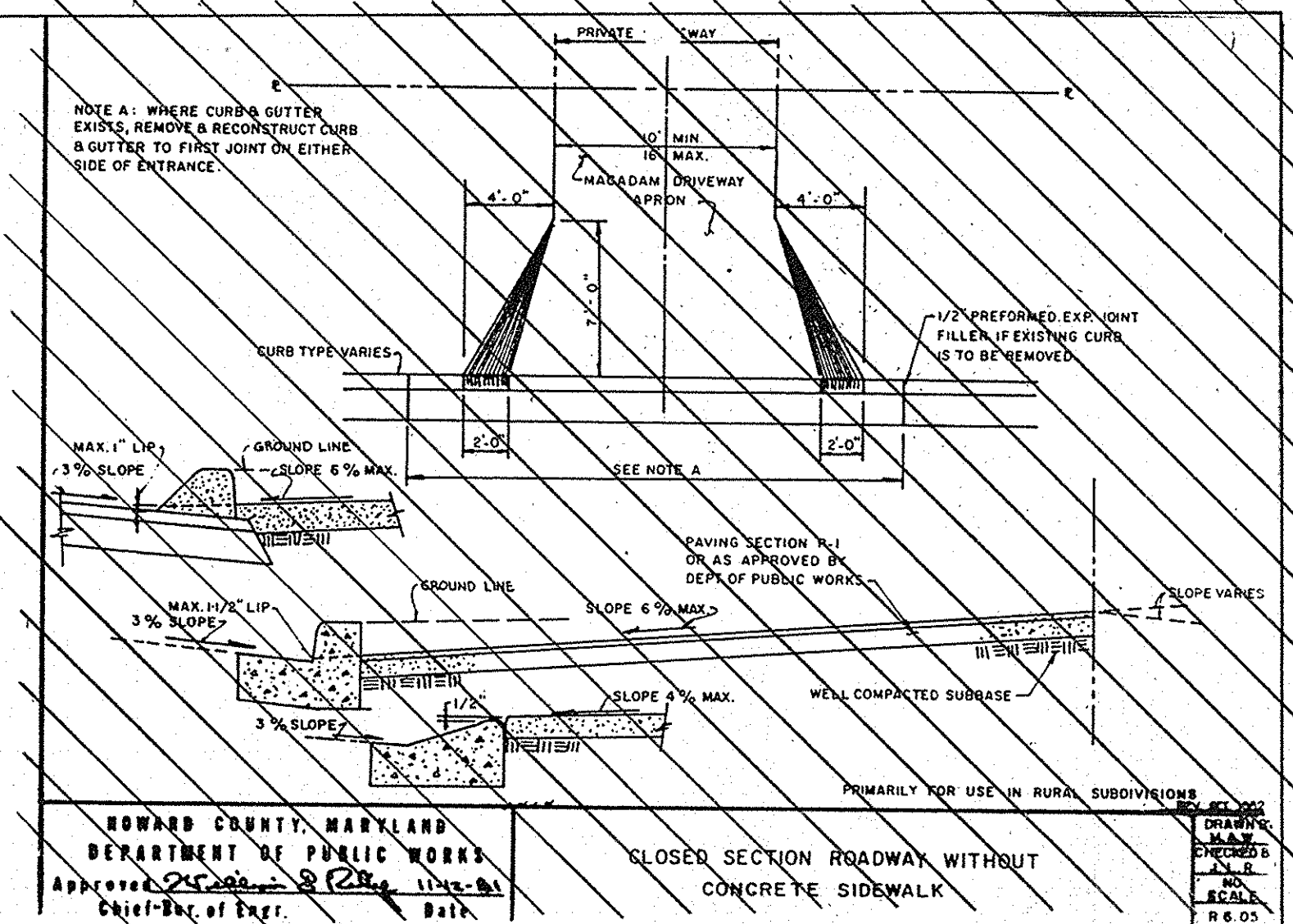
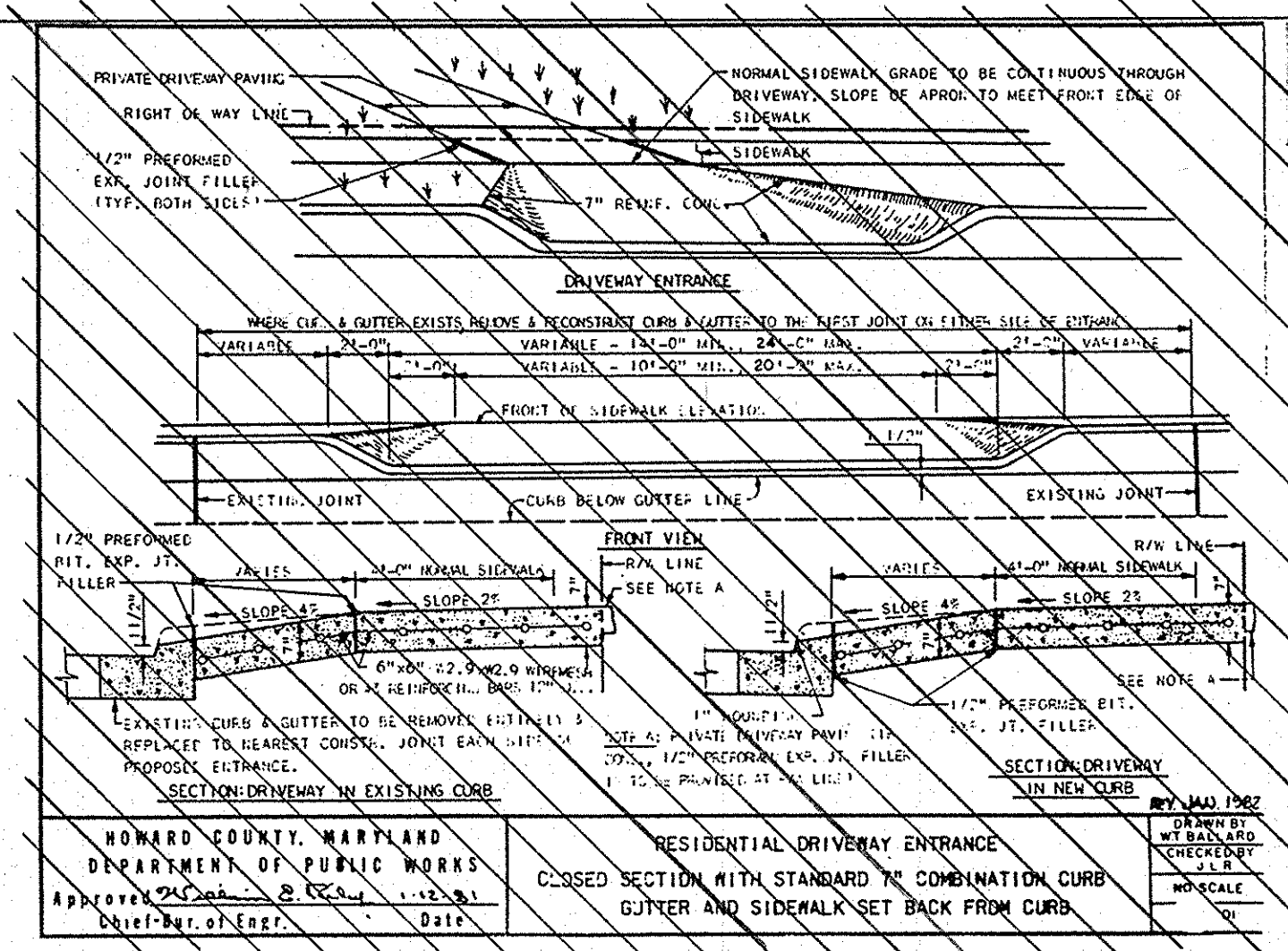
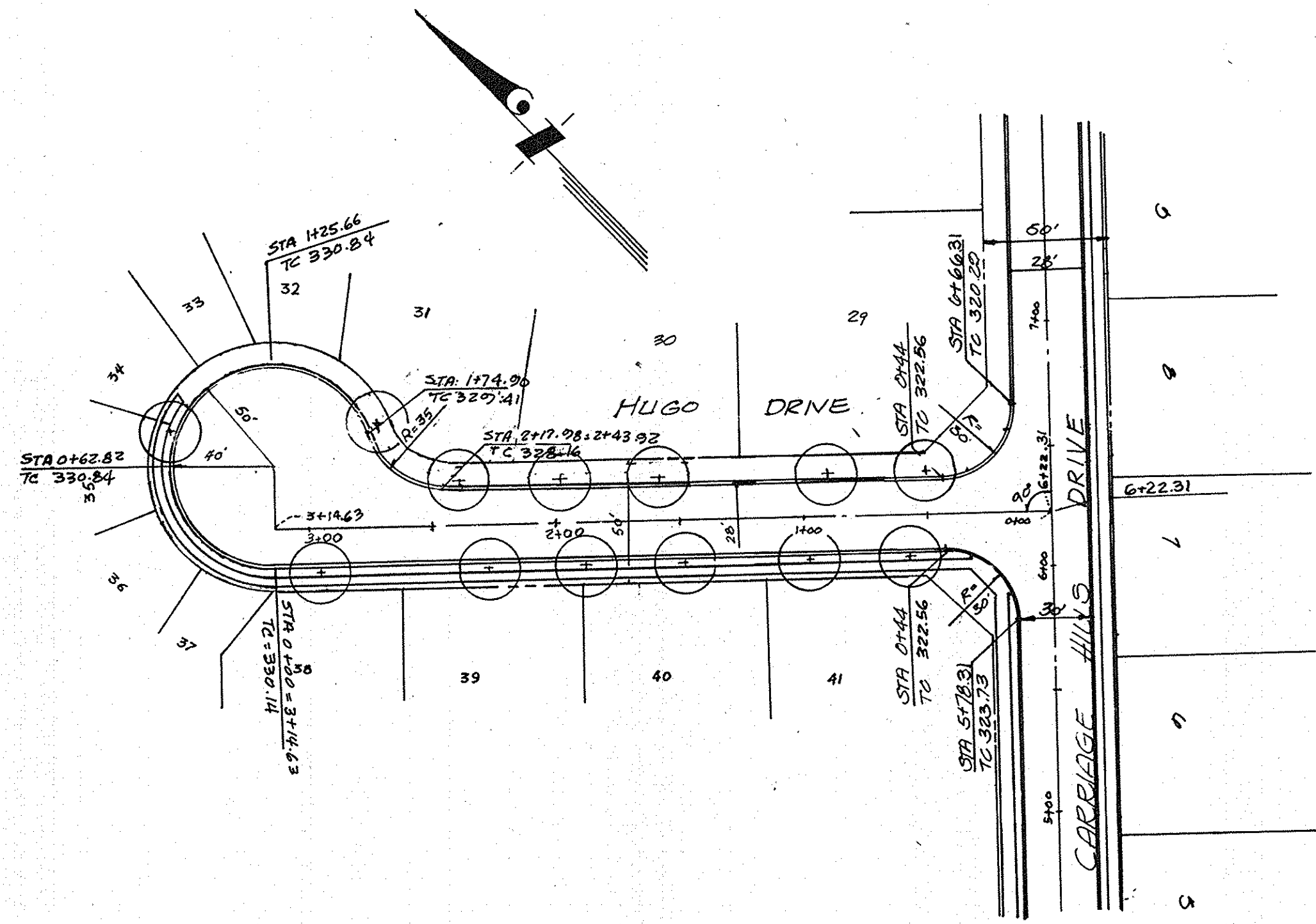






DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLAN \_\_\_\_\_  
 NOTED CHECK \_\_\_\_\_  
 NO. \_\_\_\_\_

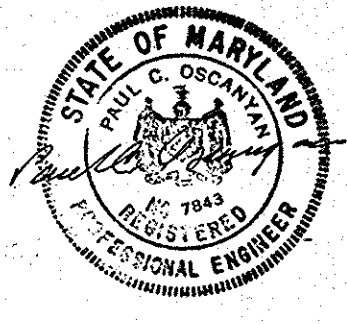


APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM-  
 DRAINAGE SYSTEMS AND ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*William S. Ryan* 3-28-85  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*John M. Marchman* 3-15-85  
 CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION DATE



DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PROFILE \_\_\_\_\_  
 NOTED CHECK \_\_\_\_\_  
 NO. \_\_\_\_\_

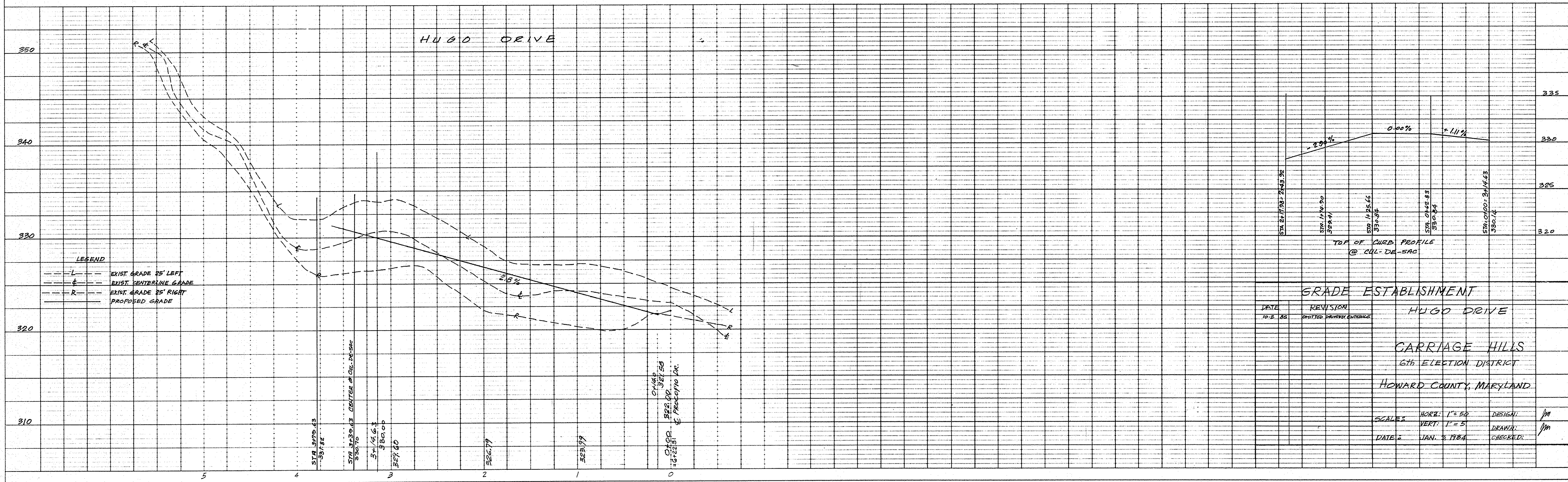


PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE  
 TABLE  
 PRINTED IN U.S.A.





