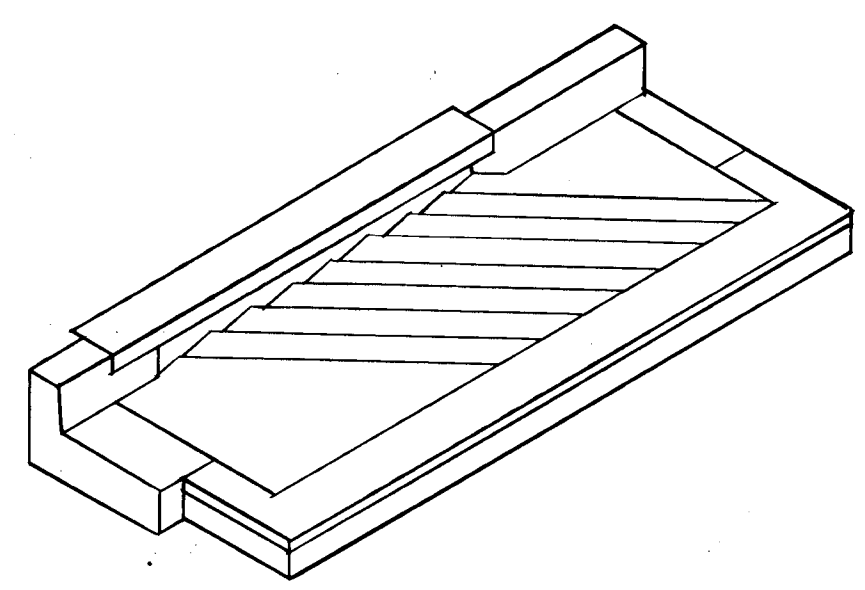
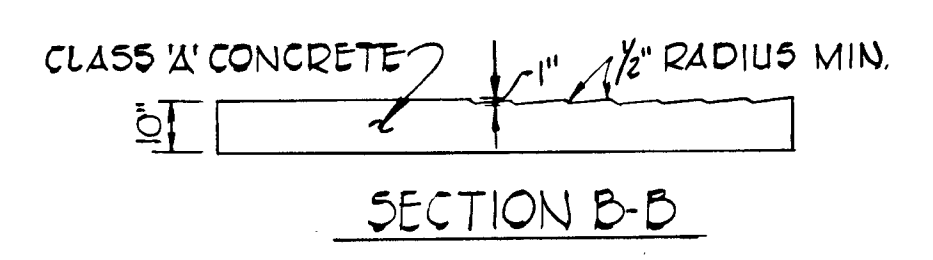
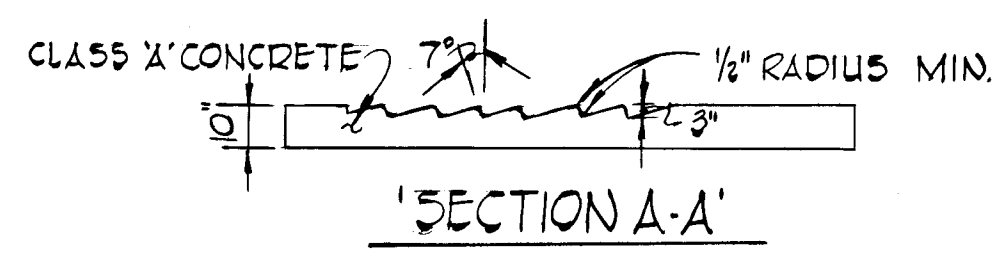
