

INDEX OF SHEETS

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4	PLAN & PROFILE THISTLE DOWNS CT.(STA.0+00 TO STA.8+00)
5	PLAN & PROFILE THISTLE DOWNS CT.(STA.8+00 TO STA.11+66.65)
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12	STORM DRAIN PROFILES & DETAILS

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, 1989 AMENDMENTS.
- 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:

WISS UTILITY	1-800-257-7777
BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 or 3554
BALTIMORE GAS AND ELECTRIC CO.	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
COASTAL PIPELINE	795-1390

- 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, 1989 AMENDMENTS.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION.
- 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 50 RIGHT-OF-WAYS 30 M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- ALL FILL AREAS WITHIN ROADWAY 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 PER 8/2/85 COMPREHENSIVE ZONING PLAN AS RURAL (R).
- TOPO TAKEN FROM FIELD RUN SURVEY DATED MARCH, 1980 BY RIEMER, MUEGGE & ASSOC.
- 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 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NUMBERS: 589-20, P89-G7
- A WETLANDS ANALYSIS WAS PERFORMED ON 6-17-88 IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS GUIDELINES WHICH DETERMINED THAT THERE ARE NO WETLANDS ON SITE.

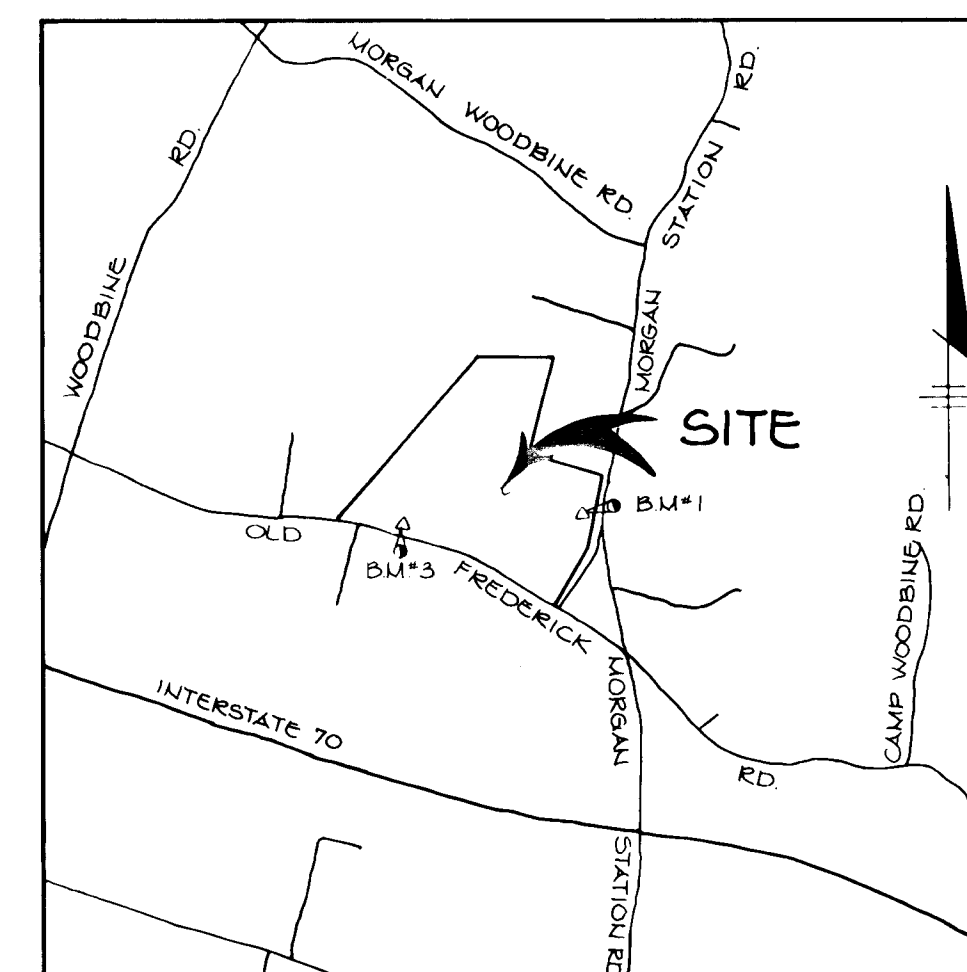
# ROADWAYS AND STORM DRAINS

## CAMDEN DOWNS

### SECTION ONE

#### 4TH ELECTION DISTRICT

## HOWARD COUNTY, MARYLAND

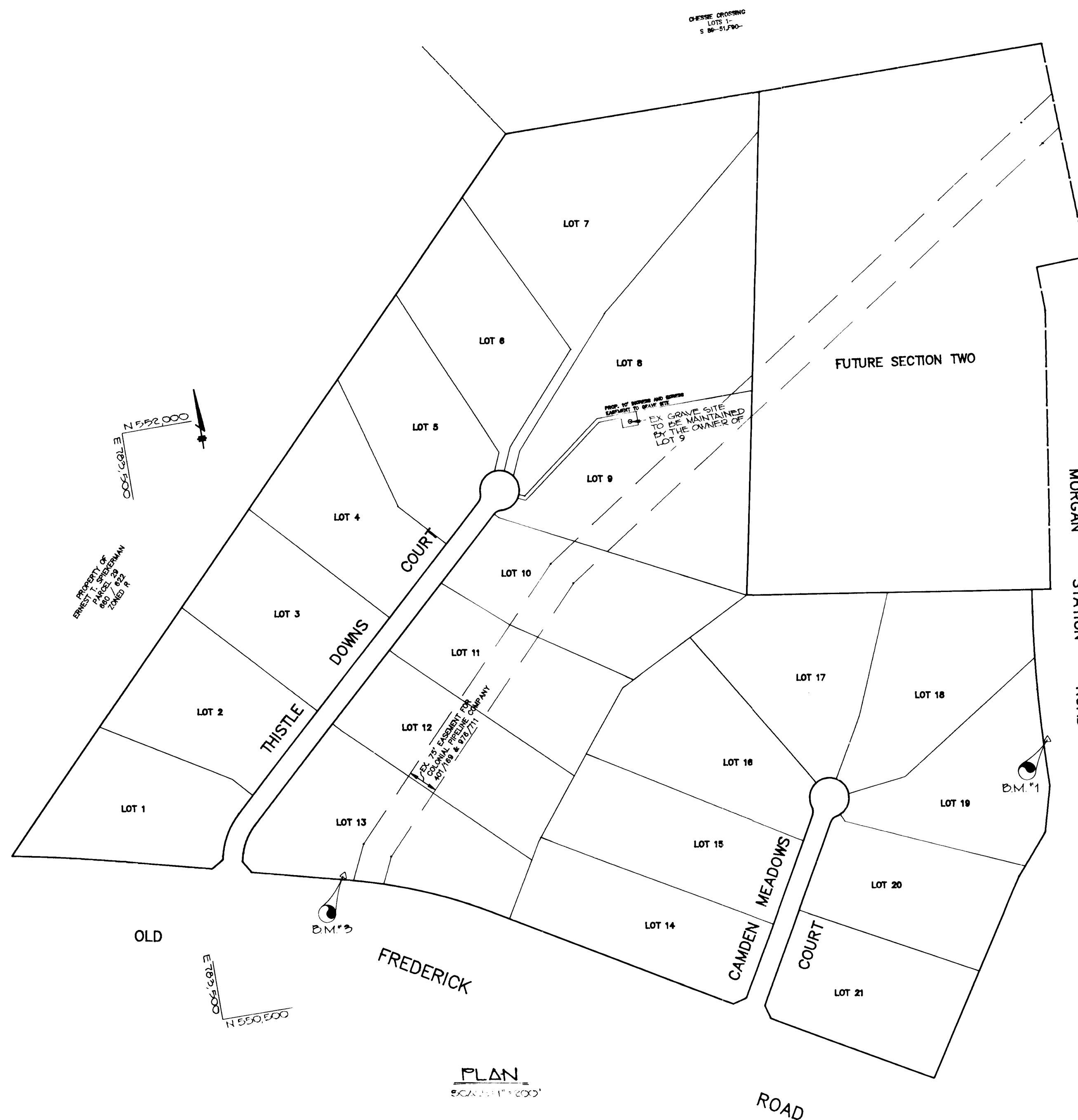


VICINITY MAP

SCALE: 1"=2000'

BENCH MARKS

B.M. 1	ELEV. 581.33
R.R. SPIKE SET IN 36" OAK, 100' SOUTHWEST OF TRAVERSE STA. 808, REAR OF LOT 19	
B.M. 3	ELEV. 590.49
HOWARD COUNTY MONUMENT 3831002 250' NORTHEAST OF THE INTERSECTION OF OLD FREDERICK ROAD AND THISTLE DOWNS COURT	



PLAN  
SCALE: 1"=200'

NOTE: THE HORIZONTAL AND VERTICAL CONTROL IS BASED ON THE FOLLOWING CONTROL STATIONS:  
STA. = 3831003 STA. = 3831005

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Paul J. Caylor* 5/18/90  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Paul J. Caylor* 5/2/90  
CHIEF, LAND DEVELOPMENT DIVISION  
*Lawrence W. Weiland* 4/30/90  
CHIEF, BUREAU OF HIGHWAYS

*Richard S. ...*  
CHIEF, BUREAU OF ENGINEERING

DATE	NO.	REVISION

OWNER / DEVELOPER  
CARRIE LEE HUTCHINS 820 MORGAN STATION RD WOODBINE, MD 21797  
CALDEN DOWNS PARTNERSHIP 8307 LAJAN STREET ELLICOTT CITY, MD 21043

PROJECT 589-20 P89-G7  
**CAMDEN DOWNS**  
SECTION ONE (LOTS 1-21)  
AREA TAX MAP 348 PARCEL 1 ZONED R  
4TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE **TITLE SHEET**

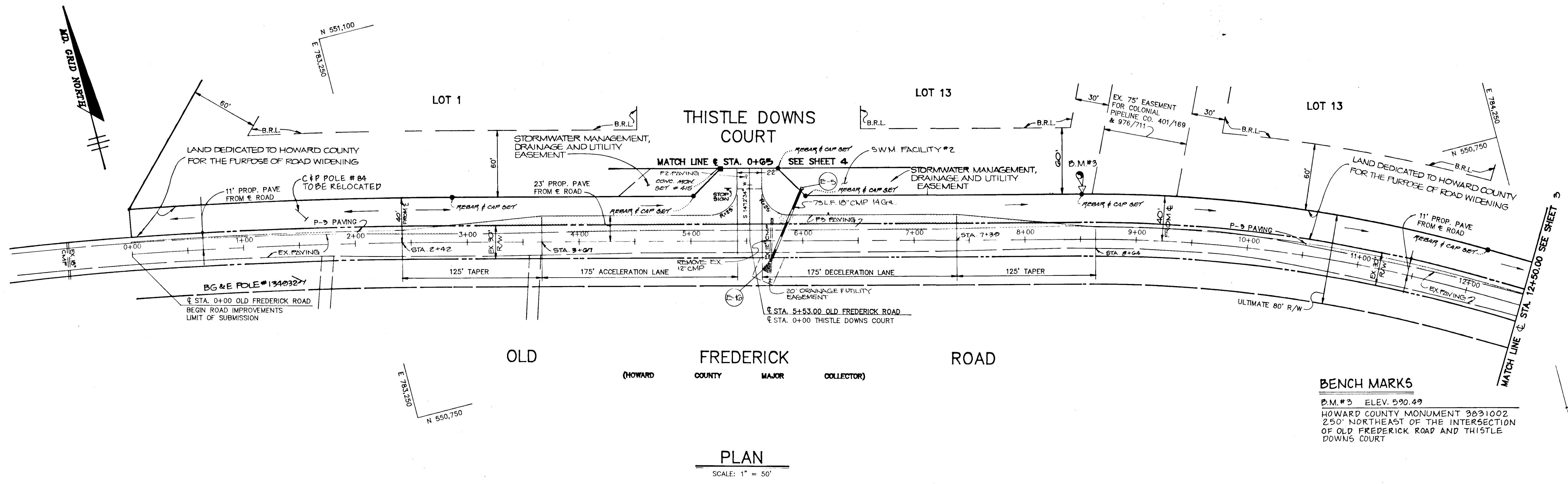
RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
3105 North Ridge Road Ellicott City, Maryland 21043  
301-461-2690 FAX: 301-750-3176

DATE 3/24/90	DESIGNED BY: D.B.S.
	DRAWN BY: CADD
	PROJECT NO: 589G0G
	DATE: MARCH 20, 1990
	SCALE: AS SHOWN
	DRAWING NO. 1 OF 12

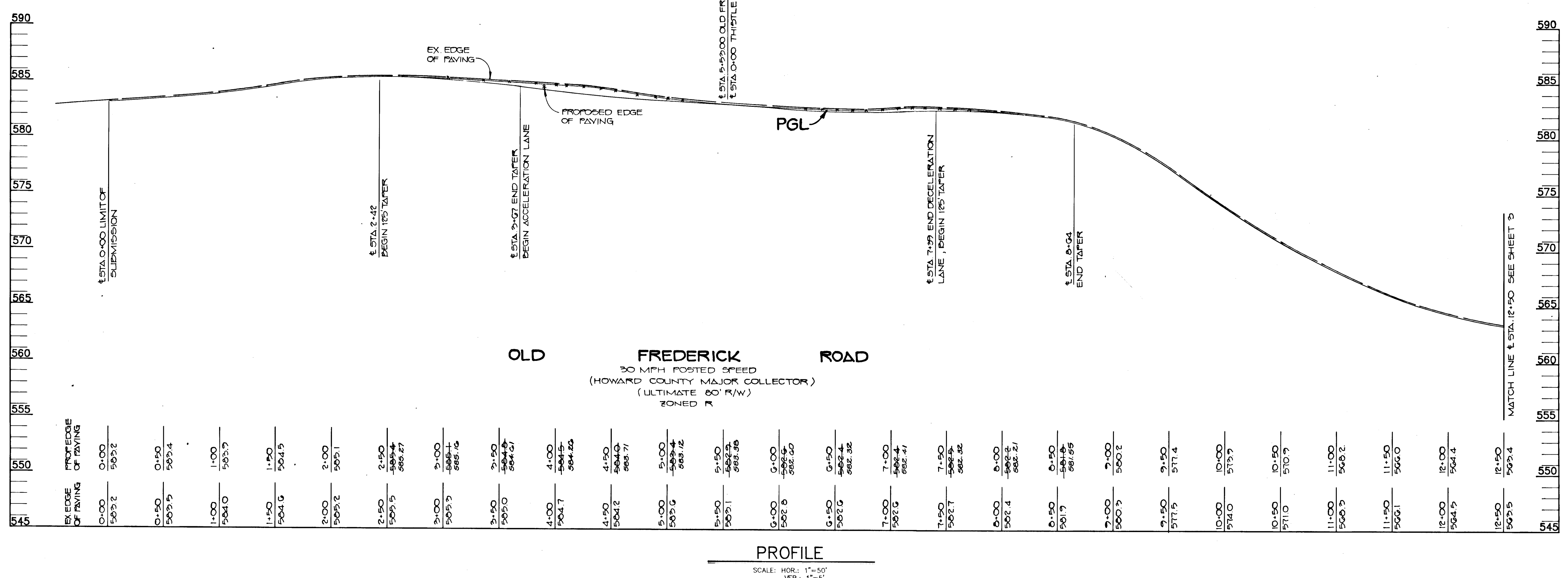
ARTHUR E. MUEGGE #6707

AS-BUILT 9 17-90

F 90-70



**PLAN**  
SCALE: 1" = 50'



**PROFILE**  
SCALE: HOR: 1" = 50'  
VER: 1" = 5'

**BENCH MARKS**  
D.M.#3 ELEV. 590.49  
HOWARD COUNTY MONUMENT 3631002  
250' NORTHEAST OF THE INTERSECTION  
OF OLD FREDERICK ROAD AND THISTLE  
DOWNS COURT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Paul W. ...* 5/10/90  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