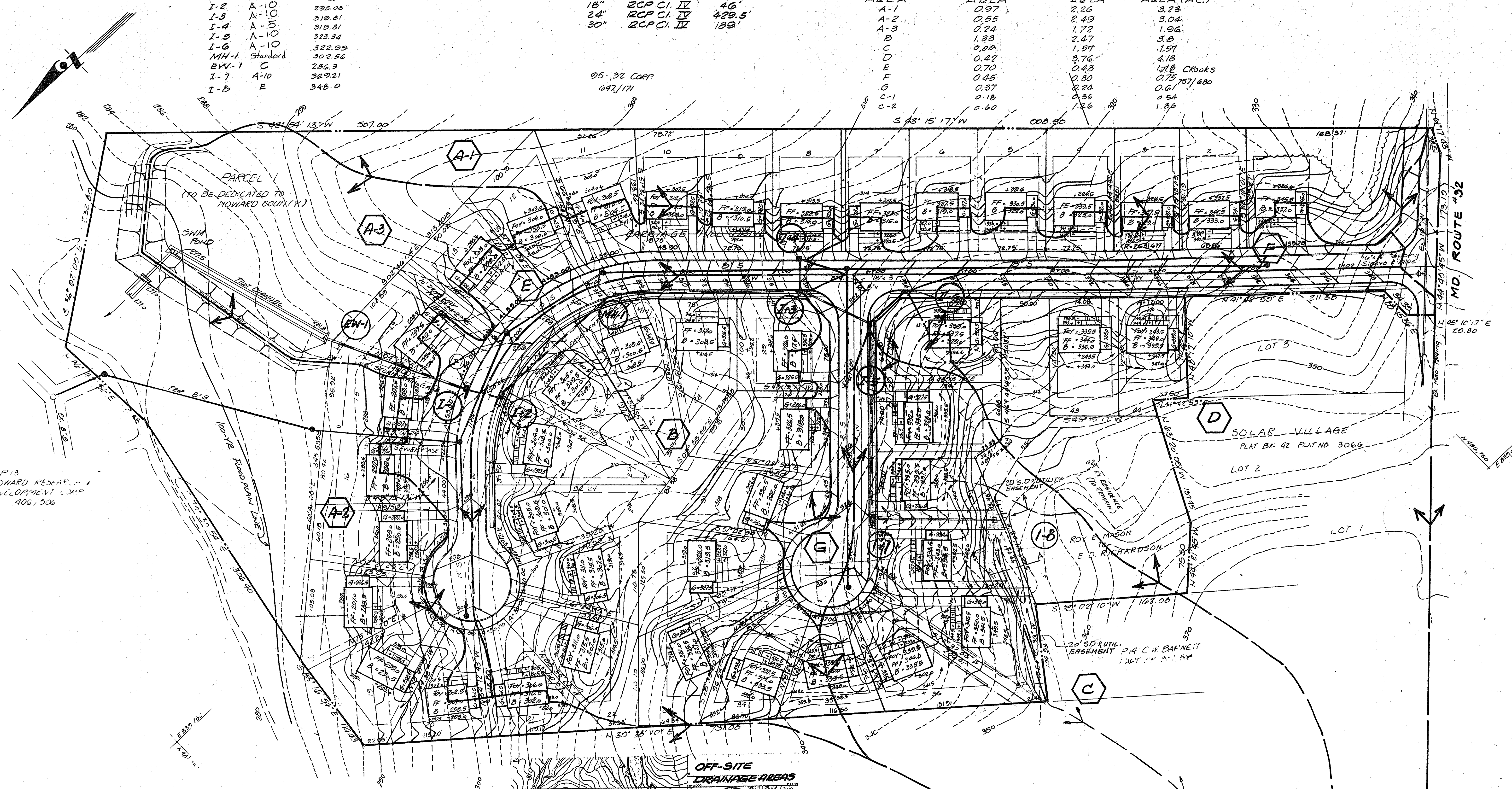


STRUCTURE SCHEDULE			
No.	Type	Top Elevation	Remarks
I-1	A-10	295.80	
I-2	A-10	295.08	
I-3	A-10	319.81	
I-4	A-5	319.81	
I-5	A-10	323.34	
I-6	A-10	322.99	
MW-1	Standard	302.56	
EW-1	C	286.3	
I-7	A-10	329.21	
I-8	E	348.0	

PIPE SCHEDULE			
Size	Pipe	Length	
15"	RCP C.I. IV	39'	
18"	RCP C.I. IV	46'	
24"	RCP C.I. IV	429.5'	
30"	RCP C.I. IV	139'	

DRAINAGE DATA			
DRAINAGE AREA	IMPERVIOUS AREA	PEDVIOUS AREA	TOTAL AREA (AC.)
A-1	0.97	2.26	3.23
A-2	0.55	2.49	3.04
A-3	0.24	1.72	1.96
B	1.33	2.47	3.8
C	0.80	1.57	2.37
D	0.42	3.76	4.18
E	0.70	0.43	1.13
F	0.45	0.30	0.75
G	0.37	0.24	0.61
C-1	0.18	0.54	0.72
C-2	0.60	1.26	1.86

05-32 CORP  
647/171



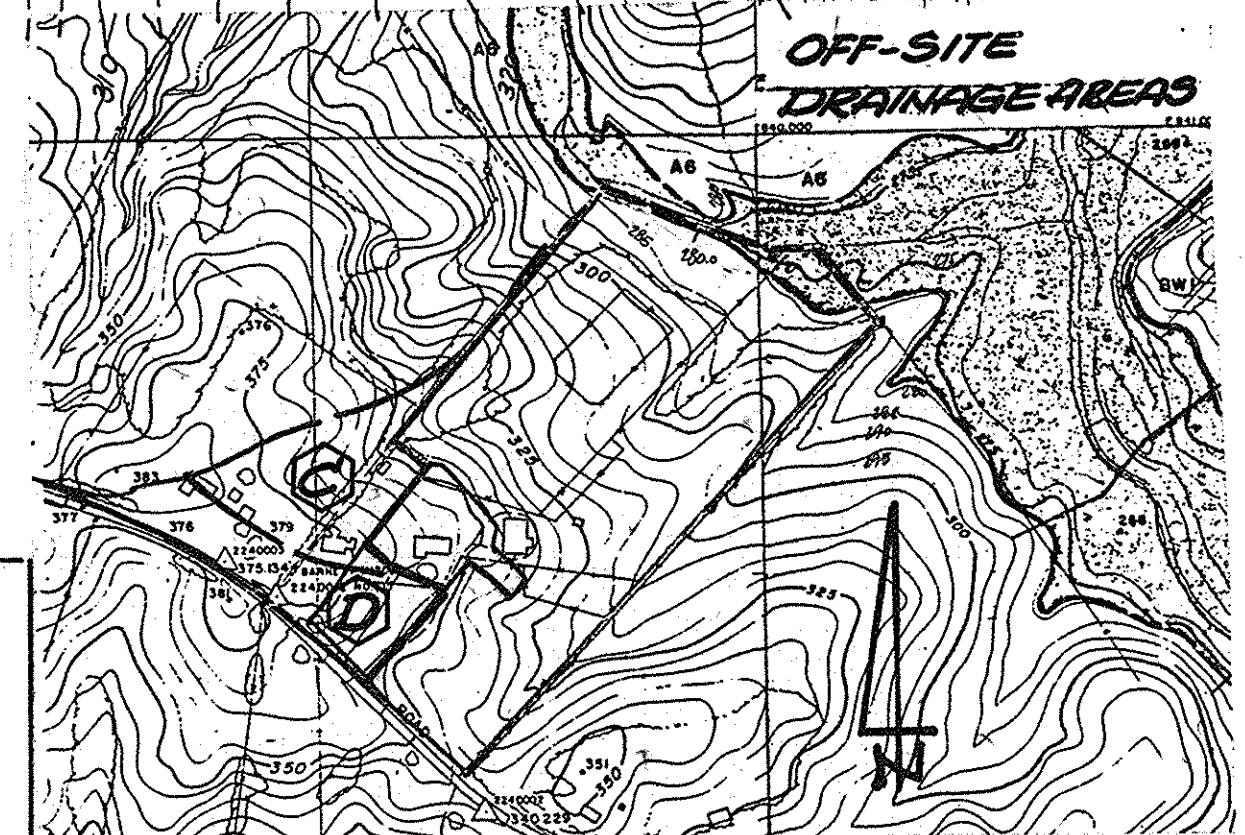
P13  
HOWARD RESEARCH &  
DEVELOPMENT CORP  
406/506

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM-  
DRAINAGE SYSTEMS AND ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

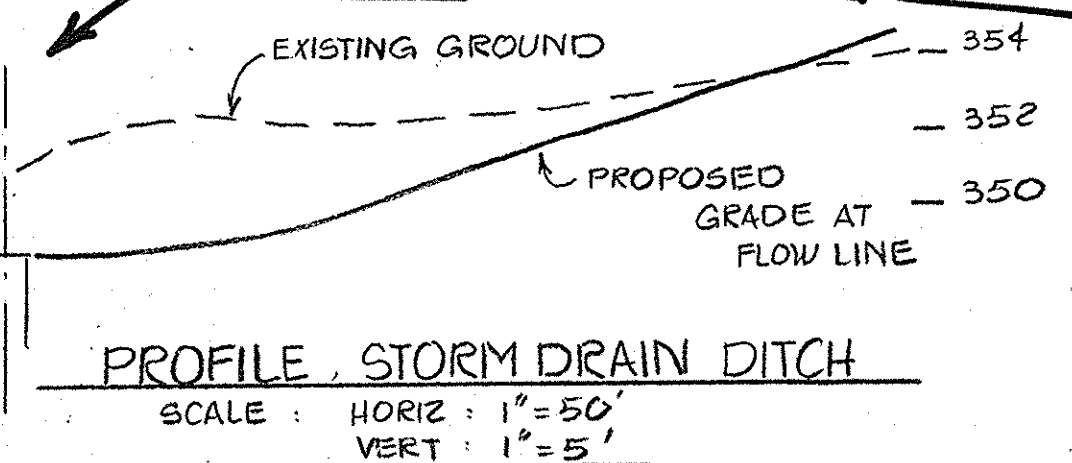
*John W. McArthur* 3-28-85  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*John W. McArthur* 3-15-85  
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION DATE

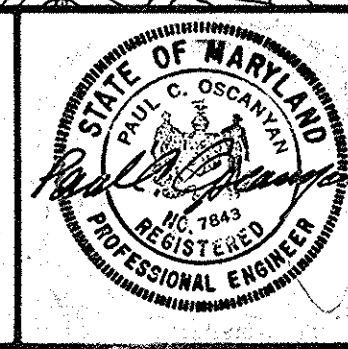


SECTION A-A  
SCALE: HORIZ: 1"=10'  
VERT: 1"=5'



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20910  
(301) 585-5676



DES ST	DRN ST	CHK PCO	DATE	BY	NO	REVISION	DATE
			17 Aug 84	JW	1	Addition of Storm Drain	3-28-85

**STORM DRAINAGE PLAN  
AND DRAINAGE AREA MAP**

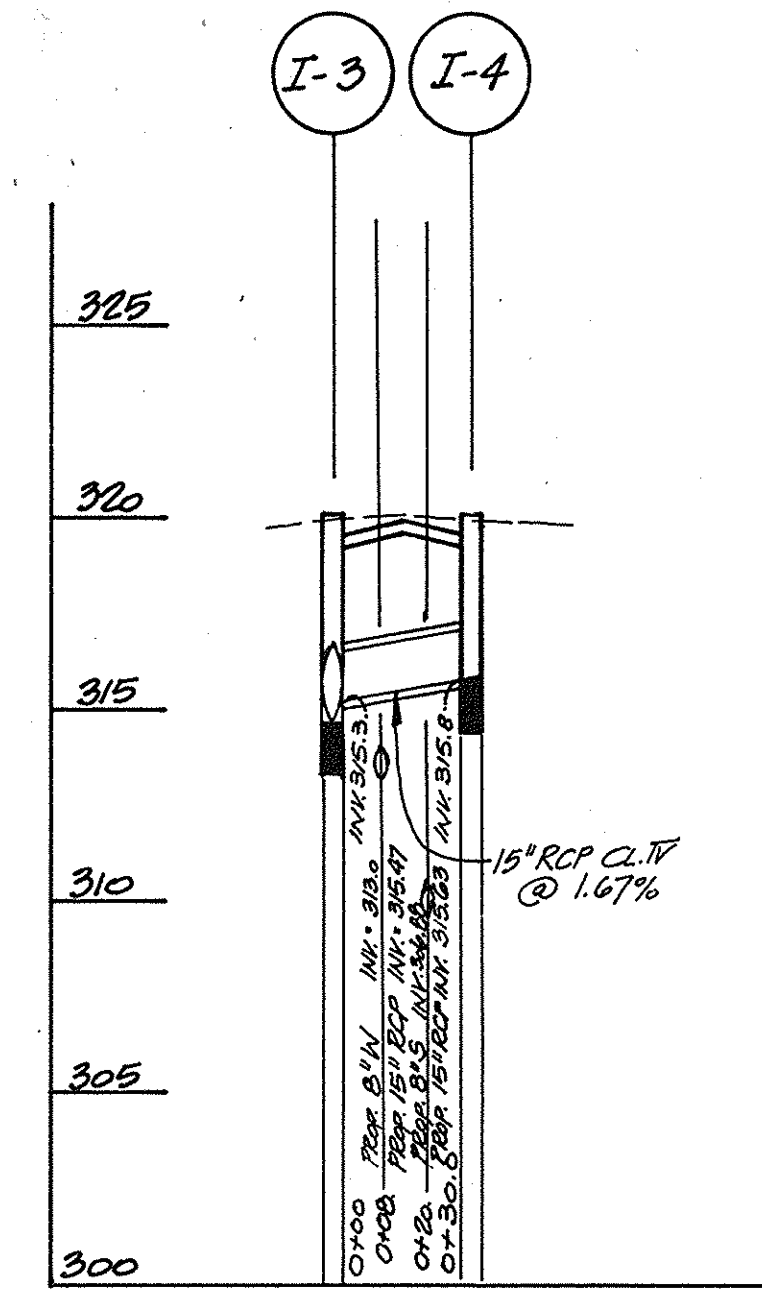
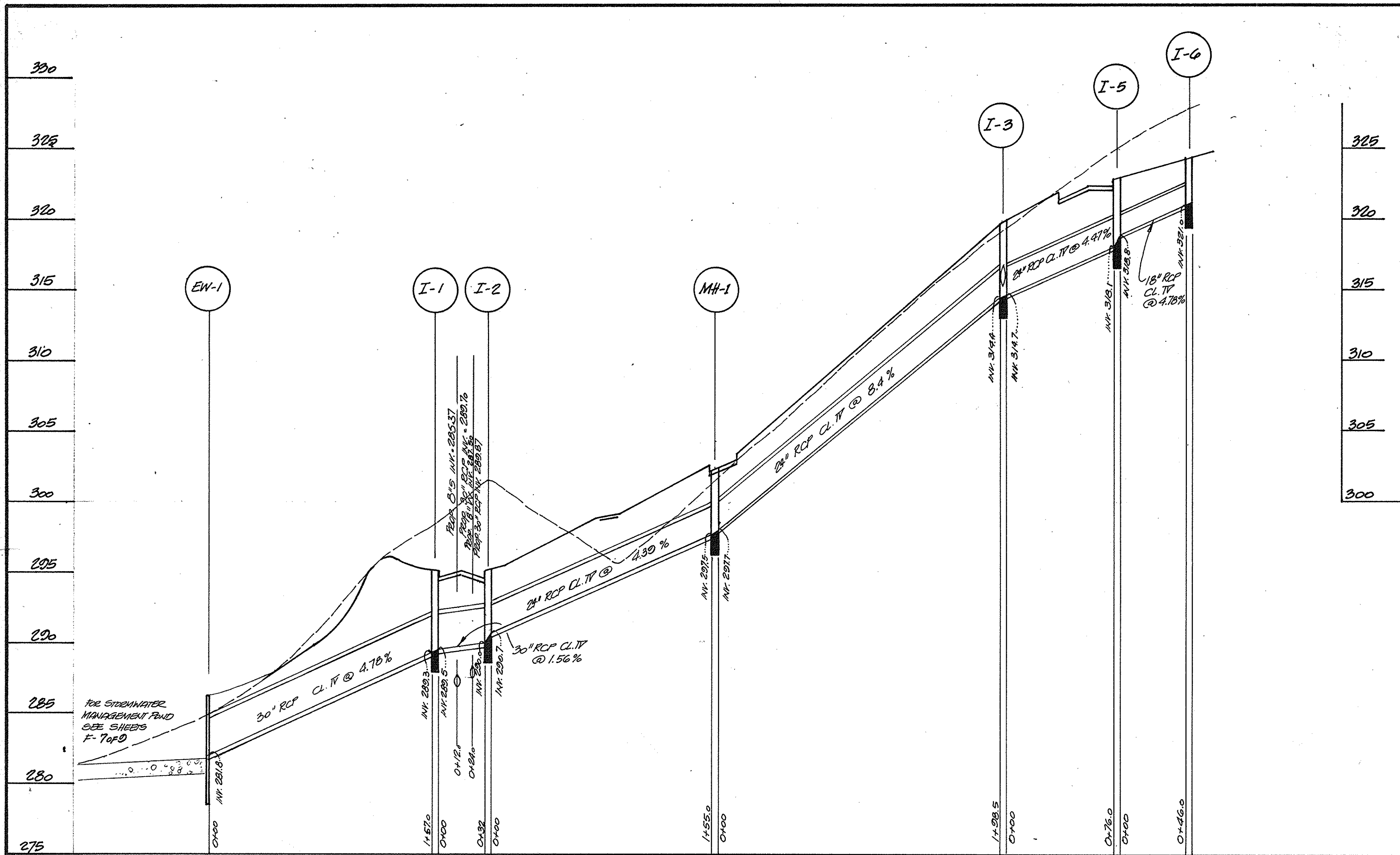
600 SCALE MAP NO. 42 BLOCK NO.

