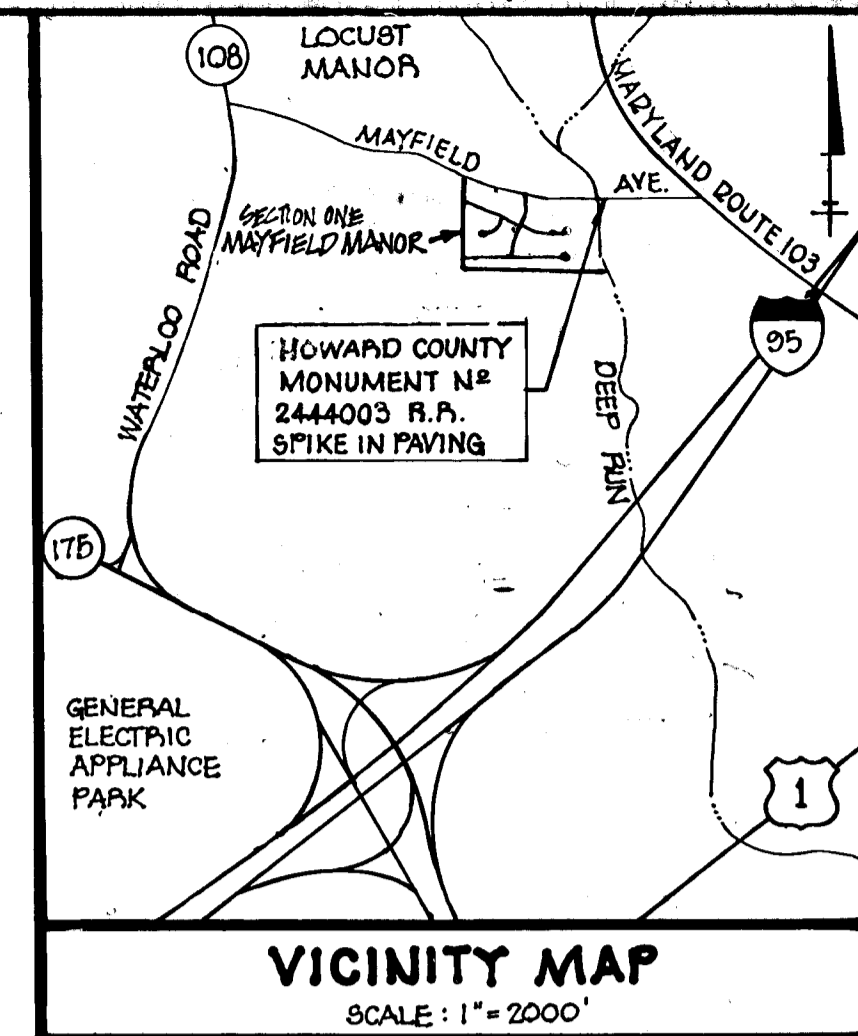


DRAINAGE AREA MAP

SCALE: 1"=200'

DRAINAGE AREA RUNOFF COEFFICIENTS

DRAINAGE AREA	ACRES	"C" VALUE
A	25	0.46
B	22	0.46
C	2.1	0.42
D	3.1	0.39
E	1.8	0.46
F	0.3	0.64
G	0.6	0.55
H	0.2	0.66
I	3.2	0.40
AA	1.0	0.39
BB	2.6	0.36
CC	0.2	0.66
DD	1.5	0.49
EE	0.3	0.66
FF	0.3	0.66
GG	1.4	0.46
HH	3.1	0.36
II	0.2	0.66
JJ	1.5	0.40
KK	0.2	0.66
LL	2.6	0.42
MM	0.2	0.66
NN	1.9	0.43
OO	0.5	0.57
PP	1.6	0.46
QQ	0.2	0.66
AAA	1.9	0.49
BBB	2.1	0.49



GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
- THE APPROXIMATE LOCATIONS OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:
BALTIMORE GAS AND ELECTRIC - UNDERGROUND ELECTRIC DISTRIBUTION ENGINEERING - 234-2891
BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION ENGINEERING - 234-2823
M&D UTILITIES - 899-0100
SHEPHERD AND POTOMAC TELEPHONE COMPANY 228-0910.
- THE CONTRACTOR SHALL LOCATE BY TEST PITS EXISTING UTILITIES IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES.
- ALL TRAFFIC CONTROL SIGNS AND THEIR USE MUST CONFORM WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- BENCH MARKS SHOWN HEREON ARE BASED ON HOWARD COUNTY DATUM.

BENCH MARKS

- B.M. NO. 1 ELEV. 230.00
RAILROAD SPIKE IN G&E POLE
*147131 LEFT OF & MAYFIELD AVENUE @ STA. 12+61.
- B.M. NO. 2 ELEV. 246.25
RAILROAD SPIKE IN 30' TREE LEFT OF & MAYFIELD AVENUE @ STA. 12+65.

HORIZONTAL & VERTICAL CONTROL DATUM
HOWARD COUNTY MONUMENT *244.002-R
*254.006-R

PURDUM & JESCHKE
CONSULTING ENGINEERS
LAND SURVEYORS
1023 North Calvert Street
Baltimore, Maryland 21202 301/837-0194

OWNER:
GUN CLUB VENTURE
8 HORIZANDY SHOPPING CENTER
ELLCOTT CITY, MD 21043

DEVELOPER:
SECURITY DEVELOPMENT CORP
6150 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MD 21043

APPROVED: HOWARD COUNTY
OFFICE OF PLANNING & ZONING

PLANNING DIRECTOR DATE
[Signature] 9-4-80
CHIEF, DIV. OF LAND DEV. DATE

APPROVED: HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS

[Signature] 9-12-80
CHIEF BUREAU OF ENGINEERING DATE

PROFESSIONAL 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 WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

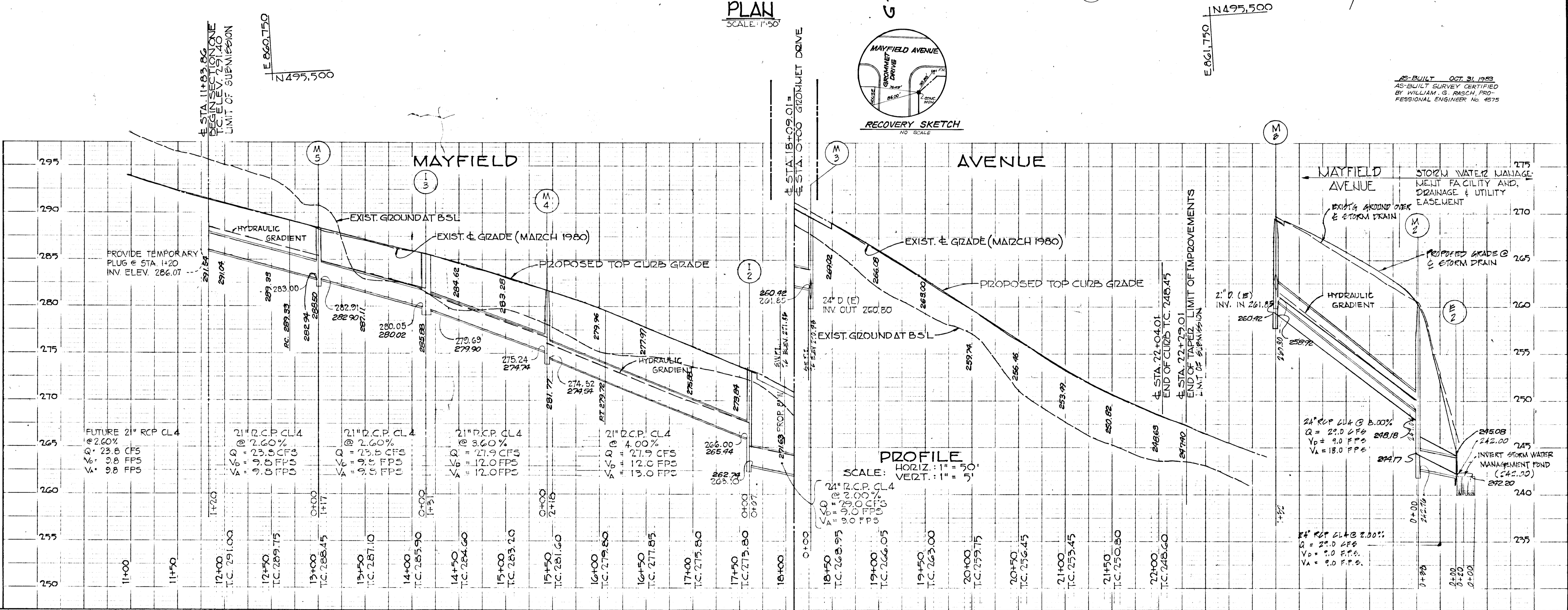
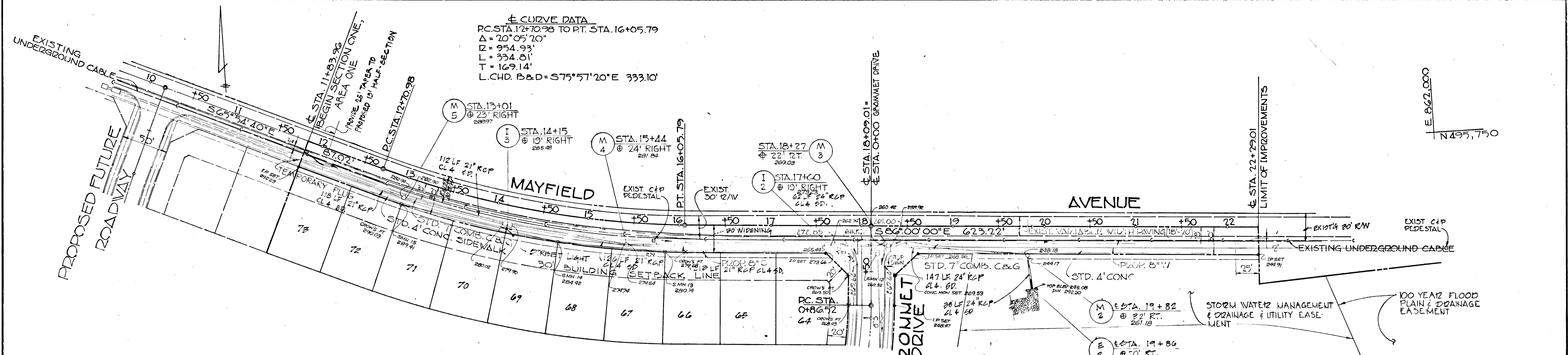
[Signature] 11-11-80
WILLIAM G. BASKI II DATE

REVISED: 3/11/81

DRAINAGE AREA MAP
MAYFIELD MANOR
SECTION ONE, AREA ONE

1ST ELECTION DIST - HOWARD COUNTY, MD
TAX MAP 37 PARCEL 162
SCALE: 1"=200' DEC. 1979

SHEET 1 OF 10
REV. PER CO. COMMENTS
DATE: 7-11-80
REV. PER CO. COMMENTS
DATE: 8-27-80



#849

PURDUM & JESCHKE
 CONSULTING ENGINEERS
 LAND SURVEYORS
 1023 North Calvert Street
 Baltimore, Maryland 21202 301/837-0194

