

ZONING - M-1
 Traffic Note
 Traffic Control Devices, Markings & Signing shall be installed in accordance with the Manual of Uniform Traffic Control Devices 1971 Edition.

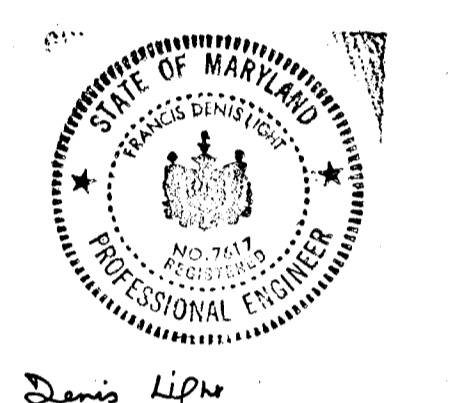
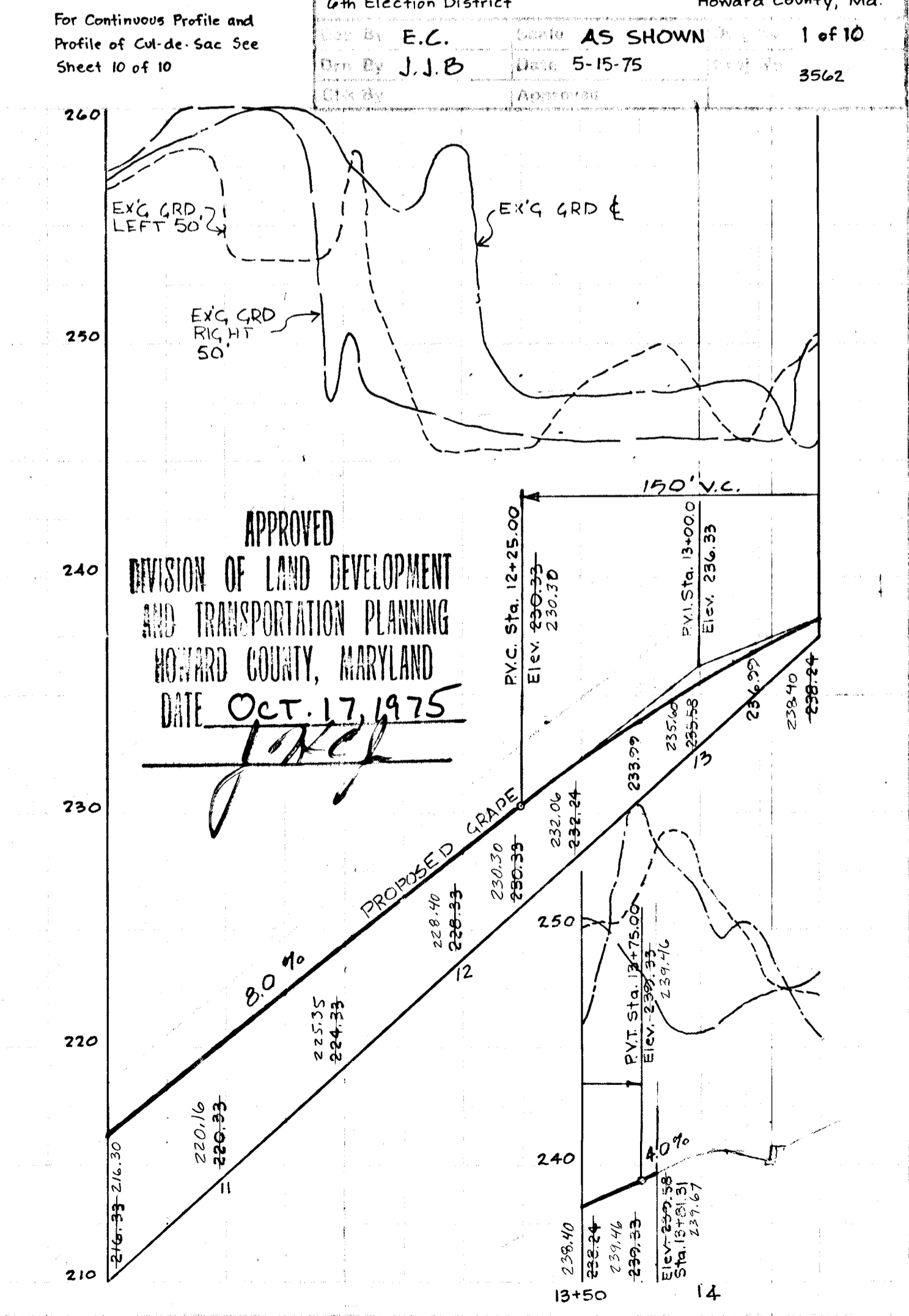
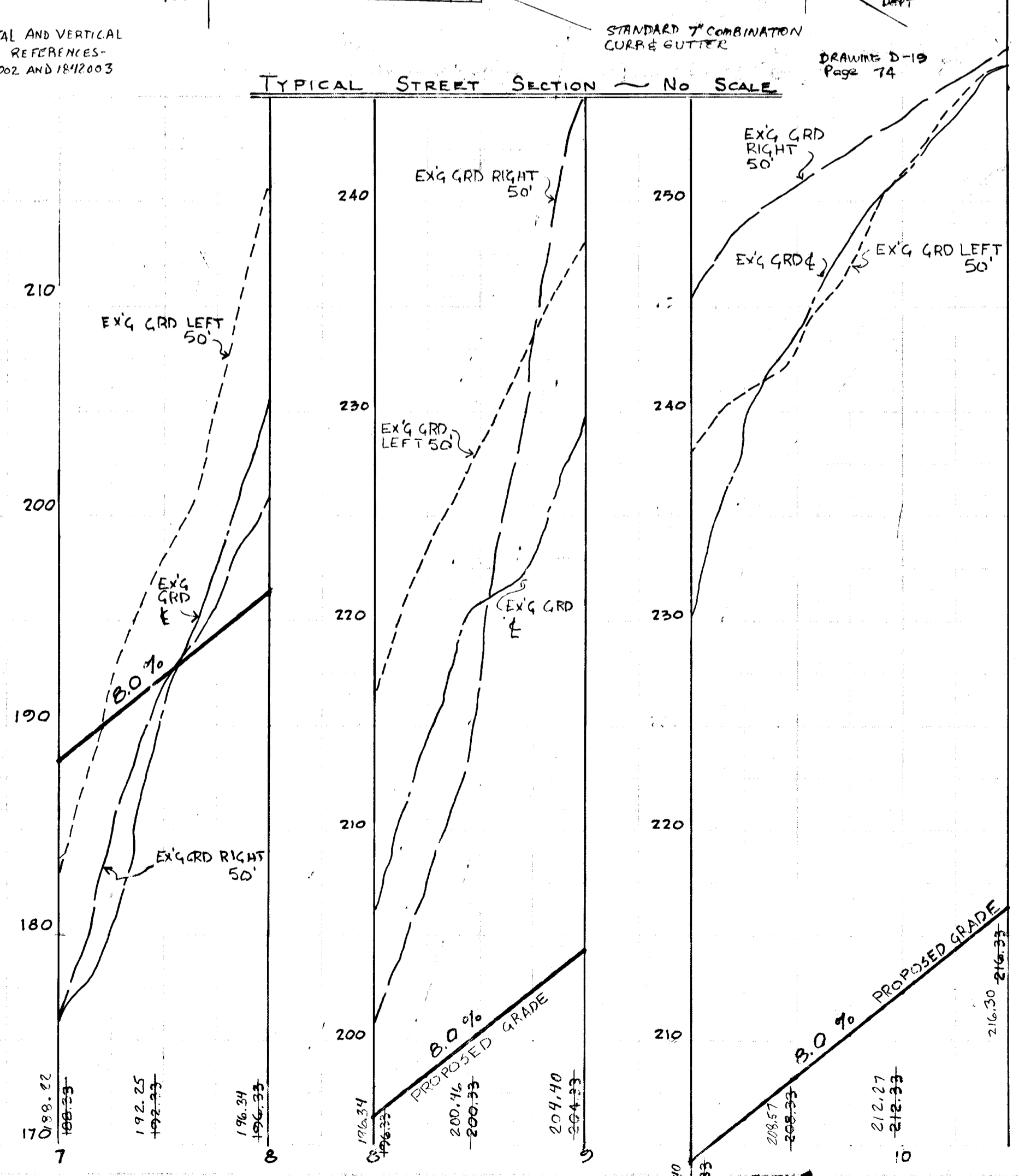
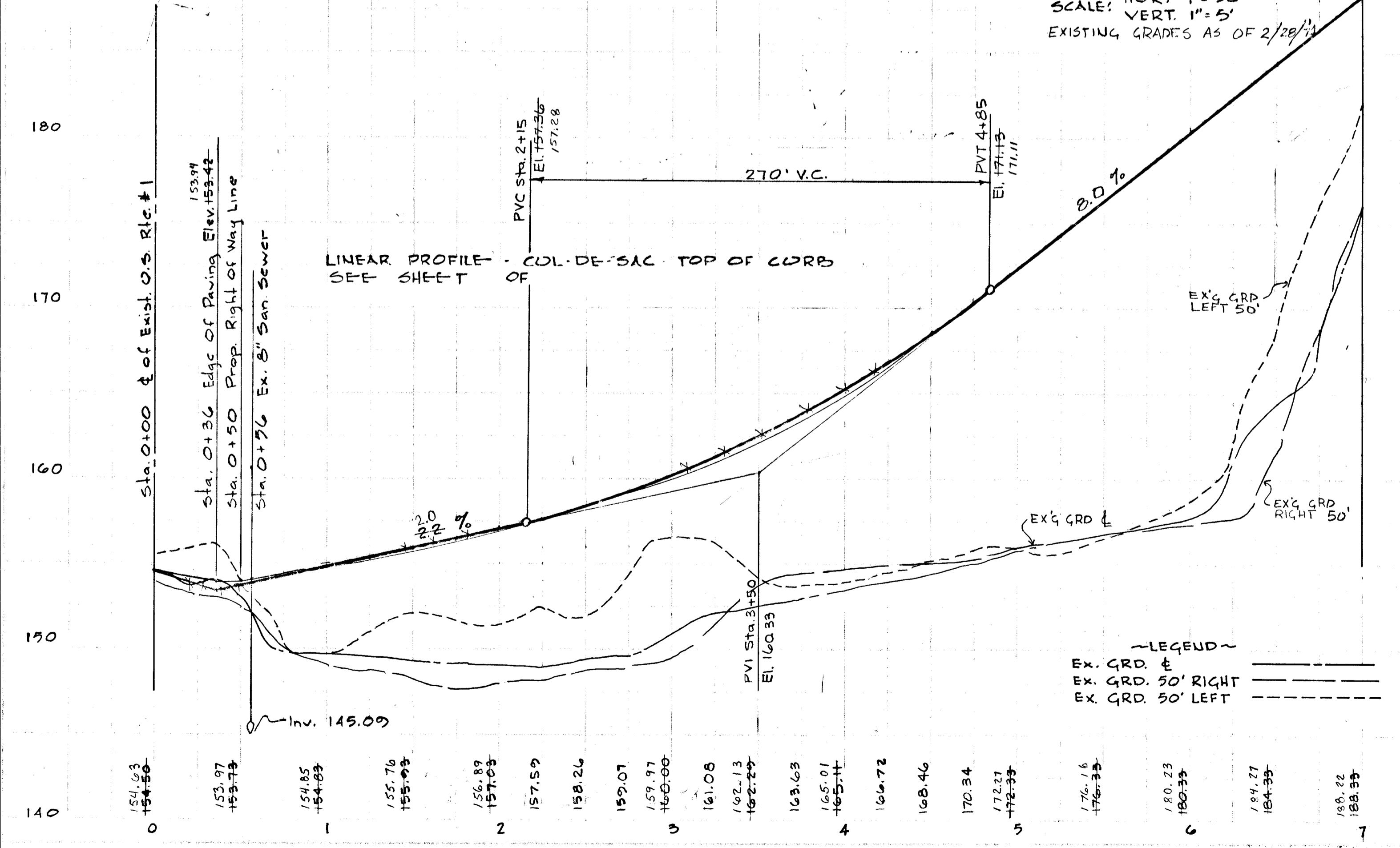
DEPARTMENT OF PUBLIC WORKS
 D. H. Ireland 1/24/76
 CHIEF BUREAU OF HIGHWAYS

OFFICE OF PLANNING AND ZONING
 J. H. Clouston 1/26/76
 CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING

PLAN
 SCALE: 1" = 50'

PROFILES
 SCALE: HOR. 1" = 50'
 VERT. 1" = 5'
 EXISTING GRADES AS OF 2/28/75

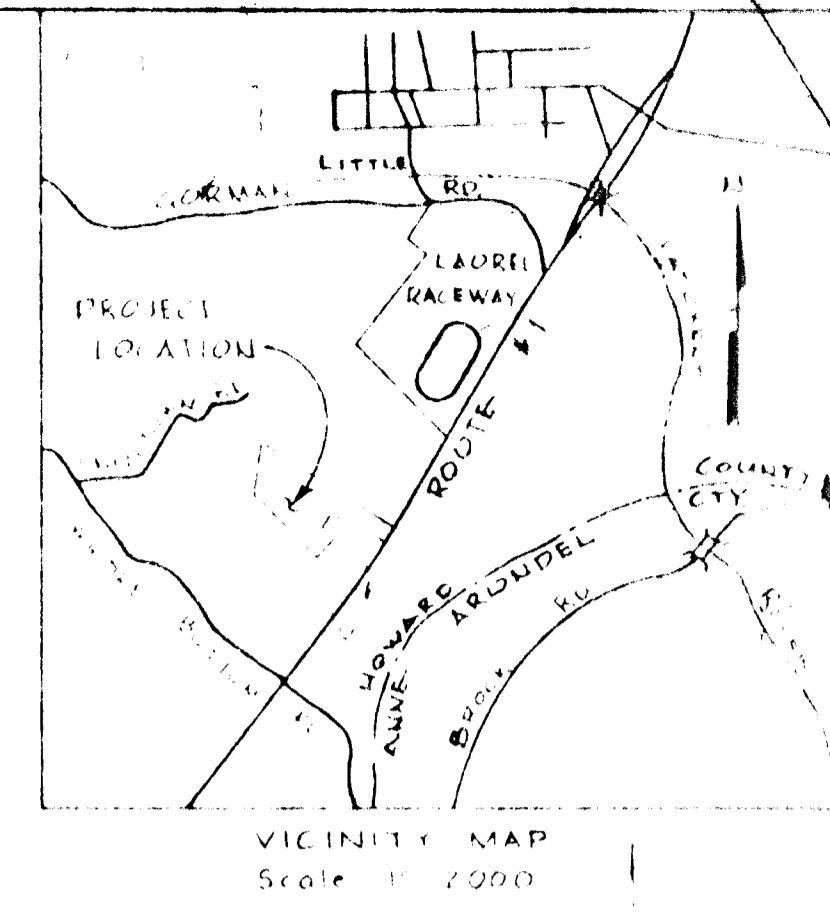
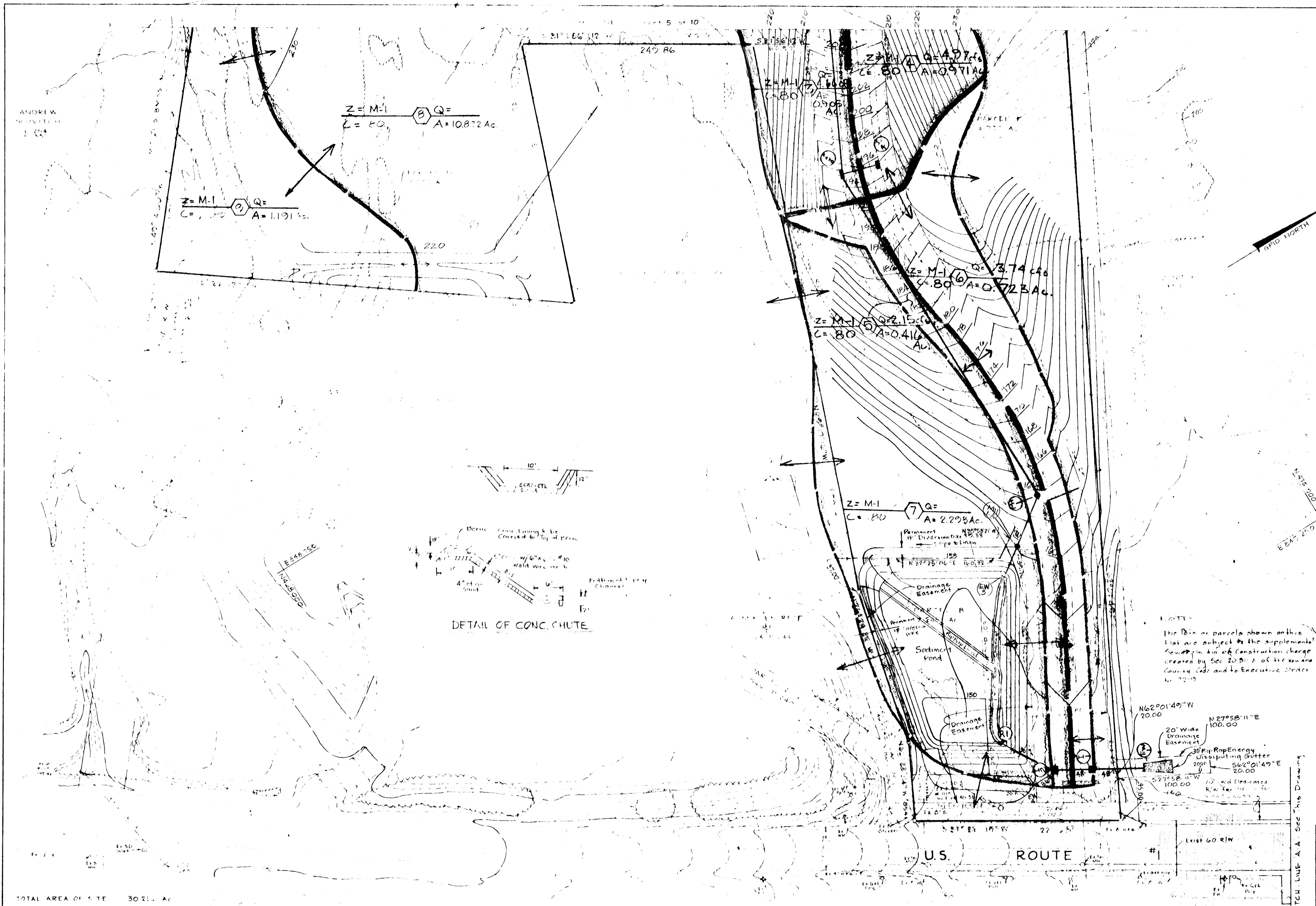
NOTE: HORIZONTAL AND VERTICAL CONTROL REFERENCES STA. 1842002 AND 1842003



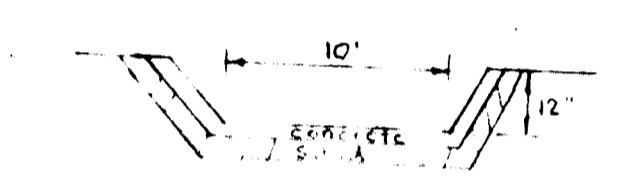
Rev. No.	Rev. Description
6-27-77	Added MH I-A
7-15-75	Added 15" RCP, SUBDRAIN, & DETAIL

STREET PLAN & PROFILE
 Property of: U.S. #1 JOINT VENTURE
 Tax Map 47 Parcel 192
 6th Election District
 Howard County, Md.

Scale: AS SHOWN 1 of 10
 Date: 5-15-75
 Drawn by: J.J.B.

