

SECTION #	AVG. PERK. TIME IN MIN. PER 2 <sup>ND</sup> INCH	MAX DEPTH PERMITTED FOR EFFLUENT PIPE TO ENTER SEWERAGE DISPOSAL AREA AT ITS HIGHEST ELEV. WITH REF. TO EXISTING GR. AT TIME OF PERK TEST

APPROVED:  
OFFICE OF PLANNING AND ZONING AOM.  
*John M. Muddiman* 4-10-91  
CHIEF: DIVISION OF LAND DEVELOPMENT DATE

APPROVED:  
DEPARTMENT OF PUBLIC WORKS  
*Wesley E. Ray* 4/16/81  
CHIEF: BUREAU OF ENGINEERING DATE

Location of White Water-Way approved by the M.S.H.A. by letter dated Sept. 29, 1977

THE LOTS SHOWN HEREON COMPLY WITH MIN. OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MD STATE DEPT. OF HEALTH REGULATIONS.

APPROVED FOR INDIVIDUAL WATER AND SEWERAGE DISPOSAL SYSTEMS LOTS 1-10 ONLY.  
DATE: \_\_\_\_\_  
COUNTY HEALTH OFFICER

ROBERT L. ATTLER  
2/30/11

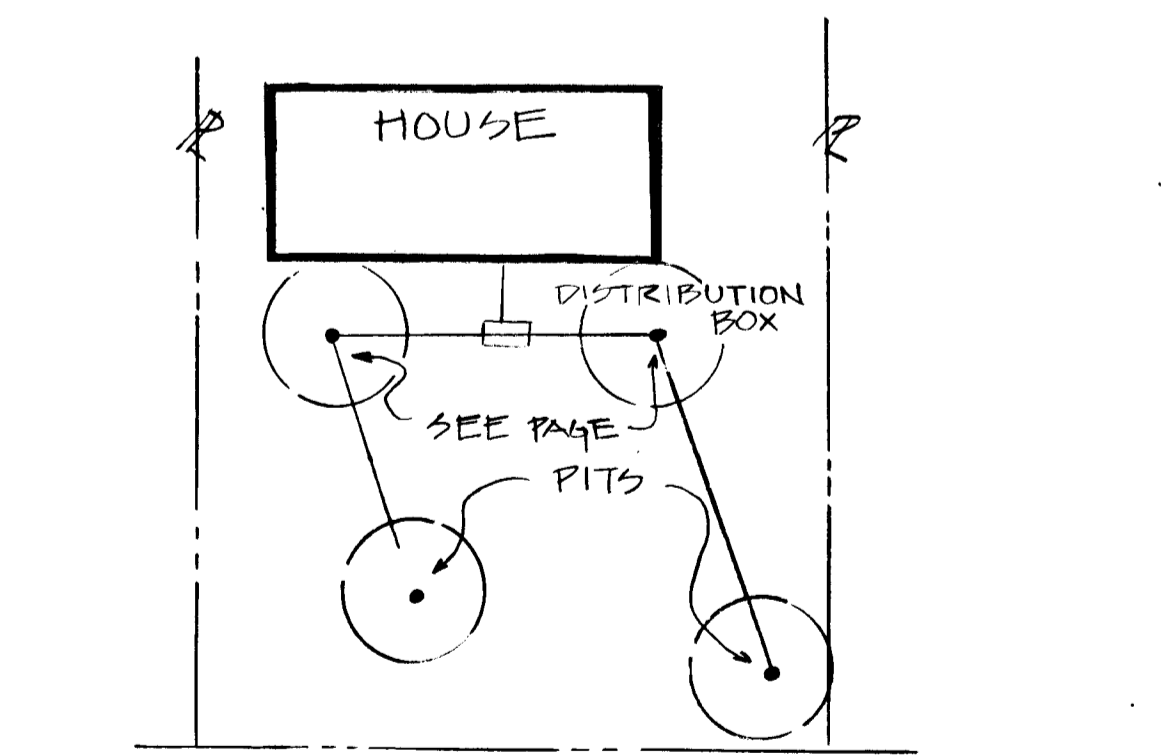


**GENERAL NOTES**

- TOPOGRAPHY IS 2' CONTOUR INTERVALS FROM ACTUAL FIELD SURVEYS.
- ZONING IS RURAL - 5 LOTS  
MINIMUM LOT AREA - 3 ACRES
- MINIMUM PAVING WIDTH SHALL BE 24 FT.
- TABULATION:  
AREA OF LOTS 21.0 ACRES  
AREA OF R/W 0.6 ACRES  
TOTAL AREA OF SEC. III 21.6 ACRES
- LOTS SHOWN HEREON TO BE SERVED BY PRIVATE WATER AND SEWERAGE SYSTEMS
- GRADES ON THESE LOTS DO NOT EXCEED 25% EXCEPT WHERE SHOWN AS BEING 25% OR OVER.
- ALL SEWERAGE DISPOSAL SYSTEMS HAVE A AREA OF 10,000 SQ. FT.
- LOTS WITHIN THIS SUBDIVISION ARE WOODED
- SETBACKS FRONT: 75' EA. SIDE 20 REAR 60
- PROPOSED SEDIMENT CONTROL NOTES:  
DIVERSION BERMS ARE TO BE CONSTRUCTED EVERY 250 FEET DURING CONSTRUCTION GRADING WHERE STREET GRADES EXCEED 5%. A TEMPORARY SEDIMENT DEVICES TO BE CONSTRUCTED UNTIL ALL STREET GRADING HAS BEEN COMPLETED.  
\* Test Holes shown. They were 1 foot in diameter & 10 ft deep.

REQUEST APPROVAL FOR LOTS 6 THRU 10 ONLY.

**DRAINAGE STUDY**



TYPICAL SEPTIC TANK LAYOUT  
NO SCALE

TEST 4 HOLES PER LOT AT LOCATIONS SHOWN THUS

**SAND HILL ACRES SECTION THREE**  
33 Erection Dist. Parcel No. 16  
HOWARD COUNTY, MARYLAND

**HANSON & DEN OUTER**  
CIVIL ENGINEERS & LAND SURVEYORS  
LAND PLANNING CONSULTANTS  
172 ROLLINS AVE. - ROCKVILLE, MD. 20852  
Phone (301) \_\_\_\_\_

SCALE 1"=100  
DATE: Oct. 25, 1977

OWNER: SAND HILL JOINT VENTURE  
MR. MARTIN HYNOTT  
51 MONROE STREET  
ROCKVILLE, MD. 20850

DESIGNED: MR. MARTIN HYNOTT  
DRAWN: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
SHEET 1 OF 5

