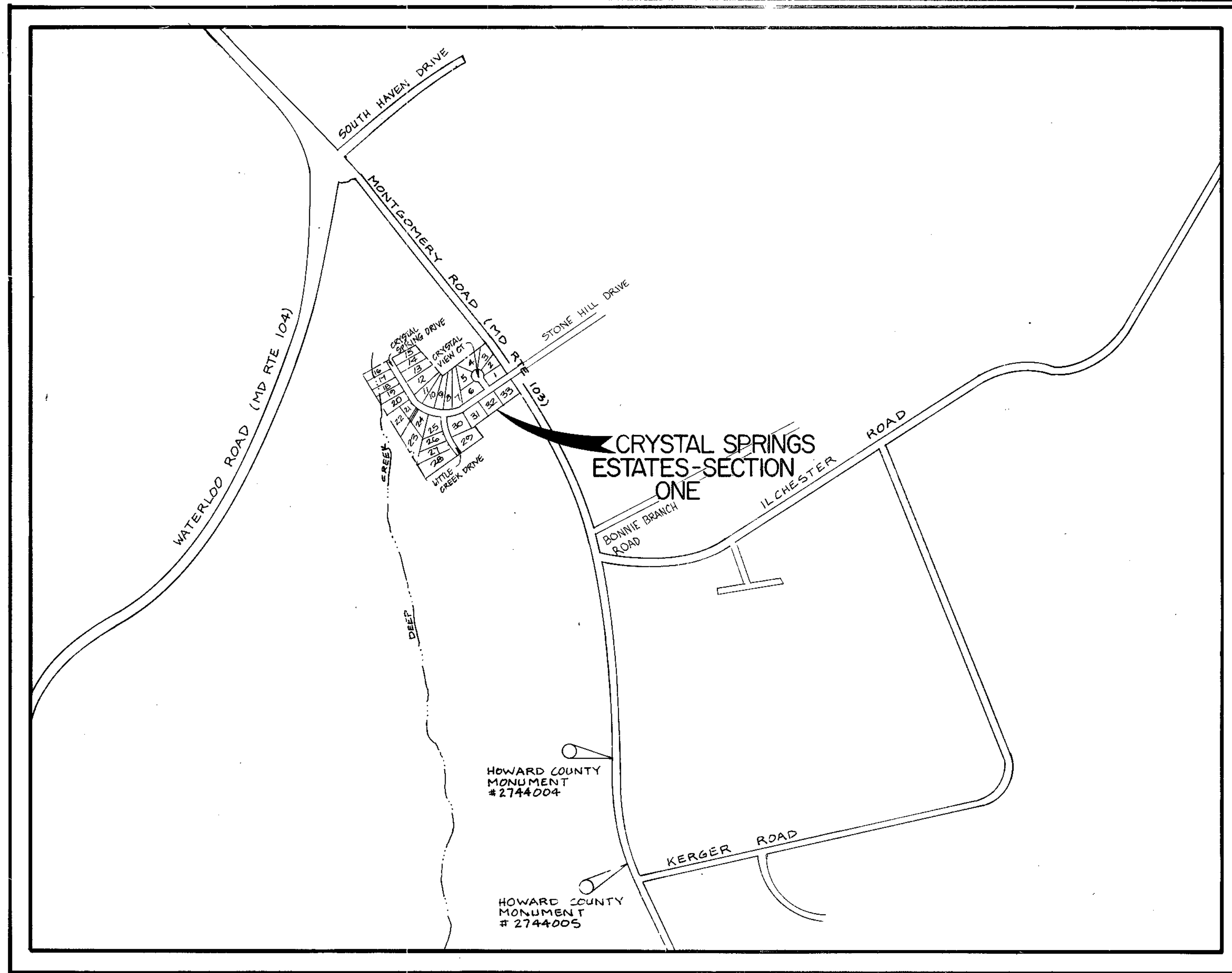
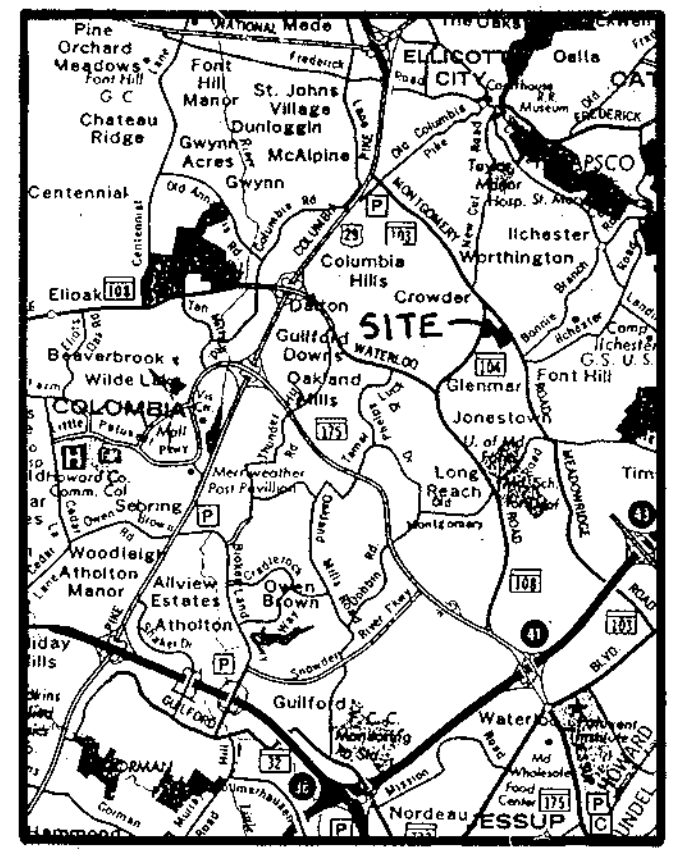


**INDEX**

1. COVER SHEET
2. PLAN & PROFILE - CRYSTAL SPRINGS DRIVE, & CRYSTAL VIEW COURT
3. PLAN & PROFILE - CRYSTAL SPRINGS DRIVE
4. PLAN & PROFILE - LITTLE CREEK DRIVE
5. PLAN & PROFILE - MARYLAND ROUTE 103
6. STORM DRAIN PROFILE & DETAILS
7. DRAINAGE AREA MAP
8. GRADING & SEDIMENT CONTROL PLAN
9. GRADING & SEDIMENT CONTROL PLAN
10. DETAIL & CONSTRUCTION NOTES



LOCATION MAP  
SCALE: 1" = 600'



VICINITY MAP  
SCALE: 1" = 2000'

**GENERAL NOTES**

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS, AND DETAILS FOR CONSTRUCTION.
2. ALL UTILITY COMPANIES MUST BE NOTIFIED 24-HOURS IN ADVANCE OF ANY CONSTRUCTION.
3. STORM DRAINAGE TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY CODE.
4. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
5. CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION AND SURVEY DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE 792-7272.
6. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE.
7. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1978 EDITION.
8. STREET TREES TO BE PROVIDED AS REQUIRED BY SECTION 16-131 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
9. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS.
  - STATE HIGHWAY ADMINISTRATION 531-5533
  - BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE 685-0123
  - BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE 685-0123
  - ENGINEERING - "DAMAGE CONTROL" 234-5611
  - "MISS UTILITY" 1-559-0100
  - CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY 725-9976
  - AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION 383-3333
  - COLONIAL PIPELINE COMPANY 795-1390
  - BUREAU OF UTILITIES HOWARD COUNTY 992-2366
10. NO CONSTRUCTION WILL BE PERMITTED WITHIN THE WETLAND AREAS, UNLESS AND UNTIL A WETLAND AND WATER QUALITY CERTIFICATION IS OBTAINED TO WORK WITHIN THESE AREAS.

# CRYSTAL SPRINGS ESTATES

## SECTION 1

### ROAD CONSTRUCTION DRAWINGS

#### 1ST ELECTION DISTRICT

#### HOWARD COUNTY, MARYLAND

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

*Thomas L. Wiley* 2/1/89  
THOMAS L. WILEY, MD REG NO. 9273 DATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

*William J. Dumborg* 2/1/89  
DATE

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

*James M. Helms* 2/2/89  
U.S. SOIL CONSERVATION SERVICE DATE

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

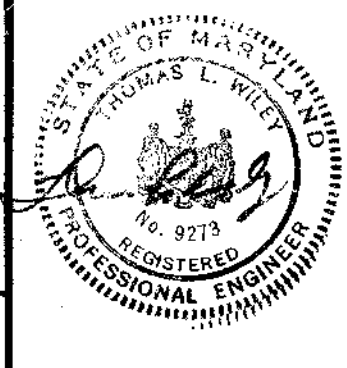
*Robert Zichem* 8/29/89  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Samuel W. Seaman* 9/19/89  
CHIEF, LAND DEVELOPMENT DIVISION DATE

*Francis W. Welwood* 9/19/89  
CHIEF, BUREAU OF HIGHWAY DATE

*Richard E. Selby* 9-20-89  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT  
*J.B.* DATE



REVISIONS	
DATE	DESCRIPTION

**Dewberry & Davis**  
ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS  
3300 N. RIDGE ROAD, SUITE 100  
ELLCOTT CITY, MD. 21043  
(301) 461-7478

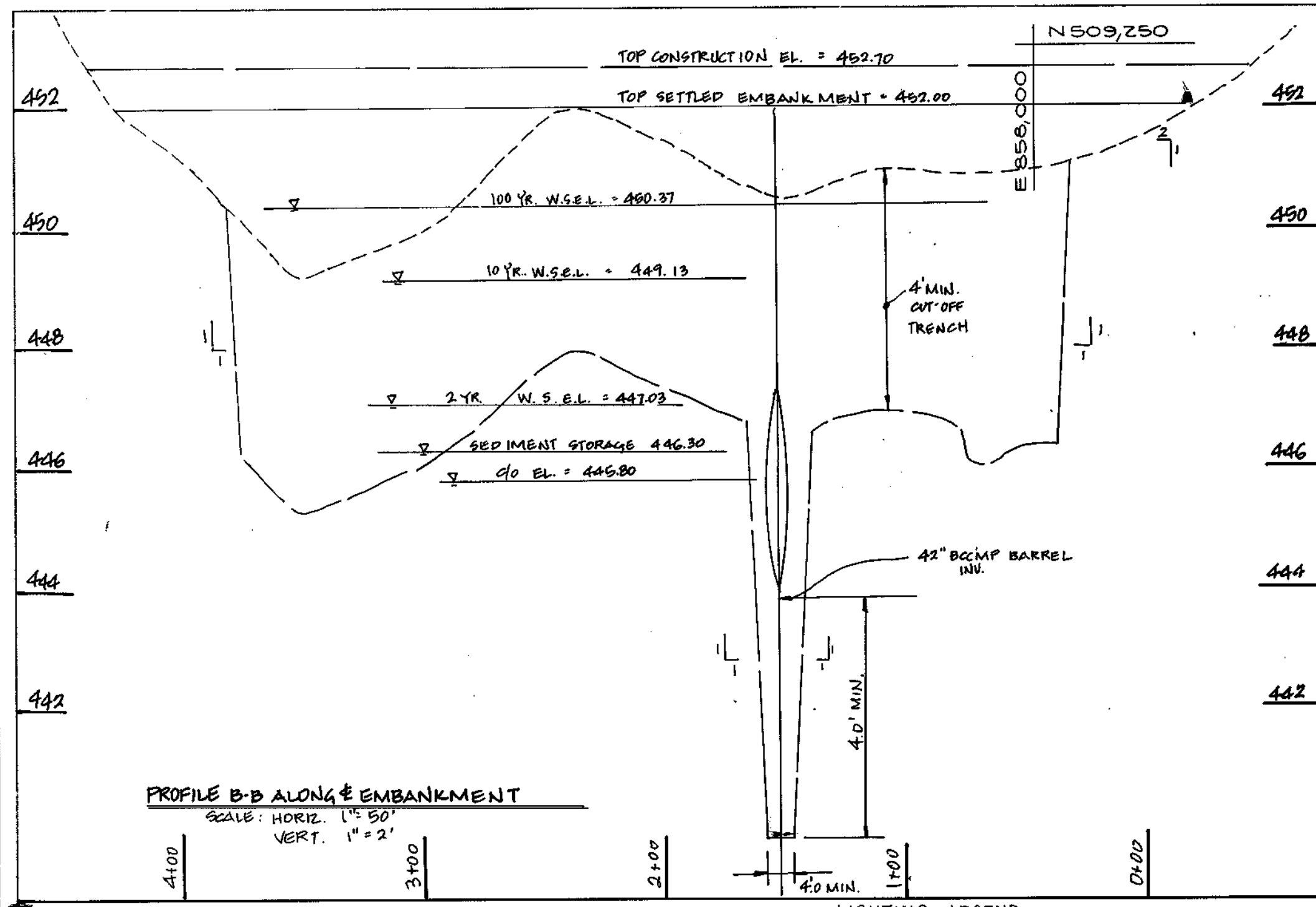
**BERTON CONSTRUCTION COMPANY**  
6110 EXECUTIVE BOULEVARD • SUITE 1090  
ROCKVILLE, MARYLAND 20852  
(301) 770-2450

