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4	PLAN AND PROFILE FOR GILBRIDE LANE
5	PLAN AND PROFILE FOR GILBRIDE LANE
6	PLAN AND PROFILE FOR SHEEPSCHEAD COURT AND STORM DRAIN PROFILES
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10	GRADING AND SEDIMENT CONTROL PLAN
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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 PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

MISS UTILITY 1-800-257-7777
 CAP TELEPHONE COMPANY 725-9976
 AT&T CABLE LOCATION DIVISION 393-3553
 BALTIMORE GAS AND ELECTRIC COMPANY 685-0123
 STATE HIGHWAY ADMINISTRATION 531-5533
 HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK) 792-7272

- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS.
- STORM DRAIN BACKFILL WITHIN ROADWAYS, UNDER STRUCTURES AND FOR STORM DRAIN TRENCHES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM 1557.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
- ALL STREET CURB RETURNS SHALL HAVE 35.0' RADI1 UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM, 1929.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED FEBRUARY, 1988.
- SUBJECT PROPERTY ZONED R PER 8.2.85 COMPREHENSIVE ZONING PLAN.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1984 EDITION.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:

ALL 50' & 60' RIGHT-OF-WAYS 20 M.P.H. - GILBRIDE LANE & SHEEPSCHEAD COURT
 ALL 80' RIGHT-OF-WAYS 40 M.P.H. - TRIADDELPHIA MILL ROAD

- LOTS 2 AND 26 AT PLOT PLAN STAGE WILL REQUIRE A 15' CMP 10 GA. CULVERT UNDER DRIVEWAY.
- LOT 4 AT PLOT PLAN STAGE WILL REQUIRE AN 18' CMP 10 GA. CULVERT UNDER DRIVEWAY.
- LOT 22 AT PLOT PLAN STAGE WILL REQUIRE AN 18' CMP 10 GA. CULVERT UNDER DRIVEWAY.

HORIZONTAL AND VERTICAL CONTROL USED IN AS-BUILT SURVEY.

BENCH MARKS

BM#1 TRAV. 601 ELEV. 557.41 N 50°52'20" E 454.4 E 802820.754
 I.P. 50'± S.W. & GILBRIDE LANE STA. 13+00.

BM#2 TRAV. 602 ELEV. 516.60 N 50°55'55" E 802099.527
 I.P. 100'± S.W. & GILBRIDE LANE STA. 23+00.

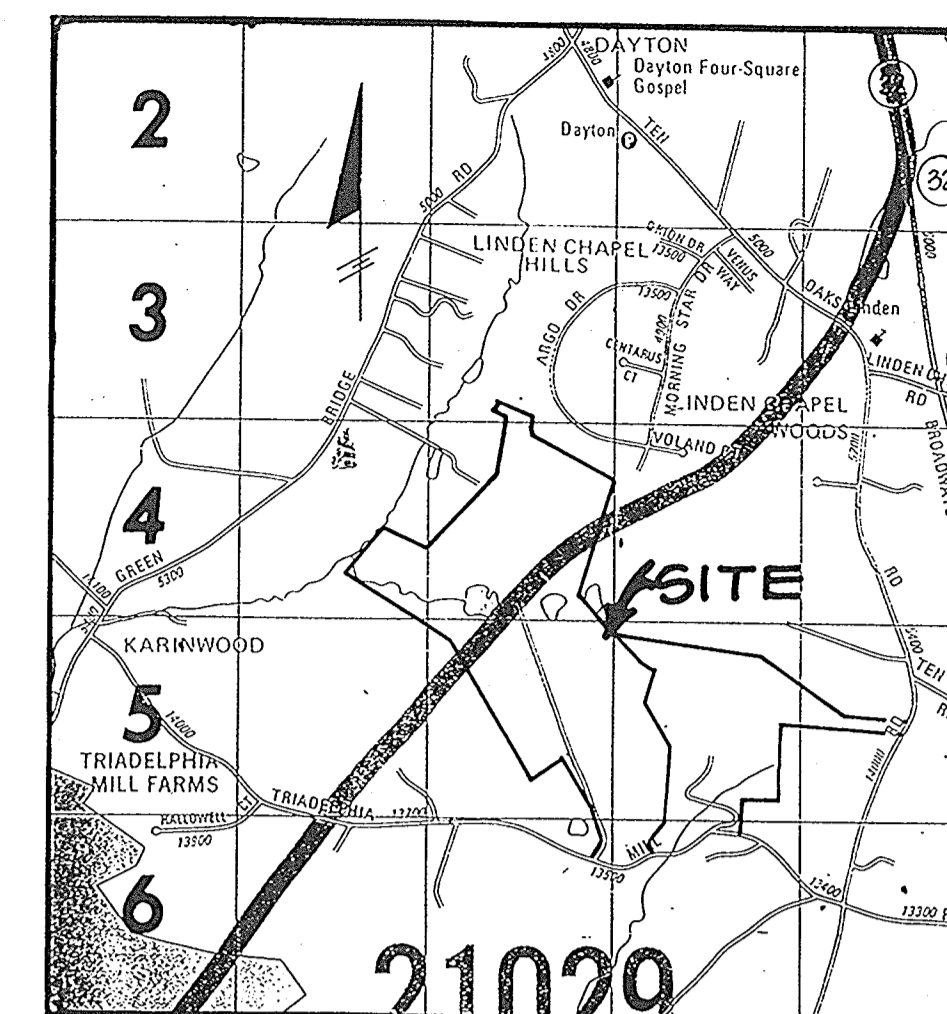
BM#3 TRAV. 603 ELEV. 518.84 N 50°55'22" E 802856.59
 I.P. 05'± N.E. & SHEEPSCHEAD COURT STA. 3+00.

BM#4 TRAV. 700 ELEV. 470.59 N 50°55'20" E 802856.665
 H&T 20'± N.E. HEADWALL ON TRIADDELPHIA MILL ROAD.

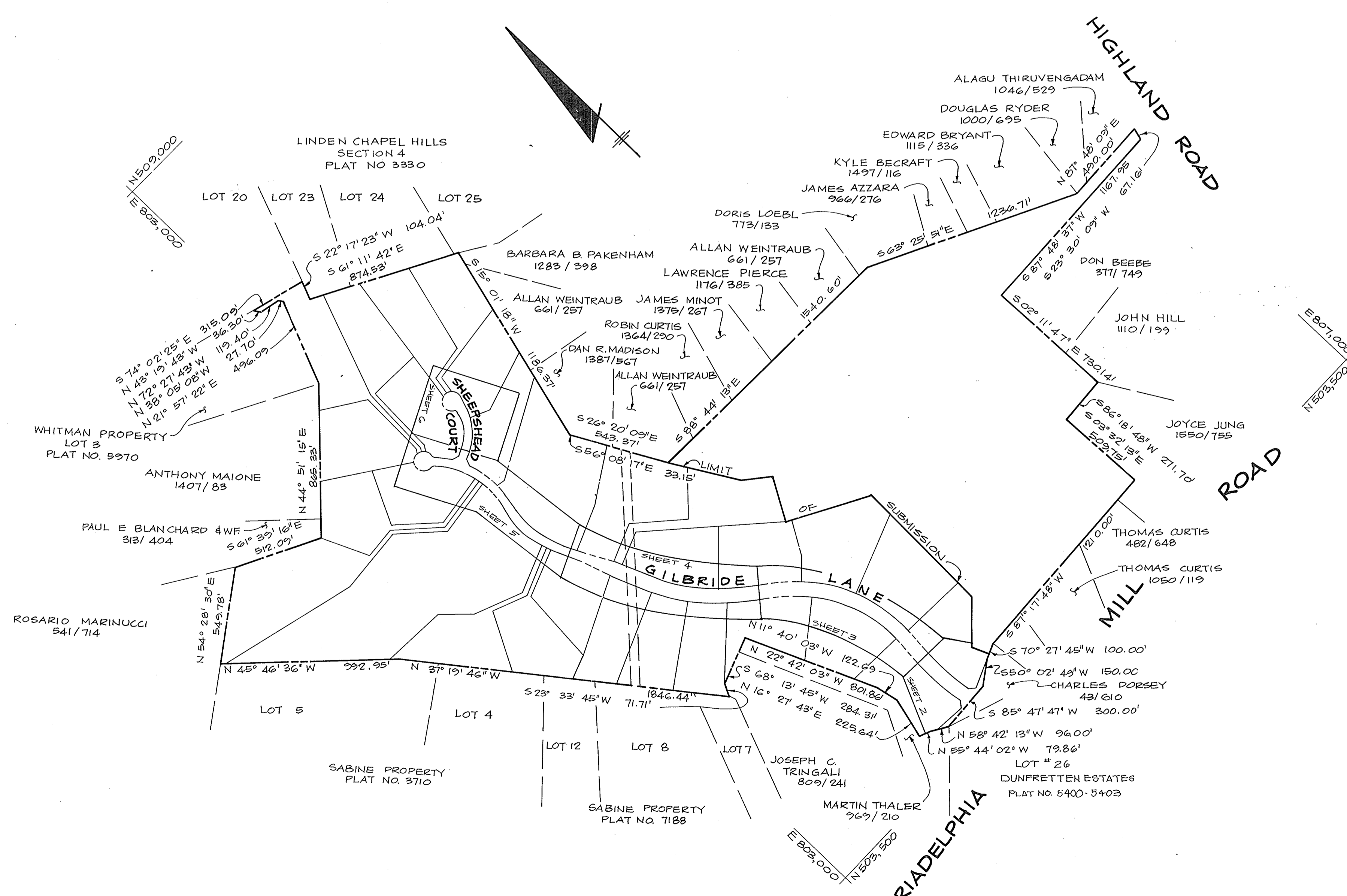
ROADWAYS AND STORM DRAINS

HEDGEROW SECTION ONE

5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1" = 2000'



PLAN
SCALE: 1" = 400'

AS BUILT CERTIFICATION	
ENGINEER	DATE
PE #	
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
<i>[Signature]</i>	DATE: 7/3/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>[Signature]</i>	DATE: 6/1/88
CHIEF, LAND DEVELOPMENT DIVISION	
<i>[Signature]</i>	DATE: 6/28/88
CHIEF, BUREAU OF HIGHWAYS	
<i>[Signature]</i>	DATE: 6/29/88
CHIEF, BUREAU OF ENGINEERING	
DATE	NO. REVISION
OWNER/DEVELOPER	
HEDGEROW ASSOCIATES LIMITED PARTNERSHIP C/O LOWRIE SARGENT 13243 WESTMEATH LANE CLARKSVILLE, MARYLAND 21029	
PROJECT: HEDGEROW	
SECTION ONE (LOTS 1-28 & PARCELS A-D)	
AREA TAX MAP 28434 PARCELS 50, 60, 30, 40	
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE: TITLE SHEET	
THE RIEMER GROUP, INC.	
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690	
DATE: 5-10-87	WP-88-60, S 88-47, F-88-74
DESIGNED BY: J.L.B.	
DRAWN BY: D.B.S.	
PROJECT NO: 47803	
DATE: MAY 10, 1987	
SCALE: AS SHOWN	
DRAWING NO. 1 OF 15	

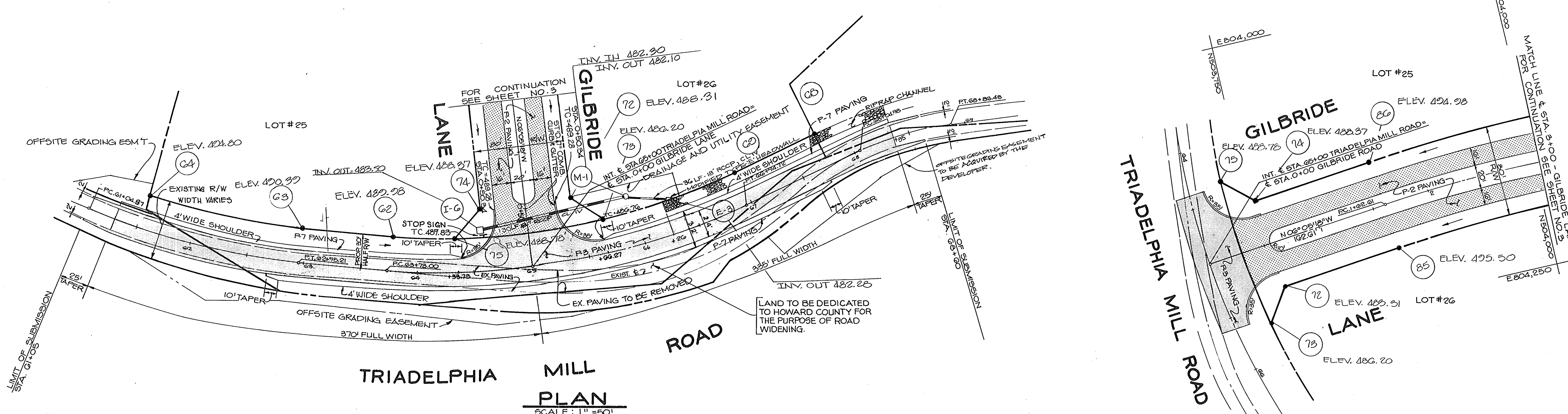
1453

CURVE DATA TABLE
 FROM STA. 61+04.87 TO STA. 62+95.21
 DELTA = 19°49'41.4"
 R = 549.97'
 L = 170.34'
 T = 76.13'
 DC = 10°25'03"
 Chd = 574°02'50.5"E, 189.89'

CURVE DATA TABLE
 FROM STA. 63+73.00 TO STA. 66+94.72
 DELTA = 50°28'06"
 R = 605.00'
 L = 321.72'
 T = 164.76'
 DC = 07°28'15"
 Chd = N 80°42'15.4"E, 317.95'

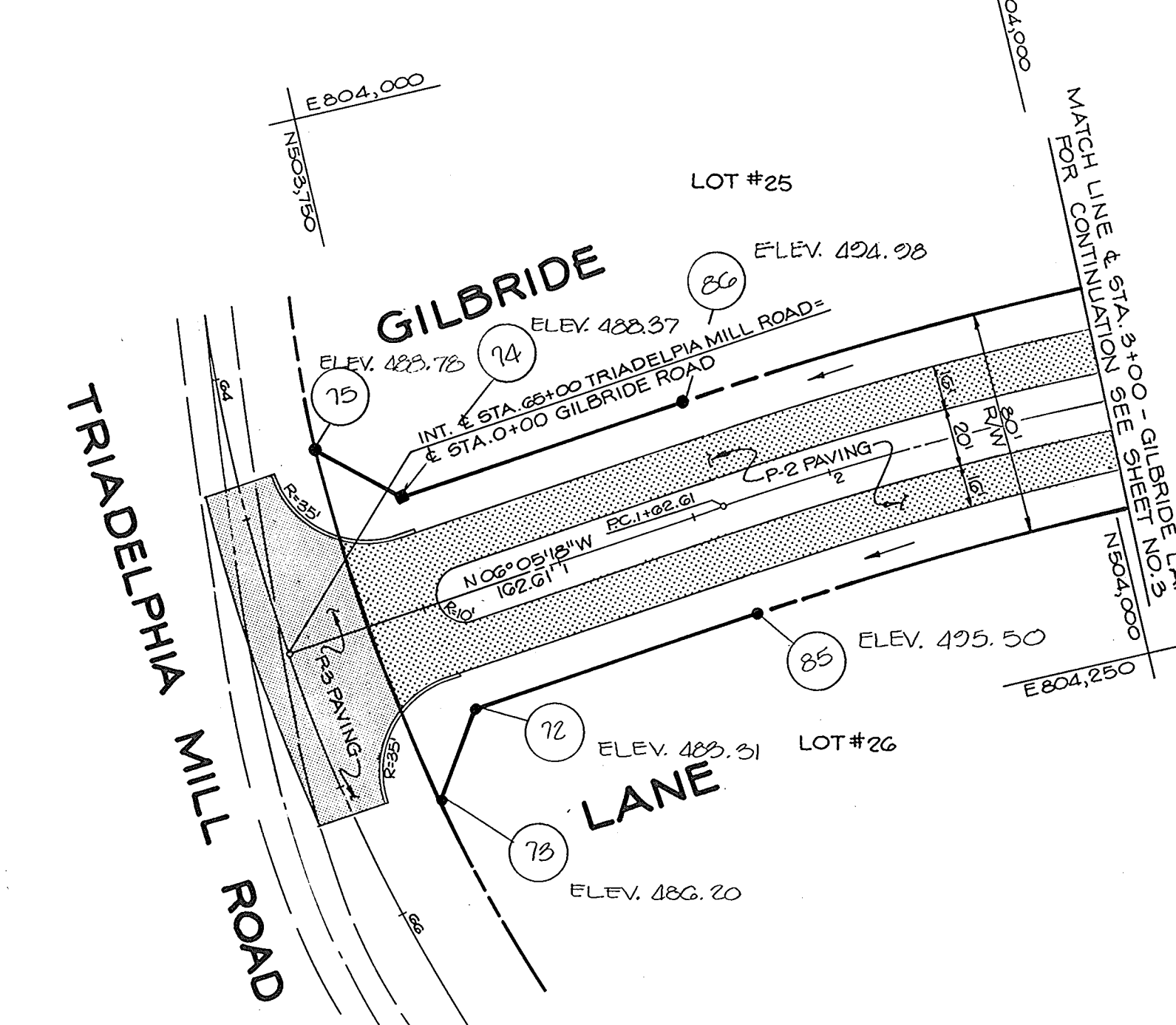
CURVE DATA TABLE
 FROM STA. 68+04.78 TO STA. 68+86.48
 DELTA = 13°40'42.7"
 R = 250.00'
 L = 81.50'
 T = 41.12'
 DC = 22°55'05"
 Chd = 74°45'34"E, 81.14'

CURVE DATA TABLE
 FROM STA. 1+02.61 TO STA. 4+04.57
 DELTA = 11°33'10.3"
 R = 1200.00'
 L = 241.96'
 T = 121.89'
 DC = 04°23'29"
 Chd = N 00°15'47"W, 241.55'

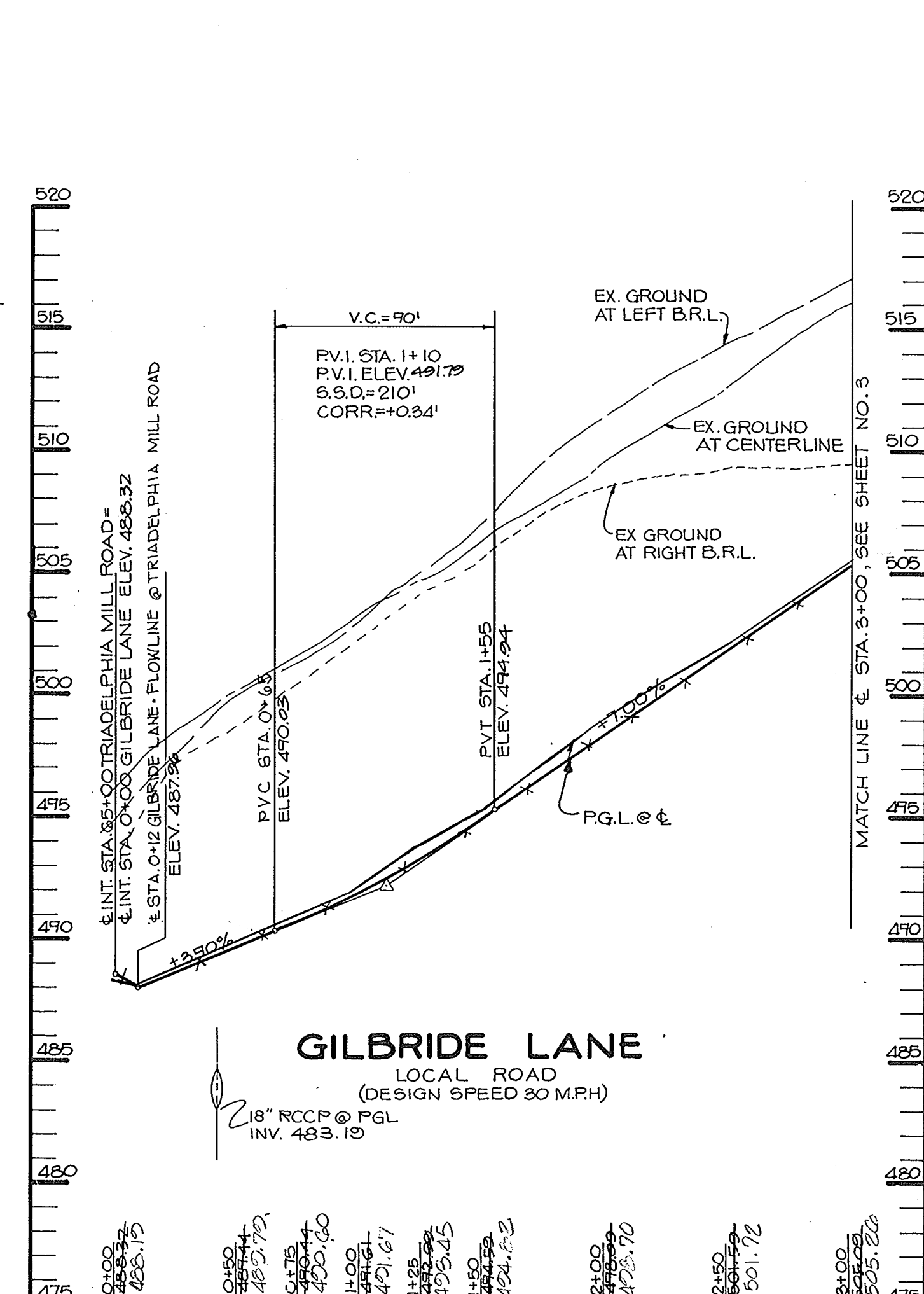
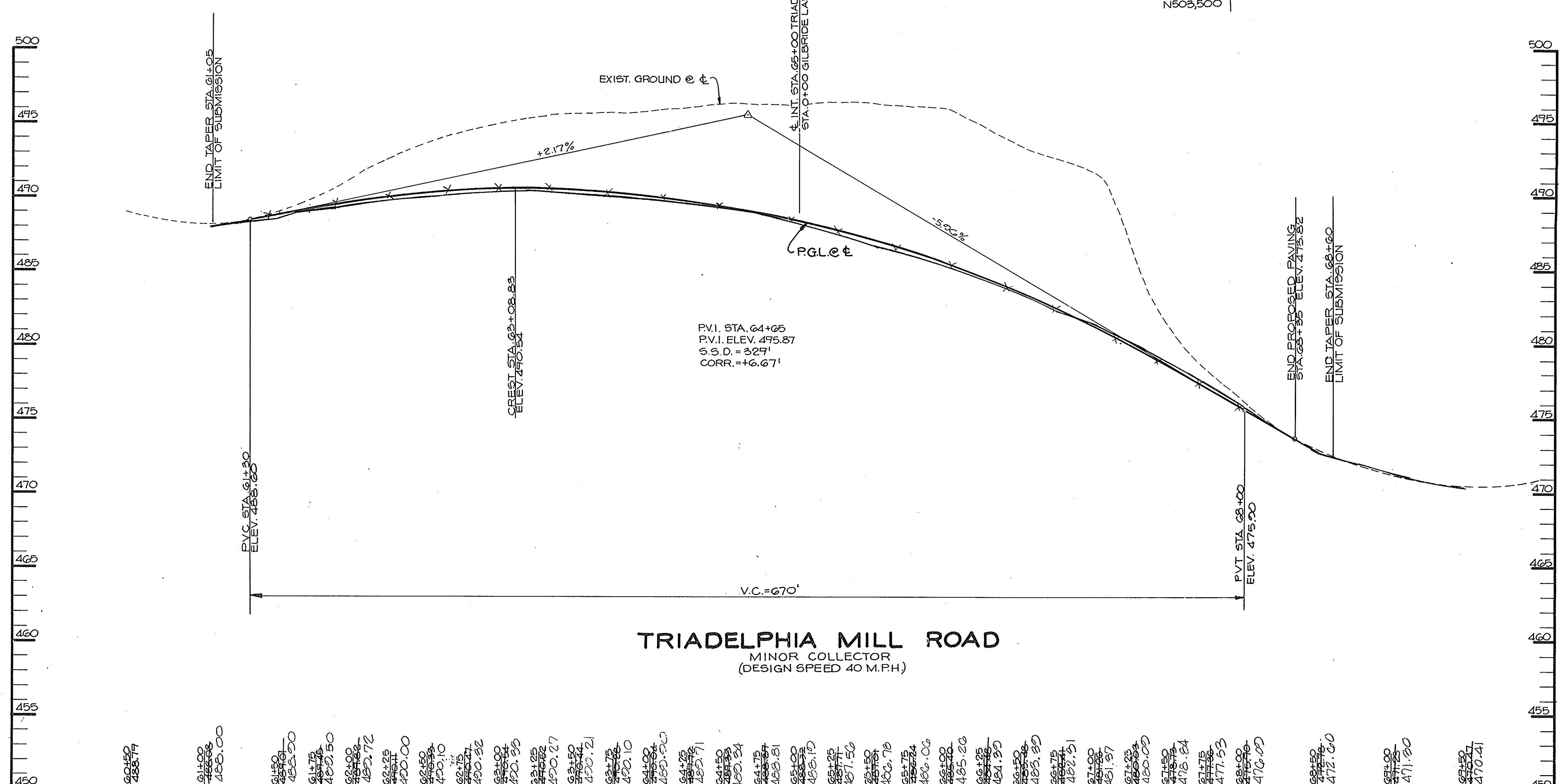


TRIADELPHIA MILL ROAD PLAN
 SCALE: 1" = 50'

LEGEND
 • DENOTES 1/2" Ø PIPE OR IRON PIN.
 ■ 4" x 4" x 36" CONCRETE MONUMENT.



GILBRIDE LANE PLAN
 SCALE: 1" = 50'



AS BUILT CERTIFICATION

ENGINEER: _____ DATE: _____
 PE # _____

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Mark J. DeCary 7/2/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul J. Gorman 6/2/89
 Chief, Land Development Division

James W. Wadsworth 4/28/89
 Chief, Bureau of Highways

Elizabeth Anderson-Coleen 4/21/89
 Chief, Bureau of Engineering, acting

DATE	NO.	REVISION

OWNER/DEVELOPER: HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 56 LOWRIE BARGENT
 15245 WESTMEATH LANE
 CLARKSVILLE, MARYLAND 21037

PROJECT: **HEDGEROW (SECTION ONE)**
 (LOTS 1-28 & PARCELS A-D)

AREA: TAX MAPS 28 & 34 PARCELS 50, 60, 30 & 64
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **PLAN AND PROFILE FOR GILBRIDE LANE & TRIADELPHIA MILL RD.**

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

DATE: 5-10-89
 DATE: 5-10-89
 DATE: 5-10-89

DESIGNED BY: J.L.B.
 DRAWN BY: J.C.R.
 PROJECT NO: 47803
 DATE: MAY 10, 1989
 SCALE: AS SHOWN
 DRAWING NO. 2 OF 15

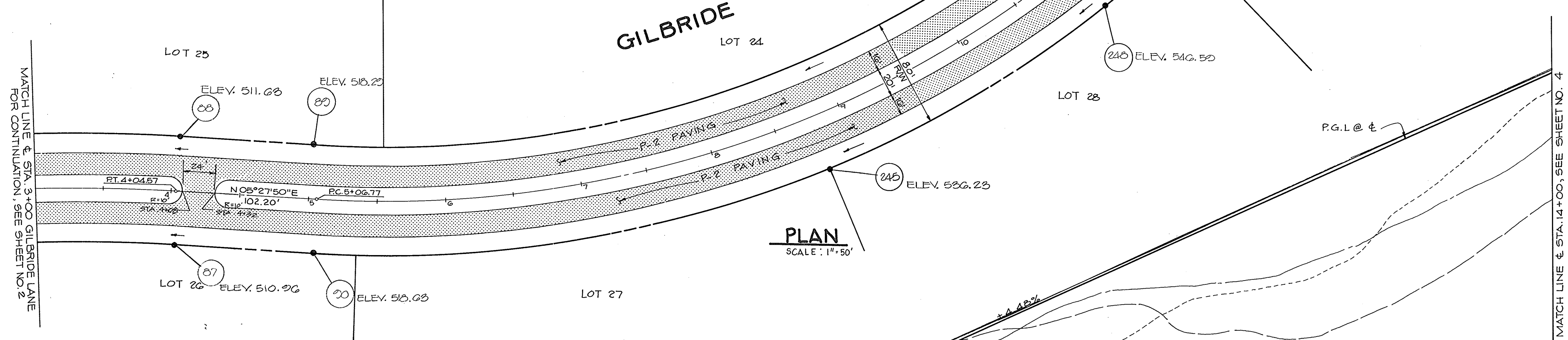
1453

E 803,750
N504,000

E 804,000
N504,000

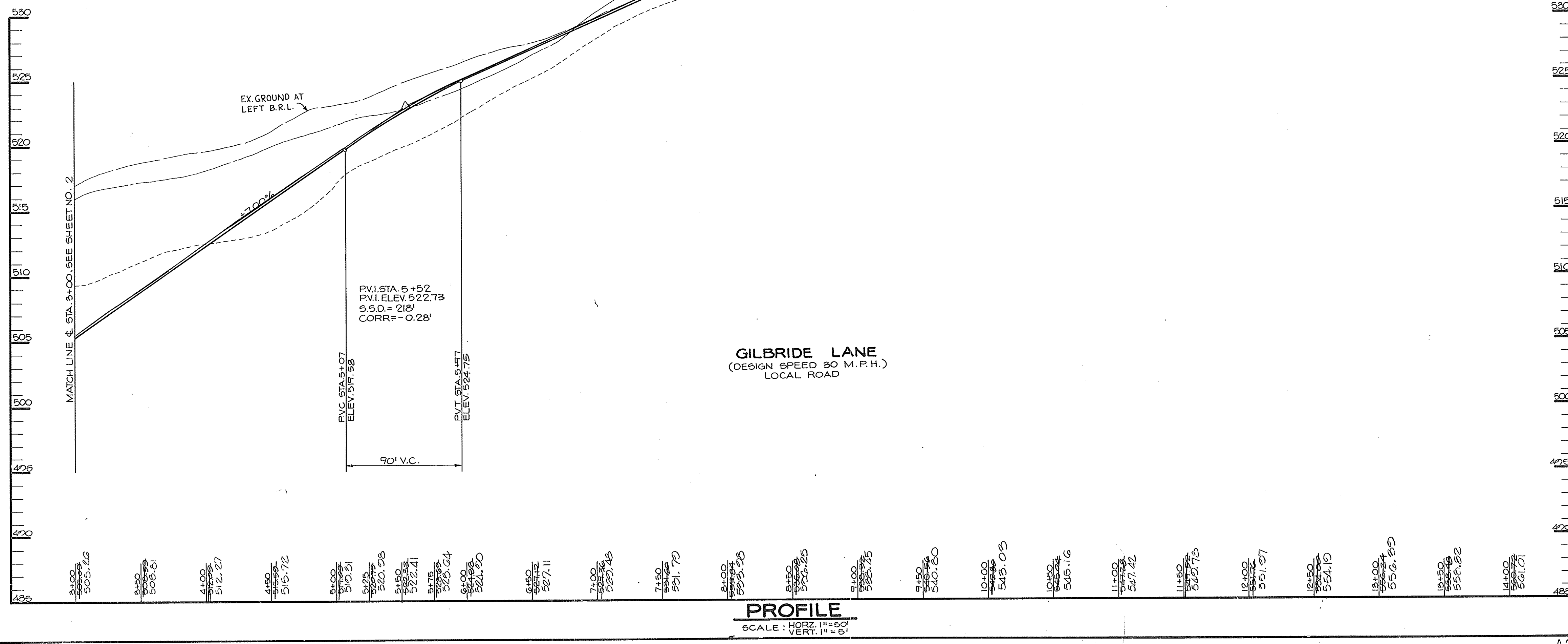
LEGEND
 ● DENOTES 1/2" Ø PIN OR IRON SET.
 ■ 4" x 4" x 36" CONCRETE MONUMENT.

