

ENGINEER'S CERTIFICATE
 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.
 EARL D. COLLINS 4-5-79
 P. E. REG. NO. 9753 DATE

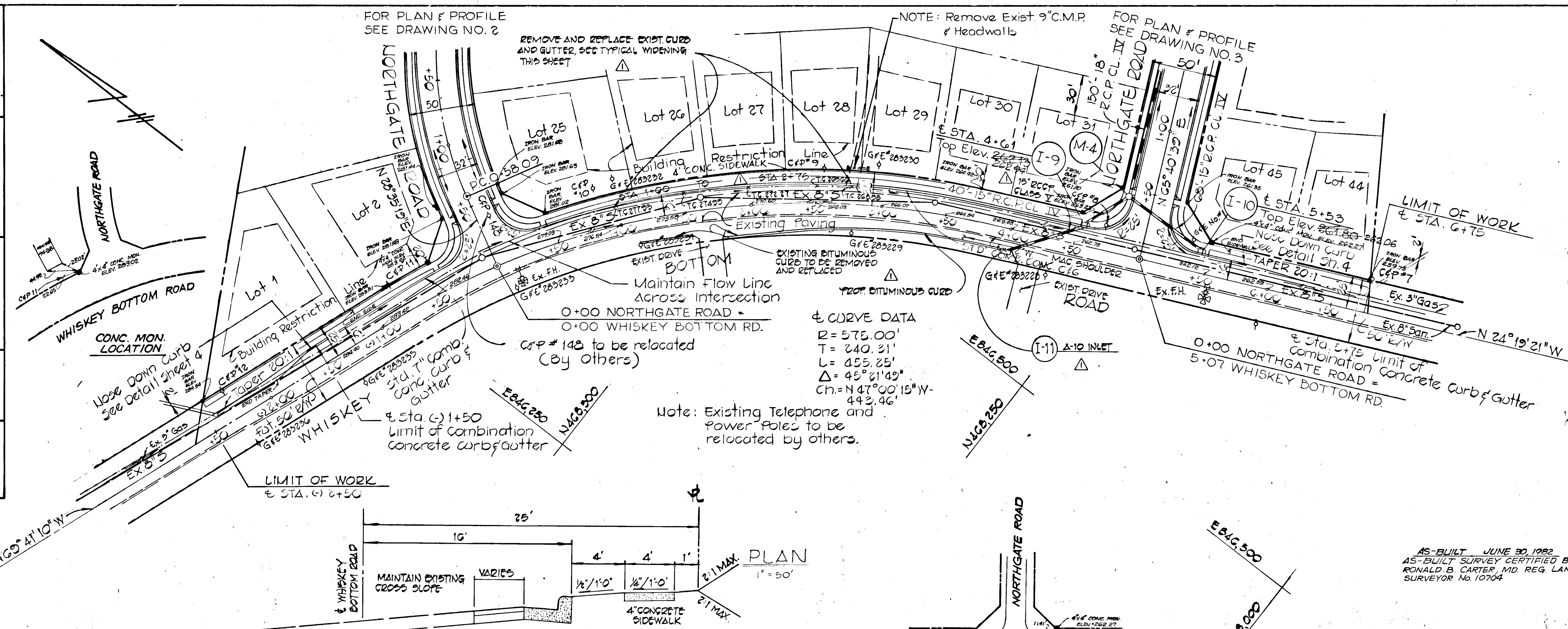
DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Murray Sherman 4/19/79
 DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 J. Helm 12/14/79
 S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Robert W. Zelman 12/14/79
 DISTRICT COORDINATOR DATE
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS
 W.D. Albert 12-18-79
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
 12-17-79
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

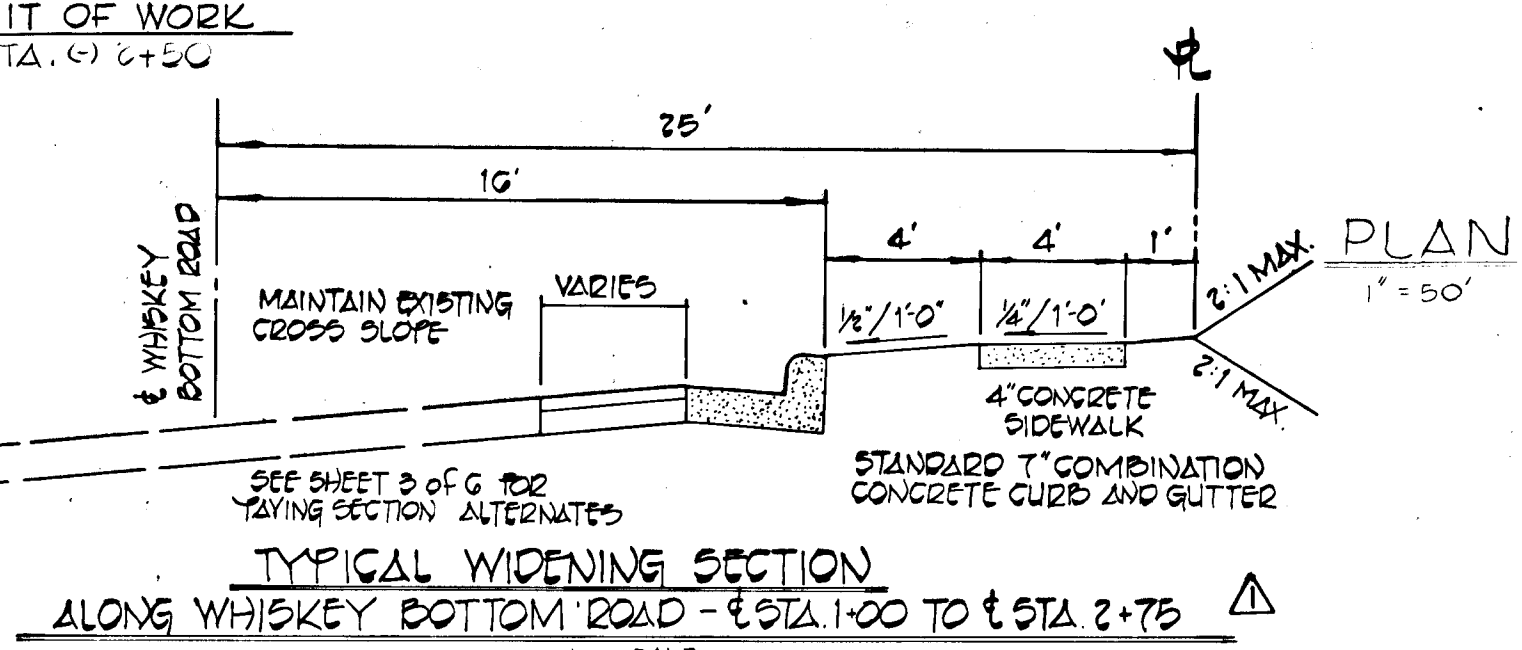


SECTION 1, AREA 1
NORTHGATE WOODS
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 ROAD AND STORM DRAIN DESIGN
WHISKEY BOTTOM ROAD
 PLAN AND PROFILE

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

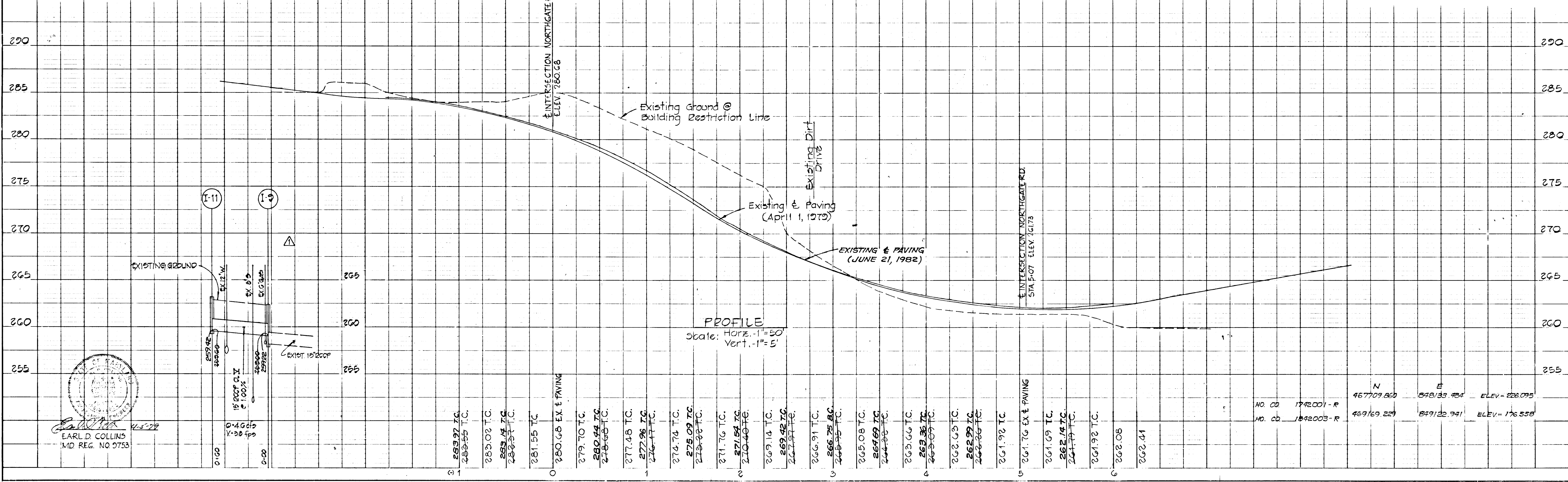
SCALE: AS SHOWN DATE: APR. 5, 1979 DWG. NO. 1 OF 6
 DES. E.D.C. DRN. D.B./K.C.B. CHK. E.D.C./K.C.B.

