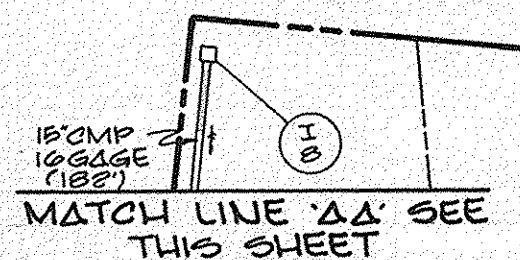


GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HRS IN ADVANCE OF ANY CONSTRUCTION.
3. STORM DRAINAGE TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
4. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
5. CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION AND SURVEY DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TELEPHONE 792-7272.
6. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION, CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
7. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES CURRENT REVISED EDITION

Street Lights
 2-175 Watt Mercury Vapor Lamp post top Fixing on a 14 foot Gray Fiberglass Pole at the following locations:
 1- the Northwest intersection of Bethany Lane and Patuxent Overlook Court
 2- the Southwest intersection of Patuxent Overlook Court and Damascus Drive.

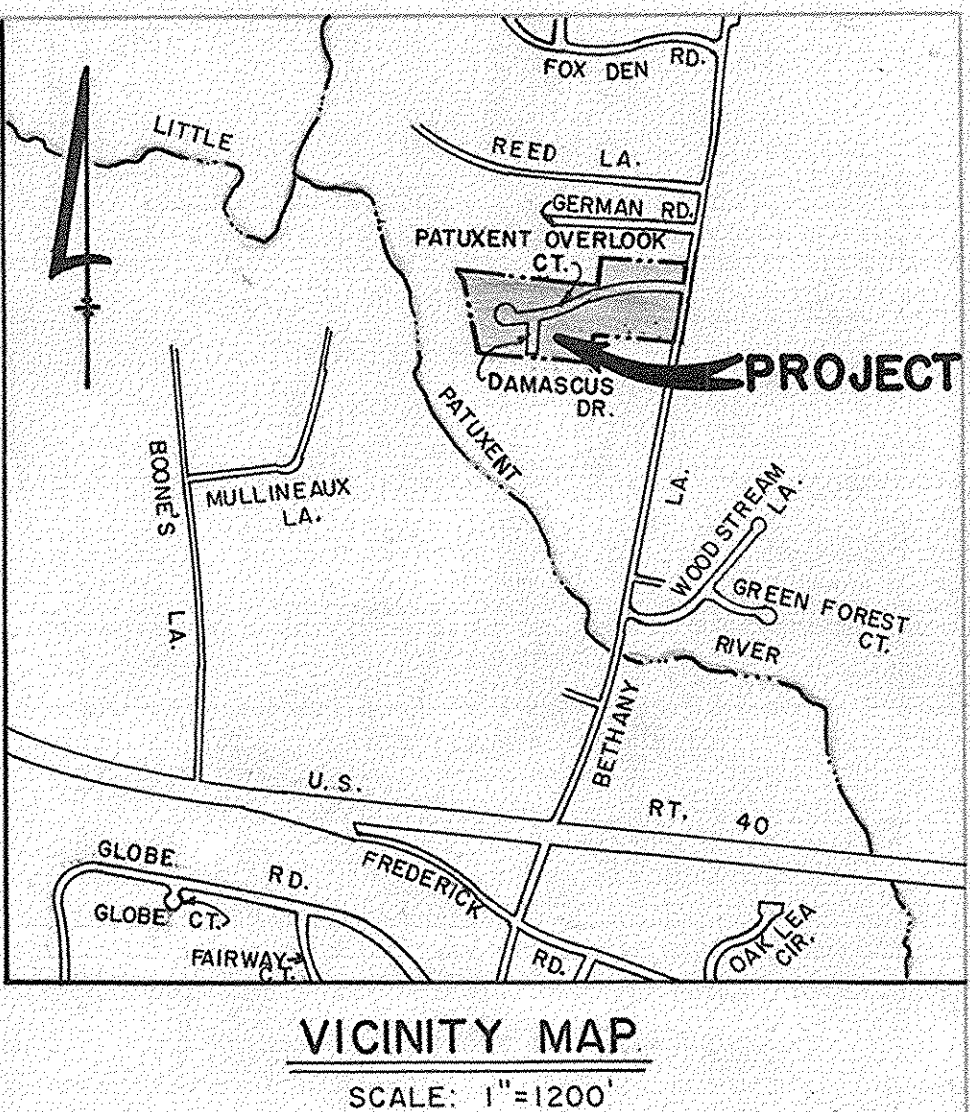
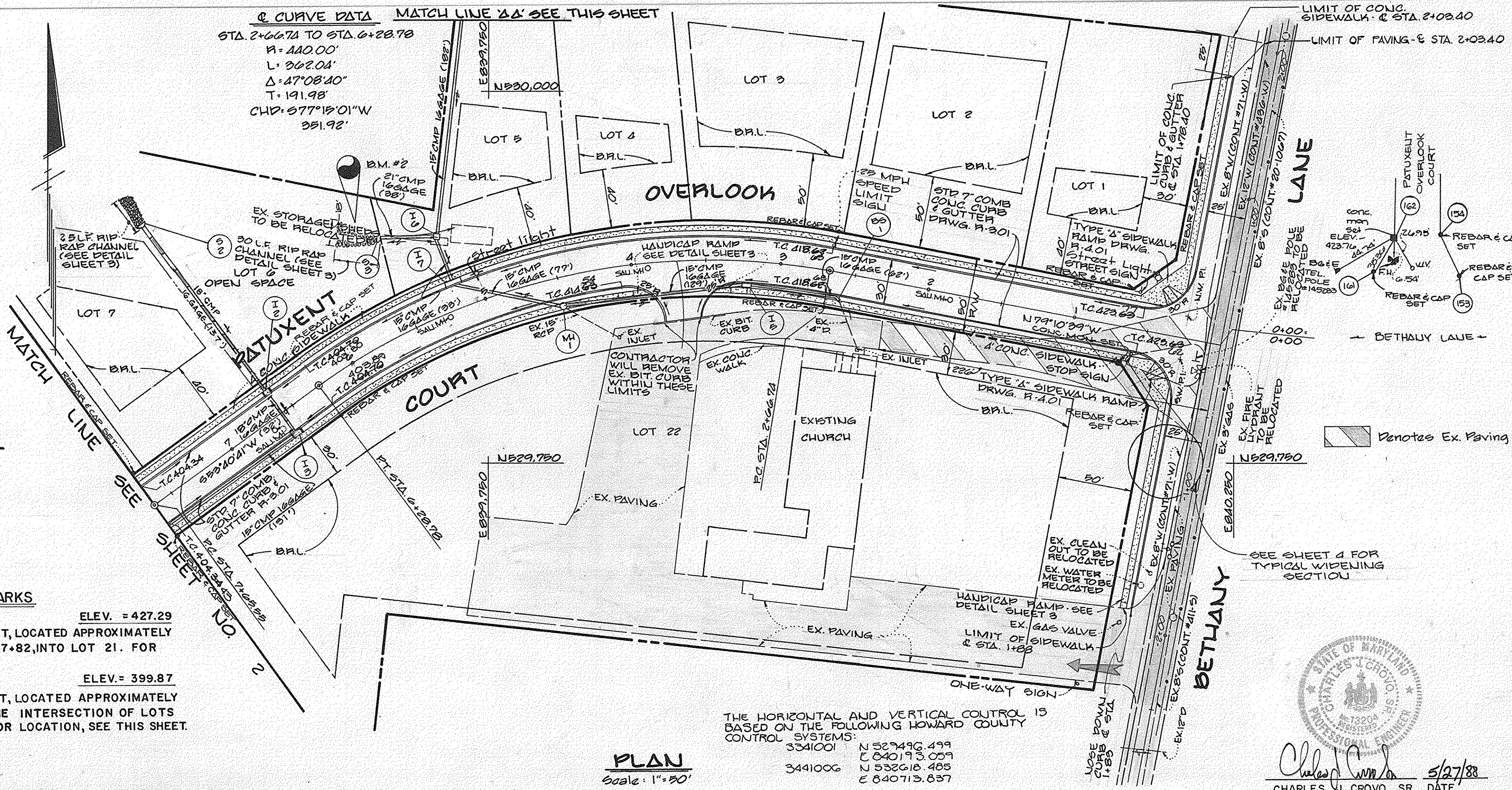


BENCH MARKS
 B.M. #1 ELEV. = 427.29
 TRAVERSE STA. "102" REBAR SET, LOCATED APPROXIMATELY 150' ± SOUTHEAST OF STA. 7+82, INTO LOT 21. FOR LOCATION SEE SHEET 2.
 B.M. #2 ELEV. = 399.87
 TRAVERSE STA. "201" REBAR SET, LOCATED APPROXIMATELY 17' OFF OF THE REAR LOT LINE INTERSECTION OF LOTS 5 AND OPEN SPACE LOT 6. FOR LOCATION, SEE THIS SHEET.

APPROVED DEPARTMENT OF PUBLIC WORKS
Branville W. Weisand 10/3/88
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED DEPARTMENT OF PUBLIC WORKS
William E. Ryan 10-3-88
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING
Janet J. Taylor 10-6-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



THE HORIZONTAL AND VERTICAL CONTROL IS BASED ON THE FOLLOWING HOWARD COUNTY CONTROL SYSTEMS:
 3341001 N 52°49'00" 499
 3341006 C 040°17'30" 059
 N 53°26'10" 485
 E 040°17'30" 057

AS-BUILT SURVEY CERTIFIED BY CHARLES J. CROVO, MD. PE. LG. 19204 ON OCT. 10, 1990.
 Charles J. Crovo 5/2/88
 CHARLES J. CROVO SR. DATE

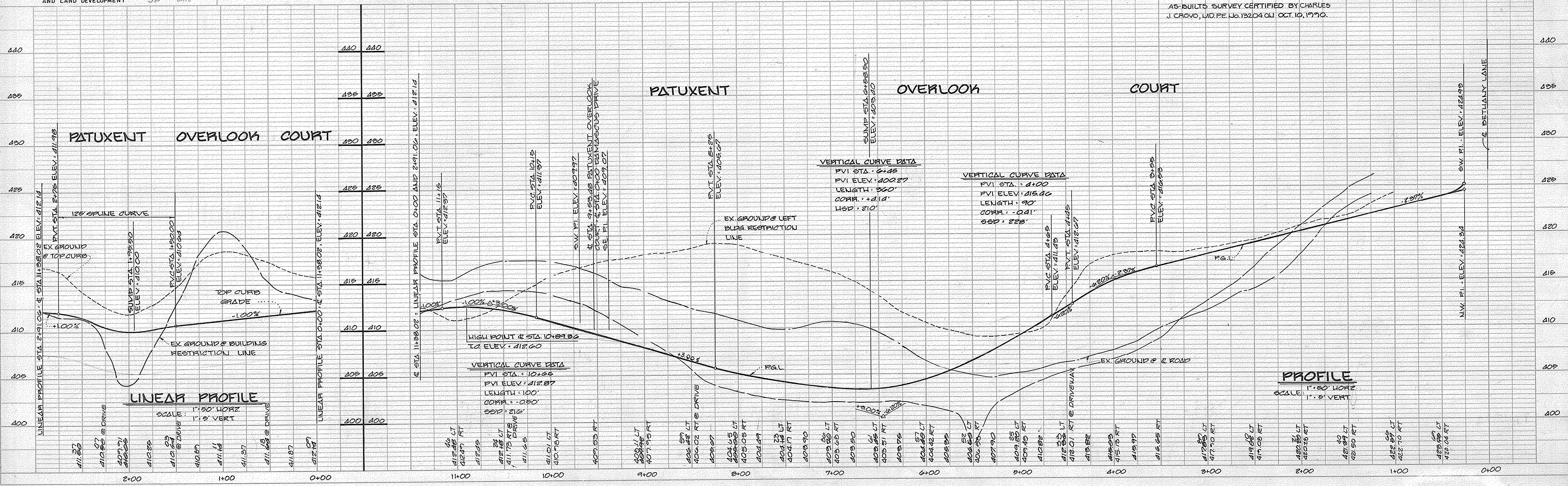
PATUXENT VALLEY OVERLOOK
 LOTS 1-22
 2 ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

