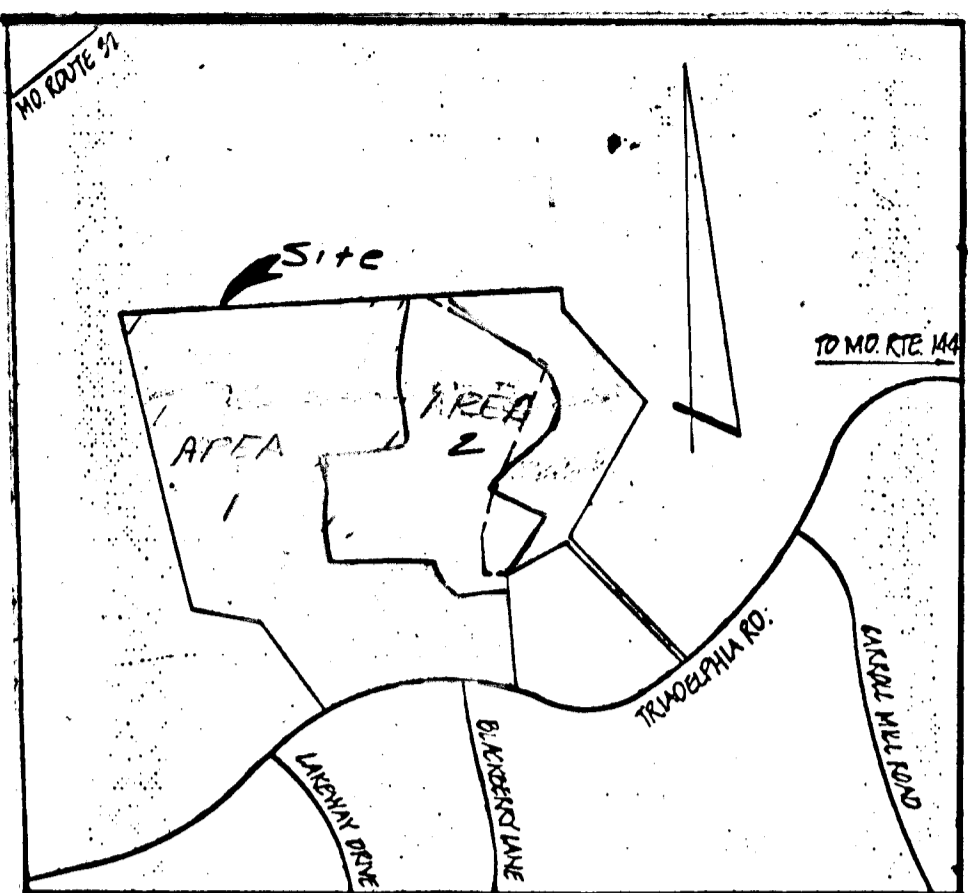
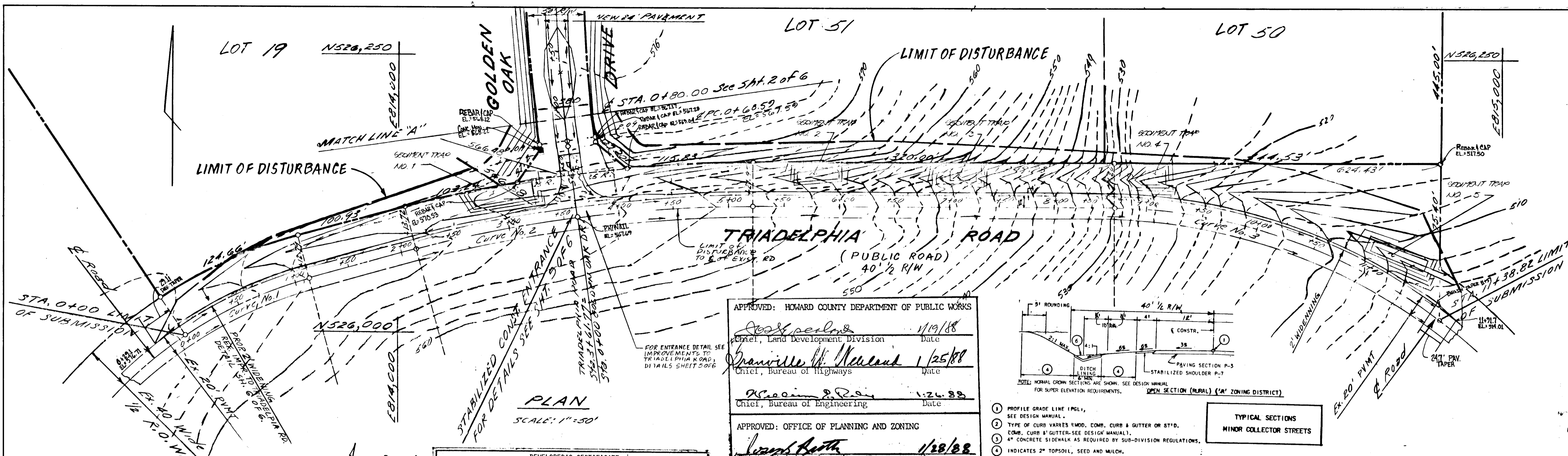


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ALIGNMENT CHECKED	
NOTE BOOK	
NO. OF PAGES CHECKED	
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NOTES:
1. FOR GENERAL NOTES SEE SHT. 5 OF 6
2. FOR EROSION AT SEDIMENT CONTROL NOTES AND DETAILS SEE SHT. 5 OF 6.
3. FOR GRADING & SEDIMENT CONTROL ON GOLDEN OAK DRIVE SEE SHT. 4 OF 6
4. FOR ENTRANCE DETAIL SEE SHT. 5 OF 6
5. FOR SEDIMENT TRAP SCHEDULES SEE SHEET 5 OF 6.

OWNER & DEVELOPER
PATIENT LAND COMPANY, INC.
1920 NICHOLS DRIVE
GARDENVILLE, MARYLAND 20707

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Land Development Division
Date: 1/19/88

Approved: *Granville W. Newland* 1/25/88
Chief, Bureau of Highways
Date

Approved: *Robert R. Rees* 1/26/88
Chief, Bureau of Engineering
Date

APPROVED: OFFICE OF PLANNING AND ZONING
Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT
Date: 1/28/88

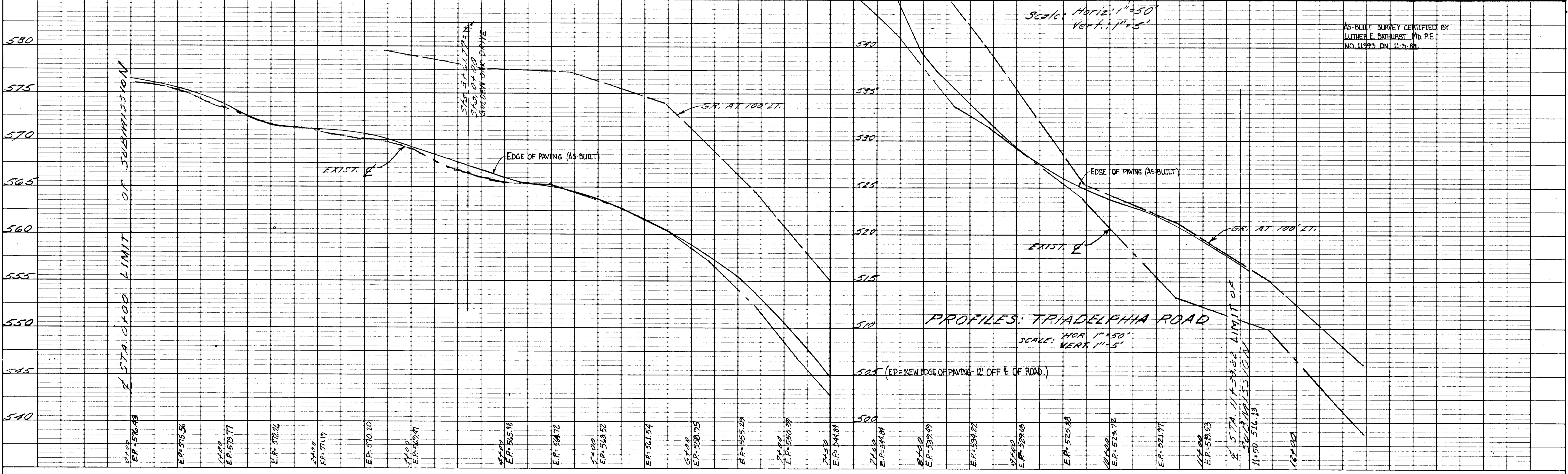
REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
U.S. SOIL CONSERVATION SERVICE
Date: 1-14-88

THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
U.S. SOIL CONSERVATION DISTRICT
Date: 1/14/88

DEVELOPER'S CERTIFICATE
I 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY.
Theodore J. Demmitt 8-21-87
DATE

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND HONORABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Robert R. Rees 8/22/87
DATE

CURVE No.	R	Δ	L	T	C	C.B.
1	380.00	17°00'21"	112.79'	56.81'	110.37'	N.60°22'04"E
2	1140.00	15°27'52"	308.25'	155.07'	307.31'	N.76°37'41"E
3	500.00	50°40'01"	267.62'	137.10'	264.44'	S.80°18'11"W



TITLE: IMPROVEMENTS TO TRIADELPHIA WOODS
PROJECT: TRIADELPHIA WOODS - SECTION 1, AREA 1
A RESUBDIVISION OF TRIADELPHIA WOODS - PARCELS 4 AND 7 THRU 10
LOCATION: O.P. & Z. FILE NOS.: VP 88-39, F-85-26, F-85-28, VP 86-66, P-87-26, 3RD ELECTION DISTRICT TAX MAP: 22 HOWARD CO. MD. 587-27

SCALE: AS SHOWN
DESIGNED BY: BWS
DRAWN BY: BWS
CHECKED BY: L.E.B.
DATE: 6/87

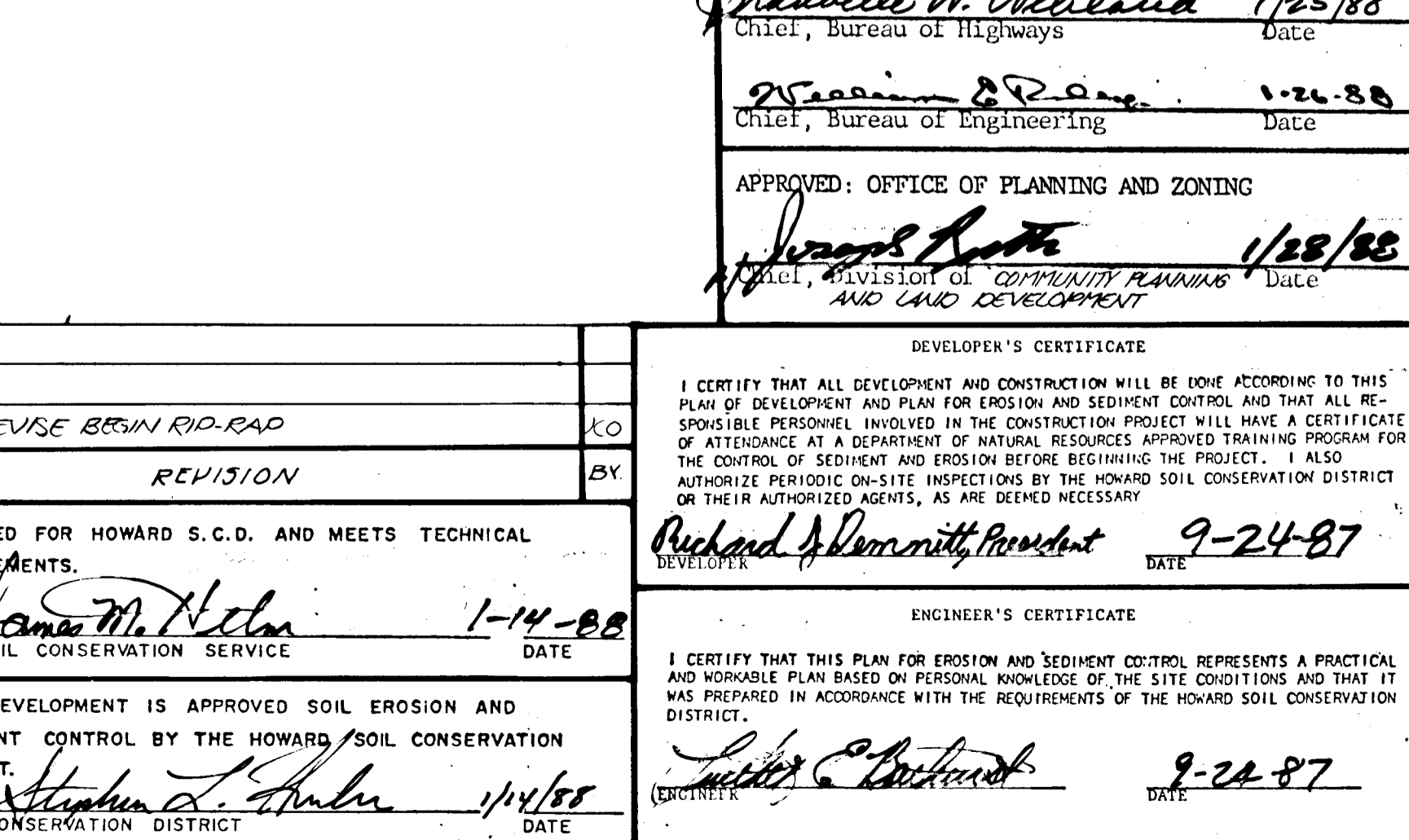
