

SHEET INDEX	
NO	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILE OF CREST DRIVE
3	PLAN AND PROFILES OF CREST DRIVE, HAMMOND BRANCH WAY AND DRAGONFLY COURT
4	PLAN AND PROFILES OF RIPPLING BRANCH ROAD AND HAMMOND BRANCH WAY
5	PLAN AND PROFILES OF LAPPING BROOK COURT, SPLASHING BROOK COURT AND SLIPPERY ROCK WAY
6	DETAILS
7	STORM DRAIN PROFILES
8	DRAINAGE AREA MAP AND STORM DRAIN PROFILES
9	GRADING AND SEDIMENT CONTROL PLAN
10	GRADING AND SEDIMENT CONTROL PLAN
11	SEDIMENT CONTROL DETAILS

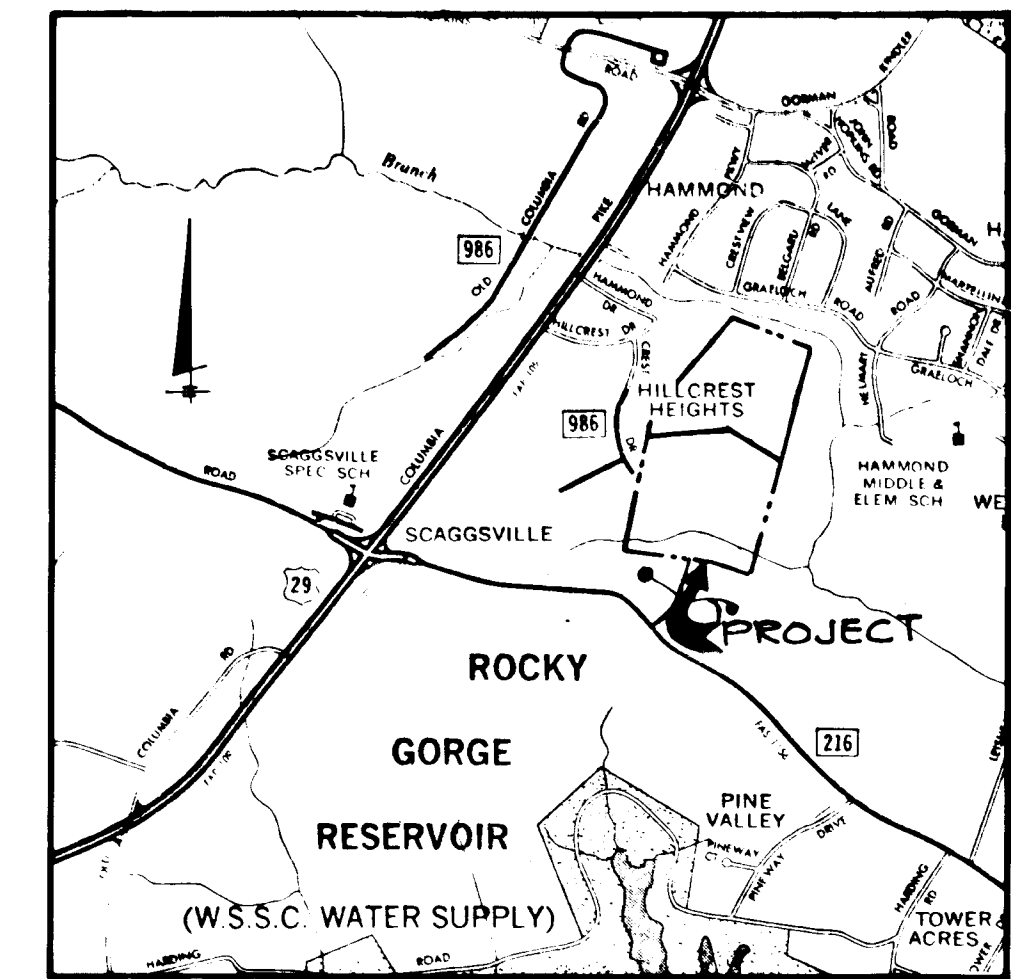
ROADWAYS, STORM DRAINS & STORM WATER MANAGEMENT

HAMMOND HILLS

SECTION 2 AREA 1

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



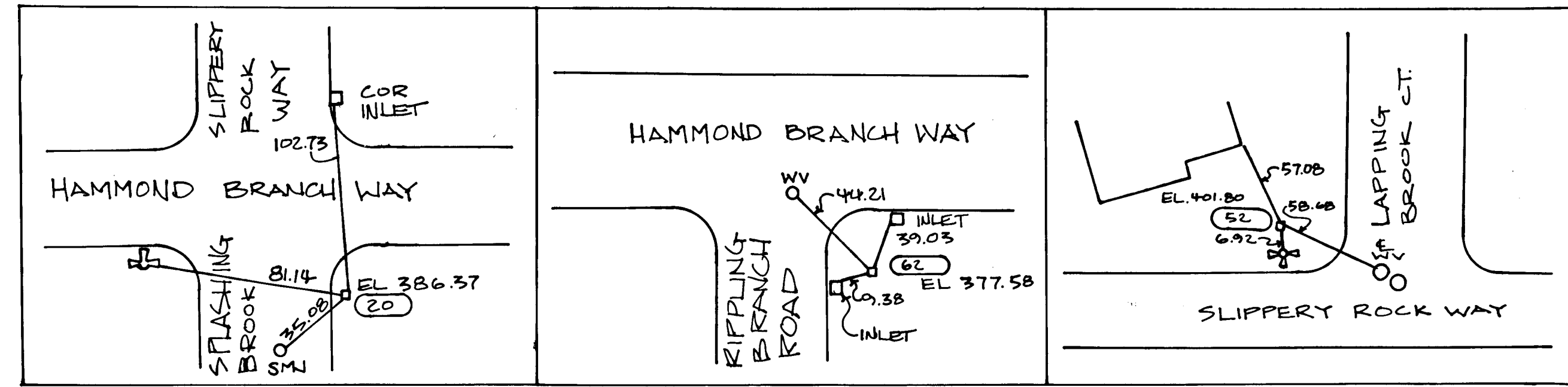
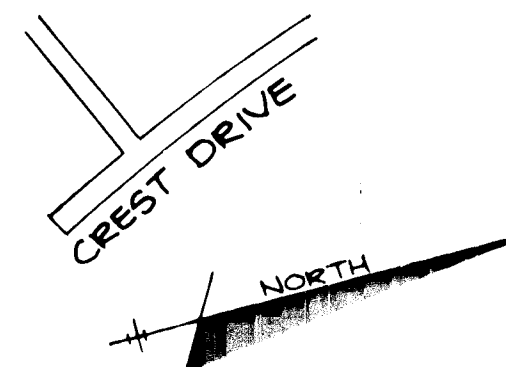
VICINITY MAP
SCALE 1:2000

BENCHMARKS

BM #1 ELEV 384.51
NAIL IN BASE OF 10" DEAD TREE 30' SOUTH OF CREST DRIVE

BM #2 ELEV 374.37
NAIL IN BASE OF 16" PINE TREE 500' SOUTH EAST OF HAMMOND BRANCH WAY.

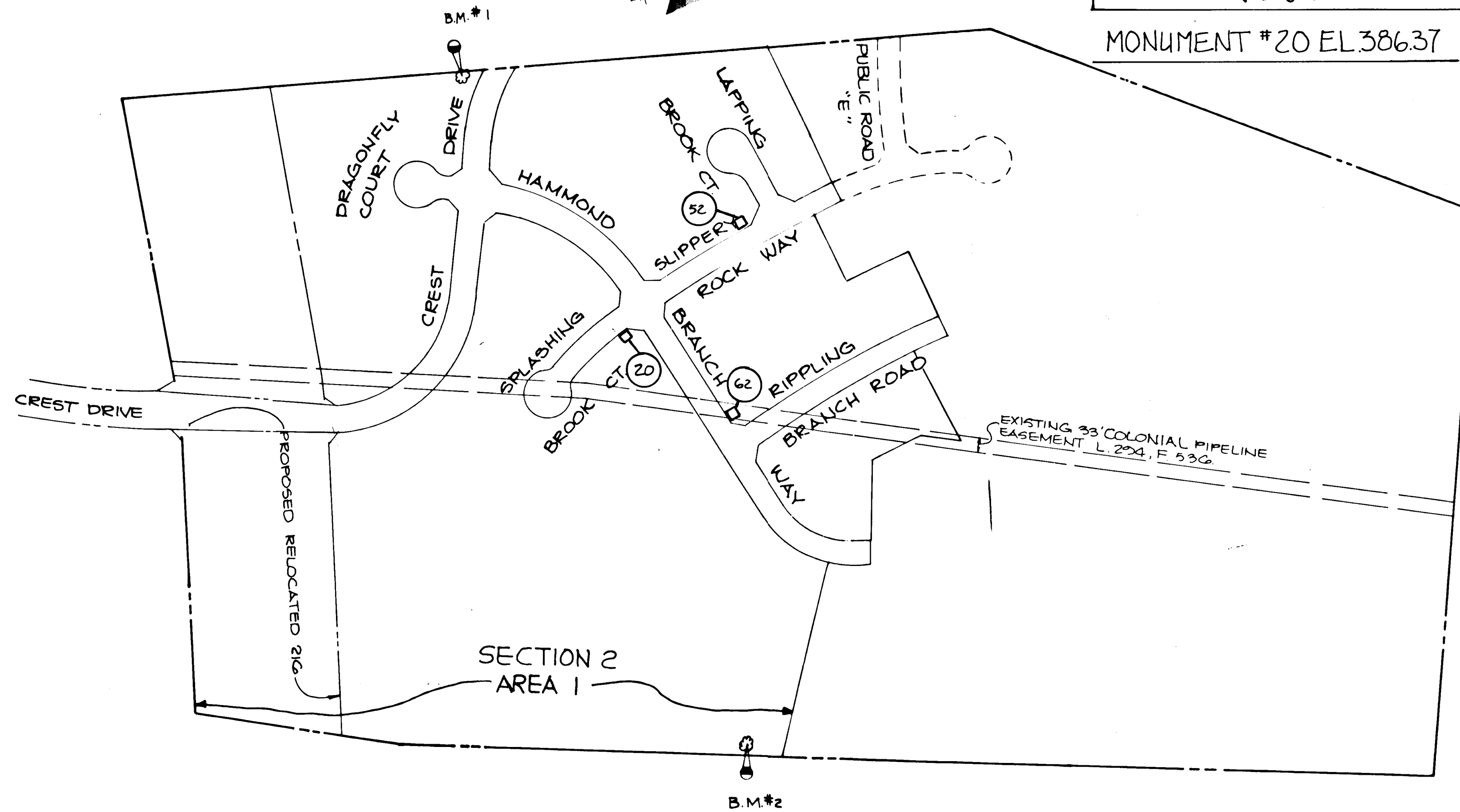
HORIZONTAL & VERTICAL CONTROL USED FOR AS-BUILT SURVEY



MONUMENT #20 EL. 386.37

MONUMENT #62 EL. 377.58

MONUMENT #52 EL. 401.80



PLAN
SCALE 1"=200'

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.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

MISS UTILITY	1-800-251-7777
BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 or 3554
BALTIMORE GAS AND ELECTRIC COMPANY	539-8000, ext. 691
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272
COLONIAL PIPELINE	795-1920
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL STREET CURB RETURNS SHALL HAVE 35.0' RADII UNLESS OTHERWISE NOTED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE DESIGN MANUAL.
- PIPE SHALL NOT BE INSTALLED BY THE 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 OFFICIAL STANDARDS:

ALL 60' RIGHT-OF-WAYS	25 M.P.H.
ALL 50' RIGHT-OF-WAYS	20 M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- SUBJECT PROPERTY ZONED R-20 PER 8-2-85 COMPREHENSIVE ZONING PLAN.
- TOPO TAKEN FROM AERIAL TOPO BY FISHER, COLLINS AND CARTER, INC. DATED MARCH 1985
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME I OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- SEE OFFICE OF PLANNING AND ZONING FILE NOS. 6-04-02, 5-02-04, P-02-134 VP-02-74

OPEN SPACE TABULATION				
LOT SIZE	Nº OF LOTS	AREA OF LOTS IN ACRES	MANDATORY OPEN SPACE IN ACRES	AREA OF OPEN SPACE IN ACRES
20,000 OR LARGER	0	10.282	0%	0.000
10,000 - 19,999	11	2.818	10%	0.282
4,000 - 9,999	33	10.272	20%	2.054
14,000 - 15,999	33	10.272	30%	3.082
TOTALS	50	20.244		5.117

OPEN SPACE PROVIDED				
LOT #	AREA AC	%	OPEN SPACE AC	%
LOT #08	1.005	5%	0.050	0.25%
LOT #09	1.016	5%	0.051	0.25%
LOT #09	0.495	5%	0.025	0.12%
LOT #10	2.514	12%	0.302	1.49%
LOT #10	0.504	2%	0.025	0.12%
LOT #10	0.758	4%	0.030	0.15%
LOT #10	0.823	4%	0.033	0.16%
TOTAL	6.055		0.296	1.46%

DENSITY TABULATION							
GROSS AREA	FLOODPLAIN	NET AREA	Nº OF DWELLING UNITS ALLOWED	FLOODPLAIN ADJUSTMENT	TOTAL Nº OF DWELLING UNITS ALLOWED	TOTAL Nº OF DWELLING UNITS PROPOSED	DENSITY PER ACRES
51600 AC	1.4 AC	50280 AC	109	3	112	50	117

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
John W. McManus 9-9-86
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William E. Cline 9-11-86
 CHIEF, BUREAU OF ENGINEERING

DATE	NO	REVISION

OWNER / DEVELOPER
 HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP
 SUITE 210
 2080 RED BRANCH ROAD
 COLUMBIA, MARYLAND 21045

PROJECT HAMMOND HILLS
 SECTION 2, AREA 1
 LOTS 39 THRU 102

AREA TAX MAP NO 41440 PARCEL NO 2
 6TH ELECTION DISTRICT 5-84-02
 HOWARD COUNTY, MARYLAND P-02-13

TITLE SHEET

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 Heath Park Drive, Ellicott City, Maryland 21043 (301) 481-8880

DATE 1-3-86
 DESIGNED BY LUD
 DRAWN BY DAM
 PROJECT NO 11705
 DATE
 SCALE AS SHOWN
 DRAWING NO 1 OF 11

939

CURVE DATA FOR CURVES & GUTTER FROM STA. 7+00.58 TO STA. 8+00.11

NO	Δ	RAD.	ARC	TAN	CHD	L.C.B.
1	04°30'48"	500.00	39.39'	19.70'	39.38'	N 19°14'11"E
2	05°49'20"	500.00	50.81'	25.49'	50.79'	N 18°34'52"E
3	04°31'10"	500.00	39.44'	19.73'	39.43'	N 18°25'28"E
4	05°48'53"	500.00	50.74'	25.39'	50.72'	N 18°04'20"E

CURVE DATA
FROM STA. 7+00.58 TO STA. 10+55.44

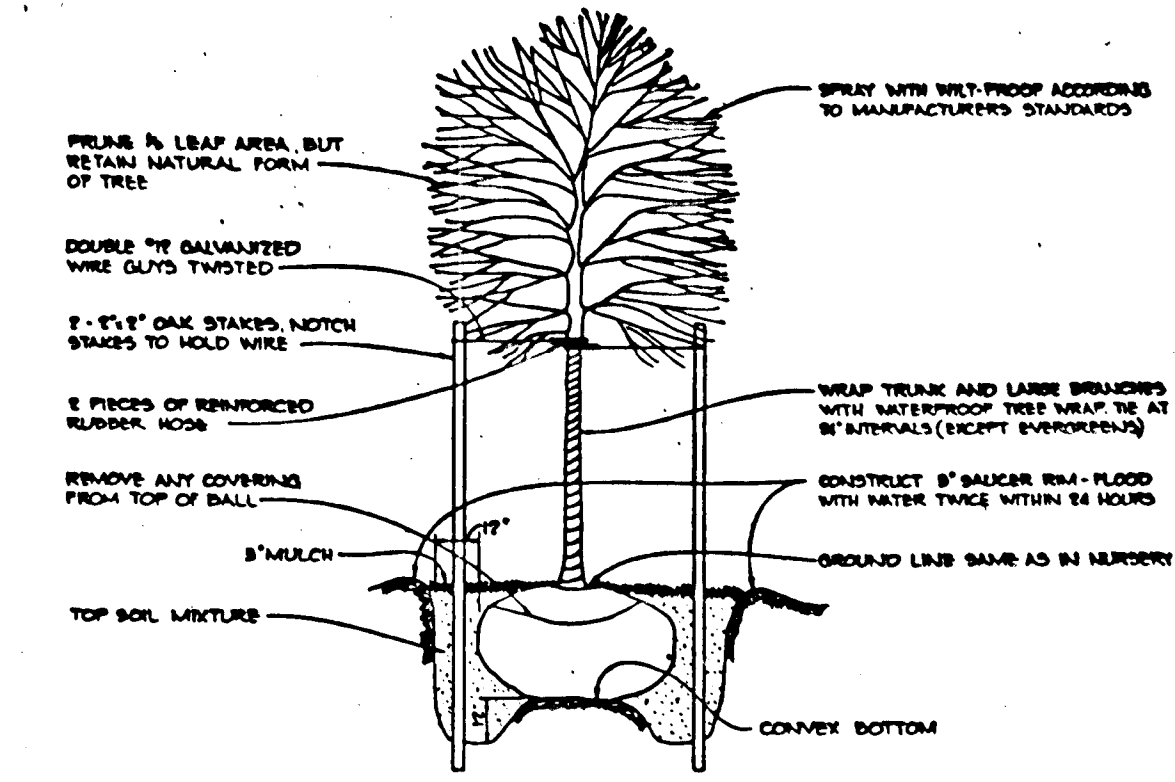
Δ = 05°00'00"
R = 399.23 20'
L = 345.86'
T = 173.04'
D = 01°36'45"
Chd = N 14°28'47"E, 345.75'

CURVE DATA
FROM STA. 10+55.44 TO STA. 14+85.02

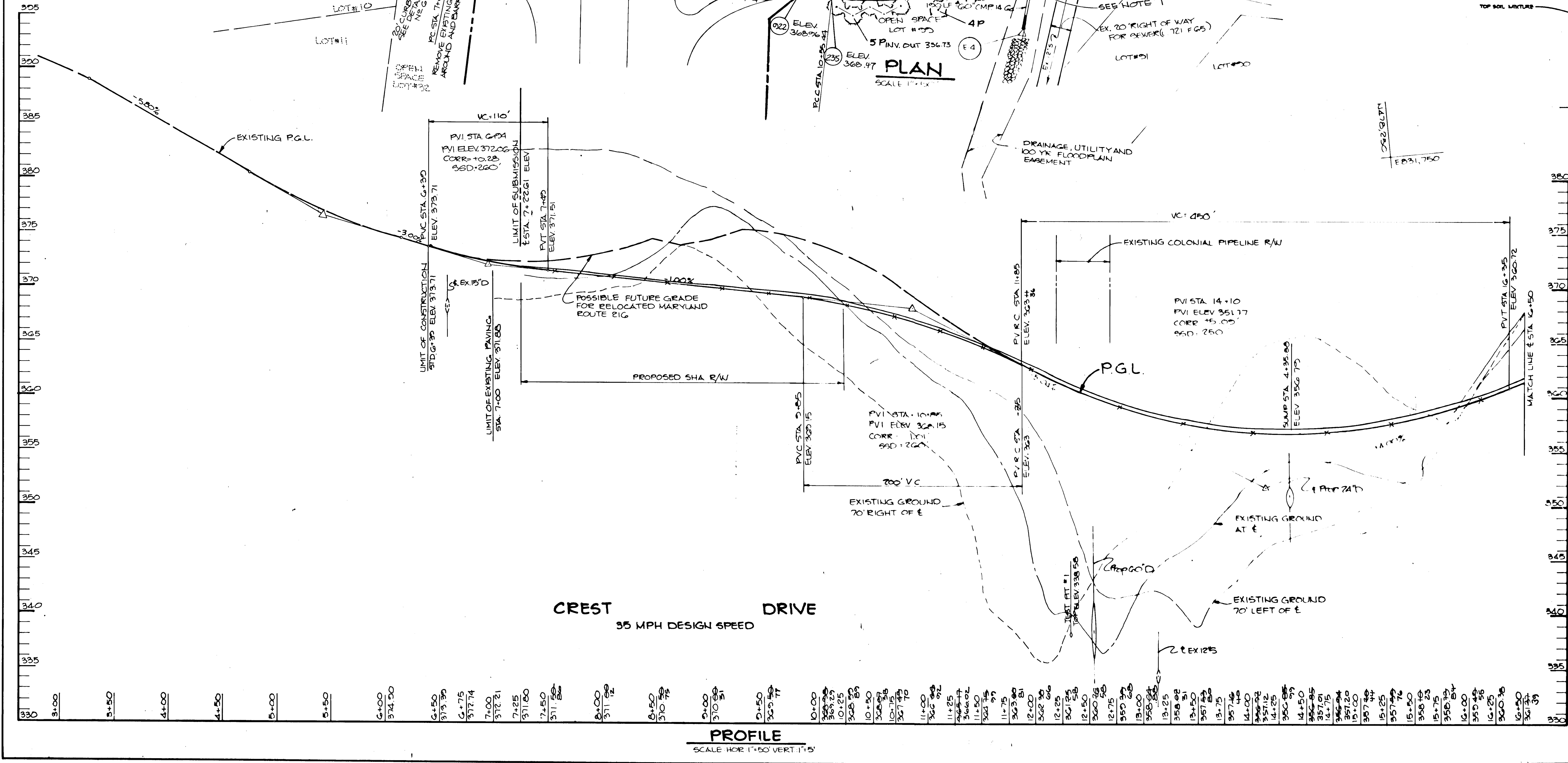
Δ = 82°12'57"
R = 300.00'
L = 430.48'
T = 221.78'
D = 19°05'55"
Chd = N 25°01'42"W, 794.47'

STREET TREE PLANTING LIST

QUANTITY	SYMBOL	NAME	NOTES
59	P	Pinus Strobus Eastern White Pine	2 1/2" Cal., 6-8 Ft. Ht., R&R, Bushheaded
49	A	Acer Rubrum Red Maple	2 1/2" Cal., 13-15 Ft. Ht., R&R, Full Head
44	Q	Quercus Borealis Northern Red Oak	2 1/2" Cal., 13-15 Ft. Ht., R&R, Full Head
15	T	Tilia Cordata 'Greenspire'	2 1/2" Cal., 13-15 Ft. Ht., R&R, Full Head
11	F	Fraxinus Lanolata 'Marshalls'	2 1/2" Cal., 13-15 Ft. Ht., R&R, Full Head



NOTE #1 - 200W MERCURY VAPOR LAMP PENDANT MOUNTED FIXTURES ON A 25' GALVANIZED STEEL POLE LOCATED NO LESS THAN 6' FROM EDGE OF PAVEMENT.



