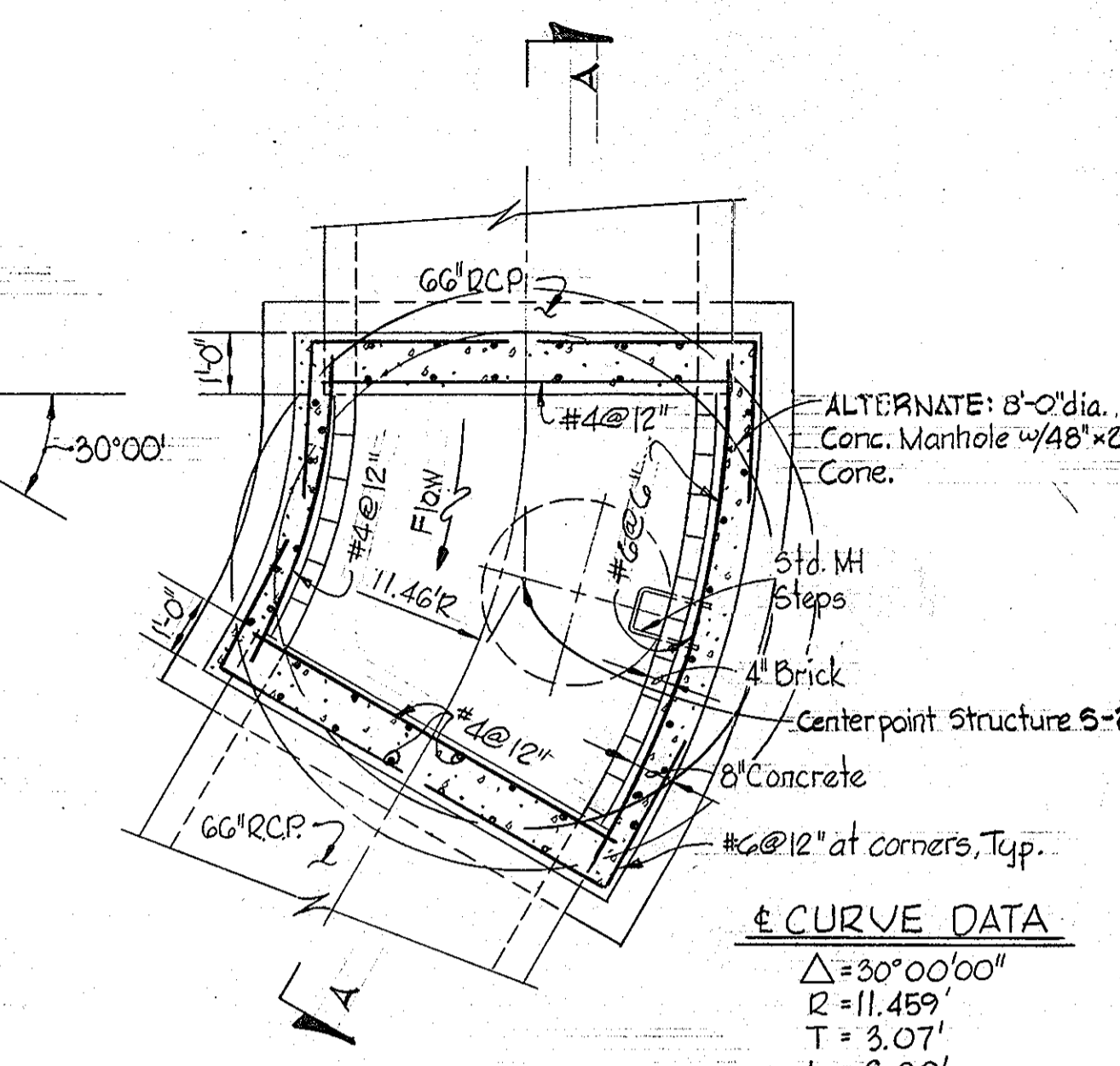
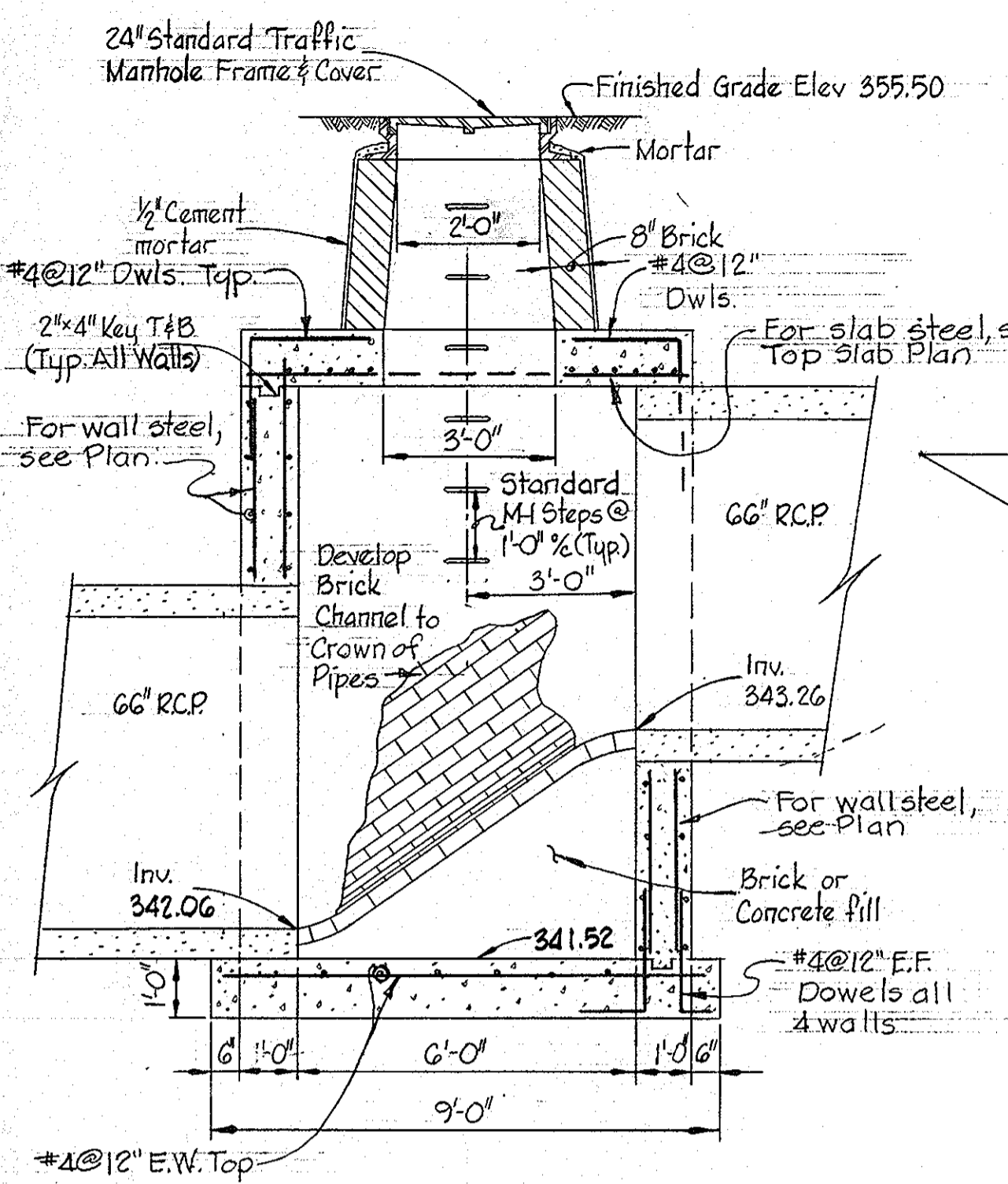
NO.	DATE	DESCRIPTION OF REVISIONS
		COLUMBIA TOWN CENTER SECTION 2 AREA 1 LOTS 22, 23 & 25 PART II Recorded in Plat Book Folio COLUMBIA MALL EXPANSION DETAILS

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

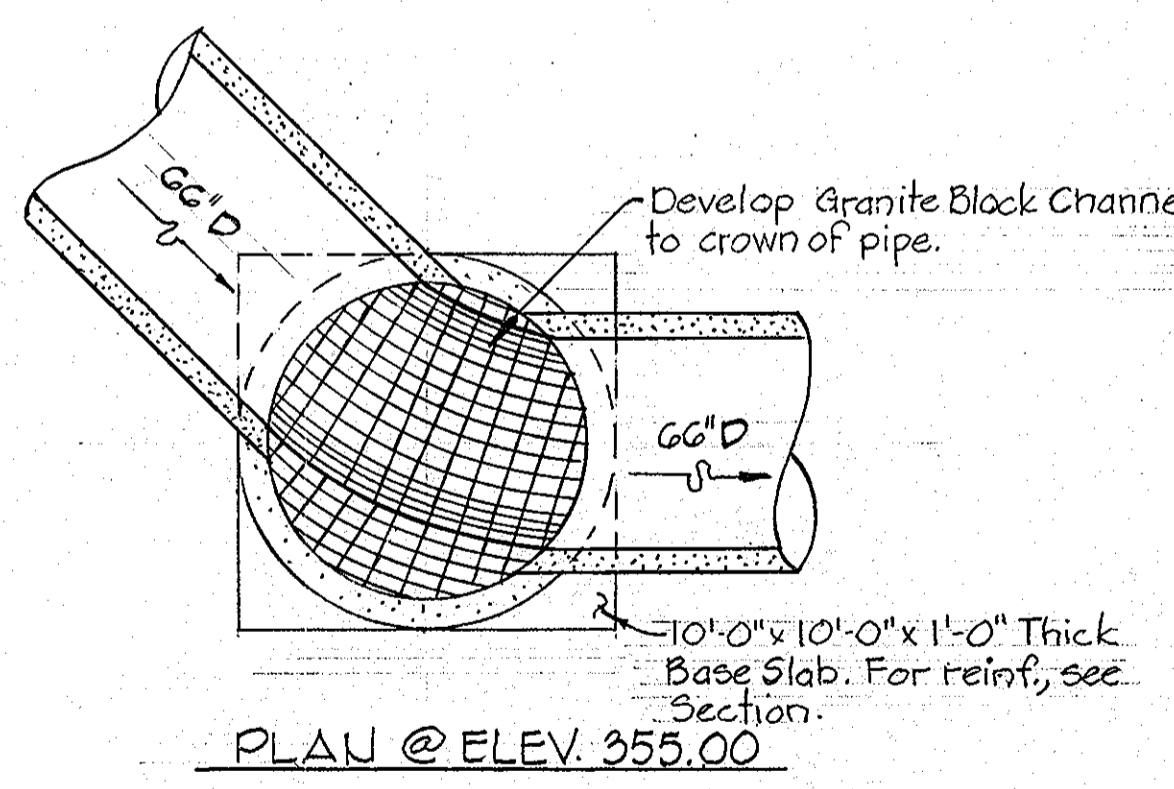
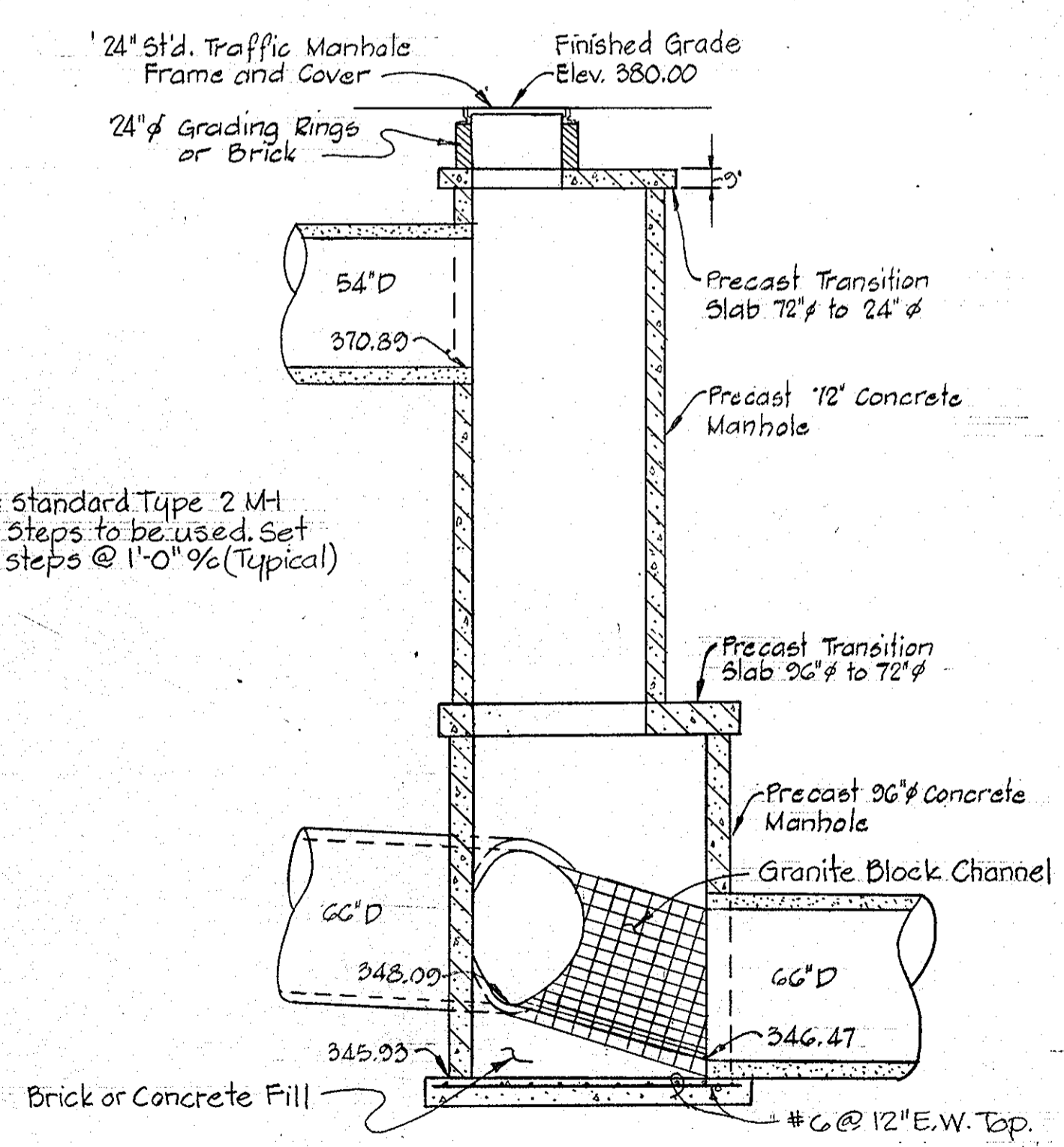
WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

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

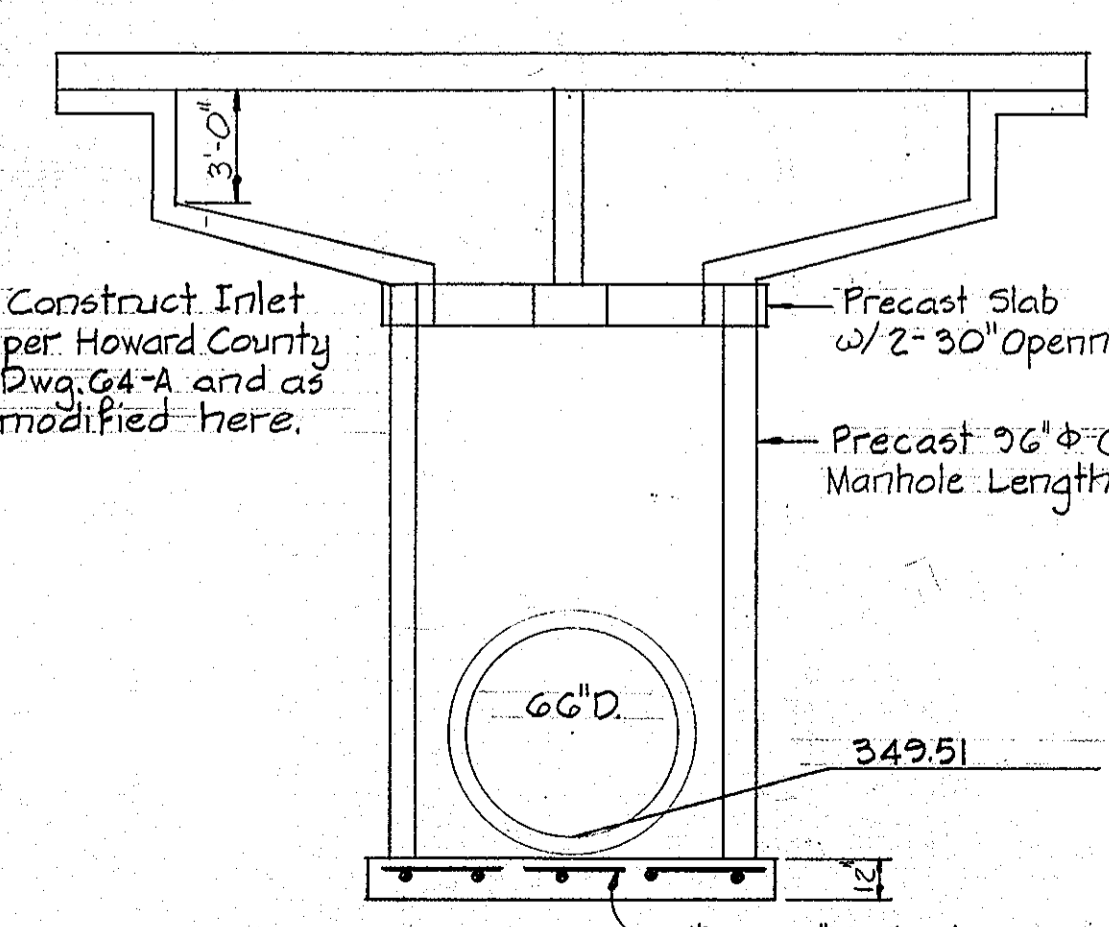
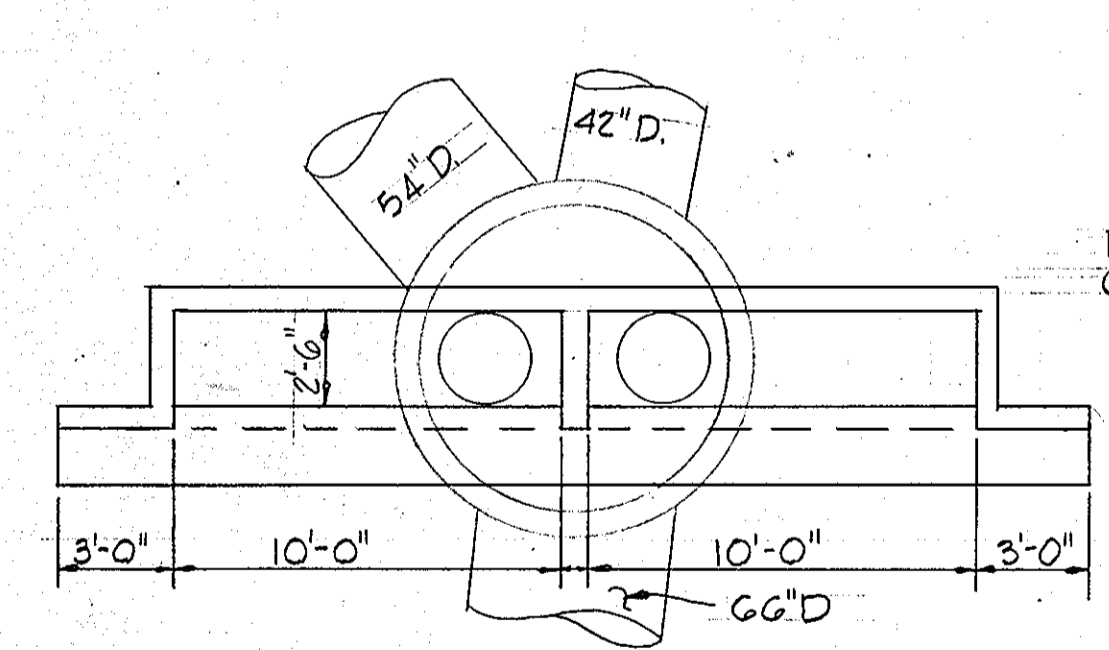
SHEET 11 OF (27) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: NONE



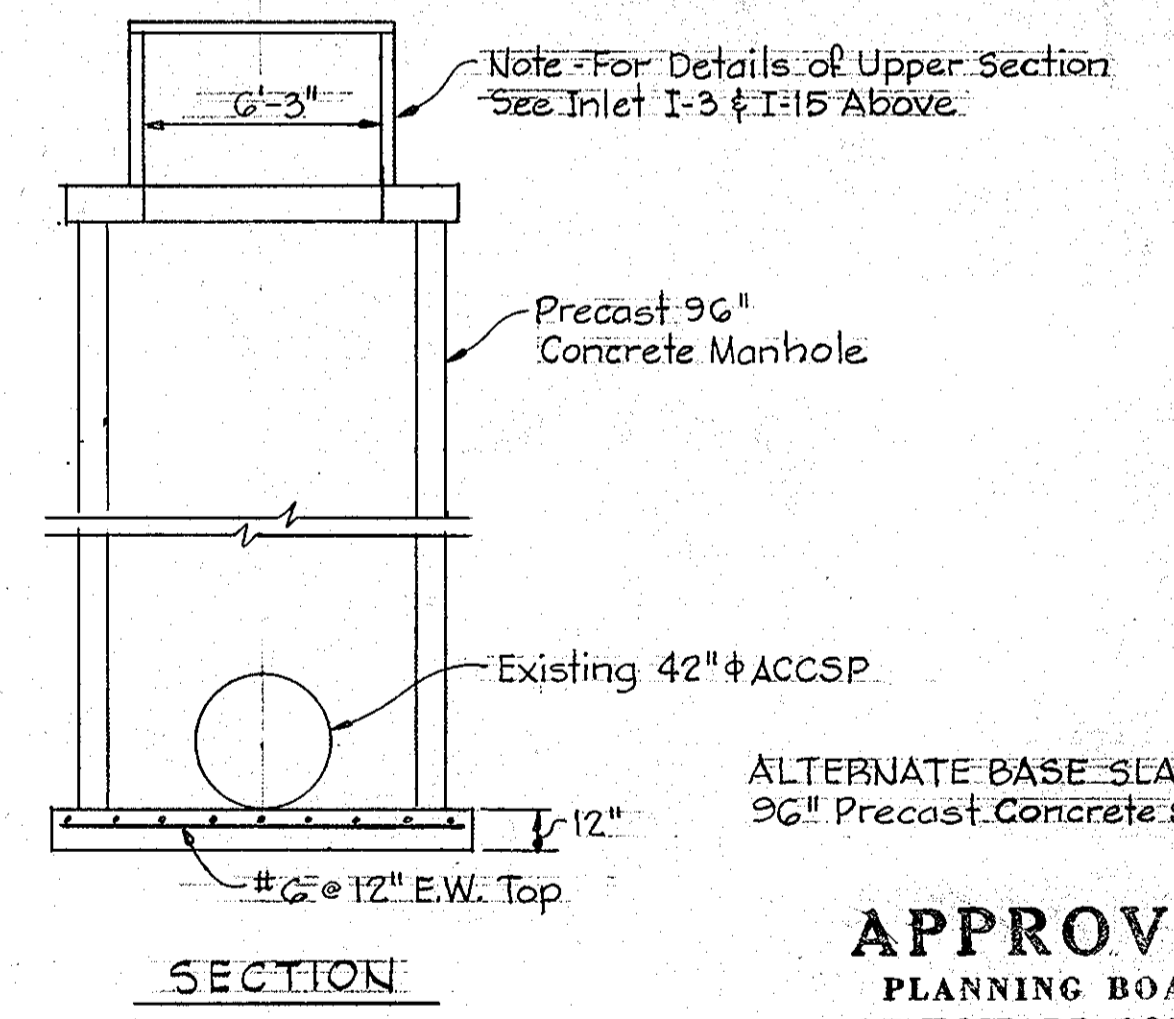
- Notes:**
1. Structural Steel shall conform to ASTM-A36.
 2. Cast-in-place concrete shall have a min. compressive strength of 3500 ps.i. @ 28 days.
 3. Reinforcing bars shall conform to ASTM - A615 Grade 40.
 4. Reinforcing Cover: Top Slab: 2" clear minimum
Walls: 2" clear minimum
Beam: 2" clear minimum
Top of Bottom Slab: 2" clear minimum
Bott. of Bottom Slab: 3" clear minimum
 5. Excavation: Contractor shall submit shop drawings of the method of excavation support for Structure S-3, for the approval of the Engineer.