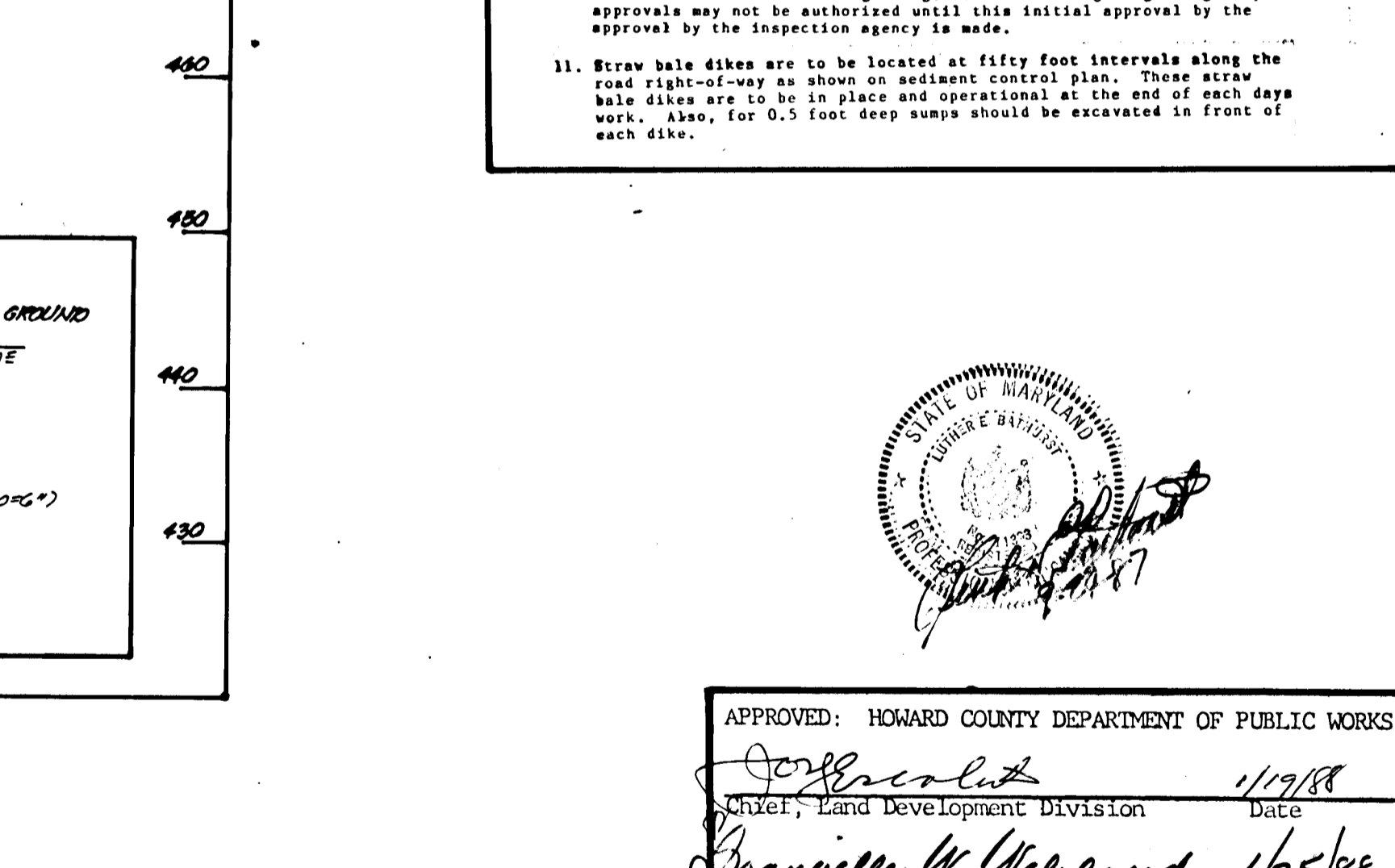
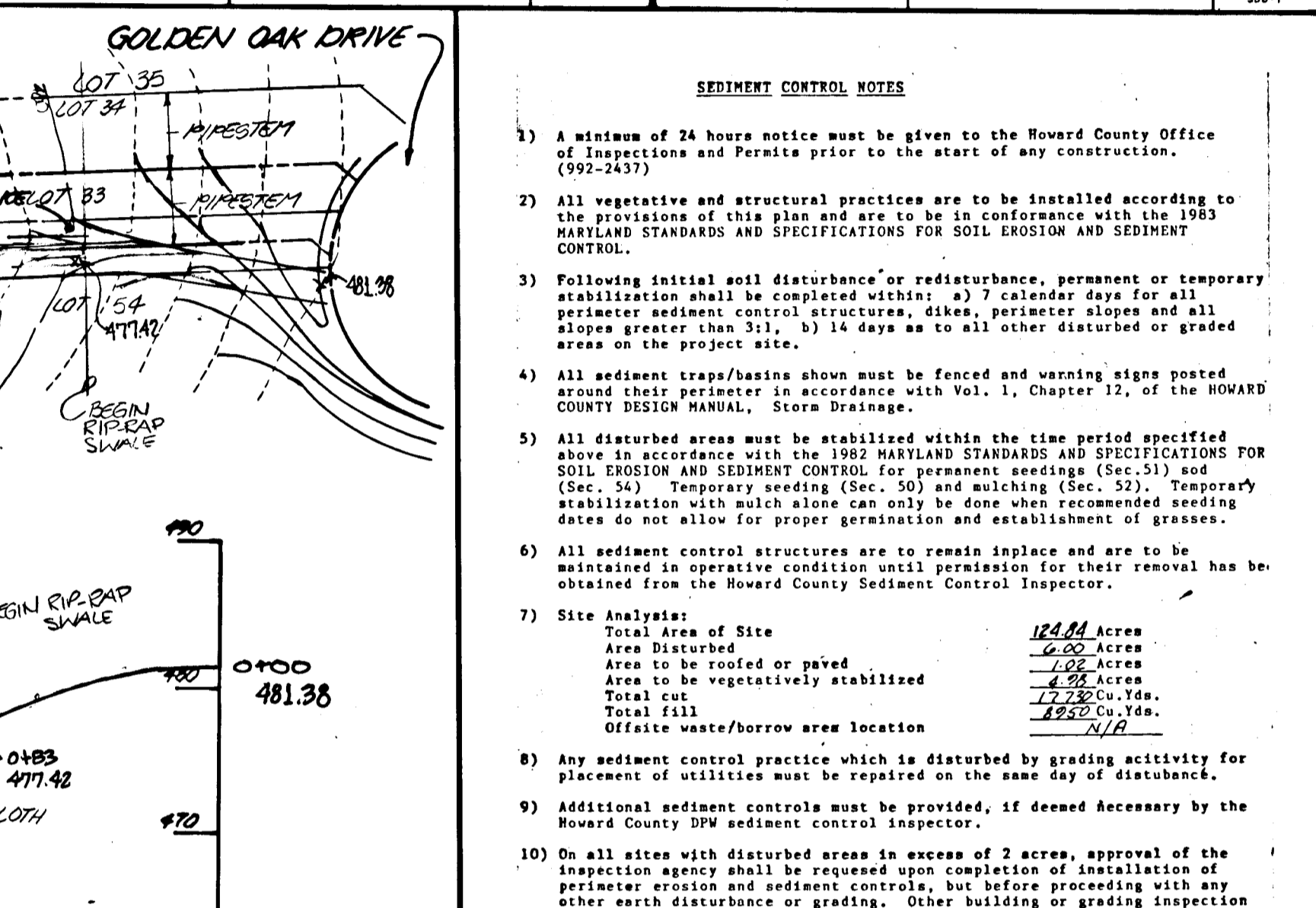
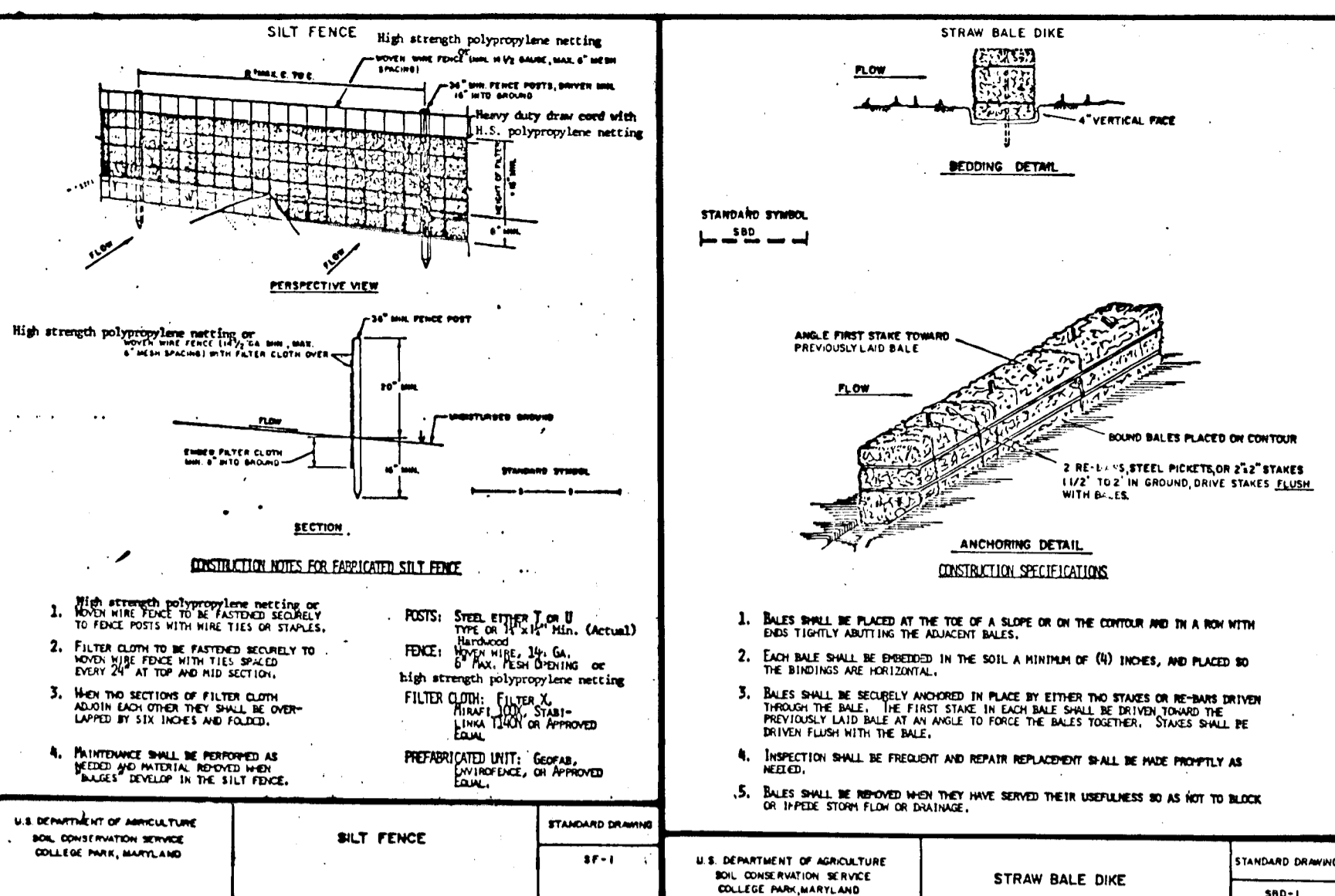
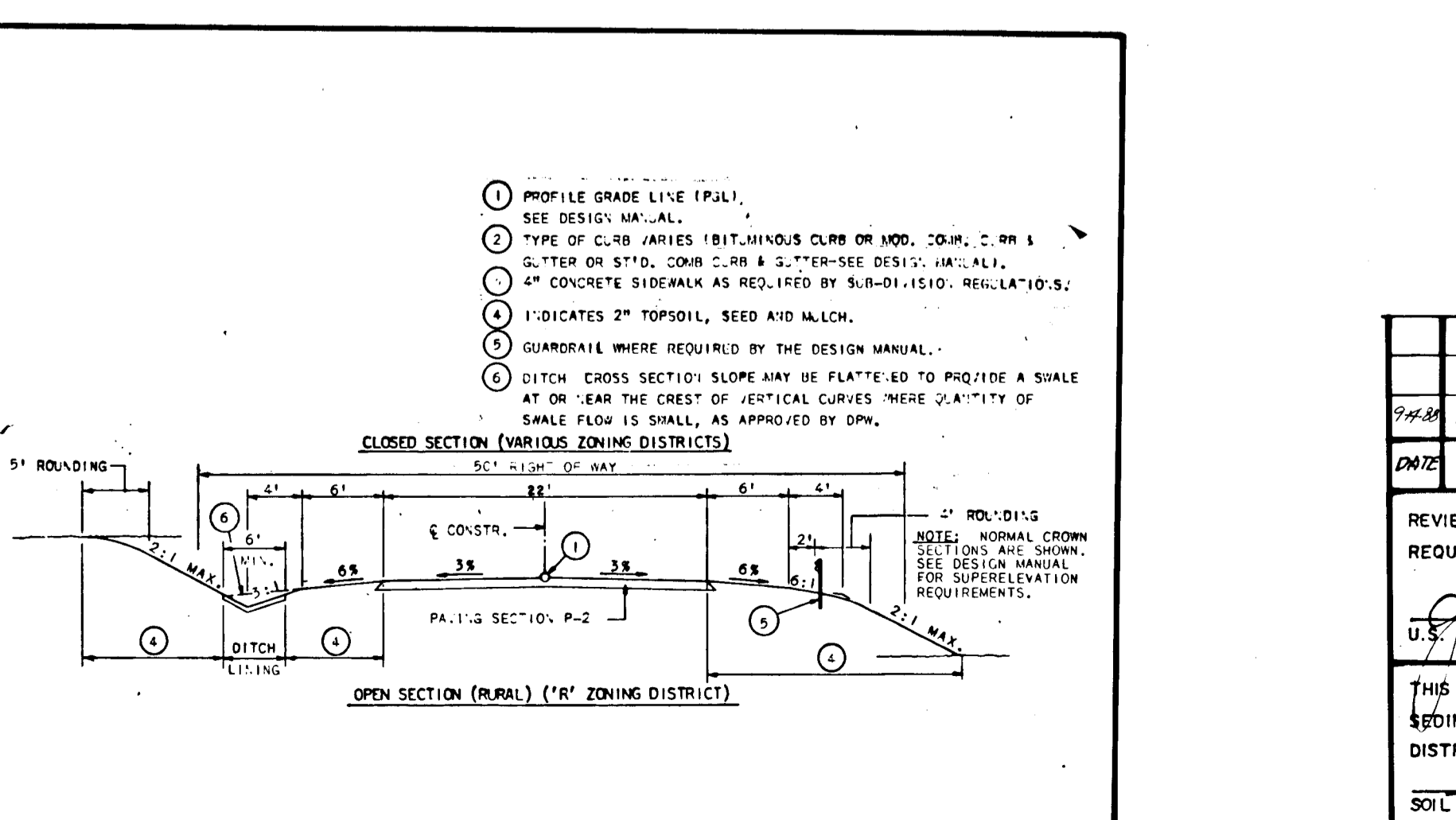
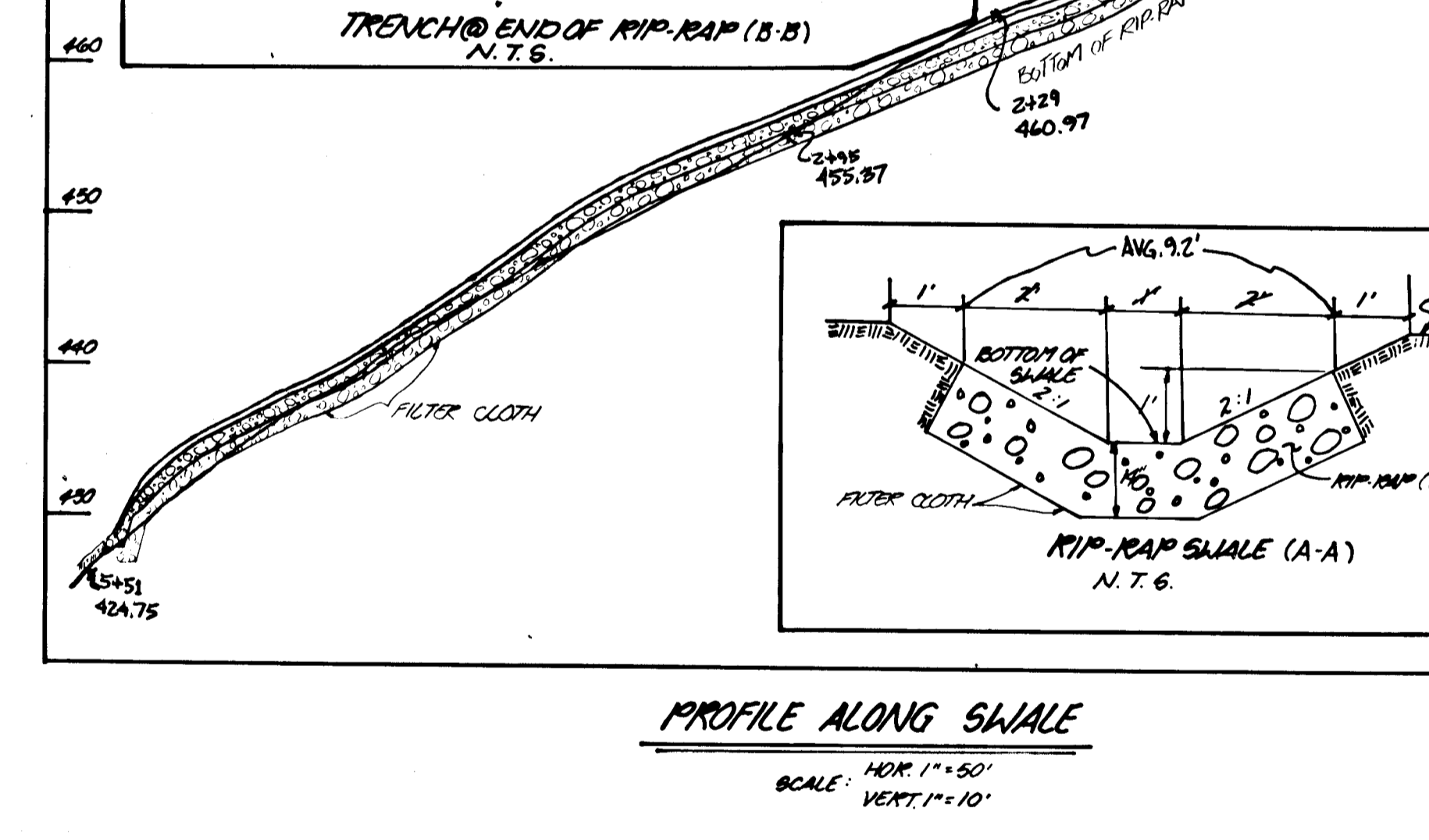
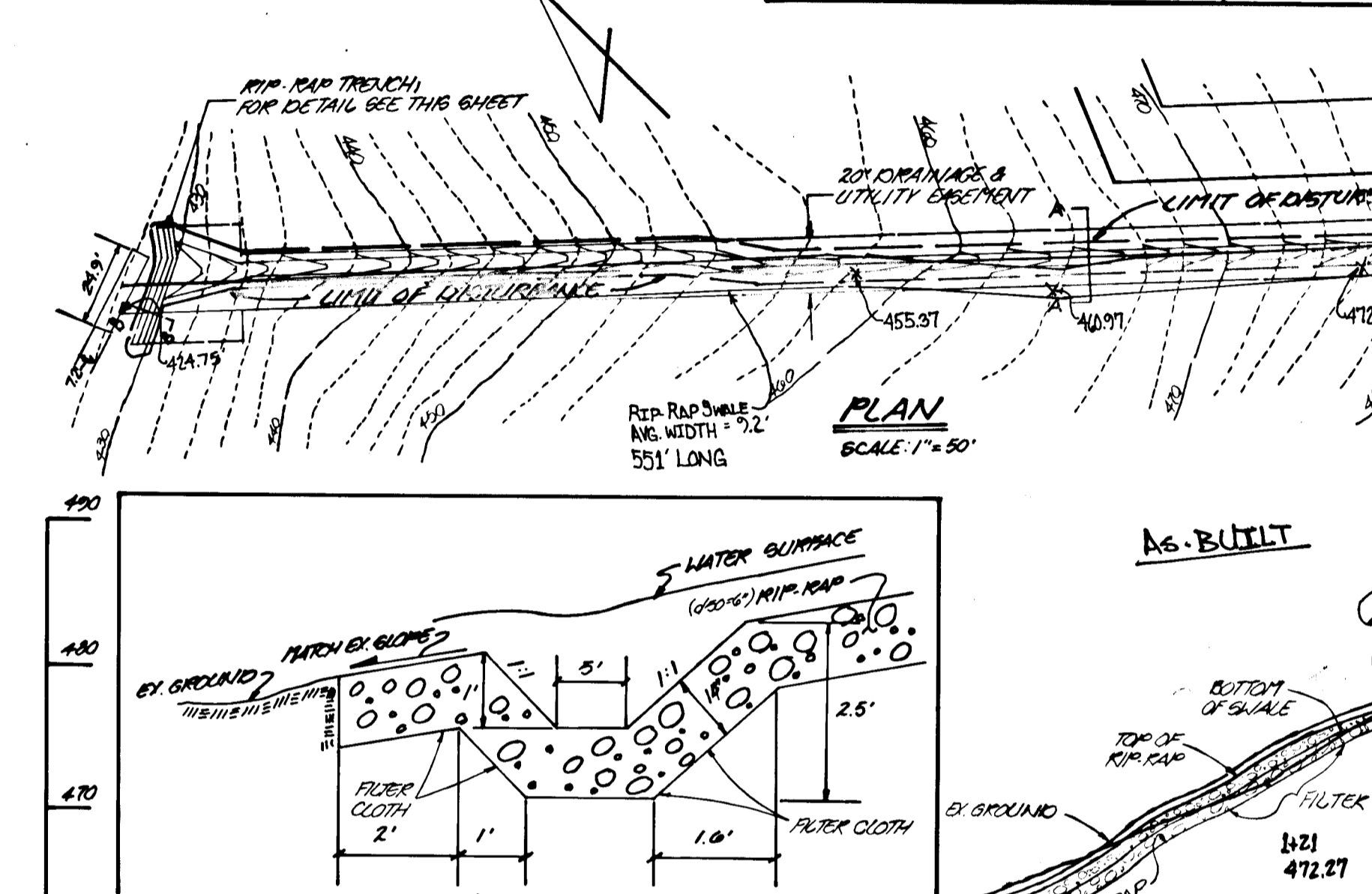