PATUXENT OVERLOOK COURT
 PLAN & PROFILE

OWNER AND DEVELOPER
 J. M. N. CONSTRUCTION CO., INC.
 406 HEADQUARTERS DRIVE, SUITE 207
 MILLERSVILLE, MARYLAND 21108

SCALE AS SHOWN DATE: APRIL 22, 1988 DWG. NO. 1 OF 6
 DES. R. ISAACS BRN C. BAUER CHK. C. CROVO

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043



DATE: _____ BY: _____

DATE: _____ BY: _____

1383

DATE	
BY	
APPROVED	
DATE	
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DATE	
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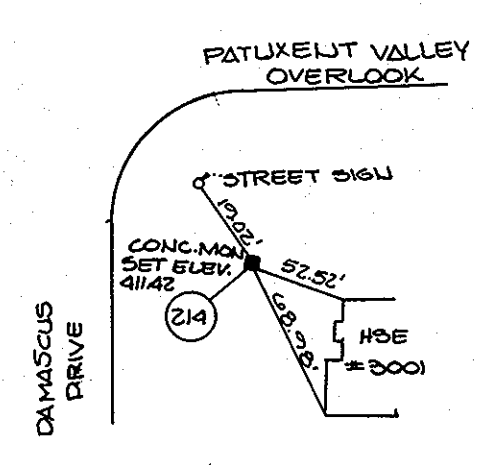
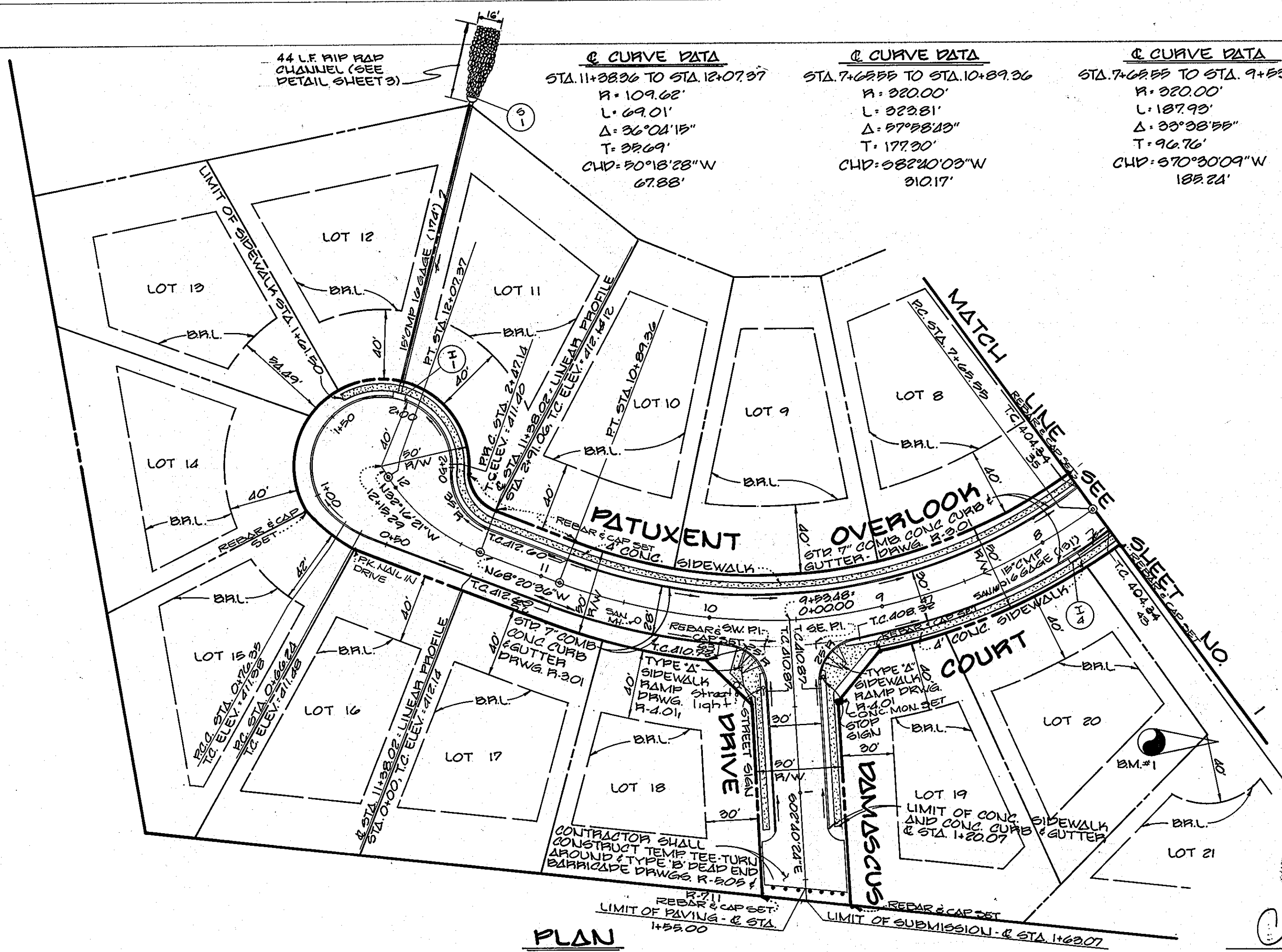
DATE	
BY	
APPROVED	
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APPROVED DEPARTMENT OF PUBLIC WORKS
Francis W. Wehland 10/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED DEPARTMENT OF PUBLIC WORKS
Donald J. Sporn 9/21/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

APPROVED DEPARTMENT OF PUBLIC WORKS
William E. Rees 10-3-88
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING
Frank S. Laughlin 10-6-88
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



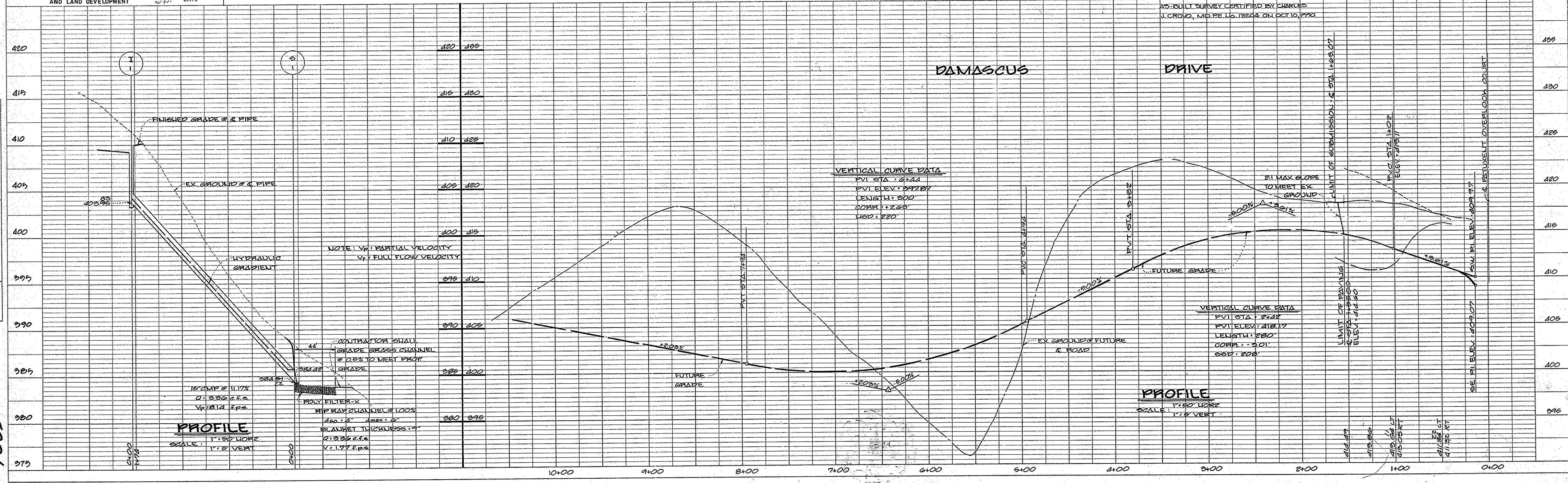
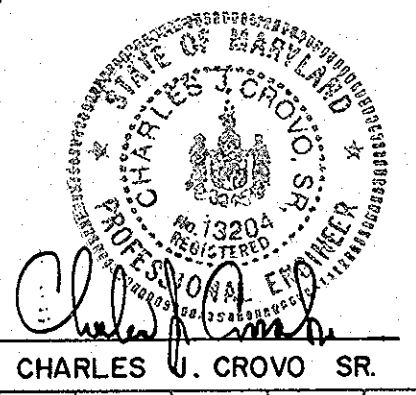
PATUXENT VALLEY OVERLOOK
 LOTS 1-22
 2 ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

PATUXENT OVERLOOK COURT PLAN **DAMASCUS DRIVE PLAN & PROFILE**

OWNER AND DEVELOPER
 J. M. N. CONSTRUCTION CO., INC.
 406 HEADQUARTERS DRIVE, SUITE 207
 MILLERSVILLE, MARYLAND 21108

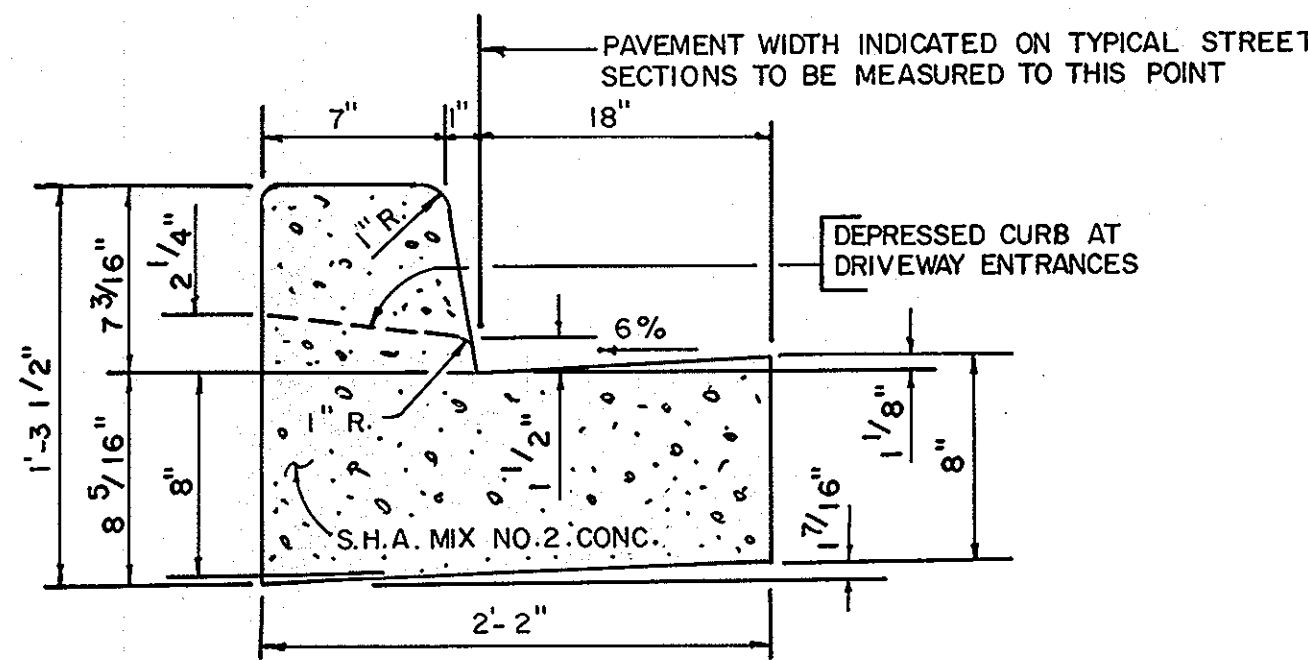
SCALE S SHOWN DATE APRIL 22, 1988 DWG. NO. 2 OF 6
 DES. R. ISAACS DRN. C. BAUER CHK. C. GROVO

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

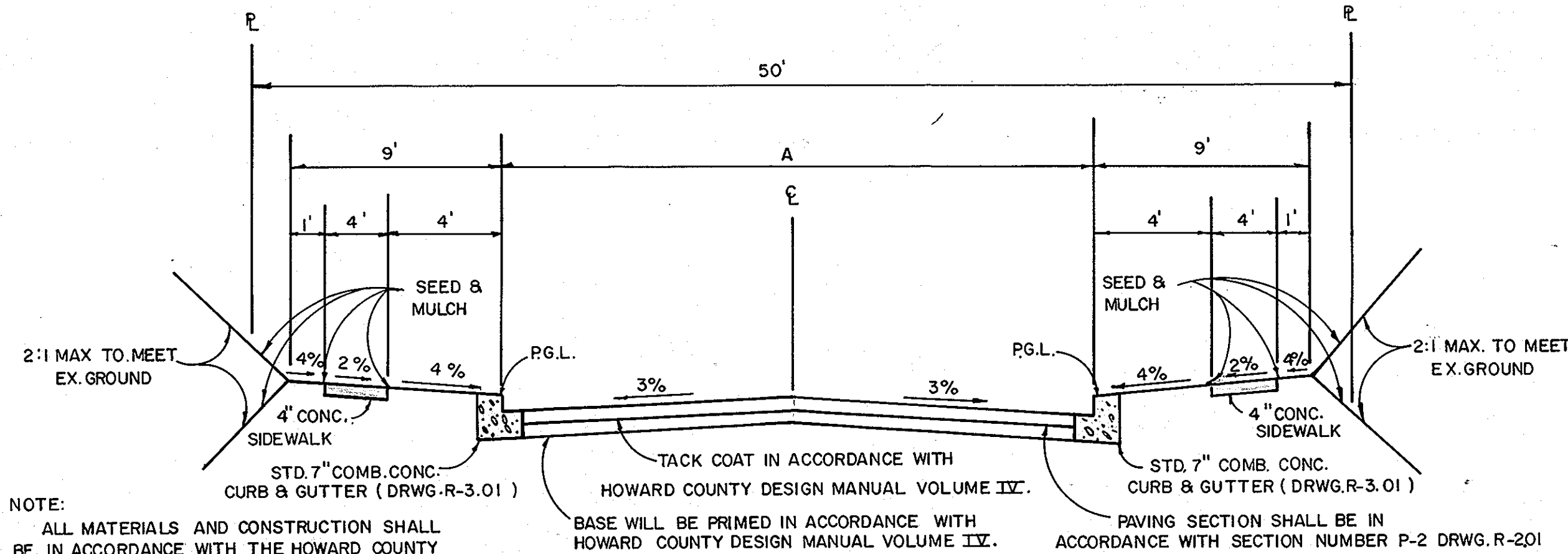


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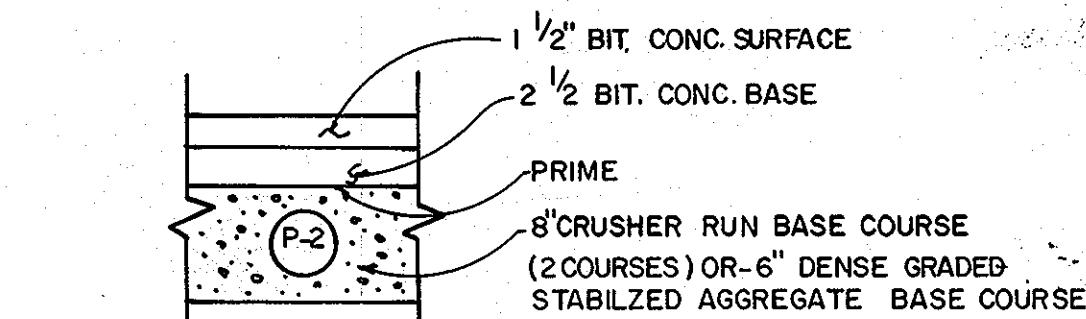
Charles J. Crovo Sr. 10/27/88