**CRYSTAL SPRINGS ESTATES**  
SECTION ONE  
TAX MAP 31 PARCEL 175  
1ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

LANDSCAPE SCHEDULE				
SYMBOL	QUANTITY	NAME	SIZE	REMARKS
⊙	87	ACER SACCHARINA (SUGAR MAPLE)	2 1/2" GAL (MIN.)	BALLED AND BURLAPPED
⊙	8	CRATAEGUS PINACEDIFORM (WASHINGTON HAWTHORN)	2 1/2" GAL (MIN.)	BALLED AND BURLAPPED

1470

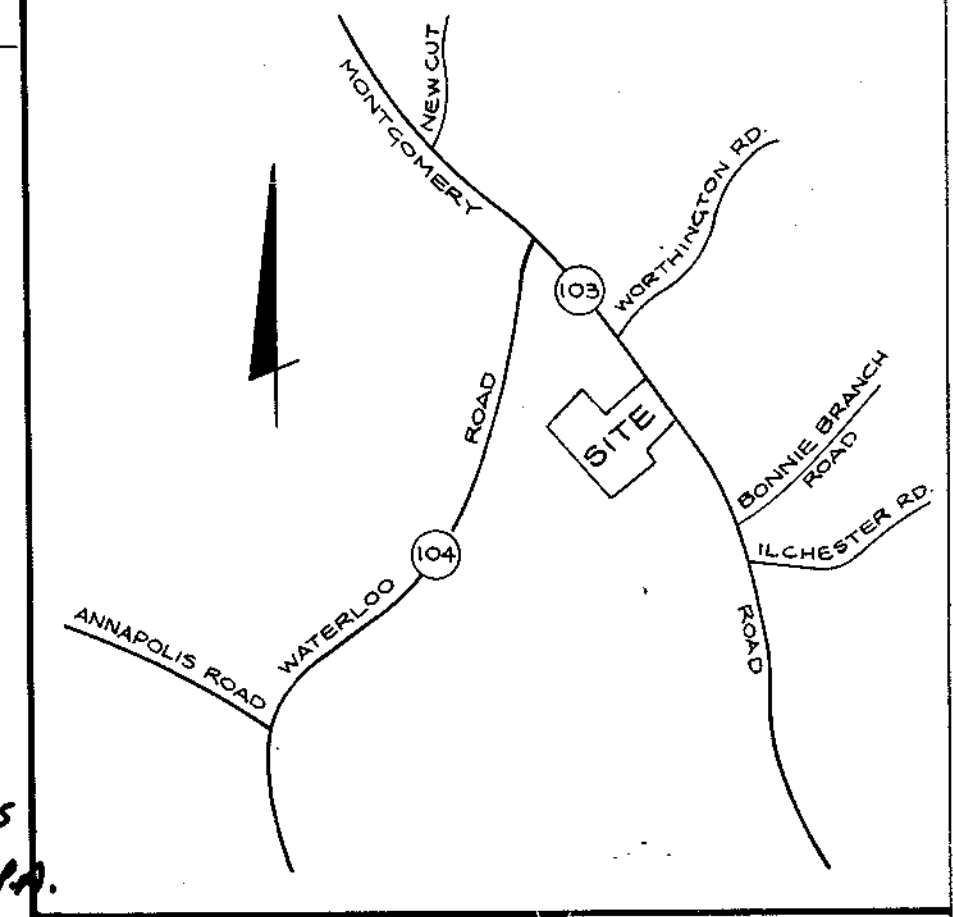
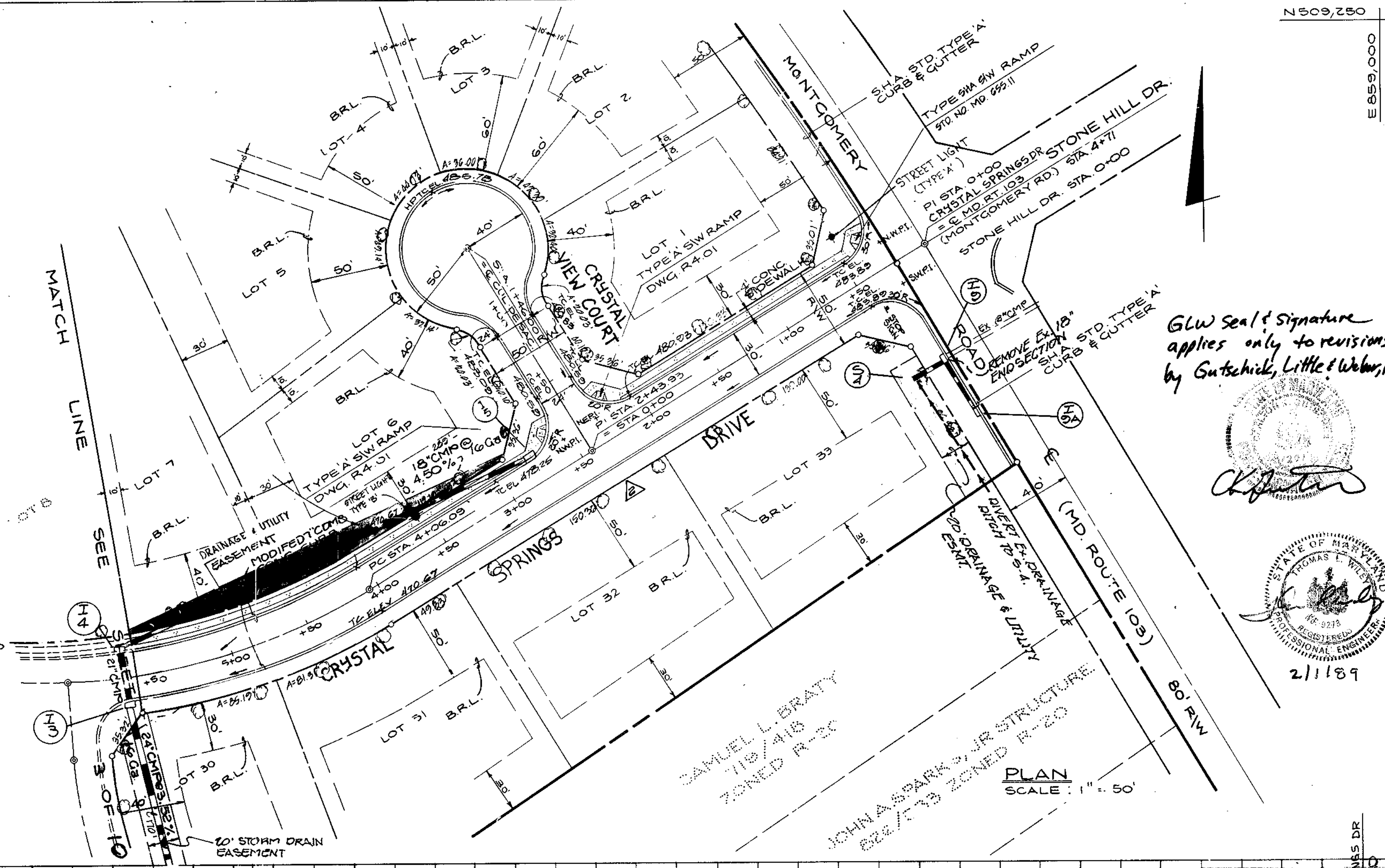
DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PLAN NOTE BOOK NO. \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Howard W. Welland* 9/19/89  
 CHIEF, BUREAU OF HIGHWAY  
*William R. Ryan* 9-20-89  
 CHIEF, BUREAU OF ENGINEERING  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Frank S. Long* 2/29/91  
 CHIEF, COMMUNITY PLANNING  
 LAND DEVELOPMENT

**LIGHTING LEGEND**  
 TYPE 'A' 250 WATT MERCURY VAPOR LAMP MOUNTED ON A 30' HIGH GALVANIZED STEEL POLE  
 TYPE 'B' 175 WATT MERCURY VAPOR LAMP MOUNTED ON A 14' HIGH FIBERGLASS BRANCH POLE

**CURVE DATA**  
 CRYSTAL SPRINGS DR  
 PC STA. 41+06.08 TO  
 PT STA. 10+24.08  
 R = 393.24'  
 $\Delta = 90^{\circ} 02' 15''$   
 A = 617.96'  
 T = 393.50'  
 C = 556.31'  
 CB = N 76° 15' 37" W



VICINITY MAP  
 SCALE: 1" = 2000'

REMOVED SIDEWALK FROM SOUTH SIDE OF CRYSTAL SPRINGS DRIVE 11/18/90  
 REVISED PROFILES

**CRYSTAL SPRINGS ESTATES SECTION I**  
 TAX MAP 31 PARCEL 175  
 15<sup>TH</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND

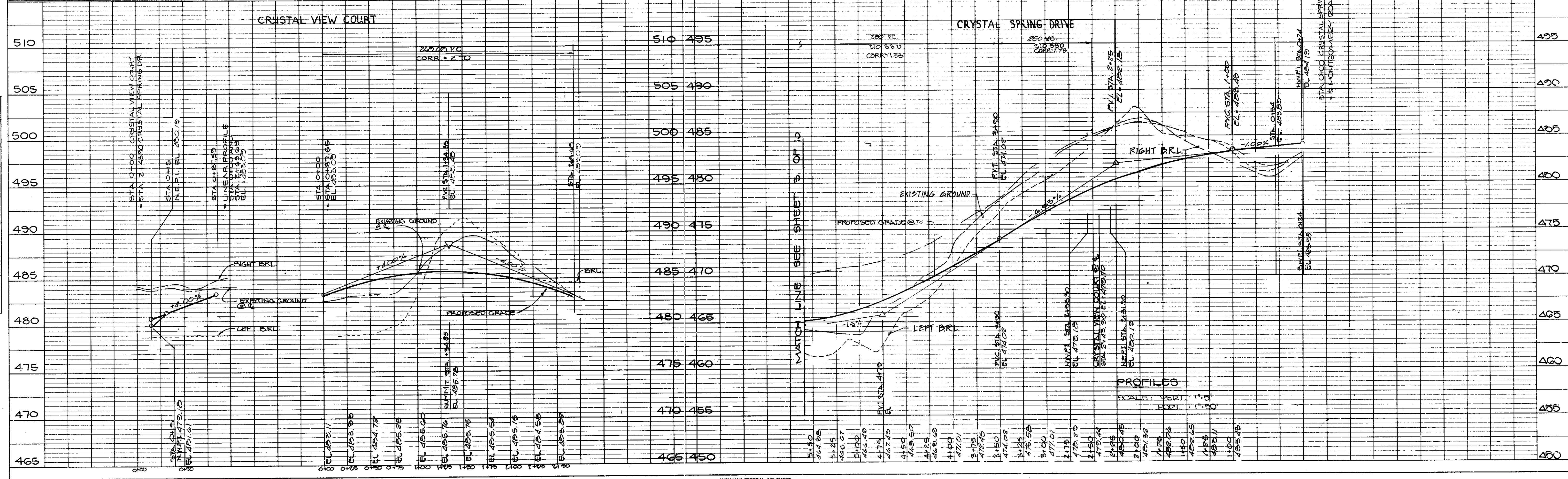
**CRYSTAL SPRINGS DRIVE**  
 PLAN & PROFILE

**BERTON CONSTRUCTION COMPANY**  
 6110 Executive Boulevard • Suite 1090  
 Rockville, MD 20852  
 (301) 770-2450

SCALE: AS SHOWN DATE: JUN. 3, 88 DWG. 2 OF 10  
 DES. F.U.N. DRN. W.D.C. CHK.