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



REVISIONS

NO.	DESCRIPTION
1	ADD STORM DRAIN (I-11 TO I-9) IN PLAN & PROFILE ADD TOP CURB ELEV. (STA. 1+00 TO STA. 2+75) ALONG WHISKEY BOTTOM ROAD & ADD TYPICAL WIDENING SECTION

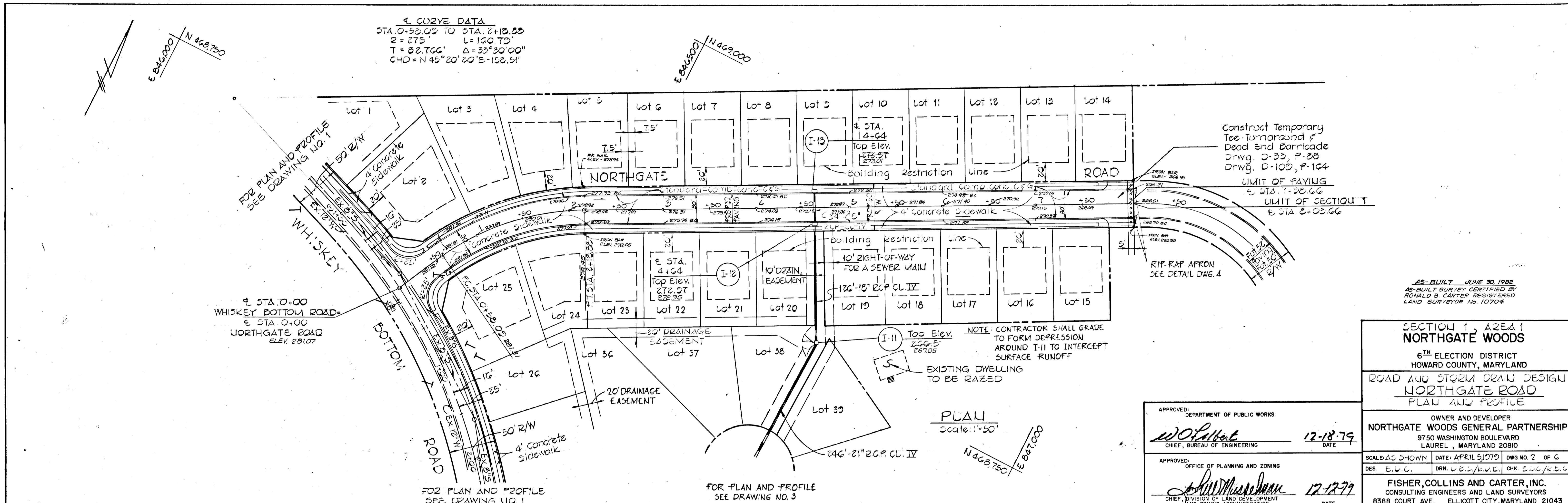


PLAN
 CHECKED BY: _____
 DATE: _____

PROFILE
 CHECKED BY: _____
 DATE: _____

DATE	
BY	
NO.	
PLAN	
NO.	

DATE	
BY	
NO.	
PROFILE	
NO.	



APPROVED: DEPARTMENT OF PUBLIC WORKS
W. O. Carter 12-18-79
 CHIEF, BUREAU OF ENGINEERING

APPROVED: OFFICE OF PLANNING AND ZONING
Earl D. Collins 12-12-79
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

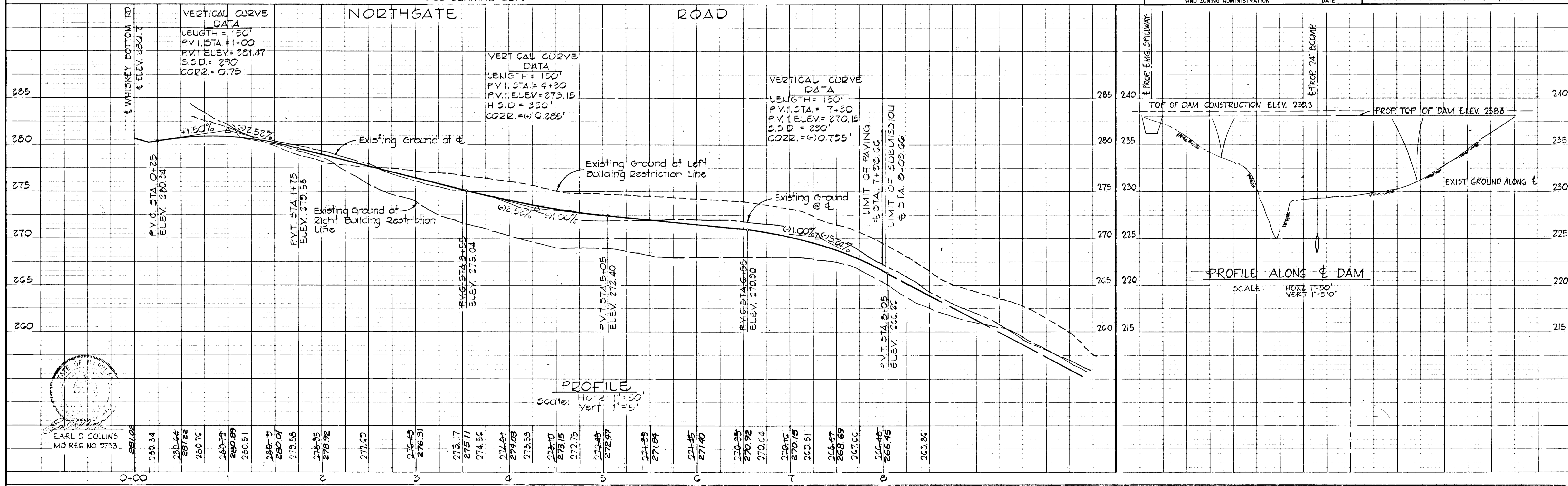
SECTION 1, AREA 1
NORTHGATE WOODS
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