CURVE DATA TABLE
 FROM STA 5+06.77 TO STA 12+91.67
 DELTA = 56°12'51.2"
 R = 800.00'
 L = 784.89'
 T = 427.29'
 Dc = 7°09'43"
 Cd = N 22°38'36.1"W, 753.79'



PLAN
 SCALE: 1" = 50'

CURVE DATA TABLE
 FROM STA 5+06.77 TO STA 12+91.67
 DELTA = 56°12'51.2"
 R = 800.00'
 L = 784.89'
 T = 427.29'
 Dc = 7°09'43"
 Cd = N 22°38'36.1"W, 753.79'



GILBRIDE LANE
 (DESIGN SPEED 30 M.P.H.)
 LOCAL ROAD

PROFILE
 SCALE: HORIZ. 1" = 50'
 VERT. 1" = 5'

AS BUILT CERTIFICATION

ENGINEER _____
 PE # _____ DATE _____

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Mark S. Taylor 7/2/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul J. Parnell 6/2/89
 Chief, Land Development Division
Francis W. McNeill 6/2/89
 Chief, Bureau of Highways
Elizabeth Anderson-Cole 6/2/89
 Chief, Bureau of Engineering, acting

DATE	NO	REVISION

OWNER/DEVELOPER
 HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 % LOWRIE SARGENT
 12223 WESTBATH LANE
 CLARKSVILLE, MARYLAND 21029

PROJECT: **HEDGEROW SECTION ONE**
 (LOTS 1-20 & PARCELS A-E)

AREA TAX MAP 28-34 PARCELS 59, 60, 30 & 64
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **PLAN AND PROFILE FOR GILBRIDE LANE**

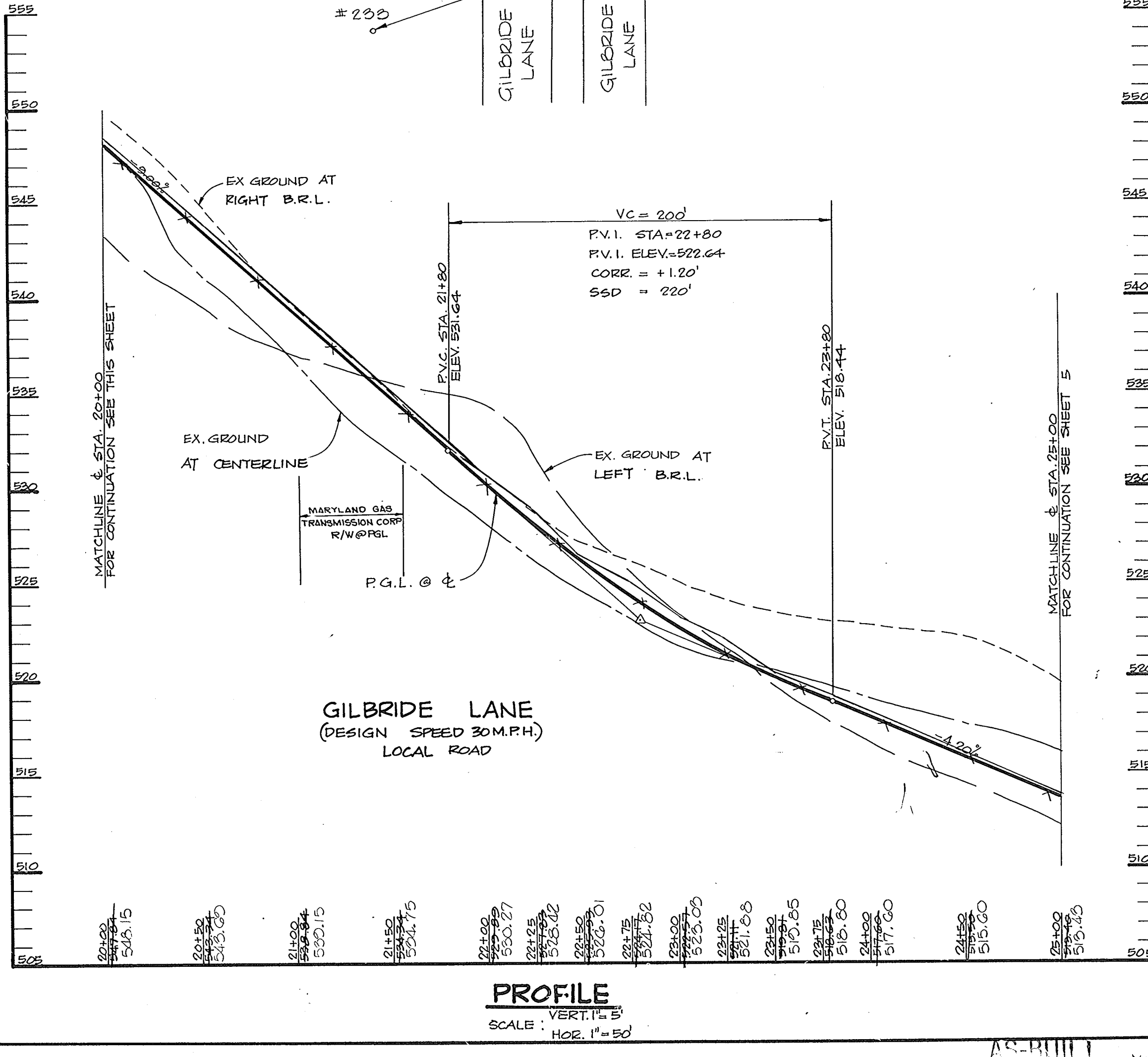
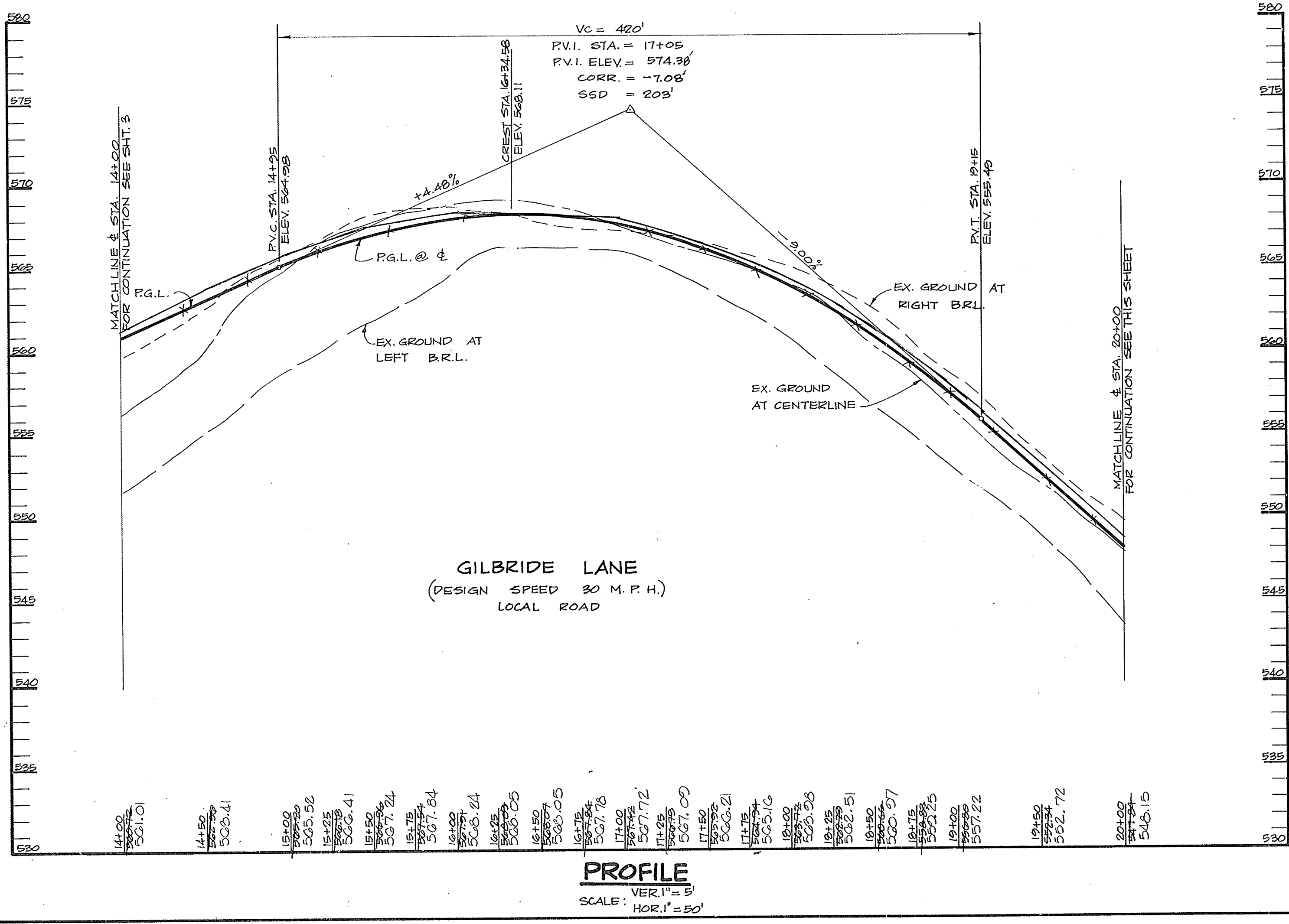
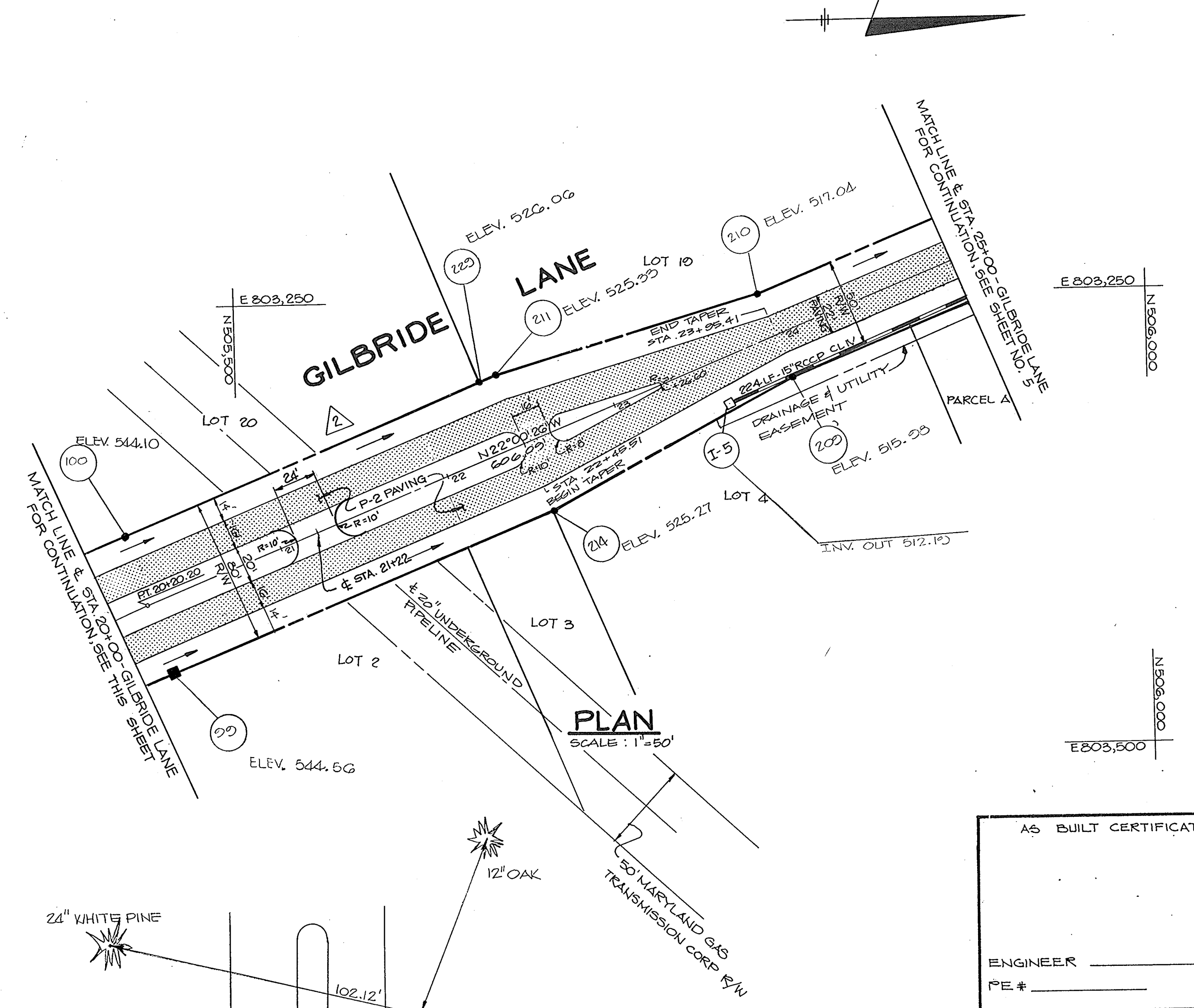
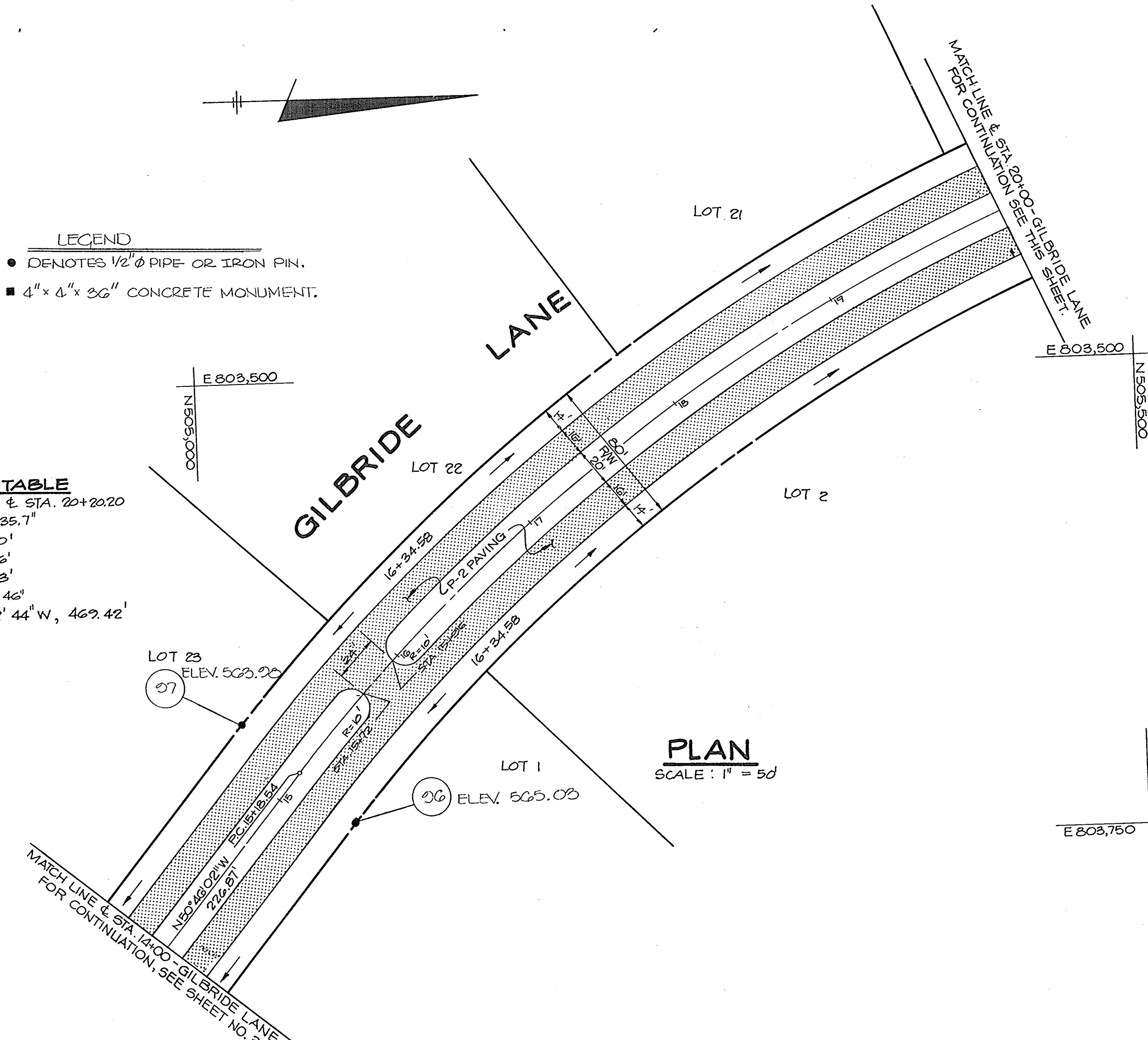
THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

DATE: 5-10-89
 WP-88-69, 5-88-47, P.88-74
 DESIGNED BY: J.L.B...
 DRAWN BY: J.C.R.
 PROJECT NO: 47803
 DATE: MAY 10, 1989
 SCALE: AS SHOWN
 DRAWING NO. 3 OF 15

ARTHUR E. MUEGGE #6707

1453

MARYLAND BLUEPRINT CO. INC. 15282



AS BUILT CERTIFICATION

ENGINEER _____
 P.E. # _____ DATE _____

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Maria S. Campbell 11/13/95
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul J. Jarama 01/31/99
 CHIEF, Land Development Division

Francis W. Woodard 01/28/99
 CHIEF, Bureau of Highways

Harold Anderson Calvo 01/29/99
 CHIEF, Bureau of Engineering, acting

11/9/95 Δ ADDED 24' MED. CROSS, GILBRIDE LN. STA. 21+22.
 1-28-04 Δ ADDED MEDIAN CROSS OVER.

DATE NO REVISION

OWNER/ DEVELOPER
 HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 56 LOWRIE SARGENT
 1924B WESTMEATH LANE
 CLARKSVILLE, MARYLAND 21029

PROJECT: **HEDGEROW (SECTION ONE)**
 (LOTS 1-23 & PARCELS A-E)

AREA TAX MAP 28 & 34 PARCEL 59, 60, 30 & 64
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **PLAN AND PROFILE FOR GILBRIDE LANE**

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2890

5-10-89
 DATE

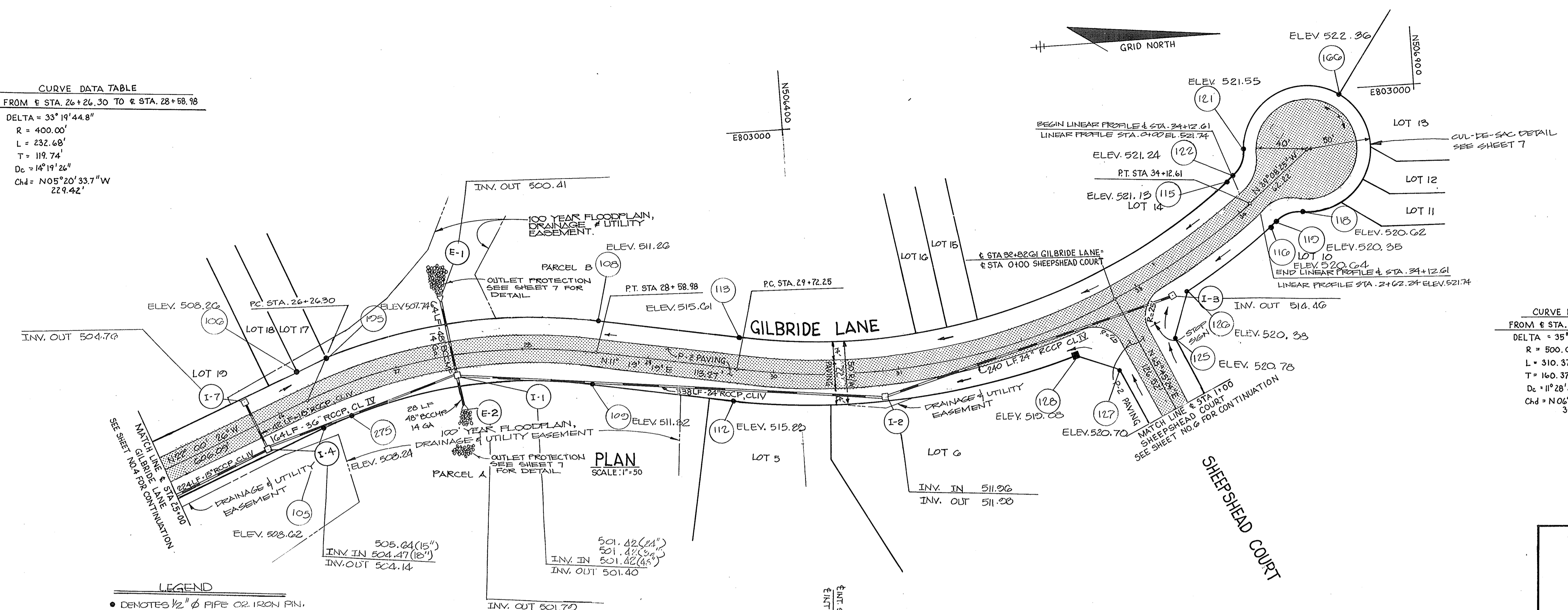
WP-88-09, 5-88-47, P-88-74
 DESIGNED BY: J.L.B.
 DRAWN BY: J.C.R.
 PROJECT NO: 47803
 DATE: MAY 10, 1989
 SCALE: AS SHOWN
 DRAWING NO. 4 OF 15

ARTHUR E. MUEGGE, PLOT

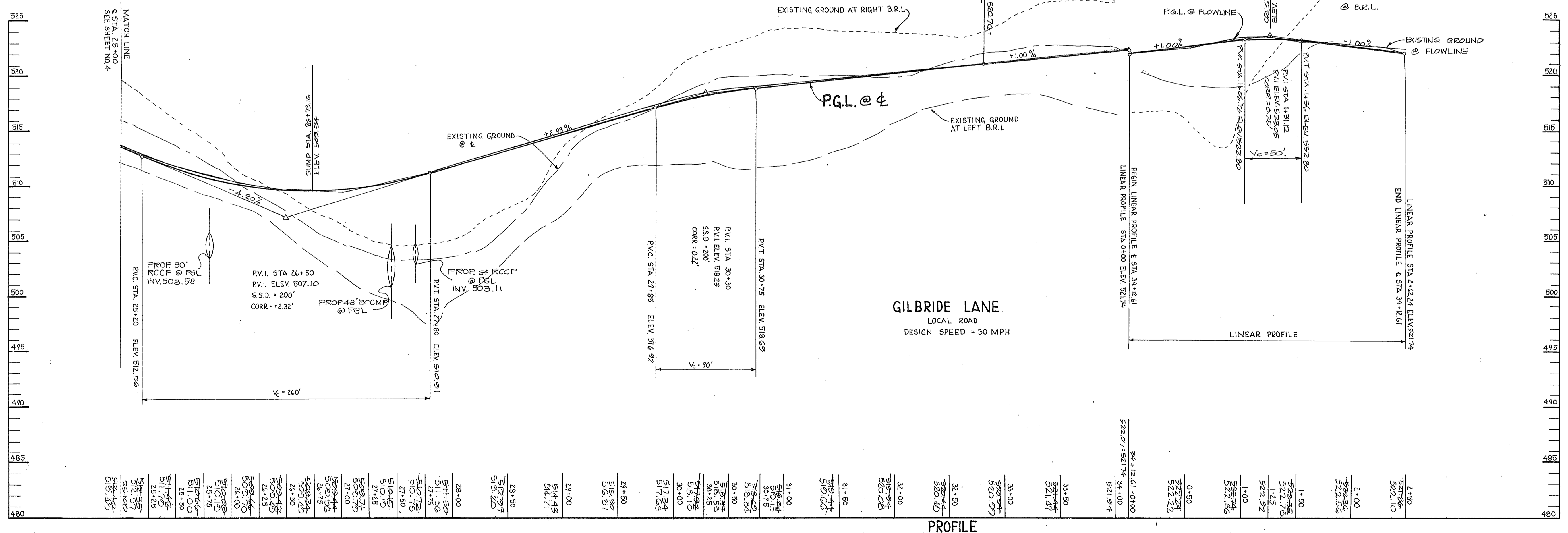
1453

CURVE DATA TABLE
 FROM STA. 26+26.30 TO STA. 28+58.98
 DELTA = 33°19'44.8"
 R = 400.00'
 L = 232.68'
 T = 119.74'
 Dc = 14°19'26"
 Chd = N05°20'33.7"W
 229.42'

CURVE DATA TABLE
 FROM STA. 29+72.25 TO STA. 34+12.61
 DELTA = 35°33'56.3"
 R = 500.00'
 L = 310.37'
 T = 160.37'
 Dc = 11°28'33"
 Chd = N06°27'38.4"W
 305.41'



- LEGEND**
- DENOTES 1/2" Ø PIPE OR IRON PIN.
 - 4" x 8" CONCRETE MONUMENT.