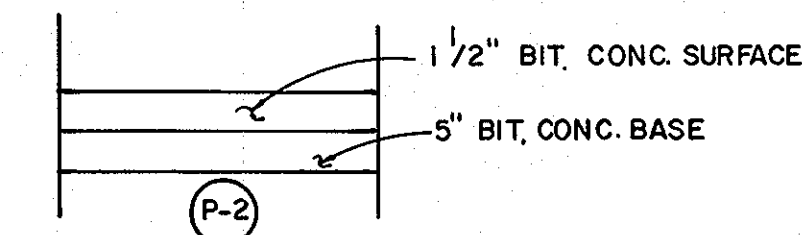
STANDARD 7" COMBINATION CURB AND GUTTER
NO SCALE



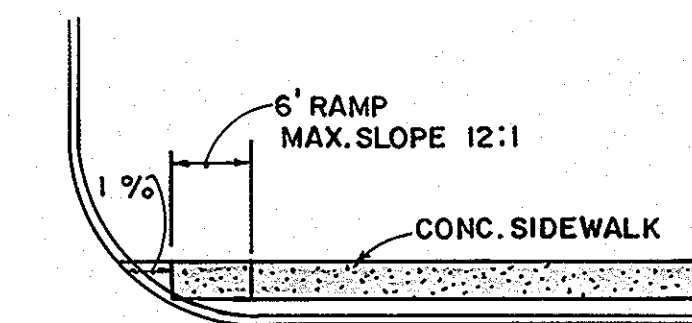
NOTE:
ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL - VOLUME IX, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.



PAVING SECTION P-2
NO SCALE



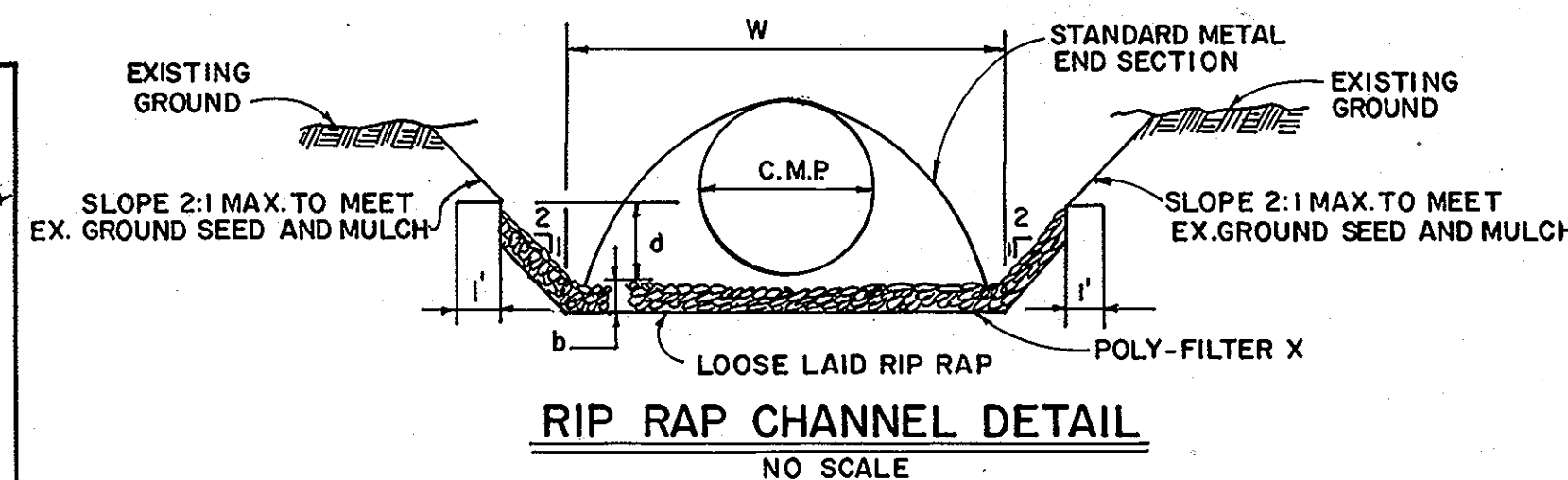
PAVING SECTION P-2
NO SCALE



SIDEWALK RAMP DETAIL "A"
NO SCALE

TYPICAL ROADWAY SECTION
NO SCALE

ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	A	STATION LIMITS
PATUXENT OVERLOOK COURT	CUL-DE-SAC	30 M.P.H.	R-20	30'	0+00 TO 9+53.48
DAMASCUS DRIVE	LOCAL ROAD	30 M.P.H.	R-20	30'	9+53.48 TO 11+38.02

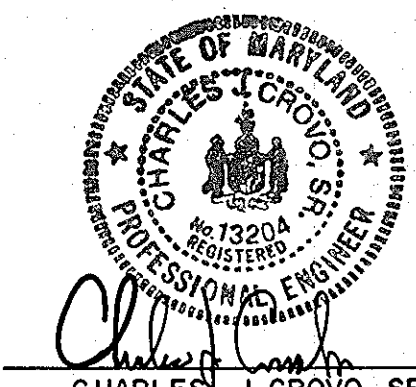


RIP RAP CHANNEL DETAIL
NO SCALE

STRUCTURE	A	P	R	R 2/3	S	S 1/2	n	Q	V	d	W	RIP RAP SIZE	b
S-1	1.92	5.79	3316	.4773	1.00%	.1000	.04	3.36 cfs	1.77 fps	0.4'	4.0'	4" 6"	9"
S-2	3.00	7.24	4146	.5544	2.75%	.1658	.04	8.01 cfs	3.42 fps	0.50'	5.0'	4" 6"	9"
S-3	8.40	10.14	8284	.8815	0.50%	.0707	.04	18.75 cfs	2.31 fps	1.15'	5.0'	4" 6"	9"

PATUXENT VALLEY OVERLOOK
LOTS 1-22
2 ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ROADWAY SECTION, DETAILS, NOTES AND STORM DRAIN PROFILES

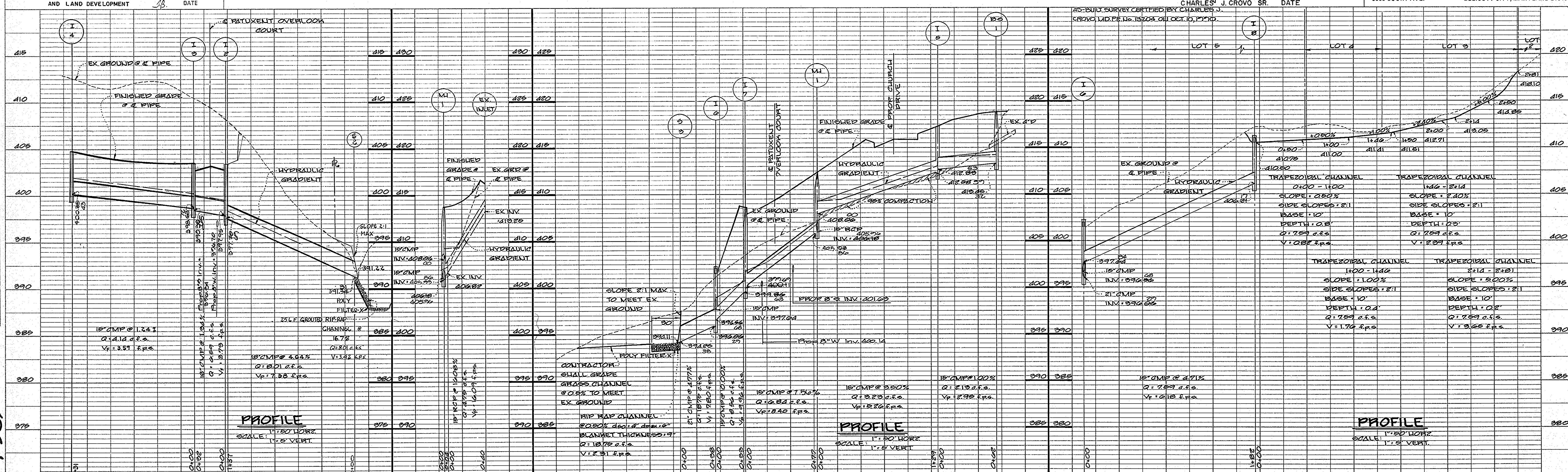
OWNER AND DEVELOPER
J. M. N. CONSTRUCTION CO., INC.
406 HEADQUARTERS DRIVE, SUITE 207
MILLERSVILLE, MARYLAND 21108
SCALE AS SHOWN DATE APRIL 22, 1988 DWG. NO. 3 OF 6
DES. R. ISAACS DRN. C. BAUER CHK. C. CROVO
FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043



APPROVED
DEPARTMENT OF PUBLIC WORKS
Lawrence W. Hebland 10/2/88
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED
DEPARTMENT OF PUBLIC WORKS
Paul J. Jenson 9/1/88
CHIEF, LAND DEVELOPMENT DIVISION DATE

APPROVED
OFFICE OF PLANNING AND ZONING
Harold J. J. Jenson 10-6-88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



NOTE: Vp = PARTIAL FLOW VELOCITY
Vf = FULL FLOW VELOCITY

DATE
BY
REVISIONS
NO. DATE

DATE
BY
REVISIONS
NO. DATE

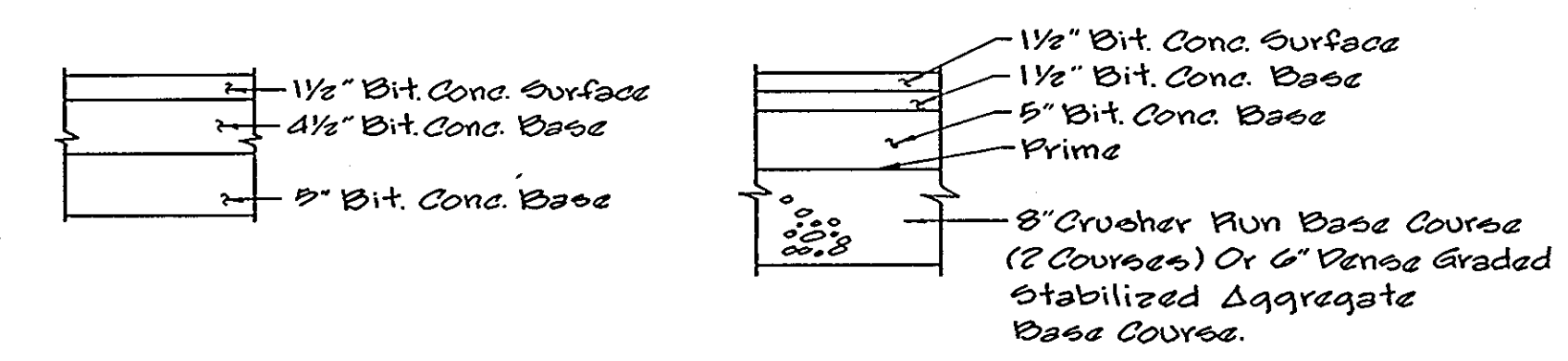
1383

APPROVED DEPARTMENT OF PUBLIC WORKS
Donald J. Sposon 7/1/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