STRUCTURE S-3



DETAIL INLET I-1



INLET I-14

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER 12-5-79 DATE
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR 12-7-79 DATE
 CHIEF DIVISION OF LAND DEVELOPMENT 12-6-79 DATE
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR 12-5-79 DATE
 CHIEF, BUREAU OF ENGINEERING 12-3-79 DATE

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST PAUL STREET
 BALTIMORE, MARYLAND 21202

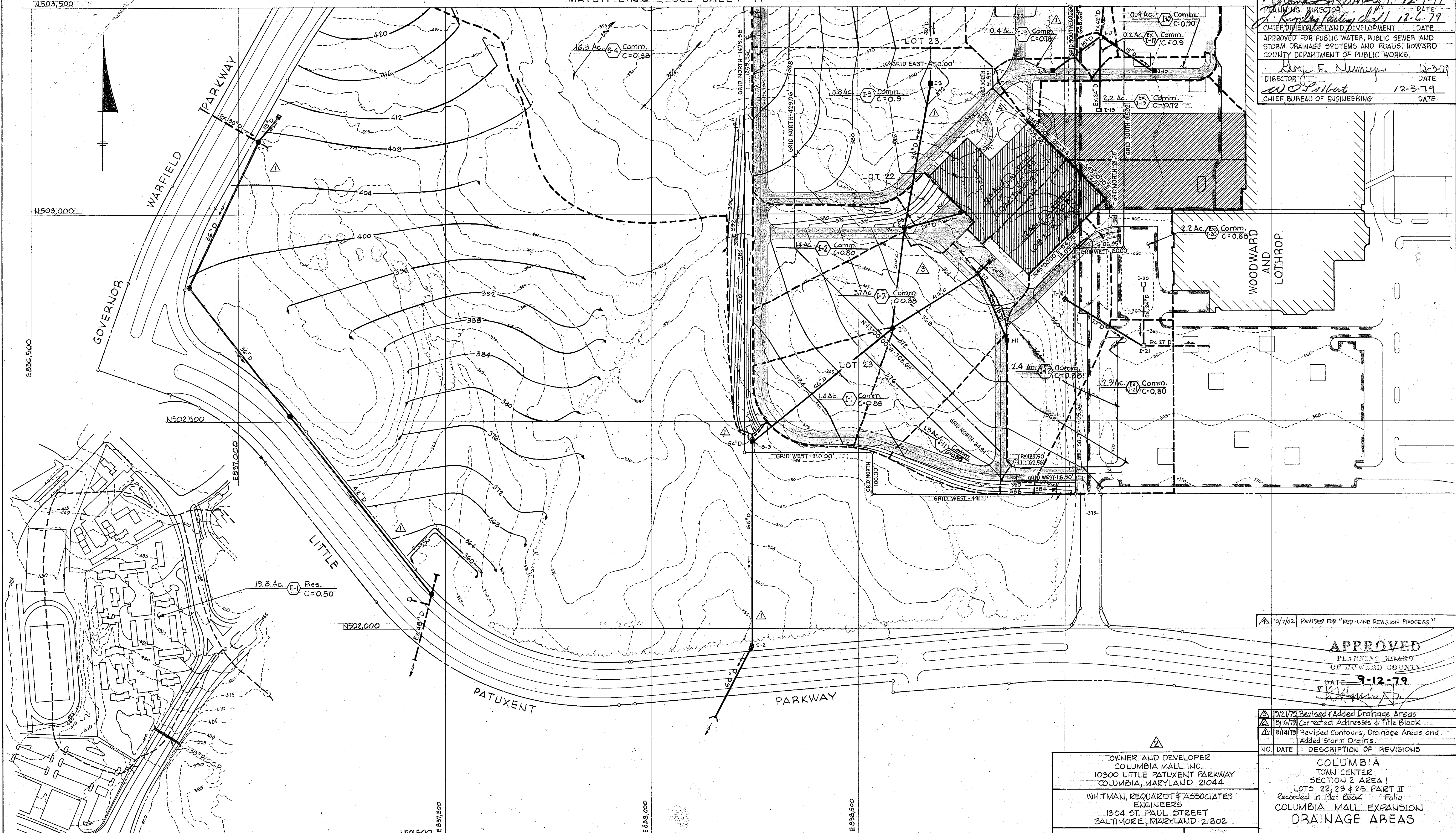
NO	DATE	DESCRIPTION OF REVISIONS
1	10/23/79	Added Detail I-1
2	9/21/79	Revised Inlet Numbers & Added Detail
3	8/16/79	Corrected Addresses & Title Block
4	8/14/79	Revised Elevs., Added Alternate Precast Option

COLUMBIA
 TOWN CENTER
 SECTION 2 AREA I
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION
 DETAILS

SHEET 12 OF (18) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD
 DATE: July 2, 1979 SCALE: NONE

MATCH LINE - SEE SHEET 14

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER *James G. ...* DATE 12-5-79
 APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR *Thomas H. ...* DATE 12-7-79
 CHIEF, DIVISION OF LAND DEVELOPMENT *R. ...* DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR *W. F. ...* DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING *W. O. ...* DATE 12-3-79



10/7/02 REVISED FOR "RED-LINE REVISION PROCESS"

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79

NO.	DATE	DESCRIPTION OF REVISIONS
10/21/79		Revised & Added Drainage Areas
8/16/79		Corrected Addresses & Title Block
8/14/79		Revised Contours, Drainage Areas and Added Storm Drains

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

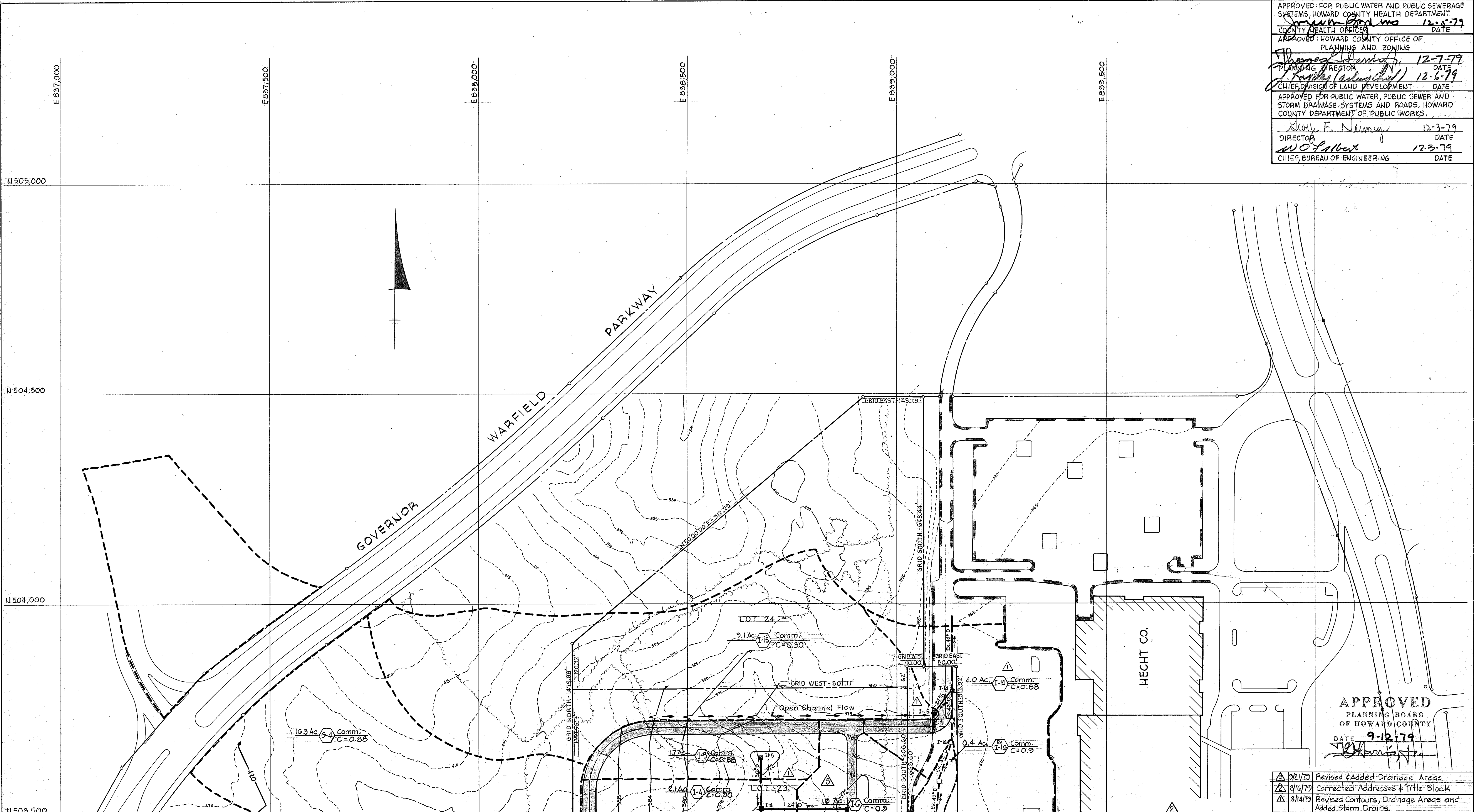
WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

COLUMBIA
 TOWN CENTER
 SECTION 2 AREA I
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION
 DRAINAGE AREAS

Kenneth A. Mc Cord
 KENNETH A. MC CORD
 Registered Engineer
 No. 1974

SHEET 13 OF (18) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1"=100'

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICE DATE 12-5-79
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR DATE 12-7-79
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING DATE 12-3-79



MATCH LINE - SEE SHEET 13

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79

NO.	DATE	DESCRIPTION OF REVISIONS
1	8/21/79	Revised & Added Drainage Areas
2	8/16/79	Corrected Addresses & Title Block
3	8/14/79	Revised Contours, Drainage Areas and Added Storm Drains.

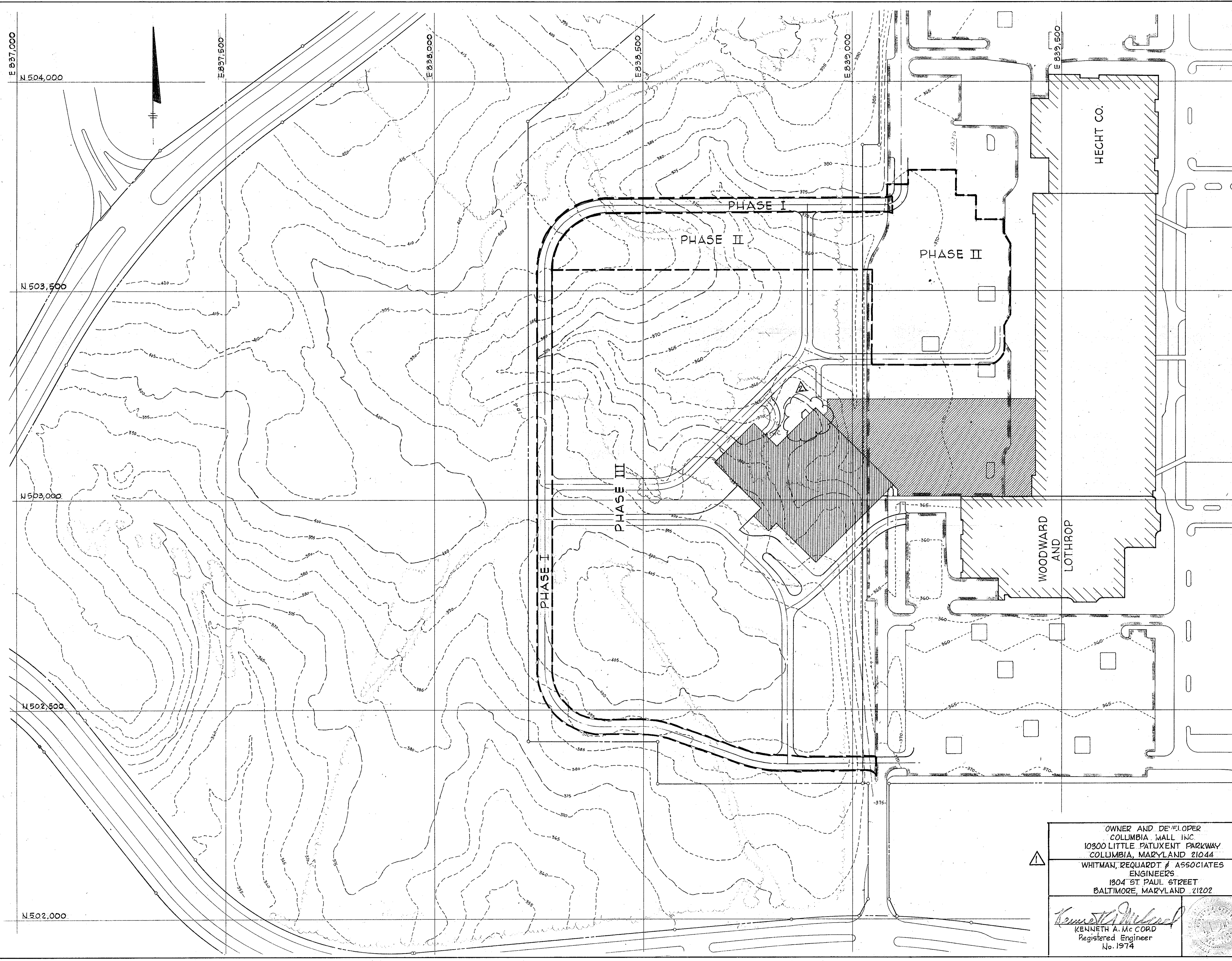
OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

KENNETH A. McCORD
 Registered Engineer
 No. 1974

COLUMBIA
 TOWN CENTER
 SECTION 2 AREA 1
 LOTS 22, 23 & 25 PART II
 Recorded in Plat Book Folio
 COLUMBIA MALL EXPANSION
 DRAINAGE AREAS

SHEET 14 OF (18) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1" = 100'



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER *[Signature]* 12-5-79 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR *[Signature]* 12-7-79 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT 12-6-79 DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR *[Signature]* 12-3-79 DATE
 CHIEF, BUREAU OF ENGINEERING *[Signature]* 12-3-79 DATE

- Phase I - Ring Road**
- Install storm drain from outlet structure south of Little Patuxent Parkway to S-4, plus 100' of the 66" dia. R.C.P. into M-1 and the 54" dia. R.C.P. into S-4, and construct S-1, S-2, S-3 and S-4.
 - Place base course and pave Ring Road and install bituminous concrete curb along outside of Ring Road.
 - Topsoil, seed and mulch disturbed areas.
- Phase II - Replacement of Parking Stalls**
- Complete installation of 66" D. to M-1 and install 54" D. to I-1, 36" D. to I-2 and 30" D. to I-3.
 - Construct M-1, I-1, I-2, M-2 and I-3.
 - Install 10" water main within limits of paving of Phase II, placing temporary cap at end.
 - Place base course and pavement within Phase II, along with curbing.
- Phase III**
- Complete all storm drains, water mains and sanitary sewers.
 - Complete all paving and curb work. The sediment control basins will be back-filled after the other areas have been paved, with the sediment control basin area being the last to receive pavement.
 - Place topsoil, seed and mulch planter areas as they become ready.

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
[Signature]

NO.	DATE	DESCRIPTION OF REVISIONS
1	10/7/62	REVISED FOR "RED LINE" REVISION PROCESS
2	8/16/79	Corrected Addresses & Title Block.

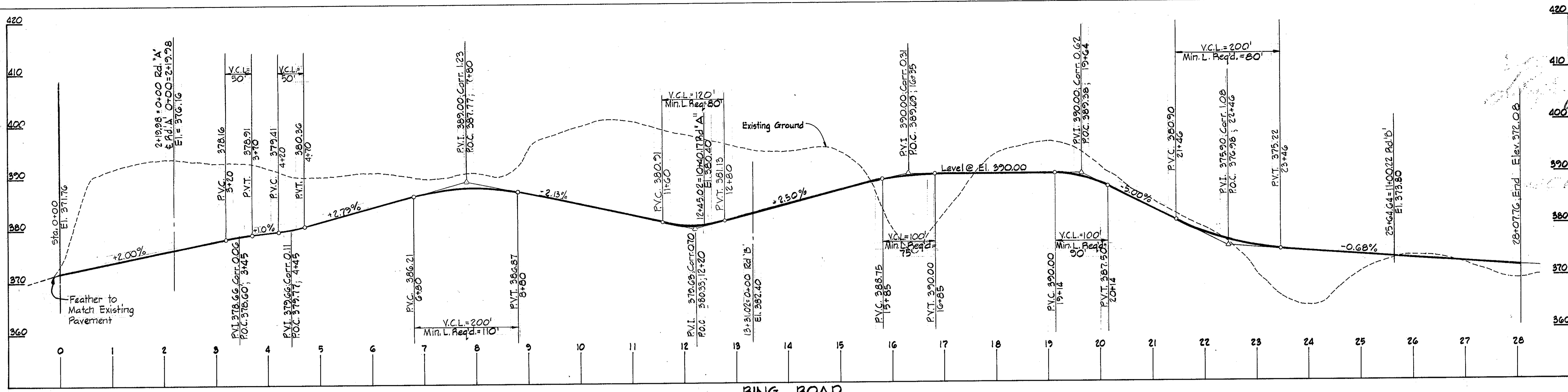
OWNER AND DEVELOPER
 COLUMBIA MALL INC
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST PAUL STREET
 BALTIMORE, MARYLAND 21202

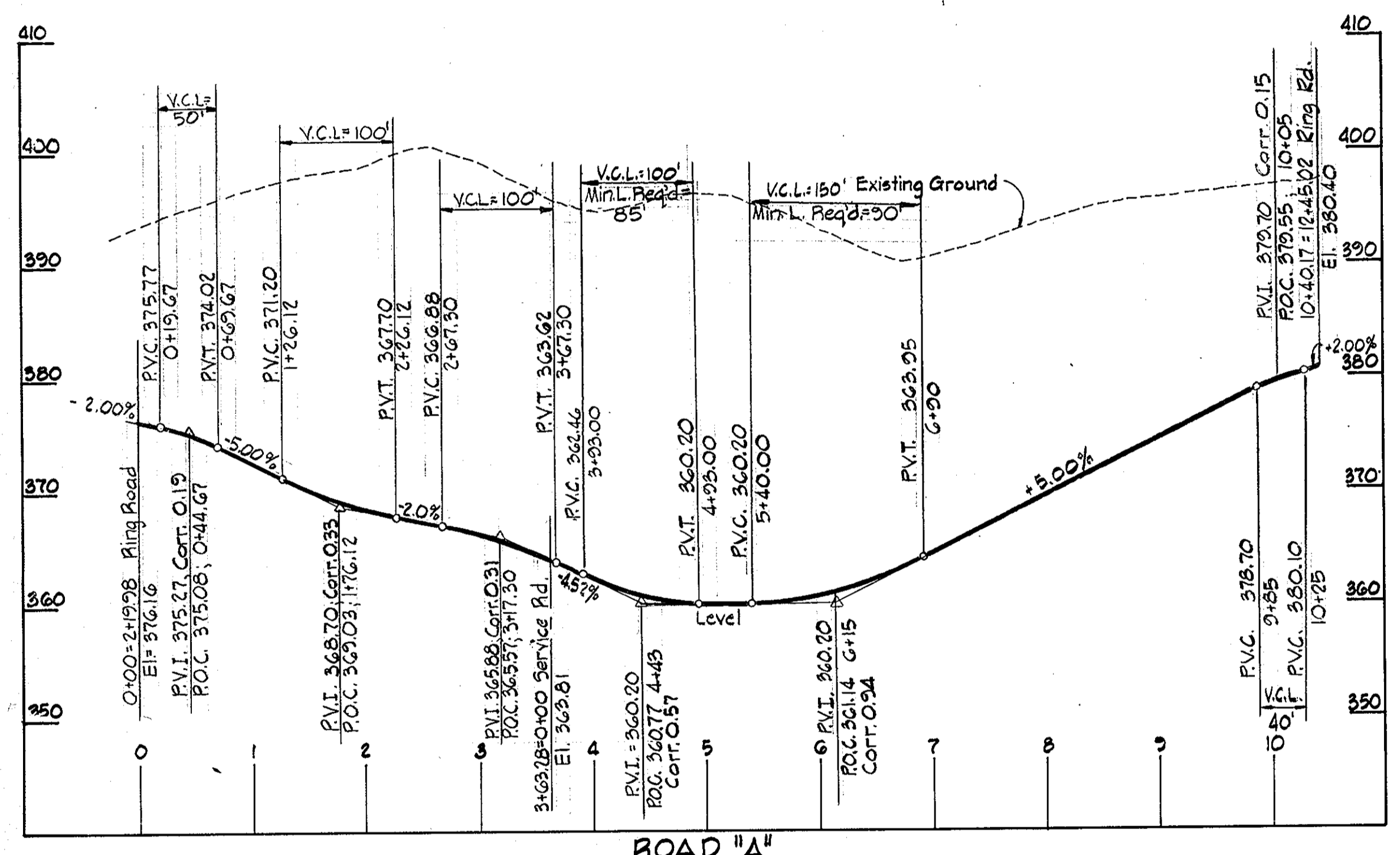
[Signature]
 KENNETH A. McCORD
 Registered Engineer
 No. 1974