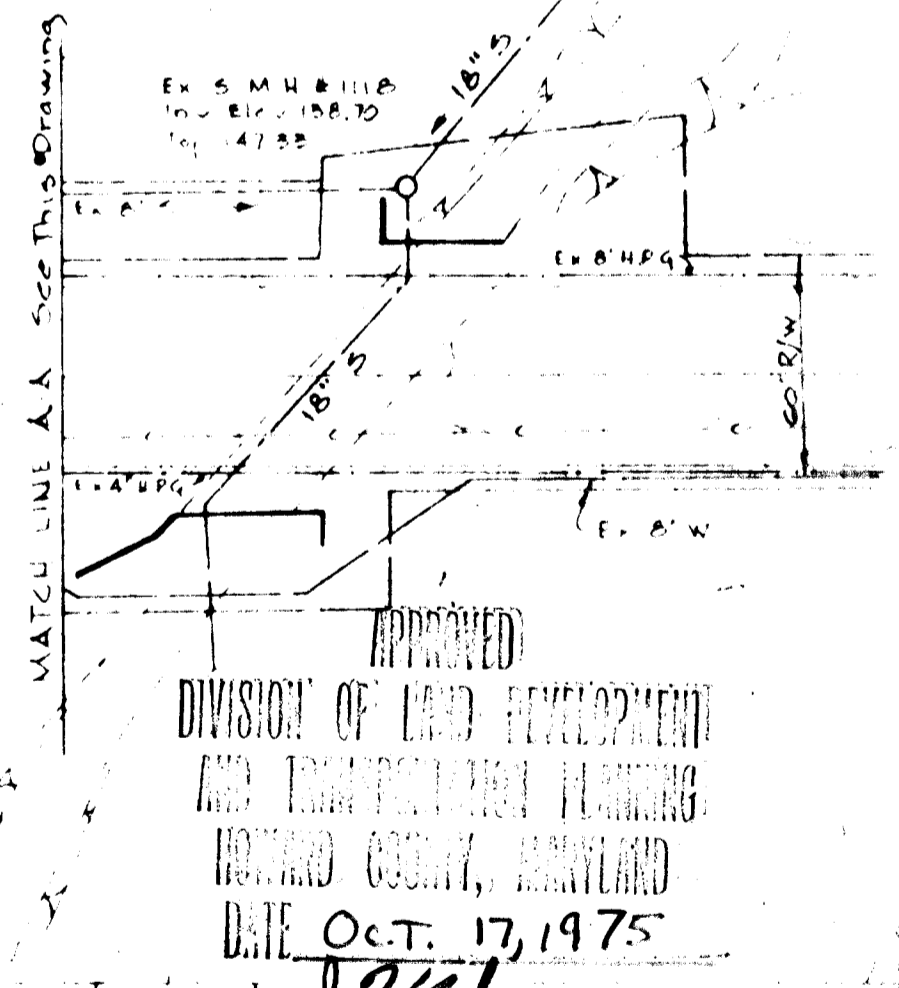


- SYMBOLS**
- Existing Water
 - Storm Drain
 - Sanitary Sewer
 - Contours
 - Proposed Landmarks
 - Gas



DETAIL OF CONC. CHUTE

NOTES
 The lots or parcels shown on this map are subject to the supplemental Survey in an Act of Construction change created by Sec 20 B1 A of the Howard County Code and to Executive Order No. 72-17



APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE Oct. 17, 1975

TOTAL AREA OF SITE 30.21 Ac

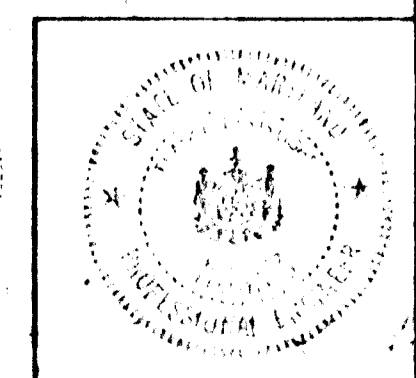
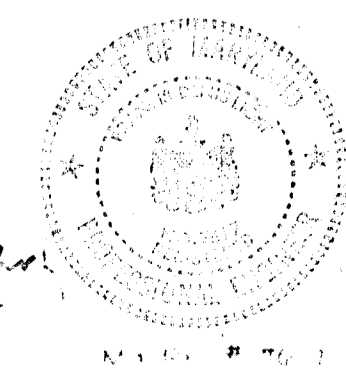
Road	2.604 Ac
Parcel A	1.50 Ac
B	2.70 Ac
C	2.74 Ac
D	1.60 Ac
E	3.20 Ac
Dedicated R/W	2.15 Ac

ZONED M-1
 DATUM - MD STATE PLANE
 TAX MAP 47 PAR E 102

Dep't of Public Works
B. M. Rosemond 1/29/76
 Chief, Bureau of Highways Date

Office of Planning and Zoning
R. K. Clouston 1/26/76
 Chief, Division of Land Development and Transportation Planning Date

OWNER
 U.S. GOVERNMENT
 1010 Rockville Pike
 Rockville, Maryland

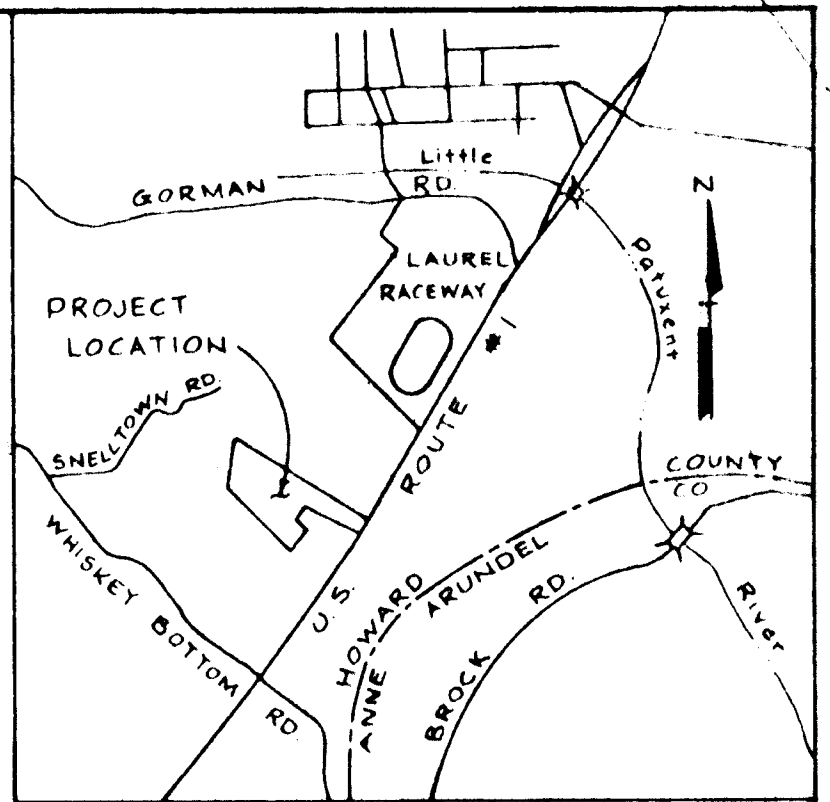
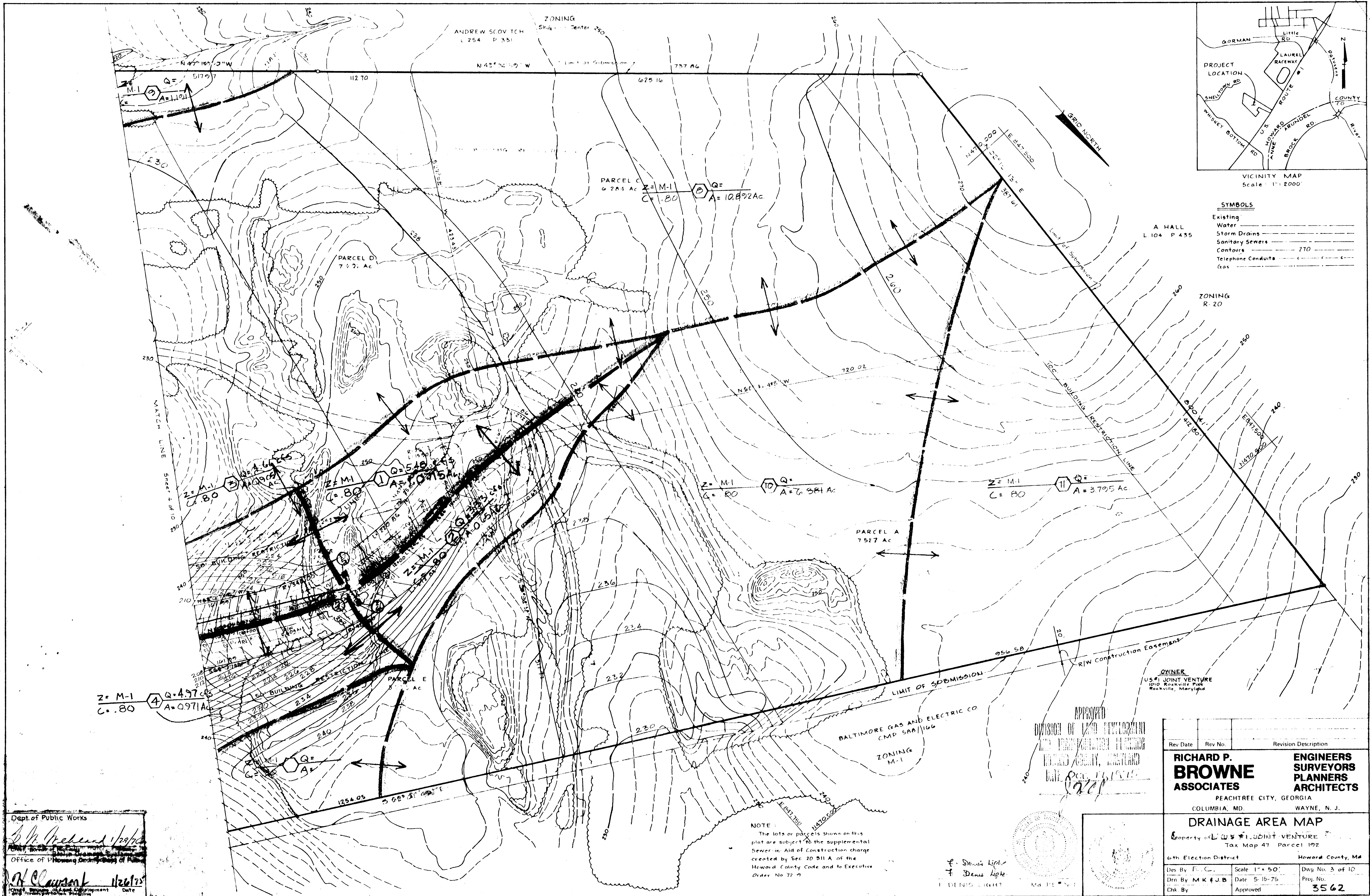


Rev. No.	Revision Description
11-17-81	
7-15-75	

RICHARD P. BROWNE ASSOCIATES
 ENGINEERS SURVEYORS PLANNERS ARCHITECTS
 PFACHTREE CITY, GEORGIA
 COLUMBIA, MD WAYNE, N. J.

DRAINAGE AREA MAP
 Property of U.S. GOVERNMENT
 Tax Map 47 Parcel 192
 4th Election District
 Howard County, Md
 Drawn by: EC Scale: 1" = 50' Day No. 2 of 10
 Drawn by: J.B. & M.K. Date: 5-15-75 Proj. No.
 Checked by: Approved 3562

44
 487



SYMBOLS

Existing Water	---
Storm Drains	---
Sanitary Sewers	---
Contours	--- 270 ---
Telephone Conduits	---
Gas	---

A HALL
L 104 P 435

ZONING
R-20

OWNER
US 1 JOINT VENTURE
1010 ROCKVILLE PIKE
ROCKVILLE, MARYLAND

APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE: Dec. 11, 1975
1975

Rev. Date	Rev. No.	Revision Description

RICHARD P. BROWNE ASSOCIATES
PEACHTREE CITY, GEORGIA
COLUMBIA, MD. WAYNE, N. J.