JOB NUMBER: 410-A1  
FILE NUMBER: PP 205

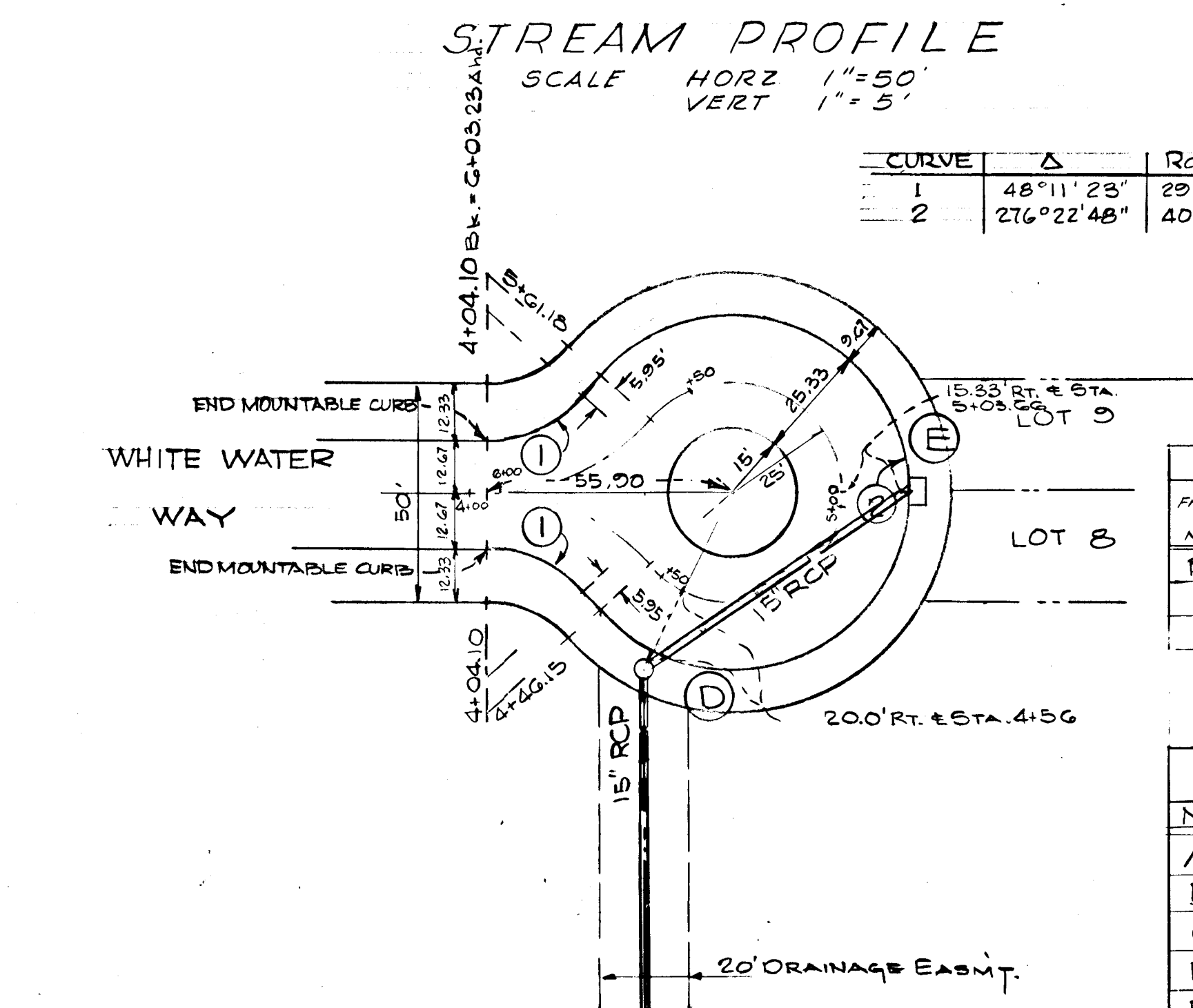
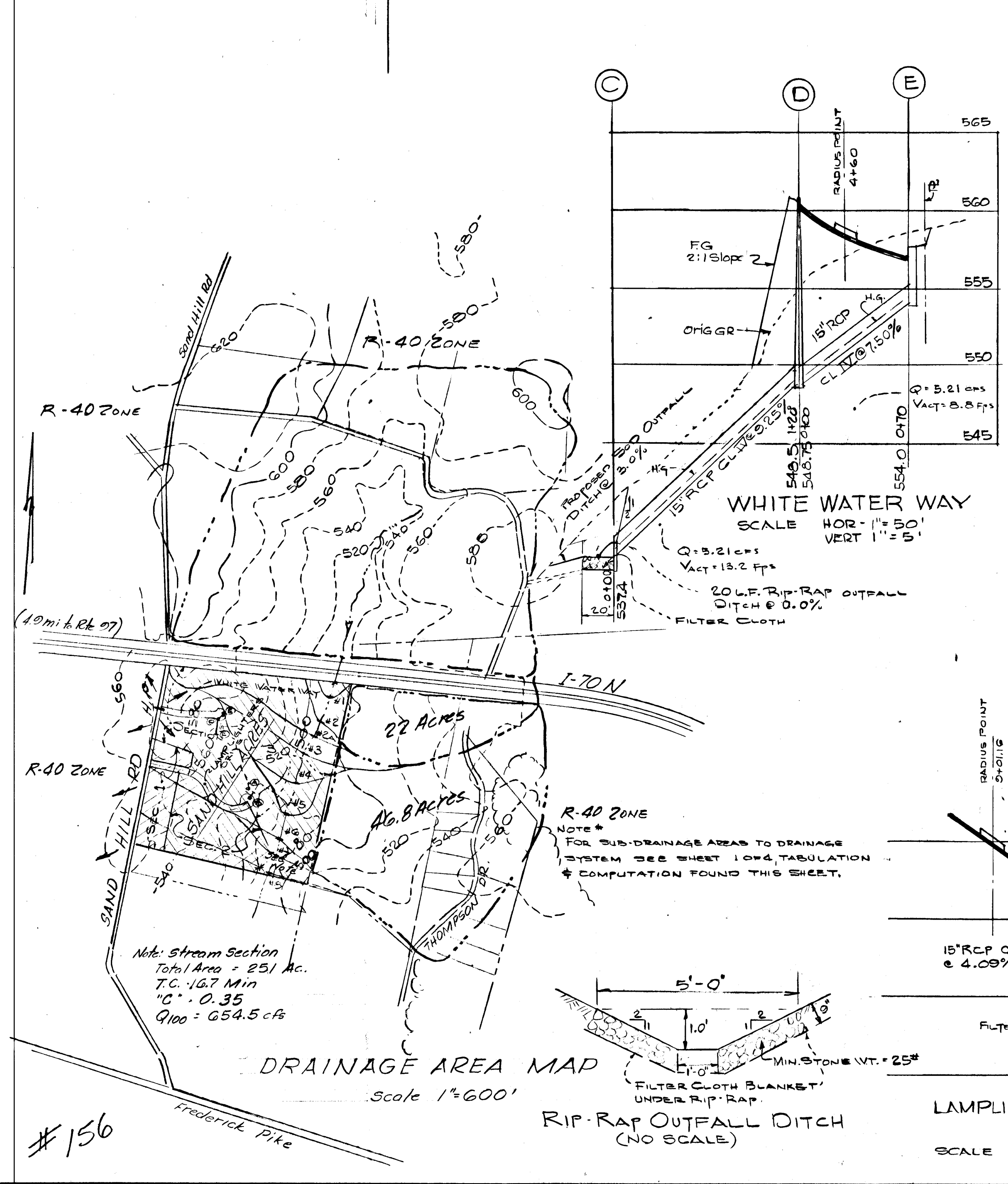
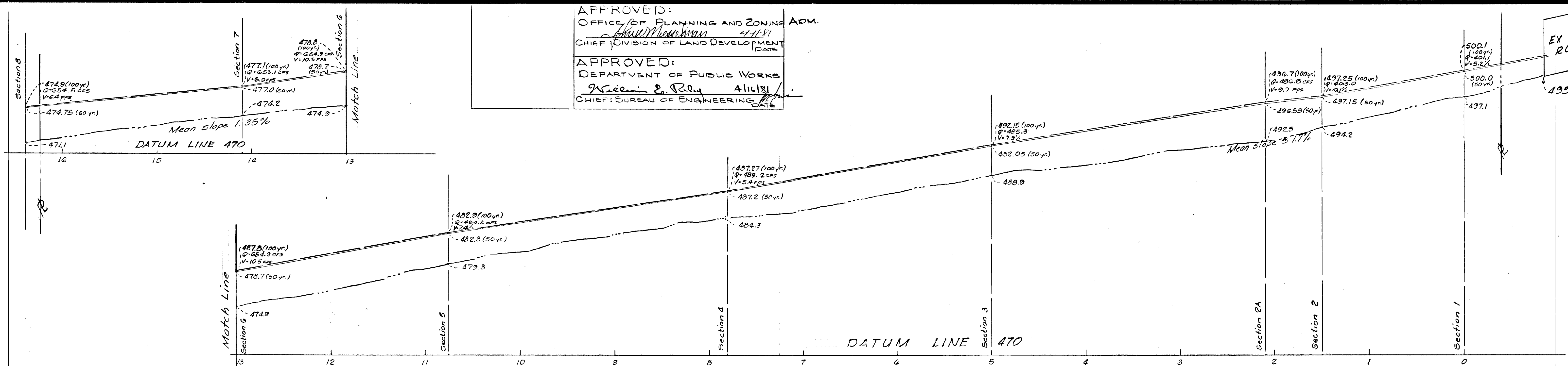
DATE	DESCRIPTION	BY

# 156



APPROVED:  
 OFFICE OF PLANNING AND ZONING APM.  
*[Signature]* 4/11/81  
 CHIEF, DIVISION OF LAND DEVELOPMENT (DATE)

APPROVED:  
 DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 4/11/81  
 CHIEF, BUREAU OF ENGINEERING (DATE)

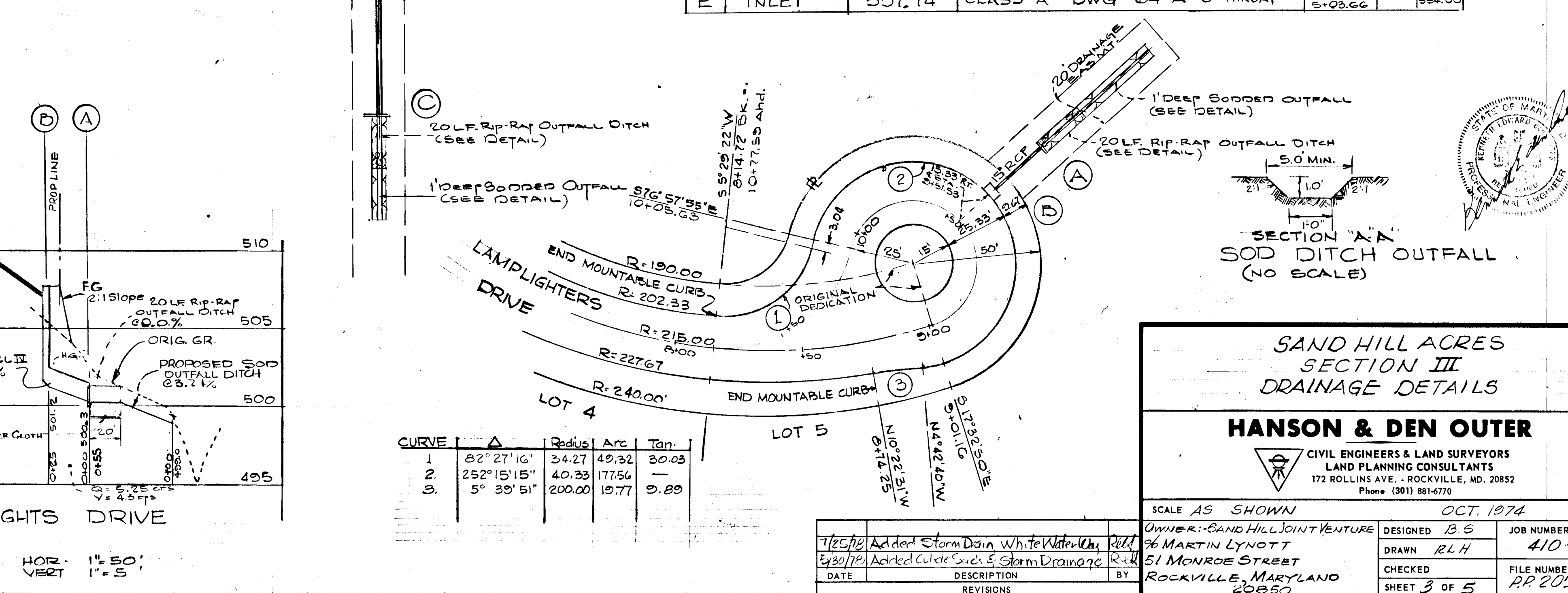


CURVE	Δ	Radius	Arc	Tan.
1	48°11'23"	29.35	24.68	13.12
2	276°22'48"	40.33	194.54	—