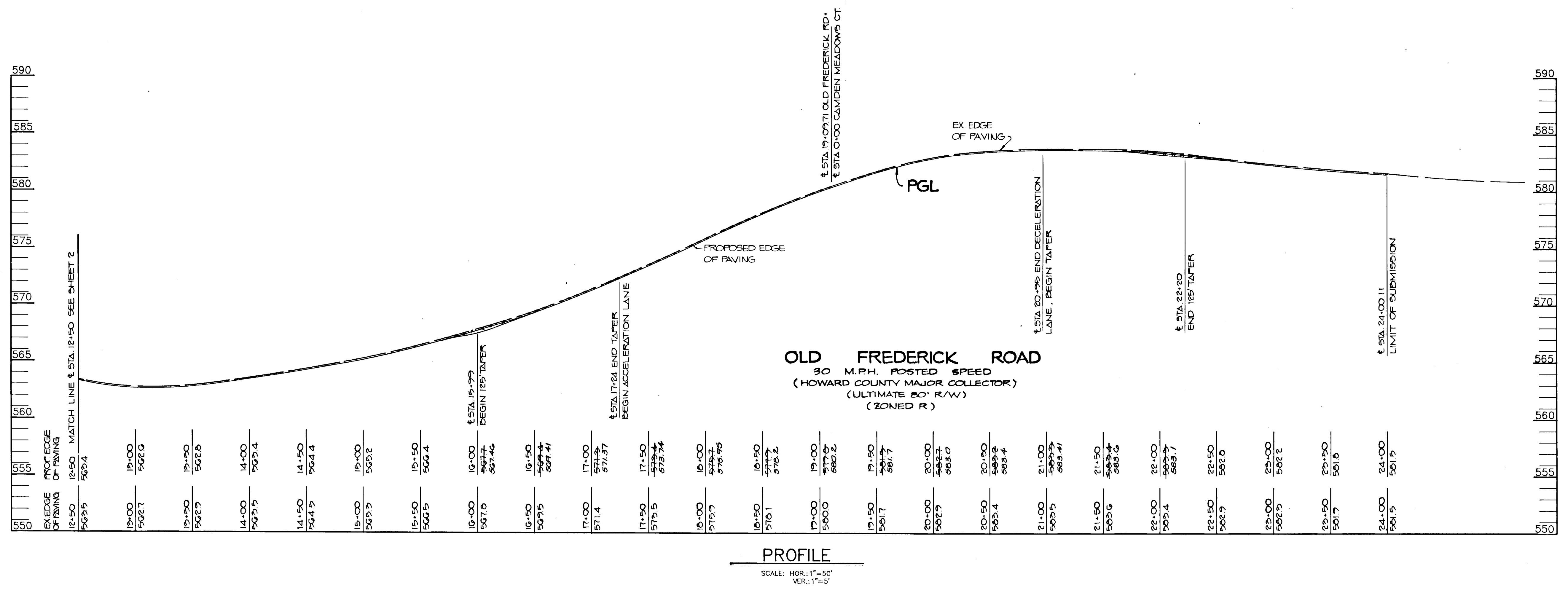
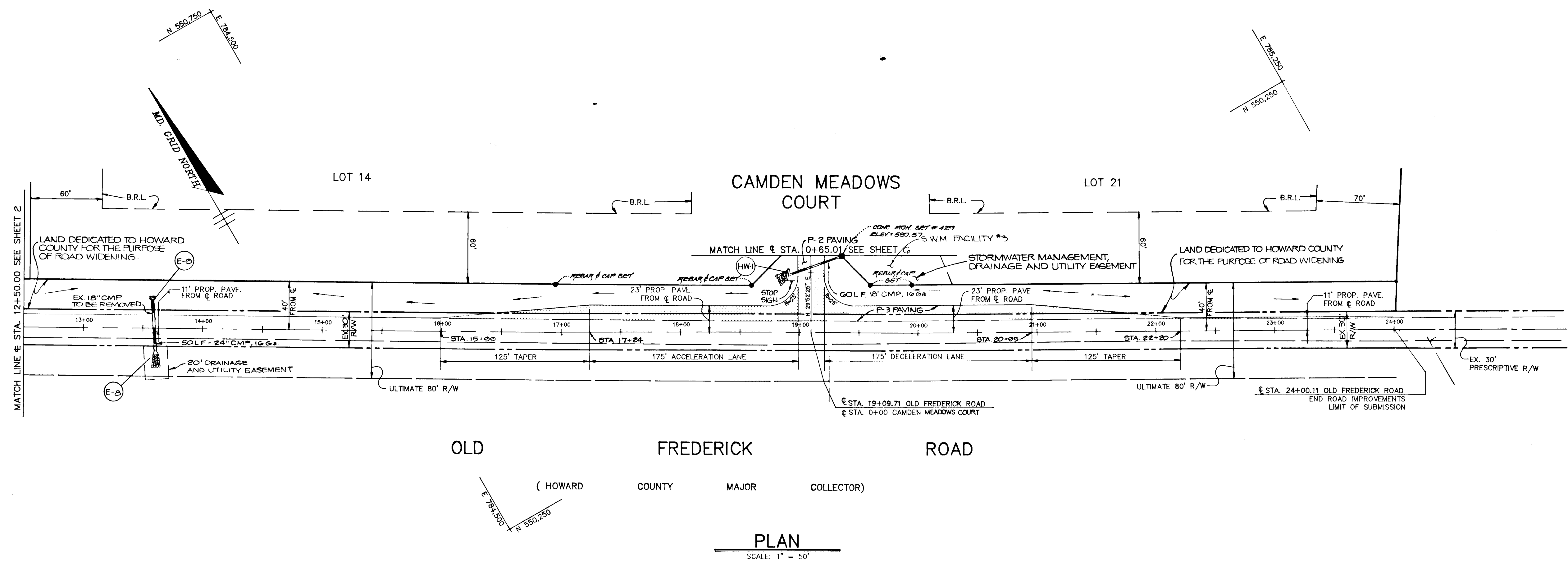
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Paul W. ...* 5/2/90  
CHIEF, LAND DEVELOPMENT DIVISION  
*David W. ...* 4/30/90  
CHIEF, BUREAU OF HIGHWAYS  
*...* 5.2.90  
CHIEF, BUREAU OF ENGINEERING

DATE NO REVISION  
OWNER/DEVELOPER  
CARRIE LEE HUTCHINS CAUDEN DOWNS PARTNERSHIP  
690 MORGAN STATION RD 8507 LAWN STREET  
WOODBINE, MD 21797 ELLICOTT CITY MD 21043

PROJECT: 589-20 P89-07  
**CAMDEN DOWNS**  
SECTION ONE (LOTS 1-21)  
AREA TAX MAP 388 PARCEL 1 ZONED R  
4 TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
TITLE: **PLAN & PROFILE**  
**OLD FREDERICK ROAD**  
STA 0+00 TO STA 12+50

**RIEMER MUEGGE & ASSOCIATES, INC.**  
A Land Planning, Engineering and Consulting Firm  
3105 North Ridge Road Ellicott City, Maryland 21043  
301-461-2690 FAX: 301-750-3176

DATE: 5-29-90  
DESIGNED BY: DBS  
DRAWN BY: CADD  
PROJECT NO: 58900  
DATE: MARCH 20, 1990  
SCALE: AS SHOWN  
DRAWING NO. 2 OF 12



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Thomas L. ...* 5/18/15  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

---

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Paul W. ...* 5/12/10  
CHIEF, LAND DEVELOPMENT DIVISION

*Travis W. ...* 4/30/10  
CHIEF, BUREAU OF HIGHWAYS

*J. ...* 5-2-10  
CHIEF, BUREAU OF ENGINEERING

DATE	NO.	REVISION

OWNER/DEVELOPER  
CARRIE LEE HUTCHINS CAMDEN DOWNS PARTNERSHIP  
850 MORGAN STATION RD. 6307 WAIN STREET  
WOODBINE, MD. 21797 ELICOTT CITY, MD. 21043

PROJECT: 509-20 P09-07  
**CAMDEN DOWNS**  
SECTION ONE (LOTS 1-21)

AREA TAX MAP 3&B PARCEL 1 ZONED R  
4TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: **PLAN & PROFILE**  
**OLD FREDERICK ROAD**  
STA. 12+50.00 TO STA. 24+00.11

**RIEMER MUEGGE & ASSOCIATES, INC.**  
A Land Planning, Engineering and Consulting Firm  
3105 North Ridge Road Elicott City, Maryland 21043  
TEL: 301-461-2690 FAX: 301-750-3176

DATE: 3/23/10

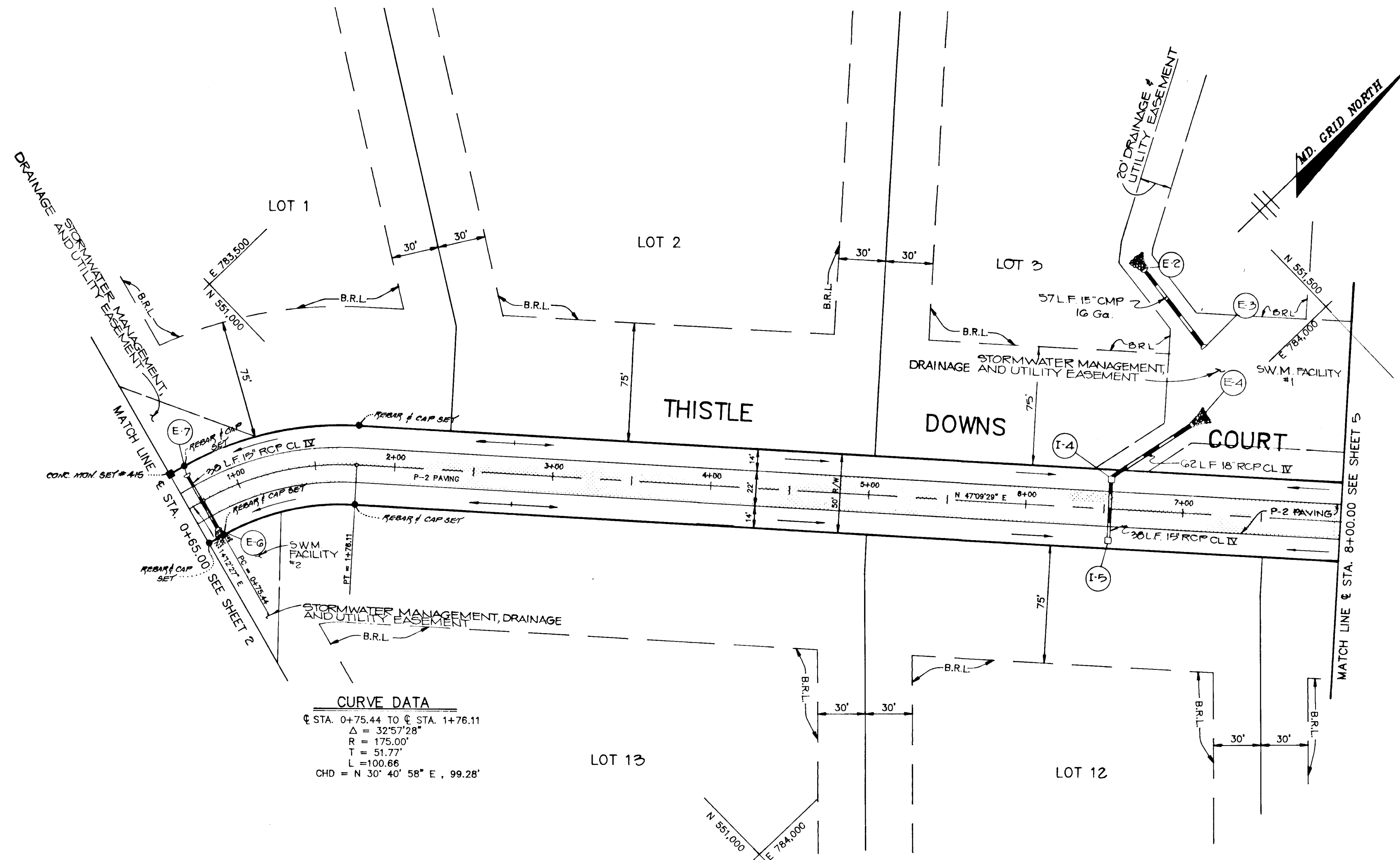
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DRAWN BY: CADD  
PROJECT NO: 5350G  
DATE: MARCH 28, 1970  
SCALE: AS SHOWN  
DRAWING NO. 3 OF 12

1566

AS-BUILT 9-15-96

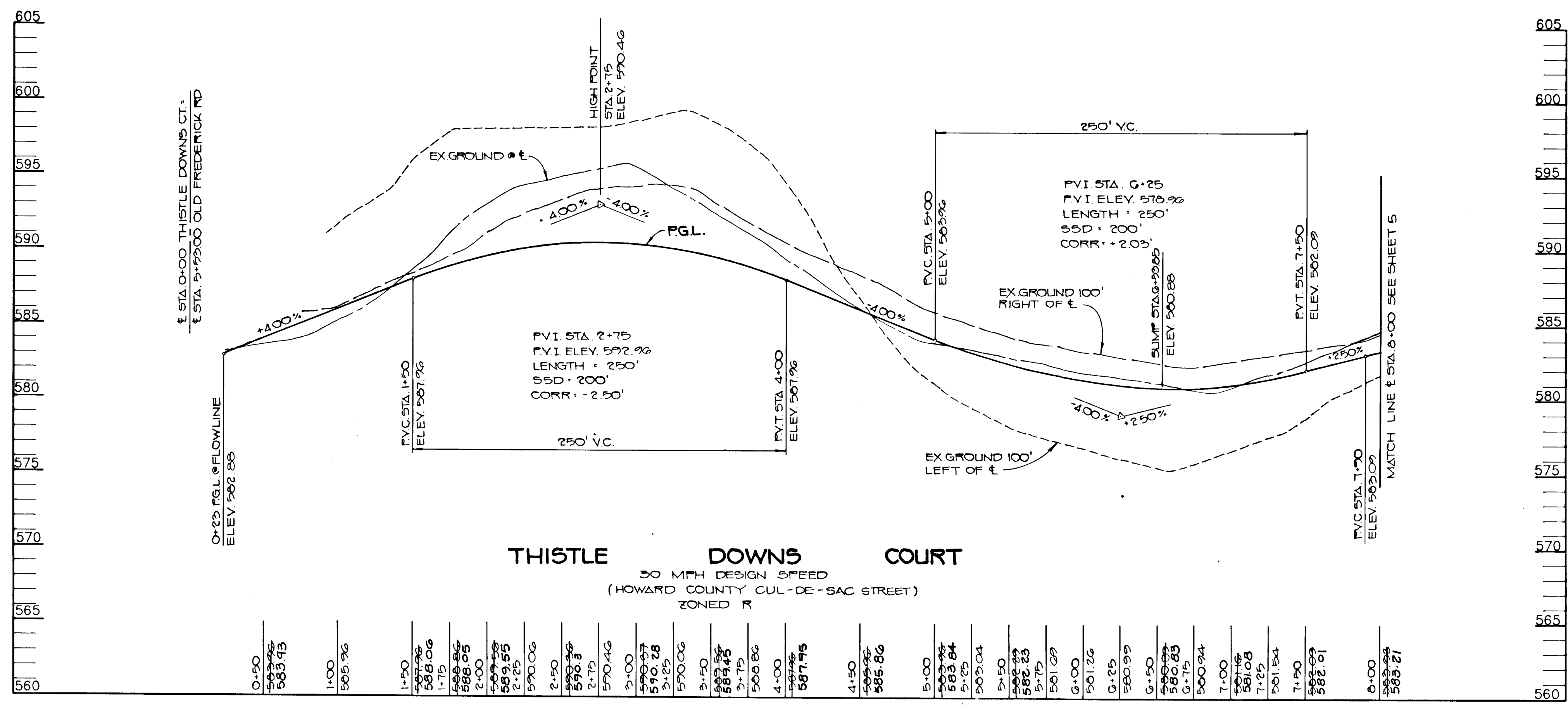
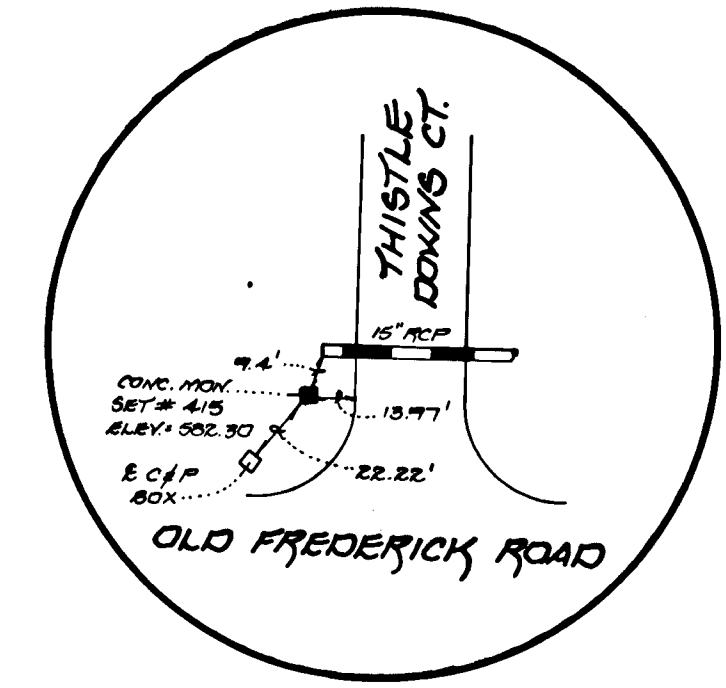
F 90-70





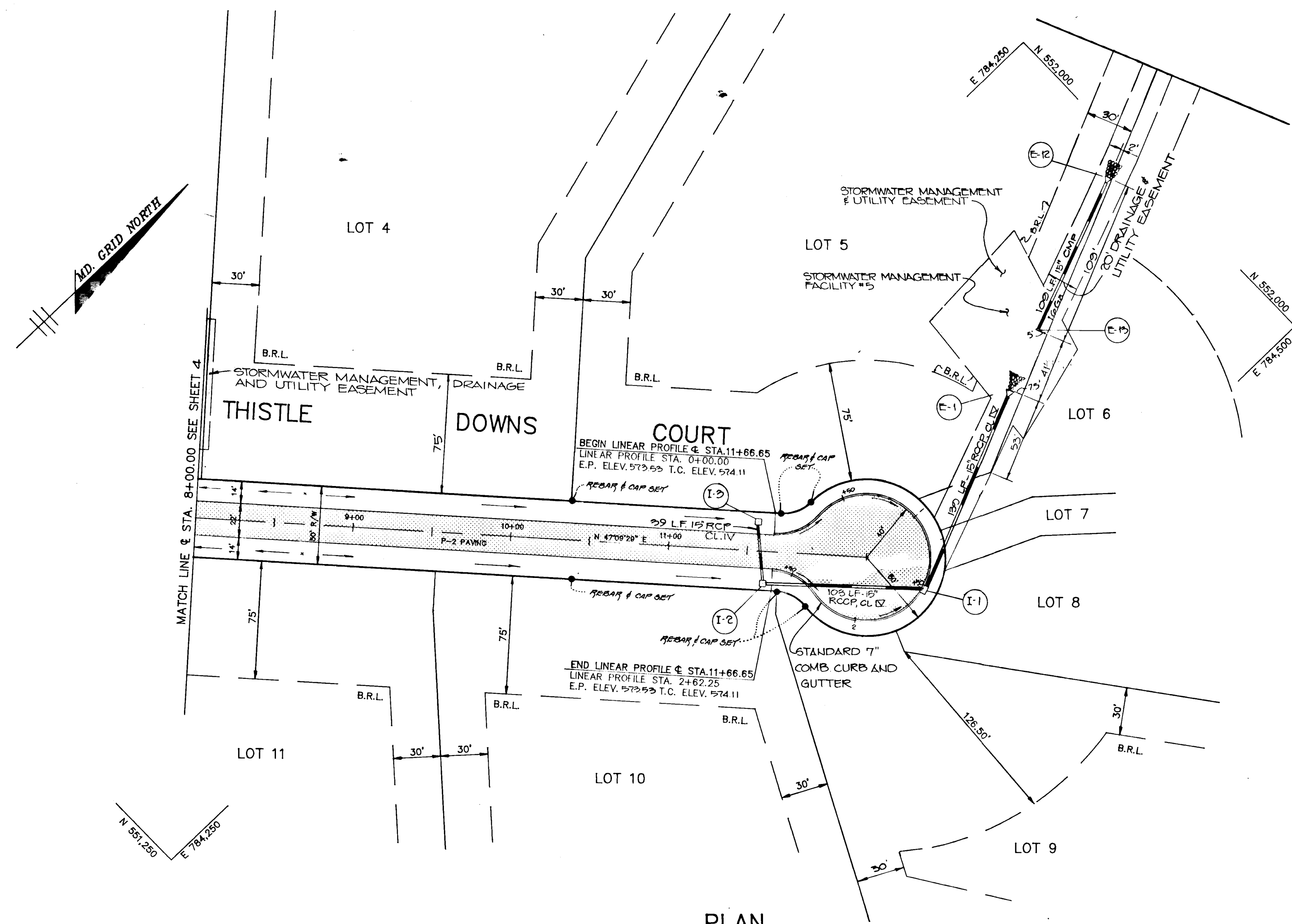
**CURVE DATA**  
 @ STA. 0+75.44 TO @ STA. 1+76.11  
 $\Delta = 32^{\circ}57'28''$   
 $R = 175.00'$   
 $T = 51.77'$   
 $L = 100.66'$   
 CHD = N 30° 40' 58" E . 99.28'