AS BUILT CERTIFICATION

ENGINEER _____ DATE _____
 FE # _____

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Maisha S. Taylor 7/2/15
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT LKS

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul Johnson 6/2/15
 Chief, Land Development Division
Dawn W. Weisand 6/2/15
 Chief, Bureau of Highways
Elanboth Anderson 6/2/15
 Chief, Bureau of Engineering & Safety

DATE	NO.	REVISION

OWNER / DEVELOPER
 HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 CO LOWRIE SARGENT
 12245 WESTMEATH LANE
 CLARKSVILLE, MARYLAND 21027

PROJECT: **HEDGEROW SECTION ONE**
 (LOTS 1-28 PARCELS A-D)

AREA: TAX MAP 28(34) PARCELS 59, 60, 30 & 64
 8TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

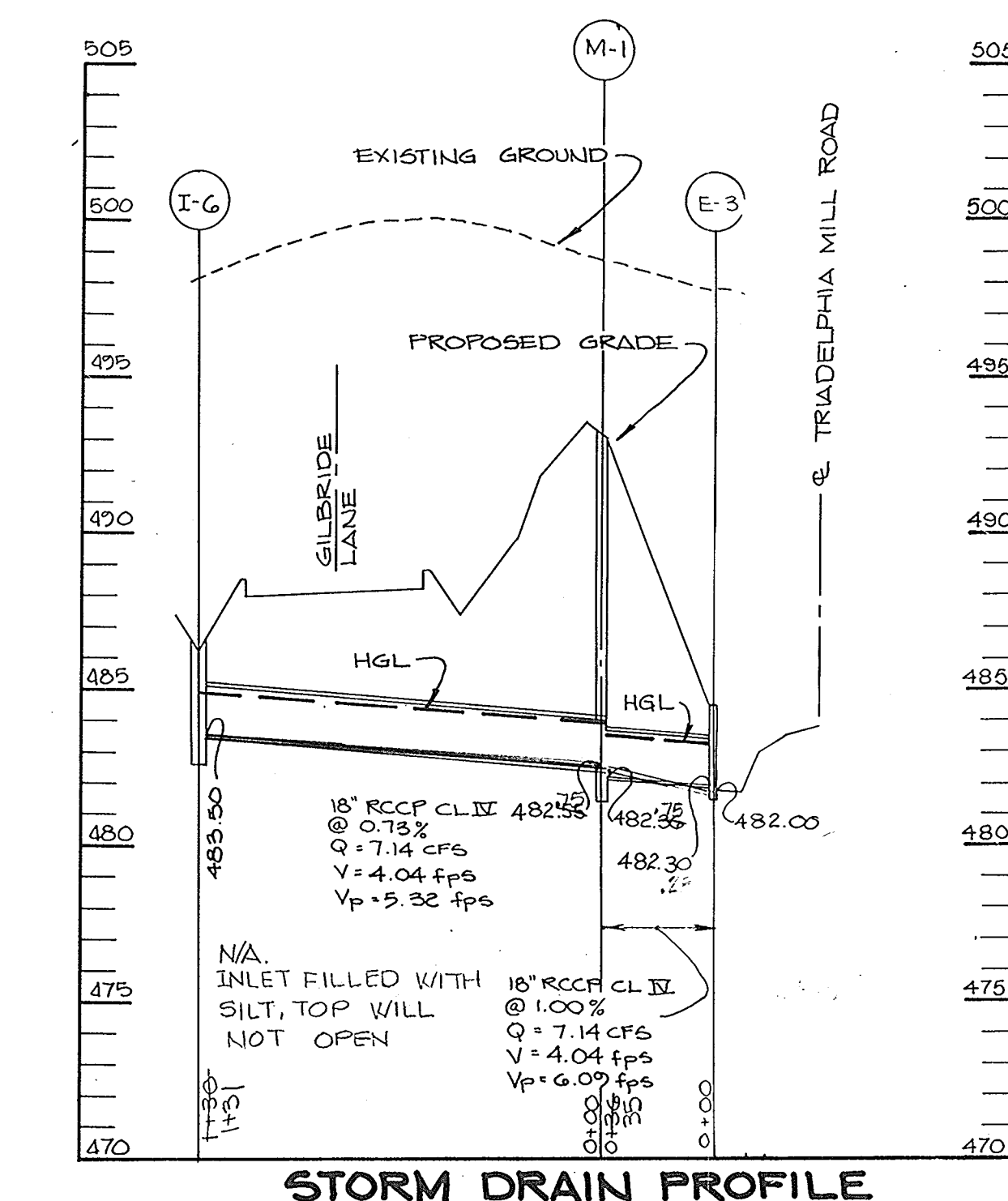
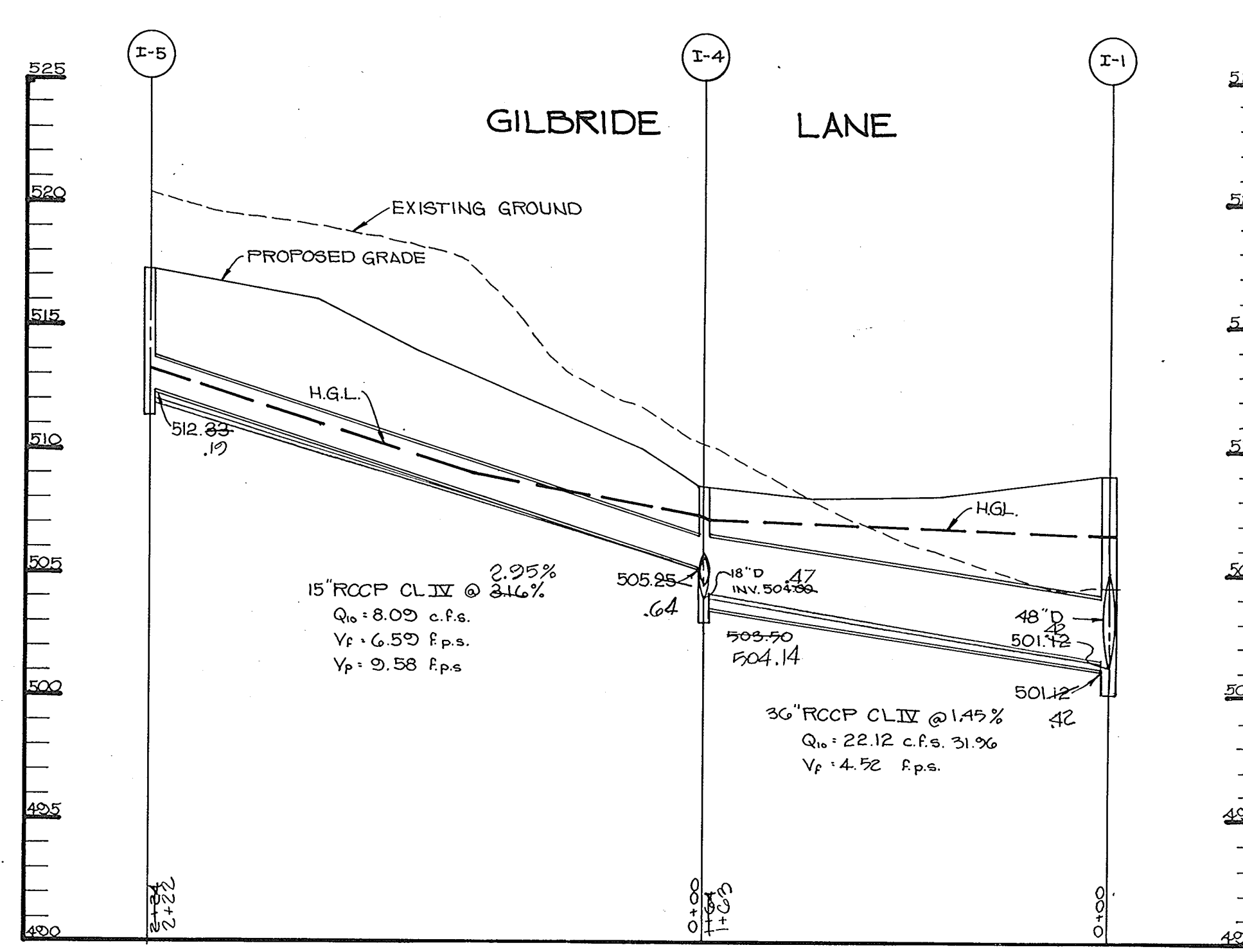
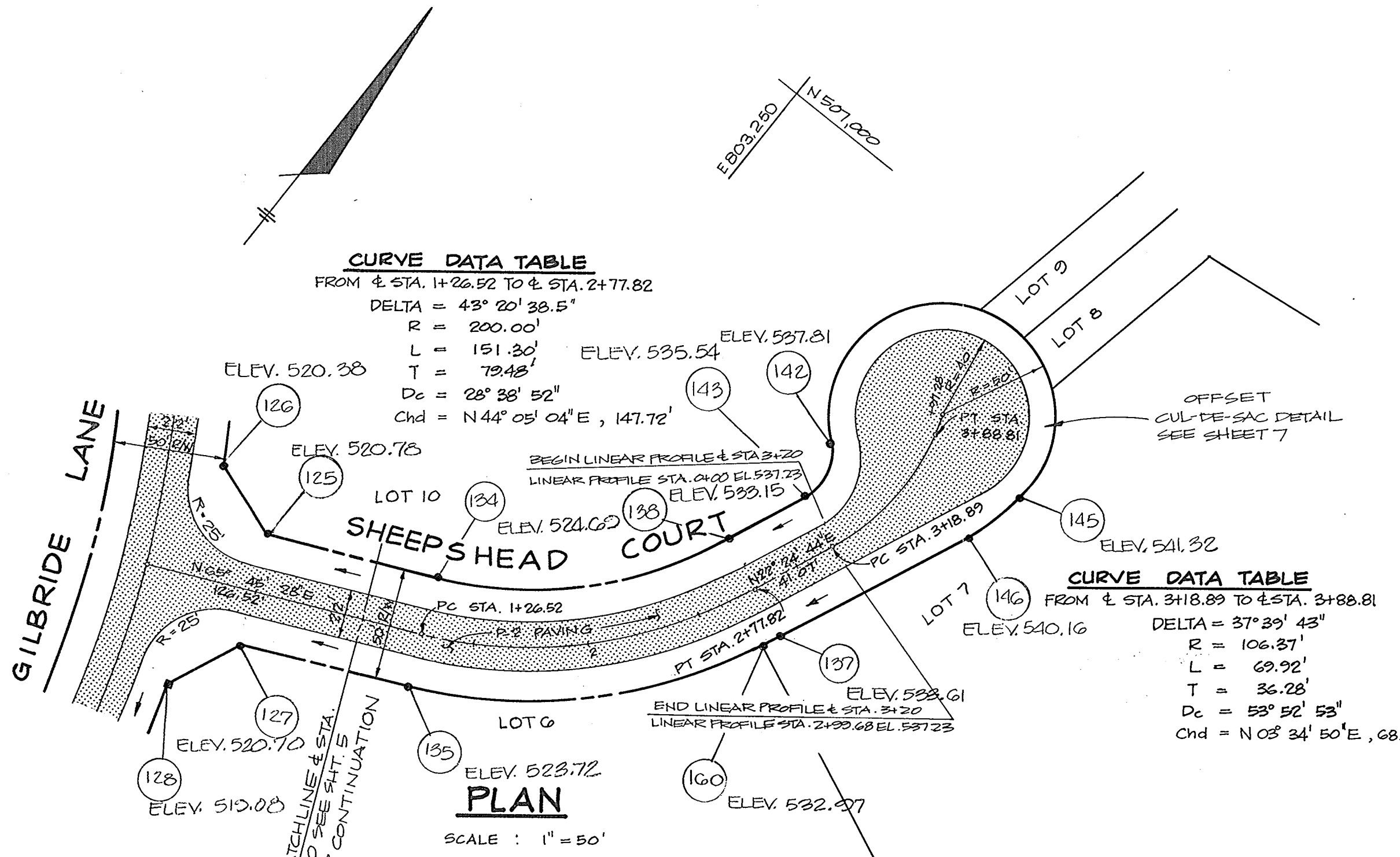
TITLE: **PLAN AND PROFILE FOR GILBRIDE LANE**

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

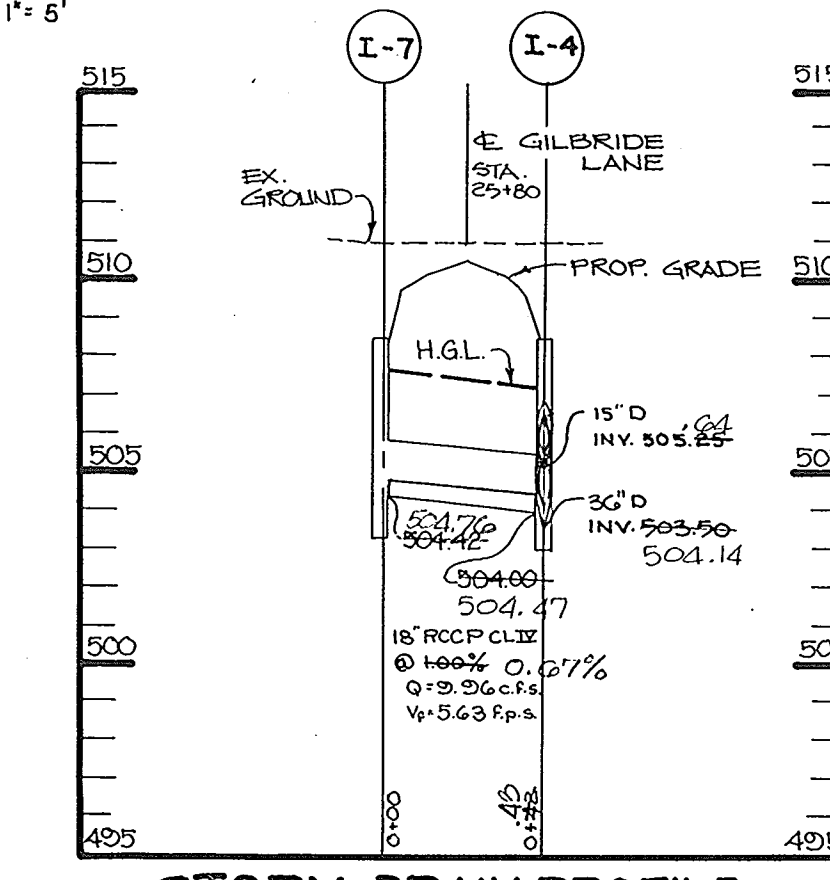
5-10-89 DATE
 WF-88-69, 8-88-47, 1-88-74
 DESIGNED BY: J.L.B.
 DRAWN BY: C.S.B.
 PROJECT NO: 47803
 DATE: MAY 10, 1989
 SCALE: AS SHOWN
 DRAWING NO. 5 OF 15

1453

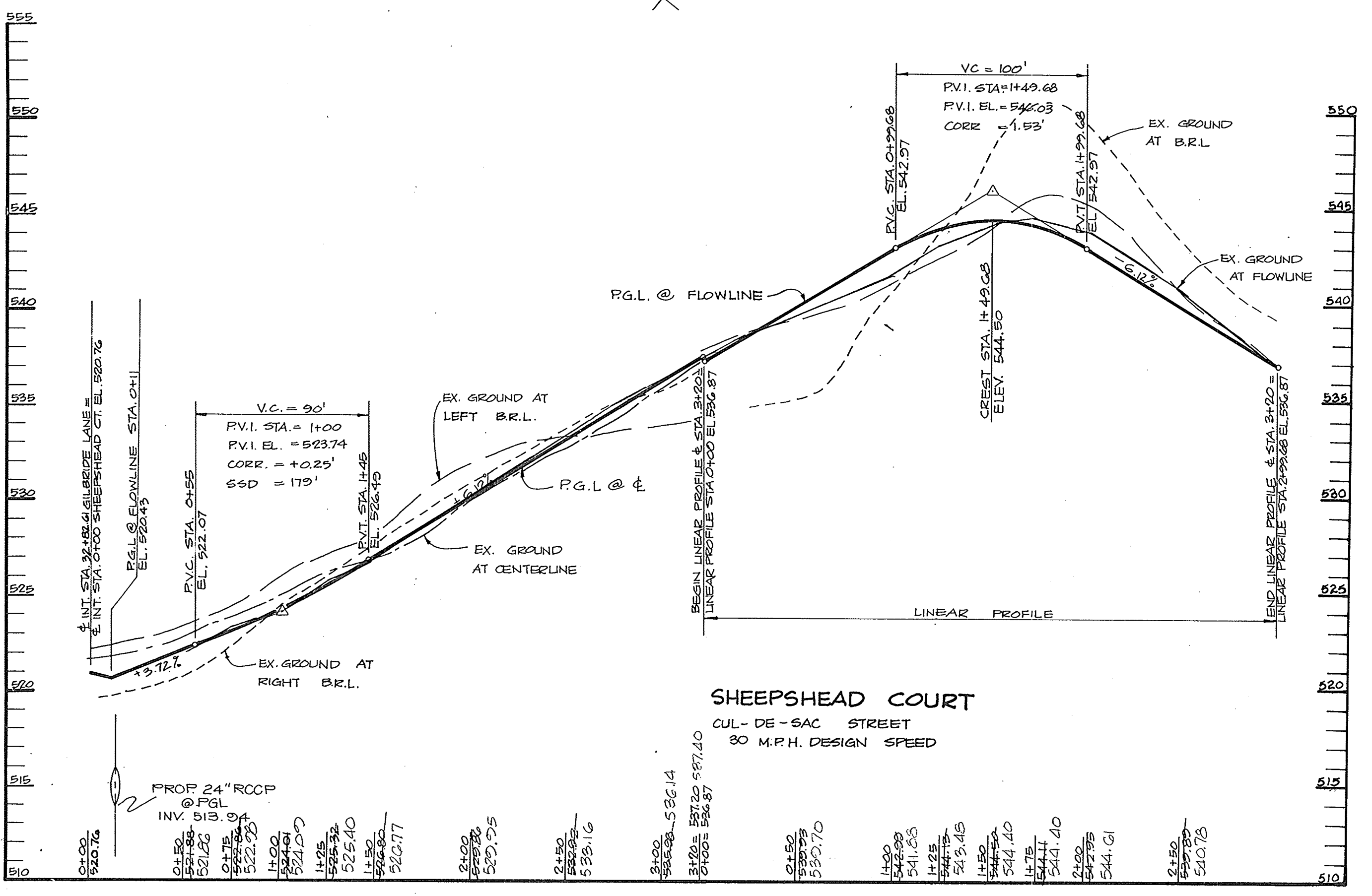
MARYLAND BLUEPRINT CO., INC. 1892R



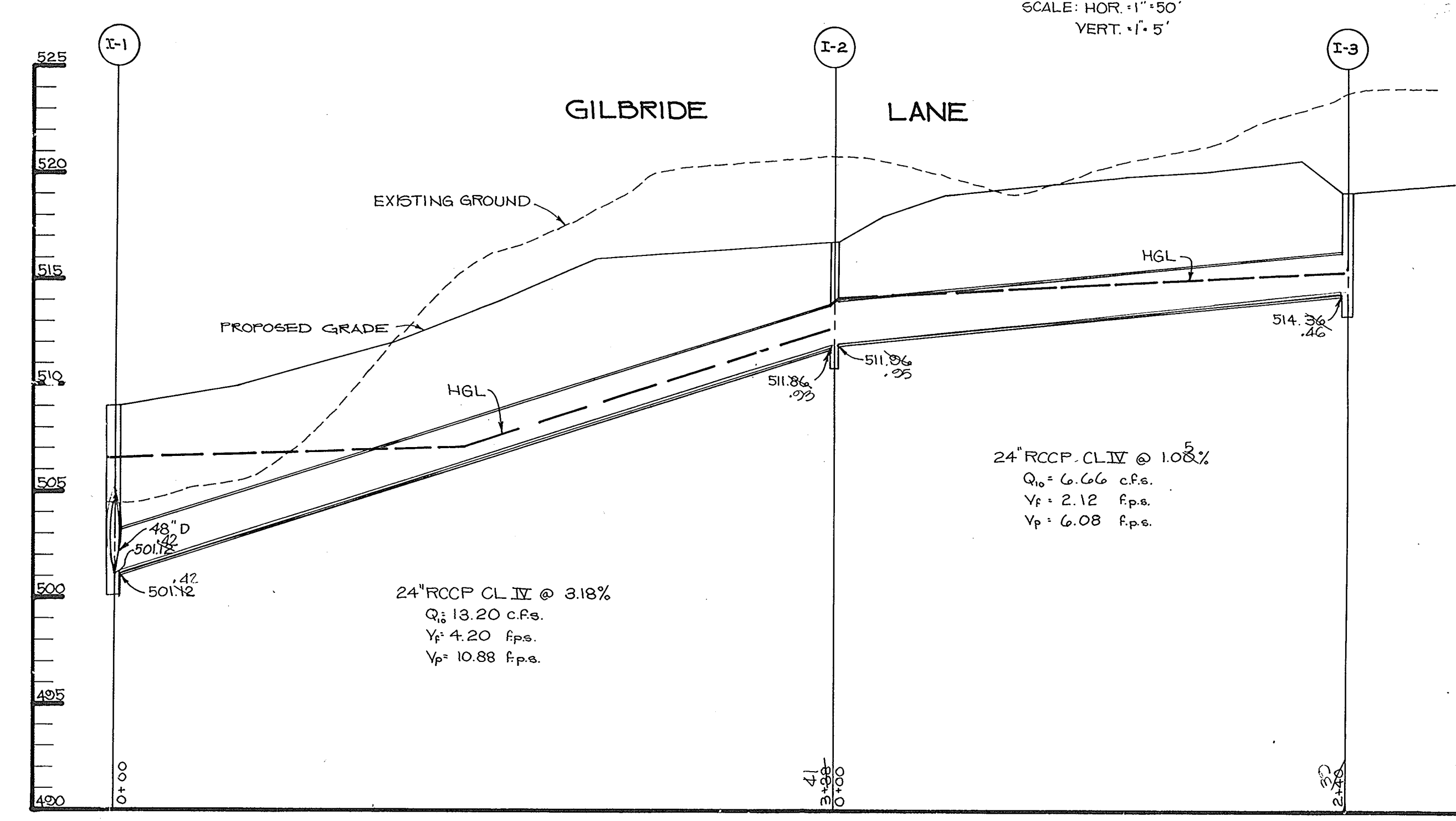
STORM DRAIN PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



STORM DRAIN PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



PROFILE
SCALE: VERT. 1" = 5'
HOR. 1" = 50'



STORM DRAIN PROFILE
SCALE: VERT. 1" = 5'
HOR. 1" = 50'

AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Mark S. Taylor 2/3/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul J. ... 4/1/89
 Chief, Land Development Division

William W. ... 6/2/89
 Chief, Bureau of Highways

Elizabeth ... 4/21/89
 Chief, Bureau of Engineering, acting

DATE	NO.	REVISION

OWNER/DEVELOPER
 HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 98 LOWRIE GARGENT
 18245 WESTMEATH LANE
 CLARKSVILLE, MARYLAND

PROJECT: **HEDGEROW (SECTION ONE)**
 (LOTS 1-28 PARCELS A-D)

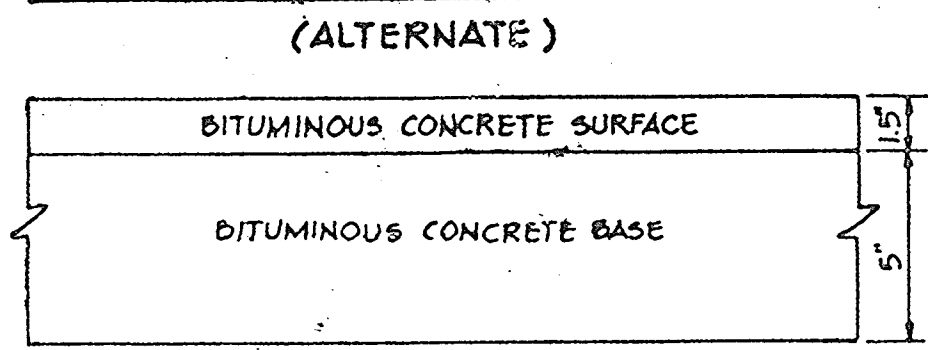
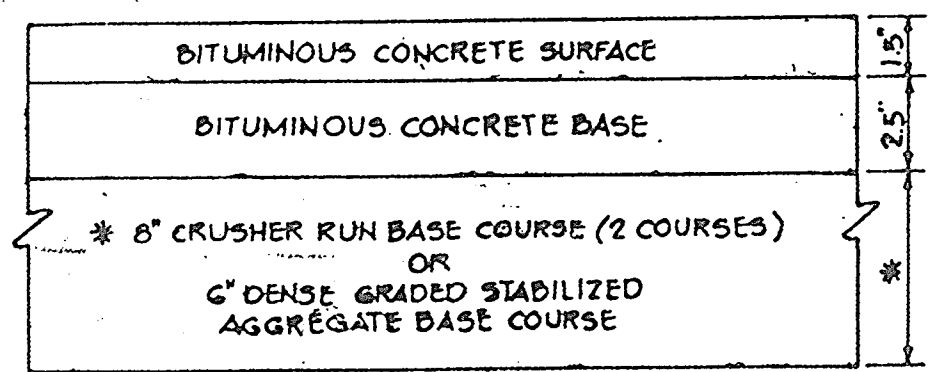
AREA TAX MAP 28 & 34 PARCEL 59, 60, 30, & 64
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **PLAN AND PROFILE FOR SHEEPSHEAD COURT AND STORM DRAIN PROFILES**

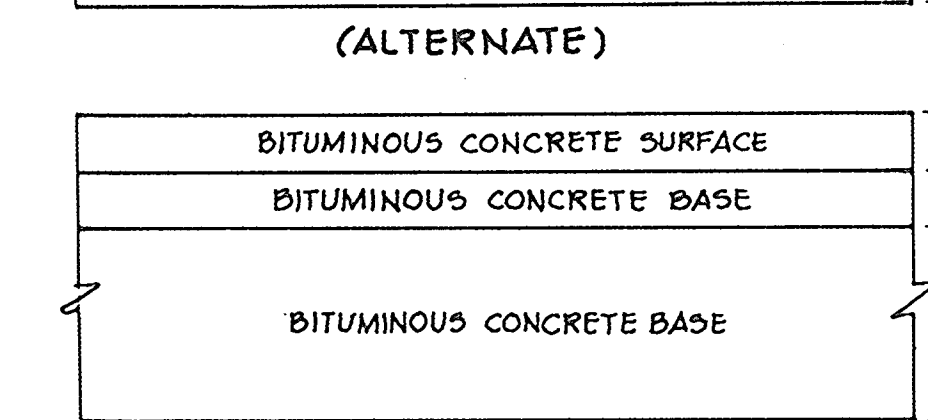
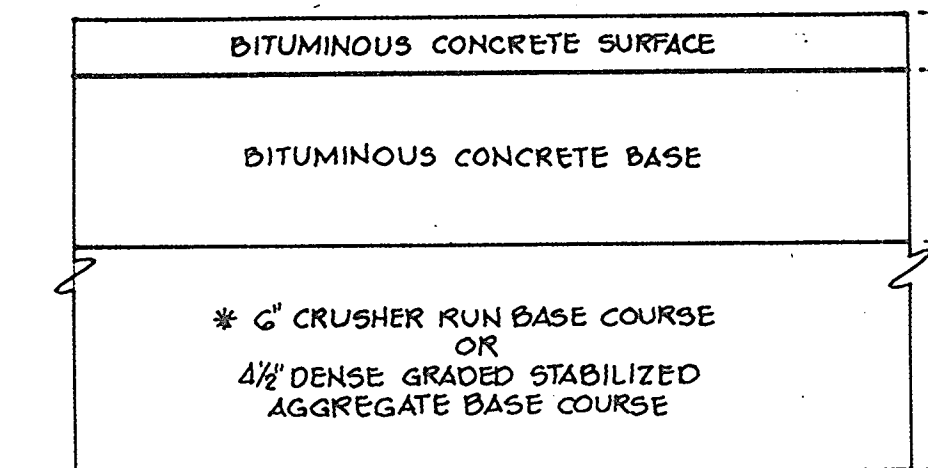
THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

5-10-87
 DATE

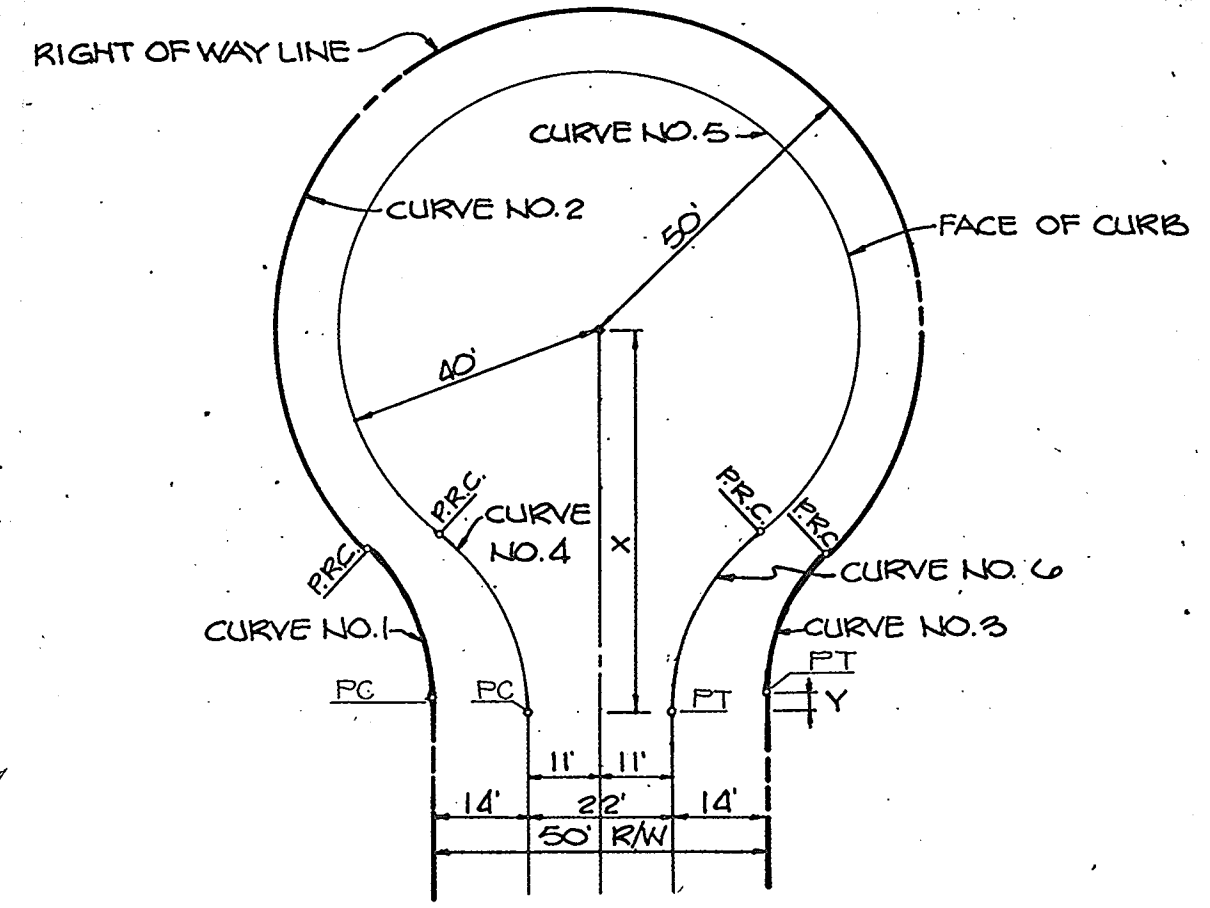
WP-88-69, S-88-47, P-88-74
 DESIGNED BY: J.L.B.
 DRAWN BY: D.B.S.
 PROJECT NO: 47803
 DATE: MAY 10, 1988
 SCALE: AS SHOWN
 DRAWING NO. 6 OF 15



(6 1/2" PAVING, P-2)