CARRIAGE HILLS  
Lots 1-45  
Election District #6  
Howard County, Maryland

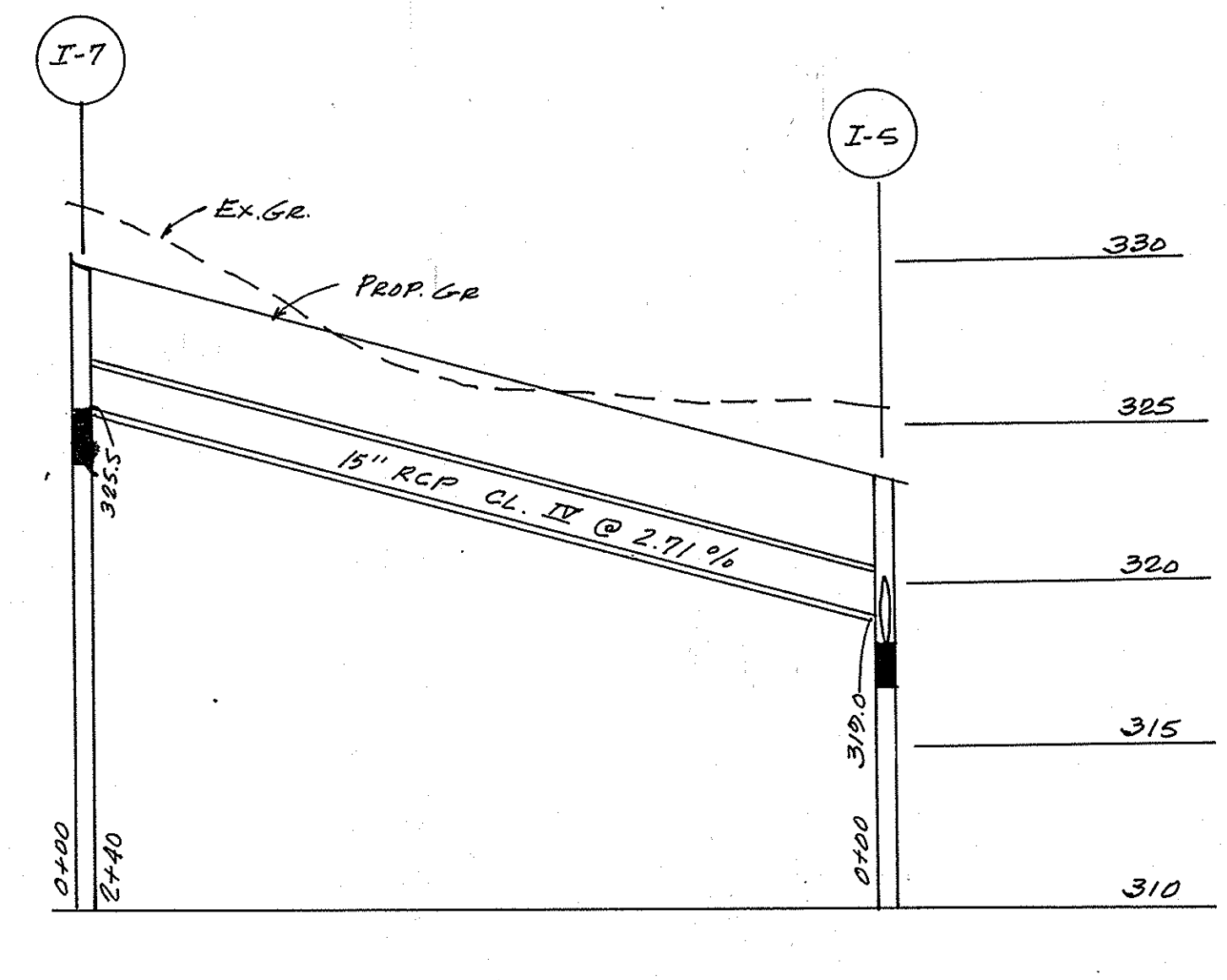
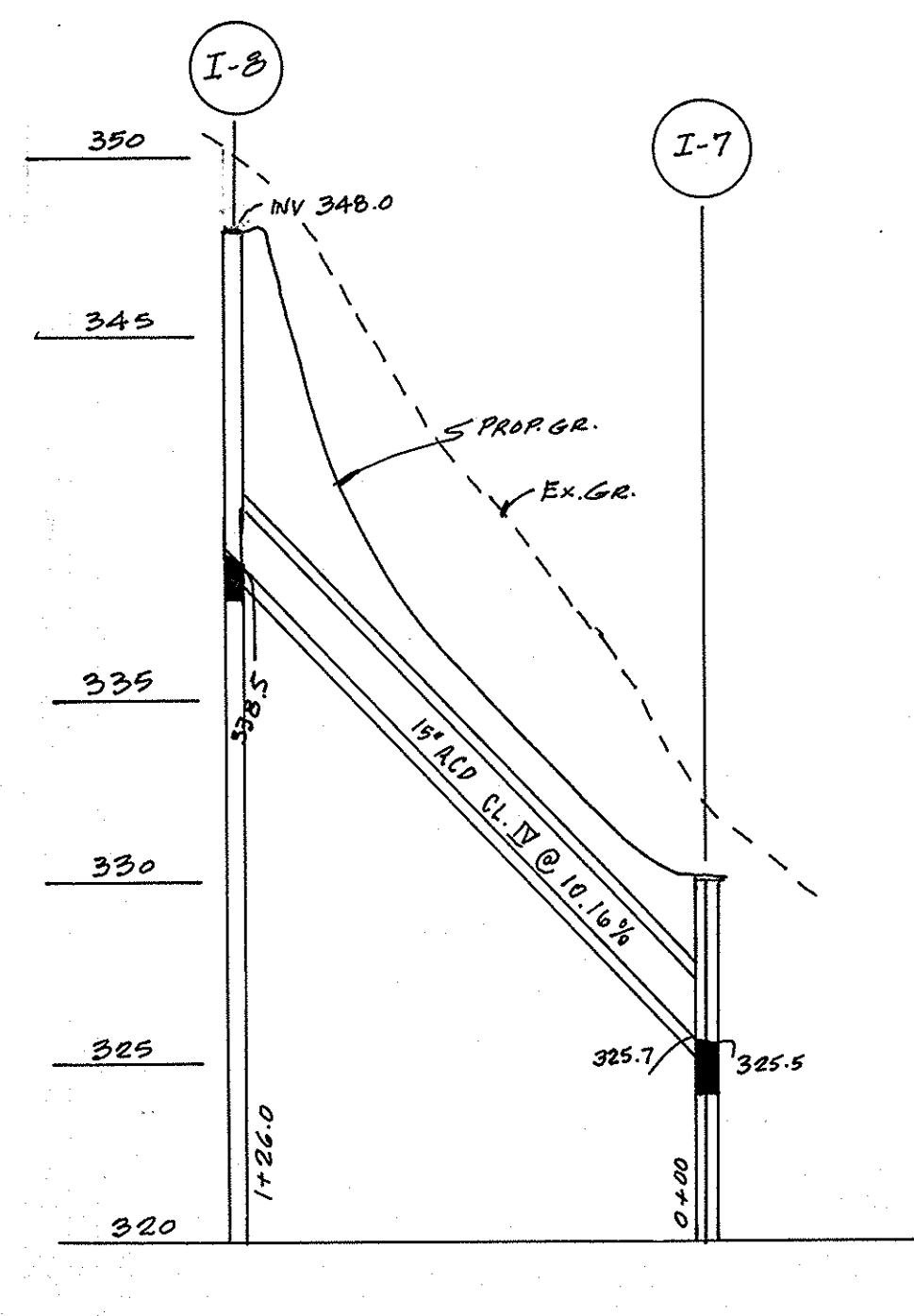
TAX MAP No. 42

SCALE AS SHOWN  
SHEET F  
4 OF 10





BORING NO. 1		BORING NO. 4	
DEPTH	DESCRIPTION	DEPTH	DESCRIPTION
0	Soft dark brown sandy clay and silt topsoil (ML-CL)	0	Brown, silty and clayey, fine sand topsoil with decomposed vegetation (CL-ML)
0.5	Yellow, loose, silty and clayey fine to coarse sand with some gravel (SM-SC)	0.5	Red and blue marine-type clays (CL)
3.5	Bluish green medium stiff clay (CL-ML)	3.0	Moist yellow brown fine to medium sand with some clay and silt (SC-SM)
7.5	Hole collapsed	4.0	Bluish green fine to medium sand with some silt and gravel (SM-SC)
BORING NO. 2		BORING NO. 5	
DEPTH	DESCRIPTION	DEPTH	DESCRIPTION
0	Brown sandy clay and silt (CL-ML)	0	Brown silty and clayey fine sand (ML-CL)
0.5	Brown, silty and clayey fine sand (SM-SC)	0.2	Brown-green medium to coarse sand with silt and clay (SC-SM)
3.5	Blue, green, sandy marine clay with silt (CL-ML)	6.2	Bluish green fine sand and gravel (SC-GC)
6.5	Hole collapsed	7.5	Bottom of hole
BORING NO. 3			
DEPTH	DESCRIPTION		
0	Brown silty fine sand. Topsoil with clay (CL-ML)		
0.8	Brown/yellow loose fine sand with silt and traces of gravel (SC-SM)		
3.5	Reddish blue marine sandy clay with gravel and cobbles (CL-GC)		
6.5	Hole collapsed		



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 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*[Signature]* 3-23-85  
 CHIEF, BUREAU OF ENGINEERING

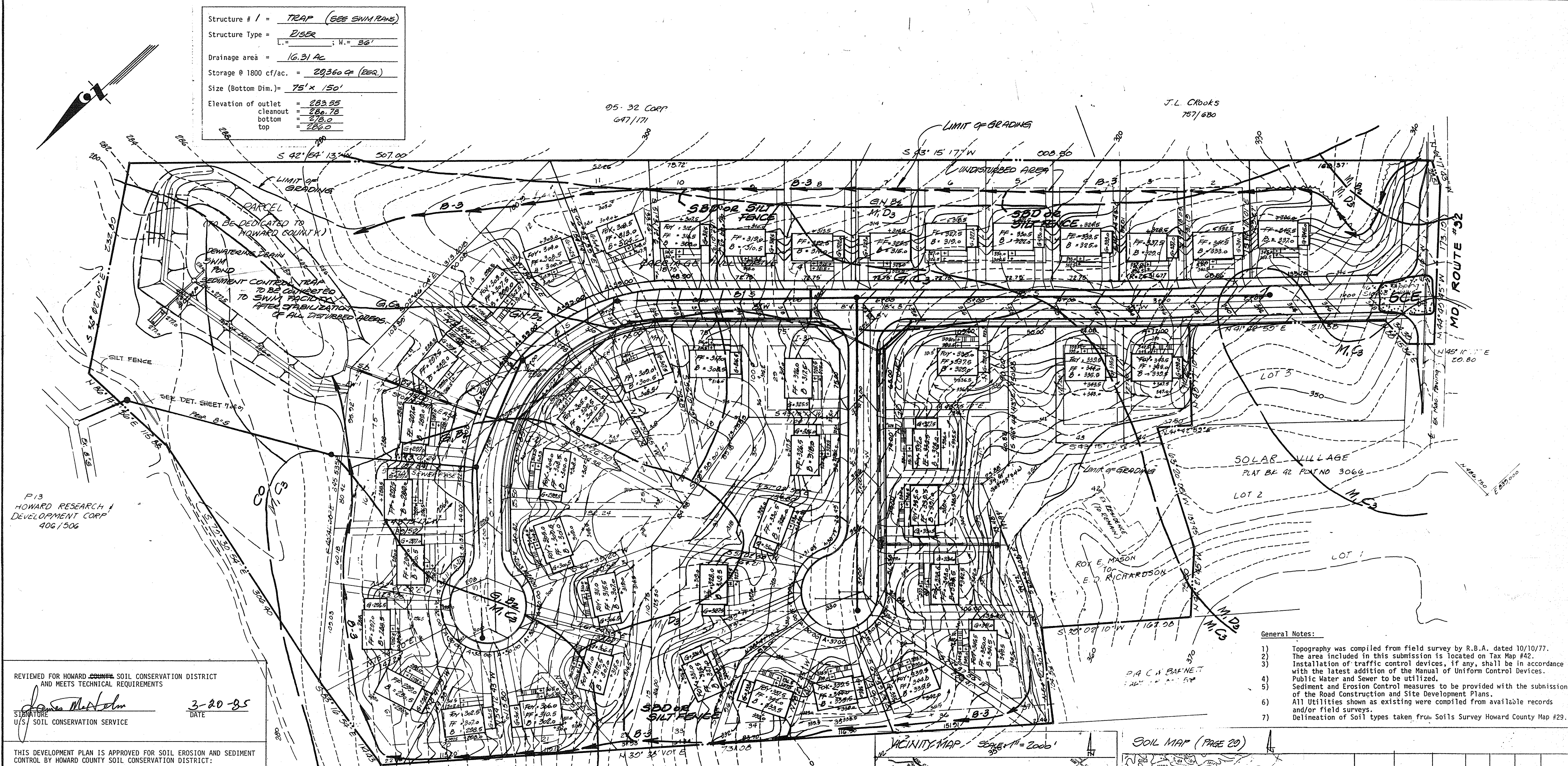
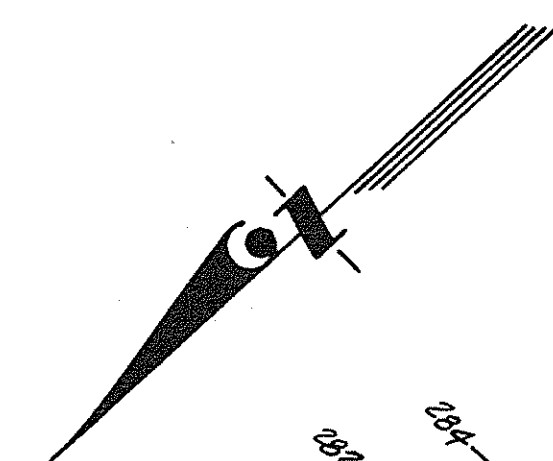
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*[Signature]* 3-15-85  
 CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION

<p><b>IPDS</b> The Interprofessional <b>PLANNING &amp; DESIGN STUDIO, LTD.</b> Engineers • Architects • Surveyors Planners &amp; Landscape Architects</p>	<p>802 Siigo Avenue Silver Spring, Md. 20910 (301) 585-5676</p>		DES: ST		<p>STORM DRAINAGE PROFILES...</p>	<p>CARRIAGE HILLS Lots 1-45 Election District #6 Howard County, Maryland</p>	<p>SCALE AS SHOWN</p>
			DRN: ST				



Structure # 1 = TRAP (SEE SWM RANS)  
 Structure Type = DISER  
 L. = \_\_\_\_\_ ; W. = 36'  
 Drainage area = 16.31 AC  
 Storage @ 1800 cf/ac. = 29360 CF (REQ.)  
 Size (Bottom Dim.) = 75' x 150'  
 Elevation of outlet  
 cleanout = 283.55  
 bottom = 280.78  
 top = 278.0  
 bottom = 286.0



P13  
 HOWARD RESEARCH &  
 DEVELOPMENT CORP  
 406/506

- General Notes:
- 1) Topography was compiled from field survey by R.B.A. dated 10/10/77.
  - 2) The area included in this submission is located on Tax Map #42.
  - 3) Installation of traffic control devices, if any, shall be in accordance with the latest addition of the Manual of Uniform Control Devices.
  - 4) Public Water and Sewer to be utilized.
  - 5) Sediment and Erosion Control measures to be provided with the submission of the Road Construction and Site Development Plans.
  - 6) All Utilities shown as existing were compiled from available records and/or field surveys.
  - 7) Delineation of Soil types taken from Soils Survey Howard County Map #29.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
 Signature: *Joan M. ...*  
 DATE: 3-20-85  
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT:  
 Signature: *Christie Ziehm*  
 DATE: 3-21-85  
 HOWARD COUNTY SOIL CONSERVATION DISTRICT

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM-DRAINAGE SYSTEMS AND ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Signature: *William E. Roy*  
 DATE: 3-20-85  
 CHIEF, BUREAU OF ENGINEERING