**PLAN**  
 SCALE: 1"=50'

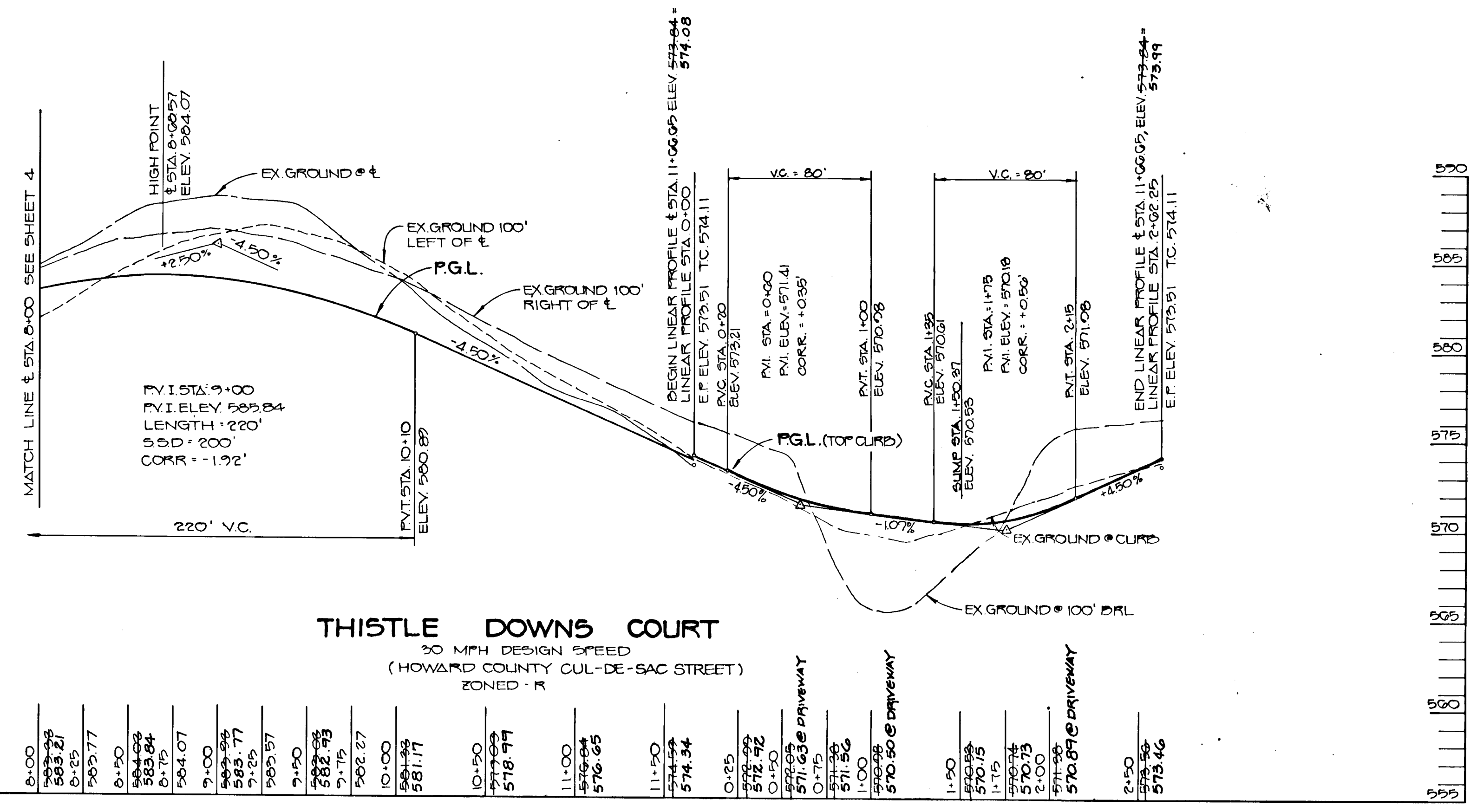


**PROFILE**  
 SCALE: HOR: 1"=50'  
 VER: 1"=5'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Donald J. Jensen</i>	5/12/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Donald J. Jensen</i>	5/12/90
CHIEF, LAND DEVELOPMENT DIVISION	DATE
<i>Travis W. Wallace</i>	4/30/90
CHIEF, BUREAU OF HIGHWAYS	DATE
<i>Richard S. Row</i>	5/2/90
CHIEF, BUREAU OF ENGINEERING	DATE
DATE	REVISION
OWNER/DEVELOPER	
CARRIE LEE HUTCHINS 830 MORGAN STATION RD. WOODBINE, MD 21797	CAUDEN DOWNS PARTNERSHIP 1307 MAIN STREET ELLCOTT CITY, MD 21043
PROJECT: 509-20 P89-07	
<b>CAMDEN DOWNS</b> SECTION ONE (LOTS 1-21)	
AREA TAX MAP 348 PARCEL 1 ZONED R 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE: <b>PLAN &amp; PROFILE</b> <b>THISTLE DOWNS COURT</b> STA. 0+00 TO STA. 8+00	
RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 3105 North Ridge Road Ellicott City, Maryland 21043 301-461-2690 FAX: 301-750-3176	
DATE: 3-29-90	DESIGNED BY: DBS
	DRAWN BY: CADD
	PROJECT NO: 50900
	DATE: MARCH 28, 1990
	SCALE: AS SHOWN
	DRAWING NO. 4 OF 12



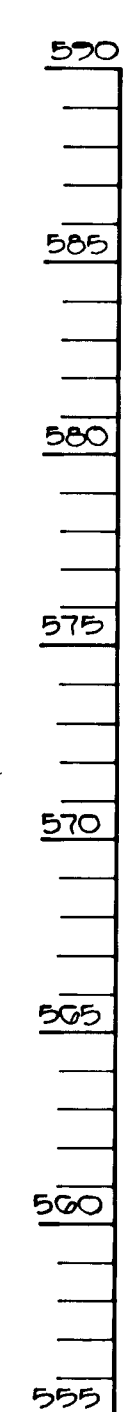
PLAN  
SCALE: 1"=50'



THISTLE DOWNS COURT

30 MPH DESIGN SPEED  
(HOWARD COUNTY CUL-DE-SAC STREET)  
ZONED - R

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



8+00	563.27	8+25	563.77	8+50	563.84	8+75	563.77	9+00	563.57	9+25	562.27	10+00	561.17	10+50	577.09	11+00	576.65	11+50	574.34	12+00	572.72	12+25	571.63	12+50	571.52	13+00	570.50	13+50	570.15	14+00	570.15	14+25	570.15	14+50	570.15	15+00	570.15	15+25	570.15	15+50	570.15	16+00	570.15	16+25	570.15	16+50	570.15	17+00	570.15	17+25	570.15	17+50	570.15	18+00	570.15	18+25	570.15	18+50	570.15	19+00	570.15	19+25	570.15	19+50	570.15	20+00	570.15
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Joseph J. Taylor* 5/2/90  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Paul M. Depon* 5/2/90  
 CHIEF, LAND DEVELOPMENT DIVISION  
*Dennis W. McKeand* 4/30/90  
 CHIEF, BUREAU OF HIGHWAYS  
*Richard E. Muegge* 5-2-90  
 CHIEF, BUREAU OF ENGINEERING

OWNER/DEVELOPER  
 CARRIE LEE HUTCHINS CALDEN DOWNS PARTNERSHIP  
 820 MORGAN STATION RD 8307 MAIN STREET  
 WOODBINE, MD 21197 ELLICOTT CITY, MD 21043

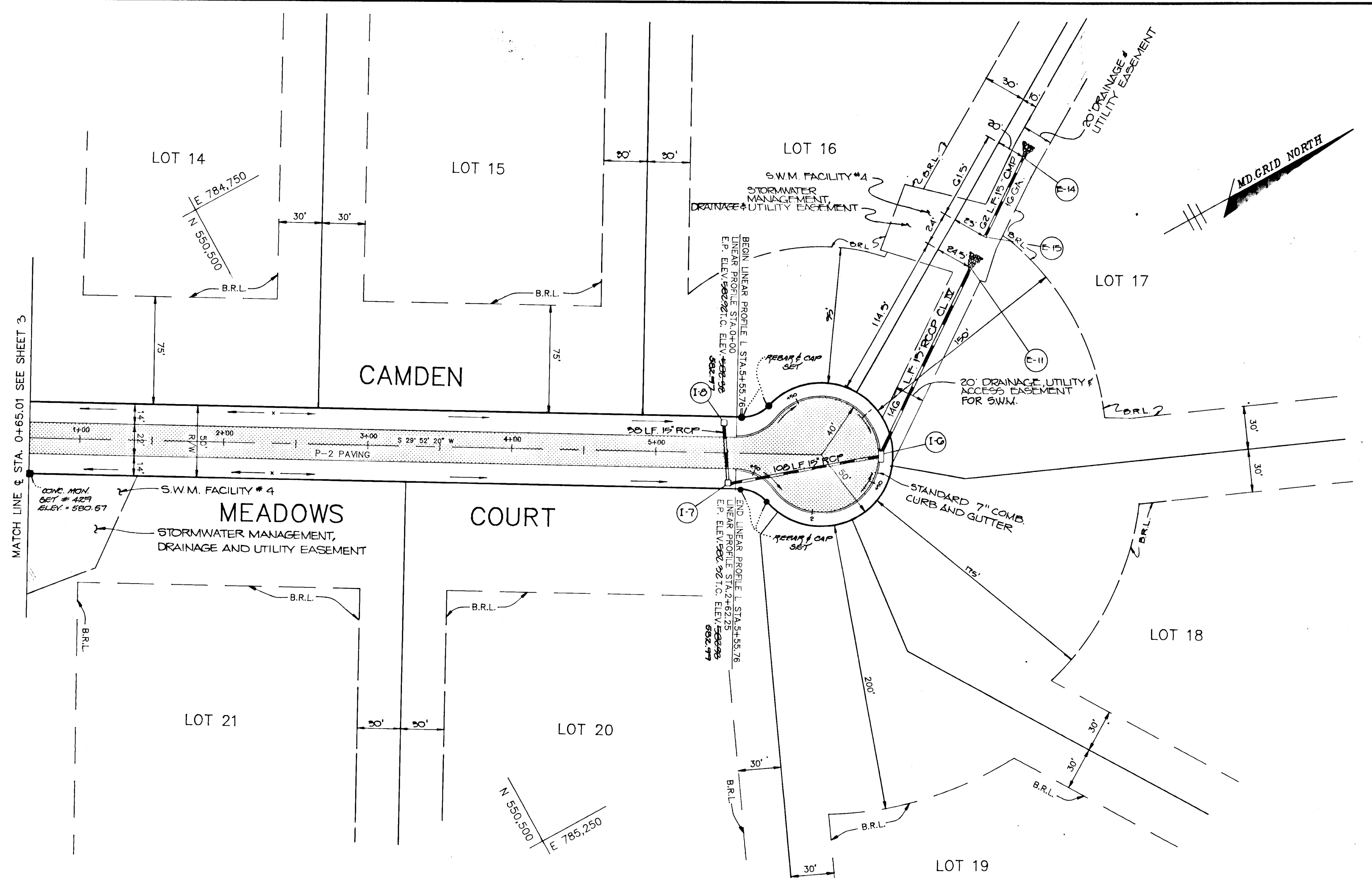
PROJECT: 509-20 P-89-07  
**CAMDEN DOWNS**  
 SECTION ONE (LOTS 1-2)  
 AREA TAX MAP 3&B PARCEL 1 ZONED - R  
 4TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 TITLE: PLAN & PROFILE  
**THISTLE DOWNS COURT**  
 STA. 8+00 TO STA. 11+00.00

RIEMER MUEGGE & ASSOCIATES, INC.  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellicott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

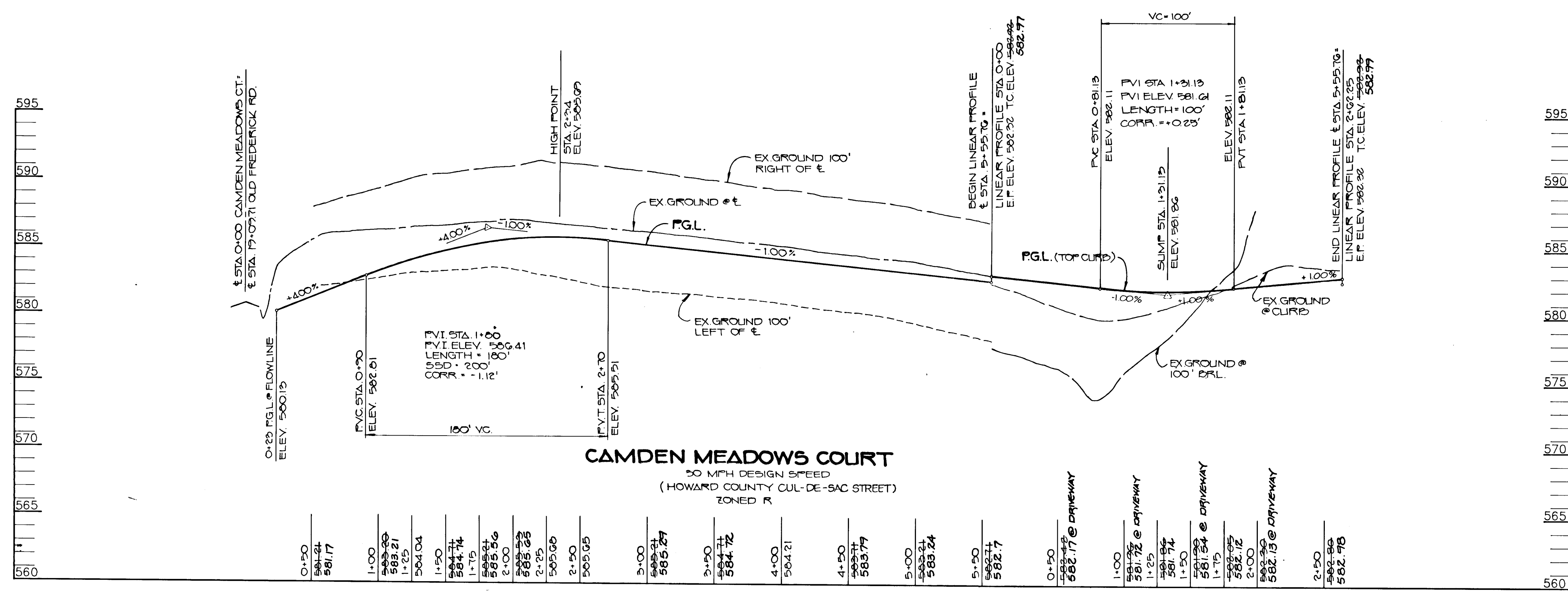
DATE: 5/2/90  
 DESIGNED BY: D.B.S.  
 DRAWN BY: CADD  
 PROJECT NO: 53606  
 DATE: MARCH 20, 1990  
 SCALE: AS SHOWN  
 DRAWING NO. 5 OF 12

1566

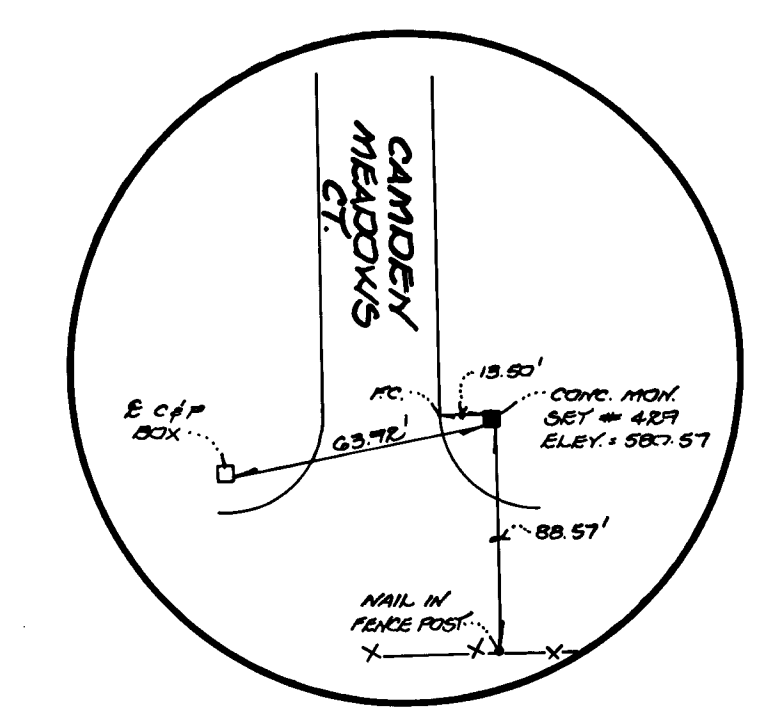
MARYLAND BLUEPRINT CO., INC. 92000



**PLAN**  
SCALE: 1"=50'



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



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*David J. Campbell* 5/18/90  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Donald W. Seaman* 5/18/90  
 CHIEF, LAND DEVELOPMENT DIVISION

*Franklin W. Woodard* 4/30/90  
 CHIEF, BUREAU OF HIGHWAYS

*William A. Kelly* 5-2-90  
 CHIEF, BUREAU OF ENGINEERING

DATE	NO	REVISION

OWNER / DEVELOPER  
 CARRIE LEE HUTCHINS CAMDEN DOWNS PARTNERSHIP  
 8307 MORGAN STATION RD. 8307 MAIN STREET  
 WOODBINE, MD. 21797 ELLICOTT CITY, MD. 21045

PROJECT: 507-20 F07-G7  
**CAMDEN DOWNS**  
 SECTION ONE (LOTS 1-21)

AREA TAX MAP 3&B PARCEL 1 ZONED R  
 4TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE: **PLAN & PROFILE**  
**CAMDEN MEADOWS COURT**

**RIEMER MUEGGE & ASSOCIATES, INC.**  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellicott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

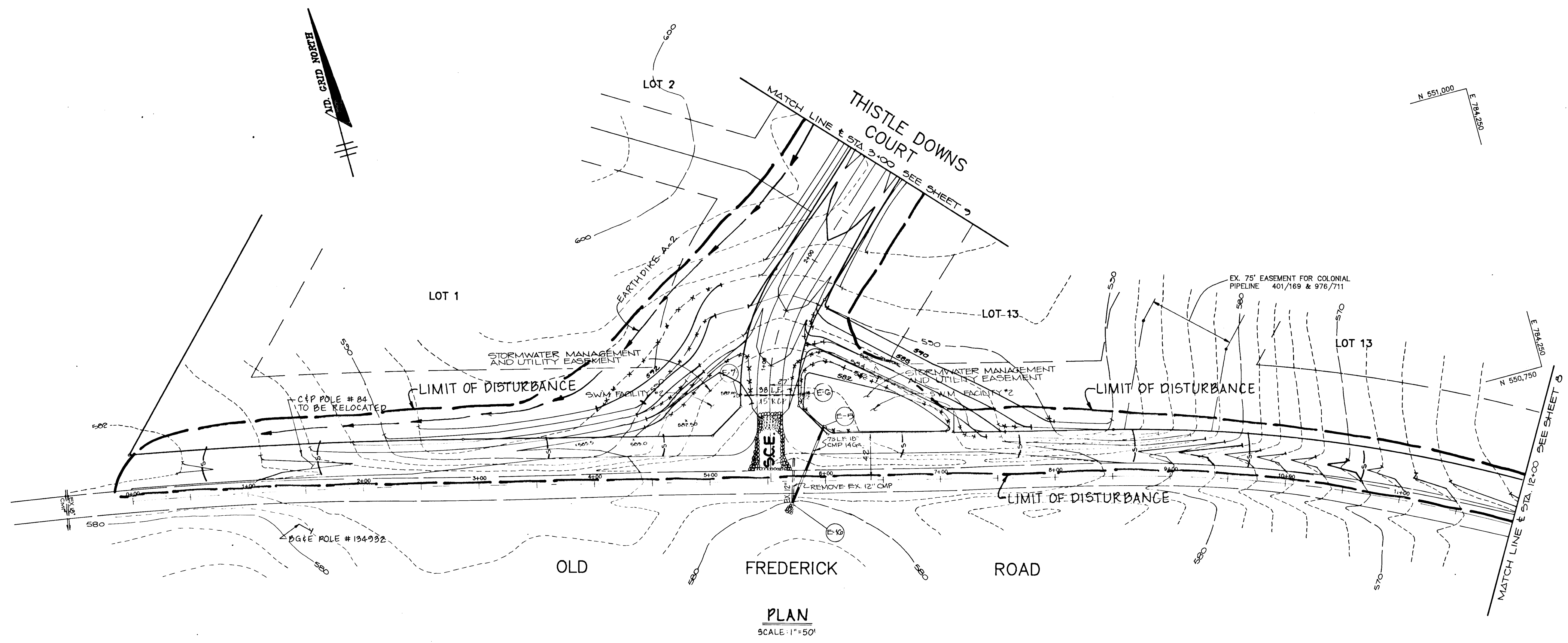
3-13-90  
 DATE

DESIGNED BY: D.B.S.  
 DRAWN BY: CADD  
 PROJECT NO: 55606  
 DATE: MARCH 20, 1990  
 SCALE: AS SHOWN  
 DRAWING NO. 6 OF 12

*Arthur E. Muegge* 10/07  
 ARTHUR E. MUEGGE P.E.