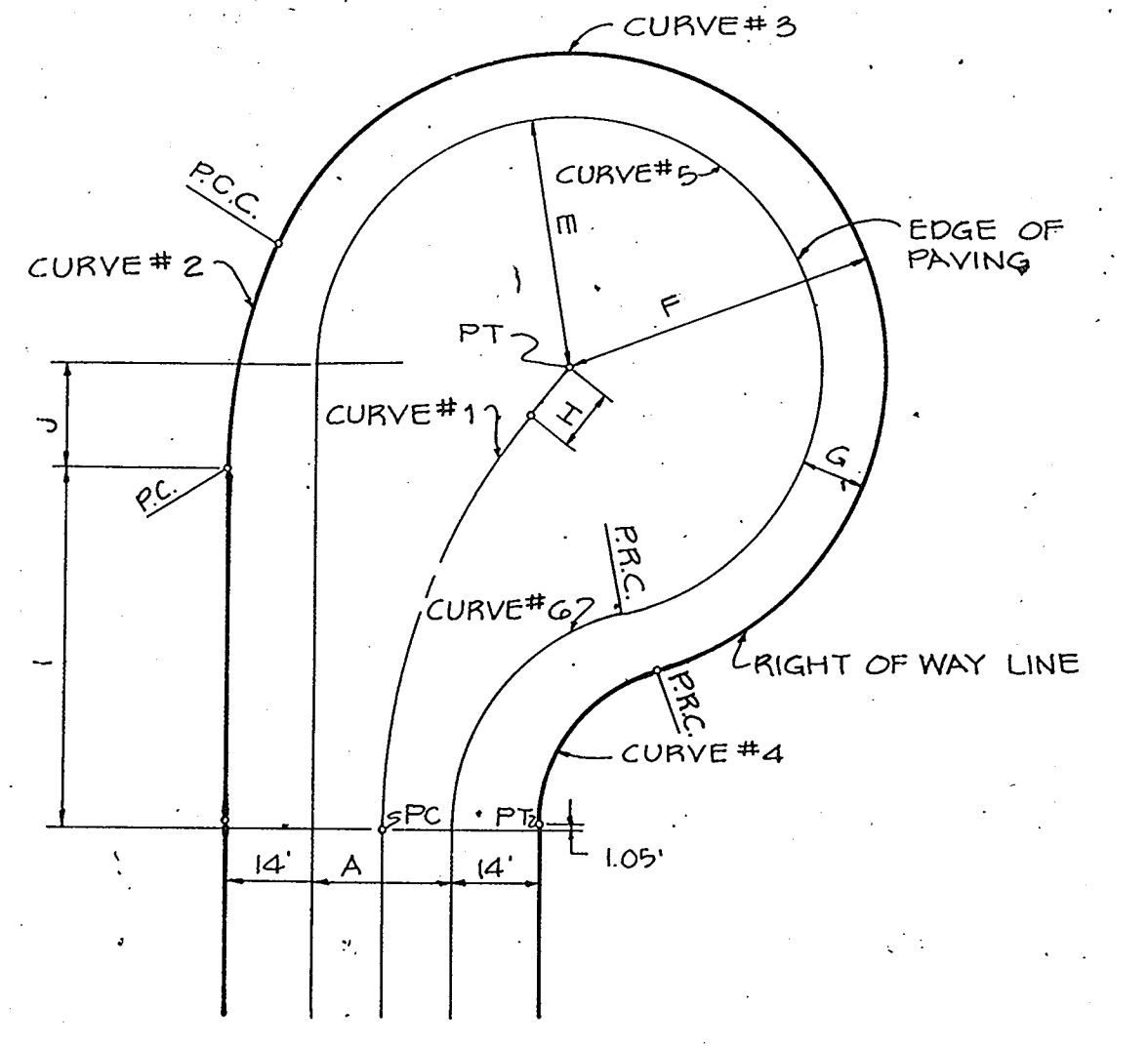


(8" PAVING, P-3)



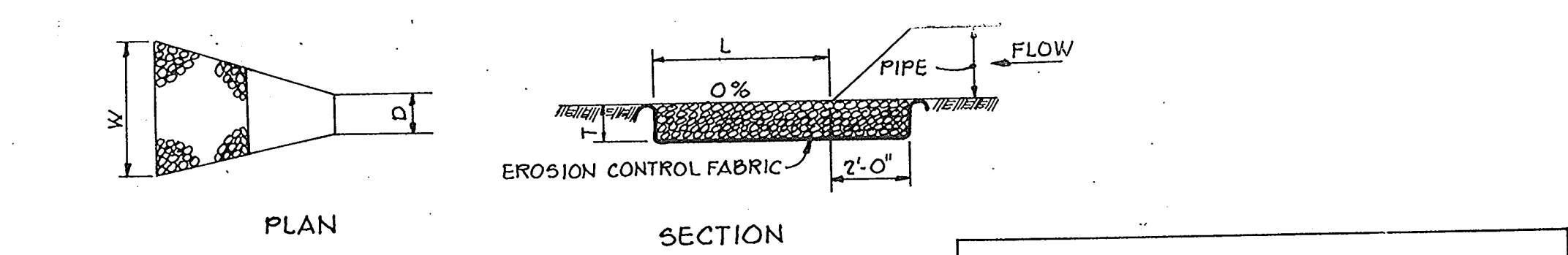
CUL-DE-SAC-DETAIL
NO SCALE

CURVE DATA	
CURVE #	DATA
1	38° 35' 15"
2	20° 24' 14"
3	50.00'
4	74° 44' 23"
5	156° 53' 57"
6	76° 53' 57"



OFFSET CUL-DE-SAC DETAIL
NO SCALE

CURVE DATA	
CURVE #	DATA
1	38° 35' 15"
2	20° 24' 14"
3	50.00'
4	74° 44' 23"
5	156° 53' 57"
6	76° 53' 57"



DOUBLE BITUMINOUS SURFACE TREATMENT

STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	0.5'	30' x 4'	18' x 16'	14"
E-2A	0.5'	30' x 4'	18' x 20'	14"
E-3	0.5'	30' x 12'	14'	14"
E-5	0.5'	40'	20'	14"

OUTLET PROTECTION DETAIL
NO SCALE

- PERMANENT SEEDING NOTES**
- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
 - Soil Amendments: Apply 0-20-20 fertilizer at the rate of 600 lbs. per acre. Narrow or disc lime and 0-20-20 fertilizer into the soil to a minimum depth of 3". Lawns or high maintenance areas will be dragged and leveled with a York rake. At the time of seeding, apply 400 lbs. of 30-0-0 ureaform fertilizer and 500 lbs. of 10-20-20 or equivalent fertilizer per acre.
 - Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 40 lbs. per acre (1 lb./1000 sq-ft.) of a mixture of certified 'Merion' Kentucky bluegrass; common Kentucky bluegrass @ 40 lbs. per acre (1 lb./1000 sq-ft.) and Red Fescue, Pennlawn or Jamestown @ 20 lbs. per acre (0.5 lb./1000 sq-ft.) for the period May 1 thru July 31, seed with 40-40-20 mix as specified above and 2 lbs. per acre (0.05 lb./1000 sq-ft.) of seeding lovegrass. During the period of October 16 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) the seed. (Option 3) Seed with 40-40-20 mix specified above and mulch with 2 tons/acre well-anchored straw.
 - Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq-ft.) of unrotted 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 gallons 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.
 - Soil Amendments: Apply 400 lbs. per acre 10-10-10 fertilizer (14 lb./1000 sq-ft.) where soil is highly acidic, apply dolomitic limestone at the rate of 1 ton per acre.
 - Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 140 lbs. per acre of annual ryegrass (3.2 lbs./1000 sq-ft.) for the period May 1 thru August 14, seed with 2 lbs. per acre (0.05 lb./1000 sq-ft.) of seeding lovegrass (0.07 lb./1000 sq-ft.). For the period November 16 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, or use seed.
 - Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq-ft.) of unrotted 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 ft. or higher, use 348 gal. per acre (8 gal./1000 sq-ft.) for anchoring.

AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

FE # _____

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

James M. Hahn 5-9-89
DEVELOPER DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Arthur E. Mueggel 5-10-89
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

James M. Hahn 5/25/89
U.S. SOIL CONSERVATION SERVICE DATE

APPROVED: *Richard Ziehm* 5/25/89
HOWARD C.O.D. DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Mark J. Conroy 7/12/89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Richard Ziehm 6/20/89
Chief, Land Development Division DATE

William W. Webber 6/20/89
Chief, Bureau of Highways DATE

Shirley Anderson-Cole 6/20/89
Chief, Bureau of Engineering, acting DATE

DATE	NO.	REVISION

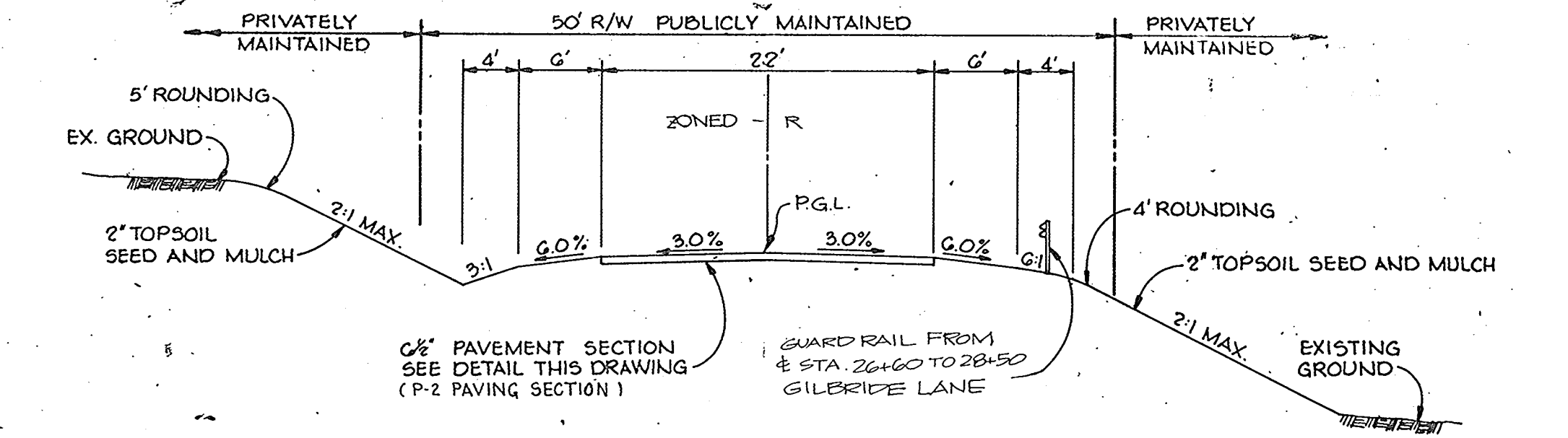
OWNER/DEVELOPER

HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
C/O LOWRIE BARGENT
13243 WESTMEATH LANE
CLARKSVILLE, MARYLAND 21029

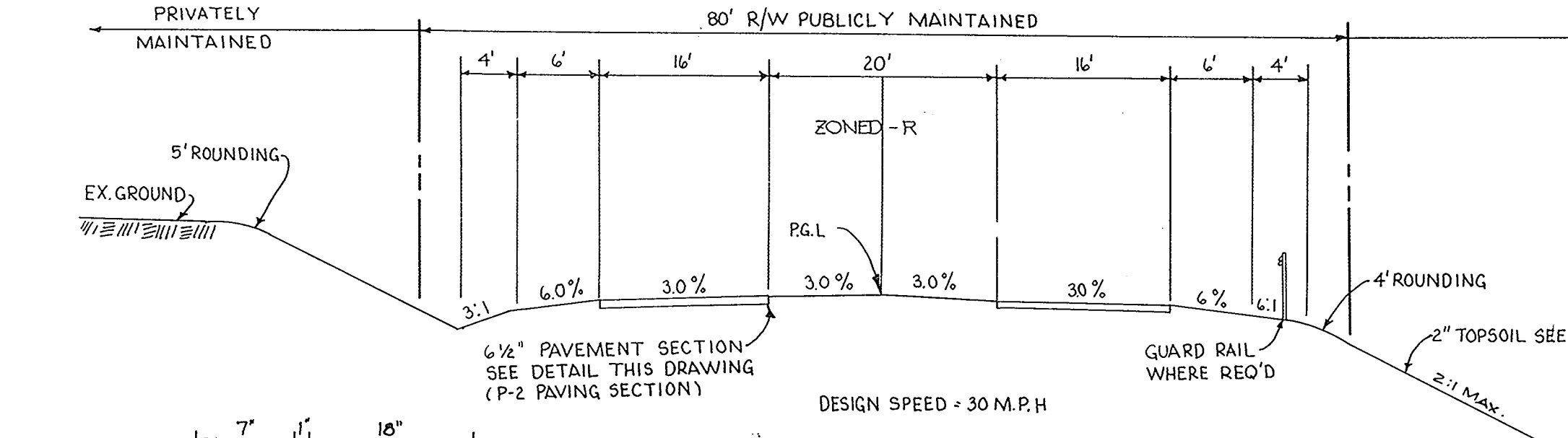
PROJECT: HEDGEROW SECTION ONE
(LOTS 1-28 PARCELS A-B)

AREA: TAX MAP 28434 PARCELS 59, 60, 30, 44
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

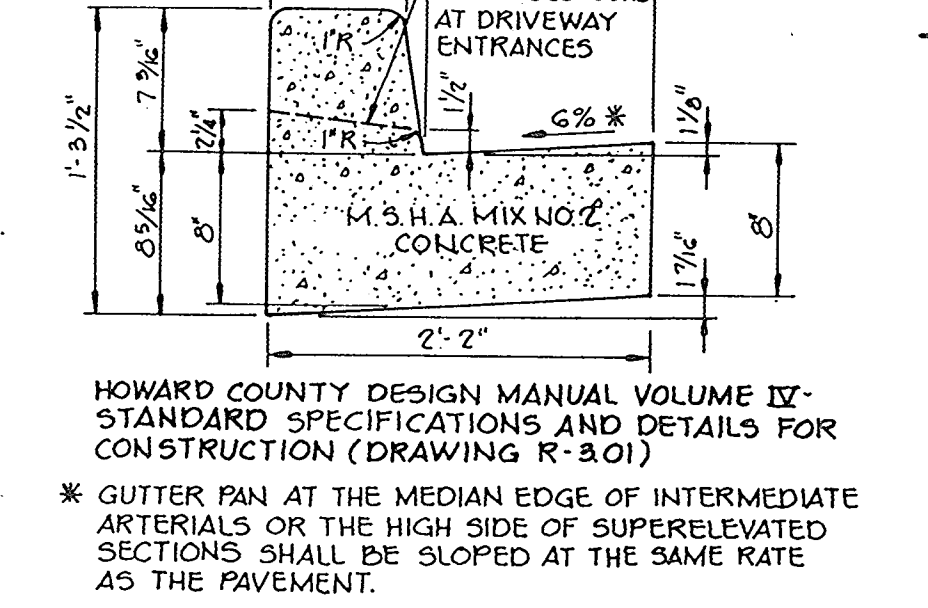
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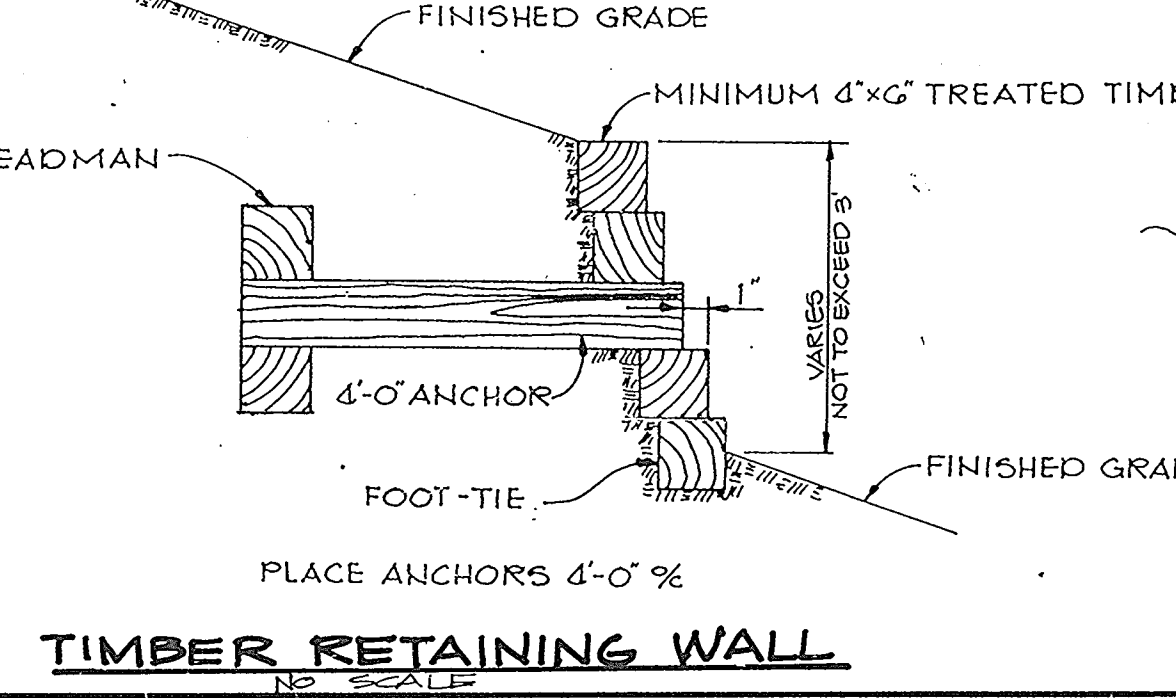
TYPICAL SECTION - 50' R/W
NO SCALE



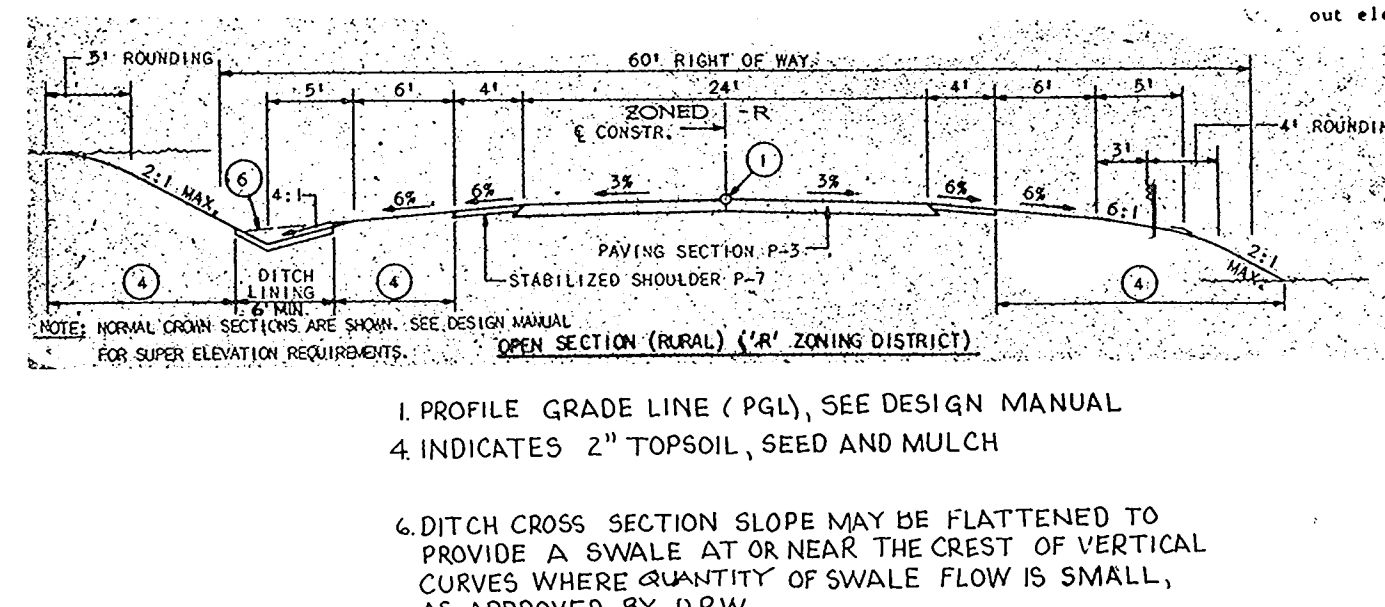
TYPICAL SECTION - 80' R/W
NO SCALE



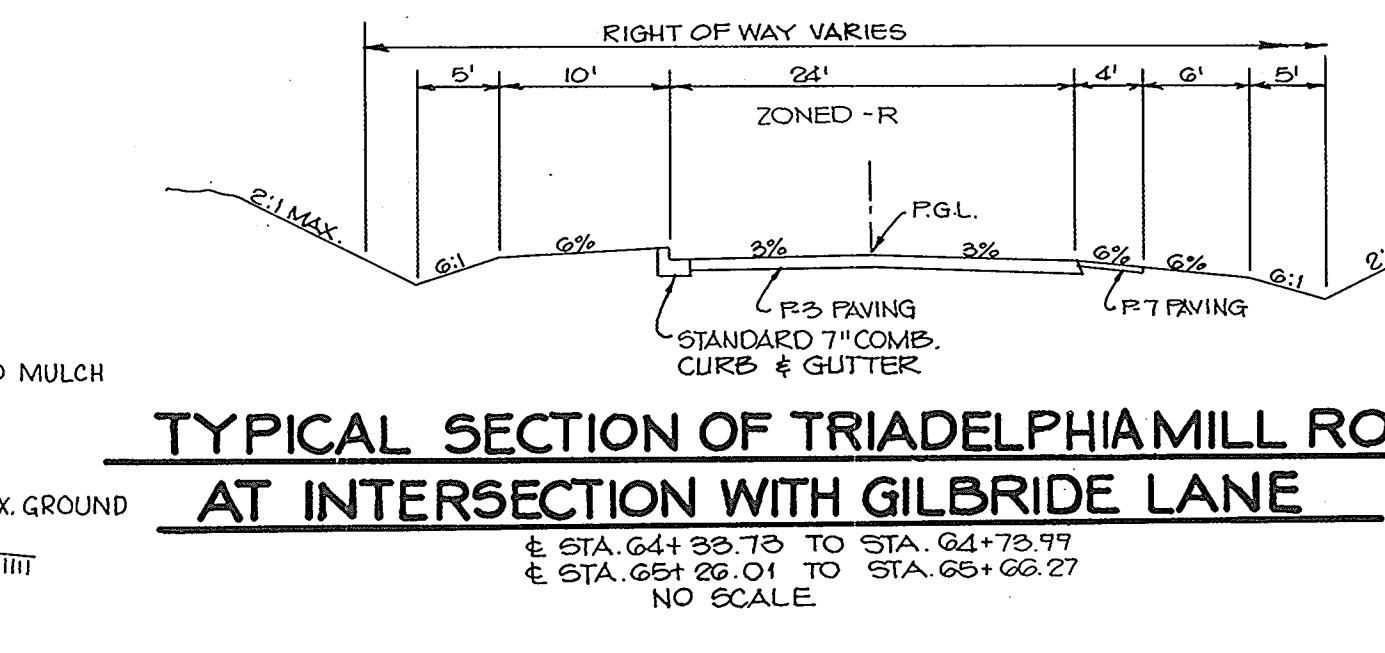
STANDARD 7" COMBINATION CURB AND GUTTER
NO SCALE



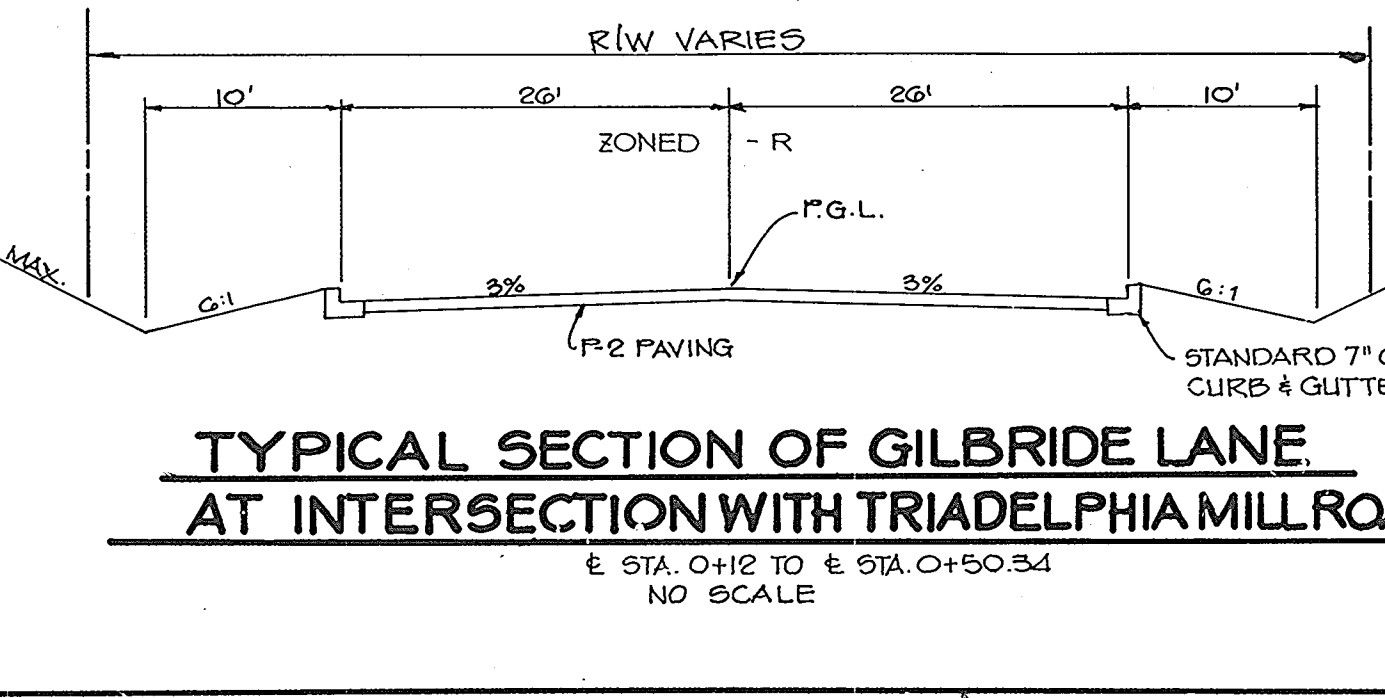
TIMBER RETAINING WALL
NO SCALE



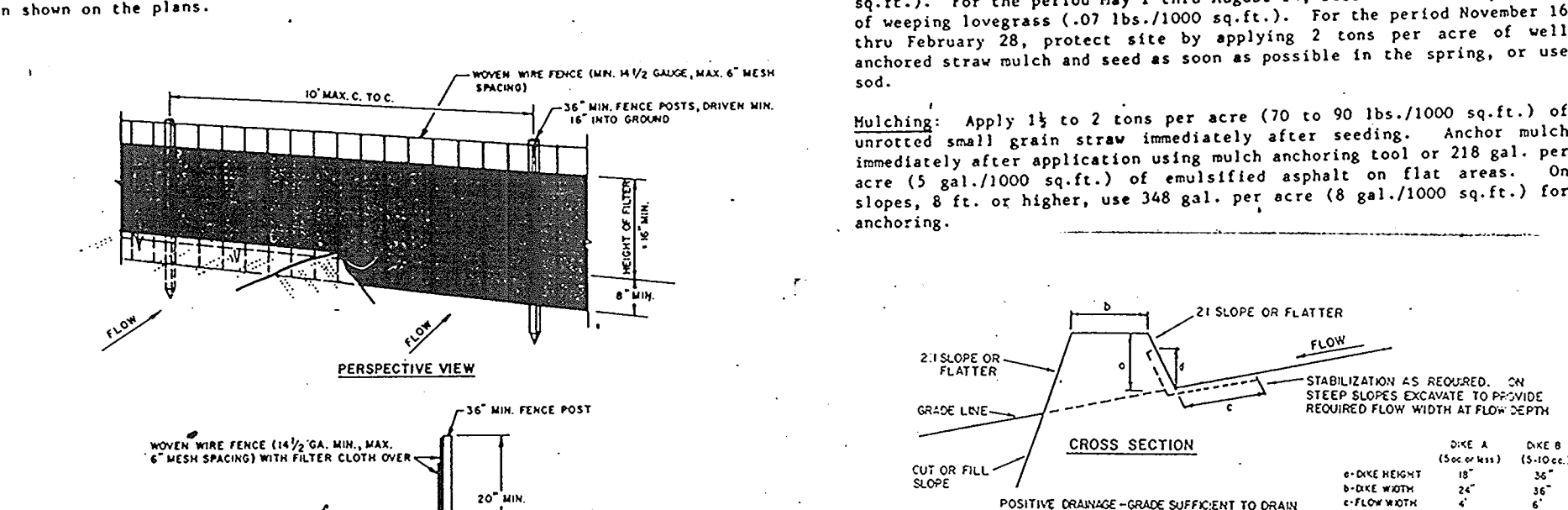
TYPICAL SECTION TRIADELPHIA MILL ROAD
NO SCALE
MINOR COLLECTOR
DESIGN SPEED 40 MPH



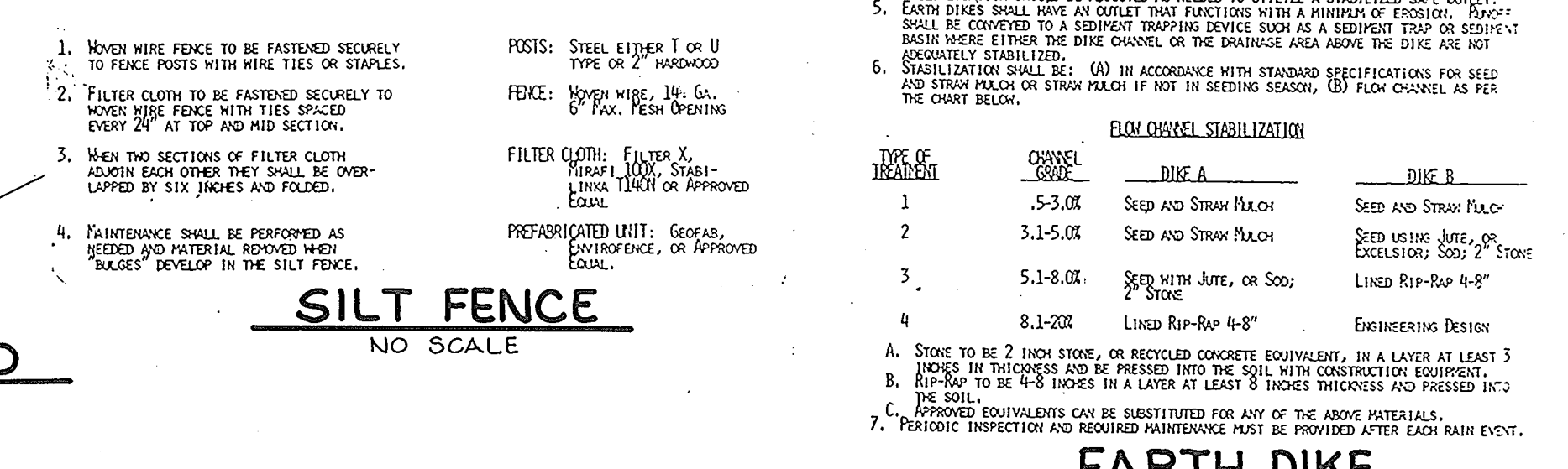
TYPICAL SECTION OF TRIADELPHIA MILL ROAD AT INTERSECTION WITH GILBRIDE LANE
NO SCALE



TYPICAL SECTION OF GILBRIDE LANE AT INTERSECTION WITH TRIADELPHIA MILL ROAD
NO SCALE



SILT FENCE
NO SCALE



SWALE INLET PROTECTION DETAIL
NO SCALE

5-10-89 DATE

WF-88-09, 0-88-47, P-88-74

DESIGNED BY: J.L.B.