APPROVED DEPARTMENT OF PUBLIC WORKS
Priscilla W. Ward 10/3/88
 CHIEF, BUREAU OF HIGHWAYS DATE

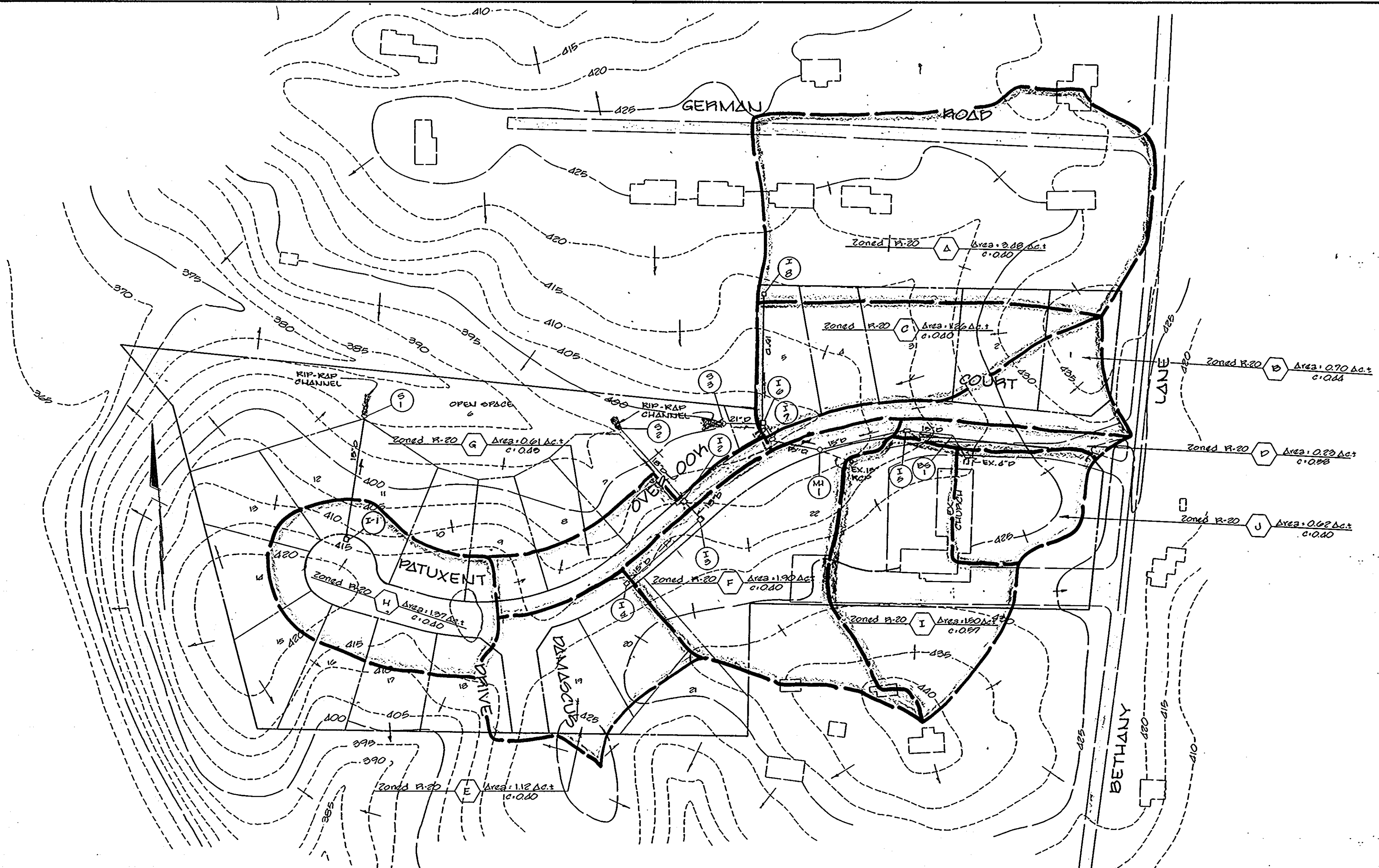
APPROVED DEPARTMENT OF PUBLIC WORKS
W. S. ... 10-3-88
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING
Frank J. ... 11-6-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

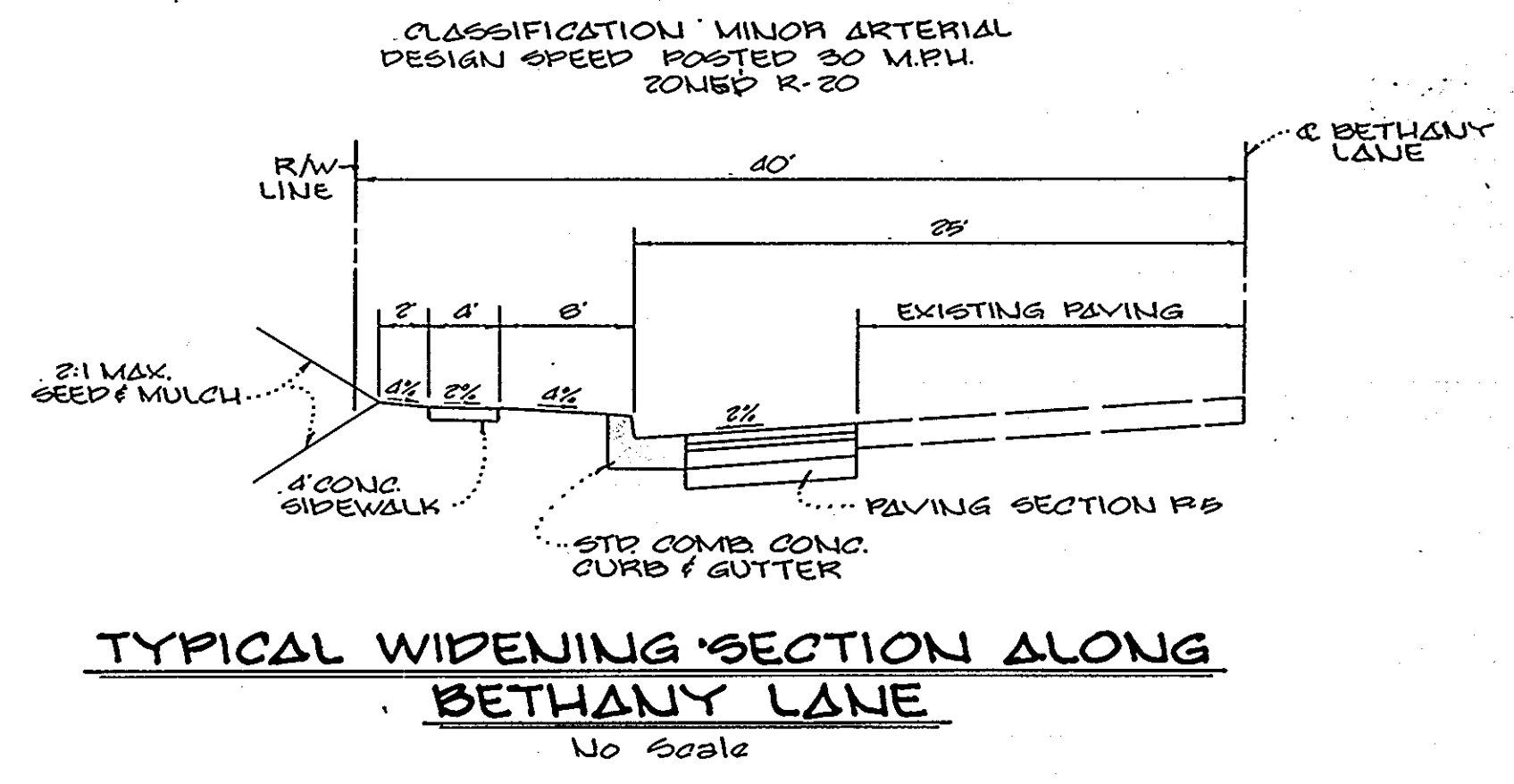


PAVING SECTION P-5
 No Scale

STRUCTURE SCHEDULE						
STRUCT.	TYPE	TOP STRUCTURE	INV. IN.	INV. OUT	ROAD STATION	REMARKS
I-1	A-5	440.00 409.75	-----	403.96 397.95	L.P. STA. 1+95.50 + 2+25 PATUXENT OVERLOOK CT.	S.D. 4.01
I-2	A-5	403.48 45	397.95	397.70 47	STA. 6+58.50 + 7+50 PATUXENT OVERLOOK CT.	S.D. 4.01
I-3	A-5	403.48 45	398.83 72	398.38 65	STA. 6+58.50 + 7+50 PATUXENT OVERLOOK CT.	S.D. 4.01
I-4	A-5 W/ DEFLECTORS	404.28 27	-----	400.25 45	STA. 7+96.44 + 8+50 PATUXENT OVERLOOK CT.	S.D. 4.01 & 4.83
I-5	A-5 W/ DEFLECTORS	417.24 38	412.83 57	412.58 50	STA. 3+25.00 PATUXENT OVERLOOK CT.	S.D. 4.01 & 4.83
I-6	'D' INLET	402.35 55	396.56 29	396.06 29	-----	S.D. 4.11
I-7	A-10	408.88 54	400.11 47	399.86 45	STA 5+16.00 PATUXENT OVERLOOK CT.	S.D. 4.02
I-8	'D' INLET	411.25 26	410.50	406.24 17	-----	S.D. 4.11
MH-1	STANDARD MANHOLE	412.30 57	408.06 00	405.93 86	STA. 4+59.60 + 4+50 PATUXENT OVERLOOK CT.	G. 5.01
S-1	ST'D. METAL END SECTION	385.76 47	384.53 22	384.42 13	-----	S.D. 5.61
S-2	ST'D. METAL END SECTION	392.84 51	391.34 31	391.22 19	-----	S.D. 5.61
S-3	ST'D. METAL END SECTION	396.00 15	394.25 50	394.11 50	-----	S.D. 5.61
BS-1	BEND STRUCTURE W/ MH STACK	418.83 47	415.28	413.45 32	STA. 2+67.25 + 2+50 PATUXENT OVERLOOK CT.	S.D. 1.01



DRAINAGE AREA MAP
 Scale: 1" = 100'

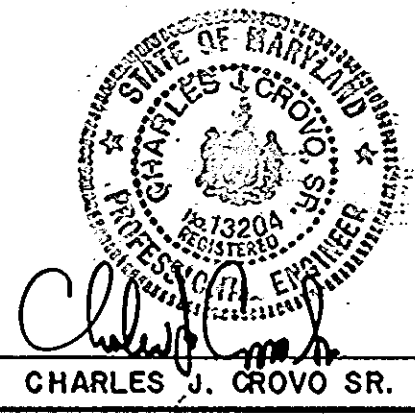


TYPICAL WIDENING SECTION ALONG BETHANY LANE
 No Scale

**DRAINAGE AREA MAP
 PATUXENT VALLEY OVERLOOK**

LOTS 1-22
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN
 SHEET 4 OF 6 APRIL 22, 1988

FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 TELEPHONE (301) 461-2855

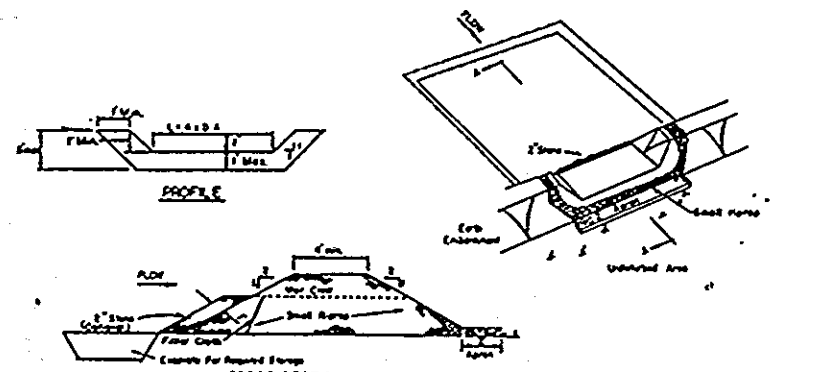


Charles J. Grovo Sr.
 CHARLES J. GROVO SR. DATE 5/27/88

OWNER AND DEVELOPER
 J. M. N. CONSTRUCTION CO., INC.
 406 HEADQUARTERS DRIVE, SUITE 207
 MILLERSVILLE, MARYLAND 21108

AS-BUILT SURVEY CERTIFIED BY CHARLES J. GROVO, MD. P.E. No. 13204 ON OCT. 10, 1980.

STONE OUTLET SEDIMENT TRAP



NOTES: 1. A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction... 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL... 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS OF THE PROJECT SITE...