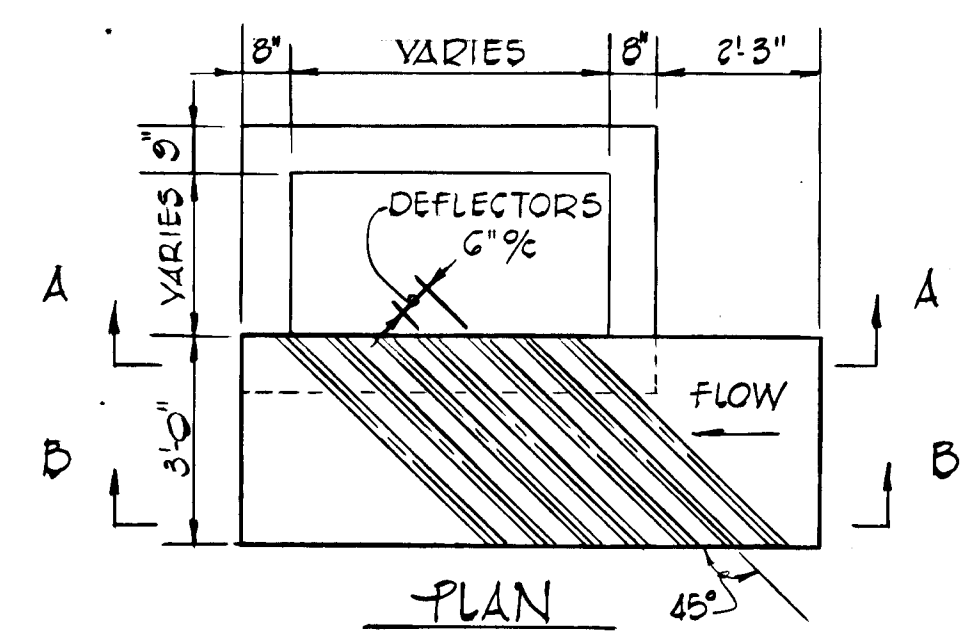
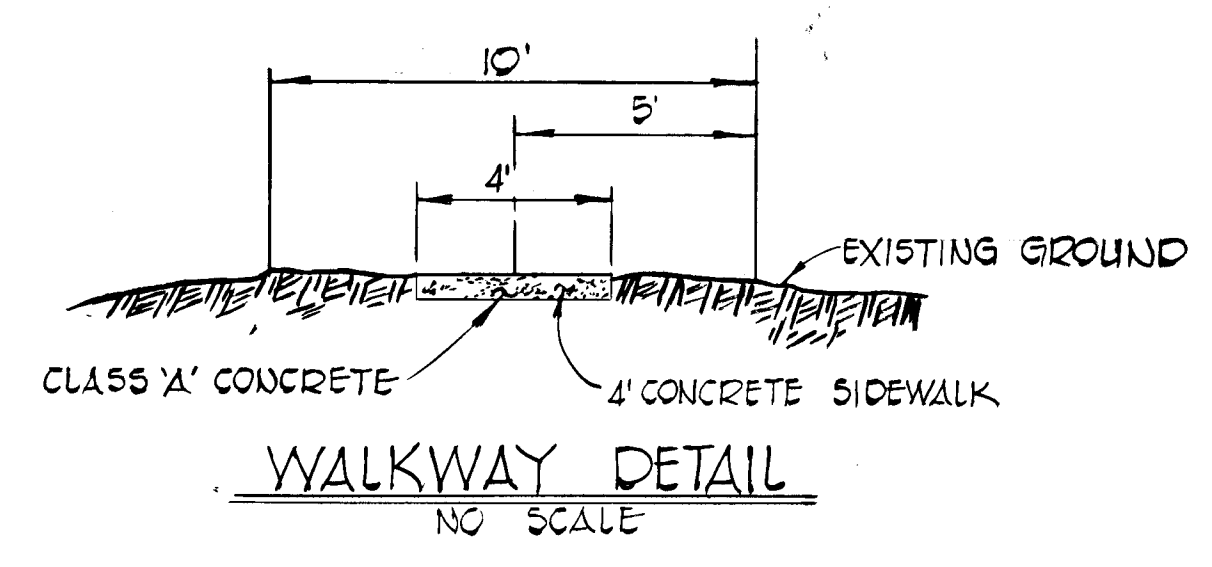
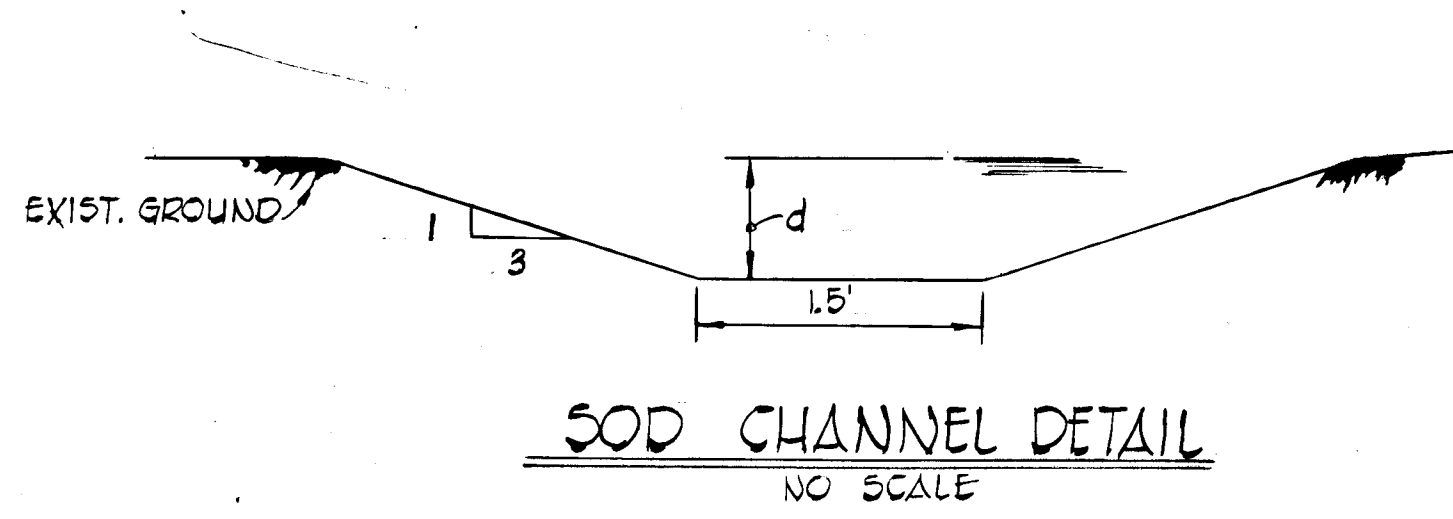