ENGINEERS SURVEYORS PLANNERS ARCHITECTS

DRAINAGE AREA MAP
Property of US 1 JOINT VENTURE
Tax Map 47 Parcel 192

6th Election District
Howard County, Md

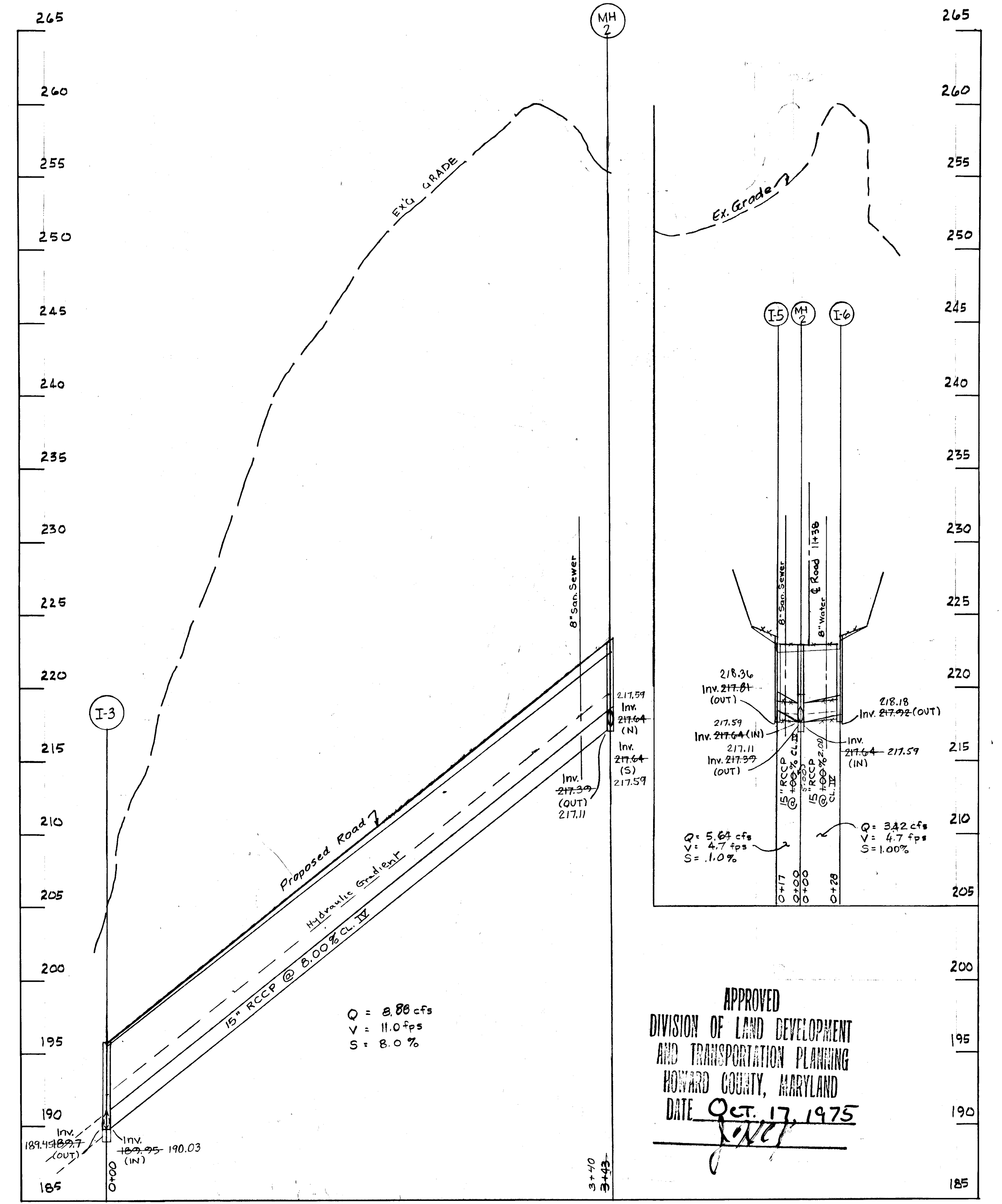
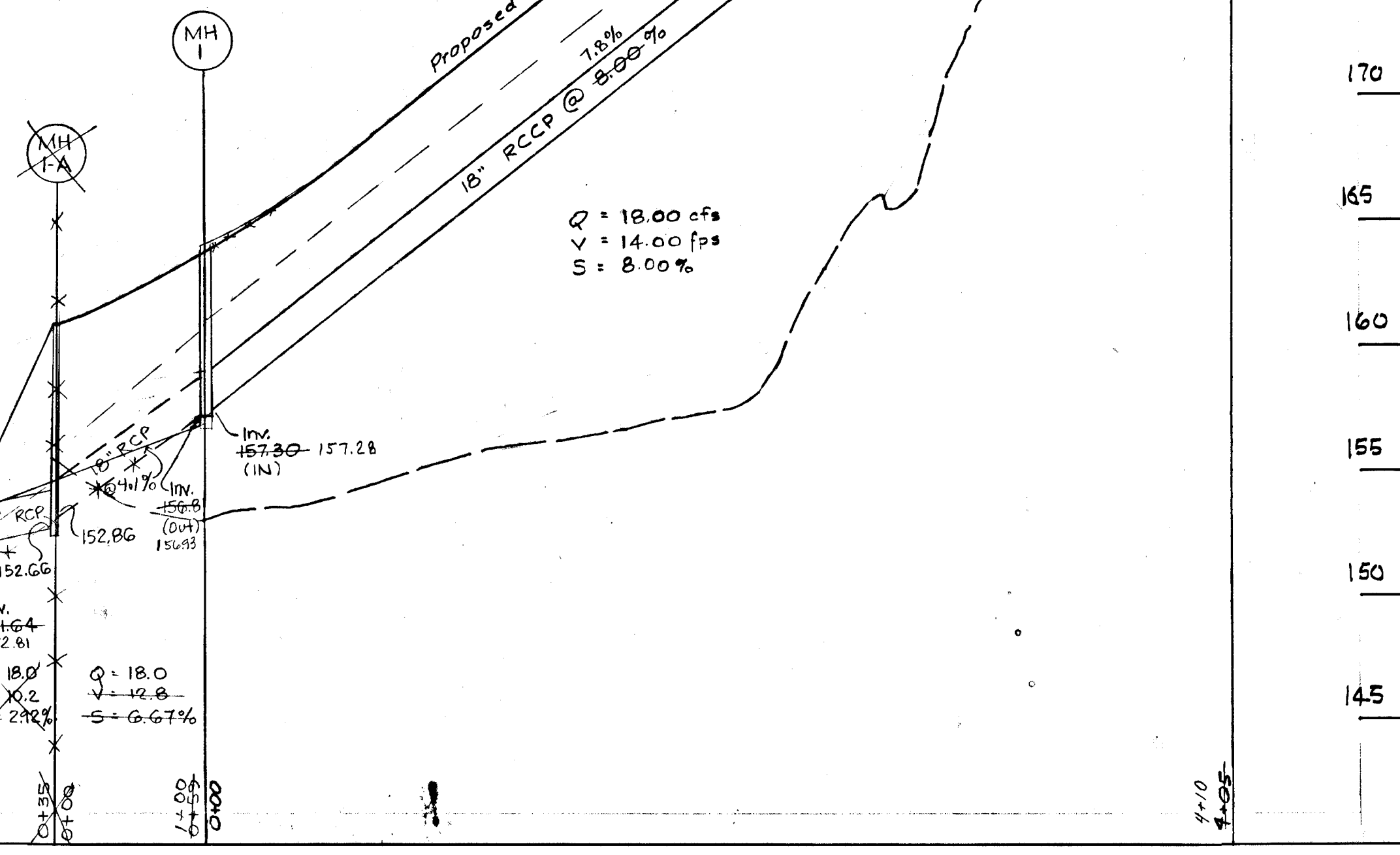
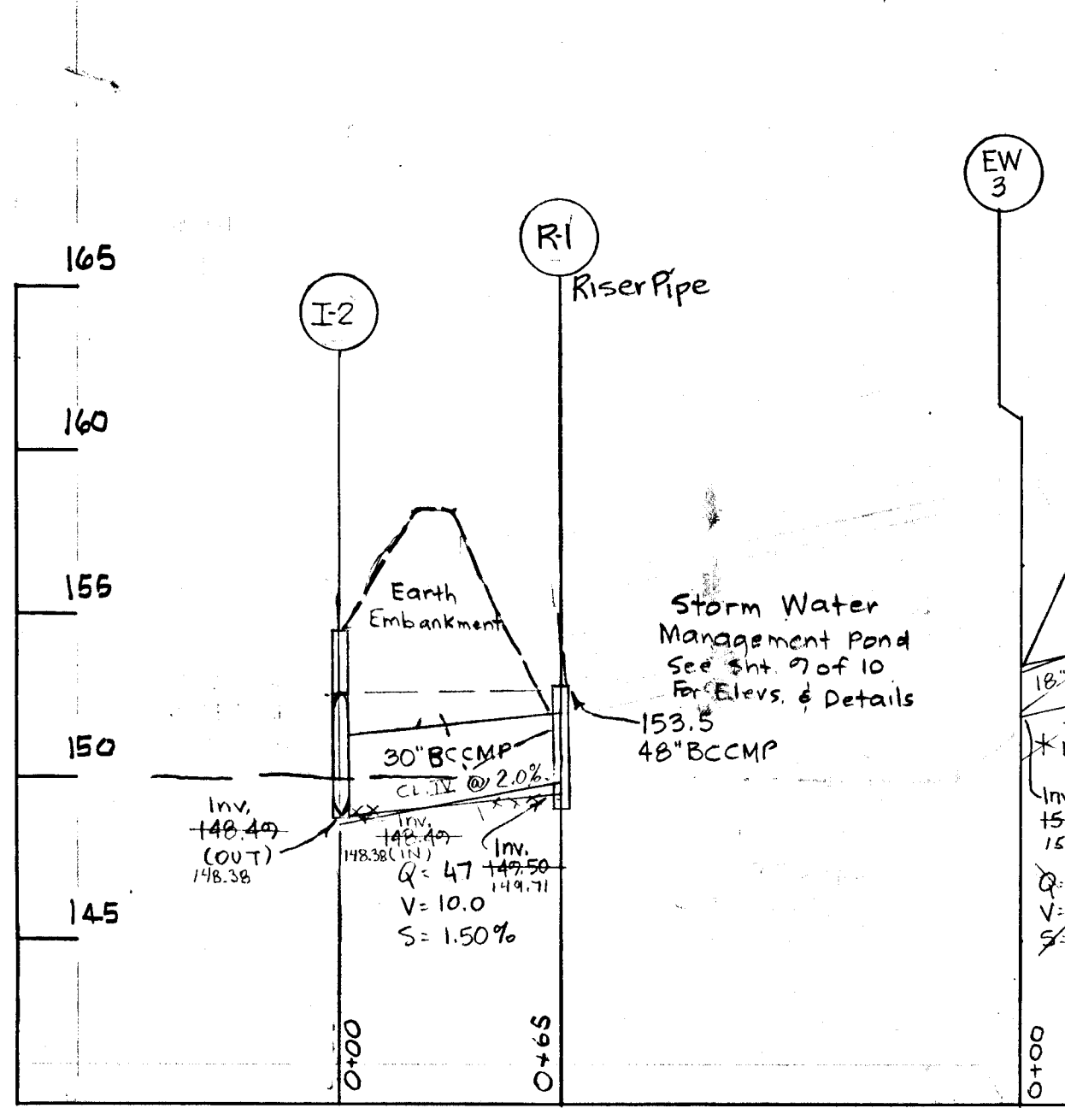
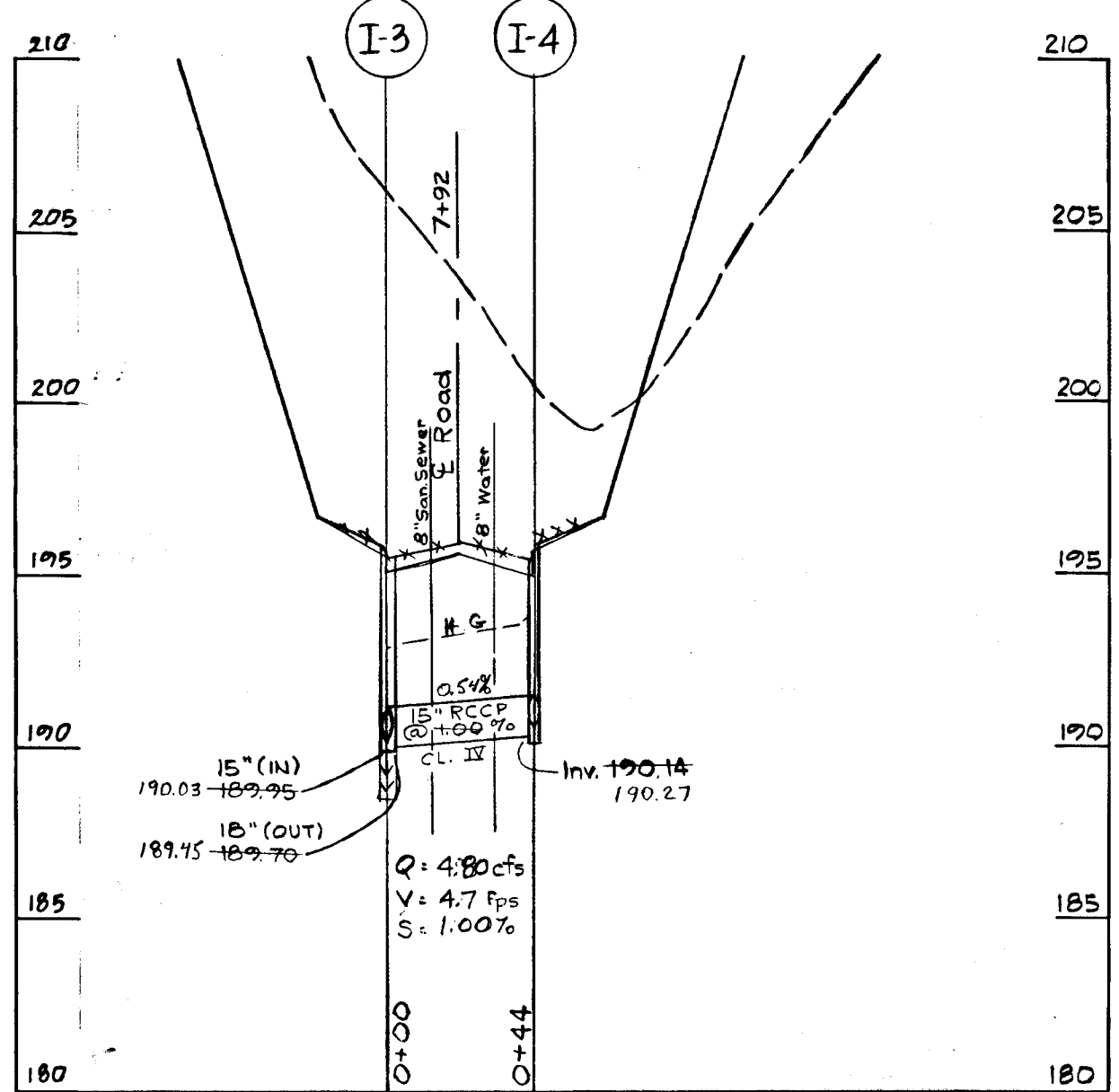
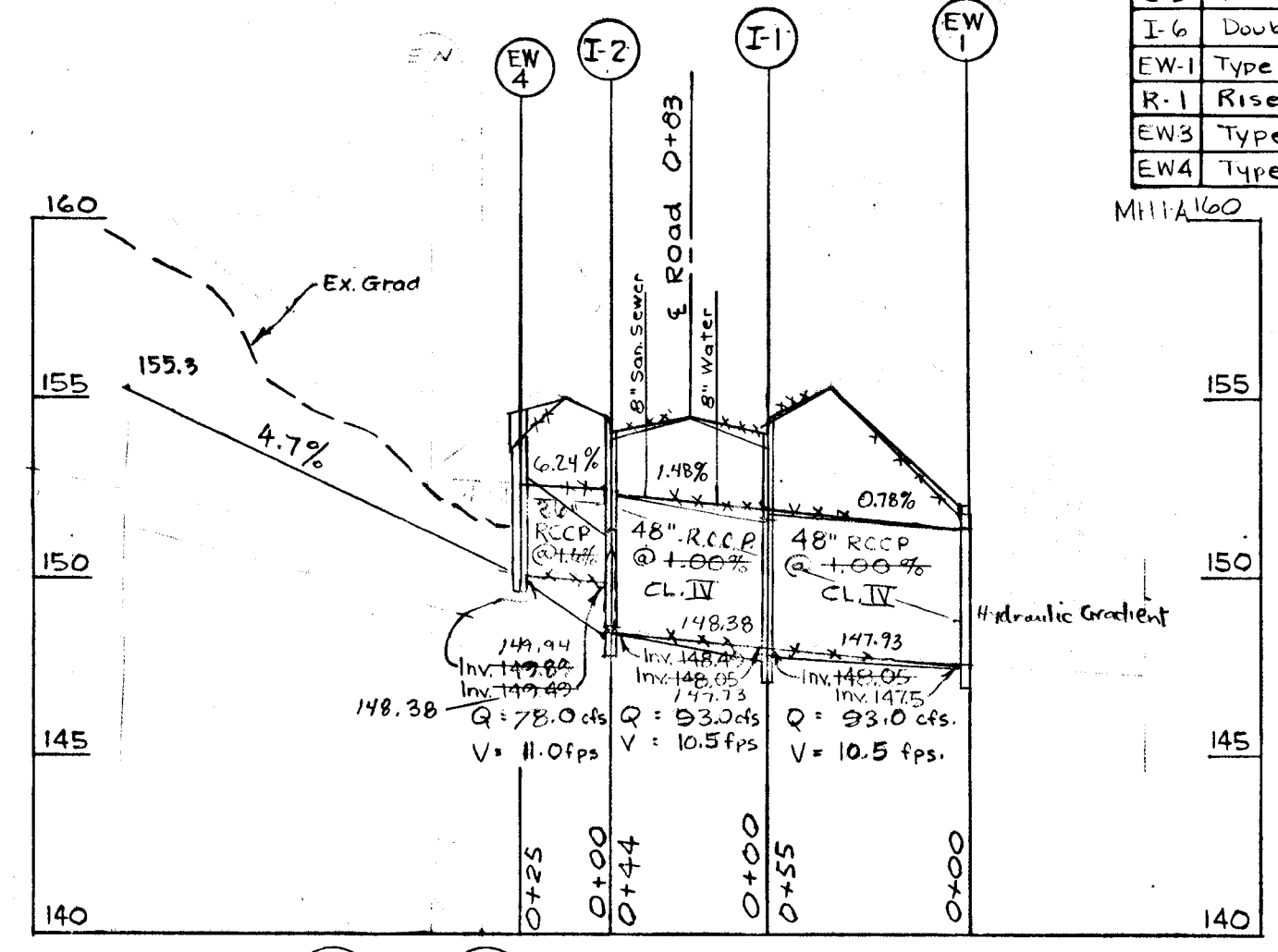
Des. By: F. C.	Scale: 1" = 50'	Dwg. No. 3 of 10
Drn. By: M. K. & J. B.	Date: 5-16-75	Proj. No.
Chk. By:	Approved:	3562

NOTE:
The lots or parcels shown on this plan are subject to the supplemental Sewer in Aid of Construction charge created by Sec 20 511 A of the Howard County Code and to Executive Order No 77 2

Dept. of Public Works
Office of Planning and Development
Date: 11/26/75

STORM DRAINAGE STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	INV.	IN	INV.	OUT	TOP# ELEV.	REMARKS
MH-1	Standard	Sta. 3+82 6.4' Left	157.30.28	156.80.33	162.01	(Top Cover)	See Ho. Co. Std. D-48 P.115	
MH-2	Standard	Sta. 11+34 30' 5" Left	217.64.59	217.59.11	222.89	(Top Cover)	"	
I-1	Std. Type "S" Comb. Dbl. Gate	Sta. 0+83 22' Right	147.73	148.05	148.45	93 (Top Curb)	See Ho. Co. Std. D-48 P.123	
I-2	Std. Type "S" Comb. Dbl. Gate	Sta. 0+83 22' Left	148.49.28	148.44.28	154.36	93 (Top Curb)	Branch & Parallel Pipe	
I-3	Double E Comb.	Sta. 7+92 22' Left	189.70.45	189.70.45	195.60	93 (Top Curb)	See Ho. Co. Std. D-48 P.123	
I-4	Double E Comb.	Sta. 7+92 22' Right	-	190.74.27	195.60	93 (Top Curb)	"	
I-5	Double E Comb.	Sta. 11+38 22' Left	-	197.44.28	223.28	93 (Top Curb)	222.86	
I-6	Double E Comb.	Sta. 11+38 22' Right	-	197.44.28	223.28	93 (Top Curb)	"	
EW-1	Type C Endwall	Sta. 0+83 77' Right	147.50	-	-	-	See Ho. Co. Std. D-52 P.107	
R-1	Riser Pipe	Sta. 1+07 17' 6" Left 77'	149.77	149.50	153.50	(Top HW)	See Sheet 7 of 10	
EW-3	Type C Endwall	Sta. 3+40 58' Left	151.80	151.64	153.89	(Top HW)	See Ho. Co. Std. D-52 P.107	
EW-4	Type C Endwall	Sta. 0+65 73' 40" Left	142.80	142.64	144.74	94	"	
MH-1	Standard	Sta. 3+82 40' Left	152.86	152.66	160.75	-	See Ho. Co. Std. SD 5.21	



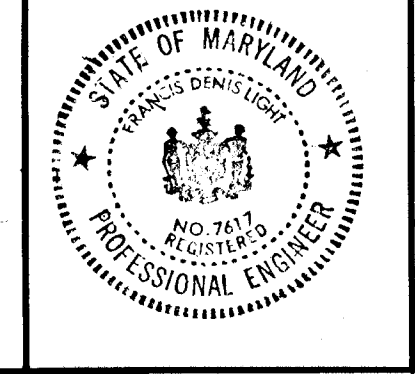
APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE Oct. 17, 1975

DEPARTMENT OF PUBLIC WORKS
D. M. McNeill 1/26/76
Chief, Bureau of Highways Date

OFFICE OF PLANNING AND ZONING
J. H. Cawson 11/26/76
Chief, Division of Land Development and Transportation Planning Date

11-17-81	Add MH-1A
7-15-75	
Rev Date	Rev No.
Revision Description	

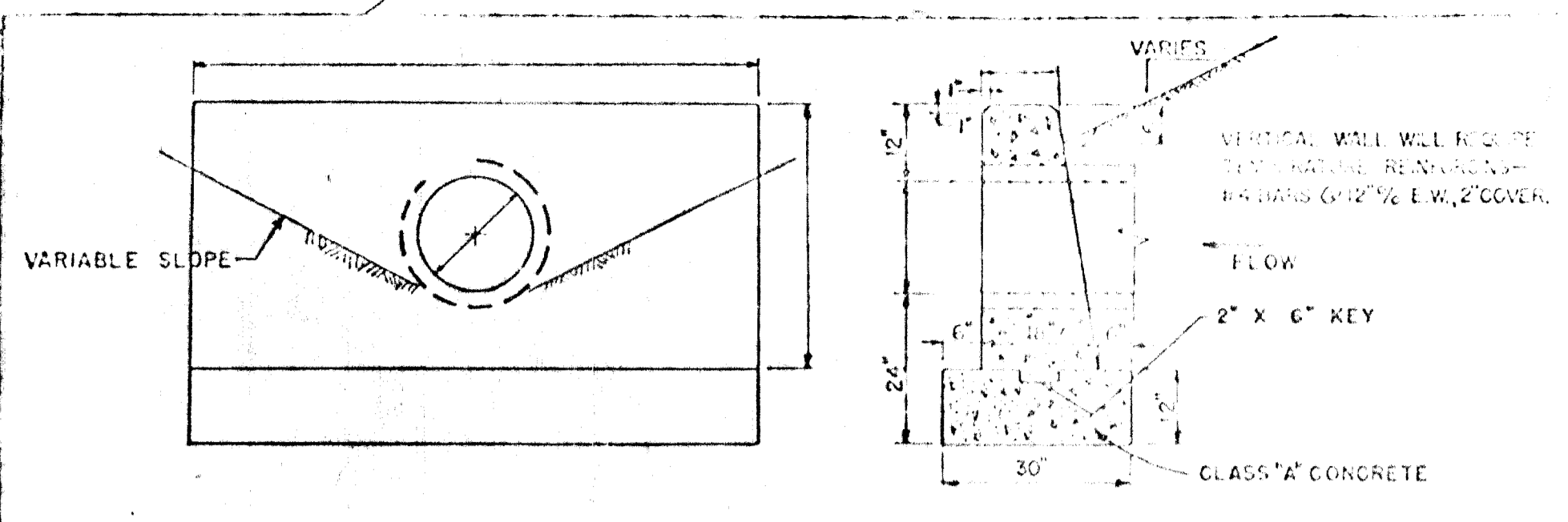
RICHARD P. BROWNE ASSOCIATES
ENGINEERS SURVEYORS PLANNERS ARCHITECTS
PEACHTREE CITY, GEORGIA
COLUMBIA, MD. WAYNE, N. J.



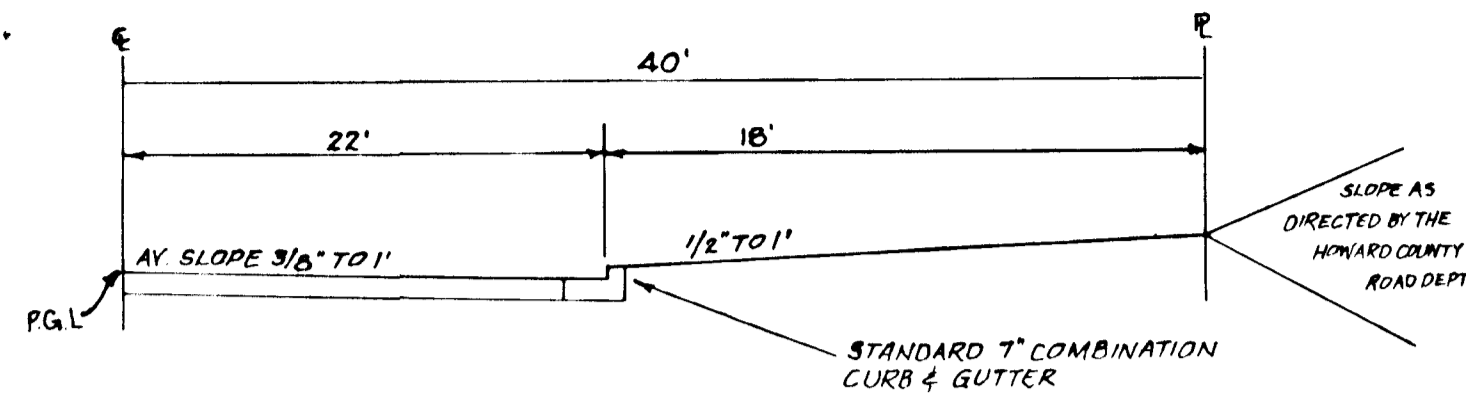
STORM DRAIN PROFILES
Property of: U.S. #1 JOINT VENTURE
Tax Map 47 Parcel 192
4th Election District Howard County, Md.