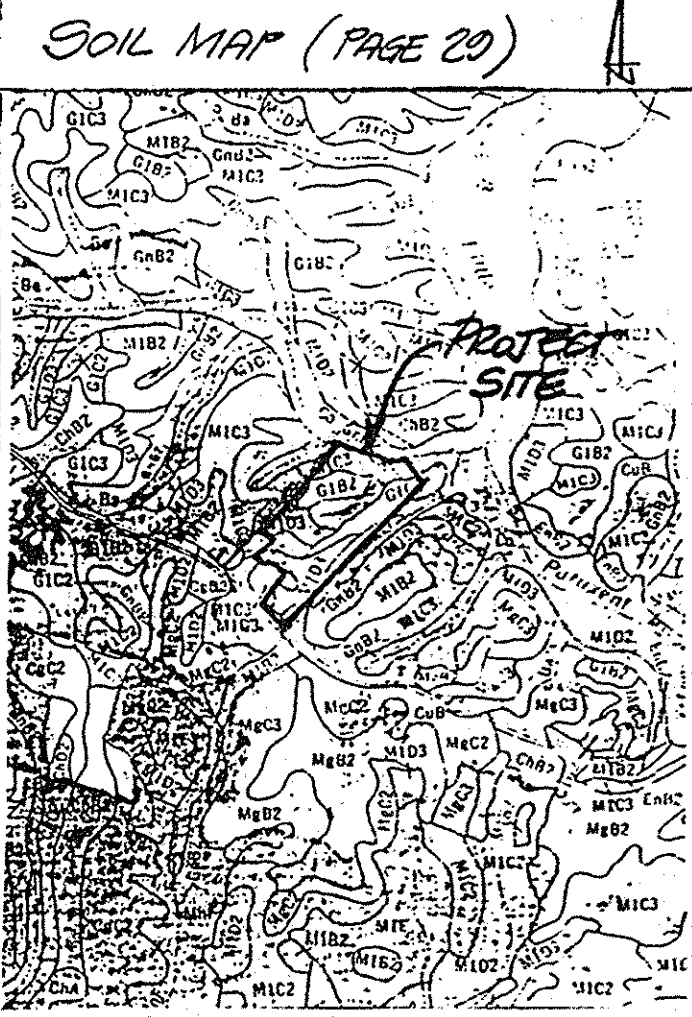
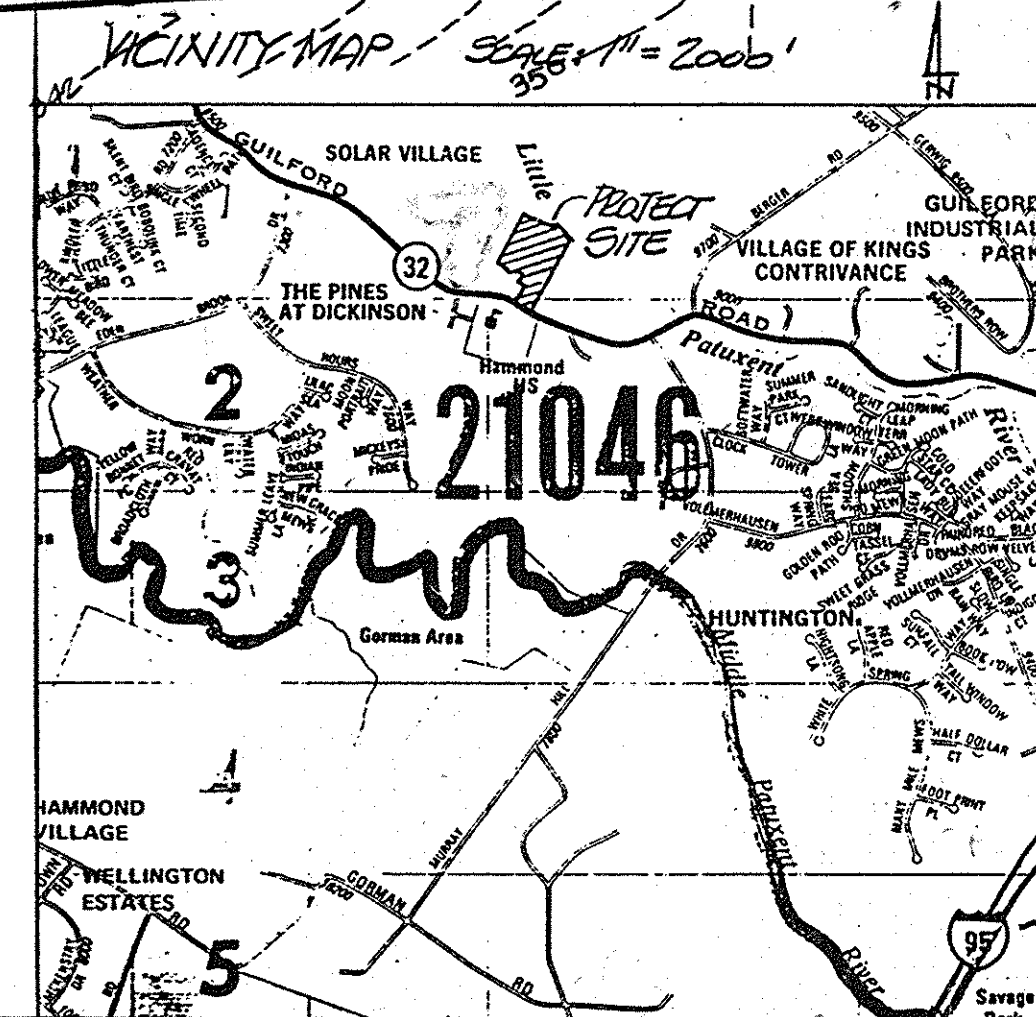
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 Signature: *Joseph M. ...*  
 DATE: 3-15-85  
 CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION

Contract Purchaser  
 H & A Construction Co.  
 C/O Mr. Albert Procopio  
 13 "C" Street, Suite H  
 Laurel, Maryland 20707

Property Owners  
 Charles D. Smith, Joice O. Smith  
 Timothy L. Kirkpatrick and  
 Patricia Kirkpatrick  
 Fairfax, Virginia  
 C.W. BARRETT  
 COLUMBIA, MD.

Land-Analysis  
 Slopes 2-15%  
 Vegetation On Northerly Perimeter of Site  
 Elevations Range from 280 to 370  
 Existing Structures To be Removed (Except as Noted)  
 Access Point As shown on highest elevation for good visibility from Md. Rte. 32  
 Soil Types Generally in Northerly and Easterly Direction  
 Drainage Pattern to Natural Stream

P303  
 SPACE ACRES, INC  
 373/532



SOILS DATA	DESIGNATION	WATER TABLE	PERMEABILITY (INCHES PER HOUR)	PH	SHRINK-SWELL POTENTIAL	EARTH WORK SUITABILITY WHEN NET	ERODIBILITY & FROST ACTION POTENTIAL
GLENVILLE SILT LOAM	GNB2	1.5-3	0.63-2.0	4-5	LOW-MOD.	POOR	MOD.
GLENELG	G1B2 G1C3	30+	0.63-2.0	5-6	LOW	POOR	MOD.
MANOR LOAM	H1C3 H1D3	20+	0.63-2.0	4.5-5.5	LOW	POOR	MOD.
CODORUS SILT LOAM	C0	1.5-3.0	0.2-2.0	4.0-5.0	LOW-MOD.	VERY POOR	HIIG-I

#1125

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STATE OF MARYLAND  
 PROFESSIONAL ENGINEER

DES ST			
DRN ST			
CHK PCO			
DATE	Sept. 84	BY	NO
REVISION	Addition of storm drain		

SEDIMENT CONTROL PLAN

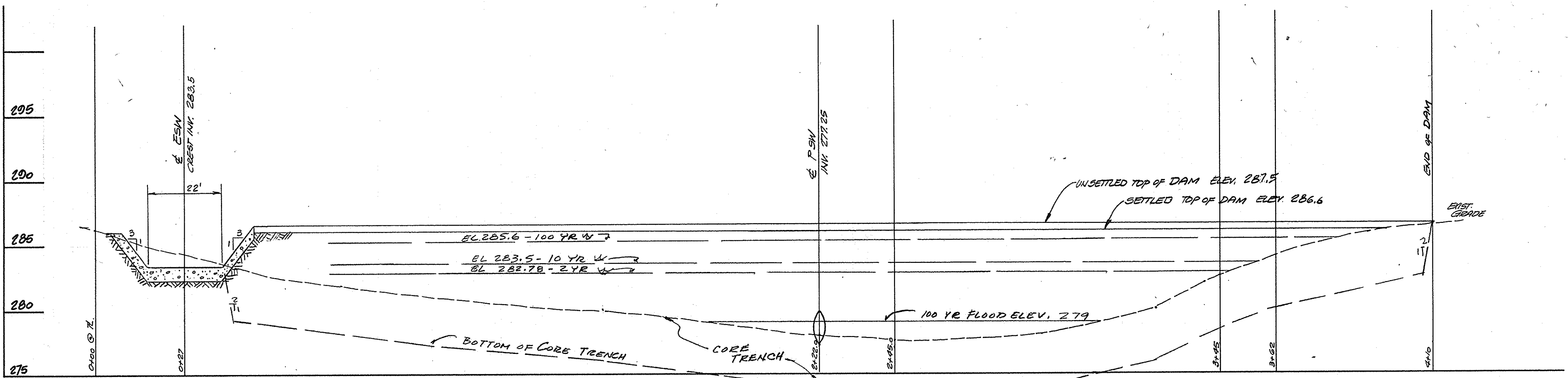
600 SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

TAX MAP No. 42

CARRIAGE HILLS  
 Lots 1-45  
 Election District #6  
 Howard County, Maryland

SCALE  
 1" = 50'  
 SHEET  
 6 OF 10





PROFILE AT & DAM  
SCALE: HORIZ = 1" = 20'  
VERT. = 1" = 5'

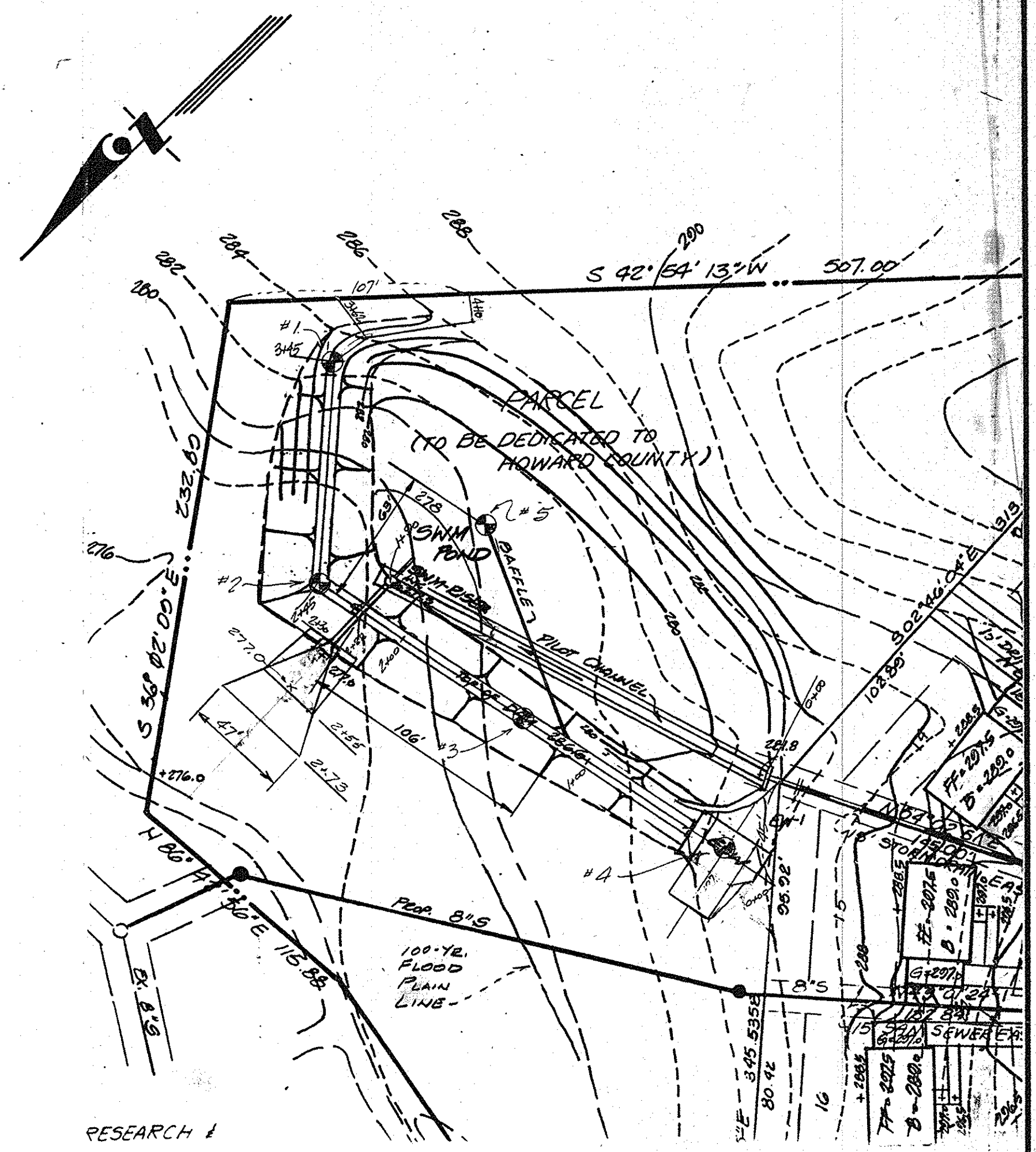
STAGE-DISCHARGE TABLE

ELEV. H	ORIFICE	Q psw	Q esw	Qtot
287	17.6	124	608	750
286	16.6	110	194	320.6
285	15.5	91	69	175.5
284	14.3	52	6	72.3
283	13.0	29	0	15.9
282	11.6	0	0	11.6
281	10.0	0	0	10.0
280	8.1	0	0	8.1
279	5.5	0	0	5.5
277.5	0	0	0	0

- NOTES:
- Construct basin embankment, plywood baffle, PSW, ESW, 12" Ø slotted standpipe, gravel cone and outfall as shown.
  - Paint red line 12" long x 2" high horizontally on 72" Ø riser at elevation 278.0. Clean out basin when sediment reaches this line.
  - When entire tributary area is stabilized and approval is given by Sediment Control Inspector, convert basin to stormwater management as follows:
    - Clean out basin to contours shown on plan; remove baffle.
    - Stabilize all exposed soil and disturbed areas.
    - Remove gravel cone and 12" Ø standpipe.
    - Cut 15" Ø BCCMP, 1' from 72" Ø riser.
    - Construct riprap entrance and sodded pilot channel.
4. See Sheet 5 of 9 for soil boring logs.

OUTFALL DESIGN

Q = 230  
 Ø = 48"  
 Tw < 0.5 Ø (Worst Case)  
 D<sub>50</sub> = 1.4"  
 La = 43"  
 M = 43 + 4 = 47



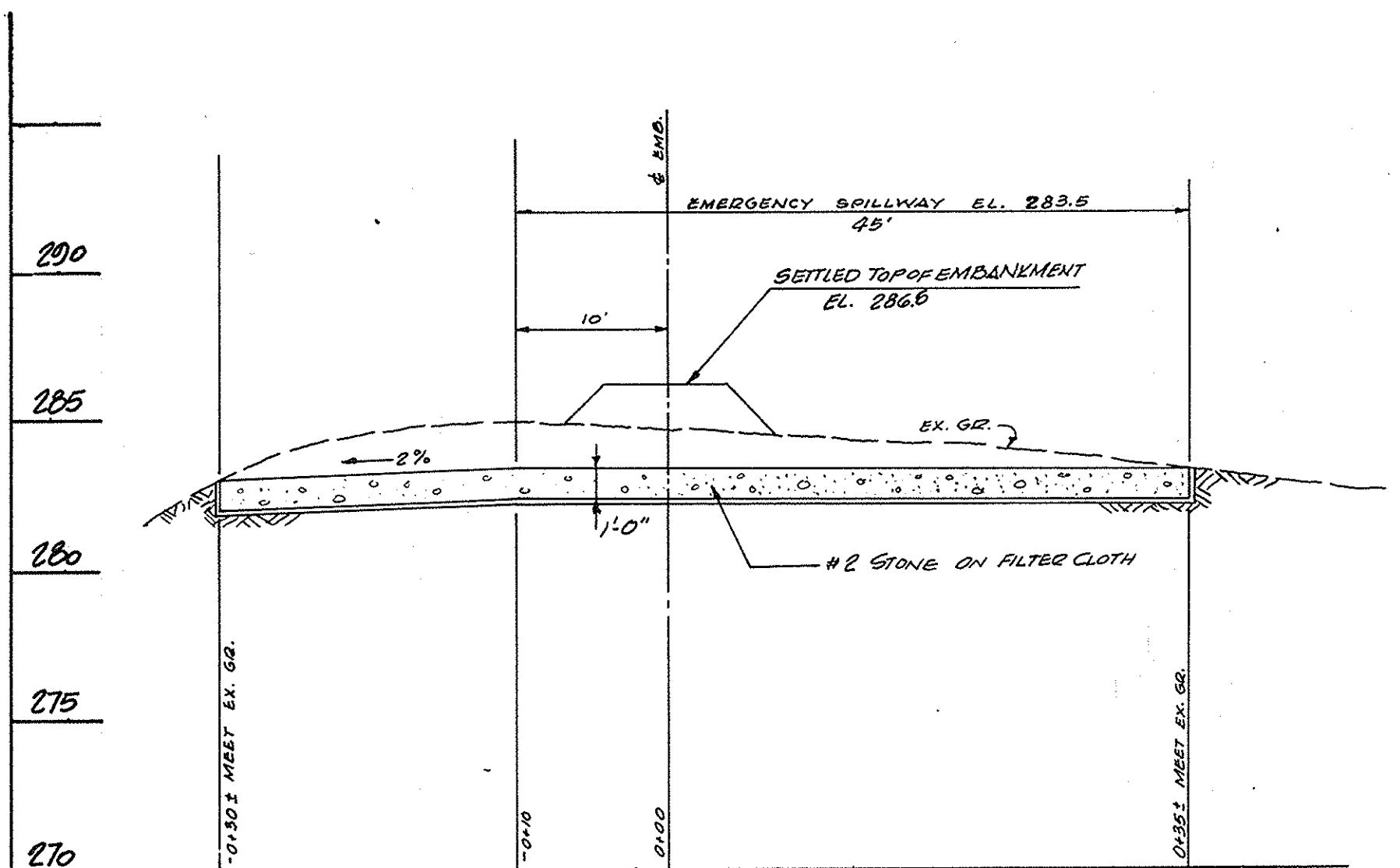
PLAN  
SCALE: 1" = 50'  
NOTE: MAINTAIN POSITIVE DRAINAGE TO BASIN AT ALL TIMES

PSW Base - Uplift Computations

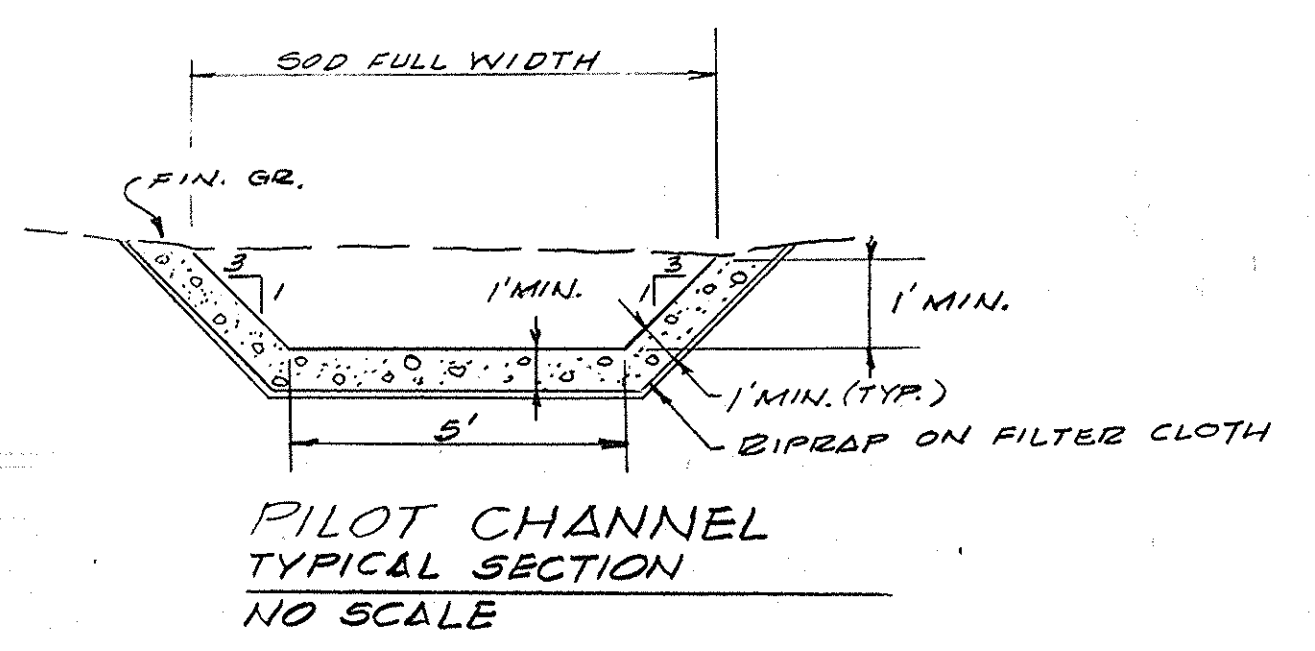
ET. PSW = 282.8  
 Inv. PSW = 277.5  
 H = 5.3