ROAD AND STORM DRAIN DESIGN
NORTHGATE ROAD
 PLAN AND PROFILE

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

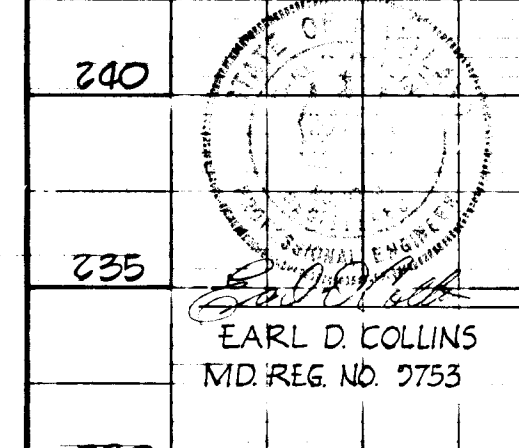
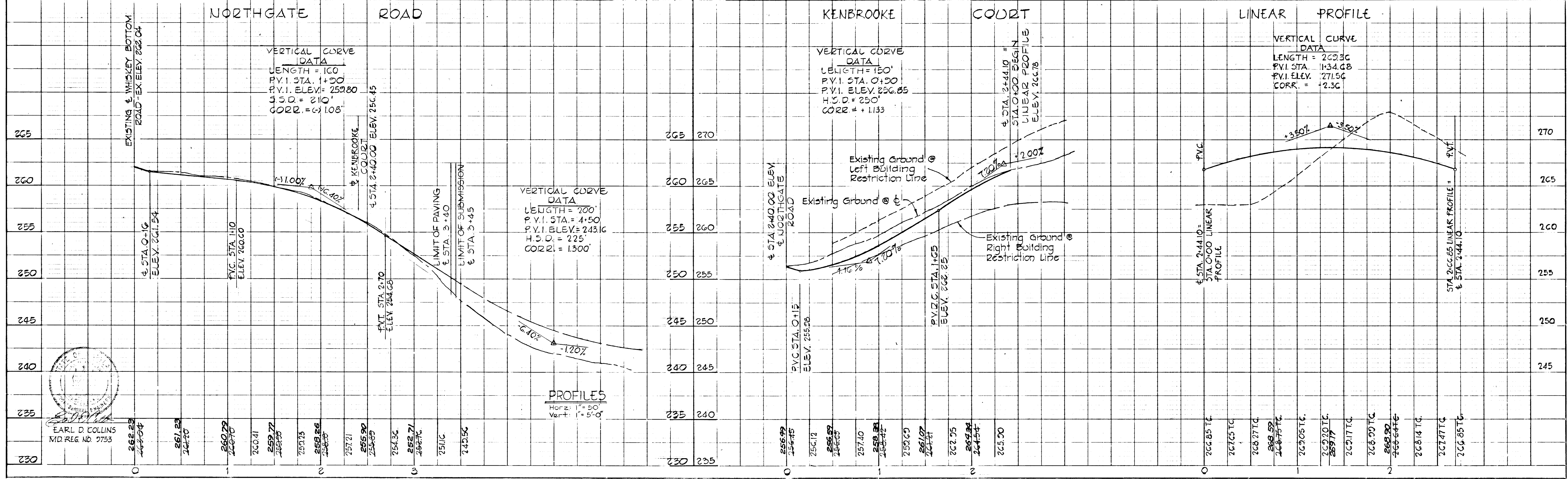
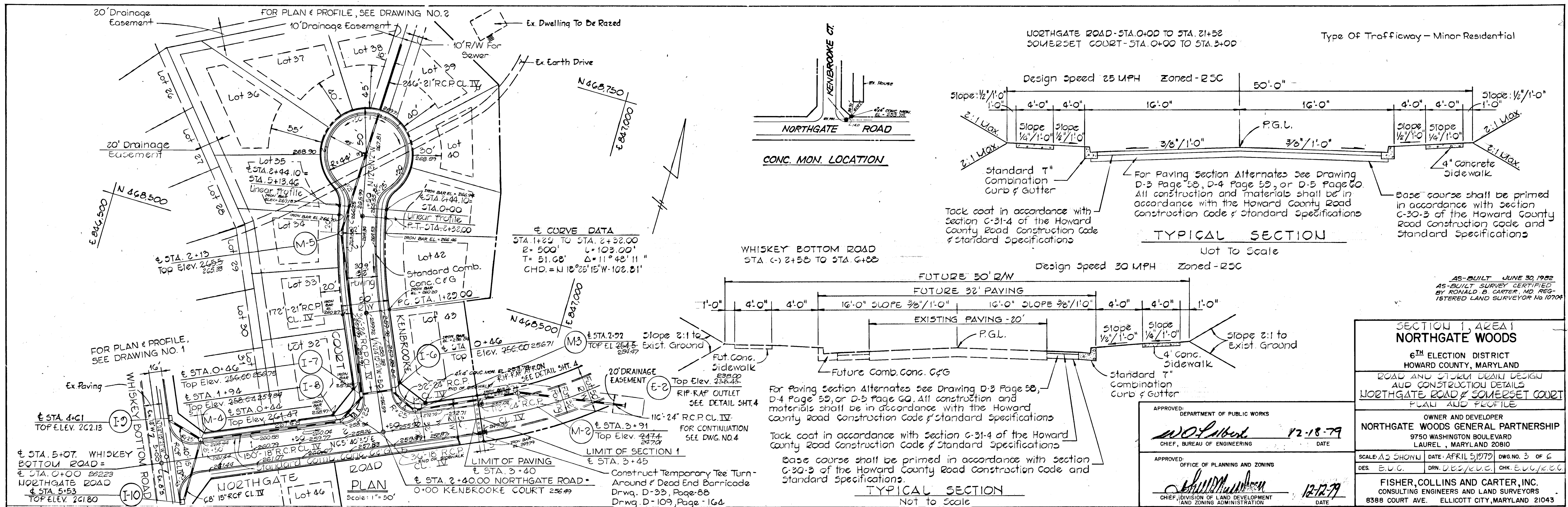
SCALE: AS SHOWN DATE: APRIL 5, 1979 DWG. NO. 2 OF 6
 DES. E.W.C. DRN. D.E.S./E.V.E. CHK. E.W.C./E.D.C.

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



DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	

DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	



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

ROAD AND STORM DRAIN DESIGN
 AND CONSTRUCTION DETAILS
 NORTHGATE ROAD & SOMERSET COURT
 PLAN AND PROFILE

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

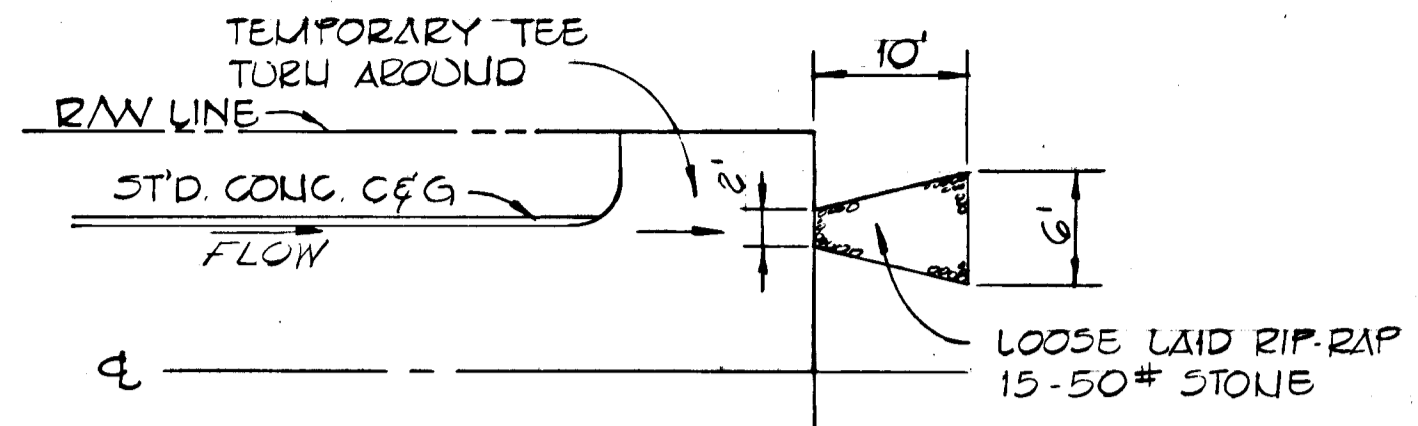
APPROVED: DEPARTMENT OF PUBLIC WORKS
W. J. Libert 12-18-79
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
William M. Brown 12-12-79
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

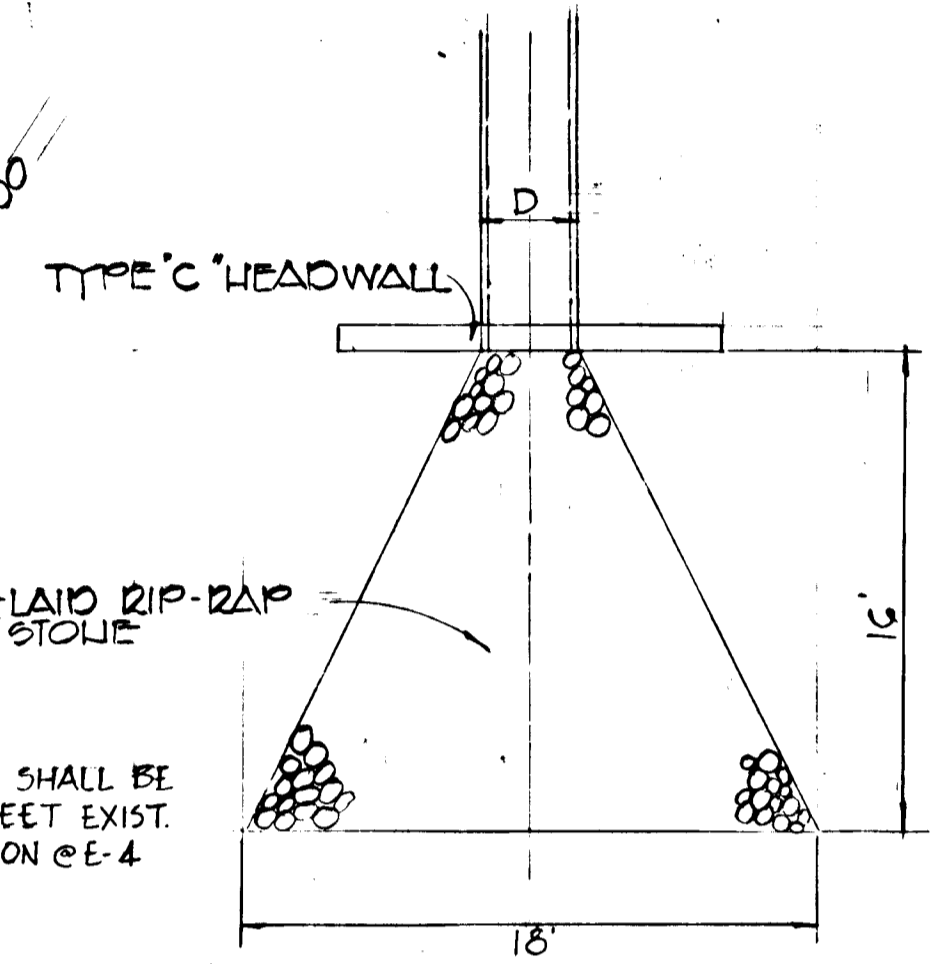
SCALE: AS SHOWN DATE: APRIL 5, 1979 DWG NO. 3 OF 6
 DES. E.U.G. DRN. D.E.S./E.U.C. CHK. E.U.G./E.C.C.