Des. By EC	Scale Horiz. 1" = 50'	Dwg. No. 4 of 10
Drn. By MK	Date -74	Proj. No. 3562
Chk. By	Approved	

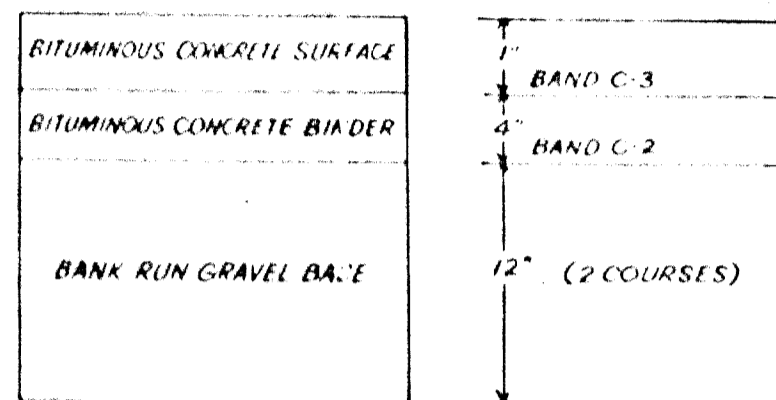
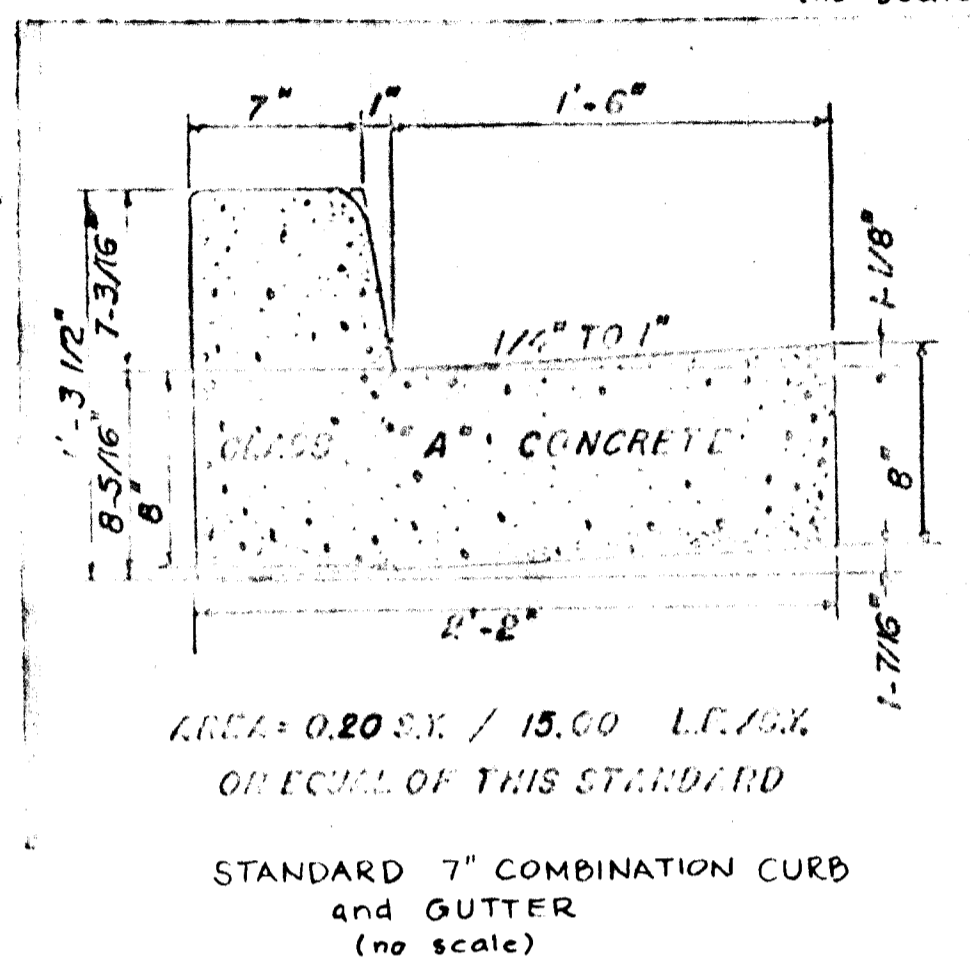
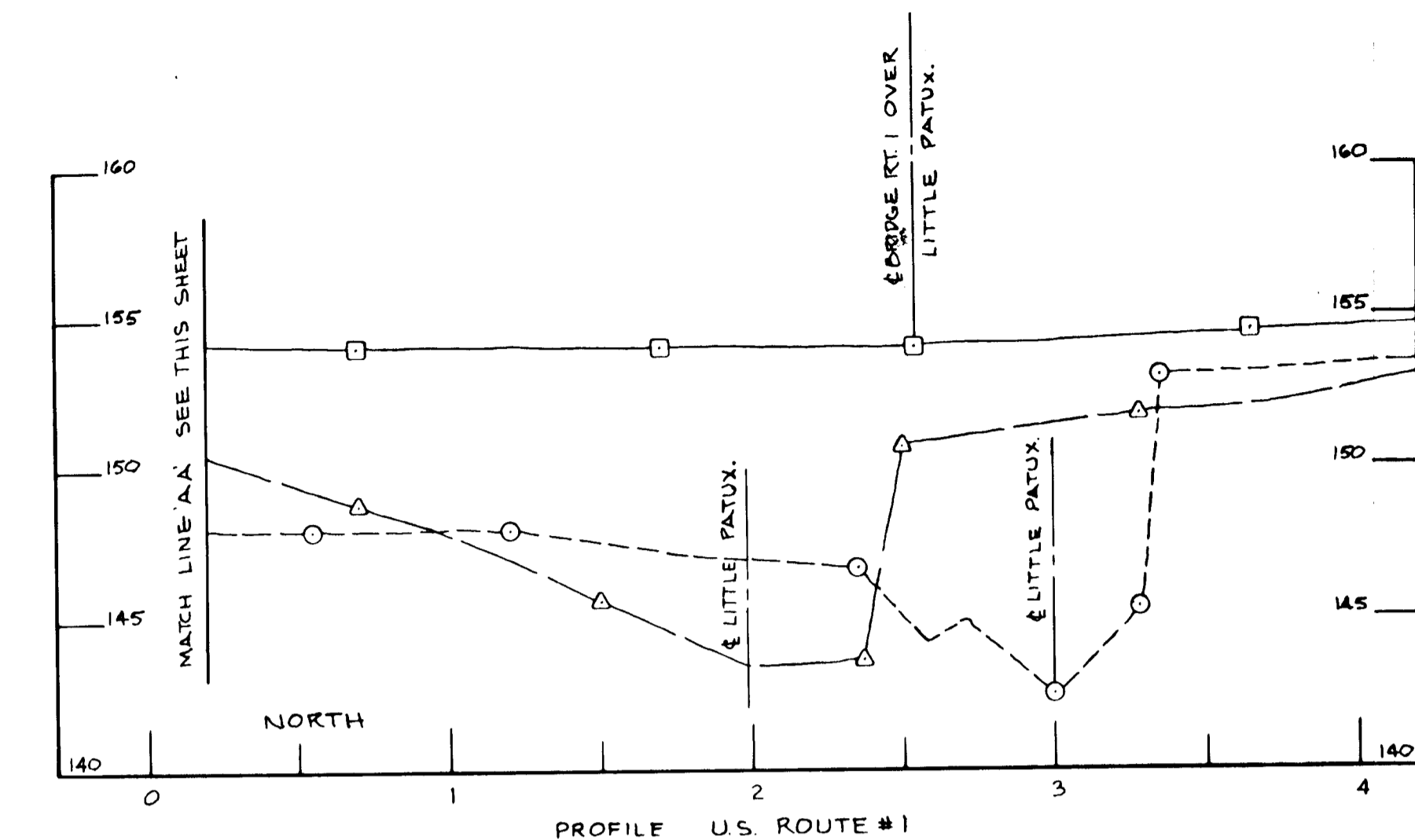
F. Denis Light
F. Denis Light #7617



STANDARD STORM DRAINAGE DETAILS
TYPE "B" HEADWALL
(no scale)



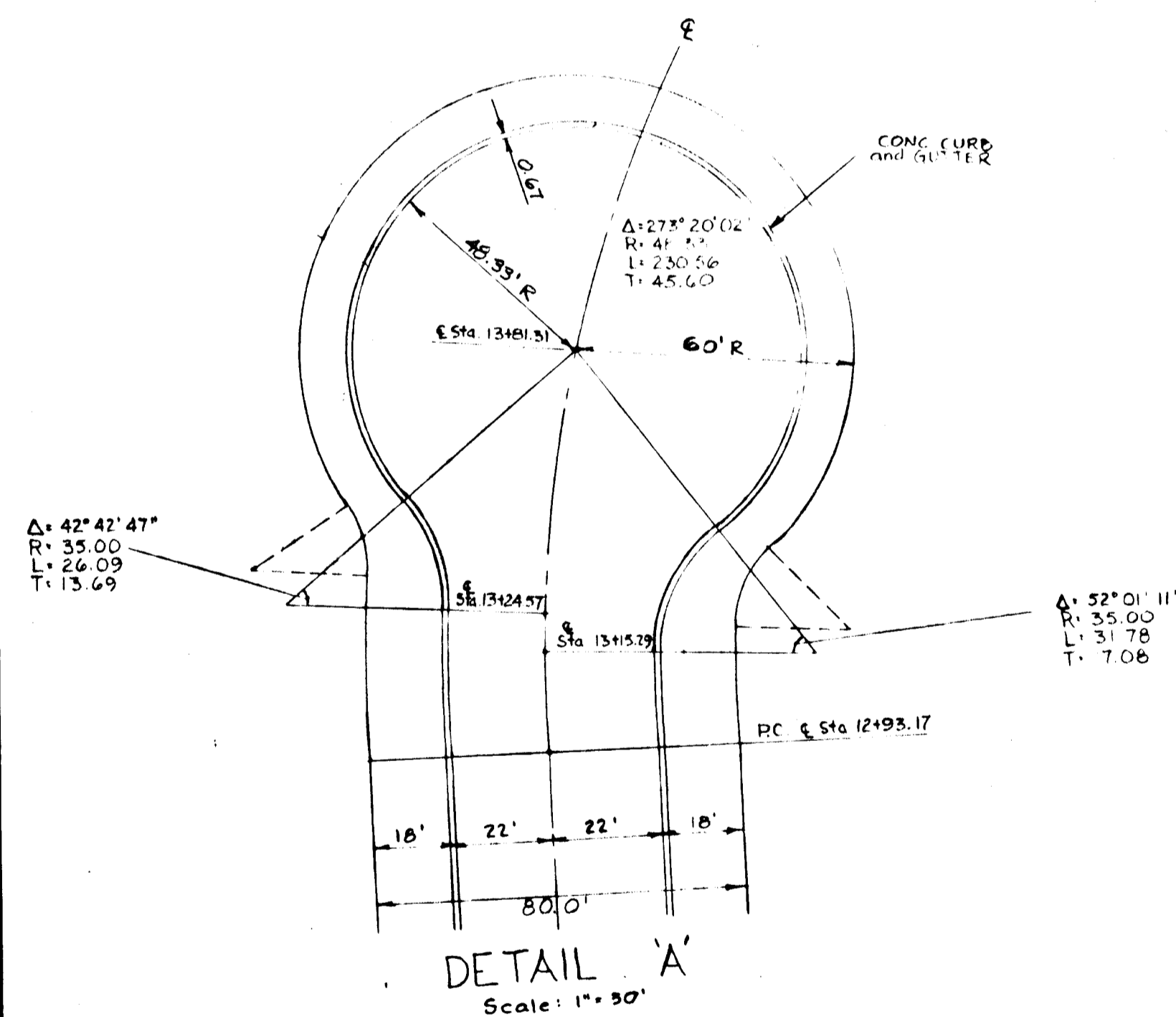
TYPICAL STREET SECTION
No. Scale



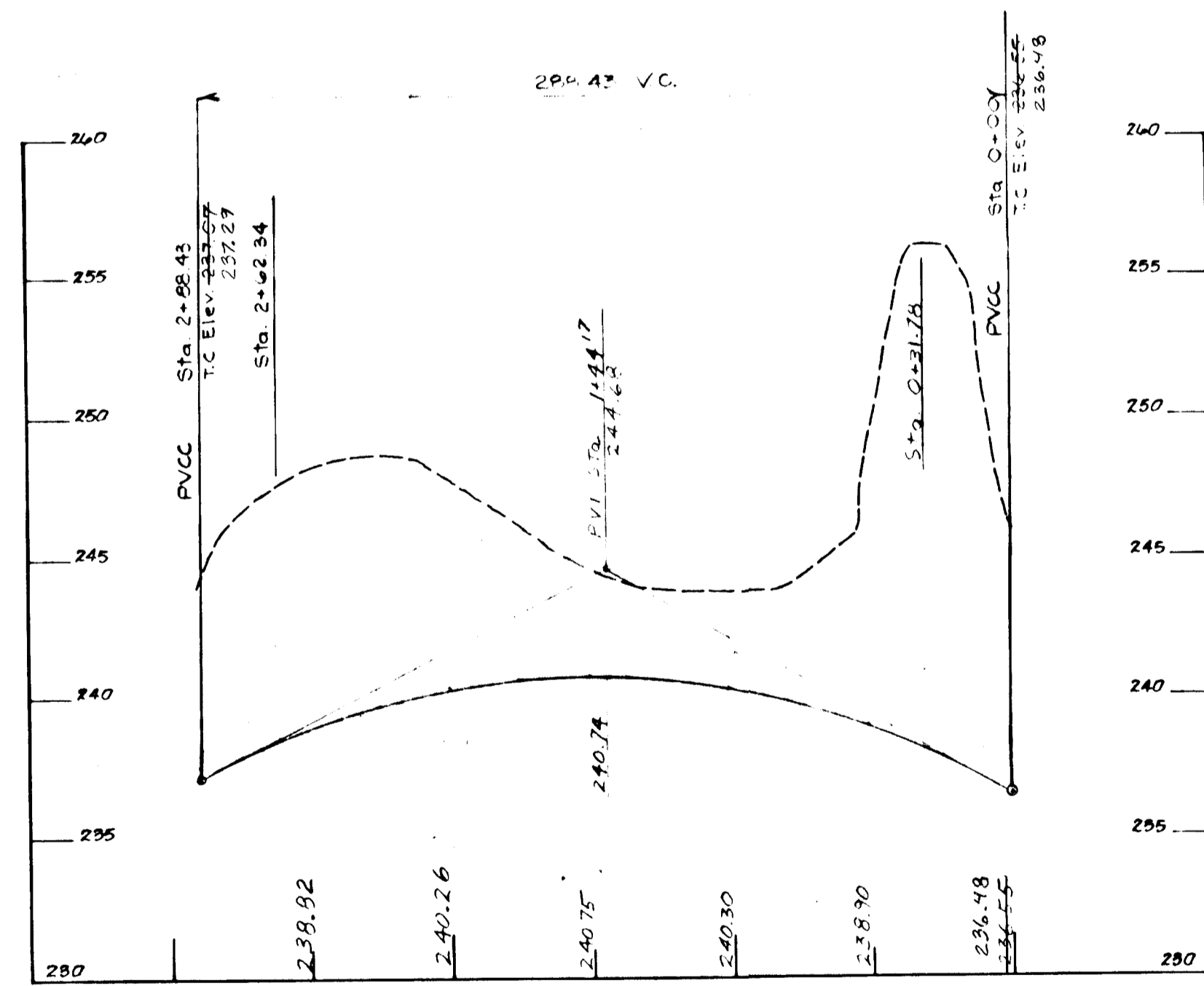
CLEANING AND GRADING: ARTICLE C-1
SURFACING: ARTICLE C-2
BASE COURSE: ARTICLE C-24
BINDER COURSE: ARTICLE C-31 & C-33
SURFACE COURSE: ARTICLE C-31

TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS

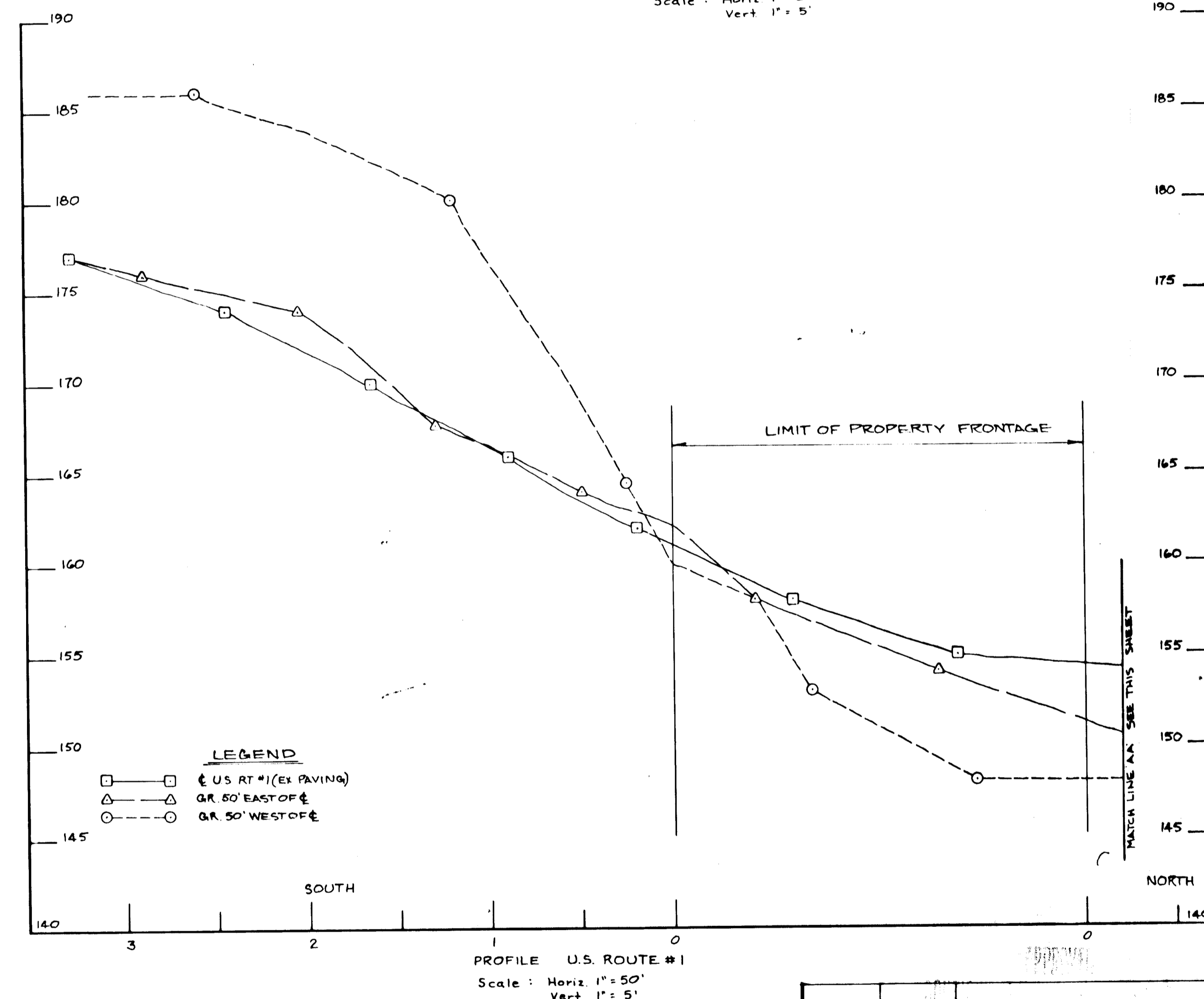
Base will be primed in accordance with Section C-30.2 as provided in the Howard County Road Construction Code and Standard Specifications.
Task Coat is required in accordance with Section C-31.4 of the Howard County Road Construction Code and Standard Specifications.