**DEWBERRY & DAVIS**  
 ARCHITECTS - ENGINEERS - PLANNERS - SURVEYORS  
 3300 N. RIDGE RD. SUITE 100, F.L. CO. CITY, MD. TEL. 461-7478

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PROFILE NOTE BOOK NO. \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

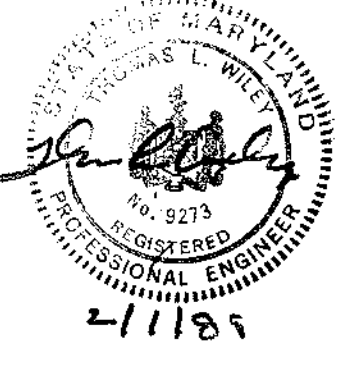


1470



GLW seal & signature applies only to revisions by Gutschick, Little & Weber, P.A.

*Robert W. Gutschick*



PLAN  
SURVEYED BY: [blank]  
NOTED BY: [blank]  
NOTE BOOK NO. [blank]  
DATE: [blank]

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Robert W. Gutschick* 9/19/89  
CHIEF, LAND DEVELOPMENT DIVISION  
*James W. Weiland* 9/19/89  
CHIEF, BUREAU OF HIGHWAY  
*William S. Riley* 9-20-89  
CHIEF, BUREAU OF ENGINEERING  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Frank J. Campbell* 9/23/89  
CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT

CURVE DATA  
CRYSTAL SPRINGS DR.  
B.C. STA. 4+06.09 TO  
P.T. STA. 10+24.05  
R = 393.24'  
Δ = 90° 02' 15"  
A = 617.96'  
T = 393.60'  
C = 556.31'  
CB = N 76° 15' 31" W

PLAN  
SCALE: 1" = 50'

10/1/92	GLW	Change HW 3 to I-10 D-inlet
7/8/91	GLW	REMOVED SIDEWALK FROM SOUTH SIDE OF CRYSTAL SPRINGS DRIVE & THE EAST SIDE OF LITTLE CREEK DRIVE
10/18/90	WEO	REVISED ELEVATION

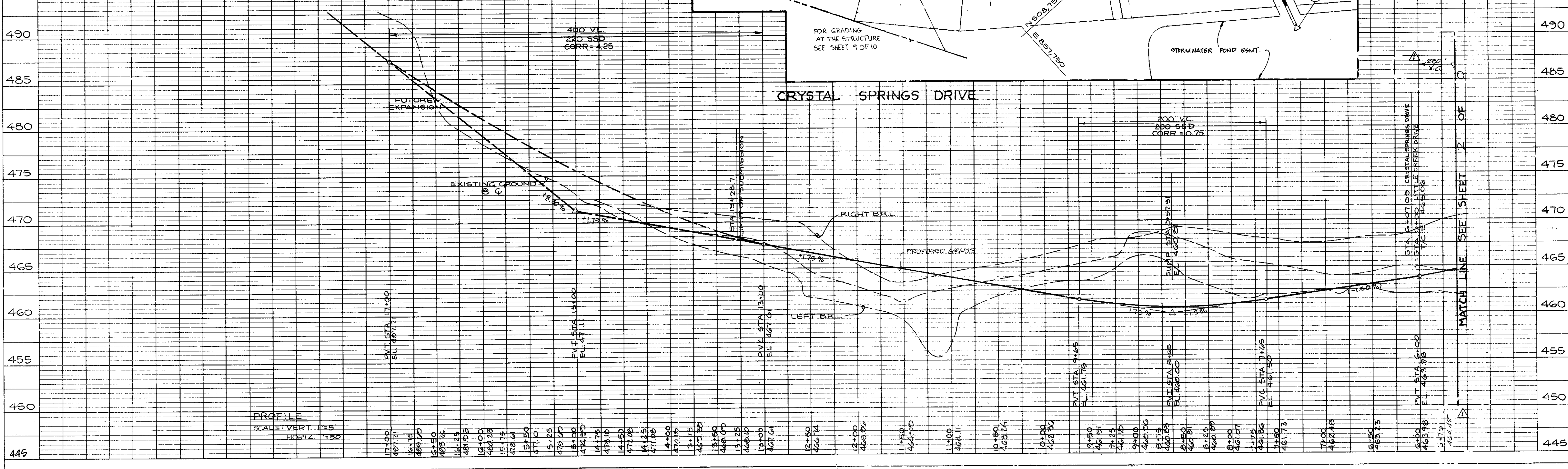
**CRYSTAL SPRINGS ESTATES SECTION I**  
TAX MAP 31 PARCEL 175  
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**CRYSTAL SPRINGS DR. PLAN & PROFILE**

**BERTON CONSTRUCTION COMPANY**  
6110 Executive Boulevard • Suite 1090  
Rockville, MD 20852  
(301) 770-2450

SCALE: AS SHOWN DATE: JUN 3, 88 DWG 3 OF 10  
DES. F. LIN. DRN. W.D.G. CHK.

**DEWBERRY & DAVIS**  
ARCHITECTS - ENGINEERS - PLANNERS - SURVEYORS  
3300 N. RIDGE RD. SUITE 100 EL LIGOTT CITY, MD. TELE 463-7478



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

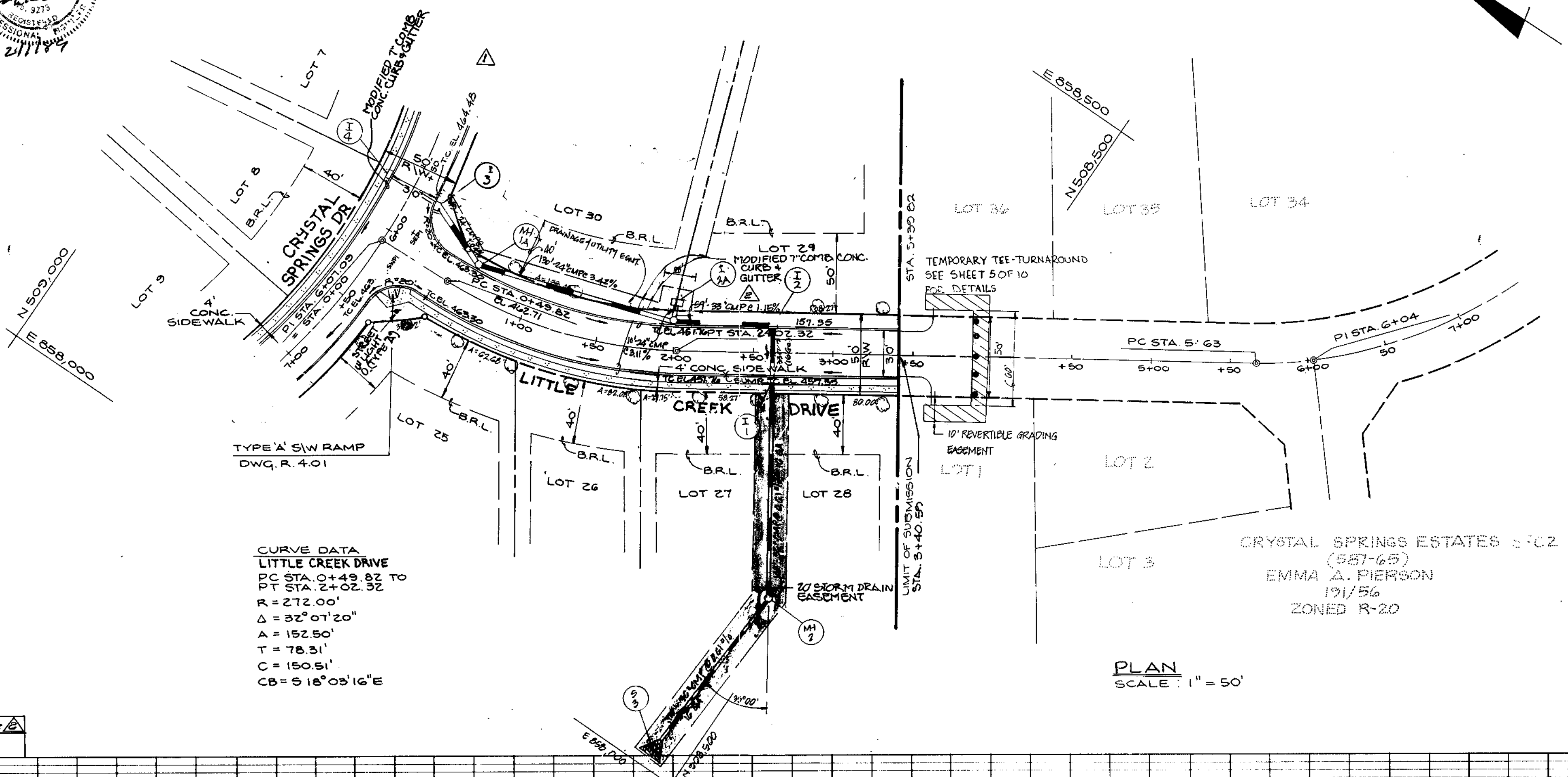
1970

GLW seal & signature applies only to revisions by Gutschick, Little & Weber, P.A.

*[Signature]*

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 2/19/89  
 SUPERVISOR OF PUBLIC WORKS  
*[Signature]* 9/19/89  
 SUPERVISOR OF HIGHWAY  
*[Signature]* 9-20-89  
 CHIEF, BUREAU OF ENGINEERING  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*[Signature]* 9/23/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



**CRYSTAL SPRINGS ESTATES SECTION I**  
 TAX MAP 31 PARCEL 175  
 1<sup>ST</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**LITTLE CREEK DRIVE PLAN & PROFILE**

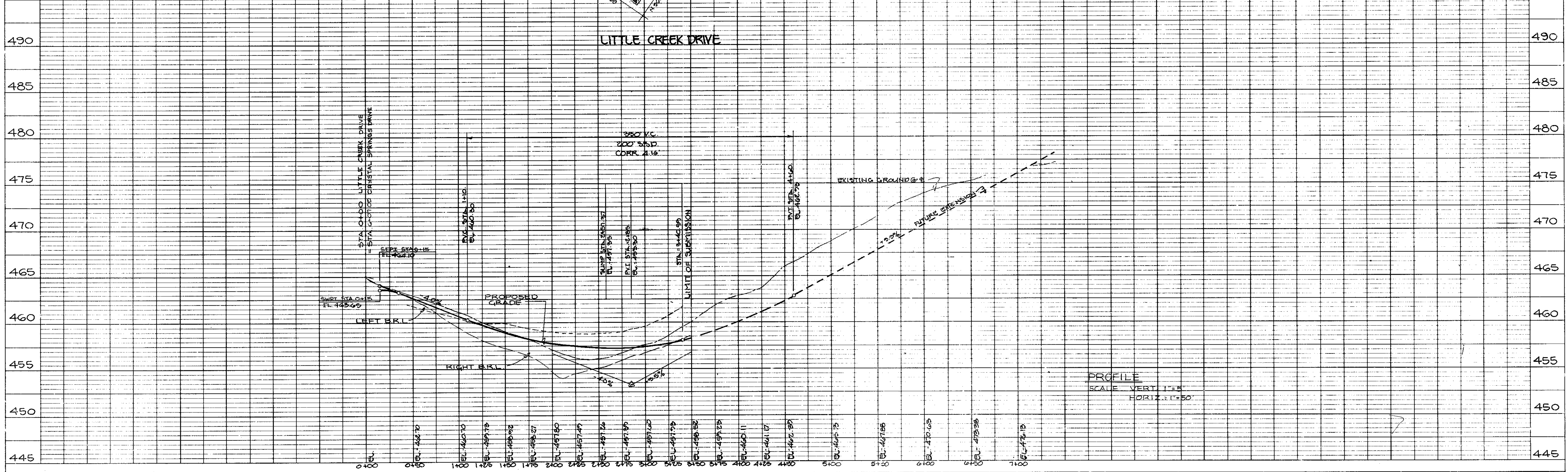
**BERTON CONSTRUCTION COMPANY**  
 6110 Executive Boulevard • Suite 1090  
 Rockville, MD 20852  
 (301) 770-2450

SCALE: AS SHOWN DATE: JUN 28 88 DWG 4-OF 10  
 DES. F.U.N. DRN. W.D.G. CHK.