MARYLAND BLUEPRINT CO. INC. 14390

939

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

John M. Murchison 9-9-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William S. Reilly 9-9-86
CHIEF, BUREAU OF ENGINEERING

DATE	NO	REVISION

OWNER / DEVELOPER
HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP
6 QUITE 210
2030 REDBRANCH ROAD
COLUMBIA, MARYLAND 21045

PROJECT
HAMMOND HILLS
SECTION 2, AREA 1
LOTS 59 THRU 102

AREA TAX MAP NO. 811446 PARCEL NO. 2
GTH COLLECTION DISTRICT 5-04-02
HOWARD COUNTY, MARYLAND P. 86-18

TITLE
PLAN AND PROFILE OF
CREST DRIVE
E. STA. 7+22.61 TO E. STA. 14+50

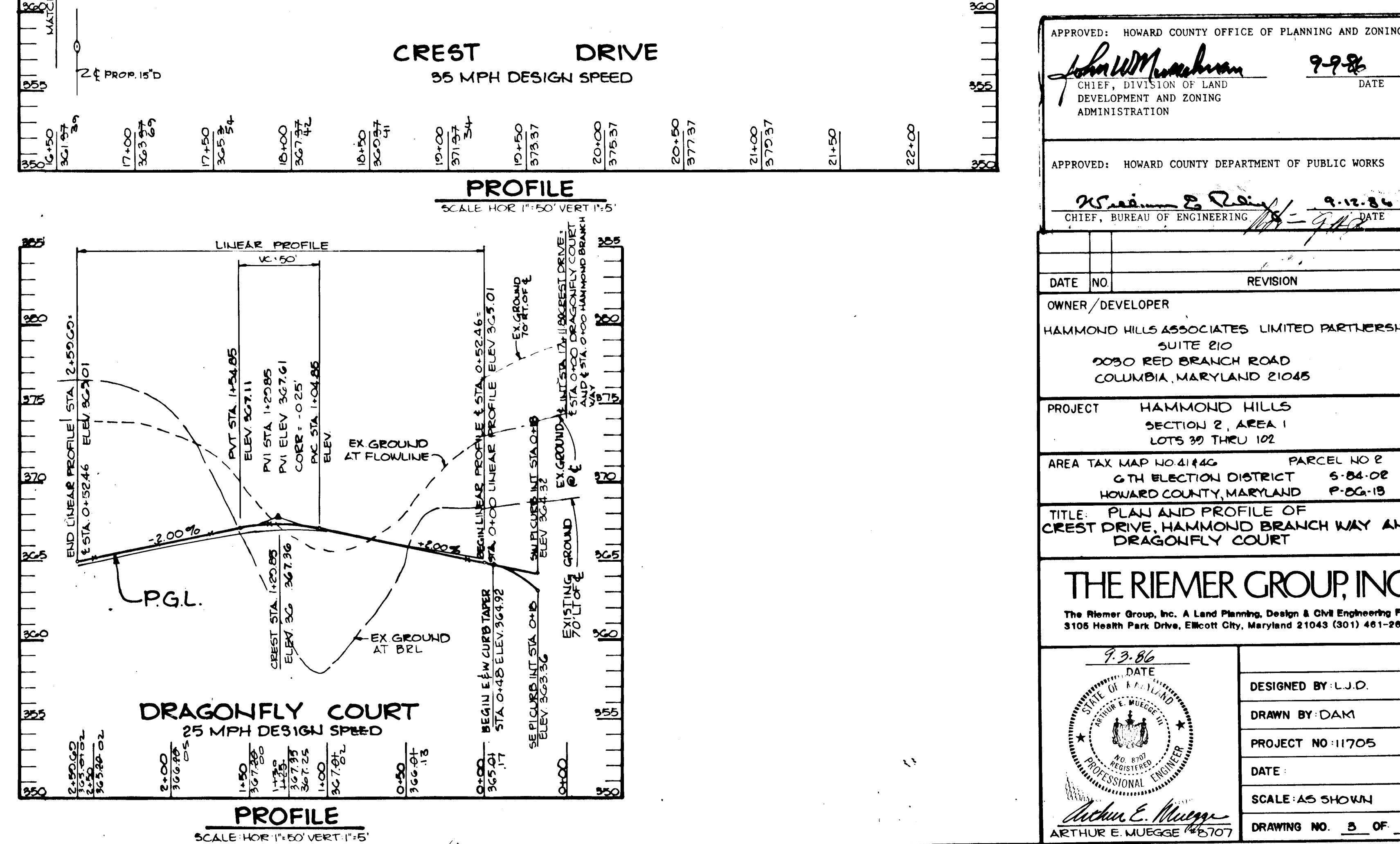
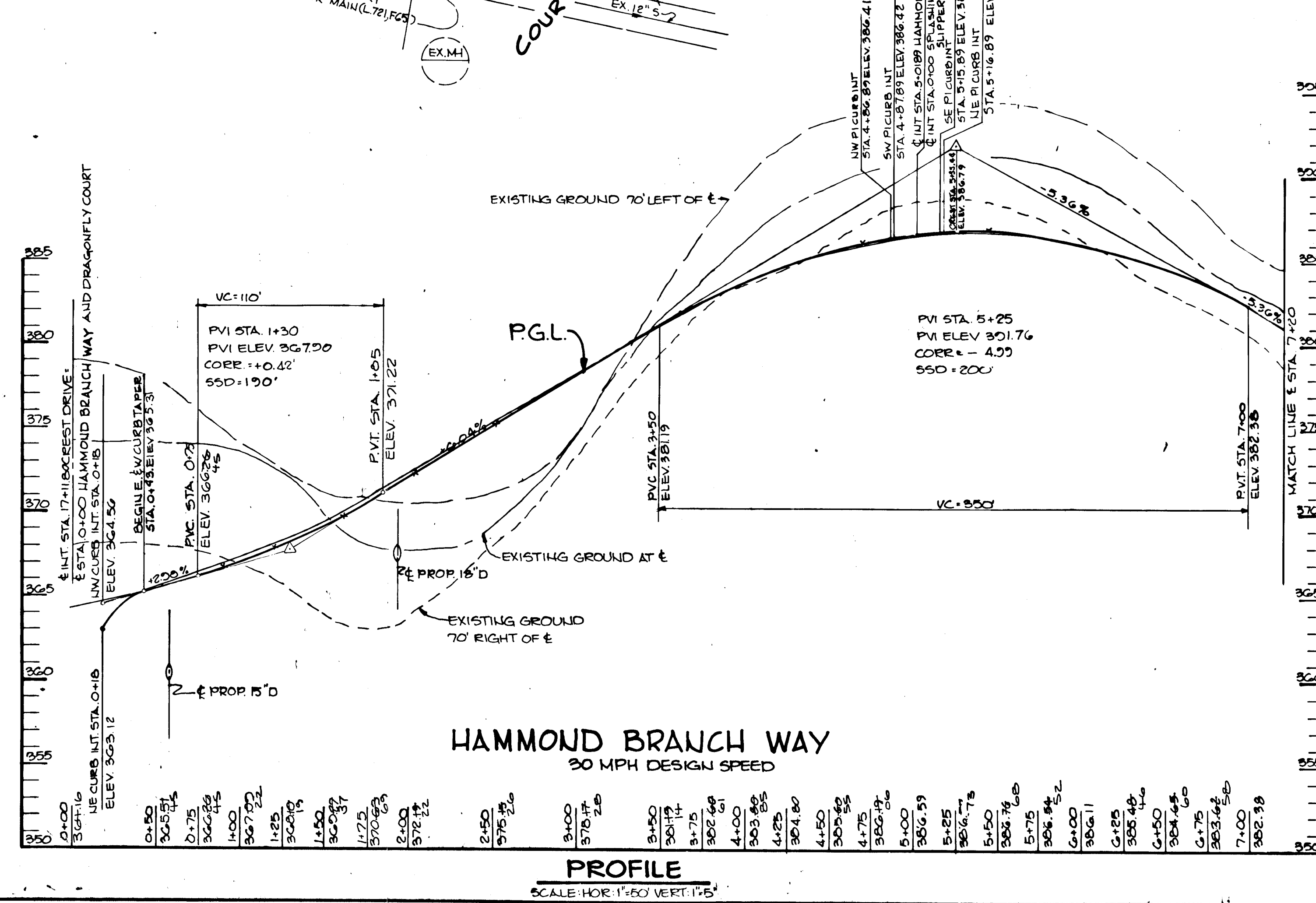
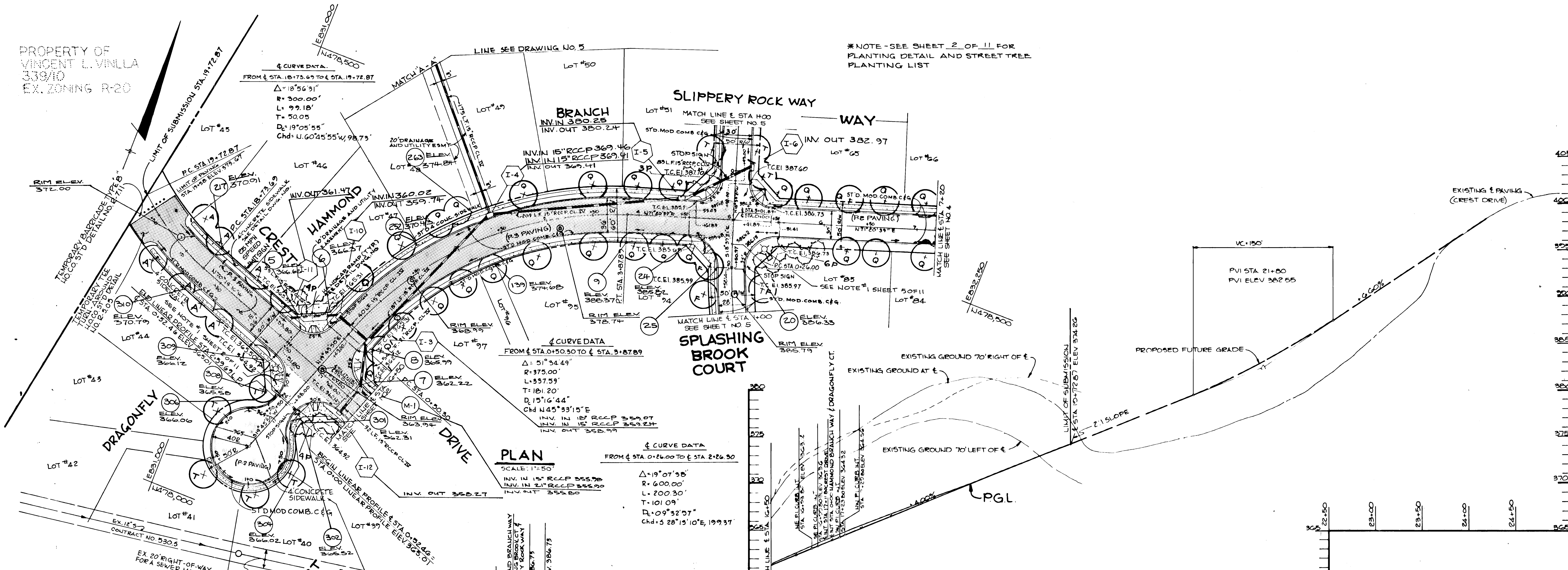
THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 481-8890

DESIGNED BY LJD
DRAWN BY DAM
PROJECT NO 11705
DATE
SCALE AS SHOWN
DRAWING NO. 2 OF 11

9-3-86
DATE
ARTHUR E. MUEJEGE 148707

PROPERTY OF
VINCENT L. VINLLA
339/10
EX. ZONING R-20

*NOTE-SEE SHEET 2 OF 11 FOR
PLANTING DETAIL AND STREET TREE
PLANTING LIST



APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
John W. M... 9-9-88 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
W... 9-12-88 DATE

CHIEF, BUREAU OF ENGINEERING

DATE	NO.	REVISION

OWNER/DEVELOPER
HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP
SUITE 210
9090 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045

PROJECT
HAMMOND HILLS
SECTION 2, AREA 1
LOTS 39 THROUGH 102

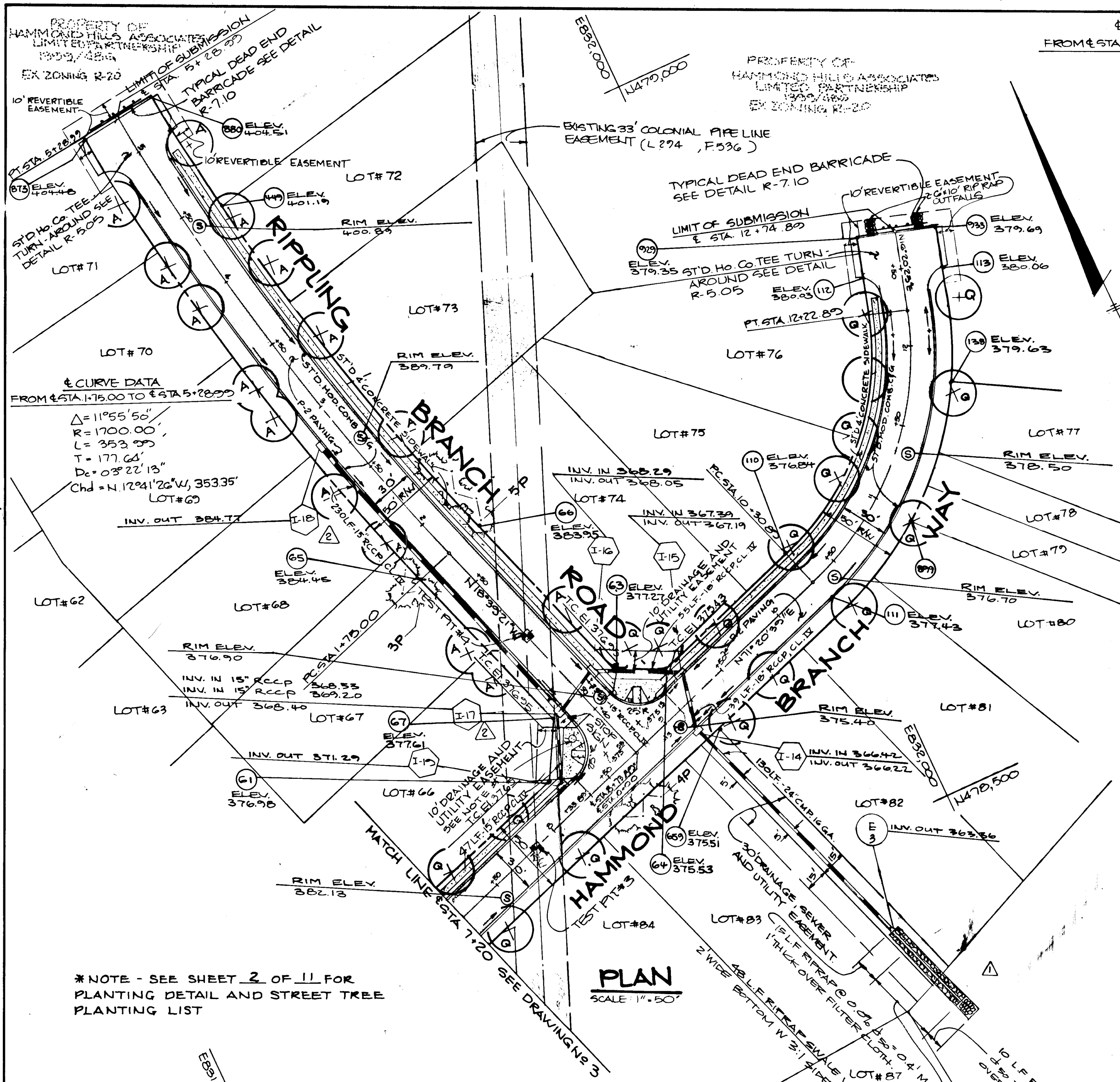
AREA TAX MAP NO. 4184G PARCEL NO. 2
GTH ELECTION DISTRICT 6-84-02
HOWARD COUNTY, MARYLAND P-82-15