STORM DRAIN COMPUTATIONS  
 FOR  
 SAND HILL ACRES  
 Section III

PIPE													INLET					
From	To	Inc. Area	Total Area	R	AR	WAR	Time	Q	Min. Slope	Dom.	Vel.	Length	Time in Pipe	Inlet No.	Area	Q	Slope	Type
No.	No.	AC	AC				Min.	Min.	%	in.	Sec.	FT	Min.	No.	Ac.	CFS	%	
D	A	2.83	0.35	0.90	19.0	5.3	5.25	0.65	1.5	4.3	25	—		B	2.83	5.25	L.P.	5' THROAT
E	D	2.19	0.35	0.77	5.0	6.8	5.21	0.63	1.5	4.2	70	0.20		E	2.19	5.21	L.P.	5' THROAT
D	C	—	2.19	0.35	—	0.77	9.28	6.8	5.21	0.63	1.5	4.2	120	0.48				

STRUCTURE SCHEDULE						
NO	TYPE	ELEV.	REMARKS	LOCATION	INV. IN	INV. OUT
A	END SUPPORT WALL	Inv. El. 501.0	STANDARD SUPPORT WALL DWG. D-46			
B	INLET	507.95	CLASS 'A' DWG G4-A-5 THROAT	15.33 RT. STA. 2+91.33		501.20
C	END SUPPORT WALL	Inv. El. 533.0	STANDARD SUPPORT WALL DWG. D-46			
D	MANHOLE	558.74	STANDARD MANHOLE DWG. D-103	200 RT. STA. 4+56	548.75	548.50
E	INLET	557.74	CLASS 'A' DWG G4-A-5 THROAT	5+03 RT. STA. 5+03.66		554.00



SAND HILL ACRES  
 SECTION III  
 DRAINAGE DETAILS

**HANSON & DEN OUTER**  
 CIVIL ENGINEERS & LAND SURVEYORS  
 LAND PLANNING CONSULTANTS  
 172 ROLLINS AVE. - ROCKVILLE, MD. 20852  
 Phone (301) 881-6770