DRAWN BY: C.S.B.

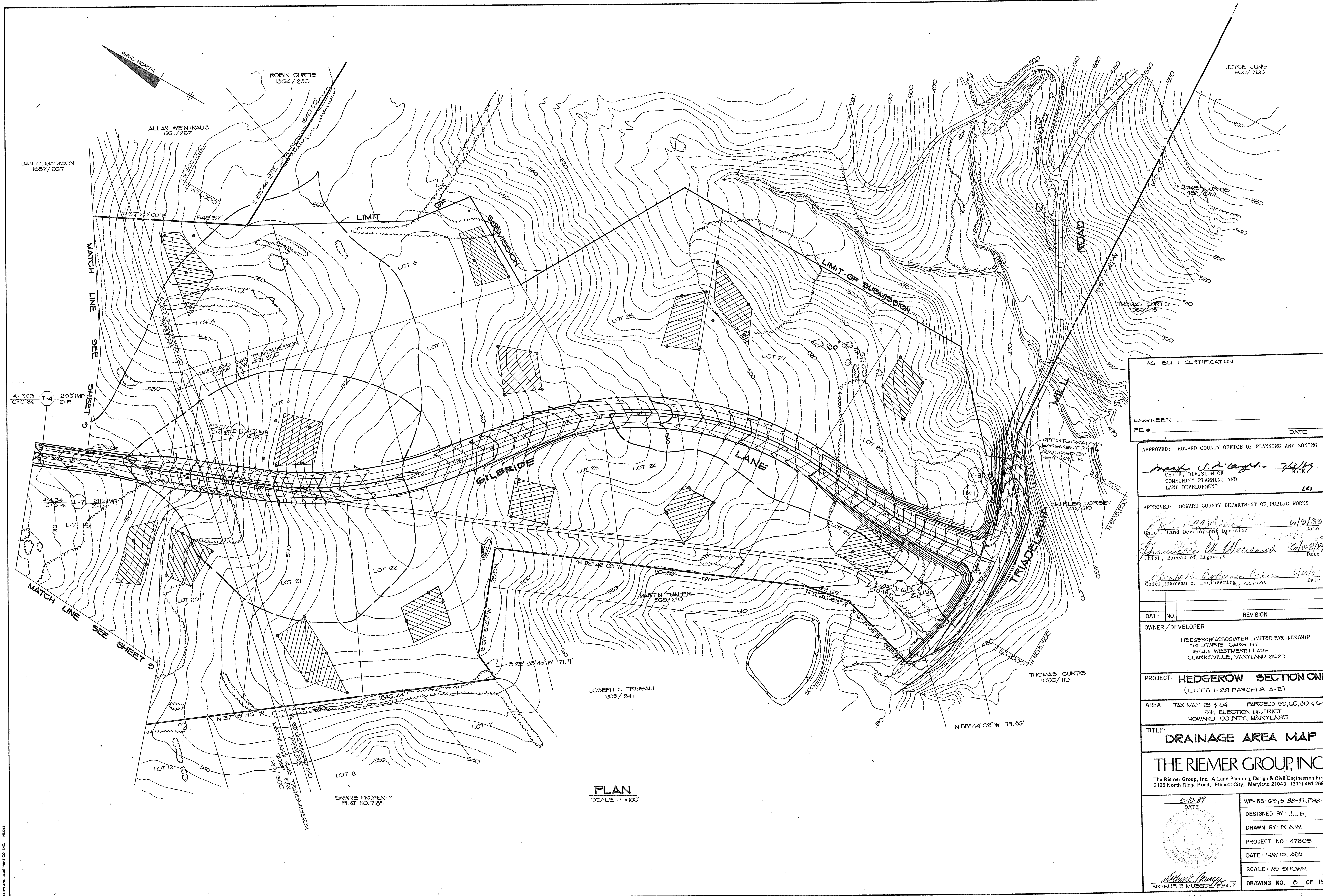
PROJECT NO: 47803

DATE: MAY 10, 1989

SCALE: AS SHOWN

DRAWING NO. 7 OF 15

Arthur E. Mueggel 5/10/89
ARTHUR E. MUEGCEL 48707



PLAN
SCALE: 1"=100'

AS BUILT CERTIFICATION	
ENGINEER _____	DATE _____
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
<i>Mark J. Gagliardi</i> 7/2/89	DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	LES
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>R. ...</i> 6/3/89	DATE
Chief, Land Development Division	
<i>Charles W. ...</i> 6/28/89	DATE
Chief, Bureau of Highways	
<i>Charles ...</i> 4/27/89	DATE
Chief, Bureau of Engineering, acting	
DATE NO. _____	REVISION _____
OWNER/DEVELOPER	
HEDGEROW ASSOCIATES LIMITED PARTNERSHIP C/O LOWRIE SARGENT 18243 WESTMEATH LANE CLARKSVILLE, MARYLAND 21029	
PROJECT: HEDGEROW SECTION ONE (LOTS 1-28 PARCELS A-B)	
AREA TAX MAP 28 & 34 PARCELS 50, 60, 30 & 64 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE: DRAINAGE AREA MAP	
THE RIEMER GROUP, INC. The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690	
<i>Arthur E. Mueggel</i> 5-10-89	DATE
WP-88-G3, S-88-47, P-88-74	DESIGNED BY: J.L.B.
	DRAWN BY: R.A.W.
	PROJECT NO: 47803
	DATE: MAY 10, 1989
	SCALE: AS SHOWN
	DRAWING NO. 8 OF 15

1453
MARYLAND BLUEPRINT CO., INC.



No.	Type	Location	Top Elev.	Inv. In.	Inv. Out	Remarks
1-1	Double S Inlet w/Ret. Grate	C/L Sta. 21+47.17 R.L. Gilbride Lane	509.00	501.12	501.08	No. Co. Std. Det. Sd. 4.23 & 4.28
1-2	"K" Inlet	C/L Sta. 20+88 21' R.L. Gilbride Lane	514.24	511.75	511.75	No. Co. Std. Det. Sd. 4.12
1-3	"K" Inlet	C/L Sta. 21+52 21' R.L. Gilbride Lane	519.91	517.46	517.46	No. Co. Std. Det. Sd. 4.12
1-4	4" x 4" Precast Manhole	C/L Sta. 20+73.16 21' R.L. Tridolphia Hill Road	508.51	503.50	503.50	No. Co. Std. Det. Sd. 4.12
1-5	"K" Inlet	C/L Sta. 20+73.16 21' R.L. Gilbride Lane	508.51	504.55	504.55	No. Co. Std. Det. Sd. 4.12
1-6	"K" Inlet	C/L Sta. 0+37 42' L.L. Gilbride Lane	486.44	483.50	483.50	No. Co. Std. Det. Sd. 4.12
1-7	"K" Inlet	C/L Sta. 20+73.16 21' R.L. Gilbride Lane	508.51	504.55	504.55	No. Co. Std. Det. Sd. 4.12
E-1	48" Metal End Section	C/L Sta. 21+46 48' L.L. Gilbride Lane	---	---	---	No. Co. Std. Det. Sd. 5.61
E-2	Headwall Type "M"	C/L Sta. 44+32 33' L.L. Tridolphia Hill Road	---	---	---	No. Co. Std. Det. Sd. 5.61
E-3	48" Metal End Section	C/L Sta. 21+51 44' R.L. Gilbride Lane	---	---	---	No. Co. Std. Det. Sd. 5.61
E-4	18" Metal End Section	N 506,925 E 809,250	---	---	502.54	No. Co. Std. Det. Sd. 5.61
E-5	18" Metal End Section	N 509,967 E 809,300	---	---	470.00	No. Co. Std. Det. Sd. 5.61
S-1	24" 300# Riser 16 Ga.	N 506,145 E 809,301	---	---	513.5	See Detail Sheet 13
S-2	30" 300# Riser 16 Ga.	N 506,904 E 809,476	---	---	483.6	See Detail Sheet 13

STRUCTURE SCHEDULE

AS BUILT CERTIFICATION

ENGINEER _____

FE # _____ DATE _____

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Frank J. Taylor 7/3/11
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William W. Walters 6/28/10
 Chief, Land Development Division

Barbara B. Pakenham 6/28/10
 Chief, Bureau of Highways

Shepherd Henderson 6/28/10
 Chief, Bureau of Engineering & Surveying

DATE NO. _____ REVISION _____

OWNER/DEVELOPER

HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 c/o LOWRIE SARGENT
 1924 B WESTMEATH LANE
 CLARKSVILLE, MARYLAND 21027

PROJECT: HEDGEROW SECTION ONE
 (LOTS 1-28 PARCELS A-E)

AREA TAX MAP 28-34 PARCELS 59, 60, 301-64
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE

DRAINAGE AREA MAP

THE RIEMER GROUP, INC.

The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellittott City, Maryland 21043 (301) 461-2690

5-10-89 DATE

W.P. 88-09, 5-88-47, P-88-74

DESIGNED BY: J.L.B.

DRAWN BY: S.L.S.

PROJECT NO: 47803

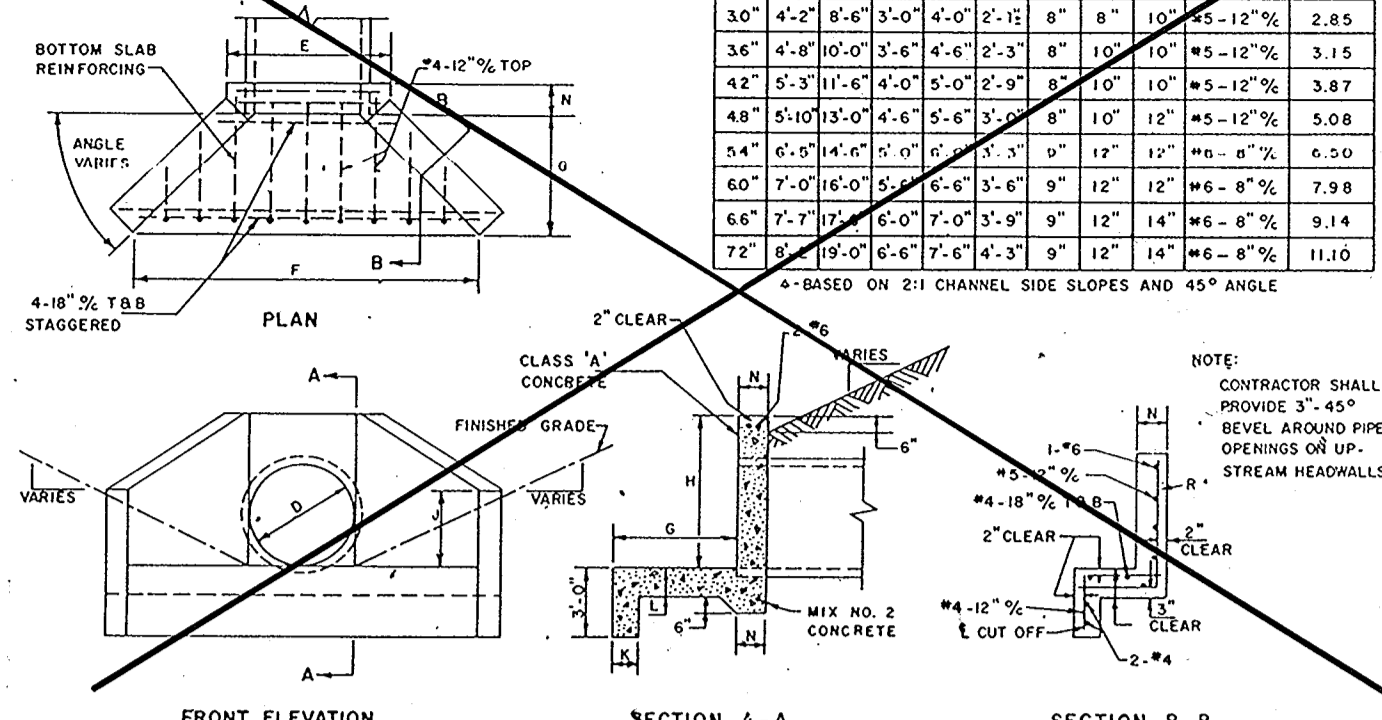
DATE: MAY 10, 1989

SCALE: AS SHOWN

DRAWING NO. 2 OF 15

1453

D	E	F	G	H	J	K	L	N	R	SOL. CY.
18"	3'-0"	7'-6"	5'-0"	4'-0"	2'-0"	0"	8"	8"	WS-12"	1.70
24"	3'-0"	7'-6"	5'-0"	4'-0"	2'-0"	0"	8"	8"	WS-12"	1.80
27"	3'-11"	8'-5"	5'-6"	5'-0"	2'-0"	0"	8"	8"	WS-12"	1.90
30"	4'-2"	8'-8"	5'-7"	5'-0"	2'-0"	0"	8"	8"	WS-12"	2.00
36"	4'-8"	9'-4"	5'-7"	5'-0"	2'-0"	0"	8"	8"	WS-12"	2.85
42"	4'-10"	9'-7"	5'-8"	5'-0"	2'-0"	0"	10"	10"	WS-12"	3.15
48"	5'-3"	10'-1"	5'-8"	5'-0"	2'-0"	0"	10"	10"	WS-12"	3.87
54"	5'-10"	10'-7"	5'-8"	5'-0"	2'-0"	0"	12"	12"	WS-12"	5.08
60"	6'-2"	11'-0"	5'-8"	5'-0"	2'-0"	0"	12"	12"	WS-8"	7.98
66"	7'-0"	11'-6"	5'-8"	5'-0"	2'-0"	0"	12"	14"	WS-8"	9.14
72"	8'-0"	12'-0"	5'-8"	5'-0"	2'-0"	0"	12"	14"	WS-8"	11.10



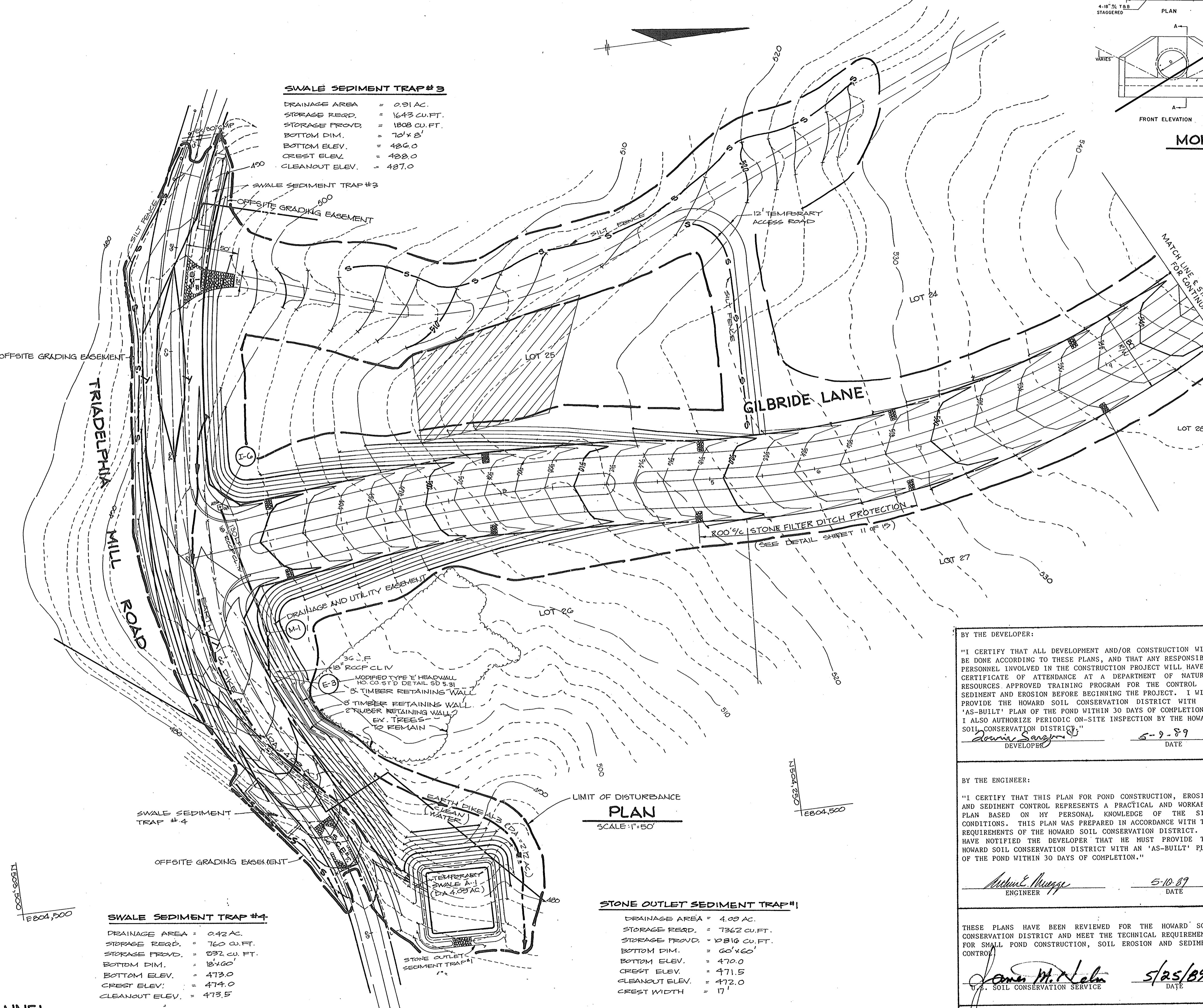
MODIFIED TYPE A' HEADWALL (E-3)
NO SCALE

AS BUILT CERTIFICATION

ENGINEER _____
PE # _____
DATE _____

SWALE SEDIMENT TRAP #3

DRAINAGE AREA = 0.91 AC.
STORAGE REQD. = 1643 CU.FT.
STORAGE PROVIDED = 1808 CU.FT.
BOTTOM DIM. = 70' x 8'
BOTTOM ELEV. = 486.0
CREST ELEV. = 488.0
CLEANOUT ELEV. = 487.0



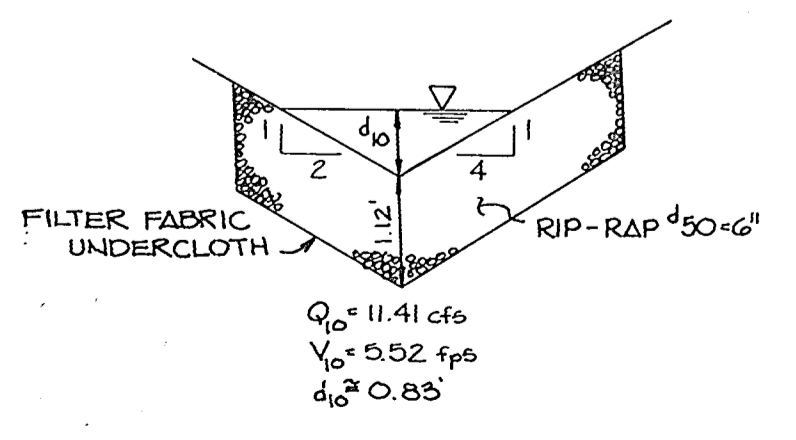
PLAN
SCALE: 1"=50'

SWALE SEDIMENT TRAP #4

DRAINAGE AREA = 0.42 AC.
STORAGE REQD. = 760 CU.FT.
STORAGE PROVIDED = 932 CU.FT.
BOTTOM DIM. = 15' x 60'
BOTTOM ELEV. = 473.0
CREST ELEV. = 474.0
CLEANOUT ELEV. = 473.5

STONE OUTLET SEDIMENT TRAP #1

DRAINAGE AREA = 4.09 AC.
STORAGE REQD. = 7362 CU.FT.
STORAGE PROVIDED = 10816 CU.FT.
BOTTOM DIM. = 60' x 60'
BOTTOM ELEV. = 470.0
CREST ELEV. = 471.5
CLEANOUT ELEV. = 472.0
CREST WIDTH = 17'



SECTION A-A OF RIP RAP CHANNEL
NO SCALE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Manisha C. DeLong 7/3/85
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Paul J. Brown 6/2/89
Chief, Land Development Division
DATE

William W. Woodard 6/2/89
Chief, Bureau of Highways
DATE

Stephane Anderson-Cole 6/2/89
Chief, Bureau of Engineering, Planning
DATE

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Kevin S. Sargent 5-9-89
DEVELOPER DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

William E. Muegge 5-10-89
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

James M. Lahn 5/25/89
U.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert Ziehm 5/25/89
HOWARD S.D. DATE

OWNER/DEVELOPER

HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
c/o LOWRIE SARGENT
13243 WESTMEATH LANE
CLARKSVILLE, MARYLAND 21029

PROJECT: **HEDGEROW (SECTION ONE)**
(LOTS 1-28 PARCELS A-B)

AREA: TAX MAP 28 & 34 PARCELS 56, 60, 80 & 64
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: **GRADING AND SEDIMENT CONTROL PLAN**

THE RIEMER GROUP, INC.

The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

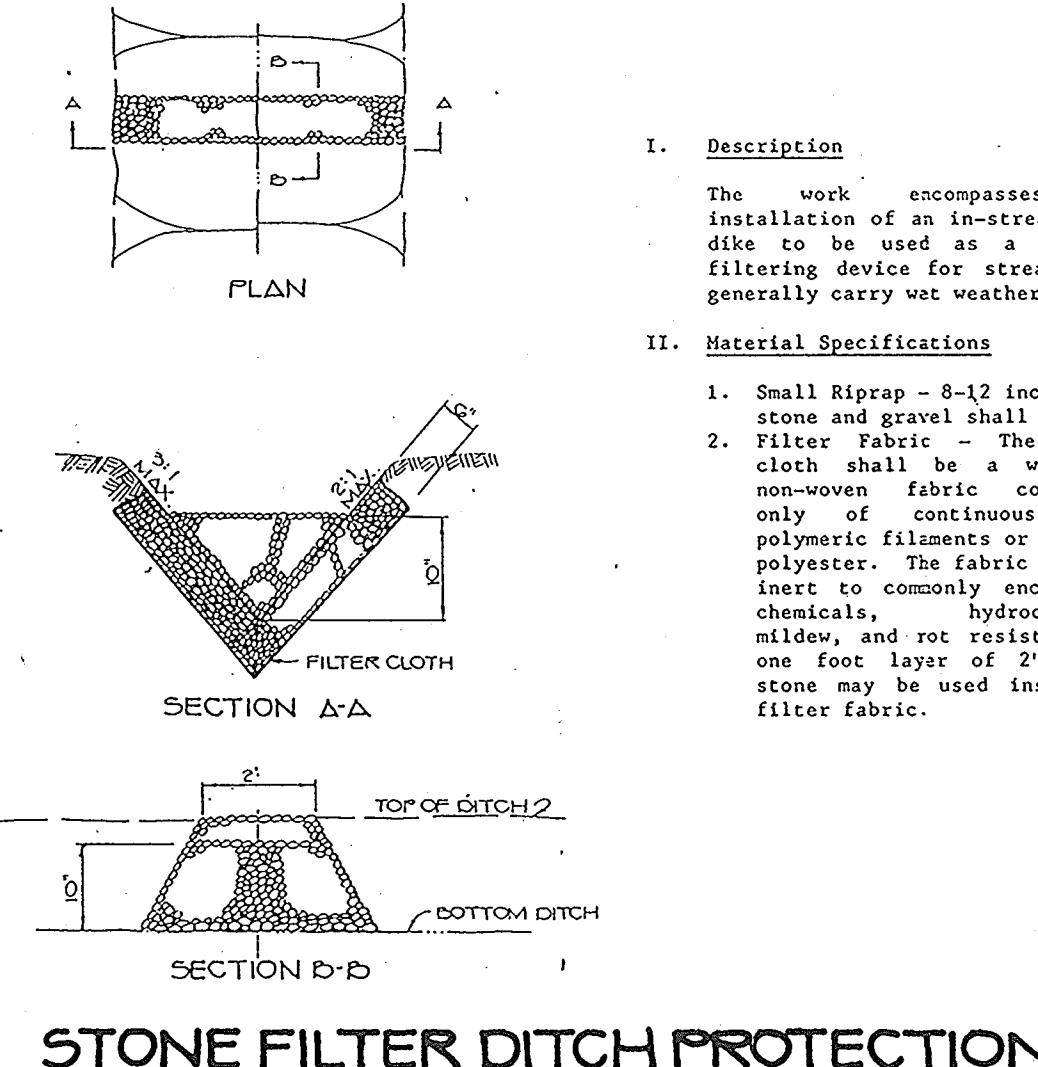
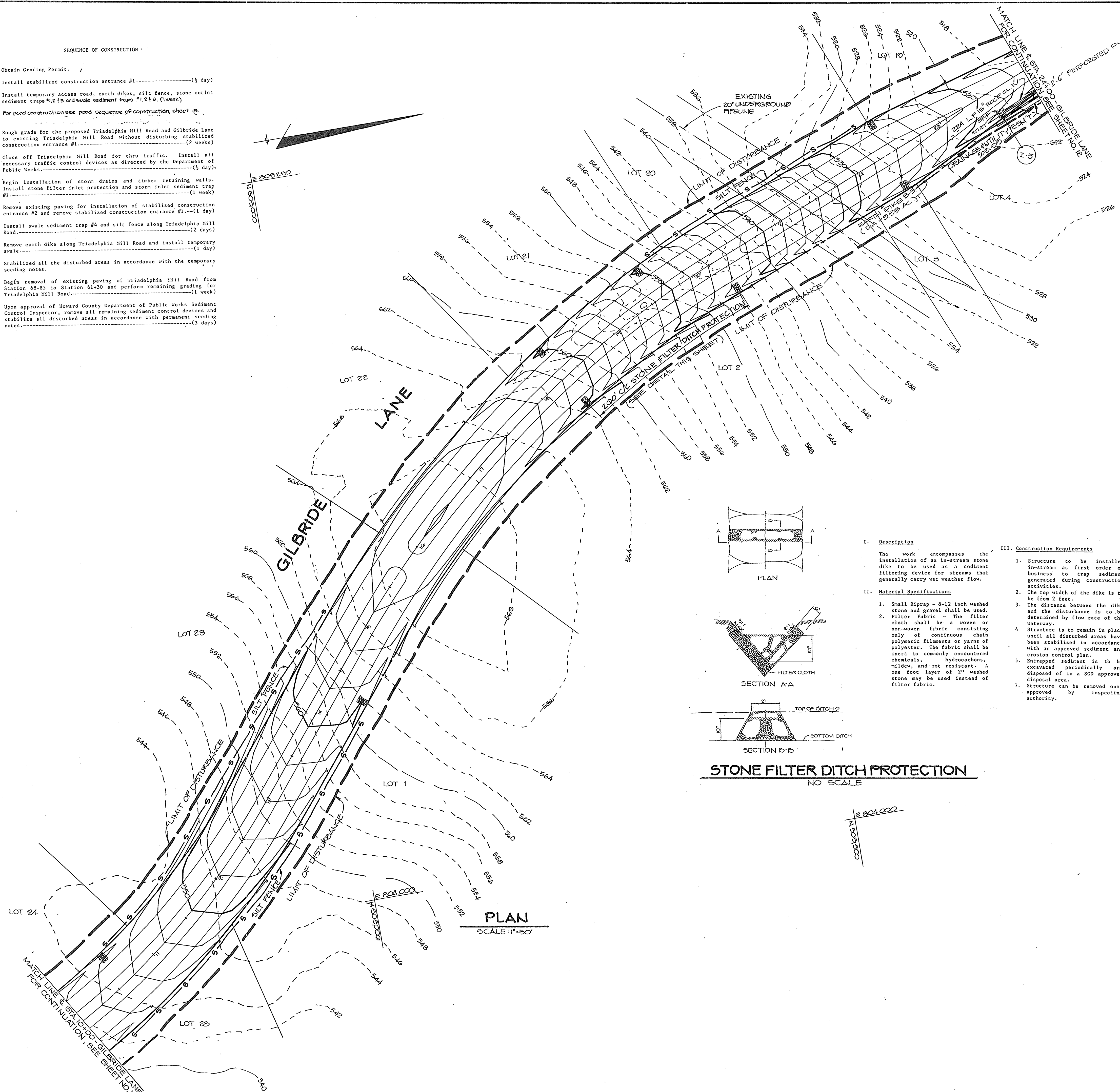
DATE: 5-10-89
DESIGNED BY: J.L.E.
DRAWN BY: C.S.E.
PROJECT NO: 47803
DATE: MAY 10, 1989
SCALE: AS SHOWN
DRAWING NO. 10 OF 15

MD 378 STANDARDS & SPECIFICATIONS FOR CONSTRUCTION

- I. SITE PREPARATION**
- Area under the borrow areas, embankment, and structural works shall be cleared, grubbed and the topsoil stripped to reveal all trees, vegetation, roots or other objectionable material. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.
- Areas covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground.
- All cleared and grubbed material shall be disposed of outside the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.
- II. EARTH FILL**
- Material:**
The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, iron or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.
- Placement:**
Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in such maximum thickness (before compaction) layers which are to be continuous over the entire length of the embankment. The maximum layer material shall be placed in the downstream portions of 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 track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.
- Cutoff Trench:**
Where specified, a cutoff trench shall be excavated along or parallel to the centerline 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 feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability. The material to be used in trench shall be sand, silt, clay, or loam only.
- III. 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 four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. As no line during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.
- IV. CORRUGATED METAL PIPE**
- Material:**
(Steel Pipe)-This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of ASTM Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.
- Connections:**
All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands shall be used at all joints. Antiseep collars shall be connected to the pipe in such a manner as to be completely watertight.
- Bedding:**
The pipe shall be evenly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
- V. CONCRETE**
- Material:**
1. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.
 2. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.
 3. Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.
 4. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.
 5. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.
- Proportioning:**
The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 3-1/2 to 5 U.S. gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:1:1-1/2. The proportion of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.
- Mixing:**
The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and the amount of the material, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operation. Excessive overwatering requires the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.
- Forms:**
The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.
- The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed.
- Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.
- Reinforcing Steel:**
All reinforcing material shall be free of dirt, rust, scale, oil, paint or other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.
- Consolidation:**
Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.
- Finishing:**
Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reared and completely filled with dry-packing mortar.
- Protection and Curing:**
Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.
- Placement Temperature:**
Concrete may not be placed at temperatures below 32° F with the temperature falling, or 36° with the temperature rising.
- VI. STABILIZATION**
All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications shown on or accompanying the drawings.