TITLE: PLAN AND PROFILE OF
CREST DRIVE, HAMMOND BRANCH WAY AND
DRAGONFLY COURT

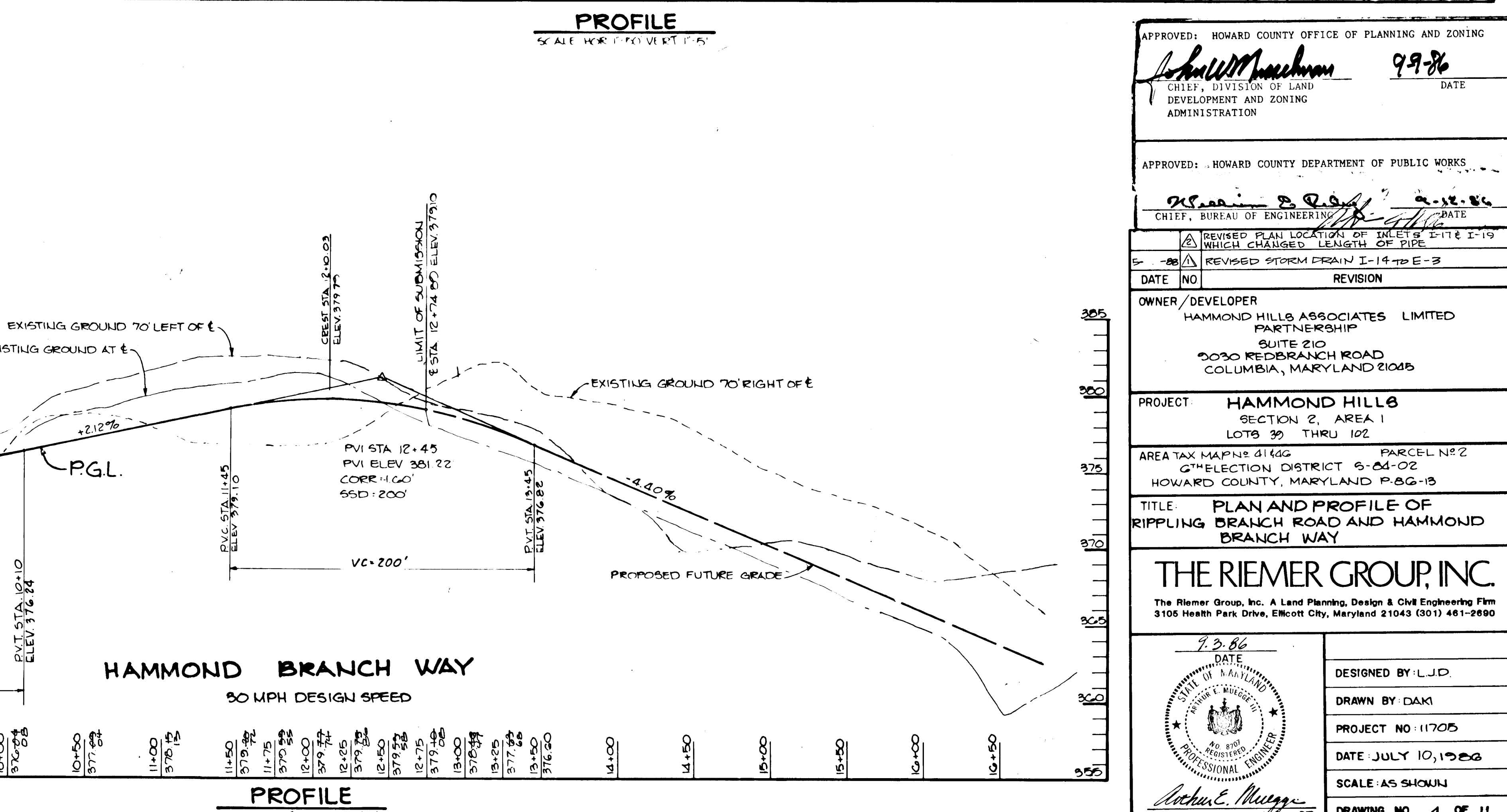
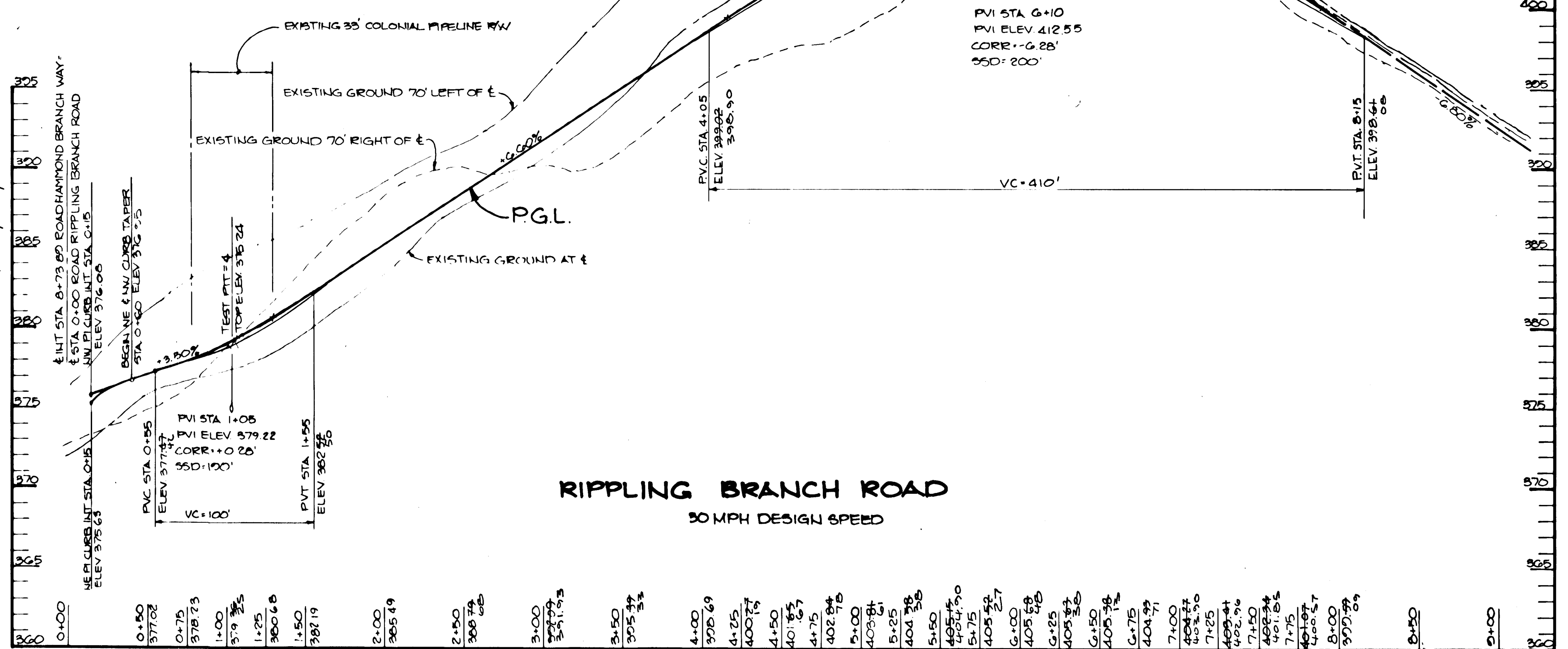
THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3106 Heath Park Drive, Ellicott City, Maryland 21043 (301) 461-2890

DATE: 9-3-86
DESIGNED BY: L.J.D.
DRAWN BY: DAM
PROJECT NO: 11705
SCALE: AS SHOWN
DRAWING NO. 5 OF 11

939



△ CURVE DATA
FROM STA 10+30.85 TO STA 12+22.89
R = 200.00'
L = 192.00'
T = 104.12'
Dc = 28°30'52"
Chd = N. 43°50'32"E, 184.71'



*NOTE - SEE SHEET 2 OF 11 FOR PLANTING DETAIL AND STREET TREE PLANTING LIST

NOTE #1- 175W MODERN MERCURY VAPOR LAMP POST TOP FIXTURES ON A 1 1/2" GRAY FIBERGLASS POLE LOCATED 2'-10" FROM BACK OF CURB.

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Arthur E. Muegge 9-9-86
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Richard E. Pugh 9-9-86
 CHIEF, BUREAU OF ENGINEERING

REVISOR: REVISION
 1-18 REVISOR: REVISION
 DATE NO REVISION

OWNER/DEVELOPER
 HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP
 SUITE 210
 3030 REDBRANCH ROAD
 COLUMBIA, MARYLAND 21046

PROJECT
 HAMMOND HILLS
 SECTION 2, AREA 1
 LOTS 39 THRU 102

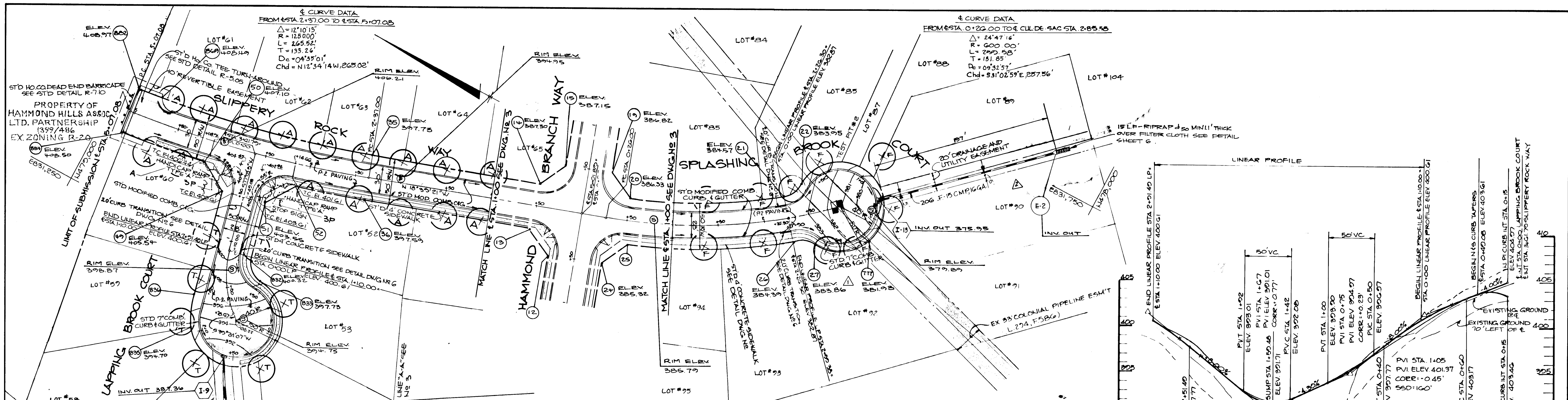
AREA TAX MAPS: 41446 PARCEL #2
 G^M ELECTION DISTRICT 6-04-02
 HOWARD COUNTY, MARYLAND P.8-G-13

TITLE
 PLAN AND PROFILE OF
 RIPPLING BRANCH ROAD AND HAMMOND BRANCH WAY

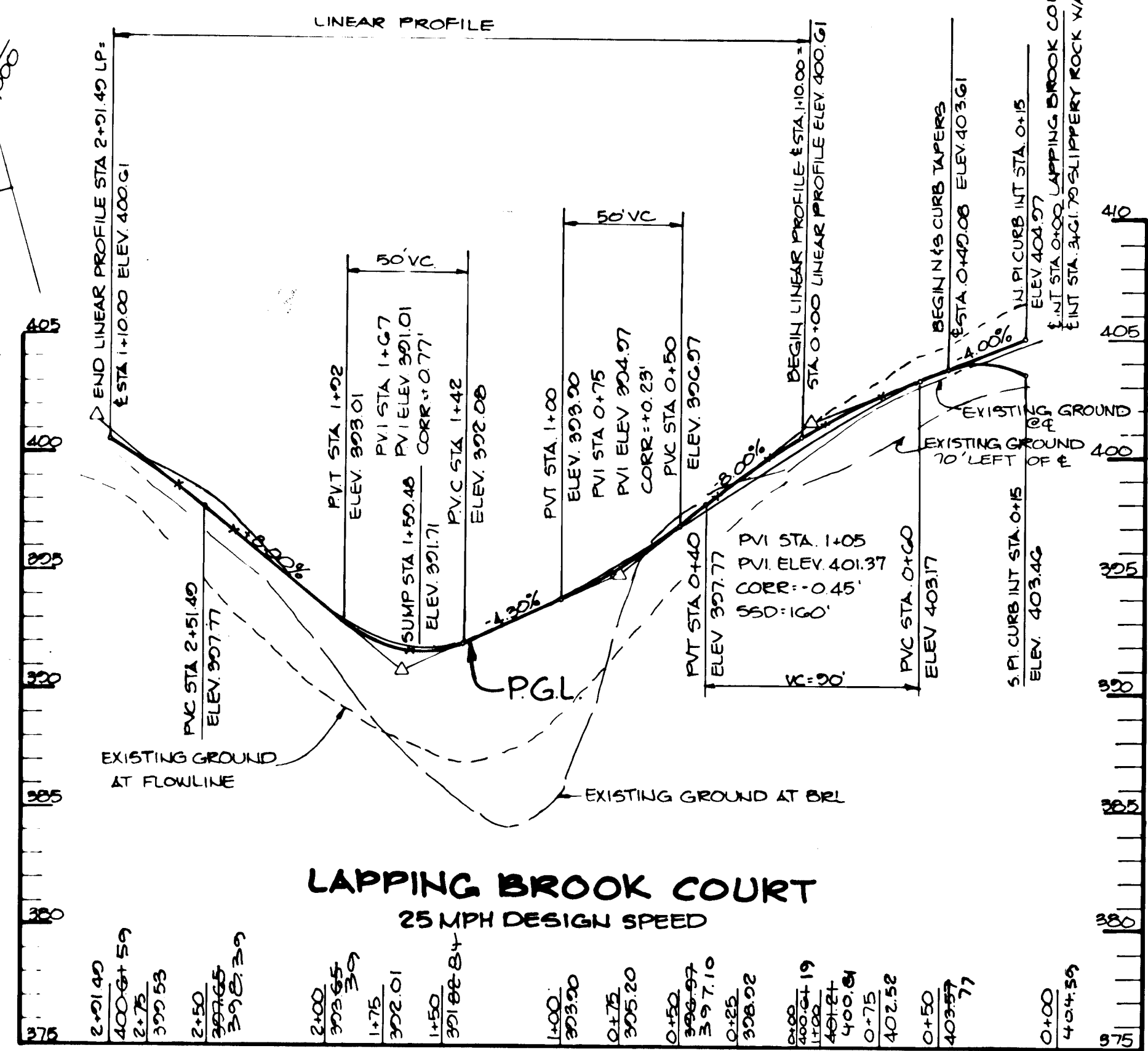
THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2660

DATE 9-9-86
 DESIGNED BY: L.J.D.
 DRAWN BY: DAK
 PROJECT NO: 11705
 DATE JULY 10, 1988
 SCALE: AS SHOWN
 DRAWING NO. 4 OF 11

939

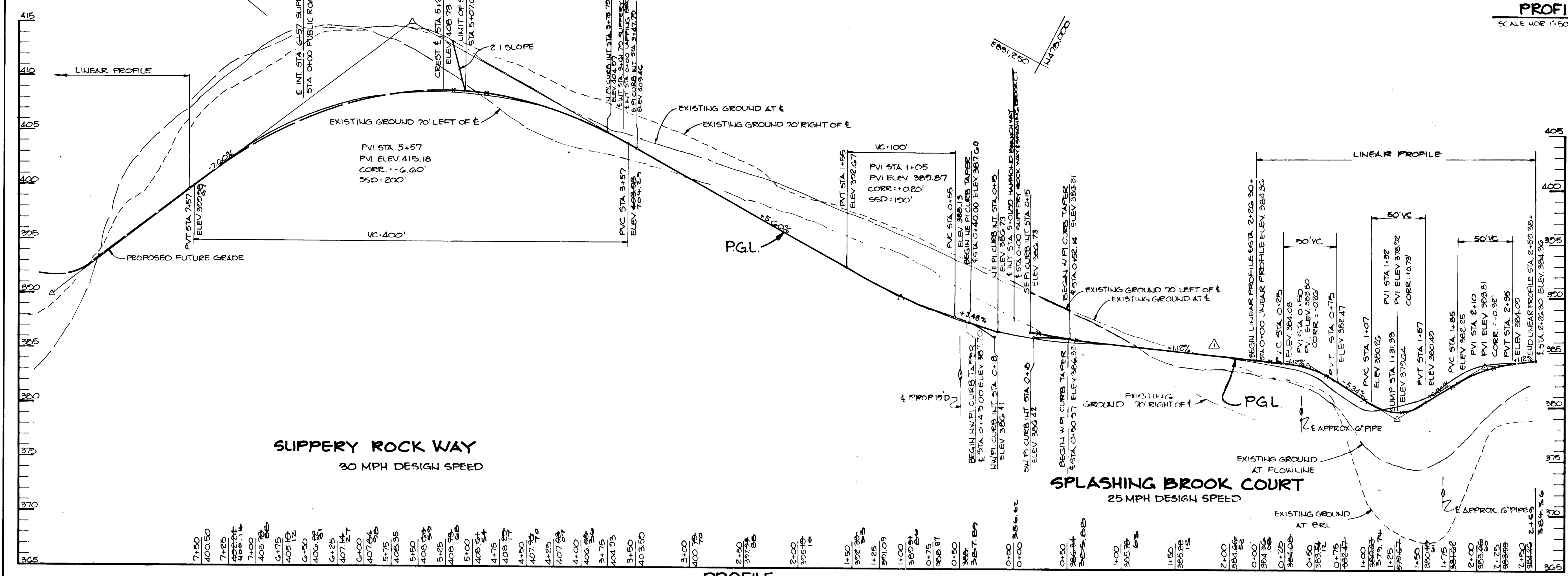


PLAN
SCALE: 1" = 50'



LAPPING BROOK COURT
25 MPH DESIGN SPEED

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



SLIPPERY ROCK WAY
30 MPH DESIGN SPEED

SPLASHING BROOK COURT
25 MPH DESIGN SPEED

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

NOTE - SEE SHEET 2 OF 11 FOR PLANTING DETAIL AND STREET TREE PLANTING LIST

NOTE #1 - 175W MODERN MERCURY VAPOR LAMP POST TOP FIXTURES ON A 14' GRAY FIBERGLASS POLE LOCATED 2'-10" FROM BACK OF CURB.

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
John W. Muschman 9986 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Arthur E. Muegge 9986 DATE
 CHIEF, BUREAU OF ENGINEERING

5-88 REVISED STORM DRAIN I-13 TO E-2
 10-27-82 REVISED PLAN AND PROFILE OF SPLASHING BROOK COURT

DATE NO REVISION

OWNER/DEVELOPER
 HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP
 SUITE 210
 3030 REDBRANCH ROAD
 COLUMBIA, MARYLAND 21045

PROJECT
 HAMMOND HILLS
 SECTION 2, AREA 1
 LOTS 39 THRU 102

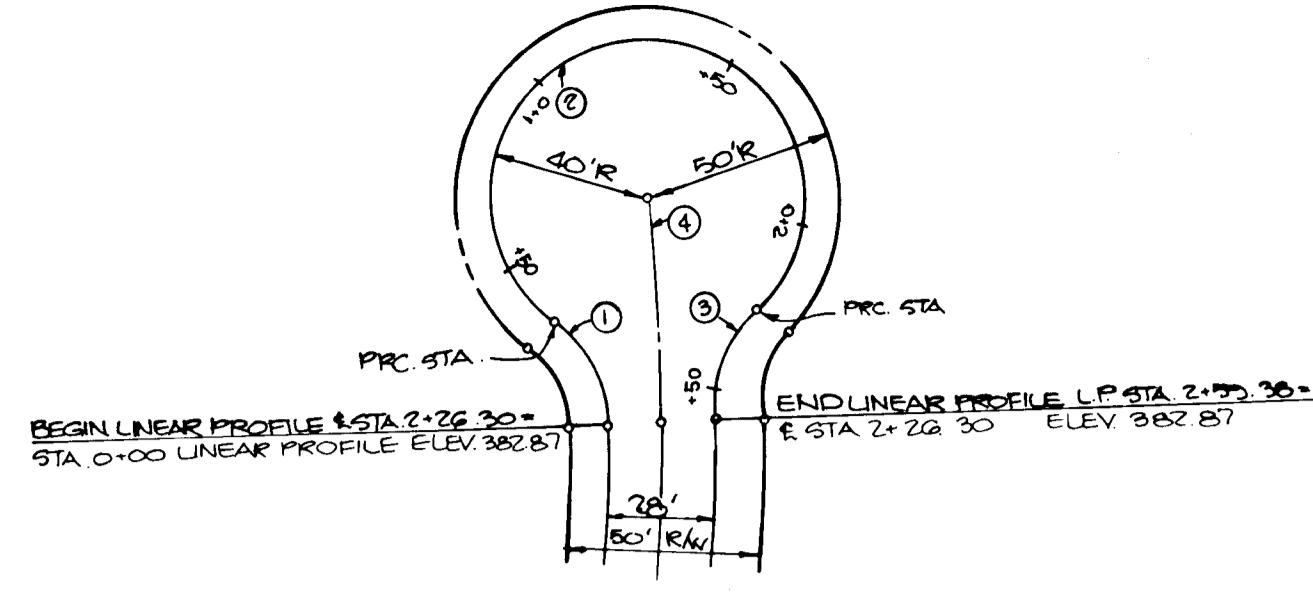
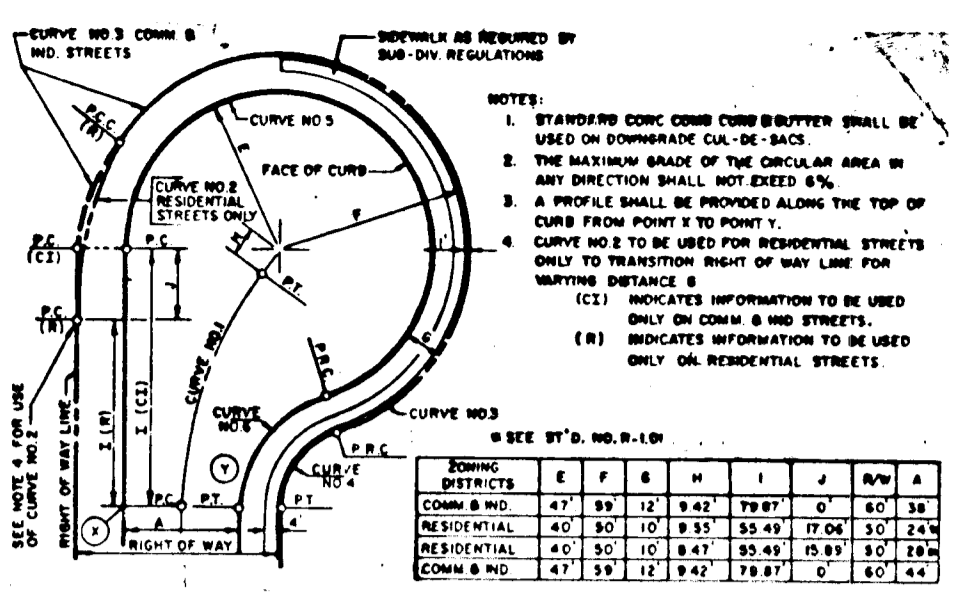
AREA TAX MAP NO. 2146G PARCEL NO. 2
 G¹ ELECTION DISTRICT S-84-02
 HOWARD COUNTY MARYLAND P-82-15