1566





PLAN  
SCALE: 1"=50'

**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, discing or other acceptable means before seeding, if not previously loosened.

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

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq ft).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs./1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

**Seeding:** For the periods March 1 thru April 30, and August 1 thru November 15, seed with 24 bushel per acre of annual rye (3.2 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.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, and 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.

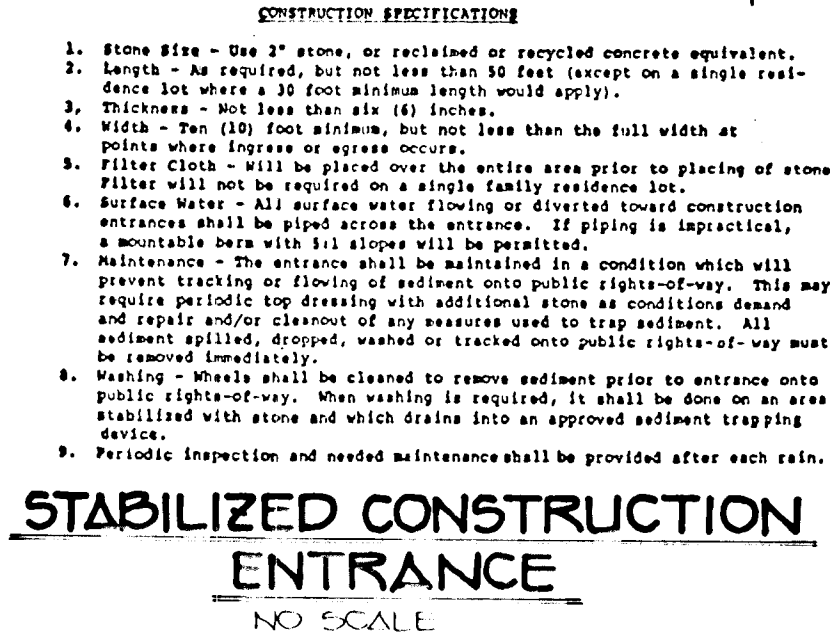
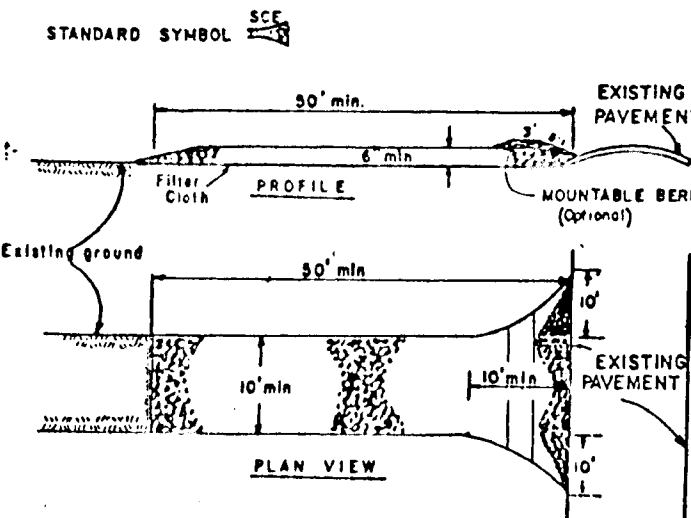
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

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

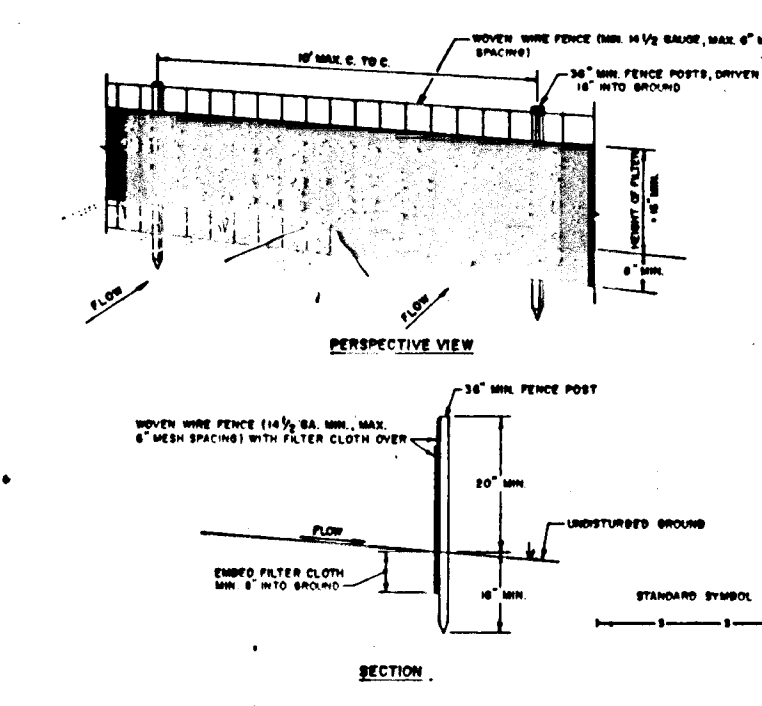
**SEDIMENT CONTROL NOTES**

1. 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 (1992-2437).
2. 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.
3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 17, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. 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. 51) and (Sec. 52), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:
 

Total Area of Site	78.35 acres
Area Disturbed	10.05 acres
Area to be roofed or paved	1.15 acres
Area to be vegetatively stabilized	6.80 acres
Total Cut	14,795.5 Cu. yds.
Total Fill	500 Cu. yds.
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County Department of Public Works Sediment Control Inspector.
10. Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
11. Sediment will be removed from traps when its depth reaches the clean out elevation shown on the plans.
12. Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unsuitable material. The contractor shall familiarize himself with site conditions which may affect the work.



**STABILIZED CONSTRUCTION ENTRANCE**  
NO SCALE



**SILT FENCE**  
NO SCALE

- CONSTRUCTION SPECIFICATIONS**
1. Stone Size - Use 2" stone, or recycled concrete equivalent.
  2. Length - As required, but not less than 50 feet (except on a single residential lot where a 20 foot minimum length would apply).
  3. Thickness - Not less than 18 inches.
  4. Width - Not less than 18 inches, but not less than the full width at points where ingress or egress occurs.
  5. 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.
  6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable beam with fill slopes will be installed.
  7. 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 materials used to trap sediment. All sediment applied, dropped, tracked or tracked onto public rights-of-way must be removed immediately.
  8. Sealing - Holes shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When sealing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
  9. Periodic inspection and needed maintenance shall be provided after each rain.

- CONSTRUCTION NOTES FOR REINFORCED SILT FENCE**
1. METAL WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  2. FILTER CLOTH TO BE FASTENED SECURELY TO WOOD WIRE FENCE WITH TIE SPACED EVERY 24" AT TOP AND MID SECTION.
  3. WHEN NO SECTIONS OF FILTER CLOTH ALIGN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND POLDED.
  4. MAINTENANCE SHALL BE PERFORMED AS NOTED AND MATERIAL REMOVED WHEN "RULES" DEVELOPED IN THE SILT FENCE.
- PREPARED BY:** GEORGE, GUNTERMAN, & ASSOCIATES, INC.

**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, discing or other acceptable means before seeding, if not previously loosened.

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

**Seeding:** For periods March 1 thru April 30 and from August 15 thru November 15, seed with 24 bushel per acre of annual rye (3.2 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.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, and 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.

1566

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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."  
Date: 3-29-90  
Developer: G

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."  
Date: 3-29-90  
Engineer: Arthur E. Muegge

REVIEWED FOR HOWARD COUNTY S.C.D.  
AND MET TECHNICAL REQUIREMENTS  
Date: 4-11-90  
U.S. SOIL CONSERVATION SERVICE  
Date: 4/11/90  
John R. Robertson  
HOWARD S.C.D.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
Date: 5/11/90  
Chief, Division of Community Planning and Land Development

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
Date: 5/2/90  
Chief, Land Development Division

Date: 4/18/90  
Chief, Bureau of Highways

Date: 5-2-90  
Chief, Bureau of Engineering

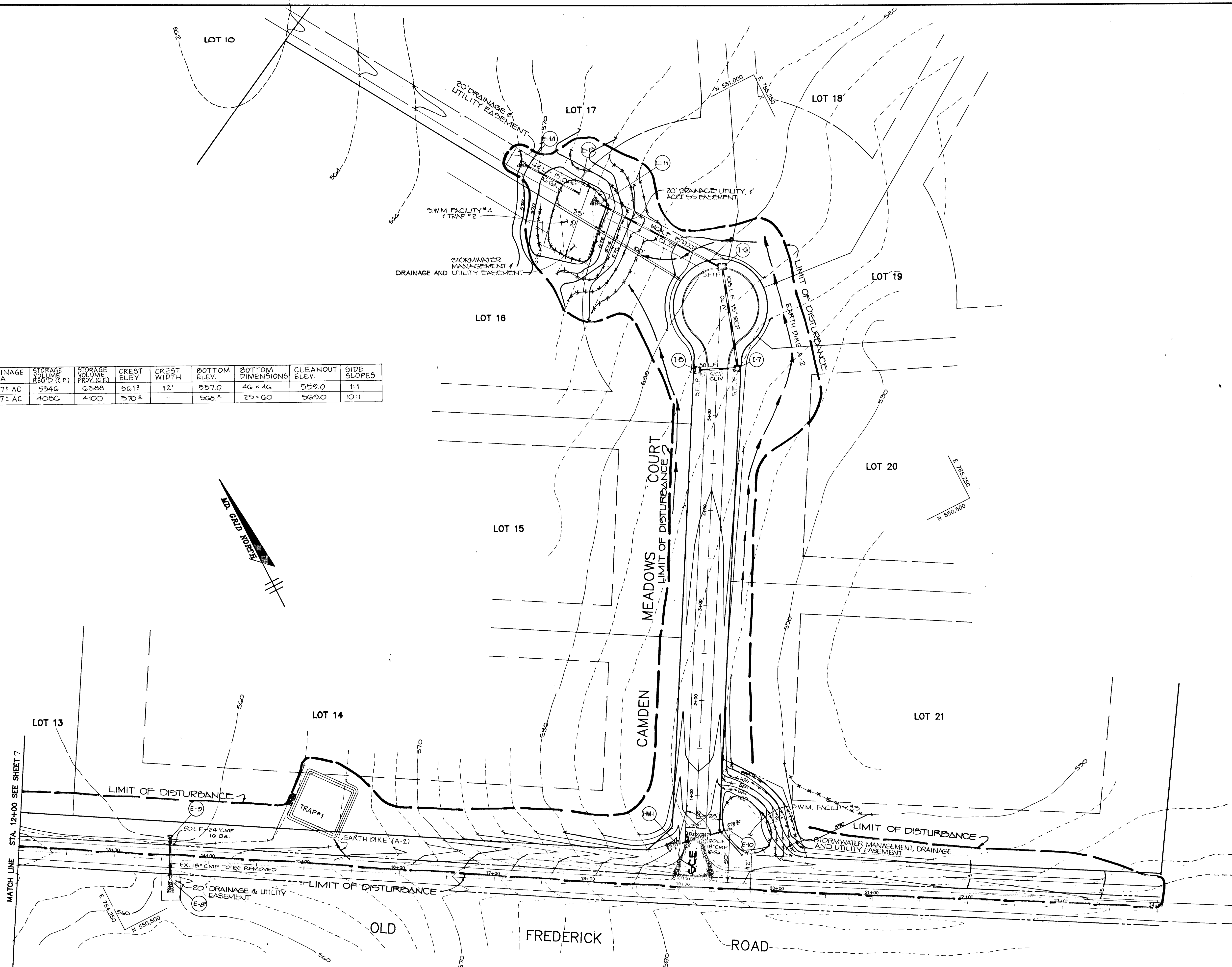
OWNER/DEVELOPER  
CARRIE LEE HUTCHINS  
6307 MORGAN STATION RD  
WOODBINE, MD 21797  
CAMDEN DOWNS PARTNERSHIP  
6307 MAIN STREET  
ELLCOTT CITY, MD 21043

PROJECT: 589-20 P-89-67  
**CAMDEN DOWNS**  
SECTION ONE (LOTS 1-21)  
AREA: TAX MAP 3&B PARCEL 1, ZONED R-4  
4TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: **GRADING, SEDIMENT CONTROL PLAN & DETAILS**

RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
3105 North Ridge Road Ellicott City, Maryland 21043  
301-461-2690 FAX: 301-750-3176  
Date: 3-29-90  
DESIGNED BY: DBS  
DRAWN BY: CADD  
PROJECT NO: 52900G  
DATE: MARCH 28, 1990  
SCALE: AS SHOWN  
DRAWING NO: 7 OF 12  
Arthur E. Muegge  
ARTHUR E. MUEGGE #0707

TYPE OF TRAP	TRAP NUMBER	DRAINAGE AREA	STORAGE VOLUME REQ'D (C.F.)	STORAGE VOLUME PROV. (C.F.)	CREST ELEV.	CREST WIDTH	BOTTOM ELEV.	BOTTOM DIMENSIONS	CLEANOUT ELEV.	SIDE SLOPES
STONE OUTLET	1	2.97 AC	5946	6388	5618	12'	557.0	46' x 46'	559.0	1:1
PIPE OUTLET	2	2.27 AC	4086	4100	5708	--	568.8	25' x 60'	569.0	10:1



PLAN  
SCALE: 1" = 50'

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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."  
 DEVELOPER: *Carrie Lee Hutchins* DATE: 3-29-90

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."  
 ENGINEER: *Arthur E. Muegge* DATE: 3-29-90

REVIEWED FOR: **HOWARD** S.C.D.  
 AND MET TECHNICAL REQUIREMENTS  
 U.S. SOIL CONSERVATION SERVICE  
 REVIEWER: *John R. Robertson* DATE: 4-11-90

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 APPROVED: *John R. Robertson* DATE: 4/11/90  
 HOWARD S.C.D.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 APPROVED: *Donald L. Sample* DATE: 5/14/90  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 APPROVED: *Donald L. Sample* DATE: 5/2/90  
 CHIEF, LAND DEVELOPMENT DIVISION  
 APPROVED: *Ramona W. Weisand* DATE: 4/11/90  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: *John R. Robertson* DATE: 5-2-90  
 CHIEF, BUREAU OF ENGINEERING

DATE	NO.	REVISION

OWNER/DEVELOPER  
 CARRIE LEE HUTCHINS 8307 MORGAN STATION RD. ELICOTT CITY, MD 21043  
 CALDEN DOWNS PARTNERSHIP 8307 MAIN STREET ELICOTT CITY, MD 21043

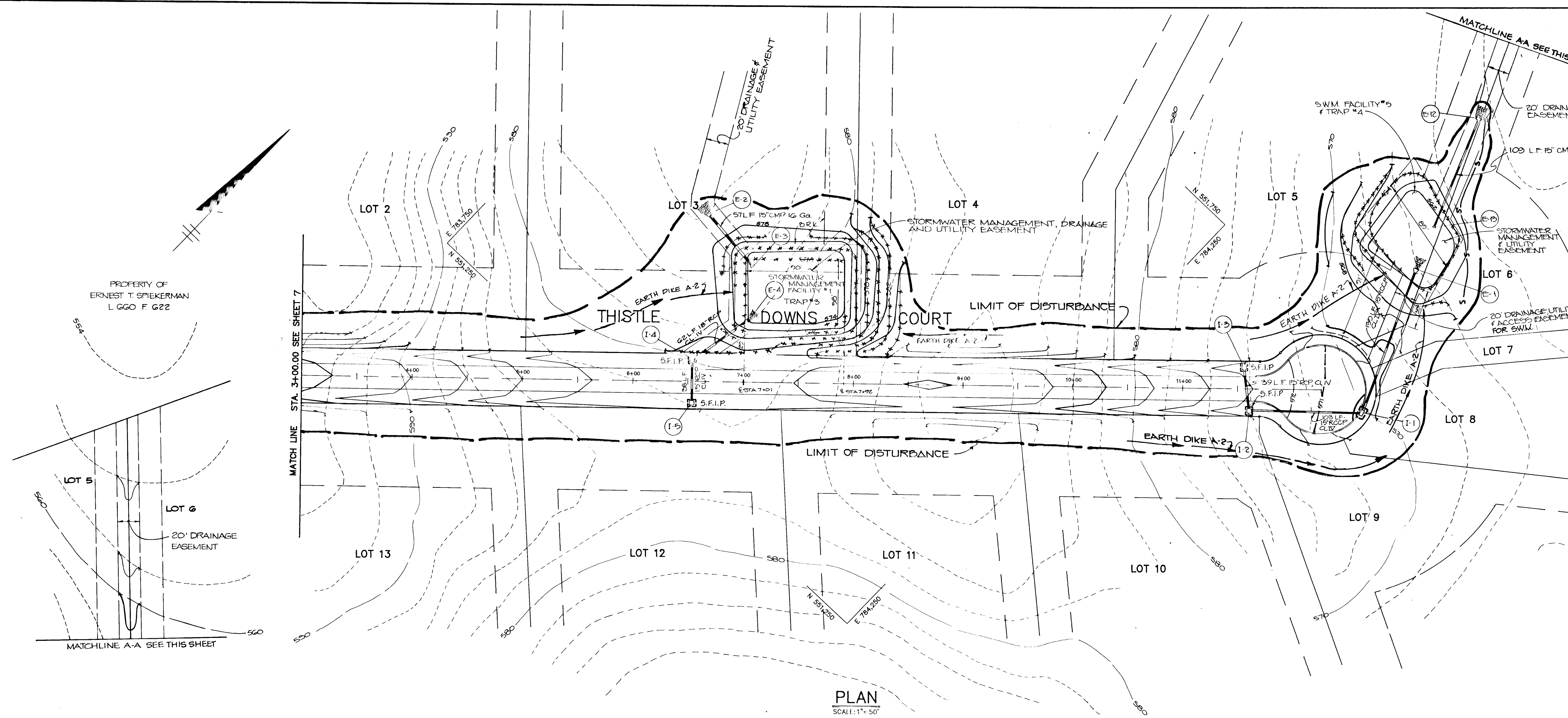
PROJECT: 589-20 109-07  
**CAMDEN DOWNS**  
 SECTION ONE (LOTS 1-21)  
 AREA: TAX MAP 3&8 PARCEL 1 ZONED R 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 TITLE: **GRADING, SEDIMENT CONTROL PLAN & DETAILS**