CONSTRUCTION SEQUENCE

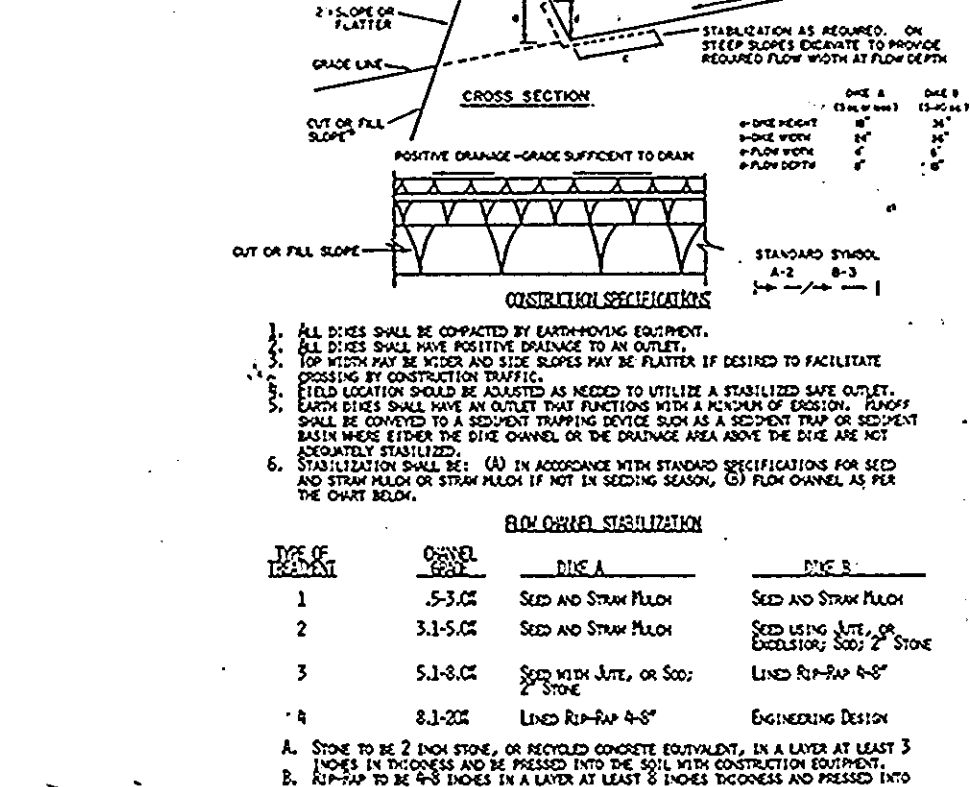
- 1. OBTAIN GRADING PERMIT. CONSTRUCT STABILIZED ENTRANCE AND STORM WATER MANAGEMENT POND OR PLAN. CONSTRUCT STONE OUTLET SEDIMENT TRAP AS SHOWN OR PLAN. STABILIZE THE POND AND TRAP WITH TEMPORARY SEEDING. 2. GRADE ROADS TO SUBGRADE. 3. CONSTRUCT STORM DRAIN SYSTEM AND TRAPEZOIDAL CHANNEL AT REAR OF LOTS 3, 4 & 5. 4. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE OF THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON, AFTER EACH RAINFALL AND ON A DAILY BASIS. 5. SEDIMENT SHALL BE REMOVED FROM THE TRAP AND STORM WATER MANAGEMENT POND WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED. 6. THE SEDIMENT TRAP AND STORM WATER MANAGEMENT POND SHALL BE DESIGNED BY RIPPING. 7. REMOVE SEDIMENT FROM ROADWAYS AND DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED. 8. FLUSH STORM DRAIN SYSTEM TO REMOVE ANY TRAPPED SEDIMENT. REMOVE STONE CONSTRUCTION ENTRANCE AND STRAW BALE DIKE/SILT FENCE. CLEAN BASE COURSE, APPLY FACE COAT TO BASE COURSE AND LAY SURFACE MANURE. 9. REMOVE ALL ACCUMULATED SEDIMENT FROM STORM WATER MANAGEMENT POND/MITIGATION BASIN. 10. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING, THE RIP-RAP @ STRUCTURE S-1 SHALL BE EXTENDED FROM 20' TO 44' AFTER REMOVAL OF SEDIMENT TRAP SO THE RIP-RAP WILL MEET GROUND. 11. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SLOPES, SLOPE PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS OF THE PROJECT SITE. 12. COMPLETE STABILIZATION OF ALL DISTURBED AREAS SHALL BE DONE PRIOR TO REMOVAL OF ALL SEDIMENT CONTROLS. 13. NOTIFY HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS FOR FINAL INSPECTION AT DURATION OF PROJECT.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS THAT NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED. SEEDING PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED. SEEDING: 1. PREFERRED - APPLY 2 TONS PER ACRE COLONNITE LIMESTONE (92 LB/1000 SQ. FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LB/1000 SQ. FT.). 2. ACCEPTABLE - APPLY 2 TONS PER ACRE COLONNITE LIMESTONE (92 LB/1000 SQ. FT.) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (14 LB/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL. SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 1 1/2 BUSHEL PER ACRE (3.2 LB/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 1 LB. PER ACRE (2.2 LB/1000 SQ. FT.) OF WEEPING LOVEGRASS, DURING THE PERIOD OF OCTOBER 15 THRU FEBRUARY 28, PROJECT SITE OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. PROJECT SITE OPTION (2) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WILL ANCHORED STRAW. MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (30 TO 40 LB/1000 SQ. FT.) OF UNMOTTLED SMALL STRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULLING ANCHORING TOOL OR 210 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF ENULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE OF GAL/1000 SQ. FT.) FOR ANCHORING. MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

Table with 4 columns: Description, Area, and other metrics. Includes 'TOTAL AREA OF SITE', 'AREA TO BE ROUGHED OR PAVED', 'AREA TO BE VEGETATIVELY STABILIZED', 'TOTAL FILL', 'TOTAL CUT', 'TOTAL AREA OF DISTURBANCE', and 'TOTAL AREA OF DISTURBANCE LOCATION'.

SOIL BORINGS



TEMPORARY SEEDING NOTES

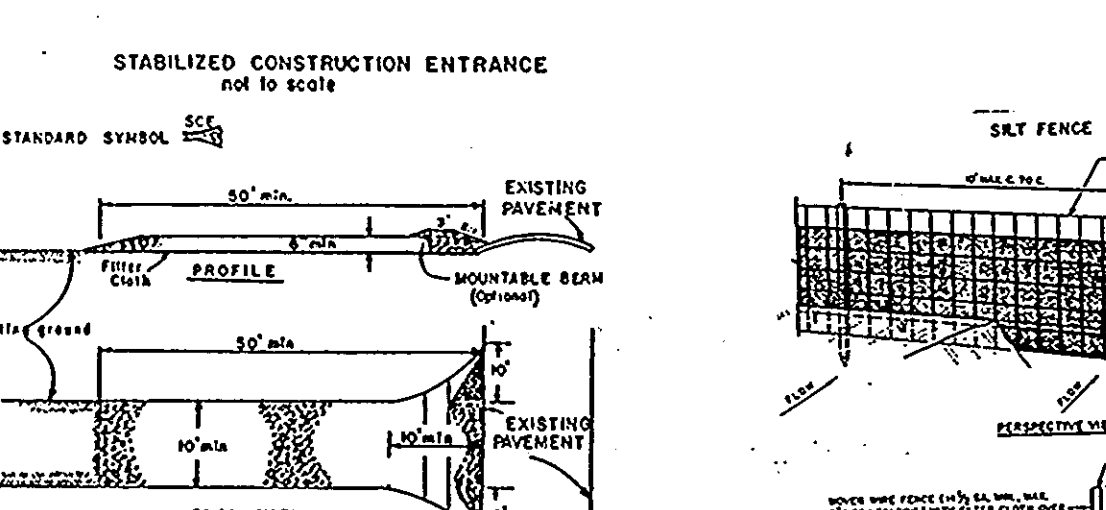
APPLY TO GRADED OR CLEARED AREAS THAT ARE TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. SEEDING PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED. SEEDING: 1. PREFERRED - APPLY 2 TONS PER ACRE COLONNITE LIMESTONE (92 LB/1000 SQ. FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LB/1000 SQ. FT.). 2. ACCEPTABLE - APPLY 2 TONS PER ACRE COLONNITE LIMESTONE (92 LB/1000 SQ. FT.) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (14 LB/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL. SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 1 1/2 BUSHEL PER ACRE (3.2 LB/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 1 LB. PER ACRE (2.2 LB/1000 SQ. FT.) OF WEEPING LOVEGRASS, DURING THE PERIOD OF OCTOBER 15 THRU FEBRUARY 28, PROJECT SITE OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. PROJECT SITE OPTION (2) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WILL ANCHORED STRAW. MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (30 TO 40 LB/1000 SQ. FT.) OF UNMOTTLED SMALL STRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULLING ANCHORING TOOL OR 210 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF ENULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE OF GAL/1000 SQ. FT.) FOR ANCHORING. MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

Table with 4 columns: Description, Area, and other metrics. Includes 'TOTAL AREA OF SITE', 'AREA TO BE ROUGHED OR PAVED', 'AREA TO BE VEGETATIVELY STABILIZED', 'TOTAL FILL', 'TOTAL CUT', 'TOTAL AREA OF DISTURBANCE', and 'TOTAL AREA OF DISTURBANCE LOCATION'.

CONSTRUCTION SPECIFICATIONS

- 1. Stone Size - 3/4" to 2" stones, or crushed or recycled concrete equivalent. 2. Slope - As specified, but not less than 2% (except on a slight reverse slope 340 where a 30 foot minimum length would apply). 3. Distance - Not less than 100 feet. 4. Width - 24" (18" foot minimum, but not less than the full width at points where changes in grade occur). 5. Filter Cloth - Will be placed over the entire area prior to placement of stone. Filter cloth will be extended on a slight positive drainage slope. 6. Surface Water - All surface water flowing or directed toward construction entrances shall be piped across the entrance. If piped through a manhole, the manhole shall be extended to the entrance. If piped through a manhole, the manhole shall be extended to the entrance. 7. Maintenance - The entrance shall be maintained in a condition which will prevent backing up of water and prevent any other obstruction. This may require periodic cleaning with additional stone as conditions change. 8. Installation - All entrances shall be installed in accordance with the approved plan and specifications. All entrances shall be installed in accordance with the approved plan and specifications. 9. Washing - Stone shall be cleaned to remove dirt and debris prior to entrance onto the entrance. Stone shall be inspected and replaced if necessary. Stone shall be washed with stone and which shall be placed into an approved sediment trapping device. 10. Particle Inspection and needed maintenance shall be provided after each rain event.

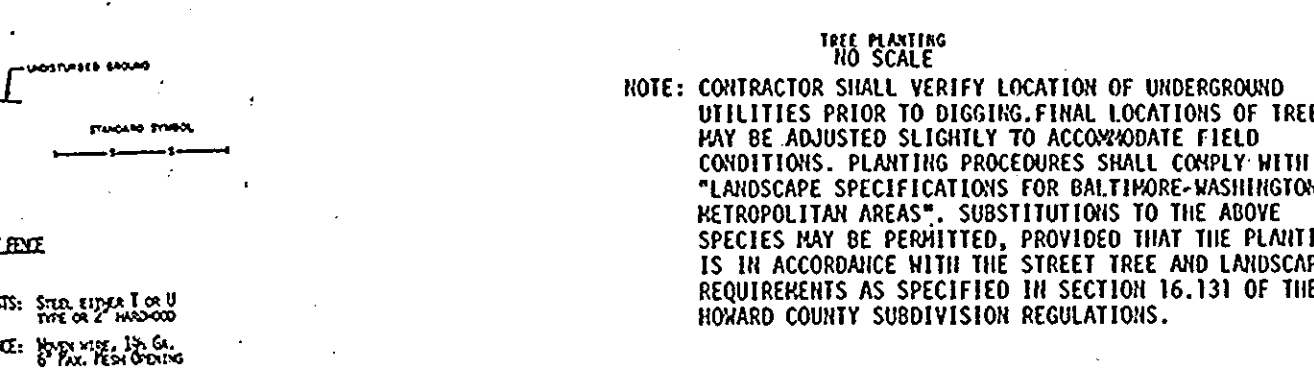
STABILIZED CONSTRUCTION ENTRANCE



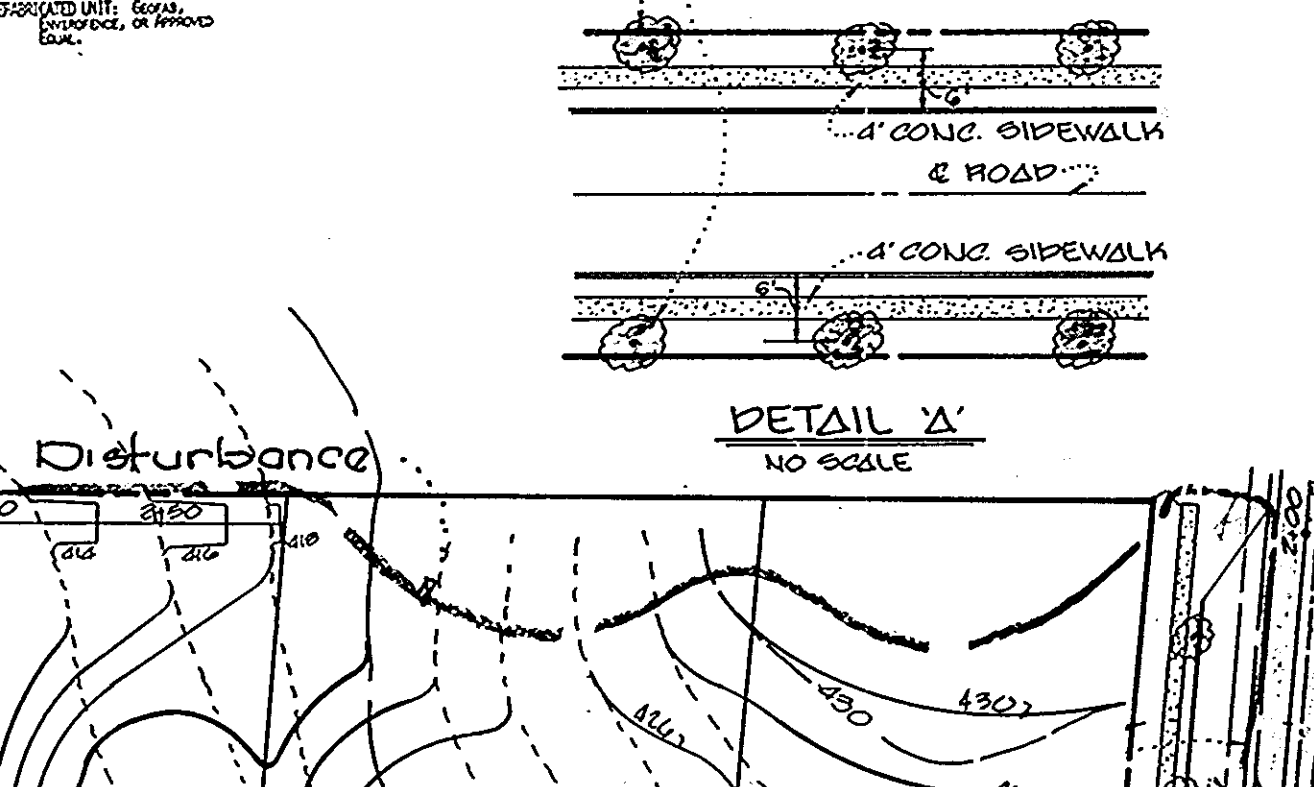
NOTES: 1. Stone shall be placed at the toe of a slope or on the contour and on a non-vent rock trench shall be provided in the adjacent area. 2. Each stone shall be placed in the hole a minimum of (8) inches, and placed so the openings are horizontal. 3. Stones shall be placed in place by either the frame or the hand driven method. The first stone in each hole shall be driven through the hole. The second stone shall be driven through the hole. The stones shall be driven flush with the hole. 4. Inspection shall be provided and repair replacement shall be made properly as needed. 5. Stones shall be replaced when they have served their usefulness so as not to block or impede the flow of water.