**DEWBERRY & DAVIS**  
 ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS  
 7300 N. RIDGE RD. SUITE 100 ELLICOTT CITY, MD TELE 461-7478

7/8/91	GLW	REMOVED SIDEWALK FROM EAST SIDE OF LITTLE CREEK DR
12/18/90	WED	REVISED ELEVATION

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_



1470

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

THOMAS L. WILEY MD. REG. NO. 9073 DATE 2/11/89

**DEVELOPER'S CERTIFICATE**  
"I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY."

DATE 2/11/89

REVIEW BY HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

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

HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE 8/29/89

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING

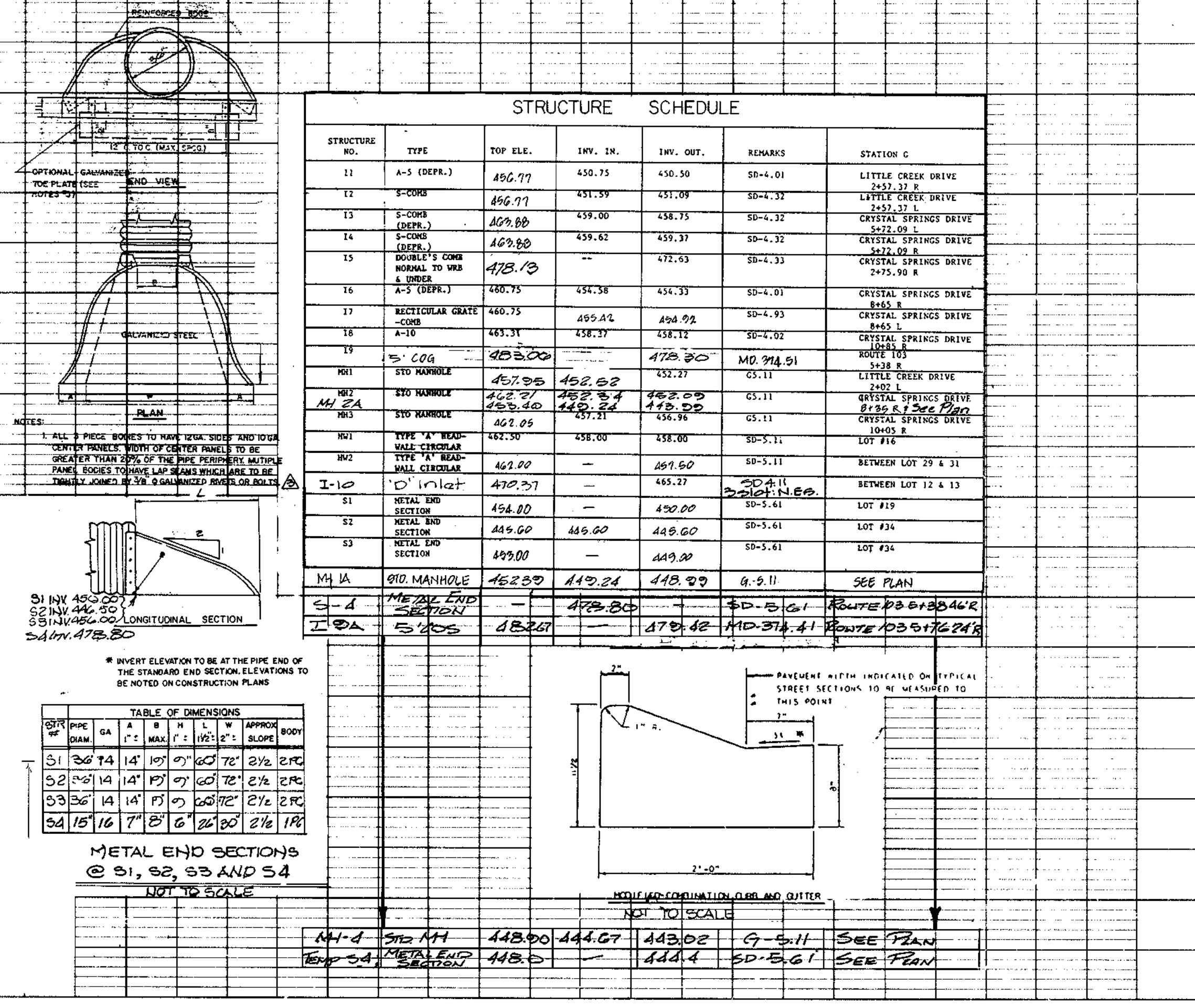
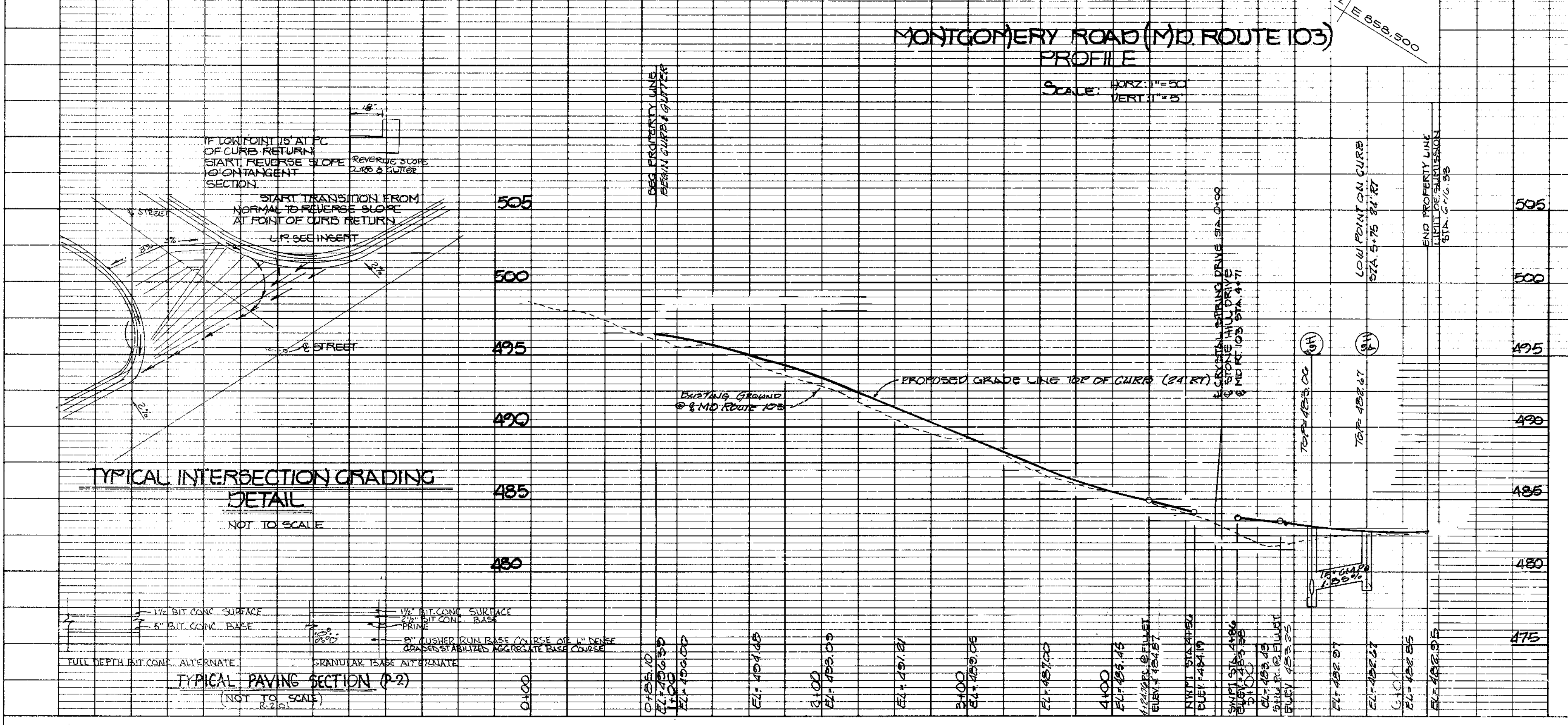
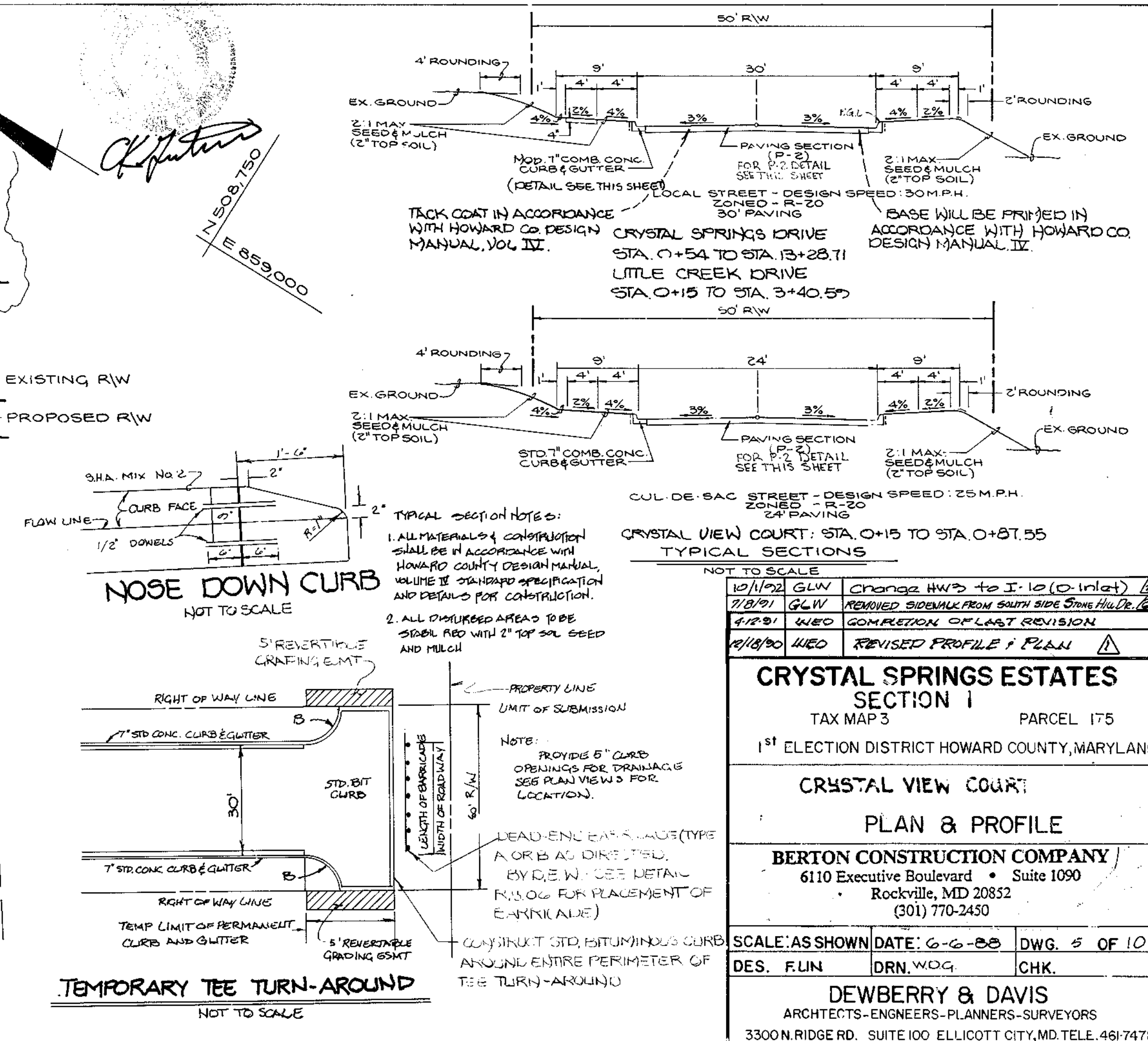
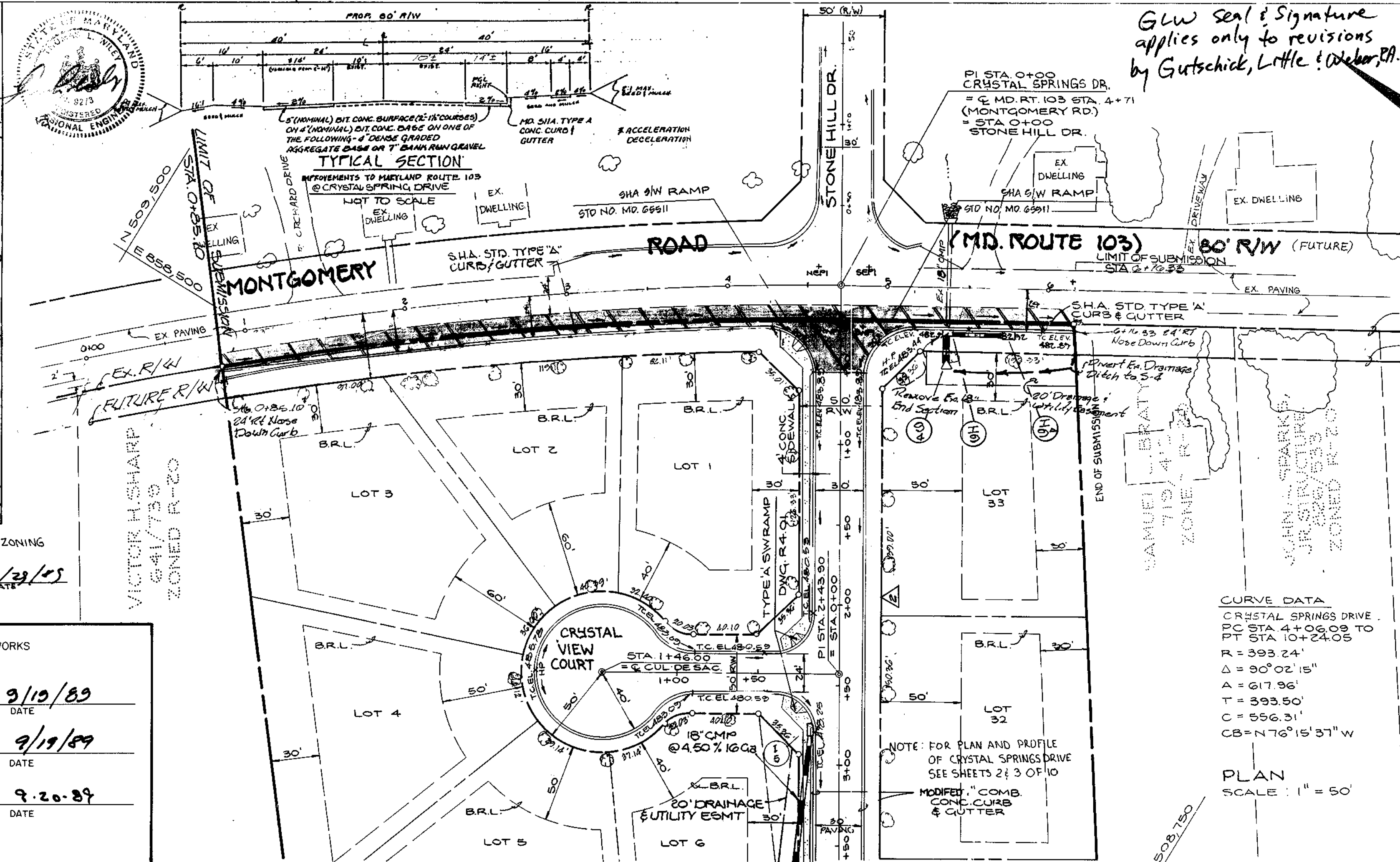
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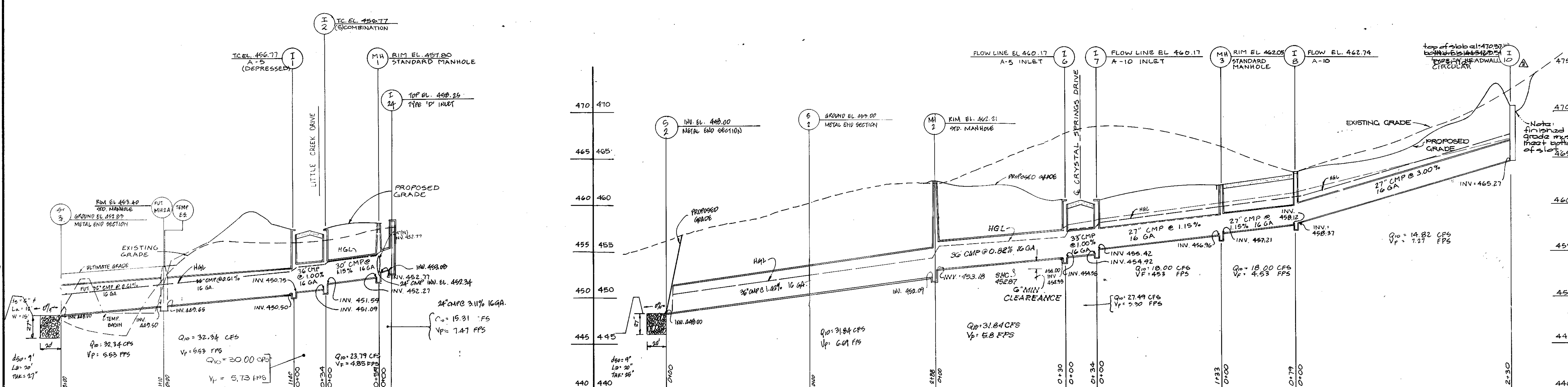
APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE 9/19/89