RIEMER MUEGGE & ASSOCIATES, INC.  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellicott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

DATE: 3-29-90  
 DESIGNED BY: D.B.S.  
 DRAWN BY: CADD  
 PROJECT NO: 839008  
 DATE: MARCH 29, 1990  
 SCALE: AS SHOWN  
 DRAWING NO: 6 OF 12

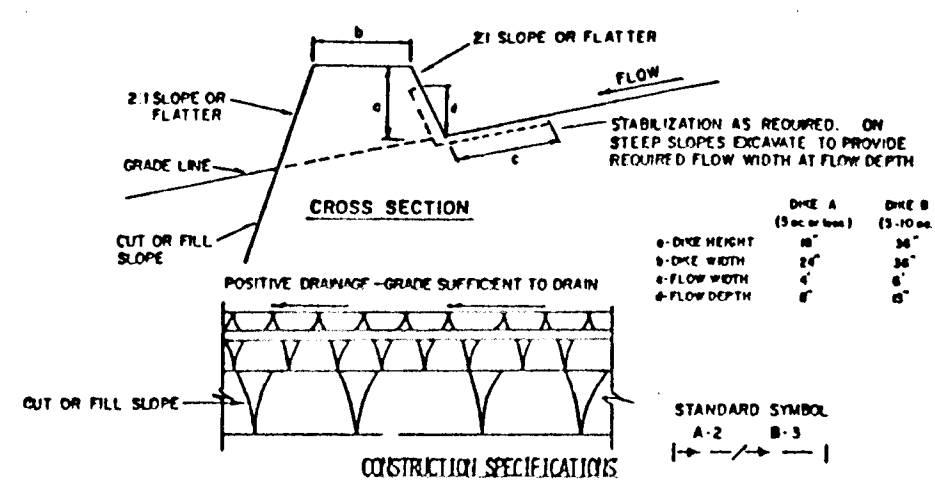
1566





PLAN  
SCALE: 1" = 50'

TYPE OF TRAP	TRAP NUMBER	DRAINAGE AREA	STORAGE VOLUME REQ'D (C.F.)	STORAGE VOLUME PROV. (C.F.)	CREST ELEV.	CREST WIDTH	BOTTOM ELEV.	BOTTOM DIMENSIONS	CLEANOUT ELEV.	SIDE SLOPES
PIPE OUTLET	3	2.26 ± AC	4068	8052	576.0	--	573.5	53' x 85'	574.75	5:1
PIPE OUTLET	4	1.55 ± AC	2790	5475	564.0	--	562.0	50' x 60'	563.0	5:1



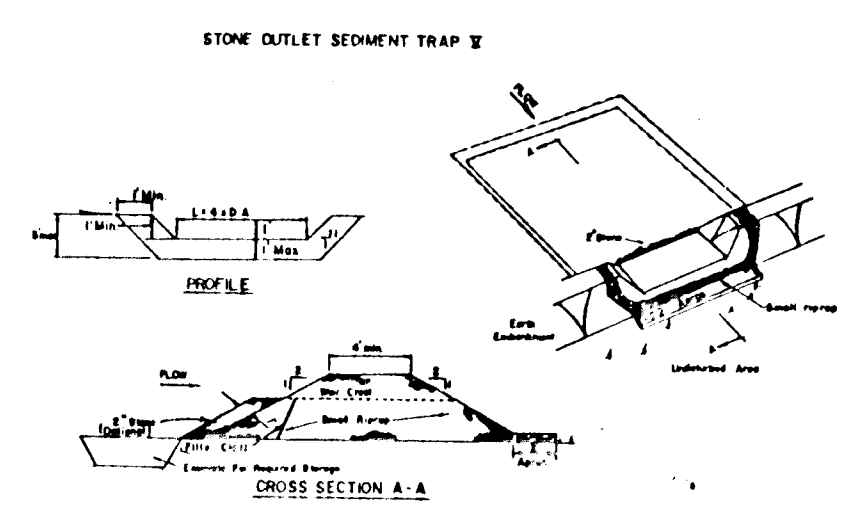
- CONSTRUCTION SPECIFICATIONS**
1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
  2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
  3. TOP WIDTH MAY BE NARROW AND SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
  4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
  5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. FLOWYARD SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT PERMANENTLY STABILIZED.
  6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STOM MULCH IF NOT IN SEEDING SEASON; (B) FLOW CHANNELS AS PER THE COURT BELOW.

**FIELD CHANNEL STABILIZATION**

TYPE OF TREATMENT	CHANNEL	DIKE A	DIKE B
1	5-3.00	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.00	SEED USING SITE OR EXCELSTON; SOG; 2" STONE	SEED USING SITE OR EXCELSTON; SOG; 2" STONE
3	5.1-8.00	SEED WITH SUE, OR SOG; LINED RIP-RAP 4-8"	SEED WITH SUE, OR SOG; LINED RIP-RAP 4-8"
4	8.1-200	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

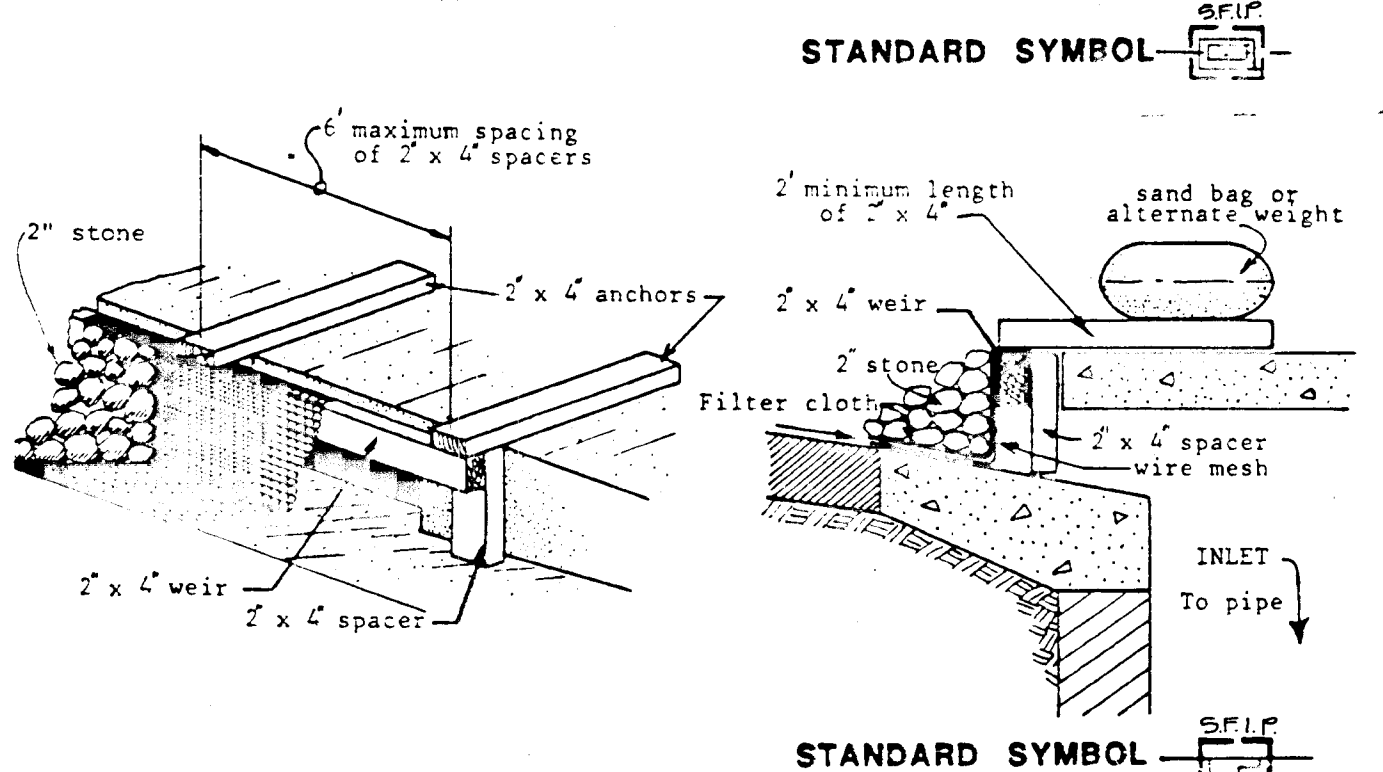
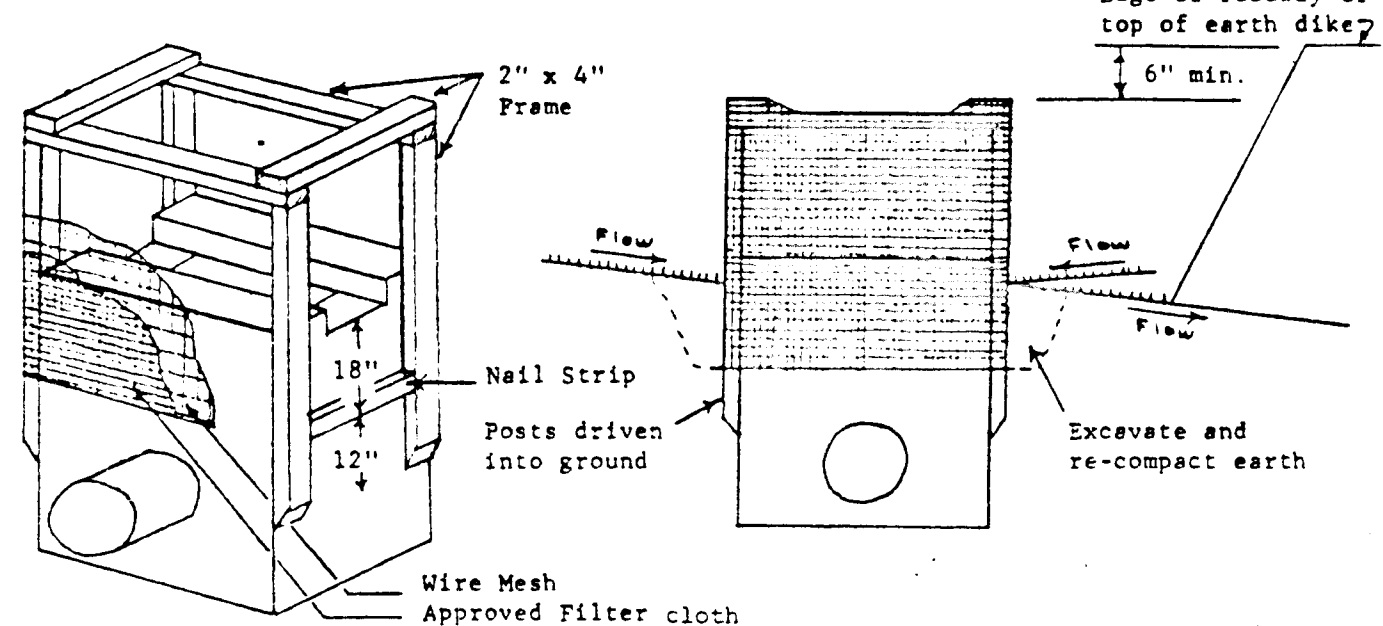
A. STONE TO BE 2" INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PREPRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.  
 B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 3 THICKNESS AND PREPRESSED INTO THE SOIL.  
 C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.  
 D. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

**EARTH DIKE**  
NO SCALE

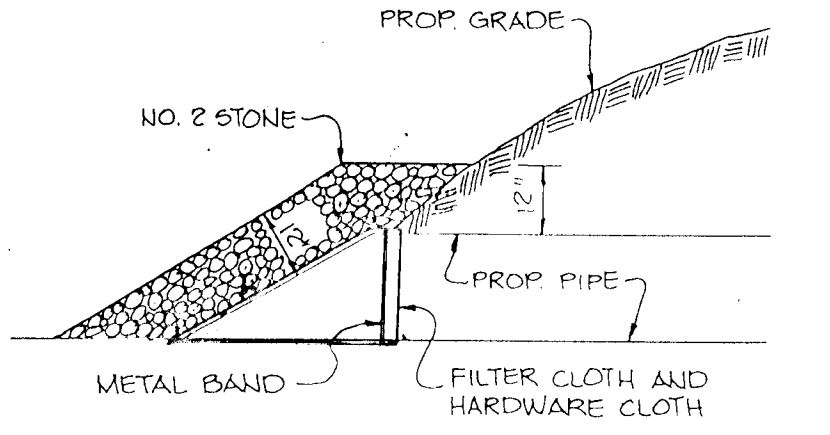


- CONSTRUCTION SPECIFICATIONS FOR SEED**
1. Area under sediment trap shall be cleared, graded and stripped of any vegetation and top soil. The soil area shall be cleared.
  2. The fill material for the sediment trap shall be free of roots and other woody vegetation as well as gravel, stones, rocks, organic material or other objectionable material. The sediment trap shall be compacted by tamping 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 4-8" along with a 1" thickness of 2" aggregate placed on the upstream side on the small riprap 2" embedded filter cloth in the trap.
  5. Sediment trap shall be removed and replaced 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 materials 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 established.

**STONE OUTLET SEDIMENT TRAP**  
NO SCALE



**INLET PROTECTION DETAILS**  
NO SCALE



**END SECTION BLOCKING**  
FOR E-3, E-5, E-13, E-15

NOTE: FILTER CLOTH TO BE INSTALLED OVER THE TOP OF HARDWARE CLOTH, METAL BAND TO BE INSTALLED TO SECURE FILTER CLOTH AND HARDWARE CLOTH.

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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."  
 DEVELOPER: [Signature] DATE: 3-29-90

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."  
 ENGINEER: [Signature] DATE: 3-29-90

REVIEWED FOR: [Signature] S.C.D.  
 AND METS TECHNICAL REQUIREMENTS  
 [Signature] DATE: 4-11-90  
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 [Signature] DATE: 4/1/90  
 HOWARD S.C.D.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] DATE: 5/1/90  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 [Signature] DATE: 5/2/90  
 CHIEF, LAND DEVELOPMENT DIVISION  
 [Signature] DATE: 4/30/90  
 CHIEF, BUREAU OF HIGHWAYS

DATE NO REVISION  
 OWNER/DEVELOPER  
 CARRIE LEE HUTCHINS 8307 WOODMAN STATION RD  
 WOODBINE, MD 21797  
 CAMDEN DOWNS PARTNERSHIP  
 8307 WOODMAN STREET  
 ELLICOTT CITY, MD 21043

PROJECT 589-20 P09-G7  
**CAMDEN DOWNS**  
 SECTION ONE (LOTS 1-2)  
 AREA TAX MAP 8AB PARCEL 1 ZONED R  
 4TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

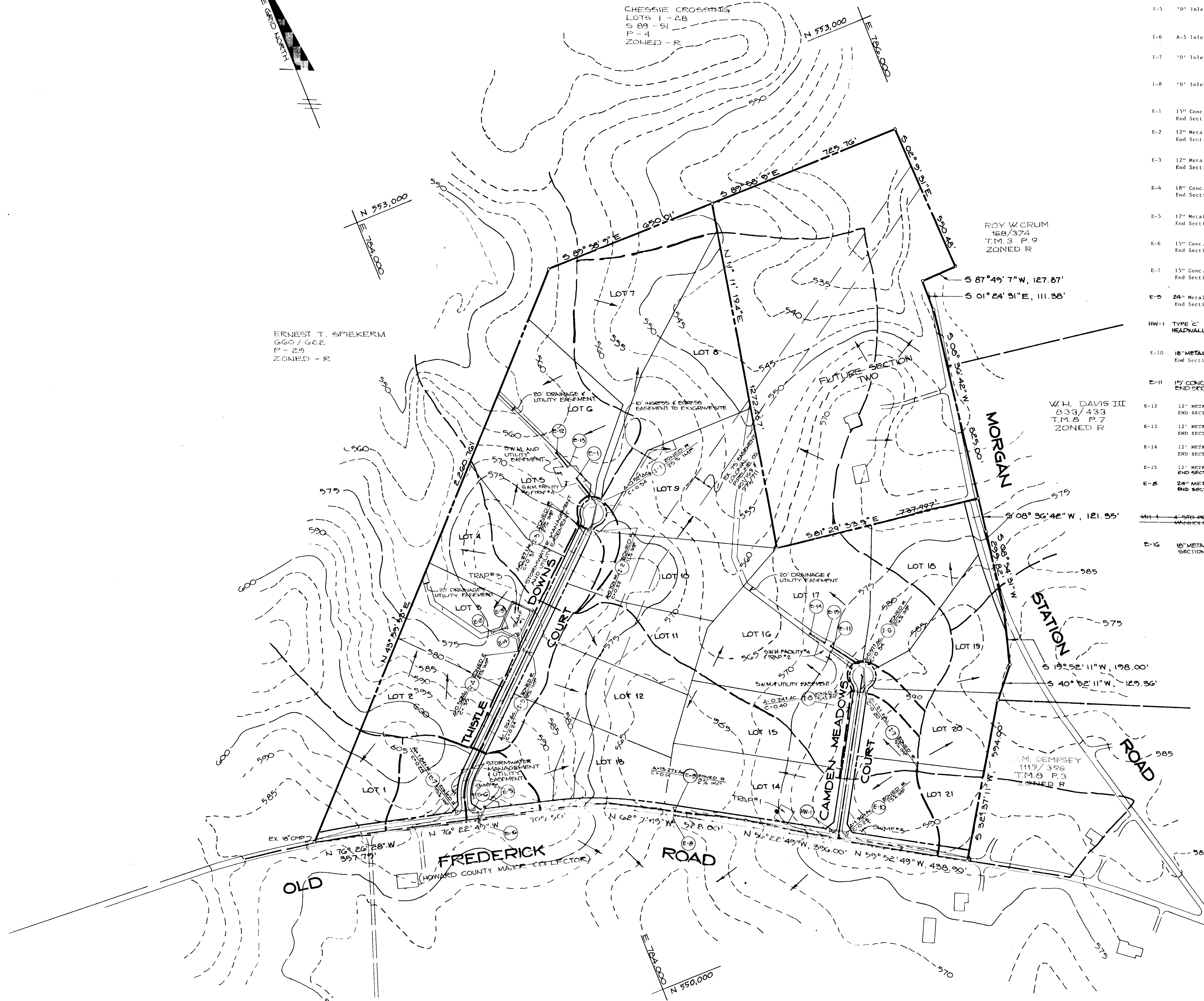
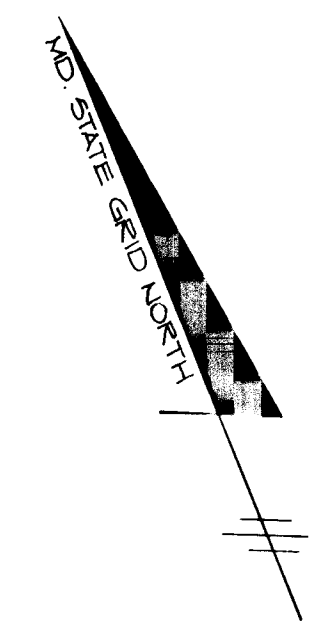
TITLE: **GRADING, SEDIMENT CONTROL PLAN & DETAILS**