CONSTRUCTION SPECIFICATIONS

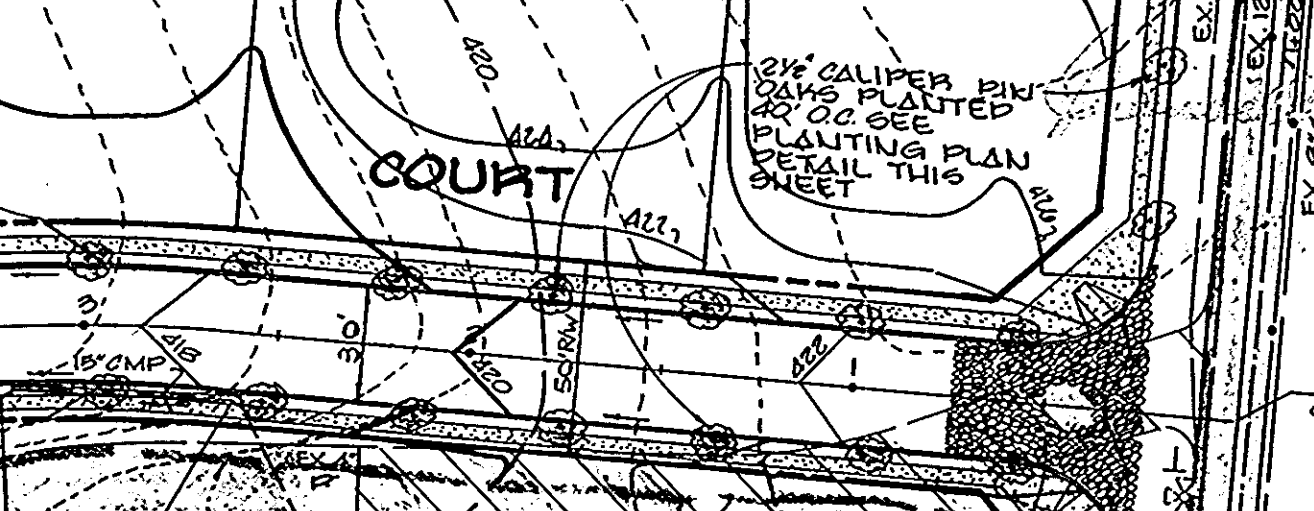
- 1. Stone Size - 3/4" to 2" stones, or crushed or recycled concrete equivalent. 2. Slope - As specified, but not less than 2% (except on a slight reverse slope 340 where a 30 foot minimum length would apply). 3. Distance - Not less than 100 feet. 4. Width - 24" (18" foot minimum, but not less than the full width at points where changes in grade occur). 5. Filter Cloth - Will be placed over the entire area prior to placement of stone. Filter cloth will be extended on a slight positive drainage slope. 6. Surface Water - All surface water flowing or directed toward construction entrances shall be piped across the entrance. If piped through a manhole, the manhole shall be extended to the entrance. If piped through a manhole, the manhole shall be extended to the entrance. 7. Maintenance - The entrance shall be maintained in a condition which will prevent backing up of water and prevent any other obstruction. This may require periodic cleaning with additional stone as conditions change. 8. Installation - All entrances shall be installed in accordance with the approved plan and specifications. All entrances shall be installed in accordance with the approved plan and specifications. 9. Washing - Stone shall be cleaned to remove dirt and debris prior to entrance onto the entrance. Stone shall be inspected and replaced if necessary. Stone shall be washed with stone and which shall be placed into an approved sediment trapping device. 10. Particle Inspection and needed maintenance shall be provided after each rain event.



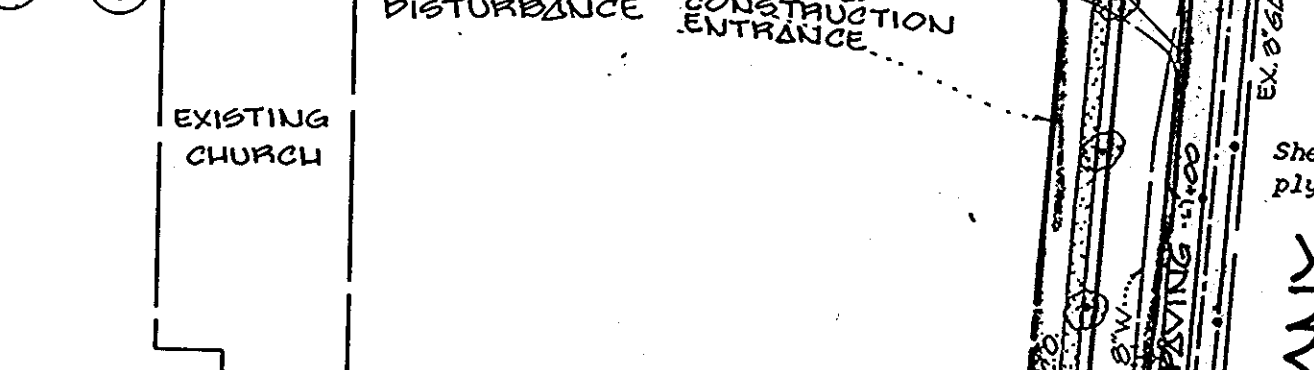
DETAIL A'



PILOT CHANNEL TYPICAL SECTION



Baffle Detail



ANCHORING SPECIFICATIONS

- 1. Bales shall be placed at the toe of a slope or on the contour and on a non-vent rock trench shall be provided in the adjacent area. 2. Each bale shall be placed in the hole a minimum of (8) inches, and placed so the openings are horizontal. 3. Stones shall be placed in place by either the frame or the hand driven method. The first stone in each hole shall be driven through the hole. The second stone shall be driven through the hole. The stones shall be driven flush with the hole. 4. Inspection shall be provided and repair replacement shall be made properly as needed. 5. Stones shall be replaced when they have served their usefulness so as not to block or impede the flow of water.

STREET TREE, GRADING AND SEDIMENT CONTROL PLAN



PATUXENT VALLEY OVERLOOK

LOTS 1-22
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN
SHEET 5 OF 5 APRIL 22, 1988

ENGINEER'S CERTIFICATE

I HEREBY 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 I WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SUBDIVISION DISTRICT.

DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY CONSERVATION DISTRICT OR THE AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

APPROVED: OFFICE OF PLANNING AND ZONING

APPROVED: OFFICE OF PLANNING AND ZONING
DATE: 9/12/88

APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: DEPARTMENT OF PUBLIC WORKS
DATE: 10/3/88

APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: DEPARTMENT OF PUBLIC WORKS
DATE: 9/12/88

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APPROVED: DEPARTMENT OF PUBLIC WORKS
DATE: 9/12/88

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLIOTT CITY, MARYLAND 21043
TELEPHONE (301) 461-2855

OWNER AND DEVELOPER
J. M. N. CONSTRUCTION CO., INC.
406 HEADQUARTERS DRIVE, SUITE 207
MILLERSVILLE, MARYLAND 21108

PLAN
Scale: 1"=50'



AS-BUILT SURVEY CERTIFIED BY CHARLES J. CROVO, M.D. PE. No. 13294 OJ. OCTOBER 10, 1970.

AS-BUILT F 88-269

POND SPECIFICATIONS

I. SITE PREPARATION

Areas under the embankment and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. To facilitate clean out and restoration, it is recommended that the permanent pool area be cleared of all brush and trees.

II. EARTH FILL

Material
The fill material shall be taken from approved designated borrow area or areas. It shall be free from roots, stumps, wood, rubbish, over-size stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased at least 10 percent above the design elevation (including freeboard) unless otherwise shown on the plans. All fill material shall be CL or ML, as approved by Soils Engineer.

Placement
Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Core Trench

Where specified, a core trench shall be excavated along or parallel to the centerline of the embankment, as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being 4-feet. The depth shall be at least 4-feet or as shown on the plans. The side slopes of the trench shall be 1:1 or flatter. The backfill material for the core trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability. Compact to 95% of AASHTO T-99 density. Materials shall be CL or ML as approved by Soils Engineer.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed 4-inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than 4-feet to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a structure or pipe unless there is a compacted fill of 2-feet or greater over the structure or pipe.

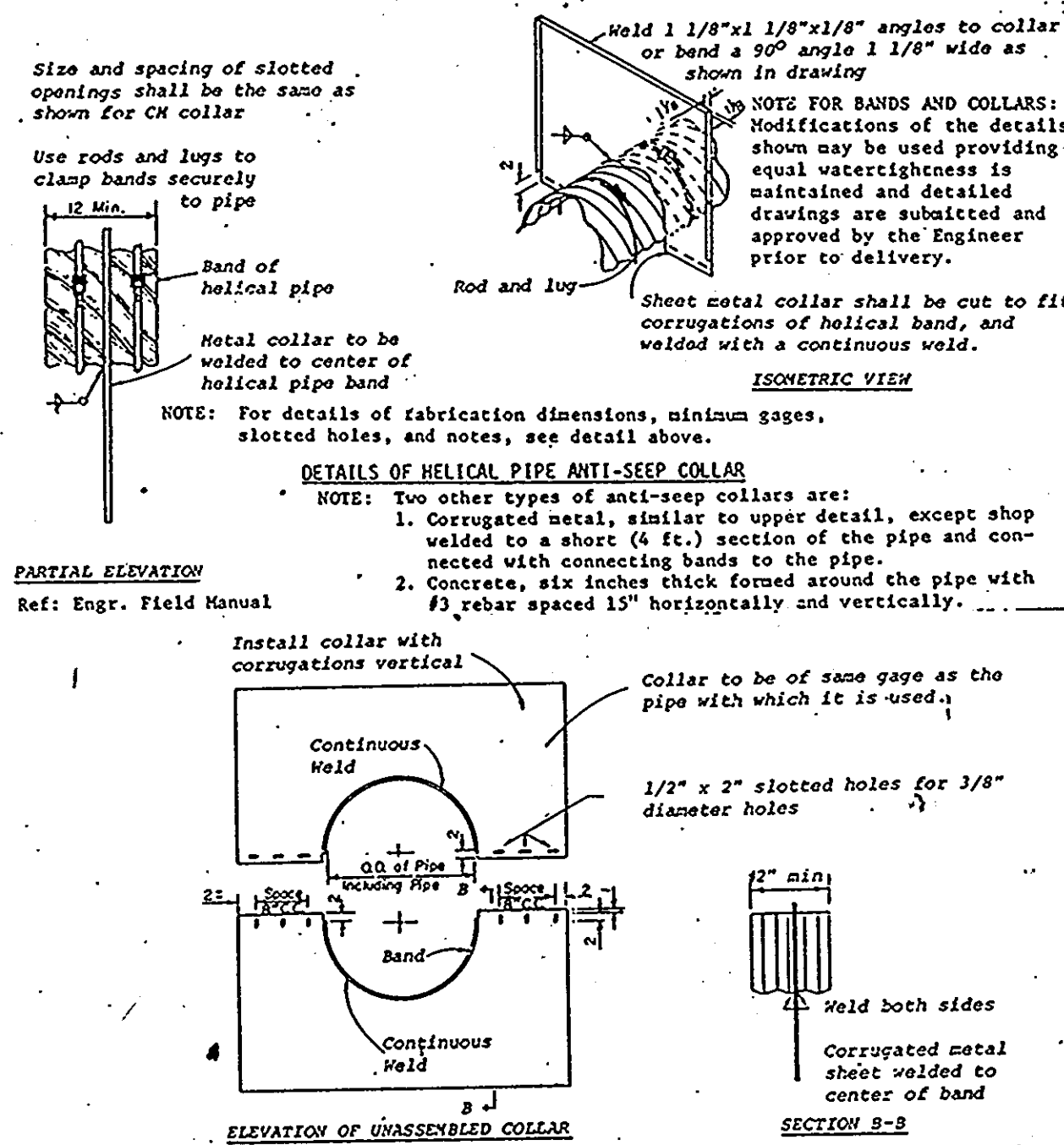
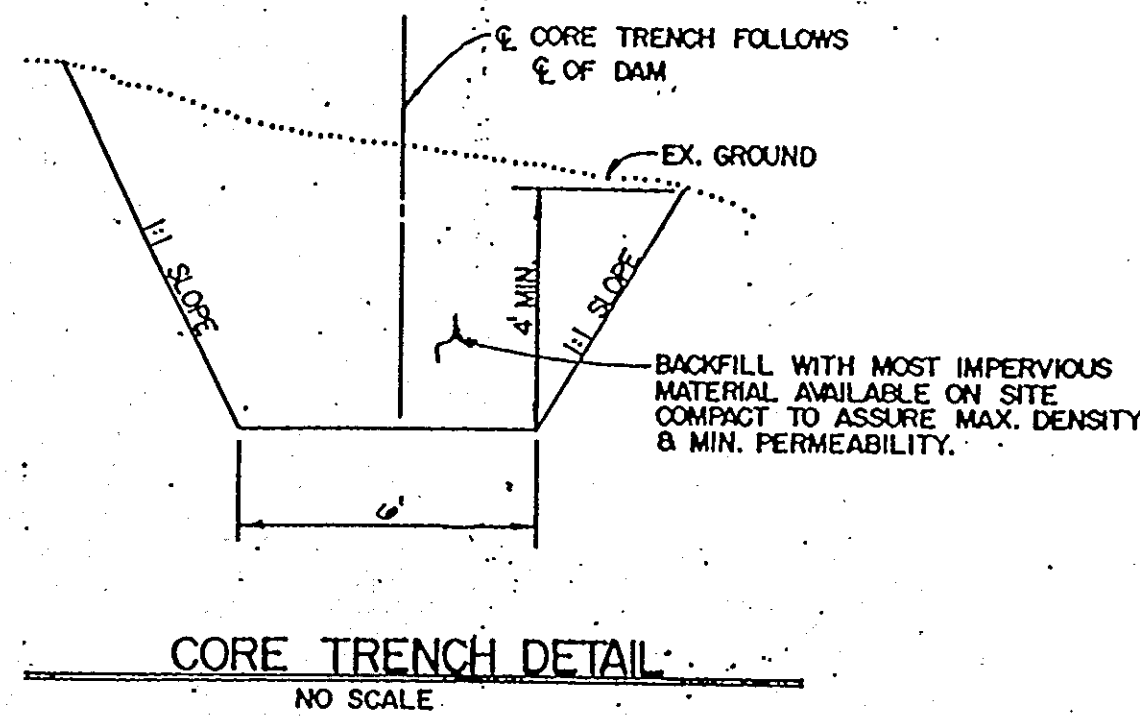
IV. PIPE CONDUITS