DATE 9/19/89

DATE 9-20-89





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

*Don Parley* 2/1/89  
 THOMAS L. WILEY, MD REG. NO. 9278  
 PROFESSIONAL ENGINEER

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Berton Construction* 2/1/89

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

*James M. Nelson* 8/29/89  
 CHIEF, LAND OBTAINMENT SECTION

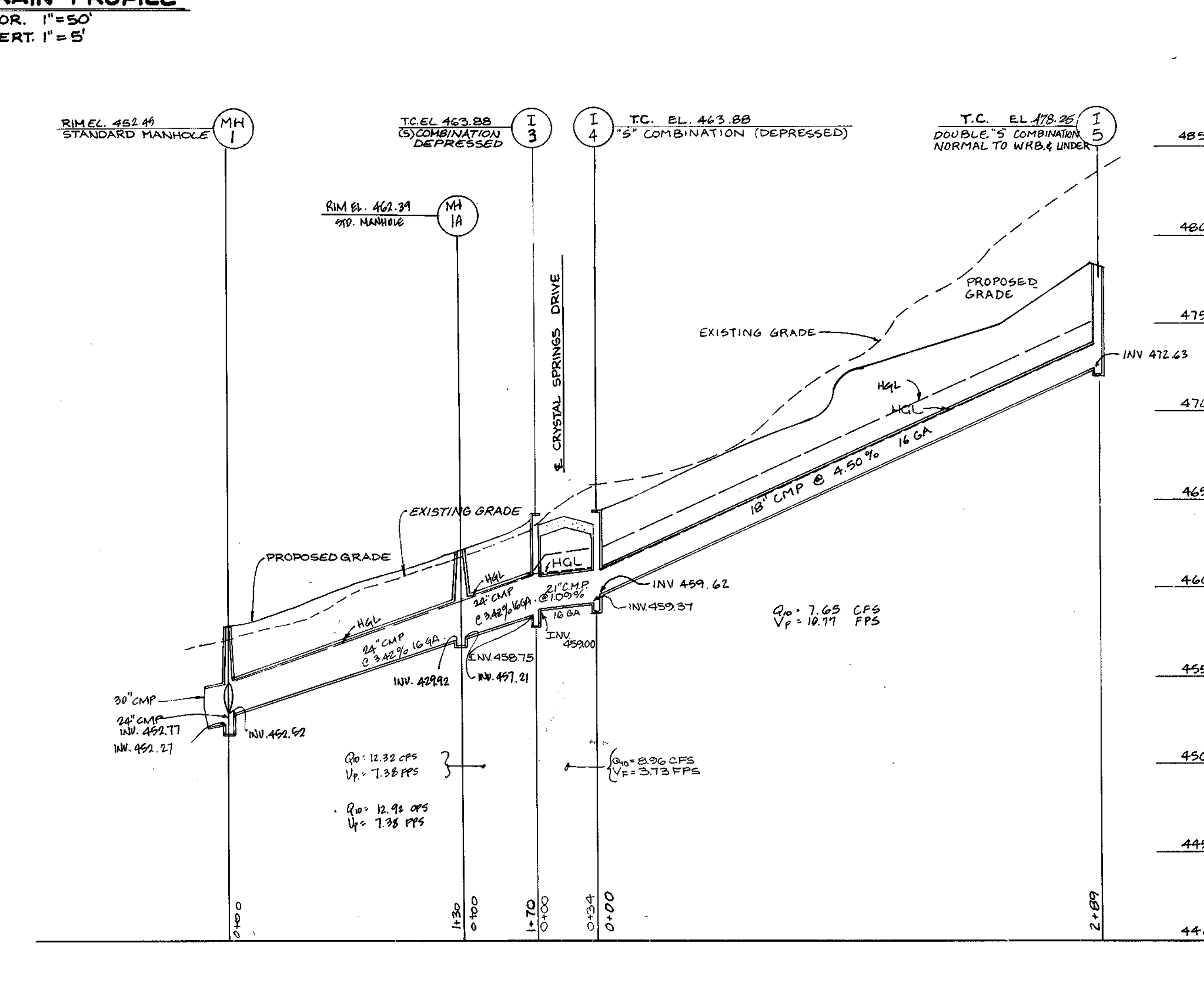
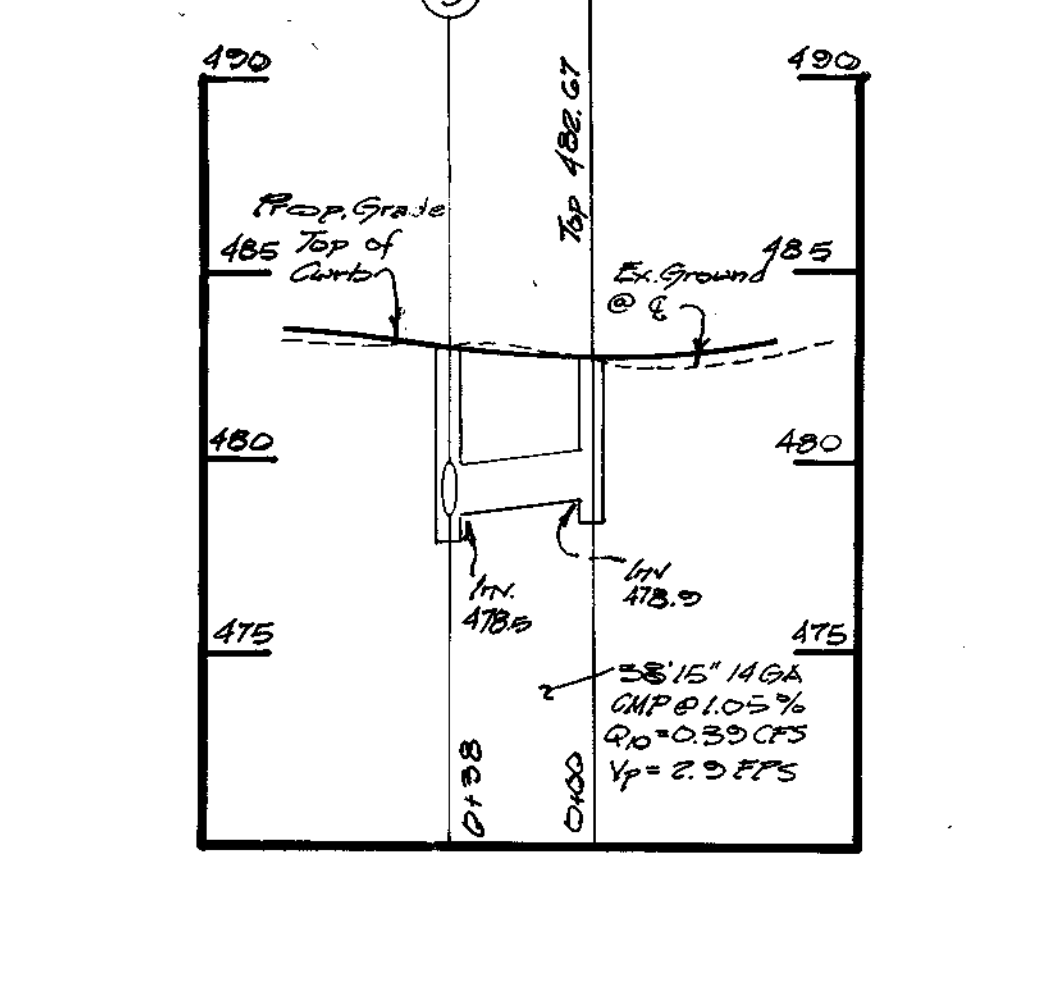
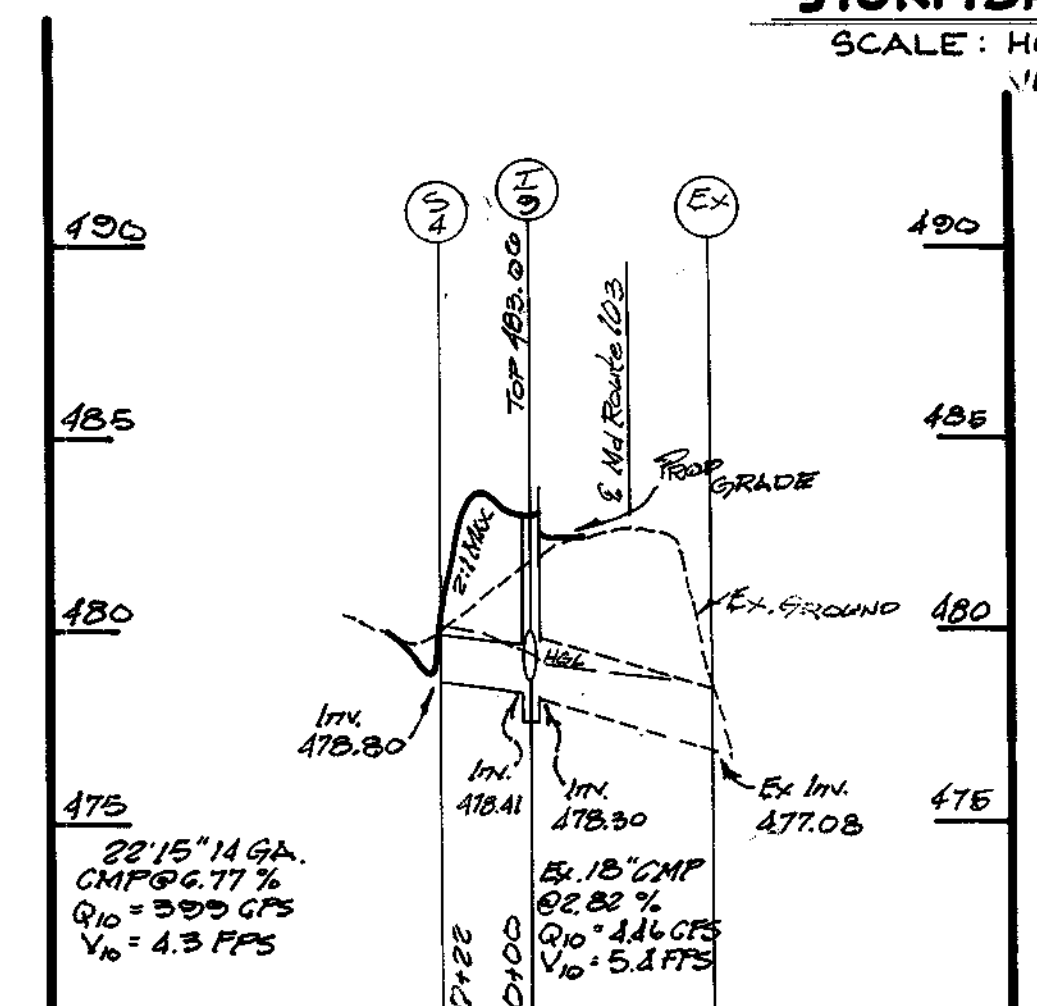