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

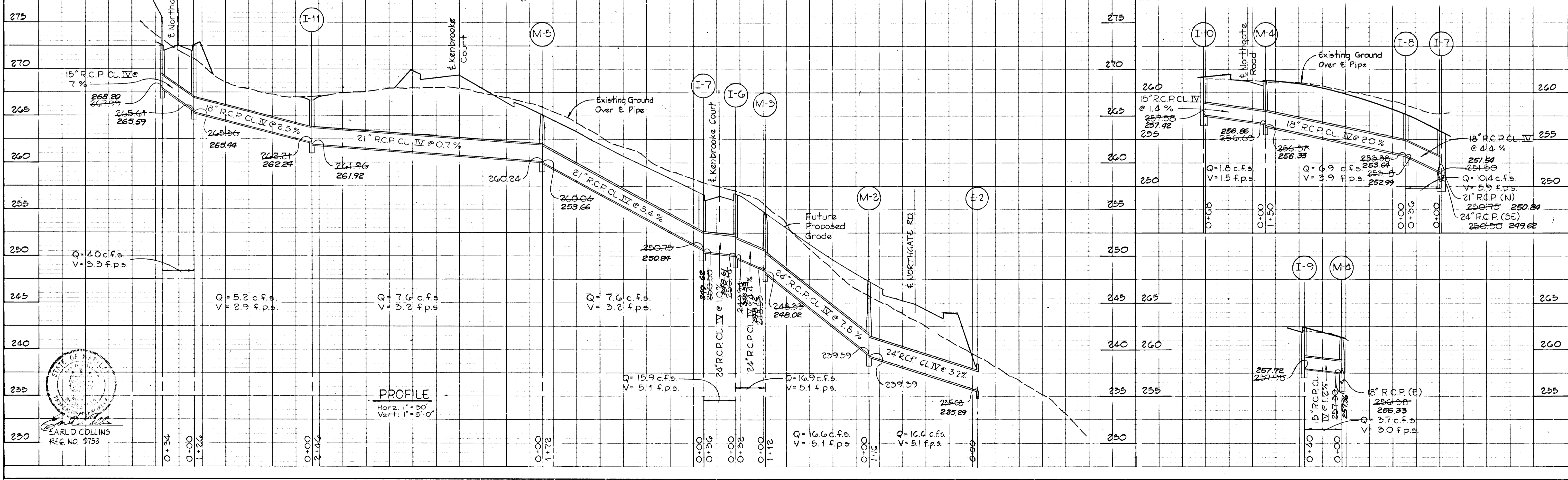
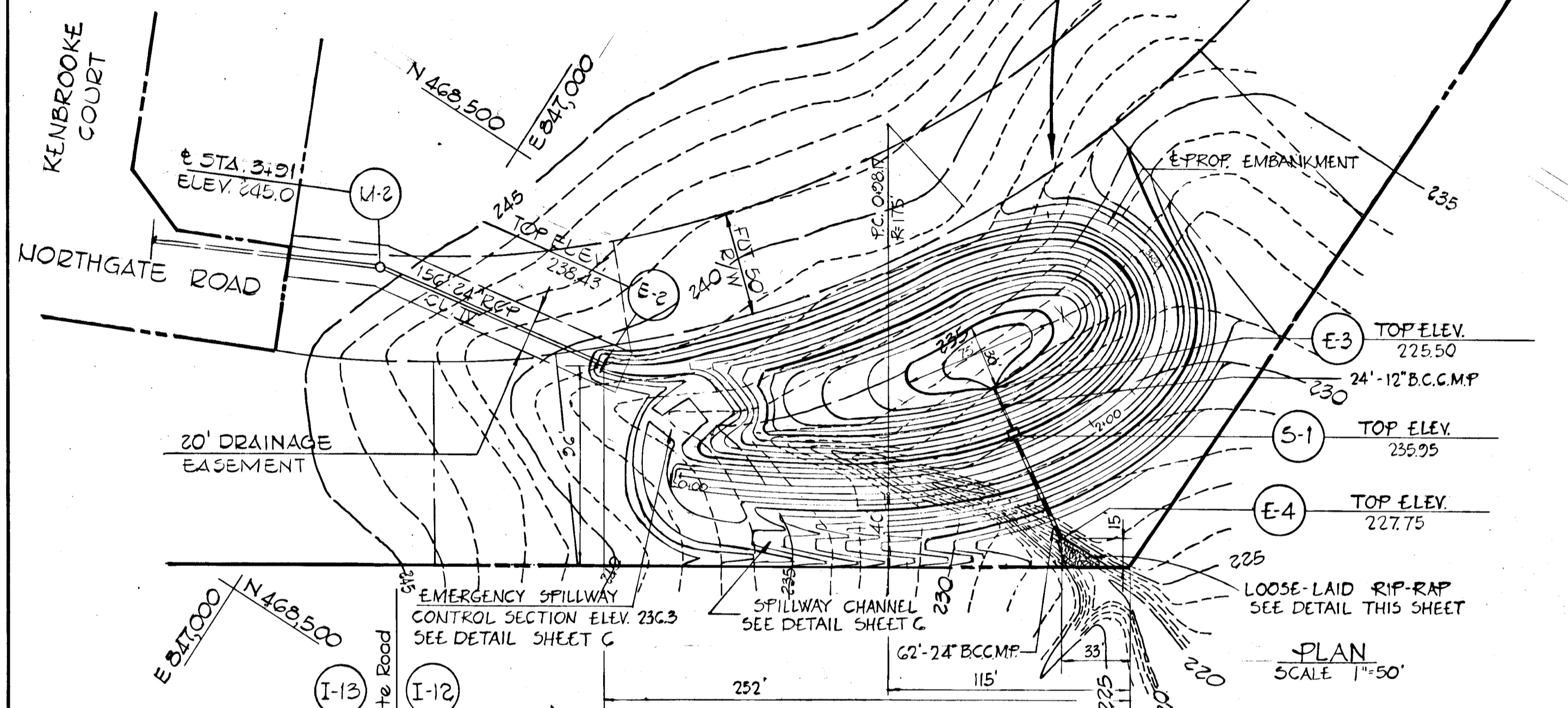
STRUCTURE SCHEDULE						EMBANKMENT CURVE DATA				
NO.	TYPE	INV. IN	INV. OUT	TOP ELEV.	LOC.	REMARKS	STATION	RADIUS	DELTA	LENGTH
E-2	TYPE 'C' ENDWALL	255.68		238.43		DRWG. D-52 PAGE 107	P.C. 0+00	450.00'	12°30'	2817'
M-2	HO. CO. STD. MANHOLE	239.59	239.39	247.4	3+91	DRWG. D-103 PAGE 158	P.C. 0+08.17	175.00	42°30'	12981'
M-3	HO. CO. STD. MANHOLE	248.53	248.33	254.5	2+77	DRWG. D-103 PAGE 158	P.C. 2+27.28	50.00	146°30'	12785'
I-6	A-10	250.14	249.94	256.60	0+46	DRWG. G4-A PAGE 119-A				
I-7	A-10	251.80	250.75	256.60	0+46	DRWG. G4-A PAGE 119-A				
M-5	HO. CO. STD. MANHOLE	260.24	260.04	265.5	2+13	DRWG. D-103 PAGE 158				
I-11	C (2 SIDES OPEN)	262.21	261.96	266.5		DRWG. D-64-C PAGE 119-C				
I-12	A-10	265.61	265.36	272.97	4+64	DRWG. G4-A PAGE 119-A				
I-13	A-10	267.99	267.97	272.97	4+64	DRWG. G4-A PAGE 119-A				
I-8	A-5 W/ DEFLECTORS	253.38	253.16	258.4	1+94	DRWG. G4-A PAGE 119-A				
M-4	HO. CO. STD. MANHOLE	256.63	256.38	261.47	0+44	DRWG. D-103 PAGE 158				
I-9	A-10	257.98	257.98	262.13	4+61	DRWG. G4-A PAGE 119-A				
I-10	A-10		257.58	261.80	5+53	DRWG. G4-A PAGE 119-A				



RIP-RAP APRON DETAIL
NO SCALE



RIP-RAP DETAIL @ E-2 & E-4
NO SCALE



ENGINEER'S CERTIFICATE
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.
Earl D. Collins 4-8-79
DATE

DEVELOPER'S CERTIFICATE
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 DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.
Murray Silverman 4/19/79
DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
John M. DeLoe 12/2/79
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Robert W. Zehn 12/4/79
DISTRICT SUPERVISOR DATE
HOWARD SOIL CONSERVATION DISTRICT

AS-BUILT JUNE 30, 1982
AS-BUILT SURVEY CERTIFIED BY
RONALD B. CARTER PROFESSIONAL LAND SURVEYOR No. 10704

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

STORM DRAIN PROFILES AND DETAILS
AND SEDIMENT CONTROL PLAN

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

SCALE AS SHOWN DATE: APRIL 5, 1979 DWG. NO. 4 OF 6
DES. E.D.C. DRN. D.B.S. CHK. R.B.C.

