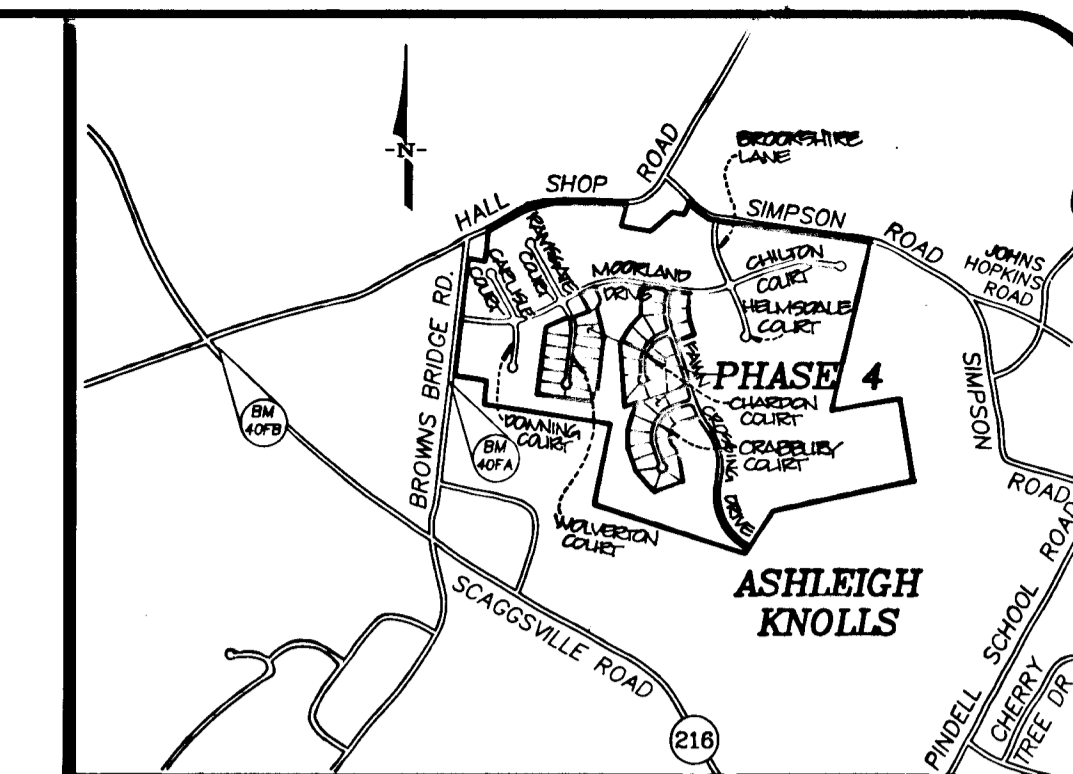


# ROADS, STORM DRAIN & GRADING ASHLEIGH KNOLLS PHASE 4

## ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND



Vicinity Map  
Scale: 1" = 2000'

### SHEET INDEX

- COVER SHEET
- WOLVERTON COURT PLAN & PROFILE
- PAWN CROSSING DRIVE PLAN & PROFILE
- CHARLTON COURT AND PAWN CROSSING DRIVE PLAN & PROFILE
- CRABPUKY COURT PLAN & PROFILE
- GRADING AND SEDIMENT CONTROL PLAN
- GRADING AND SEDIMENT CONTROL PLAN
- GRADING AND SEDIMENT CONTROL PLAN
- GRADING AND SEDIMENT CONTROL NOTES & DETAILS
- GRADING AND SEDIMENT CONTROL PROFILES & DETAILS
- DRAINAGE AREA MAP
- STORM DRAIN PROFILES
- STORM DRAIN PROFILES, NOTES & DETAILS