TITLE PLAN AND PROFILE OF LAPPING BROOK COURT, SPLASHING BROOK COURT AND SLIPPERY ROCK WAY

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

7-3-84 DATE
 DESIGNED BY: LJD
 DRAWN BY: DAM
 PROJECT NO: 11705
 DATE:
 SCALE: AS SHOWN
 DRAWING NO. 5 OF 11

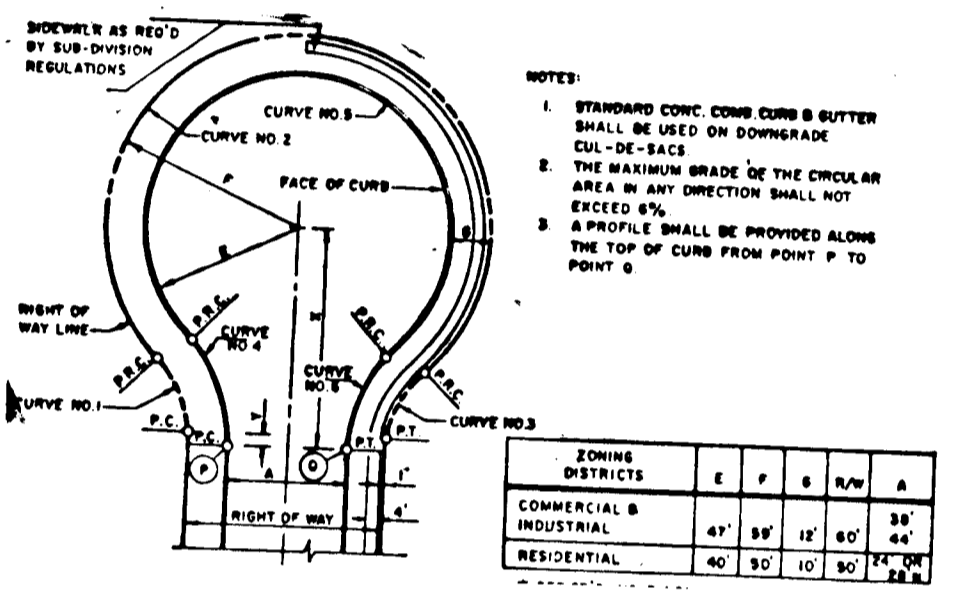
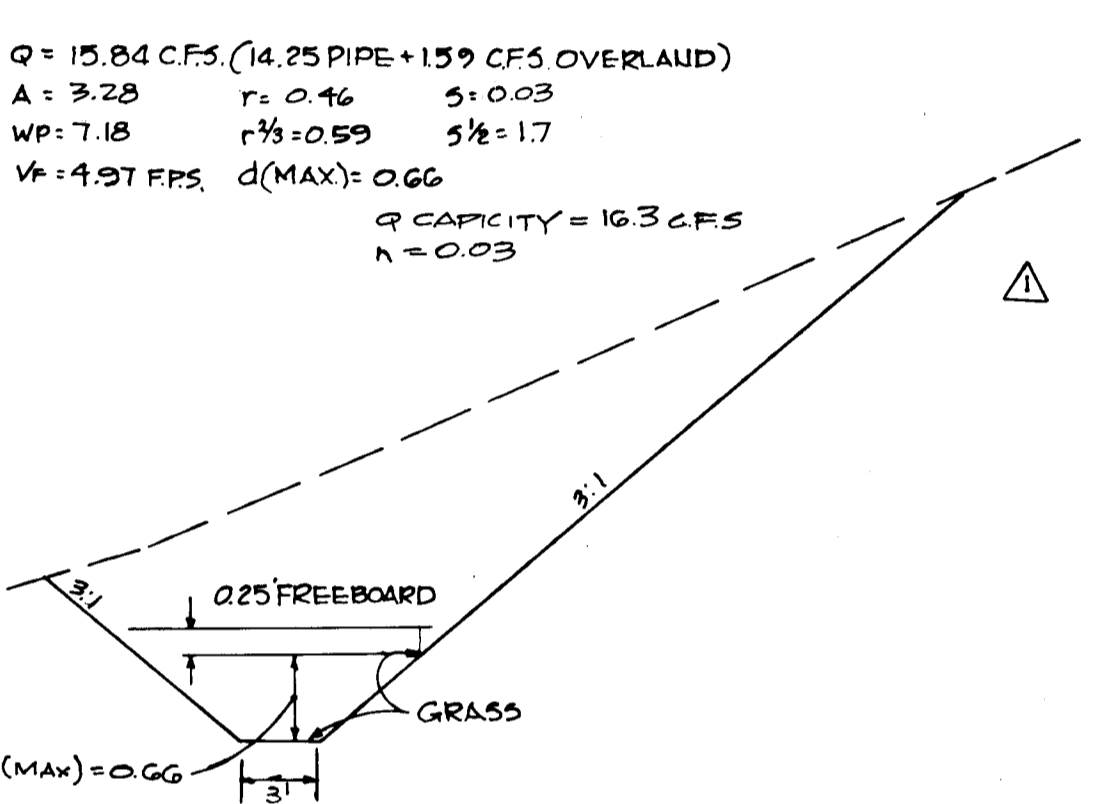
939



CURVE DATA						
No.	Δ	RAD	ARC	TAN	CHD	LCD
1	52°05'49"	35.00	31.82	17.11	30.74	5.02°05'54"E
2	278°18'08"	40.00	104.29	—	52.33	5.02°16'14"W
3	46°35'00"	35.00	28.50	15.09	27.72	N.14°54'12"W
4	90°26'49"	24.00	4.77	2.39	4.77	N.38°00'20"W

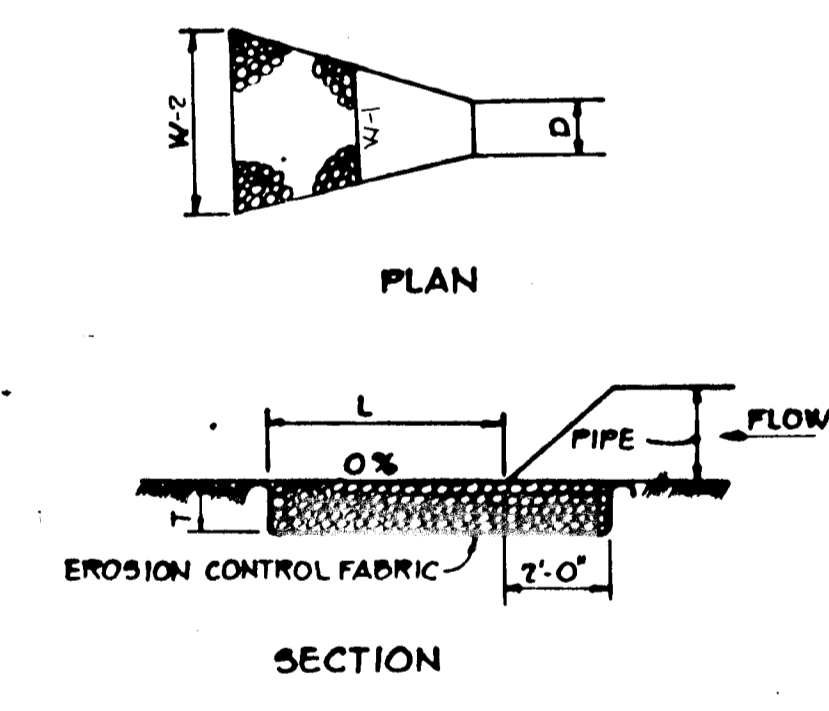
OFFSET CUL-DE-SAC LAPPING BROOK COURT
 NO SCALE

CUL-DE-SAC DETAIL FOR SPLASHING BROOK COURT
 NO SCALE



SECTION A-THRU 3' WIDE GRASS SWALE
 SCALE HORIZ 1"=5'
 VERT. 1"=2'

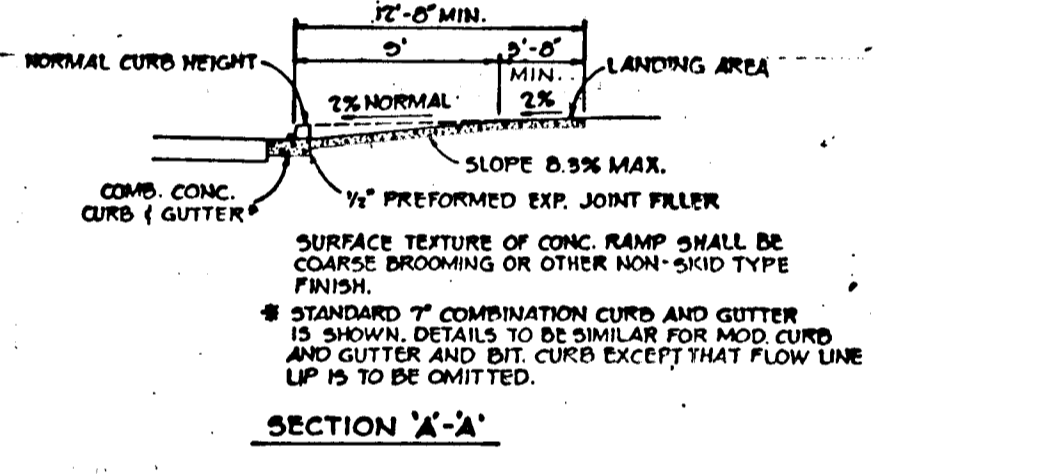
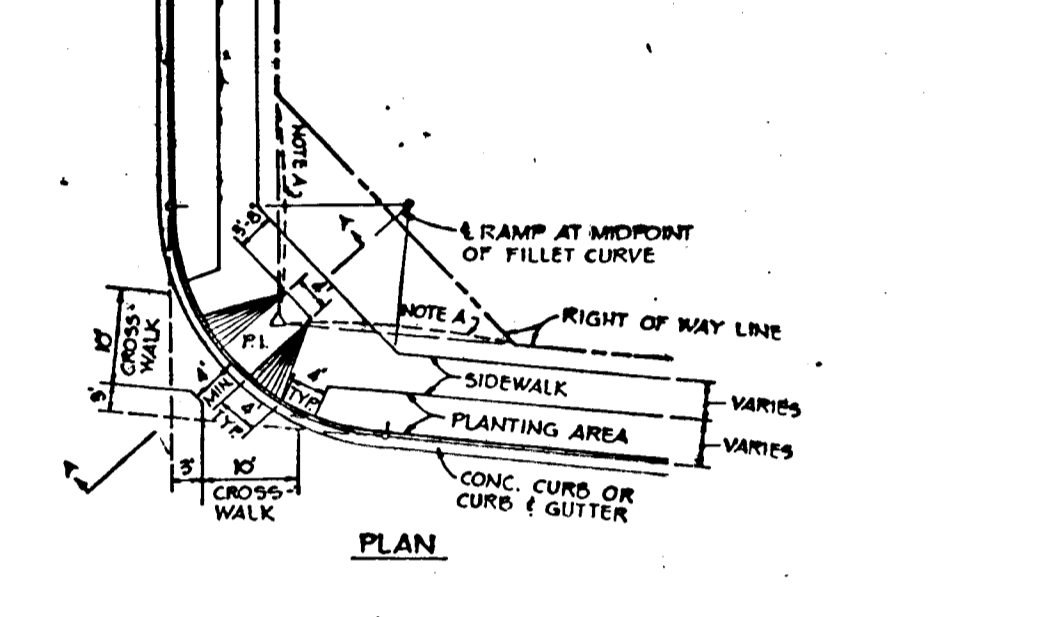
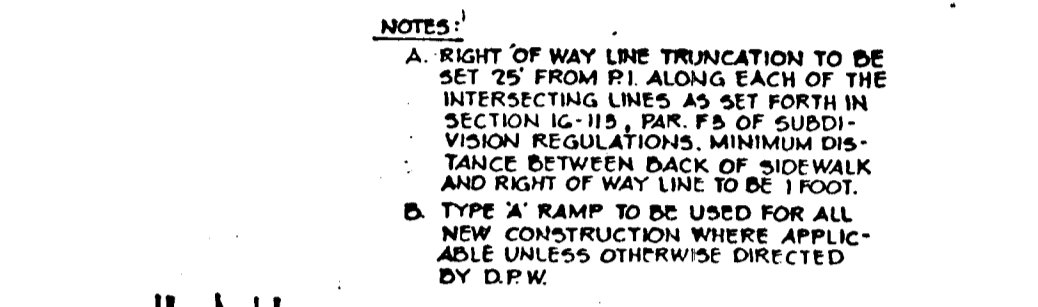
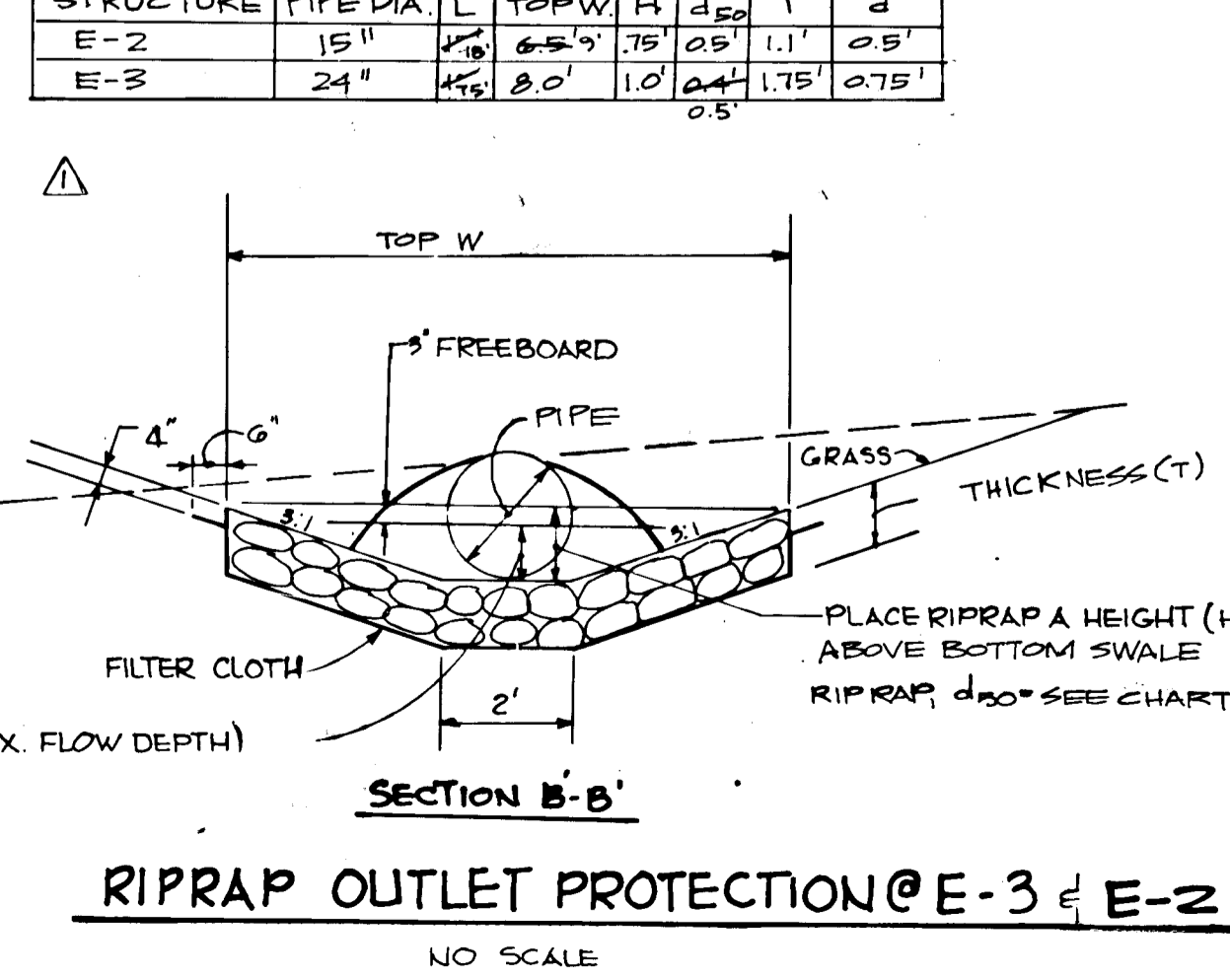
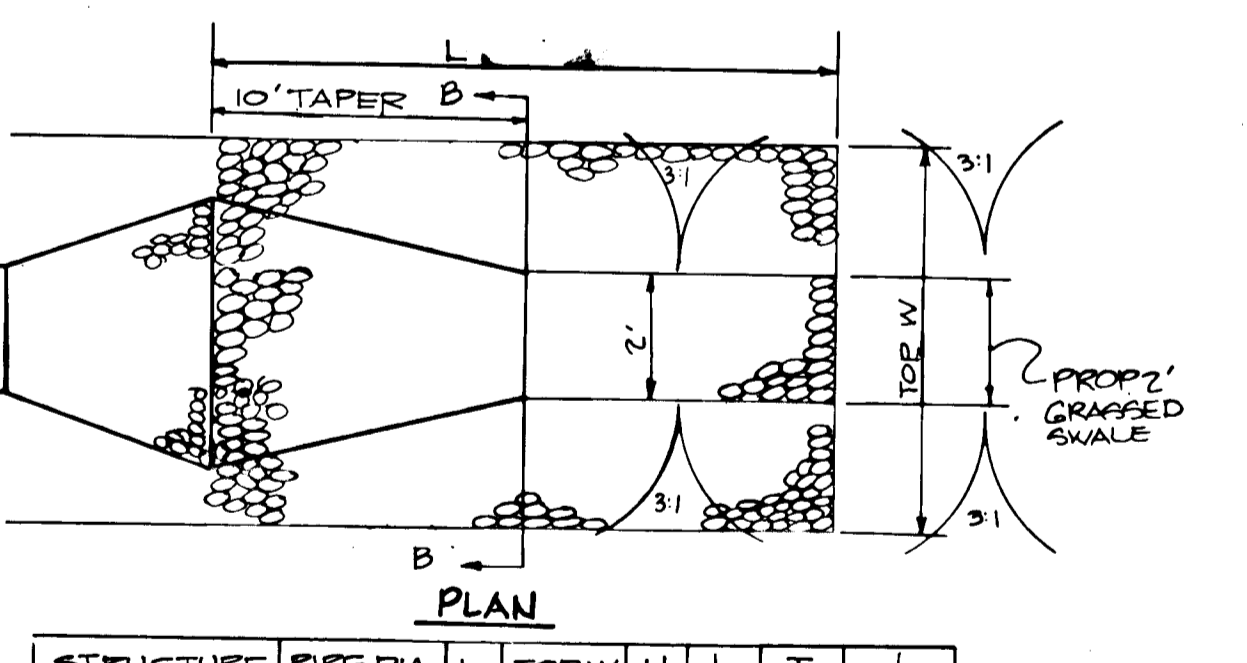
CUL-DE-SAC DETAIL DRAGONFLY COURT
 NO SCALE