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

APPROVED: DEPARTMENT OF PUBLIC WORKS
Wolfe 12-18-79
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
Shaw 12-12-79
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

PLAN
DATE
BY
SURVEIL
NOTE BOOK
ALPHABETICALLY CHECKED
BY: OF WAY CHECKED
No.

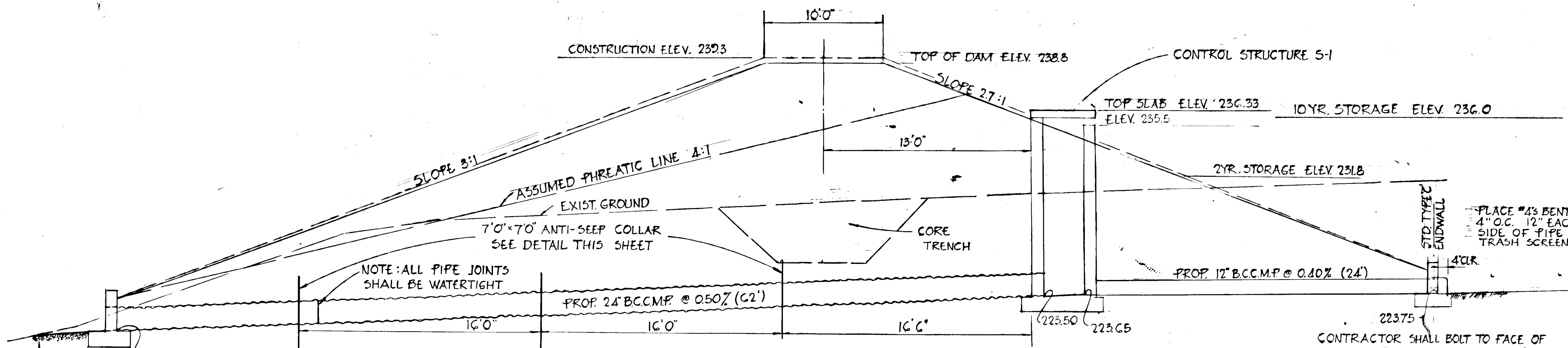
PROFILE
DATE
BY
SURVEIL
NOTE BOOK
GRADE CHECKED
BY: M.A. NOTED
STRUCTURE LOCATIONS CHECKED
No.

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 Lawn Creeping 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 14-2 tons/acre.
 - Tie mulch down with liquid asphalt at 0.1 gal./S.Y. or emulsified 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.

NOTE: STORM WATER MANAGEMENT IS BEING PROVIDED IN THE ULTIMATE CONDITIONS OF DEVELOPMENT.