SCALE AS SHOWN OCT. 1974

OWNER: SAND HILL JOINT VENTURE  
 DESIGNED: B.S.  
 JOB NUMBER: 410-A1

DRAWN: R.L.H.  
 CHECKED: [Signature]  
 FILE NUMBER: RP 205

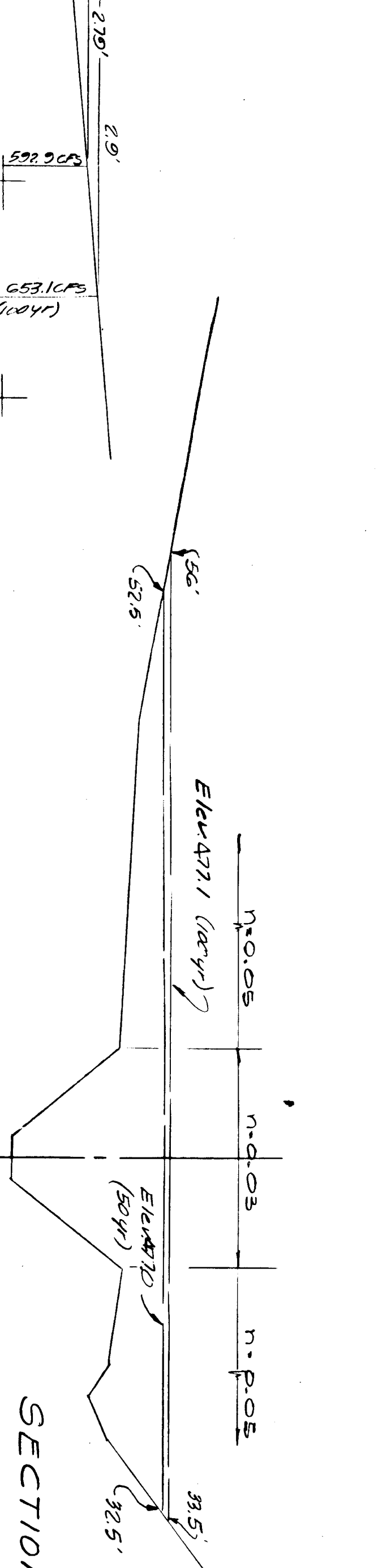
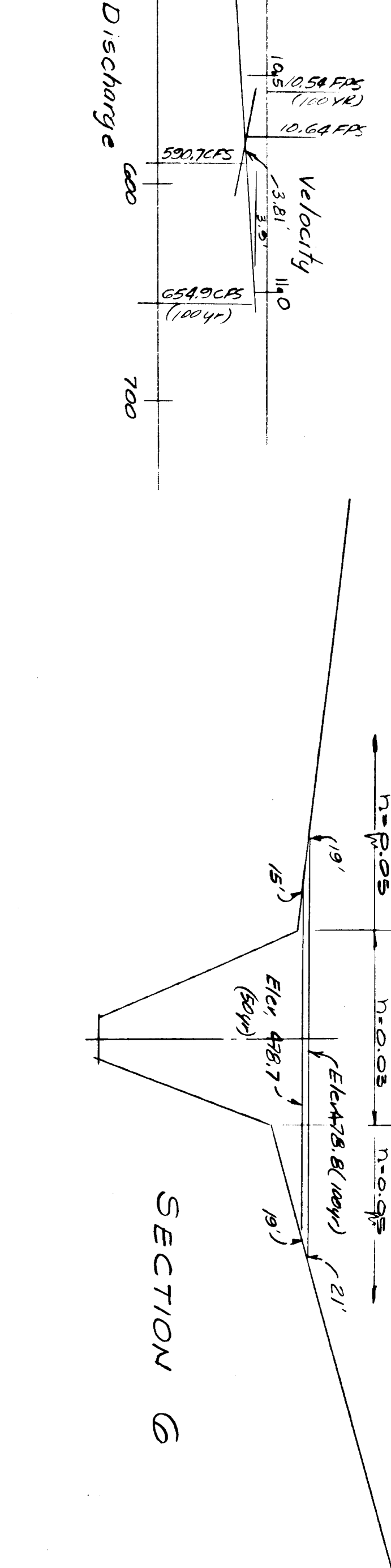
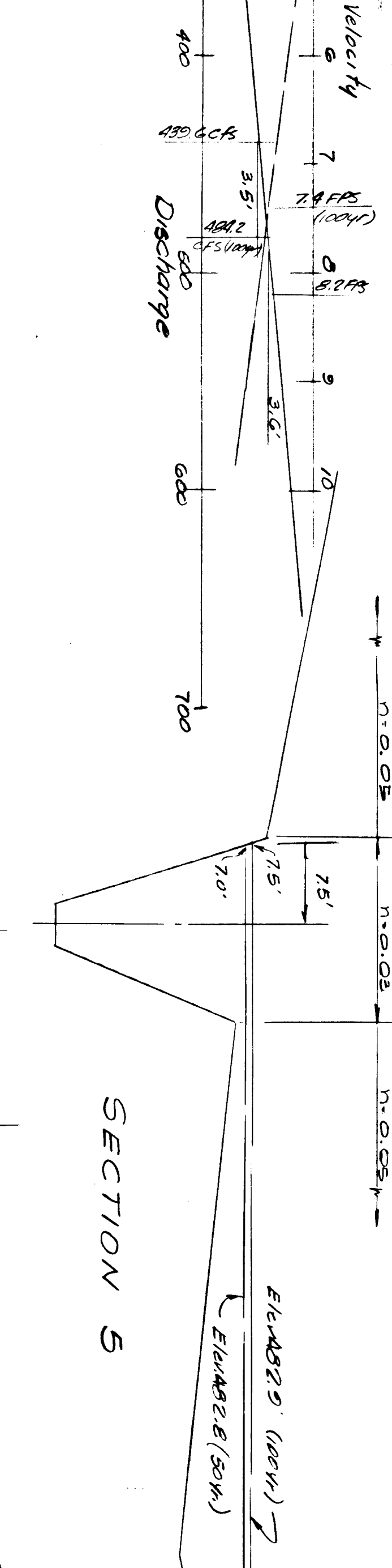
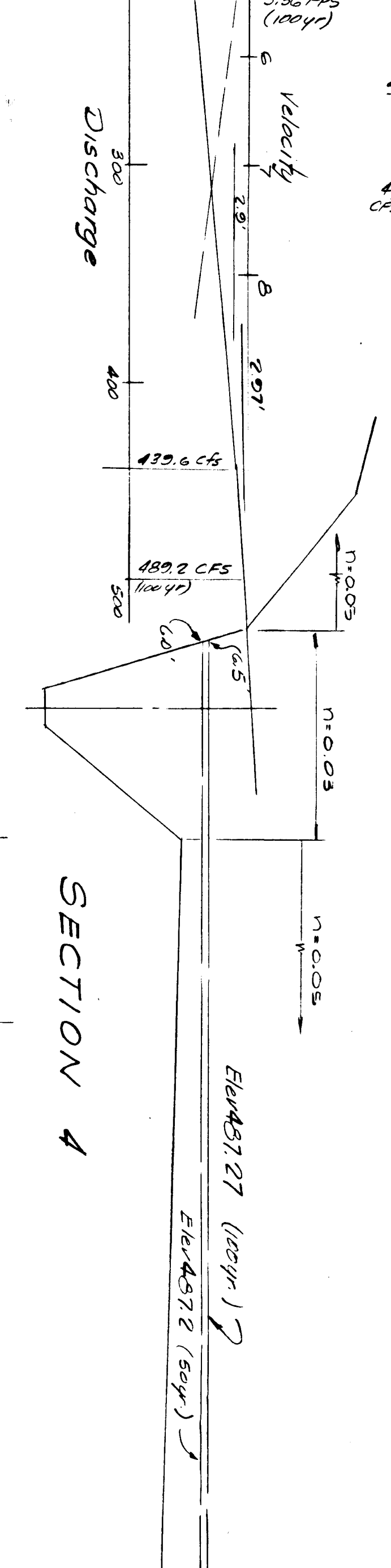
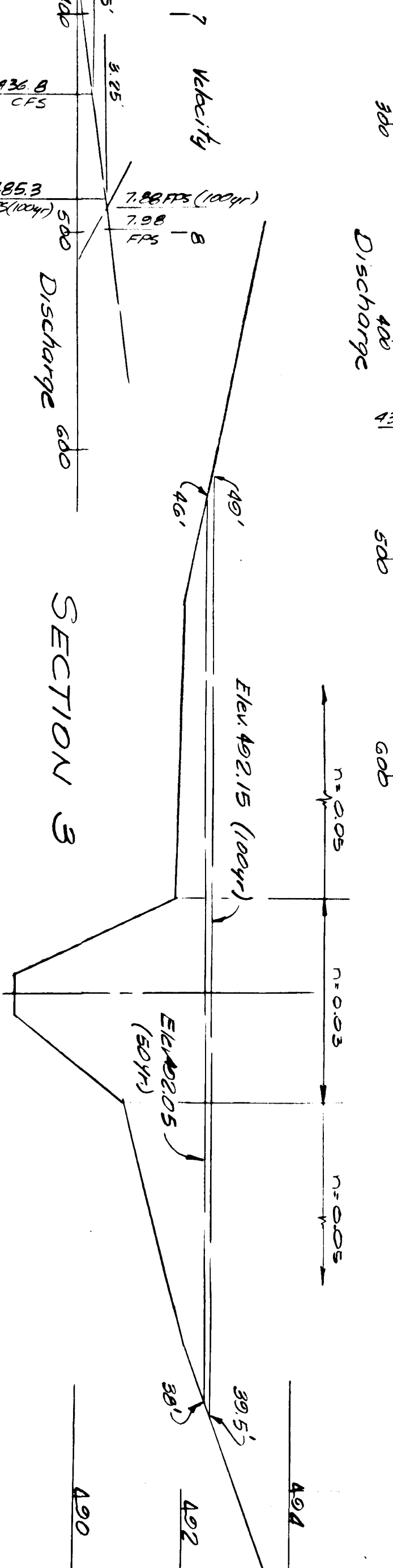
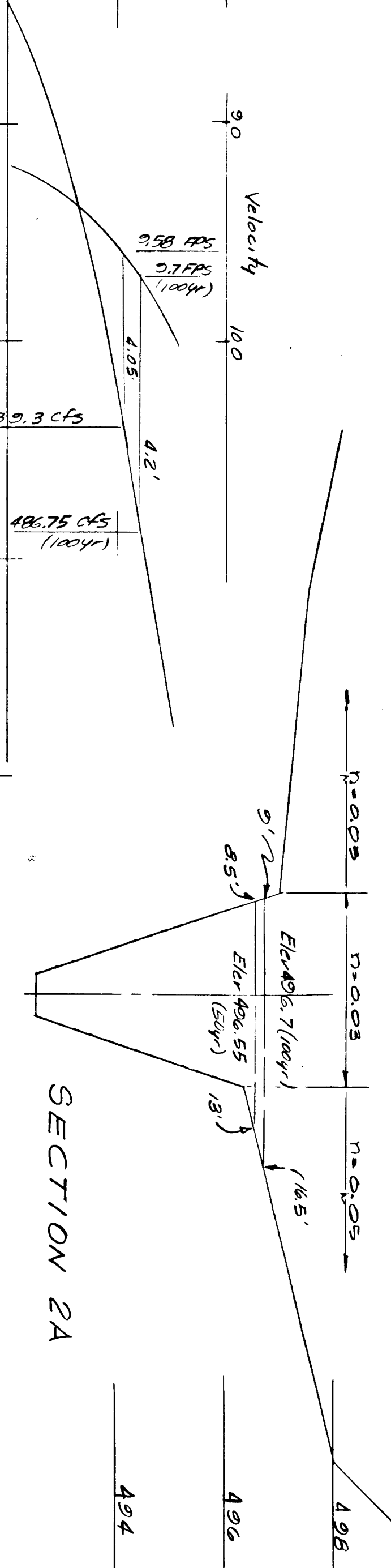
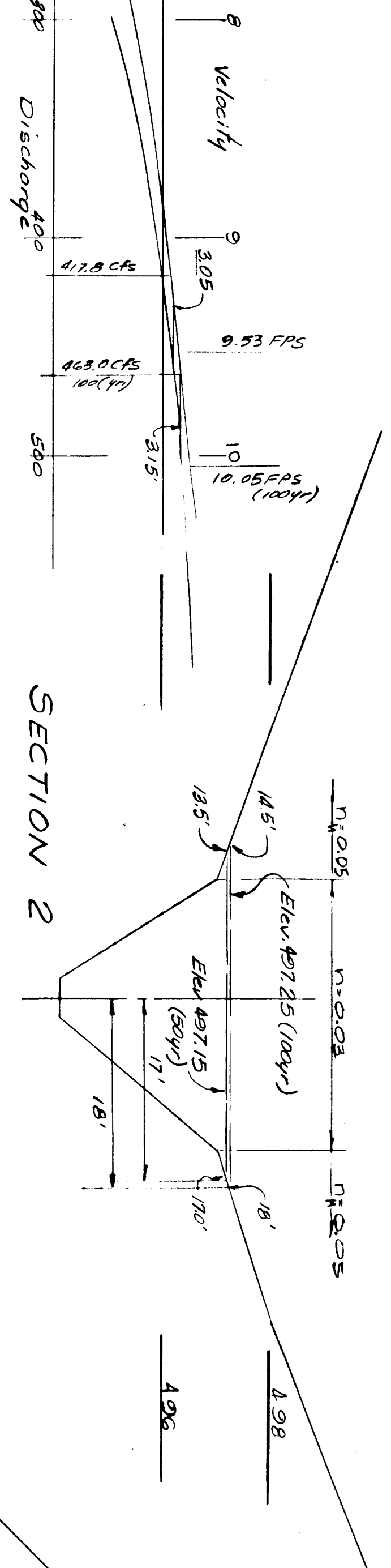
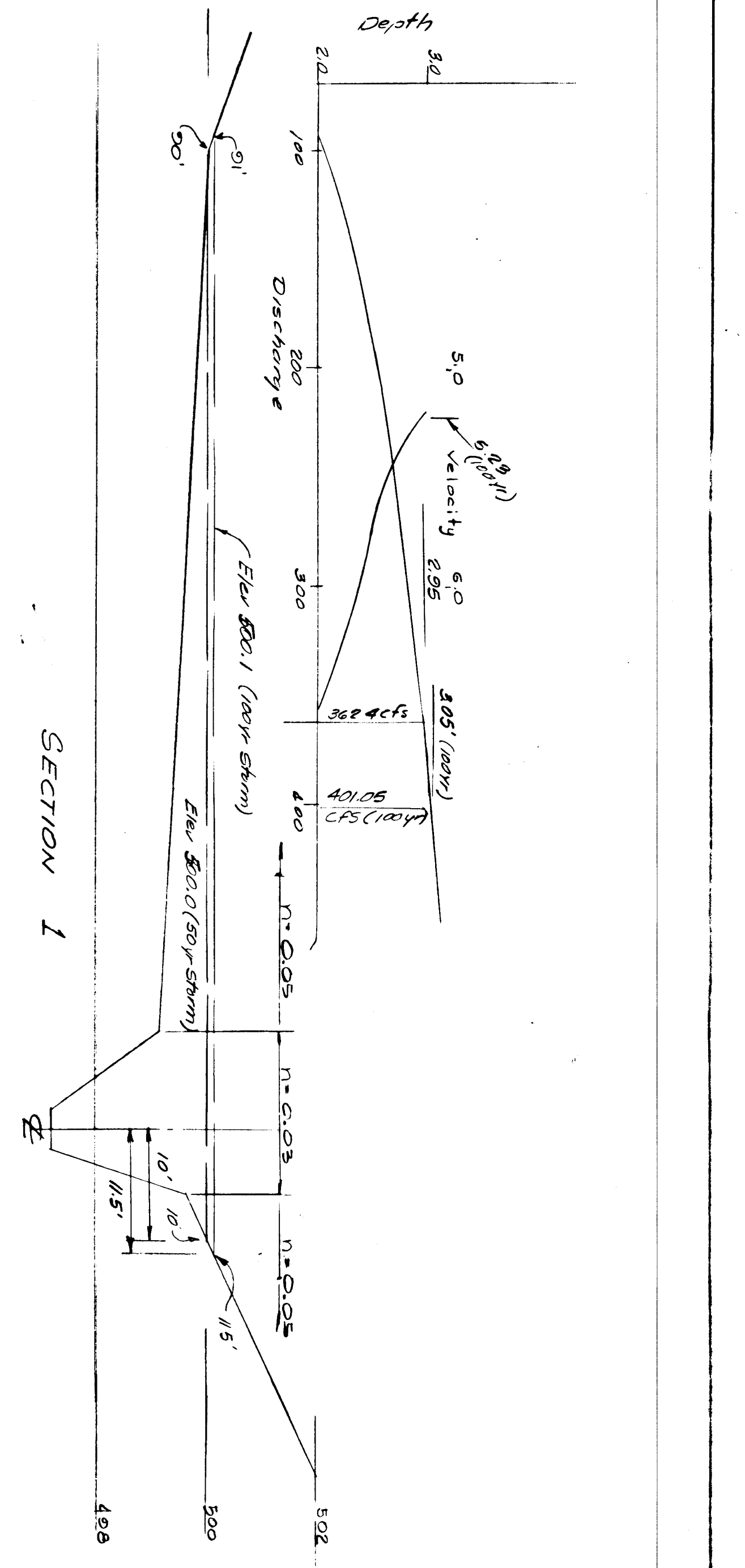
DATE: [Signature]  
 DESCRIPTION: Storm Drain White Water Way  
 REVISIONS: [Signature]