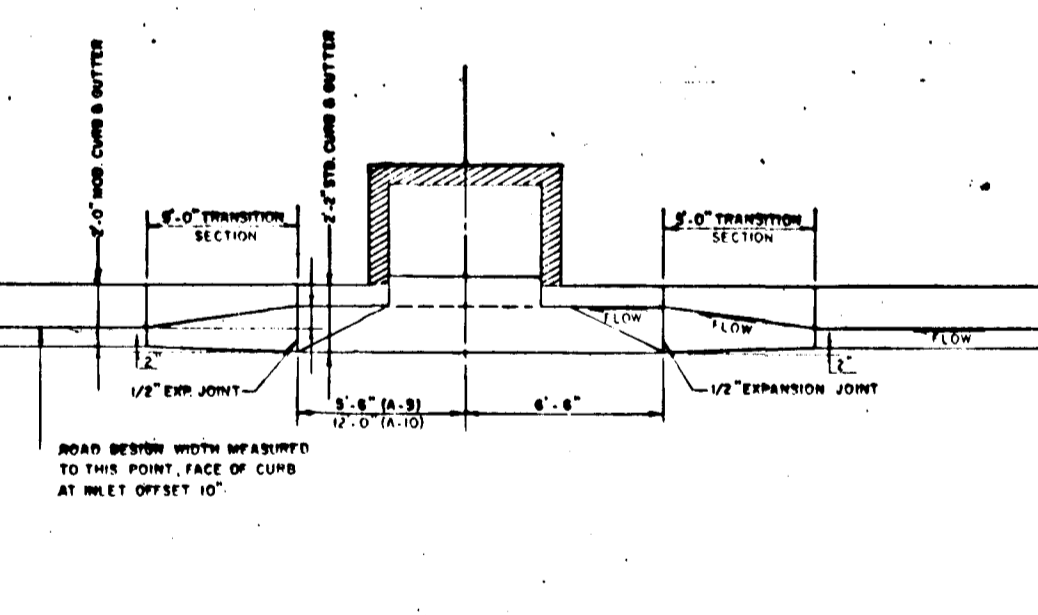
STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W-2)	THICKNESS (T)	(W-1)
E-1	0.4'	SEE DETAIL SHIT B	14'	24"	68"
E-4	1.65'	49'	*	40"	150"
27T TEMP	0.5'	14'	16'	21"	1.5'

* SHAPE TO CONFORM TO EXISTING CHANNEL, PLACE TO ELEV. 367.63

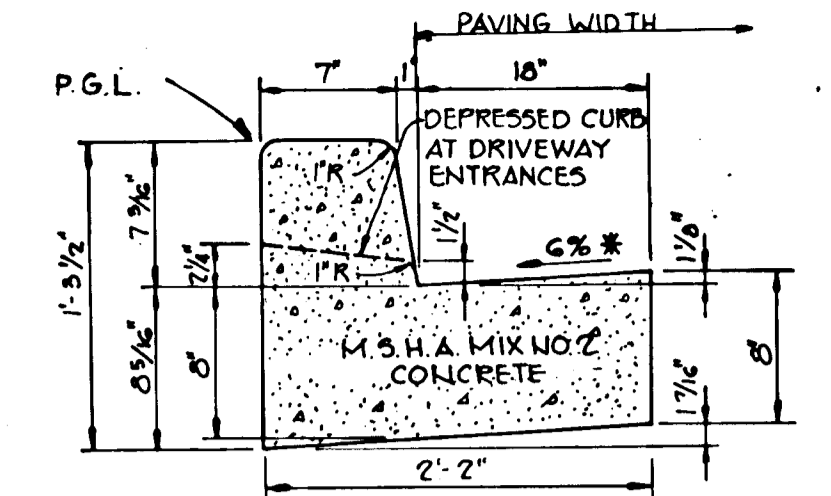
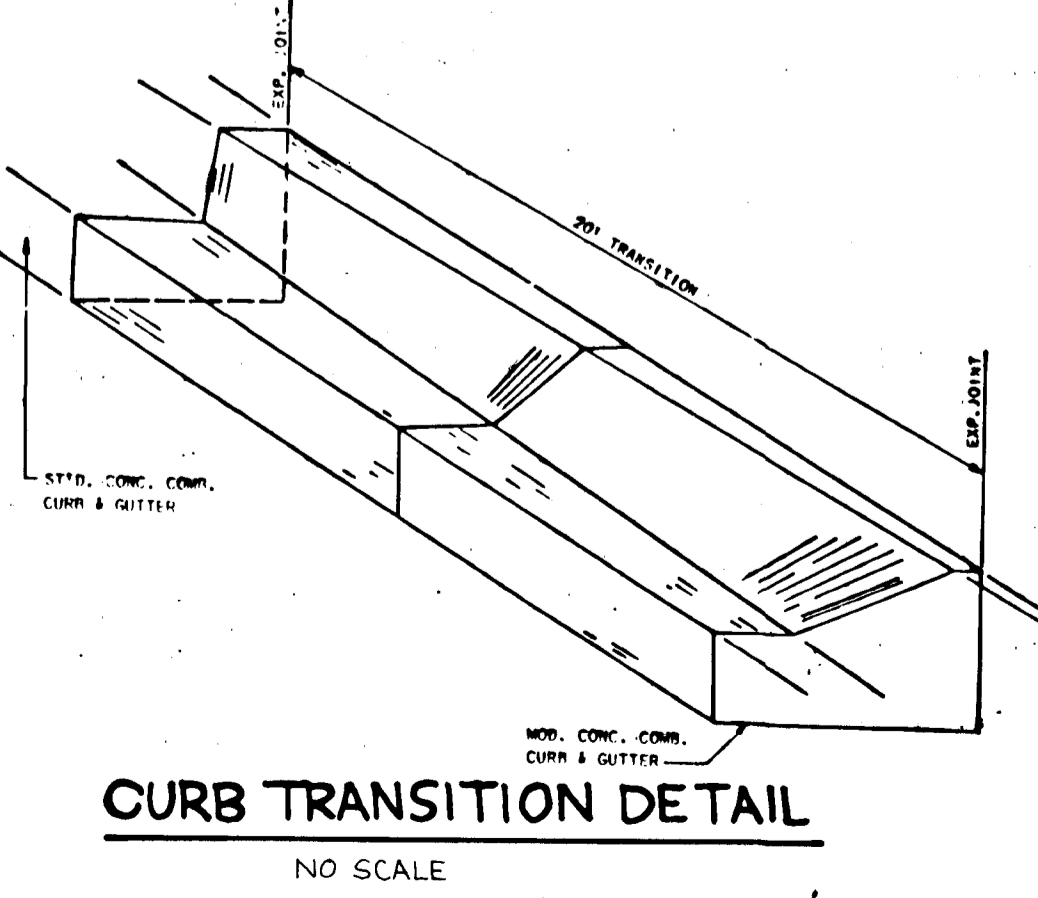
RIP RAP OUTLET PROTECTION
 NO SCALE



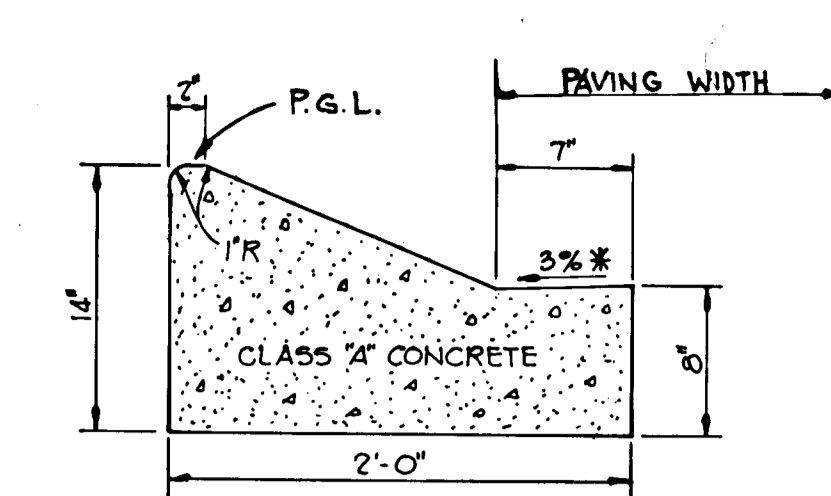
TYPICAL HANDICAP RAMP
 NO SCALE



CURB TRANSITION @ INLETS
 NO SCALE



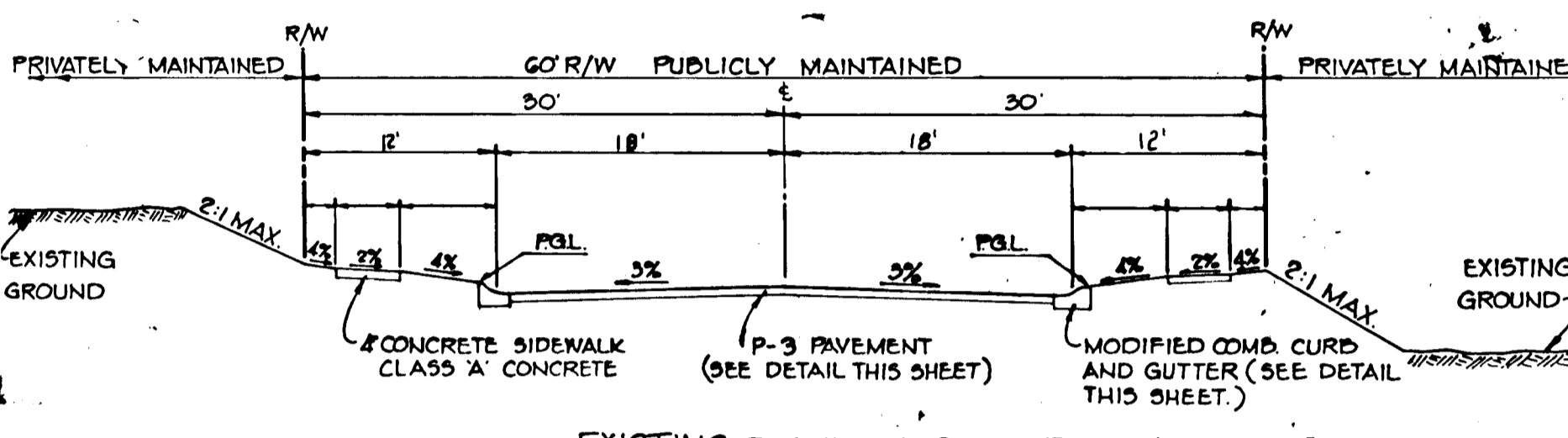
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)
 * GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.



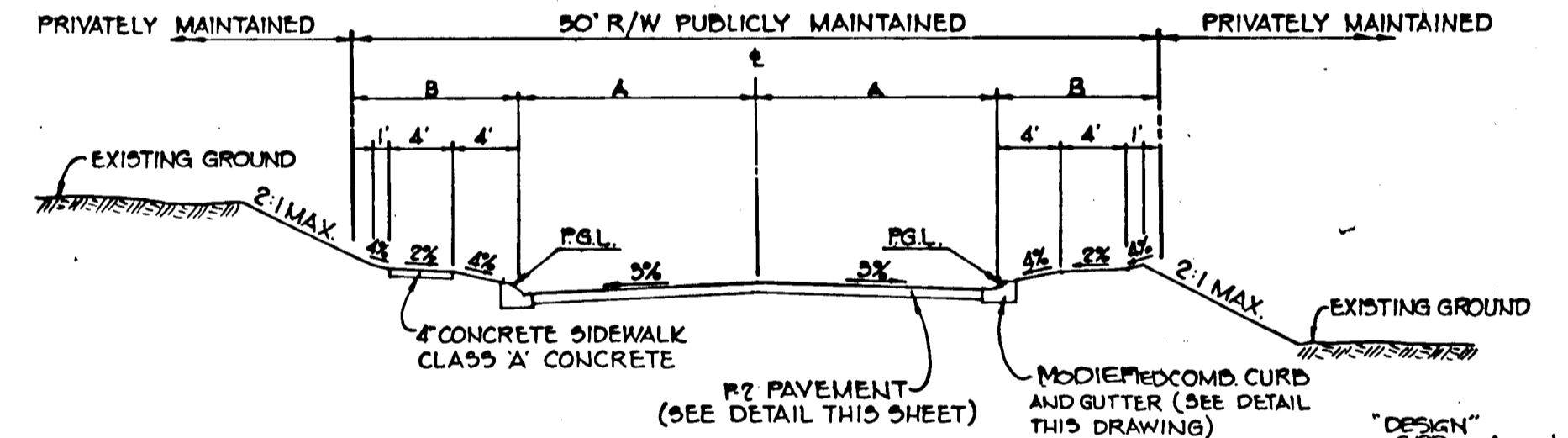
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)
 * GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

STANDARD 7" COMBINATION CURB AND GUTTER
 No Scale

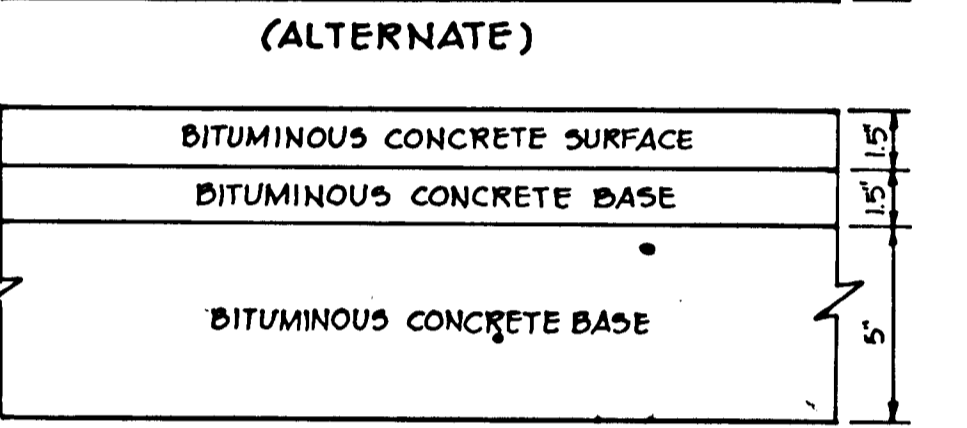
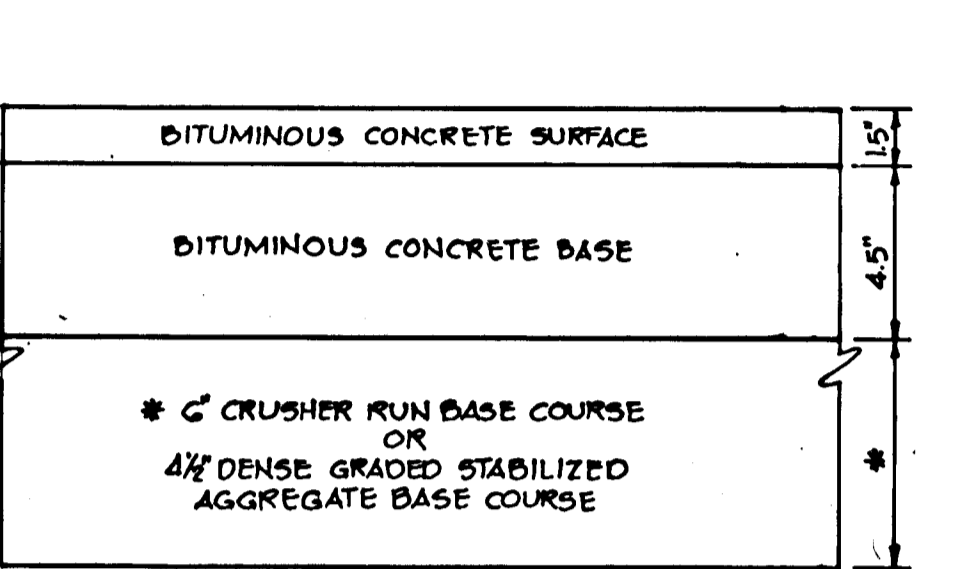
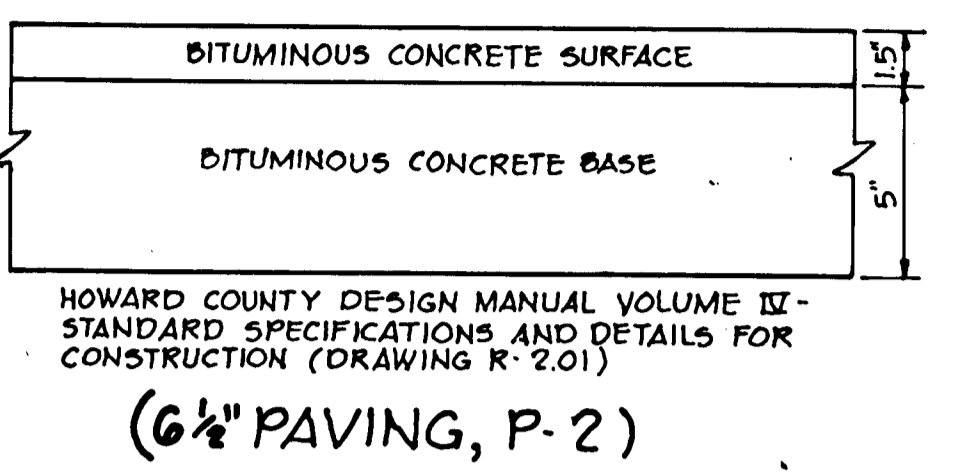
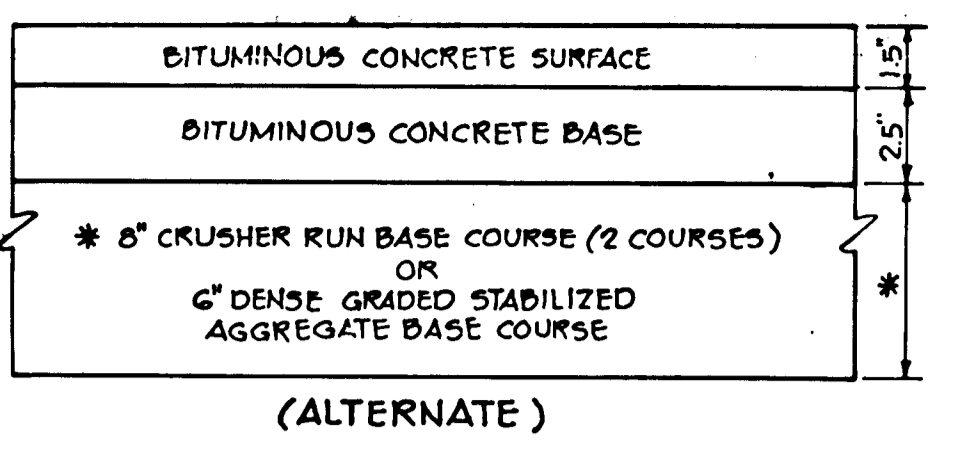
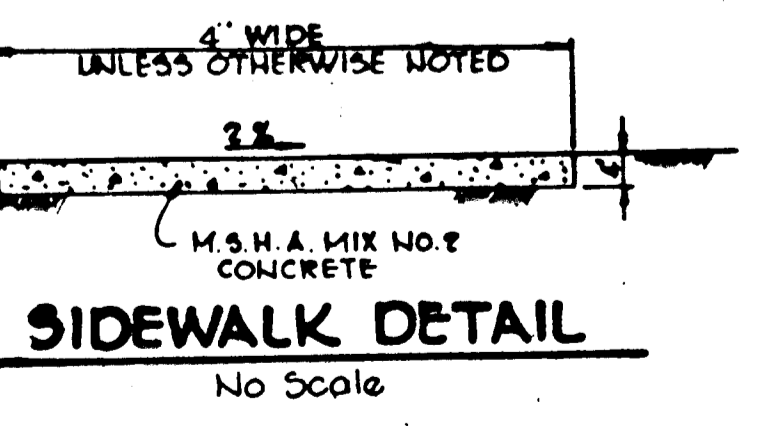
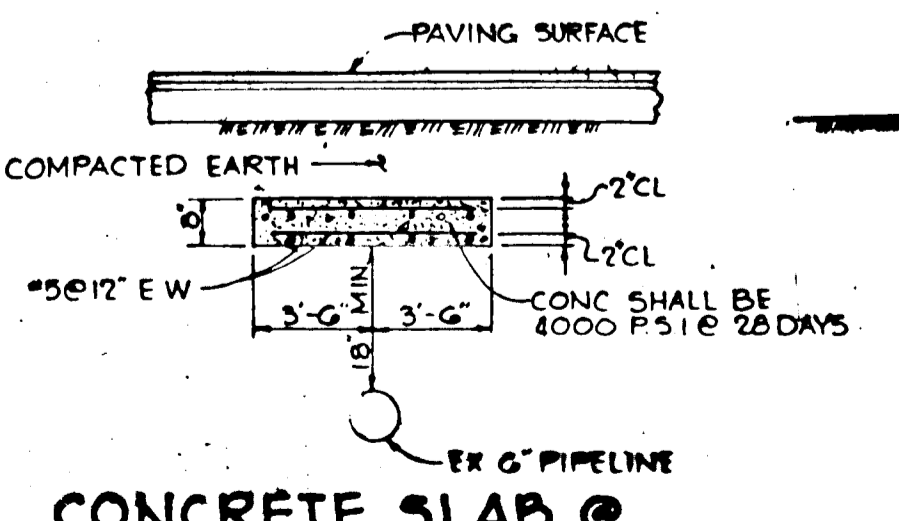
MODIFIED COMBINATION CURB AND GUTTER
 No Scale