COLUMBIA TOWN CENTER SECTION 2 AREA I
 COLUMBIA MALL EXPANSION
 Lots 22, 23 & 25, Part II
 RECORDED IN PLAT BOOK FOLIO
 PHASING PLAN

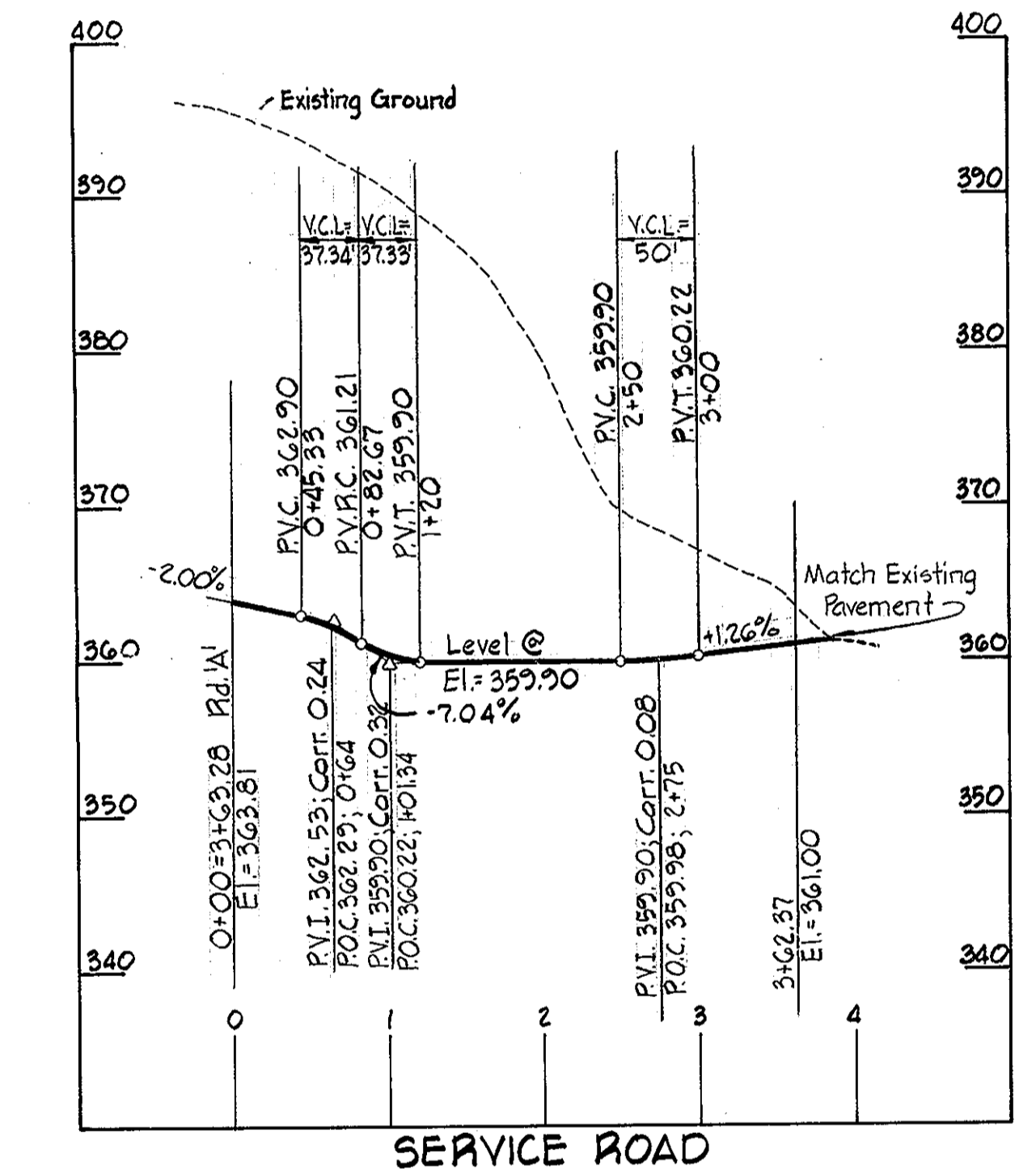
SHEET 15 OF (19) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: JULY 2, 1979 SCALE: 1"=100'



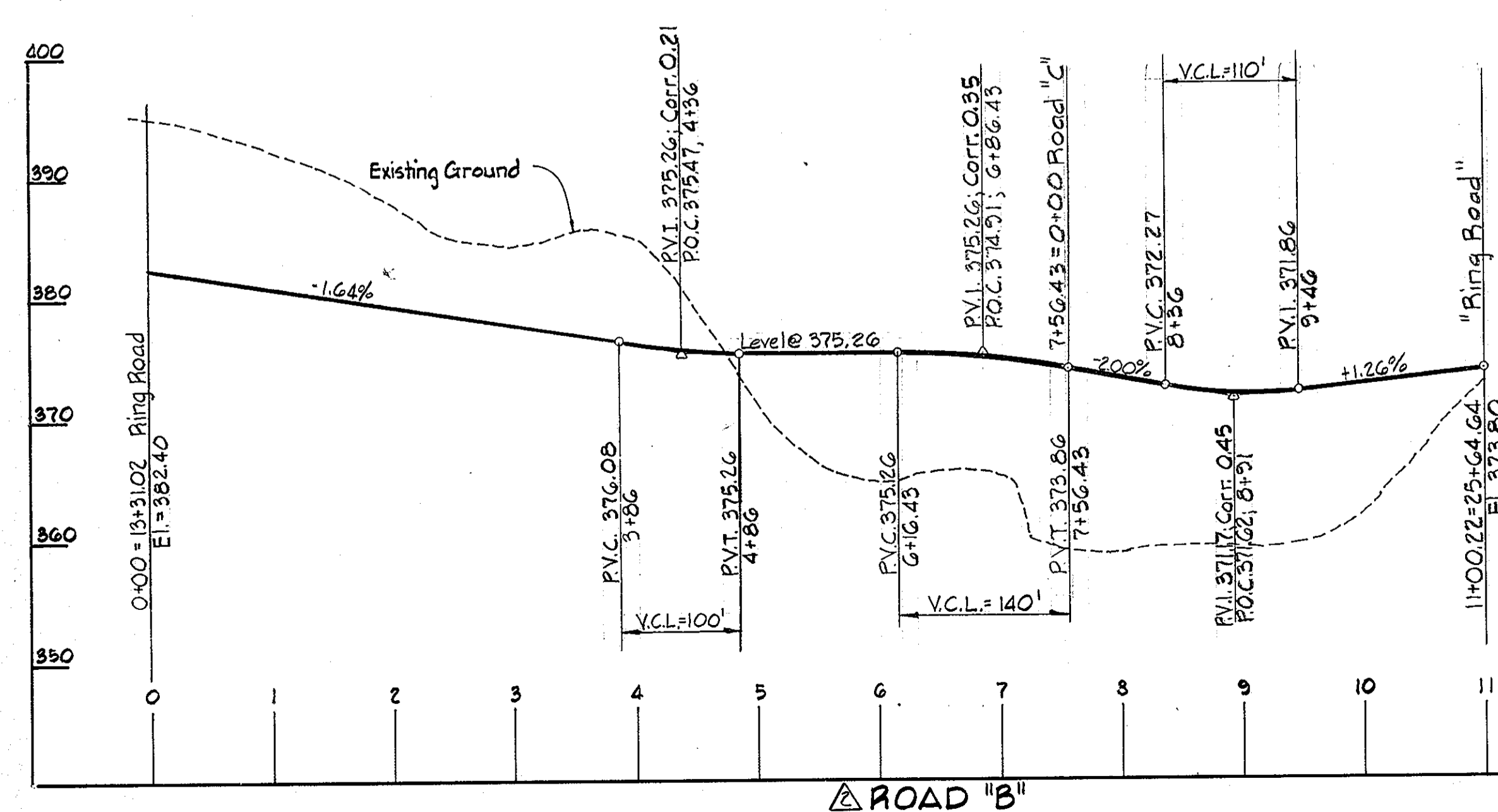
RING ROAD



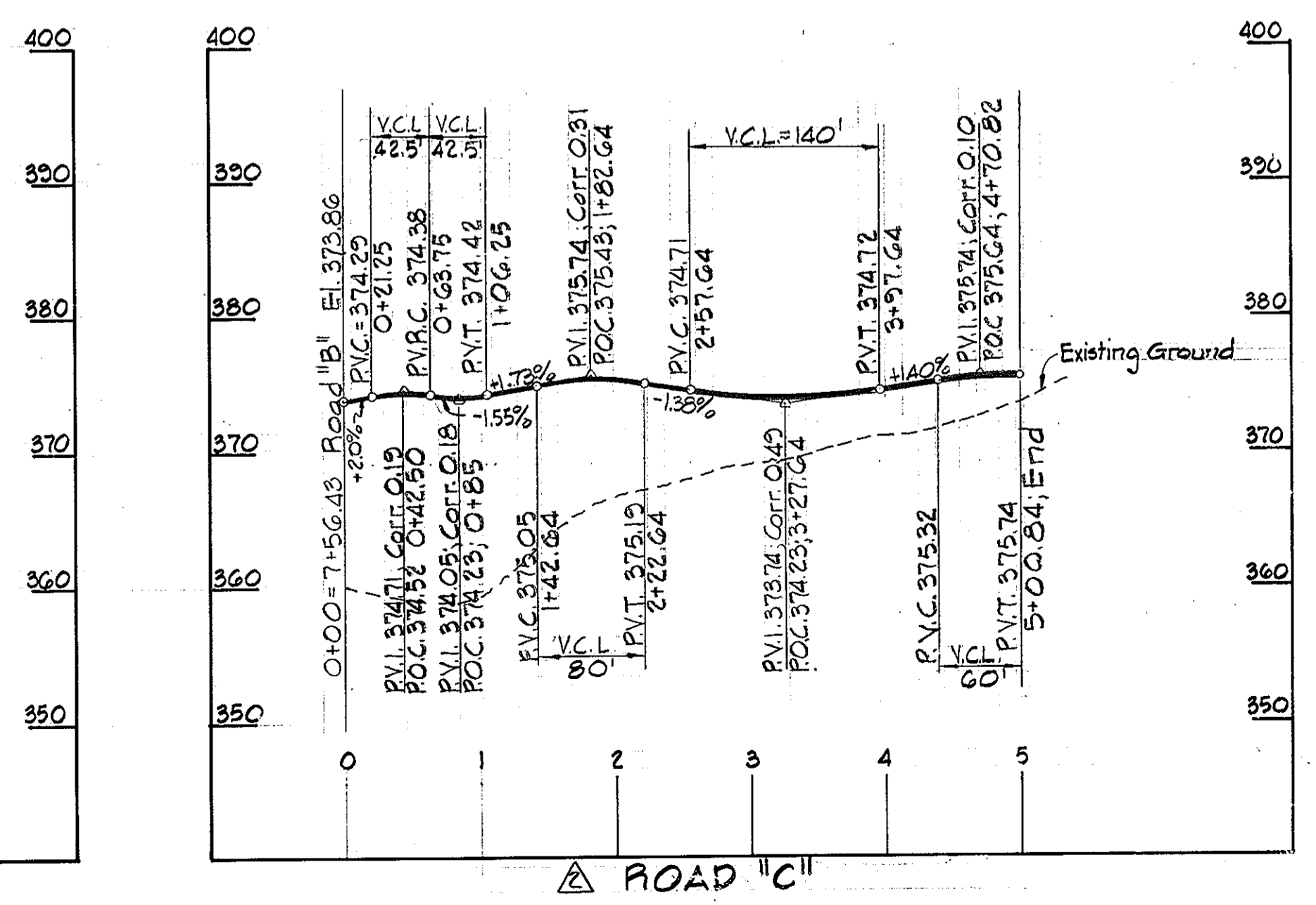
ROAD "A"



SERVICE ROAD

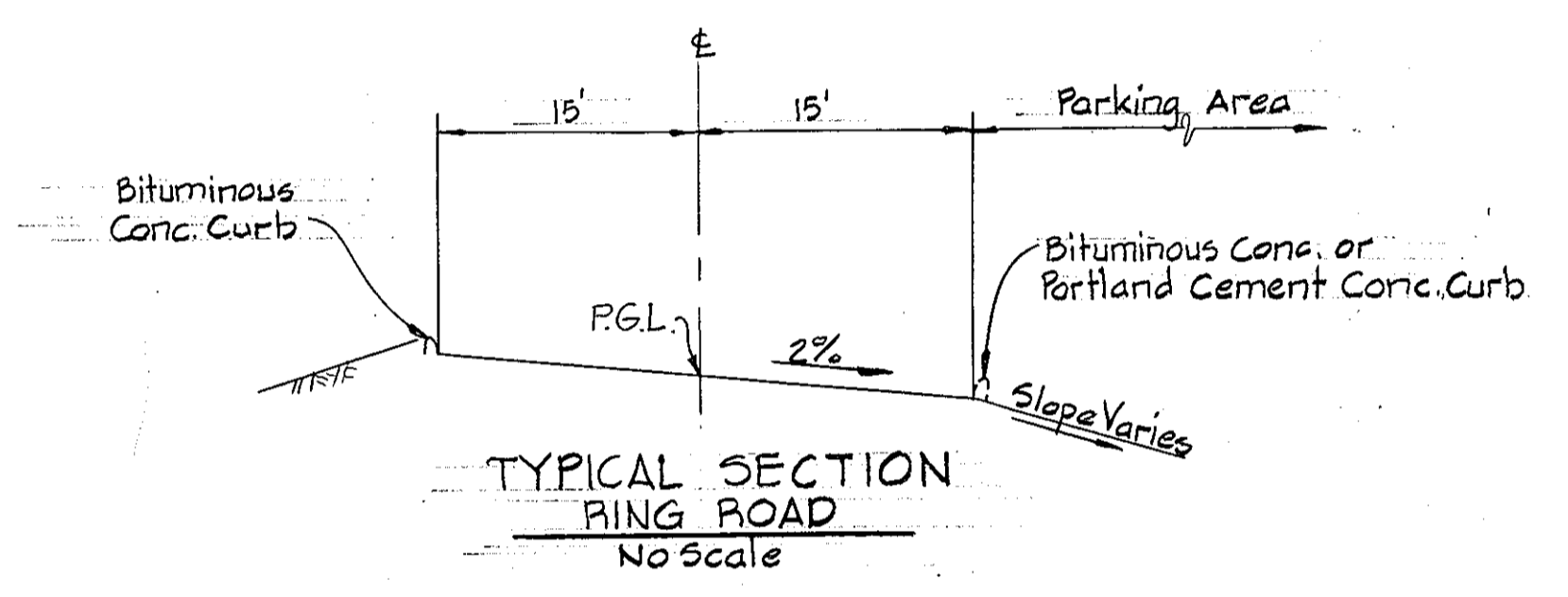


ROAD "B"

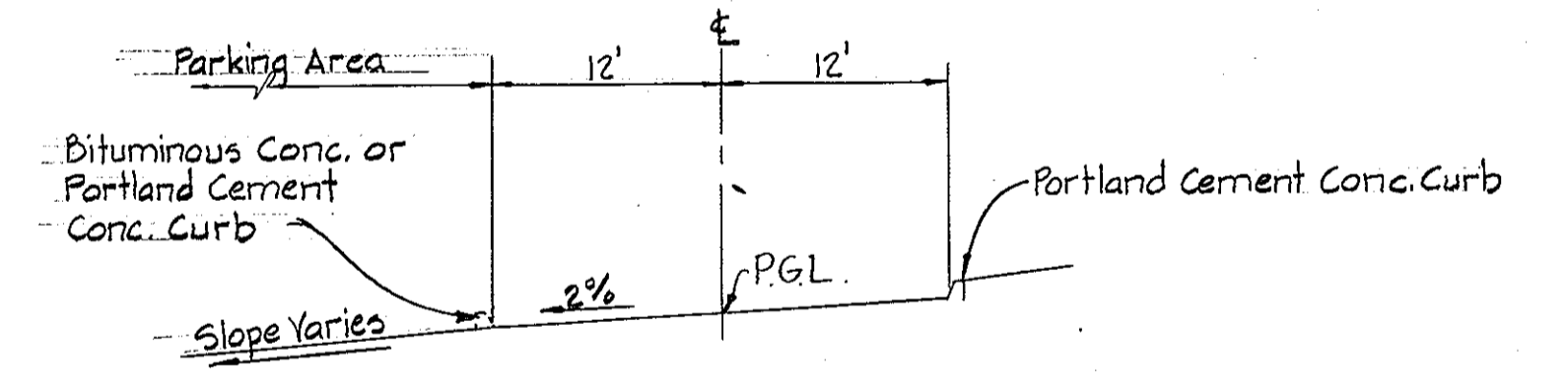


ROAD "C"

ROAD PROFILES
Scale: Hor. 1"=100'
Vert. 1"=10'



TYPICAL SECTION RING ROAD
No Scale



TYPICAL SECTION ROADS 'A', 'B', 'C', & Service Road
No Scale

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER DATE
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR DATE
 CHIEF, BUREAU OF ENGINEERING DATE

DESIGN SPEED = 25 M.P.H.
 HSD = 55D = 160' min.

- Notes:
- The design speed for all roads is 25 M.P.H.
 - For structural sections see sheet #11 of 19.
 - All finished profile grades at street center line.

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY

DATE 9-12-79
 [Signature]

NO.	DATE	DESCRIPTION OF REVISIONS
10/23/79		Added Note #3.
7/21/79		Revised Profiles B & C; Added Sections
8/16/79		Corrected Addresses of Title Block

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10800 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 ENGINEERS
 WHITMAN, REQUARDT & ASSOCIATES
 1804 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

COLUMBIA TOWN CENTER SECTION 2 AREA I
 COLUMBIA MALL EXPANSION

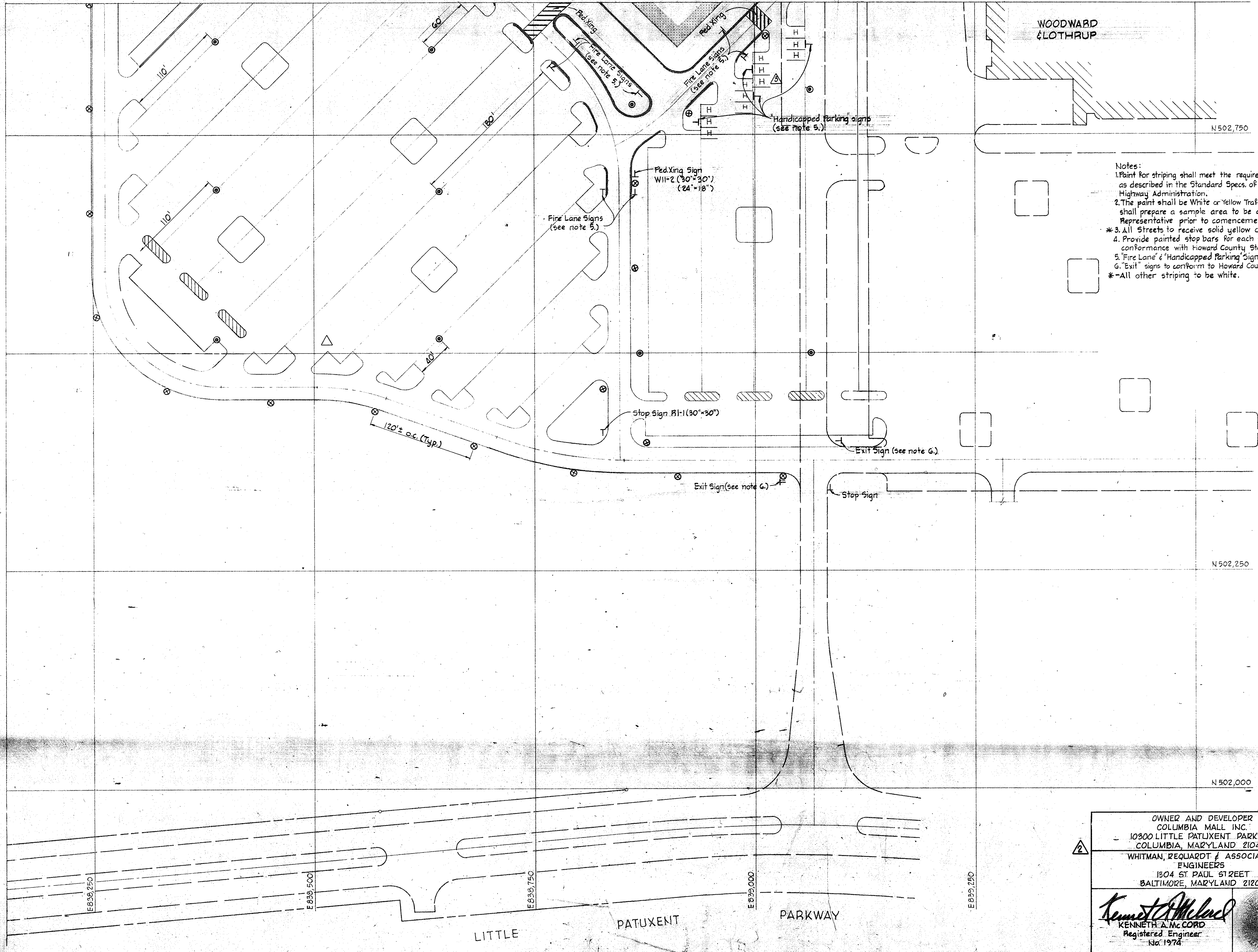
STREET PROFILES & SECTIONS

[Signature]
 KENNETH A. MCCORD
 Registered Engineer
 No. 1974

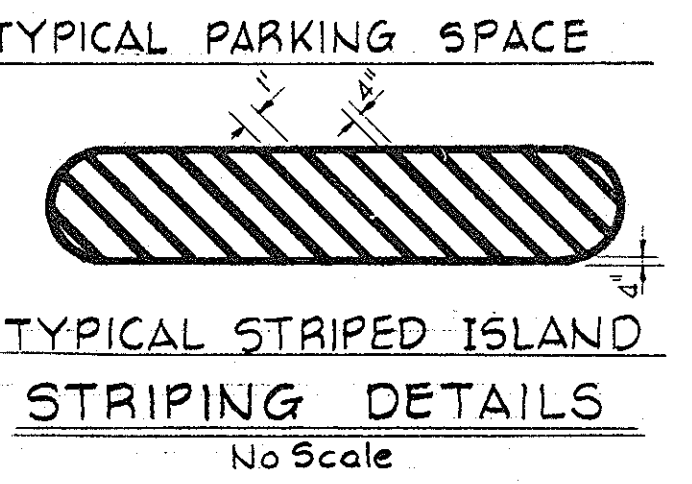
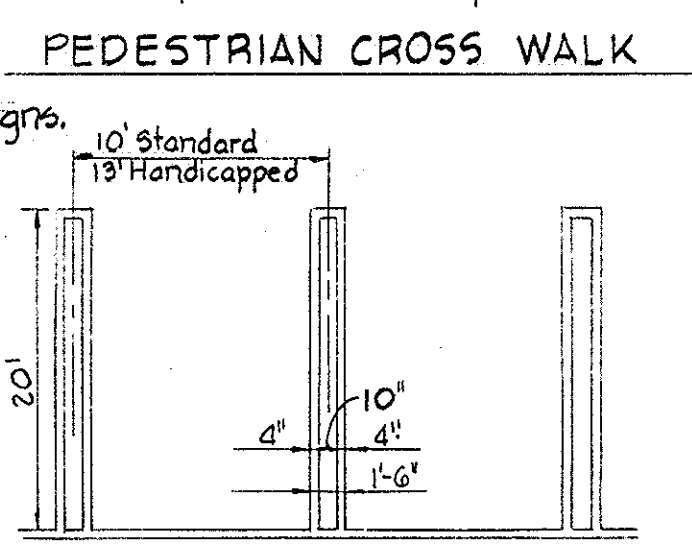
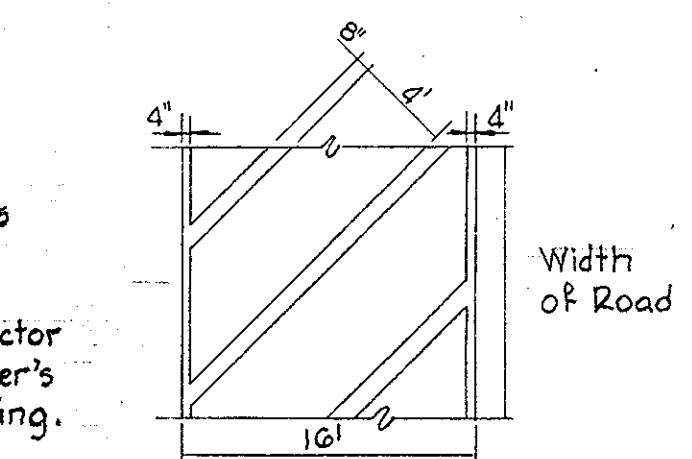
SHEET 16 OF (19) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: August 14, 1979 SCALE: As Shown

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER *John P. ...* DATE 12-5-79
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR *James ...* DATE 12-7-79
 CHIEF, DIVISION OF LAND DEVELOPMENT *...* DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR *...* DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING *...* DATE

MATCH LINE- SEE SHEET 18 OF 18



- Notes:
1. Paint for striping shall meet the requirements for Traffic Stripes as described in the Standard Specs. of the Maryland State Highway Administration.
 2. The paint shall be White or Yellow Traffic Paint and the Contractor shall prepare a sample area to be approved by the Owner's Representative prior to commencement of the traffic striping.
 - * 3. All Streets to receive solid yellow center-line 4" wide.
 4. Provide painted stop bars for each stop sign in conformance with Howard County Standards.
 5. Fire Lane & Handicapped Parking Signs to conform to exist. signs.
 6. Exit signs to conform to Howard County Standards.
 - * -All other striping to be white.