DETAIL "A"
Scale: 1" = 30'



LINEAR PROFILE - CUL-DE-SAC - TOP OF CURB
Scale: Horiz 1" = 50'
Vert 1" = 5'



LEGEND
□ □ U.S. RT #1 (EX PAVING)
△ △ GR. 80' EAST OF E
○ ○ GR. 50' WEST OF E

APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE OCT. 17, 1975
[Signature]

DEPARTMENT OF PUBLIC WORKS
[Signature] 11/29/76
CHIEF BUREAU OF HIGHWAYS DATE
OFFICE OF PLANNING AND ZONING
[Signature] 11/26/76
DATE

Rev. No.	Rev. Date	Revision/Description
1		AS SHOWN

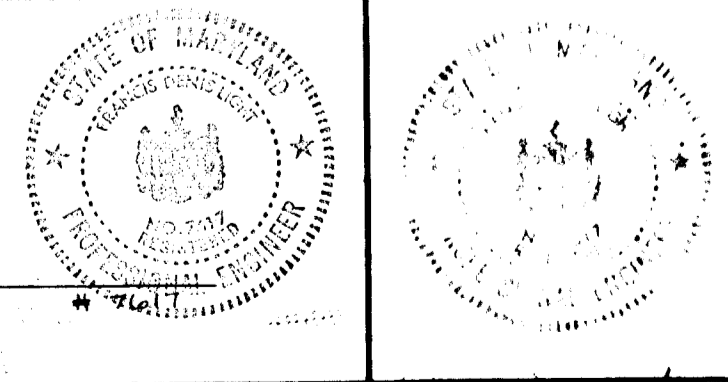
RICHARD P. BROWNE ASSOCIATES
ENGINEERS SURVEYORS PLANNERS ARCHITECTS
PEACHTREE CITY, GEORGIA
COLUMBIA, MD. WAYNE, N. J.

DETAIL SHEET
Property of: U.S. #1 JOINT VENTURE
Tax Map 47 Parcel 192
4th Election District Howard County, Md

Des. By	Scale AS SHOWN	Dwg. No. 5 of 10
Drn. By C.B.M.	Date 5-15-75	Proj. No. 3562
Chk. By	Approved	

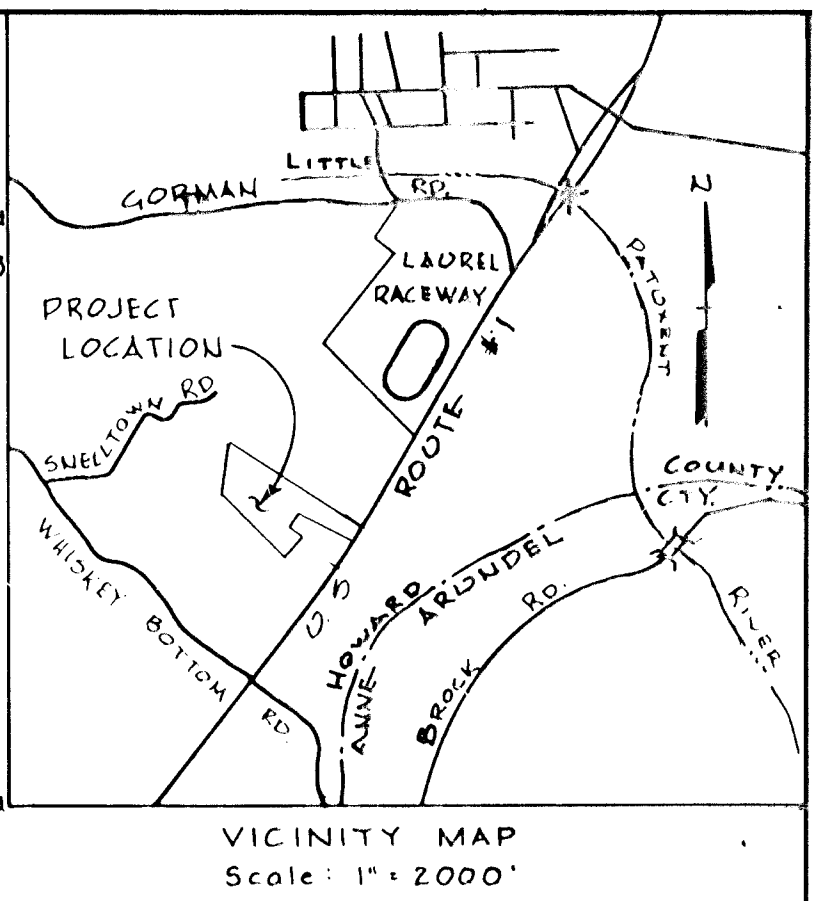
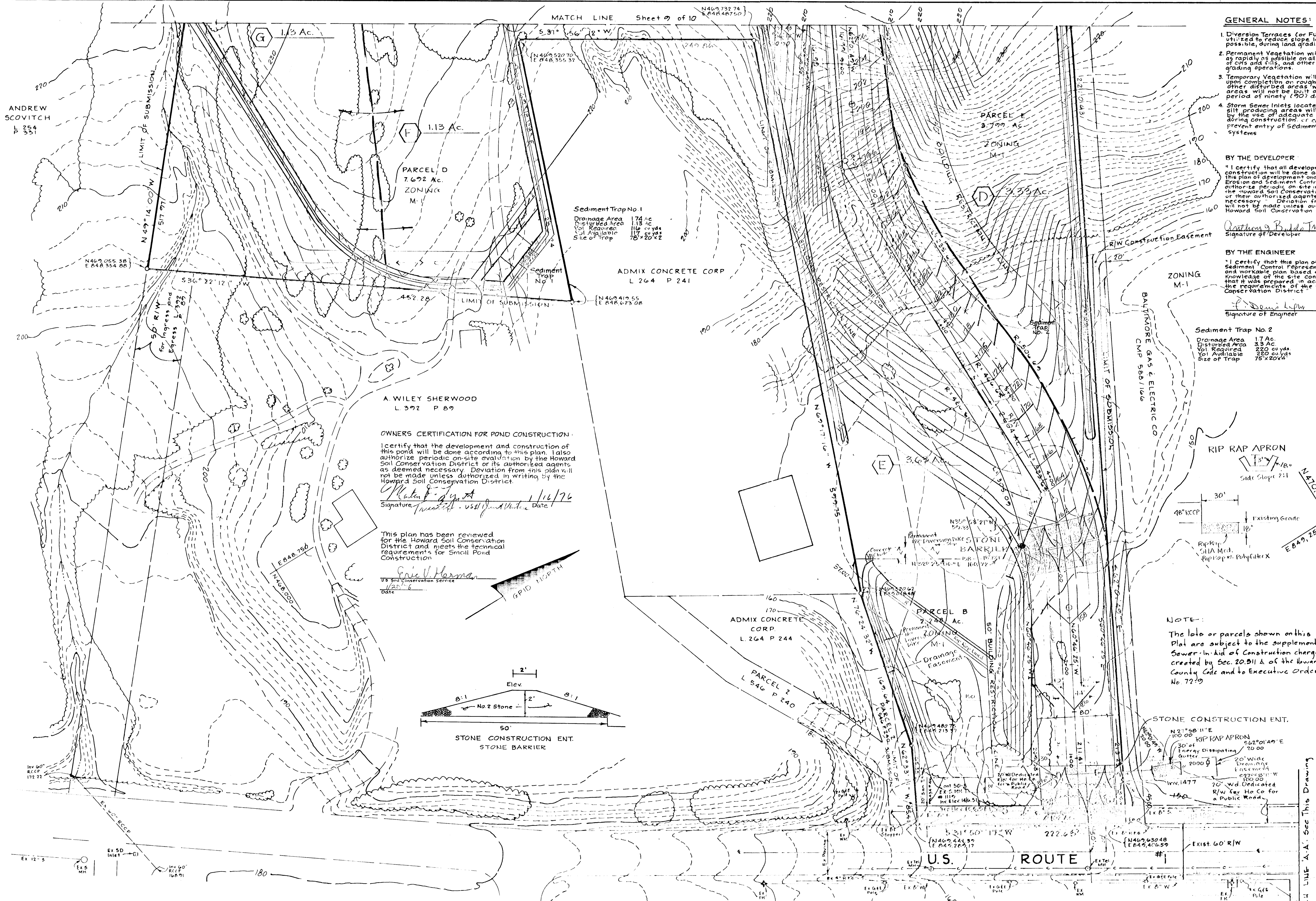
DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways Date

F. Denis Light
F. Denis Light



12/2/87

1-75-67



- GENERAL NOTES:**
1. Diversion Terraces (or Furrows) will be utilized to reduce slope lengths where possible, during land grading operations.
 2. Permanent Vegetation will be established as readily as possible on all exposed faces of cuts and fills, and other areas, following grading operations.
 3. Temporary Vegetation will be applied upon completion of rough grading on all other disturbed areas where surface material will not be built on within a period of ninety (90) days.
 4. Storm Sewer inlets located below high water table areas will be protected by the use of adequate silt traps to prevent entry of sediment into the systems.

BY THE DEVELOPER
 I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard County Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard County Soil Conservation District.

Richard P. Browne
 Signature of Developer Date

BY THE ENGINEER
 I certify that this plan of Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.

F. Dennis Light
 Signature of Engineer Date

- SYMBOLS**
- Existing: Water
 - Storm Drains
 - Sanitary Sewer
 - Contours 270
 - Telephone Conduits
 - Gas

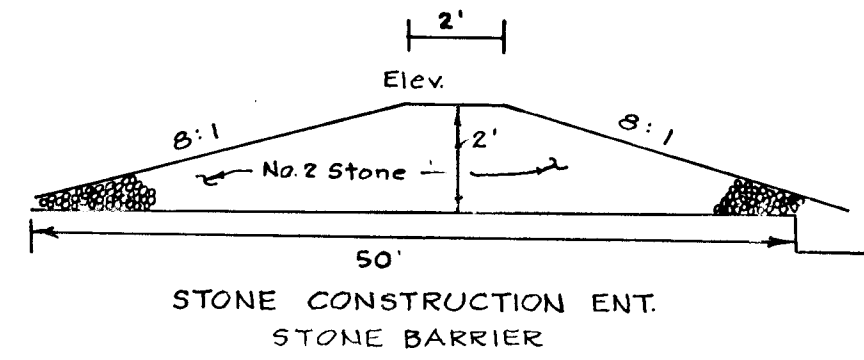
- SEDIMENT AND SOIL EROSION CONTROL NOTES:**
1. All Sediment Control Measures to be adjusted to meet field conditions at time of construction and be constructed prior to any grading or disturbance of existing surface material.
 2. All Sediment Measures shall be undertaken in strict accordance with the approved plans and the criteria and specifications approved by the Howard County Soil Conservation District.
 3. All Seeding on Sediment Control Facilities to be done in accordance with the Howard County Soil Conservation District's Temporary Seeding Specifications on this sheet. Seeding to be done immediately upon construction.
 4. Periodic Inspection and Maintenance of all Sediment Control Structures must be provided to insure the intended purpose is accomplished.
 6. All Sediment Control Measures are to remain in place until permission for their removal has been obtained from the Howard County Soil Conservation District.
 7. Notify the Howard County Soil Conservation District Office prior to starting any work. (445-5000 ext. 318)
 8. On site inspection and Maintenance of all Sediment Control Measures, including cleanup of all Sediment Traps and Berms and proper establishment of all Vegetation measures will be the responsibility of the Contractor or his Representative on the site on a continuing day to day basis.

OWNERS CERTIFICATION FOR POND CONSTRUCTION:
 I certify that the development and construction of this pond will be done according to this plan. I also authorize periodic on-site evaluation by the Howard County Soil Conservation District or its authorized agents as deemed necessary. Deviation from this plan will not be made unless authorized in writing by the Howard County Soil Conservation District.

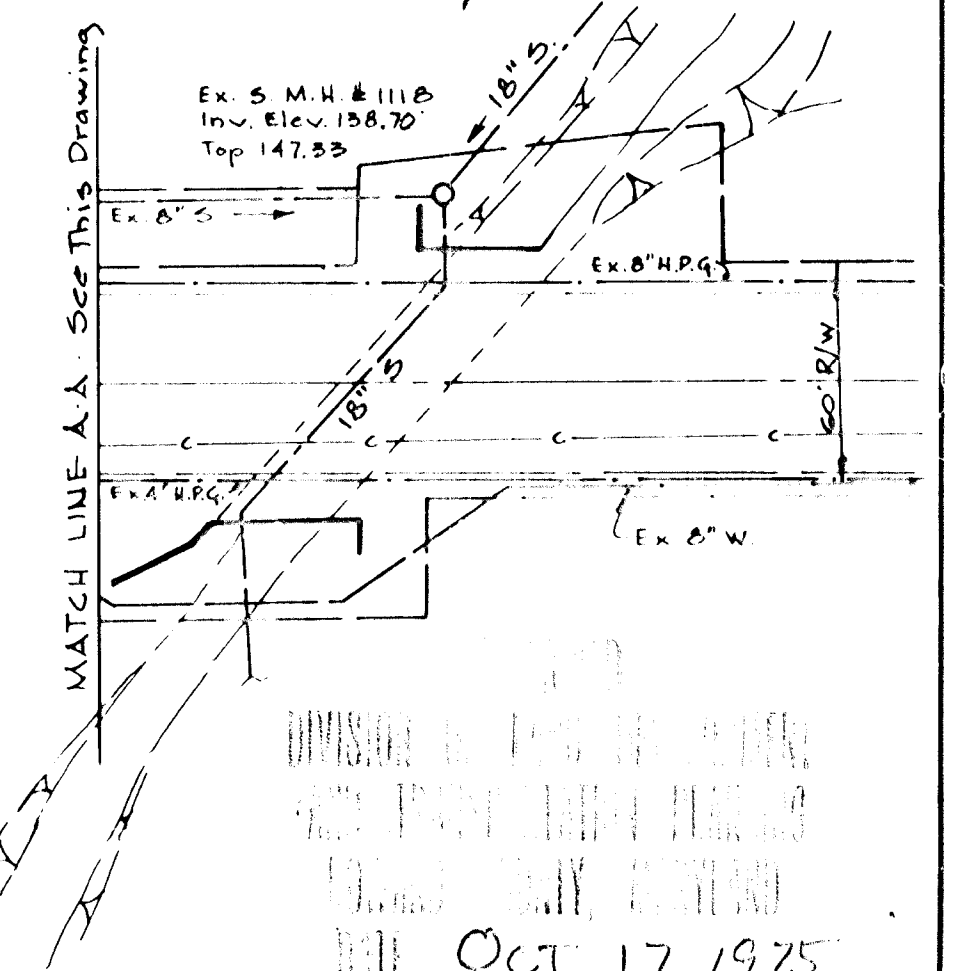
Robert J. Sherwood
 Signature Date 1/16/76

This plan has been reviewed for the Howard County Soil Conservation District and meets the technical requirements for Small Pond Construction.

Eric W. Herman
 US Soil Conservation Service Date



NOTE:
 The lots or parcels shown on this Plan are subject to the supplemental Sewer in-lid of Construction charge created by Sec. 20.311 & of the Howard County Code and to Executive Order No. 77-9



Dedicated R/W	0.102 Ac
Road	2.604 Ac
Parcel A	7.527 Ac
B	2.248 Ac
C	6.284 Ac
D	7.692 Ac
E	3.799 Ac
TOTAL AREA OF SITE	30.256 Ac

Reviewed for HOWARD S.C.D., and meets technical requirements.

Eric W. Herman 1/20/76
 Signature Date
 US Soil Conservation Service

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard County Soil Conservation District.

Richard P. Browne 1/20/76
 Approved Date
 Howard S.C.D.

DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways Date

MULCHING:
 1. Mulch materials should be unweathered, unchopped small grain straw spread at the rate of 2 tons per acre.
 2. Spread uniformly by hand or mechanically so that at least 75% of the soil surface will be covered. For uniform distribution of hand spread mulch divide area into approximately 1000 square foot sections and place 1 bale approx. match; 100 lbs. of mulch for distribution with a chain section approximately 65-70 lb. baler will be required.

TEMPORARY SEEDING SPECIFICATIONS:
 1. Apply ground agricultural limestone at the rate of two tons per acre.
 2. Apply a minimum of 500 lbs. per acre of 10-20-10 or equivalent fertilizer.
 3. Incorporate both lime and fertilizer into the top 3" of surface soil by disking or other suitable means.
 4. Seed one of the following mixtures at the rate shown:
 (August 1 to November 1)
 1 lb. Italian ryegrass or 2 lb. Small grain or 5 lb. winter oats.
 5. Mulch, or stated under mulching note, this sheet.

PERMANENT SEEDING SPECIFICATIONS:
 Before seeding apply the following per acre:
 2000# Ground Agricultural Limestone
 1000# 5-10-10 Fertilizer
 Incorporate into the soil to a depth of 2-3" by disking or other suitable means. Then seed the following mixture at the rate shown per acre:
 50 lbs. Kentucky 31 Tall Fescue
 15 lbs. Korean Lespedeza
 Mulch as stated under mulching notes, this sheet.
 2 SLOPES STEEPER THAN 3:1 - Same as above except that in lieu of the Korean Lespedeza, 20# Crownvetch will be applied per acre.

OWNER:
 U.S. JOINT VENTURE
 1010 Rockville Pike
 Rockville, Maryland

F. Dennis Light
 F DENNIS LIGHT
 Md PL # 7617

11-17-81	MR. F.A. APPROV.	
7-13-77		
Rev Date	Rev No.	Revision Description
RICHARD P. BROWNE ASSOCIATES		ENGINEERS SURVEYORS PLANNERS ARCHITECTS
PEACHTREE CITY, GEORGIA		WAYNE, N. J.
COLUMBIA, MD.		
STORM WATER MANAGEMENT & SEDIMENT CONTROL		
Property of U.S. JOINT VENTURE		
Tax Map 47 Parcel 192		
4th Election District	Howard County, Md.	
Des. By E.C.	Scale 1" = 50'	Dwg. No. 3 of 10
Drn. By J.B. & M.K.	Date 5-15-75	Proj. No.
Chk. By	Approved	3562

BY THE DEVELOPER

I certify that all development and/or construction will be done according to this plan of development and Plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. A Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

Signature of Developer Date

BY THE ENGINEER:

I certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

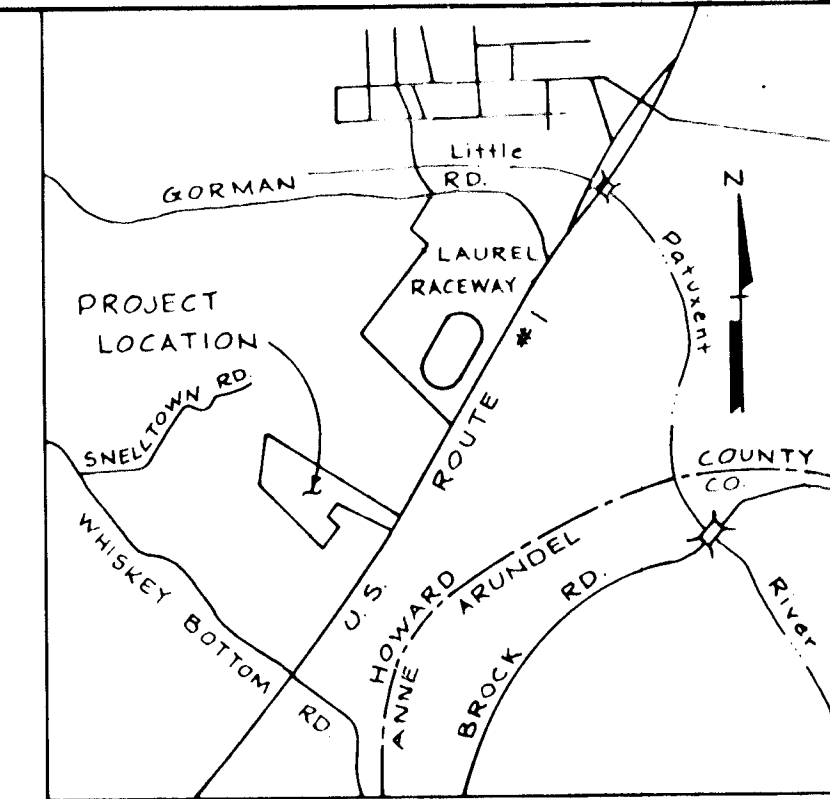
Signature of Engineer Date

Reviewed for HOWARD S.C.D. and meets technical requirements.