TYPICAL SECTION FOR 60' R/W
 NO SCALE



TYPICAL SECTION FOR 50' R/W
 NO SCALE



HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)
 (8" PAVING, P-3)

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 Chief, Division of Land Development and Zoning Administration
 DATE: 9-9-86

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Engineering
 DATE: 9-17-86

OWNER/DEVELOPER
 HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP
 SUITE 210
 2020 RED BRANCH ROAD
 COLUMBIA, MARYLAND 21045

PROJECT: HAMMOND HILLS SECTION 2, AREA 1 LOTS 30 THRU 102
 AREA TAX MAP N9414G PARCEL N9 2
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

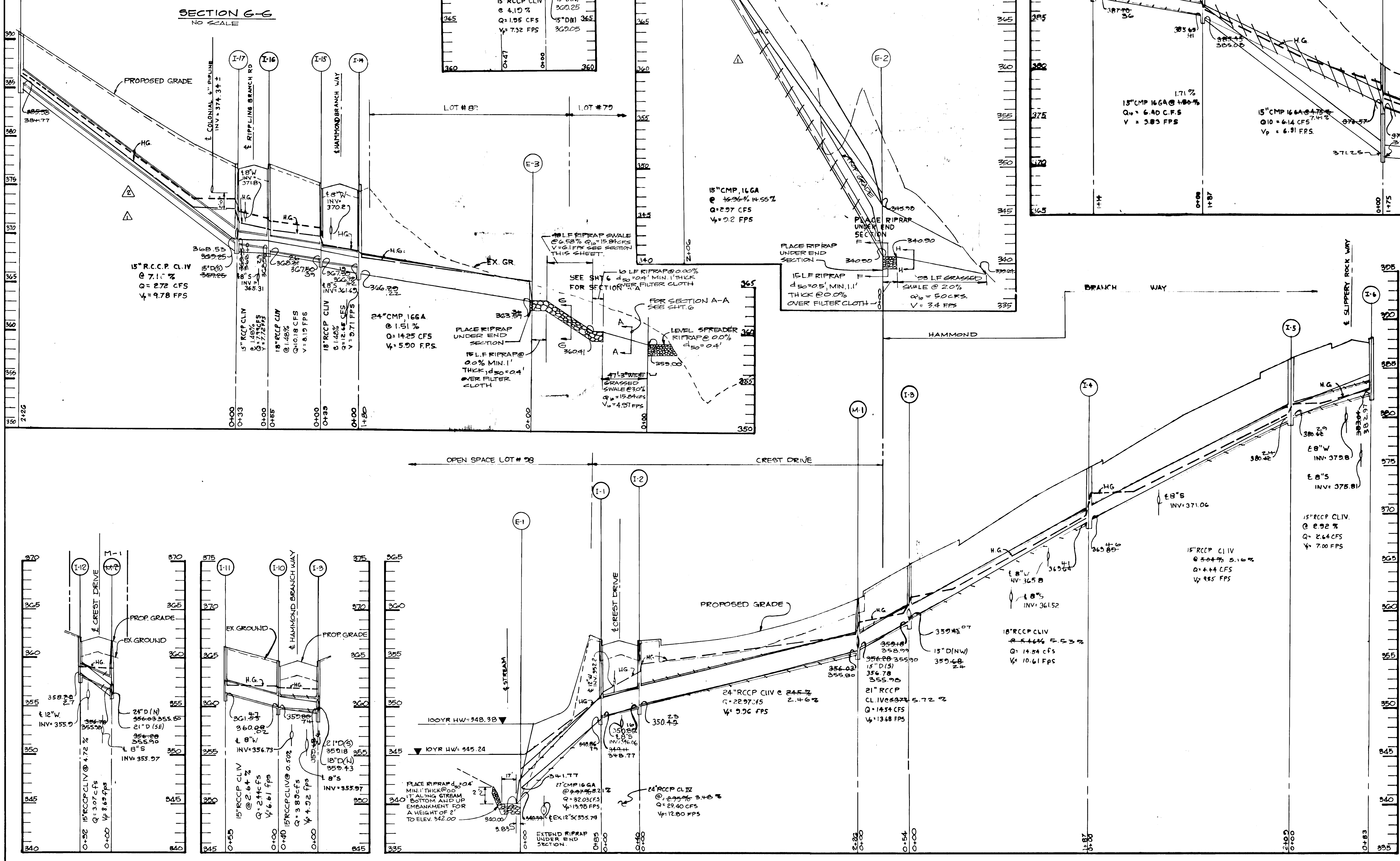
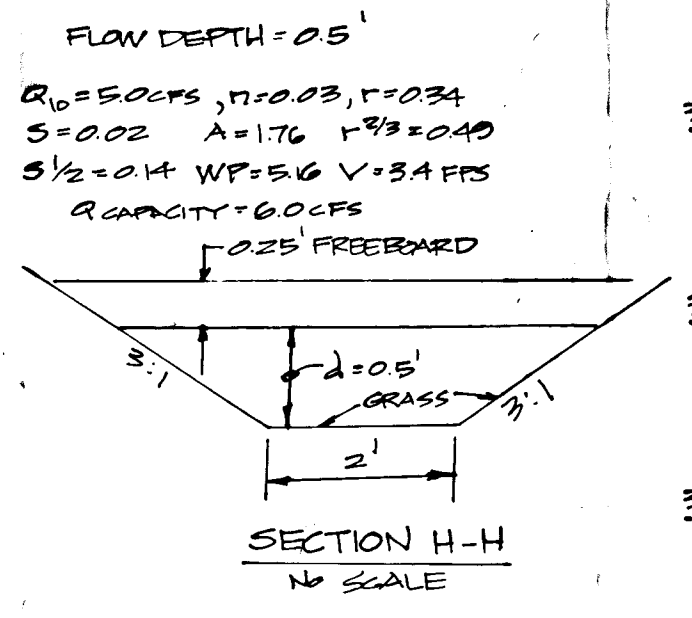
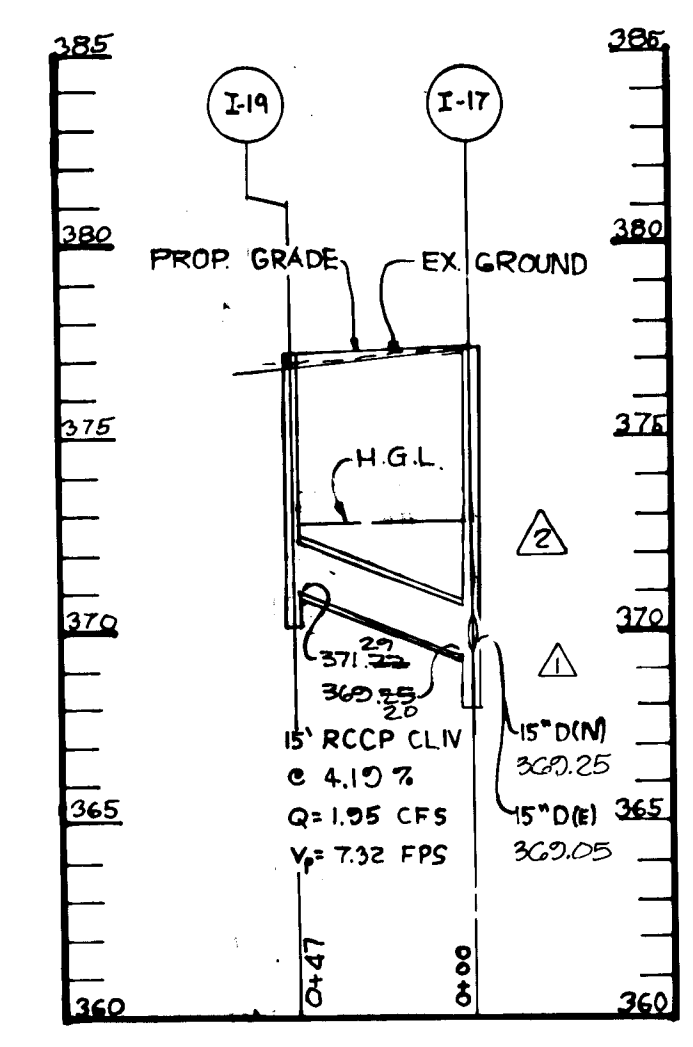
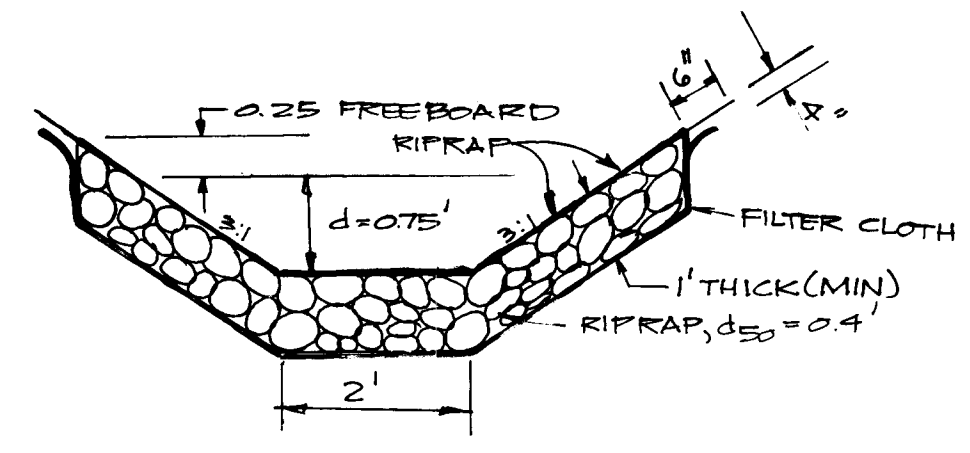
TITLE: DETAILS

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

DATE: 9-3-86
 DESIGNED BY: L.J.D.
 DRAWN BY: D.D.B.
 PROJECT NO: 11705
 DATE:
 SCALE: AS SHOWN
 DRAWING NO. 6 OF 11

F-87-14

FLOW DEPTH = 0.75'
 $Q = 15.84 \text{ CFS}$ $n = 0.038$ $V = 0.47$
 $S = 0.0058$ $A = 3.18$ $V^2/2g = 0.060$
 $S \frac{1}{2} = 0.26$ $WP = 6.74$ $V = 6.1 \text{ FPS}$
 CAPACITY = 19.4 CFS



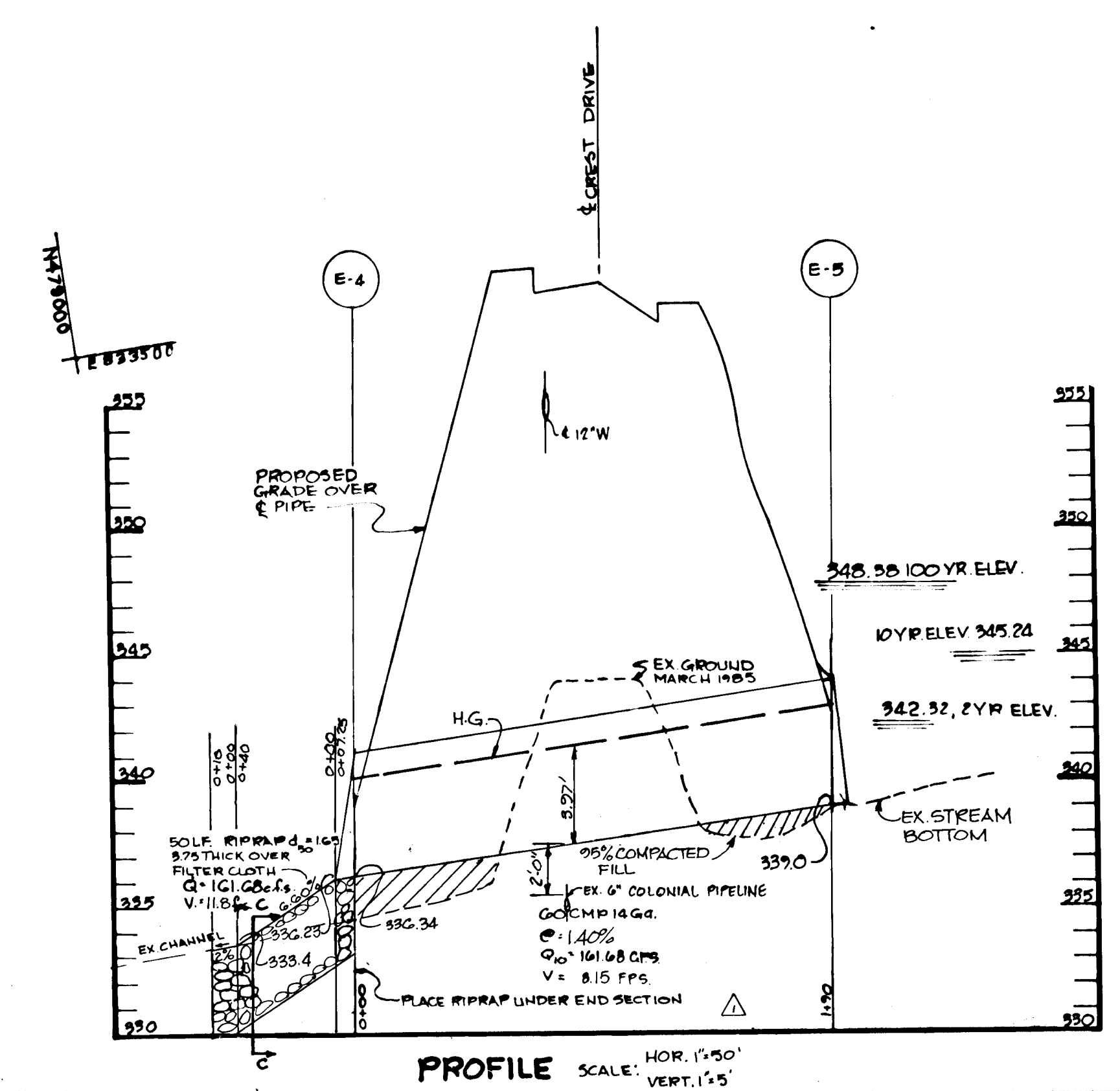
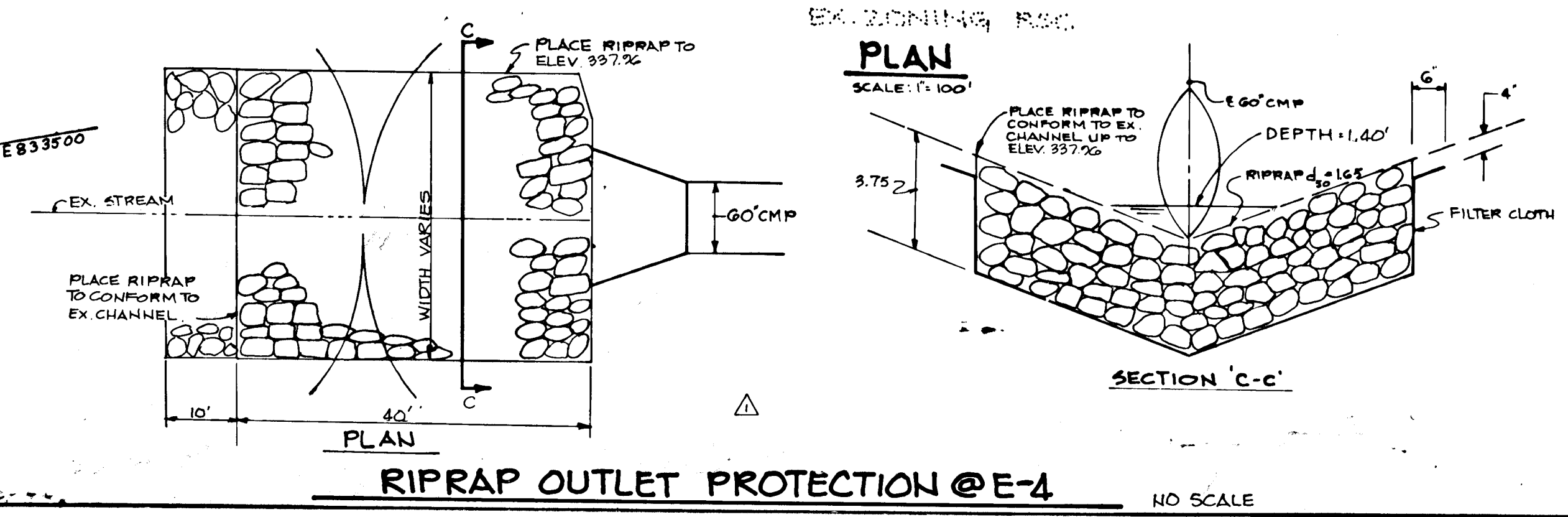
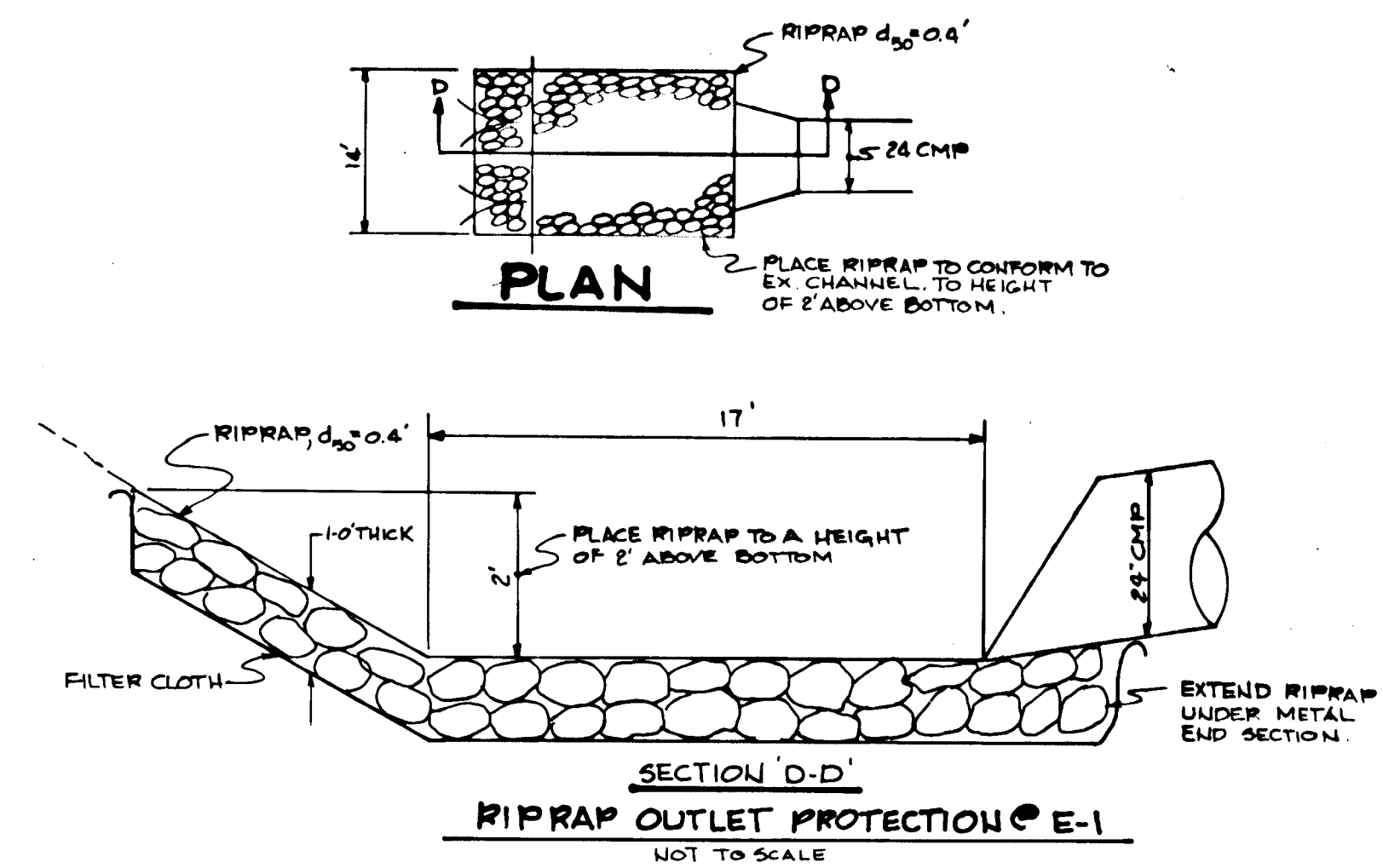
REVISED STORM DRAIN I-14 TO E-3 AND I-13 TO E-2, ADDED SECTION.	
DATE	NO. REVISION
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
<i>John M. Baschman</i>	9-9-86 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>W. Scott B. R... ..</i>	9-18-86 DATE
CHIEF, BUREAU OF ENGINEERING	
REVISED STORM DRAIN PROFILE FROM I-17 TO I-18 AND I-17 TO I-15	
REVISED PROFILES FROM I-13 TO E-2, I-14 TO I-17, I-18 TO E-3	
DATE	NO. REVISION
OWNER/DEVELOPER	
HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP	
SUITE 210	
0030 RED BRANCH ROAD	
COLUMBIA, MARYLAND 21045	
PROJECT: HAMMOND HILLS	
SECTION 2, AREA 4	
LOTS THRU	
AREA TAX MAP NO 4144G PARCEL NO 2	
GTH ELECTION DISTRICT 6-84-02	
HOWARD COUNTY, MARYLAND P-8G-13	
TITLE: STORM DRAIN PROFILES	
THE RIEMER GROUP, INC.	
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm	
8106 Heath Park Drive, Ellicott City, Maryland 21043 (301) 481-9800	
DATE	DESIGNED BY: LUD
9-3-86	DRAWN BY: DDB
PROJECT NO: 11705	DATE:
SCALE: HOR 1"=50'	VERT 1"=8'
DRAWING NO. 7 OF 11	