LIGHTING LEGEND

- ⊙ 2-1000 Watt Metal Halid Cutoff Luminaires on 60' Poles
- ⊙ 1-400 Watt High Pressure Sodium Lamps on 25' Poles

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY

DATE 9-12-79
J. ...

NO.	DATE	DESCRIPTION OF REVISIONS
Δ	2/21/79	Revised Island Striping; Added Handicapped Parking Signs.
Δ	6/16/79	Corrected Addresses & Title Block
Δ	8/14/79	Added Lighting

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST PAUL STREET
 BALTIMORE, MARYLAND 21202

Kenneth A. Mc Cord
 KENNETH A. MC CORD
 Registered Engineer
 No. 1974

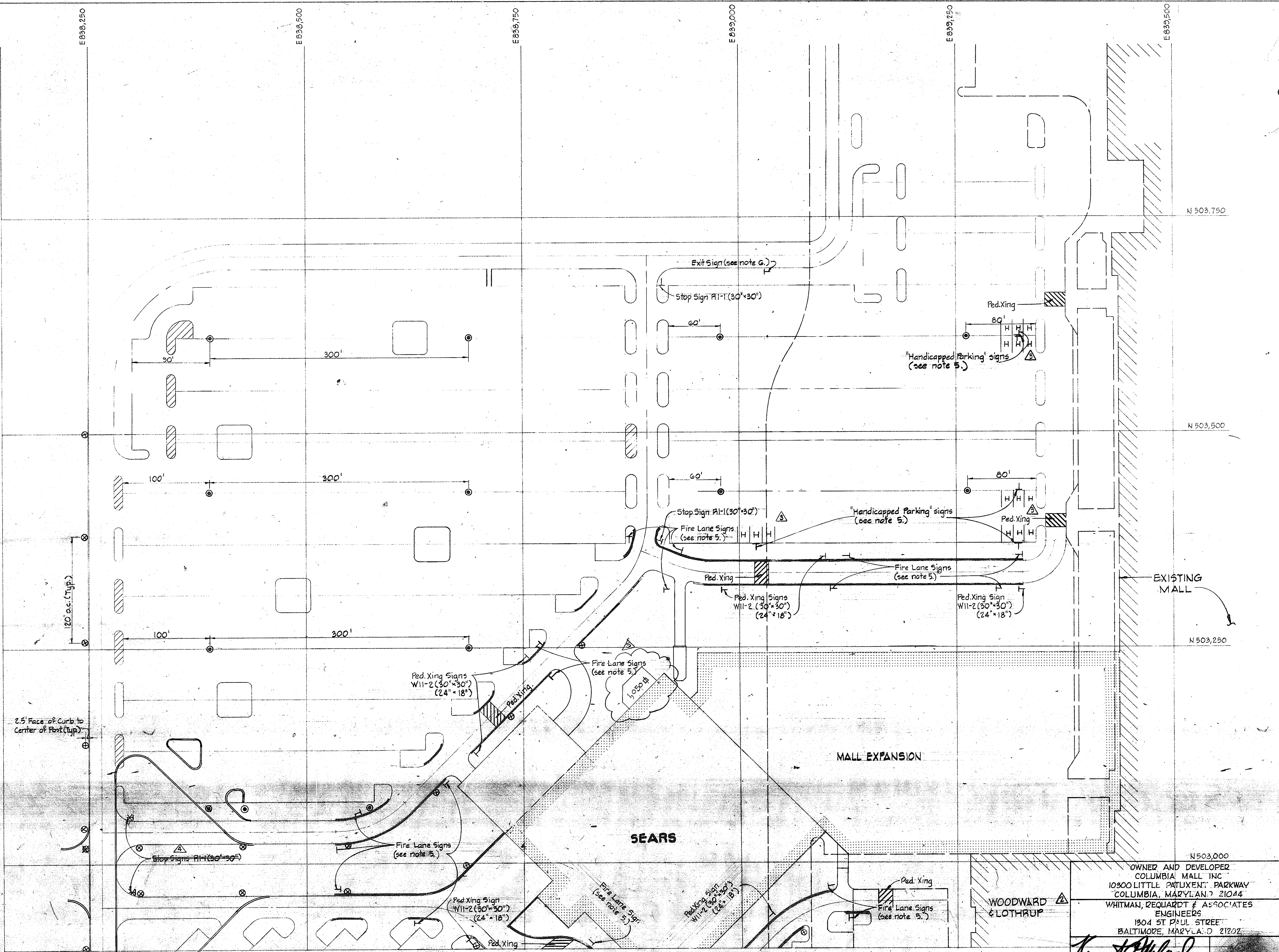
COLUMBIA TOWN CENTER SECTION 2 AREA 1
 COLUMBIA MALL EXPANSION
 Lots 22, 23 & 25, Part II
 RECORDED IN PLAT BOOK FOLIO
 STRIPING, SIGNING, AND LIGHTING LAYOUT PLAN

SHEET 17 OF (18) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 20, 1979 SCALE: 1"=50'
 SDP-80-01c

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *John P. ...* 12-5-79 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR: *Thomas L. ...* 12-7-79 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT: *J. ...* 12-6-79 DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR: *...* 12-2-79 DATE
 CHIEF, BUREAU OF ENGINEERING: *W.O. ...* 12-2-79 DATE



10/7/02 REVISED FOR "RED-LINE REVISION PROCESS"
 5/2/02 Moved Lighting & eliminated stop signs

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
Thomas L. ...

NO.	DATE	DESCRIPTION OF REVISIONS
1	5/21/79	Added "Handicapped Parking Signs"
2	8/14/79	Corrected Addresses & Title Block
3	8/14/79	Added Lighting

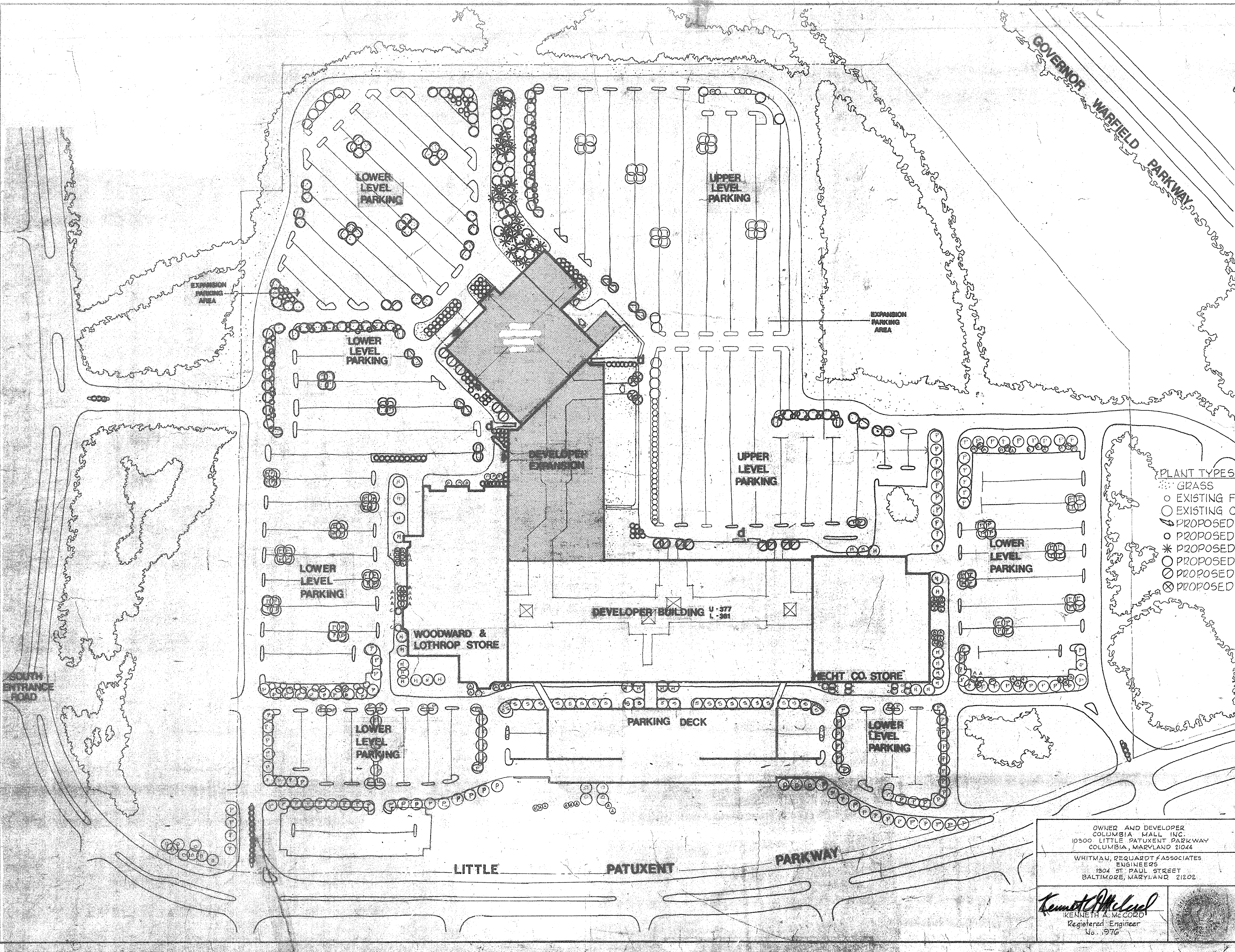
OWNED AND DEVELOPER
 COLUMBIA MALL INC
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, DEQUARDT & ASSOCIATES
 ENGINEERS
 1804 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

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

COLUMBIA TOWN CENTER SECTION 2 AREA 1
 COLUMBIA MALL EXPANSION
 Lots 22, 23 & 25, Part II
 RECORDED IN PLAT BOOK FOLIO
STRIPING, SIGNING, AND LIGHTING LAYOUT PLAN

SHEET 18 OF (19) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 20, 1979 SCALE: 1"=50'

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 SYSTEMS HEALTH OFFICER DATE 12-5-79
 APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR DATE 12-7-79
 CHIEF DIVISION OF LAND DEVELOPMENT DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR DATE 12-3-79
 CHIEF BUREAU OF ENGINEERING DATE



- PLANT TYPES**
- GRASS
 - EXISTING FLOWERING TREES
 - EXISTING CANOPY TREES
 - PROPOSED EVERGREEN SHRUBS 2'-2 1/2' HT.
 - PROPOSED FLOWERING TREES 2 1/2'-3' CAL. 8'-10' HT.
 - PROPOSED EVERGREEN TREES 8'-10' HT.
 - PROPOSED MEDIUM CANOPY TREES 3'-3 1/2' CAL. 14'-16' HT.
 - PROPOSED SPECIMEN CANOPY TREES 3 1/2'-4' CAL. 14'-16' HT.
 - PROPOSED SPECIMEN CANOPY TREES 4'-5' CAL. 16'-18' HT.

Notes:
 1. Location of all free standing tree islands subject to location of light standards.
 2. Site entrance islands subject to revision upon completion of further engineering.
 3. Area within Sears curb subject to change.

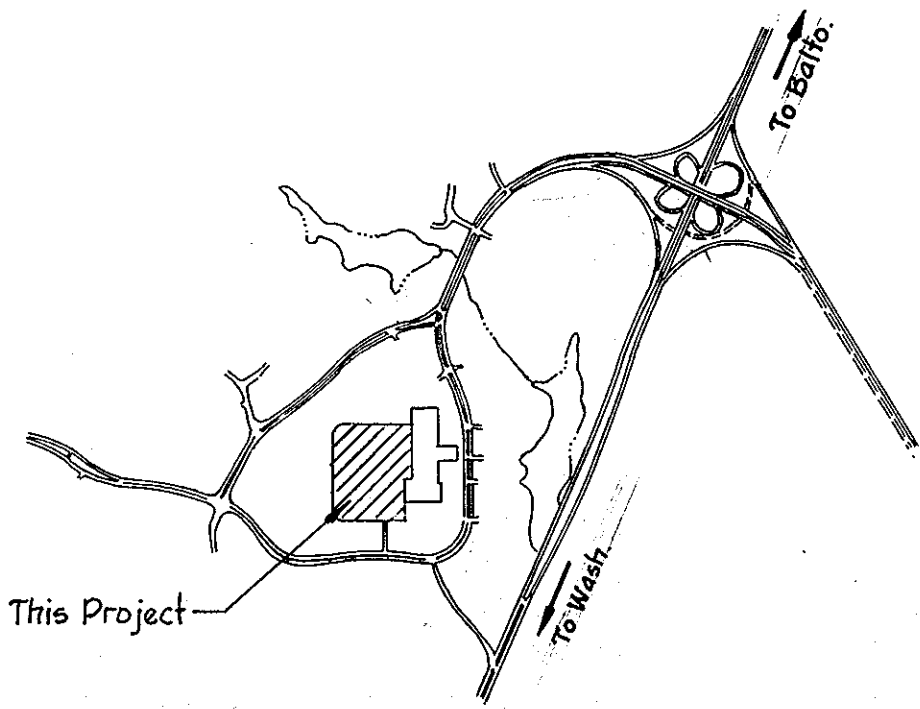
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
[Signature]

NO	DATE	DESCRIPTION OF REVISIONS

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, REQUART & ASSOCIATES
 ENGINEERS
 1204 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. McCORD
 Registered Engineer
 No. 1976


SHEET 19 OF (19) 27
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: Aug. 21, 1979 SCALE: 1" = 100'



VICINITY MAP

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT	<i>James G. ...</i>	12-3-79
COUNTY HEALTH OFFICER		DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	<i>Thomas L. Hamby</i>	12-7-79
PLANNING DIRECTOR		DATE
APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.	<i>R. ...</i>	12-6-79
CHIEF DIVISION OF LAND DEVELOPMENT		DATE
DIRECTOR	<i>John F. Nemy</i>	12-3-79
CHIEF, BUREAU OF ENGINEERING		DATE

ROUGH GRADING PLAN FOR COLUMBIA MALL EXPANSION COLUMBIA, MARYLAND

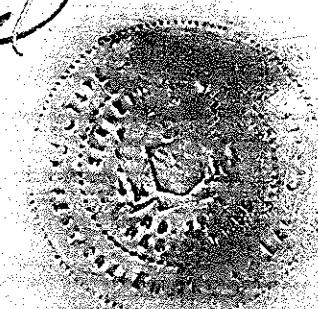
TOWN CENTER SECTION 2 AREA I
LOTS 22, 23 & 25 PART II 
RECORDED IN PLAT BOOK FOLIO


LIST OF DRAWINGS

<u>SHEET NO.</u>	<u>TITLE</u>
1	TITLE SHEET
2	ROUGH GRADING PLAN
3	ROUGH GRADING PLAN
4	ROUGH GRADING PLAN
5	ROUGH GRADING PLAN
6	SEDIMENT CONTROL DETAILS
7	STORM DRAINS
8	PHASING PLAN

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL STREET
BALTIMORE, MARYLAND 21202

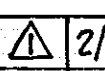
Kenneth A. McCord
KENNETH A. McCORD
PROFESSIONAL ENGINEER
MD LICENSE No. 1974
Date: July 2, 1979



 OWNER AND DEVELOPER
COLUMBIA MALL INC.
10300 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

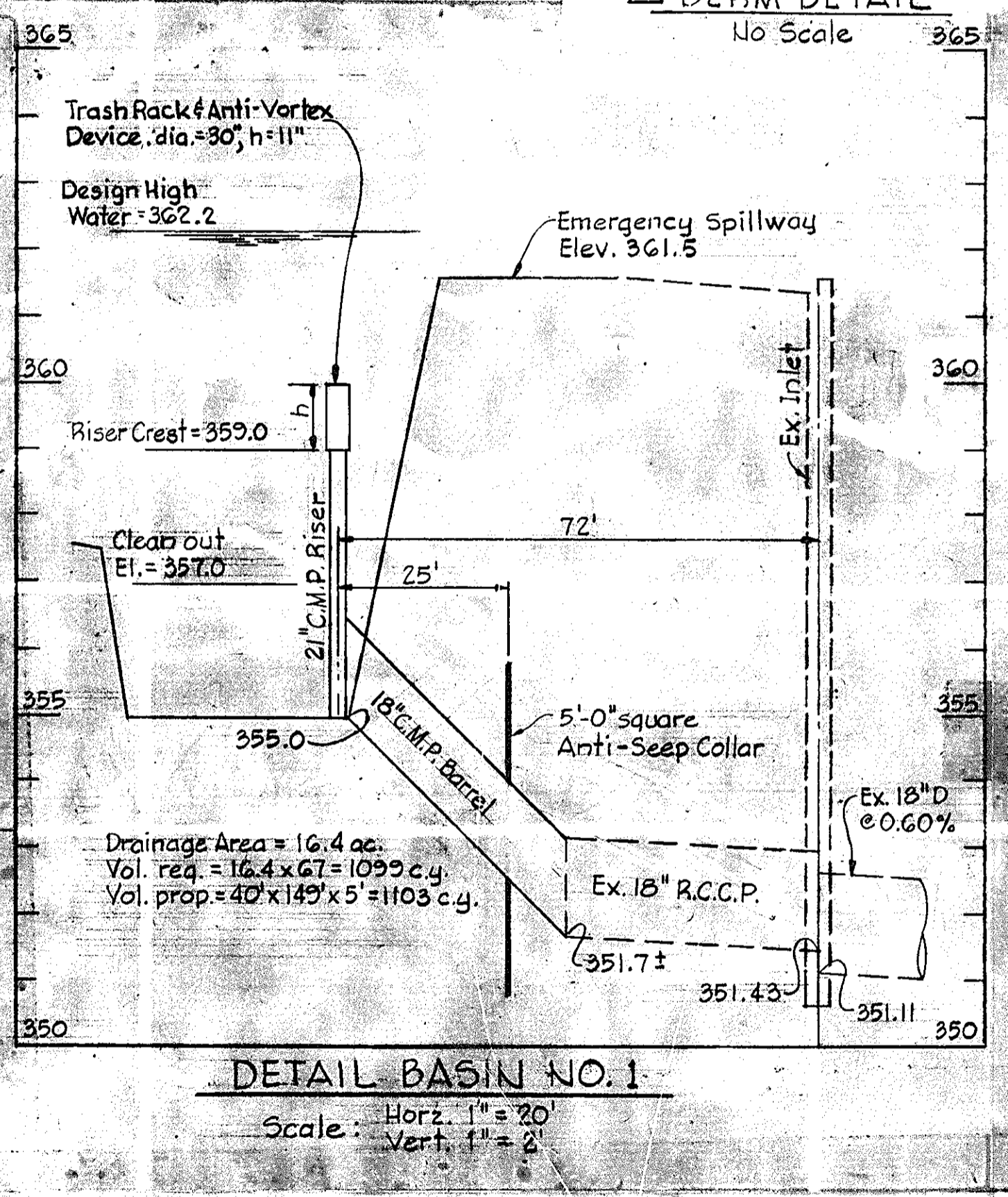
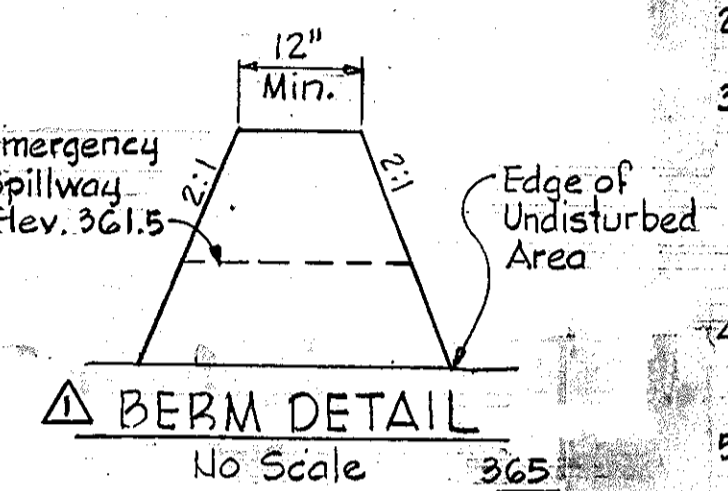
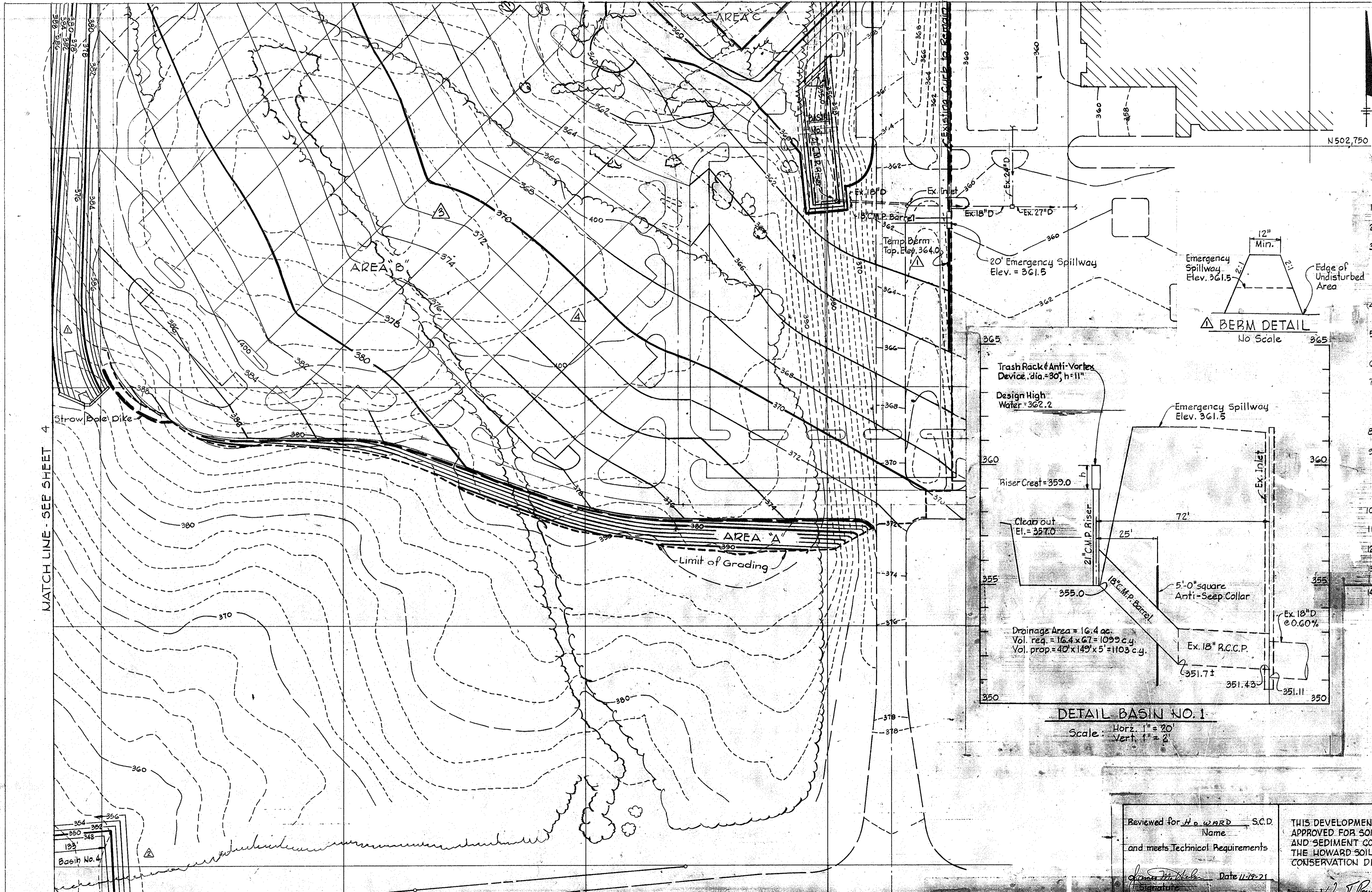
APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 9-12-79
Thomas L. Hamby