STRUCTURE SCHEDULE						
NO	TYPE	INV. IN.	INV. OUT.	TOP ELEV.	£ LOC.	REMARKS
I-1	A-5	235.50	231.17	236.76	8+37.30	DRWG. 04-A PAGE 110-A
M-1	NO. CO. STAND. MANHOLE	235.50	234.80	240.11	8+07.30	DRWG. 04-A PAGE 110-A
I-3	A-5	238.92	238.63	243.47	9+74.30	DRWG. 04-A PAGE 110-A
I-4	A-5	238.92	240.85	244.83	9+74.30	DRWG. 04-A PAGE 110-A
I-2	A-5	238.92	238.63	238.63	8+91.30	" " " "
I-5	C (2 SIDES OPEN)	---	242.60	242.60	---	DRWG. 04-C PAGE 110-C
S-1	TYPE 'C' ENDWALL	---	---	225.25	---	DRWG. 05-A PAGE 107

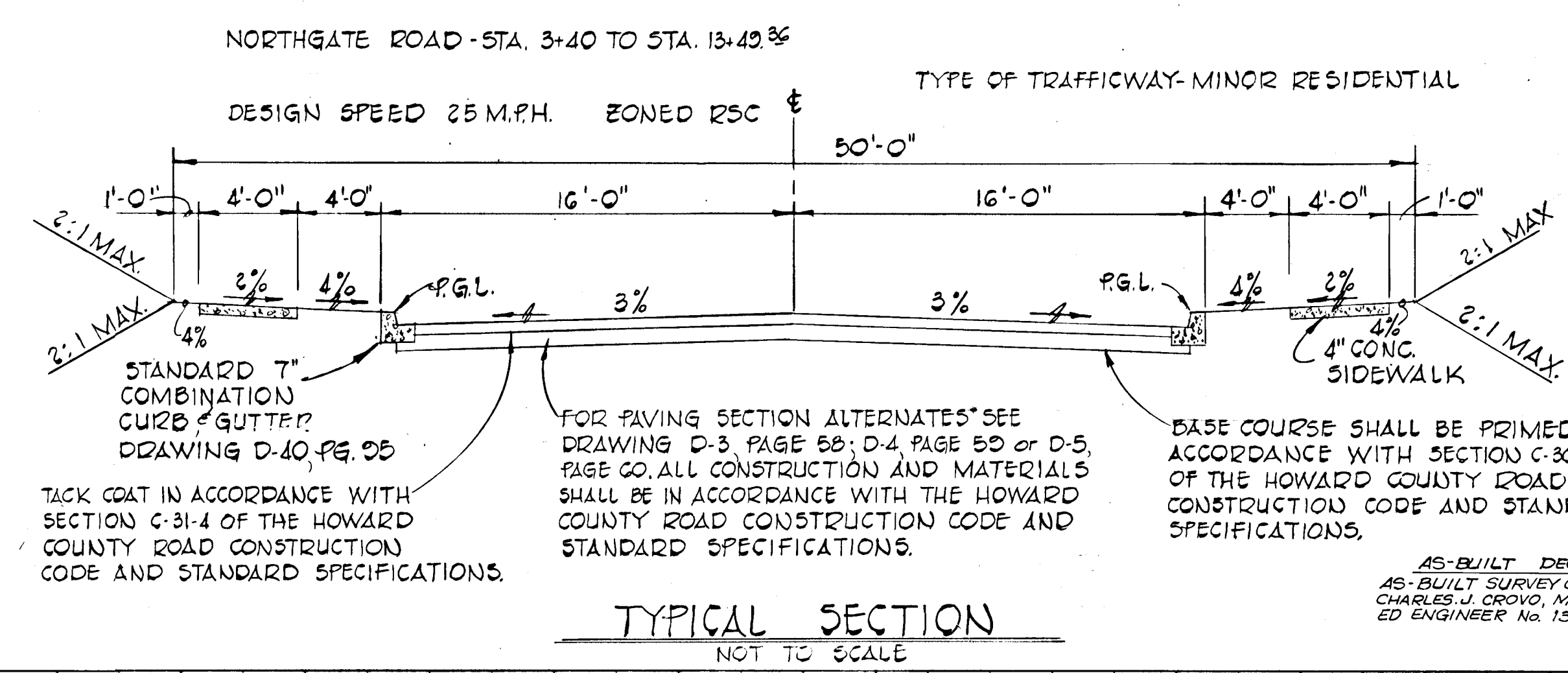


TYPE 'A' INLET w/ DEFLECTORS
NOT TO SCALE



A=2.03'
P=5.36'
R=0.3787
R²=0.523
S=3.0%
S²=0.1732
d=0.01'
V=4.5 f.p.s.
Q=21 c.f.s.