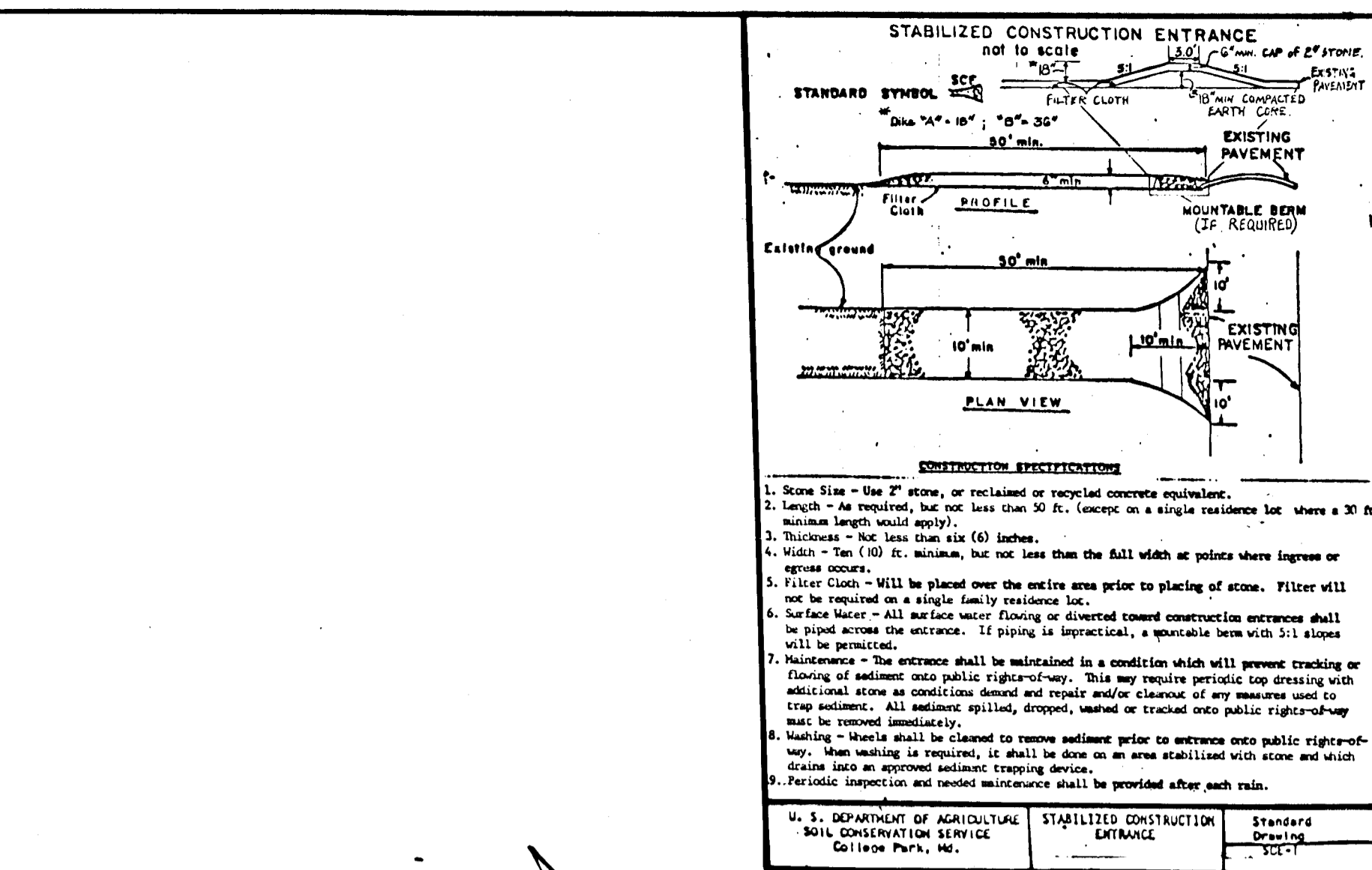
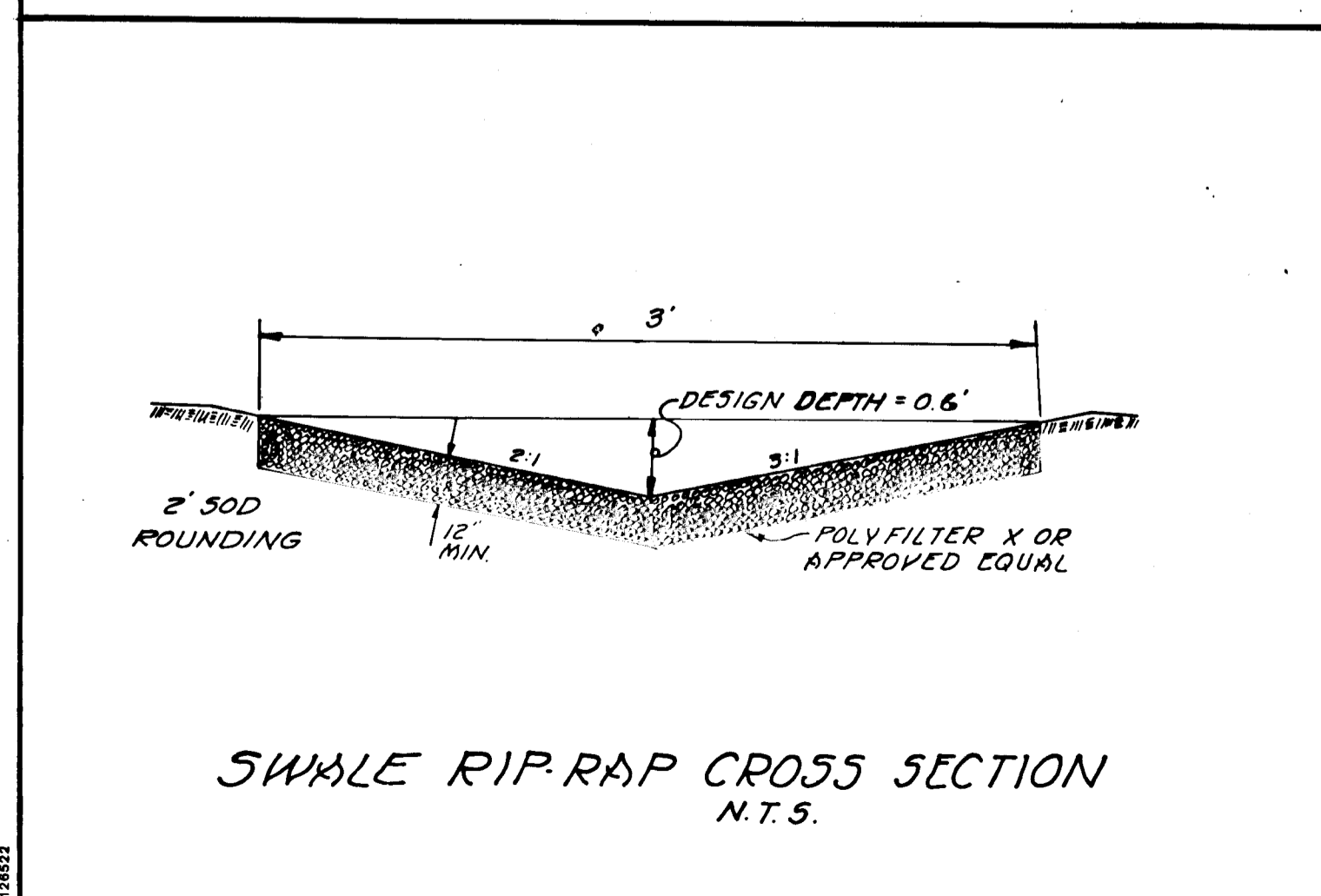
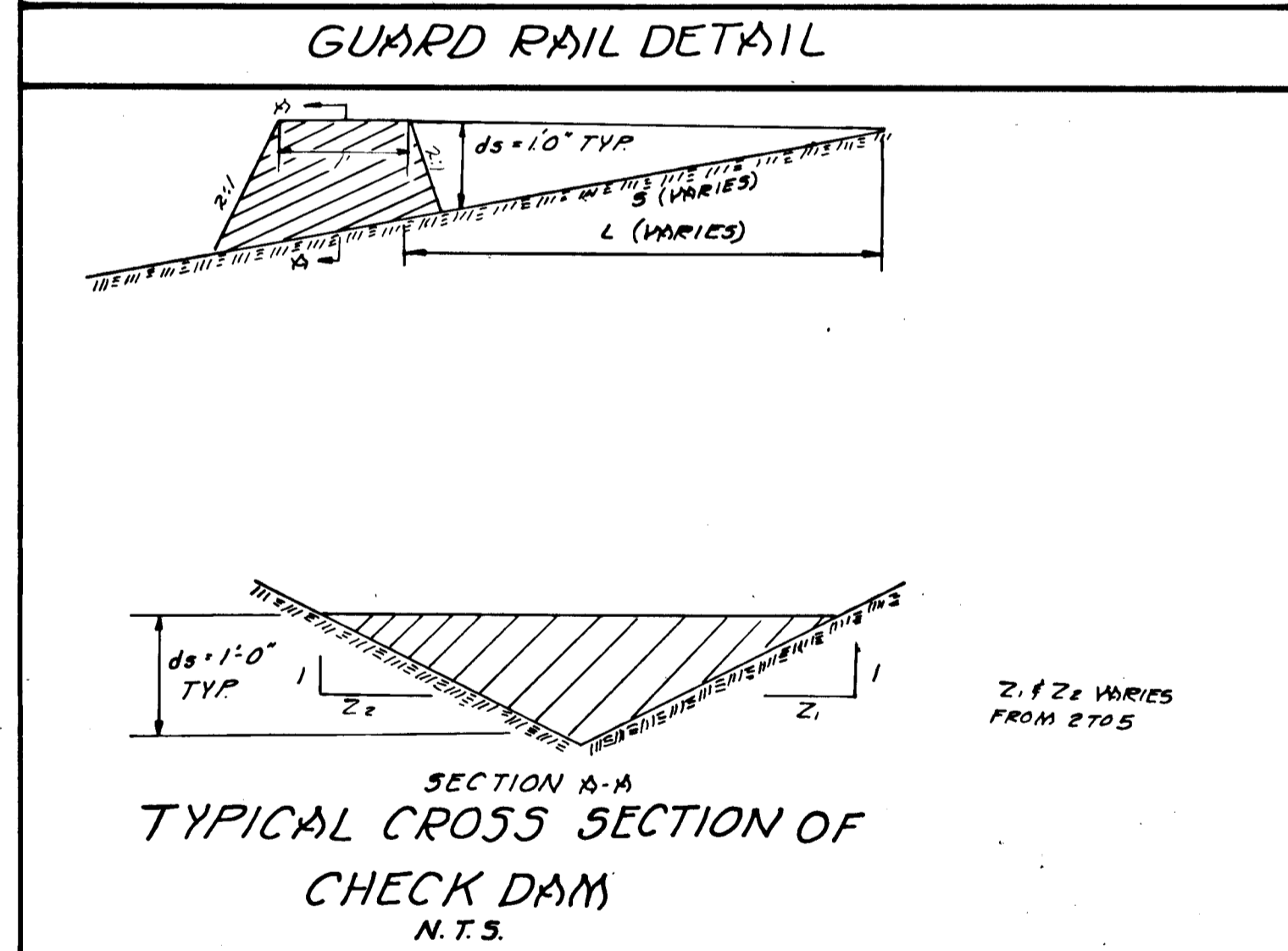
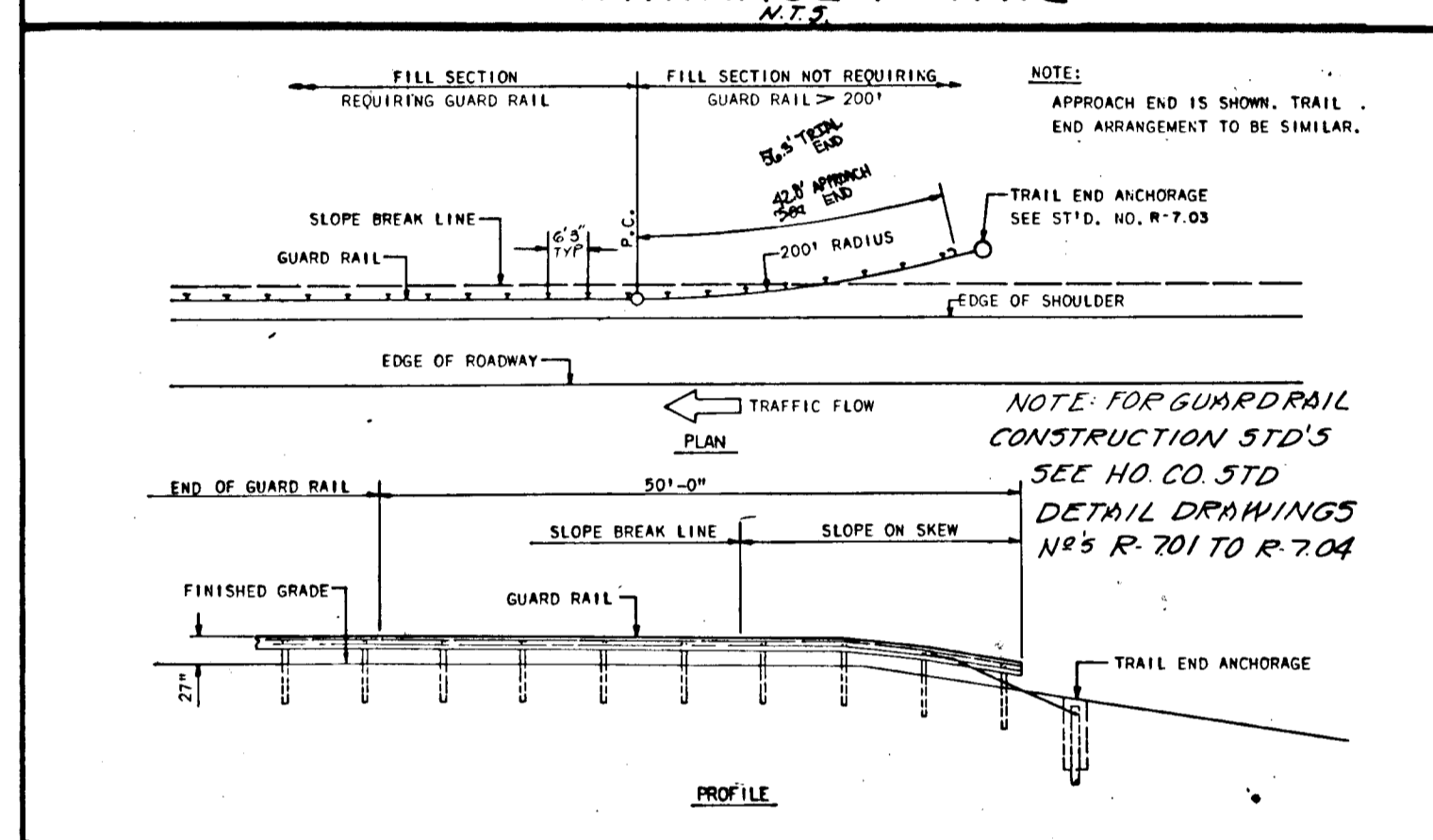
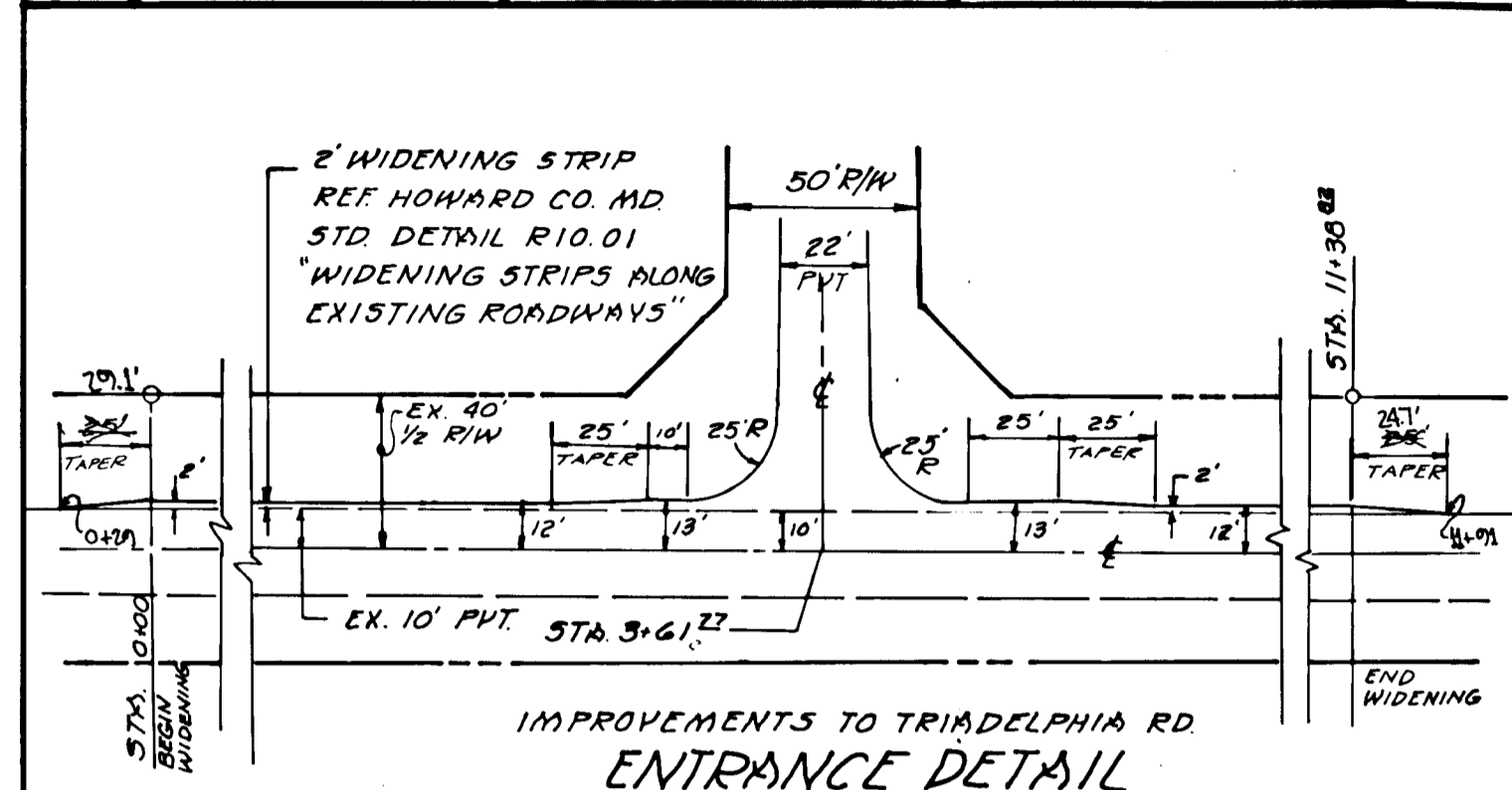
FIELD BOOK: 94
PAGE NO.:
JOB NO.: 86368
DRAWING NO.: 1 OF 6