 2/16/79 Corrected Owners Name & Address, Added Description	
NO.	DESCRIPTION OF REVISIONS
SHEET (1 OF 8)	
ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.	

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER DATE
 APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR DATE 12-7-79
 CHIEF DIVISION OF LAND DEVELOPMENT DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING DATE 12-3-79

MATCH LINE - SEE SHEET 3



- GENERAL NOTES**
- All work shall be performed in accordance with the requirements of Howard County.
 - All utility companies shall be notified 24 hours in advance of construction.
 - Approximate locations of existing utilities are shown. The Contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to Contractor's operations shall be repaired immediately at the Contractor's expense.
 - The Contractor shall test pit existing utilities where directed by the Engineer, a minimum of two weeks in advance of any construction.
 - Contractor to notify the Howard County Dept. of Inspections and Permits at least 3 days before starting work shown on these drawings, telephone no. 465-3180.
 - All disturbed slope areas to be stabilized as soon as grading is completed.
 - All sediment control basins shall be constructed in accordance with the U.S. Dept. of Agriculture Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas," dated July, 1975.
 - The area to be cleared and grubbed shall be ten (10) feet outside the limits of grading as shown hereon.
 - In those areas designated as Area 'A', except for slopes exceeding 3:1, the areas shall be excavated or filled one (1) foot below the grade shown with one (1) to one and a half (1 1/2) feet of top soil placed thereon. On slopes exceeding 3:1 the areas shall be excavated or filled four (4) inches below the grade shown with four (4) inches of topsoil placed thereon.
 - In those areas designated as Area 'B' the areas shall be excavated or filled nine (9) inches below the grades shown.
 - In Area 'C' the area shall be excavated or filled to the elevation shown.
 - In fill areas the existing ground shall be stripped of all topsoil and organic materials prior to placing any embankment.
 - All existing pavement, concrete curb, etc. shall be removed within the limit of grading.
 - All disturbed areas which are outside of paved or building areas shall be topsoiled, seeded and mulched.

NOTE - Portion of these plans have been approved for grading under Permit No. GPN GP 79-71-A. Namely areas outside of existing paved areas shown on sheet 2 and sheet 3.

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY

Reviewed for HOWARD S.C.D. Name _____ and meets Technical Requirements
 Signature _____ Date 11-29-79
 U.S. Soil Conservation Service
 Approved _____ Date 11-29-79
 Howard S.C.D.

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

NO.	DATE	DESCRIPTION OF REVISIONS
1	9/21/79	Revised Grades
2	8/16/79	Corrected Parking Lot Contours
3	8/14/79	Added Basin 4, Added Drainage Ditch
4	11/9/79	Revised Note No. 14; Added Permit No. Added Temp. Berm & Revised Basin Detail.

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 Soil Conservation District.
 Signature _____ Date 5-18-79
 Kenneth A. McCord, P.E. 1974

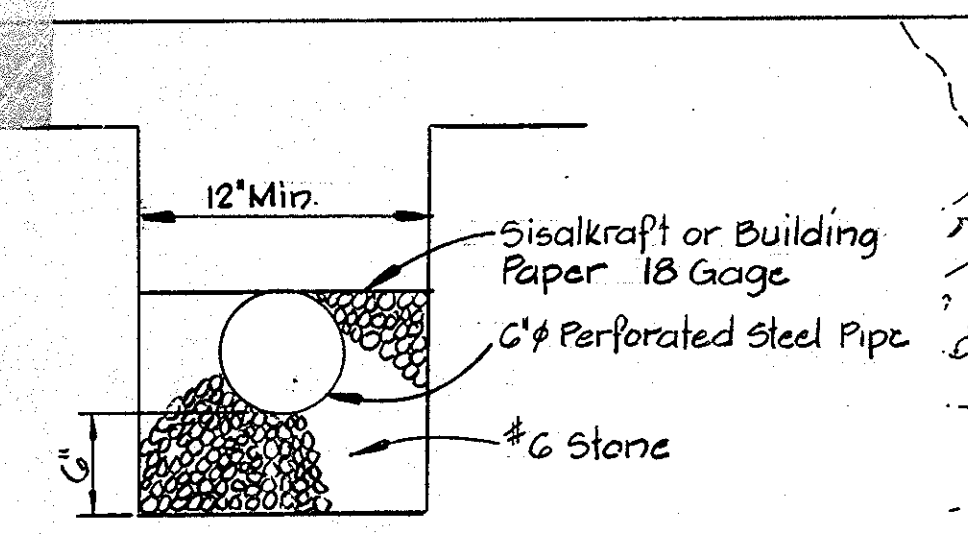
CERTIFICATION BY THE DEVELOPER
 I certify that all development and or construction will be done according to this plan of development and plan for erosion and sediment control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary.
 Signature _____ Date 5-18-79

COLUMBIA ROUGH GRADING PLANS
 FOR TOWN CENTER SECTION 2 AREA 1
 Lots 22, 23 & 25, Part II
 RECORDED IN PLAT BOOK FOLIO
 SHEET 21 of 27 (2 of 3)
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1" = 50'

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN REQUARDT & ASSOCIATES ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202
 Signature _____
 KENNETH A. McCORD
 Registered Engineer
 No. 1974

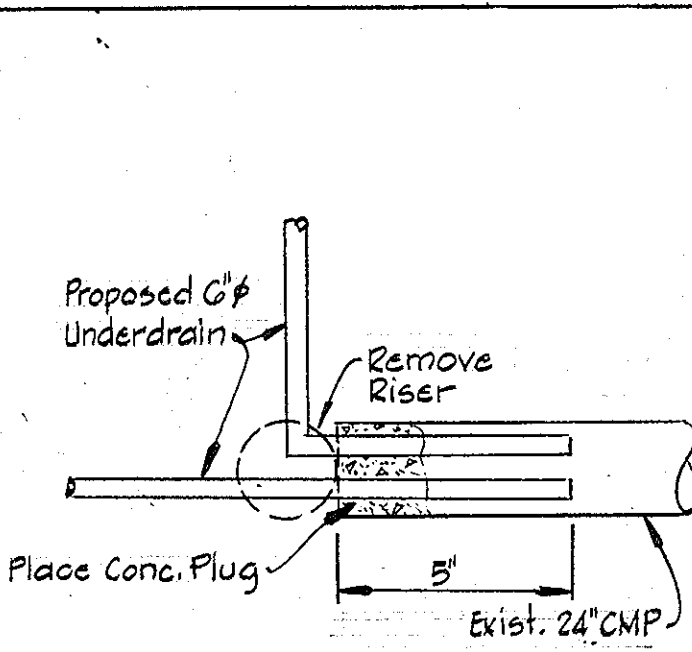
UNDERDRAIN TRENCH DETAIL
No Scale

Note: Provide Min. of 1 1/2' of Depth to Flow Line in Areas Pipe Follows Existing Slope.



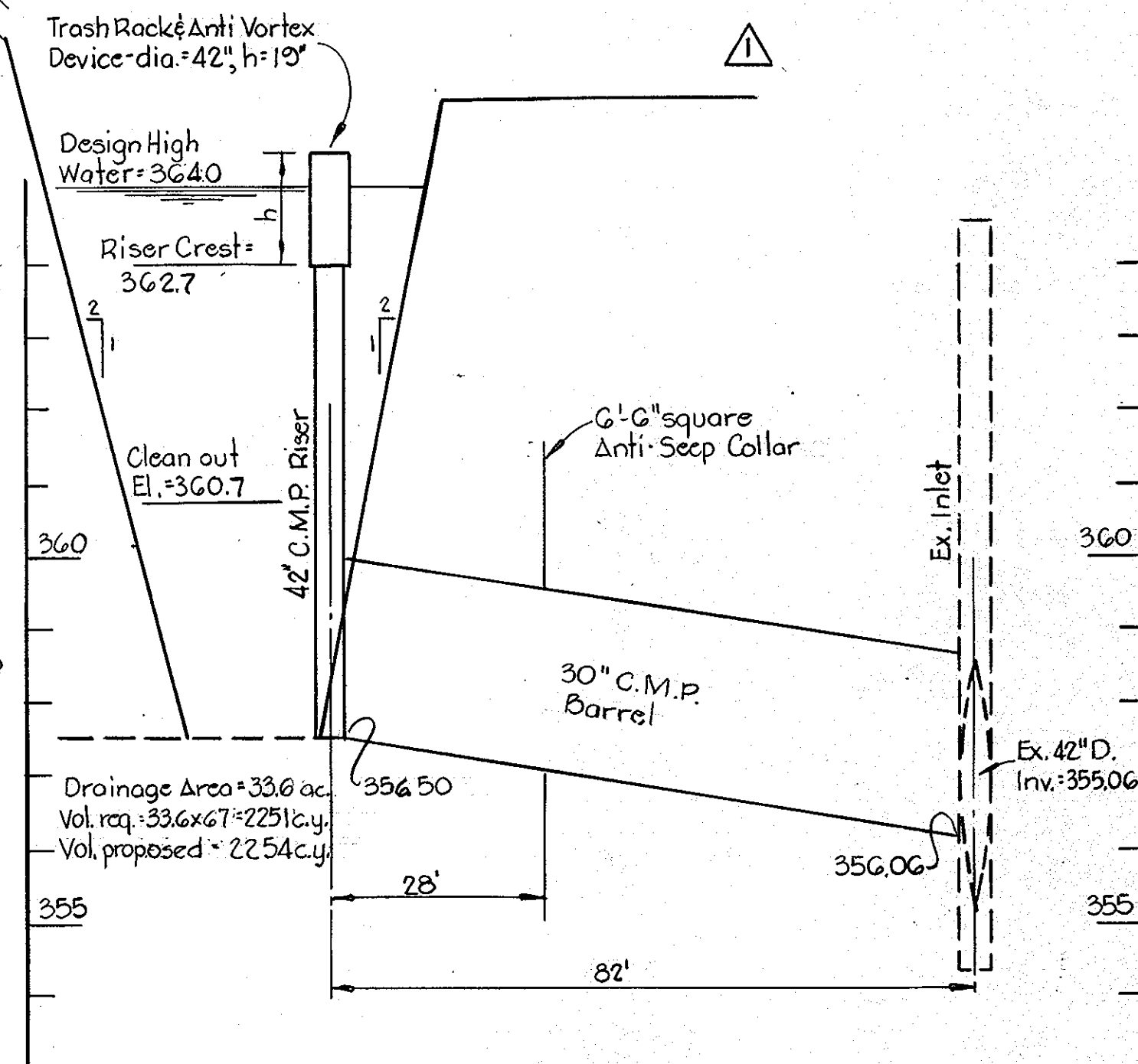
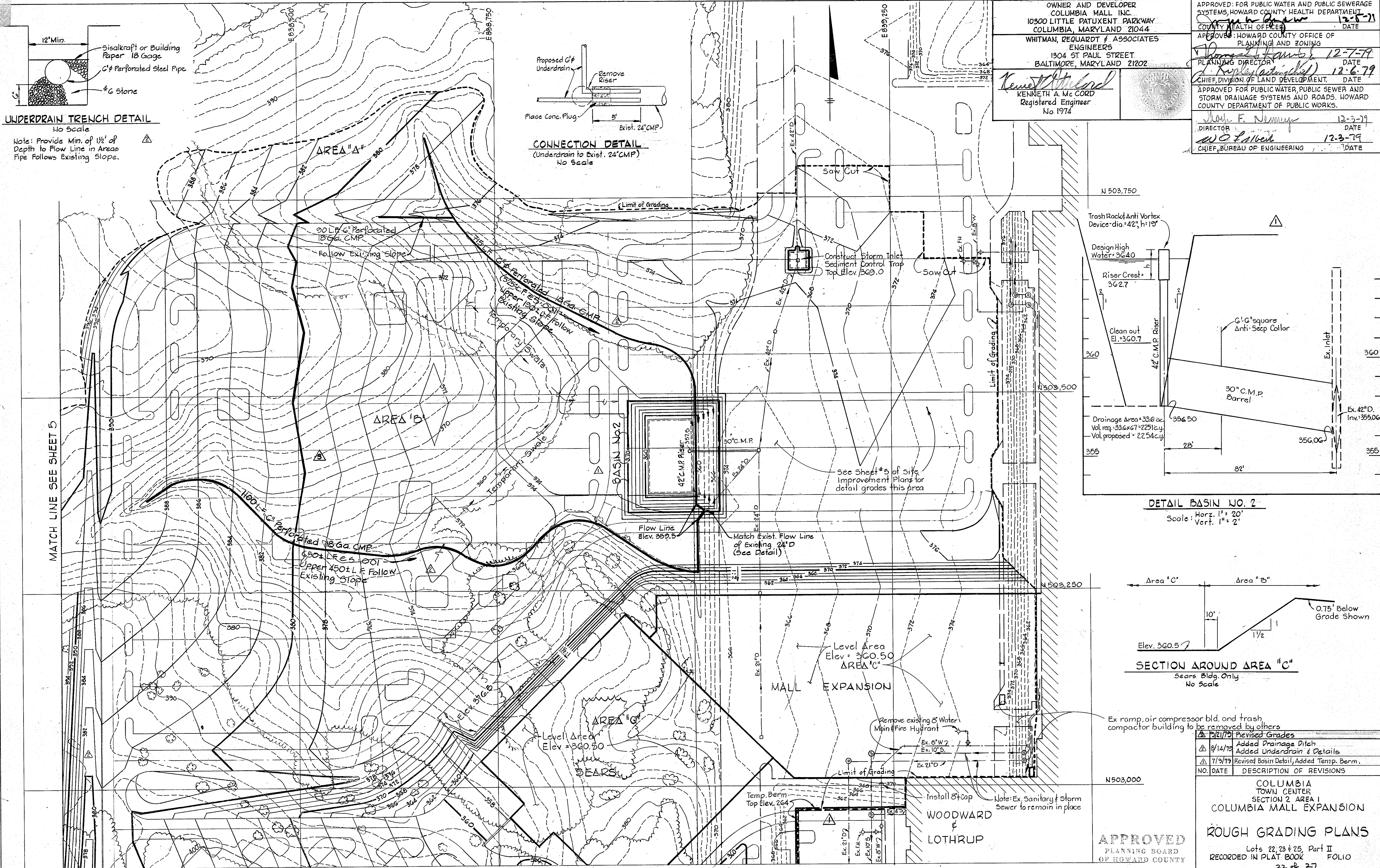
CONNECTION DETAIL
(Underdrain to Exist. 24" CMP)
No Scale

No Scale



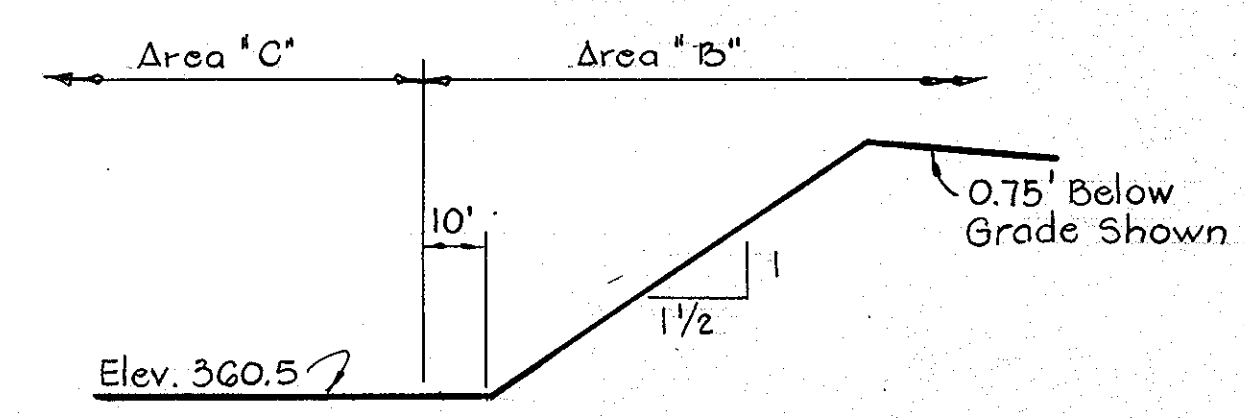
OWNER AND DEVELOPER
COLUMBIA MALL INC.
10300 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL STREET
BALTIMORE, MARYLAND 21202
Kenneth A. McCord
KENNETH A. McCORD
Registered Engineer
No. 1974

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER
DATE 12-5-79
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
PLANNING DIRECTOR
DATE 12-7-79
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE 12-6-79
APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR
DATE 12-3-79
CHIEF, BUREAU OF ENGINEERING
DATE 12-3-79



DETAIL BASIN NO. 2

Scale: Horiz. 1" = 20'
Vert. 1" = 2'



SECTION AROUND AREA "C"

Sears Bldg. Only
No Scale

NO.	DATE	DESCRIPTION OF REVISIONS
1	9/21/79	Revised Grades
2	8/14/78	Added Drainage Ditch Added Underdrain & Details
3	7/9/79	Revised Basin Detail, Added Temp. Berm.