A=2.24'
P=5.62'
R=0.3585
R²=0.542
S=2.5%
S²=0.1561
d=0.008'
V=4.2 f.p.s.
Q=24 c.f.s.



NORTHGATE WOODS
SECTION 1 AREA 3
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

STORM DRAIN PROFILES AND DETAILS

OWNER AND DEVELOPER
NORTHGATE WOODS GENERAL PARTNERSHIP
9750 WASHINGTON BOULEVARD
LAUREL, MARYLAND 20810

SCALE (AS SHOWN) DATE 11/7/00 DWG. NO. 2 OF 3
DES. C.J.C. DRN. T.A.F. CHK. R.B.C.

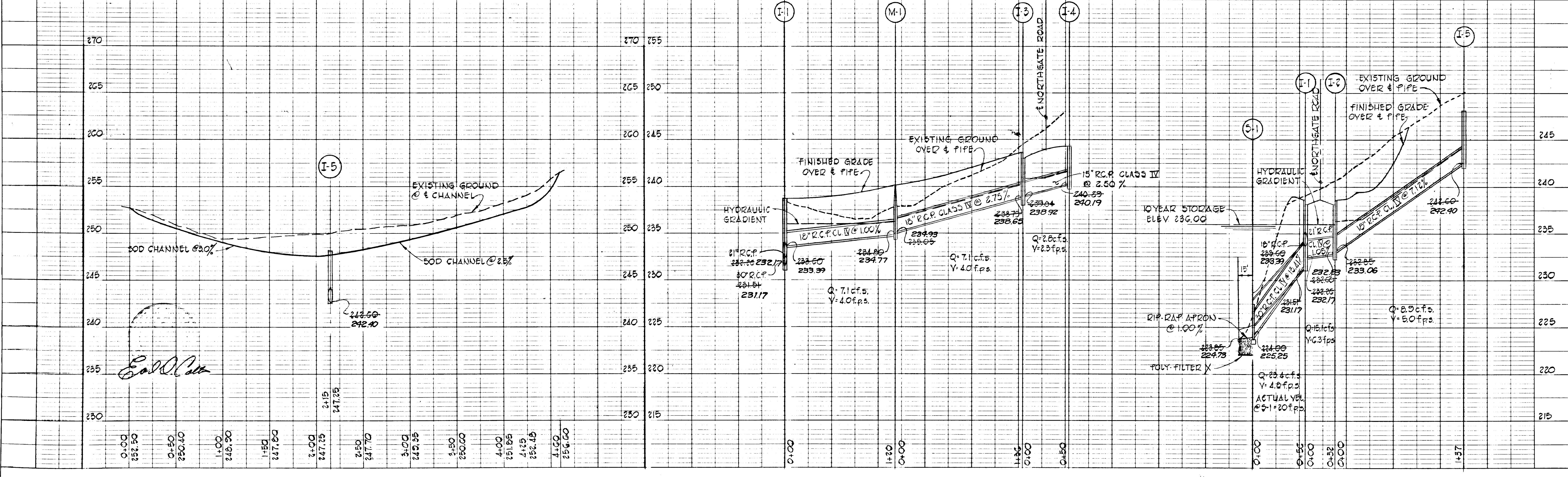
FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

DATE	
BY	
PLANNED	
CHECKED	
NO.	