$V = 5.3 \times \frac{D^2}{4} \times 3.1416$   
 $U = 62.5 V (= \text{Uplift})$   
 D = 6.0'  
 $U = 9,366\#$   
 Ø 87.6 pcf, conc. req'd = 107 CFT  
 Actually provided: 8 x 8 x 2.5 = 160 CFT  
 F.S. = 160/107 = 1.5

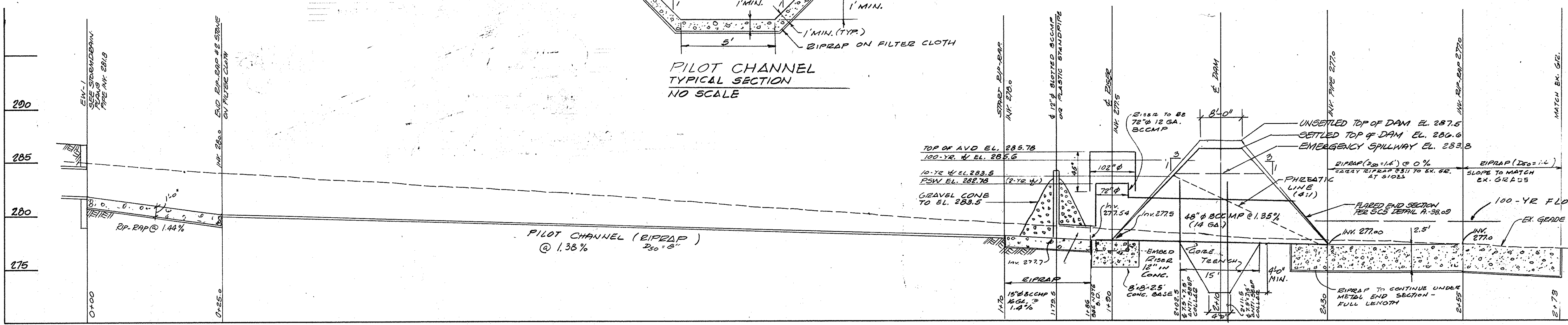
POND CLASSIFICATION = a  
 Storage - Height Product = < 3000  
 Watershed Area < 100 Ac.  
 Height to ESW Crest < 15'  
 Normal Surface Area < 10 Acres  
 Freeboard: 1.0' above ES Design Storm (Min.)



PROFILE OF EMERGENCY SPILLWAY @ &  
SCALE: HORIZ. 1" = 10'  
VERT. 1" = 5'



PILOT CHANNEL TYPICAL SECTION  
NO SCALE

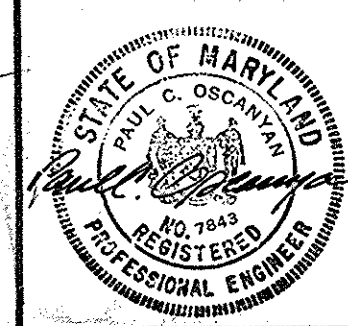


PROFILE OF PRINCIPAL SPILLWAY AND PILOT CHANNEL @ &  
SCALE: HORIZ. 1" = 10'  
VERT. 1" = 5'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 Date: 3/28/85  
 Chief, Bureau of Engineering

APPROVED: FOR PUBLIC WATER, PUBLIC SEWER, AND STORM DRAINAGE SYSTEMS & ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Date: 3/28/85  
 Chief, Bureau of Engineering

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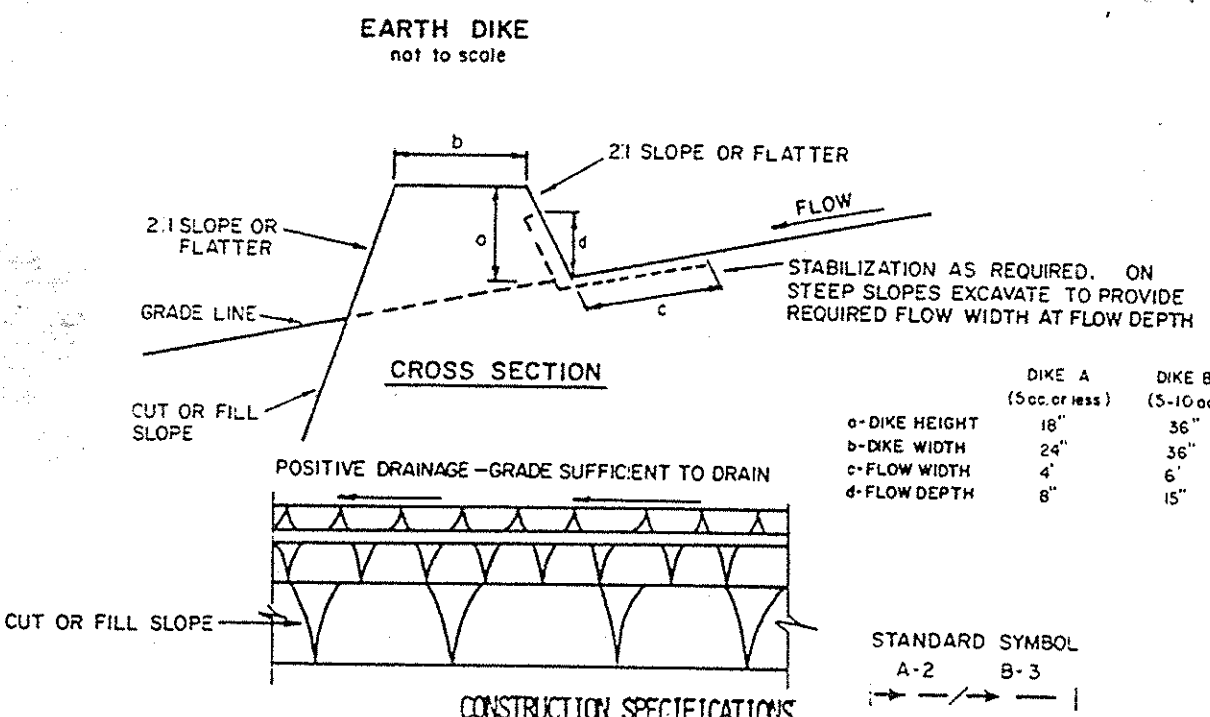
DES:	PCO
DRN:	PCO
CHK:	ST
DATE:	3/28/85
BY:	PCO
NO:	1
REVISION:	PSW Base Uplift Comps & Embedded Riser 12"
DATE:	3/15/85

**SEDIMENT CONTROL PLAN**  
 SEDIMENT BASIN - PLAN & PROFILES  
 600 SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

**CARRIAGE HILLS**  
 Lots 1-45  
 Election District #6  
 Howard County, Maryland

SCALE AS SHOWN  
 SHEET 7 OF 10

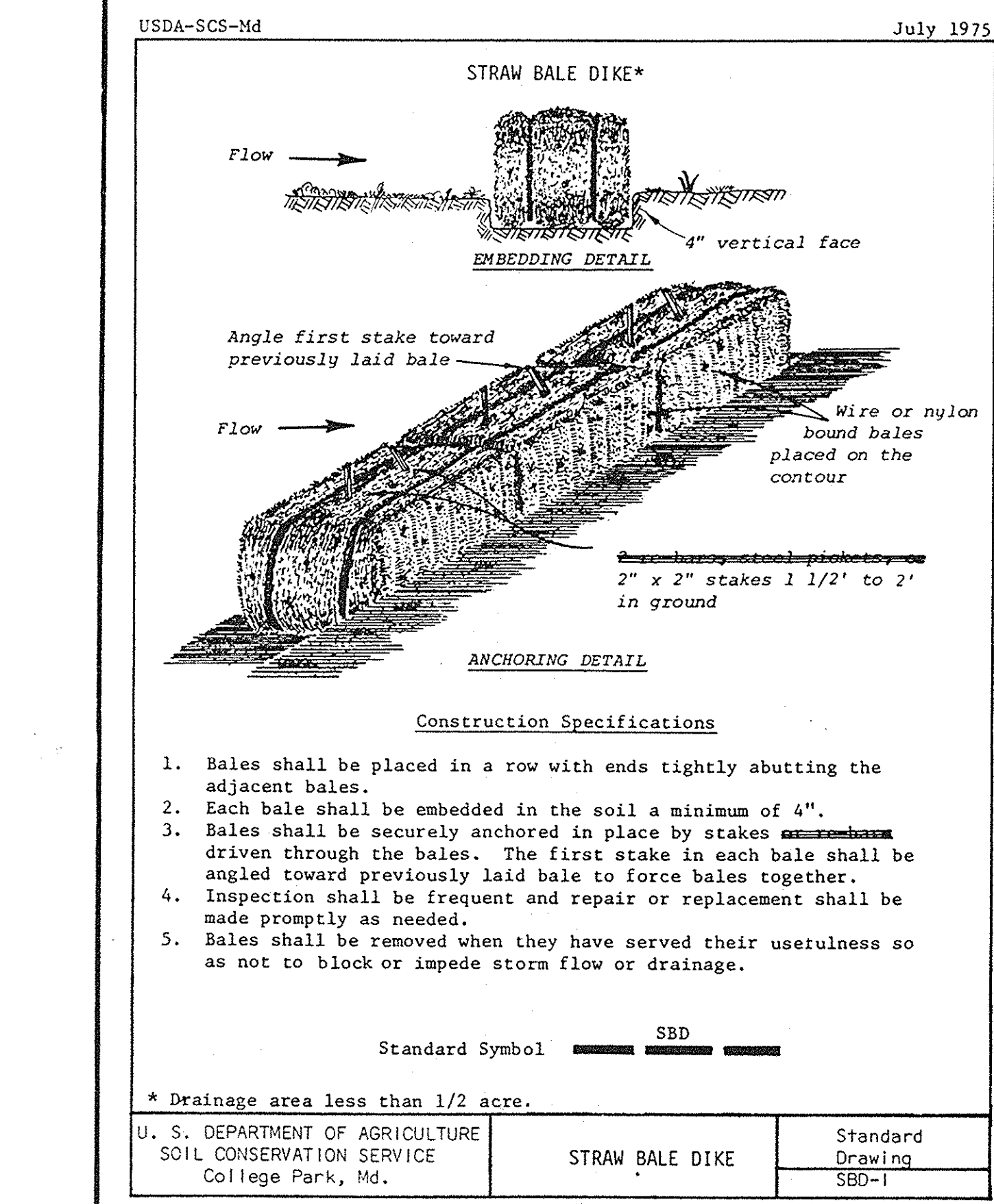




1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.  
 2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.  
 3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.  
 4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.  
 5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.  
 6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCESSIVE; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

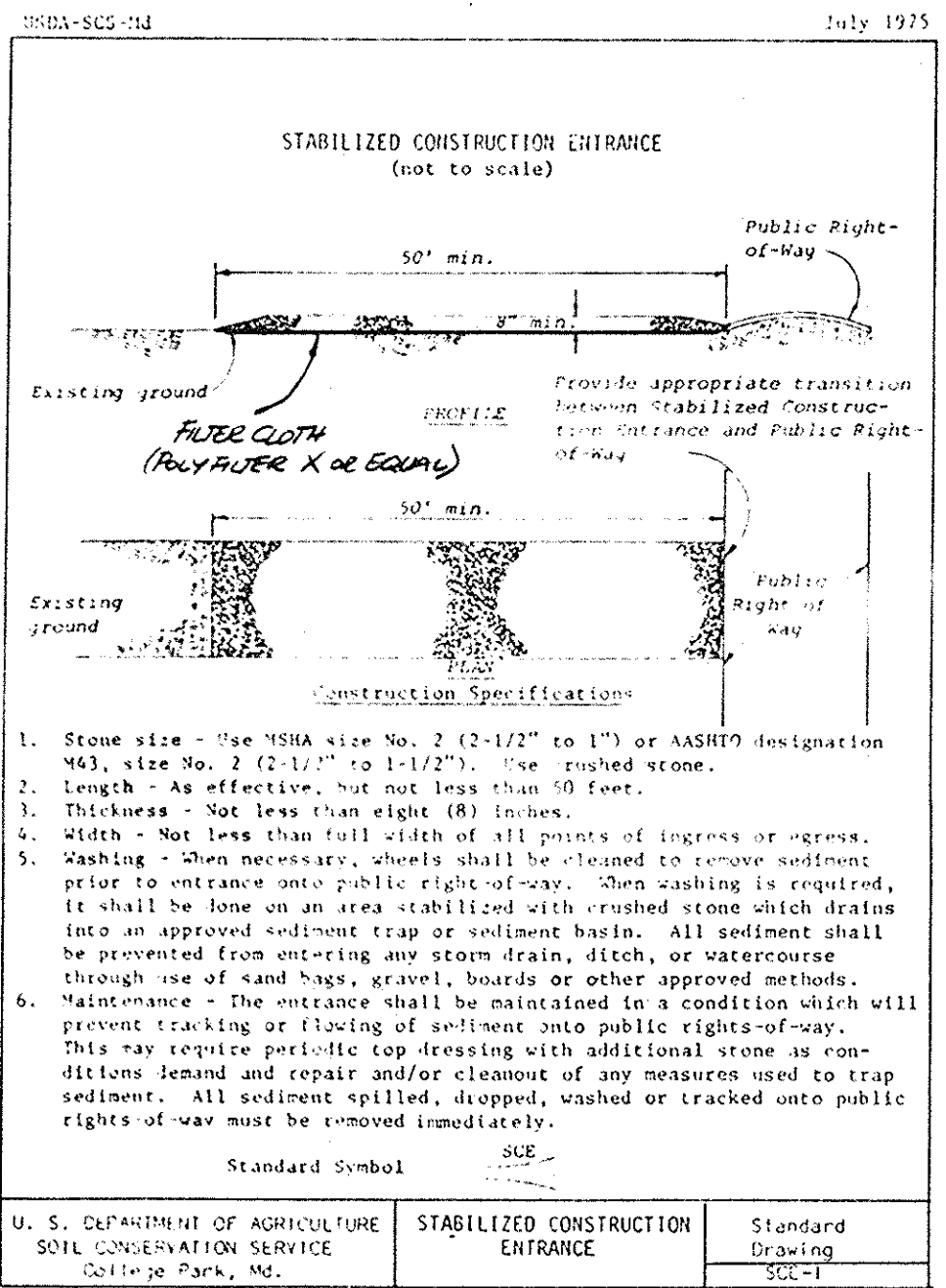
A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.  
 B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.  
 C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