939

PROPERTY OF
VINCENT L. VINELLA
530/10
EX. ZONING R-20

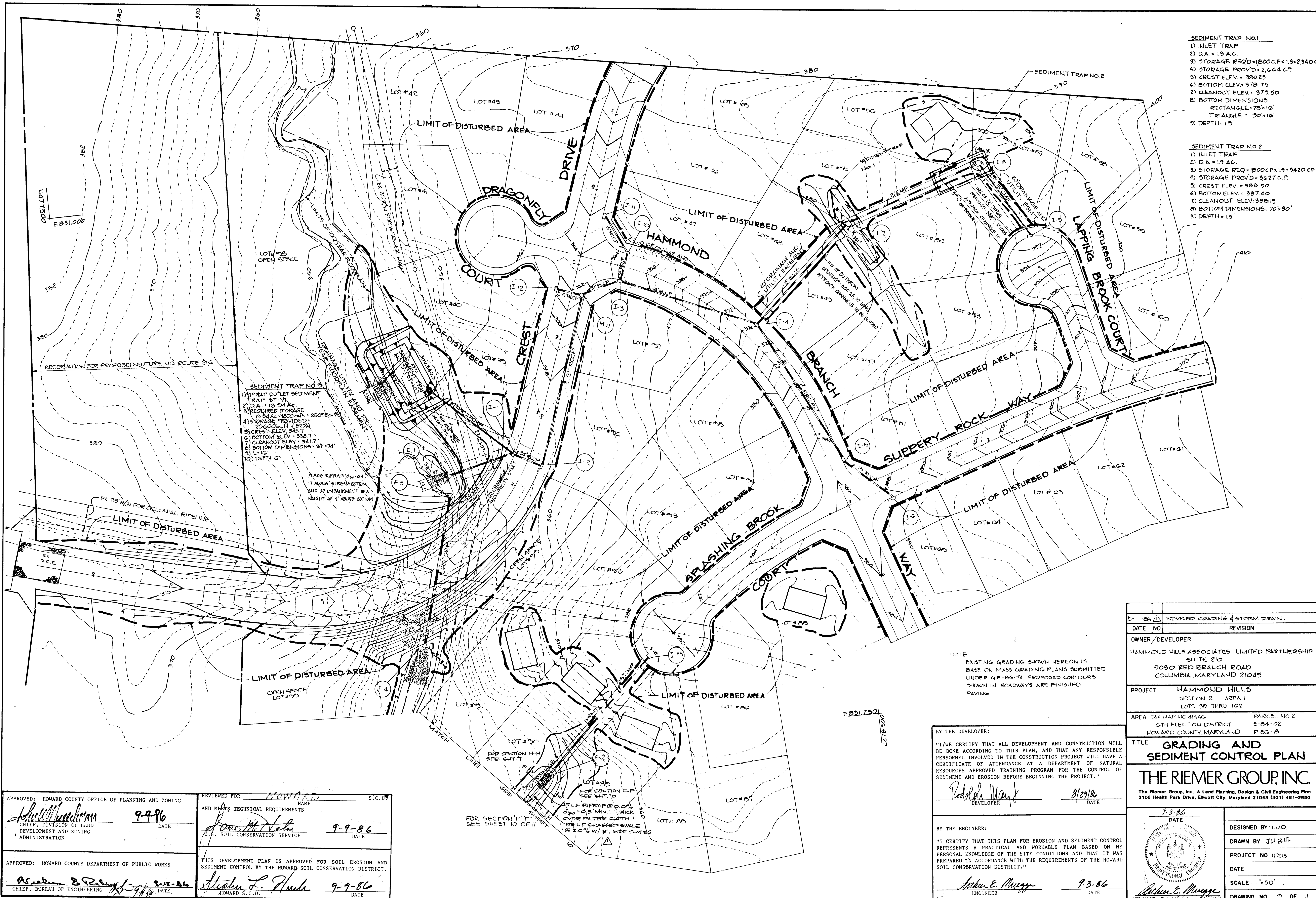
STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP OF CURB ELEV.
1-19	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 8+26.89, 15' Lt.	---	371.2227	376.8320
1-18	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 2+80, 15' Lt.	---	365.5939	370.7770
1-17	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 0+52.00, 15' Lt.	---	369.5520	377.3746
1-16	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 0+55.50, 15' Rt.	---	368.5629	377.4925
1-15	Ho. Co. Std. 'A-5' Inlet	SD-4.01 Centerline Sta. 9+30.64, 15' Lt.	---	367.5639	375.4925
1-14	Ho. Co. Std. 'A-5' Inlet	SD-4.01 Centerline Sta. 9+13, 15' Rt.	---	366.7724	375.3459
1-13	Ho. Co. Std. 'A-5' Inlet	SD-4.01 L.P. Sta. 1+31.33	---	375.8475	370.6451
1-12	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 L.P. Sta. 16+63.30, 18' Lt.	---	358.8427	361.9891
1-11	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 17+70.29, 18' Rt.	---	361.4477	366.1827
1-10	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 16+63.30, 18' Lt.	---	360.0802	365.7697
1-9	Ho. Co. Std. 'A-5' Inlet	SD-4.01 L.P. Sta. 1+59.48	---	387.7036	391.7469
1-8	Ho. Co. Std. 'K' Inlet	SD-4.12 See Plan, Sheet 5	---	385.4441	390.1452
1-7	Ho. Co. Std. 'K' Inlet	SD-4.12 See Plan, Sheet 5	---	374.7617	384.7703
1-6	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 0+55.50, 15' Rt.	---	380.7725	380.2627
1-5	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 4+45.39, 18' Lt.	---	380.4725	385.4346
1-4	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 2+43, 18' Lt.	---	369.4940	374.2377
1-3	Ho. Co. Std. 'A-5' Inlet w/Defl.	SD-4.01 Centerline Sta. 0+58.95, 18' Rt.	---	359.4307	365.7927
1-2	Ho. Co. Std. 'A-10' Inlet	SD-4.02 Centerline Sta. 14+35.88, 18' Rt.	---	350.4023	356.7926
1-1	Ho. Co. Std. 'A-5' Inlet	SD-4.01 Centerline Sta. 14+35.88, 18' Lt.	---	348.7148	356.7927
M-1	Ho. Co. Std. Precast Shallow Manhole	G-5.12 Centerline Sta. 16+63.30, 12' Rt.	---	356.7855	361.8861
E-3	Ho. Co. Std. Metal End Section	SD-5.61 Centerline Sta. 9+13, 19' Rt.	---	363.62	363.8736
E-2	Ho. Co. Std. Metal End Section	SD-5.61 See Plan, Sheet 5	---	341.27	340.00
E-1	Ho. Co. Std. Metal End Section	SD-5.61 Centerline Sta. 13+60, 78' Lt.	---	340.30	340.00
E-4	Ho. Co. Std. Metal End Section	SD-5.61 Centerline Sta. 12+03, 82' Rt.	---	336.34	336.00
F-5	Ho. Co. Std. Metal End Section	SD-5.61 Centerline Sta. 13+30, 60' Lt.	---	---	339.00

* Denotes Elevation at top of Frame



15-	REVISE STORM PRAU I-14 TO E-3 & I-18 TO E-2 & CONSTRUCT SCH.
DATE	REVISION
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
<i>Michael S. P...</i>	9-9-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Michael S. P...</i>	9-9-86
CHIEF, BUREAU OF ENGINEERING	DATE
10-27-86	REVISION
DATE	NO
OWNER/DEVELOPER HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP SUITE 110 8030 REDBRANCH ROAD COLUMBIA, MARYLAND 21045	
PROJECT: HAMMOND HILLS SECTION 2, AREA 1 LOTS 39 THRU 102.	
AREA TAX MAP NO 41 & 48 PARCEL NO 2 6TH ELECTION DISTRICT S-84-08 HOWARD COUNTY, MARYLAND P-86-13	
TITLE: DRAINAGE AREA MAP	
THE RIEMER GROUP, INC. The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 3108 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2680	
DATE	DESIGNED BY: L.J.D.
DATE	DRAWN BY: DOB
DATE	PROJECT NO: 11705
DATE	SCALE: AS SHOWN
DATE	DRAWING NO. 8 OF 11

939



SEDIMENT TRAP NO.1
 1) INLET TRAP
 2) D.A. = 1.9 AC.
 3) STORAGE REQ'D = 1800 C.F. x 1.3 = 2340 C.F.
 4) STORAGE PROVIDED = 2,664 C.F.
 5) CREST ELEV. = 380.25
 6) BOTTOM ELEV. = 378.75
 7) CLEANOUT ELEV. = 377.50
 8) BOTTOM DIMENSIONS
 RECTANGLE = 75' x 16'
 TRIANGLE = 30' x 16'
 9) DEPTH = 1.5'

SEDIMENT TRAP NO.2
 1) INLET TRAP
 2) D.A. = 1.9 AC.
 3) STORAGE REQ'D = 1800 C.F. x 1.9 = 3420 C.F.
 4) STORAGE PROVIDED = 3627 C.F.
 5) CREST ELEV. = 388.90
 6) BOTTOM ELEV. = 387.40
 7) CLEANOUT ELEV. = 388.15
 8) BOTTOM DIMENSIONS = 70' x 30'
 9) DEPTH = 1.5'

SEDIMENT TRAP NO.3
 1) RIP RAP OUTLET SEDIMENT TRAP 5' x 17'
 2) D.A. = 1.0 AC.
 3) REQUIRED STORAGE = 1,000 C.F.
 4) STORAGE PROVIDED = 2,000 C.F.
 5) CREST ELEV. = 345.7
 6) BOTTOM ELEV. = 341.7
 7) CLEANOUT ELEV. = 341.7
 8) BOTTOM DIMENSIONS = 57' x 74'
 9) L = 12'
 10) DEPTH = 6'

PLACE RIPRAP (2.0' x 4') 17' ALONG STREAM BOTTOM AND OF EMBANKMENT TO A HEIGHT OF 2' ABOVE BOTTOM

NOTE:
 EXISTING GRADING SHOWN HEREON IS BASE ON MASS GRADING PLANS SUBMITTED UNDER G.P. 86-74. PROPOSED CONTOURS SHOWN IN ROADWAYS ARE FINISHED PAVING

BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."
Robert May DEVELOPER
 8/29/86 DATE

BY THE ENGINEER:
 "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."
Arthur E. Muegge ENGINEER
 9.3.86 DATE

5'-28'	REVISED GRADING & STORM DRAIN.
DATE NO.	REVISION
OWNER/DEVELOPER	
HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP SUITE 210 2030 RED BRANCH ROAD COLUMBIA, MARYLAND 21045	
PROJECT	
HAMMOND HILLS SECTION 2 AREA 1 LOTS 30 THRU 102	
AREA TAX MAP NO 4164G	PARCEL NO 2
6TH ELECTION DISTRICT	5-84-02
HOWARD COUNTY, MARYLAND	P-86-15

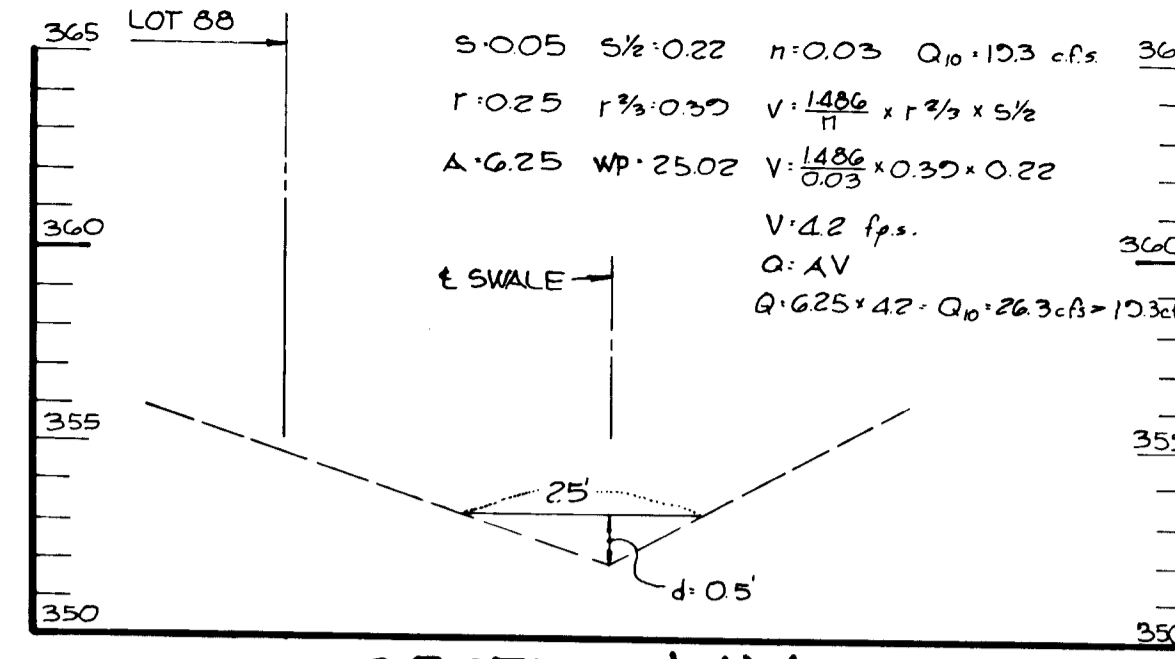
TITLE
GRADING AND SEDIMENT CONTROL PLAN

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2680

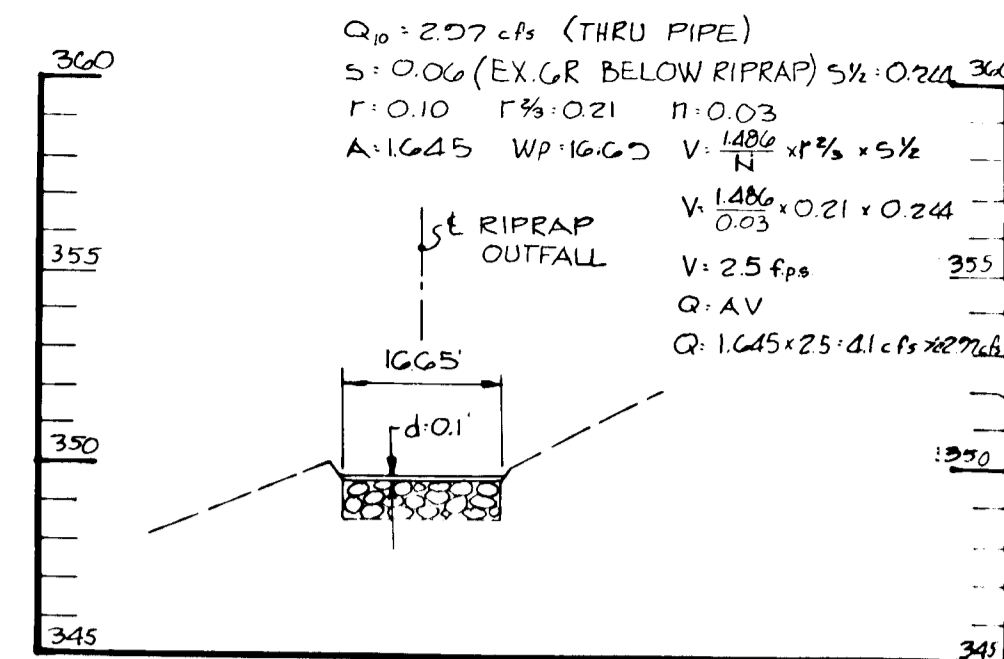
9.3.86	DATE
DESIGNED BY: LUD	
DRAWN BY: JHB III	
PROJECT NO: 11705	
DATE	
SCALE: 1" = 50'	
DRAWING NO. 2 OF 11	

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING <i>Richard W. Hirschman</i> 9-9-86 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	REVIEWED FOR: HOWARD COUNTY NAME: <i>Richard W. Hirschman</i> AND MEETS TECHNICAL REQUIREMENTS <i>Robert May</i> 9-9-86 U.S. SOIL CONSERVATION SERVICE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>Robert May</i> 9-9-86 CHIEF, BUREAU OF ENGINEERING	THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. <i>Arthur E. Muegge</i> 9-9-86 HOWARD S.C.D.