SHEET 3 OF 5

#156

APPROVED  
 OFFICE OF PLANNING AND ZONING ADM.  
 CHIEF: DIVISION OF LAND DEVELOPMENT DATE: 4-10-81

APPROVED  
 DEPARTMENT OF PUBLIC WORKS  
 CHIEF: BUREAU OF ENGINEERING DATE: 4-16-81



SAND HILL ACRES SEC. 3.  
 Stream X-Sections For Flood  
 Plain & Stage Discharge Curves

474  
 476  
 478  
 480  
 482  
 484  
 486  
 488  
 490  
 492  
 494  
 496  
 498  
 500

**HANSON & DEN OUTER, LTD.**  
 CIVIL ENGINEERS & LAND SURVEYORS  
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 172 ROLLINS AVE. - ROCKVILLE, MD. 20852  
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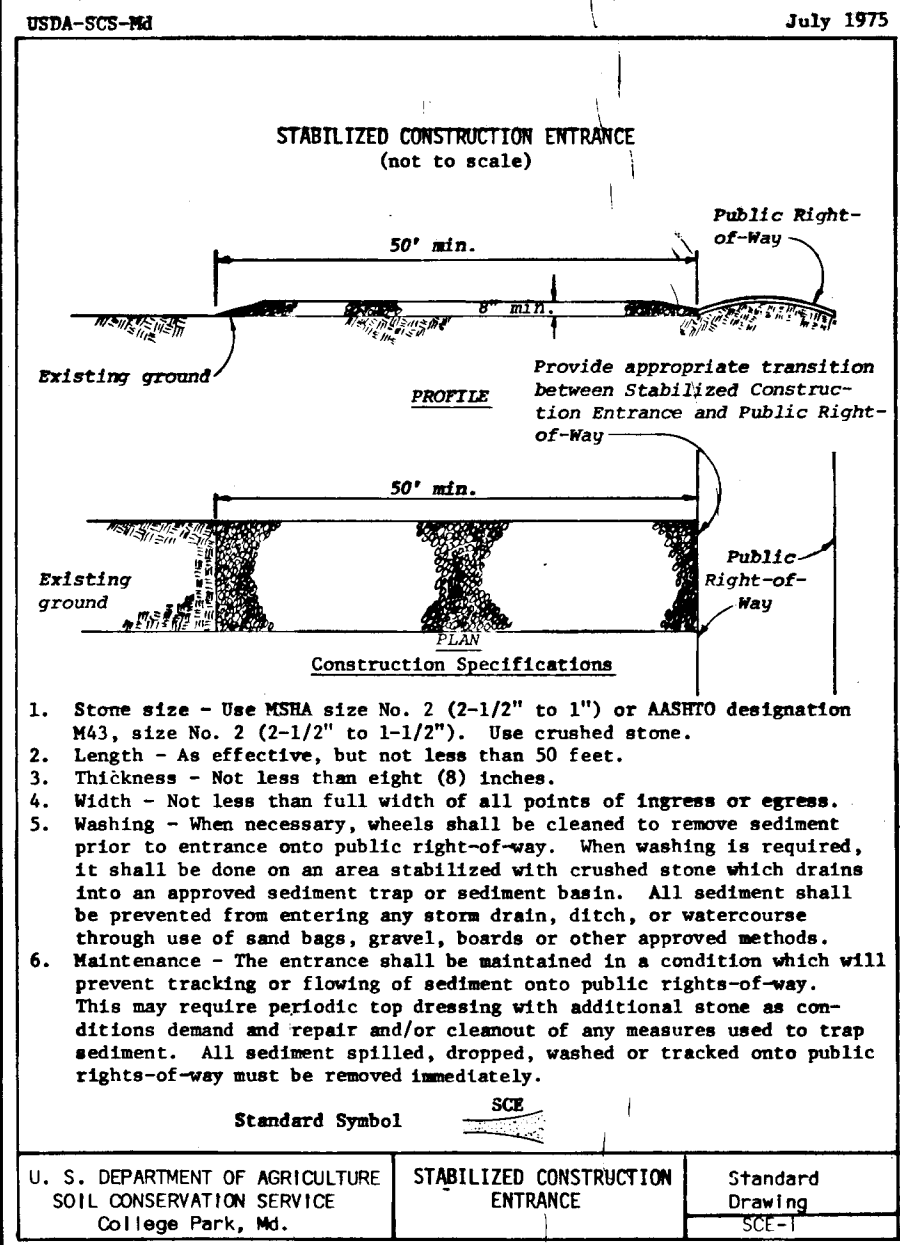
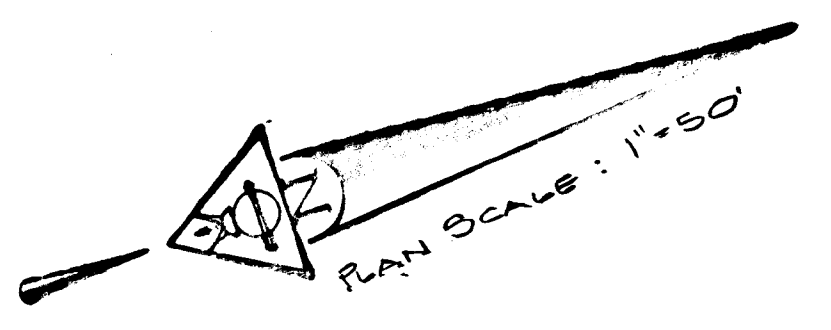
SCALE 1"=2' Vert. 1"=10' Horiz. Oct 25, 1977

