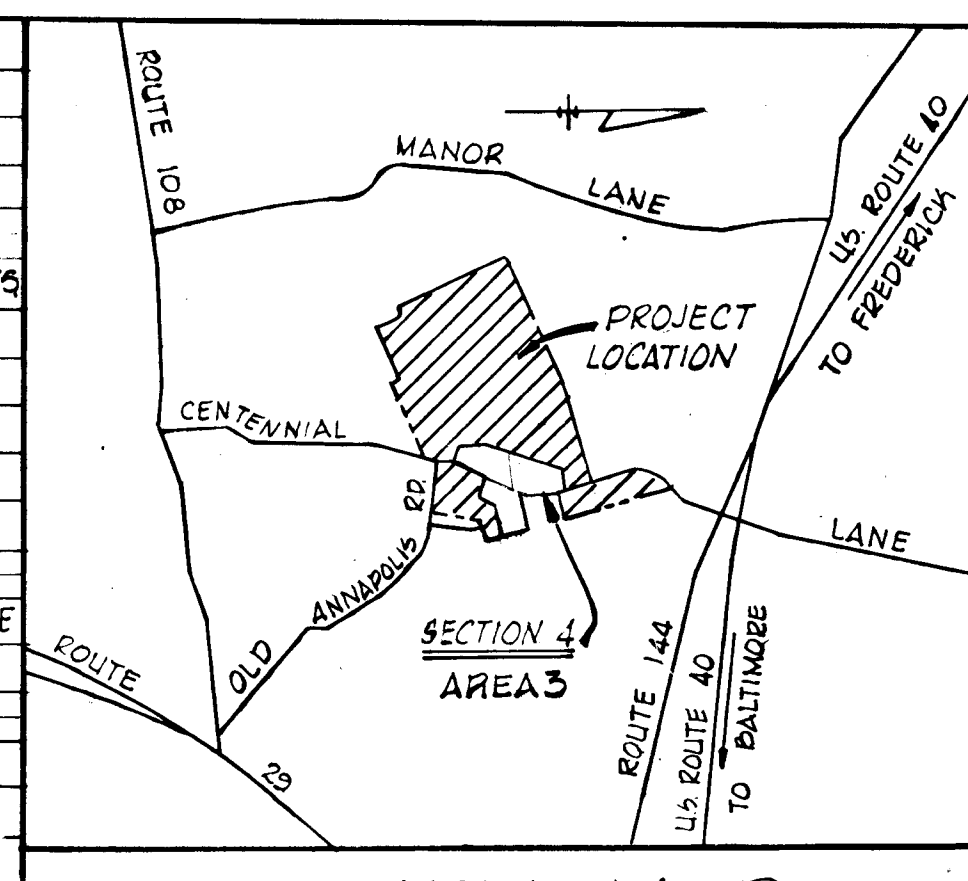
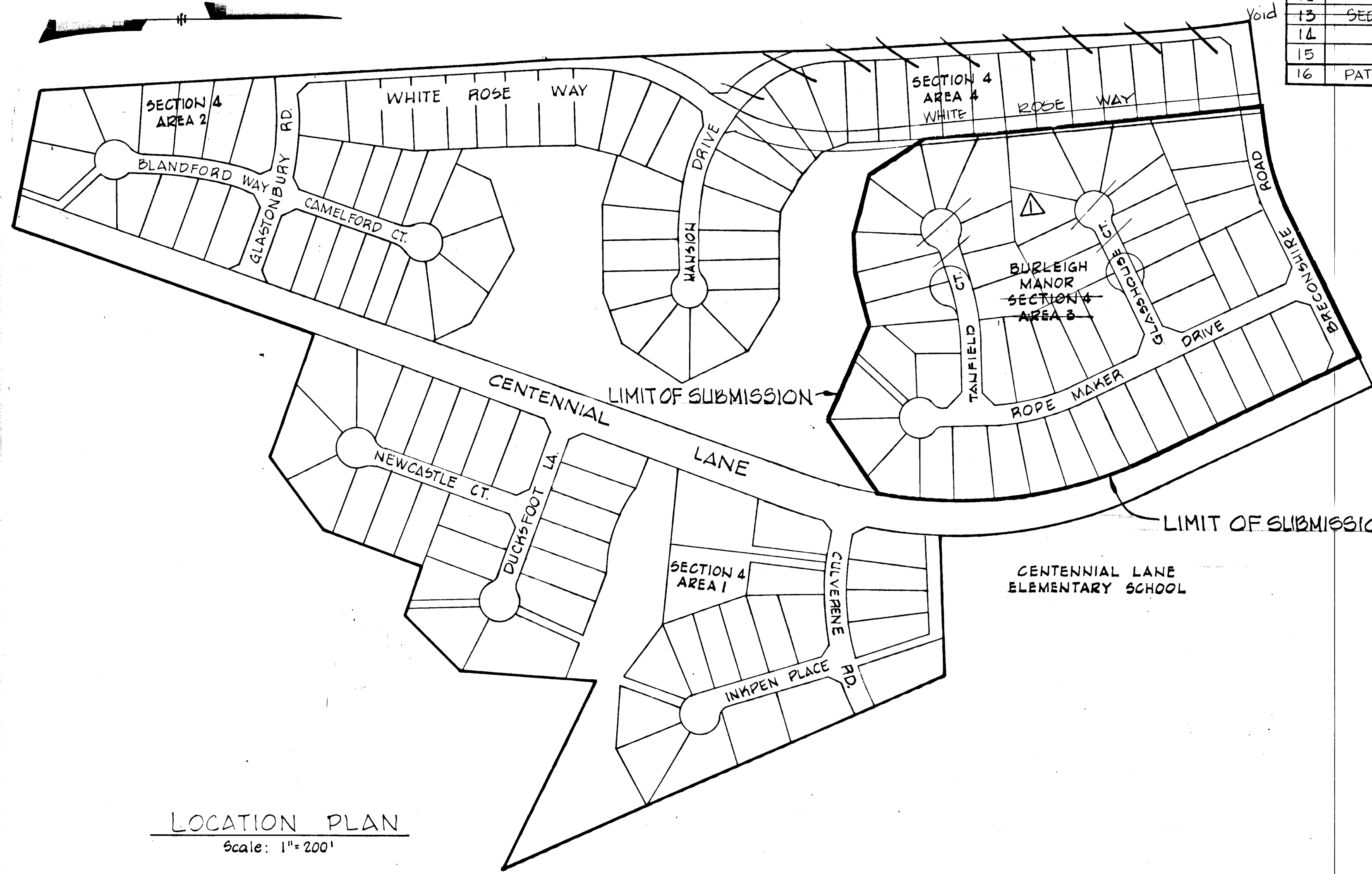


SHEET INDEX	
No.	DESCRIPTION
1	COVER SHEET
2	PLAN & PROFILE BRECONSHIRE ROAD
3	PLAN & PROFILE ROPE MAKER DRIVE
4	PLAN & PROFILE TANFIELD & GLASSHOUSE CTS
5	CENTENNIAL LANE IMPROVEMENTS
6	" " " "
7	STORM DRAIN PROFILES & DETAILS
8	ROAD & DRAIN DETAILS
9	DRAINAGE AREA MAP
10	" " " "
11	STORM WATER MANAGEMENT PLAN & PROFILE
12	" " " " DETAILS
13	SEDIMENT CONTROL PLAN
14	" " " "
15	" " " " DETAILS
16	PATHWAY BRIDGE DETAILS



VICINITY MAP
Scale: 1" = 1/2 Mile



LOCATION PLAN
Scale: 1" = 200'

GENERAL NOTES

- All work shall be performed in accordance with the Howard County Road Construction Code and Standard Specifications.
 - All utility companies shall be notified 24 hours in advance of construction.
 - * Streets are designed for traffic speed of 25 mph. in accordance with AASHTO standards.
 - All inlets shall be Howard County standards unless otherwise noted.
 - All street curb returns shall have a 35' radius unless otherwise noted.
 - Storm drain trenches within road rights-of-way shall be backfilled and compacted in accordance with Howard County Road Construction Code and Standard Specifications.
 - Approximate location of existing utilities are shown. The contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage due to contractors operations shall be repaired immediately at the contractors expense.
 - The contractor shall test pit existing utilities where directed by the engineer a minimum of two weeks in advance of construction operations.
 - All reinforced concrete for storm drain structures shall have a minimum 28 day strength of 4000 psi.
 - Traffic control devices and installation shall be in accordance with Manual on Uniform Traffic Control Devices, 1971 Revised Edition.
 - Poly Filter, X (filter cloth blanket) or equal shall be placed under all storm pipe-rap.
 - Pipe-rap at inlets shall be unpaved unless otherwise noted.
 - All horizontal and vertical controls are based on Maryland State Datum.
 - Seed and mulch all disturbed areas.
- * Breconshire Road design speed = 30 mph

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
BALTIMORE, MARYLAND
Kenneth A. Mc BORD
KENNETH A. Mc BORD
Registered Engineer
No. 1974

DEPARTMENT OF PUBLIC WORKS
Allen S. Brown 11/1/79
CHIEF, BUREAU OF ENGINEERING DATE
OFFICE OF PLANNING AND ZONING
John J. ... 10/27/79
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

OWNER AND DEVELOPER
COSTAIN WASHINGTON INC.
10710 LEE HIGHWAY SUITE 201
FAIRFAX, VIRGINIA 22030

Revised Mansion Drive, Tanfield Ct. and Glasshouse Ct. (Index) 4/26/84	
NO.	REVISION DATE
BURLEIGH MANOR SECTION 4 AREA 3	
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
Scale: As Shown	Date: July 13, 1979

STRUCTURE SCHEDULE

No.	Type	Location	Inv. In	Inv. Out	Top El.	Remarks
S-2	Precast 18"	See Plan	436.91	-	-	Standard End Section
I-10	A-5	0+62.17 Breconshire Rd. 20.60' Lt.	437.58	437.38	442.18	See Detail Sheet B
I-11	A-10	0+64.67 Breconshire Rd. 20.60' Rt.	438.00	437.86	442.44	See Detail Sheet B
I-12	Class C, Type D	See Plan	-	439.03	442.43	Ho. Co. Std. D-44C Pg. 119-C

DEPARTMENT OF PUBLIC WORKS

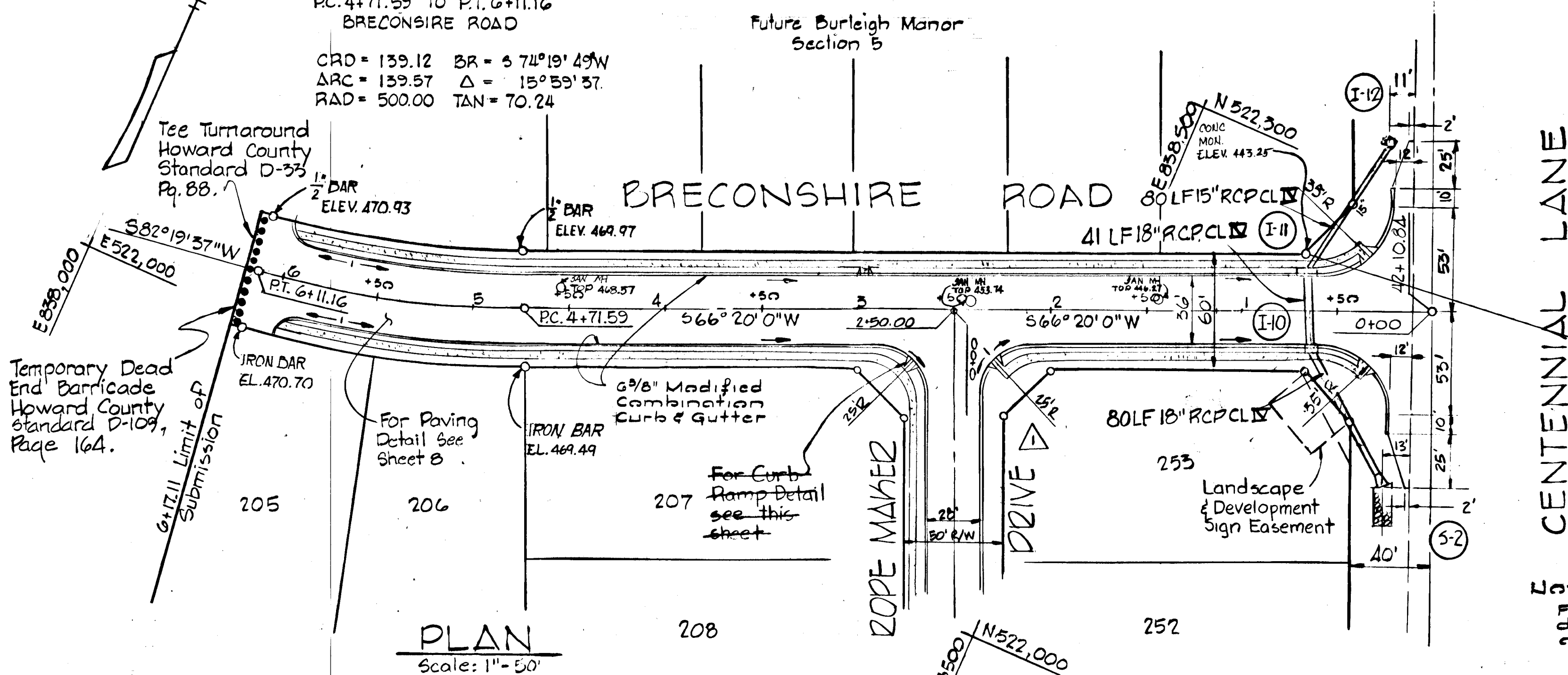
Allen J. Brown 11/1/79
CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

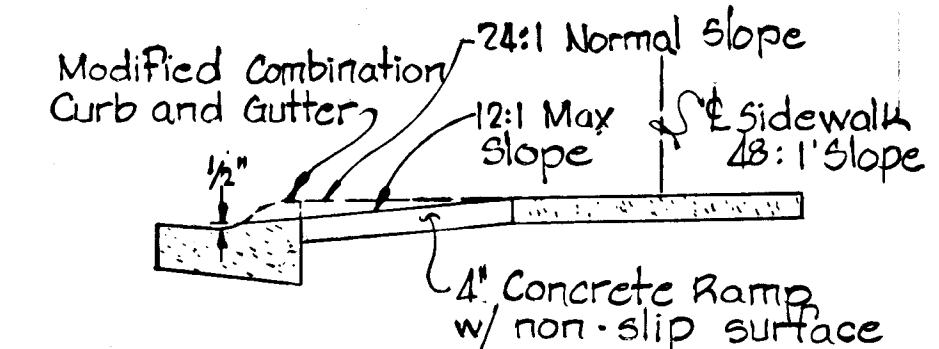
10-29-79
CHIEF DIVISION OF LAND DEVELOPMENT DATE

CURVE DATA

PC: 4+71.59 TO PT. G+11.16
BRECONSHIRE ROAD
CRD = 159.12 BR = 5 74°19' 49"W
ARC = 139.57 Δ = 15° 59' 57"
RAD = 500.00 TAN = 70.24



Max. Slope 12:1
Sides 6:1
Width 3'-4" (Min.)



PLAN-TYPICAL Scale: 1" = 20'-0"

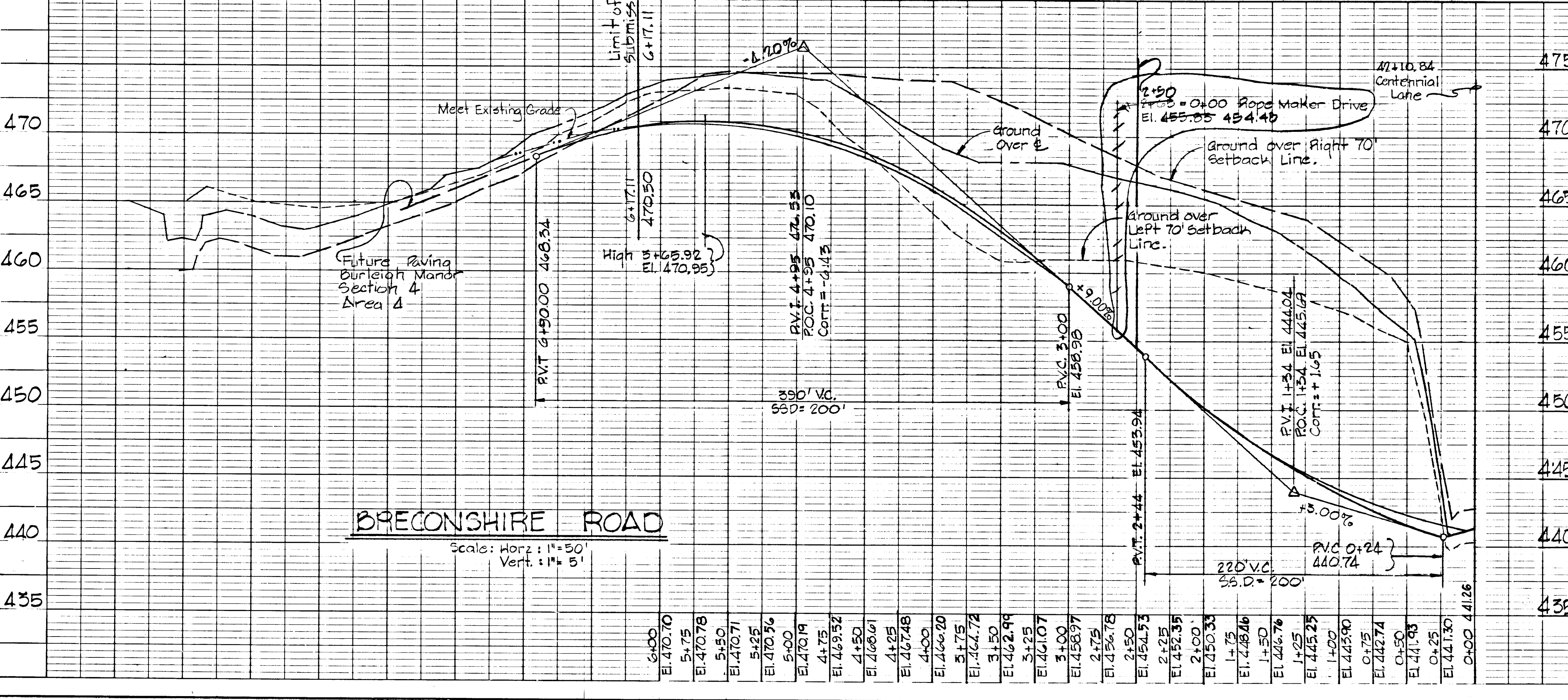
DETAIL - CURB - RAMP

BURLEIGH MANOR SECTION 4 AREA 3
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PLAN & PROFILE BRECONSHIRE ROAD
SCALE: AS SHOWN DATE: July 13, 1979
WHITMAN REQUARDT & ASSOCIATES, ENGINEERS
BALTIMORE, MARYLAND 21202

OWNER AND DEVELOPER
COSTAIN WASHINGTON INC.
10710 LEE HIGHWAY SUITE 201
FAIRFAX, VIRGINIA 22030

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

NO	Revision	Date
1	Shifted Rope Maker Drive to 2+50 sta	4/26/84



PLAN
SURVEYED, PLOTTED, CHECKED, BY DATE
NOTE BOOK NO. OF WAY CHECKED.

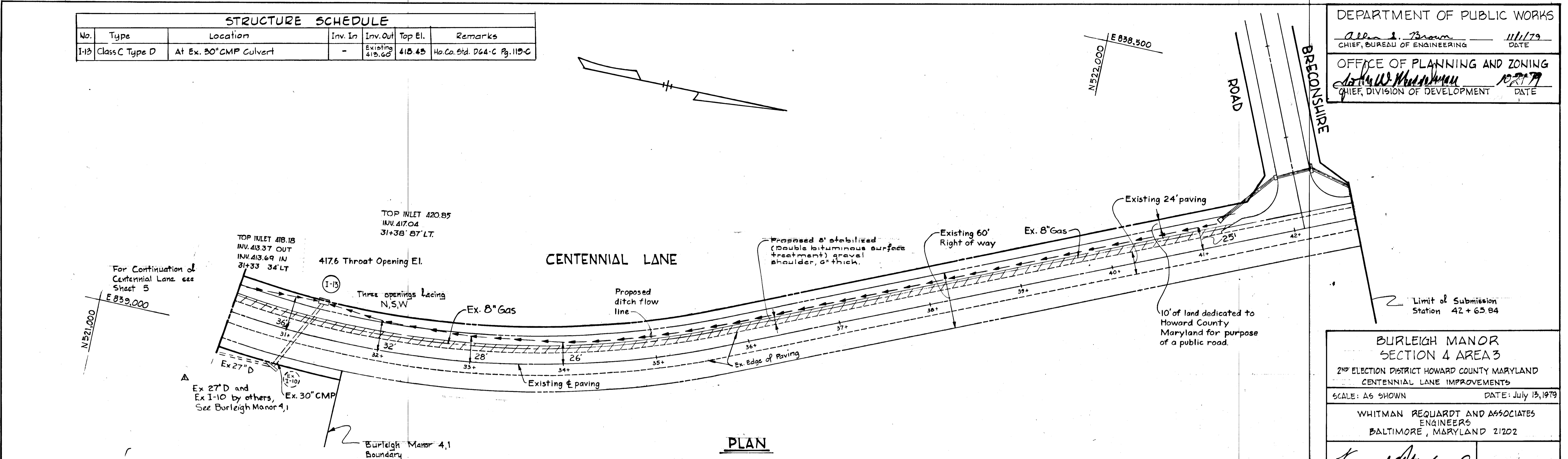
PROFILE
SURVEYED, PLOTTED, CHECKED, BY DATE
NOTE BOOK NO. OF WAY CHECKED.
STRUCTURE NOTATIONS CHECKED.

STRUCTURE SCHEDULE						
No.	Type	Location	Inv. In	Inv. Out	Top El.	Remarks
I-13	Class C Type D	At Ex. 30" CMP Culvert	-	Existing 413.66	413.43	Ho. Co. Std. D64-C Pg. 119-C

DEPARTMENT OF PUBLIC WORKS
Allen S. Brown 11/1/79
 CHIEF, BUREAU OF ENGINEERING DATE
 OFFICE OF PLANNING AND ZONING
Doyle W. Woodman 10/27/79
 CHIEF, DIVISION OF DEVELOPMENT DATE

DATE
 BY
 SURVEYED
 PLOTTED
 ALIGNED
 CHECKED
 NO. OF PAGES
 PLAN
 NOTE BOOK
 NO.

DATE
 BY
 SURVEYED
 PLOTTED
 GRADES CHECKED
 STRUCTURE NOTATIONS CHECKED
 NO.



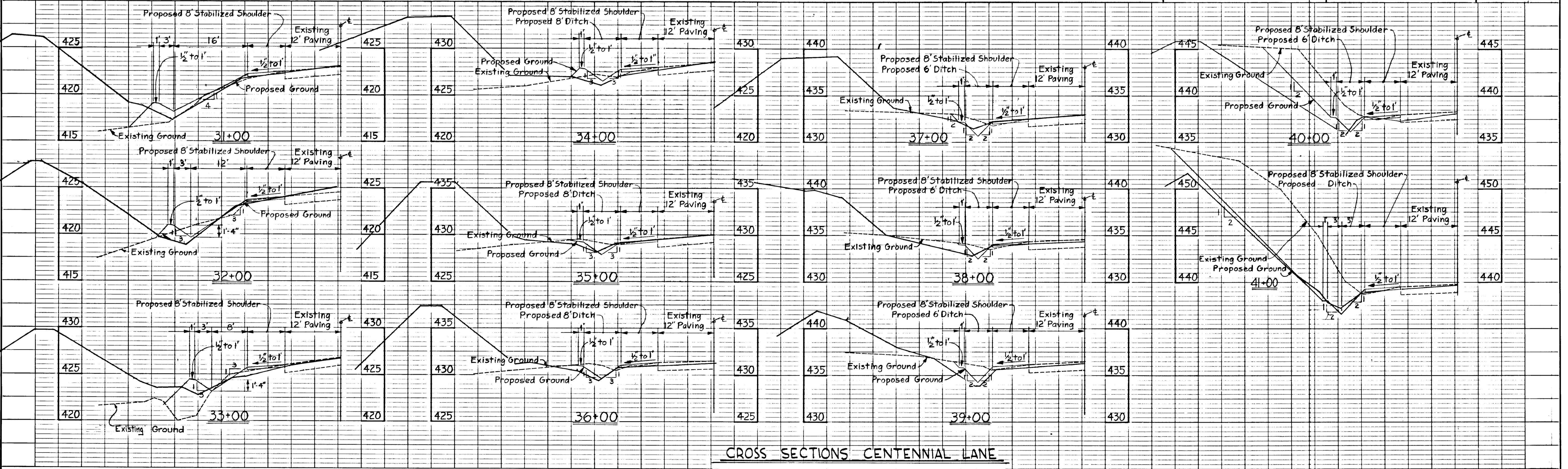
PLAN

1" = 50'

REVISIONS
 Δ 1/28/80 Added Ex 27"D + I-10 NOTE

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030

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



CROSS SECTIONS CENTENNIAL LANE

Scales: 1" = 10' H
 1" = 5' V

PLATE 1, PLAN-PROFILE
 KEUFFEL & ESSER CO.
 48 7024 MADE IN U.S.A.