A. CORRUGATED METAL PIPE
1. Materials - Metal Pipe - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211, with watertight coupling bands.
2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the control structure shall be mortared all around. Watertight coupling bands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.
3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
5. Backfilling shall conform to structural backfill as shown above.
6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

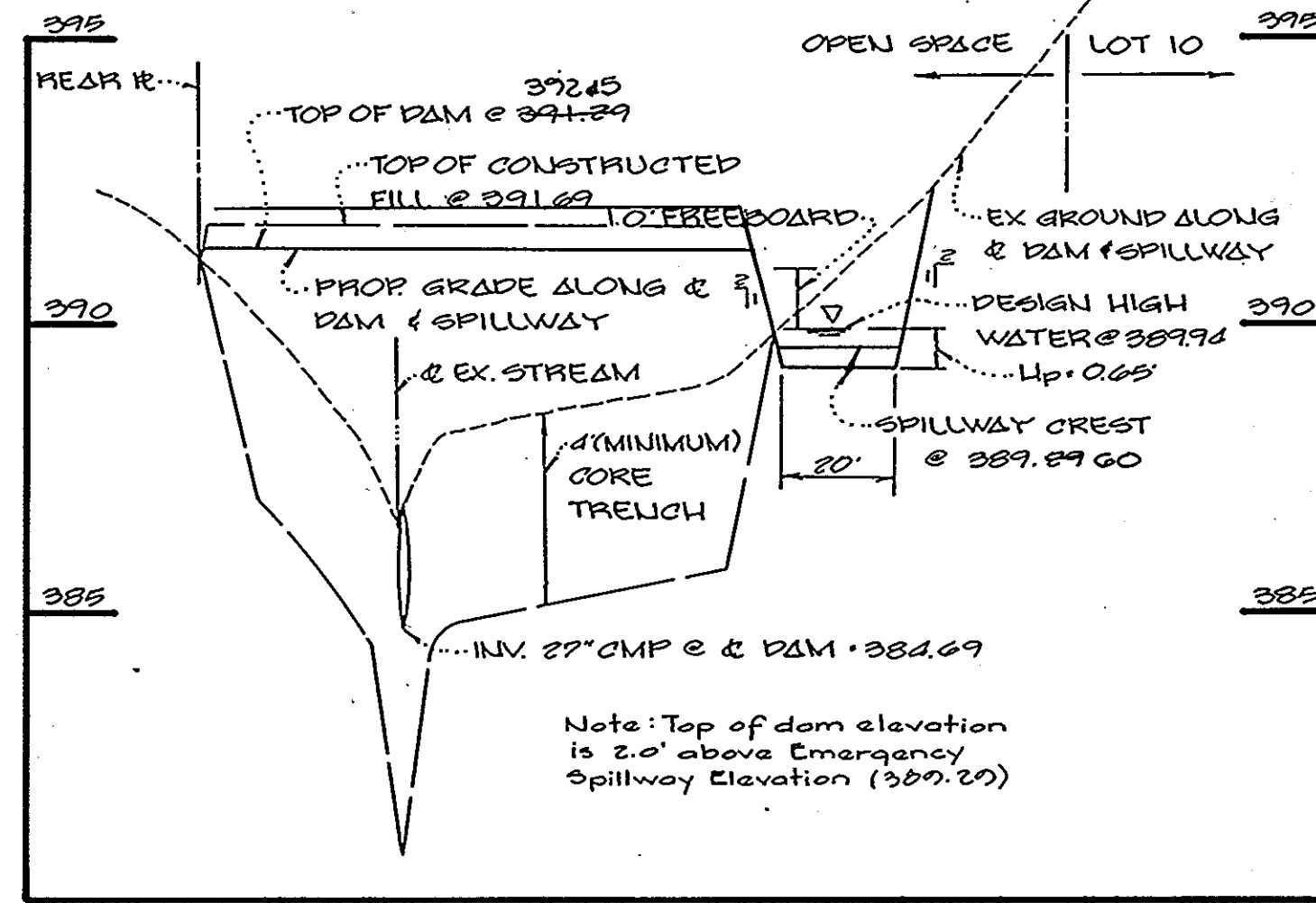
V. CONCRETE
Concrete shall meet minimum requirements set forth in Maryland State Highway Administration Specifications for Materials, Highways, Bridges, and Incidental Structures, Article 20.07 (Portland Cement Concrete Mixtures), Mix No. 3.

VI. STABILIZATION
All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway and borrow areas shall be stabilized by permanent seeding and applying straw mulch in accordance with "Standards and Specifications for Soil Erosion and Sediment Control in Urbanizing Areas" immediately after finish grading.

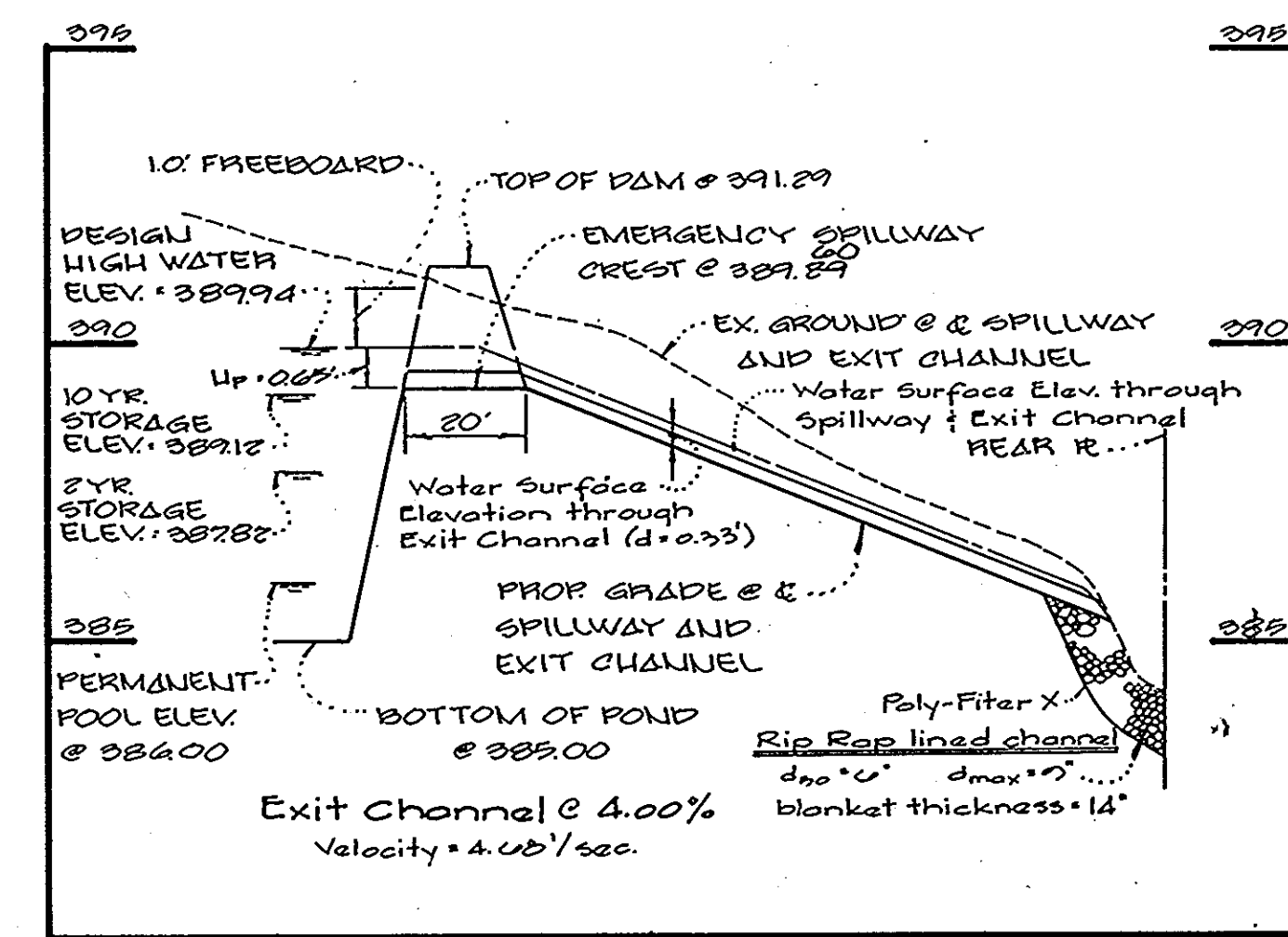
Fertilizer:	10-10-10	@ 11.5 lbs./1000 sq.ft.
Seed:	Crownvetch inoculated	@ 0.5 lbs./1000 sq.ft.
	'KY-31' Tall Fescue	@ 1.0 lbs./1000 sq.ft.
Mulch:	Straw	@ 80 lbs./1000 sq.ft.
Asphalt Tie-down:	Slopes	@ 8 gal./1000 sq.ft.
	Flat areas	@ 5 gal./1000 sq.ft.