APPROVED: HOWARD COUNTY
 OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR DATE
 CHIEF, DIV. OF LAND DEV. DATE

APPROVED: HOWARD COUNTY
 DEPARTMENT OF PUBLIC WORKS
 CHIEF BUREAU OF ENGINEERING DATE

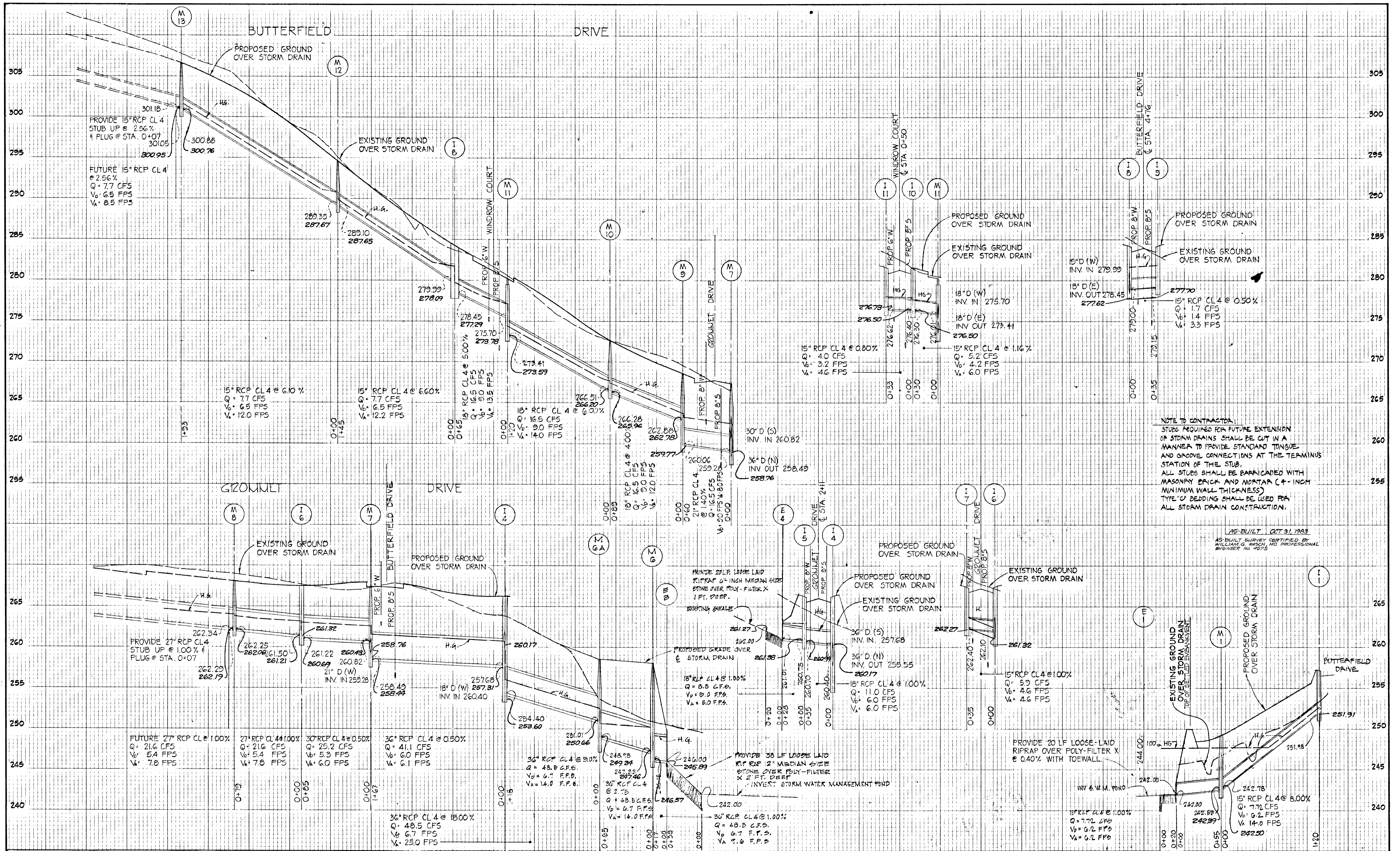
HOWARD SOIL CONSERVATION DISTRICT:
 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 DATE 9-3-80
 DATE 9-12-80
 DATE 9-3-80

PROFESSIONAL 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 WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 WILLIAM G. RASCH II 5/12/80 DATE



ROAD & STORM DRAIN PLAN & PROFILE
MAYFIELD AVENUE
 MAYFIELD MANOR
 SECTION ONE, AREA ONE
 FIRST ELECTION DISTRICT HOWARD CO. MARYLAND
 MAY 80 SCALE: AS NOTED
 TAX MAP 37 PARCEL 162

SHEET 2 OF 10
 DESIGNED: A.E.L.
 DRAWN: J.F.T.
 CHK'D: A.E.L.
 REV. PER CO. COMMENTS
 DATE 7-11-80
 REV. PER CO. COMMENTS
 DATE 8-21-80



NOTE TO CONTRACTOR:
 STUBS REQUIRED FOR FUTURE EXTENSION OF STORM DRAINS SHALL BE CUT IN A MANNER TO PROVIDE STANDARD TONGUE AND GROOVE CONNECTIONS AT THE TERMINUS STATION OF THE STUB. ALL STUBS SHALL BE BARRICADED WITH MASONRY BRICK AND MORTAR (4-INCH MINIMUM WALL THICKNESS) TYPE 'C' BEDDING SHALL BE USED FOR ALL STORM DRAIN CONSTRUCTION.

AS-BUILT OCT. 31, 1983
 AS-BUILT SURVEY CERTIFIED BY WILLIAM G. RASCH, INC. PROFESSIONAL ENGINEER NO. 14275

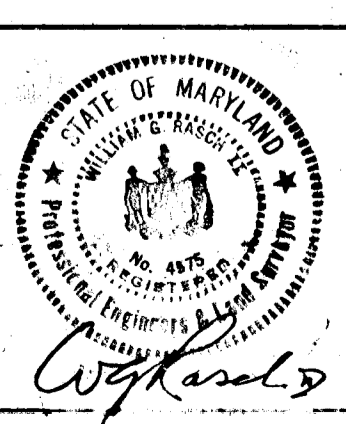
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR DATE
 CHIEF, DIV. OF LAND DEV. DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF BUREAU OF ENGINEERING DATE

HOWARD SOIL CONSERVATION DISTRICT - REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 DATE 9-3-80

PURDUM & JESCHKE
 CONSULTING ENGINEERS
 LAND SURVEYORS
 1023 North Calvert Street
 Baltimore, Maryland 21202 301/837-0194

PROFESSIONAL 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 WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 DATE 5/1/80

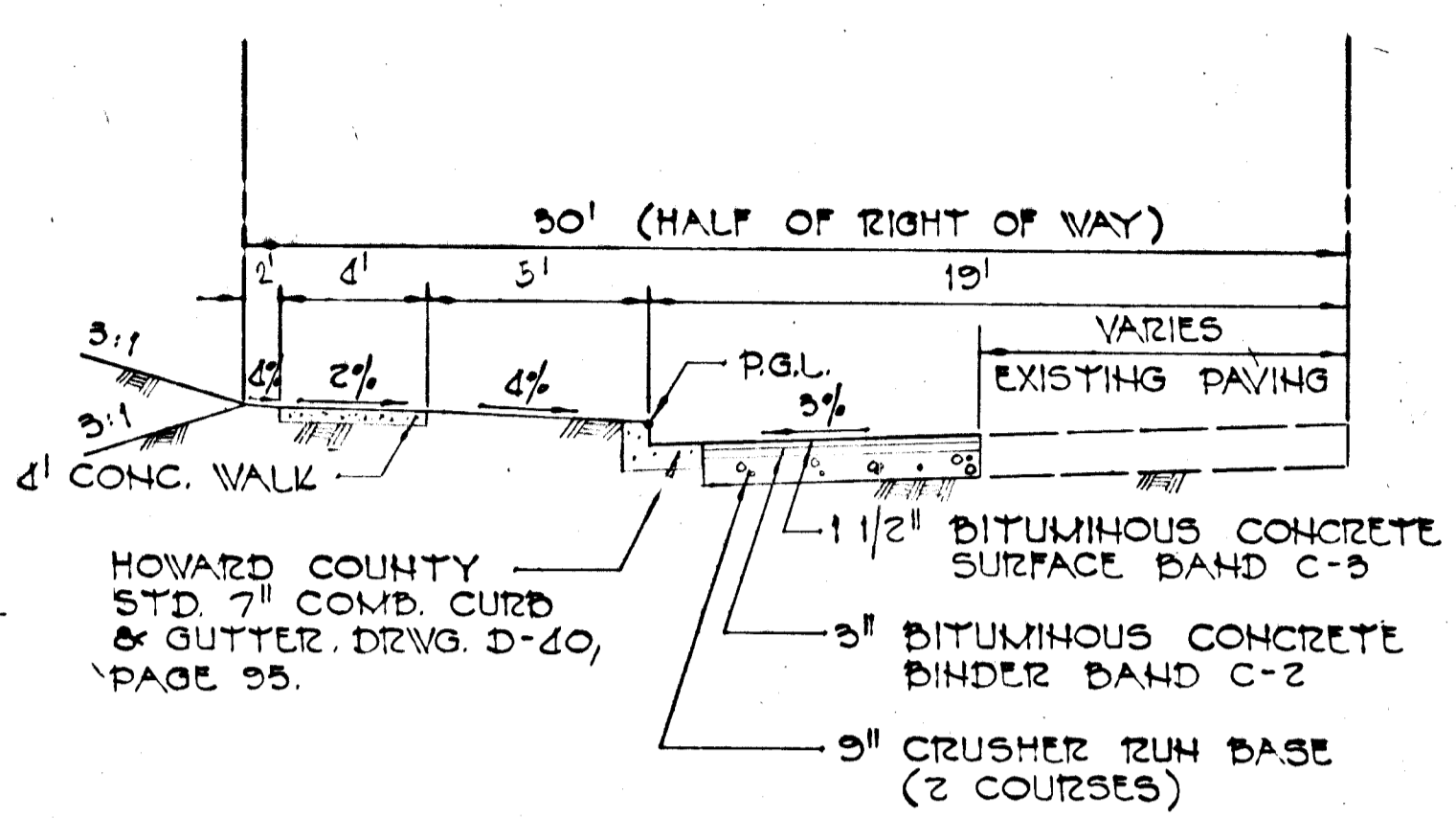


STORM DRAIN PROFILES
MAYFIELD MANOR
 SECTION ONE, AREA ONE
 FIRST ELECTION DISTRICT HOWARD CO., MARYLAND
 MAY 80 SCALE: AS NOTED
 TAX MAP 37 PARCEL 162

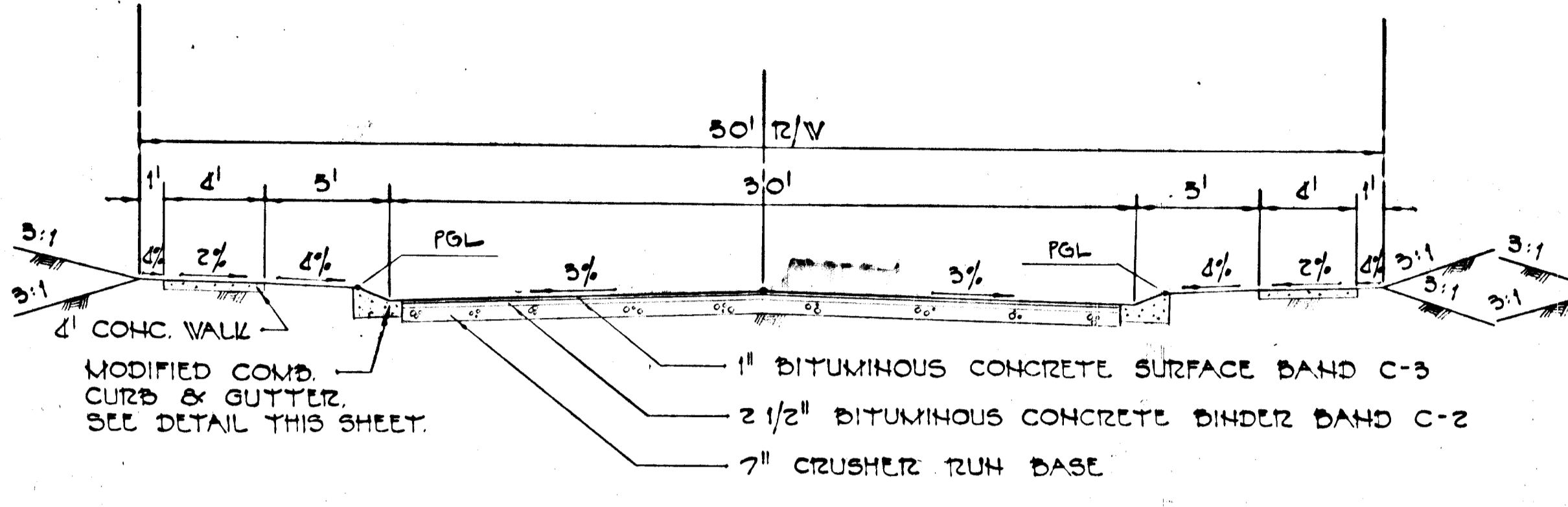
SHEET 5 OF 10
 REV. PER CO. COMMENTS DATED 7-11-80
 REV. PER CO. COMMENTS DATED 8-7-80
 DESIGNED: A.E.L.
 DRAWN: J.F.T.
 CHK'D: A.E.L.