SEQUENCE OF CONSTRUCTION

1. Obtain Grading Permit. (3 day)
2. Install stabilized construction entrance #1. (1 week)
3. Install temporary access road, earth dikes, silt fence, stone outlet sediment traps #1, #2 and #3. (1 week)
4. For pond construction see pond sequence of construction, sheet #2.
5. Rough grade for the proposed Triadelphia Mill Road and Gilbride Lane to existing Triadelphia Mill Road without disturbing stabilized construction entrance #1. (2 weeks)
6. Close off Triadelphia Mill Road for thru traffic. Install all necessary traffic control devices as directed by the Department of Public Works. (2 days)
7. Begin installation of storm drains and timber retaining walls. Install stone filter inlet protection and storm inlet sediment trap #1. (1 week)
8. Remove existing paving for installation of stabilized construction entrance #2 and remove stabilized construction entrance #1. (1 day)
9. Install swale sediment trap #4 and silt fence along Triadelphia Mill Road. (2 days)
10. Remove earth dike along Triadelphia Mill Road and install temporary swale. (1 day)
11. Stabilized all the disturbed areas in accordance with the temporary seeding notes.
12. Begin removal of existing paving of Triadelphia Mill Road from Station 68+85 to Station 61+30 and perform remaining grading for Triadelphia Mill Road. (1 week)
13. Upon approval of Howard County Department of Public Works Sediment Control Inspector, remove all remaining sediment control devices and stabilize all disturbed areas in accordance with permanent seeding notes. (3 days)



AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Developer: _____ DATE: 5-9-89

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR PONDS CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Engineer: Arthur E. Muegge DATE: 5-10-89

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL PONDS CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Approved: James M. Smith DATE: 5/25/89
SOIL CONSERVATION SERVICE

THESE PLANS FOR SMALL PONDS CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: Robert J. Zich DATE: 5/25/89
HOWARD COUNTY

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Approved: _____ DATE: 5/25/89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Approved: _____ DATE: 6/25/89
Chief, Land Development Division

Approved: _____ DATE: 6/25/89
Chief, Bureau of Highways

Approved: _____ DATE: 6/25/89
Chief, Bureau of Engineering

DATE	NO.	REVISION

OWNER/DEVELOPER
HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
C/O LOWRIE SERGENT
13243 WESTMEATH LANE
CLARKSVILLE, MARYLAND 21029

PROJECT: HEDGEROW (SECTION ONE)
(LOTS 1-28 & PARCELS A-B)

AREA TAX MAP 28 & 34 PARCELS 59, 60, 30 & 64
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: GRADING AND SEDIMENT CONTROL PLAN

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2890

DATE: 5/10/89
DESIGNED BY: J.L.B.
DRAWN BY: D.B.S.
PROJECT NO: 47803
DATE: MAY 10, 1989
SCALE: AS SHOWN
DRAWING NO. 11 OF 15

WP-88-03, S-88-47, P-88-74

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
SOIL CONSERVATION DISTRICT

1453
MARYLAND BLUEPRINT CO., INC.

AS BUILT CERTIFICATION

ENGINEER _____
PE # _____ DATE _____

BY THE DEVELOPER:
"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
James M. Keltin 5-9-89
DEVELOPER DATE

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
Arthur E. Muegge 5/10/89
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
James M. Keltin 5/25/89
S.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Robert W. Ziehm 5/25/89
HOWARD S.O.D. DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Wanda S. P. ... 7/3/89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William W. ... 6/28/89
Chief, Bureau of Highways DATE
Michael Anderson 6/28/89
Chief, Bureau of Engineering, acting DATE

DATE NO REVISION

OWNER/DEVELOPER
HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
% LOWRIE SARGENT
19243 WESTMEATH LANE
CLARKSVILLE, MARYLAND 21029

PROJECT: HEDGEROW SECTION ONE
(LOTS 1-28 & PARCELS A-B)
AREA: TAX MAPS 28 & 84 PARCELS 56,60,80 & 64
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: GRADING AND SEDIMENT CONTROL PLAN

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

5-10-89 DATE
WP-28-60, 5-28-47, P-28-74

DESIGNED BY: J.L.B.
DRAWN BY: D.B.S.

PROJECT NO: 47803
DATE: MAY 10, 1989

SCALE: AS SHOWN
DRAWING NO. 12 OF 15

Arthur E. Muegge
ARTHUR E. MUEGGE, P.E.

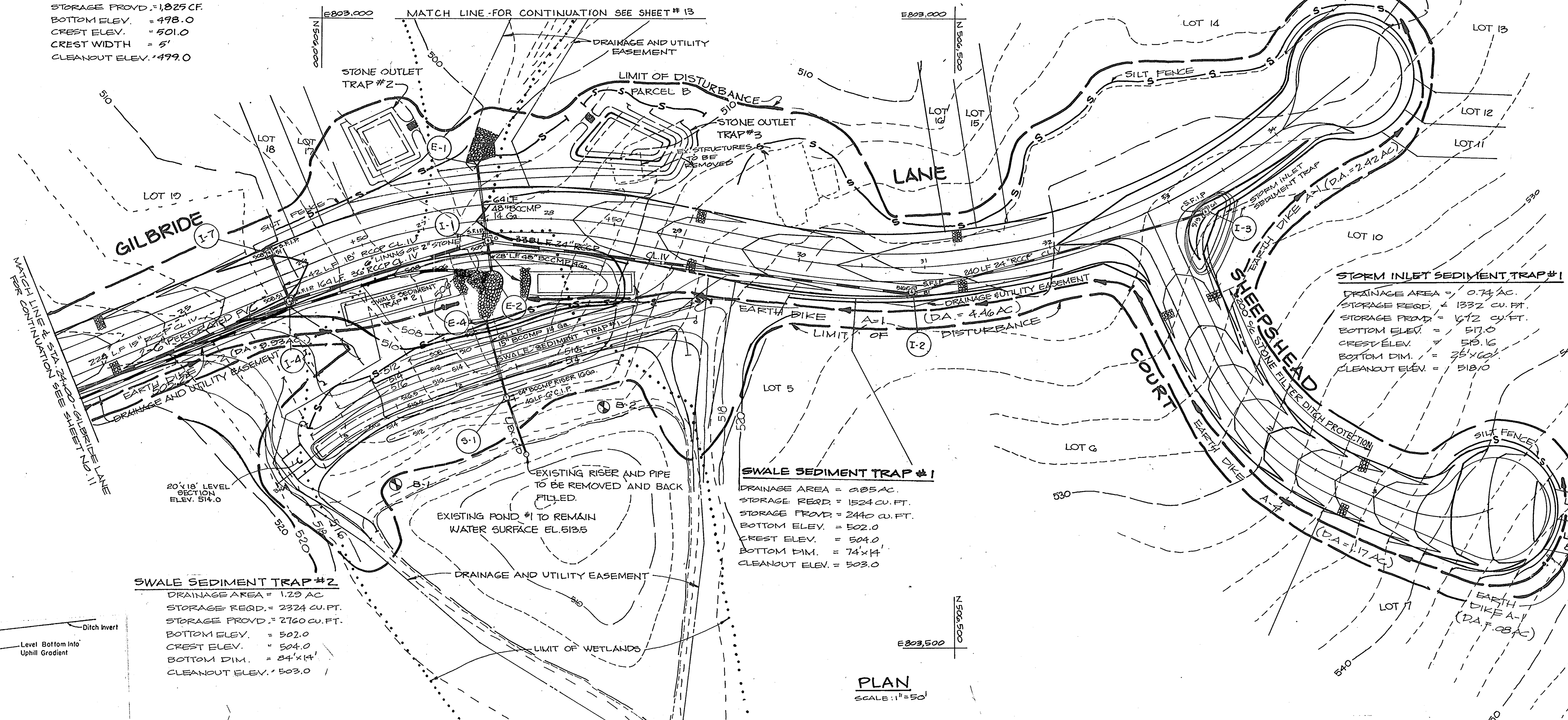
STONE OUTLET SEDIMENT TRAP #3

DRAINAGE AREA = 0.75 AC.
STORAGE REQD. = 1,350 CF
STORAGE PROVIDED = 2,500 CF
BOTTOM ELEV. = 498
CREST ELEV. = 501
CREST WIDTH = 5'
CLEANOUT ELEV. = 499.0

STONE OUTLET SEDIMENT TRAP #2

DRAINAGE AREA = 0.42 AC.
STORAGE REQD. = 756 CF
STORAGE PROVIDED = 1,825 CF
BOTTOM ELEV. = 498.0
CREST ELEV. = 501.0
CREST WIDTH = 5'
CLEANOUT ELEV. = 499.0

GRADING FOR SEDIMENT TRAPS TO BE TEMPORARY.

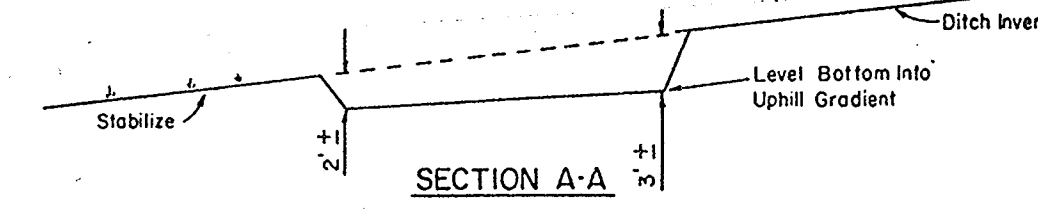


SWALE SEDIMENT TRAP #1

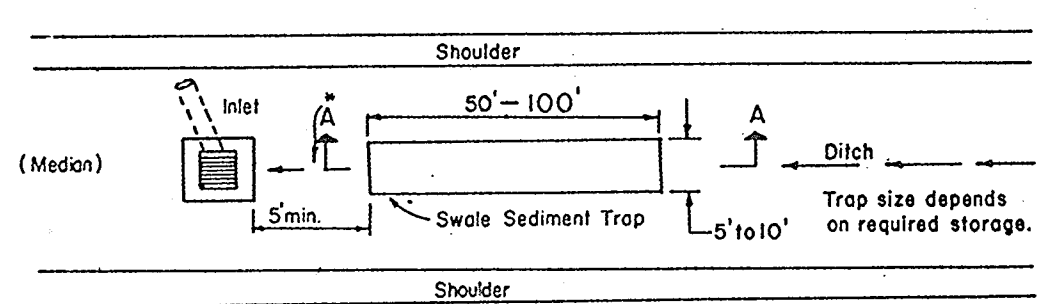
DRAINAGE AREA = 0.85 AC.
STORAGE REQD. = 1524 CU. FT.
STORAGE PROVIDED = 2440 CU. FT.
BOTTOM ELEV. = 502.0
CREST ELEV. = 504.0
BOTTOM DIM. = 74'x14'
CLEANOUT ELEV. = 503.0

SWALE SEDIMENT TRAP #2

DRAINAGE AREA = 1.23 AC.
STORAGE REQD. = 2324 CU. FT.
STORAGE PROVIDED = 2760 CU. FT.
BOTTOM ELEV. = 502.0
CREST ELEV. = 504.0
BOTTOM DIM. = 84'x14'
CLEANOUT ELEV. = 503.0

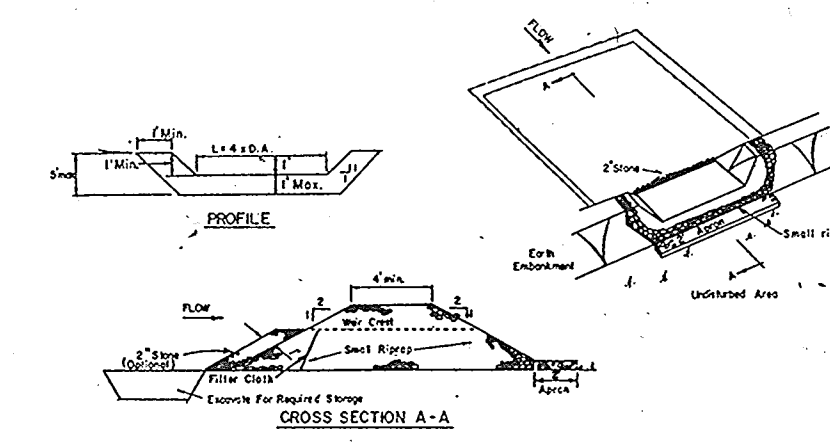


SWALE SEDIMENT TRAP



CONSTRUCTION SPECIFICATION FOR ST-IV

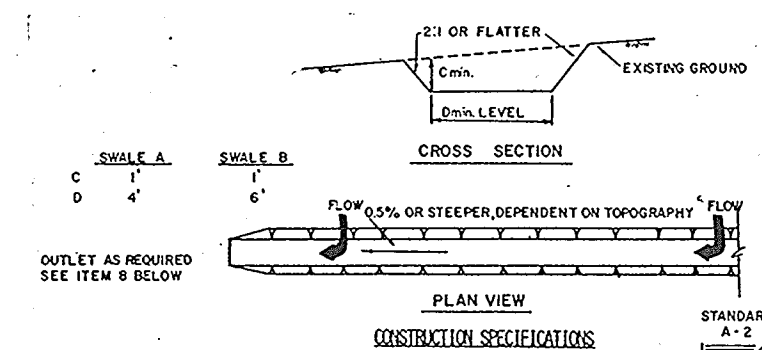
- 1. The swale sediment trap shall be constructed in accordance with the dimensions provided on the design drawings or sized to provide the minimum storage necessary 1800 cubic feet of storage for each acre of drainage area.
- 2. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- 3. The structure shall be inspected after each rain and repairs made as needed.
- 4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
- 5. The sediment trap shall be removed and area stabilized when the contributory drainage area has been properly stabilized.
- 6. The swale sediment trap will be properly backfilled and the swale or ditch reconstructed.



- 1. Area under sediment shall be cleared, grubbed and removed of any vegetation and root mat. The soil area shall be cleared.
- 2. The fill needed for the sediment trap shall be free of stones and other woody vegetation as well as oversized debris, sticks, organic material or other objectionable material. The sediment trap shall be supported with equipment while it is being constructed.
- 3. All cut and fill slopes shall be 2:1 or flatter.
- 4. The stone used in the outlet shall be small riprap 4"-6" along with a 1" thickness of 2" aggregate placed on the up-grade side on the small riprap 22 sediment filter cloth in the outlet.
- 5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
- 6. The structure shall be inspected after each rain and repairs made as needed.
- 7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
- 8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

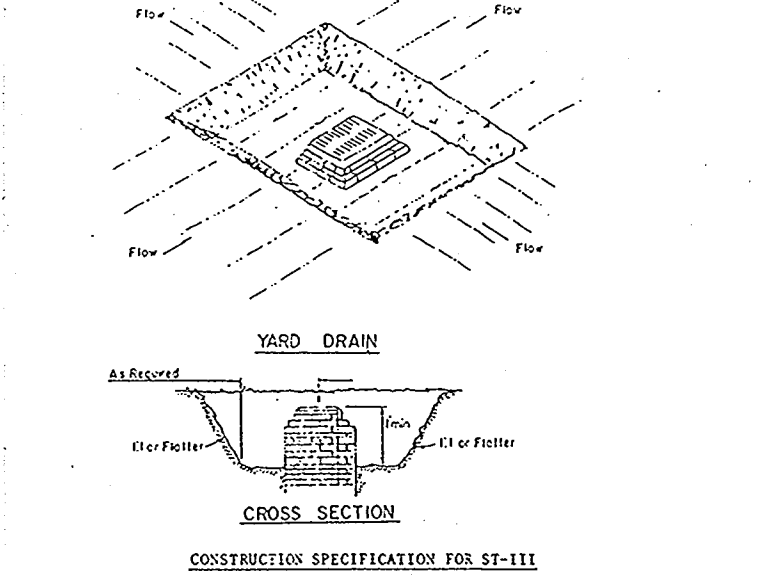
Maximum Drainage Area: 5 Acres
STONE OUTLET SEDIMENT TRAP
NO SCALE

PLAN
SCALE: 1" = 50'



- 1. All temporary shales shall have undisturbed positive grade to an outlet.
 - 2. Diverted runoff from a disturbed area shall be conveyed to a sediment trapping device.
 - 3. Diverted runoff from an undisturbed area shall outlet directly into an undisturbed stabilized area of non-erosive material.
 - 4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
 - 5. The swale shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein and be free of bank protrusions or other irregularities which will impede normal flow.
 - 6. Fills shall be compacted by earth moving equipment.
 - 7. All earth removed and not needed in construction shall be placed so that it will not interfere with the functioning of the swale.
 - 8. Stabilization shall be as per the chart below:
- | TYPE OF TRAFFIC | COVER | A (5 AC OR LESS) | B (5 AC - 10 AC) |
|-----------------|------------|-------------------------------|-----------------------------|
| 1 | 0.5-1.0 CI | SEED AND STRAW PLACED | SEED AND STRAW PLACED |
| 2 | 3.1-5.0 CI | SEED AND STRAW PLACED | SEED USING JUTE OR EXCELOR |
| 3 | 5.1-8.0 CI | SEED WITH JUTE OR EXCELOR/STP | LINED RIP-RAP 4-8" |
| 4 | 8.1-20 CI | LINED RIP-RAP 4-8" | RECYCLED CONCRETE EQUIPMENT |
- 9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

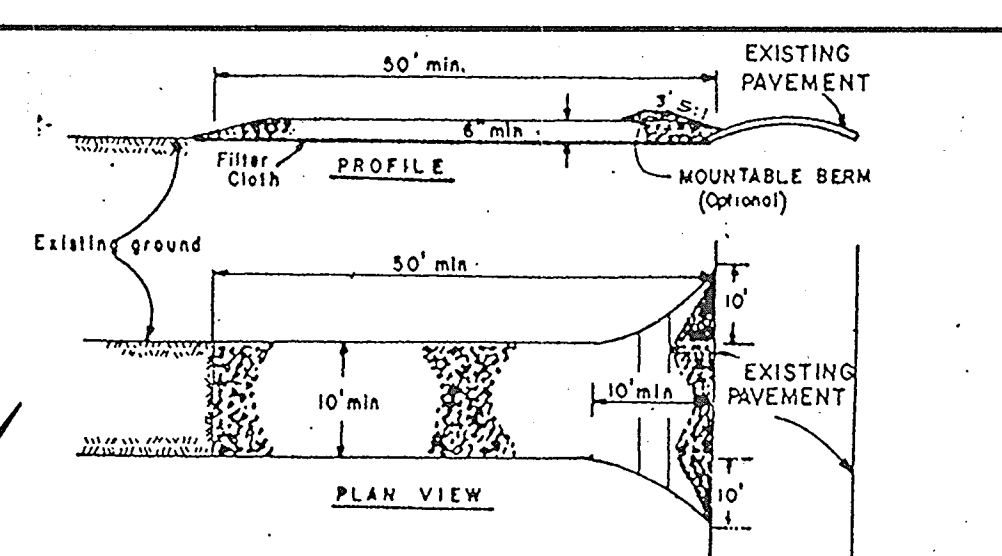
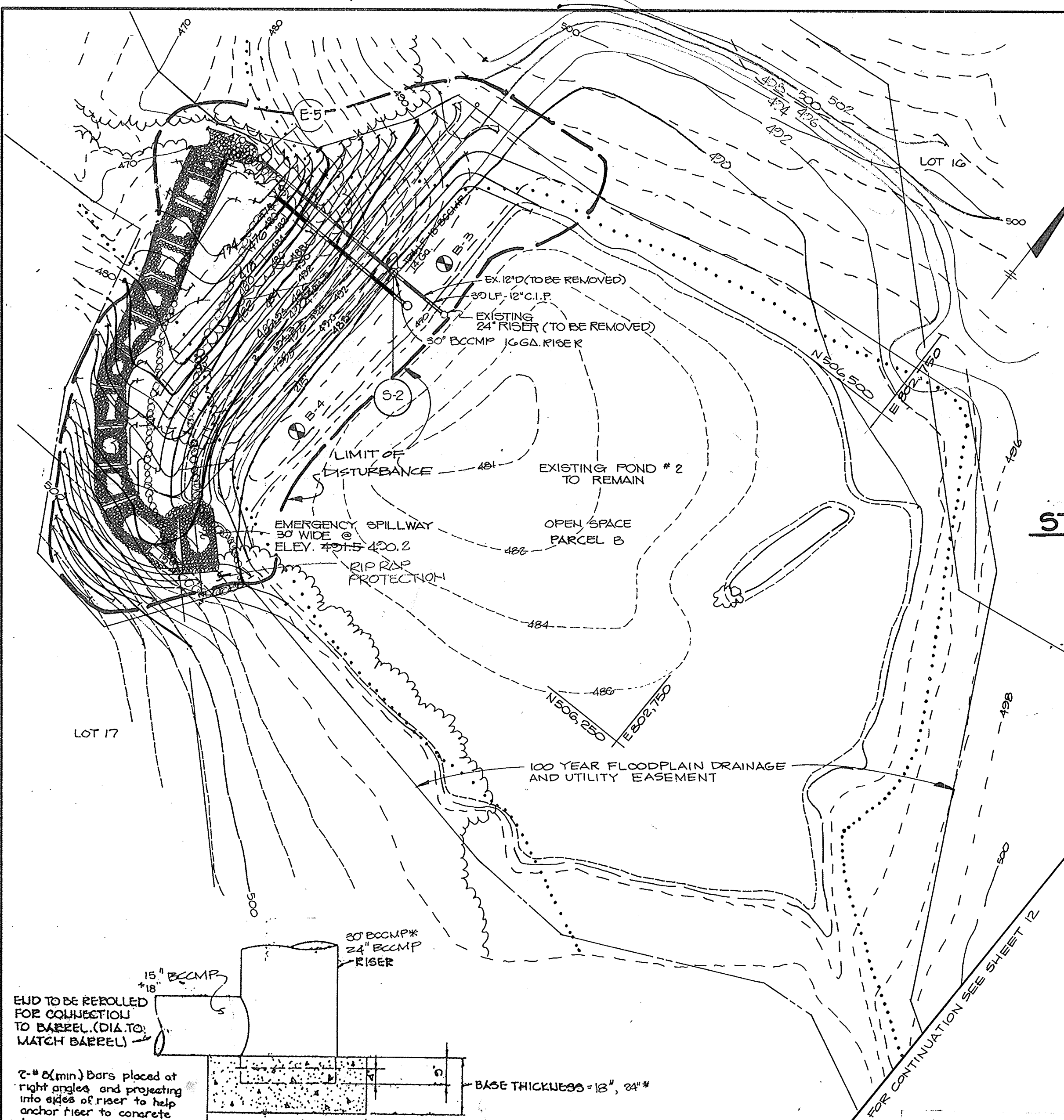
TEMPORARY SWALE
NO SCALE



- 1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
 - 2. The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
 - 3. The structure shall be inspected after each rain and repairs made as needed.
 - 4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
 - 5. The sediment trap shall be removed and area stabilized when the contributory drainage area has been properly stabilized.
 - 6. All cut slopes shall be 2:1 or flatter.
- Maximum Drainage Area: 3 Acres