AS-BUILT

SHEET 6 OF 16

F-80-08

Allen S. Brown 11/1/79
 CHIEF, BUREAU OF ENGINEERING DATE

William M. Mueselmann 10-27-79
 OFFICE OF PLANNING AND ZONING
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

CERTIFICATION BY THE DEVELOPER
 "WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND WE ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
John DeGroot 7-12-79
 BRANCH MANAGER DATE
Michael E. McGuire
 MANAGER, LAND DEVELOPMENT

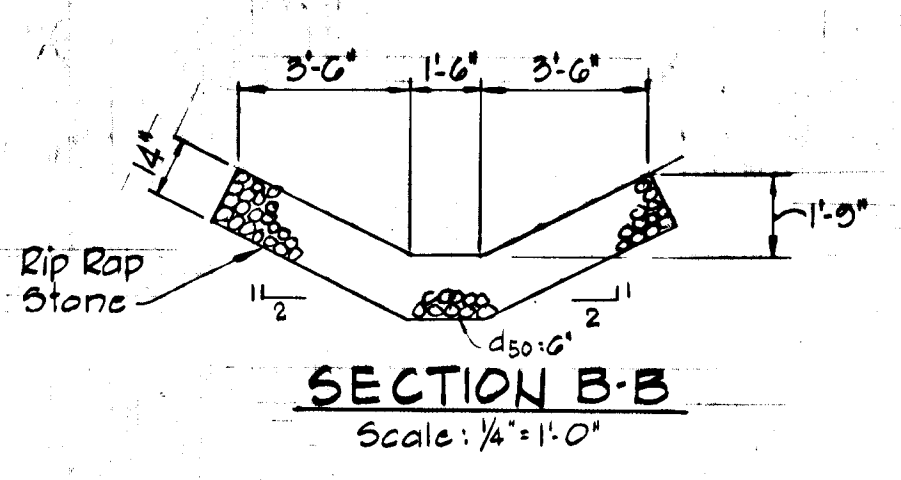
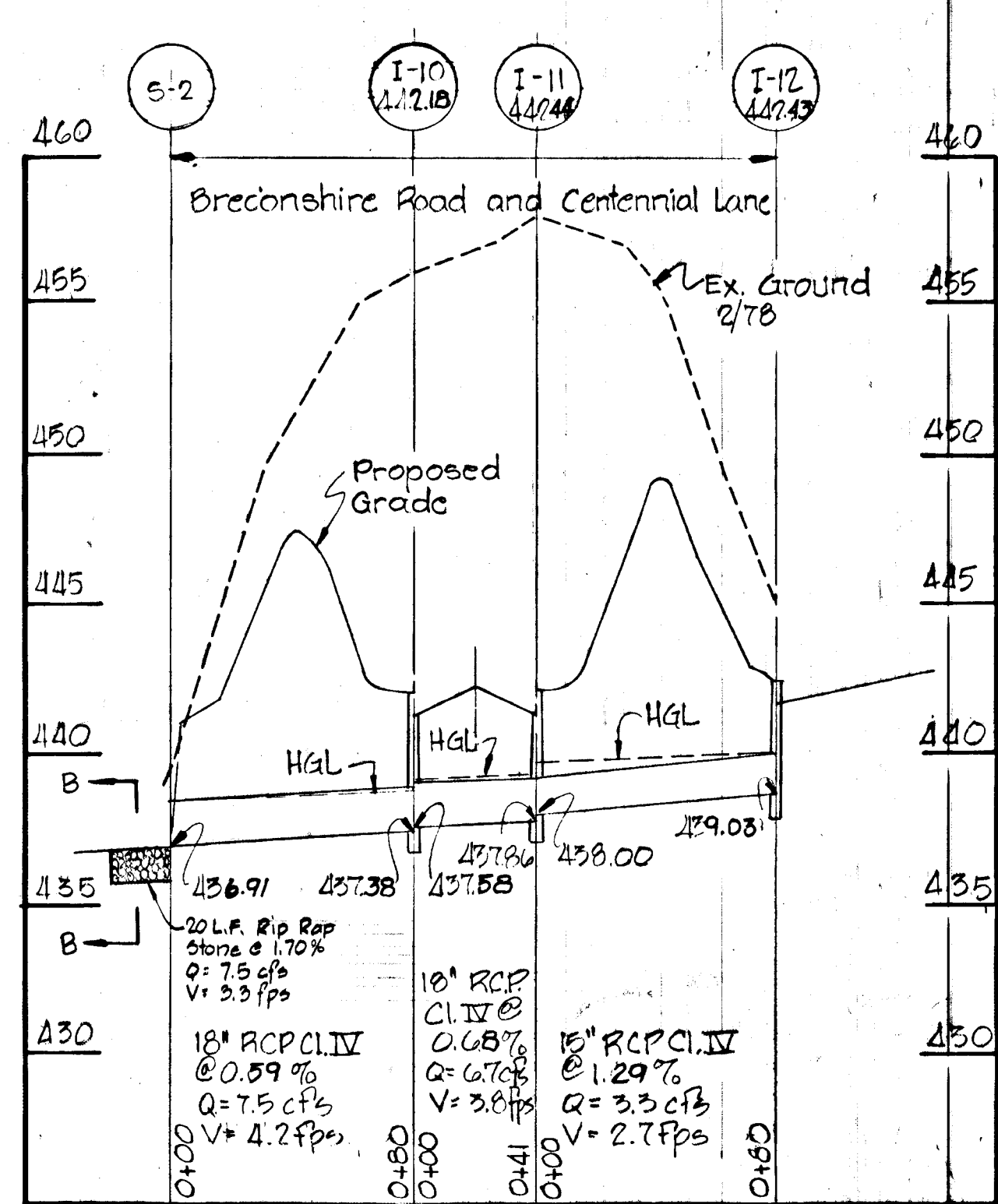
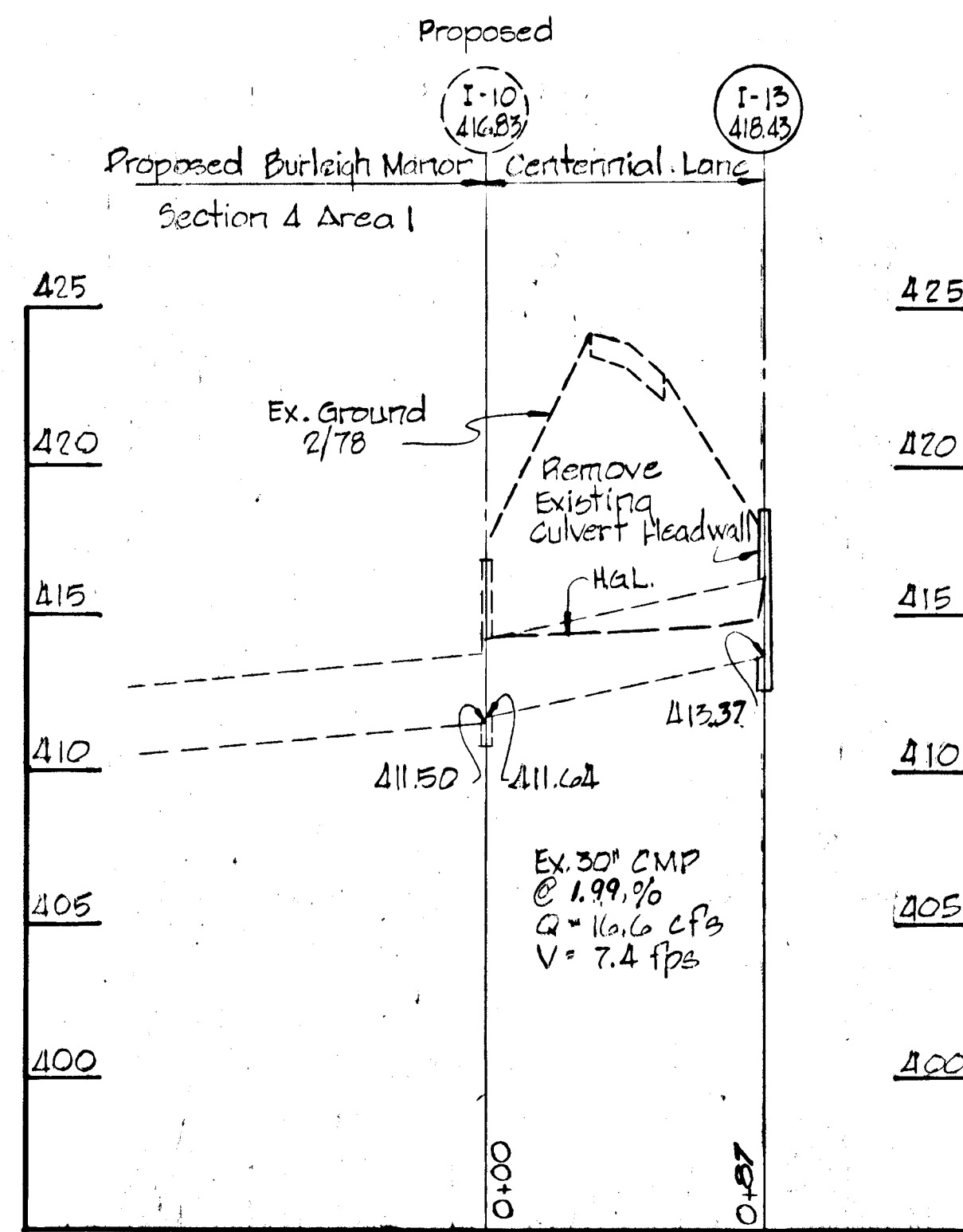
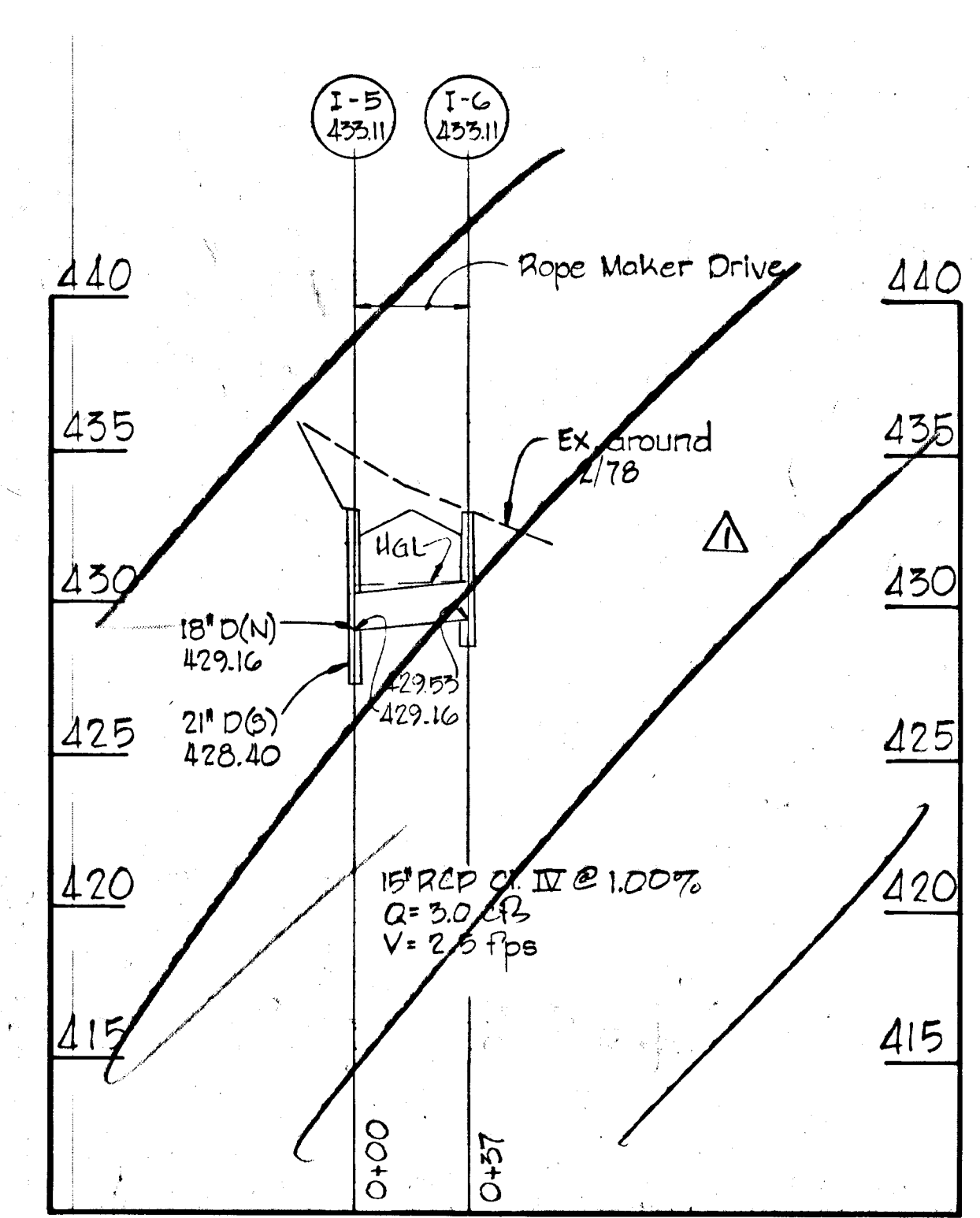
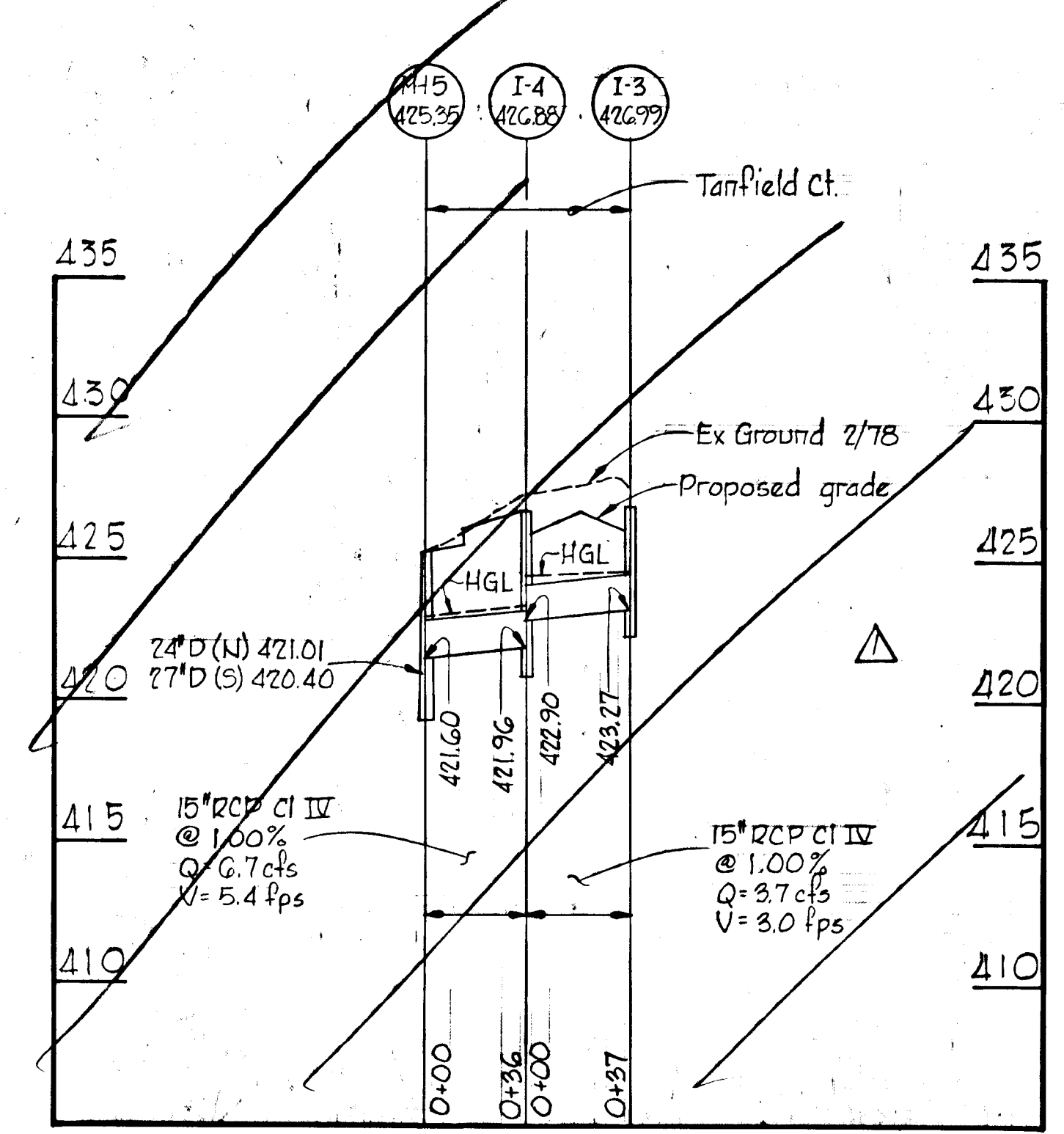
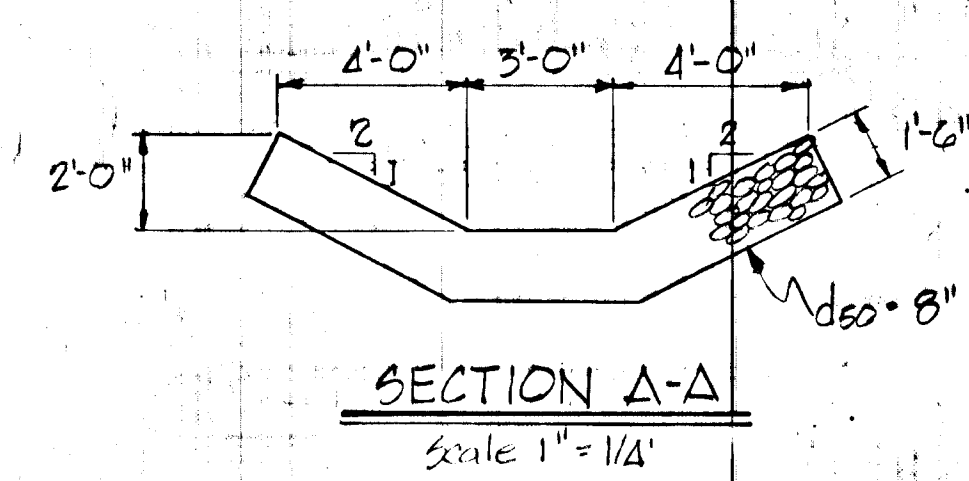
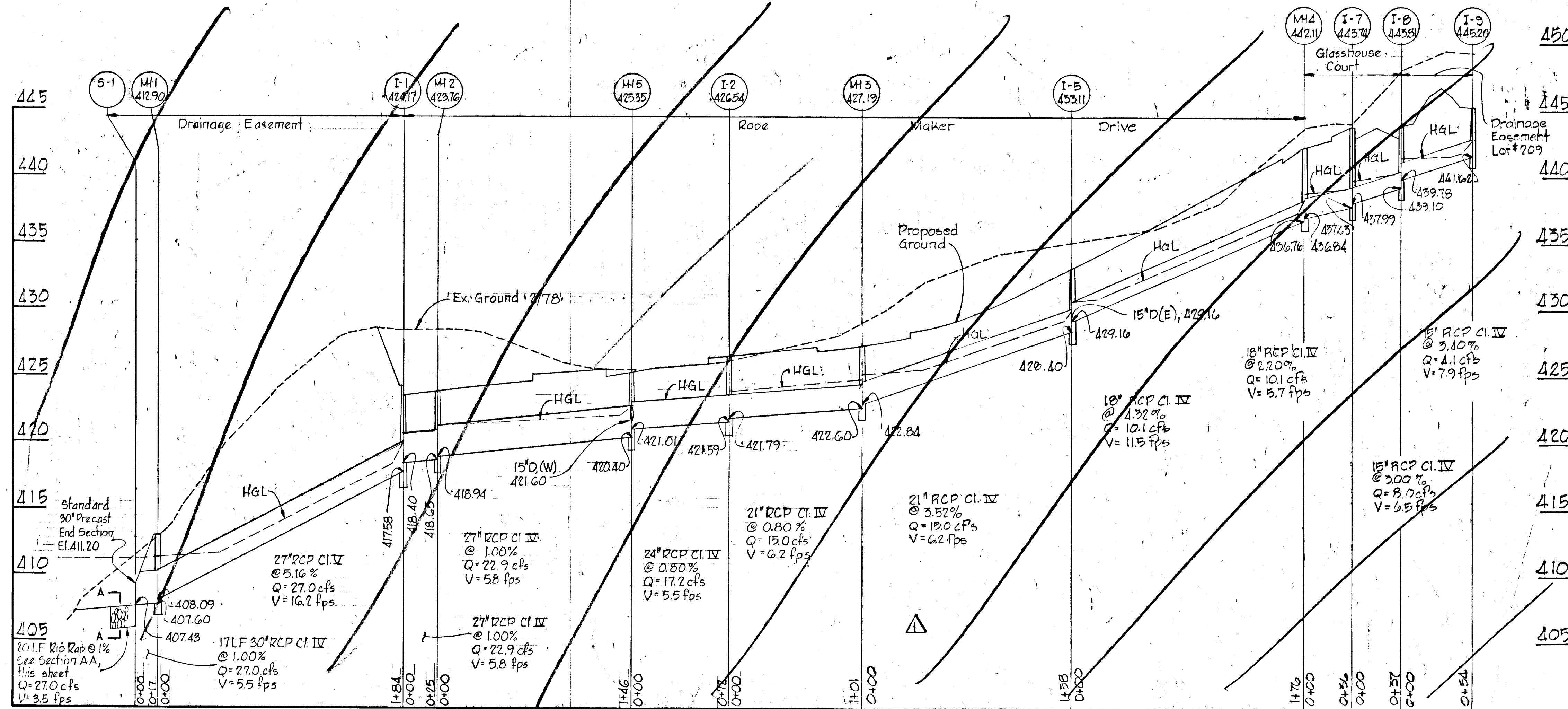
CERTIFICATION BY THE ENGINEER
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Kenneth A. McCord 7-13-79
 KENNETH A. MCCORD, P. E. 1974 DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

James Holm 11-2-79
 SIGNATURE DATE
 U.S. SOIL CONSERVATION SERVICE

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

APPROVED: *Wm. V. Paine* 11-2-79
 HOWARD S.C.D.