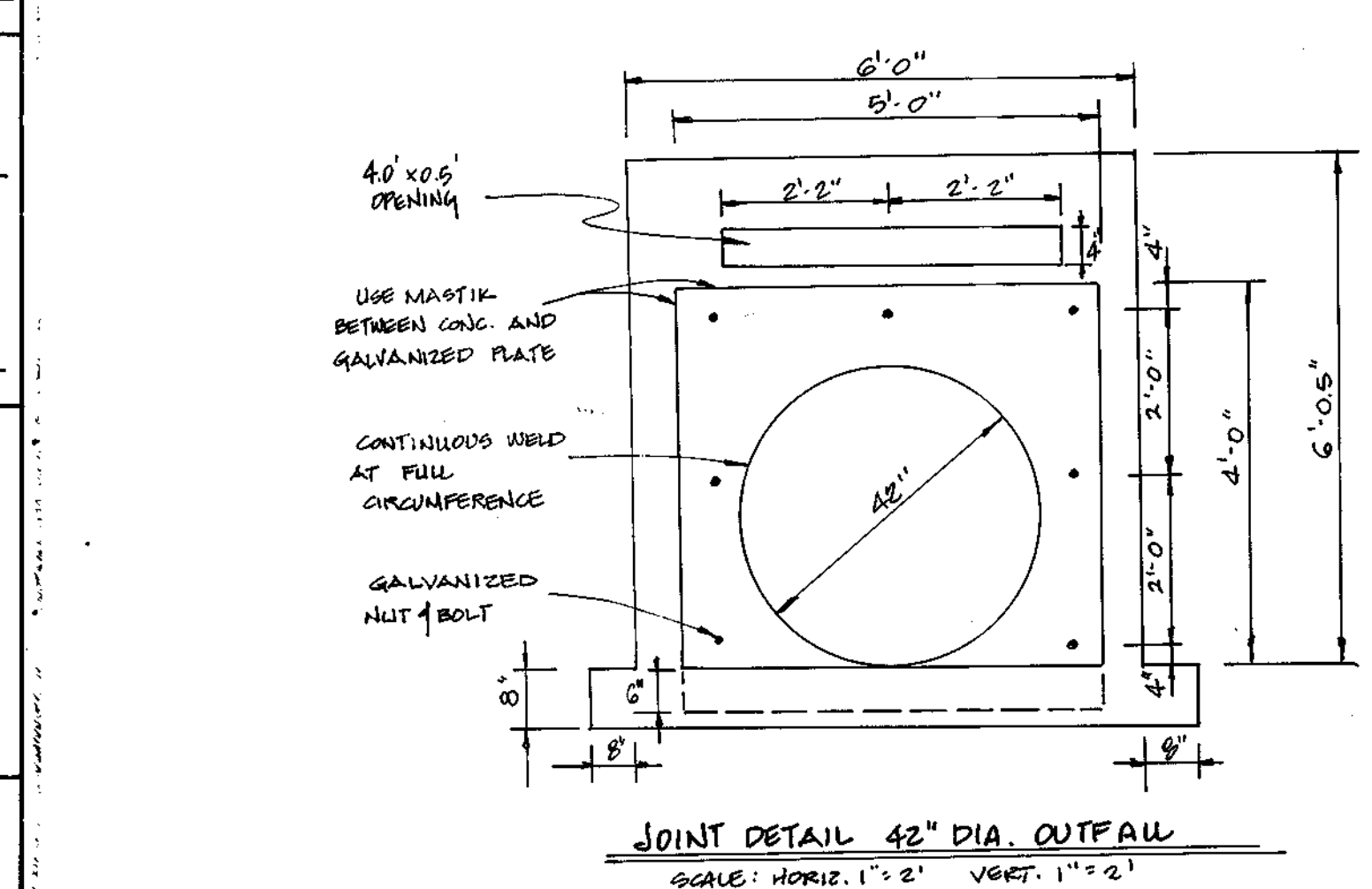
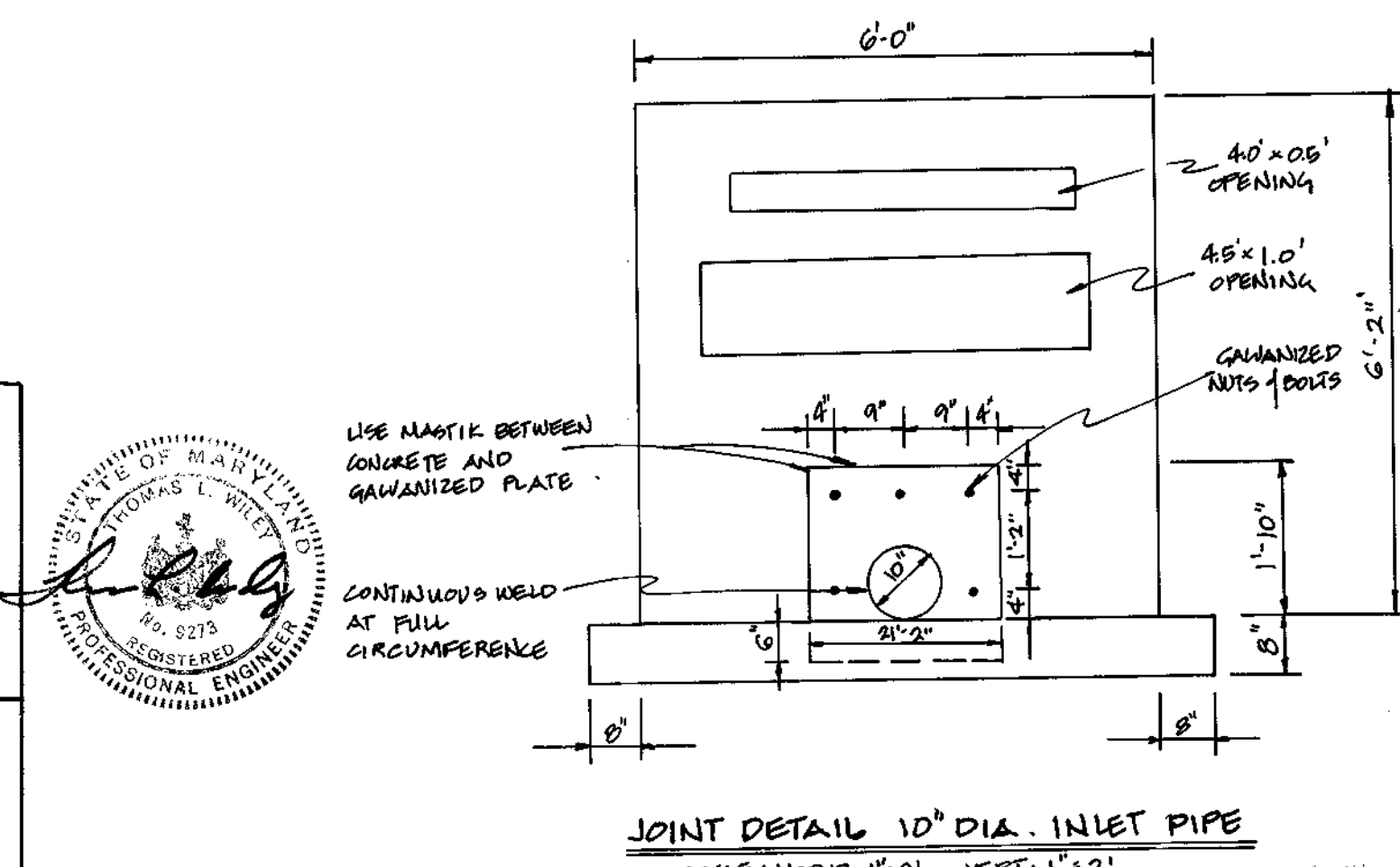
*Robert W. Ziehm* 8/29/89  
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Paul J. Seaman* 9/19/89  
 CHIEF, LAND OBTAINMENT SECTION

*Thomas W. Weverand* 9/19/89  
 CHIEF, BUREAU OF HIGHWAY

*William J. Rely* 9-20-89  
 CHIEF, BUREAU OF ENGINEERING

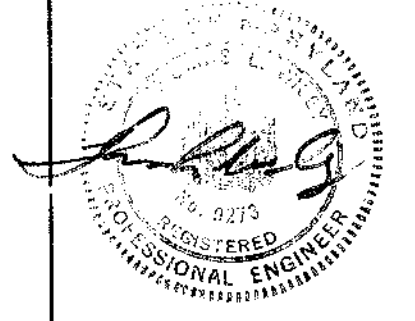
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Thomas S. J. Campbell* 9/29/89  
 CHIEF, DIVISION OF CONSUMERS PLANNING & LAND DEVELOPMENT