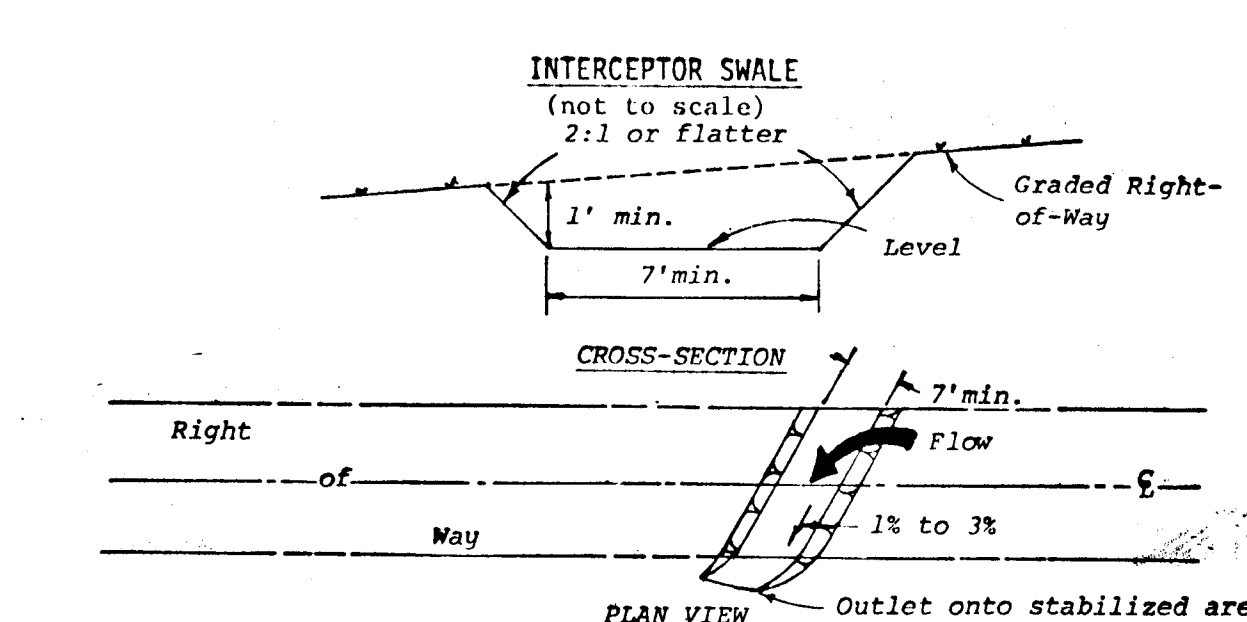
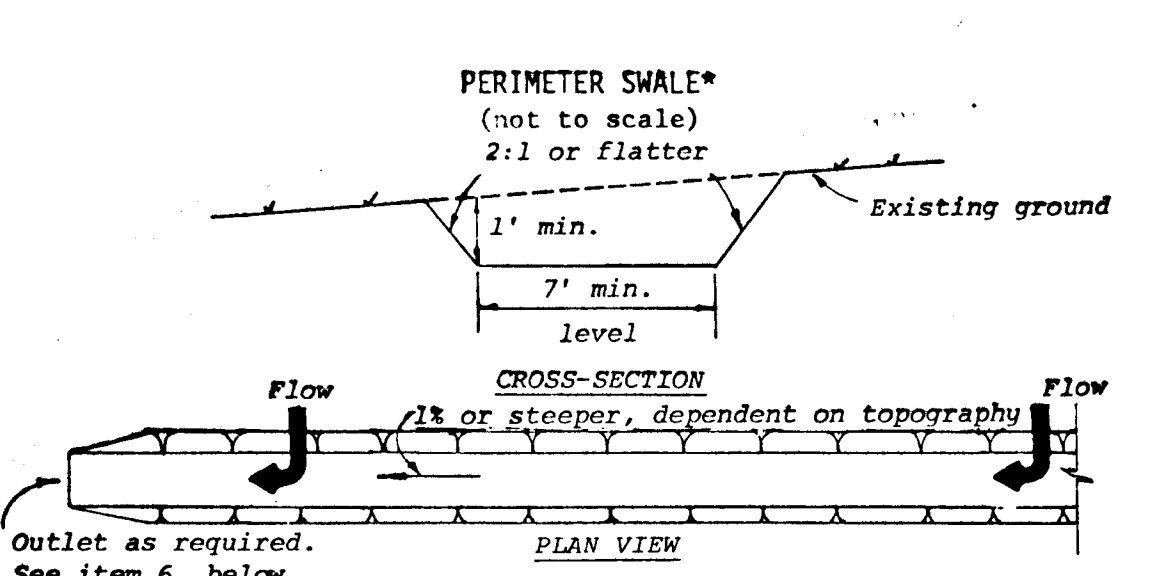
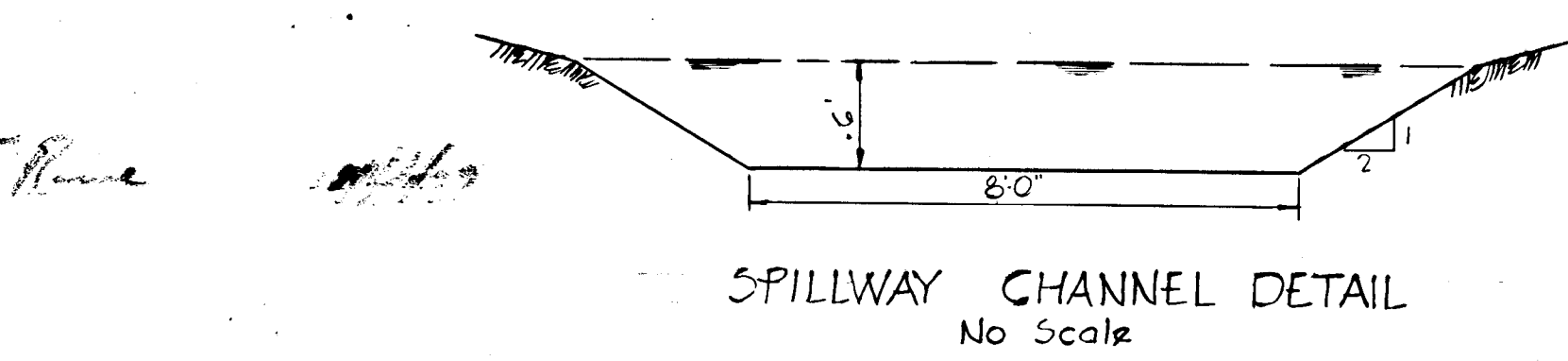
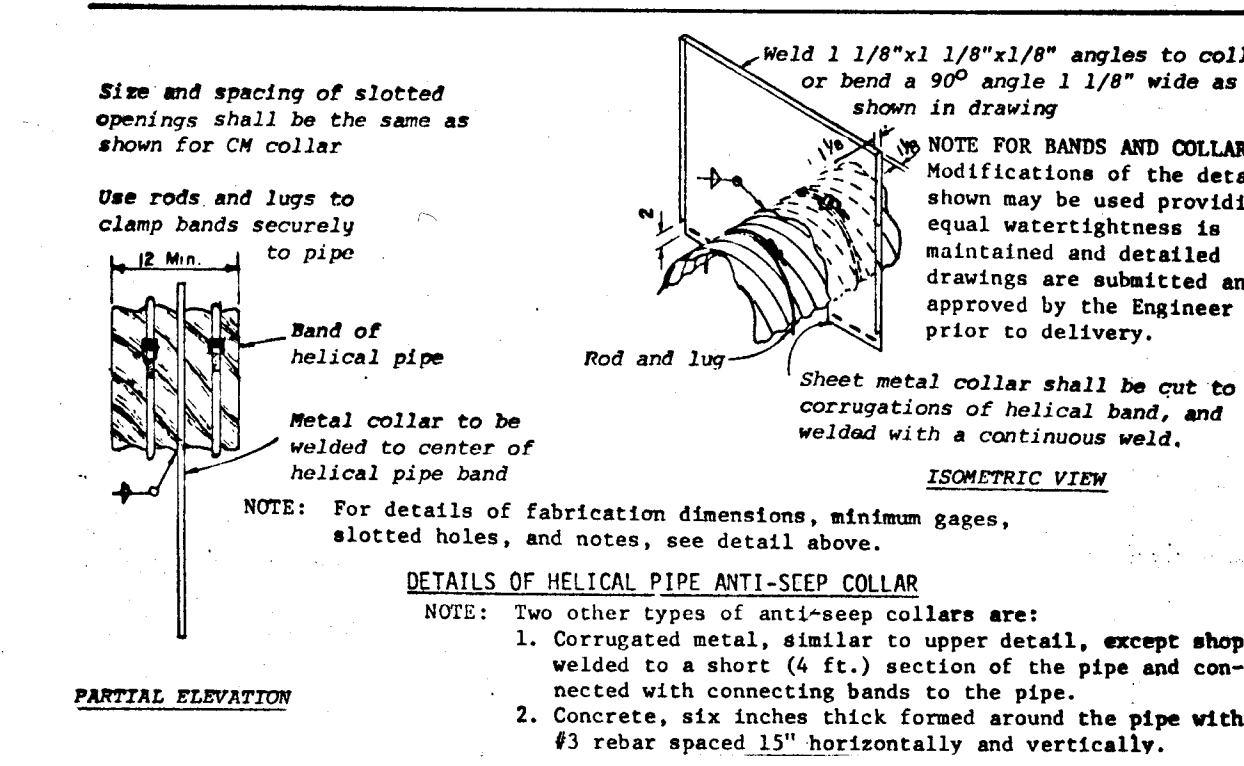
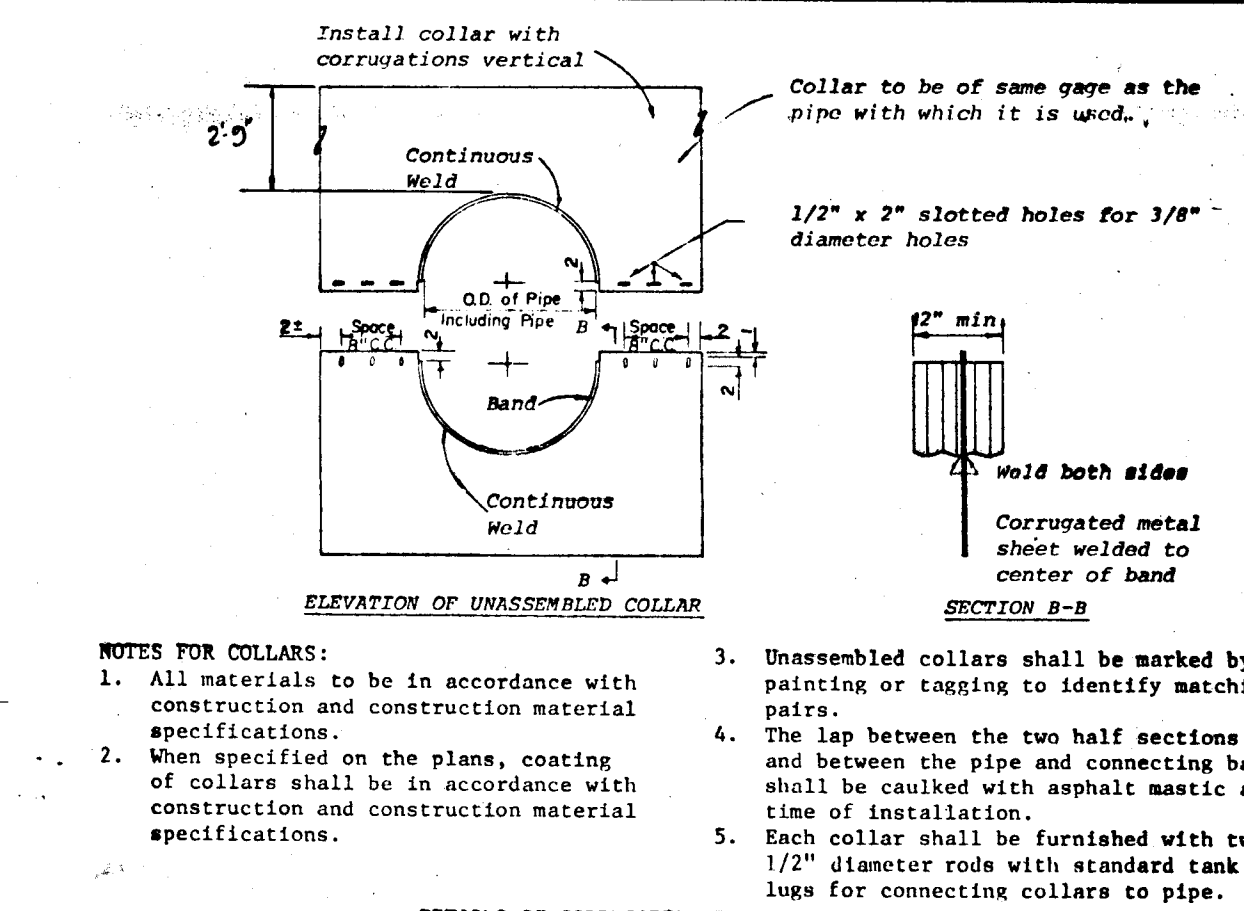