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

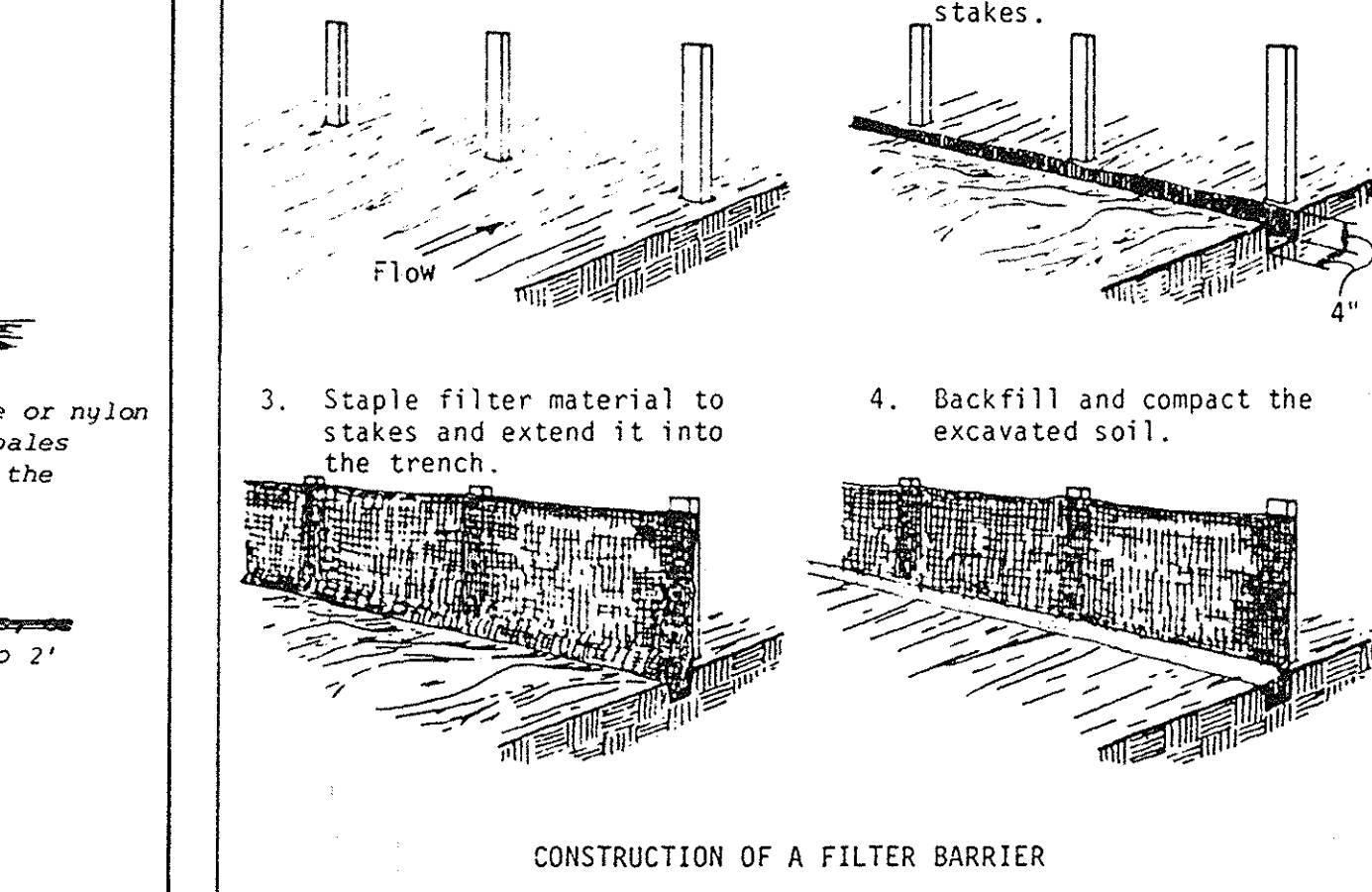
All areas shall be permanently stabilized when site development work, grading and/or other related construction-related activities, cease to be continuous or ongoing for periods exceeding 49 days. These disturbed areas shall be stabilized in accordance with the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas." The in-place sediment control measures will be maintained on a continuing basis until the site is permanently stabilized and all permit requirements are met.

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DATE: 3-28-85



1. Stone size - Use MSHA size No. 2 (2-1/2" to 1") or AASHTO designation #43, size No. 2 (2-1/2" to 1-1/2"). Use crushed stone.  
 2. Length - As effective, but not less than 50 feet.  
 3. Thickness - Not less than eight (8) inches.  
 4. Width - Not less than full width of all points of ingress or egress.  
 5. Sealing - When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sand bags, gravel, boards or other approved methods.  
 6. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights of way must be removed immediately.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STABILIZED CONSTRUCTION ENTRANCE	Standard Drawing
		SD-1



1. Set the stakes.  
 2. Excavate a 4"x4" trench upslope along the line of stakes.  
 3. Staple filter material to stakes and extend it into the trench.  
 4. Backfill and compact the excavated soil.

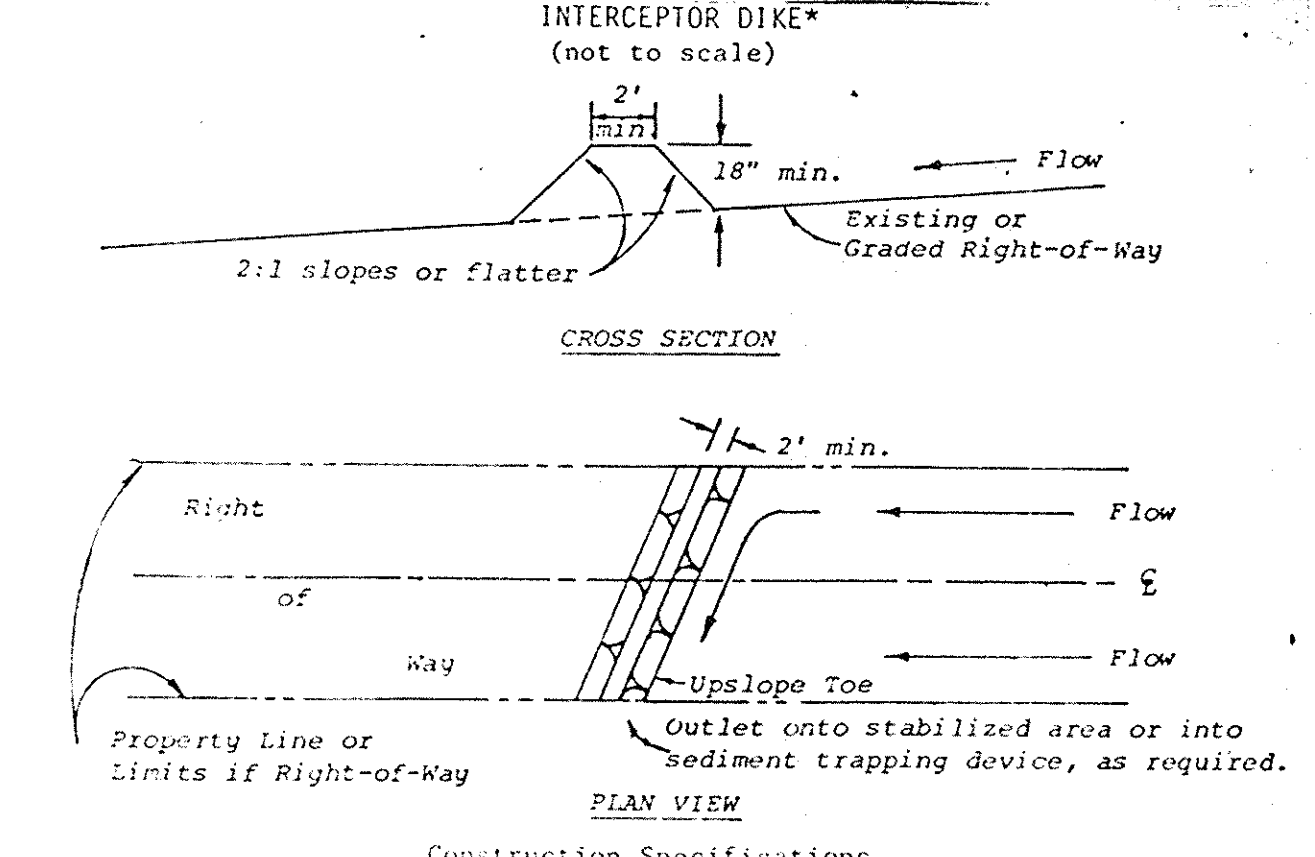
Points A should be higher than point B  
 PROPER PLACEMENT OF A FILTER BARRIER IN A DRAINAGE WAY

**CRITICAL AREA STABILIZATION W/ PERMANENT SEEDINGS**  
 Minimum soil conditions needed for the establishment and maintenance of a long-lived vegetative cover:

- Enough fine-grained materials (over 30 percent silt plus clay) to provide the capacity to hold at least a moderate amount of available moisture. Noticeable exception would be planting leguminae and sericea lespedeza which can be planted on a sandier soil.
- Sufficient pore space to permit adequate root penetration.
- The soil shall be free from any material harmful to plant growth.

I. Site Preparation  
 A. Install needed erosion control practices such as interceptor dikes, berms and spreaders, contour ripping, erosion stops, channel liners and sediment basins.  
 B. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, anchoring and maintenance.

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 DATE: 3-15-85



1. All dikes shall be machine compacted.  
 2. All interceptor dikes shall have positive drainage to an outlet.  
 3. Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.  
 4. Field location should be adjusted as needed to utilize a stabilized safe outlet.  
 5. Interceptor dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin when either the interceptor dike channel or the drainage area above the dike are not adequately stabilized.  
 6. Stabilization, as specified by the plans, shall be: (1) in accordance with Standard and Specifications for Grassed Waterway, and the area to be stabilized shall be the channel (flow area); or (2) the flow area shall be lined with stone that meets MSHA size No. 2 or AASHTO size No. 2 or 24 which is placed in a 3 inch thick layer and pressed into the soil. The area covered by the stone shall be as shown on Standard Drawing DD-1.  
 7. Periodic inspection and required maintenance must be provided.

\* Drainage area less than 5 acres. Standard Symbol: [Symbol]

**SEDIMENT CONTROL NOTES**

- THE DEVELOPER SHALL NOTIFY THE HOWARD COUNTY SOIL CONSERVATION SERVICE AT LEAST 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION SHOWN HEREON.
- SEDIMENT CONTROL MEASURES MUST BE INSTALLED PRIOR TO GRADING OPERATION AND STABILIZED ACCORDING TO NOTE "STABILIZATION".
- ALL DISTURBED AREAS ON THE BALANCE OF THE SITE SHALL BE STABILIZED AS STATED ABOVE IN NOTE "STABILIZATION".
- THE DEVELOPER SHALL INSTALL DEVICES, DETAILED ON THIS PLAN, TO PREVENT SEDIMENT FROM REACHING EXISTING STORM DRAINAGE SYSTEMS.
- THE CONTRACTOR SHALL NOT BEGIN ANY CONSTRUCTION SHOWN ON THESE PLANS UNTIL AN APPROVED GRADING AND SEDIMENT CONTROL PLAN HAS BEEN PLACED ON FILE WITH THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
- ALL SEDIMENT CONTROL MEASURES SHALL BE TAKEN IN STRICT ACCORDANCE WITH THE APPROVED PLANS AND THE CRITERIA & SPECIFICATIONS APPROVED BY THE HOWARD COUNTY S.C.D.
- ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD REQUIREMENTS & CONDITIONS AT THE TIME OF CONSTRUCTION & TO BE CONSTRUCTED & STABILIZED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL OF THE SITE.
- PERIODIC INSPECTION & MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES SHALL BE PROVIDED BY DEVELOPER TO INSURE THAT THE INTENDED PURPOSE IS BEING ACCOMPLISHED. THE DEVELOPER WILL BE RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY AND FOR ANY DAMAGE CAUSED OFF SITE BY THE SAME.
- THE DEVELOPER SHALL CLEAN OUT SEDIMENT BASINS WHEN SILT LEVEL REACHES THE CLEAN OUT POINT AS DESIGNATED. A PAINTED YELLOW LINE SHALL BE PLACED IN THE BASIN RISER AT THE ELEVATION COMPUTED AT THE TIME OF CONSTRUCTION.
- DURING GRADING OPERATIONS THOSE AREAS WITHIN ± 1.0 FOOT OF FINISHED GRADE SHALL REMAIN UNDISTURBED AS WELL AS THOSE AREAS SHOWN ON THE SITE PLAN TO BE KEPT UNDISTURBED.
- CUT & FILL SLOPES SHALL BE PROTECTED AGAINST STORMWATER RUNOFF BY SLOPING THE GROUND ALONG THEIR UPPER SIDE AWAY FROM THE SLOPE. SLOPES SHALL BE STABILIZED BY SEEDING & MULCHING AS SOON AS PRACTICAL AFTER GRADING. STABILIZATION SHALL BE IN ACCORDANCE WITH NOTE "STABILIZATION" & SCS SPECIFICATIONS. PERMANENT OR TEMPORARY STABILIZATION IS AS FOLLOWS:  
 TEMPORARY - ALL BERMS, BASINS, INTERCEPTOR DIKES & OTHER REMOVABLE ELEMENTS UP TO ONE (1) YEAR.  
 PERMANENT - ALL OTHER DISTURBED AND/OR ERODIBLE AREAS.
- POLYFILTER-X SHALL BE INSTALLED UNDER ALL RIP-RAP TO HOLD SOIL IN PLACE.
- ALL STORM DRAIN INLETS SHALL BE CLOSED DURING CONSTRUCTION OR STORM WATER SHALL BE DIVERTED INTO SEDIMENT BASINS.
- ALL ELEVATIONS ON SEDIMENT STRUCTURES SHOWN THUS;
- ALL STRUCTURAL SEDIMENT MEASURES ARE TO REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM HOWARD COUNTY S.C.D.
- ALL PRACTICES SHALL BE IN ACCORDANCE WITH 1983 STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.

**SEQUENCE OF CONSTRUCTION**

- OBTAIN GRADING & WEA PERMITS PRIOR TO BEGINNING CONSTRUCTION
- GRADE FOR SEDIMENT CONTROL PRACTICES ONLY; INSTALL SEDIMENT BASIN & STABILIZED
- INSTALL SEDIMENT CONTROL DEVICES AND STABILIZE BERM. (10 DAYS)
- GRADE LOTS AND STREETS. (30 DAYS)
- BEGIN HOUSING CONSTRUCTION. (60 DAYS)
- INSTALL WATER AND SEWER.
- CONSTRUCT STORM DRAINAGE AND PAVEMENT. PROTECT ALL STORM DRAIN INLETS PER REQUIREMENTS OF S.C.S. (180 DAYS)
- COMPLETE HOUSING CONSTRUCTION. (180 DAYS)
- STABILIZE ALL DISTURBED AREAS PERMANENTLY AND REMOVE SEDIMENT CONTROL DEVICES. REPAIR AND STABILIZE AFTER SEDIMENT CONTROL FACILITIES HAVE BEEN REMOVED. (25 DAYS)

**Sequence of conversion of sediment basin to stormwater management facility**

Upon stabilization of all areas the riser outlet sediment basin shall be converted to the stormwater management facility as shown on plans as follows:

- Drain basin of all water (or pump out, if STANDING WATER IS PERMISSIBLE)
- Clear basin of all sediment and remove perforated 8" pipe including filter cloth and #2 stone protection.
- Install rip-rap channel and clean out outfall channel, if required.
- Stabilize remaining area of basin.

10. SEE NOTE 3, SHEET 7 OF 9, FOR CONVERSION OF SEDIMENT BASIN TO STORMWATER MANAGEMENT.

II. Seedbed Preparation  
 Flat areas and slopes up to 3 to 1 grade shall be loose and friable to a depth of at least 3 inches. The top layer of soil shall be loosened by raking, discing or other acceptable means before seeding.  
 Slopes steeper than 3 to 1 shall have the top 1-3 inches of soil loose and friable before seeding.

III. Soil Amendments  
 Apply 2 tons dolomitic limestone and 600 pounds 0-20-20, or equivalent per acre before seeding. Harrow or discolime and 0-20-20, or equivalent fertilizer uniformly into the soil to minimum depth of 3 inches on slopes flatter than 3 to 1. On slopes of greater than 3 to 1 grade, the lime and fertilizer shall be worked in as directed by the contracting officer. On sloping land, the final harrowing or discing operation should be on the contour wherever feasible. No attempt should be made to drag any disced area to make the soil surface very smooth after discing. At time of seeding, apply 400 pounds 38-0-0 ureaform fertilizer and 500 pounds 10-20-20, or equivalent fertilizer per acre.

IV. Seeding  
 A. Mixture to be KY #31.  
 B. Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder or hydroseeder. (slurry includes seed and fertilizer) on a firm, moist seedbed. Maximum seeding depth should be 1/4 inch on clayey soils and 1/2 inch on sandy soils, when using other than hydroseeder method of application.

V. Mulching  
 A. Materials and Amounts  
 1. Straw - Straw shall be unrotted small grain straw applied at the rate of 1-1/2 to 2 tons per acre, or 70 to 90 pounds per 1,000 sq. ft. Mulch materials shall be relatively free of all kinds of weeds and shall be free of prohibited noxious weeds which are: Canada thistle, Johnsongrass and quackgrass.  
 Spread uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 sq. ft. section and place 70-90 lbs. of mulch in each section.  
 2. Mulch anchoring shall be accomplished immediately after mulch placement to minimize loss by wind or water.  
 Mulch Anchoring Tool - A tractor drawn implement designed to punch and anchor mulch into the surface 2 inches of soil. This practice affords minimum erosion control but is limited to flatter slopes where equipment can operate safely. Tracking - primarily used on > 3:1 cut and fill slopes to cut the mulch into the soil with bulldozer cleats.