COLUMBIA TOWN CENTER SECTION 2 AREA 1
COLUMBIA MALL EXPANSION
ROUGH GRADING PLANS
Lots 22, 23 & 25, Part II
RECORDED IN PLAT BOOK FOLIO
SHEET 22 OF 27
(3 OF 8)
ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
DATE: July 2, 1979 SCALE: 1"=50'

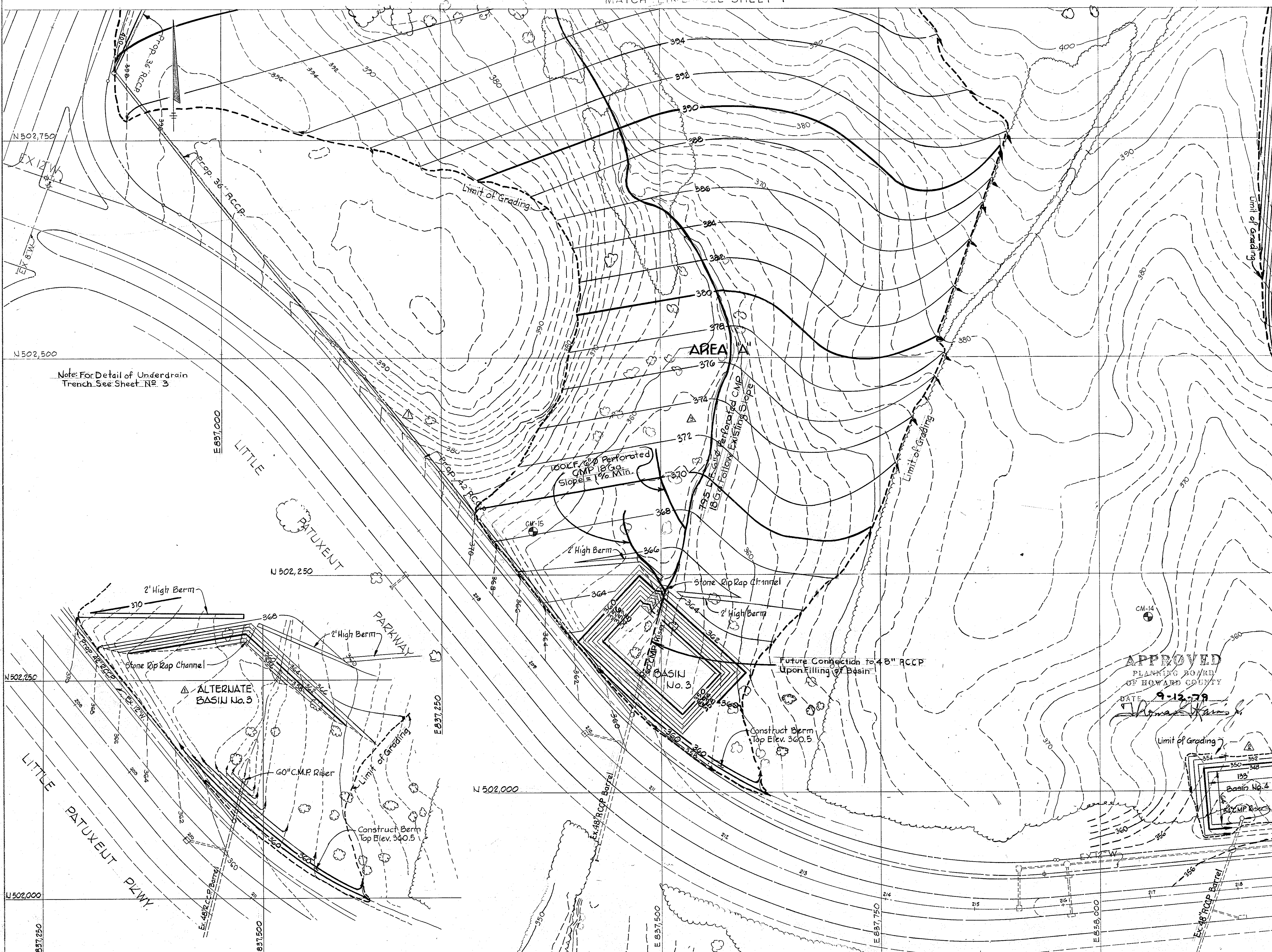
APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 9-12-79

MATCH LINE - SEE SHEET 2

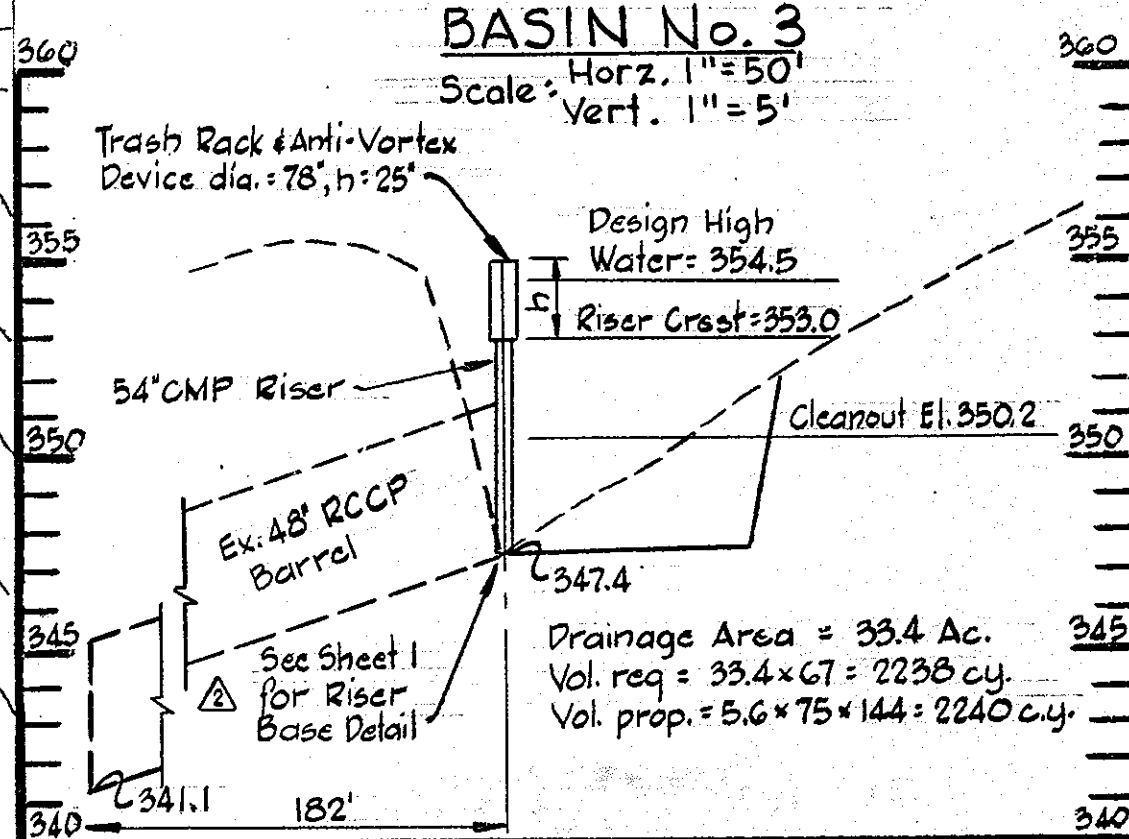
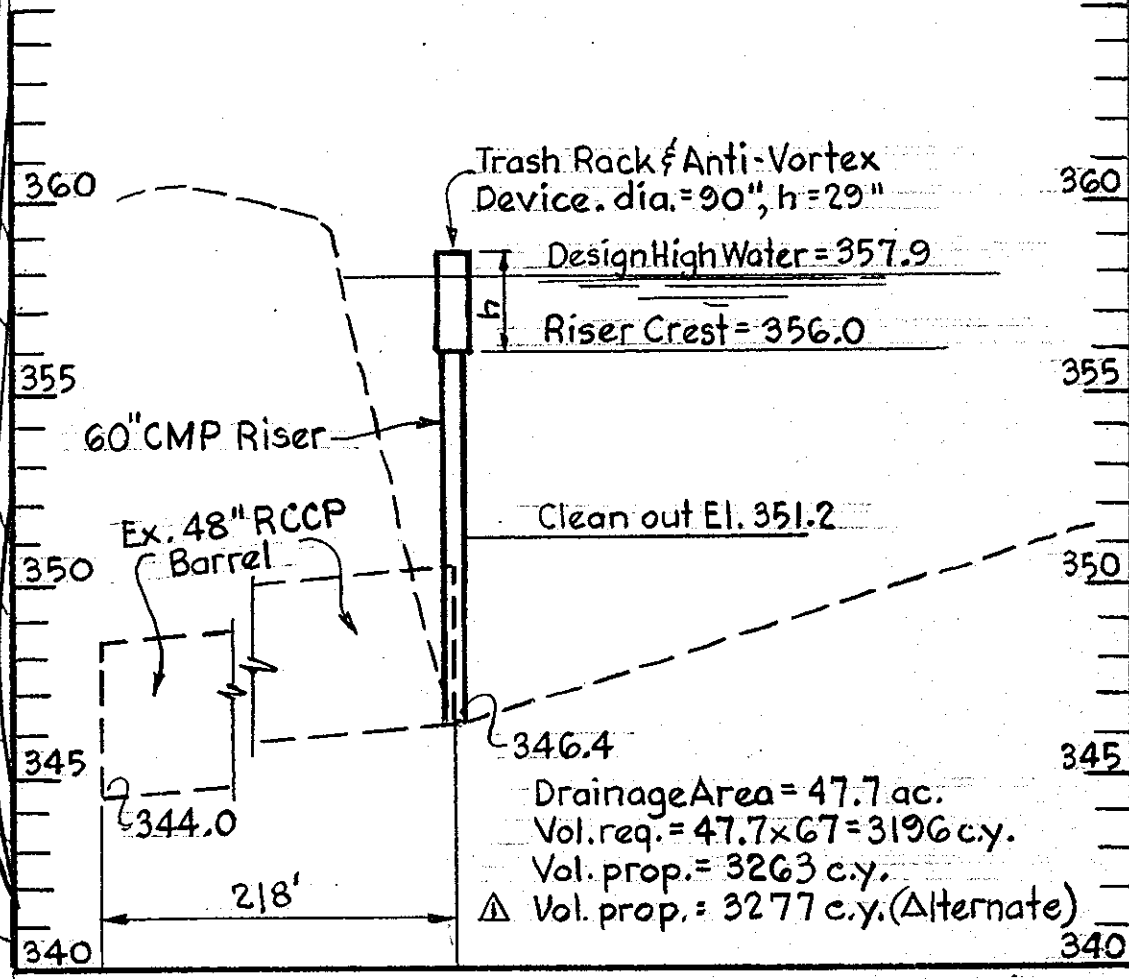
MATCH LINE SEE SHEET 5

MATCH LINE - SEE SHEET 4

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER *James B. ...* DATE 12-5-79
 APPROVED FOR PLANNING AND ZONING
 PLANNING DIRECTOR *James B. ...* DATE 12-7-79
 CHIEF DIVISION OF LAND DEVELOPMENT *James B. ...* DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR *John E. ...* DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING *W.D. Albert* DATE 12-3-79



Note: For Detail of Underdrain Trench See Sheet No. 3



BASIN No. 4
 Scale: Horz. 1"=50'
 Ver. 1"=5'
 OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, REARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202
 Kenneth A. McCord
 Registered Engineer
 No. 1974

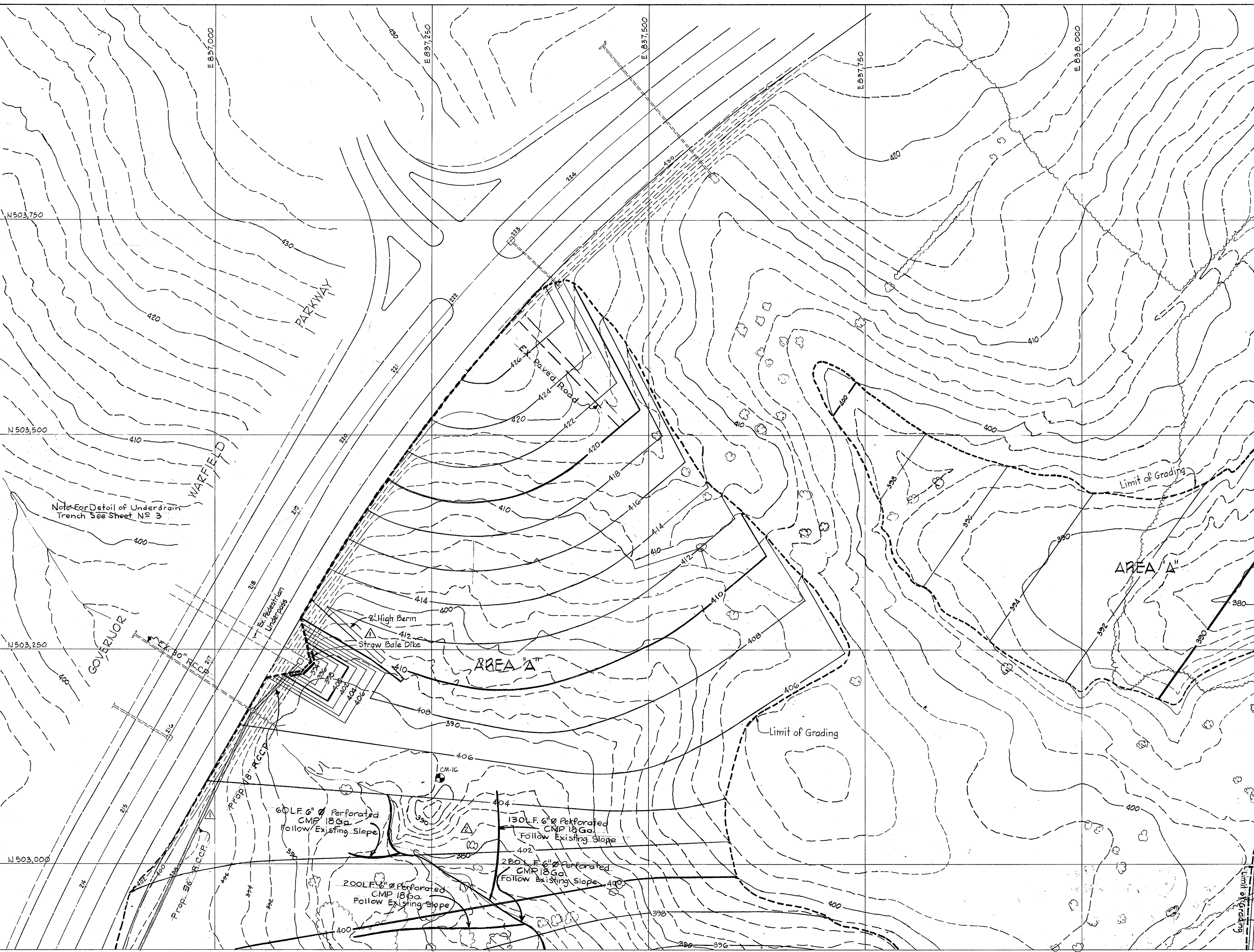
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 9-12-79
James B. ...

MATCH LINE - SEE SHEET 2

No.	DATE	DESCRIPTION OF REVISIONS
1	9/21/79	Added Underdrains
2	8/14/79	Added Basin 4, Detail & Drainage Ditch
3	7/2/79	Added Alternate Basin #3 & Prop. Storm Drain

COLUMBIA
 ROUGH GRADING PLANS
 FOR
 TOWN CENTER
 SECTION 2 AREA I
 Lots 22, 23 & 25, Part II
 RECORDED IN PLAT BOOK FOLIO
 23 of 27
 SHEET (4 of 8)
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1"=50'

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH DEPT. DATE 12-5-79
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR DATE 12-7-79
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING DATE



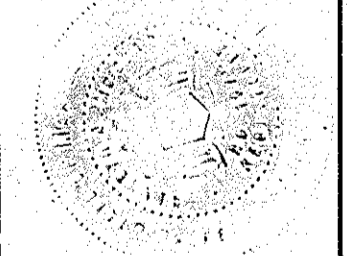
MATCH LINE - SEE SHEET 2

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY

DATE 9-12-79
[Signature]

OWNER AND DEVELOPER
 COLUMBIA MALL, INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1204 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202

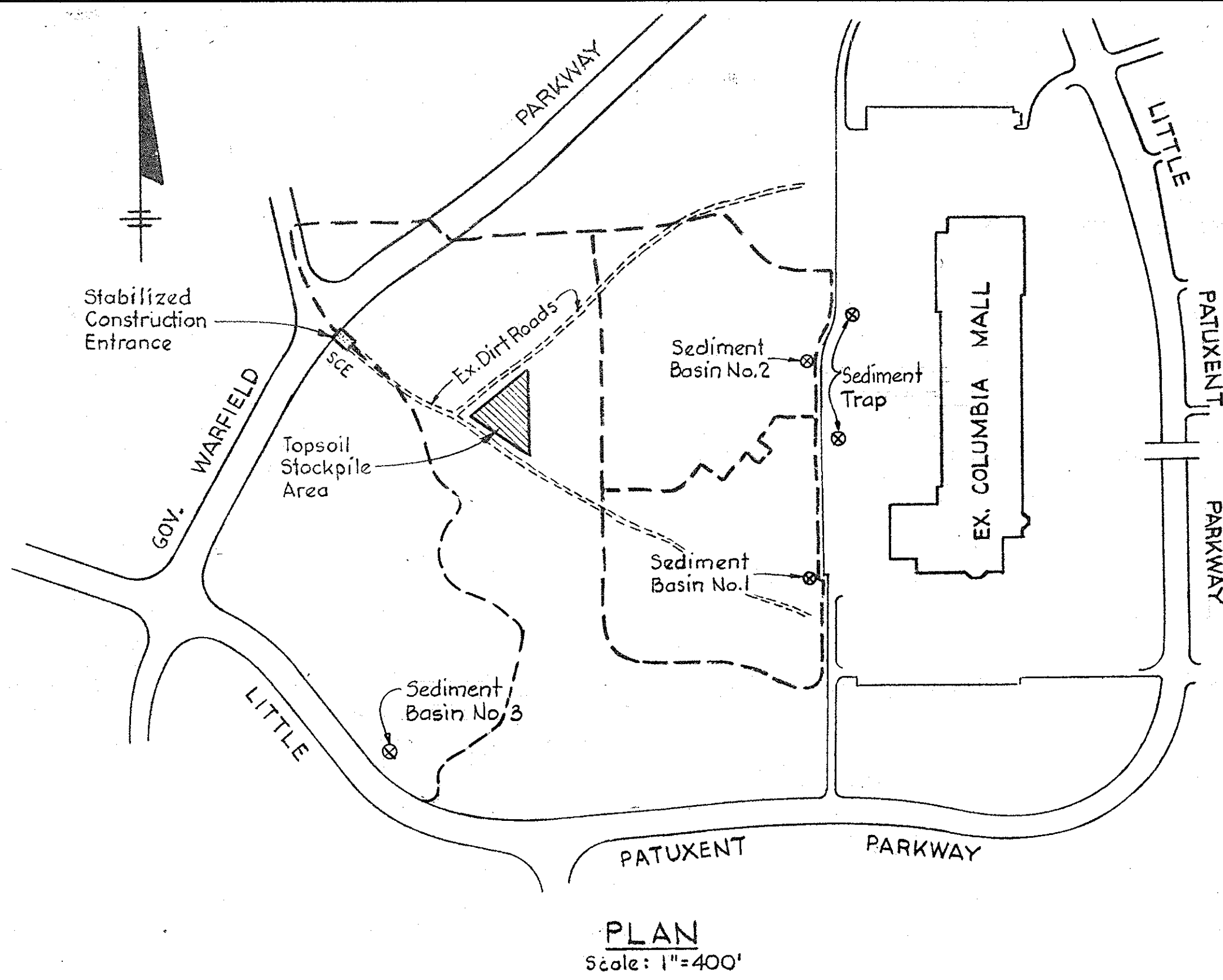
[Signature]
 KENNETH A. Mc CORD
 Registered Engineer
 No. 1974



NO.	DATE	DESCRIPTION OF REVISIONS
1	9/21/79	Added Underdrains
2	8/14/79	Added Straw Bale Dike & Prop. Storm Drain

COLUMBIA
ROUGH GRADING PLANS
 FOR
 TOWN CENTER
 SECTION 2 AREA 1
 Lots 22, 23 & 25, Part II
 RECORDED IN PLAT BOOK FOLIO
 24-827
 SHEET (5 OF 8)
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: 1"=50'