AS-BUILT 10-31-83 80-157 5-12-80

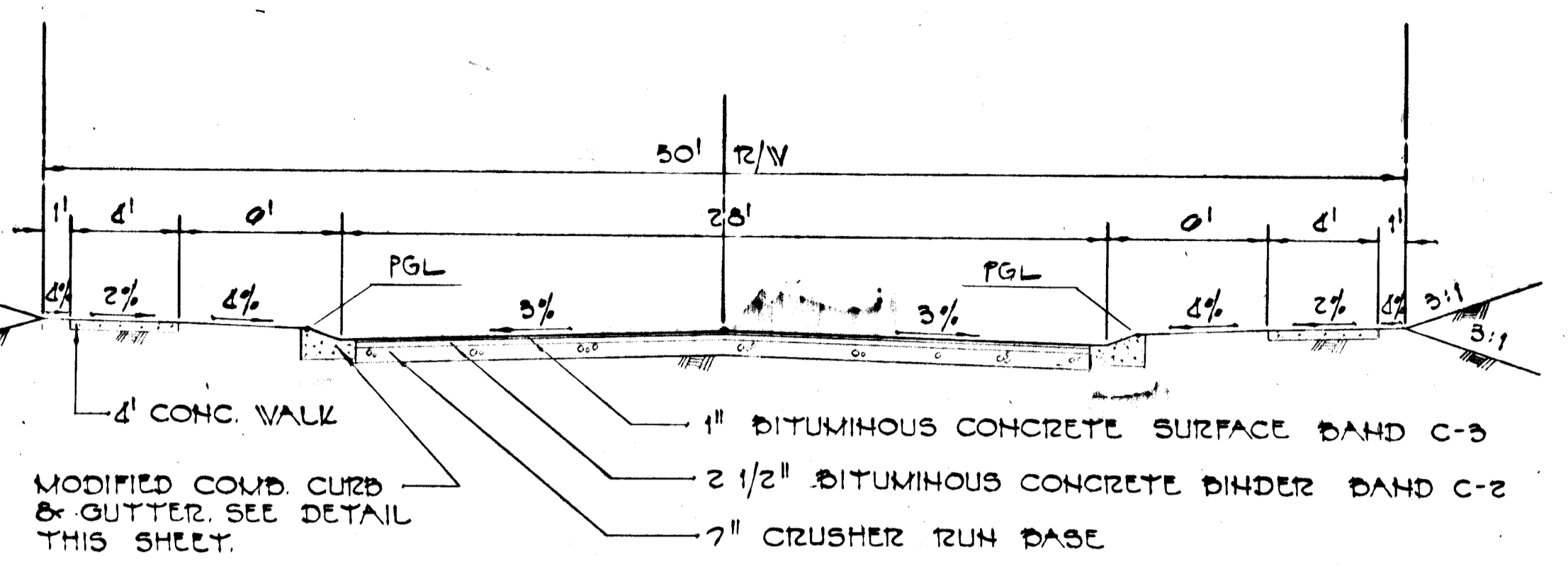
- NOTES
1. BASE SHALL BE PRIMED IN ACCORDANCE WITH SECTION C-10-2 OF THE HOWARD COUNTY ROAD CODE.
 2. TACK COAT SHALL BE REQUIRED IN ACCORDANCE WITH SECTION C-21-4 OF THE HOWARD COUNTY ROAD CODE.
 3. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CODE.



* TYPICAL HALF SECTION (COLLECTOR STREET)
 MAYFIELD AVENUE
 STA. 11+89.96 TO STA. 22+04.01
 ZONING: R.S.C. DESIGN SPEED: 35 M.P.H.



* TYPICAL SECTION (LOCAL ROAD)
 MAYBERRY DRIVE STA. 0+44 TO STA. 5+42.22
 BUTTERFIELD DRIVE STA. 1+45.33 TO STA. 7+57.20
 ZONING: R.S.C. DESIGN SPEED: 30 M.P.H.

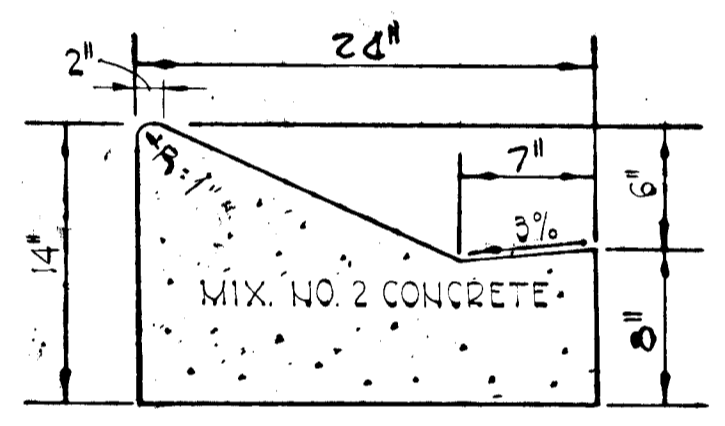


* TYPICAL SECTION (CUL-DE-SAC)
 BUTTERFIELD DRIVE STA. 8+37.20 TO STA. 11+19.71 (LT.) & STA. 11+50.33 (RT.)
 WINDROW COURT STA. 0+40 TO STA. 3+55.00
 ZONING: R.S.C. DESIGN SPEED: 30 M.P.H.

* ALTERNATIVE PAVING SECTION FOR ALL ROADS
 SHALL BE 1 1/2\"/>

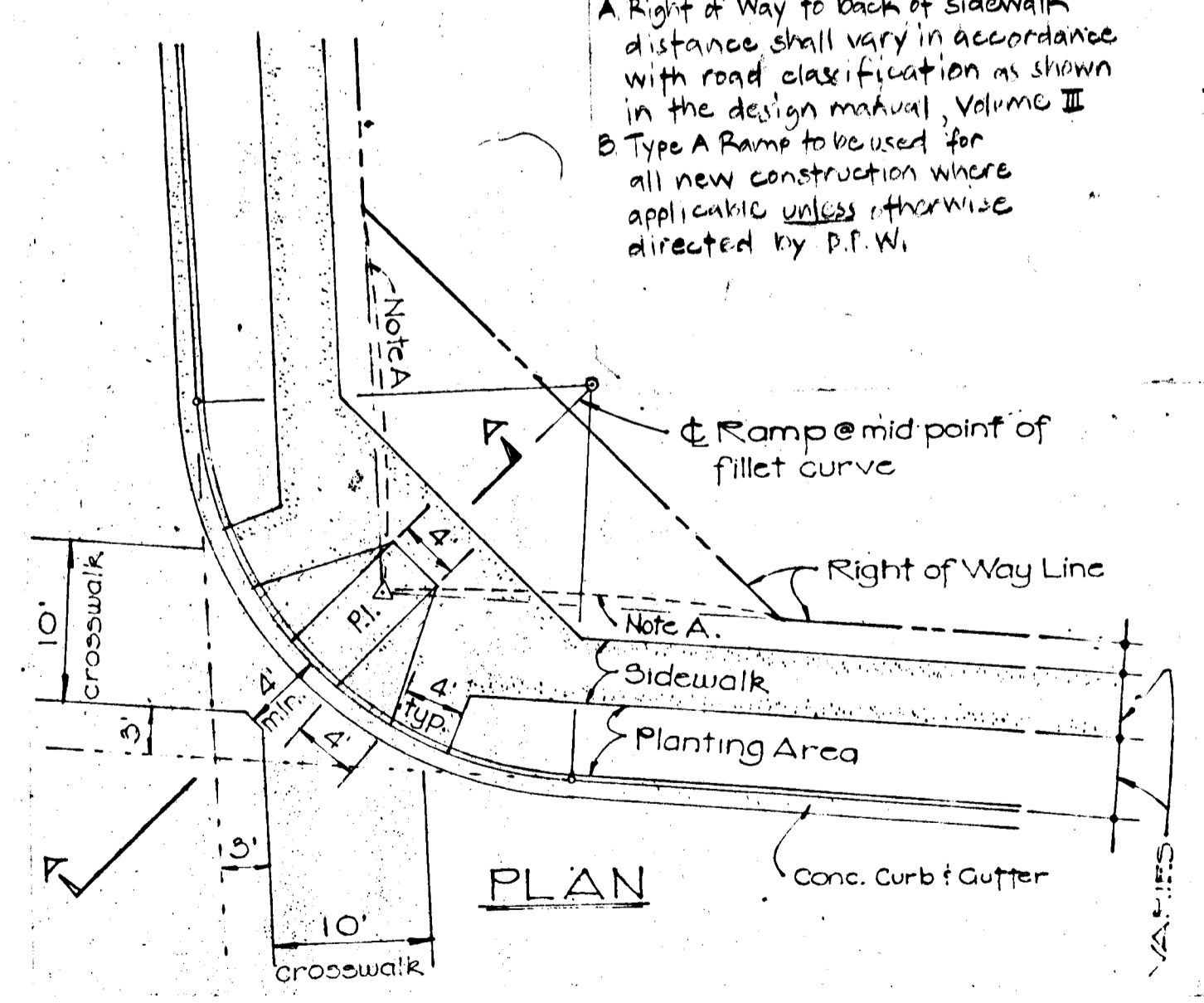
STRUCTURE SCHEDULE							
NO.	TYPE	INV. IN	INV. OUT	± TOP EL.	DWG. NO.	PAGE NO.	± ROAD STA.
E-1	TYPE "C"	222.00	222.00	222.00	D-52	107	11+11.44
M-1	STD.	222.20	222.93	252.80	D-103	158	11+13.88
E-2	(DEPRESSED) A-5	221.58	221.58	242.50	D-24-A	119-A	11+13.33
E-2	TYPE "C"	242.00	242.75	242.75	D-52	107	19+06
M-2	TYPE "B"	249.04	248.76	251.00	SDD/5		19+82
M-3	STD.	241.85	240.80	249.50	D-103	158	18+27
E-2	A-5 W/DEFL.	246.00	243.10	273.50	D-24-A	119-A	17+40
M-4	TYPE "B"	275.24	273.54	281.75	SDD/5		15+44
E-3	A-10 W/DEFL.	280.05	279.69	285.70	D-24-A	119-A	14+15
M-5	TYPE "B"	285.00	285.91	288.42	SDD/5		13+01
E-3	TYPE "C"	284.00	284.00	280.00	D-52	107	0+06
M-6	TYPE "B"	247.33	247.15	251.00	SDD/5		0+26
E-4	DEPRESSED A-5	252.20	251.40	260.00	D-24-A	119-A	2+13
E-5	DEPRESSED A-10	260.15	260.70	260.00	D-24-A	119-A	2+13
M-7	STD.	255.25	255.25	267.00	D-103	158	8+17
E-6	A-5	261.50	261.22	267.54	D-24-A	119-A	4+60
E-7	A-10	262.40	262.11	268.11	SDD/5		4+60
M-8	TYPE "B"	262.10	261.25	267.54	D-24-A	119-A	5+42
M-9	STD. (DROP)	262.88	260.00	268.51	D-103	158	7+57
M-10	STD.	266.51	266.25	272.53	D-103	158	6+48
M-11	TYPE "B"	270.21	270.70	280.00	SDD/5		5+43
E-8	A-10 W/DEFL.	275.55	275.00	278.45	D-24-A	119-A	4+76
E-9	A-5 W/DEFL.	275.55	275.00	275.93	D-24-A	119-A	4+78
M-12	STD.	285.55	285.10	292.53	D-103	158	3+35
M-13	STD.	301.16	300.80	306.52	D-103	158	1+63
E-10	A-5 W/DEFL.	276.80	276.30	281.59	D-24-A	119-A	0+48
E-11	A-10 W/DEFL.	276.80	276.42	281.42	D-24-A	119-A	0+50
M-14	STD. (DROP)	251.01	248.98	258.00	D-103	158	1+44
E-4	TYPE "C"	261.01	261.01	263.26	D-52	107	2+00