boender associates inc.
consulting engineers
land surveyors
land planners
COURTHOUSE SQUARE
3865 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MD. 21043
13011 465-7777

DATE	
BY	
PROFILE	
SUBMITTED	
PHOTO	
GRADES CHECKED	
NOTE BOOK	
STRUCTURE NOTATIONS CHECKED	
NO.	

1139

P-2	RESIDENTIAL ZONES LOCAL, CALDE SAC STR. ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS	1 1/2" BIT. CONC. SURFACE 5" BIT. CONC. BASE	1 1/2" BIT. CONC. SURFACE 2 1/2" BIT. CONC. BASE
P-3	RESIDENTIAL ZONES MINOR AND MAJOR COLLECTORS COMMERCIAL INDUSTRIAL ZONES LOCAL AND COLLECTOR STREETS ALLEYS	1 1/2" BIT. CONC. SURFACE 5" BIT. CONC. BASE	1 1/2" BIT. CONC. SURFACE 4 1/2" BIT. CONC. BASE PRIME OR 4 1/2" DENSE GRADED STABILIZED AGGREGATE BASE COURSE
P-7	STABILIZED SHOULDER FOR ALL ZONES AND ROAD CLASSIFICATIONS	DOUBLE BIT. SURFACE TREATMENT OR 4 1/2" DENSE GRADED STABILIZED AGGREGATE BASE COURSE	



GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PITS FOR EXISTING UTILITIES AT LEAST FIVE (5) DAYS PRIOR TO STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAY PRIOR TO BEGINNING WORK SHOWN ON THESE DRAWINGS:
 - MISC. UTILITY.....559-0100
 - BELL TELEPHONE SYSTEM.....393-3649
 - AT&T TELEPHONE SYSTEM.....393-3649
 - GALTHER GAS & ELECTRIC COMPANY.....539-8000
 - HOWARD COUNTY BUREAU OF UTILITIES.....492-2366
 - HOWARD COUNTY CONSTRUCTION DIVISION.....792-7272
 - SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK).....792-7272
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL STREET CURB RETURNS SHALL HAVE 20' RADII UNLESS OTHERWISE NOTED.
- EXISTING DRAINAGE TRENCHES WITH ROAD RIGHTS-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1978 EDITION (REVISED).
- PIPE SHALL NOT BE INSTALLED BY CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (TRIADLPHIA RD - 40' 1/2 RIGHT-OF-WAY (MINOR COLLECTOR) GOLDEN OAK DRIVE - 50' RIGHT-OF-WAY (LOCAL RD. COLLECTOR))
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- ALL FILL AREAS WITHIN ROADWAYS AND/OR UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% COMPACTION.
- PROFILE STATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- SUBJECT PROPERTY ZONED R PER 05-02-85 COMPREHENSIVE ZONING PLAN.
- TPOD SHOWN HEREIN HAS BEEN DETERMINED BY THE HOWARD COUNTY ENGINEER.
- NO PIPE SHALL BE LAID IN PLACE UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO WITHIN SIX (6) INCHES OF FINISHED GRADE ELEVATIONS.
- ALL STORM DRAIN PIPE DIVERSION SHALL BE SHOWN IN FIG. 11.4 OF THE HOWARD COUNTY DESIGN MANUAL, VOL. I, UNLESS OTHERWISE NOTED.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeding Preparation: Loosen up three inches of soil by raking, discing or other acceptable means before seeding, IF NOT PREVIOUSLY DONE.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-10 ureaform fertilizer (5 lbs/1000 sq. ft.).
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq. ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq. ft.) of Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq. ft.) of weeping lovegrass. During the period of October 1 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 11 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of windowed small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal. per acre (8 gal/1000 sq. ft.) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seeding Preparation: Loosen up three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.).

Seeding: For periods March 1 thru April 30 and from August 1 thru November 15, seed with 21 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.). For the period May 1 thru August 14, seed with 60 lbs per acre of weeping lovegrass (.07 lbs/1000 sq. ft.). For that period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Use seed.

Mulching: Apply 11 to 2 tons per acre of 70 to 90 lbs/1000 sq. ft.) of windowed small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 ft. or higher, use 348 gal. per acre (8 gal/1000 sq. ft.) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature] 1/19/88
Chief, Land Development Division Date

[Signature] 1/25/88
Chief, Bureau of Highways Date

[Signature] 1-26-88
Chief, Bureau of Engineering Date

APPROVED: OFFICE OF PLANNING AND ZONING

[Signature] 1/28/88
Chief, Division of Community Planning and Land Development Date

DEVELOPER'S CERTIFICATE

I 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

[Signature] 9-24-87
DEVELOPER

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 9-24-87
ENGINEER

OWNER/DEVELOPER

PATIENT LAND COMPANY INC.
13650 NICHOLS DRIVE
CLARKSVILLE, MD 21020

AS-BUILT SURVEY CERTIFIED BY:
LUTHER E. PATRICK, MD PE.
NO. 11339 ON 11-3-88

boender associates inc.
consulting engineers
land surveyors
land planners

COURTHOUSE SQUARE
3565 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MD 21043
(301) 465-7777

1139

AS-BUILT 11-3-88 F-88-68



LEGEND

- LIMIT OF MAJOR DRAINAGE AREA
- LIMIT OF INTERIOR DRAINAGE AREA (FOR 100 YR FLOOD PLAIN)
- LIMIT OF INTERIOR DRAINAGE AREA (FOR ROADWAY SWALES)
- SWALE

SECTION	AREA 1	COMPOSITE
A	0.230K	0.33
B	0.597K	0.33
C	2.571K	0.21
D	1.433K	0.19
E	2.066K	0.19
F	0.240K	0.33
G	2.479K	0.20
H	1.653K	0.24

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature] 1/19/88
 Chief, Land Development Division Date

[Signature] 1/22/88
 Chief, Bureau of Highways Date

[Signature] 1/22/88
 Chief, Bureau of Engineering Date

APPROVED: OFFICE OF PLANNING AND ZONING

[Signature] 1/22/88
 Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT Date

OWNER/DEVELOPER
 TRIANGLE LAND COMPANY, INC.
 1300 NICHOLS DRIVE
 CLARKSVILLE, MD 21029

AS-BUILT SURVEY CERTIFIED BY
 LUTHER E. BATHURST, MD, P.E.
 No. 11392 ON 11-3-88

TITLE: 100YR FLOODPLAIN STUDY
 DRAINAGE AREA MAP

PROJECT: TRIADPHILIA WOODS Area 1, Section 1
 A REVISION OF THE 1982 STUDY UNDER LICENSE 11-1-82

LOCATION: O.P. & Z. FILE NO. VP-81-55, VP-80-55, P-81-26, P-82-11, VP-82-11

SRD ELECTION DISTRICT TAX MAP 22 HOWARD CO. MD

SCALE: 1"=200' DESIGNED BY: JH DRAWN BY: J Boyd CHECKED BY: LEB DATE: MARCH 1987

FIELD BOOK: PAGE NO: JOB NO: 26505 DRAWING NO: 6 of 6

boender associates
 inc.
 consulting engineers
 land surveyors
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