OWNER: SAND HILL JOINT VENTURE  
 TO: MARTIN LYNOTT  
 51 MONROE STREET  
 ROCKVILLE, MARYLAND

DESIGNED	B.S.	JOB NUMBER	410A1
DRAWN	RM	FILE NUMBER	PP 205
CHECKED			
SHEET	4 OF 5		

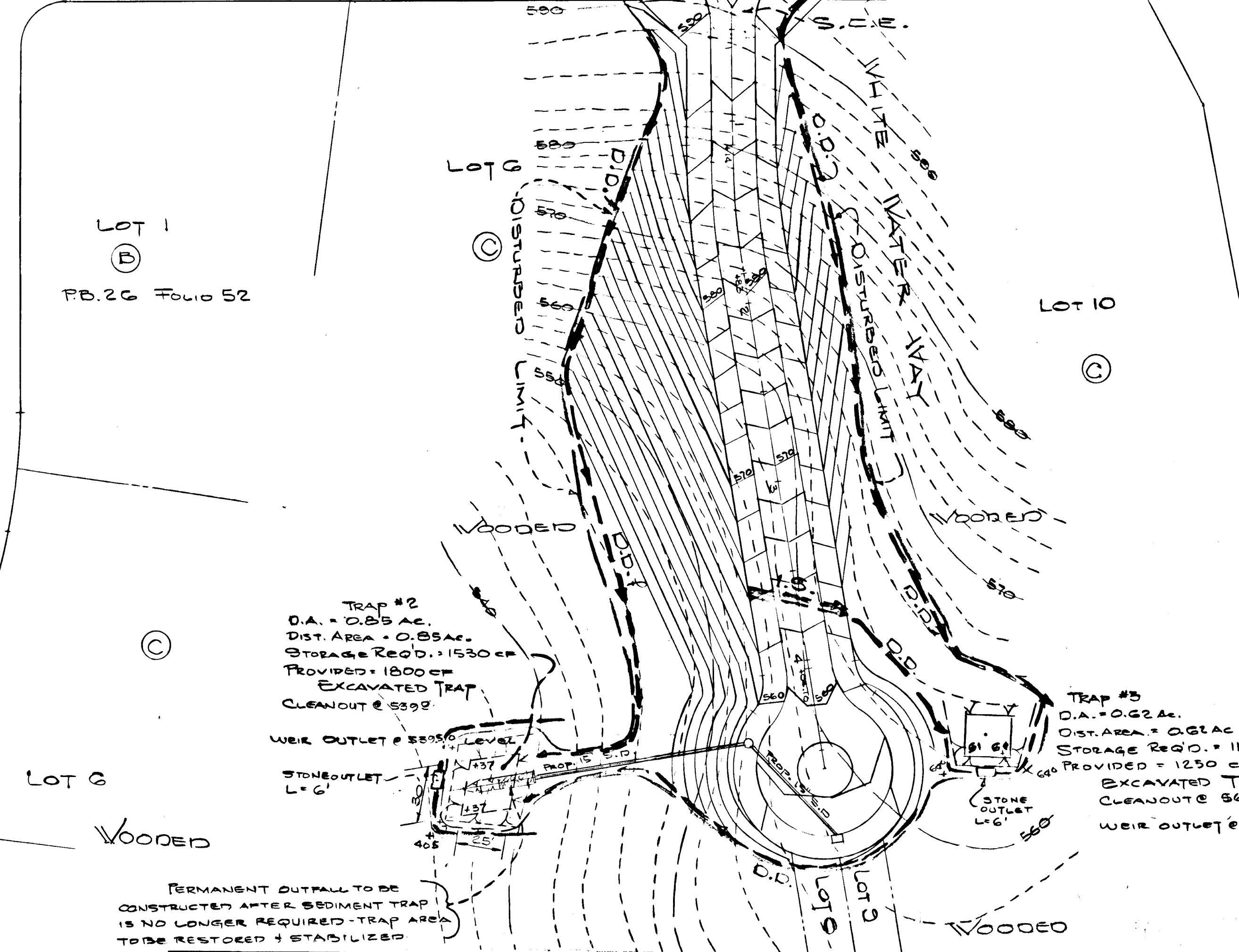
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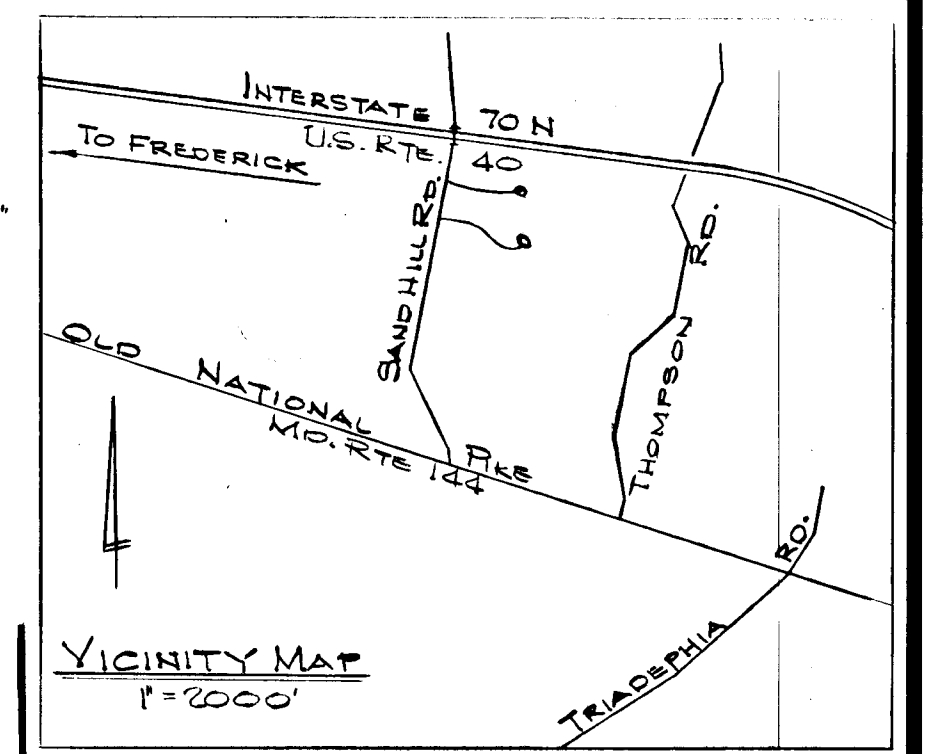


NOTE: LAMPLIGHTERS DRIVE IS PAVED & STABILIZED TO STATION 9+00.

### SAND HILL ROAD

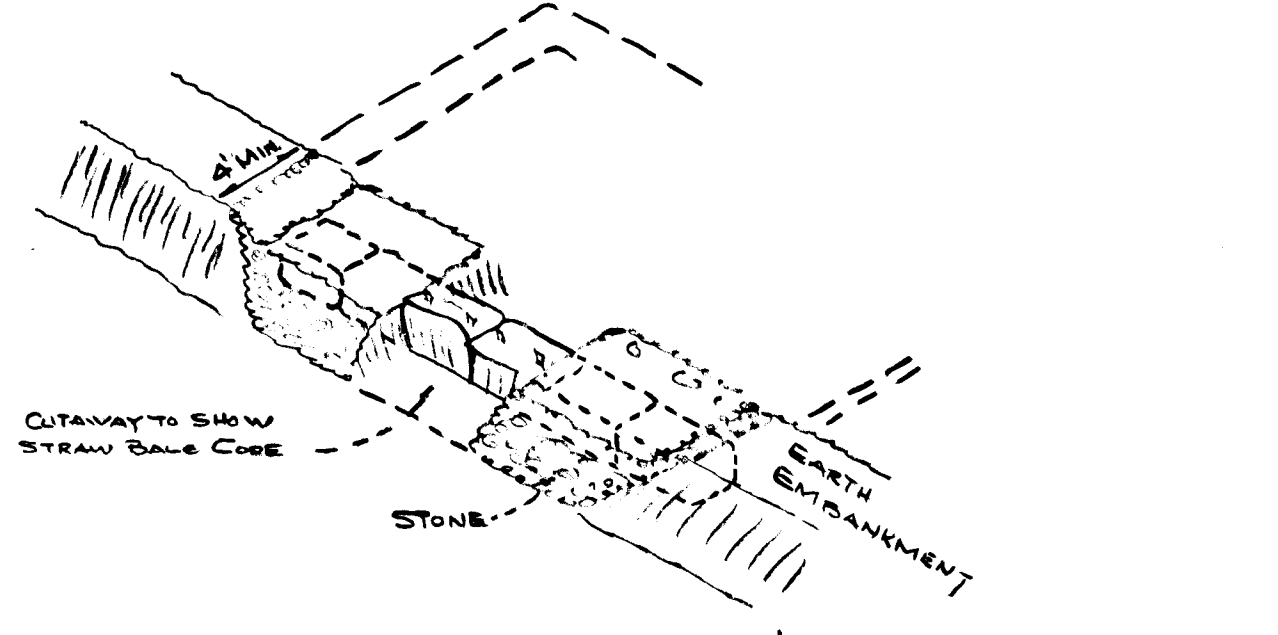


- #### CONSTRUCTION SEQUENCE
- OBTAIN GRADING PERMIT.
  - CLEAR AREAS OF SEDIMENT CONTROL ONLY.
  - INSTALL SEDIMENT CONTROL DEVICES.
  - CLEAR BALANCE OF PROPERTY WITHIN AREA DELINEATED AS "DISTURBED LIMIT"
  - GRADE WHITE WATER WAY IN ACCORDANCE WITH GRADE ESTABLISHMENT.
  - CONSTRUCT STORM DRAINS.
  - PAVE STREETS.
  - REMOVE SEDIMENT CONTROLS & STABILIZE ALL DISTURBED AREAS.