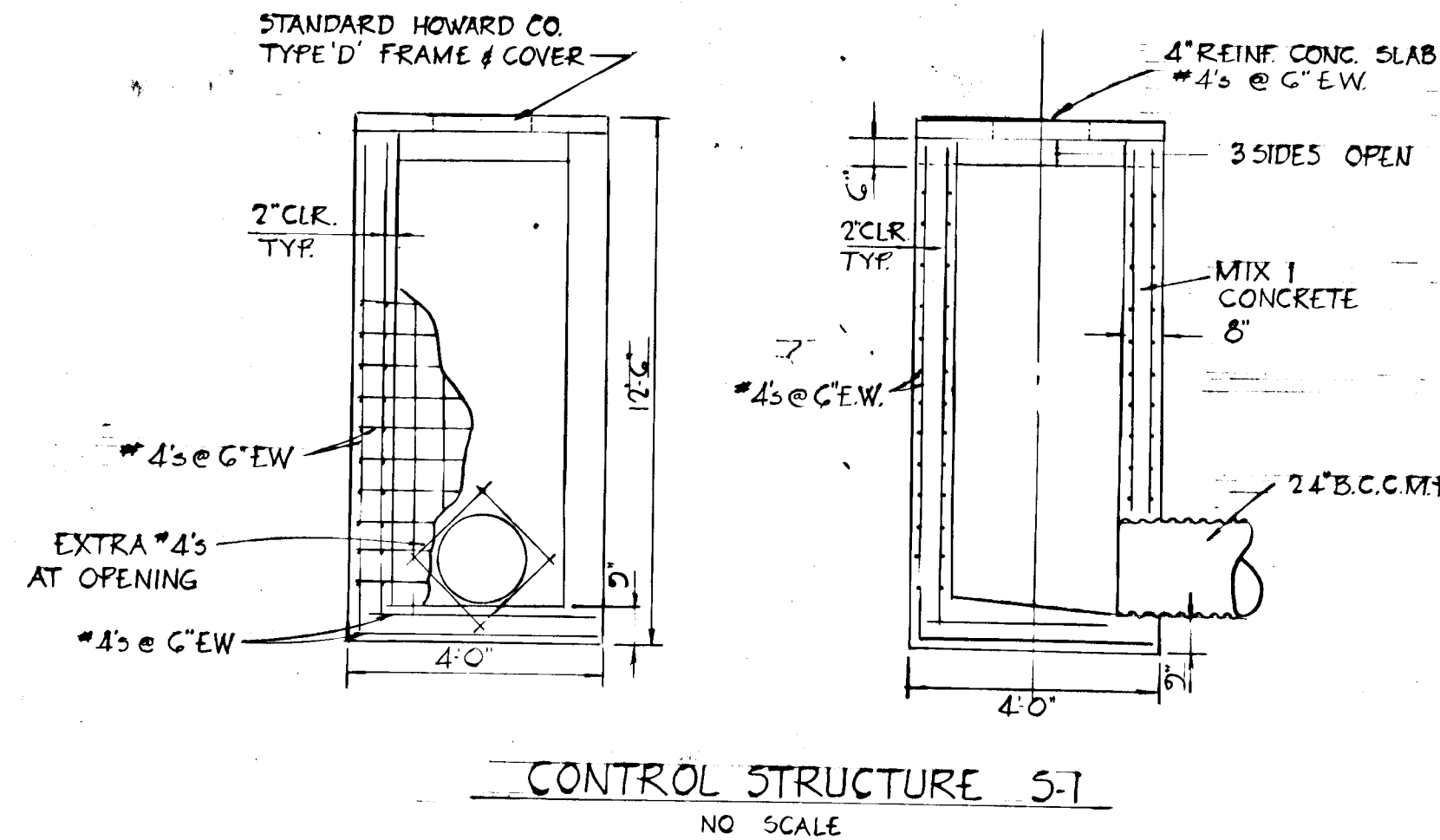
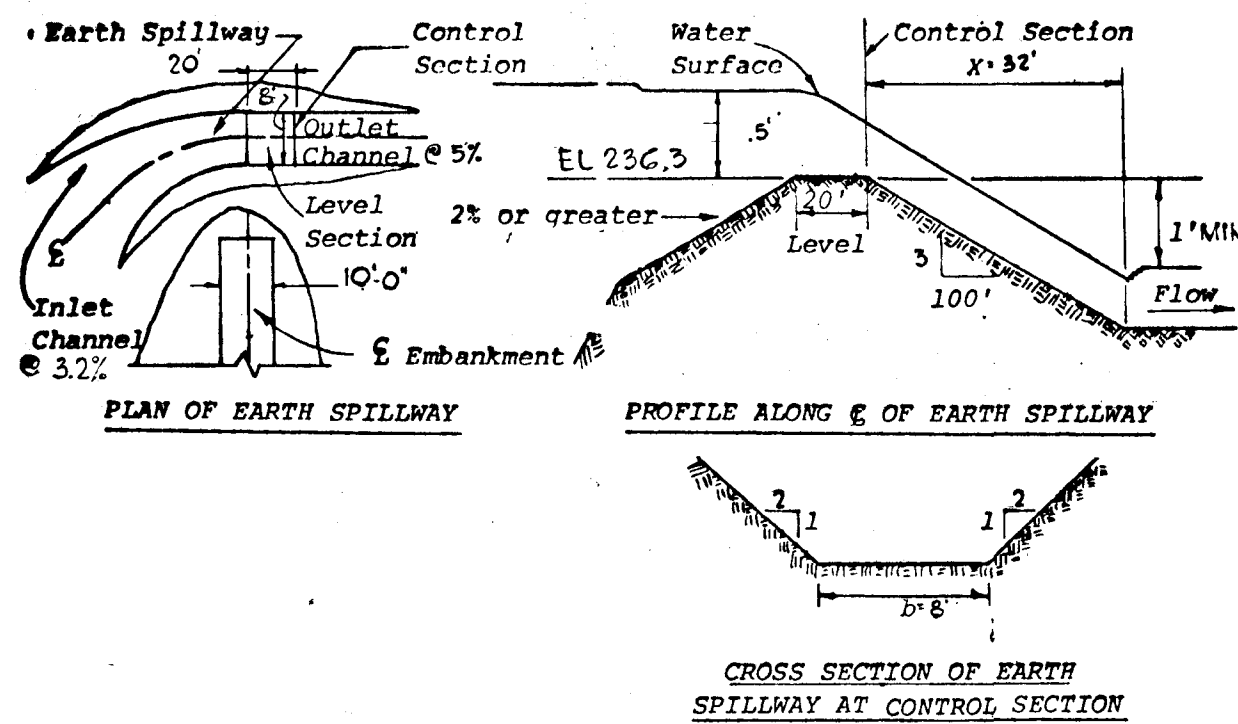
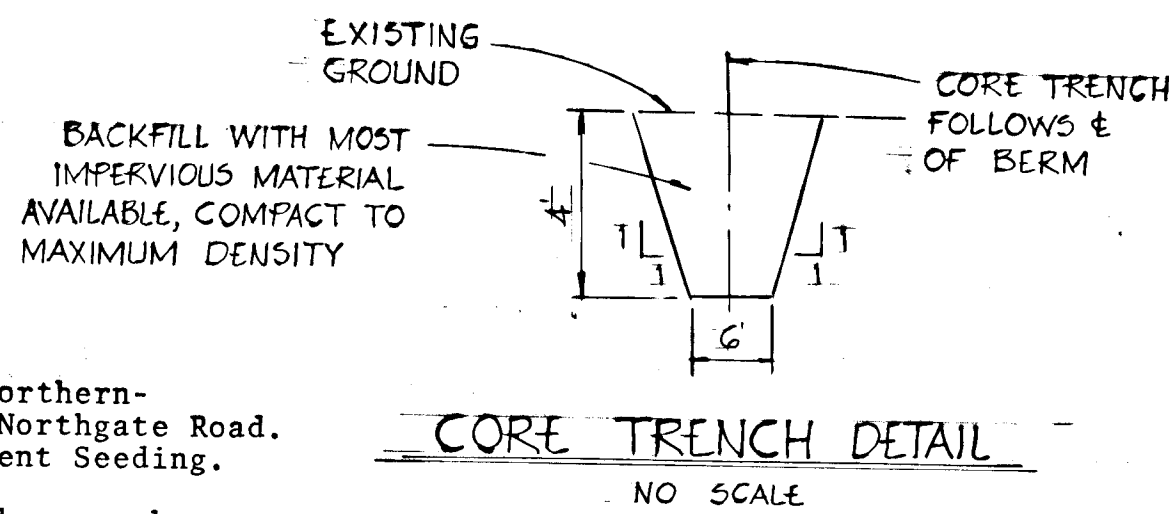
FILL AROUND CONTROL STRUCTURE SHALL BE COMPACTED TO 95% MAX. DENSITY PER ASTM D1557-58T