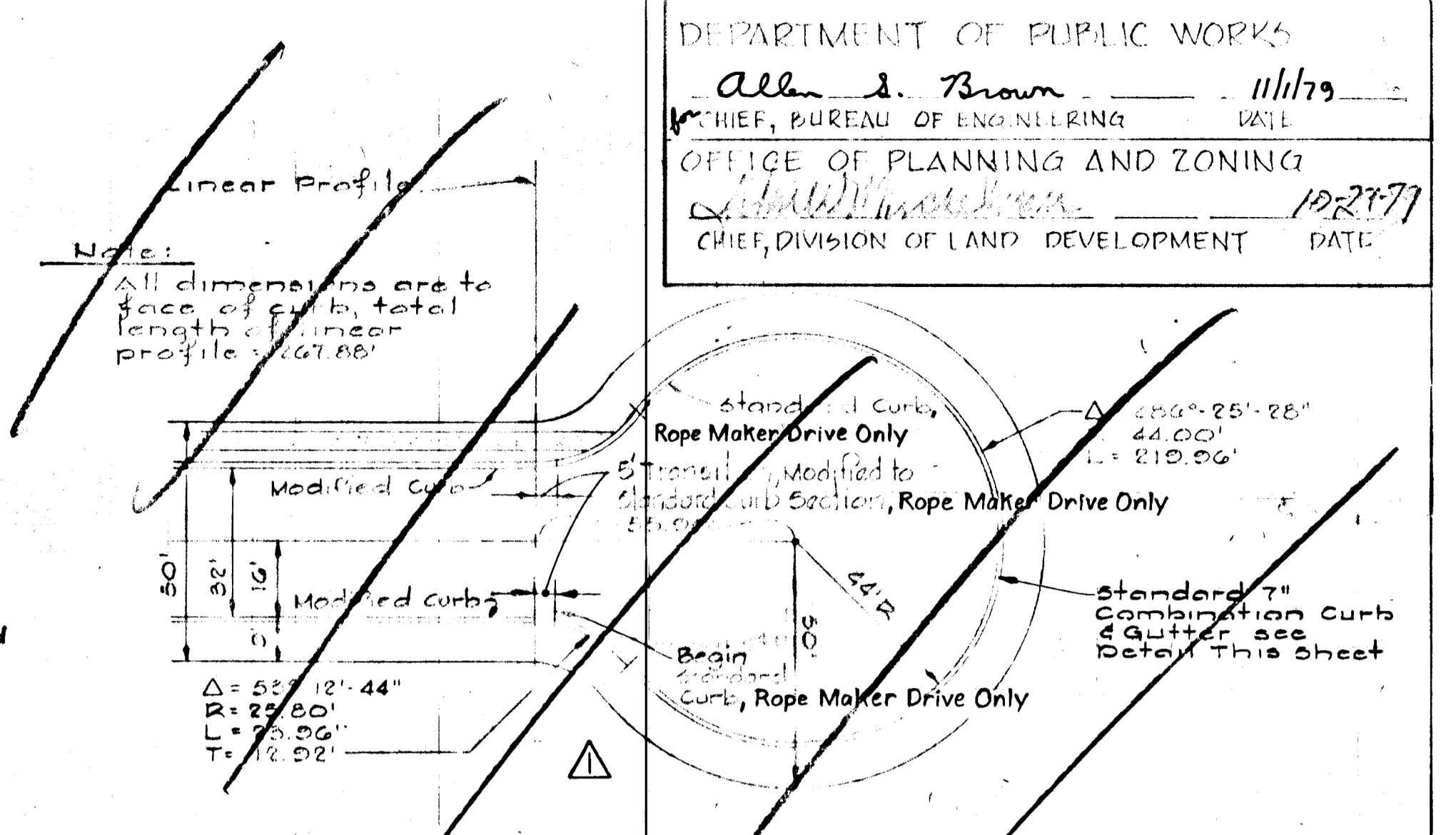
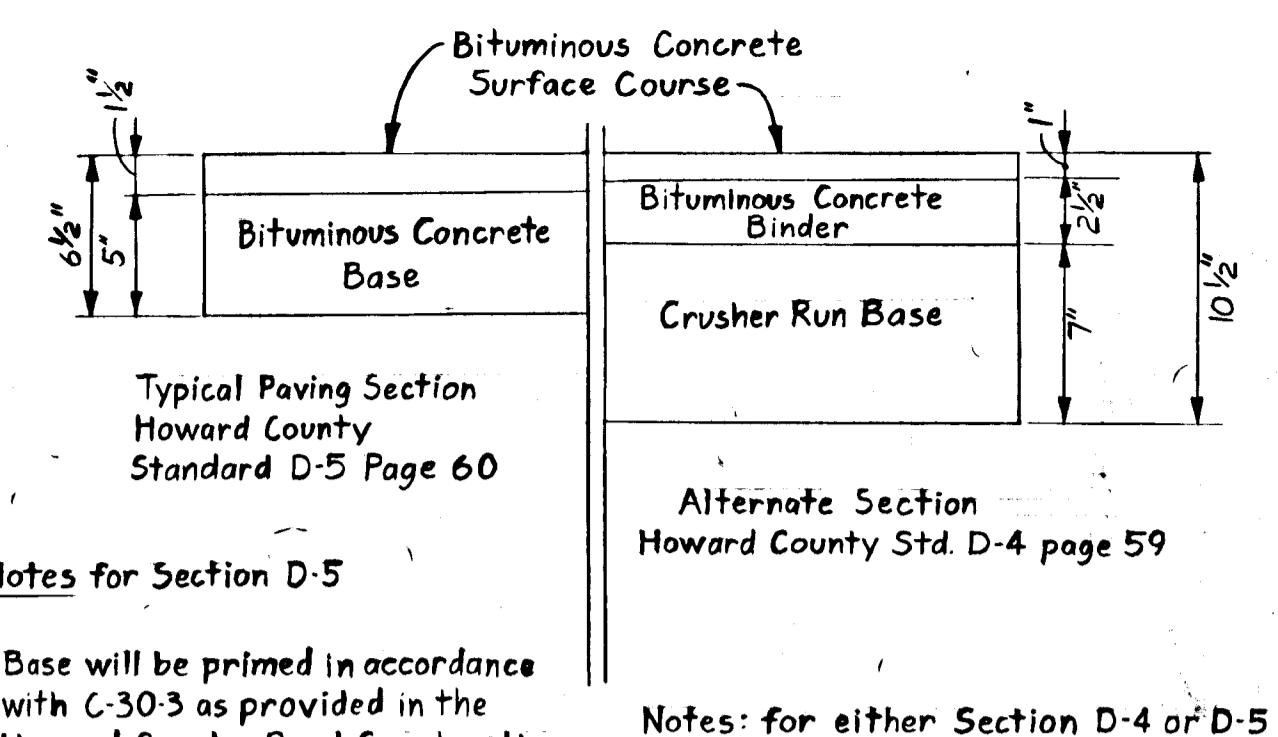
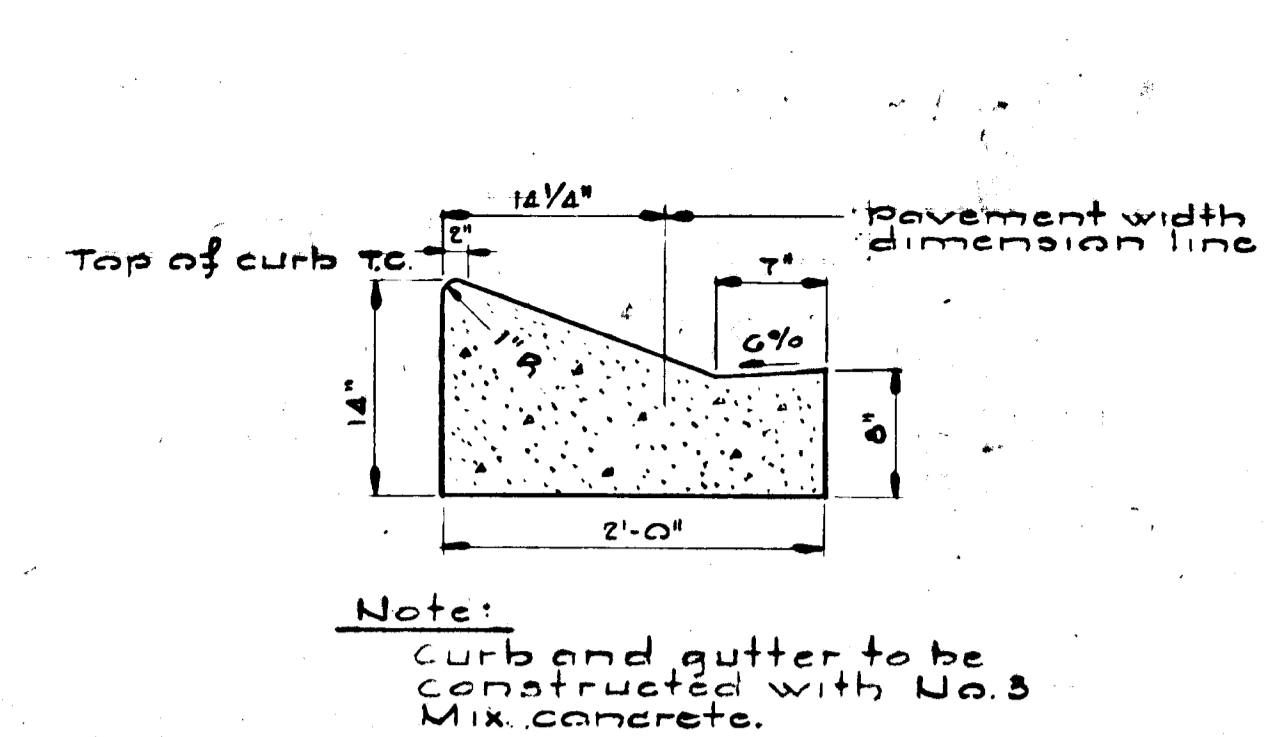
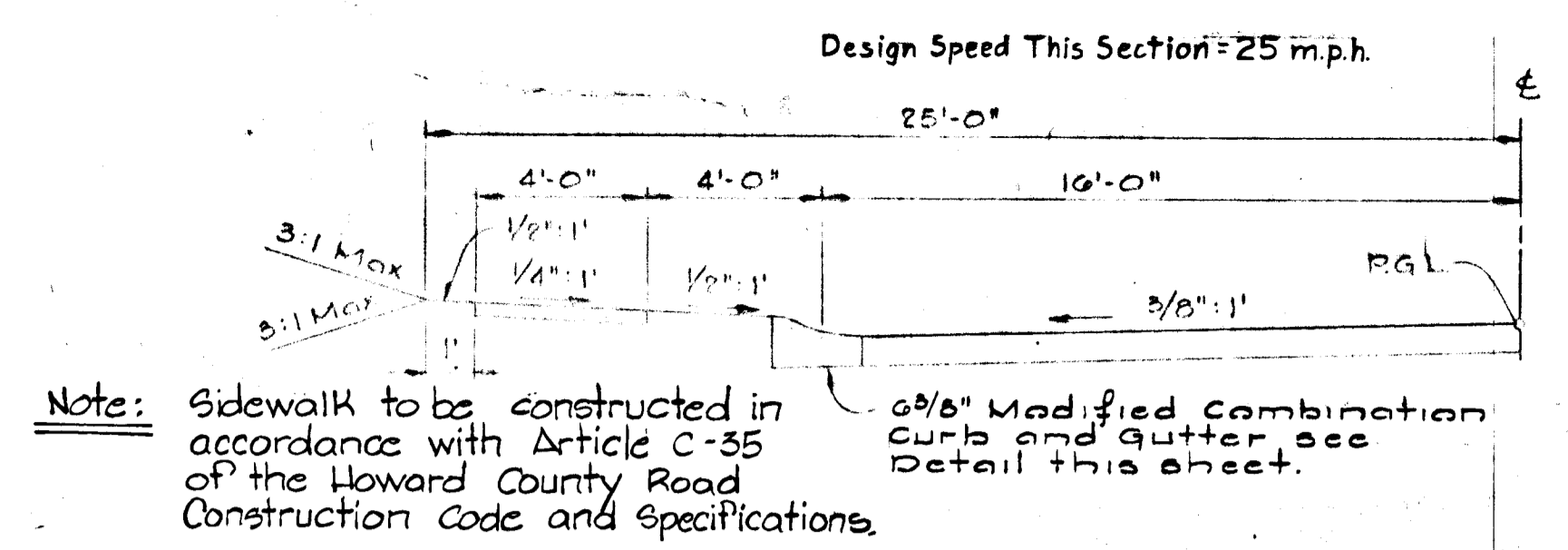


PROFILES
 Scales: Horiz.: 1" = 50'
 Vert.: 1" = 5'

BURLEIGH MANOR SECTION 4 AREA 3
 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND
 STORM DRAIN - PROFILES AND DETAILS
 SCALE: AS SHOWN DATE: July 13, 1979
 WHITMAN REQUARDT & ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21202