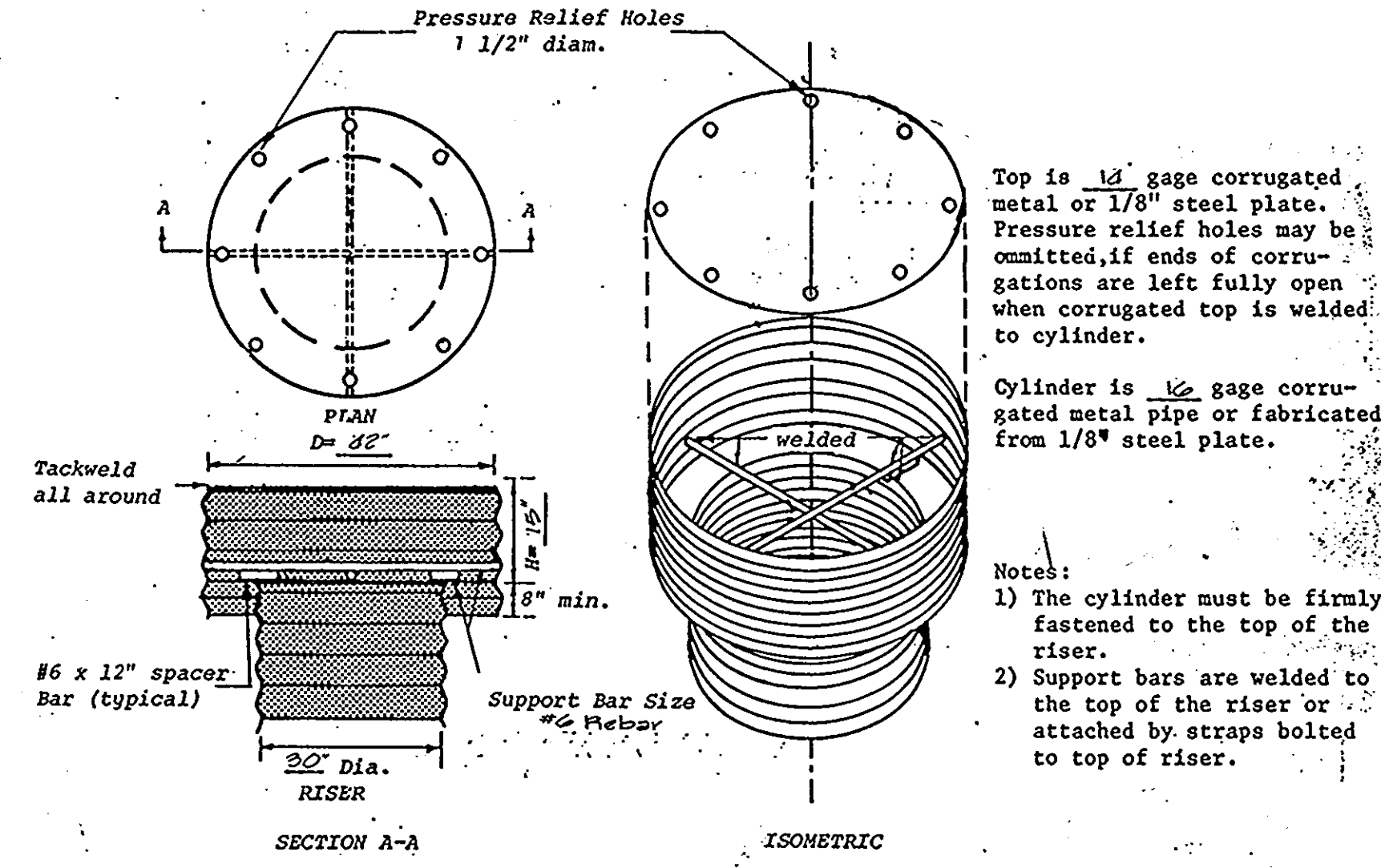
CORRUGATED METAL ANTI-SEEP COLLAR DETAILS
NO SCALE



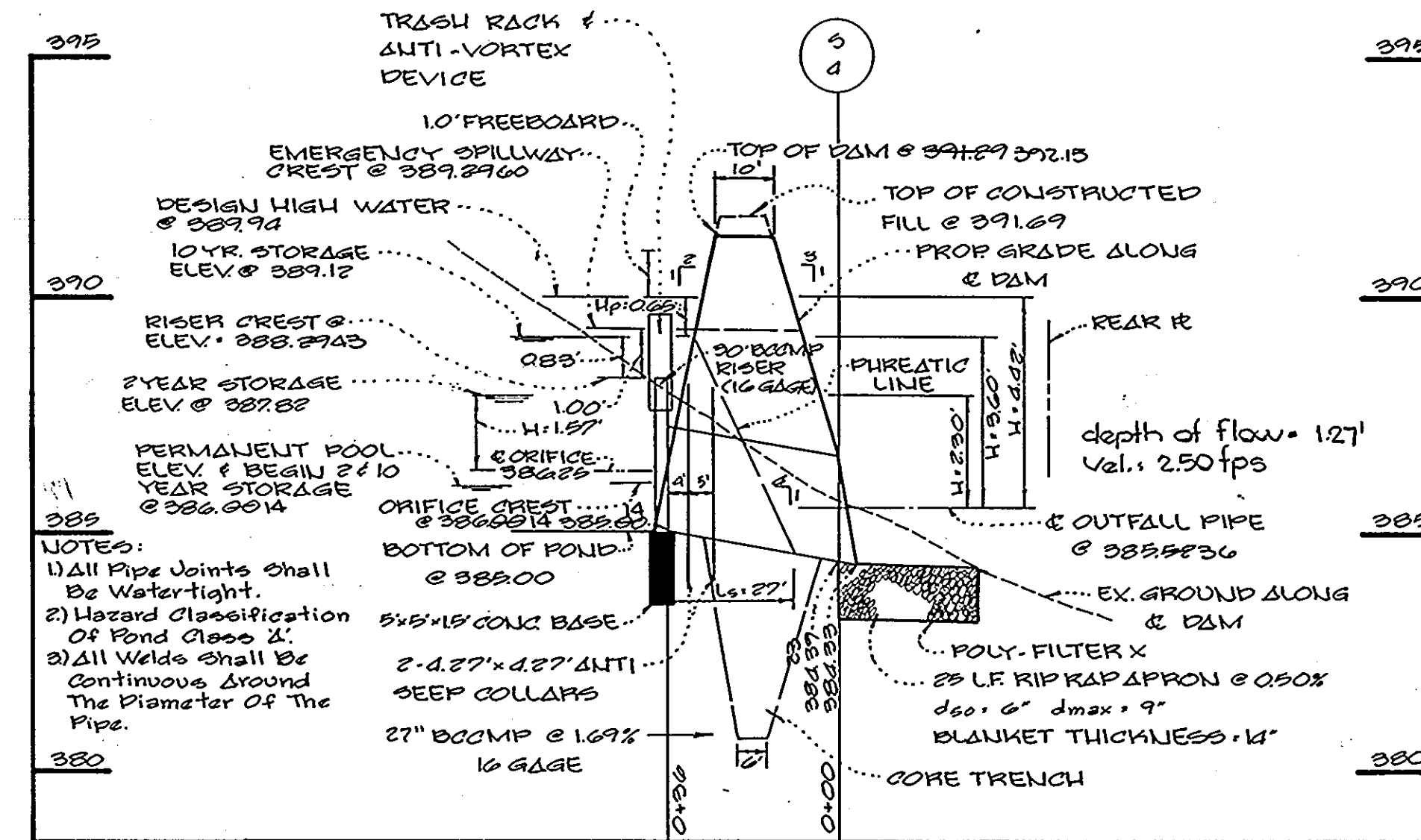
PROFILE ALONG & DAM
Scale: 1" = 20' Horiz. 1" = 3' Vert.



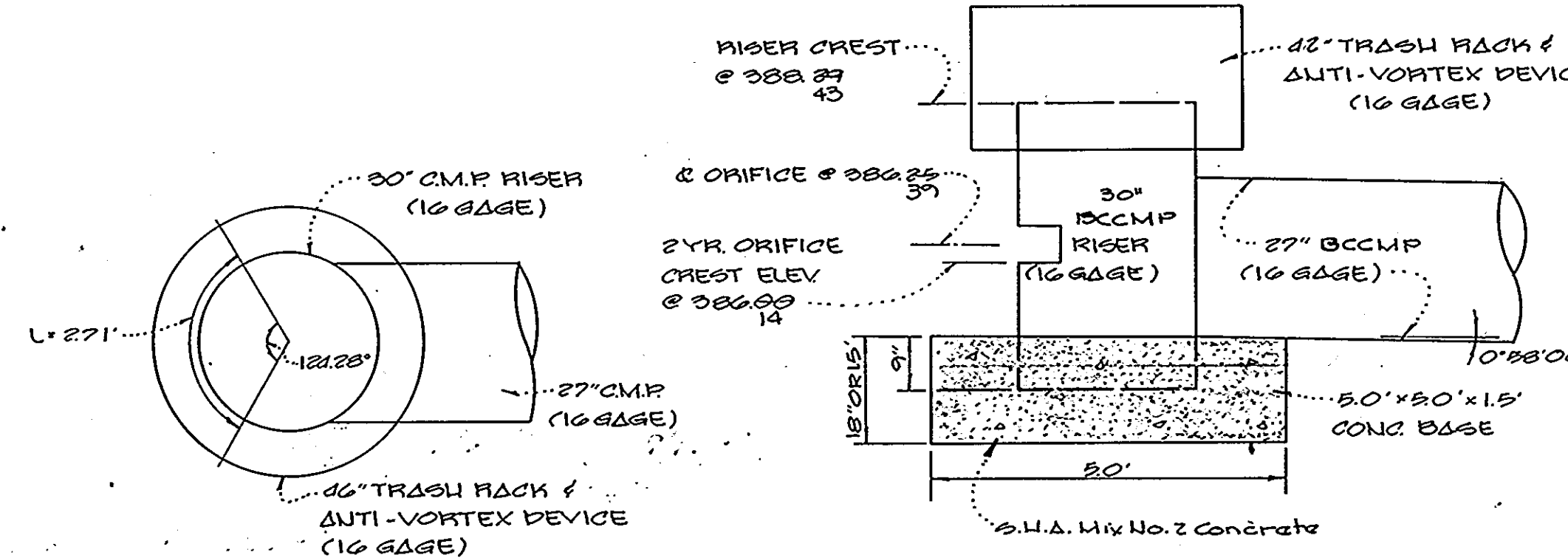
PROFILE THRU & SPILLWAY
Scale: 1" = 20' Horiz. 1" = 3' Vert.



CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE DETAIL
NOT TO SCALE



STORM WATER MANAGEMENT POND PROFILE
Scale: 1" = 20' Horiz. 1" = 3' Vert.



RISER DETAIL
No Scale

RISER & CONCRETE BASE DETAIL
No Scale

STORM WATER MANAGEMENT POND CERTIFICATION AND APPROVAL

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Signature of Engineer: *Charles J. Crovo* DATE: 5/21/88

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Signature of Developer: *J. M. N. Construction Co., Inc.* DATE: 8/31/88

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Signature: *James M. Helm* DATE: 9-12-88
HOWARD SOIL CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

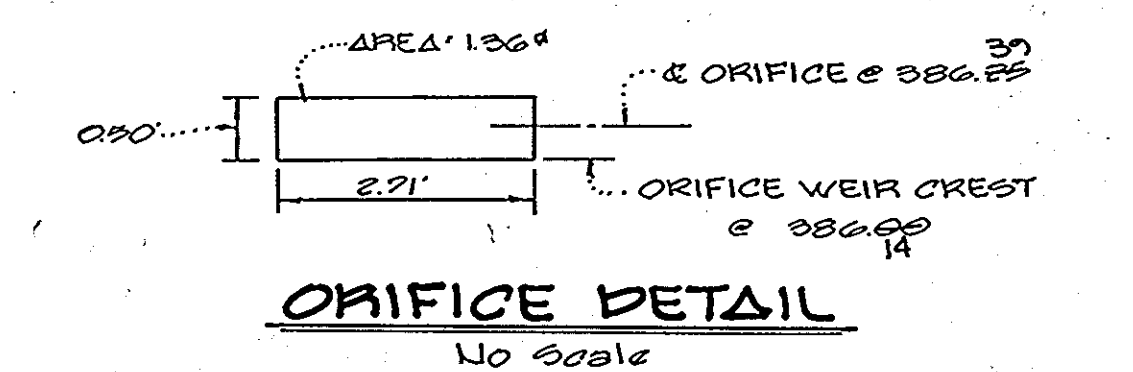
Signature: *Robert J. Ziem* DATE: 9-12-88
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: OFFICE OF PLANNING AND ZONING
Signature: *Janice S. Campbell* DATE: 10-6-88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

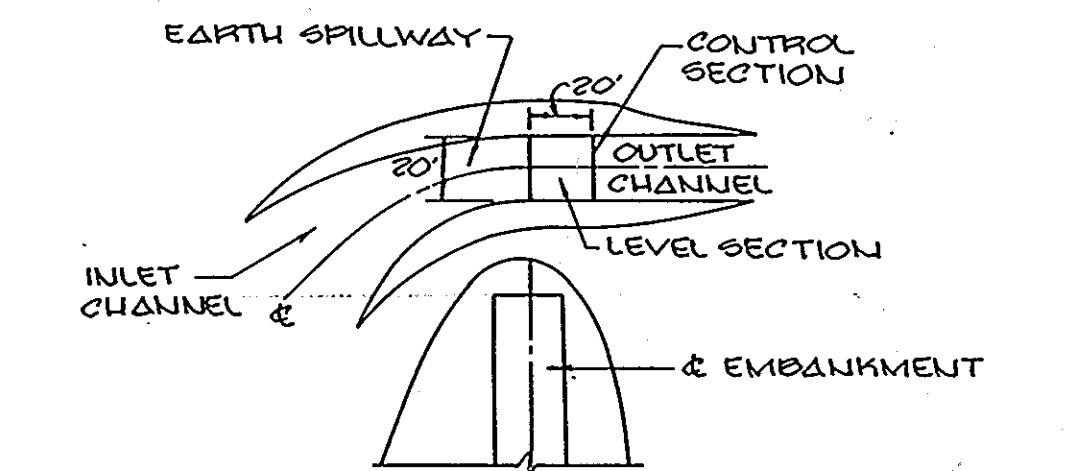
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Signature: *Donald J. Spasm* DATE: 9/11/88
CHIEF, LAND DEVELOPMENT DIVISION

Signature: *Dr. W. W. Wilkerson* DATE: 10/3/88
CHIEF, BUREAU OF HIGHWAYS

Signature: *William E. Roney* DATE: 10-8-88
CHIEF, BUREAU OF ENGINEERING



ORIFICE DETAIL
No Scale



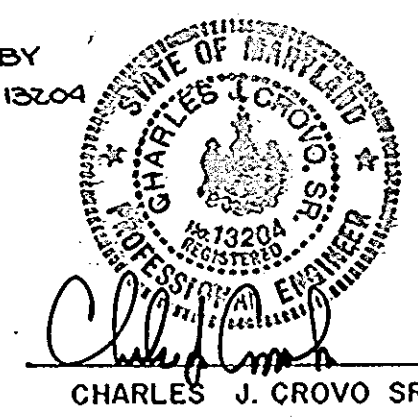
PLAN OF EARTH SPILLWAY
No Scale

STORM WATER MANAGEMENT POND, SPECIFICATIONS, NOTES AND DETAILS

PATUXENT VALLEY OVERLOOK

LOTS 1-22
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN
SHEET 6 OF 6 APRIL 22, 1988

AS-BUILT SURVEY CERTIFIED BY CHARLES J. CROVO, MD. RE. NO. 13204 ON OCTOBER 10, 1990.



OWNER AND DEVELOPER
J. M. N. CONSTRUCTION CO., INC.
406 HEADQUARTERS DRIVE, SUITE 207
MILLERSVILLE, MARYLAND 21108

Signature: *Charles J. Crovo* DATE: 5/21/88
CHARLES J. CROVO SR.

1383

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043