**"STABILIZATION"**

TEMPORARY (SEE NOTE 11 FOR APPLICABLE AREAS)  
 ACCORDING TO SCS "STANDARDS & SPECIFICATIONS FOR SOIL EROSION & SEDIMENT CONTROL IN URBANIZING AREAS" SEC. 3.000

- SITE PREPARATION-SO AS TO ALLOW USE OF CONVENTIONAL SEEDBED PREPARATION EQUIPMENT
- APPLY:  
 A. DOLOMITIC LIMESTONE 2000 LBS./AC.  
 B. 10-10-10 FERTILIZER 500-800 LBS./AC.
- HARROW TO A DEPTH OF 3"
- SEED WITH KENTUCKY-31 AT RATE OF 60 LBS PER ACRE
- MULCH WITH STRAW AT A RATE OF 2.5 TONS/ACRE IMMEDIATELY AFTER SEEDING & TACK WITH ASPHALT.

PERMANENT STABILIZATION-ALL AREAS FLATTER THAN 3:1  
 ACCORDING TO TEMPORARY EXCEPT FOR FOLLOWING:

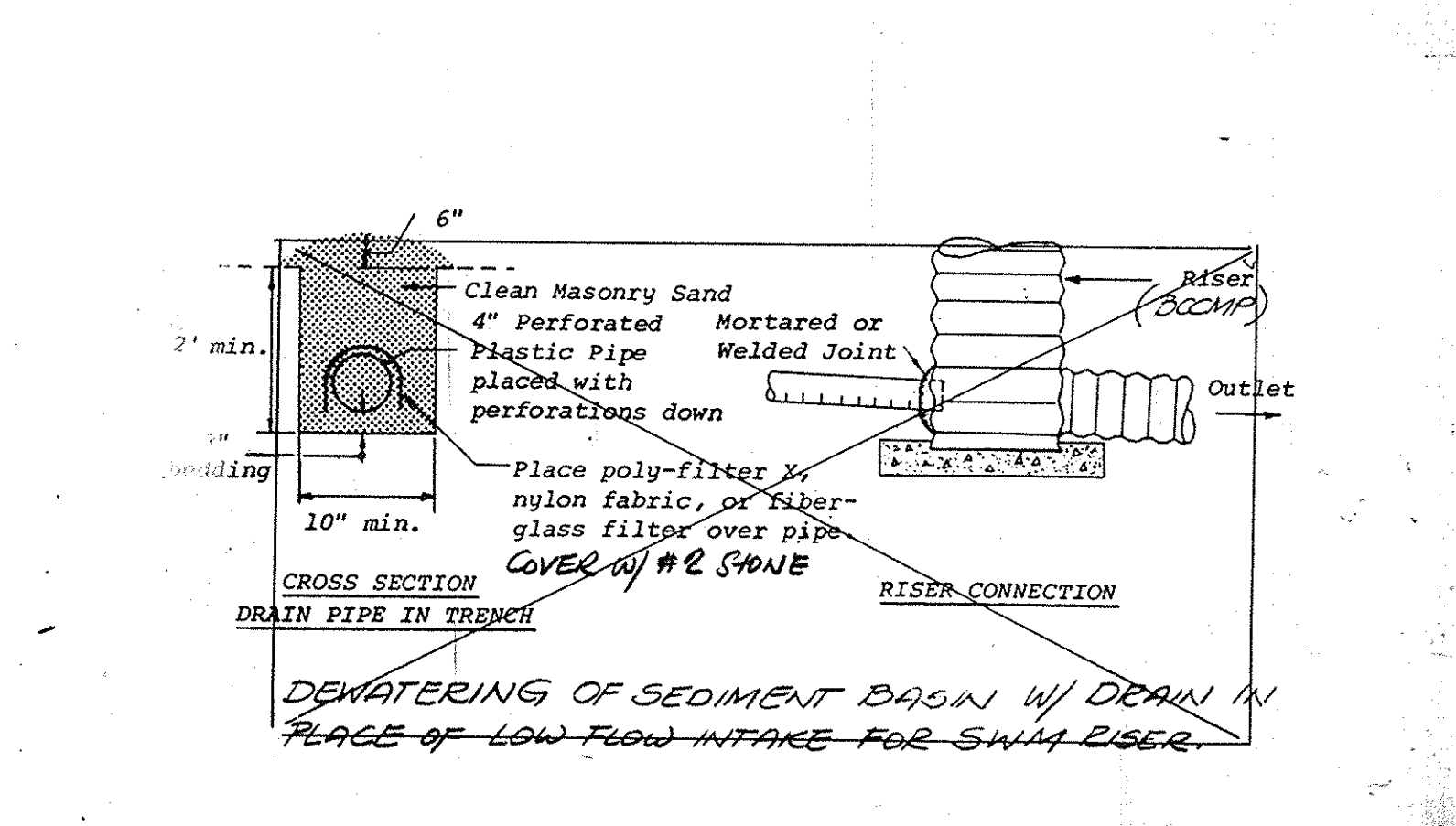
- APPLY IN ADDITION TO LIMESTONE & FERTILIZER, 0-20-0 @500-1000 LBS./ACRE.
- SEED WITH:  
 A. CERTIFIED MERION BLUEGRASS @ 40LBS/AC.  
 B. COMMON KENTUCKY BLUEGRASS @ 40LBS/AC.  
 C. PENNLANW RED FESCUE @ 20LBS/AC.
- MULCH AS IN "TEMPORARY"

PERMANENT STABILIZATION-AREAS STEEPER THAN 3:1  
 ACCORDING TO ABOVE EXCEPT FOR FOLLOWING:

- SEED WITH:  
 A. KENTUCKY 31 @ 40 LBS./ACRE  
 B. CROWN VETCH (INOCULATED) @ 40 LBS/ACRE
- FERTILIZE & MULCH AS STATED ABOVE

DEVELOPERS & ENGINEERS CERTIFICATIONS  
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY. DEVIATIONS FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD COUNTY S.C.D.

Signature of Developer: [Signature] DATE: 3/14/85  
 Signature of Engineer: [Signature] DATE: 5-16-83  
 REGISTERED PROFESSIONAL ENGINEER



REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS  
 Signature: [Signature] DATE: 3-20-85  
 U.S. SOIL CONSERVATION SERVICE SIGNATURE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
 Signature: [Signature] DATE: 3-21-85  
 APPROVED HOWARD COUNTY SOIL CONSERVATION DISTRICT

**SEDIMENT CONTROL SPECS. & DETAILS**

REVISIONS: 2/15/85

DATE: SEPT, 1984

SCALE: 8 OF 10

LOTS 1 THRU 45  
 CARRIAGE HILLS  
 COLUMBIA, ELECTION DISTRICT #6, HOWARD COUNTY, MD.  
 TAX MAP # 42 PART OF PARCEL 15 (852/82) & PARCEL 14 (307/508)

OWNERS:  
 C.W. Barnett, Columbia, Maryland  
 Charles V. Smith, Joyce O. Smith  
 Timothy L. Kirkpatrick and  
 Patricia Kirkpatrick  
 Fairfax, Virginia

802 Sligo Avenue  
 Silver Spring, Md.  
 20910  
 (301) 585-5676

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**CONSTRUCTION SPECIFICATION**

**I. SITE PREPARATION**

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no deeper than 1:1.

Areas to be 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 and below 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.

**II. 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, oversize 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 a minimum of four complete passes of a sheepfoot, 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. Compact to 95% of AASHTO T-99 density.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density and is to be certified by the Engineer.

**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 as shown on the drawings, 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 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.

**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 four 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 four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

**IV. 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 water tight 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. 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.

**B. REINFORCED CONCRETE PIPE**

- Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. An approved equivalent is AWWA Specification C-301.
- Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3", or as shown on the drawings.
- Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and the grade of the pipe.
- Backfilling shall conform to structural backfill as shown above.
- Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

**V. CONCRETE STRUCTURES**

Concrete structures shall meet minimum requirements set forth in the latest Maryland State Highway Administration "Specifications for Materials, Highways, Bridges, and Incidental Structures", as amended.

**A. CONCRETE**

Article 20.07 (Portland Cement Concrete Mixtures), Mix No.3.

**B. Article 20.10 (Reinforcement).**

**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, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing mulching or sodding in accordance with the specifications shown hereon.

**A. SOD**

- Specifications - Sod shall be "KY-31" Tall Fescue or Kentucky Bluegrass/Fescue mixture or approved equal. Class of turfgrass sod shall be Maryland or Virginia state certified or approved sod.
- Site Preparation - Where soil is acid or composed of heavy clays, ground limestone shall be spread at the rate of 100 lbs./1000 sq. ft. In all soils 5-10-5 fertilizer or approved equal shall be applied and mixed into the top 3" of soil with the required lime. Slow release nitrogen, at the rate of 3.5 lbs./1000sq. ft., shall be applied to the prepared soil immediately prior to sod installation. This material shall be approximately one-third immediately available and two-thirds water insoluble nitrogen. Urea formaldehyde (UF) and isobutylidene (IBDU) meet these standards.

**Sod Installation**-The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Insure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots. On sloping areas where erosion may be a problem, sod shall be laid with long edges parallel to the contour and with staggered joints. Secure the sod by tamping and pegging or other approved methods. As sodding is completed in any one section, the entire area shall be rolled or tamped to insure solid contact or roots with the soil surface. Sod shall be watered immediately after rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. The operations of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.

**B. PERMANENT SEEDING**

All disturbed areas shall be stabilized as follows:

- Seedbed Preparation - Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding.
- Soil Amendments - Apply 2 tons per acre dolomitic limestone (185 lbs./1000 sq. ft.) and 600 lbs. per acre 0-20-20 fertilizer (14 lbs./1000 sq. ft.). Harrow or disc line and fertilizer into upper three inches of soil. At time of seeding, apply 400 lbs. per acre (9.2 lbs./1000 sq. ft.) of 38-0-0 ureaform fertilizer and 500 lbs. per acre (11.5 lbs./1000 sq. ft.) of 10-20-20 fertilizer.
- Seeding - For the periods March 1, thru April 30, and August 1 thru October 15, seed with 87 lbs. per acre Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 87 lbs. per acre Kentucky 31 Tall Fescue and 2 lbs. per acre weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed with 87 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw.
- Mulching - Apply 1.5 to 2 tons per acre of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using 200 gallons per acre of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre for anchoring.
- Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseeding.

**C. TEMPORARY SEEDING**

- Seedbed Preparation - Loosen upper 3 inches of soil by discing, raking or other acceptable means before seeding.
- Soil Amendments - Apply 600 lbs. per acre of 10-20-10 fertilizer.
- Seeding - For periods March 1 thru April 30, and from August 15 thru November 15, seed with 2.5 bushels per acre annual rye. For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass.
- Mulching - Same as permanent seeding.

**VII. EROSION & SEDIMENT CONTROL**

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized, as shown on these plans and as set forth in the latest "Standards & Specifications for Soil Erosion and Sediment Control in Developing Areas" of the Soil Conservation Service of Maryland, Howard County Soil Conservation District, as amended.

**VIII. FENCING**

Fencing shall be 42" high chain link fence constructed in accordance with the latest Maryland State Highway Administration Standard Details 690.01 and 690.02. The specifications for a 6'-0" fence shall be used, substituting 42" fabric and 6'-8" line posts.

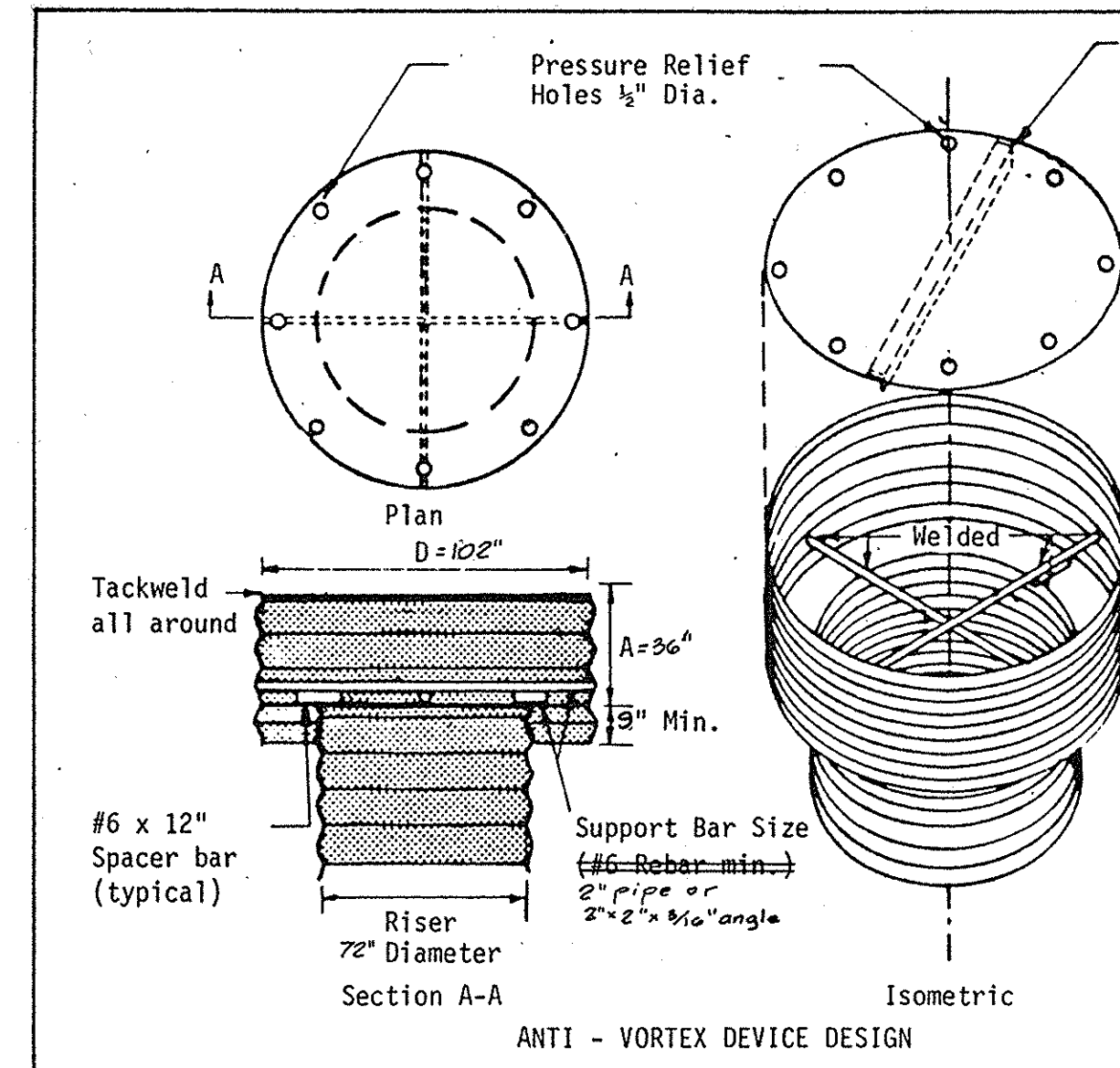
**IX. INSPECTION**

Contractor shall notify the engineer a minimum of 5 working days prior to starting any work shown on these plans. THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY DIVISION, 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT 792-7272.

**X. GENERAL**

Unless otherwise noted, all materials and construction practices shall conform to the following:

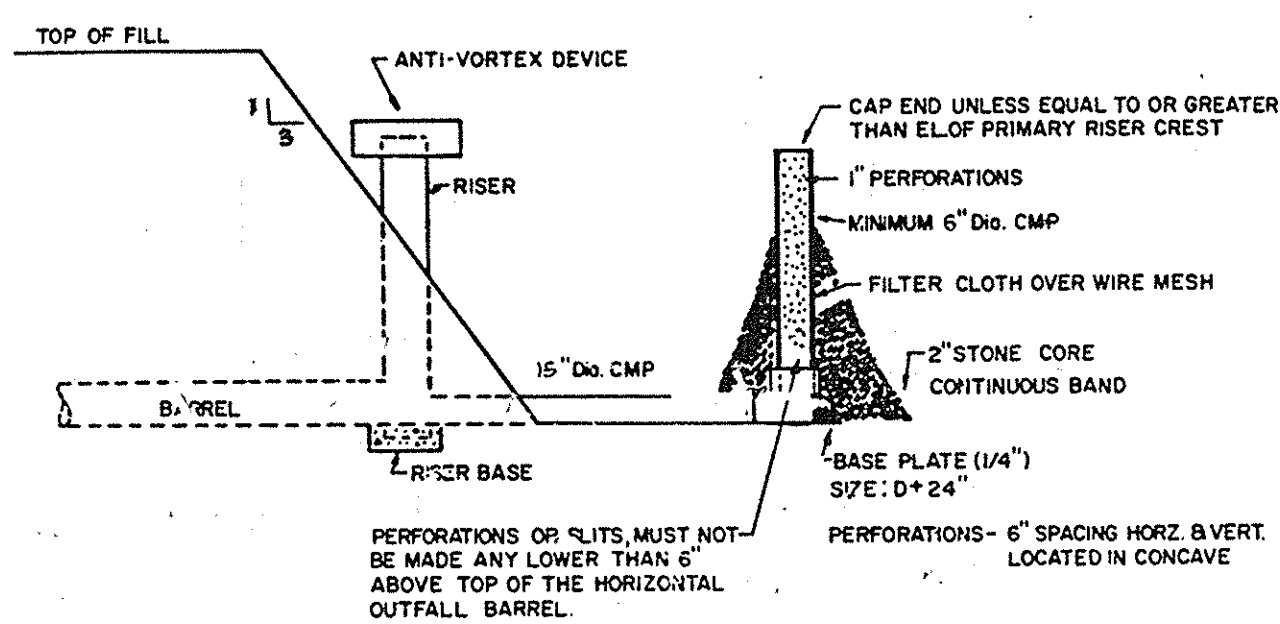
- "Standard Specifications and Details for Construction" of the Howard County Maryland Department of Public Works, as amended.
- "Specifications for Materials, Highways, Bridges, and Incidental Structures" of the Maryland State Highway Administration, as amended.
- "Standard and Specifications for Ponds" of the Soil Conservation Service of Maryland (MD-378), July, 1981 and as amended.