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030

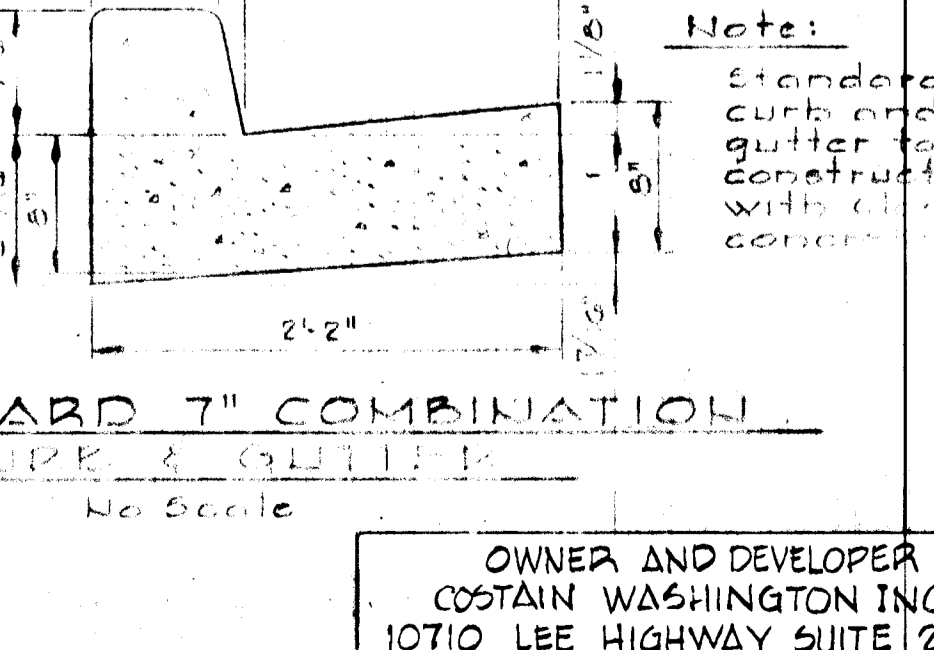
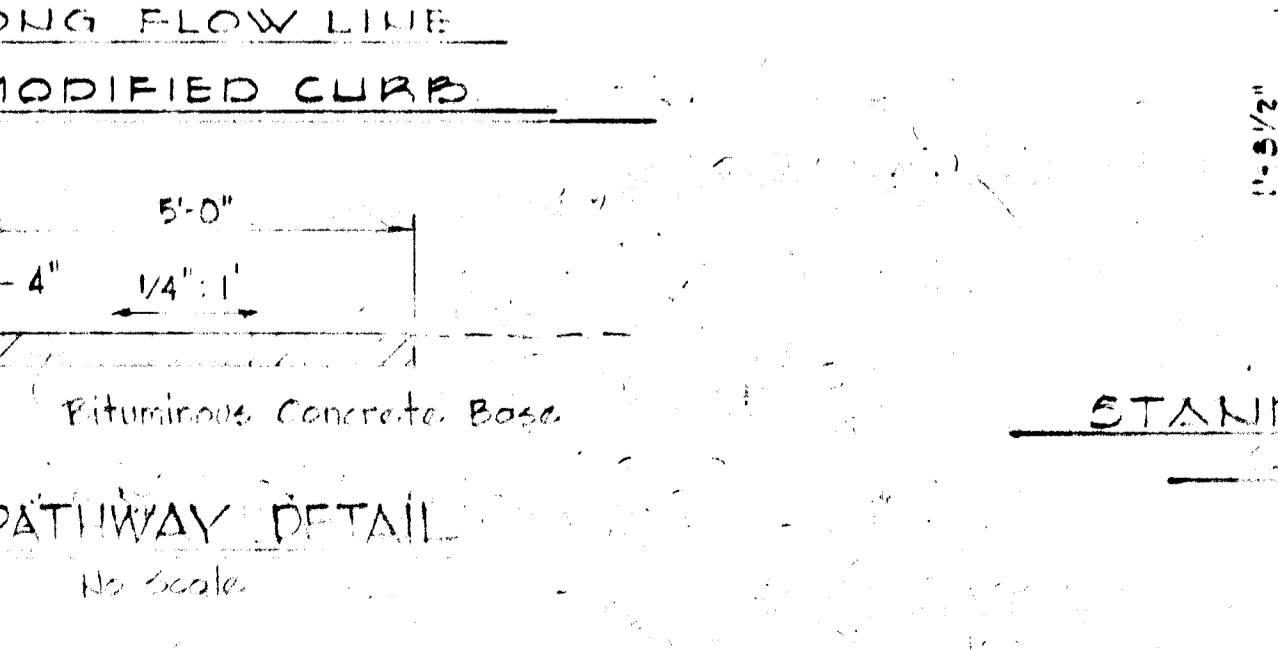
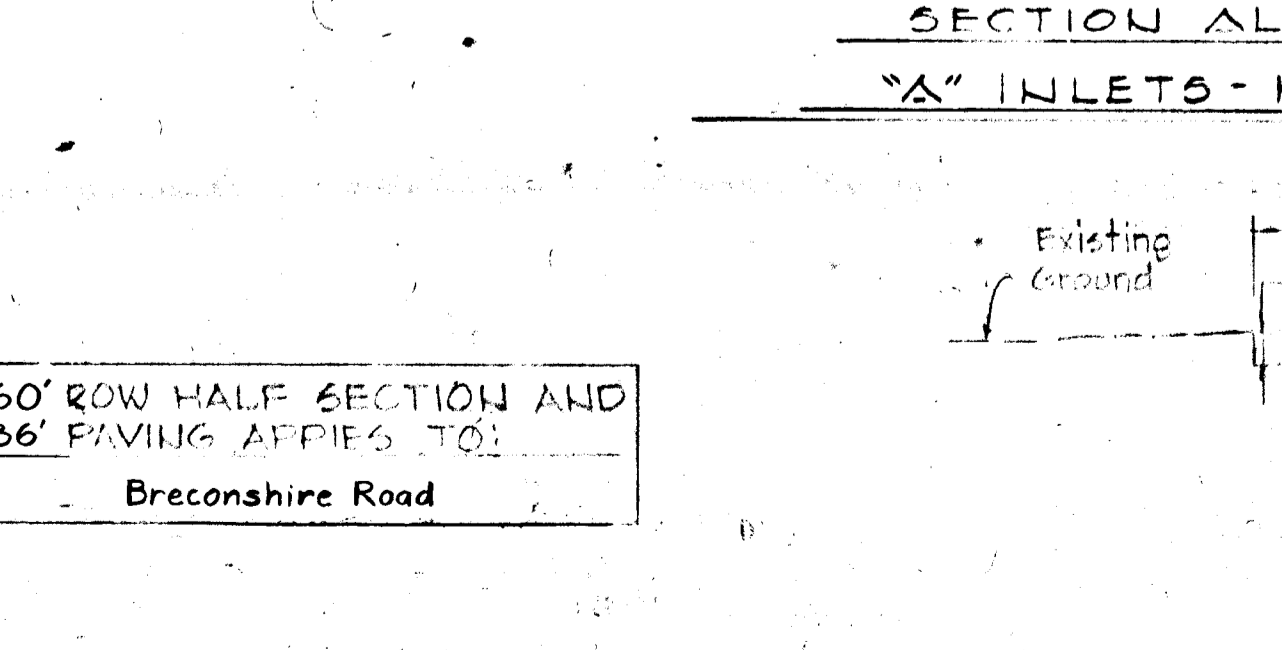
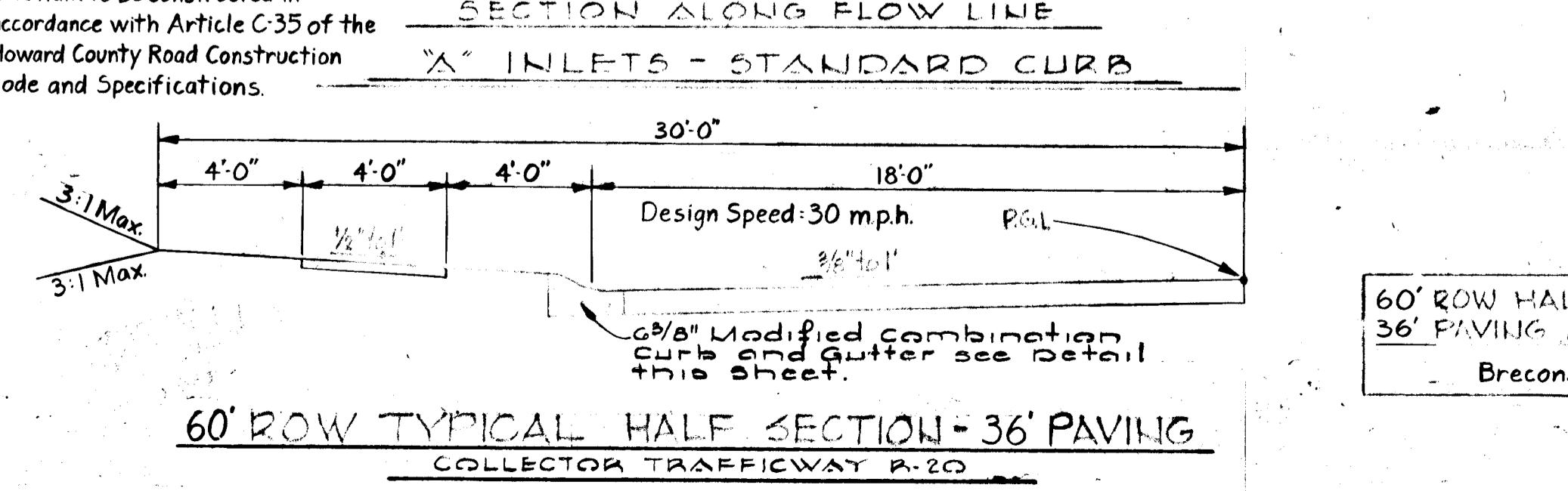
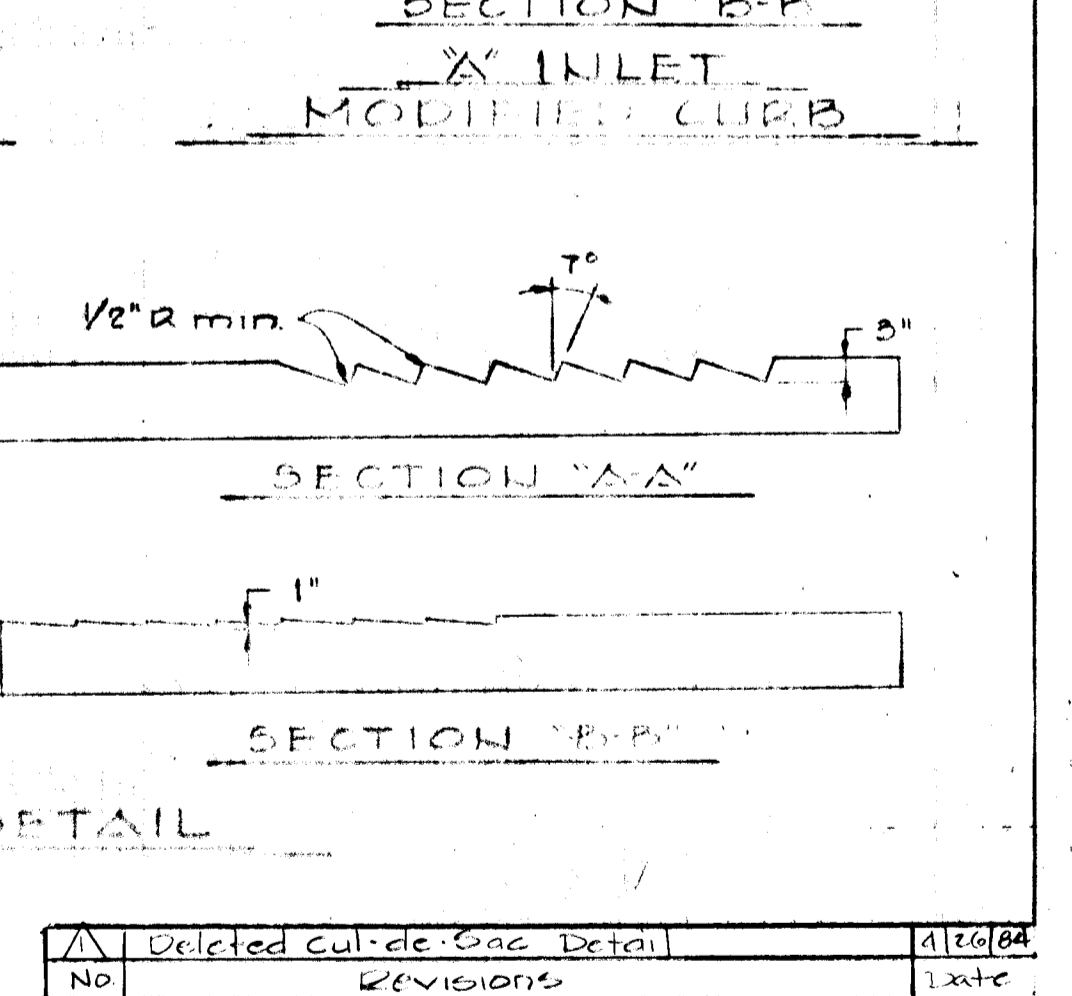
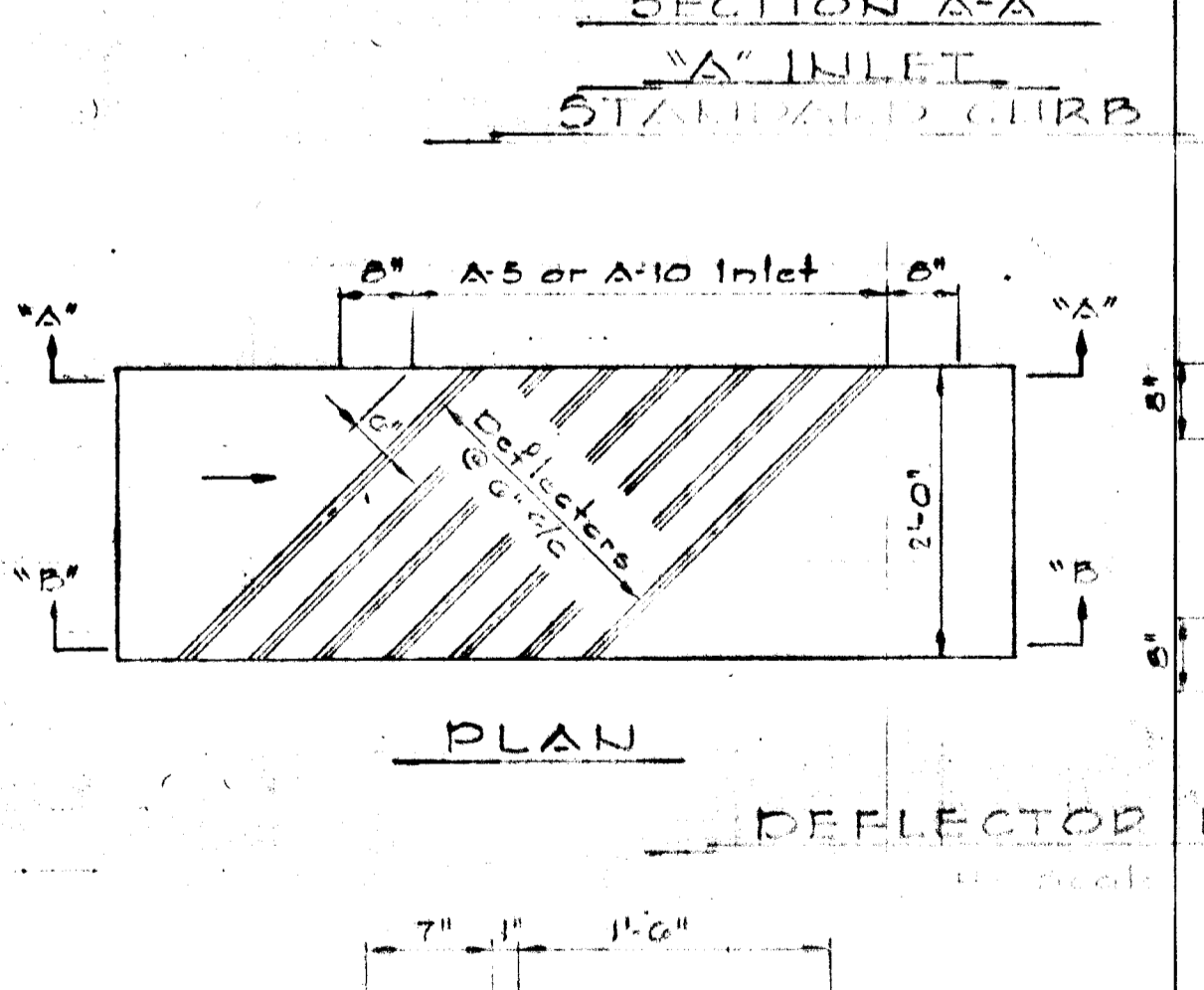
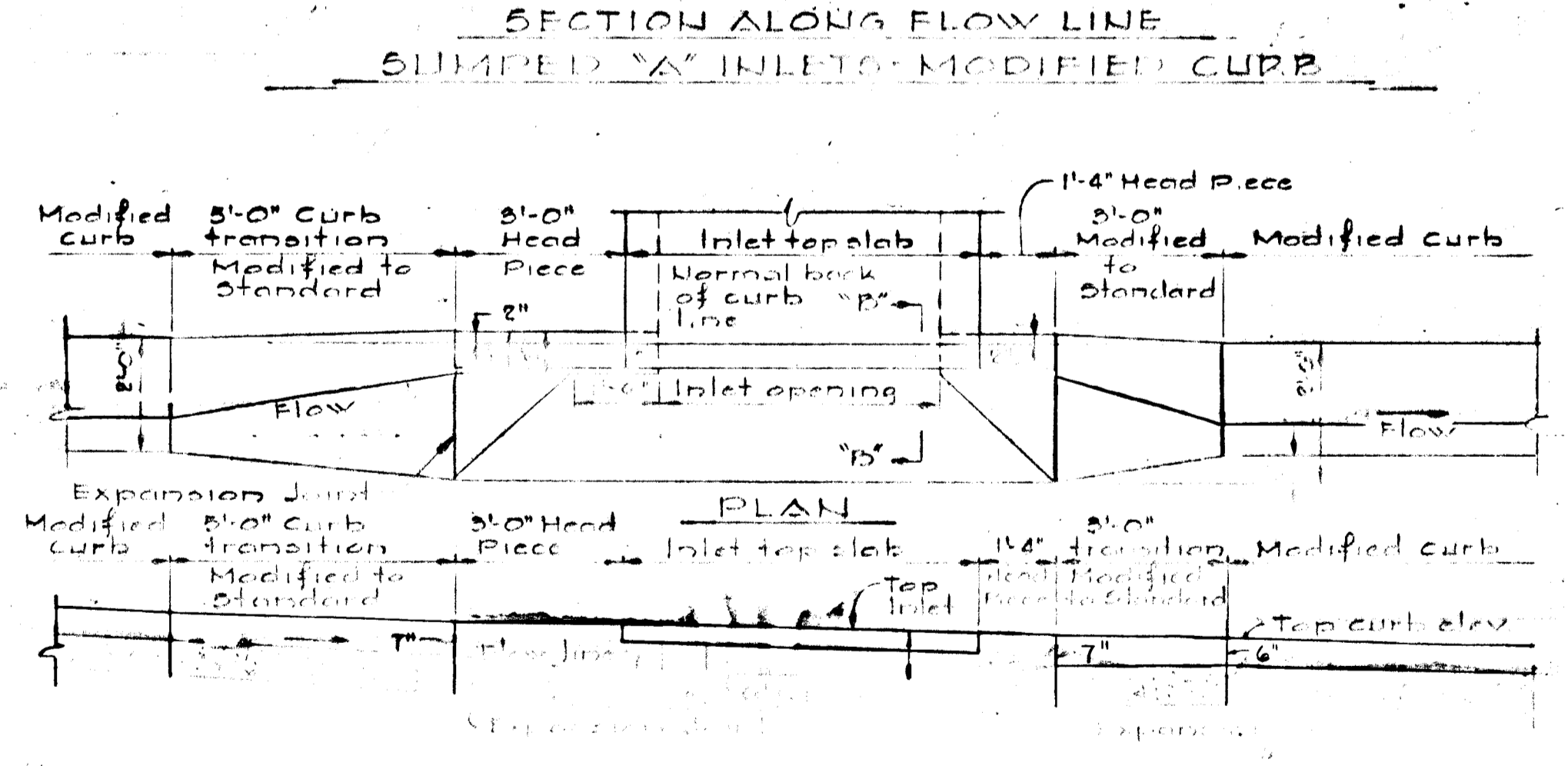
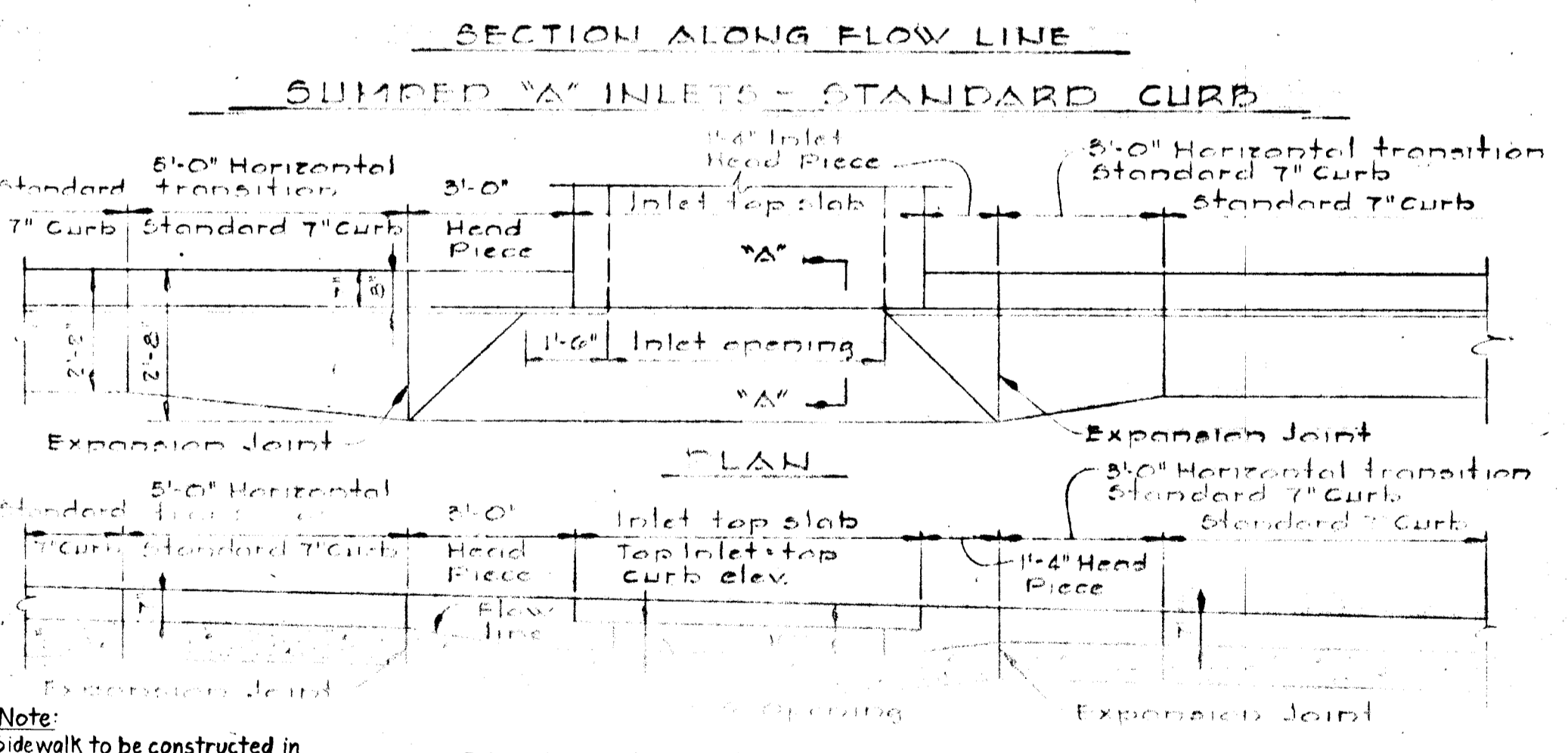
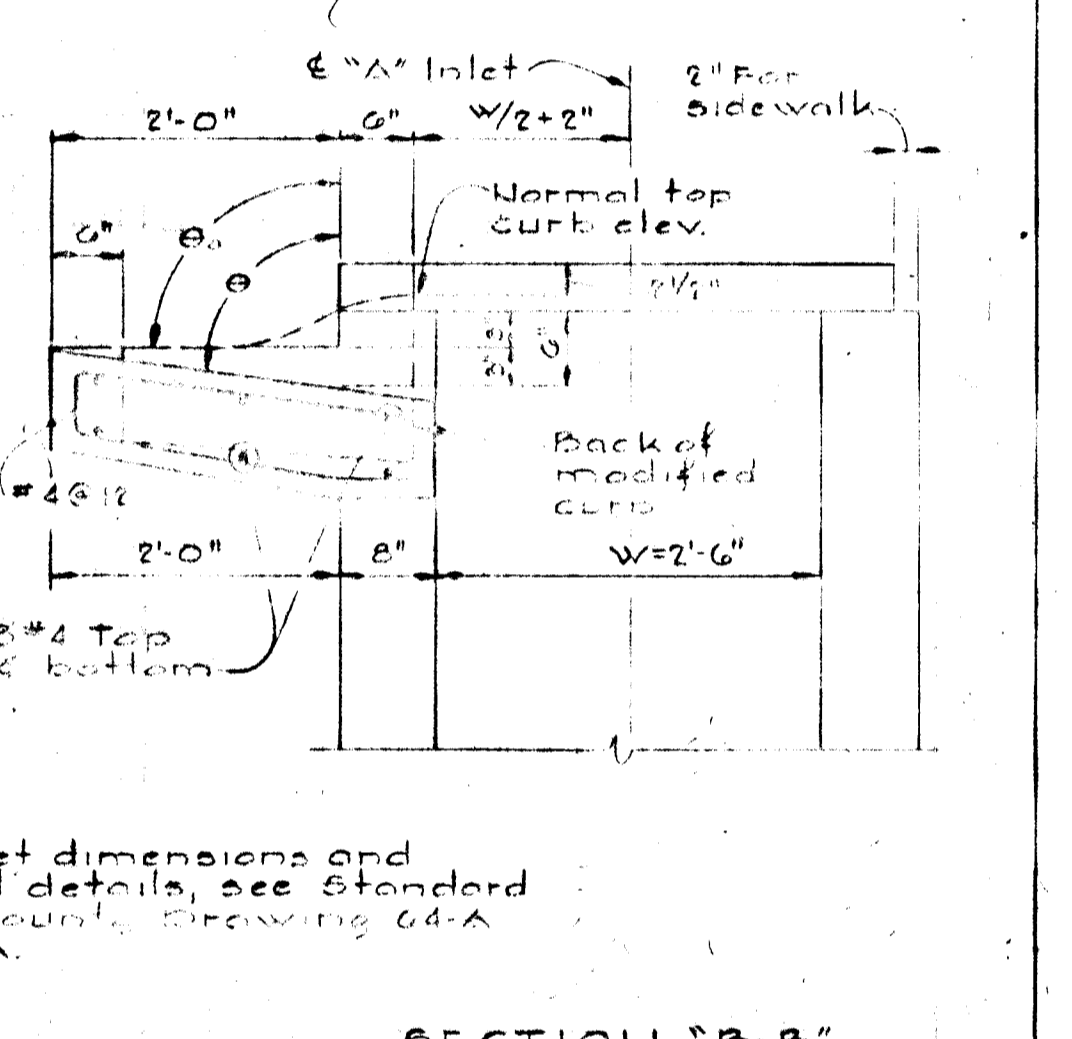
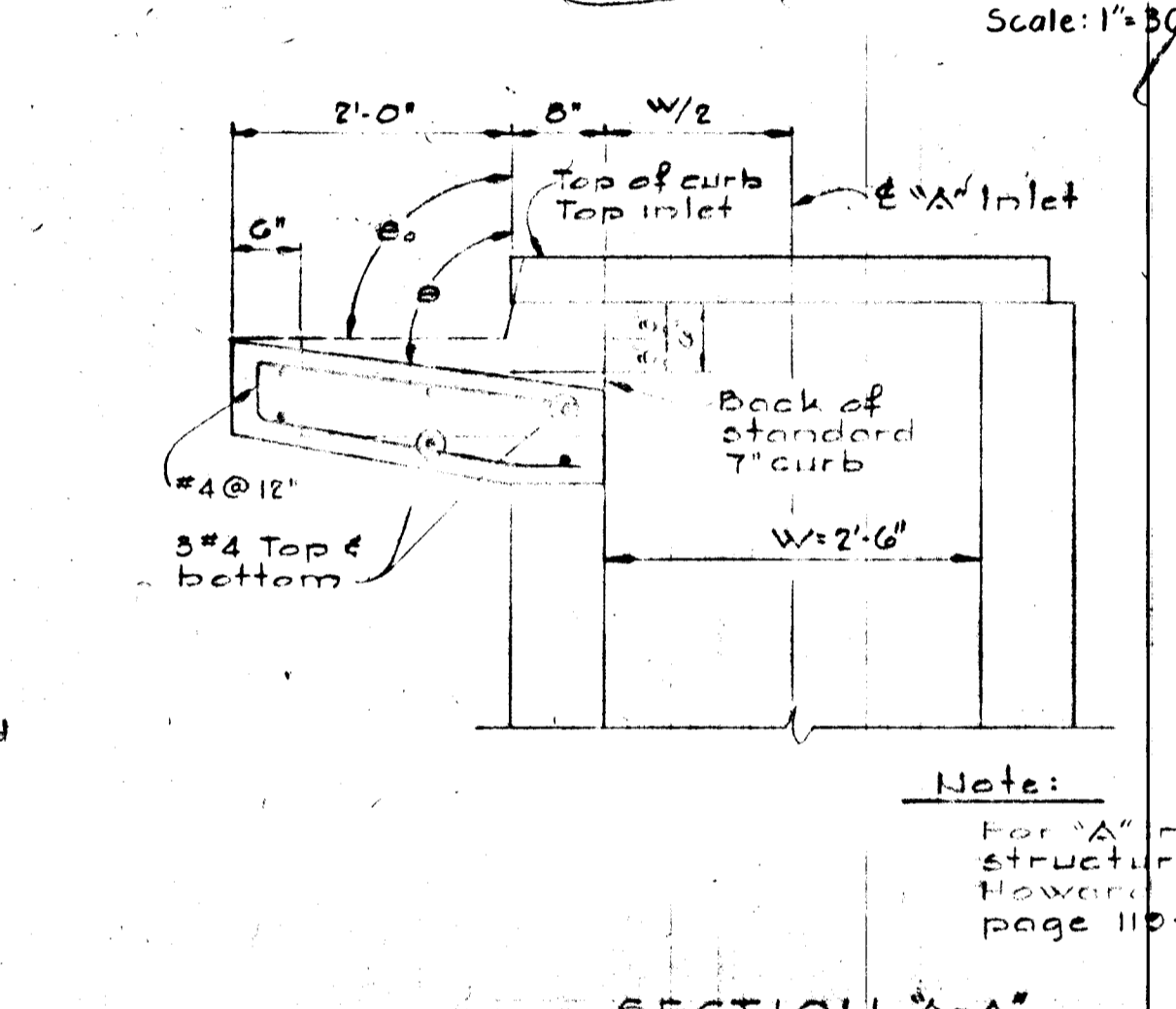
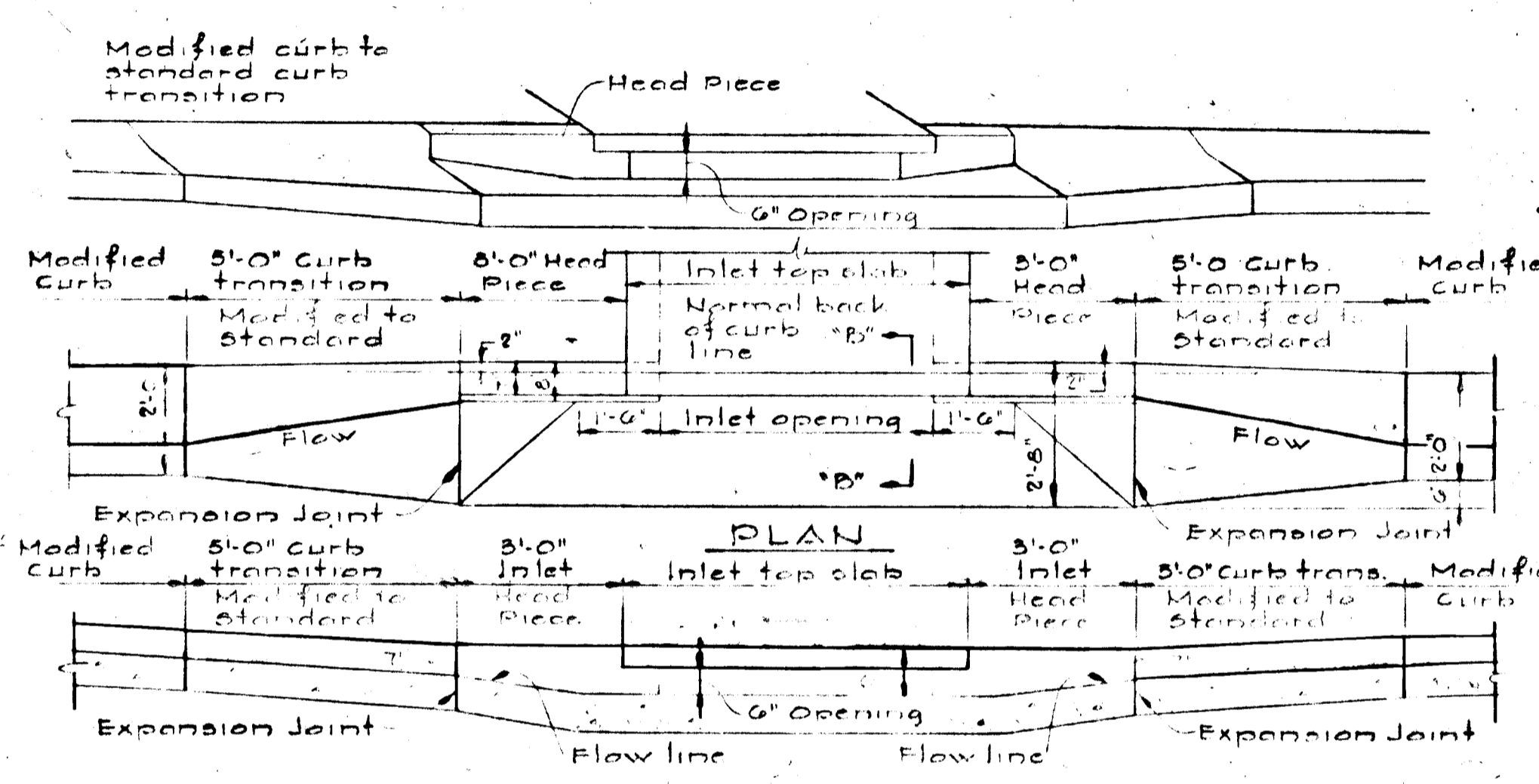
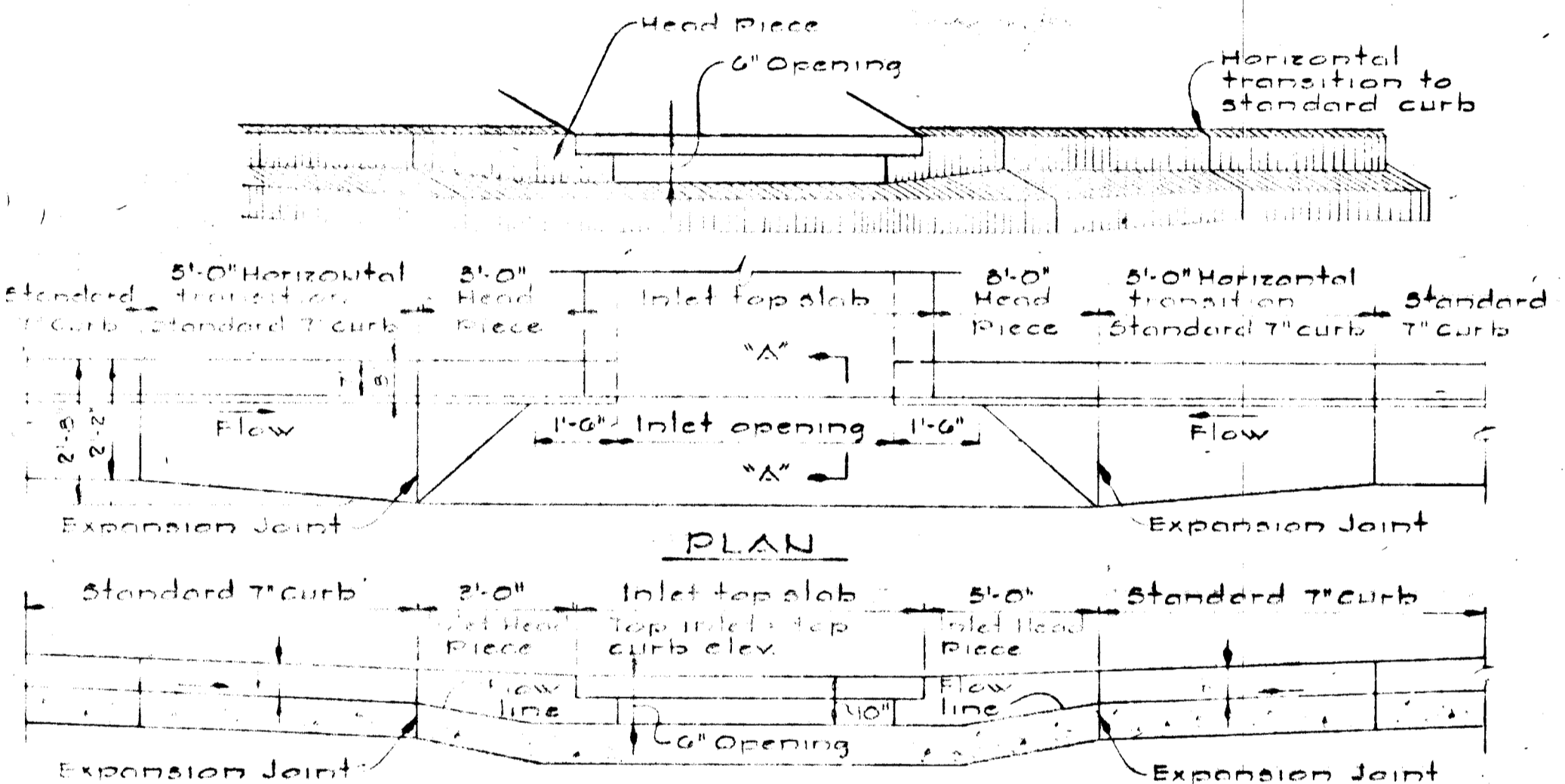
Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No. 1974



50' ROW TYPICAL HALF SECTION - 32' PAVING
 RESIDENTIAL TRAFFICWAY - R-20
 Scale: 1/4" = 1'-0"
 50' ROW HALF SECTION AND 32' PAVING APPLIES TO:
 Rope Maker Drive
 Tanfield Court
 Glasshouse Court

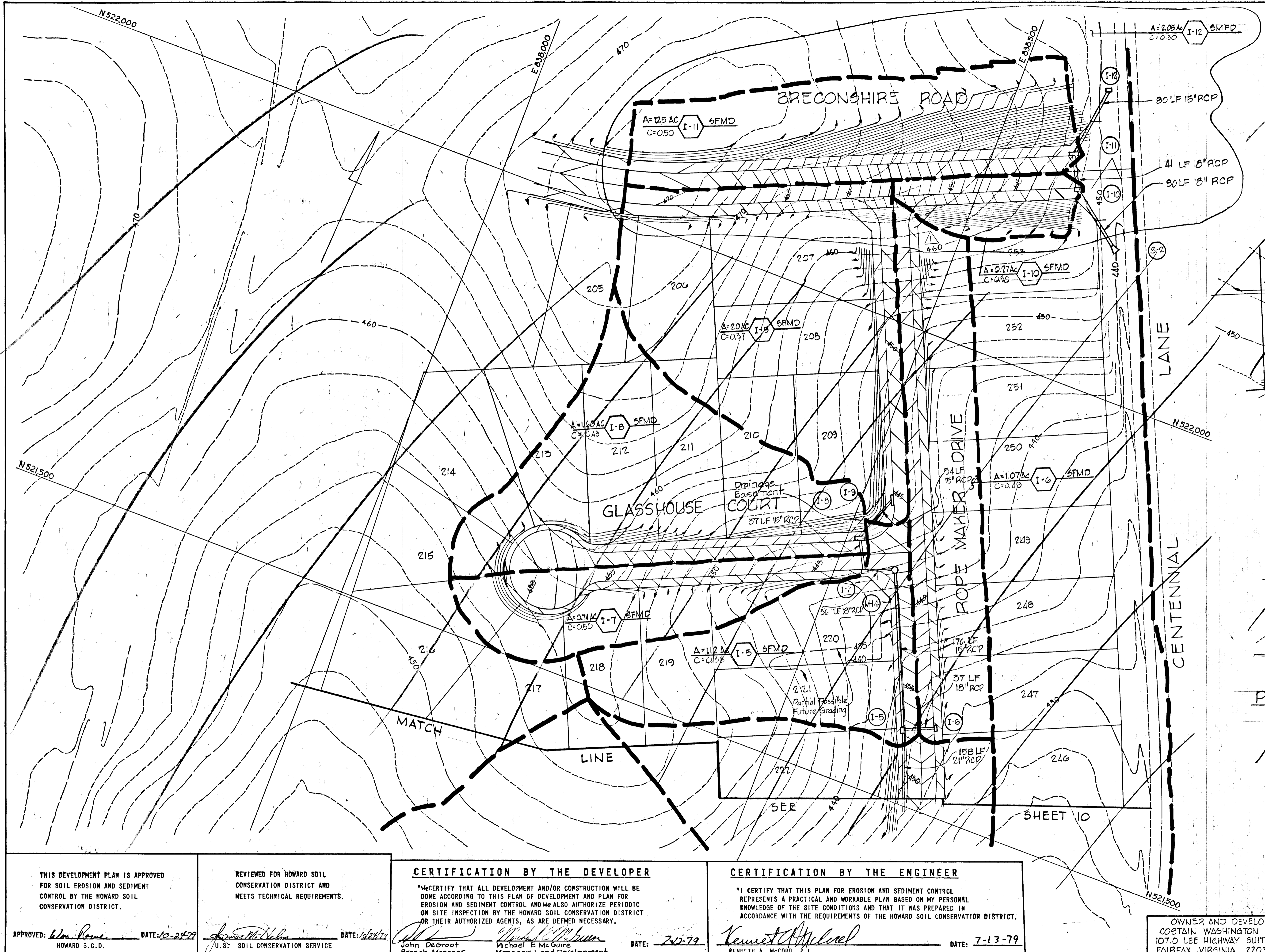
6 3/8" MODIFIED COMBINATION CURB & GUTTER
 No. 3 Mix Concrete