APPROVED
DEPARTMENT OF PUBLIC WORKS
Allen S. Brown 5/1/81
CHIEF, BUREAU OF ENGINEERING

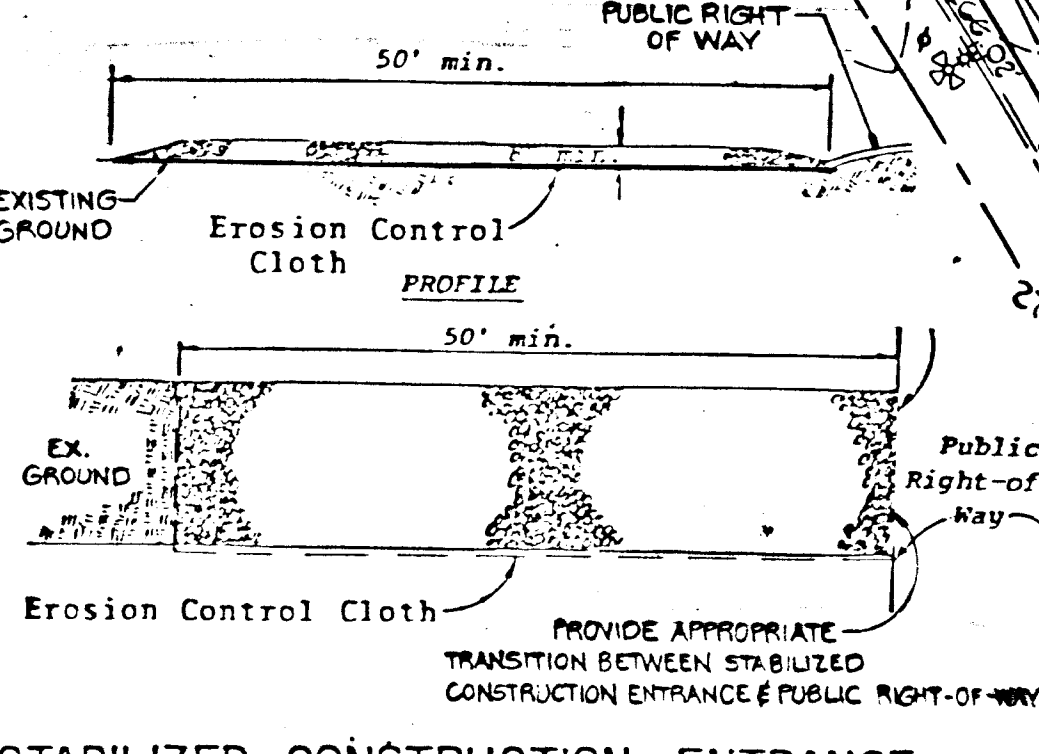
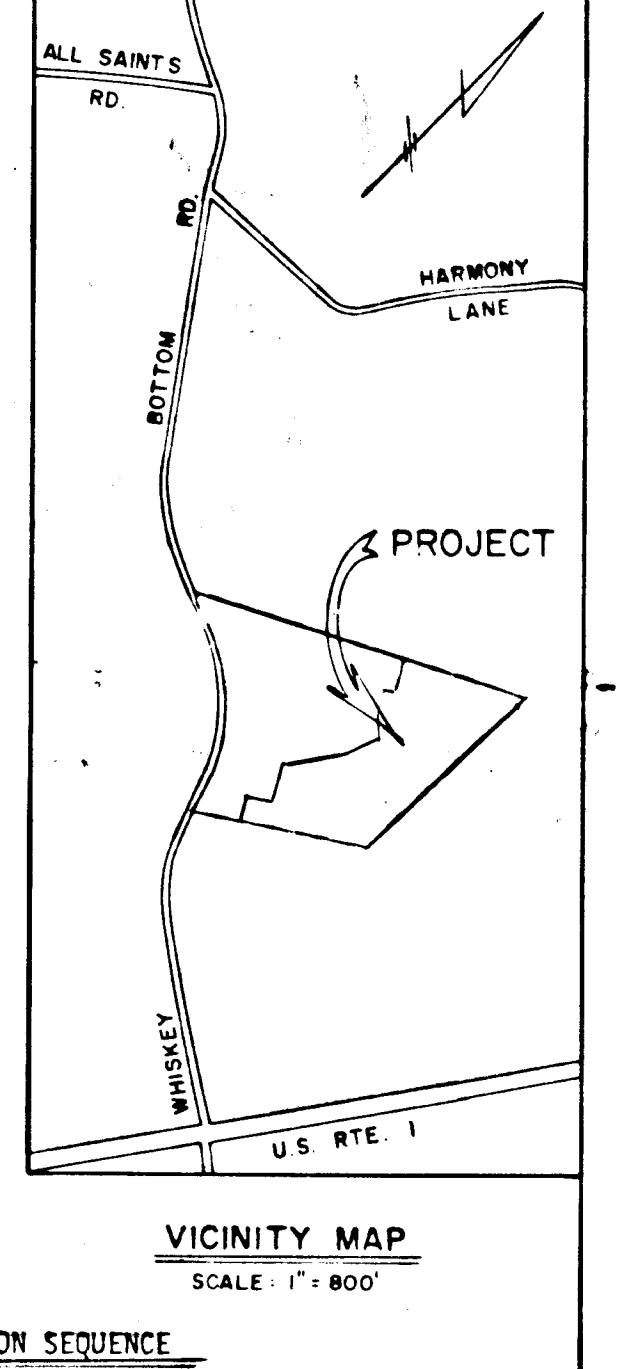