OUTLET PROTECTION SCHEDULE				
NO.	MEDIAN STONE SIZE	L	W	D
E-1	6 IN.	20'	10'	1'
E-2	12 IN.	22'	10'	2'
E-3	12 IN.	33'	15'	2'
E-4	6 IN.	20'	10'	1'

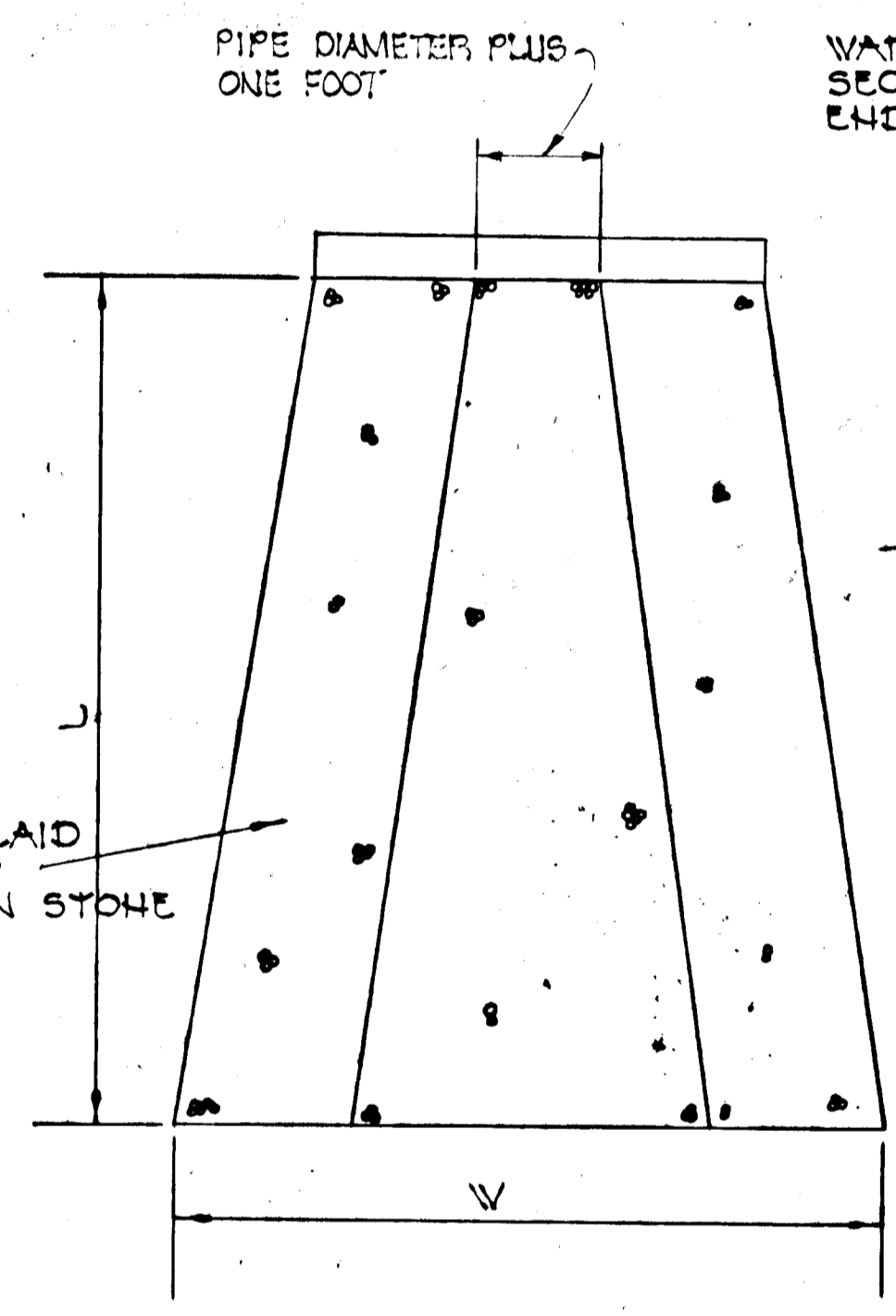


NEW MODIFIED COMP. CURB & GUTTER
 NOT TO SCALE

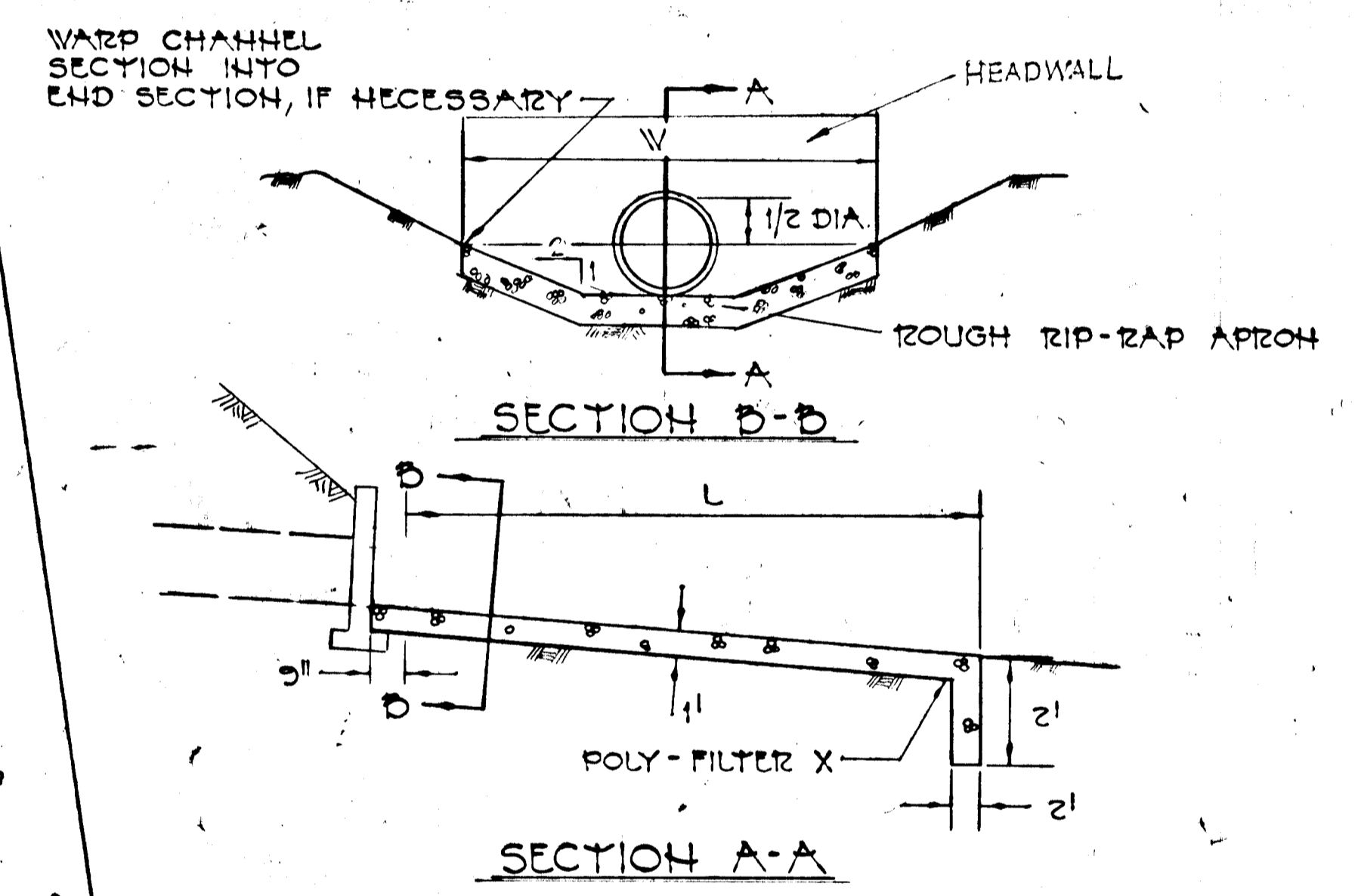
NOTES:
 A Right of Way to back of sidewalk distance shall vary in accordance with road classification as shown in the design manual, Volume II
 B Type A Ramp to be used for all new construction where applicable unless otherwise directed by P.E.W.