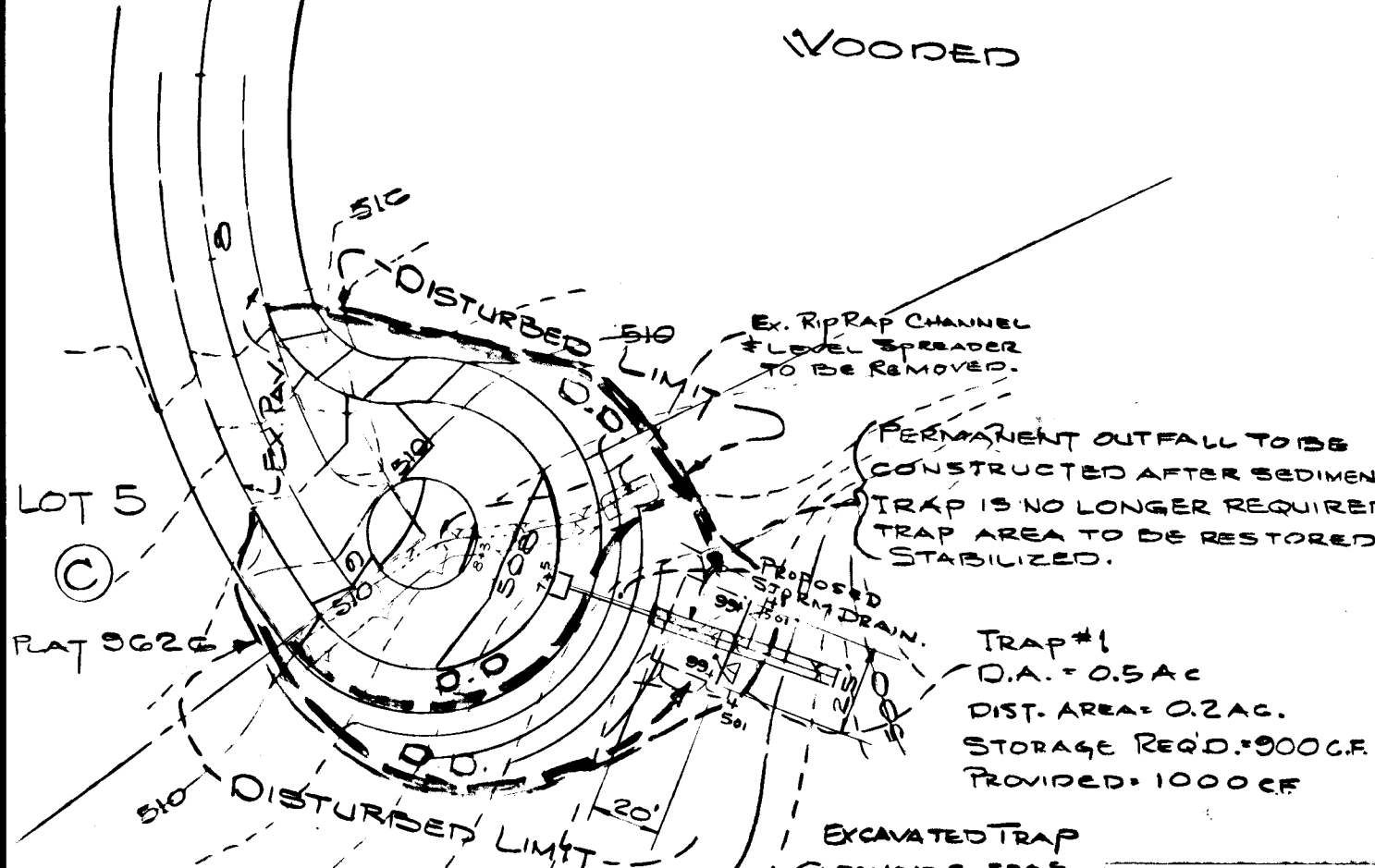
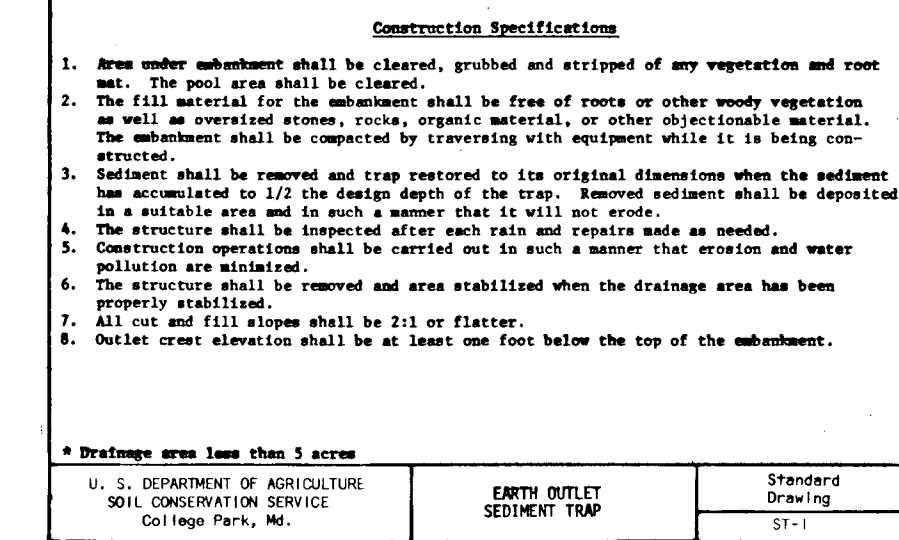
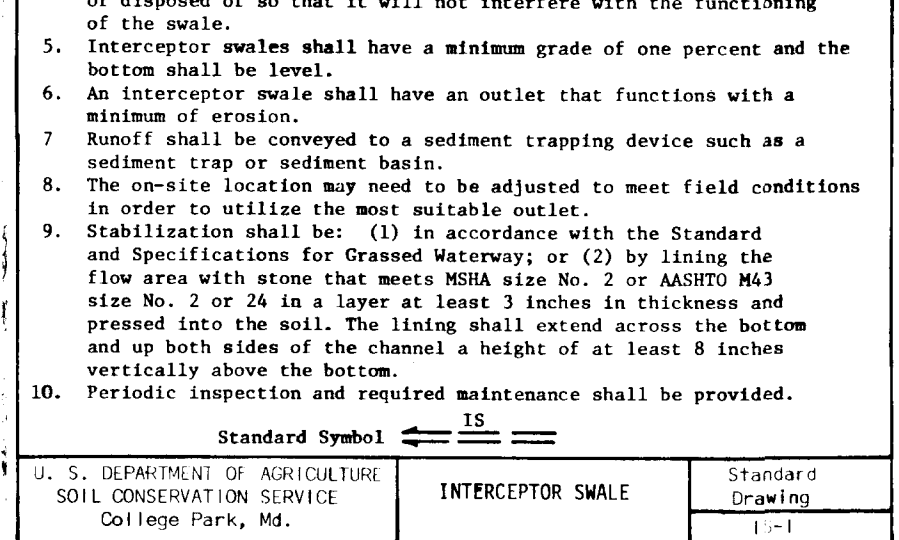
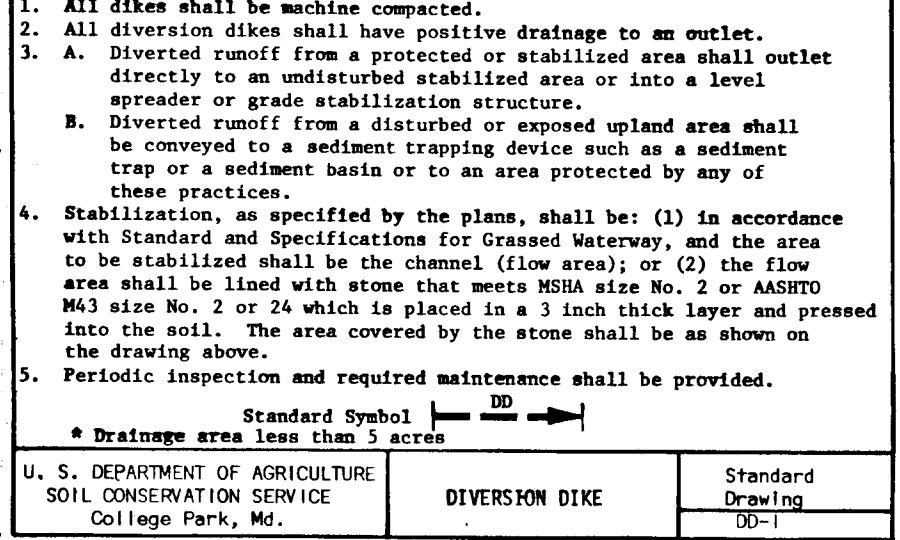
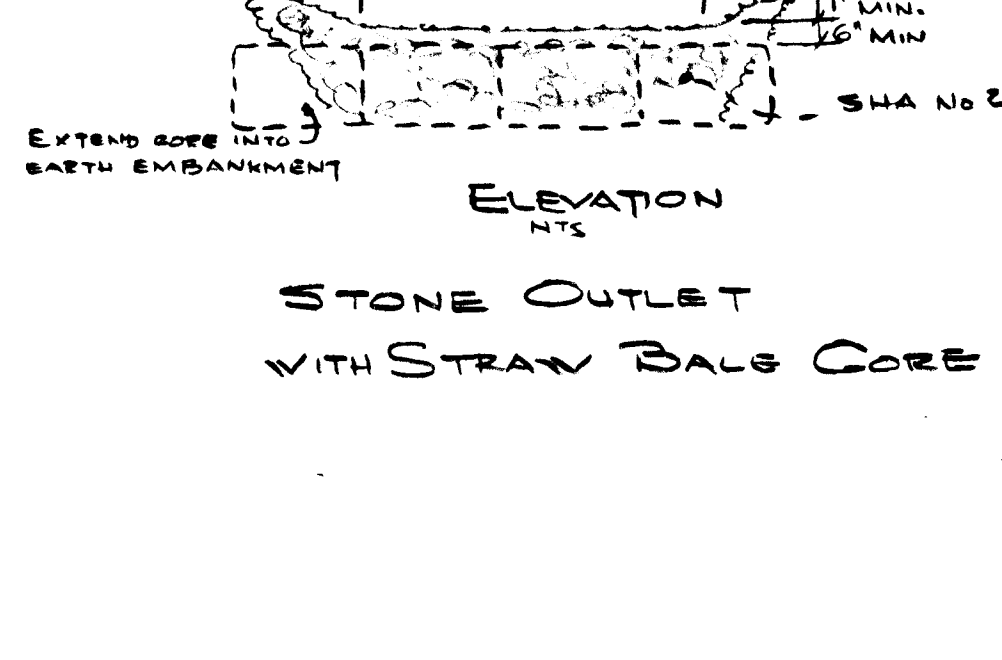
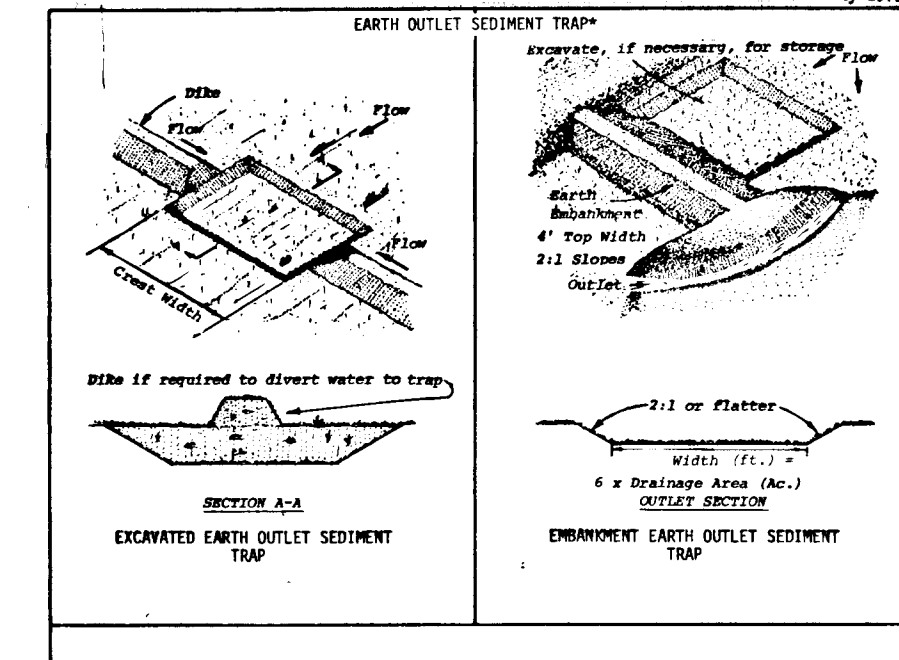
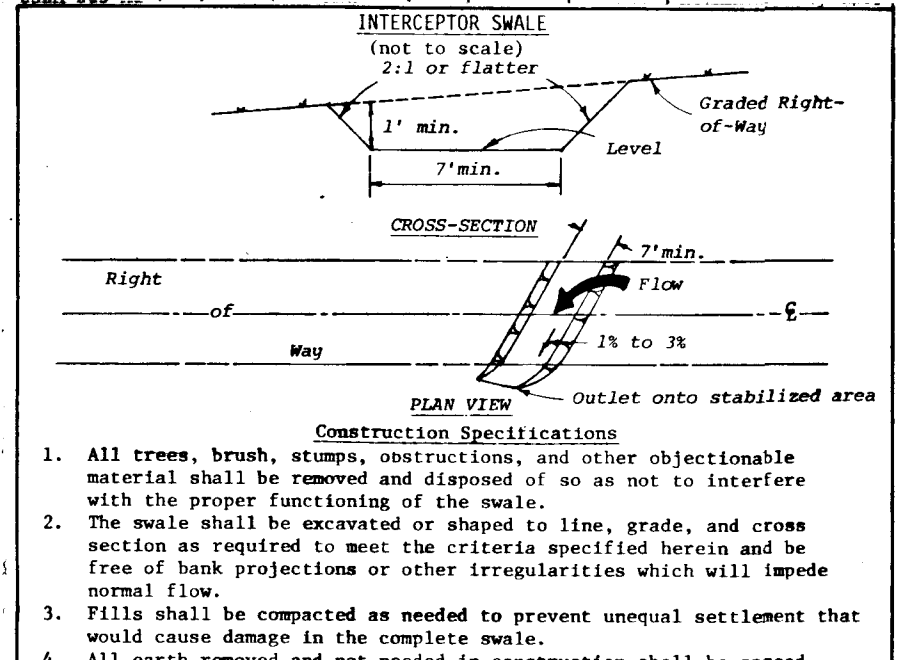
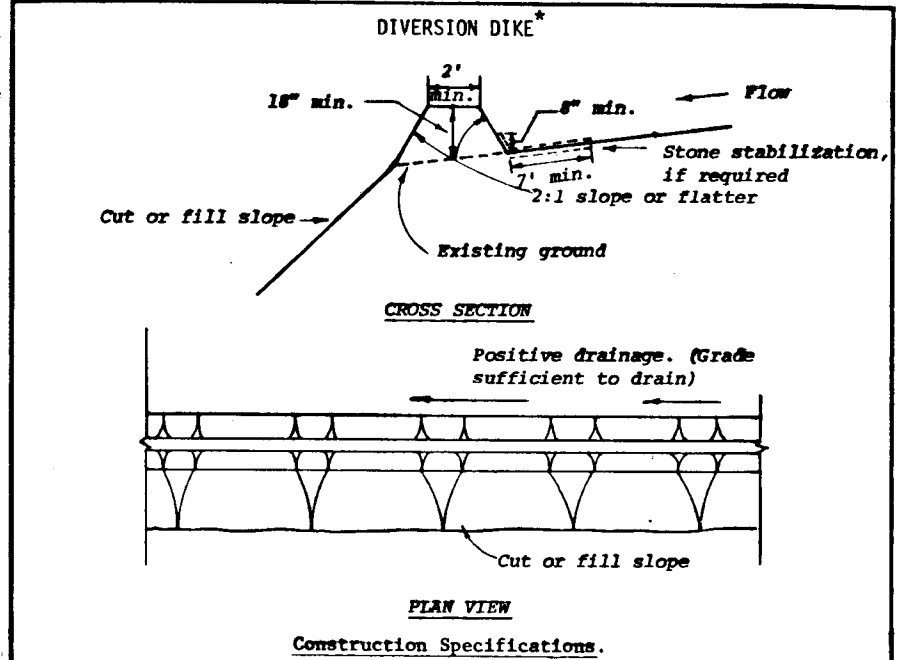