RIEMER MUEGGE & ASSOCIATES, INC.  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellicott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

DATE: [Signature]  
 DESIGNED BY: D.B.S.  
 DRAWN BY: D.B.S.  
 PROJECT NO: 589G06  
 DATE: MARCH 28, 1990  
 SCALE: AS SHOWN  
 DRAWING NO: 7 OF 12

1566

1566



PLAN  
SCALE: 1" = 200'

STRUCTURE SCHEDULE		Top Elev.		Inv. In.		Inv. Out		Remarks
No.	Type	Location						
1-1	A-5 Inlet	L.P. Sta. 1+50.07 Thistle Downs Court	570.53	566.21	560.02			No. Co. Std. Detail Sd. 4.01
1-2	"0" Inlet	C/L Sta. 11+61 Thistle Downs Court Offset 19' Right	573.01	567.42	567.42			No. Co. Std. Detail Sd. 4.11 Open on S.W. Side
1-3	"0" Inlet	C/L Sta. 11+56 Thistle Downs Court Offset 19' Left	573.27		568.00			No. Co. Std. Detail Sd. 4.11 Open on S.W. Side
1-4	"0" Inlet	C/L Sta. 6+53.85 Thistle Downs Court Offset 19' Left	579.44	574.47	574.0			No. Co. Std. Detail Sd. 4.11 Open on S.W. & N.E. Sides
1-5	"0" Inlet	C/L Sta. 6+53.85 Thistle Downs Court Offset 19' Right	579.44		574.47			No. Co. Std. Detail Sd. 4.11 Open on S.W. & N.E. Sides
1-6	A-5 Inlet	L.P. Sta. 1+31.13 Camden Meadows Court	561.42	576.22	575.09			No. Co. Std. Detail Sd. 4.01
1-7	"0" Inlet	C/L Sta. 5+51 Camden Meadows Court Offset 19' Right	581.44	577.44	573.23			No. Co. Std. Detail Sd. 4.11 Open on S.W. Side
1-8	"0" Inlet	C/L Sta. 5+47 Camden Meadows Court Offset 19' Left	581.44		577.90			No. Co. Std. Detail Sd. 4.11 Open on S.W. Side
E-1	15" Conc. End Section	See Plan SHEET B			562.07			No. Co. Std. Detail Sd. 5.51
E-2	12" Metal End Section	C/L Sta. 6+66 Thistle Downs Court Offset 151' Left			572.45			No. Co. Std. Detail Sd. 5.61
E-3	12" Metal End Section	C/L Sta. 7+06 Thistle Downs Court Offset 104' Left			574.49			No. Co. Std. Detail Sd. 5.61
E-4	18" Conc. End Section	C/L Sta. 7+04 Thistle Downs Court Offset 55' Left			573.40			No. Co. Std. Detail Sd. 5.51
E-5	12" Metal End Section	C/L Sta. 6+00 Old Frederick Road Offset 47' Left			580.20			No. Co. Std. Detail Sd. 5.61
E-6	15" Conc. End Section	C/L Sta. 0+74 Thistle Downs Court Offset 20' Right			581.60			No. Co. Std. Detail Sd. 5.51
E-7	15" Conc. End Section	C/L Sta. 0+74 Thistle Downs Court Offset 19' Left			582.09			No. Co. Std. Detail Sd. 5.51
E-8	24" Metal End Section	C/L Sta. 13+57 Old Frederick Road Offset 24' Left			558.80			No. Co. Std. Detail Sd. 5.61
HW-1	TYPE C HEADWALL	C/L Sta. 0+47 Camden Meadows Court Offset 19' Left			576.94			No. Co. Std. Detail Sd. 5.21
E-10	18" METAL END SECTION	C/S Sta. 0+67 Camden Meadows Court Offset 19.5' Right			578.00			No. Co. Std. Detail Sd. 5.51
E-11	15" CONC. END SECTION	SEE PLAN SHEET G			569.28			No. Co. Std. Detail Sd. 5.51
E-12	12" METAL END SECTION	SEE PLAN SHEET B			560.97			No. Co. Std. Detail Sd. 5.61
E-13	12" METAL END SECTION	SEE PLAN SHEET B			562.07			No. Co. Std. Detail Sd. 5.61
E-14	12" METAL END SECTION	SEE PLAN SHEET C			567.27			No. Co. Std. Detail Sd. 5.61
E-15	12" METAL END SECTION	SEE PLAN SHEET G			567.61			No. Co. Std. Detail Sd. 5.61
E-16	24" METAL END SECTION	SEE PLAN SHEET G			558.80			No. Co. Std. Detail Sd. 5.61
HW-1	TYPE C HEADWALL	SEE PLAN SHEET G			570.20			No. Co. Std. Detail Sd. 5.51
E-16	18" METAL END SECTION	SEE PLAN SHEET G			570.20			No. Co. Std. Detail Sd. 5.61

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Charles J. Saylor* 5/2/90  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Donald J. Saxon* 5/2/90  
CHIEF, LAND DEVELOPMENT DIVISION

*Francis W. Weirone* 4/30/90  
CHIEF, BUREAU OF HIGHWAYS

*Robert J. ...* 5-2-90  
CHIEF, BUREAU OF ENGINEERING

DATE	NO.	REVISION

OWNER/DEVELOPER

CARRIE LEE HITCHINS 830 MORGAN STATION RD WOODBINE, MD. 21797

CAUDEN DOWNS PARTNERSHIP 8307 MAIN STREET ELLICOTT CITY, MD 21043

PROJECT: 589-20 P-89-G1

**CAMDEN DOWNS**  
SECTION ONE (LOTS 1-21)

AREA: TAX MAP 3 & 8 PARCEL 1 ZONED R  
4TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: **DRAINAGE AREA MAP**

**RIEMER MUEGGE & ASSOCIATES, INC.**  
A Land Planning, Engineering and Consulting Firm  
3105 North Ridge Road Elllicott City, Maryland 21043  
301-461-2690 FAX: 301-750-3176

DATE: 3-29-90

DESIGNED BY: D.B.S./C.B.

DRAWN BY: C.B.

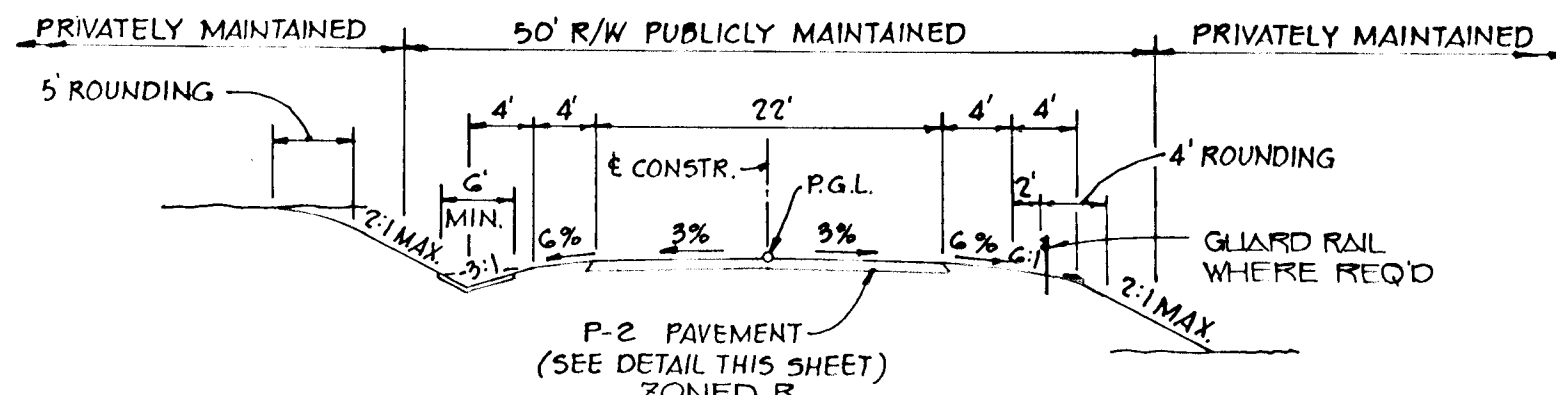
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DATE: MARCH 28, 1990

SCALE: AS SHOWN

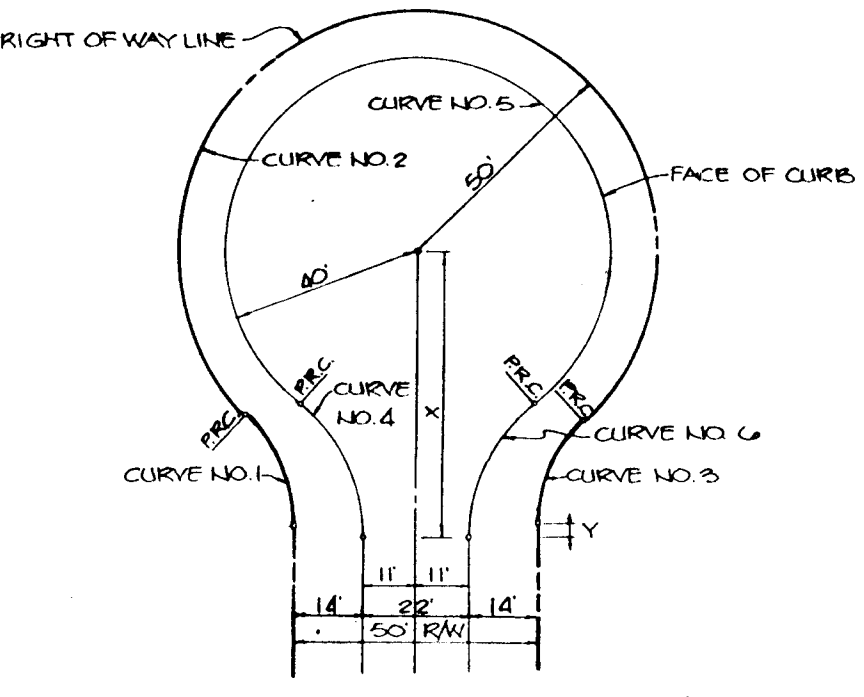
DRAWING NO. 10 OF 12





**TYPICAL ROAD SECTION**

NO SCALE  
 30 MPH DESIGN SPEED  
 HOWARD COUNTY CUL-DE-SAC STREET  
 STA. 0+00 TO STA. 11+66 THISTLE DOWNS CT.  
 STA. 0+00 TO STA. 5+55 CAMDEN MEADOWS CT.

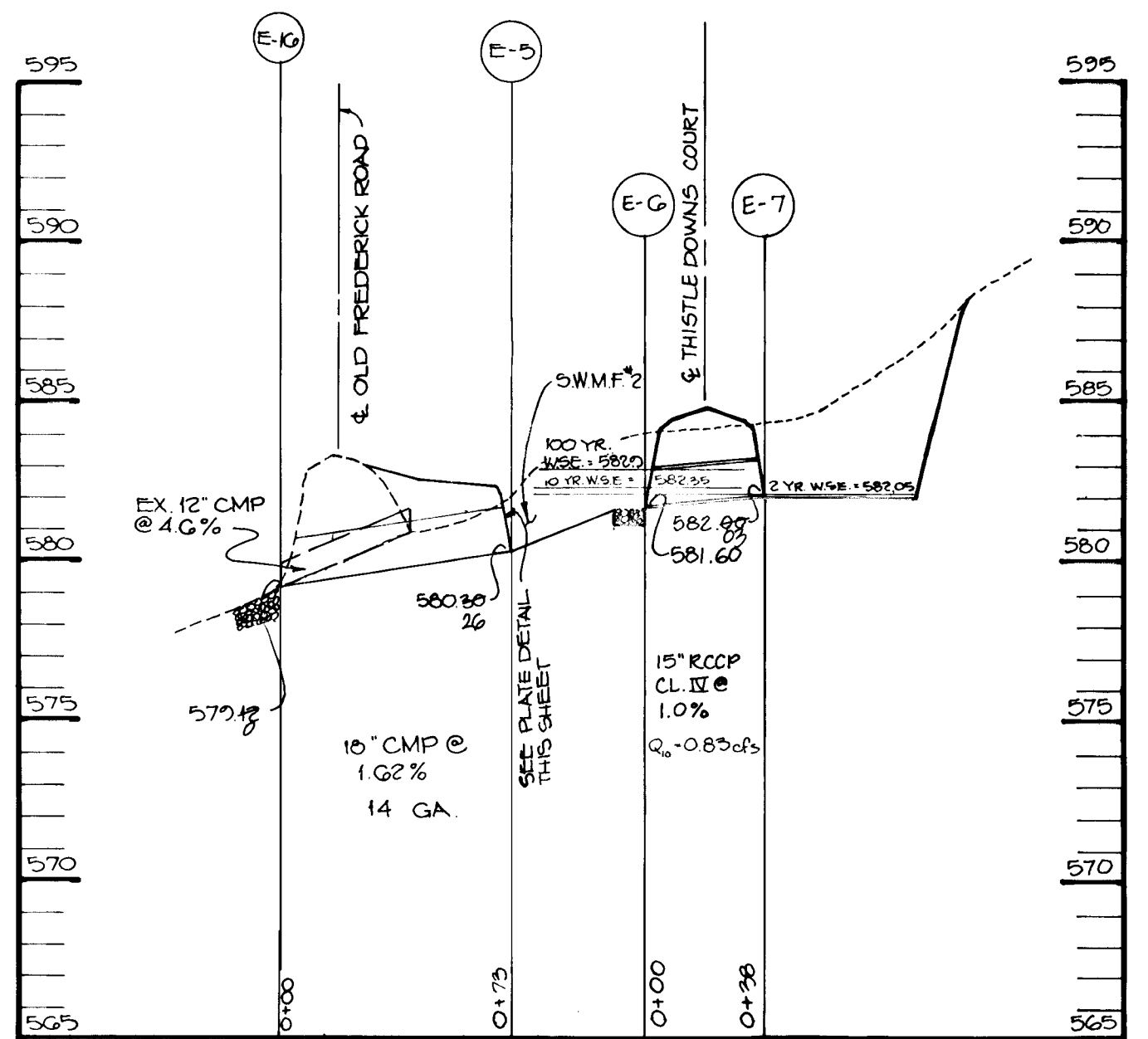


**CURVE DATA**

Curve No.	R	L	Δ	Δ/2	Δ/4	Δ/8	Δ/16	Δ/32	Δ/64	Δ/128	Δ/256	Δ/512	Δ/1024
1	11.18'	17.15'	17.15'	8.57'	4.28'	2.14'	1.07'	0.54'	0.27'	0.13'	0.07'	0.03'	0.02'
2	25.00'	39.00'	39.00'	19.50'	9.75'	4.87'	2.44'	1.22'	0.61'	0.30'	0.15'	0.08'	0.04'
3	50.00'	78.00'	78.00'	39.00'	19.50'	9.75'	4.87'	2.44'	1.22'	0.61'	0.30'	0.15'	0.08'
4	100.00'	156.00'	156.00'	78.00'	39.00'	19.50'	9.75'	4.87'	2.44'	1.22'	0.61'	0.30'	0.15'
5	200.00'	312.00'	312.00'	156.00'	78.00'	39.00'	19.50'	9.75'	4.87'	2.44'	1.22'	0.61'	0.30'

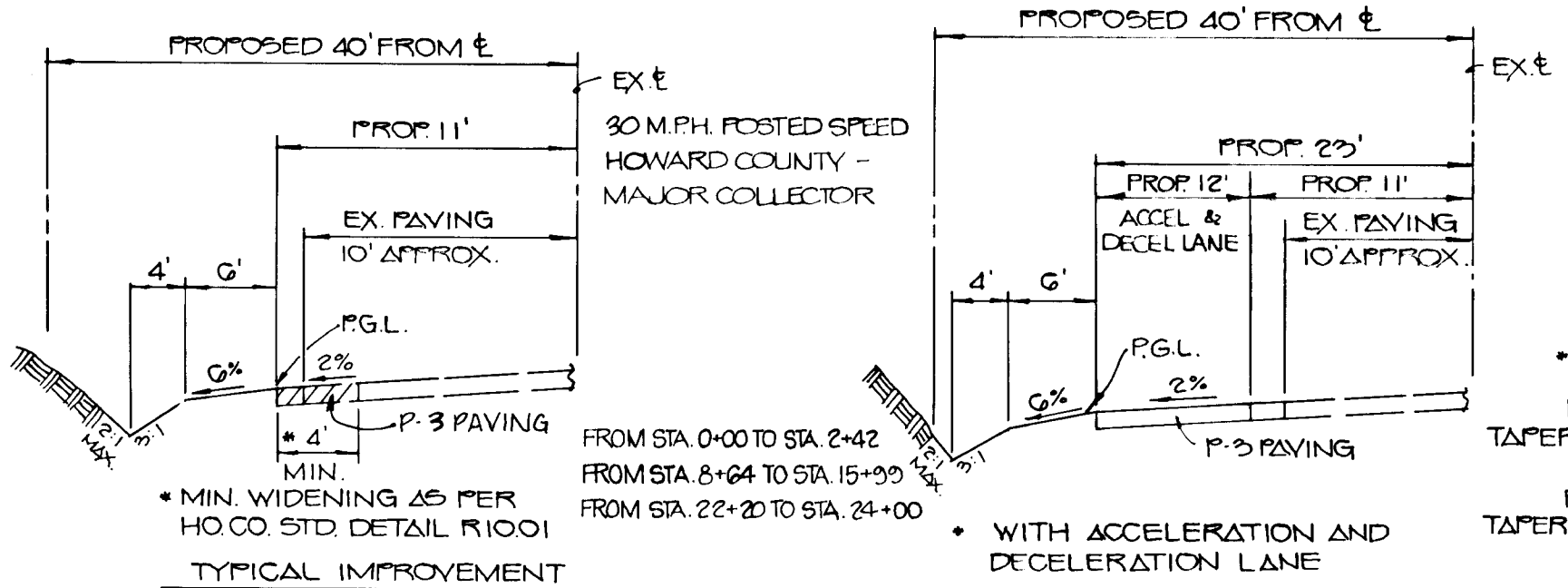
**CUL-DE-SAC DETAIL**

NO SCALE



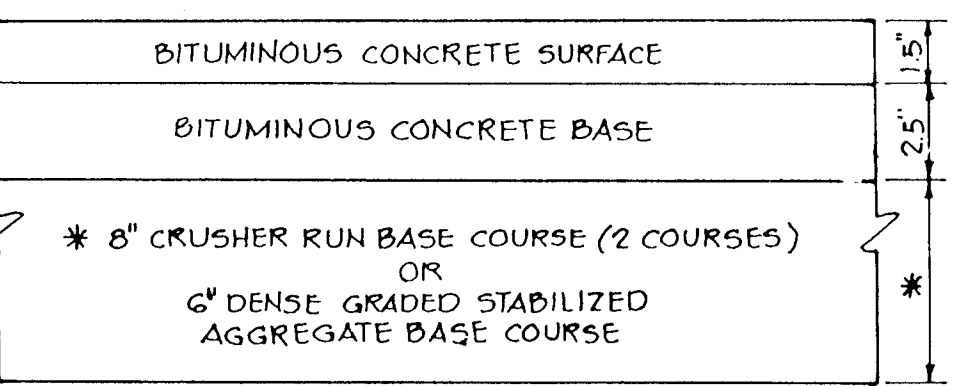
**PROFILE**

SCALE: HOR.: 1"=50'  
 VER.: 1"=5'