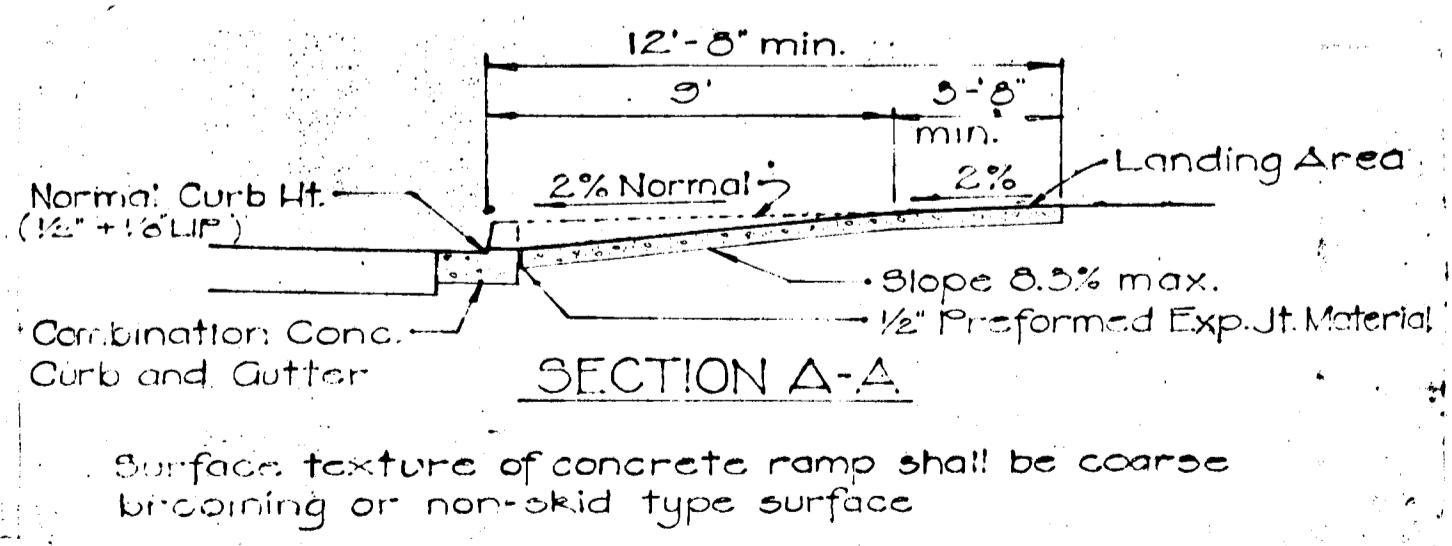
PLAN



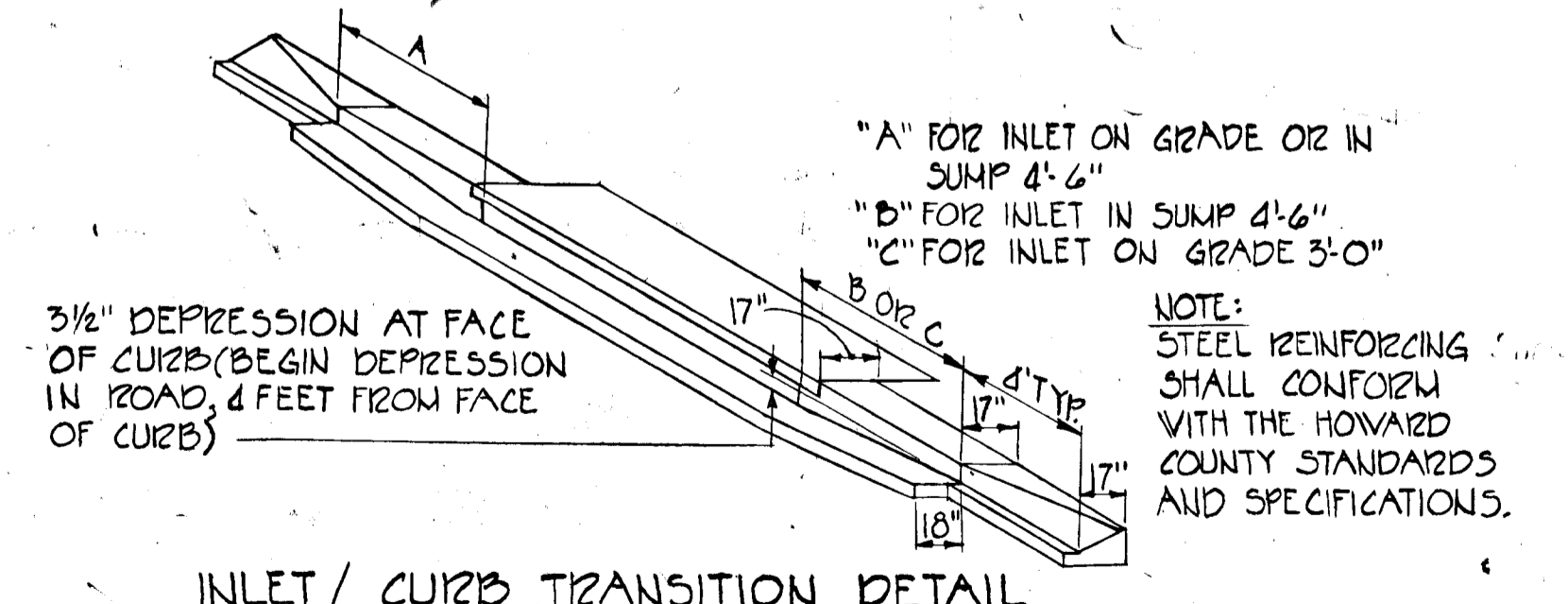
PLAN



OUTLET PROTECTION DETAIL
 NOT TO SCALE



SECTION A-A



INLET / CURB TRANSITION DETAIL
 NO SCALE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
 PLANNING DIRECTOR DATE
 CHIEF, DIV. OF LAND DEV. DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF BUREAU OF ENGINEERING DATE

HOWARD SOIL CONSERVATION DIST. REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 DATE

PURDUM & JESCHKE CONSULTING ENGINEERS LAND SURVEYORS
 1023 North Calvert Street
 Baltimore, Maryland 21202 301/837-0194

PROFESSIONAL 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 WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 DATE

TYPICAL SECTIONS & DETAILS
MAYFIELD MANOR
 SECTION ONE, AREA ONE
 1st ELEC. DIST. MAY 1980 TAX MAP 57
 HOWARD CO., MD. SCALE AS NOTED PARCEL 162

SHEET 6 OF 10
 REV. PER COMMENTS DATE 7-11-80
 DES. A.E.L. DIV. D.J.G. CHIEF A.E.L. REV. PER COMMENTS DATED 5-17-80

CONSTRUCTION SPECIFICATIONS FOR PONDS

SITE PREPARATION

Areas under the borrow areas, embankment, and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of 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 above the design elevation (including freeboard) as shown on the plans.

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.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Cutoff Trench

Where specified, a cutoff 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 four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

PIPE CONDUITS

A. Corrugated Metal Pipe

- Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.
- Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. 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.
- 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.
- Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
- Backfilling shall conform to structural backfill as shown above.
- Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, way, spoil and borrow areas, and berms shall be stabilized by seeding, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications shown on or accompanying the drawings.

SEDIMENT CONTROL NOTES

- Specifications for the Sediment Control Details shown hereon are included in the U.S.D.A. Soil Conservation Service "Standards and Specifications for soil erosion and sediment control in developing areas."
- The developer shall notify the Howard County Office of Inspection and Permits at least 24 hours prior to beginning any construction shown hereon (892-2435 or 892-2436).
- All sediment control structures to remain in place until permission for their removal has been obtained from the Howard County Office of Inspection and Permits (892-2435 or 892-2436).
- All graded areas shall be stabilized in accordance with the following requirements:

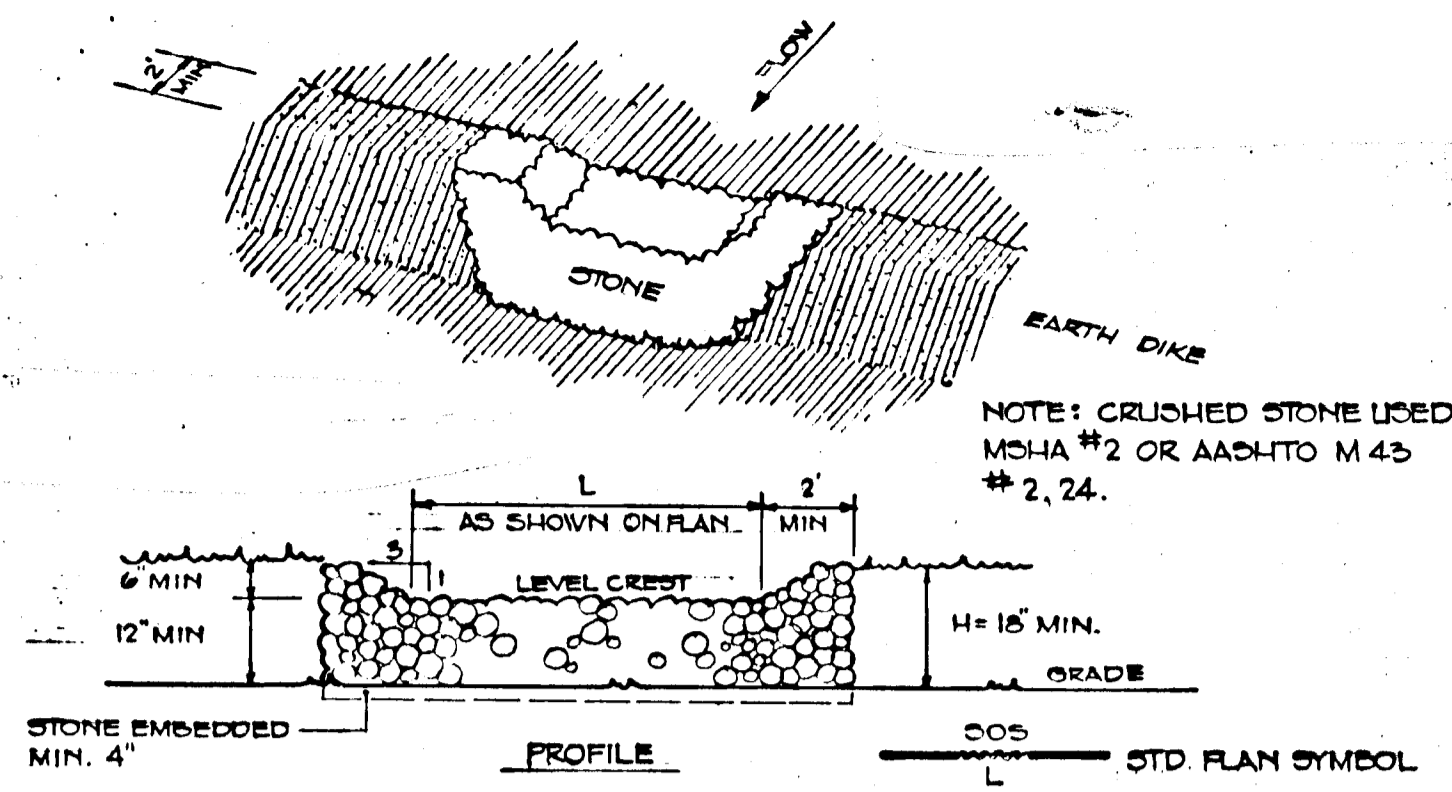
- Site Preparation:
 - Harrow or disc the areas to be seeded with the following materials at the specified rate to a depth of 3":
 - Pulverized limestone at 1 1/2 tons/acre.
 - Commercial fertilizer 10-10-10 at 3/4 tons/acre.
 - Super phosphate at 600 lbs./acre.
 - Seeding:
 - Sow the following seed mixture at the specified rate with a mechanical spreader:
 - Temporary - Italian or Perennial Ryegrass. (1lb/1000 sq. ft.)
 - Permanent - (Slopes Flatter than 3:1) - Common Kentucky Bluegrass 40%
Meadow Bluegrass 40%, Red Fescue 20% (3 lb/1000 sq. ft.)
Slopes steeper than 3:1 - Ground Cover
 - The seeded area shall be raked with a York Rake (minimum of 2 passes), covered and compacted with a cultipacker or other approved method.
 - Mulching:
 - Seeded areas shall be uniformly mulched immediately after seeding with unweathered small grain straw at the rate of 1 1/2 to 2 tons/acre.
 - Tie mulch down with liquid asphalt at 0.1 gal./s.y. or emulsified asphalt at 0.04 gal./s.y.
 - Sodding:
 - Apply 10-10-10 fertilizer at 1000 lbs./acre. (25 lbs./1000 s.f.)
 - Apply ground agricultural limestone at 2000 lbs./acre. (50 lbs./1000 s.f.)
 - Incorporate both lime and fertilizer into soil by disking. Firm up after incorporation.
 - Lay sod to a tight fit. Roll to insure contact with underlying soil. Water as necessary for first two weeks (in summer) to insure establishment.
 - Ground Cover:
 - Crown vetch (innoculated) at 15 lbs./acre, and Kentucky 31 Tall Fescue (certified) at 40 lbs./acre. (2:1 maximum slope)
5. The contractor shall place plywood braced with sand bags at the inlet end of unfinished drain pipes at the end of each work day.
6. All stockpiles shall be protected with straw bale dikes, silt fences, or other approved sediment control devices.
7. Slopes steeper than 3:1 shall be stabilized with common Kentucky L-31 (certified) @ 40 LB/Acre and crownvetch scarified and innoculated @ 15 LB/Acre.

CONSTRUCTION SEQUENCE (ROADWAY AND STORM WATER MANAGEMENT POND AREAS ONLY)

- Obtain grading permit.
- Place stabilized construction entrance at Grommet Drive.
- Clear and grub limit of disturbed areas of sediment control structures.
- Install and stabilize all sediment control structures.
- Prior to construction of storm water management pond (temporary sediment basin), place straw bale dikes and stone outlet structure as shown on sheet 8 of 10. Sediment basin shall be cleaned of sediment when build-up reaches elevation 243.2 shown on dam profile. (See note #14)
- Cut core trench and place fill per specifications.
- Install barrel and riser assembly per details and barricade orifice per detail.
- Place embankment to unsettled embankment elevations.
- Proceed with pond construction.
- Place sewer, water and storm drain utilities (barricade all inlets).
- Grade roadways to subgrade.
- Place base course, curbing, surface course and sidewalks.
- Fine grade all slopes, remove temporary sediment control devices and stabilize with permanent seeding.
- Upon completion of proposed improvements, clean out sediment to elevations shown on plans, remove barricade and stabilize all disturbed areas. (See Conversion Sequence Below)
- Lot grading, construction and sediment control to be performed by others in accordance with an approved site development plan.