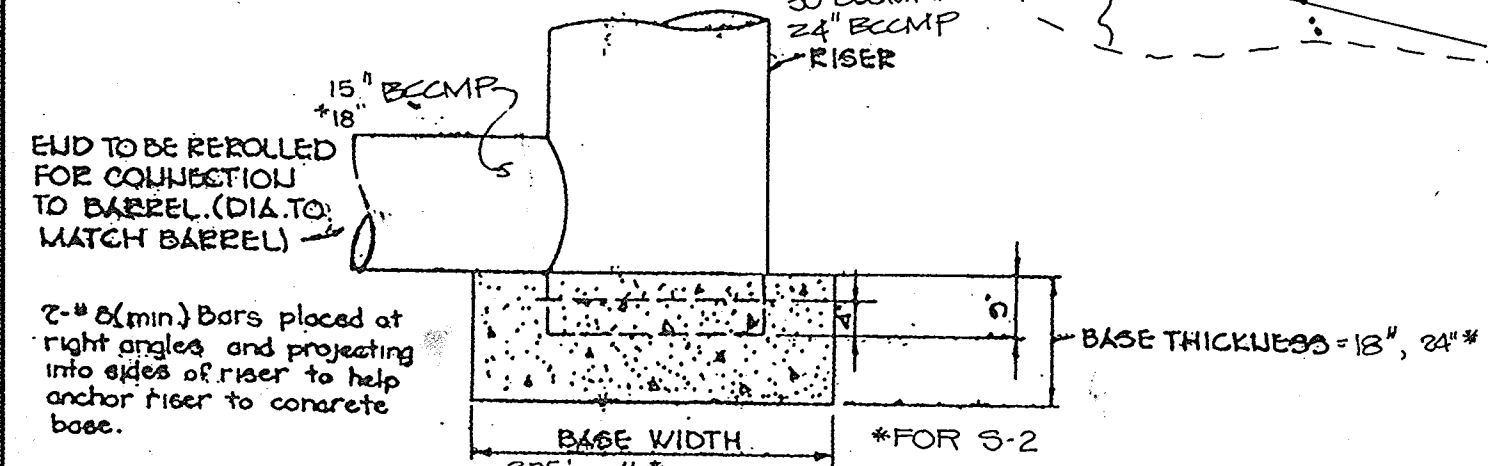
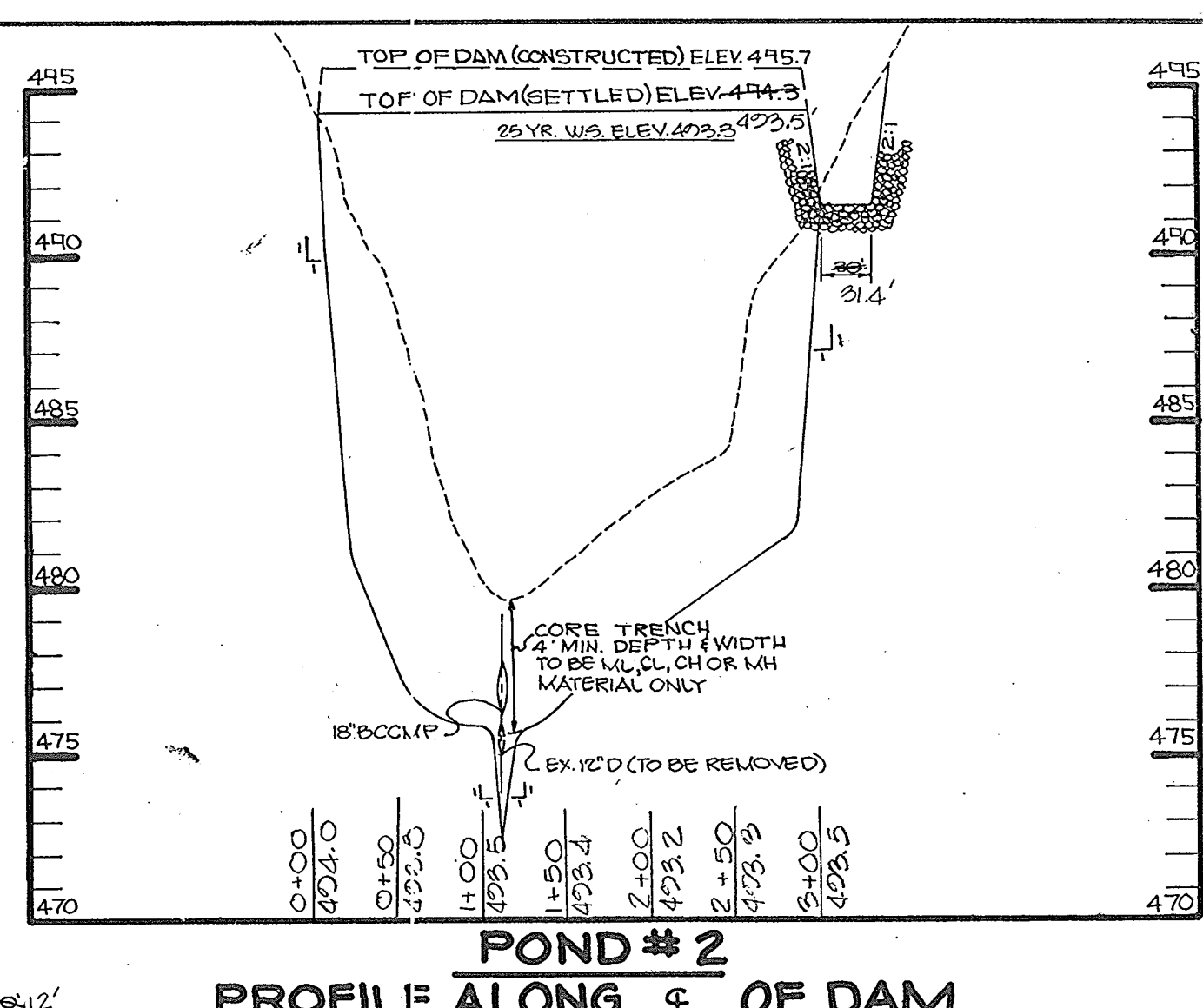
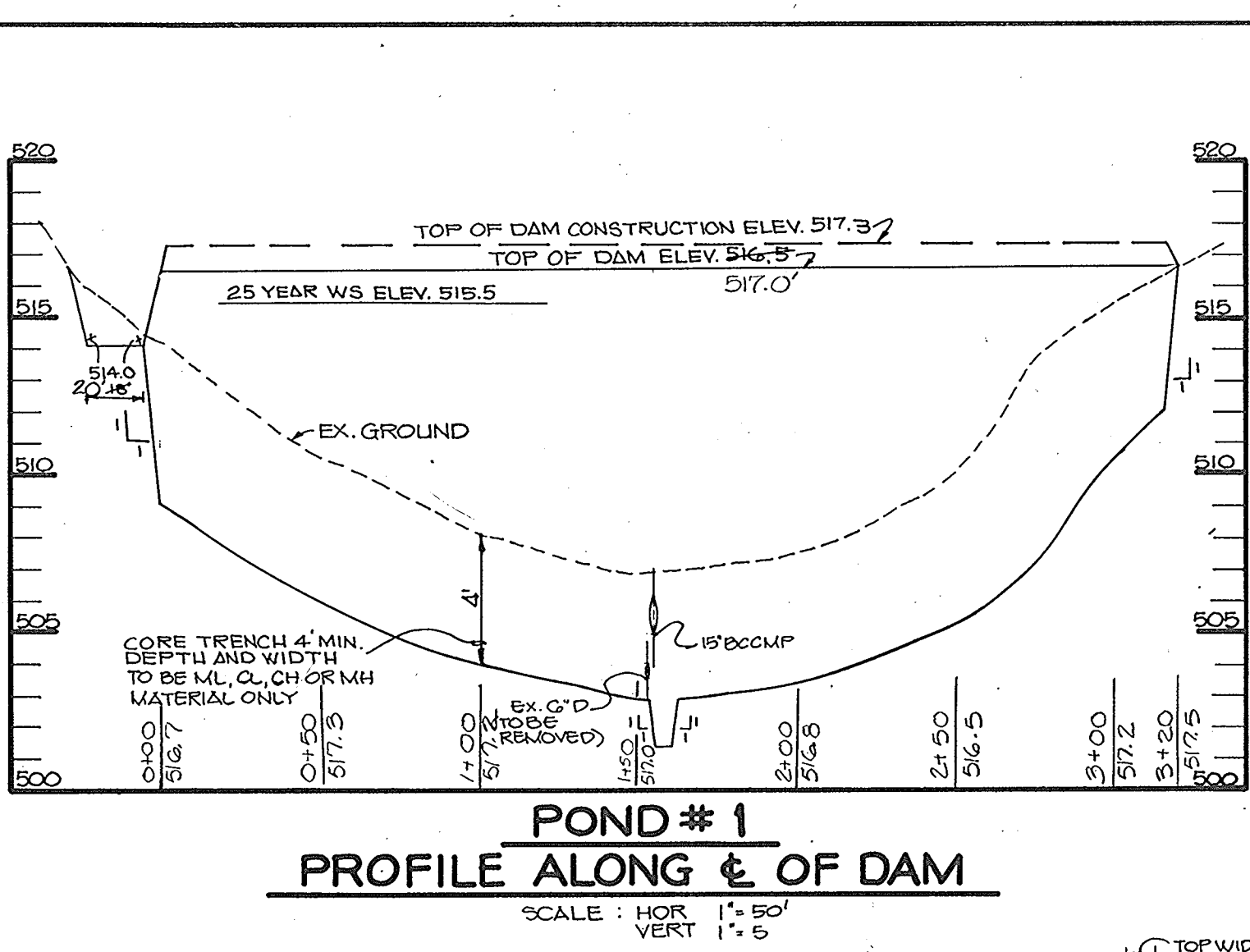
STORM INLET SEDIMENT TRAP
NO SCALE

1453
MARYLAND BLUEPRINT CO., INC.



- CONSTRUCTION SPECIFICATION**
- Stone Size - Use 2" stones, or reclaimed or recycled concrete equivalent.
 - Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
 - Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 - Surface Water - All surface water flowing or diverted toward construction entrance shall be piped across the entrance. If piping is impractical, a mountable berm with 5% slopes will be permitted.
 - Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 - Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM
NO SCALE



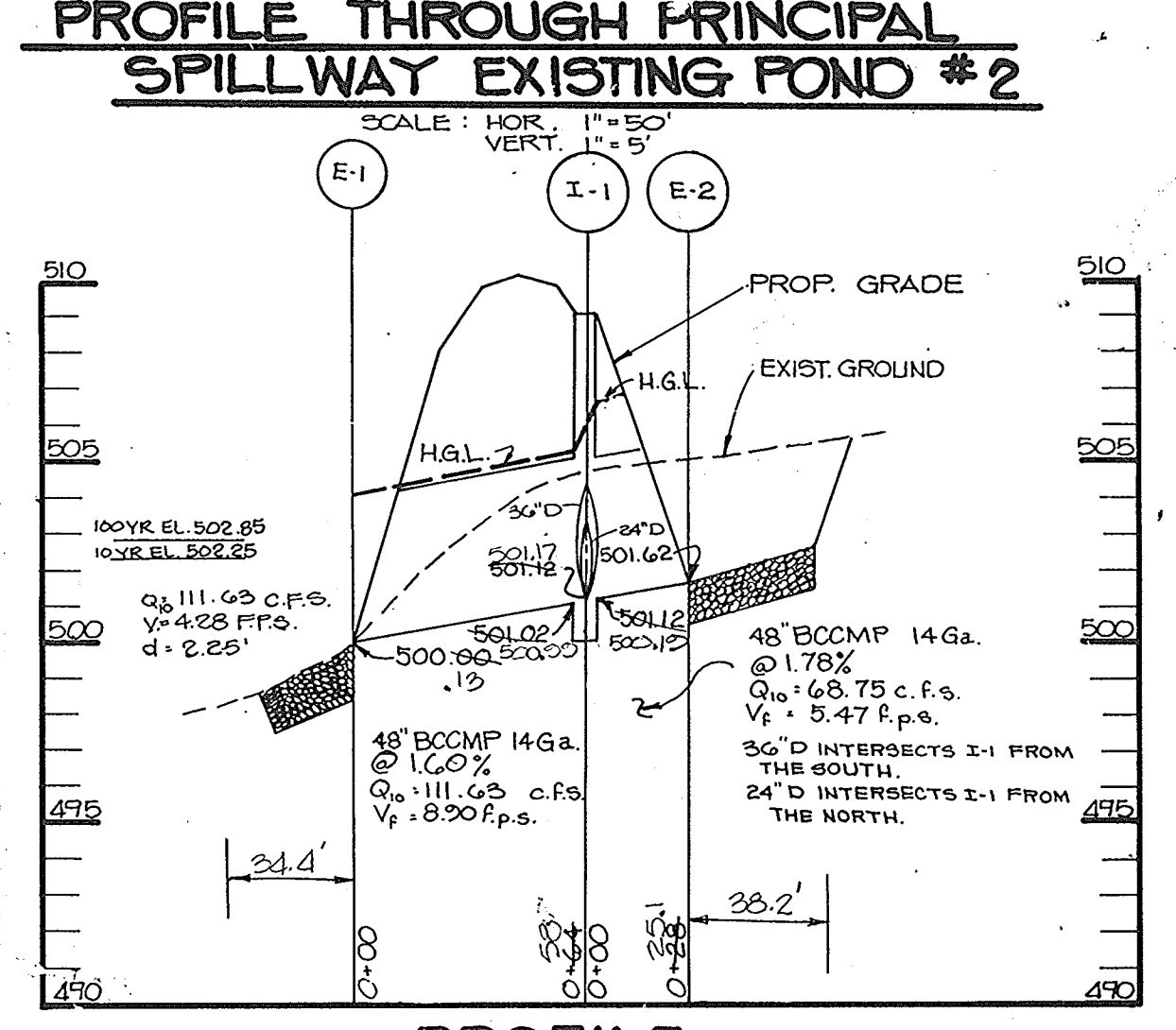
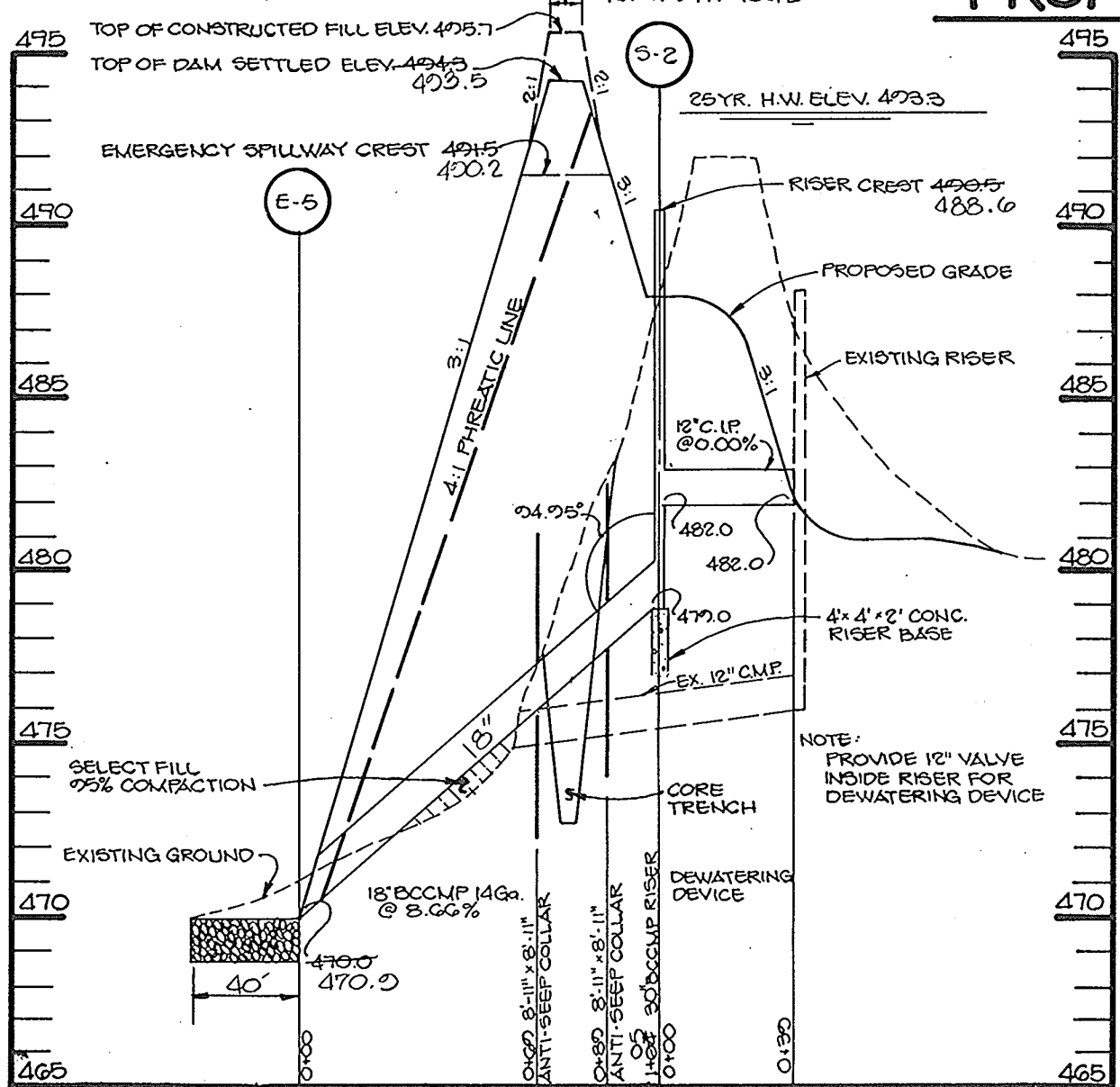
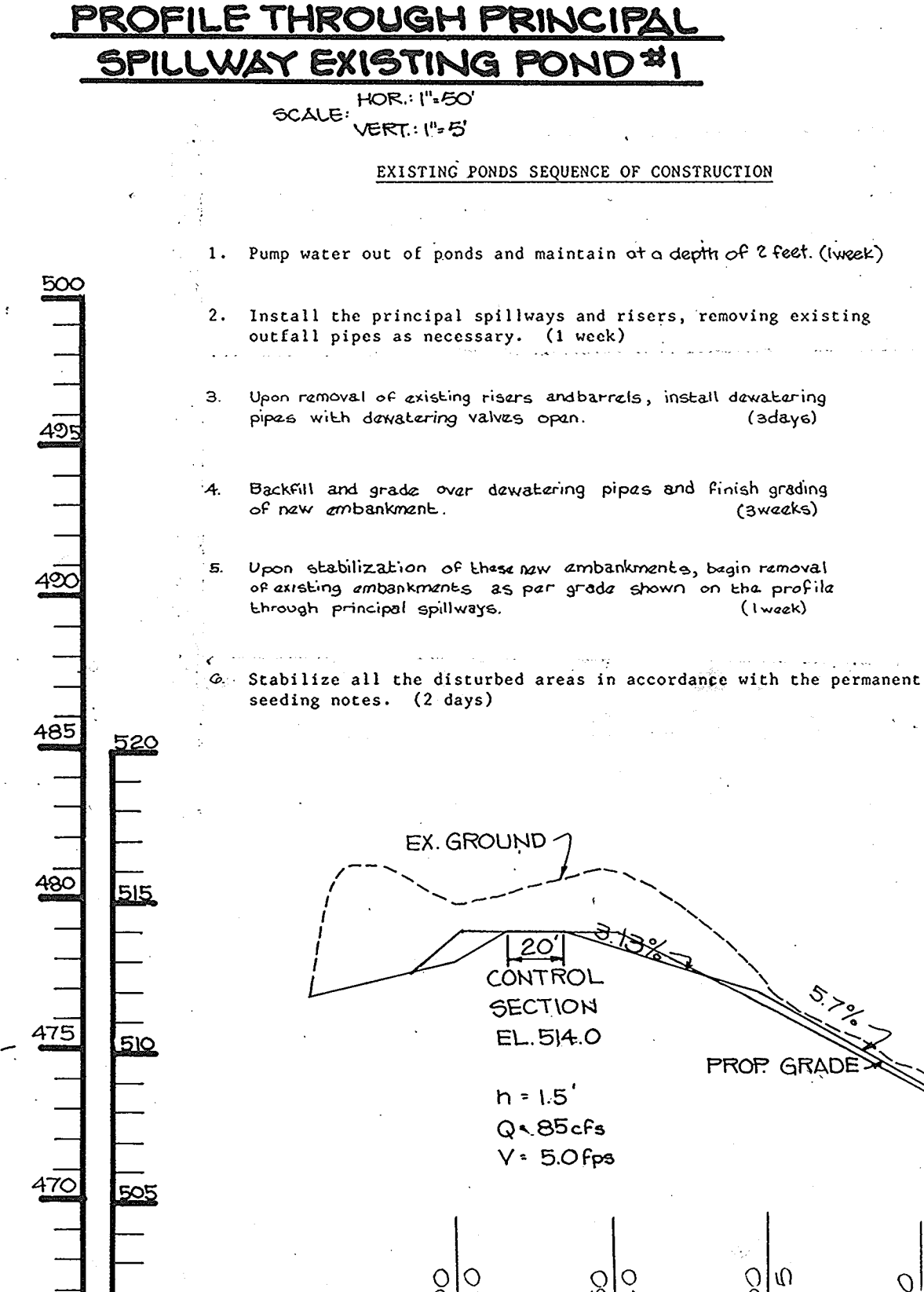
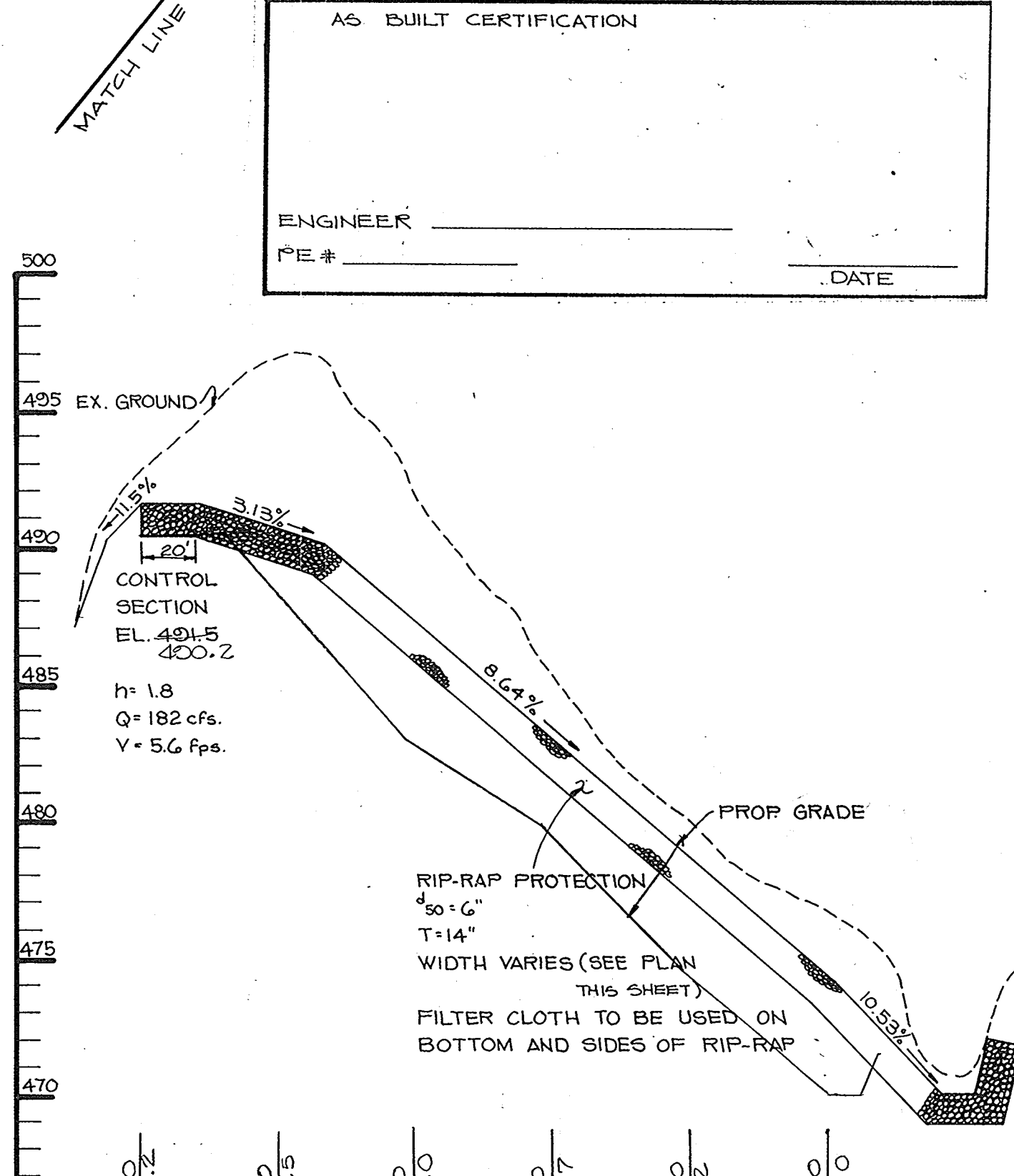
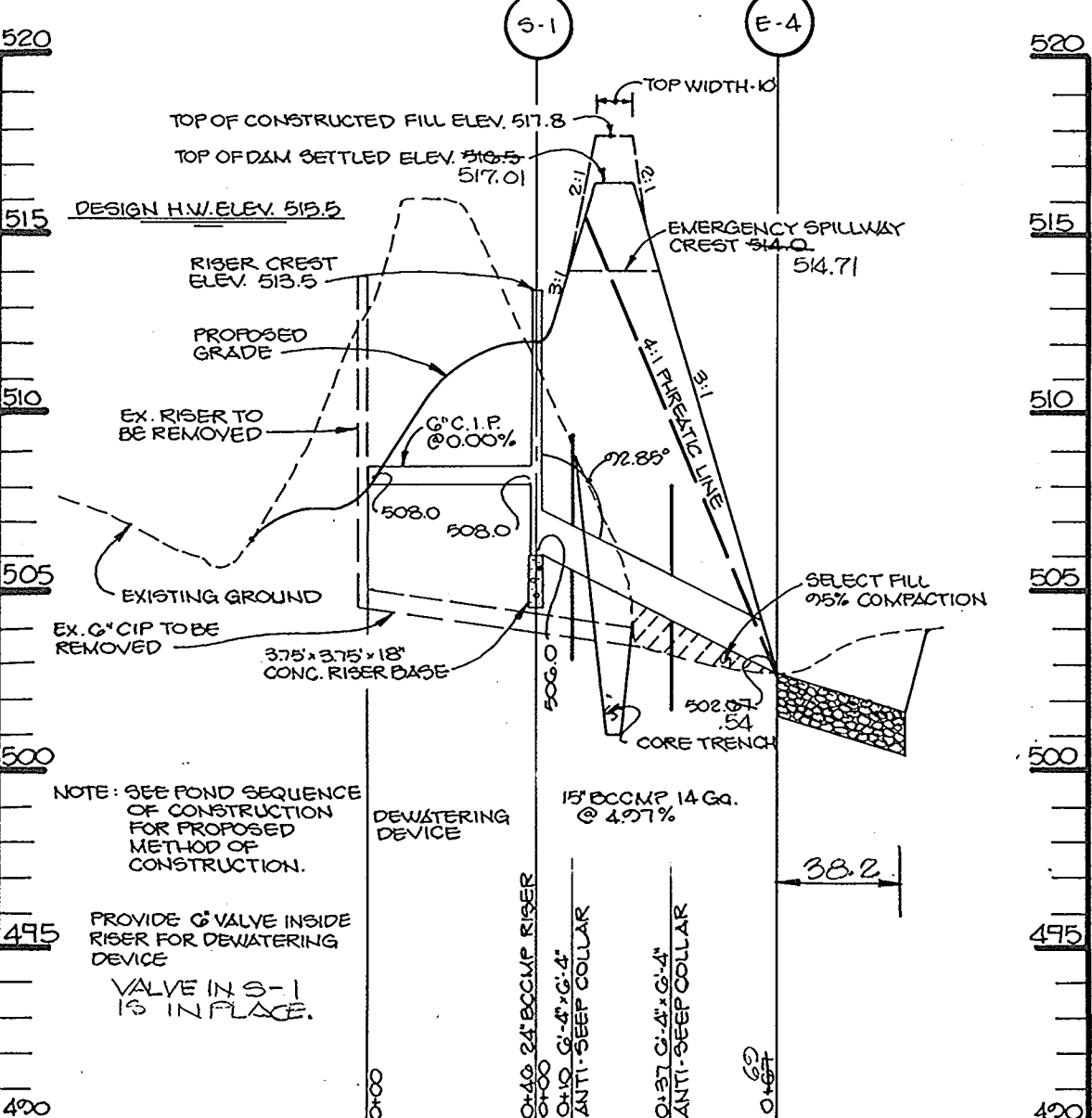
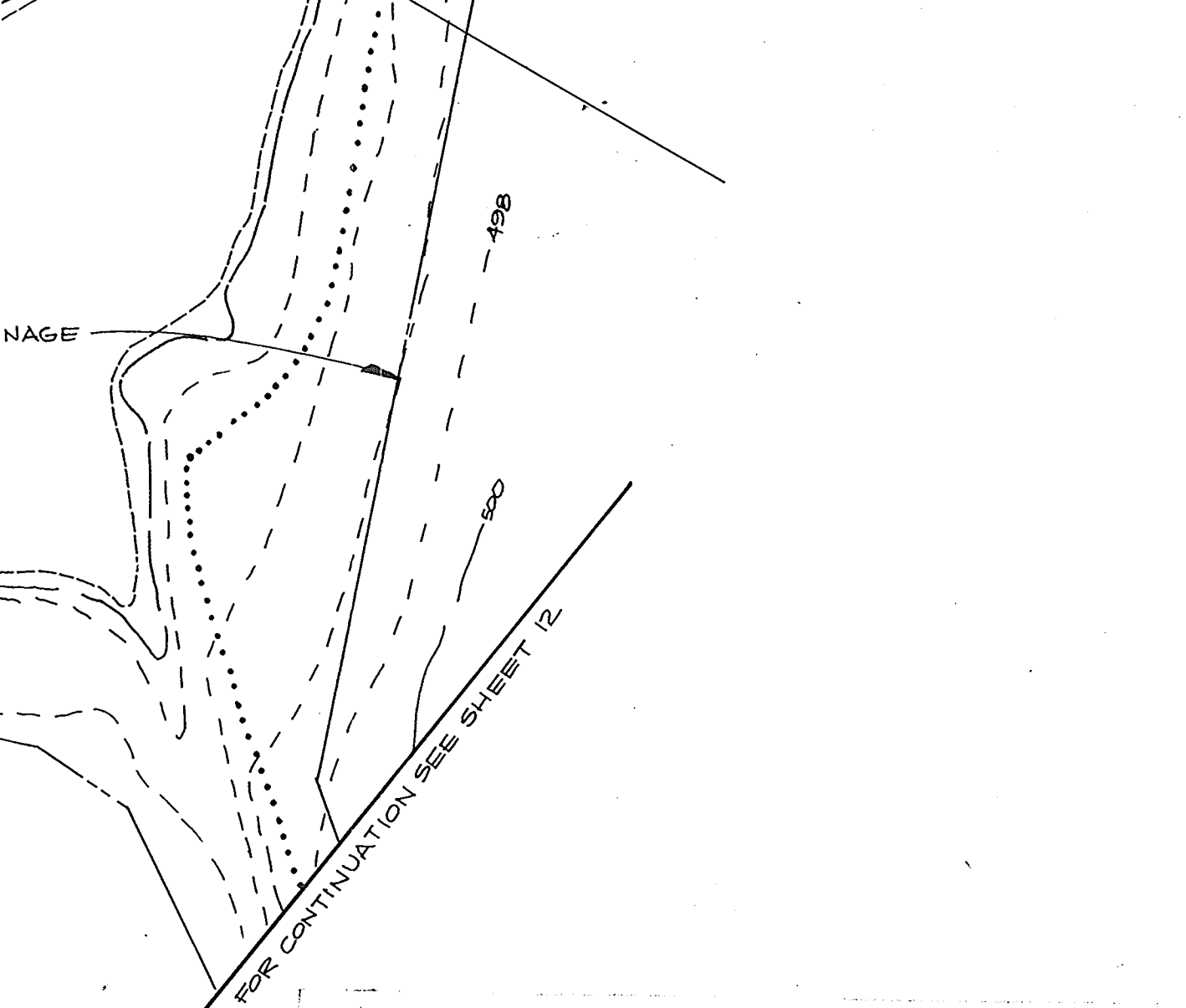
PLAN
SCALE: 1"=50'

NOTE: The concrete shall be poured in such a manner to insure that the concrete fills the bottom of the riser to the invert of the outlet pipe to prevent the riser from breaking away from the base.