939

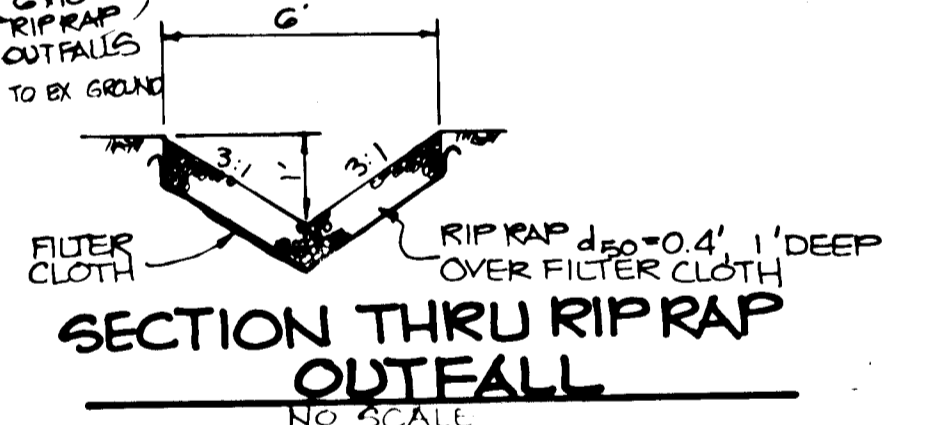
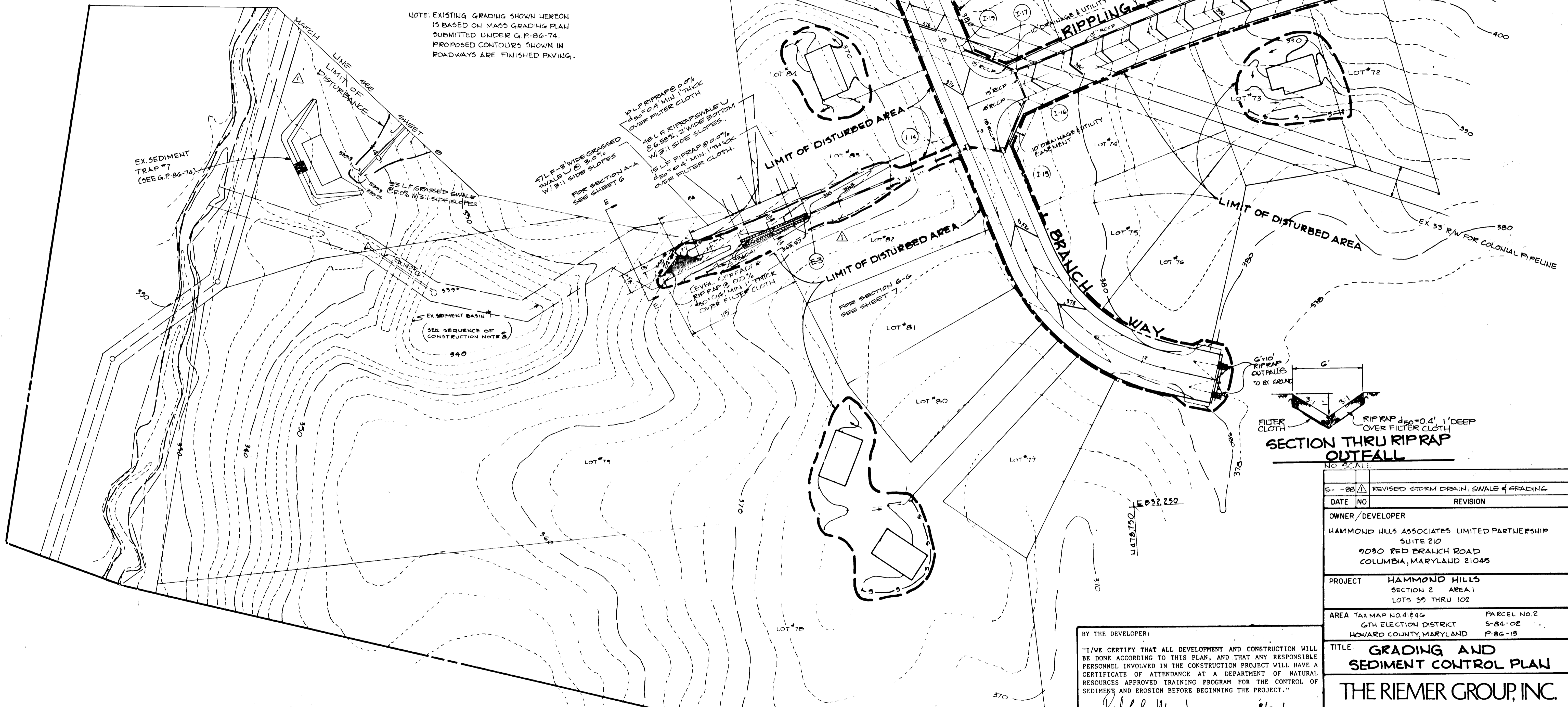


SECTION E-E
 HOR: 1"=50'
 SCALE VERT: 1"=5'



SECTION F-F
 HOR: 1"=50'
 SCALE VERT: 1"=5'

NOTE: EXISTING GRADING SHOWN HEREON IS BASED ON MASS GRADING PLAN SUBMITTED UNDER G.P. 86-74. PROPOSED CONTOURS SHOWN IN ROADWAYS ARE FINISHED PAVING.



5-28	REVISED STORM DRAIN, SWALE & GRADING
DATE NO	REVISION
OWNER/DEVELOPER	
HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP SUITE 210 9090 RED BRANCH ROAD COLUMBIA, MARYLAND 21045	
PROJECT	
HAMMOND HILLS SECTION 2 AREA 1 LOTS 69 THRU 102	
AREA TAX MAP NO. 4146	PARCEL NO. 2
6TH ELECTION DISTRICT	5-84-02
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 Heath Park Drive, Ellicott City, Maryland 21043 (301) 461-2880

BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."
Robert Marx 8/29/86
 DEVELOPER DATE

BY THE ENGINEER:
 "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."
Arthur E. Muegge 9-3-86
 ENGINEER DATE

9-3-86 DATE
 DESIGNED BY: L.U.D.
 DRAWN BY: JHB
 PROJECT NO: 11705
 DATE:
 SCALE: 1"=50'
Arthur E. Muegge 9/3/86
 ARTHUR E. MUEGGE #8707
 DRAWING NO. 10 OF 11

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING <i>John W. Macchiaro</i> 9-9-86 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	REVIEWED FOR: HOWARD S.C.D. NAME: HOWARD AND MEETS TECHNICAL REQUIREMENTS <i>Donna M. Stelm</i> 9-9-86 U.S. SOIL CONSERVATION SERVICE DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>Robert E. Riehl</i> 9-12-86 CHIEF, BUREAU OF ENGINEERING	THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. <i>Michael L. Fike</i> 9-9-85 HOWARD S.C.D. DATE

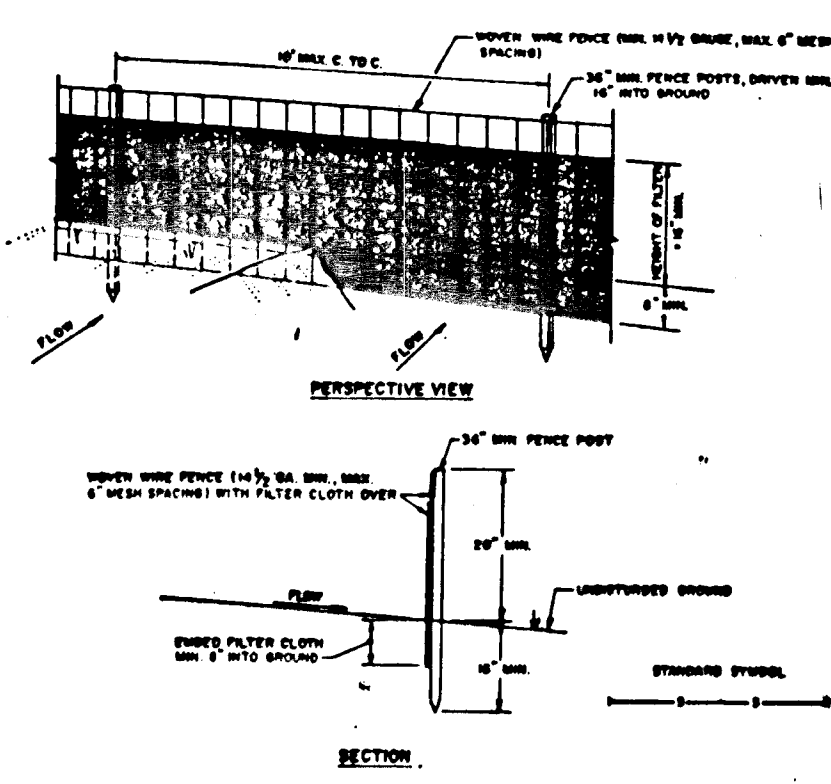
- SEDIMENT CONTROL NOTES**
- A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (997-2437).
 - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, ditches, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
 - All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
 - All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 31) and (Sec. 34), temporary seeding (Sec. 30) and mulching (Sec. 32). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
 - All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

- PERMANENT SEEDING NOTES**
- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- Soil Amendments:** Apply 0-20-20 fertilizer at the rate of 800 lbs. per acre. Harrow or disc time 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 30-10-10 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, Penstemon 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 weeping 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) Use sod. (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 ft. 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 reseeding.

- TEMPORARY SEEDING NOTES**
- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- Soil Amendments:** Apply 400 lbs. per acre 10-10-10 fertilizer (14 lbs./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 rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 2 lbs. per acre of weeping lovegrass (0.07 lbs./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 sod.
- 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 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.

- SEQUENCE OF CONSTRUCTION**
- Obtain Grading Permit
 - Repair all existing sediment control measures (see G.P.-86-74). Install silt fence. (3 days)
 - Bring Crest Drive up to grade and construct Sediment Trap No. 3 and stabilize in accordance with Temporary Seeding Notes (3 days)
 - Construct I-1 and Temporary 27' C.M.P. to sediment Trap No. 3 (2 days)
 - Install all utilities and inlet traps at I-7 and I-8, redirect water into I-1 thru I-9 and I-10 thru I-12. Permanent 27' C.M.P. between I-1 and I-1 shall not be constructed until ALL areas above that Drainage Area is stabilized in accordance with Permanent Seeding Notes. (15 weeks)
 - Grade areas shown and stabilize in accordance with permanent seeding notes. (1 week)
 - Construct curb and gutter. (1 week)
 - Pave Roads. (2 weeks)
 - Fine grade where necessary. Apply permanent stabilization. (2 days)
 - Upon stabilization of all disturbed areas, flush storm drain systems of any sediment and obtaining permission from the Howard County Sediment Control Division, remove existing sediment basins and traps by:
 - Pump any standing water onto a stabilized outfall.
 - Remove Riser at Sediment Basin #1 and grade to provide positive drainage.
 - Regrade basins and traps to original grade.
 - Stabilize in accordance with permanent seeding notes.

Remove all remaining sediment control measures and stabilize any areas disturbed by their removal in accordance with the permanent seeding notes. (1 week)



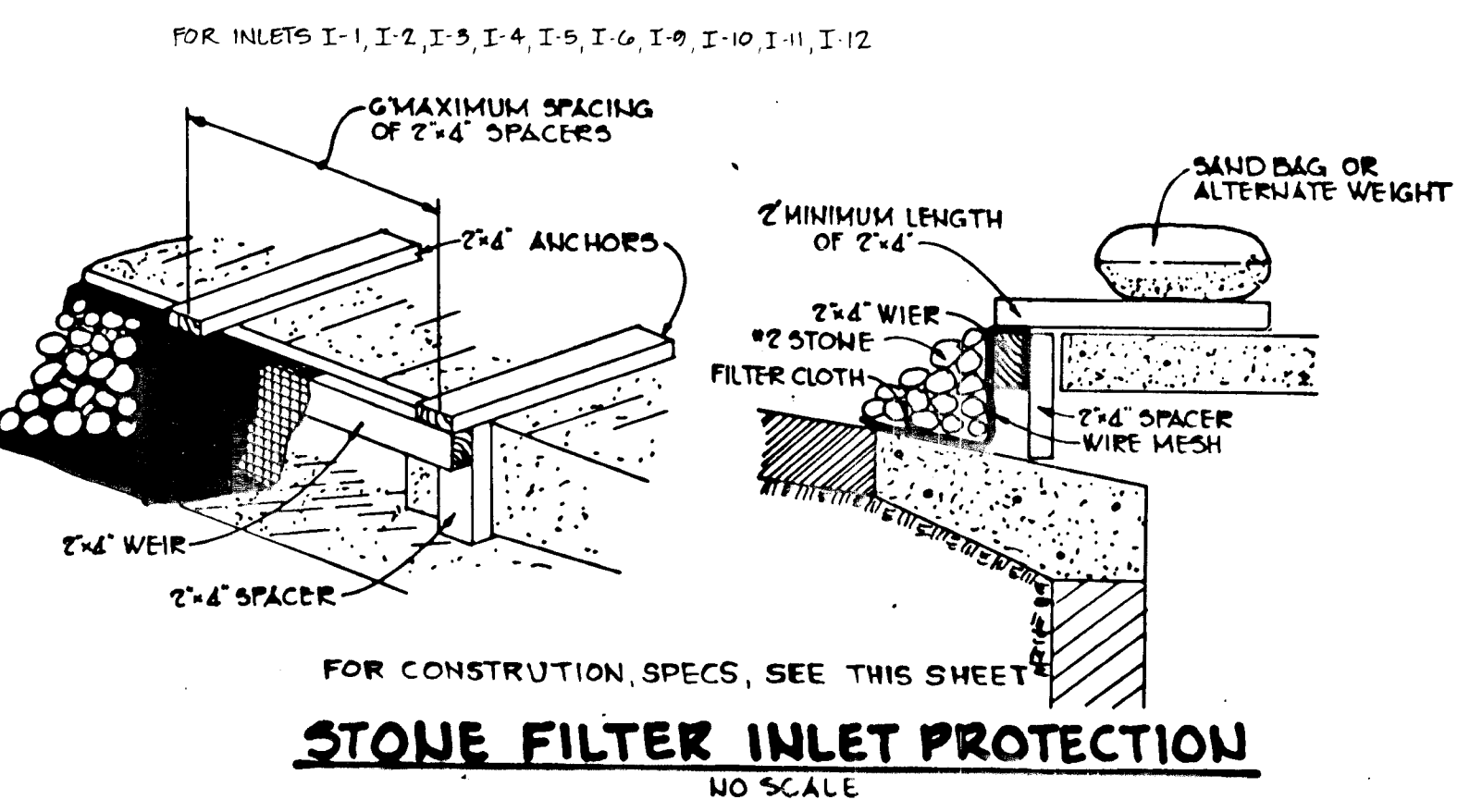
- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- When wire fence is to be fastened to posts, use 1/2" x 1/2" x 1/2" WOOD SCREWS TO FASTEN TO POSTS.
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- PREPARED UNIT:** GEORGE W. MUEGGEL, INC. OR APPROVED EQUIVALENT.

- CONSTRUCTION SPECIFICATIONS**
- I. Materials FOR STONE INLET FILTER PROTECTION**
- Wooden frame is to be constructed of 2" x 4" construction grade lumber.
 - Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.
 - Filter cloth must be of a type approved for this purpose; resistant to sunlight with stone size, 20#, 40-85#, to allow sufficient passage of water and removal of sediment.
 - Stone is to be 2" in size and clean, since fines would clog the cloth.

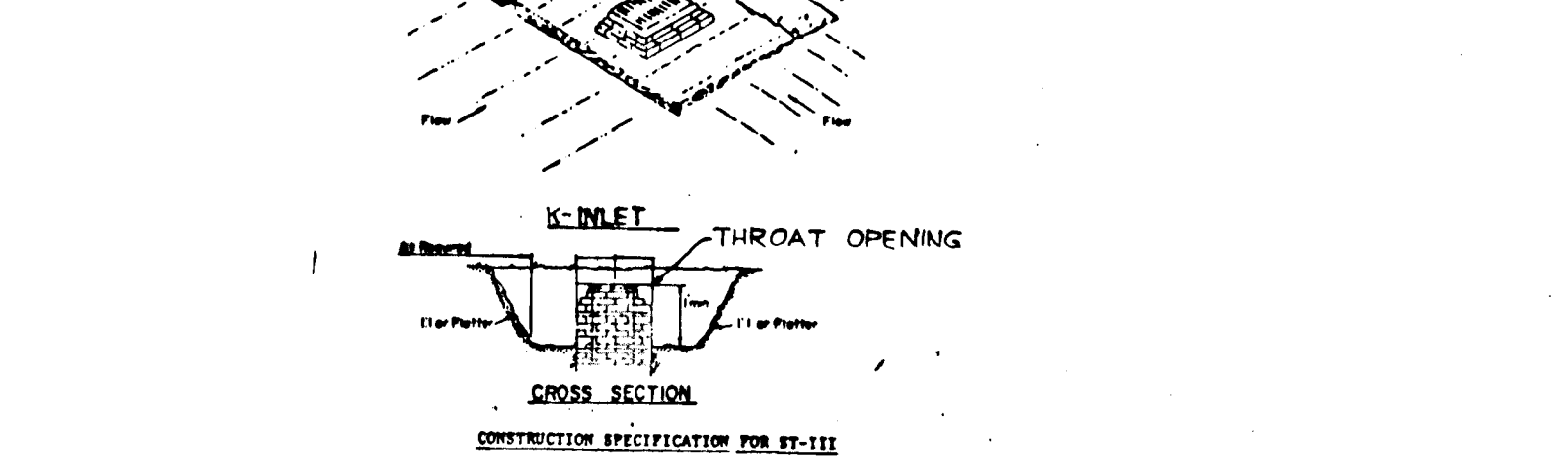
- II. Procedure**
- A swale, ditchline or yard inlet protection.
 - Excavate completely around inlet to a depth of 18" below notch elevation.
 - Drive 2 x 4 post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
 - Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
 - Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
 - Backfill around inlet in compacted 4" layers until layer of earth is even with notch elevation on ends and top elev. on sides.
 - If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
 - This structure must be inspected frequently and the filter fabric replaced when clogged.

- B. Curb Inlet Protection.**
- Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
 - Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
 - Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
 - Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
 - The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
 - Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place a clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.

- This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
- Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.



- FOR CONSTRUCTION, SPECS, SEE THIS SHEET**
- STONE FILTER INLET PROTECTION**
- NO SCALE**
- STANDARD SYMBOL** S.F.I.P.



- CONSTRUCTION SPECIFICATION FOR INLET TRAP**
- Sediment shall be removed and the trap returned 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.
 - The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
 - The structure shall be inspected after each rain and repairs made as needed.
 - Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
 - The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
 - All cut slopes shall be 1:1 or flatter.
- Maximum Drainage Area: 3 Acres**

- INLET TRAP @ I-7 AND I-8 DETAIL**
- NOT TO SCALE**
- Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
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- This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
- Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

Robert May DEVELOPER 8/29/86 DATE

BY THE ENGINEER:

"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."

Arthur E. Muegge ENGINEER 9-3-86 DATE

REVIEWED FOR HOWARD S.C.D. NAME

AND MEETS TECHNICAL REQUIREMENTS

John M. Hahn 9-9-86 DATE

U.S. SOIL CONSERVATION SERVICE

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

Arthur E. Muegge 9/9/86 DATE

HOWARD S.C.D.

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

John W. Muegge 9-9-86 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING *Arthur E. Muegge* DATE

OWNER/DEVELOPER

HAMMOND HILLS ASSOCIATES LIMITED PARTNERSHIP

SUITE 210

9030 RED BRANCH ROAD

COLUMBIA, MARYLAND 21045

PROJECT: HAMMOND HILLS

SECTION 2 AREA 1

LOTS 99 THRU 102

AREA TAX MAP NO. 4146G PARCEL NO. 2

GTH ELECTION DISTRICT 5-84-02

HOWARD COUNTY, MARYLAND ABG-13

TITLE: **SEDIMENT CONTROL DETAILS**

THE RIEMER GROUP, INC.

The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm

3105 Heath Park Drive, Ellicott City, Maryland 21043 (301) 461-2600

9-3-86 DATE

DESIGNED BY: LUD

DRAWN BY: JHB

PROJECT NO: 11705

DATE:

SCALE: AS SHOWN

DRAWING NO. 11 OF 11

Arthur E. Muegge 9/3/86 DATE

ARTHUR E. MUEGGE #8707