1470

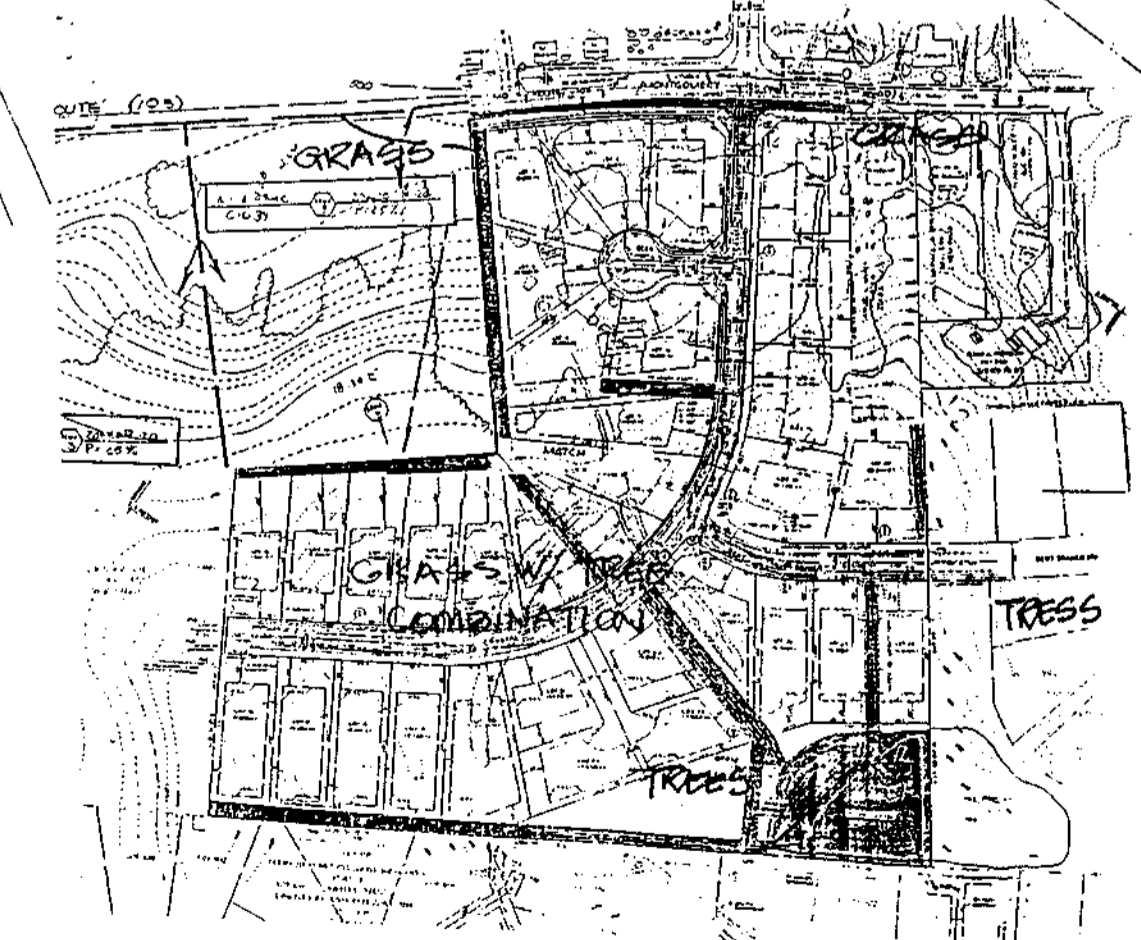
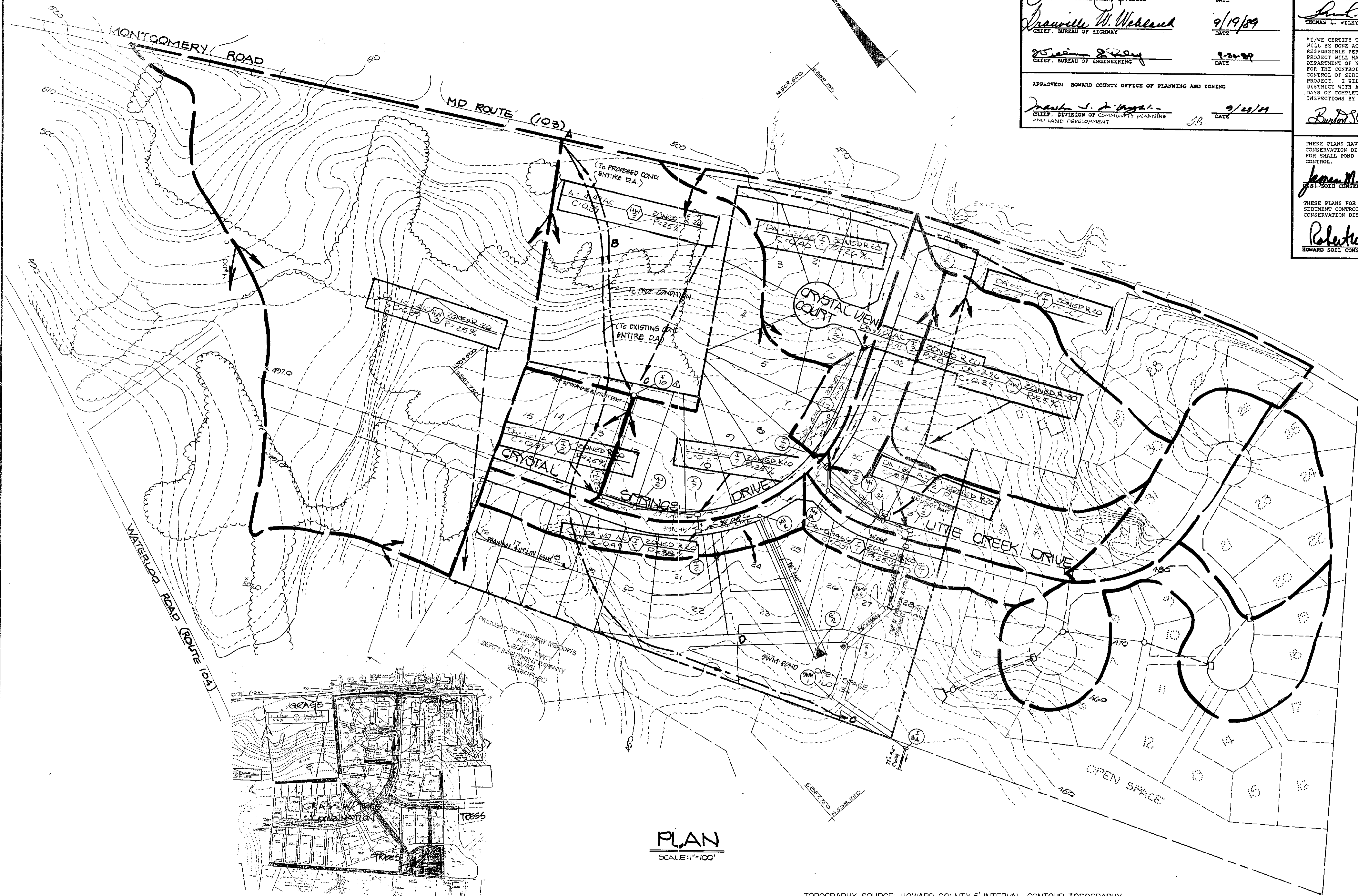
REVISIONS			
DESIGNED	DATE	BY	DESCRIPTION
FLIN	6-6-88		
DATE	10/16/90	WED	ADD PROFILES
DRAWN	WEO	6-6-88	
DATE	1/15/91	WED	RAISE STORM DRAIN FROM 22 1/2" TO 30"
CHECKED		date	change #W3 to I-10 (inlet)
APPROVED		date	

**Dewberry & Davis**  
 ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS  
 3300 N. RIDGE ROAD, SUITE 100  
 ELLICOTT CITY, MD. 21043  
 (301) 461-7478



**BERTON CONSTRUCTION COMPANY**  
 6110 EXECUTIVE BOULEVARD • SUITE 1090  
 ROCKVILLE, MARYLAND 20852  
 (301) 770-2450

**CRYSTAL SPRINGS ESTATES. SECTION ONE**  
 TAX MAP 31 PARCEL 175  
 1ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND



**PLAN**  
SCALE: 1"=100'

TOPOGRAPHY SOURCE: HOWARD COUNTY 5' INTERVAL CONTOUR TOPOGRAPHY.

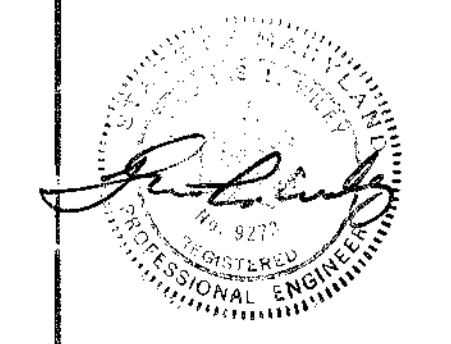
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Paul W. Jensen* 2/12/89  
 CHIEF, LAND DEVELOPMENT DIVISION DATE  
*Lawrence W. Wehland* 9/19/89  
 CHIEF, BUREAU OF HIGHWAY DATE  
*John S. ...* 9-20-89  
 CHIEF, BUREAU OF ENGINEERING DATE  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Thomas L. ...* 9/21/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."  
*Thomas L. Wiley* 2/11/89  
 THOMAS L. WILEY, ND REG. NO. 9278 DATE  
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."  
*Burton S. Chambers* 2/1/89  
 BURTON S. CHAMBERS DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.  
*James M. ...* 8/29/89  
 JAMES M. ... DATE  
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
*Robert W. Ziehm* 8/29/89  
 ROBERT W. ZIEHM DATE

DESIGNED		DATE		BY		DESCRIPTION	
FUN	6-2-88	10/1/88	GLW	Change #1-3 to I-10 (P-Inlet Δ)			
DRAWN		DATE		BY		DESCRIPTION	
W. E. OWENS	6-2-88						
CHECKED		DATE		BY		DESCRIPTION	
APPROVED		DATE		BY		DESCRIPTION	

**Dewberry & Davis**  
 ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS  
 3300 N. RIDGE ROAD, SUITE 100  
 ELLICOTT CITY, MD. 21043  
 (301) 461-7478



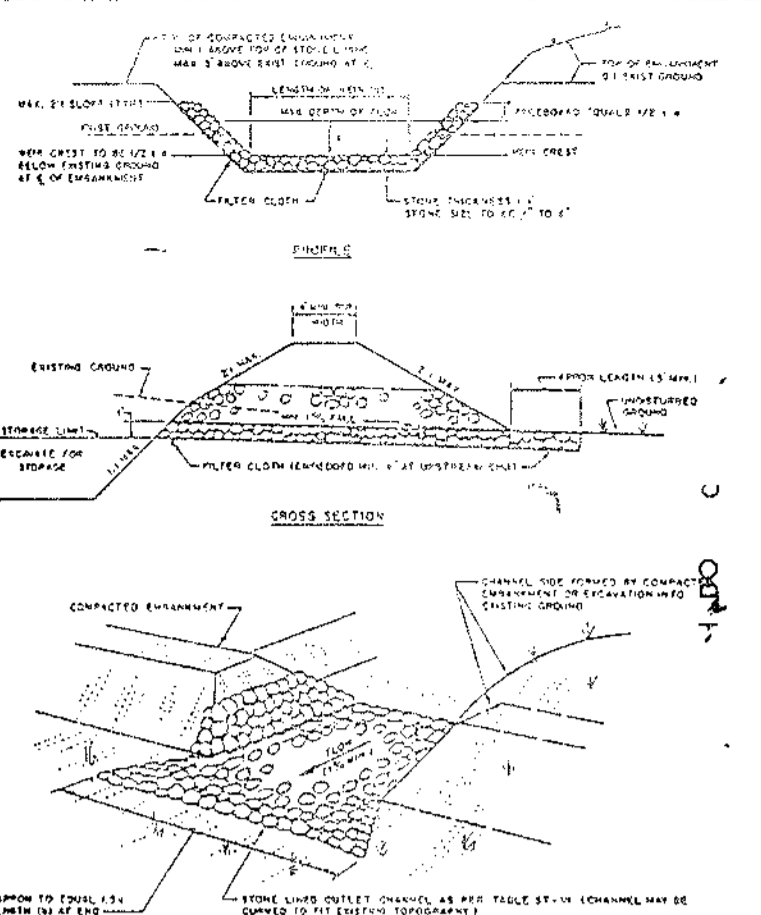
OWNER / DEVELOPER  
**BERTON CONSTRUCTION CO.**  
 6110 EXECUTIVE BOULEVARD SUITE 1090  
 ROCKVILLE, MARYLAND 20852  
 (301) 770-2450