Paving Section Alternates
 Not to scale

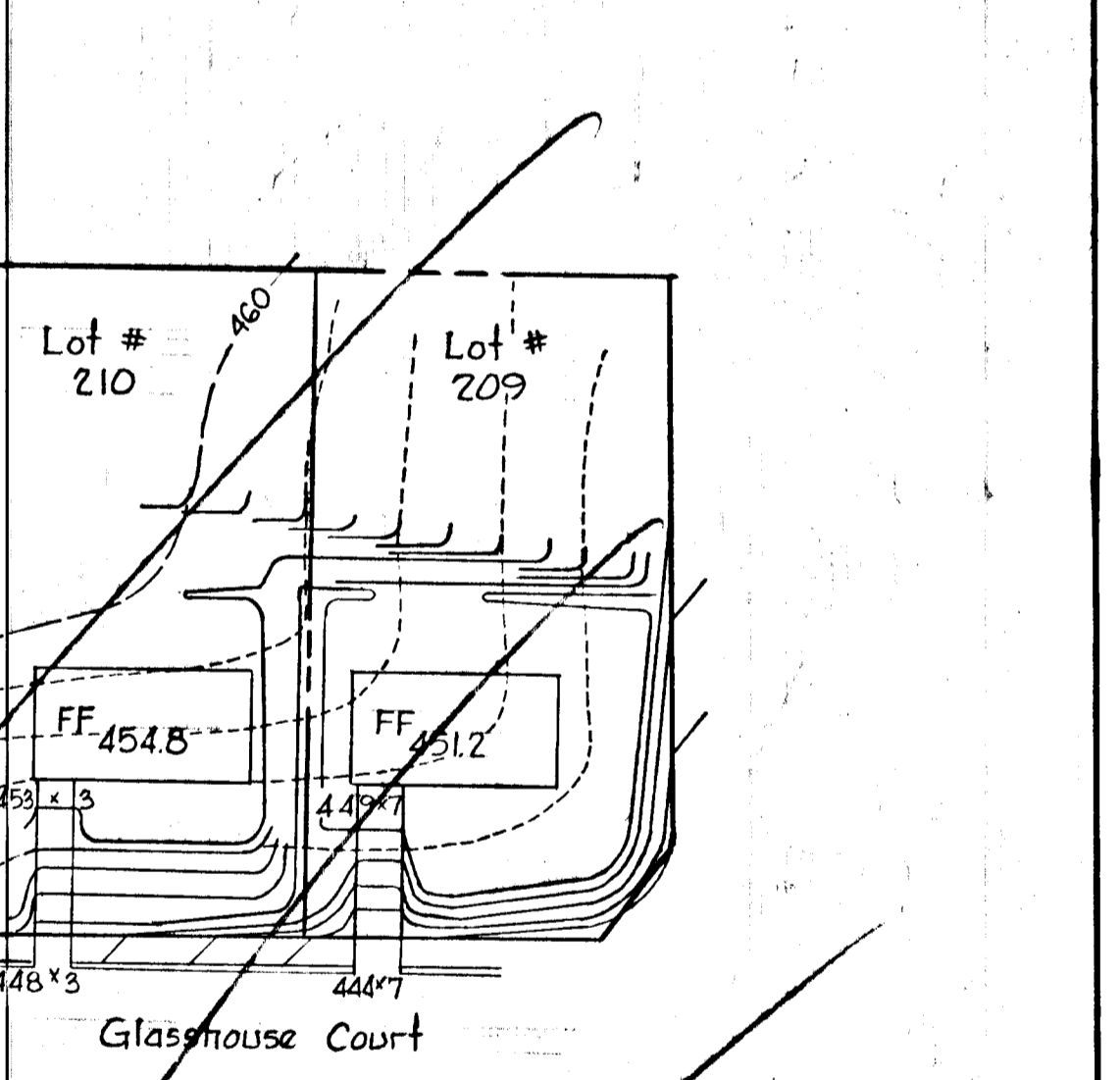
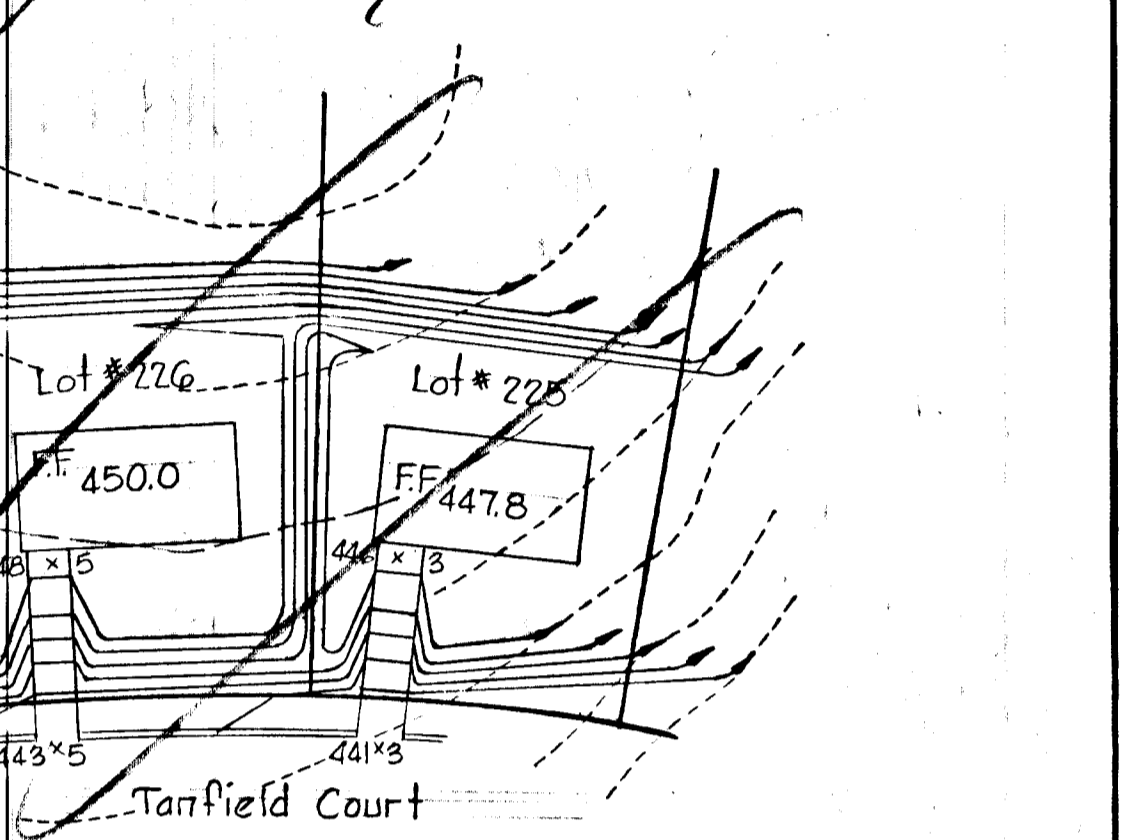
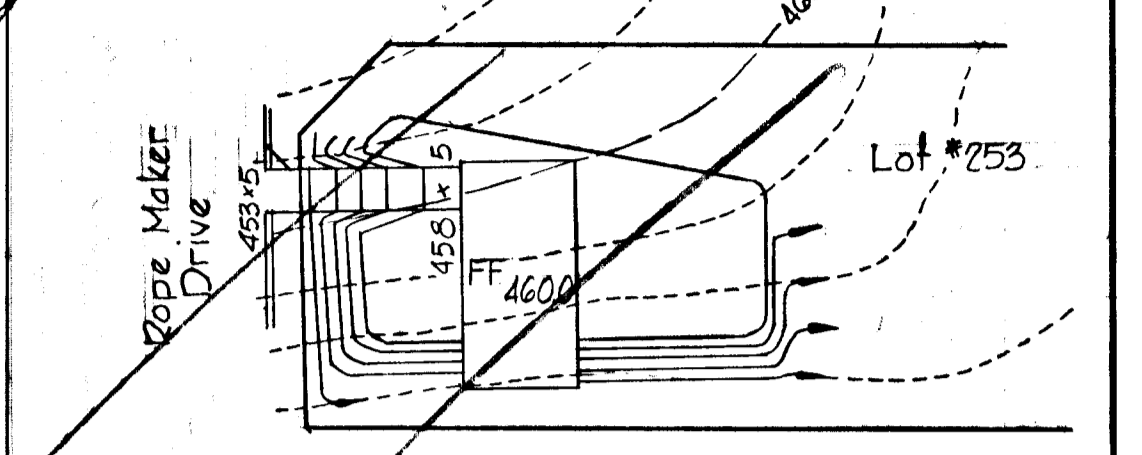


No.	Revisions	Date
1	Deleted Cul-de-Sac Detail	11/10/84
2	Revisions	1/1/85

BURLEIGH MANOR SECTION 4 AREA 3
 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND
 ROADWAY & STORM DRAIN DETAILS
 DATE: July 13, 1979
 WHITMAN, FERGUSON & ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21202
 Kenneth McCloud
 Registered Engineer No. 19711



DEPARTMENT OF PUBLIC WORKS
Allen J. Brown 11/1/79
 CHIEF, BUREAU OF ENGINEERING DATE
 OFFICE OF PLANNING AND ZONING
William M. Madsen 10-29-79
 CHIEF DIVISION OF LAND DEVELOPMENT DATE



POSSIBLE FUTURE GRADING OF
 LOTS 209, 210, 225, 226 & 253
 Scale: 1" = 50'
 (By Others)

Revised Contours @ Rope Maker Drive	4/26/84
NO. Revisions	Date

BURLEIGH MANOR SECTION 4 AREA 3
 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND
 DRAINAGE AREA MAP
 SCALE: 1" = 50' DATE: July 13, 1979
 WHITMAN, REQUART & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

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

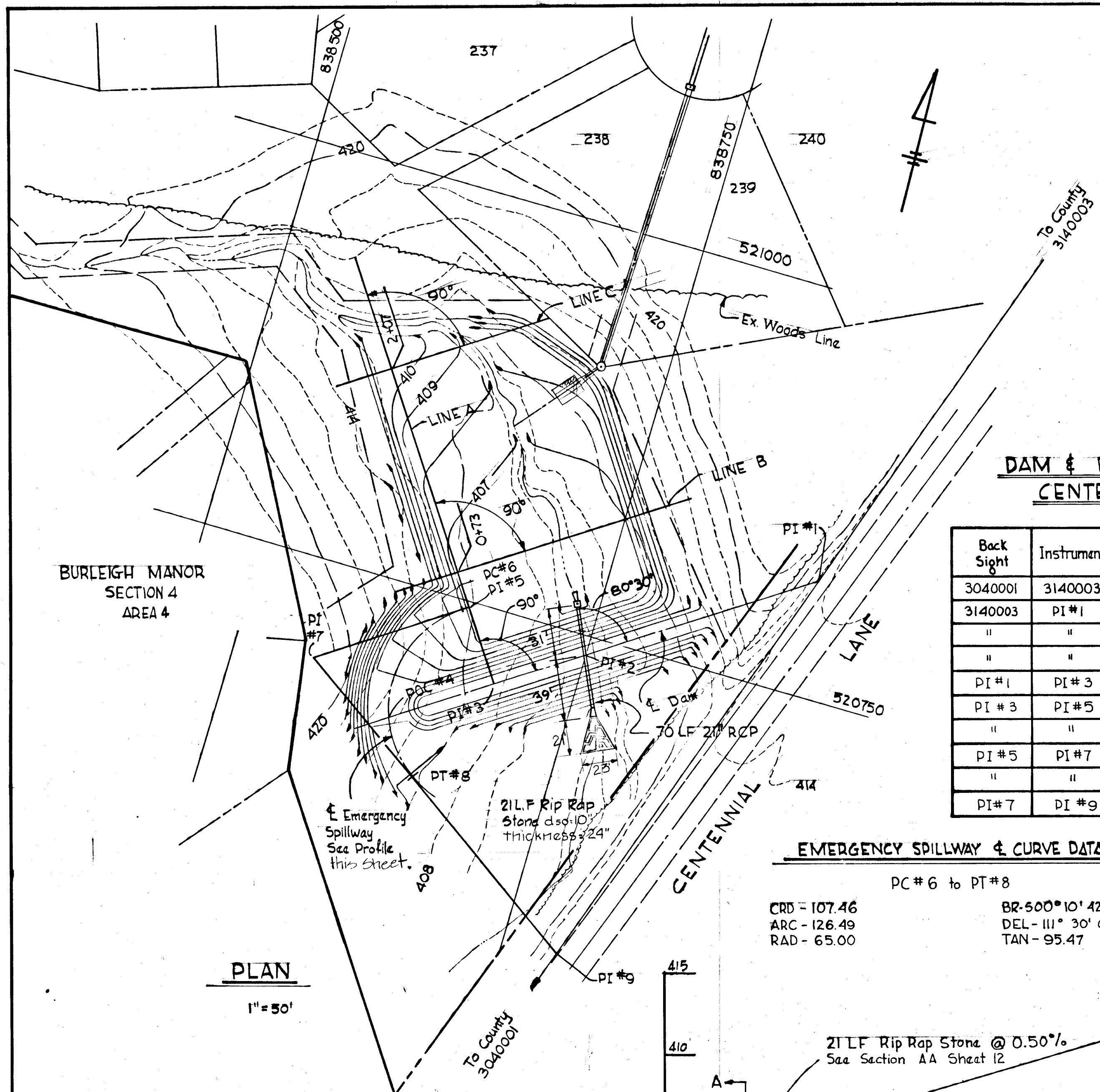
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *Wm. Rowe* DATE: 10-24-79
 HOWARD S.C.D.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
John DeGroot DATE: 10/24/79
 U.S. SOIL CONSERVATION SERVICE

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 WE ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
John DeGroot Branch Manager DATE: 7-13-79
Michael E. McGuire Manager, Land Development

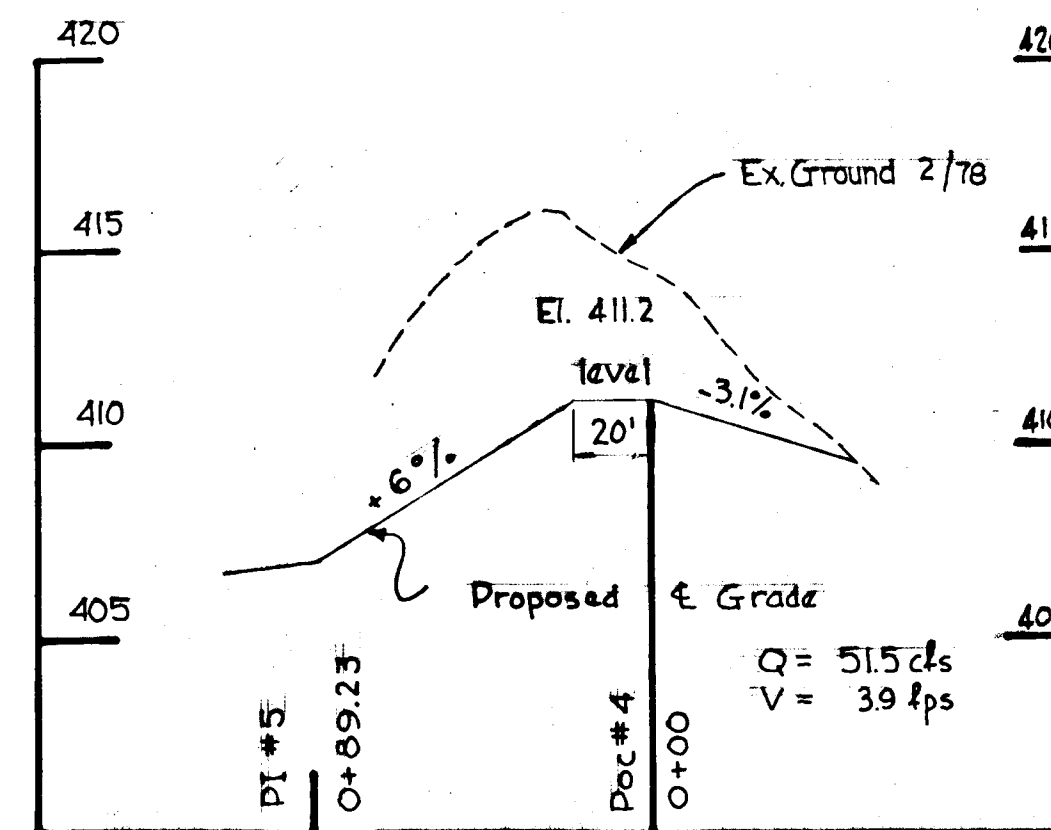
CERTIFICATION BY THE ENGINEER
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Kenneth A. McCord DATE: 7-13-79
 KENNETH A. MCCORD P.E.

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030



**DAM & EMERGENCY SPILLWAY
 CENTERLINE STAKEOUT**

Back Sight	Instrument	Fore-Sight	Distance	Clockwise Angle
3040001	3140003	PI #1	440.35'	0° 00' 00"
3140003	PI #1	PI #2	155.00'	217° 8' 18"
"	"	PI #3	214.00'	"
"	"	POC #4	282.30'	"
PI #1	PI #3	PI #5	52.22'	270° 00' 00"
PI #3	PI #5	PC #6	4.57'	90° 00' 00"
"	"	PI #7	100.03'	"
PI #5	PI #7	PI #8	95.47'	68° 30' 00"
"	"	PI #9	240.11'	"
PI #7	PI #9	3140003	723.89'	74° 21' 42"



PROFILE EMERGENCY SPILLWAY

Scales H: 1" = 50'
 V: 1" = 5'

STORM WATER MANAGEMENT NOTES

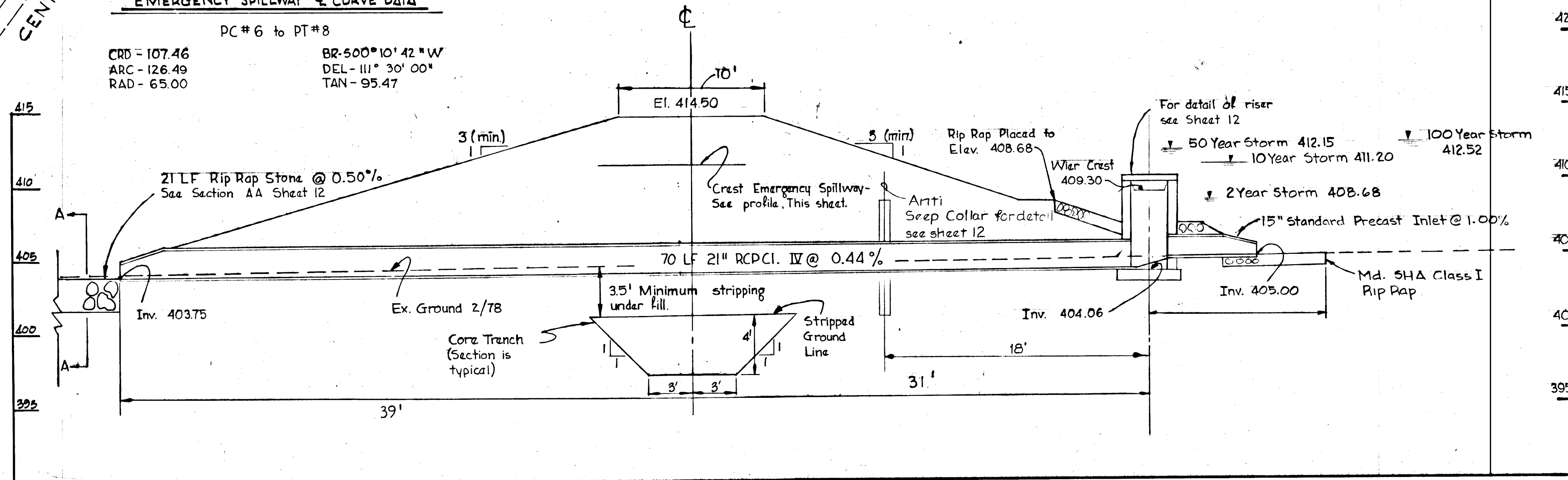
- 1) All work shall be performed in accordance with the "Storm Water Management Pond Design Manual, Maryland Association of Soil Conservation Districts", Construction Specifications, starting page 6-7.
 - 2) Stripping under fill shall be a minimum of 3 1/2 feet.
 - 3) Borrow fill for construction of the earth embankment may not be taken from the pond excavation.*
 - 4) Fill sections shall be compacted to at least 95% of the optimum density.
- *This fill may be taken from the road cuts.

STORM WATER MANAGEMENT DATA

Storm Frequency (yr)	Peak Inflow (cfs)	Release (cfs)	Storage (cu ft)	Peak Elevation (ft)	Allowable Release Rates (cfs)
2	30	10.3	33,000	408.7	13.0
10	79	28.8	94,000	411.2	44.7
50	122	83	122,000	412.2	NA
100	149	118	134,000	412.5	NA

EMERGENCY SPILLWAY & CURVE DATA

PC #6 to PT #8
 CRD = 107.46
 ARC = 126.49
 RAD = 65.00
 BR = 500° 10' 42" W
 DEL = III° 30' 00"
 TAN = 95.47



PROFILE PRINCIPAL SPILLWAY

Scales H: 1" = 5'
 V: 1" = 5'

THIS PLAN HAS BEEN REVIEWED BY THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION.

THIS PLAN FOR SMALL POND CONSTRUCTION MEETS THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John DeGroot
 District Service
 DATE: 10/21/79

APPROVED: Kenneth A. McCord
 HOWARD S.C.D.
 DATE: 10/24/79

CERTIFICATION BY THE DEVELOPER

We CERTIFY THAT ALL DEVELOPMENT AND OR CONSTRUCTION OF THIS POND WILL BE DONE ACCORDING TO THIS PLAN. We ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. We WILL AUTHORIZE A REGISTERED PROFESSIONAL ENGINEER TO SUPPLY THE HOWARD SOIL CONSERVATION OFFICE WITH AN AS-BUILT PLAN OF THIS POND WITHIN 30 DAYS OF THE PONDS COMPLETION.

John DeGroot, Branch Manager
 Michael E. McGuire, Manager, Land Development
 DATE: 7-12-79

CERTIFICATION BY THE ENGINEER

I CERTIFY THAT THIS PLAN FOR SMALL POND CONSTRUCTION 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.

Kenneth A. McCord
 KENNETH A. MCCORD P.E. NO. 1974
 DATE: 7-13-79

BURLEIGH MANOR SECTION 4 AREA 3

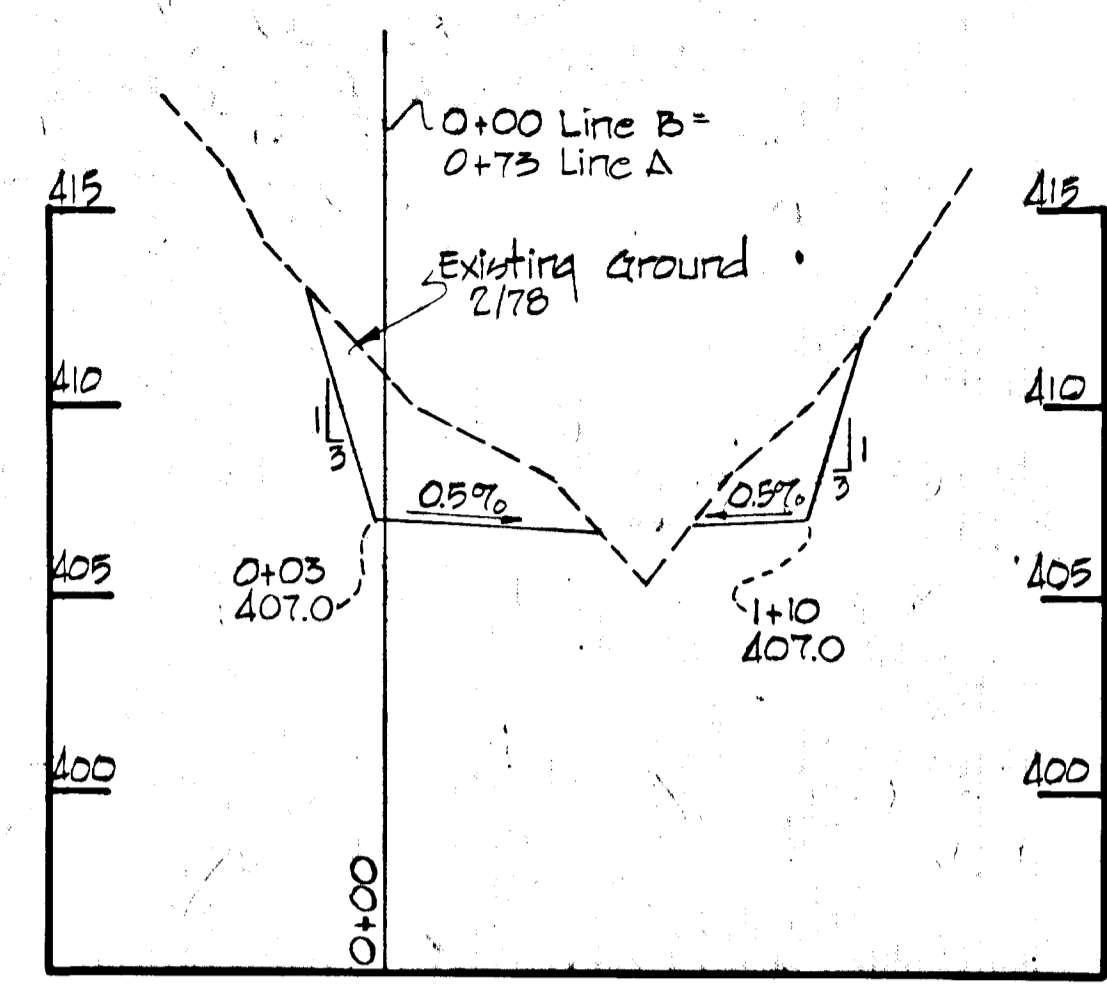
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 STORM WATER MANAGEMENT - PLAN & PROFILES