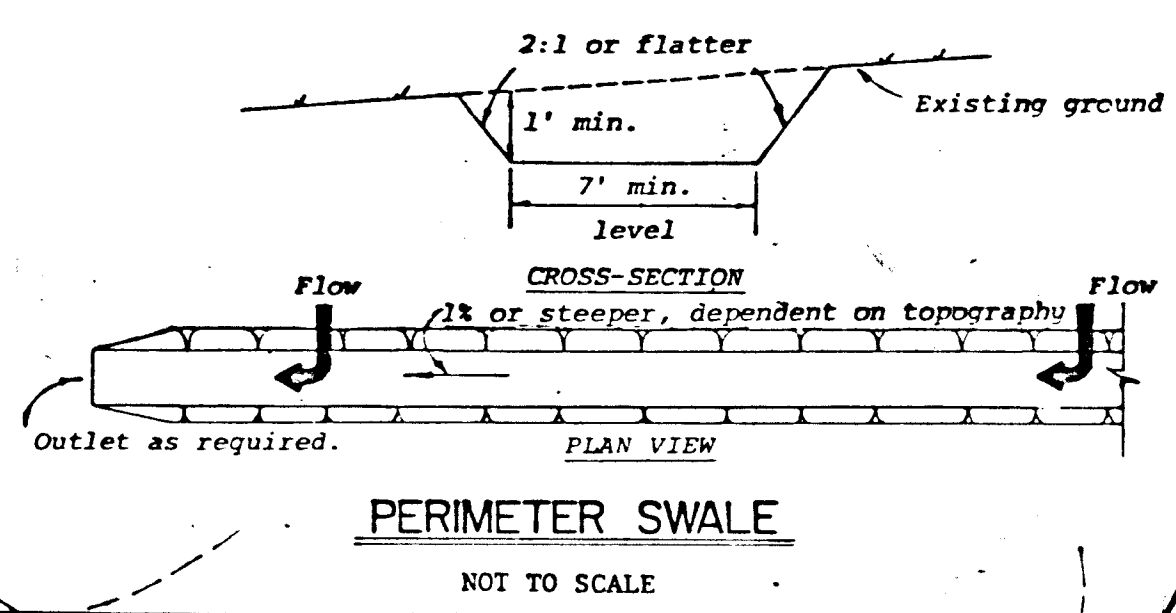
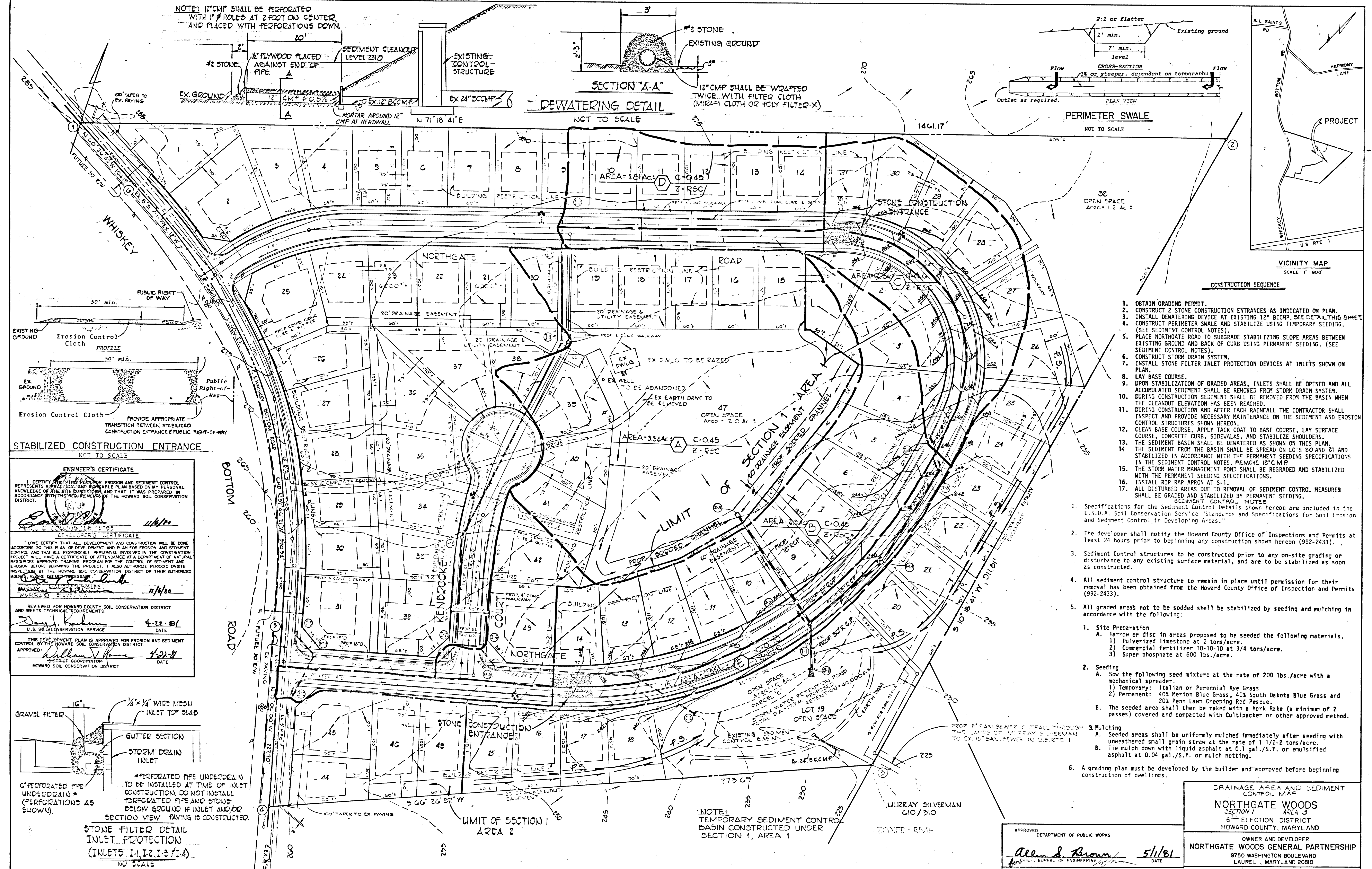
APPROVED
OFFICE OF PLANNING AND ZONING
Paul MacPherson 4/23/81
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