Signature of Engineer Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

Approved Signature of Engineer Date

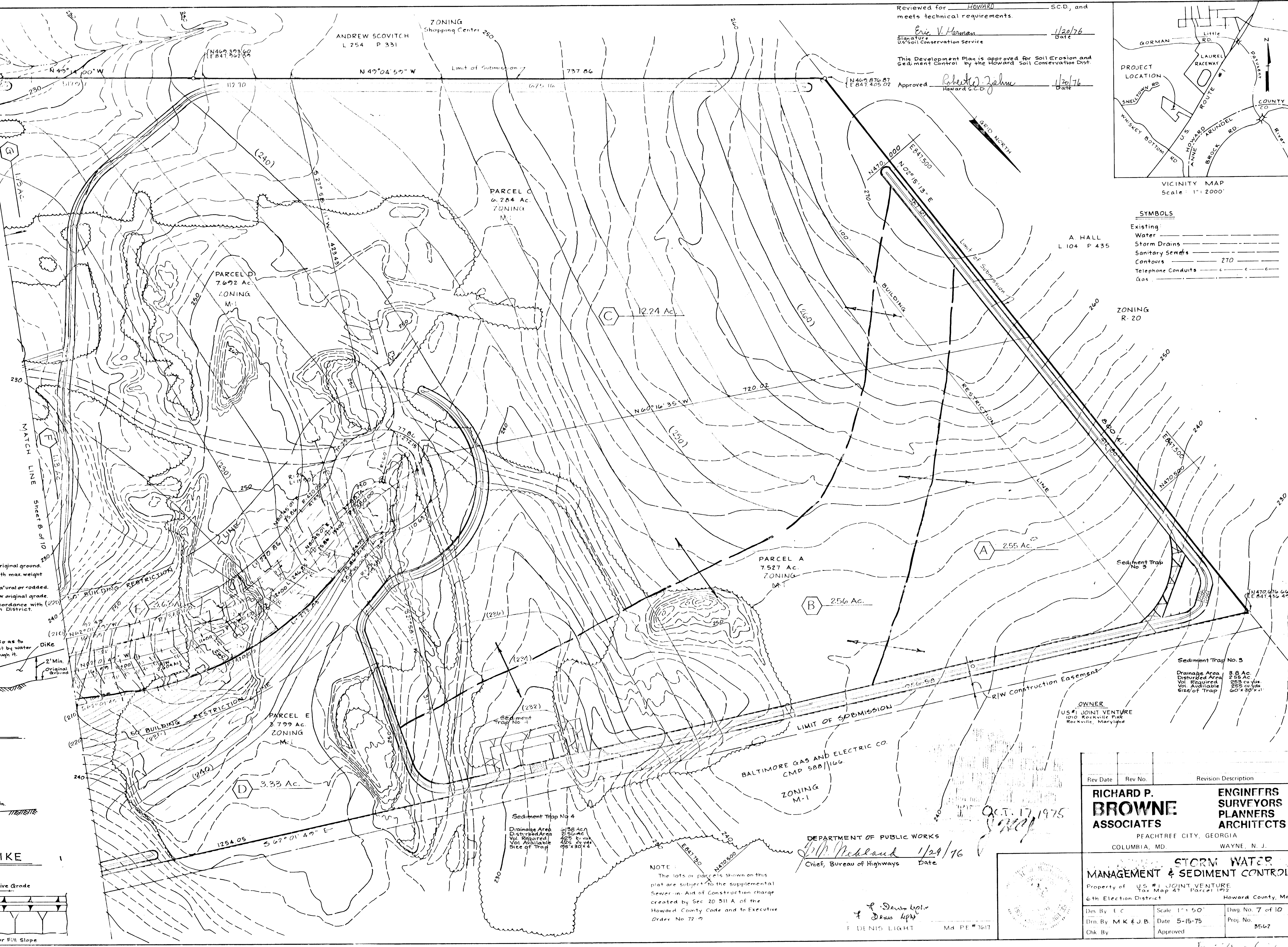
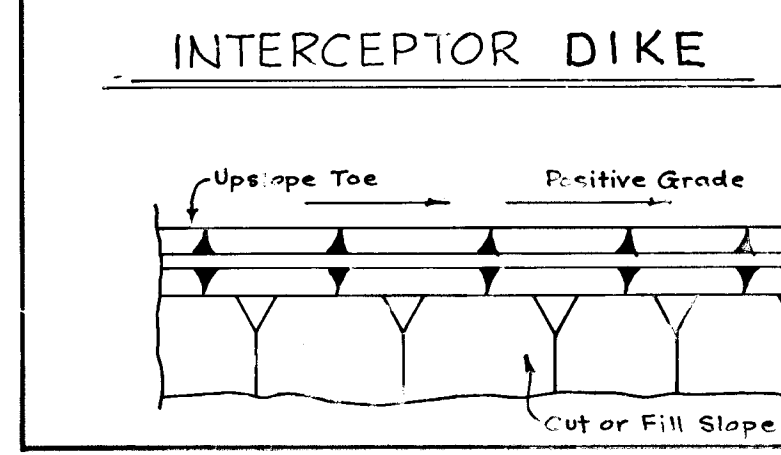
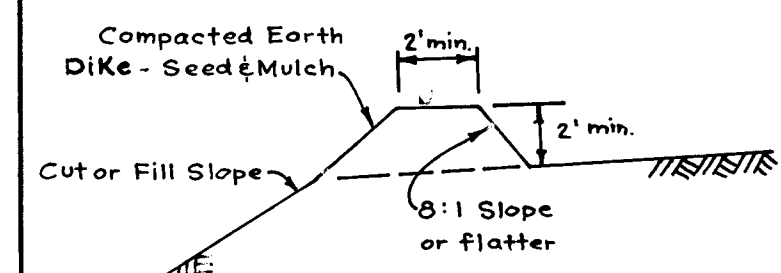
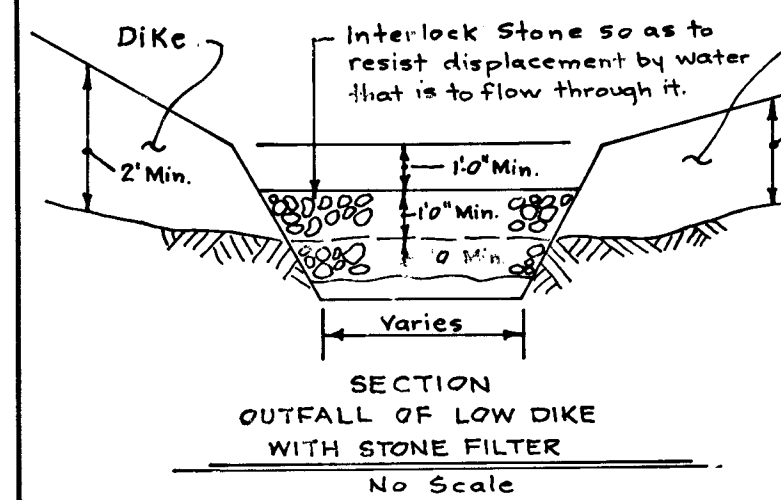


SYMBOLS

- Existing Water
Storm Drains
Sanitary Sewers
Contours 270
Telephone Conduits
Gas

CONTRACTOR'S NOTE:

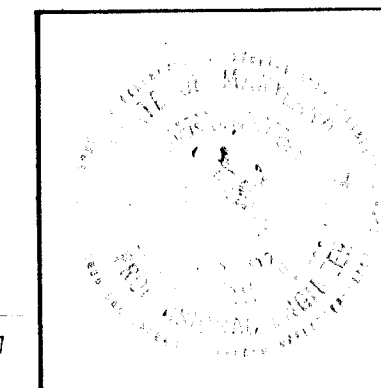
- 1. Stone is to be "keyed" 10" min into original ground.
2. Stone is to be of irregular shape with max. weight of 50 lbs (3' x 4" in size).
3. Provided vegetation outfall, either natural or sodded.
4. Cleanout when silt reaches 6" below original grade.
5. All construction shall be done in accordance with the Howard County Soil Conservation District.



NOTE: The lots or parcels shown on this plat are subject to the Supplemental Sewer in Aid of Construction charge created by Sec 20 Bill A of the Howard County Code and to Executive Order No 72-9

DEPARTMENT OF PUBLIC WORKS Chief, Bureau of Highways Date

Table with columns: Rev Date, Rev No., Revision Description. Includes project name: STORM WATER MANAGEMENT & SEDIMENT CONTROL, and company: RICHARD P. BROWNE ASSOCIATES ENGINEERS SURVEYORS PLANNERS ARCHITECTS.



Signature of Engineer Date

Handwritten mark

Handwritten number 175-67

This plan for small pond construction meets the requirements of the Howard Soil Conservation District.

APPROVED: Robert J. Zick 1/20/76
Howard SCD Date
F-75-67
Plan Number

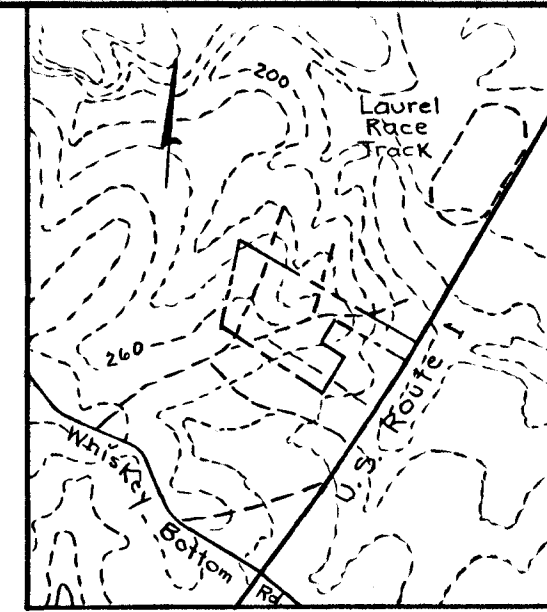
This plan has been reviewed for the Howard Soil Conservation District and meets the Technical Requirements for Small Pond Construction.

Eric V. Herman 1/20/76
U.S. Soil Conservation Service Date

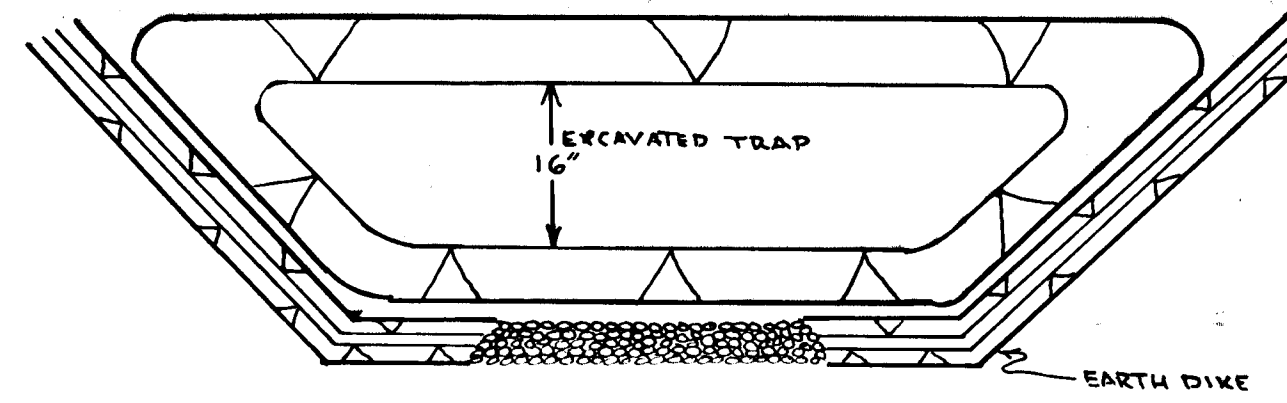
OWNER'S CERTIFICATION FOR POND CONSTRUCTION:

I certify that the development and construction of this pond will be done according to this plan. I also authorize periodic on-site evaluation by the Howard Soil Conservation District or its authorized agents as deemed necessary. Deviation from this plan will not be made unless authorized in writing by the Howard Soil Conservation District.

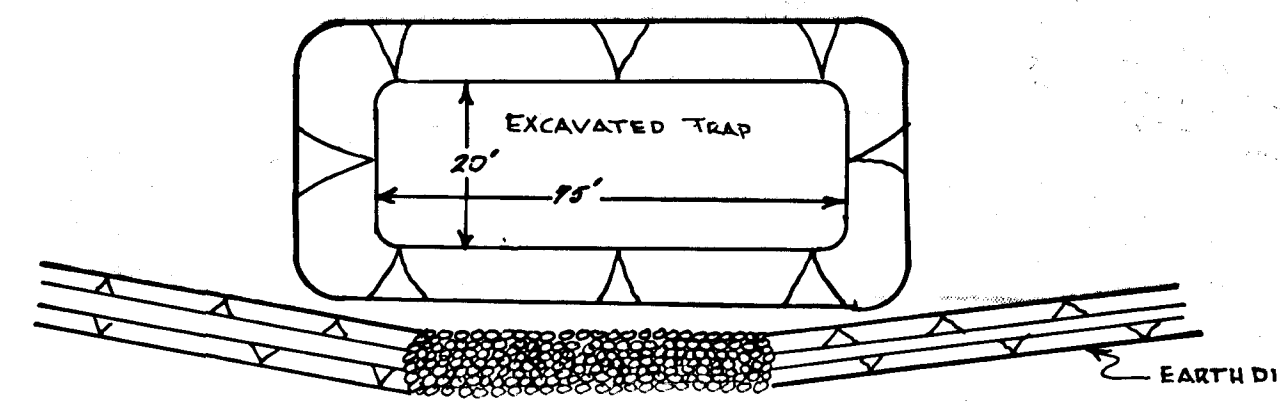
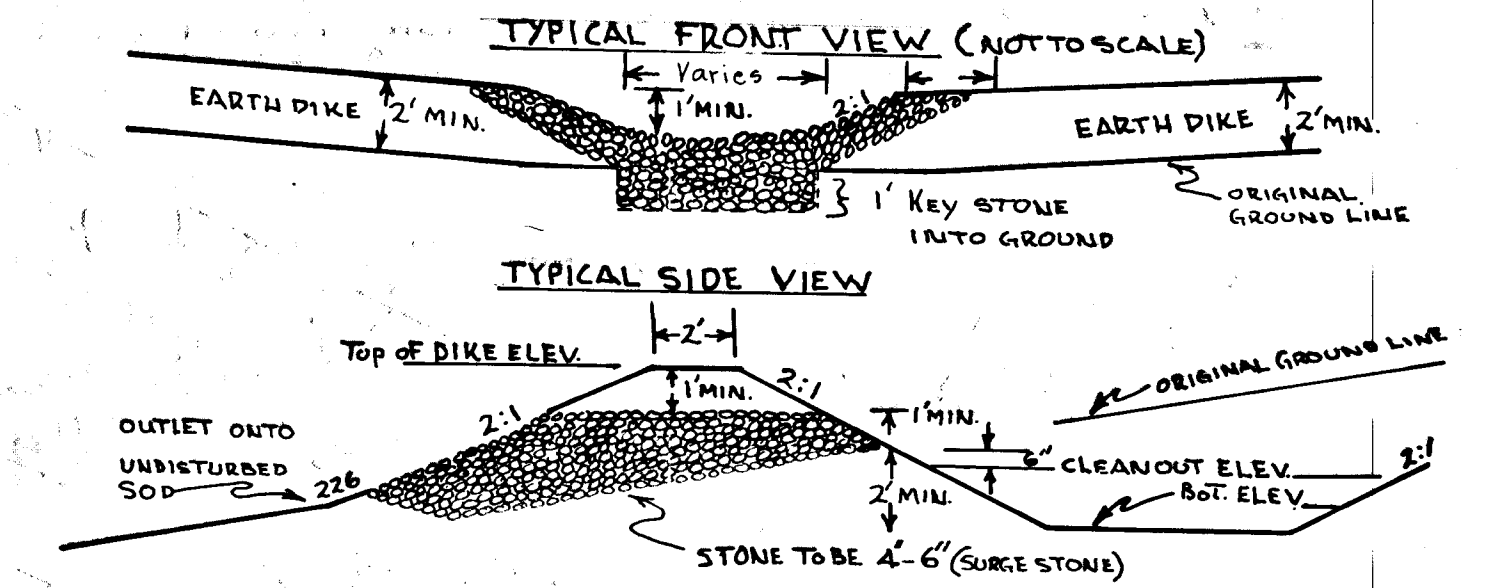
Anthony G. Bufala Trustee 8-5-75
Signature Date



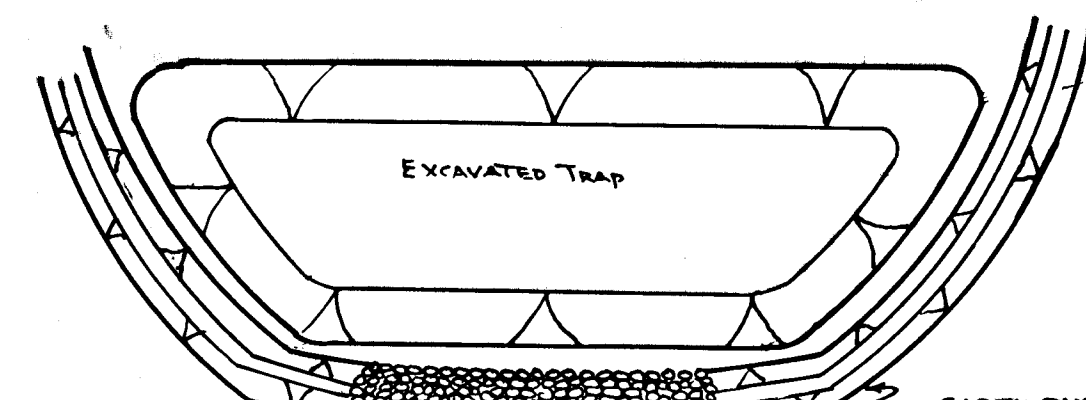
Watershed & Location



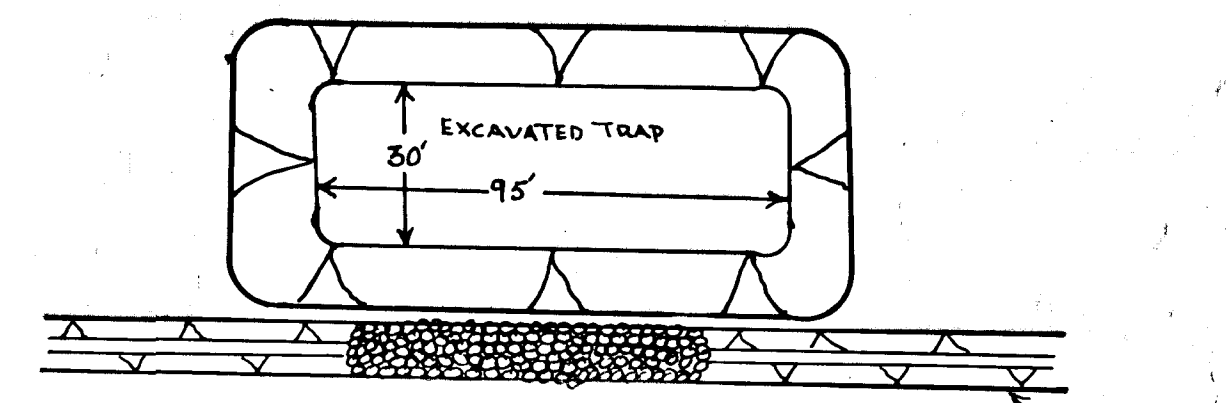
FILTER #1
TYPICAL PLAN VIEW
(NOT TO SCALE)