SCALE: AS SHOWN DATE: July 13, 1979

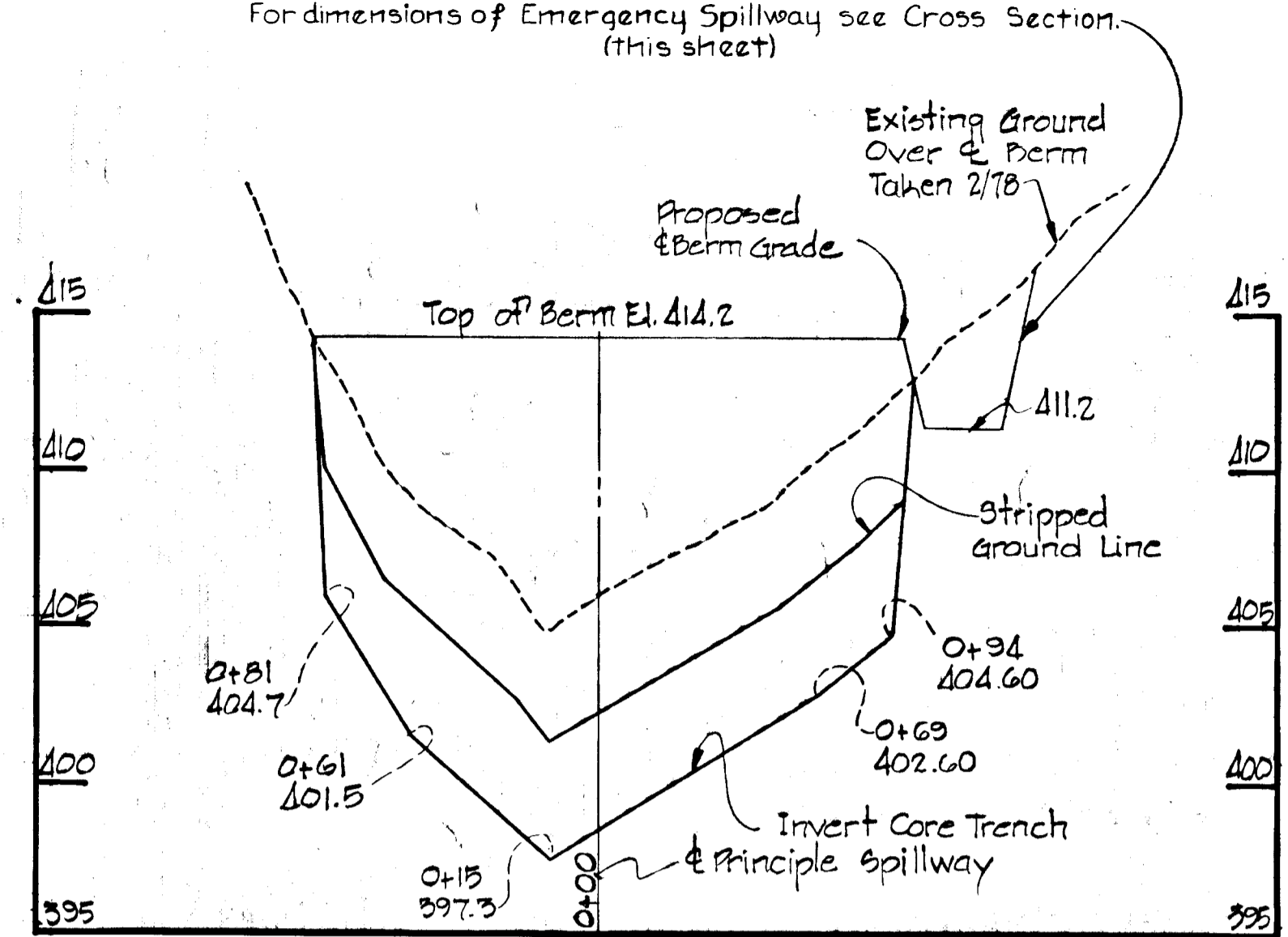
WHITMAN REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030

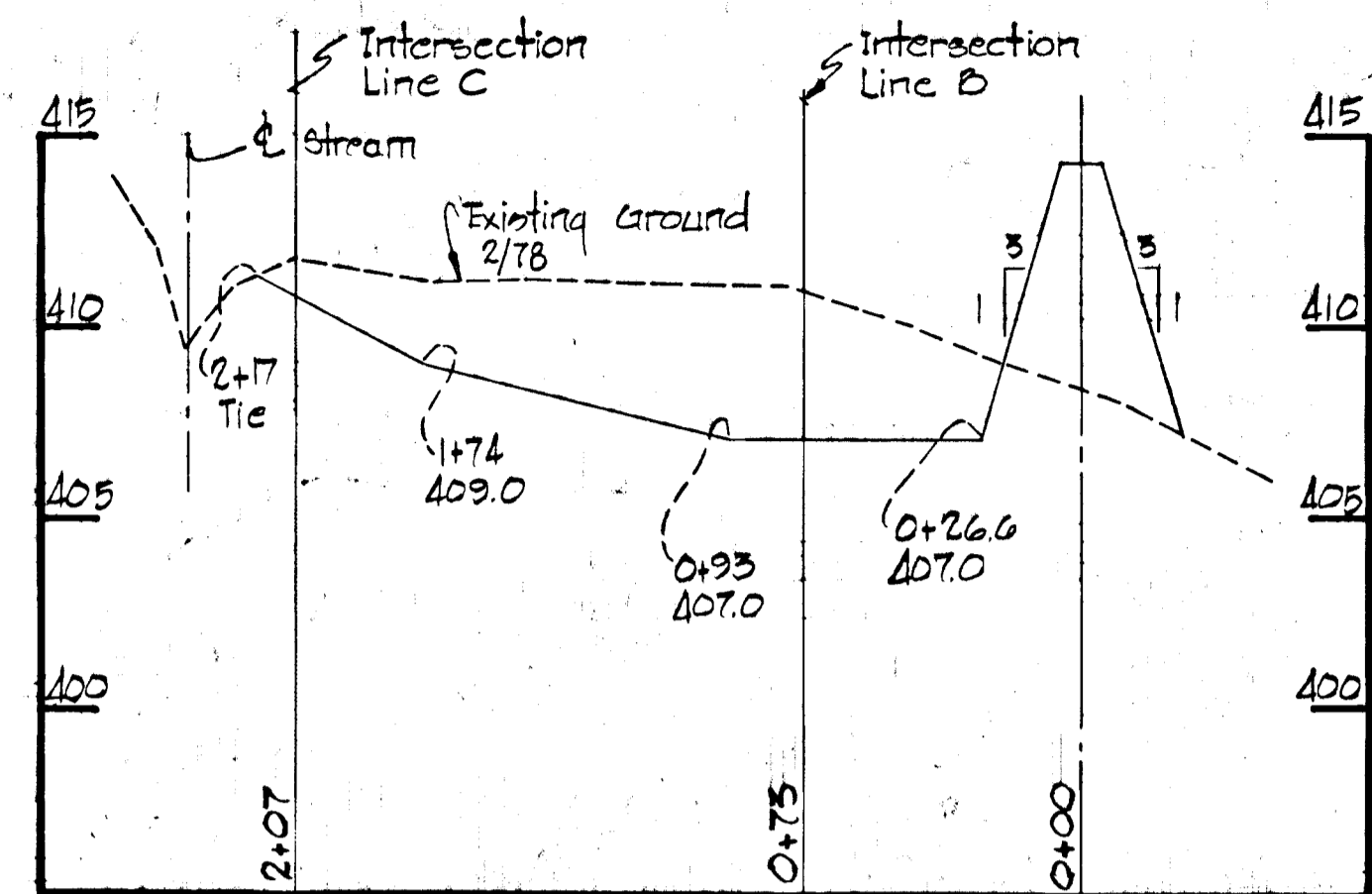
Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineers
 No. 1974



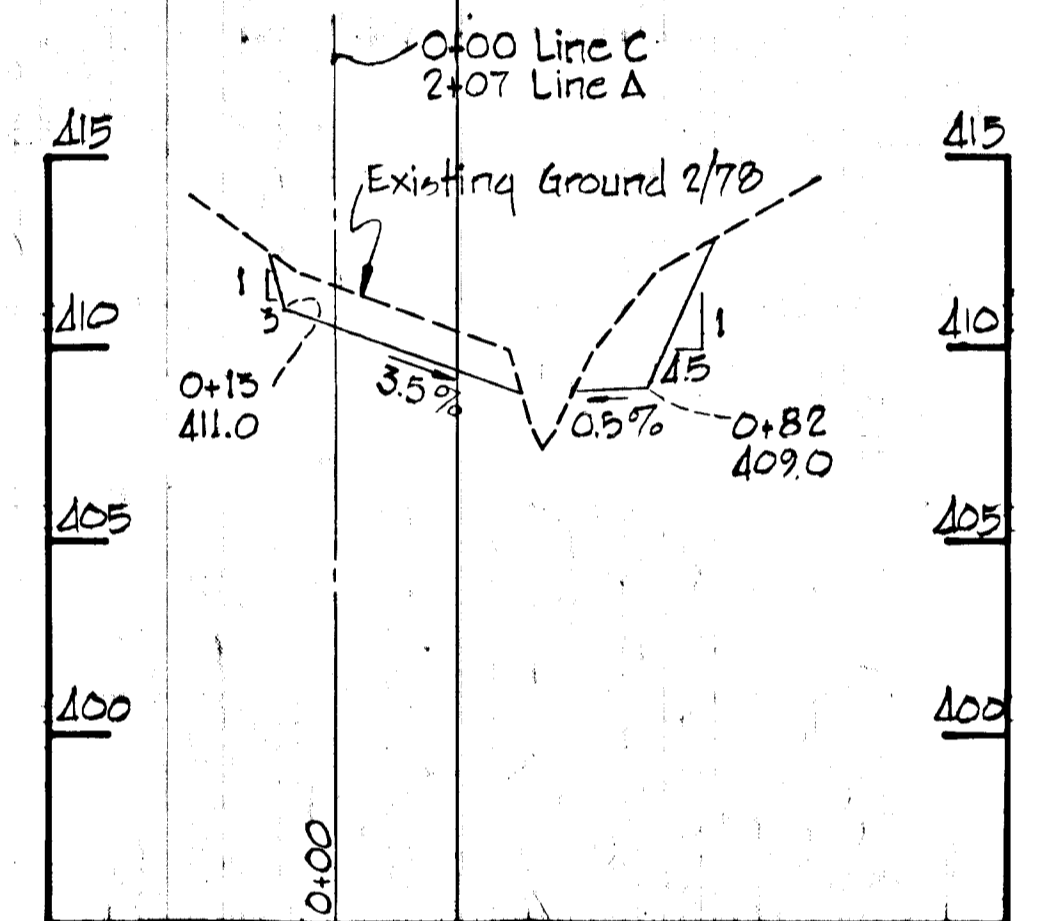
PROFILE LINE B
 Scale: Hor. 1" = 50'
 Vert. 1" = 5'



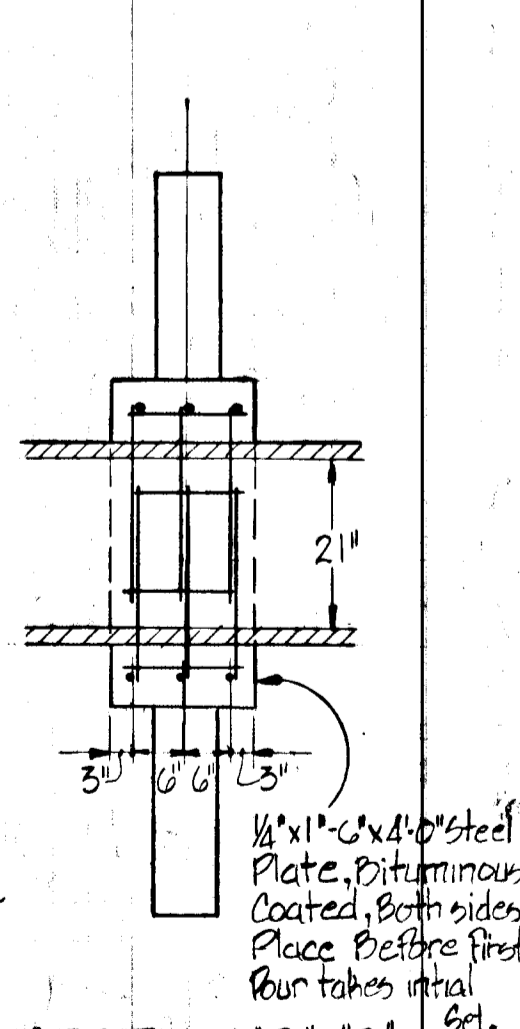
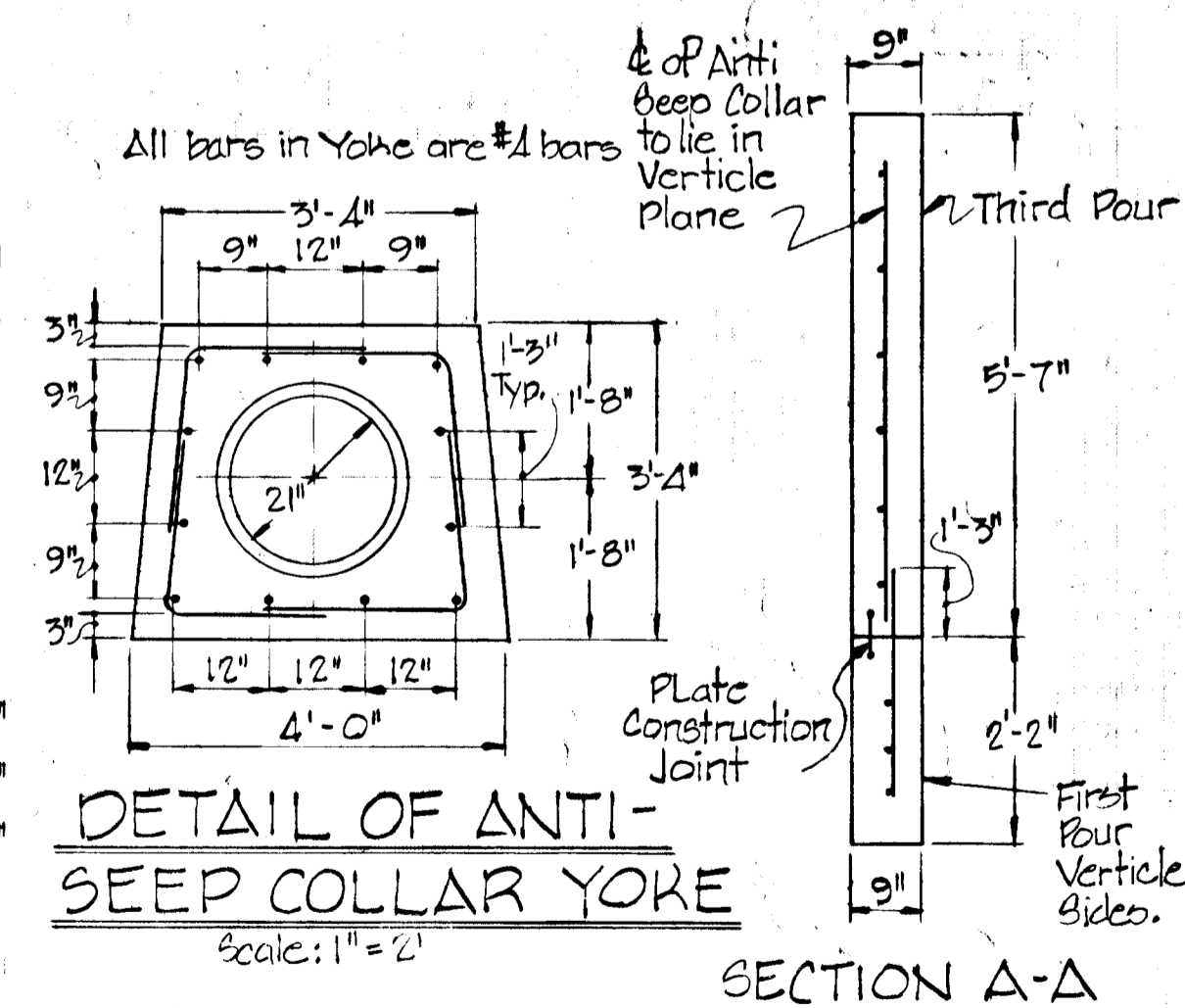
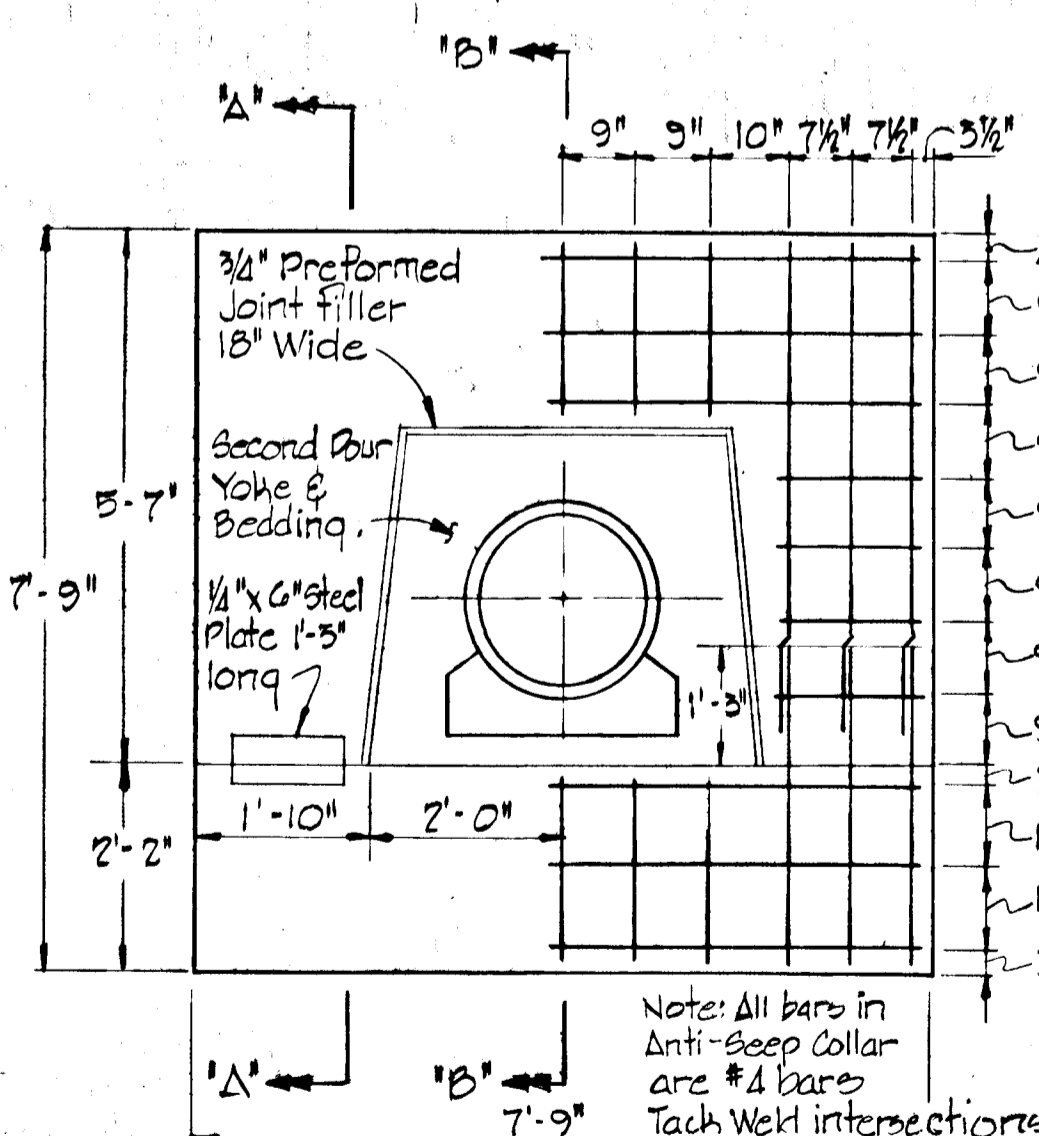
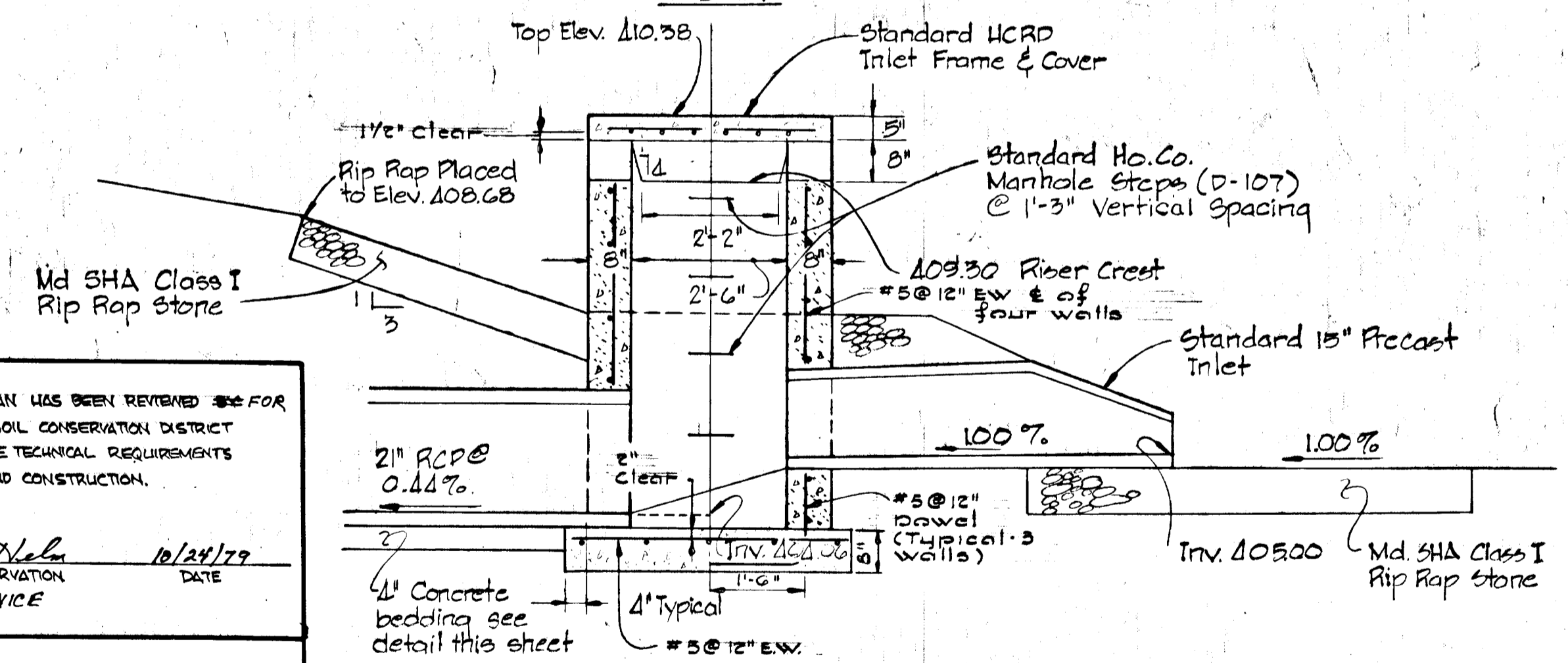
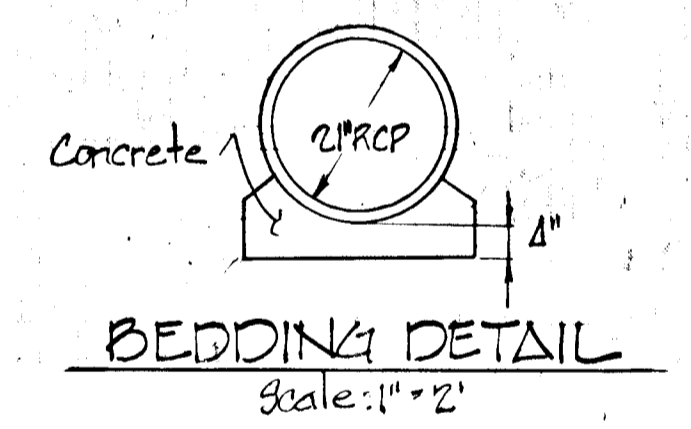
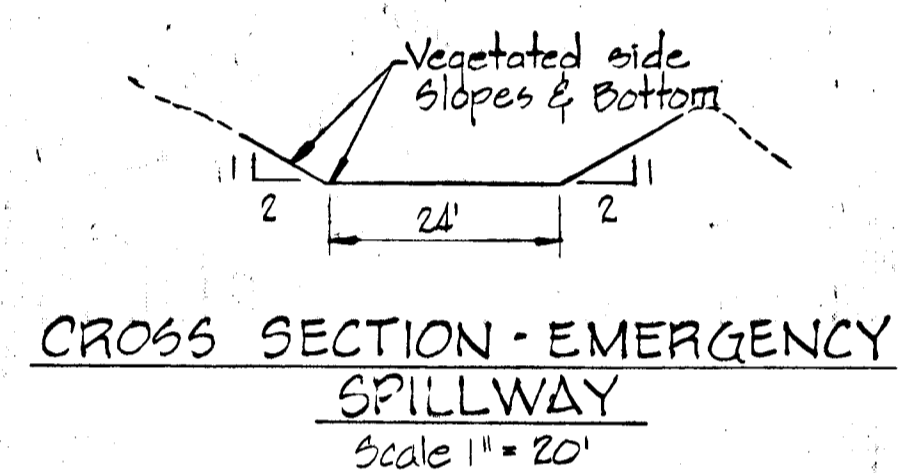
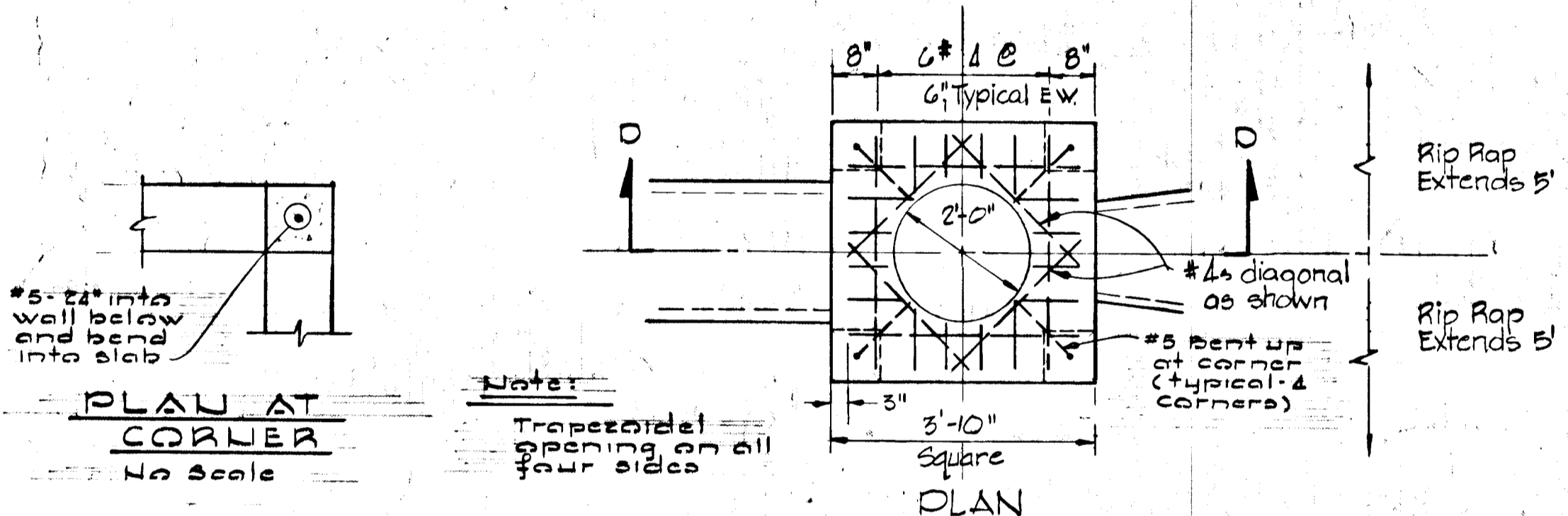
PROFILE ALONG BERM
 Scale: Hor. 1" = 50'
 Vert. 1" = 5'