DATE	
BY	
PROFILING	
CHECKED	
NO.	



#316

NOTE: 12" CMP SHALL BE PERFORATED WITH 1" HOLES AT 2 FOOT ON CENTER AND PLACED WITH PERFORATIONS DOWN.



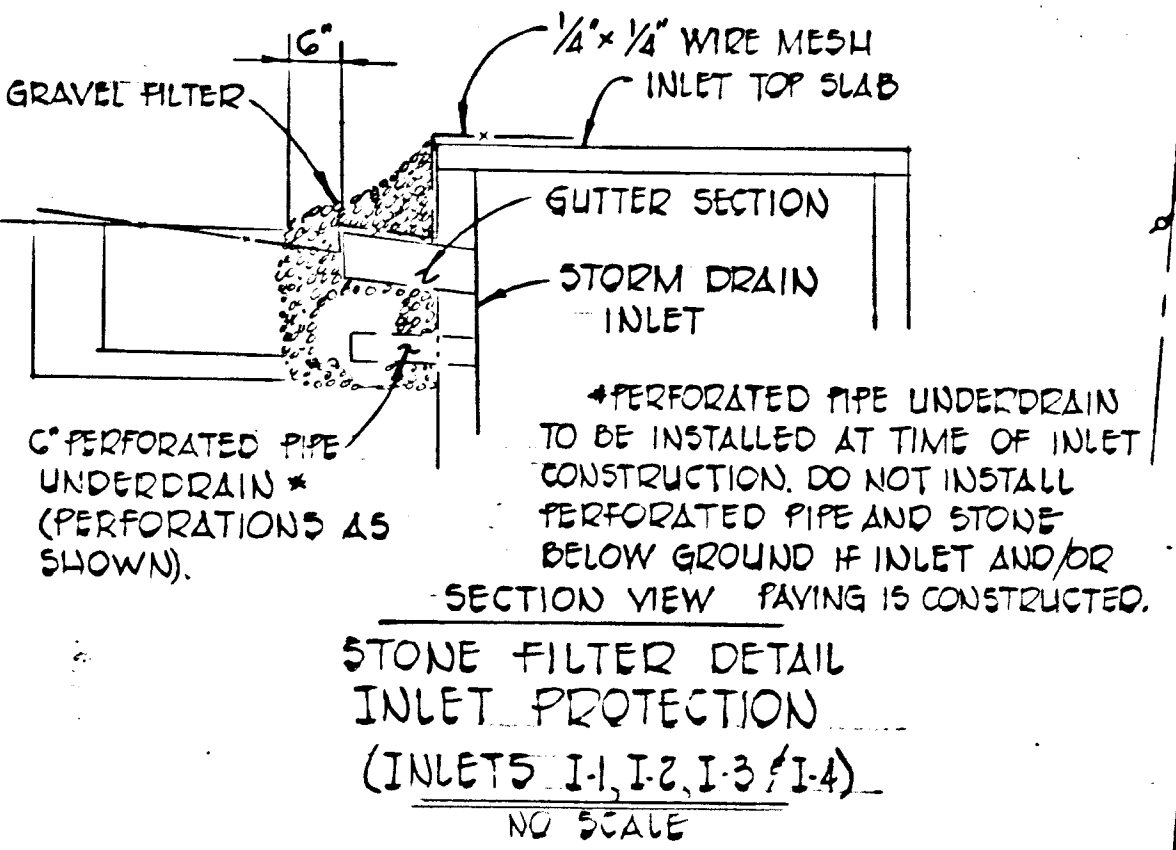
STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE 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.