LAND USE MAP AND DRAINAGE AREA MAP WITH FLOW PATHS  
**CRYSTAL SPRINGS ESTATES**  
 SECTION ONE  
 TAX MAP 31 PARCEL 175  
 1ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE: 1"=100' CONTRACT NO. FILE NO. SHEET 7 OF 10

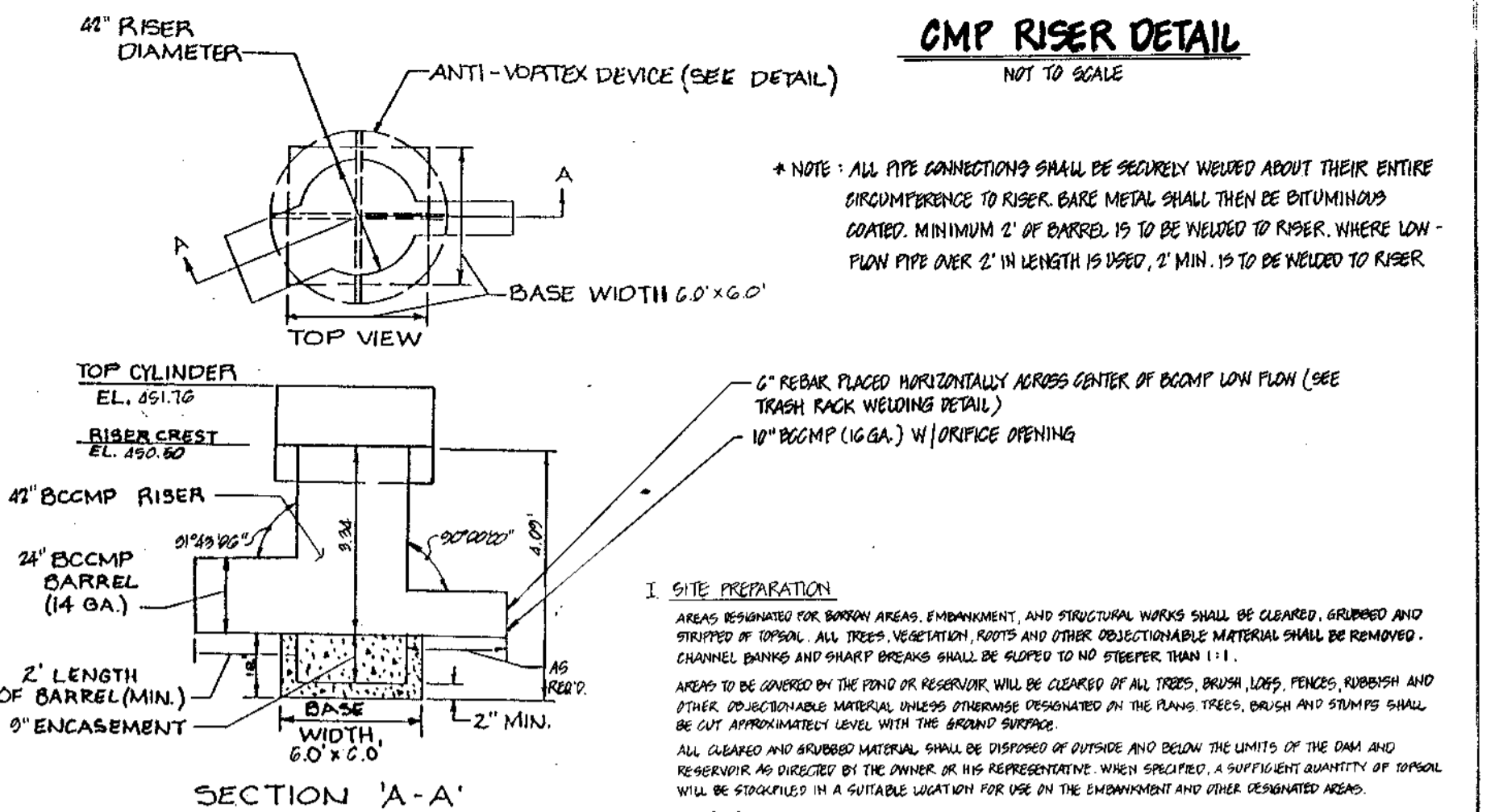
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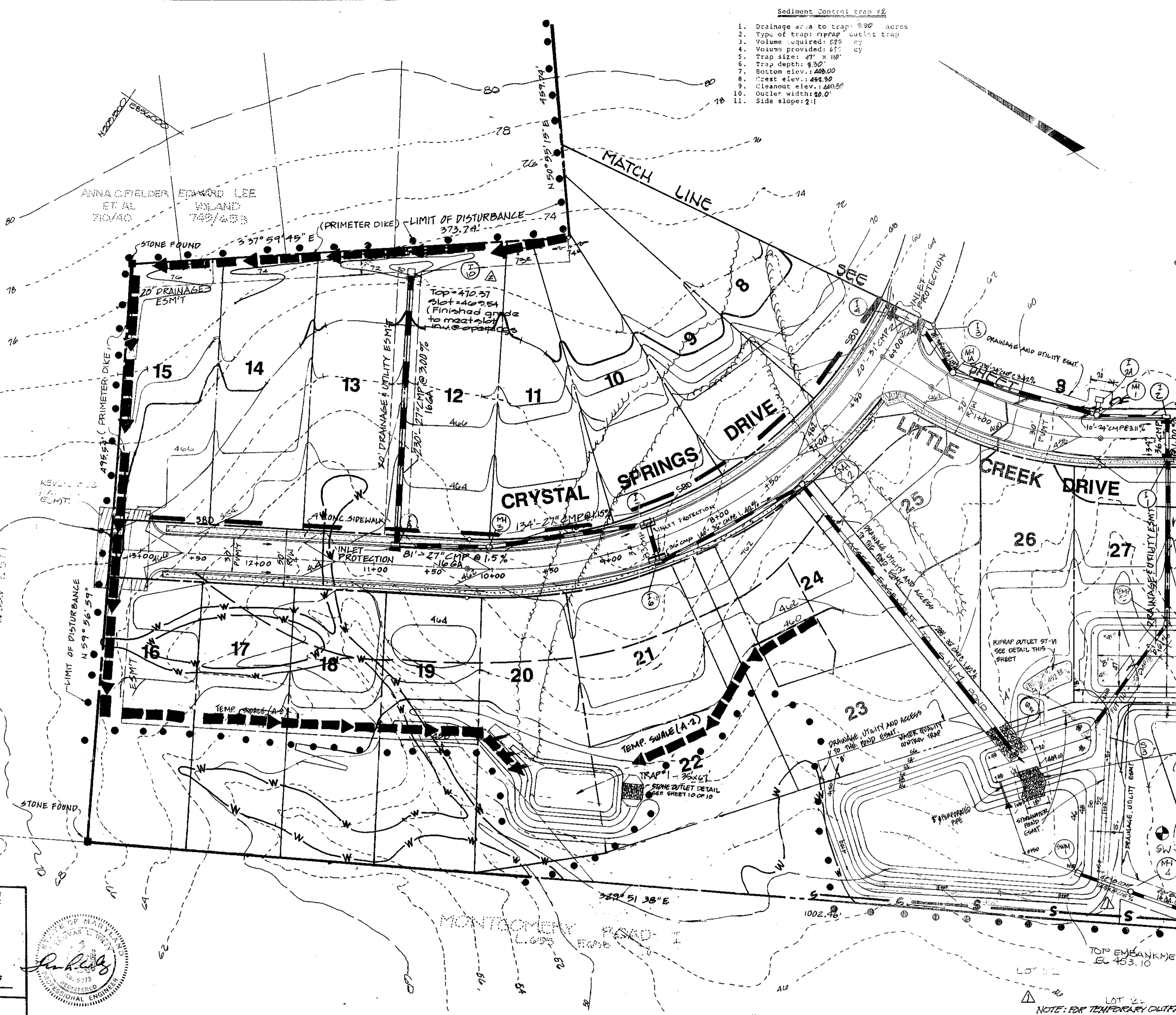
**RIPRAP OUTLET SEDIMENT TRAP**  
NOT TO SCALE



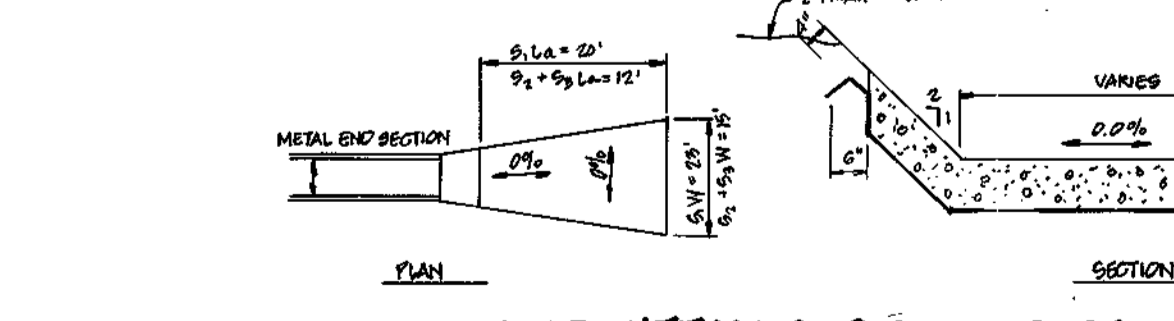
**CMP RISER DETAIL**  
NOT TO SCALE

- Sediment Control trap #1**
1. Drainage area to trap: 1.2 acres
  2. Type of trap: riprap outlet trap
  3. Volume required: 52 cy
  4. Volume provided: 178 cy
  5. Trap depth: 2'
  6. Trap size: 36' x 60'
  7. Bottom elev.: 459.00'
  8. Crest elev.: 456.00'
  9. Cleanout elev.: 454.50'
  10. Outlet width: 10.0'
  11. Side slope: 2:1

- Sediment Control trap #2**
1. Drainage area to trap: 9.00 acres
  2. Type of trap: riprap outlet trap
  3. Volume required: 628 cy
  4. Volume provided: 670 cy
  5. Trap depth: 1.10'
  6. Trap size: 47' x 110'
  7. Bottom elev.: 448.00'
  8. Crest elev.: 444.50'
  9. Cleanout elev.: 442.50'
  10. Outlet width: 20.0'
  11. Side slope: 2:1



- NOTES:**
1. QUALITY S.W.M. WILL BE DONE ON SITE VIA VEGETATED SWALE.
  2. QUALITY S.W.M. WILL BE DONE IN THE REGIONAL FACILITY BUILT IN MONTICEMERY MEADOWS.
  3. TOPOGRAPHY SOURCE: AERIAL & FIELD TOPOGRAPHY BY DEWBERRY & DAVIS.



**RIPRAP OUTFALLS @ 51, 52 & 53**  
NOT TO SCALE

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

*[Signature]* 2/1/89  
DATE

I HAVE CERTIFIED THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT CONTROL FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD COUNTY SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE FOND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

*[Signature]* 2/1/89  
DATE

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

*[Signature]* 2/2/89  
DATE

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

*[Signature]* 2/2/89  
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*[Signature]* 9/19/89  
DATE

*[Signature]* 9/19/89  
DATE

*[Signature]* 9-20-89  
DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*[Signature]* 2/2/89  
DATE

REVISIONS			
DATE	BY	DESCRIPTION	
2/1/89	WED	ADD HW 4 & TEMP OUTFALL NOTE	Δ
10/1/82	GLW	change HW 3 to 110 (0-Inlet)	Δ

**Dewberry & Davis**  
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OWNER / DEVELOPER  
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6110 EXECUTIVE BOULEVARD • SUITE 1090  
ROCKVILLE, MARYLAND 20852  
(301) 770-2450

GRADING AND SEDIMENT CONTROL PLAN  
**CRYSTAL SPRING ESTATES**  
SECTION ONE  
TAX MAP 31 PARCEL 175  
1ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50'  
CONTRACT NO. FILE NO. SHEET 9 OF 10  
F-88-278