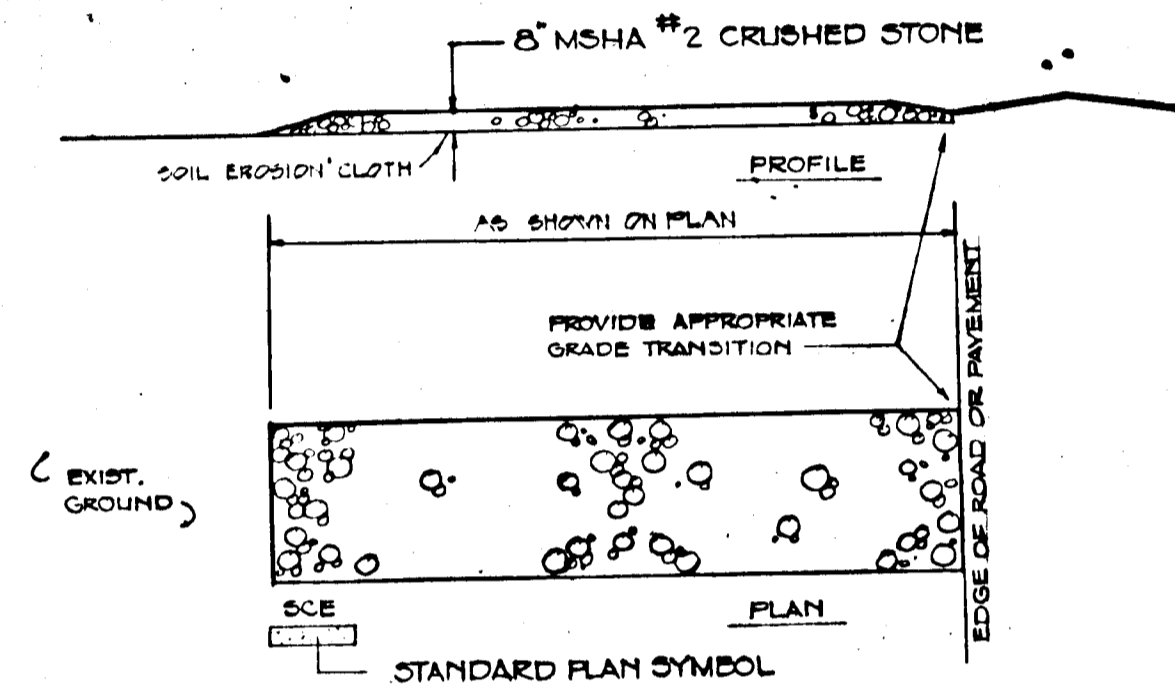
CONVERSION SEQUENCE FOR SEDIMENT BASIN TO SWM POND

- Pump all standing water over riser to barrel.
- Remove all sediment and restore area to design grades of dry pond.
- Place sediment in spoil area designated on plan.
- Stabilize area per sediment control notes.



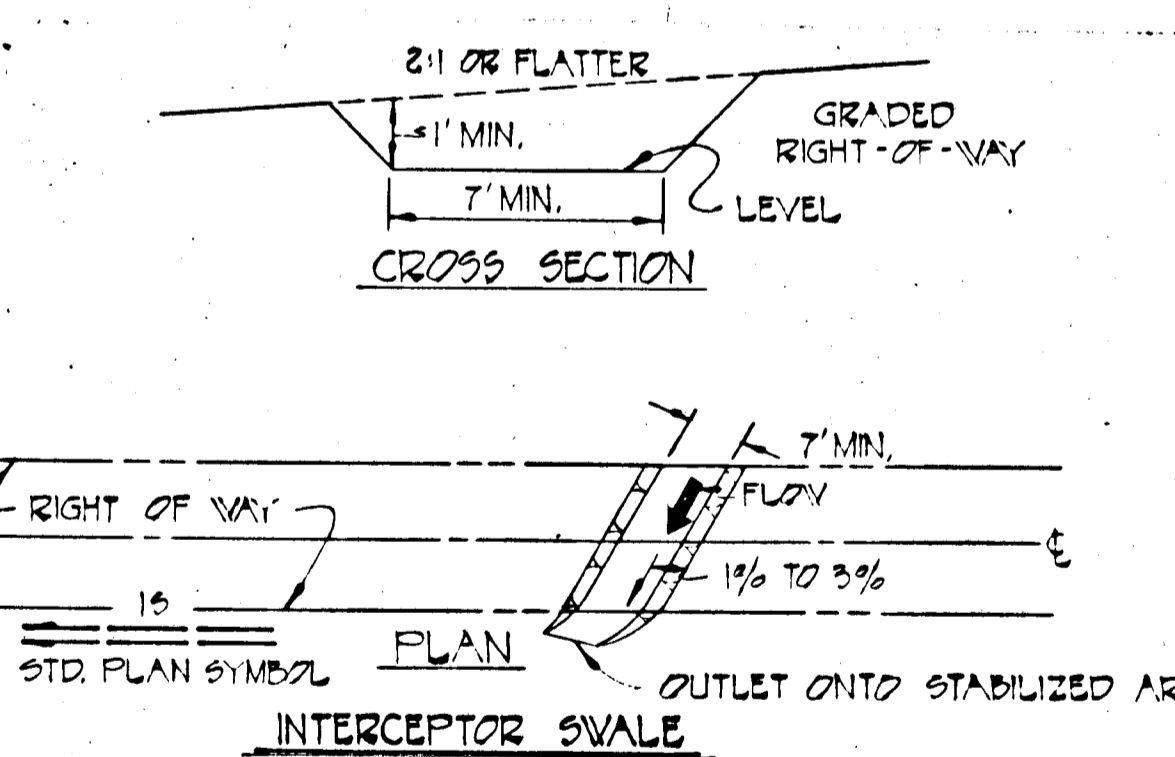
STONE OUTLET STRUCTURE

- Area under embankment shall be cleared, grubbed, and stripped of vegetation and root mat. Trap area shall be cleared.
- Embankment material shall be free of roots, large stones, rocks, organic or other objectionable material. Compact with construction equipment.
- All cut or fill slopes shall be 2:1 or flatter.
- Crushed stone shall meet AASHTO designation M43, Size No. 2 or 24 (MSHA No. 2). Gravel may be used, crusher-run is unacceptable.
- Clean out when sediment has reached the elevation noted.



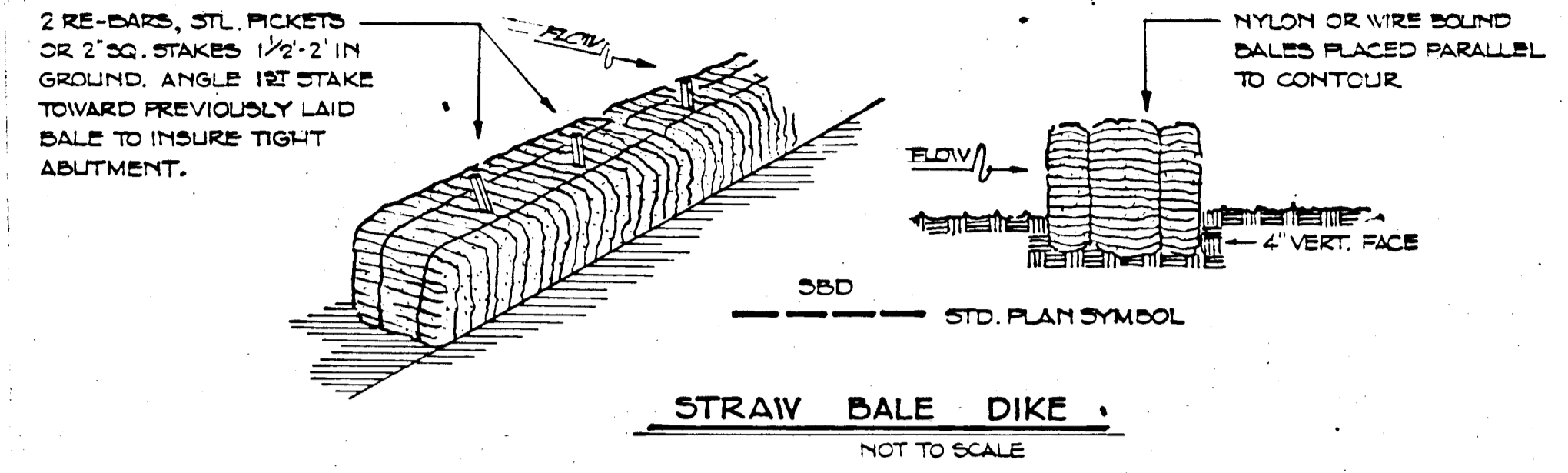
STABILIZED CONSTRUCTION ENTRANCE

- Stone size - MSHA No. 2 or AASHTO designation M43 size No. 2.
- Place stone on soil erosion cloth for its entire width and length.
- When necessary, wheels shall be washed to remove sediment prior to entering public road.



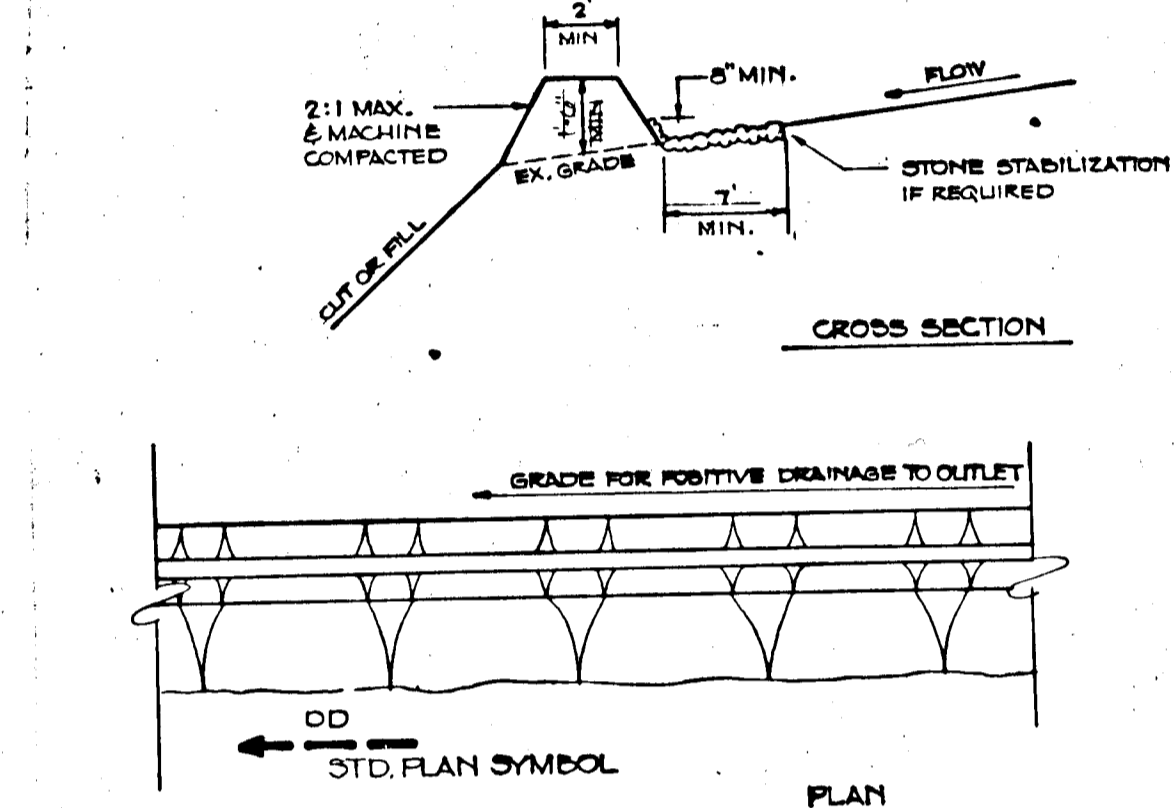
INTERCEPTOR SWALE

- All trees, brush, stumps, and other objectionable material shall be removed.
- Swale shall be excavated or shaped to line, grade and cross section.
- Swale shall have a minimum grade of 1 percent and the bottom shall be level.
- Run off shall be diverted to a sediment control device.
- Stabilization shall be in accordance with the Sediment Control Notes. Stone if required as shown on plan shall be MSHA No. 2 placed in a layer at least 3 inches in thickness. It shall extend across the bottom and up both sides of the channel at least 8 inches.