BORING LOGS
NO SCALE

B-1	B-2	B-3	B-4
1 TAN CLAY SILT WITH MICA	1 TAN SILT W/ DECOMPOSED ROCK AND MICA	1 GRAY BROWN FINE SAND SILT WITH MICA / GRAVEL	1 RED CLAYEY SILTY SAND
2 GRAY/TAN CLAYEY SILTY SAND WITH MICA, TRACE OF FINE SAND. (SM)	2 TAN SILT W/ DECOMPOSED ROCK AND LARGE GRAVEL	2 BROWN SILTY SAND WITH MICA AND DECOMPOSED ROCK. (SM)	2 RED SILTY SAND WITH DECOMPOSED ROCK (MCA)
3 BROWN SILT WITH MICA (SM)	3 BROWN SILTY SAND / SANDY SILT WITH DECOMPOSED ROCK. (SM)	3 BROWN SILTY SAND WITH MICA AND DECOMPOSED ROCK. (SM)	3 GRAY BROWN SILT WITH DECOMPOSED ROCK.
4 BROWN SILTY SAND WITH DECOMPOSED ROCK. (SM)	4 GRAY / WHITE DECOMPOSED ROCK.	4 BROWN SILT WITH DECOMPOSED ROCK / MICA.	4 BROWN SILT WITH DECOMPOSED ROCK / MICA.
5 BROWN SILTY SAND (SM)	5 BROWN SILTY SAND (SM)	5 BROWN SILTY SAND (SM)	5 BROWN SILTY SAND (SM)

BOTTOM OF BORING @ 15 FT. WATER @ 11 FT. (POND #1)
 BOTTOM OF BORING @ 15 FT. WATER @ 14 FT. (POND #2)
 BOTTOM OF BORING @ 12 FT. NO WATER ENCOUNTERED (POND #3)
 BOTTOM OF BORING @ 20 FT. WATER @ 15.0 FT. (POND #4)



APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

BY THE DEVELOPER:
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
 DEVELOPER: *James J. ...* DATE: 5-9-89

BY THE ENGINEER:
 "I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
 ENGINEER: *William E. ...* DATE: 5-10-89

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 SOIL CONSERVATION SERVICE: *John M. ...* DATE: 5-25-89

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *Robert W. ...* HOWARD S.C.D. DATE: 5-25-89

OWNER / DEVELOPER
 HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 % LOWRIE SARGENT
 13248 WESTMEATH LANE
 CLARKSVILLE, MARYLAND 21027

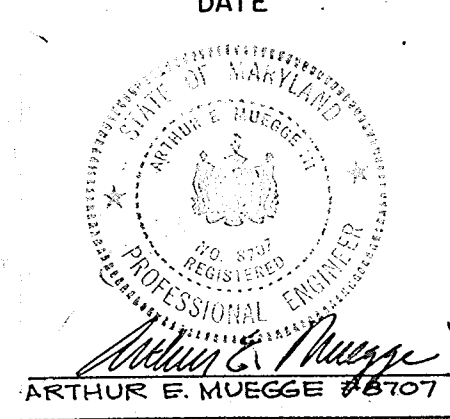
PROJECT: **HEDGEROW SECTION ONE**
 (LOTS 1-28 & PARCELS A-D)

AREA TAX MAP 28 & 34 PARCEL 57,60,20 & 64
 574 SECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **EXISTING POND PLAN, PROFILES AND DETAILS**

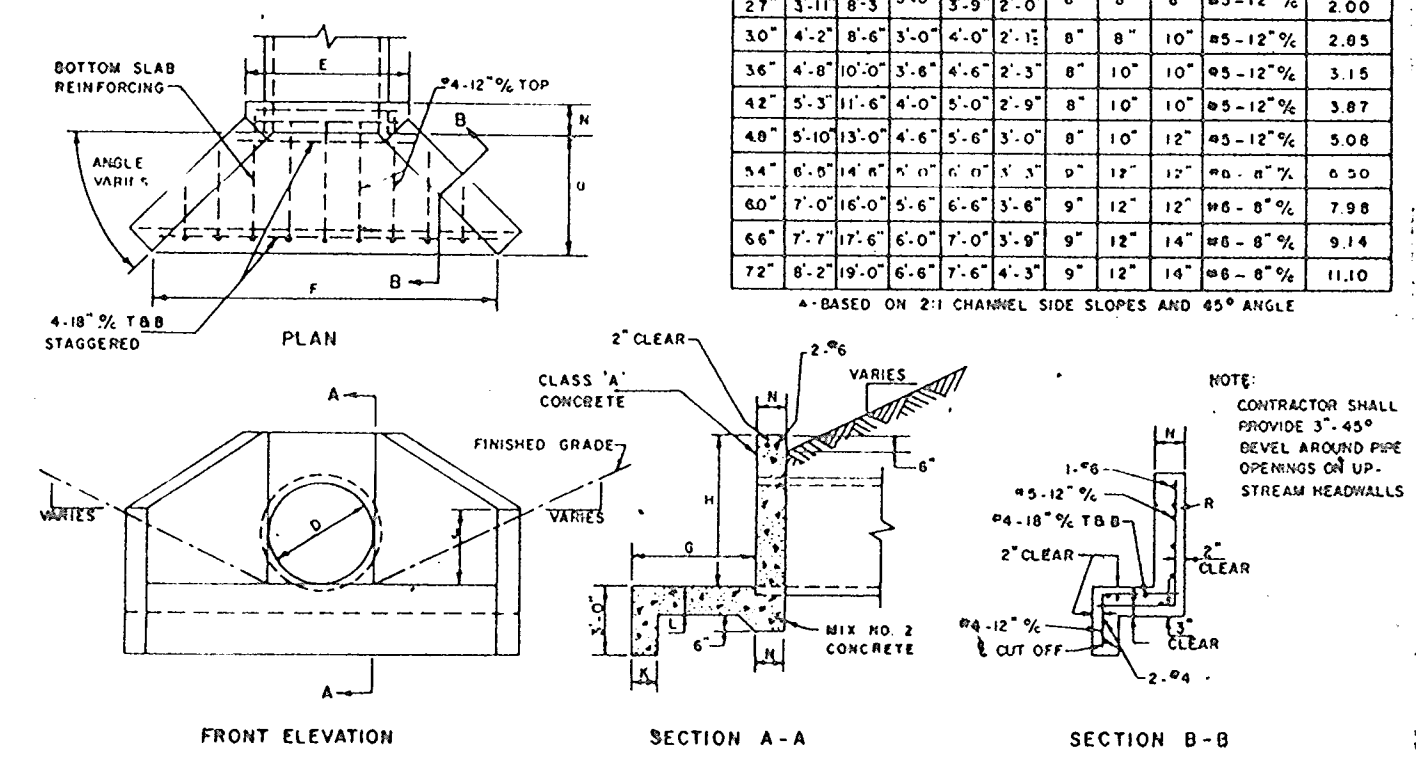
THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

DATE: 5/10/89
 DESIGNED BY: C.J.K.
 DRAWN BY: J.C.R.
 PROJECT NO: 47803
 DATE: MAY 10, 1989
 SCALE: AS SHOWN
 DRAWING NO. 13 OF 15



1453

D	E	F	G	H	J	K	L	M	N	Vol.	C7
18"	3'-0"	7'-4"	4'-0"	2'-0"	8"	8"	8"	8"	8"	1.70	
21"	3'-4"	7'-8"	4'-4"	2'-4"	8"	8"	8"	8"	8"	1.80	
24"	3'-8"	8'-2"	4'-8"	2'-8"	8"	8"	8"	8"	8"	1.90	
27"	4'-2"	8'-6"	5'-2"	3'-2"	8"	8"	8"	8"	8"	2.00	
30"	4'-6"	9'-0"	5'-6"	3'-6"	8"	8"	8"	8"	8"	2.09	
34"	5'-0"	9'-4"	6'-0"	4'-0"	8"	8"	8"	8"	8"	2.18	
38"	5'-4"	9'-8"	6'-4"	4'-4"	8"	8"	8"	8"	8"	2.27	
42"	5'-8"	10'-2"	6'-8"	4'-8"	8"	8"	8"	8"	8"	2.36	
46"	6'-2"	10'-6"	7'-2"	5'-2"	8"	8"	8"	8"	8"	2.45	
50"	6'-6"	11'-0"	7'-6"	5'-6"	8"	8"	8"	8"	8"	2.54	
54"	7'-0"	11'-4"	8'-0"	6'-0"	8"	8"	8"	8"	8"	2.63	
58"	7'-4"	11'-8"	8'-4"	6'-4"	8"	8"	8"	8"	8"	2.72	
62"	7'-8"	12'-2"	8'-8"	6'-8"	8"	8"	8"	8"	8"	2.81	
66"	8'-2"	12'-6"	9'-2"	7'-2"	8"	8"	8"	8"	8"	2.90	
70"	8'-6"	13'-0"	9'-6"	7'-6"	8"	8"	8"	8"	8"	2.99	
74"	9'-0"	13'-4"	10'-0"	8'-0"	8"	8"	8"	8"	8"	3.08	
78"	9'-4"	13'-8"	10'-4"	8'-4"	8"	8"	8"	8"	8"	3.17	
82"	9'-8"	14'-2"	10'-8"	8'-8"	8"	8"	8"	8"	8"	3.26	
86"	10'-2"	14'-6"	11'-2"	9'-2"	8"	8"	8"	8"	8"	3.35	
90"	10'-6"	15'-0"	11'-6"	9'-6"	8"	8"	8"	8"	8"	3.44	
94"	11'-0"	15'-4"	12'-0"	10'-0"	8"	8"	8"	8"	8"	3.53	
98"	11'-4"	15'-8"	12'-4"	10'-4"	8"	8"	8"	8"	8"	3.62	
102"	11'-8"	16'-2"	12'-8"	10'-8"	8"	8"	8"	8"	8"	3.71	
106"	12'-2"	16'-6"	13'-2"	11'-2"	8"	8"	8"	8"	8"	3.80	
110"	12'-6"	17'-0"	13'-6"	11'-6"	8"	8"	8"	8"	8"	3.89	

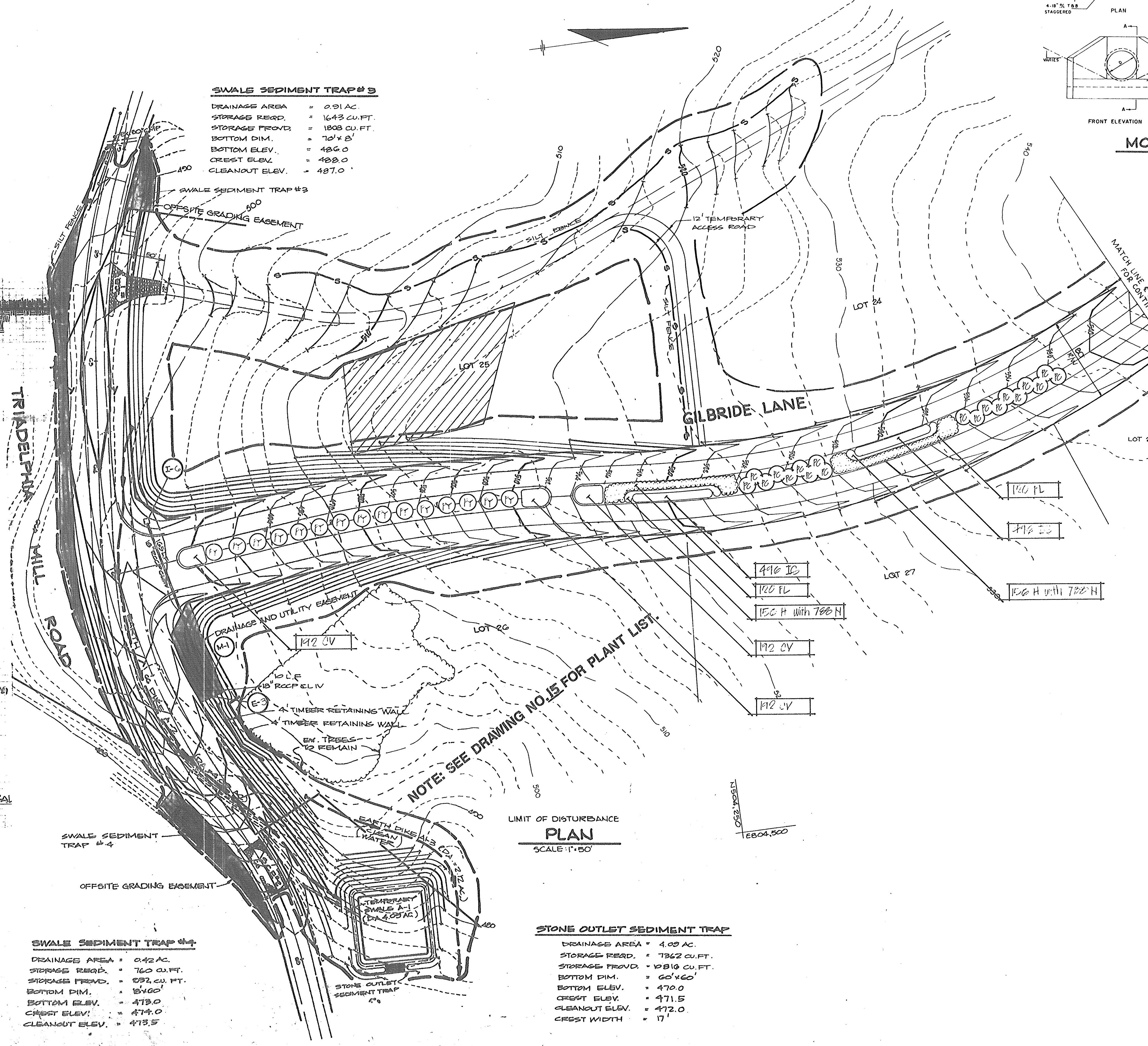


MODIFIED TYPE 'A' HEADWALL
NO SCALE

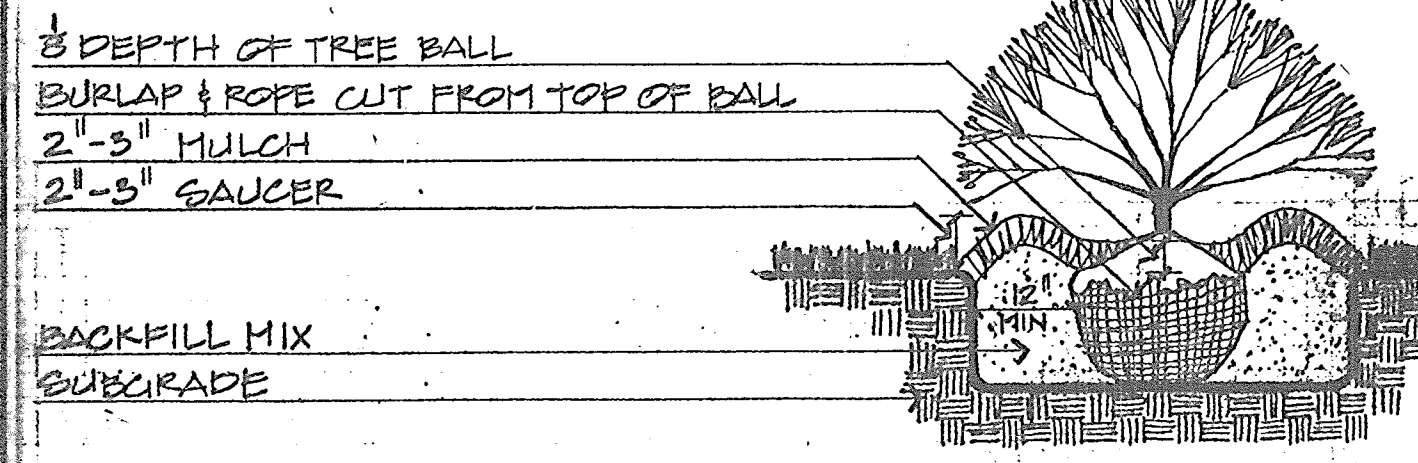
SWALE SEDIMENT TRAP #3
 DRAINAGE AREA = 0.91 AC
 STORAGE REQD. = 1643 CU.FT.
 STORAGE PROVIDED = 1808 CU.FT.
 BOTTOM DIM. = 70' x 8'
 BOTTOM ELEV. = 486.0
 CREST ELEV. = 488.0
 CLEANOUT ELEV. = 487.0

SWALE SEDIMENT TRAP #4
 DRAINAGE AREA = 0.42 AC
 STORAGE REQD. = 760 CU.FT.
 STORAGE PROVIDED = 832 CU.FT.
 BOTTOM DIM. = 54' x 6'
 BOTTOM ELEV. = 473.0
 CREST ELEV. = 474.0
 CLEANOUT ELEV. = 473.5

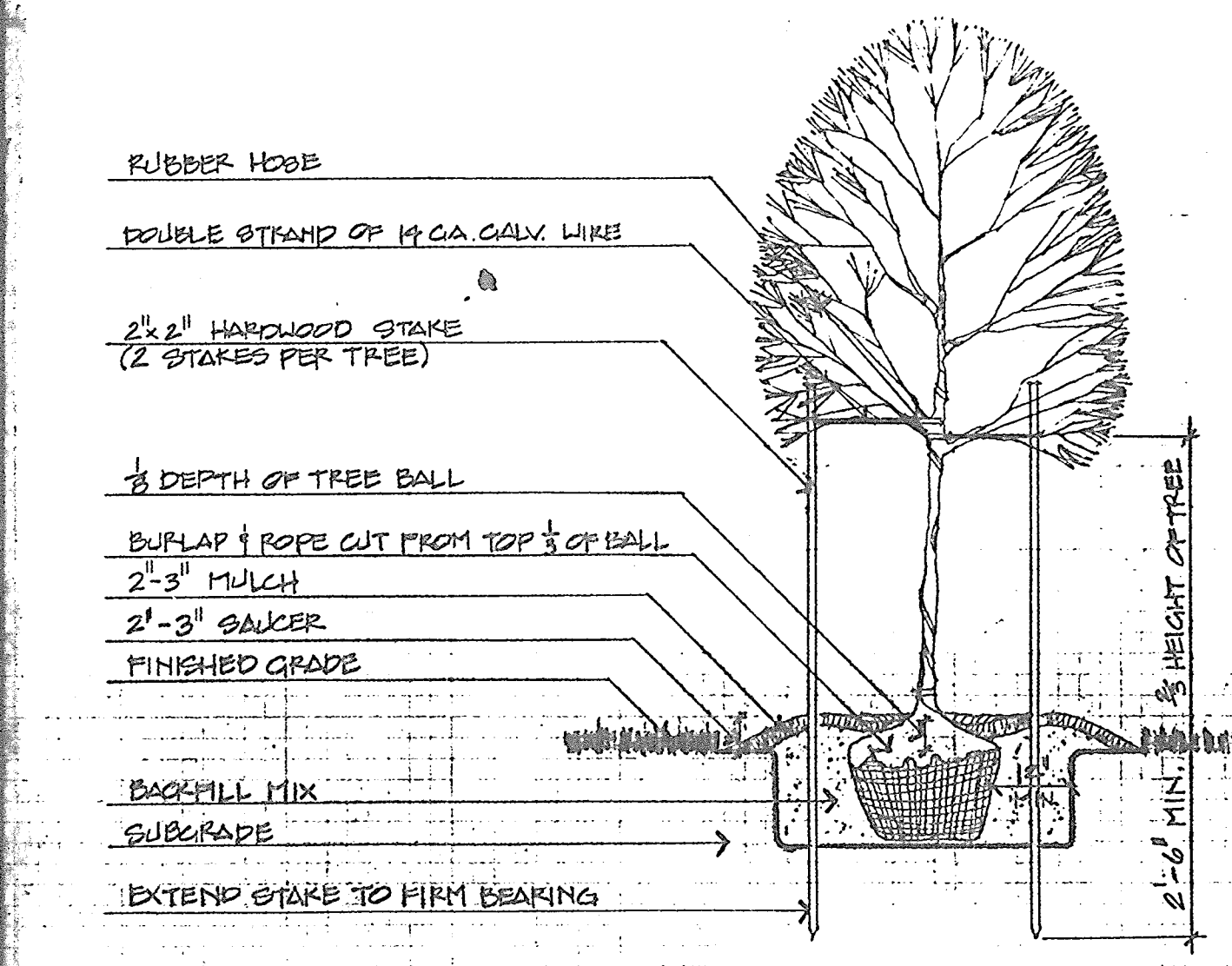
STONE OUTLET SEDIMENT TRAP
 DRAINAGE AREA = 4.09 AC
 STORAGE REQD. = 7362 CU.FT.
 STORAGE PROVIDED = 12810 CU.FT.
 BOTTOM DIM. = 60' x 60'
 BOTTOM ELEV. = 470.0
 CREST ELEV. = 471.5
 CLEANOUT ELEV. = 472.0
 CREST WIDTH = 17'



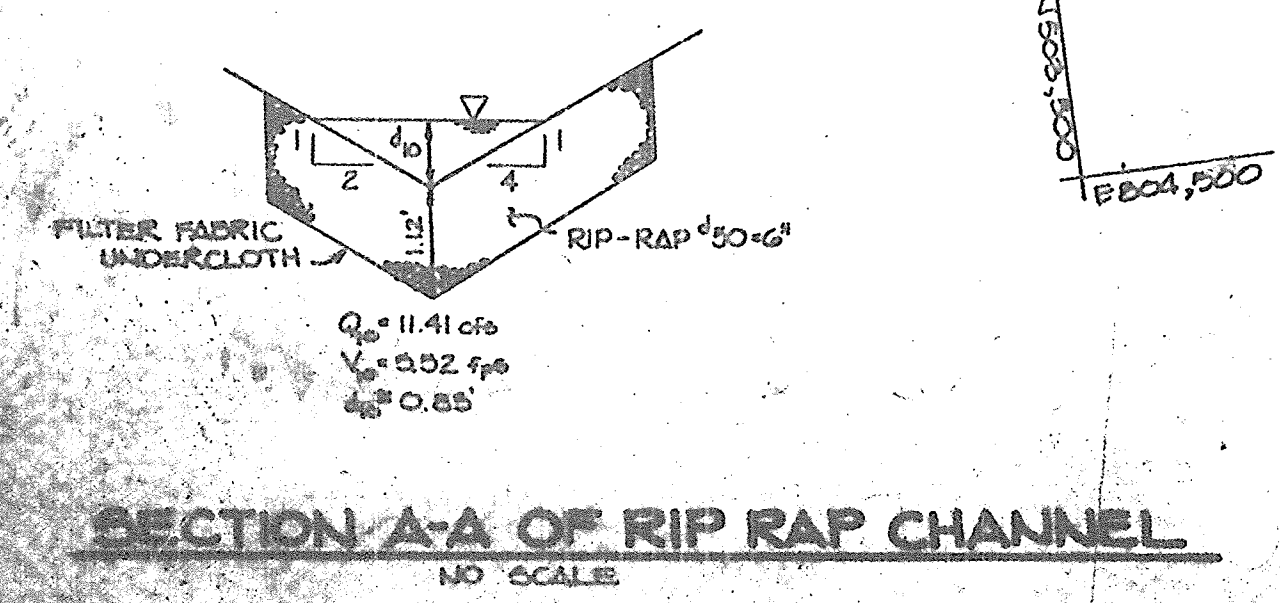
NOTE: SEE DRAWING NO. 15 FOR PLANT LIST.



1 SHRUB PLANTING DETAIL
NO SCALE



2 TREE PLANTING DETAIL - TREES UNDER 2 1/2" CAL
NO SCALE



SECTION A-A OF RIP RAP CHANNEL
NO SCALE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 March 1, 2011 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 LKS

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Date
 Chief, Land Development Division
 Date
 Chief, Bureau of Highways
 Date
 Chief, Bureau of Engineering
 Date

DATE	NO.	REVISION

OWNER/DEVELOPER
 HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 96 LOWRIE SARGENT
 18245 WESTMEATH LANE
 CLARKSVILLE, MARYLAND 21029

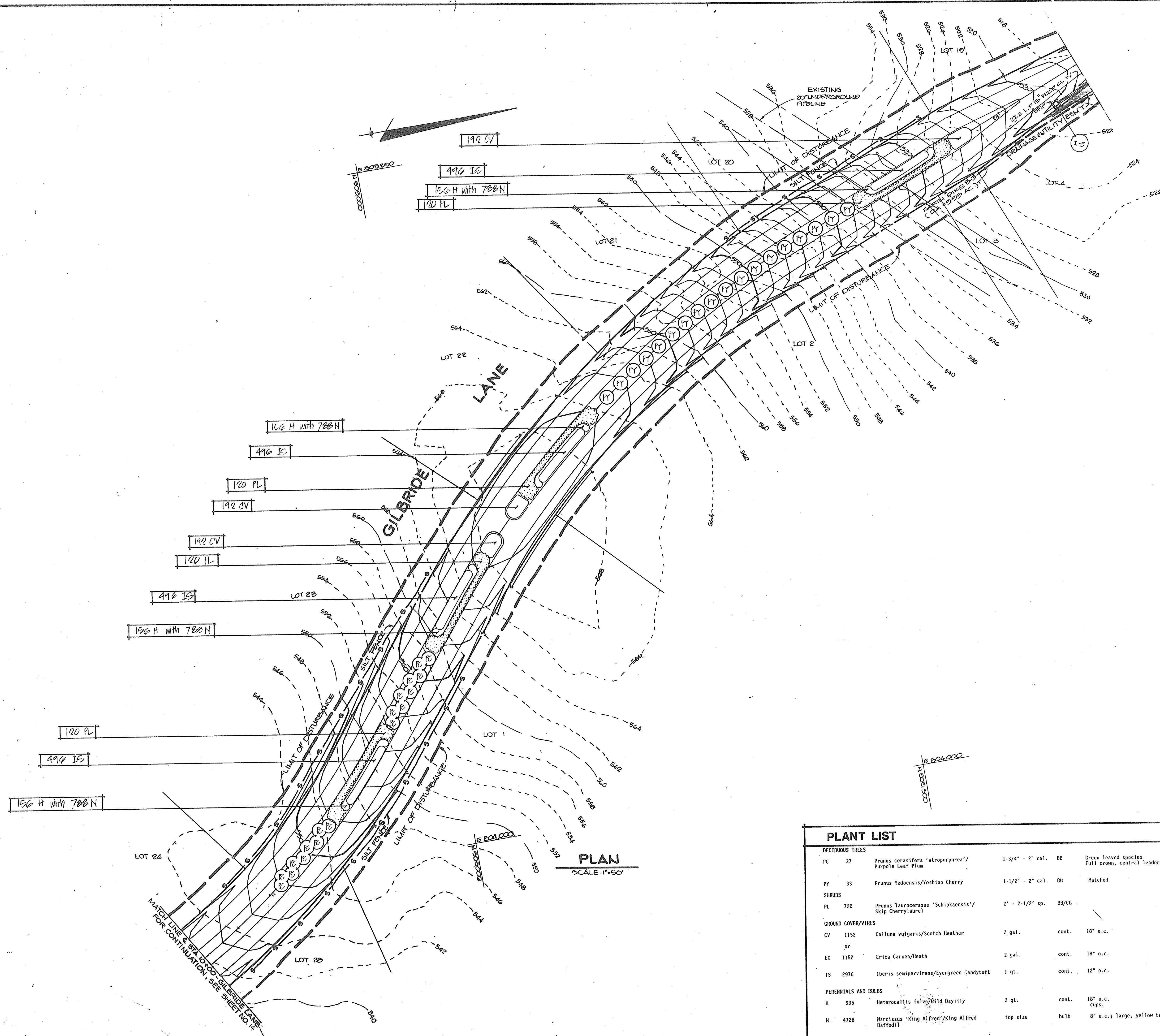
PROJECT: **HEDGEROW (SECTION ONE)**
 (LOTS 1-28 & PARCELS A-B)

AREA: TAX MAP 28 & 34 PARCELS 56, 60, 30 & 64
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **R.O.W. PLANTING PLAN**

CDC Columbia Design Collective Architects, Planners Landscape Architects 681 Broken Land Parkway Suite 200 Columbia Maryland 21046

DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 PROJECT NO: 47503
 DATE: MAY 10, 1989
 SCALE: AS SHOWN
 DRAWING NO. 14 OF 15



PLANT LIST				
DECIDUOUS TREES				
PC	37	Prunus cerasifera 'atropurpurea' / Purple Leaf Plum	1-3/4" - 2" cal.	BB Green leaved species Full crown, central leader
PY	33	Prunus Yedoensis/Yoshino Cherry	1-1/2" - 2" cal.	BB Hatched
SHRUBS				
PL	720	Prunus laurocerasus 'Schipkaensis' / Skip Cherrylaurel	2" - 2-1/2" sp.	BB/CG
GROUND COVER/VINES				
CV	1152	Calluna vulgaris/Scotch Heather	2 gal.	cont. 18" o.c.
		or		
EC	1152	Erica Carnea/Heath	2 gal.	cont. 18" o.c.
IS	2976	Iberis sempervirens/Evergreen Candytuft	1 qt.	cont. 12" o.c.
PERENNIALS AND BULBS				
H	936	Homocallis fulva/Wild Daylily	2 qt.	cont. 18" o.c. cups.
N	4728	Narcissus 'King Alfred'/King Alfred Daffodil	top size	bulb 8" o.c.; large, yellow trump

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Thomas S. Taylor 7/8/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division
 Chief, Bureau of Highways
 Chief, Bureau of Engineering

DATE	NO.	REVISION

OWNER/DEVELOPER
 HEDGEROW ASSOCIATES LIMITED PARTNERSHIP
 % LOWRIE BARGENT
 13245 WESTMEATH LANE
 CLARKSMILLE, MARYLAND 21209

PROJECT: **HEDGEROW (SECTION ONE)**
 (LOTS 1-28 & PARCELS A-B)

AREA TAX MAP 28-494 PARCELS 59,60,304,64
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **R.O.W. PLANTING PLAN**

CDC Columbia Design Collective
 Architects, Planners
 Landscape Architects 8881 Broken Land Parkway
 Suite 200
 Columbia Maryland 21046

WP-88-60 5-28-87 P-28-74
 DESIGNED BY:
 DRAWN BY:
 PROJECT NO: 47803
 DATE: MAY 10, 1989
 SCALE: AS SHOWN
 DRAWING NO. 15 OF 15

1453