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



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



THIS PLAN HAS BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION.
 Approved: John DeGroot 10/24/79 DATE
 U.S. SOIL CONSERVATION SERVICE

THIS PLAN FOR SMALL POND CONSTRUCTION MEETS THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Approved: Robert Ziehm 10/24/79 DATE
 HOWARD SOIL CONSERVATION SERVICE

CERTIFICATION BY THE DEVELOPER
 "WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION OF THIS POND WILL BE DONE ACCORDING TO THIS PLAN. WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. WE WILL AUTHORIZE A REGISTERED PROFESSIONAL ENGINEER TO SUPPLY THE HOWARD SOIL CONSERVATION OFFICE WITH AN AS-BUILT PLAN OF THIS POND WITHIN 30 DAYS OF THE POND'S COMPLETION."
 Approved: John DeGroot 7-12-79 DATE
 BRANCH MANAGER

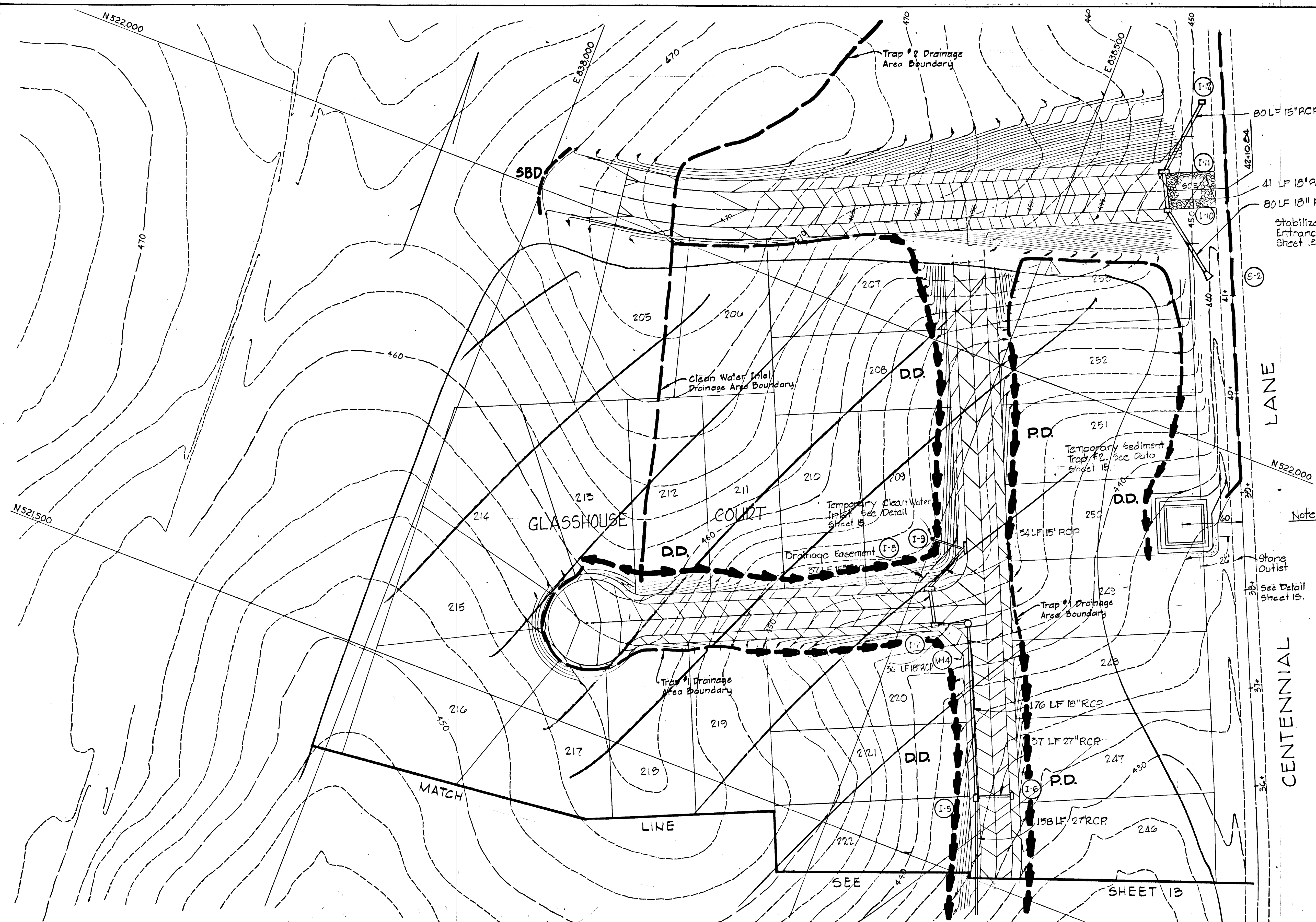
CERTIFICATION BY THE ENGINEER
 "I CERTIFY THAT THIS PLAN FOR SMALL POND CONSTRUCTION REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 Approved: Kenneth A. McCord 7-13-79 DATE
 KENNETH A. MCCORD P.E. 1974

BURLEIGH MANOR SECTION 4 AREA 3
 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND
 STORM WATER MANAGEMENT DETAILS
 SCALE: AS SHOWN DATE: July 13, 1979
 WHITMAN, REQUARDT & ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21202

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030

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

DEPARTMENT OF PUBLIC WORKS
Allen J. Brown 11/1/79
 CHIEF, BUREAU OF ENGINEERING DATE
 OFFICE OF PLANNING AND ZONING
John W. Middleman 10-24-79
 CHIEF DIVISION OF LAND DEVELOPMENT DATE



80 LF 15" RCP
 41 LF 18" RCP
 80 LF 18" RCP
 Stabilized Construction Entrance, See Detail Sheet 15.

Note: Inlets 1, 2, 3, 4, 5, 6, 7, 8, 9 shall be blocked, see blocked inlet detail sheet 15. Inlets 10, 11, 12 & 13 are not to be blocked.

NOTE: For detail of perimeter or diversion dike, see sheet 15.

NO	Revised contours saved easement control	1/2/80
	REVISIONS	DATE

BURLEIGH MANOR SECTION 4 AREA 3
 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND
 SEDIMENT CONTROL PLAN

SCALE: 1" = 50' DATE: July 13, 1979

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030
 Registered Engineer
 No. 1974

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *Wm. Rowe* DATE: 10-24-79
 HOWARD S.C.D.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
John W. Middleman 10-24-79
 U.S. SOIL CONSERVATION SERVICE DATE: 10/24/79

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 WE ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
Michael E. McGurk
 Michael E. McGurk
 Manager, Land Development
 DATE: 7-12-79

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.
Kenneth A. McCord
 KENNETH A. MCCORD P.E.
 DATE: 7-13-79

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030

GENERAL NOTES

- TEMPORARY, COMPACTED, 18" HIGH EARTH FILL DIVERSION DIKES SHALL BE CONSTRUCTED ABOVE THE LIPS OF FILL SLOPES, CONCURRENTLY WITH THE INITIAL GRADING AND DIRECTED TO UNDISTURBED SOD AREAS AT THE END OF EACH DAY.
- CONTRACTOR TO NOTIFY THE HOWARD COUNTY BUREAU OF INSPECTION AND PERMITS 465-5000X365 AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- ALL DISTURBED SLOPE AREAS TO BE STABILIZED AS SOON AS GRADING IS COMPLETED.
- ALL SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MANUAL, "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS".

PERMANENT SEEDING NOTES

- ALL SEDIMENT CONTROL MEASURES MUST BE CONSTRUCTED AND STABILIZED ACCORDING TO NOTE 3 PRIOR TO ANY OTHER GRADING ON THE SITE.
- NO TEMPORARY SEDIMENT CONTROL STRUCTURE MAY BE REMOVED OR DESTROYED WITHOUT APPROVAL OF THE HOWARD SOIL CONSERVATION DISTRICT.
- ALL AREAS OTHER THAN LAWNS TO BE SEEDED (DIKES, BASINS, DRAINAGE SWALES AND DISTURBED AREAS) AT THE RATE OF 80lbs./ACRE OF THE FOLLOWING: KENTUCKY 31 TALL FESCUE-60lbs./ACRE AND KOPEAN LESPEDEZA (SCARIFY AND INOCULATE) 20lbs./ACRE, IMMEDIATELY AFTER CONSTRUCTION. SOW WITH MECHANICAL SPREADER, RAKE MINIMUM TWO (2) PASSES WITH "YORK RAKE", COVER AND COMPACT WITH CULTIPACKER.
- SURFACE PREPARATION TO INCLUDE GROUND LIMESTONE OVER TOPSOIL SURFACE AREA AT THE RATE OF ONE TON/ACRE (50lbs./1000 S.F.) COMMERCIAL FERTILIZER (10-10-10) AT THE RATE OF TWO TONS/ACRE. ANCHOR WITH ASPHALT AT THE RATE OF 480 GALLONS/ACRE. DRAINAGE SWALES AND DITCHES SHALL BE MULCHED AND COVERED WITH A PREFERATED EROSION CONTROL BLANKET FOR THE FULL WIDTH OF THE SWALE OR DITCH. BLANKET SHALL BE JUTE MAT OR EQUAL. STABILIZATIONS OF SLOPES STEEPER THAN 3:1 SHALL BE PLANTED WITH KENTUCKY 31 TALL FESCUE 40lbs./1000 S.F.) AND CROWN VETCH (SCARIFY AND INOCULATE) 15lbs./ACRE.

SEQUENCE OF CONSTRUCTION

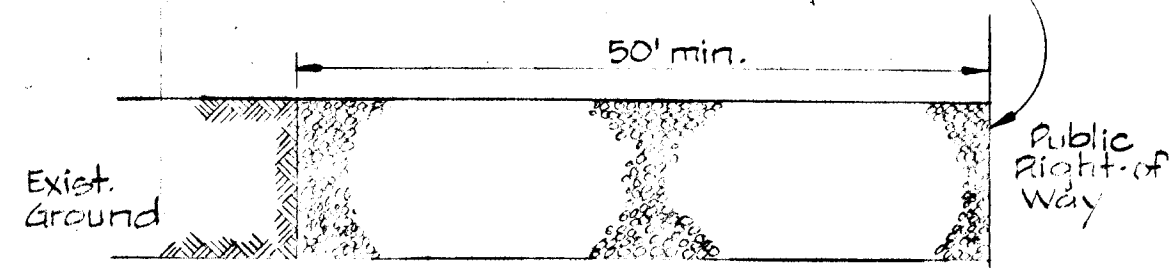
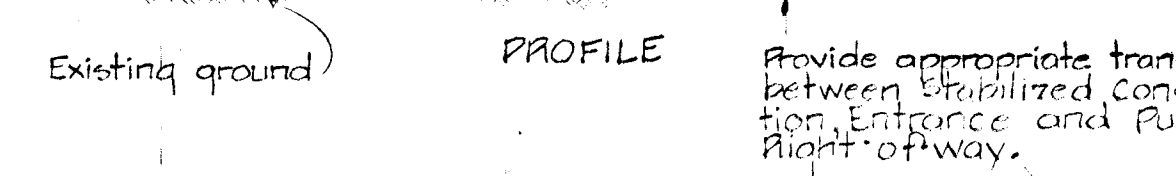
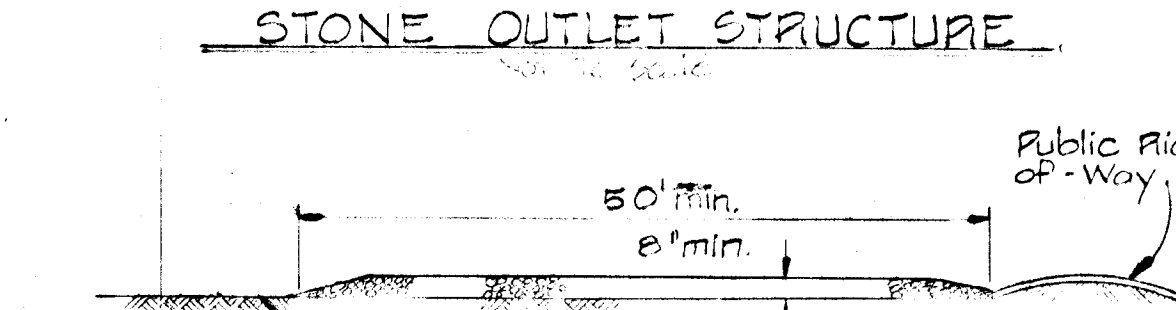
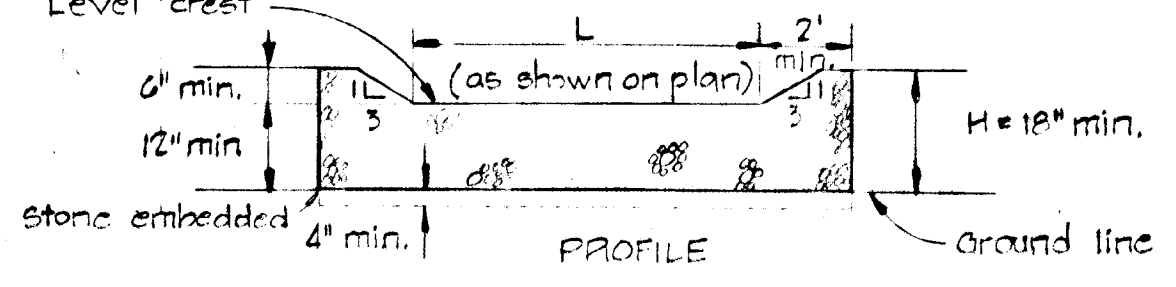
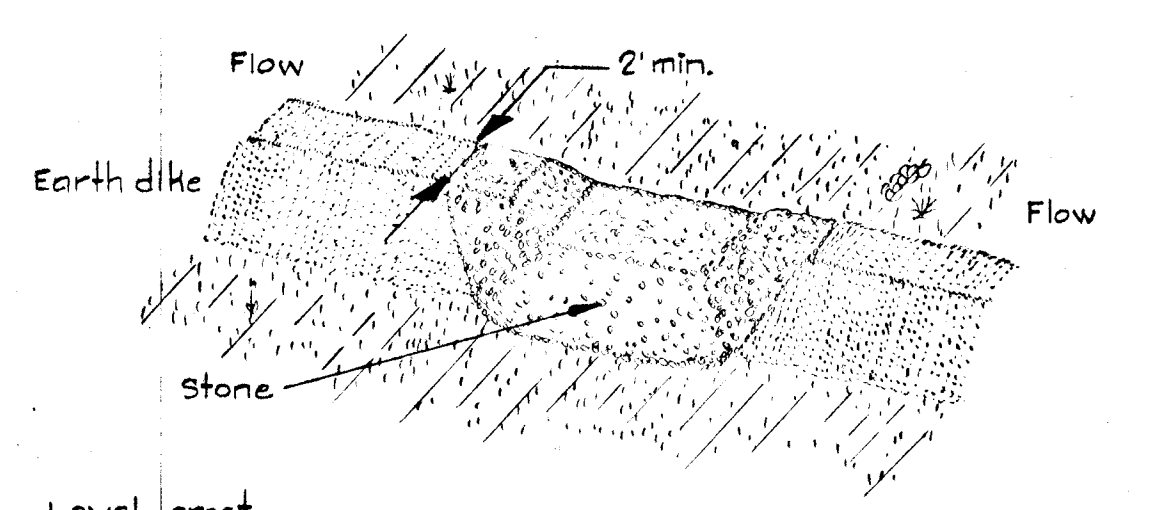
- OBTAIN GRADING PERMIT.
- CLEAR AND GRUB WOODED AREAS
- CONSTRUCT DIVERSION DIKES ALONG PROPOSED ROADWAYS AND AT SEDIMENT TRAPS.
- STRIP AND GRADE ROADS AND SEED TOPSOIL STOCKPILE.
- INSTALL STORM DRAIN PIPES. PLACE POLY FILTER GB CLOTH AROUND END OF DOWNSTREAM PIPE AT ALL INLET AND MANHOLE LOCATIONS PRIOR TO LAYING UPSTREAM PIPE. SEE DETAIL 'A', THIS SHEET.
- BUILD INLETS AND MANHOLES AND INSTALL WOOD PLANKING AND STONE FILTERS AT INLETS TO COMPLETE SEDIMENT TRAP CONSTRUCTION. BLOCK INLETS AS NOTED.
- CONSTRUCT ALL UTILITIES.
- FINE GRADE ROADS, CONSTRUCT CURB AND GUTTER AND SEED ALL DISTURBED AREAS AS PER SPECIFICATIONS THIS SHEET.
- REMOVE SEDIMENT TRAPS, FINISH CURB AND GUTTER AND PAVE ROADS.
- REMOVE DIVERSION DIKES AFTER CONSTRUCTION IS COMPLETE AND GRASS IS ESTABLISHED.

LAWN SEEDING NOTES

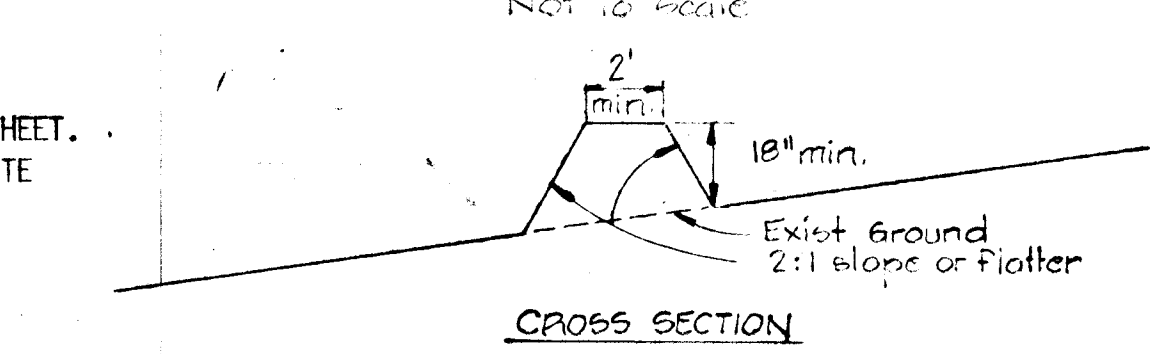
- ALL SEDIMENT CONTROL MEASURES MUST BE CONSTRUCTED AND STABILIZED ACCORDING TO NOTE 3 PRIOR TO ANY OTHER GRADING ON SITE.
- NO TEMPORARY SEDIMENT CONTROL STRUCTURE MAY BE REMOVED OR DESTROYED WITHOUT APPROVAL OF THE HOWARD SOIL CONSERVATION DISTRICT.
- ALL LAWN AREAS TO BE SEEDED AT THE RATE OF 113lbs./ACRE (31lbs./1000 S.F.) OF THE FOLLOWING: CERTIFIED BLUEGRASS - 65% lbs./ACRE (1 1/2 lbs./1000 S.F.) AND CREEPING RED FESCUE - 65% lbs./ACRE (1 1/2 lbs./1000 S.F.) IMMEDIATELY AFTER CONSTRUCTION. SOW WITH A MECHANICAL SPREADER, RAKE MINIMUM TWO (2) PASSES WITH "YORK RAKE", COVER AND COMPACT WITH CULTIPACKER SURFACE PREPARATION TO INCLUDE - GROUND LIMESTONE OVER TOPSOIL SURFACE AREA AT THE RATE OF ONE TON/ACRE (50lbs./1000 S.F.) COMMERCIAL FERTILIZER (10-10-10) AT THE RATE OF 1000lbs./ACRE. MULCH AREAS WITH STRAW AT THE RATE OF 50lbs./ACRE OR ONE TON/ACRE. ANCHOR WITH ASPHALT AT THE RATE OF 480 GALLONS/ACRE.

SODDING NOTES

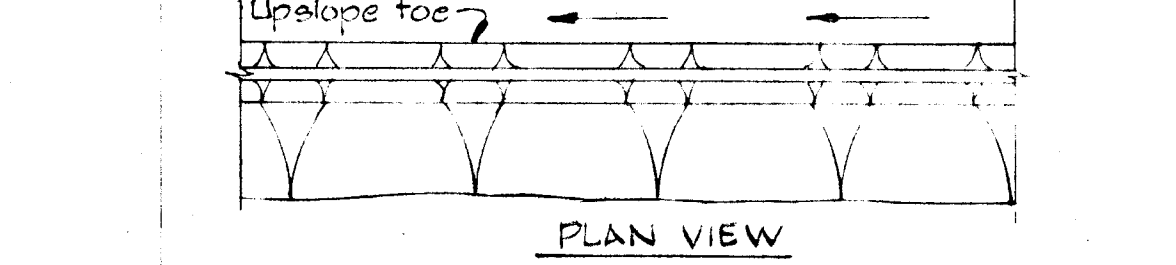
- APPLY 10-10-10 FERTILIZER @ 1000lbs./ACRE (25lbs./1000 S.F.)
- APPLY GROUND AGRICULTURAL LIMESTONE @ 2000lbs./ACRE (50lbs./1000 S.F.)
- INCORPORATE BOTH LIME AND FERTILIZER INTO SOIL BY DISCING. FIRM UP AFTER INCORPORATION.
- LAY SOD TO A TIGHT FIT. ROLL TO ENSURE CONTACT WITH UNDERLYING SOIL. WATER IS NECESSARY FOR 1ST 2 WEEKS (IN SUMMER) TO ENSURE ESTABLISHMENT.