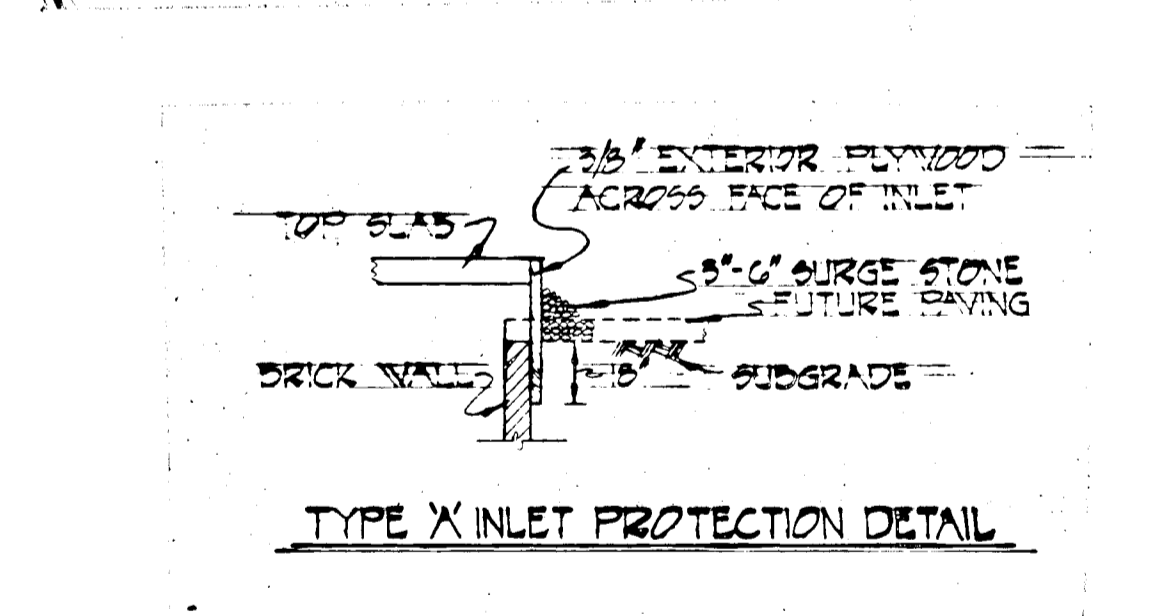
STRAW BALE DIKE

- Area under embankment shall be cleared, grubbed, and stripped of vegetation and root mat. Trap area shall be cleared.
- Embankment material shall be free of roots, large stones, rocks, organic or other objectionable material. Compact with construction equipment.
- All cut or fill slopes shall be 2:1 or flatter.
- Crushed stone shall meet AASHTO designation M43, Size No. 2 or 24 (MSHA No. 2). Gravel may be used, crusher-run is unacceptable.
- Clean out when sediment has reached the elevation noted.



DIVERSION DIKE

- All dikes shall be machine compacted and shall have positive drainage to an outlet.
- Diverted runoff from an undisturbed or stabilized area shall outlet to an undisturbed or stabilized area.
- Diverted runoff from a disturbed area shall outfall into an area protected by a sediment control device.
- Stabilization shall be as specified in Sediment Control Notes.
- Stone if required as shown on the plan shall have MSHA No. 2 placed in a 3" thick layer and pressed into the soil.



TYPE X INLET PROTECTION DETAIL

APPROVED: Howard County Department of Public Works
 [Signature]
 CHIEF BUREAU OF ENGINEERING

APPROVED: Howard County Office of Planning and Zoning
 [Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT

DEVELOPER
 I certify that all development and/or construction will be done according to these plans of development and construction and erosion and sediment control. I also authorize periodic on site inspection by the 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. I will provide the Howard Soil Conservation District with a red-lined "AS BUILT" of the pond within 30 days of completion.
 [Signature]
 SIGNATURE OF DEVELOPER

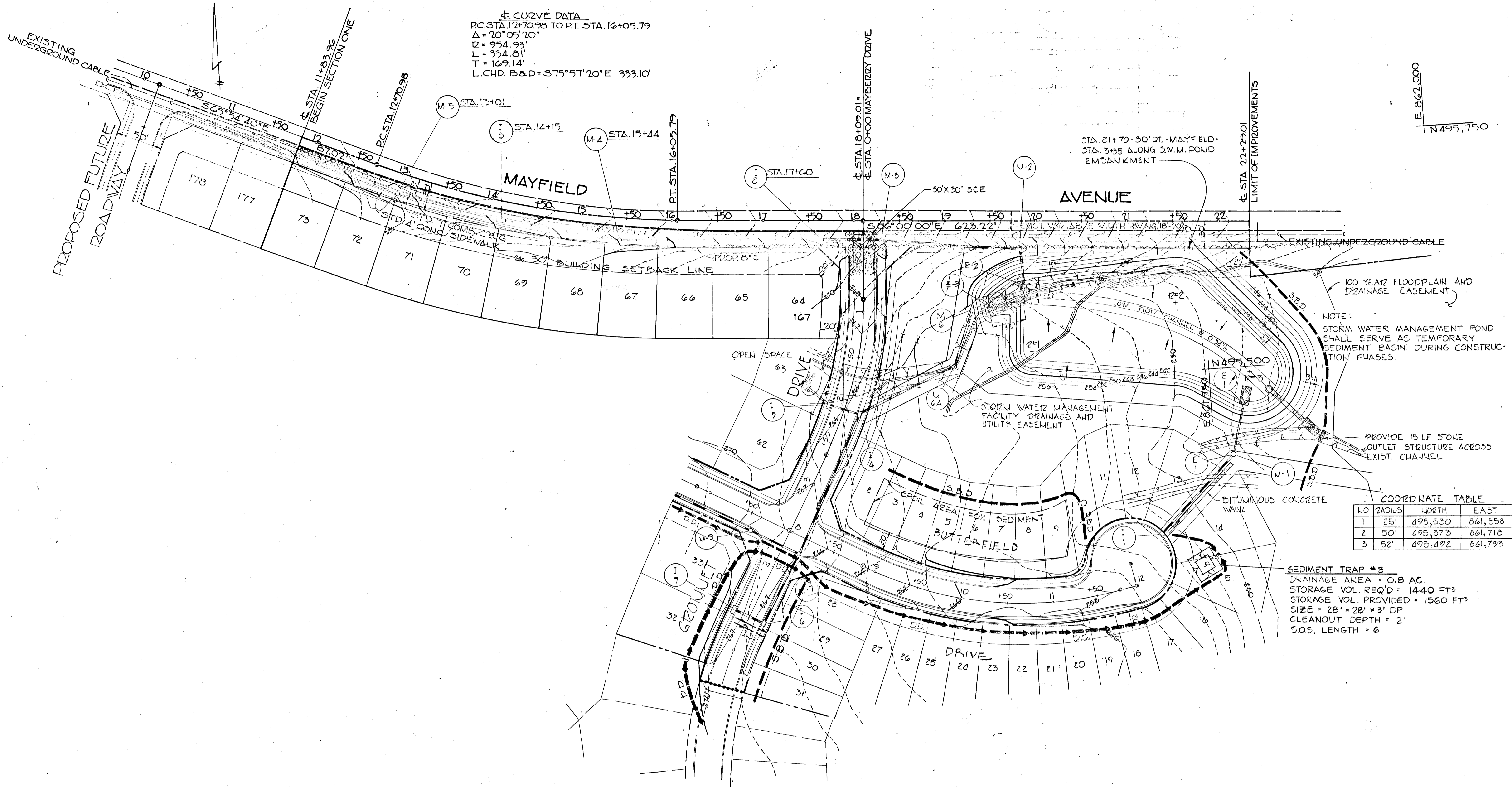
PURDUM & JESCHKE
 CONSULTING ENGINEERS
 LAND SURVEYORS
 1023 North Calvert Street
 Baltimore, Maryland 21202 301/837-0194

ENGINEER
 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 a red-lined "AS BUILT" of the pond within 30 days of completion.
 [Signature]
 WILLIAM G. RASCH II REG. NO. 4575 DATE 5/1/80

STORM WATER MANAGEMENT & SEDIMENT CONTROL
MAYFIELD MANOR
 SECTION ONE, AREA ONE
 FIRST ELECTION DISTRICT HOWARD CO MARYLAND
 MAY 1980 SCALE: AS NOTED
 TAX MAP 37 PARCEL 162
 SHEET 7 OF 10
 REV. PER. CO. COMMENTS DATED 7-11-80
 REV. PER. CO. COMMENTS DATED 8-27-80
 AS-BUILT 10-31-83

BRUNING 44132 234421

± CURVE DATA
 PC STA. 12+70.98 TO PT. STA. 16+05.79
 $\Delta = 20^{\circ}05'20''$
 $R = 954.93'$
 $L = 334.81'$
 $T = 169.14'$
 L.CHD. B&D = $S75^{\circ}57'20''E$ 333.10'



NOTE:
 STORM WATER MANAGEMENT POND SHALL SERVE AS TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION PHASES.

COORDINATE TABLE

NO	RADIUS	WIDTH	EAST
1	25'	495,530	861,558
2	50'	495,573	861,718
3	52'	495,492	861,793

SEDIMENT TRAP #3
 DRAINAGE AREA = 0.8 AC
 STORAGE VOL. REQ'D = 1440 FT³
 STORAGE VOL. PROVIDED = 1560 FT³
 SIZE = 28' x 28' x 3' DP
 CLEANOUT DEPTH = 2'
 S.O.S. LENGTH = 6'

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.

James M. Helm 9-3-80
 Soil Conservation Service Date

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

APPROVED: *Wm. T. Howe* 9-3-80
 Howard S.C.D. Date
 F-80-157
 Plan Number

APPROVED: Howard County Department of Public Works

William E. Ray 9-12-80
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: Howard County Office of Planning and Zoning

 PLANNING DIRECTOR DATE
William E. Ray 9-4-80
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

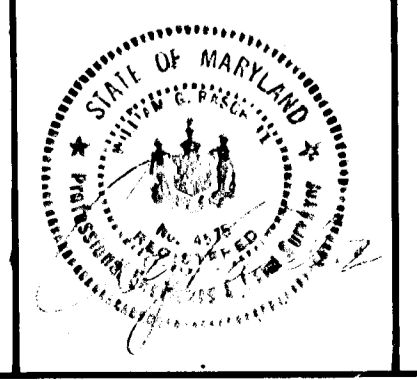
DEVELOPER
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James R. Schulte 11/1/80
 SIGNATURE OF DEVELOPER DATE

PURDUM & JESCHKE
 CONSULTING ENGINEERS
 LAND SURVEYORS
 1023 North Calvert Street
 Baltimore, Maryland 21202 301/837-0194

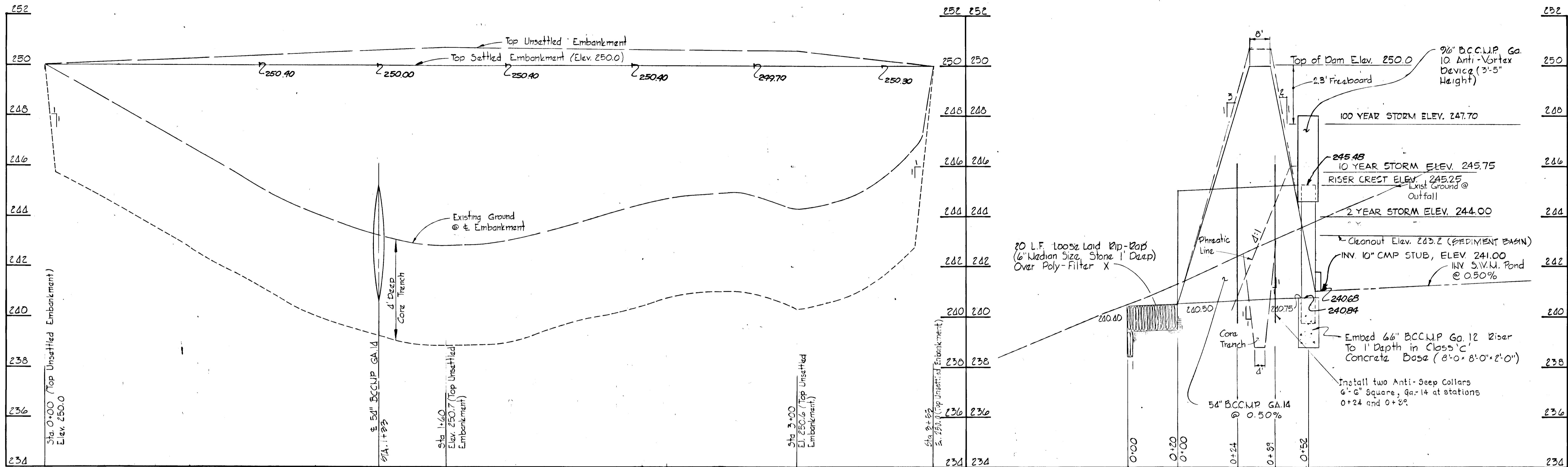
ENGINEER
 I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he must provide the Howard Soil Conservation District with a red-lined as built of the pond within 30 days of completion.