MATCH LINE - SEE SHEET 3

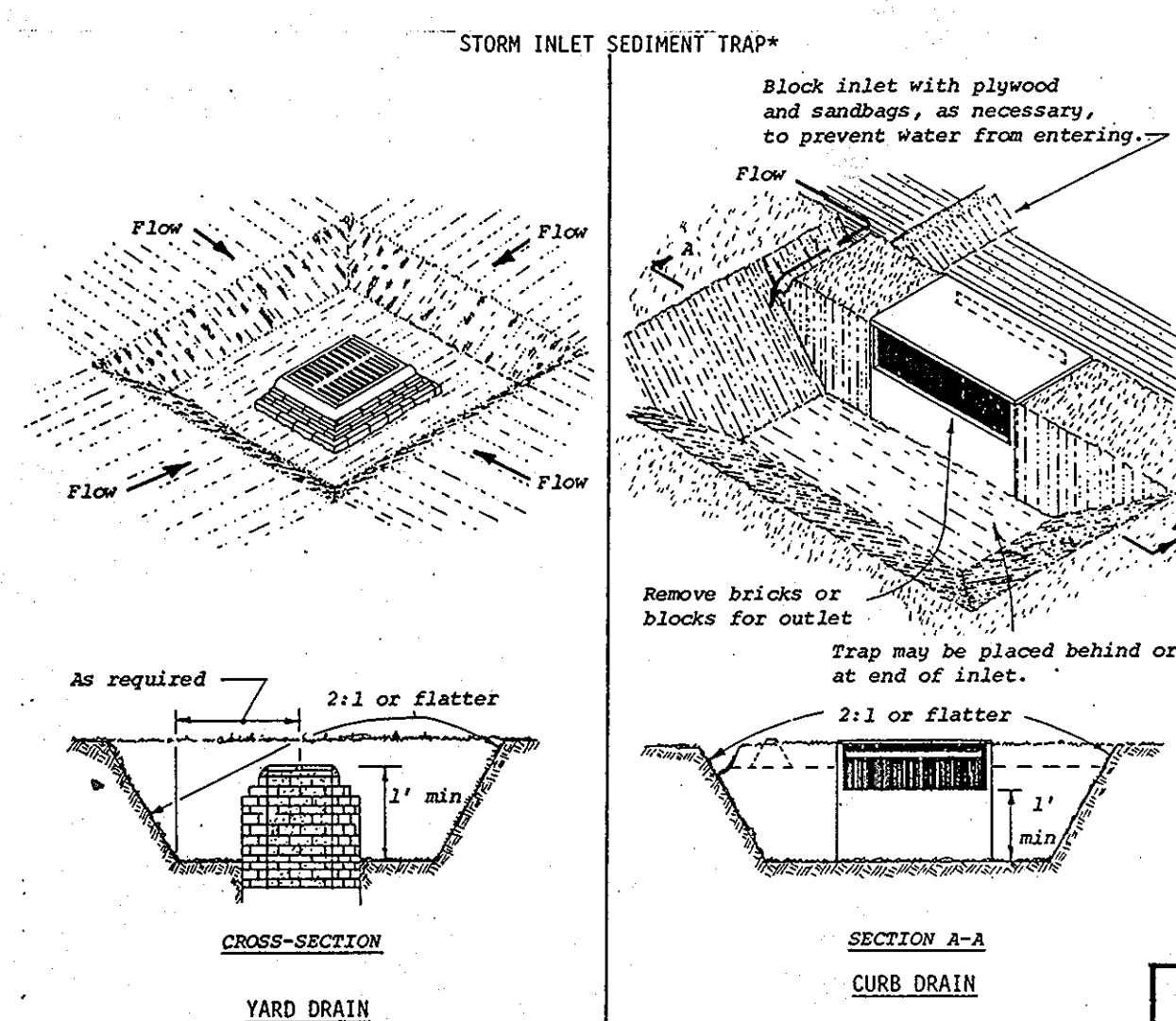
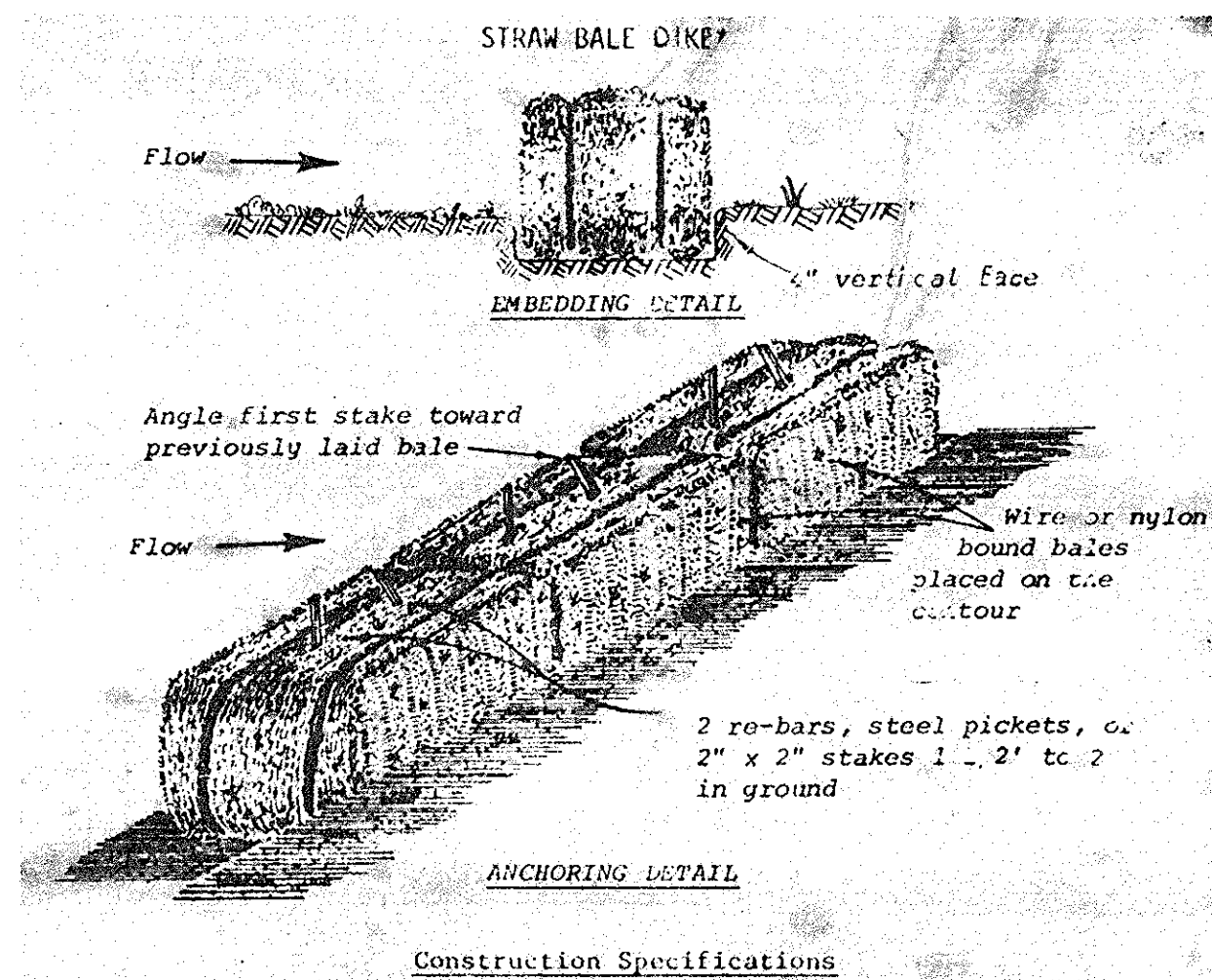
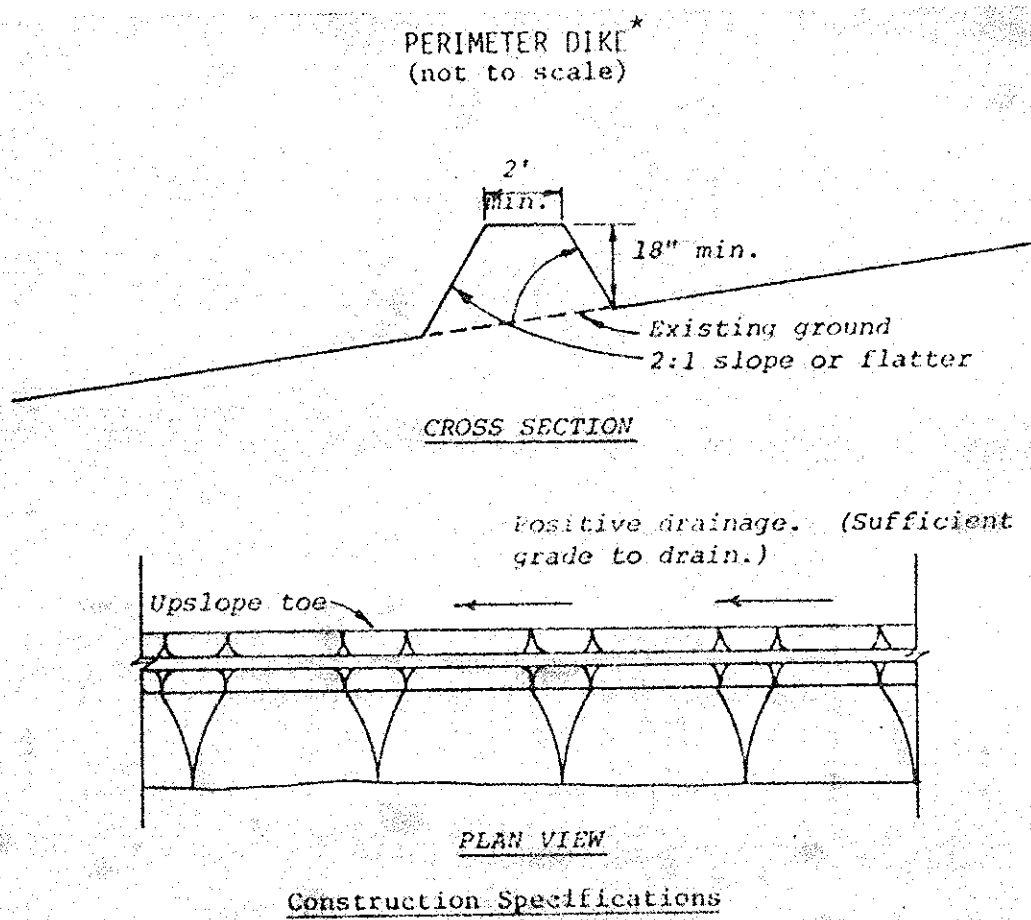


SEQUENCE OF CONSTRUCTION FOR SEDIMENT CONTROL

1. Obtain Grading Permit.
2. Clear and grub wooded areas.
3. Construct Diversion Dikes along proposed roadways and at Sediment Basins.
4. Strip and grub areas and seed topsoil stockpile.
5. Complete all cuts and fills, install storm drain pipes. Place Poly Filter GB Cloth around end of downstream pipe at all inlet and manhole locations prior to laying upstream pipe.
6. Build inlets and manholes and install wood planking and stone filters at inlets to complete Sediment Trap construction. Block inlets as noted.
7. Install clean water inlets and temporary piping as required.
8. Construct all utilities.
9. Fine grade paved areas, construct curb & gutter and seed all disturbed areas as per specifications this sheet.
10. Remove Sediment Traps, finish curb and gutter and pave roads and parking areas.
11. Remove diversion dikes and clean water inlets after construction is complete and grass is established.
12. Before placing any fill in the sediment control basins, the basin shall be dewatered and all muck, mud and unstable material removed. The basin shall then be filled to the lines and grades shown with the area paved or sodded as soon as possible.

PERMANENT SEEDING

LIME = 2 Tons/acre Agricultural Ground Limestone
FERTILIZER = 1000 Lbs/acre (10-10-10)
SEEDING = 100 Lbs/acre of the following:
 20% Kentucky Blue Grass, 20% Merion Blue Grass,
 55% Creeping Red Fescue, 5% Red top.
 Mulch Required - Mulch area with straw at 75 lbs./1000 s.f. or
 Anchor with asphalt at the rate of 480 gallons/acre.
 Stabilization of slopes steeper than 3:1 shall be planted with crown vetch
 Kentucky 31 Tall Fescue 40 lbs/acre (1 lb./1000 s.f.)



1. All dikes shall be machine compacted.
2. All perimeter dikes shall have positive drainage to an outlet.
3. A. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area or onto a level spreader or grade stabilization structure.
B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as sediment trap or a sediment basin or to an area protected by any of these practices.
4. Stabilization, when required, shall be done in accordance with Standard and Specifications for Grassed Waterway. The minimum area to be stabilized shall be the channel flow area.
5. Periodic inspection and required maintenance shall be provided.

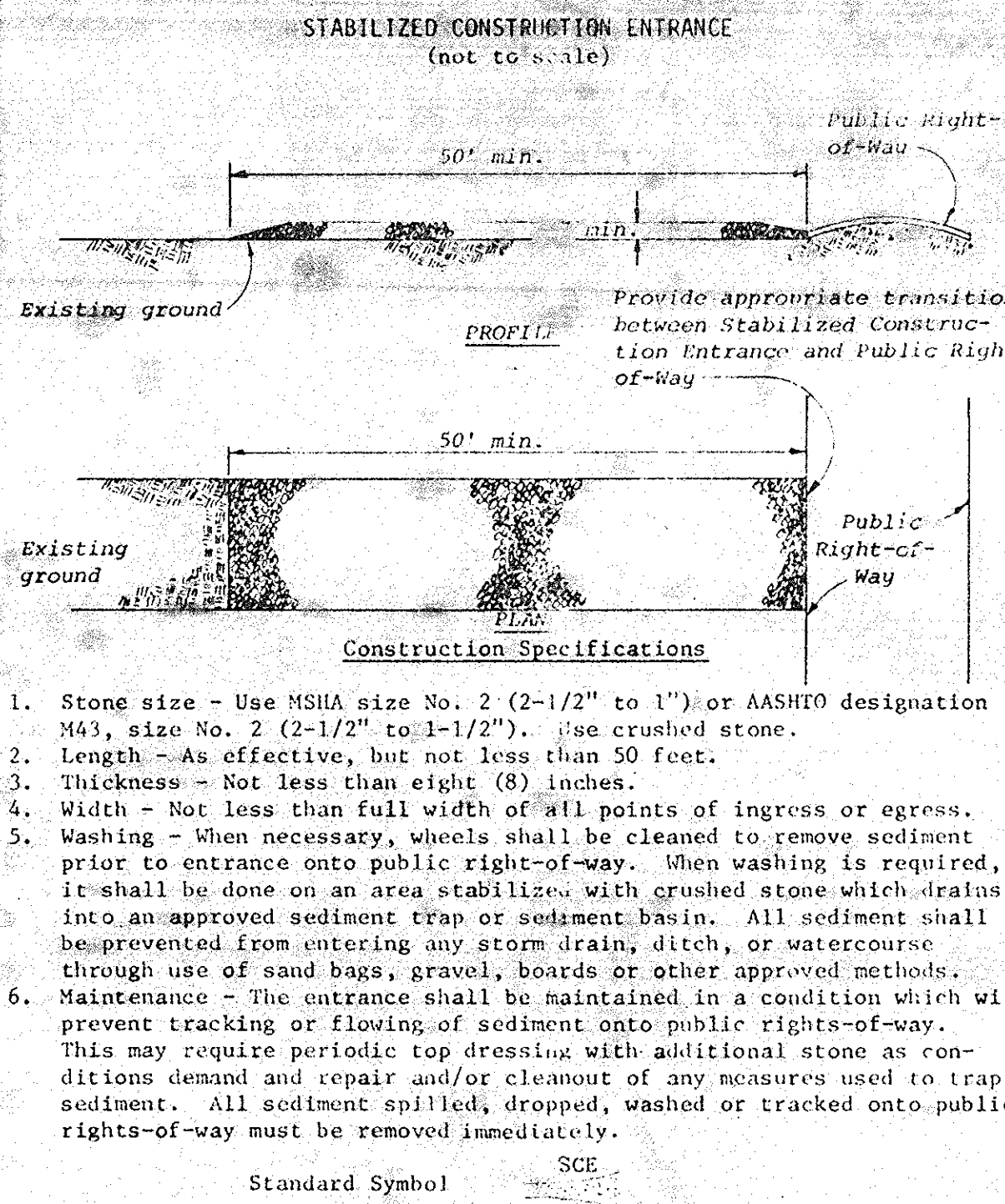
1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

- CONSTRUCTION SPECIFICATIONS**
1. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
 2. The structure shall be inspected after each rain and repairs made as needed.
 3. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
 4. The sediment trap shall be removed and area stabilized when the remaining drainage area has been properly stabilized.
 5. All cut and fill slopes shall be 2:1 or flatter.

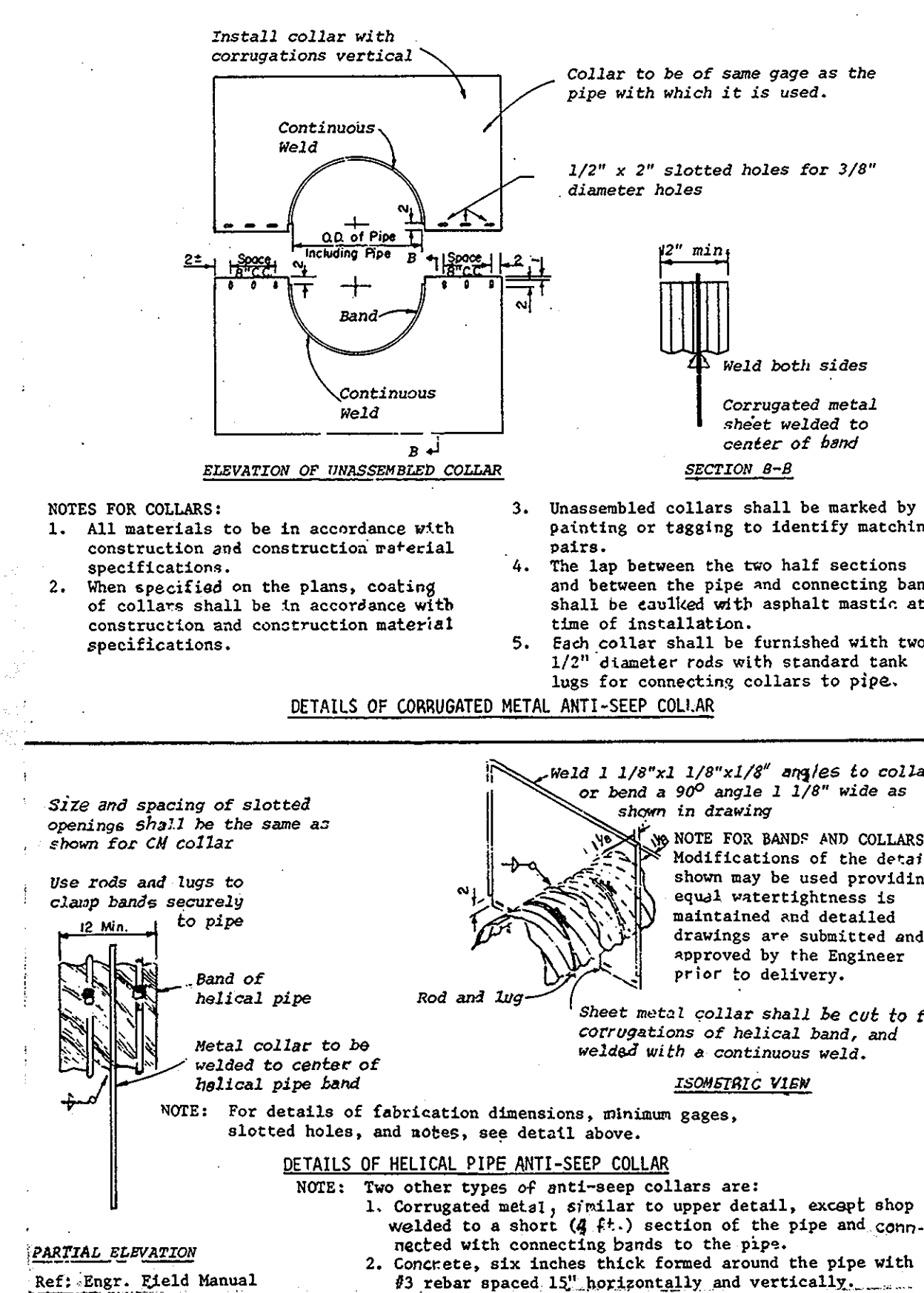
* Drainage area less than 5 acres

* Drainage area less than 1/2 acre.

* Drainage area less than 5 acres.

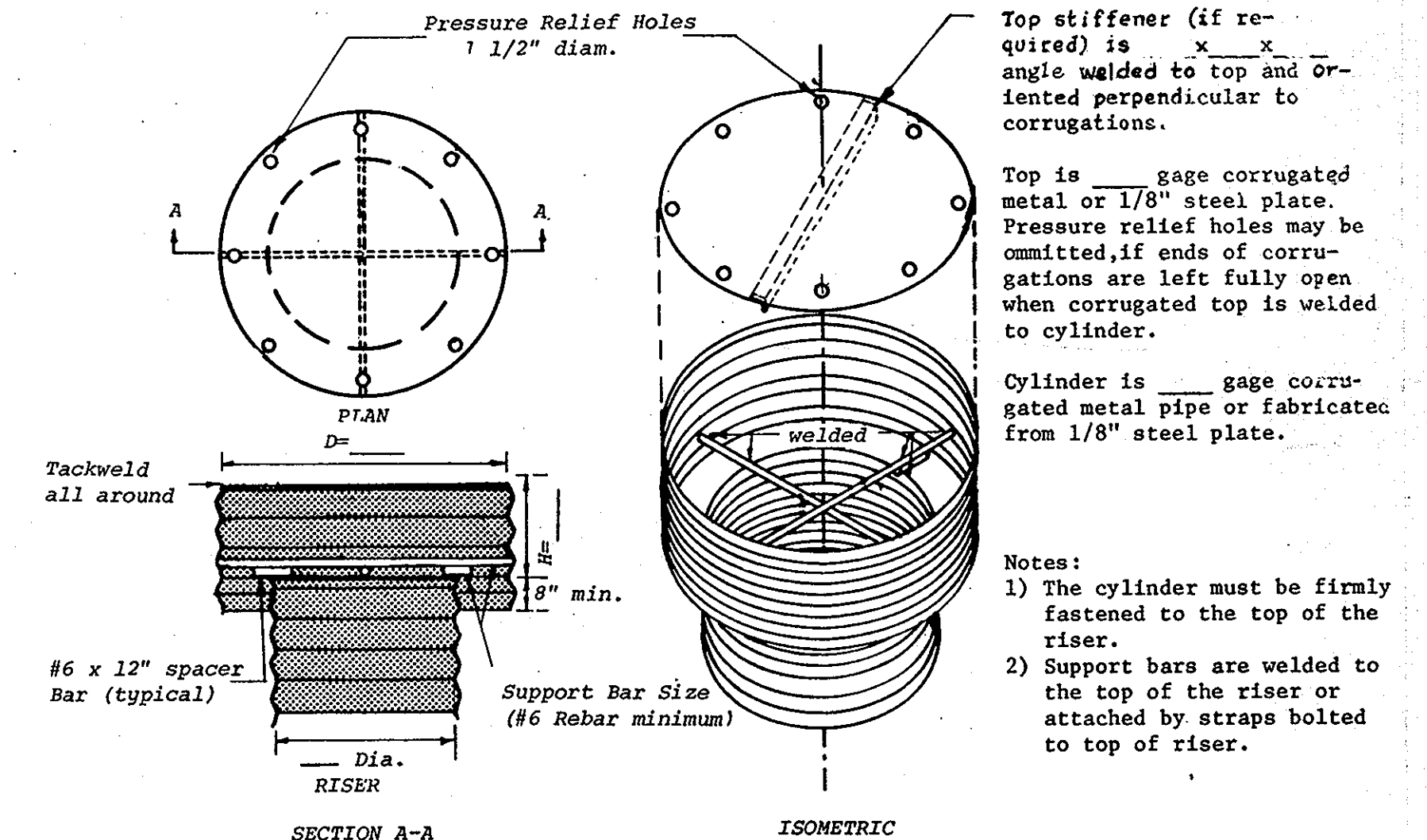
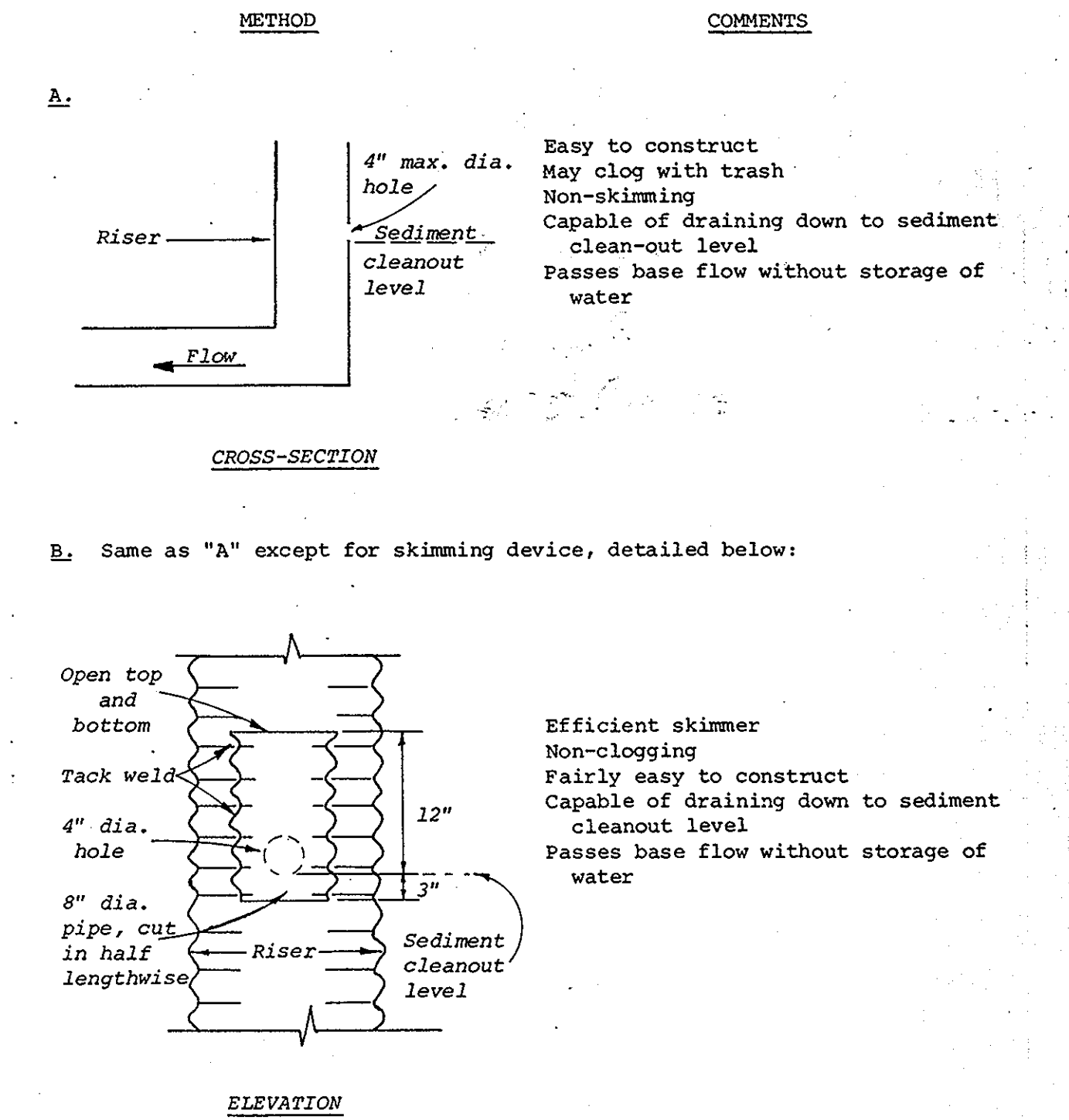


1. Stone size - Use MSHA size No. 2 (2-1/2" to 1") or AASHTO designation M43, size No. 2 (2-1/2" to 1-1/2"). Use crushed stone.
2. Length - As effective, but not less than 50 feet.
3. Thickness - Not less than eight (8) inches.
4. Width - Not less than full width of all points of ingress or egress.
5. Washing - When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sand bags, gravel, boards or other approved methods.
6. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.