Top stiffener (if required) is 2 1/2" x 3/16" angle welded to top and oriented perpendicular to corrugations.  
Top is 3/8" gage corrugated metal or 1/8" steel plate. Pressure relief holes may be omitted, if ends of corrugations are left fully open when the top is attached.  
Cylinder is 10 gage corrugated metal pipe or fabricated from 1/8" steel plate.

- 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.

**OPTIONAL SEDIMENT BASIN DEWATERING DEVICE I WITH PERFORATED RISER**

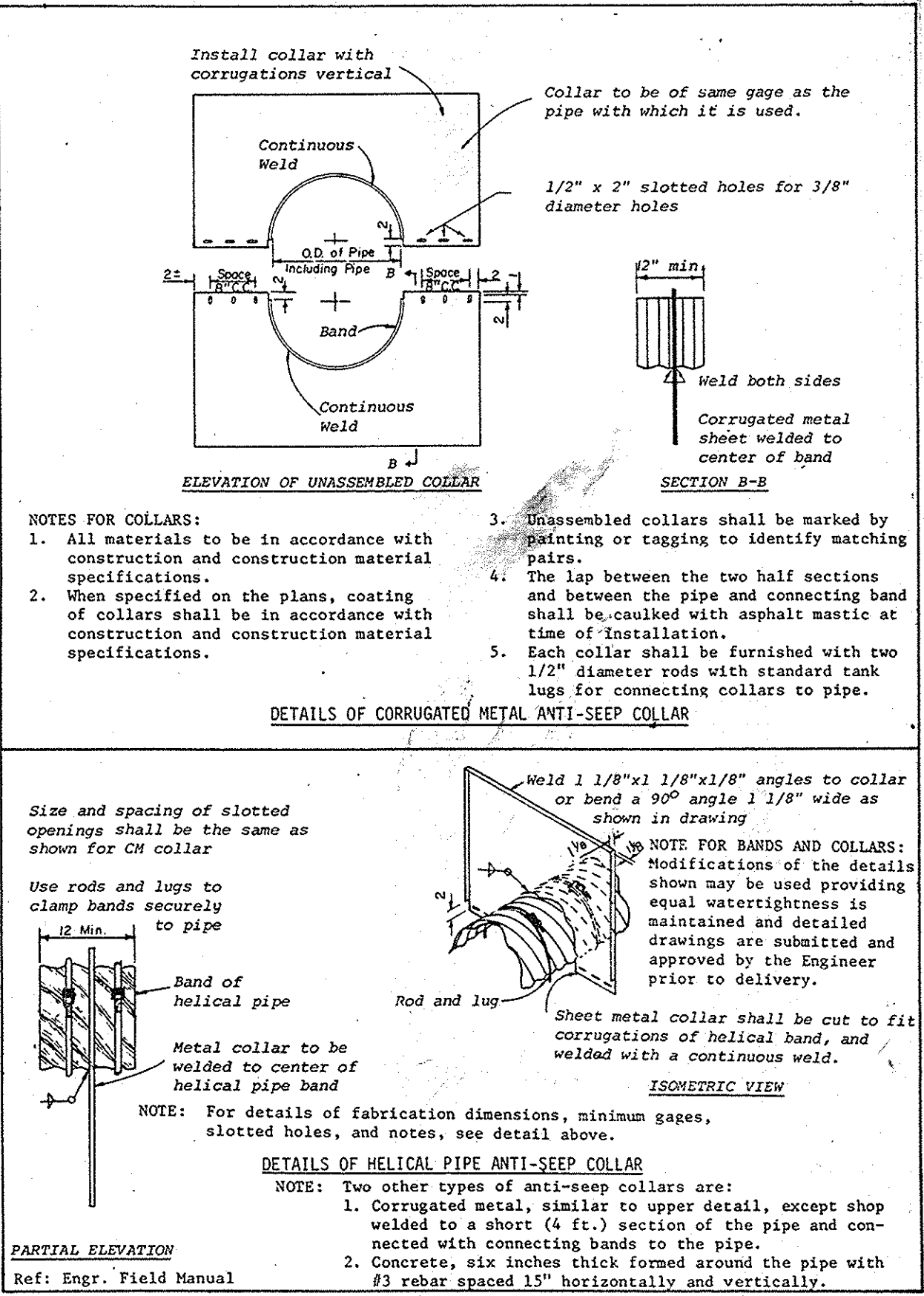


I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer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

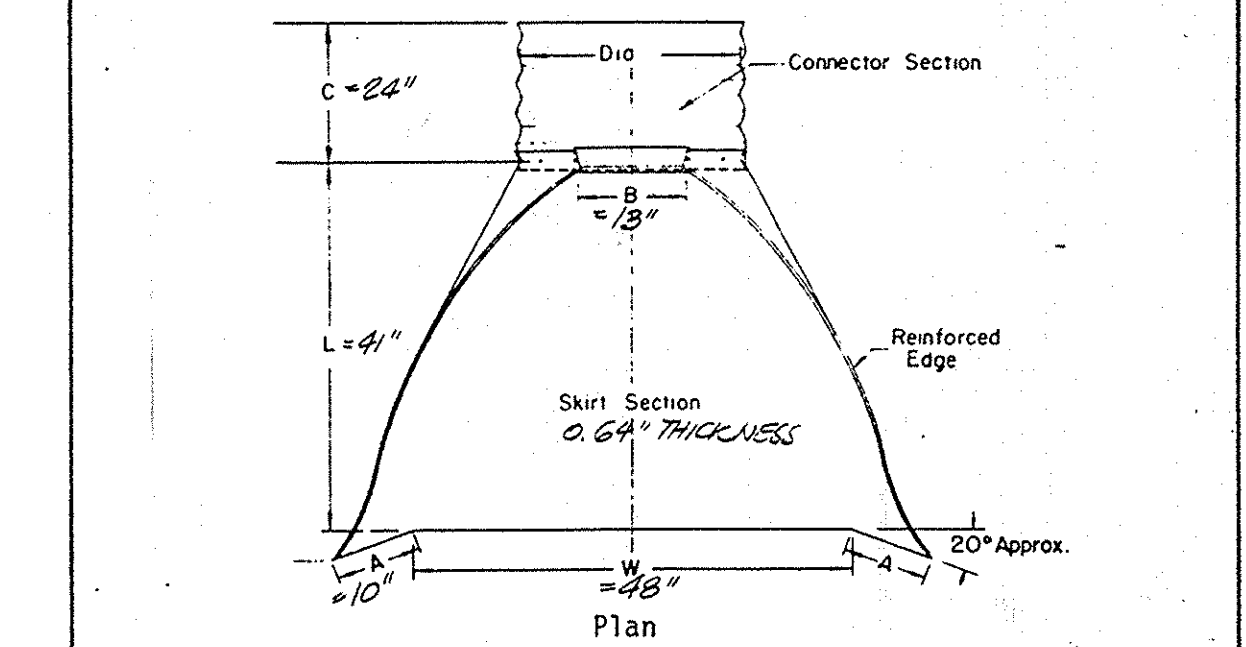
Signature of Engineer: *Paul R. Procario, P.E.*  
Print Name below signature: *Paul R. Procario, P.E.*  
Date: *3/14/85*

I 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.

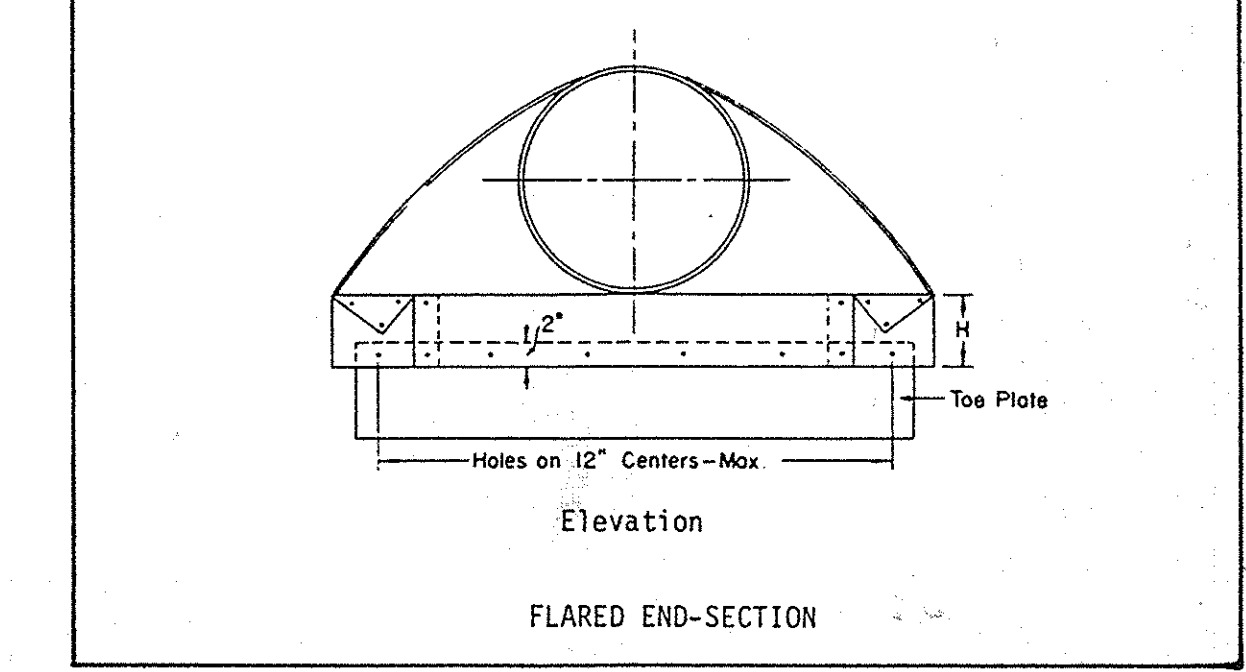
Signature of Developer: *Albert Procario*  
Print name below signature: *ALBERT PROCARIO*  
Date: *3/14/85*



Size and spacing of slotted openings shall be the same as shown for OD collar.  
Use rods and lugs to clamp bands securely to pipe.  
Metal collar to be welded to center of helical pipe band.  
NOTE: For details of fabrication dimensions, minimum gages, slotted holes, and notes, see detail above.



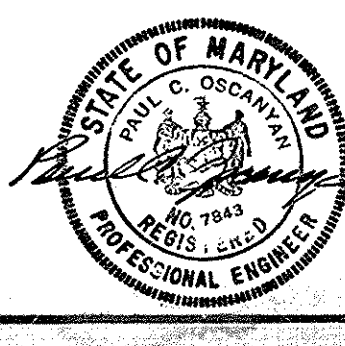
Where Flared End-Sections are to be used with bituminous coated and paved metal pipe, they are to be galvanized only.



The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 792-7272.

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*William E. R...*  
CHIEF, BUREAU OF ENGINEERING  
DATE: *3-28-85*

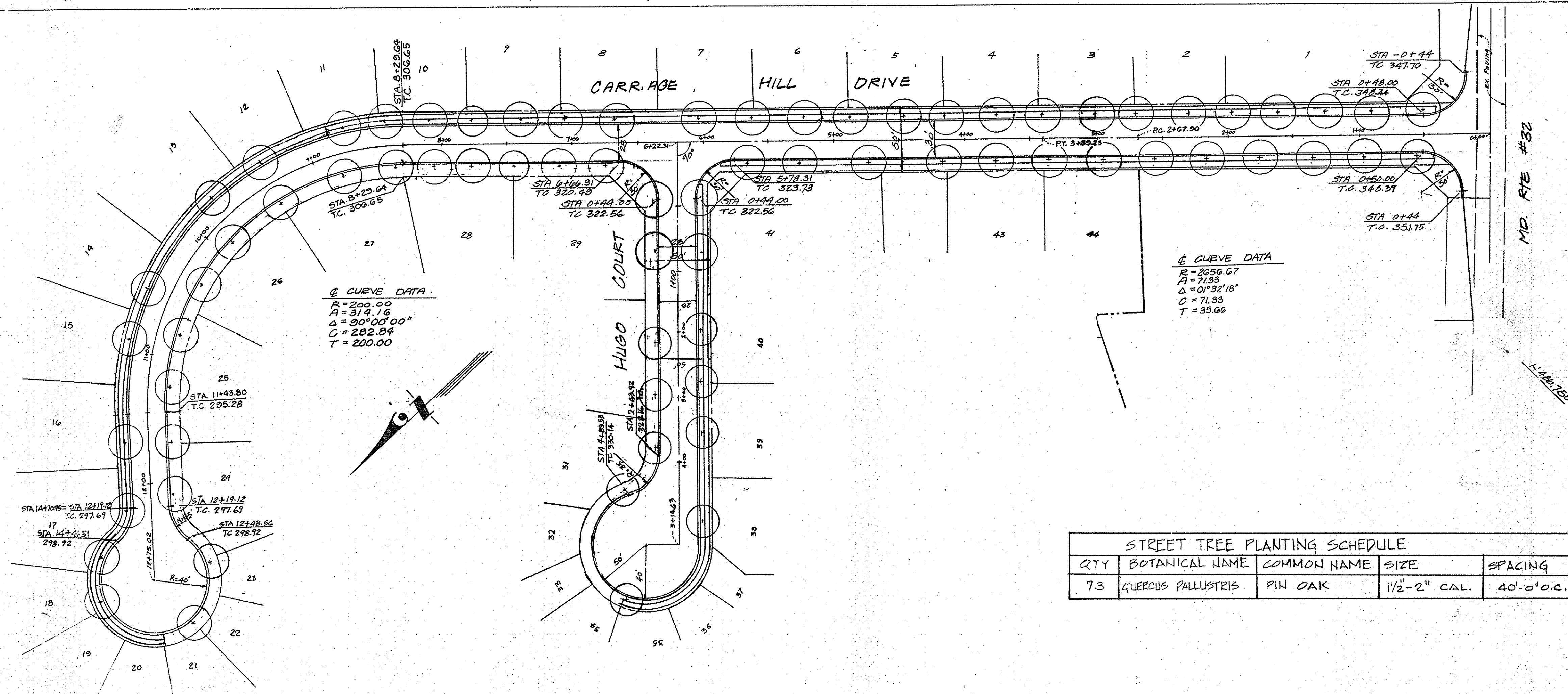
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*John W. M...*  
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
DATE: *3-15-85*



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802 Sligo Avenue  
Silver Spring, Md  
20910  
(301) 585-5676

**OWNERS**  
*Charles V. Smith, Joyce O. Smith, Timothy L. Kirkpatrick and Patricia Kirkpatrick, Fairfax, Virginia*  
WC SWEET & CO. INC. MD  
REVISIONS: *4/1/85*  
DATE: *SEPT, 1984*  
SCALE:  
SHEET: *9* OF 10  
F-85-66





STREET TREE PLANTING SCHEDULE				
QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
73	QUERCUS PALLUSTRIS	PIN OAK	1 1/2"-2" CAL.	40'-0" O.C.

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM-DRAINAGE SYSTEMS AND ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

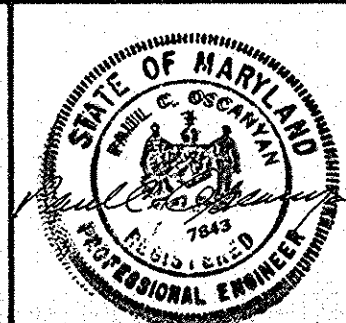
*[Signature]* 3-28-85  
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*[Signature]* 3-15-85  
 CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION

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 20910  
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DES: ST					
DRN: ST					
CHK:					
DATE: 2/15/85	AMM	1	OMITT DRIVEWAY ENTRANCES		10/1/85
BY: NO			REVISION		DATE

**STREET TREE PLANTING PLAN**

600 SCALE MAP NO. 42 BLOCK NO.

**CARRIAGE HILLS**  
 Lots 1-45  
 Election District #6  
 CONTRACT No.

SCALE AS SHOWN  
 SHEET 10 OF 10

#1125