William G. Pasch II 11/1/80
 WILLIAM G. PASCH II REG. NO. 2575 DATE



STORM WATER MANAGEMENT AND SEDIMENT CONTROL
 MAYFIELD MANOR
 SECTION ONE, AREA ONE
 FIRST ELECTION DISTRICT HOWARD COUNTY MARYLAND
 MAY 1980 SCALE: PARCEL: 162
 TAX MAP 37

SHEET 8 OF 10
 REV. PER. CO. COMMENTS DATED 7-11-80
 REV. PER. CO. COMMENTS DATED 8-17-80
 DESIGNED: A.E.L.
 DRAWN: S.B.D.
 CHK'D: A.E.L.

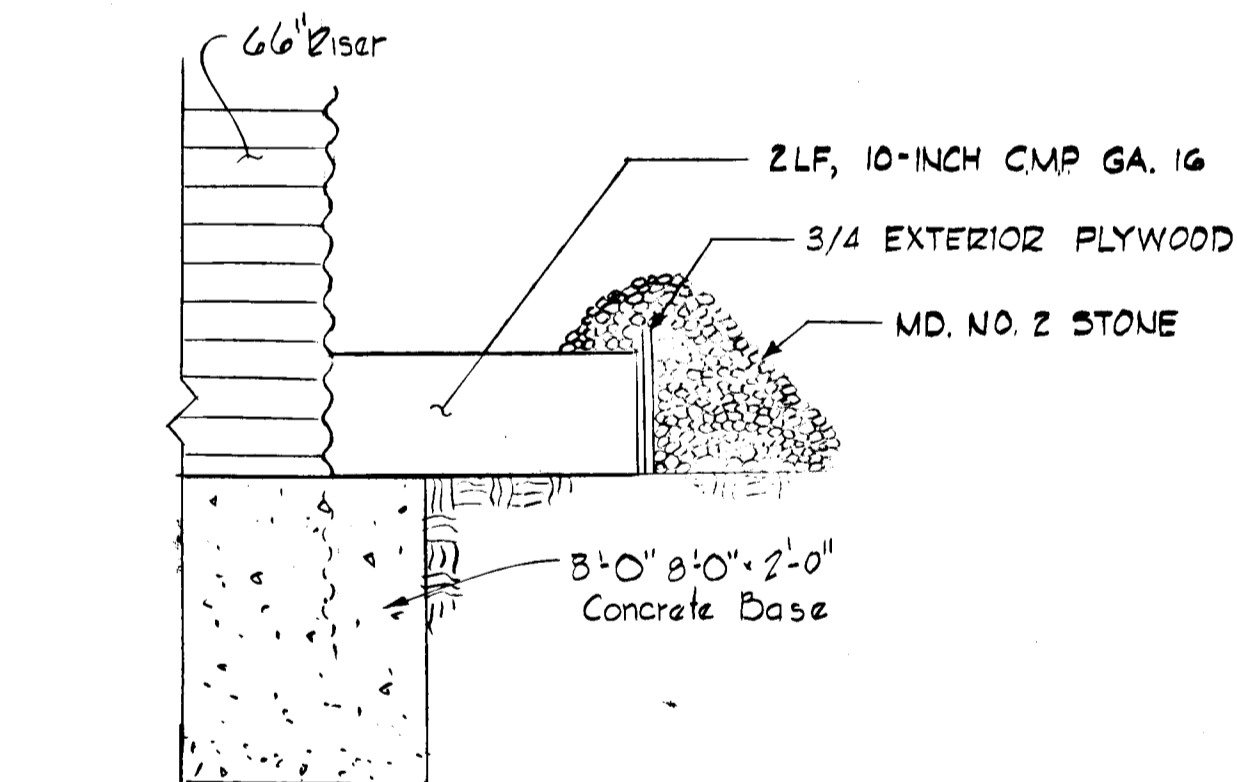


PROFILE ALONG E EMBANKMENT

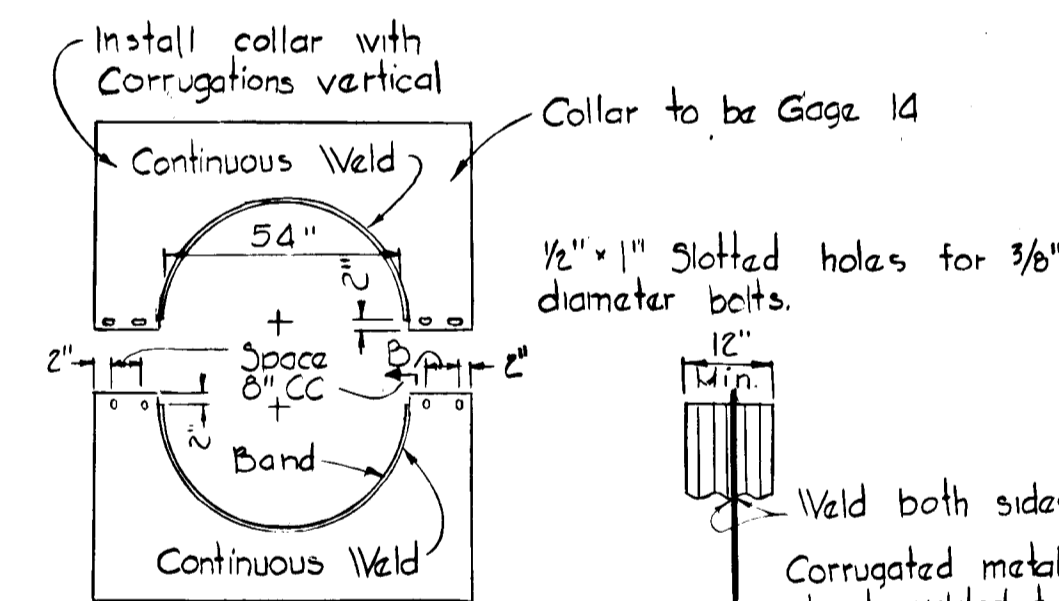
Scale: Horiz. 1"=20'
Vert. 1"=2'

SECTION THRU EMBANKMENT

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



LOW FLOW ORIFICE
BLOCKING DETAIL



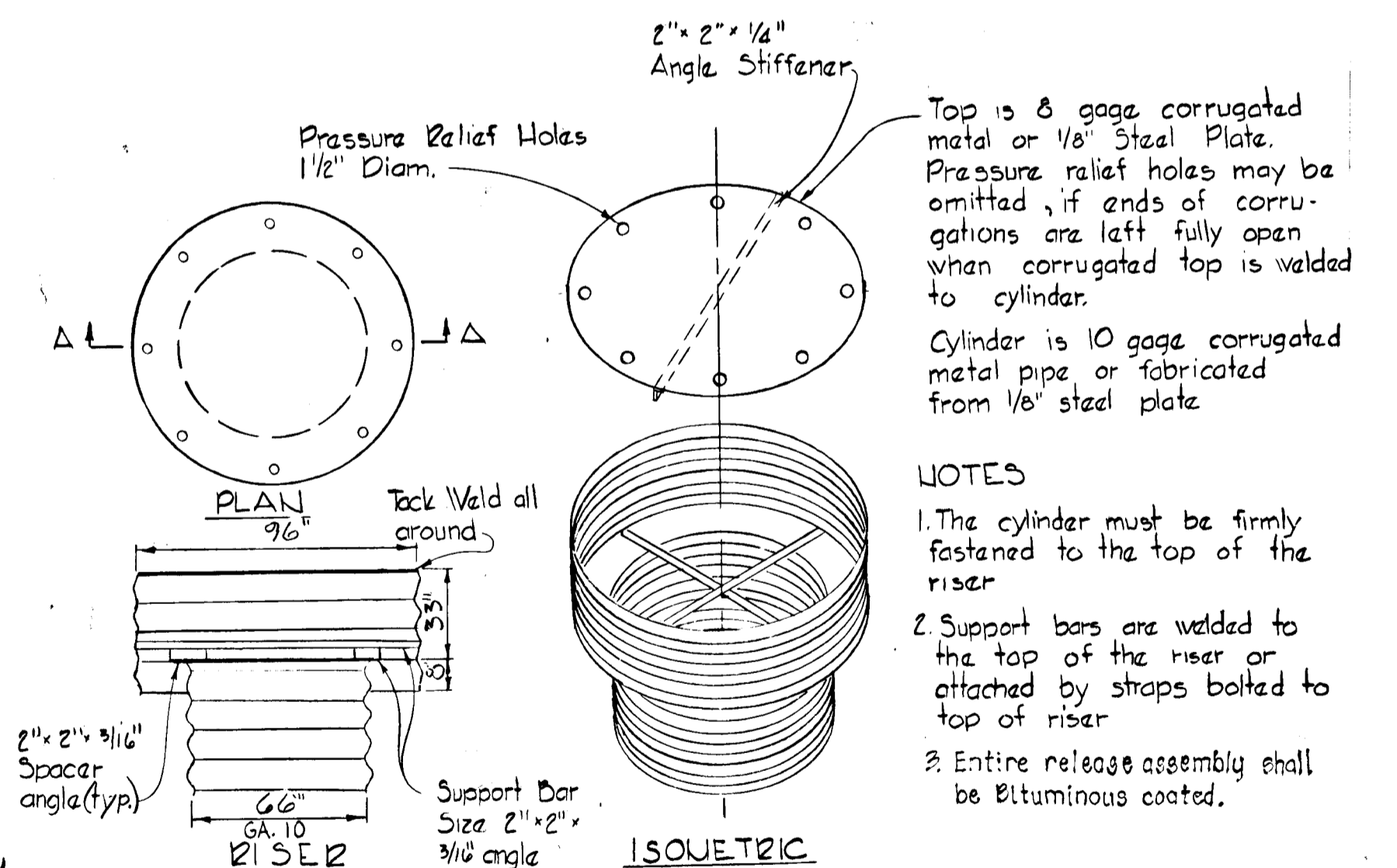
ELEVATION OF
UNASSEMBLED COLLAR

NOTES FOR COLLAR:

- The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at time of installation.
- Each collar shall be furnished with two 1/2" diameter rods with standard tank lugs for connecting collars to pipe.

DETAILS OF CORRUGATED METAL
ANTI-SEEP COLLAR

No Scale



CONCENTRIC TRASH RACK
AND ANTI-VORTEX DEVICE

No Scale

- NOTES
- The cylinder must be firmly fastened to the top of the riser.
 - Support bars are welded to the top of the riser or attached by straps bolted to top of riser.
 - Entire release assembly shall be bituminous coated.

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.

Approved: *[Signature]* 9-3-80
Date

Approved: *[Signature]* 9-3-80
Date

Plan Number: E-80-157

Approved: Howard County Department of Public Works

APPROVED: Howard County Office of Planning and Zoning

Chief Bureau of Engineering: *[Signature]* 9-12-80
Date

Planning Director: *[Signature]* 9-12-80
Date

DEVELOPER: I certify that all development and/or construction will be done according to these plans of development, pond construction and erosion and sediment control. I also authorize periodic on site inspection by the 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. I will provide the Howard Soil Conservation District with a red-lined as built of this pond within 30 days of completion.

Signature of Developer: *[Signature]* DATE

PURDUM & JESCHKE
CONSULTING ENGINEERS
LAND SURVEYORS

1023 North Calvert Street
Baltimore, Maryland 21202 301/837-0194

ENGINEER: 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 Cons. District. I have notified the developer that he must provide the Howard Soil Conservation District with a red-lined as built of the pond within 30 days of completion.

Signature of Engineer: *[Signature]* DATE



STORM WATER MANAGEMENT
MAYFIELD MANOR
SECTION ONE, AREA ONE

FIRST ELECTION DISTRICT HOWARD COUNTY MARYLAND
APRIL, 1980 SCALE: AS NOTED
TAX MAP 37 PARCEL 162

SHEET 10 OF 10

DESIGNED: A.E.L.
DRAWN: S.P.B.
CHECKED: A.E.L.