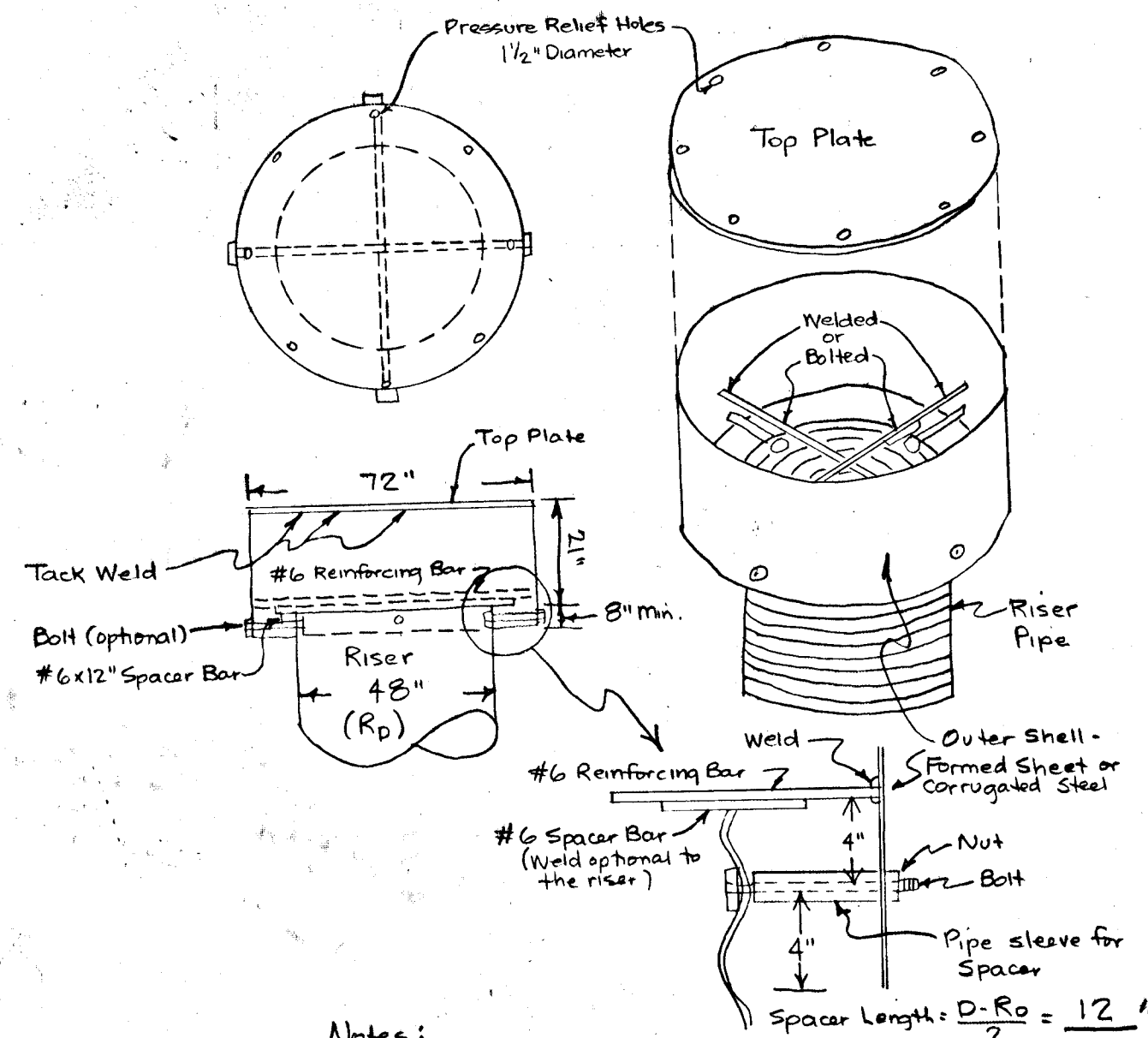
FILTER #2
TYPICAL PLAN VIEW
(NOT TO SCALE)



FILTER #3
TYPICAL PLAN VIEW
(NOT TO SCALE)



FILTER #4
TYPICAL PLAN VIEW
(NOT TO SCALE)



- Notes:
1. Top Plate - To be 1/8" steel plate.
 2. Outer Shell - To be of same gauge metal as the riser; may be formed sheet steel or corrugated steel.
 3. Attachment to riser - may be welded but recommend bolts as shown with bolts directly under the reinforcing rods as shown - for maintenance reasons.
 4. Bolts - use 1/2" for risers up to 36" diameter; use 3/8" diameter for all larger riser diameters.
 5. Bituminous coat all surfaces after fabrication and attachment to the riser.

CONCENTRIC ANTI-VORTEX DEVICE & TRASH RACK

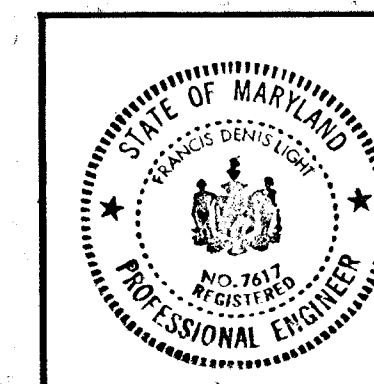
SEDIMENT TRAP NO.	FILTER NO. 1	FILTER NO. 2	FILTER NO. 3	FILTER NO. 4
DRAINAGE AREA	1.74	1.70	3.80	6.38
DISTURBED AREA	1.15	3.93	2.55	2.56
VOLUME REQUIRED	116	220	253	425
VOLUME AVAILABLE	117	220	255	425
SIZE OF TRAP	78x20x2	75x20x4	60x30x4	95x30x4
TOP OF DIKE (WIDTH)	5'	8'	8'	20'
TOP OF DIKE (ELEV.)	2'	2'	2'	2'
CLEANOUT ELEV.	218.5	156.0	233.0	227.0
BOTTOM ELEV.	217.0	152.5	229.5	223.5

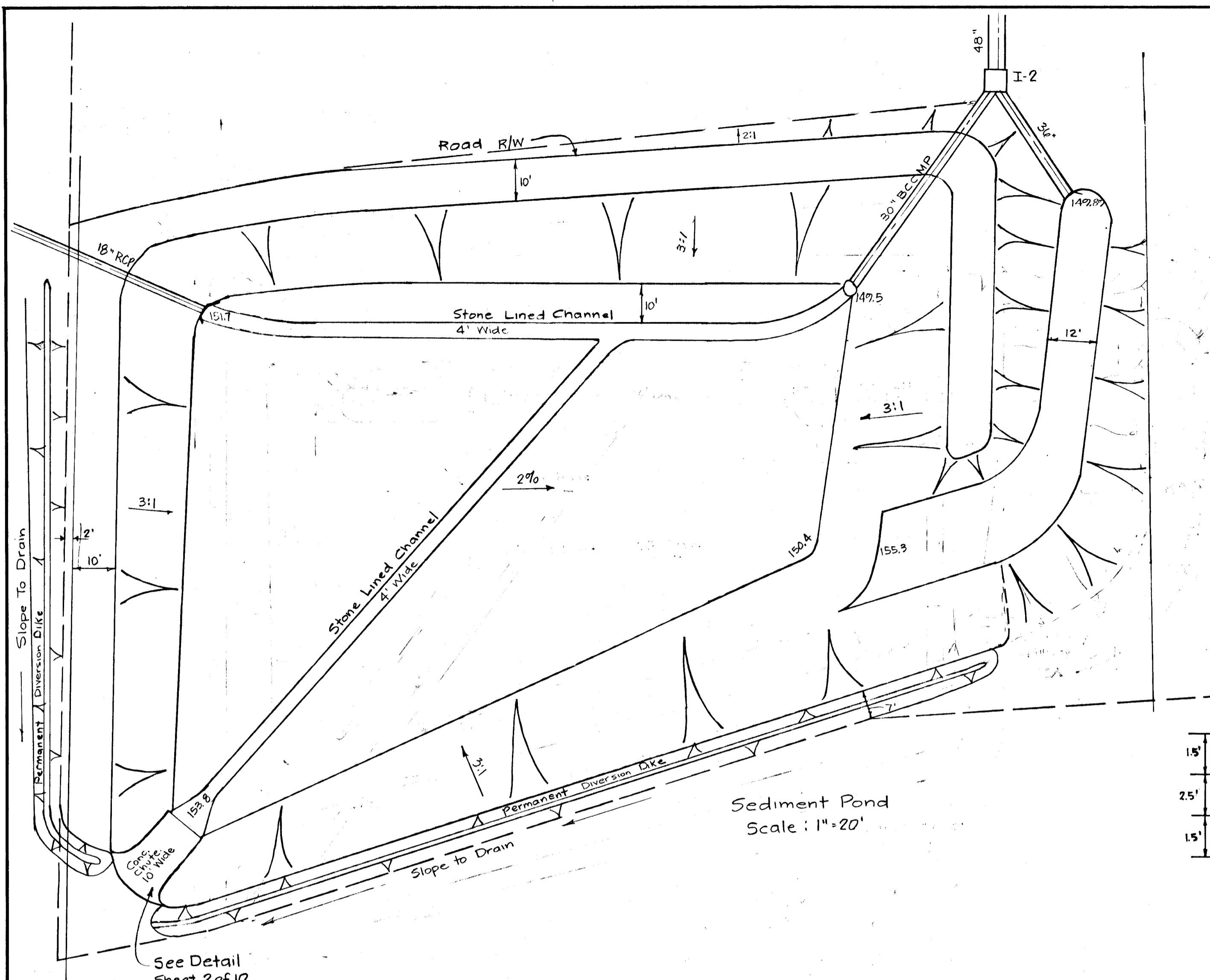
APPROVED
DIVISION OF LAND DEVELOPMENT
AND TRANSPORTATION PLANNING
HOWARD COUNTY, MARYLAND
DATE OCT. 17, 1975
J.W.C.

7-15-75	Rev No.	Revision Description
Rev Date		
RICHARD P. BROWNE ASSOCIATES		ENGINEERS SURVEYORS PLANNERS ARCHITECTS
PEACHTREE CITY, GEORGIA		WAYNE, N. J.
COLUMBIA, MD.		
STORM WATER MANAGEMENT & SEDIMENT CONTROL		
Property of: U.S. #1 JOINT VENTURE		
Tax Map 47 Parcel 192		
6th Election District		Howard County, Md.
Des. By F.D.L.	Scale as shown	Dwg. No. 8 of 10
Dwn. By J.B.	Date 5-15-75	Proj. No. 3562
Chk. By	Approved	

DEPARTMENT OF PUBLIC WORKS
B. N. Newman 1/29/76
Chief, Bureau of Highways Date

F. Denis Light
F. Denis Light Md. PE. #7617





This plan for small pond construction meets the requirements of the Howard Soil Conservation District.

This plan has been reviewed for the Howard Soil Conservation District and meets the Technical Requirements for Small Pond Construction.

APPROVED: *Charles J. Lehman* 1/20/76
 Howard SQD Date
 F-75-67
 Plan Number

Eric V. Hammer 1/20/76
 U.S. Soil Conservation Service Date

CONSTRUCTION SEQUENCE

1. Construct Stormwater Management Pond with 30" principal pipe spillway.
 2. Construct emergency spillway, outlet channel and 30" pipe to outlet drainage system 48".
 3. Construct 48" storm drainage discharge system.
 4. Construct concrete inlet chute at upper end of pond.
 5. Construct diversion dike west of pond.
 6. Construct the 4 sediment traps and site sediment berms.
 7. Make clearing and grading operations for roads and land parcels.
 8. Construct storm drainage system.
 9. Construct water and sewer lines.
 10. Construct road pavement.
 11. Remove all accumulated sediment from pond down to original grades. Cut 12" hole in bottom of riser and install rip rap ditches.
 12. Seed and mulch all disturbed areas on the entire site, including bottom of pond.
- Within 10 days of completion of item 12 prepare and submit to Howard Soil Conservation District a site drawing of permanent structures in accordance with PA 6-10 of storm water management pond Design Manual.

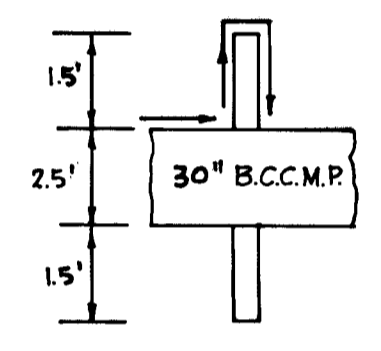
OWNER'S CERTIFICATION FOR POND CONSTRUCTION:

I certify that the development and construction of this pond will be done according to this plan. I also authorize periodic on-site evaluation by the Howard Soil Conservation District or its authorized agents as deemed necessary. Deviation from this plan will not be made unless authorized in writing by the Howard Soil Conservation District.

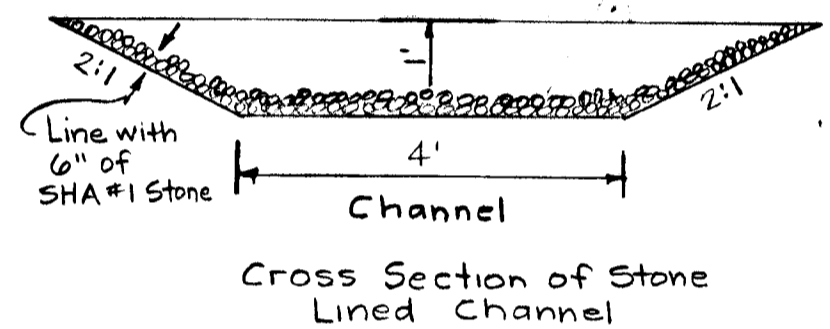
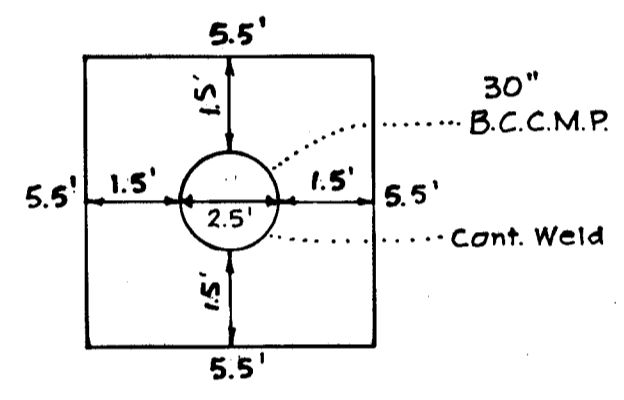
Signature *Carl Ray G. Buffalo* Date 8-5-75

NOTES:

1. Site Preparation - The permanent pool area shall be cleared of all brush and trees.
2. Earth Fill -
 Material - The fill material shall be taken from approved designated borrow areas or areas. It shall be free from roots, stumps, wood, brush, over sized 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 shall be placed in layers, or the embankment shall be increased at least 10% unless otherwise shown on the plans.
 Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill material shall be placed in 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 on 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 of each piece of equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall be compacted to the maximum density obtainable with a ball without crumbling. If water can be squeezed out of the ball, it is too wet to compact properly.
 Core Trench - Where specified, a core trench shall be excavated along or parallel to the center line 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 (4) feet. The depth shall be at least four (4) feet 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.
3. 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 24 inches in thickness and compacted by hand tamper or other compaction equipment. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four (4) feet to the structure. The contractor shall be responsible for any structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted layer of 12 inches or greater over the structure or pipe.
4. Stabilization - All borrow areas shall be graded to provide proper drainage, and left in a sandy condition. All exposed surface of embankment, spillway, and bottom areas shall be stabilized by seeding and applying straw, mulch in accordance with sheet 10.
5. Pipe Conduits - 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-100 Type A with material coupling bands.
 Helically corrugated pipe in addition to the requirements above shall have either continuously welded seams or have lock seams which are caulked with neoprene bead.
 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 lock or other joints are used, the bedding shall be compacted to provide adequate support and 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 side.
 Backfilling - Shall conform to structural backfill as shown above.
 Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
 Pipe Conduits - Reinforced Concrete Pipe
 Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-301. Approved equivalents are ANWW Specification C-300, 301 and 302.
 Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. The bedding shall consist of a 4" layer of concrete placed under the pipe and on the sides of the pipe at least 10% of its diameter with a minimum thickness of 1" WSSJ low grade bedding is an approved equivalent.
 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 on 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 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 drawings.