DEVELOPER'S CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS TO VERIFY COMPLIANCE WITH THE EROSION AND SEDIMENT CONTROL MEASURES.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 DATE: 4-22-81
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 DATE: 4-22-81
 DISTRICT COORDINATOR
 HOWARD SOIL CONSERVATION DISTRICT



STONE FILTER DETAIL INLET PROTECTION (INLETS 1-1, 2-1, 3-1, 4-1) NO SCALE

- OBTAIN GRADING PERMIT.
 - CONSTRUCT 2 STONE CONSTRUCTION ENTRANCES AS INDICATED ON PLAN.
 - INSTALL DEWATERING DEVICE AT EXISTING 12" BC CMP. SEE DETAIL THIS SHEET.
 - CONSTRUCT PERIMETER SWALE AND STABILIZE USING TEMPORARY SEEDING. (SEE SEDIMENT CONTROL NOTES).
 - PLACE NORTHGATE ROAD TO SUBGRADE STABILIZING SLOPE AREAS BETWEEN EXISTING GROUND AND BACK OF CURB USING PERMANENT SEEDING. (SEE SEDIMENT CONTROL NOTES).
 - CONSTRUCT STORM DRAIN SYSTEM.
 - INSTALL STONE FILTER INLET PROTECTION DEVICES AT INLETS SHOWN ON PLAN.
 - LAY BASE COURSE.
 - UPON STABILIZATION OF GRADED AREAS, INLETS SHALL BE OPENED AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM STORM DRAIN SYSTEM.
 - DURING CONSTRUCTION SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED.
 - DURING CONSTRUCTION AND AFTER EACH RAINFALL THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
 - CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE, LAY SURFACE COURSE, CONCRETE CURB, SIDEWALKS, AND STABILIZE SHOULDERS.
 - THE SEDIMENT BASIN SHALL BE DEWATERED AS SHOWN ON THIS PLAN.
 - THE SEDIMENT FROM THE BASIN SHALL BE SPREAD ON LOTS 20 AND 21 AND STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS IN THE SEDIMENT CONTROL NOTES. REMOVE 12" CMP.
 - THE STORM WATER MANAGEMENT POND SHALL BE REGRADED AND STABILIZED WITH THE PERMANENT SEEDING SPECIFICATIONS.
 - INSTALL RIP RAP APRON AT S-1.
 - ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.
- SEDIMENT CONTROL NOTES
- Specifications for the Sediment Control Details shown hereon are included in the U.S.D.A. Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas."
 - The developer shall notify the Howard County Office of Inspections and Permits at least 24 hours prior to beginning any construction shown hereon (992-2433).
 - Sediment Control structures to be constructed prior to any on-site grading or disturbance to any existing surface material, and are to be stabilized as soon as constructed.
 - All sediment control structure to remain in place until permission for their removal has been obtained from the Howard County Office of Inspection and Permits (992-2433).
 - All graded areas not to be sodded shall be stabilized by seeding and mulching in accordance with the following:
 - Site Preparation
 - Harrow or disc in areas proposed to be seeded the following materials.
 - Pulverized limestone at 2 tons/acre.
 - Commercial fertilizer 10-10-10 at 3/4 tons/acre.
 - Super phosphate at 600 lbs./acre.
 - Seeding
 - Sow the following seed mixture at the rate of 200 lbs./acre with a mechanical spreader.
 - Temporary: Italian or Perennial Rye Grass
 - Permanent: 40% Merion Blue Grass, 40% South Dakota Blue Grass and 20% Penn Law Greening Red Fescue.
 - The seeded area shall then be raked with a York Rake (a minimum of 2 passes) covered and compacted with Cultipacker or other approved method.
 - Mulching
 - Seeded areas shall be uniformly mulched immediately after seeding with unweathered small grain straw at the rate of 1 1/2-2 tons/acre.
 - Tie mulch down with liquid asphalt at 0.1 gal./S.Y. or mulchified asphalt at 0.04 gal./S.Y. or mulch netting.
 - A grading plan must be developed by the builder and approved before beginning construction of dwellings.

G.H. WILLIAMS 586/391 ZONED - RSC

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Allen S. Brown 5/1/81
 for CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
 William W. ... 4-24-81
 DATE

DRAINAGE AREA AND SEDIMENT CONTROL MAP
NORTHGATE WOODS
 SECTION 1 AREA 3
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
NORTHGATE WOODS GENERAL PARTNERSHIP
 9750 WASHINGTON BOULEVARD
 LAUREL, MARYLAND 20810

SCALE: 1" = 50' DATE: 11/1/80 DWG. NO. 3 OF 6
 DES. C.J.C. DRN. T.A. CHK. R.B.C.

FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8399 COURT AVE., ELLICOTT CITY, MARYLAND 21043

#810

F-81-55 AS-BUILT 12283