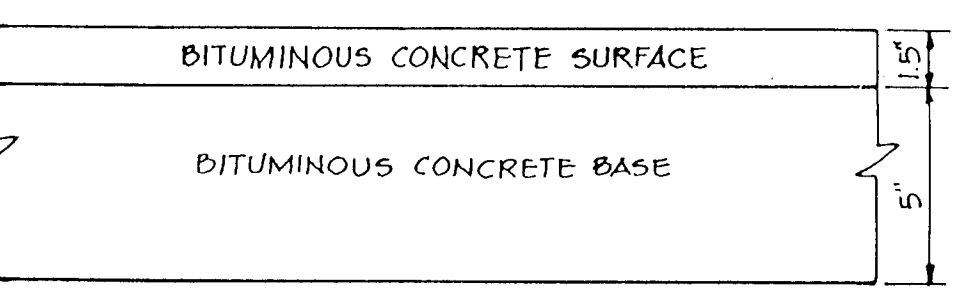


**OLD FREDERICK ROAD WIDENING DETAILS**

NO SCALE  
 ZONED R



(ALTERNATE)

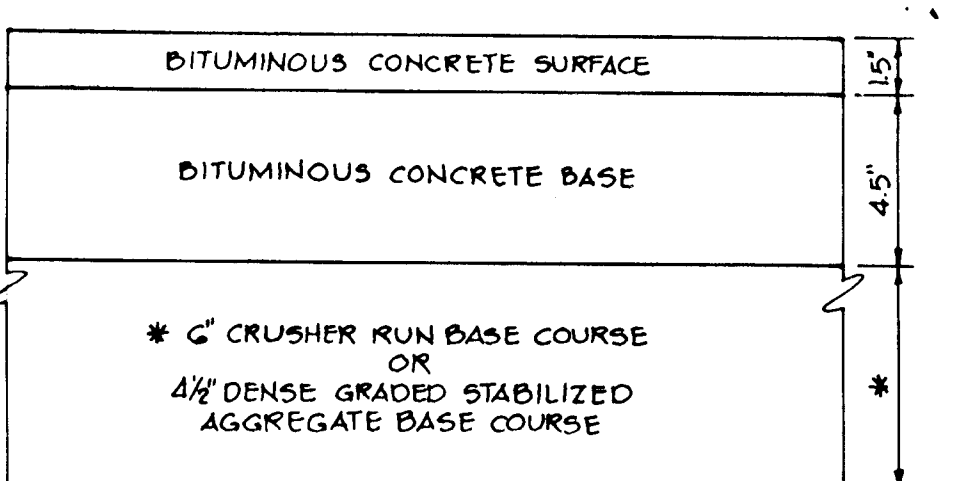


HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

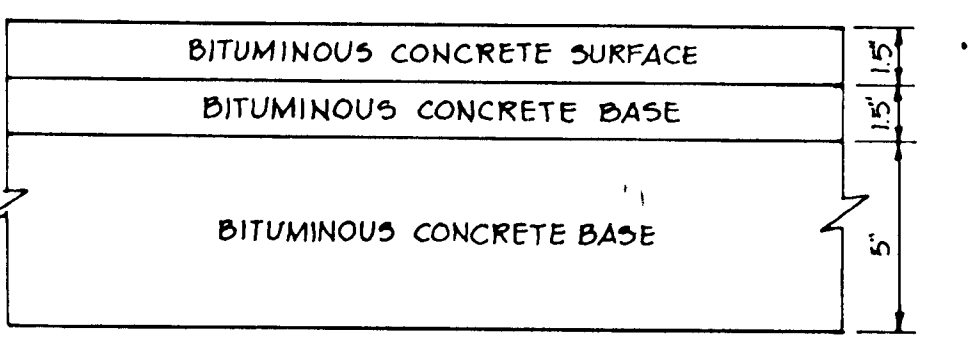
**(6 1/2" PAVING, P-2)**

**P-2 PAVING DETAIL**

NO SCALE



(ALTERNATE)

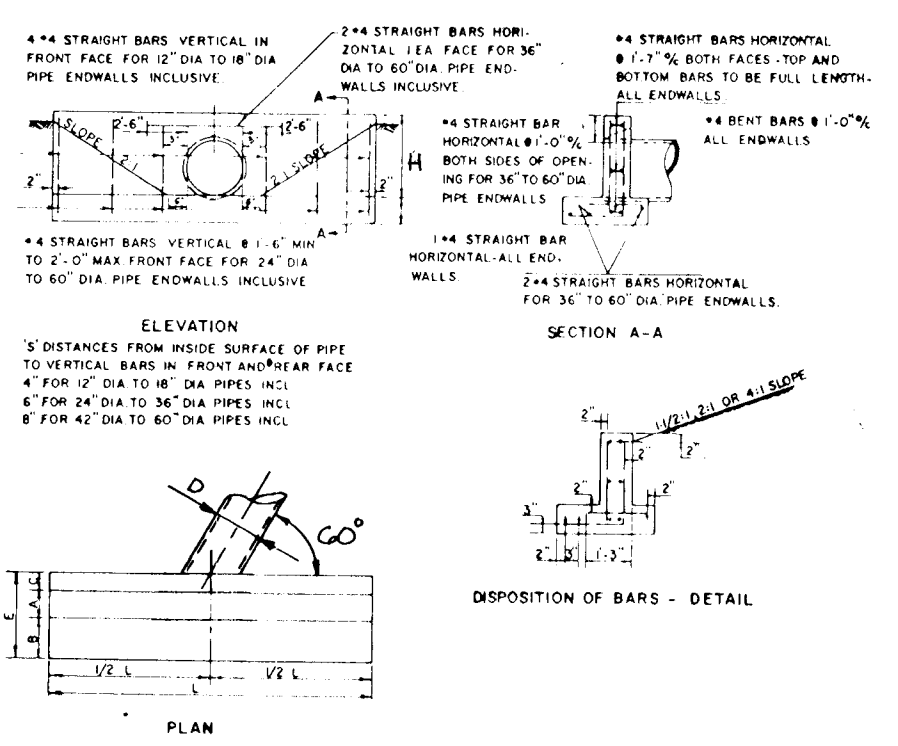


HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

**(8" PAVING, P-3)**

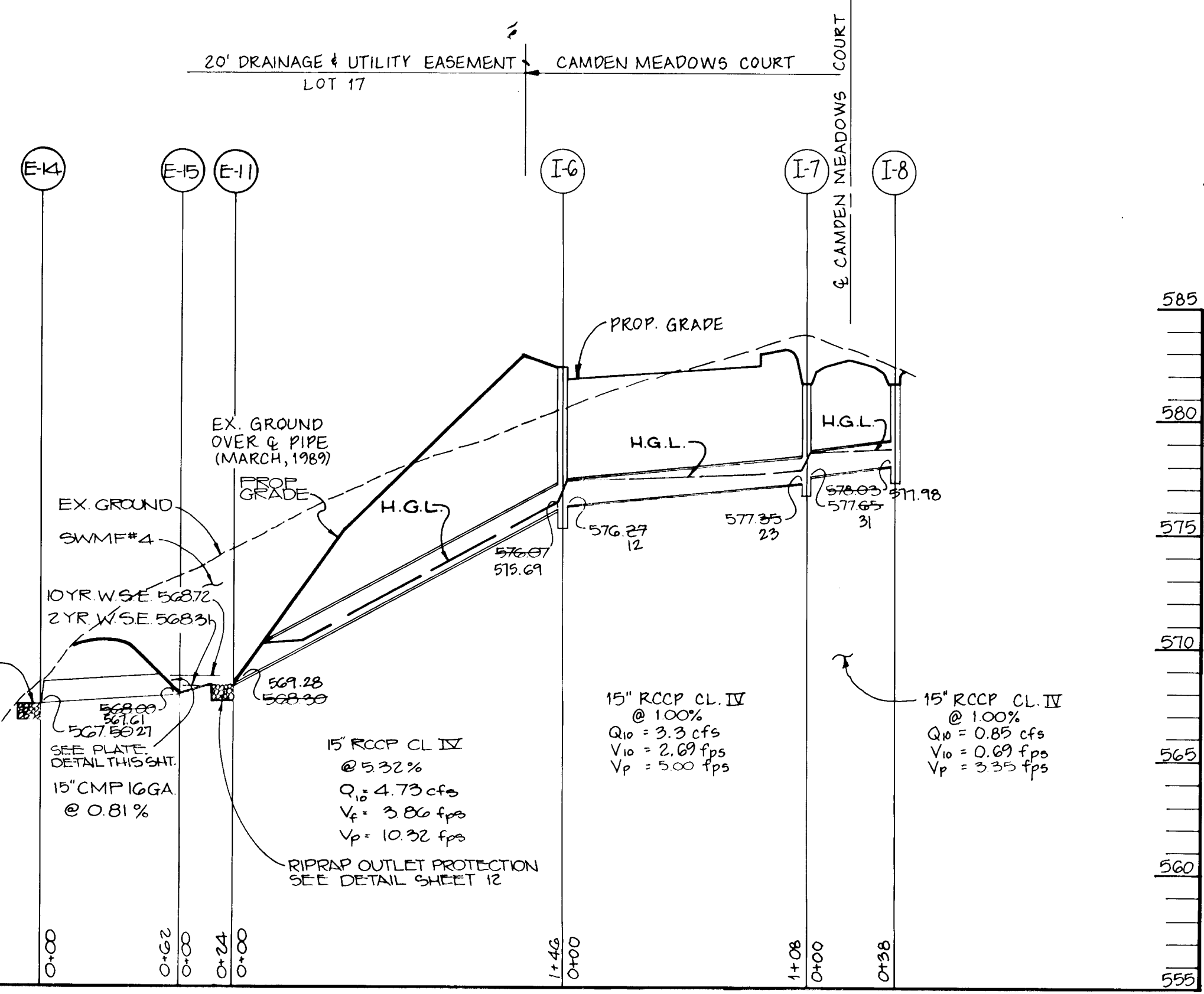
**P-3 PAVING DETAIL**

NO SCALE



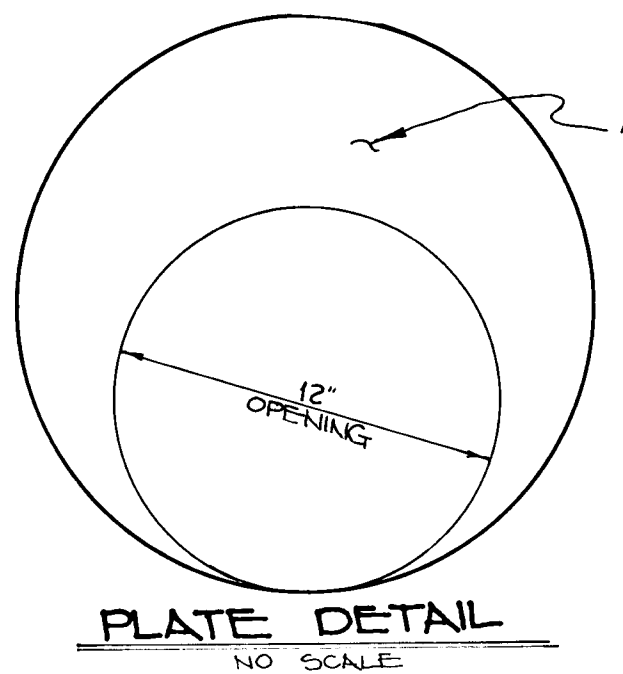
**TYPE 'C' HEADWALL**

NO SCALE



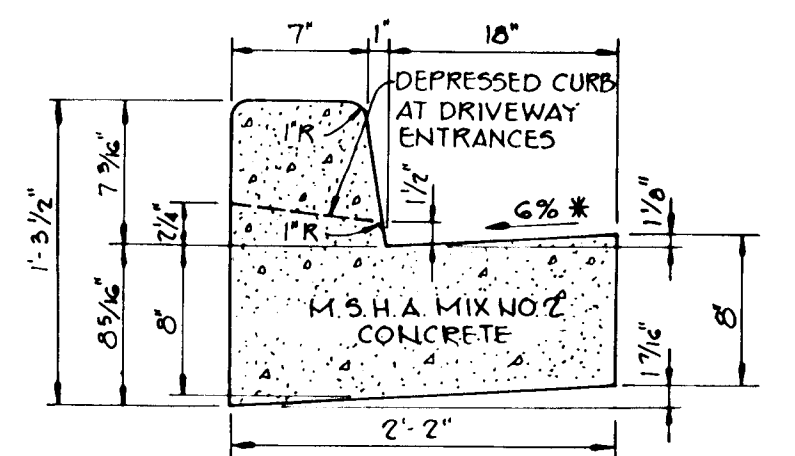
**PROFILE**

SCALE: HOR.: 1"=50'  
 VER.: 1"=5'



**PLATE DETAIL**

NO SCALE



**STANDARD 7" COMBINATION CURB AND GUTTER**

NO SCALE  
 FOR CUL-DE-SACS ONLY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*David S. Campbell* 5/10/10  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Donald J. Johnson* 5/10/10  
 CHIEF, LAND DEVELOPMENT DIVISION  
*Drummond W. Wehner* 4/30/10  
 CHIEF, BUREAU OF HIGHWAYS  
*Gregory S. C. ...* 5-2-10  
 CHIEF, BUREAU OF ENGINEERING

DATE NO REVISION  
 OWNER/DEVELOPER  
 CARRIE LEE HUTCHINS 8307 MORGAN STATION RD WOODBINE, MD 21797  
 CAMDEN DOWNS PARTNERSHIP 8307 MAIN STREET ELLICOTT CITY, MD 21043

PROJECT 587-20 P-07-07  
**CAMDEN DOWNS**  
 SECTION ONE (LOTS 1-2)  
 AREA TAX MAP 3 & B PARCEL 1 ZONED R  
 4TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE: **STORM DRAIN PROFILES & DETAILS**

**RIEMER MUEGGE & ASSOCIATES, INC.**  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellcott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

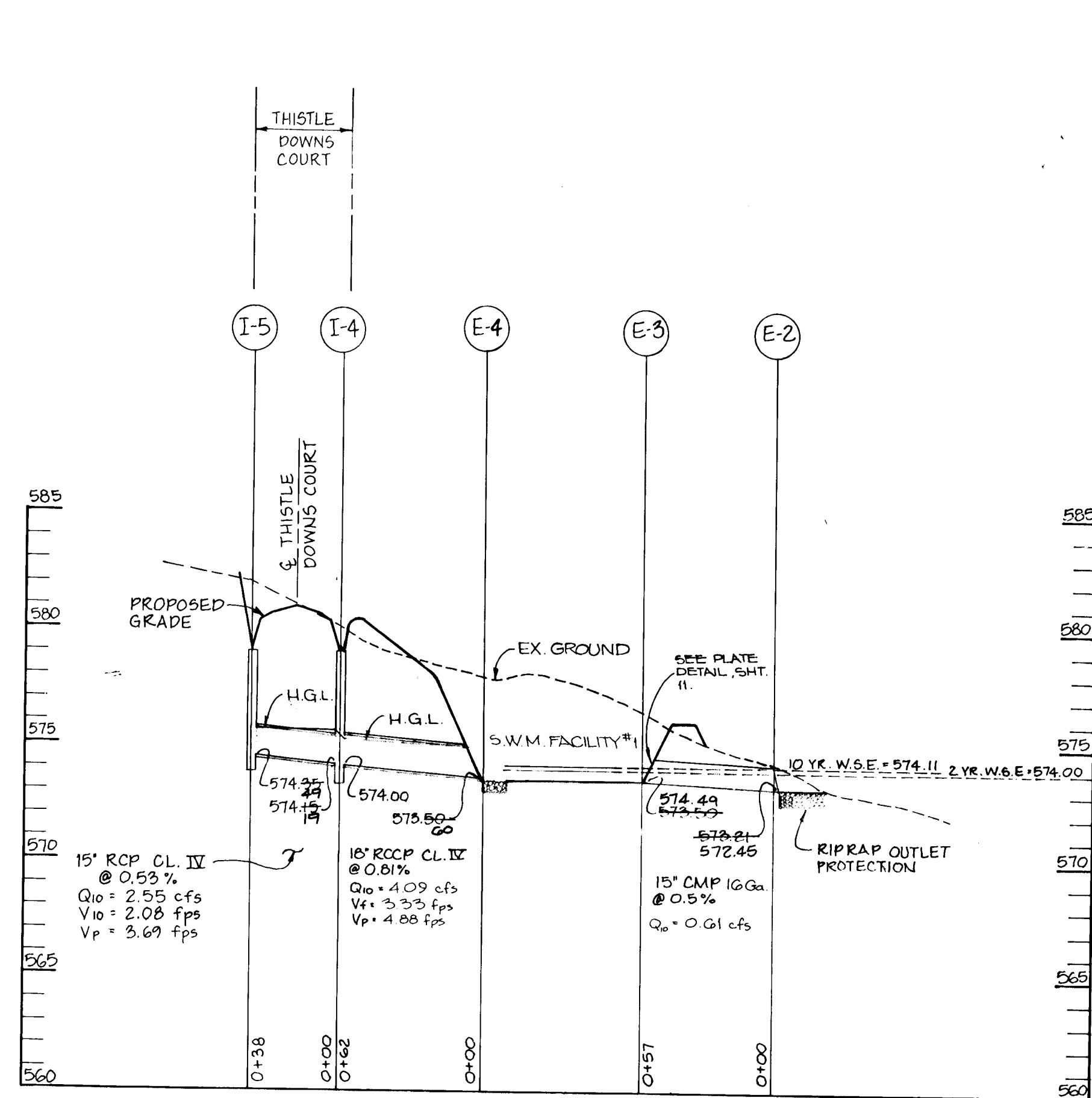
DATE 3/10/10  
 DESIGNED BY DBS  
 DRAWN BY CB  
 PROJECT NO 22600  
 DATE MARCH 26, 1990  
 SCALE AS SHOWN  
 DRAWING NO. 11 OF 12