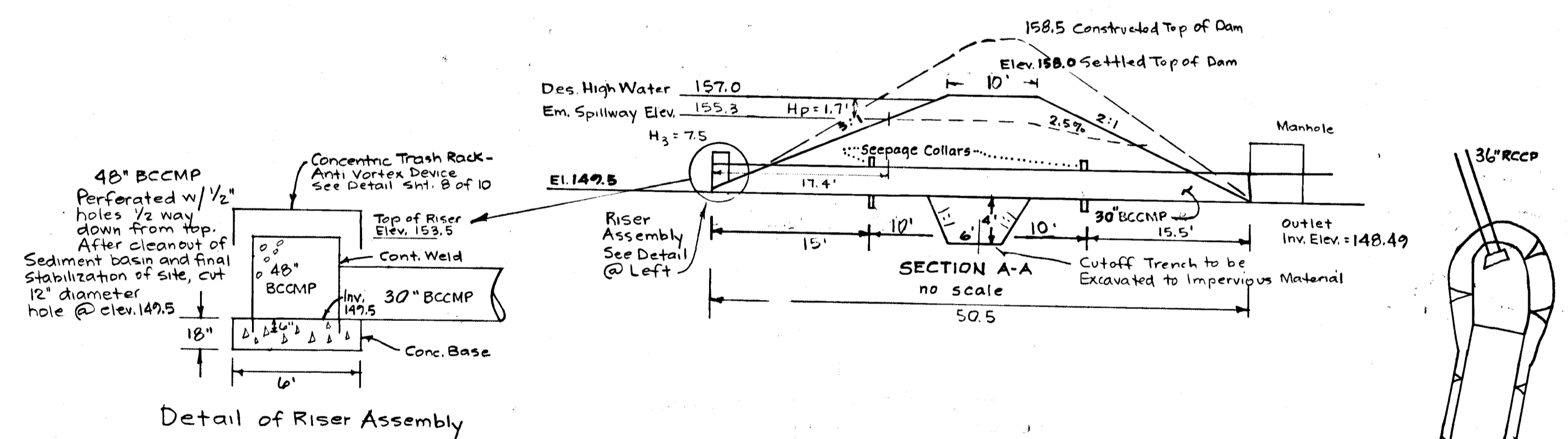


SEEPAGE COLLAR - Bit-Coated Corr. Metal 14 Ga. no scale

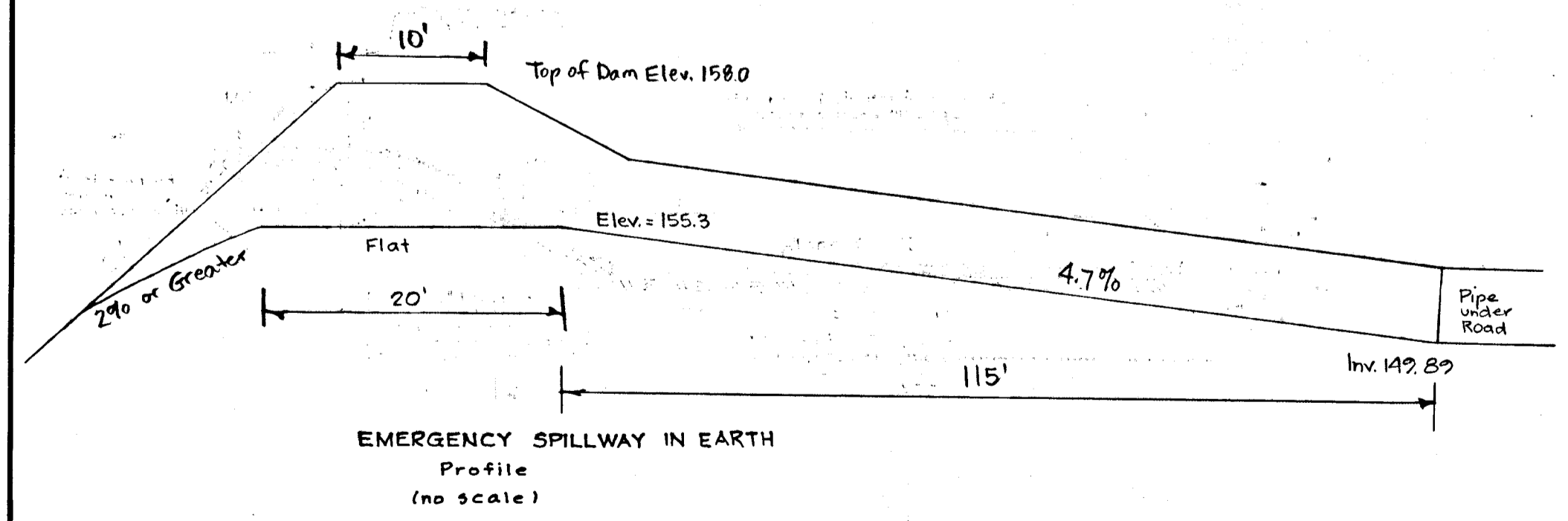


Cross Section of Stone Lined Channel

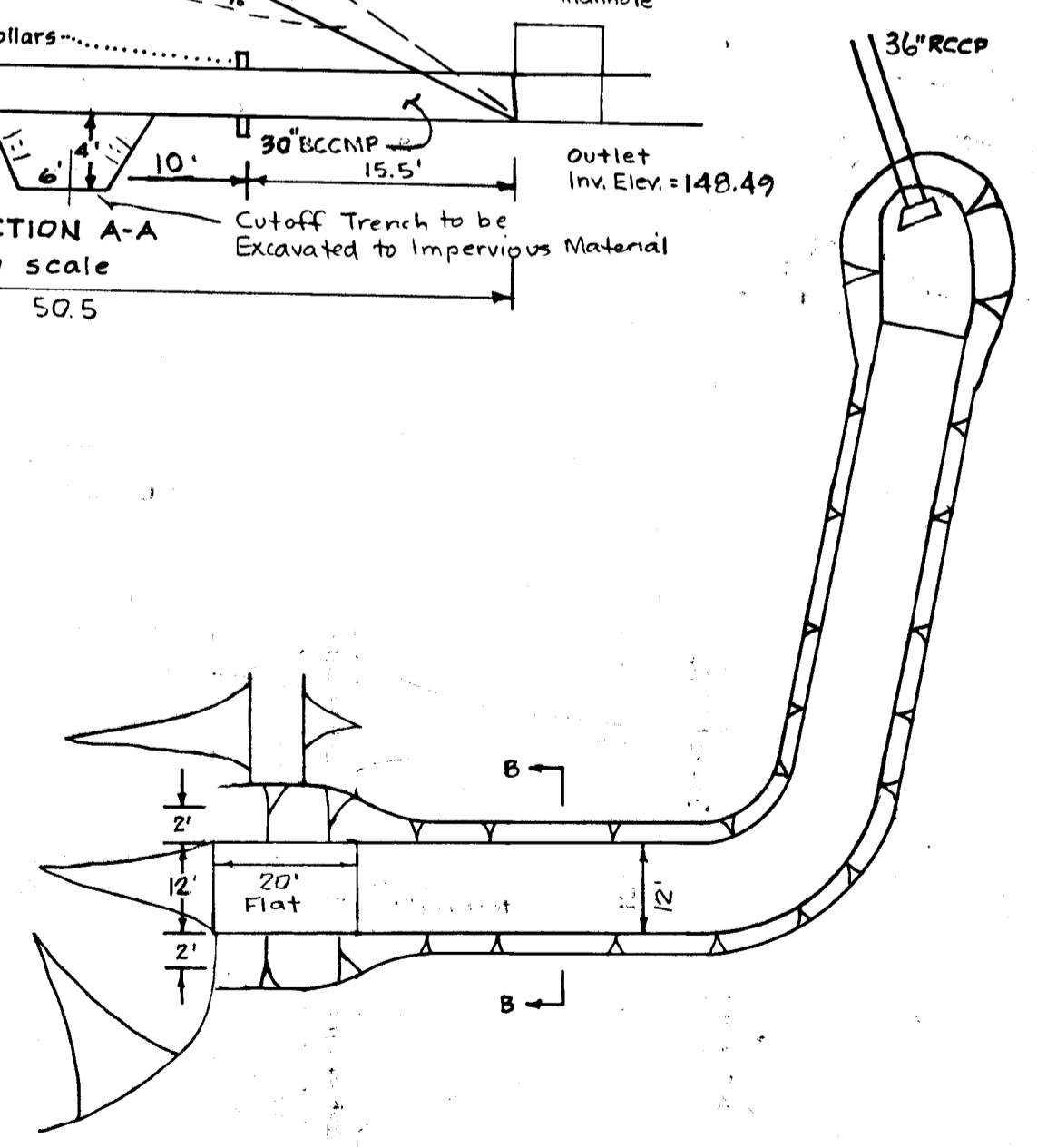
See Detail Sheet 2 of 10



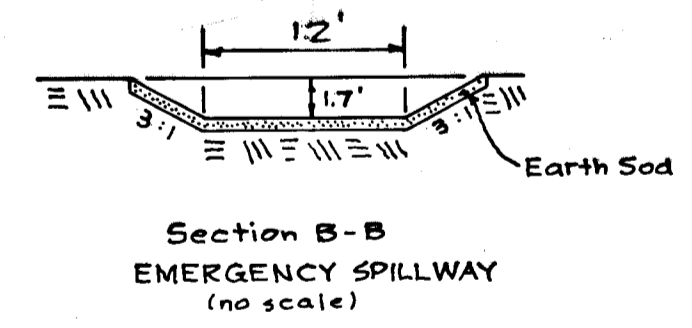
Detail of Riser Assembly



EMERGENCY SPILLWAY IN EARTH Profile (no scale)



EMERGENCY SPILLWAY Plan (no scale)

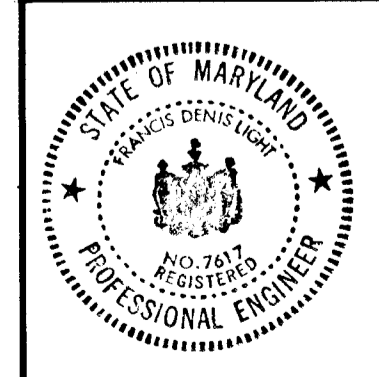


SECTION B-B EMERGENCY SPILLWAY (no scale)

DEPARTMENT OF PUBLIC WORKS
P. H. Beland 1/29/76
 Chief Bureau of Highways Date

APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE *Oct 17 1975*

F. Denis Light
 F. Denis Light Md. PE. #7617



Rev Date	Rev No.	Revision Description
7-15-75		

RICHARD P. BROWNE ASSOCIATES
 ENGINEERS SURVEYORS PLANNERS ARCHITECTS
 PEACHTREE CITY, GEORGIA
 COLUMBIA, MD. WAYNE, N. J.

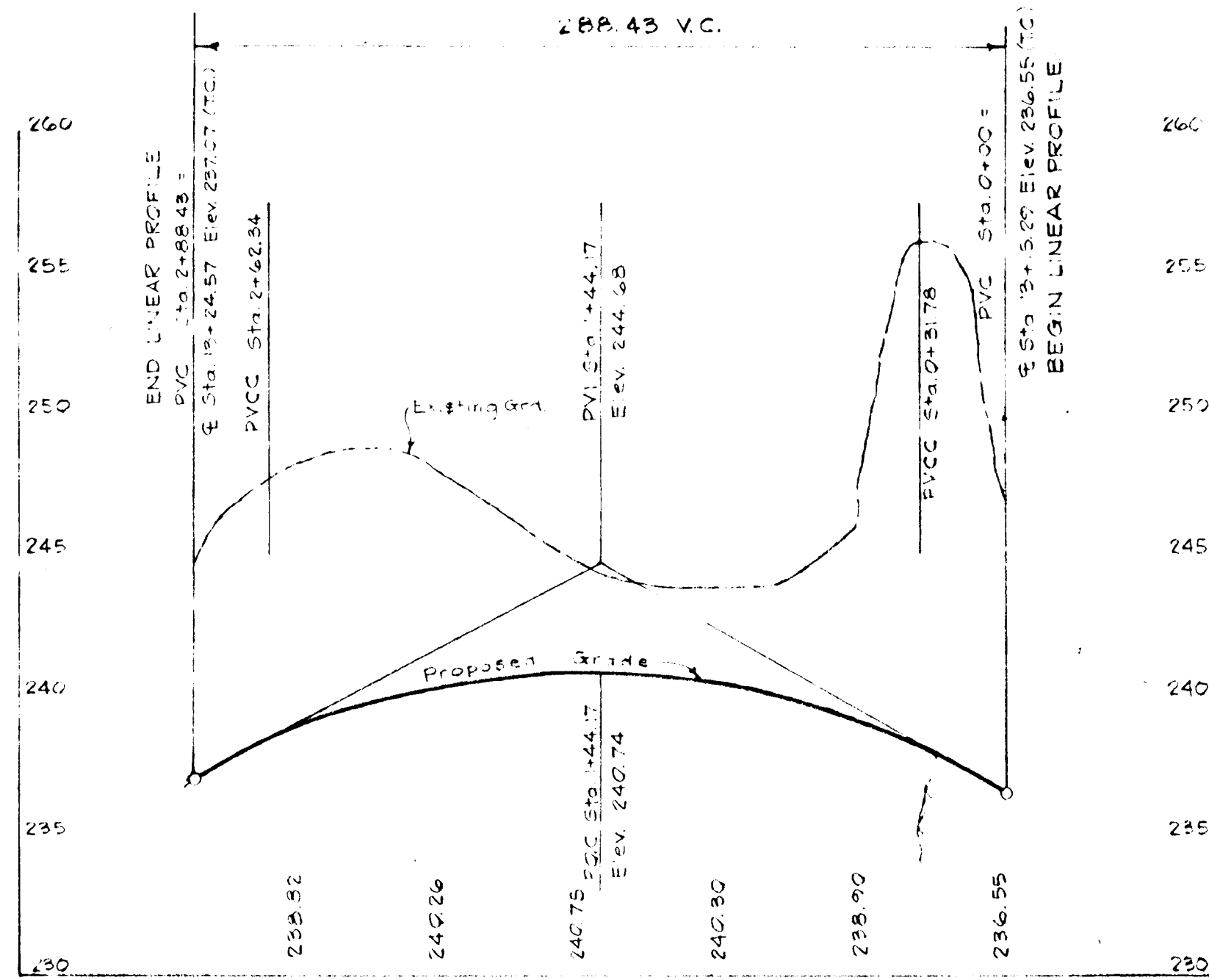
STORM WATER MANAGEMENT & SEDIMENT CONTROL
 Property of: U.S. #1 JOINT VENTURE
 Tax Map 47 Parcel 192
 6th Election District Howard County, Md.

Des. By F.D.L.	Scale as shown	Dwg. No. 9 of 10
Drn. By M.X.	Date 5-15-75	Proj. No. 3562
Chk. By	Approved	

F-75-67

260
250
240
230
180
170
160
150
140

260
250
240
230
220
210
200



LINEAR PROFILE - COLDE SAC
TOP OF CURB

LEGEND -
 EX. Gr. 1 Existing Ground
 EX. Gr. 1 50' Right Existing Ground 50' Right
 EX. Gr. 1 50' Left Existing Ground 50' Left

BEGIN PROFILE
 Sta. 0+00 & Existing U.S. Rte. #1

Sta. 0+36 Edge of Paving E. V. 153.42
 Sta. 0+50 Prop. R.O.W. Line
 Sta. 0+56 Ex. S. San. Sewer

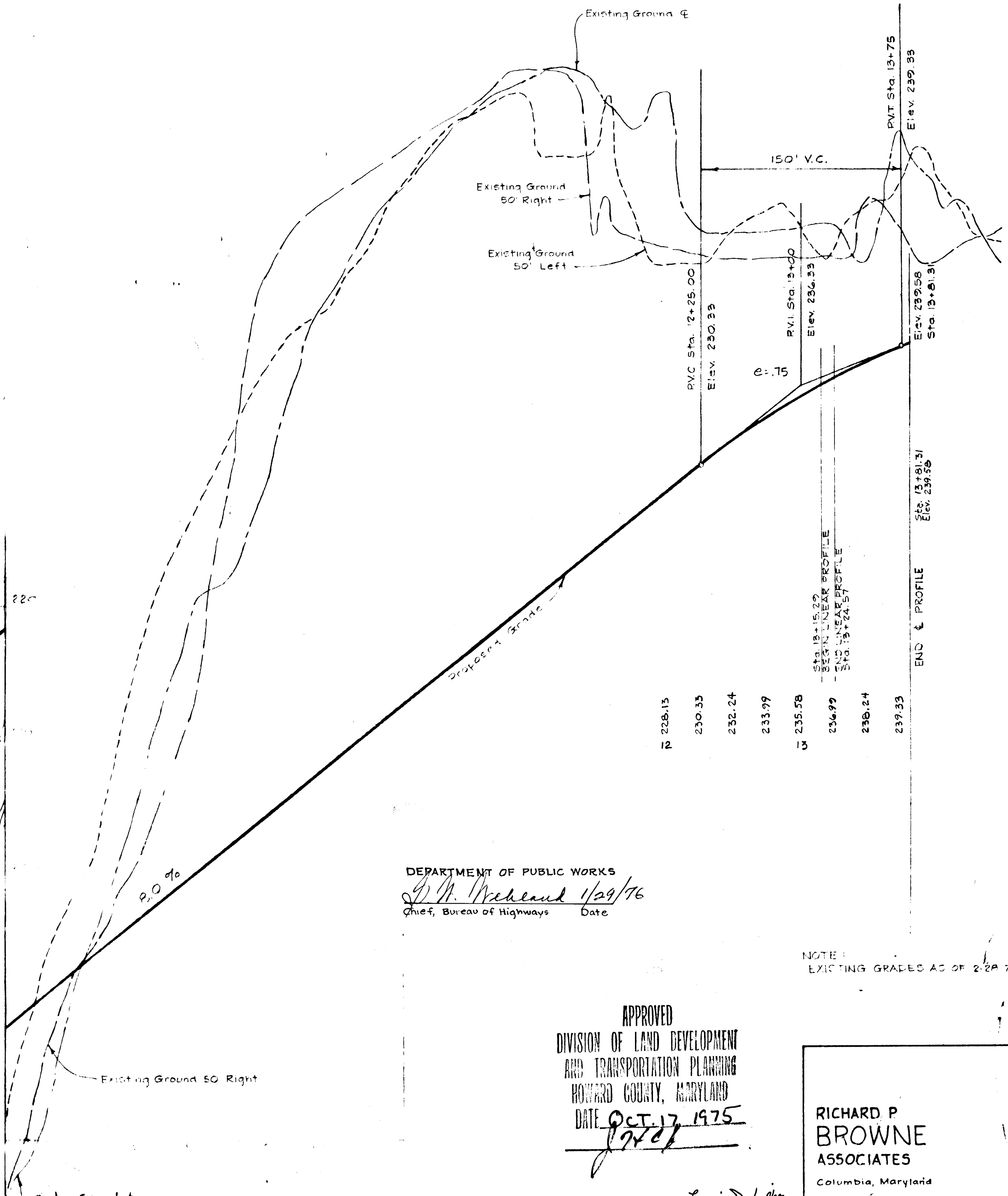
0 154.50
 1 153.73
 2 154.83
 3 155.23
 4 157.03
 5 157.57
 6 158.26
 7 159.07
 8 160.00
 9 161.09
 10 162.29
 11 163.69
 12 165.11
 13 166.72
 14 168.46
 15 170.24
 16 172.33
 17 176.33
 18 180.33
 19 184.33
 20 188.33
 21 192.33
 22 196.33
 23 200.33
 24 204.33
 25 208.33
 26 212.33
 27 216.33
 28 220.33
 29 224.33
 30 228.33

228.15
 230.33
 232.24
 233.99
 235.58
 236.99
 238.24
 239.33

2.2%
 Proposed Grade
 Inv. 145.09
 PVI Sta. 3+50
 Elev. 160.33
 PVI Sta. 4+
 Elev. 171.12

170' V.C.
 PVI Sta. 0+30.1
 Elev. 244.17
 PVI Sta. 0+30.1
 Elev. 244.63
 PVI Sta. 0+30.1
 Elev. 244.17
 PVI Sta. 0+30.1
 Elev. 244.63

Existing Ground 50' Left
 Existing Ground 50' Right
 Existing Ground &

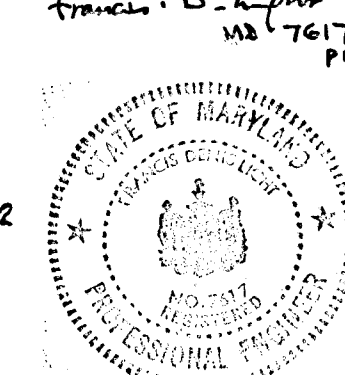


DEPARTMENT OF PUBLIC WORKS
 G. W. Weheand 1/29/76
 Chief, Bureau of Highways Date

APPROVED
 DIVISION OF LAND DEVELOPMENT
 AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE Oct. 17, 1975

NOTE:
 EXISTING GRADES AS OF 2-29-74

RICHARD P
 BROWNE
 ASSOCIATES
 Columbia, Maryland
 ENGINEERS
 PLANNERS
 ARCHITECTS
 Wayne, New Jersey



STREET PROFILE
 Property of: US #1 JOINT VENTURE
 TAX MAP 47 PARCEL 192
 6th Election District Howard County, Md.
 Des By E.C. Scale: Horiz. 1" = 100' Vert. 1" = 4' Dwg No. 10 of 10
 Dwn By M.K. Date: 5-15-75 Proj. No. 356-7

F-75-67