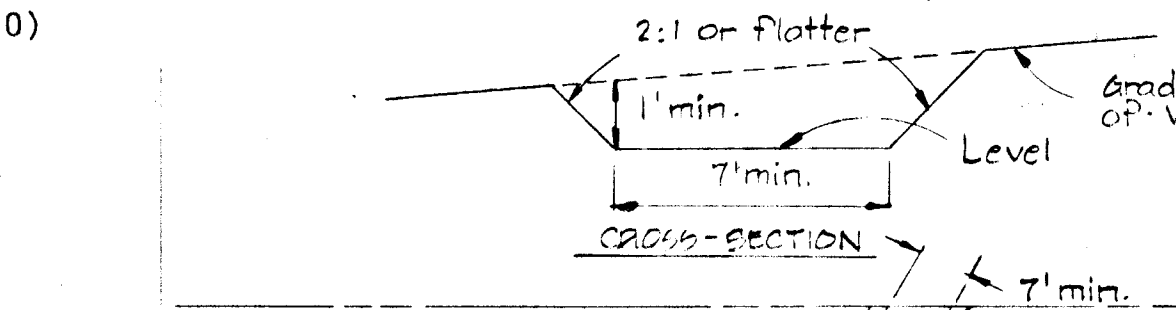
STABILIZED CONSTRUCTION ENTRANCE
 Not to Scale



CROSS SECTION

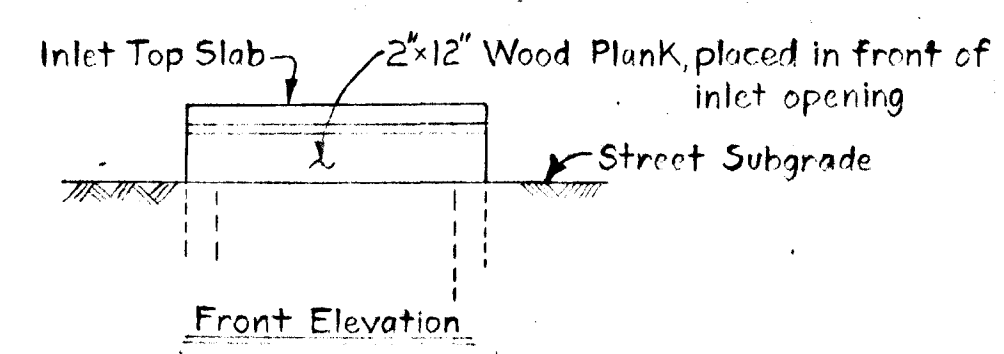


PLAN VIEW PERIMETER DIKE
 Not to Scale

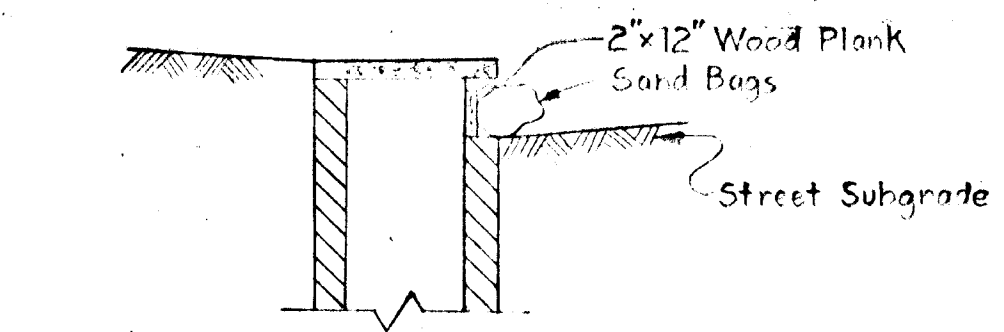


CROSS SECTION INTERCEPTOR SWALE

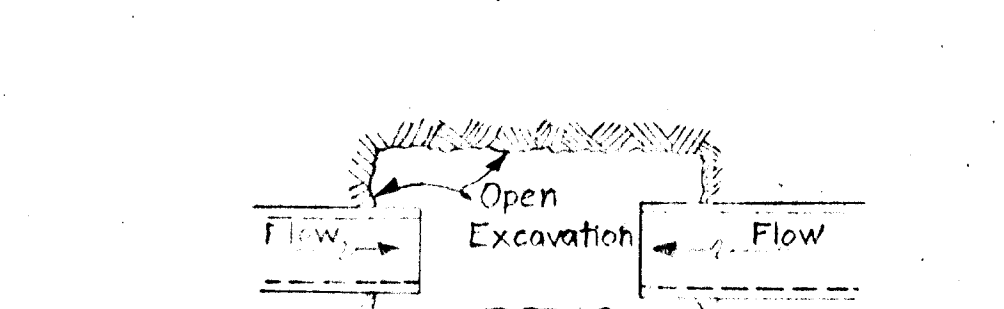
PLAN VIEW INTERCEPTOR SWALE
 Not to Scale



Front Elevation



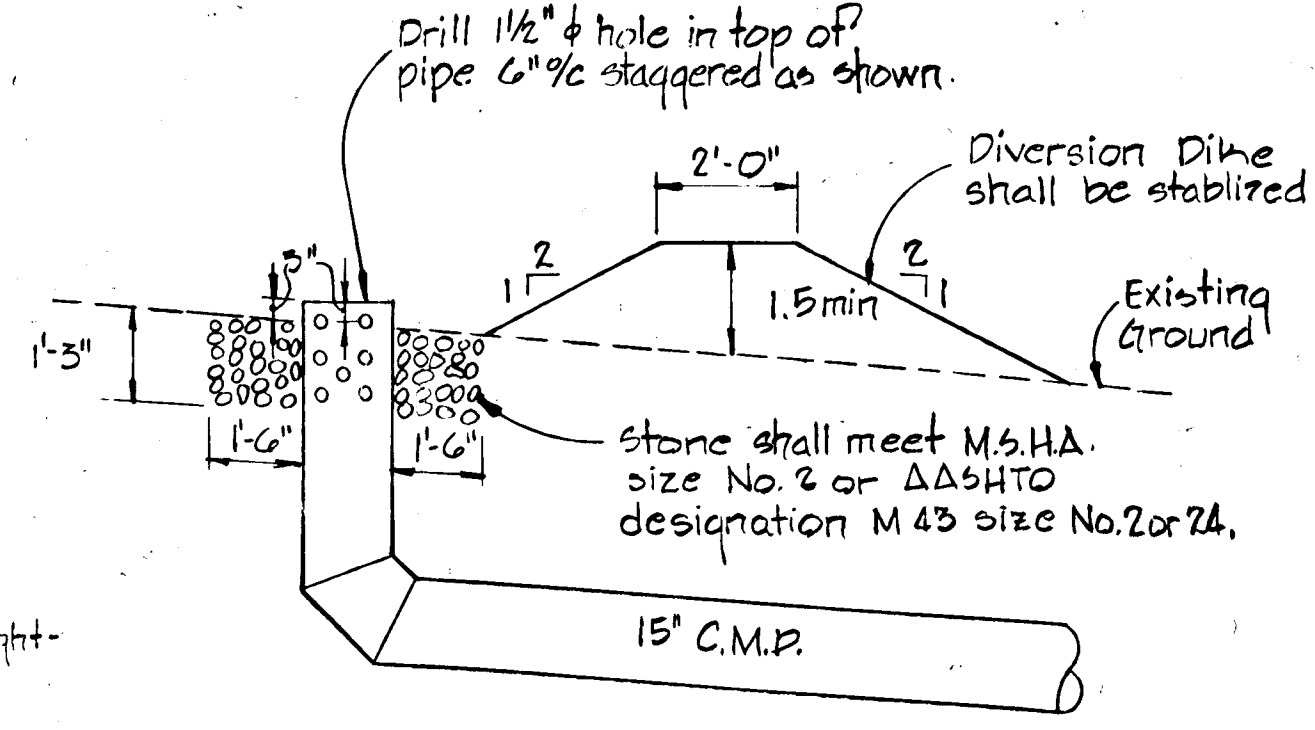
Detail - Blocked Inlets
 1/4" = 1'



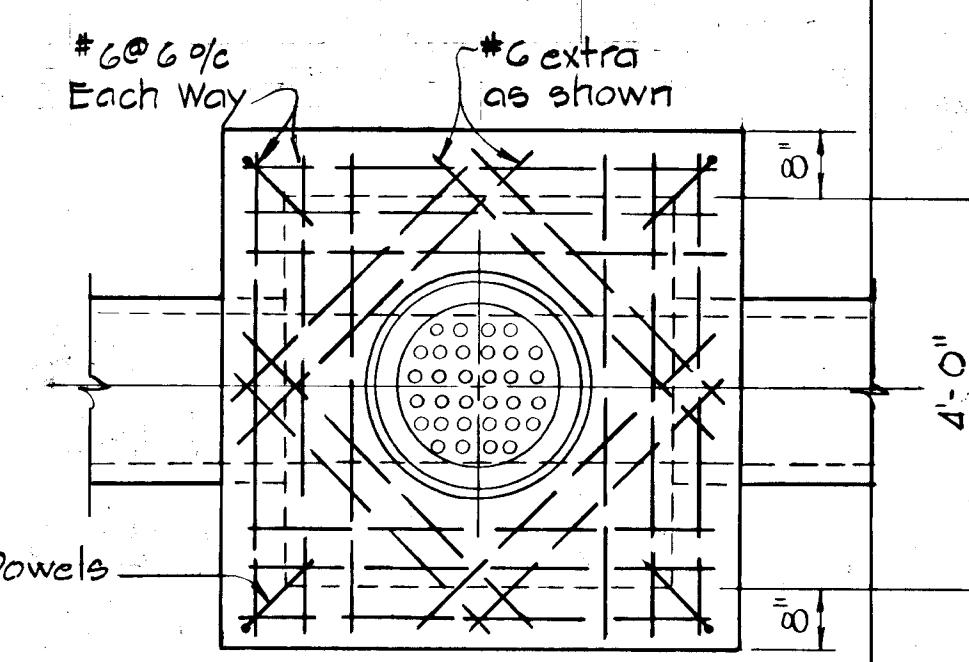
Filter Cloth shall be supplied by Carriage Mills Incorporated

Detail 'A'
 No Scale

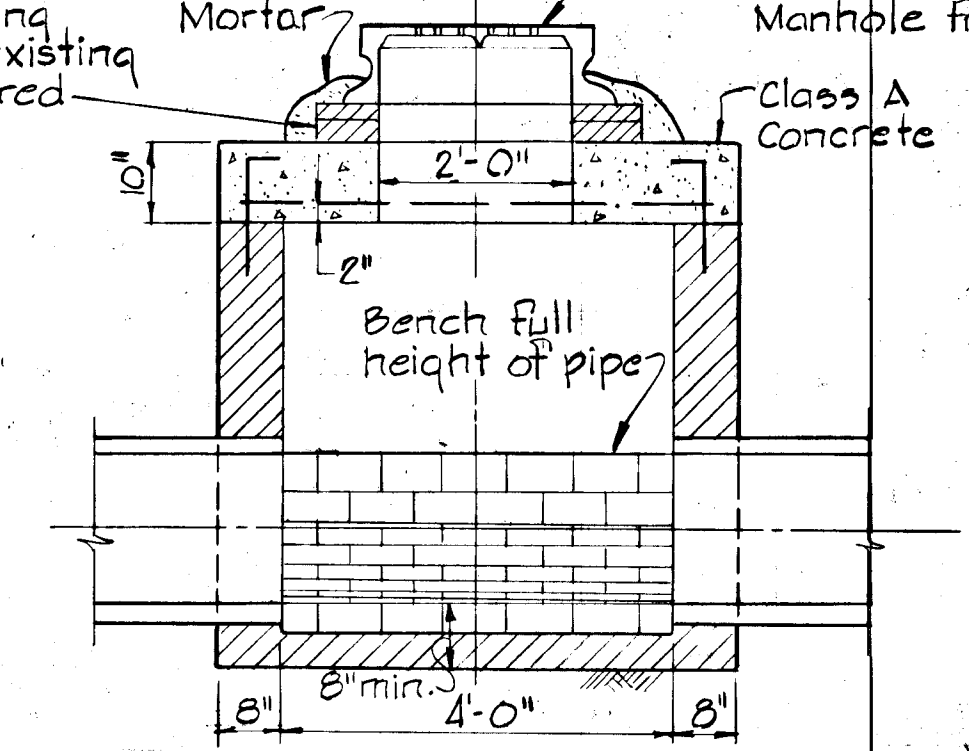
Place Poly filter GB cloth around end of downstream Pipe to limits of excavation (Typical at all structure locations) Fasten with rubber gaskets, A.S.T.M. C-443-77 or equal.



DETAIL-CLEAN WATER INLET AND DIVERSION DIKE
 Scale: 3/8" = 1'-0"



PLAN

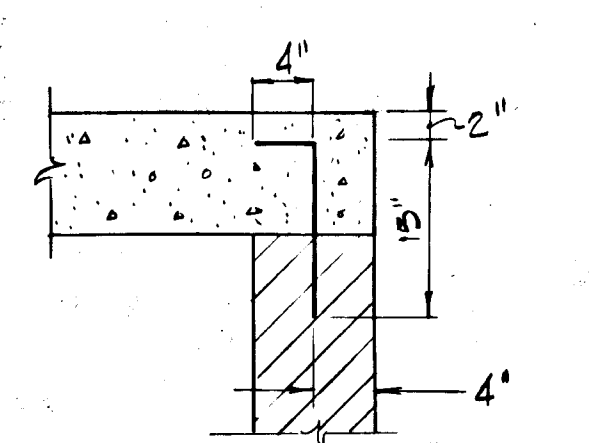


SECTION

TYPE "B" MANHOLE (SHALLOW)
 No Scale

Note:
 MH Frame & Cover to be centered in MH as shown.

Walls bottom slab and invert shall be brick or plan class 'A' concrete poured in place.



DOWEL DETAIL
 Scale: 3/4" = 1'-0"

REV.	DATE	REMARKS
Δ	1/18/80	standard Manhole changed to shallow type
		REMARKS

BURLEIGH MANOR
 SECTION 4 AREA 3
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SEDIMENT CONTROL DETAILS

SCALE: AS SHOWN DATE: July 13, 1979

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030

AS-BUILT 3-29-88 F-80-08 SHEET 15 OF 16

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
 James M. Helm DATE: 10/21/79
 U.S. SOIL CONSERVATION SERVICE

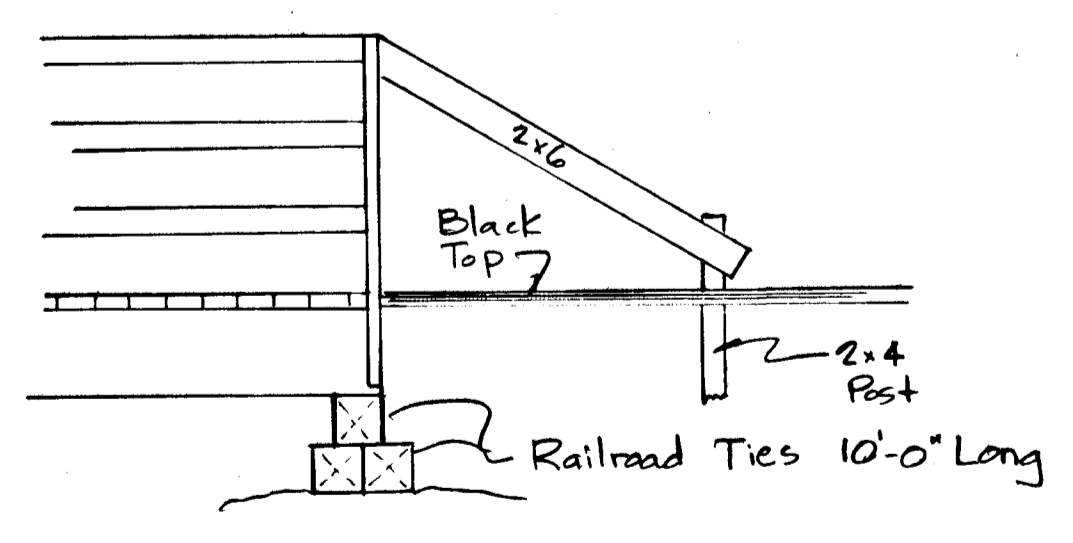
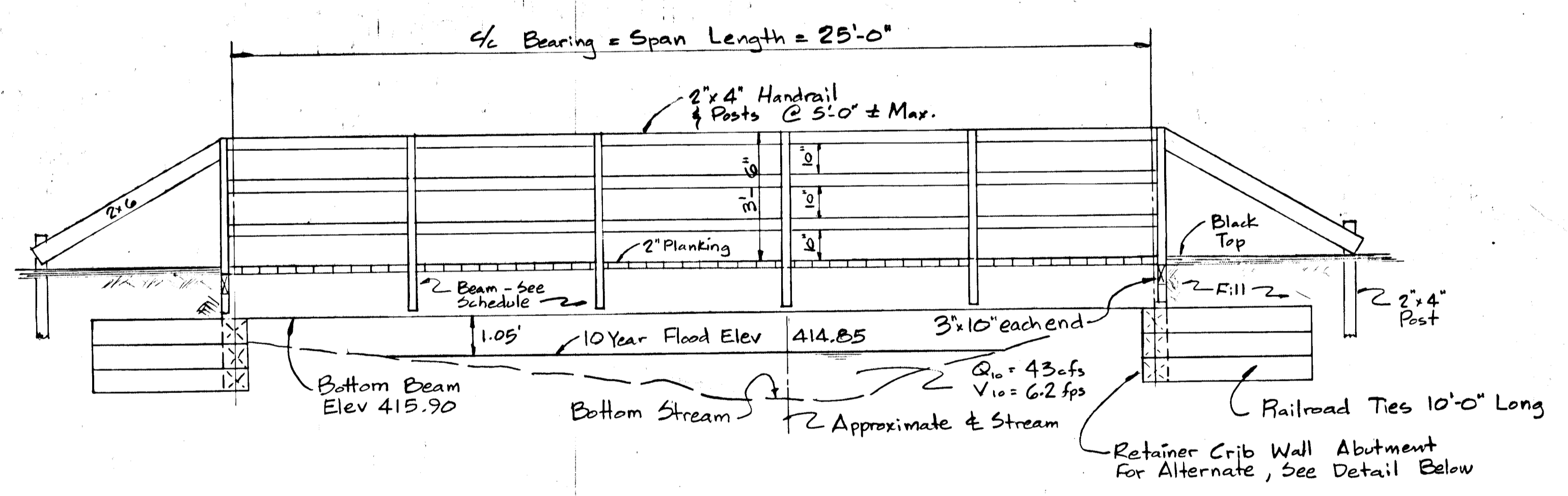
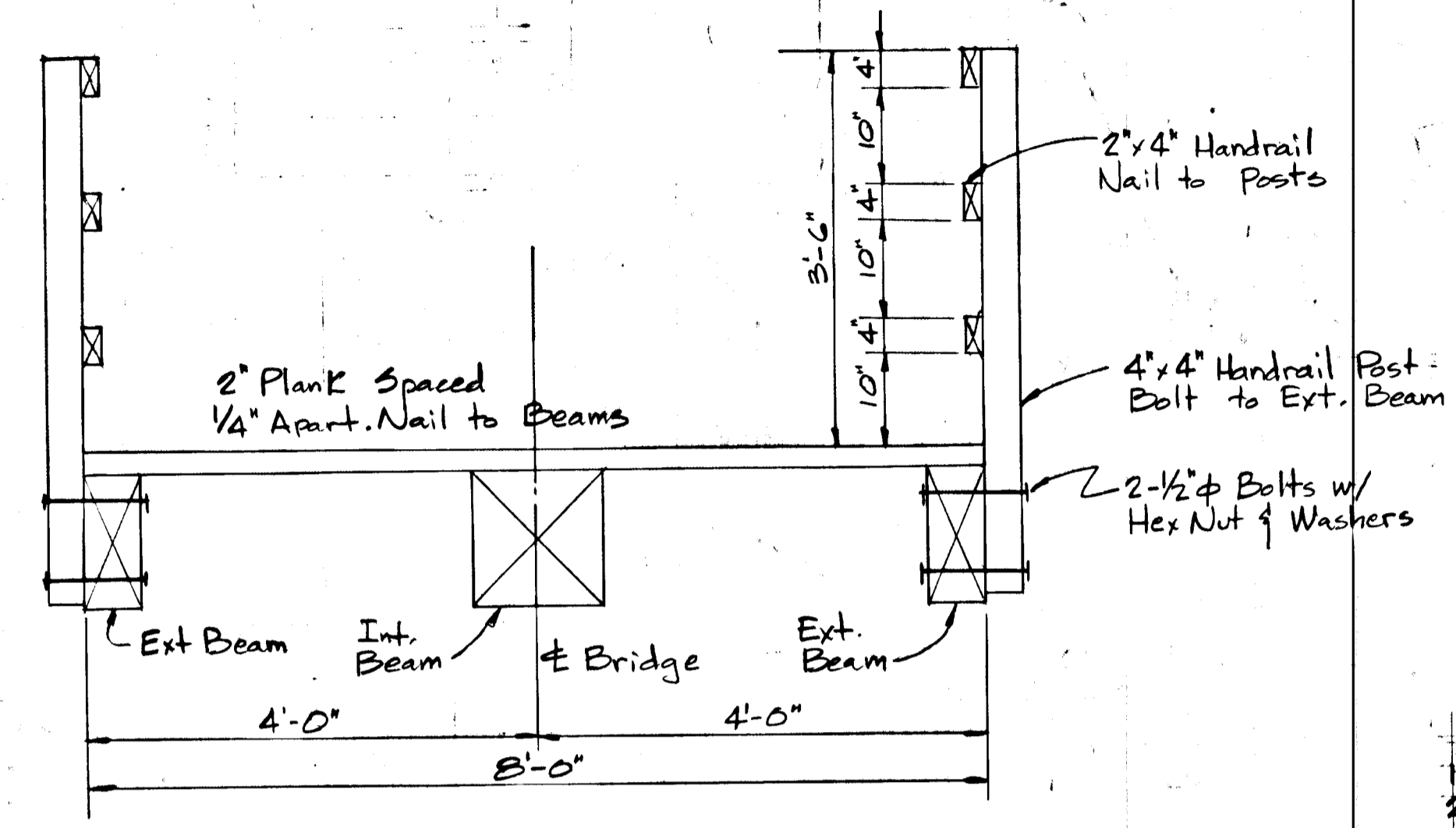
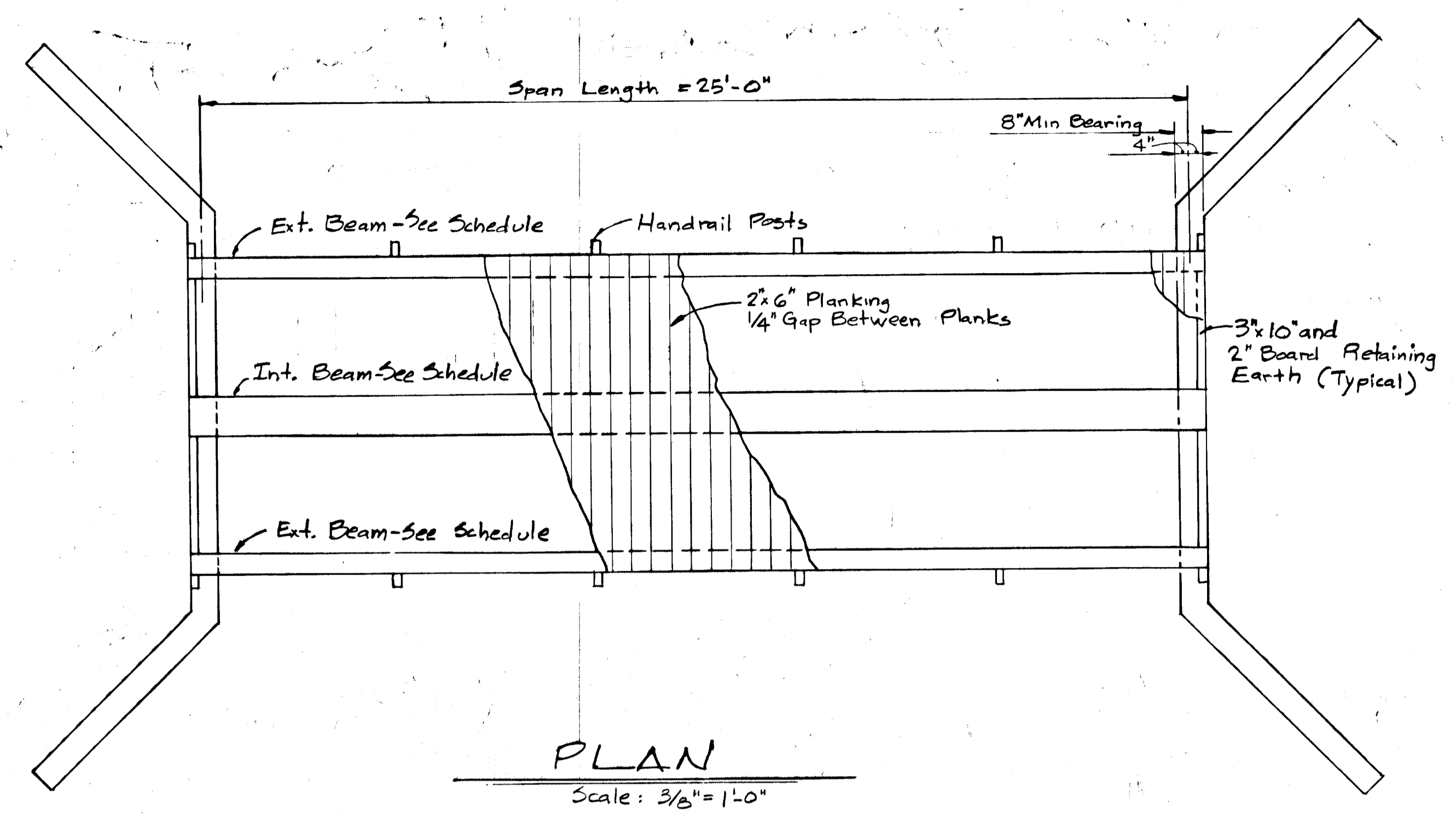
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 APPROVED: Wm Rowe DATE: 10-24-79
 HOWARD S.C.D.

CERTIFICATION BY THE DEVELOPER
 We CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND WE ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
 John DeGroot Branch Manager
 Michael E. McGuire Manager, Land Development
 DATE: 7-12-79

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.
 Kenneth A. McCord, P.E. 1974
 DATE: 7-13-79

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030

Allen J. Berman 11/1/79
 DATE
 10-27-79
 DATE



SOLID BEAM SCHEDULE

SPAN	EXT. BEAM	INT. BEAM
20 FT	6" x 12"	12" x 12"
* 25 FT	6" x 14"	14" x 14"
30 FT	8" x 14"	2-6" x 14" & 1-8" x 14"
35 FT	10" x 14"	3-10" x 14"

ALTERNATE LAMINATED BEAM SCHEDULE

SPAN	EXT. BEAM	INT. BEAM
20 FT	3 1/8" x 12"	5 1/8" x 13 1/2"
* 25 FT	5 1/8" x 12"	5 1/8" x 16 1/2"
30 FT	5 1/8" x 15"	8 3/4" x 16 1/2"
35 FT	5 1/8" x 16 1/2"	8 3/4" x 19 1/2"

Note: Net widths shown

- STRUCTURAL NOTES**
- All wood shall be Southern Pine No. 2
 - All wood shall be CCA treated at 0.40 Retention, except wood thicker than 3" shall have 0.60 Retention. Solid timber F_o = 1150 psi
 - All hardware shall be hot-dip galvanized
 - CCA = Chromated Copper Arsenate Standard PS & CI, AWPA
 - Laminated Timber 15" or less = 20F-V3 over 15" = 24F-V3
 - 2" Deck-net thickness
 - Live Load = 85#/SF

Burleigh Manor Section 4 Area 4 and Section 4 Area 5 Pathway System between Mansion House Drive and Red Lion Court. (25 Foot Span)
 For Plan, see sheet 10 this File, F80-08

BURLEIGH MANOR SECTION 4 AREA 3
 2ND ELECTION DISTRICT HOWARD COUNTY, MD.
 SCALE: As Shown DATE: Aug. 20, 1979
 WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21202

- 9-25-85 Define Span = 25'
- 9-25-85 Add Timber Abtn & Timber Beams
- 9-25-85 Delete Concrete Abtm. & Steel Beams

OWNER AND DEVELOPER
 COSTAIN WASHINGTON INC.
 10710 LEE HIGHWAY SUITE 201
 FAIRFAX, VIRGINIA 22030

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974