- #### SOD NOTES
- APPLY 10-10-10 FERTILIZER @ 1000\*/AC. (25\*/1000 \$).
  - APPLY GROUND AGRICULTURAL LIMESTONE @ 3000\*/AC. (30\*/1000 \$).
  - INCORPORATE LIME AND FERTILIZER INTO SOIL BY DISCING, FIRM UP AFTER INCORPORATION.
  - LAY SOD TO A TIGHT FIT. ROLL TO INSURE CONTACT WITH UNDERLYING SOIL.
- #### TEMPORARY SEEDING (Dikes, etc.)
- APPLY 10-20-10 FERTILIZER @ 600\*/AC. (15\*/1000 \$).
  - APPLY GROUND AGRICULTURAL LIMESTONE @ 3000\*/AC. (30\*/1000 \$).
  - APPLY SEED (RYE GRASS) UNIFORMLY @ 40\*/AC.
  - APPLY MULCH AND ANCHOR SAME.
- #### PERMANENT SEEDING (2:1 SLOPES)
- SEED MIXTURE TO BE 15% AC. CROWN VETCH, INOCULATED AND 40% AC. KENTUCKY 31. IF SEED IS APPLIED IN SPRING OR LATER, THAN CROWN VETCH MUST BE SCARIFIED.
  - APPLY MULCH AND ANCHOR SAME.

- #### GENERAL SEDIMENT CONTROL NOTES
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH APPLICABLE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS.
  - STRUCTURAL MEASURES, SUCH AS BERMS, TRAPS, BASINS, ETC., WILL BE INSTALLED AND STABILIZED ACCORDING TO THIS PLAN PRIOR TO ANY OTHER GRADING, CLEARING OR DISTURBANCE OF EXISTING SURFACE OF THE SITE.
  - ALL STRUCTURAL SEDIMENT CONTROL MEASURES ARE TO REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD CO. SEDIMENT CONTROL DIVISION PHONE 992-2436
  - NOTIFY THE HOWARD CO. SEDIMENT CONTROL DIVISION AT LEAST 24 HOURS BEFORE STARTING ANY WORK, PHONE 992-2436
  - THE DEVELOPER SHALL EXERCISE SOUND JUDGEMENT AND FORESIGHT IN IMPROVING ADDITIONAL ON-SITE SEDIMENT CONTROL MEASURES TO MEET FIELD CONDITIONS.
  - ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS WILL BE PROTECTED TO PREVENT TRACKING OF MUD ON TO PUBLIC WAYS.
  - ALL OFFSITE SPOIL OR BORROW AREAS NECESSARY FOR THE CONSTRUCTION ON THIS SITE MUST HAVE APPROVED SEDIMENT CONTROL PLANS.



- #### NOTES
- THIS PLAN IS FOR ROAD IMPROVEMENT AND CONSTRUCTION ONLY. SITE WORK TO BE COVERED BY ADDITIONAL PLANS. ROAD CONSTRUCTION INCLUDING FILL PLACEMENT SHALL CONFORM TO THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
  - A ONE FOOT HIGH LIP SHALL BE PLACED AT THE TOP OF ALL FILL SLOPES AT THE END OF EACH DAYS GRADING OPERATION.
  - ALL AREAS DISTURBED BY THE CONSTRUCTION SHOWN HEREON SHALL BE SODED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS, EXCEPT AREAS TO BE GRADED FOR LOT DEVELOPMENT.
- \* A COMPLETE GRADING PLAN FOR LOT DEVELOPMENT MUST BE PREPARED AND APPROVED PRIOR TO THE ISSUING OF BUILDING PERMITS.



HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

*James M. Avelar* 4/9/81  
SIGNATURE DATE

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

APPROVED: *William V. Rome* 4/9/81  
HOWARD SOIL CONSERVATION DISTRICT DATE

OWNERS/DEVELOPERS CERTIFICATION

"I/We hereby certify that all clearing, grading, construction and/or development will be done pursuant to this plan 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."

*Walter L. Smith PARTNER* 10/22/80  
SIGNATURE DATE

PROFESSIONAL ENGINEER

I CERTIFY THAT THIS PLAN FOR EROSION & 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.

5473 *Walter E. Avelar* 10-22-80  
REG. NO. DATE

APPROVED

OFFICE OF PLANNING AND ZONING ADM.

*William E. Avelar* 4/9/81  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED

DEPARTMENT OF PUBLIC WORKS

*William E. Avelar* 4/11/81  
CHIEF, BUREAU OF ENGINEERING DATE

Certification of the Quantities of Excavation and Fill

I hereby certify that the total amount of excavation and fill as shown on these plans has been computed to be 50 cubic yards of excavation and 2700 cubic yards of fill

TOTAL AREA OF SITE = 24 AC  
DISTURBED AREA = 1.4 AC  
PAVED AREA = 0.4 AC  
AREA TO BE REVEGETATED = 1.0 AC

DATE	DESCRIPTION	BY

SEDIMENT CONTROL PLAN

WHITE WATER WAY  
SAND HILL ACRES  
HOWARD COUNTY, MARYLAND

**HANSON & DEN OUTER, LTD.**

CIVIL ENGINEERS & LAND SURVEYORS  
LAND PLANNING CONSULTANTS  
172 ROLLINS AVE. - ROCKVILLE, MD. 20852  
Phone (301) 881-6770

SCALE AS SHOWN JULY 1980

OWNER:	DESIGNED	JOB NUMBER
SAND HILL JOINT VENTURE		
6 MARTIN LYNOTT		410 A1
51 MONROE STR.	CHECKED	FILE NUMBER
ROCKVILLE, MD. 20850	SHEETS OF 5	SC 103

#156