AS-BUILT 9-19-96 | 20-70

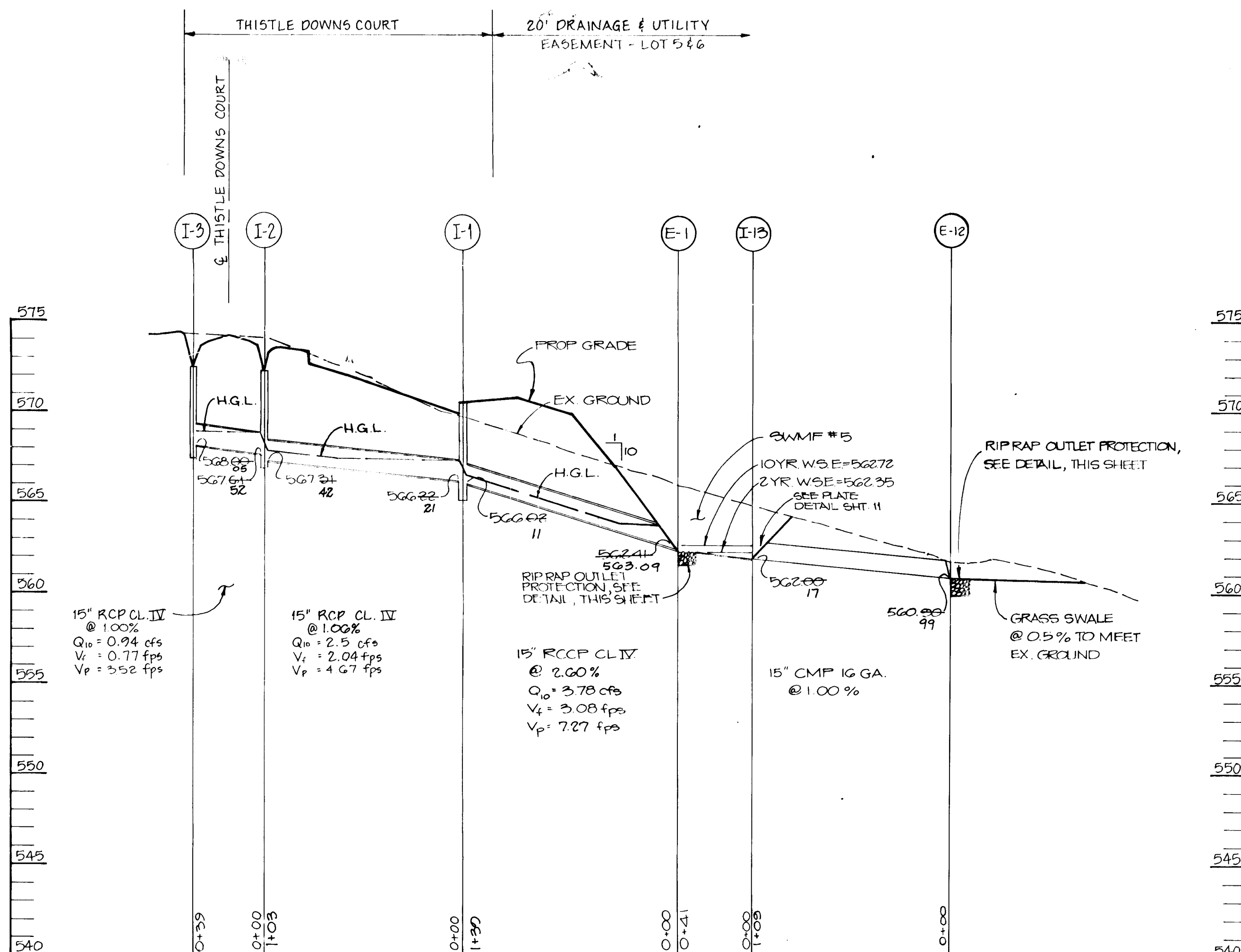
1566

MARYLAND BLUEPRINT CO., INC. 703007

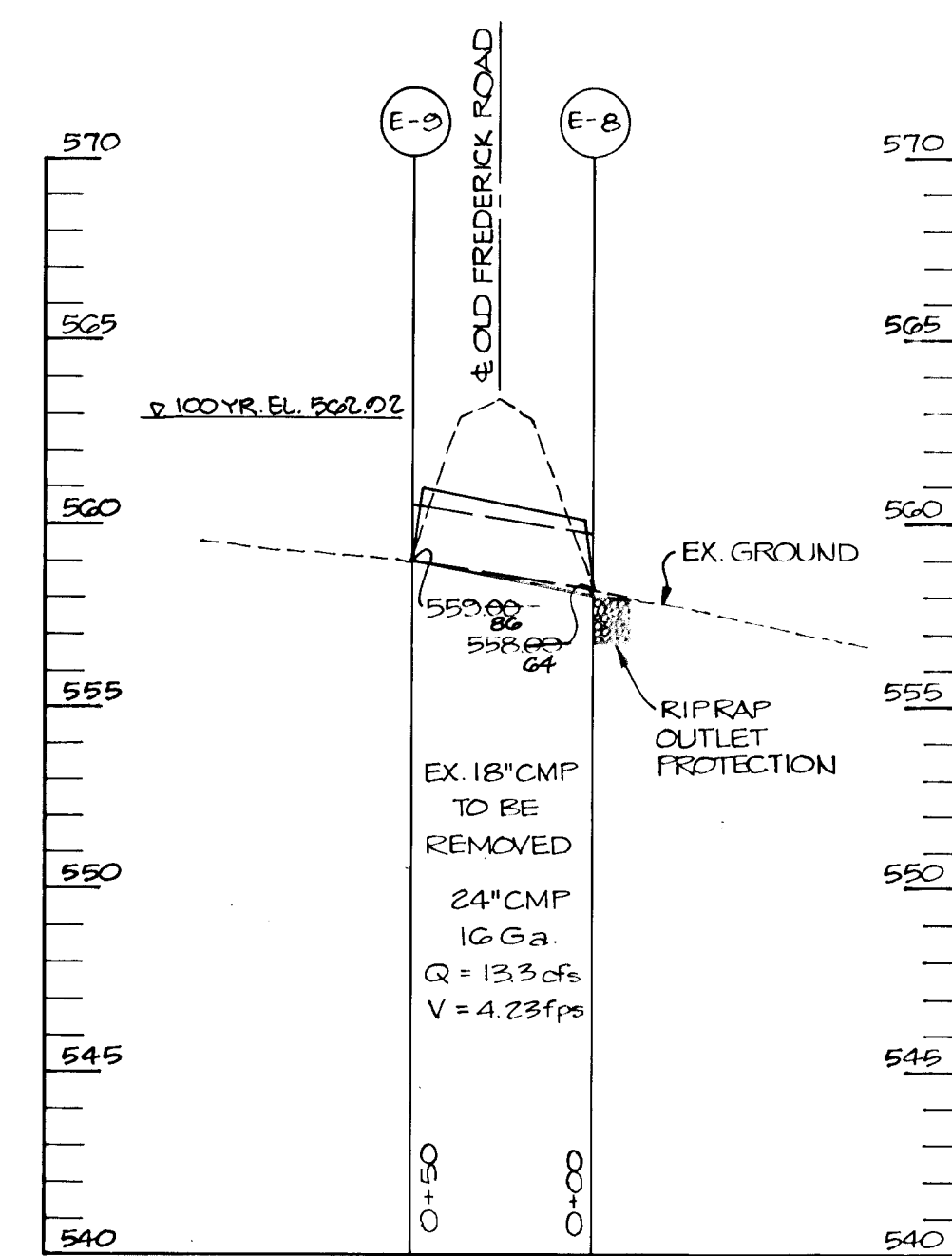




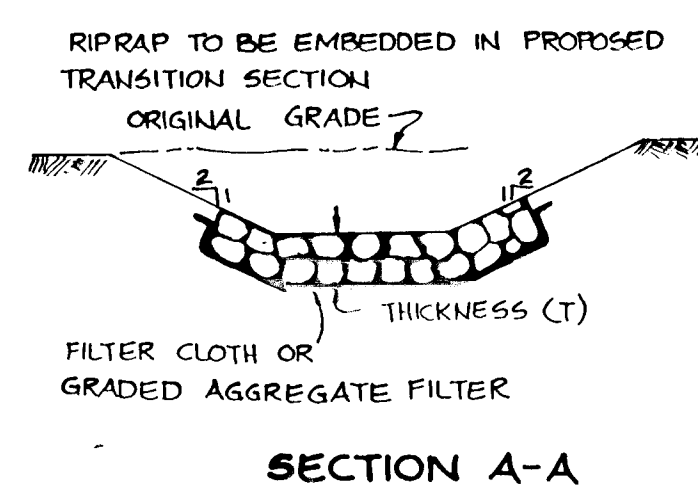
**PROFILE**  
SCALE: HOR. 1" = 50'  
VERT. 1" = 5'



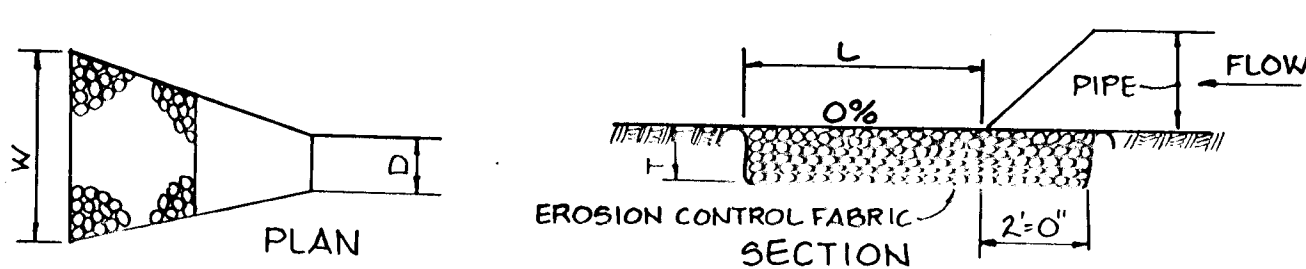
**PROFILE**  
SCALE: HOR. 1" = 50'  
VERT. 1" = 5'



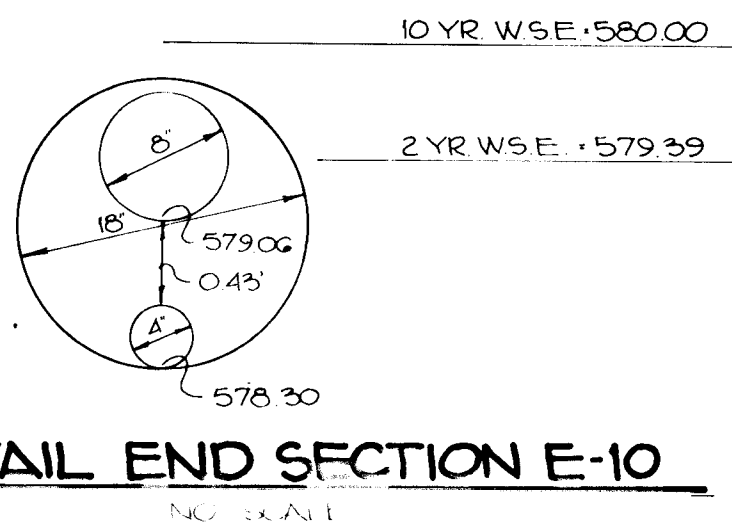
**PROFILE**  
SCALE: HOR. 1" = 50'  
VERT. 1" = 5'



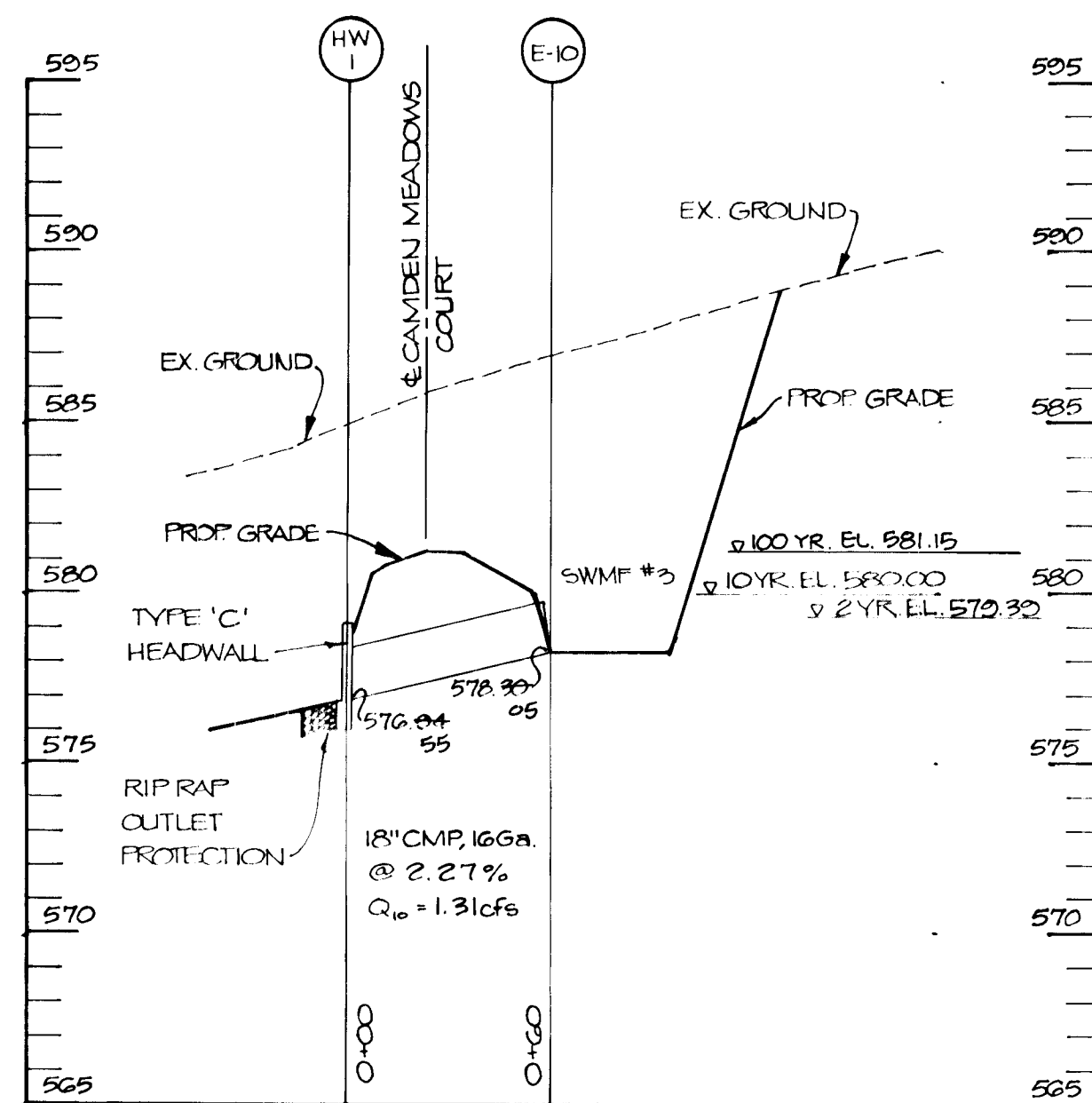
**SECTION A-A**



STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	6"	10'	11.25'	7"
E-2	6"	20'	21'	7"
E-4	6"	10'	11.5'	7"
E-6	6"	10'	11.25'	7"
HW-1	6"	10'	11.5'	9"
E-11	6"	10'	11.25'	7"
E-12	6"	10'	11'	7"
E-14	6"	10'	11'	7"
E-8	6"	10'	6'	14'
E-10	6"	10'	11.5'	7"



**DETAIL END SECTION E-10**



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

**SEQUENCE OF CONSTRUCTION**

- OBTAIN A GRADING PERMIT.
- GRADE FOR TRAP #3 AND STORMWATER MANAGEMENT POND #2. INSTALL E-2 & E-3, E-6 & E-7, E-9 & E-10 AND E-5. INSTALL END SECTION BLOCKING ON E-3 & E-5.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SEDIMENT TRAPS, SILT FENCE, EARTH DIKES AND SEDIMENT CONTROL DEVICES.
- GRADE ROADS WITHOUT DISTURBING SEDIMENT CONTROL DEVICES.
- INSTALL REMAINING STORM DRAINS AND STONE FILTER INLET PROTECTIONS, AND GRADE FOR STORMWATER MANAGEMENT POND #3.
- COMPLETE ROAD CONSTRUCTION.
- STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
- REMOVE BLOCKING FROM E-3 AND E-5 AND CONVERT TRAP #3 TO STORMWATER MANAGEMENT POND #1.
- FLUSH CLEAN NEW STORM DRAIN SYSTEM.
- UPON APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE AREAS DISTURBED BY THEIR REMOVAL IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*James S. Taylor* 5/12/90  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Ronald E. Brown* 5/2/90  
 CHIEF, LAND DEVELOPMENT DIVISION

*William W. Wainman* 4/30/90  
 CHIEF, BUREAU OF HIGHWAYS

DATE NO REVISION

OWNER/DEVELOPER  
 CARRIE LEE HUTCHINS 6307 MAIN STREET  
 WOODBINE, MD. 21797 CALDEN DOWNS PARTNERSHIP  
 ELLICOTT CITY, MD. 21043

PROJECT 589-20 P89-67  
**CAMDEN DOWNS**  
 SECTION ONE (LOTS 1-21)

AREA TAX MAP 3&B PARCEL 1 ZONED K  
 4TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

**TITLE**  
**STORM DRAIN PROFILES & DETAILS**

**RIEMER MUEGGE & ASSOCIATES, INC.**  
 A Land Planning, Engineering and Consulting Firm  
 3105 North Ridge Road Ellicott City, Maryland 21043  
 301-461-2690 FAX: 301-750-3176

DATE

DESIGNED BY: D.B.S.  
 DRAWN BY: M.K.  
 PROJECT NO: 53606  
 DATE: MARCH 20, 1990  
 SCALE: AS SHOWN  
 DRAWING NO: 12 OF 12

1566

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