TEMPORARY SEDIMENT BASIN AND PERMANENT STORM WATER MANAGEMENT FACILITY
NO SCALE

CONSTRUCTION SEQUENCE

- Obtain grading permit
- Install stabilized construction entrance at northernmost intersection of Whiskey Bottom Road and Northgate Road.
- Construct sediment basin and seed with Permanent Seeding. (See Sediment Control Notes).
- Grade perimeter and interceptor swales and dikes as shown. Seed with Temporary Seeding. (See Sediment Control Notes).
- Place roads to subgrade.
- Install utilities.
- Place inlet protection devices.
- Lay pavement base courses.
- See Sediment Control Note #6.
- Maintain sediment basin, and temporary sediment control devices for use during construction of buildings and development of Section 2.
- Contractor shall also inspect sediment control devices after each rainfall, and provide any necessary maintenance.



ENGINEER'S CERTIFICATE
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.
Earl D. Collins P.E. REG. NO. 9755 4/1/79 DATE

DEVELOPER'S CERTIFICATE
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. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.
Murray Sherman 4/1/79 DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
James M. Hech 12/3/79 DATE
THE DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: DISTRICT COORDINATOR HOWARD SOIL CONSERVATION DISTRICT DATE
APPROVED: DEPARTMENT OF PUBLIC WORKS
W.D. Albert 12-18-79 DATE
APPROVED: OFFICE OF PLANNING AND ZONING
Phillip M. ... 12-12-79 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

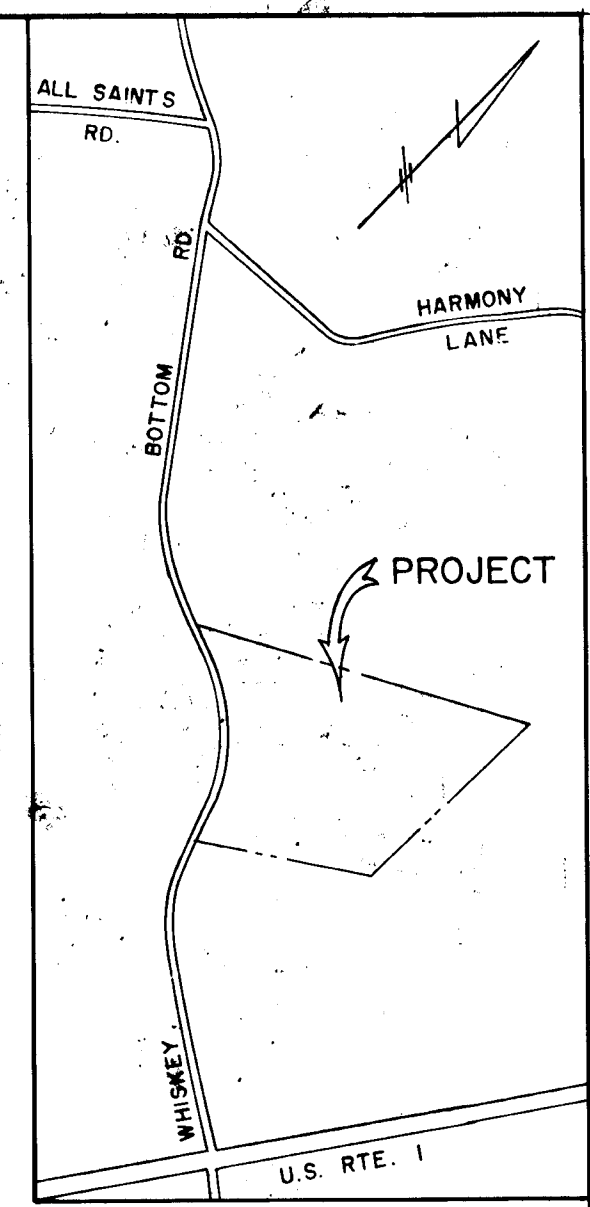
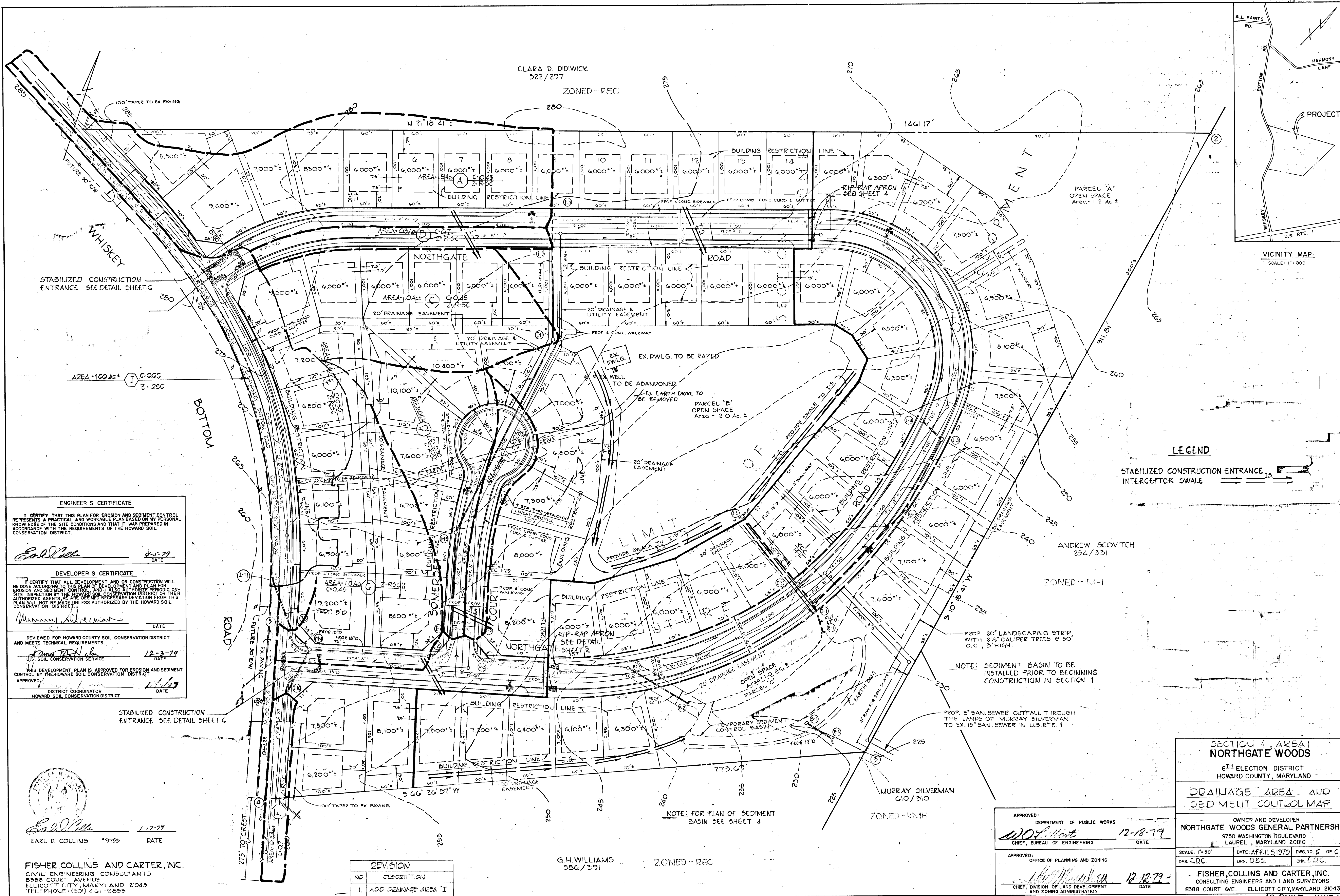
SECTION 1, AREA 1
NORTHGATE WOODS
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL DETAILS

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

SCALE: AS SHOWN DATE: APR 8, 1979 DWG. NO. 01 OF 6
DES. E.D.C. DRN. D.B.S./R.D.B. CHK. E.D.C./R.B.C.

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



VICINITY MAP
SCALE: 1" = 800'

LEGEND

STABILIZED CONSTRUCTION ENTRANCE
INTERCEPTOR SWALE

ENGINEER'S CERTIFICATE
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.
Earl Collins 4-5-79 DATE

DEVELOPER'S CERTIFICATE
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 DEEMED NECESSARY DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.
Murray Silverman DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
James McNeil 12-3-79 DATE
U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 1/1/79 DATE
DISTRICT COORDINATOR
HOWARD SOIL CONSERVATION DISTRICT

Earl Collins 1-17-79 DATE
EARL P. COLLINS '9795

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERING CONSULTANTS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
TELEPHONE: (301) 461-2855

NO	DESCRIPTION
1.	ADD DRAINAGE AREA 'I'

G.H. WILLIAMS 586/291 ZONED - RSC

APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 12-18-79 DATE
CHIEF, BUREAU OF ENGINEERING

APPROVED: OFFICE OF PLANNING AND ZONING
[Signature] 12-12-79 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

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

**DRAINAGE AREA AND
SEDIMENT CONTROL MAP**

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

SCALE: 1" = 50' DATE: APRIL 5, 1979 DWG. NO. 6 OF 6
DES. E.D.C. DRN. D.B.S. CHK. E.D.C.

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043
7-79-167 AS-BUILT JUNE 30, 1982

NOTE: SEDIMENT BASIN TO BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION IN SECTION 1

NOTE: FOR PLAN OF SEDIMENT BASIN SEE SHEET 4

NOTE: PROP. 8" SAN. SEWER OUTFALL THROUGH THE LANDS OF MURRAY SILVERMAN TO EX. 15" SAN. SEWER IN U.S. RTE. 1

EX DWLG. TO BE ABANDONED
EX EARTH DRIVE TO BE REMOVED
EX WELL TO BE ABANDONED

ANDREW SCOVITCH 254/331

ZONED - M-1

MURRAY SILVERMAN 610/210

ZONED - RMH

CLARA D. DIDWICK 522/297

ZONED - RSC

G.H. WILLIAMS 586/291

ZONED - RSC