METHODS OF DEWATERING SEDIMENT BASIN DETENTION POOLS

The dewatering methods shown here are inexpensive and operate automatically. Other methods, such as pumping, may also be used.



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT <i>[Signature]</i> 12-3-79 COUNTY HEALTH OFFICER DATE	NO.	DATE	DESCRIPTION OF REVISIONS
APPROVED FOR PLANNING AND ZONING <i>[Signature]</i> 12-7-79 PLANNING DIRECTOR DATE			
APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. <i>[Signature]</i> 12-3-79 DIRECTOR DATE			
<i>[Signature]</i> 12-3-79 CHIEF, BUREAU OF ENGINEERING DATE			

OWNER AND DEVELOPER
COLUMBIA MALL INC.
10300 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

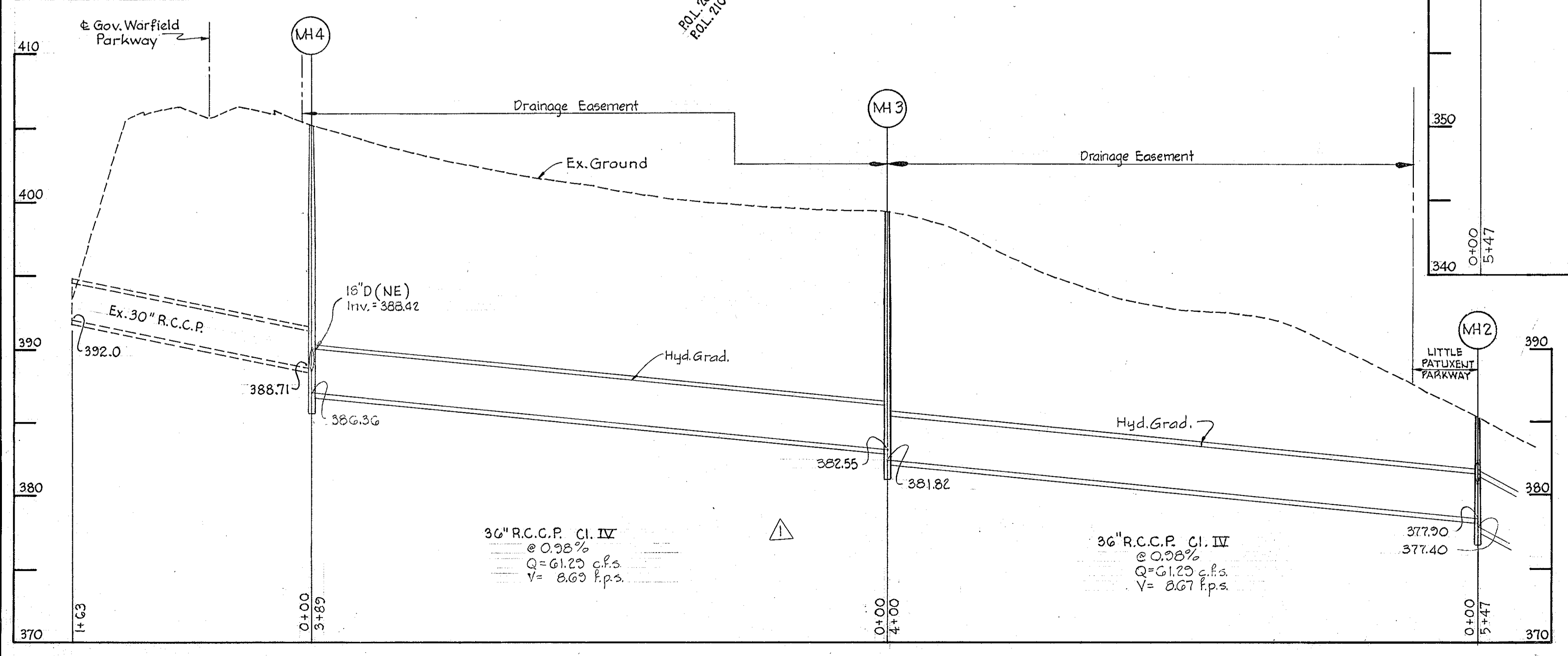
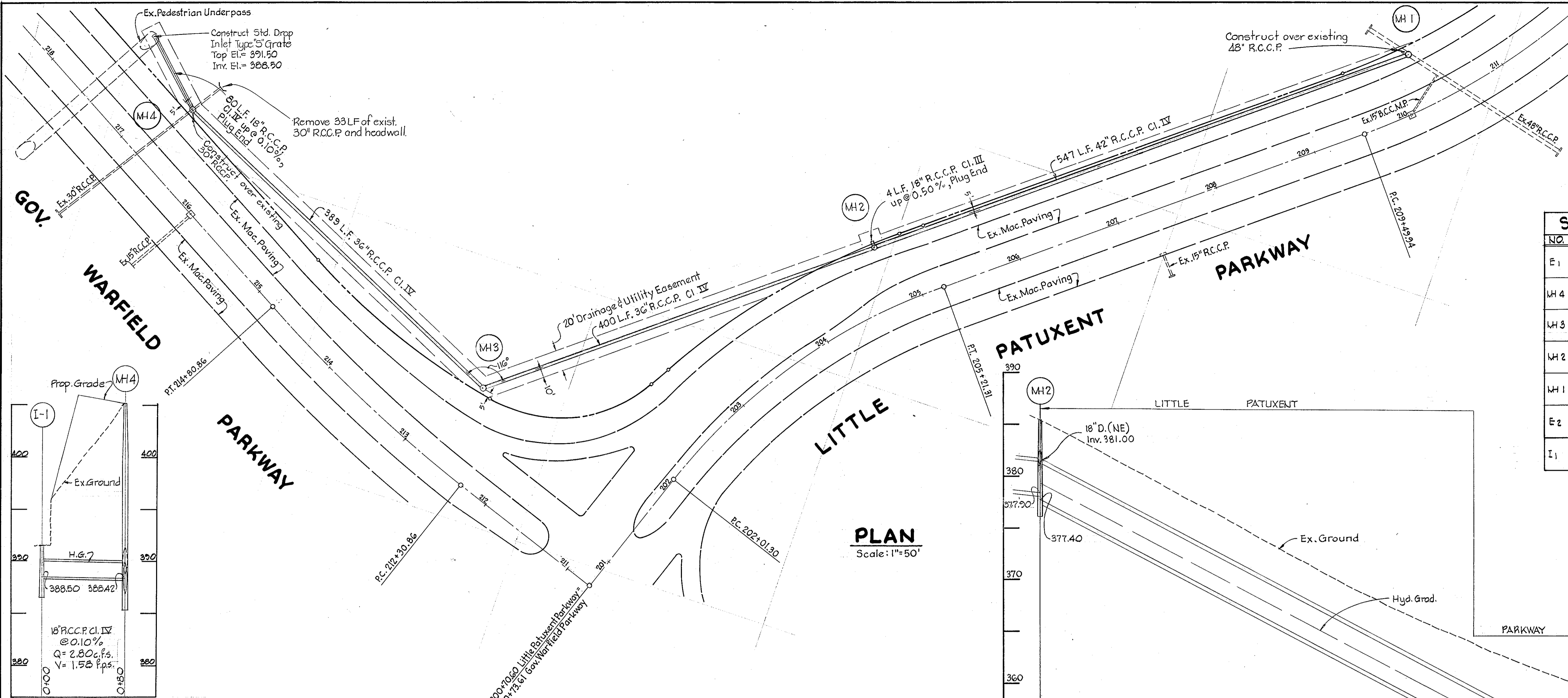
WHITMAN, REQUARD & ASSOCIATES
ENGINEERS
1304 ST. PAUL STREET
BALTIMORE, MARYLAND 21202

[Signature]
KENNETH A. McCORD
Registered Engineer
No. 1974

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 9-12-79
[Signature]

COLUMBIA
FOR
TOWN CENTER
SECTION 2 AREA 1
Lots 22, 23 & 25, Part II
RECORDED IN PLAT BOOK FOLIO
25 of 27
SHEET (6 of 8)
ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
DATE: July 2, 1979 SCALE: 1" = 50'

SEDIMENT CONTROL DETAILS



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER DATE 12-1-79
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR DATE 12-7-79
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR DATE 12-3-79
 CHIEF, BUREAU OF ENGINEERING DATE 12-3-79

STRUCTURE		SCHEDULE			
NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP EL.
E 1	End of Existing Pipe	Gov. Warfield Pkwy. Sta. 216+85 35' Lt.	392.00	394.79	(Top Pipe)
MH 4	Std. Manhole	Gov. Warfield Pkwy. Sta. 216+74 67' Rt.	388.71	388.21	405.20
MH 3	Std. Manhole	Gov. Warfield Pkwy. Sta. 212+74 86' Rt.	386.27	386.17	398.40
MH 2	Std. Manhole	Little Patuxent Pkwy. Sta. 204+76 60' Lt.	379.50	379.00	385.40
MH 1	Std. Manhole	Little Patuxent Pkwy. Sta. 210+22 54' Lt.	348.92	345.89	359.20
E 2	Ex. Endwall	Little Patuxent Pkwy. Sta. 210+02 100' Rt.	344.00		348.42 (Top Pipe)
I 1	Std. Drop Inlet	Gov. Warfield Pkwy. Sta. 218+51 88' Rt.	388.50	391.50	

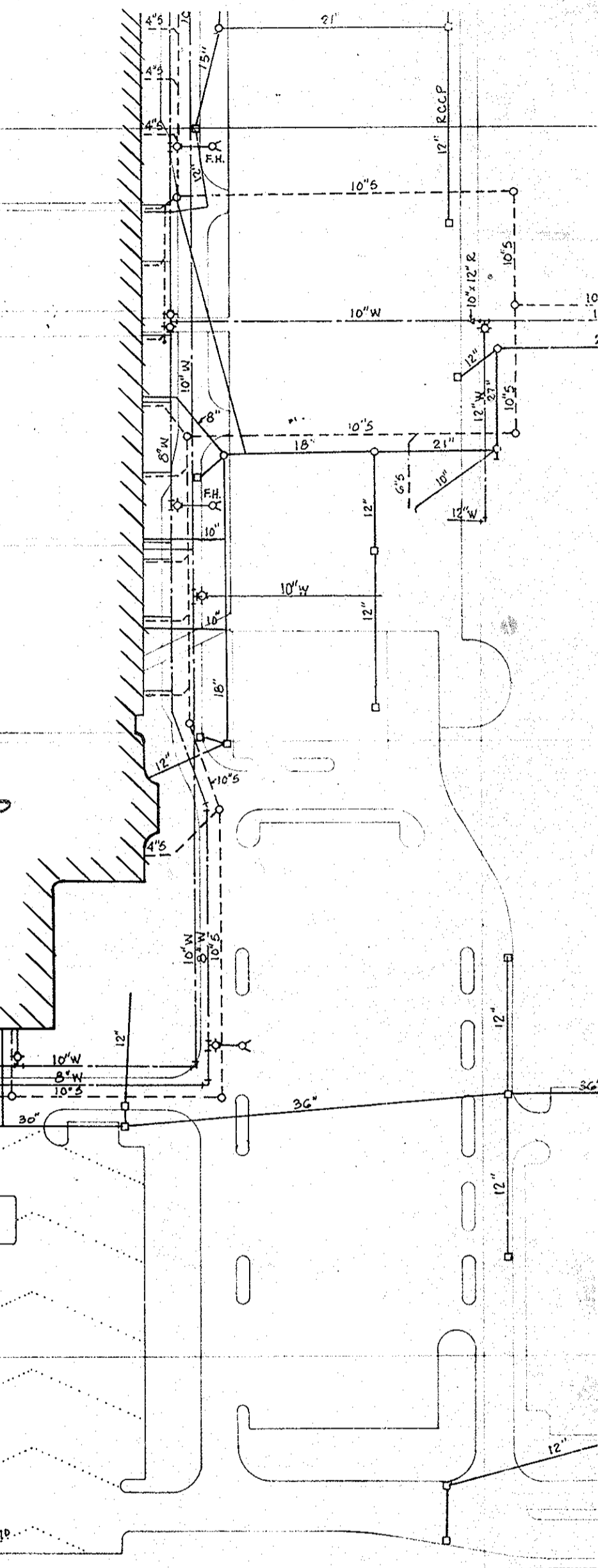
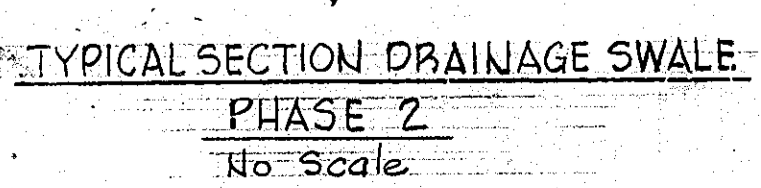
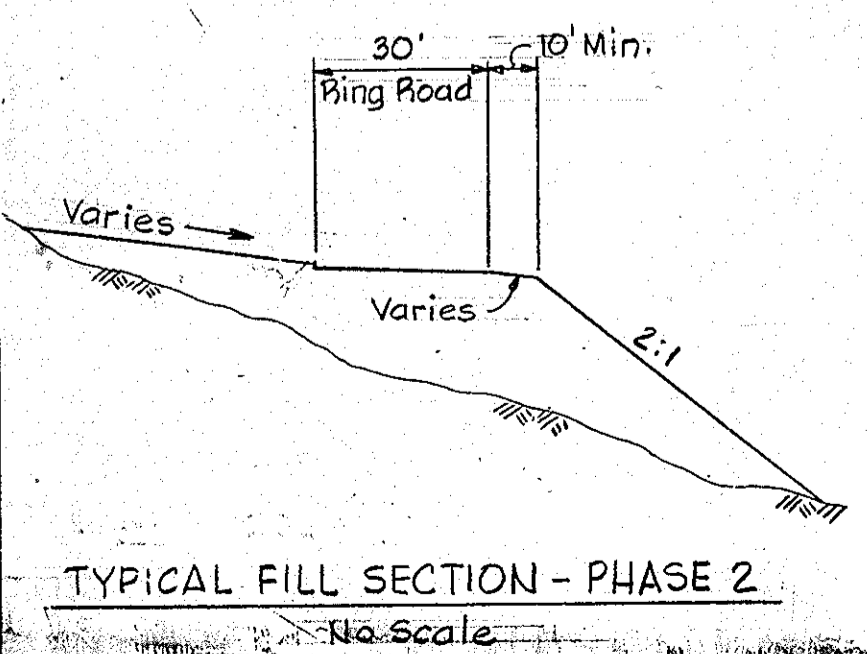
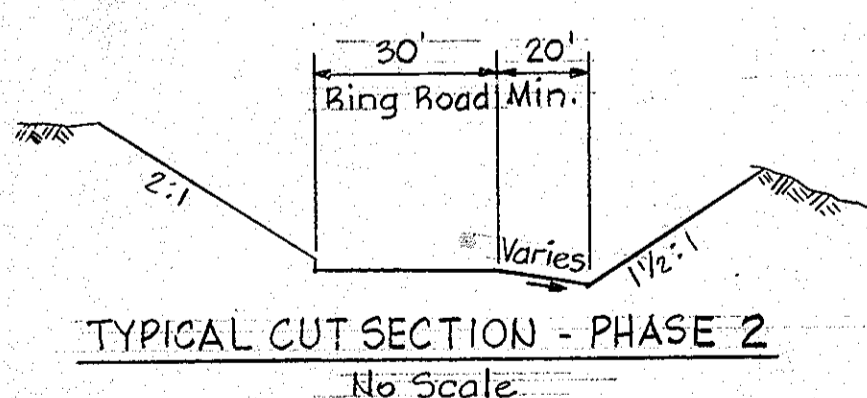
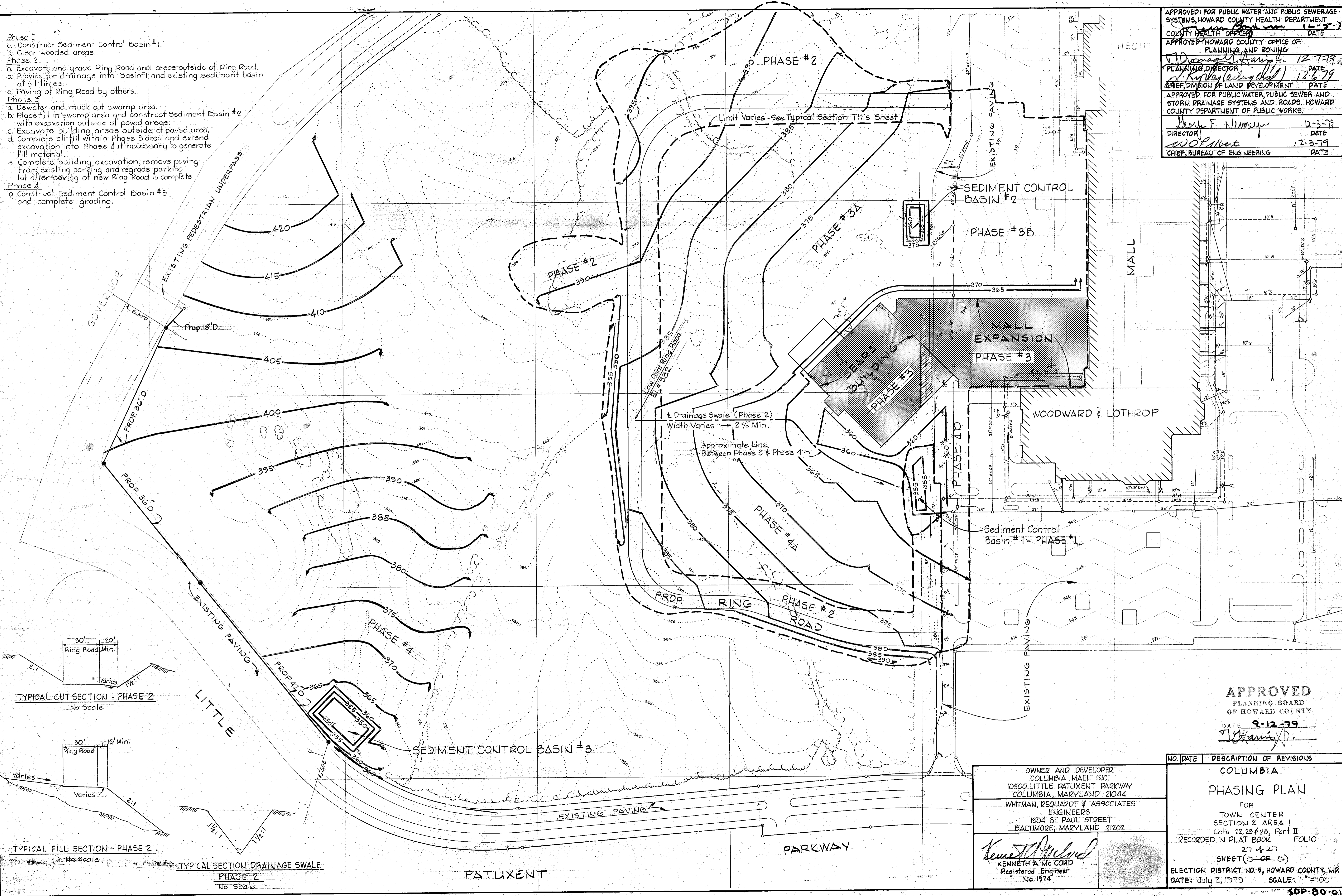
APPROVED
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 OF HOWARD COUNTY
 DATE 9-12-79

OWNER AND DEVELOPER
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 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
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 1304 ST. PAUL STREET
 BALTIMORE, MARYLAND 21202
 Kenneth A. Mc Cord
 Registered Engineer
 No. 1974

Revised Storm Drain Profiles
 NO. DATE DESCRIPTION OF REVISIONS
 COLUMBIA
STORM DRAINS
 FOR
 TOWN CENTER
 SECTION 2 AREA I
 Lots 22, 23 & 25, Part II
 RECORDED IN PLAT BOOK FOLIO
 26 of 27
 SHEET (7 OF 8)
 ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD.
 DATE: July 2, 1979 SCALE: As Shown

- Phase 1
 a. Construct Sediment Control Basin #1.
 b. Clear wooded areas.
- Phase 2
 a. Excavate and grade Ring Road and areas outside of Ring Road.
 b. Provide for drainage into Basin #1 and existing sediment basin at all times.
 c. Paving of Ring Road by others.
- Phase 3
 a. Dewater and muck out swamp area.
 b. Place fill in swamp area and construct Sediment Basin #2 with excavation outside of paved areas.
 c. Excavate building areas outside of paved area.
 d. Complete all fill within Phase 3 area and extend excavation into Phase 4 if necessary to generate fill material.
 e. Complete building excavation, remove paving from existing parking and regrade parking lot after paving of new Ring Road is complete.
- Phase 4
 a. Construct Sediment Control Basin #3 and complete grading.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 12-3-79
 APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR: *[Signature]* DATE: 12-7-79
 CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 12-6-79
 APPROVED FOR PUBLIC WATER, PUBLIC SEWER AND STORM DRAINAGE SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 DIRECTOR: *[Signature]* DATE: 12-3-79
 CHIEF, BUREAU OF ENGINEERING: *[Signature]* DATE: 12-3-79



APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 9-12-79
[Signature]

OWNER AND DEVELOPER
 COLUMBIA MALL INC.
 10300 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST PAUL STREET
 BALTIMORE, MARYLAND 21202

[Signature]
 KENNETH A. McCORD
 Registered Engineer
 No 1974

NO.	DATE	DESCRIPTION OF REVISIONS
		COLUMBIA PHASING PLAN FOR TOWN CENTER SECTION 2 AREA 1 Lots 22, 23 & 25, Part II. RECORDED IN PLAT BOOK FOLIO 27 & 27 SHEET (3 OF 3) ELECTION DISTRICT NO. 5, HOWARD COUNTY, MD. DATE: July 2, 1979 SCALE: 1" = 100'