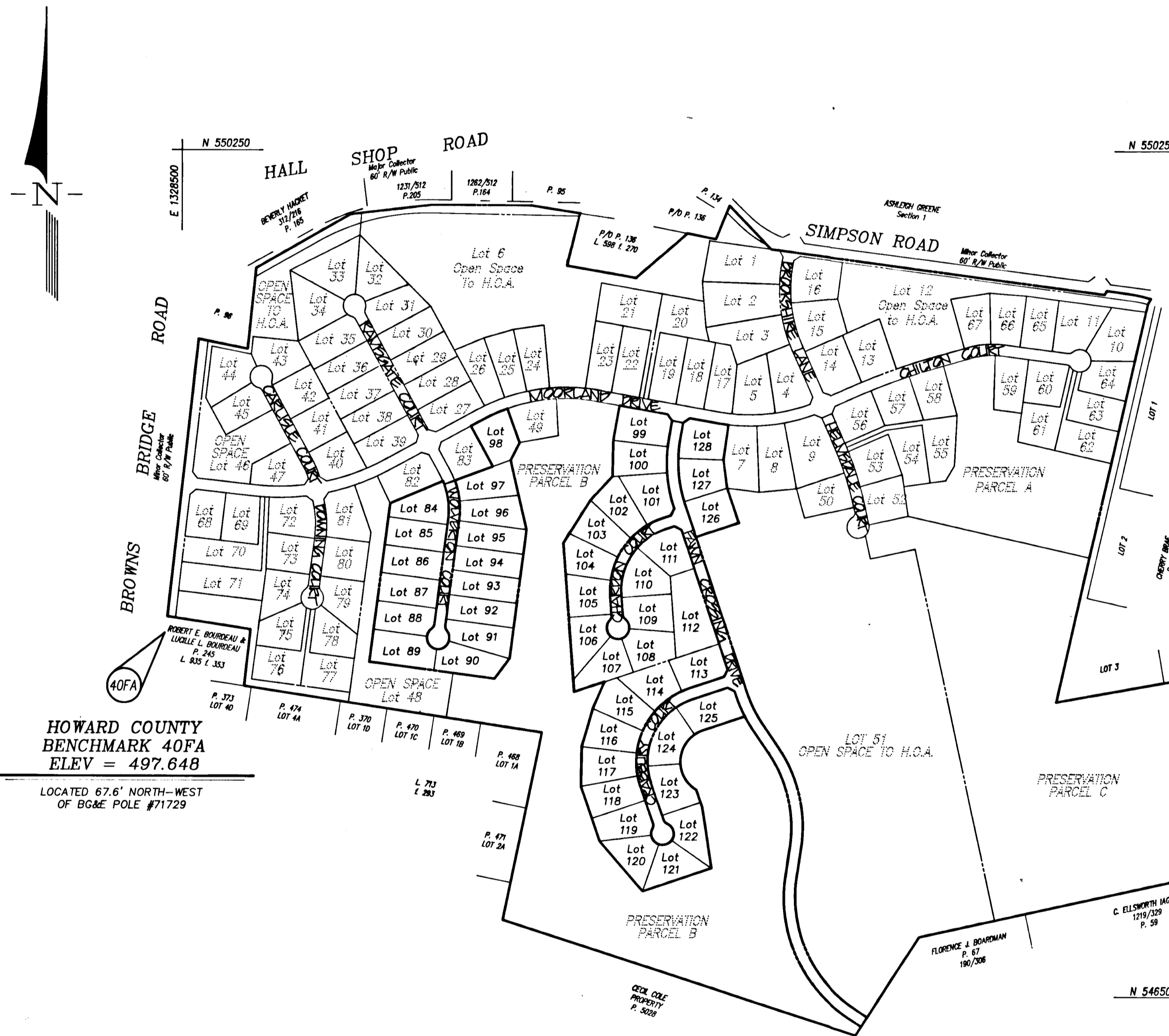
### GENERAL NOTES

- PROJECT BACKGROUND:  
TAX MAP: 41 P/O PARCEL 137 AND 174  
ZONING: R-R  
ELECTION DISTRICT: 5th  
TOTAL TRACT AREA: 382.95 AC±  
PHASE 4 AREA: 41.42 AC±  
NUMBER OF PROPOSED LOTS (PHASE 4): 45  
PRELIMINARY EQUIVALENT SKETCH PLAN APPROVED MARCH 11, 1993 SP-93-04
- SUBJECT PROPERTY ZONED R-R PER 10/10/93 COMPREHENSIVE SKETCH PLAN.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S S-88-80, P-89-025, SP-93-04, WP-93-68, P-93-116, P-94-70, P-95-02.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 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. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:  
MISS 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  
HOWARD COUNTY BUREAU OF UTILITIES 313-4900  
HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (24 HOUR NOTICE PRIOR TO COMMENCEMENT OF WORK) 313-1880  
COLONIAL PIPELINE 795-1390
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION. ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- TOPD TAKEN FROM AERIAL SURVEY DATED 10/22/93 PREPARED BY WINGS AERIAL MAPPING.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIGURE 11.4 VOLUME I OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- THE PAVEMENT DETAILS SHOWN ON THESE PLANS REFLECT THE HOWARD COUNTY MINIMUM STANDARD PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING, THE FINAL PAVING SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE. ANY PAVEMENT SECTIONS DETERMINED BY THE GEOTECHNICAL ENGINEER THAT IS LESS THAN THE HOWARD COUNTY MINIMUM STANDARD, SHALL FIRST BE APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. THE TESTING AND GEOTECHNICAL ENGINEER SHALL BE FURNISHED BY THE OWNER.
- FLOODPLAIN INFORMATION PREPARED BY MILDENBERG, MOCHI & ASSOCIATES, INC., NOVEMBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
- WETLAND INFORMATION PREPARED BY ENVIRONMENTAL SYSTEMS ANALYSIS, INC., OCTOBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
- TRAFFIC STUDY PREPARED BY LEE CUNNINGHAM & ASSOCIATES, INC., DECEMBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
- WATER AND SEWER SERVICE SHALL BE PRIVATE WELL & PUBLIC SEPTIC.
- THIS PROJECT CONFORMS TO THE LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT.
- ALL DRAINWAYS SHALL HAVE A MINIMUM 1% MIN. DRAINWAY CULVERT RATED AS SHOWN IN HOWARD COUNTY STANDARD DETAIL R6.06, UNLESS OTHERWISE INDICATED ON THE GRADING AND SEDIMENT CONTROL PLAN. (SEE NOTE 25)
- THE PAYMENT OF FEE-IN-LIEU OF PROVIDING STORMWATER MANAGEMENT FOR THE ROAD WAS APPROVED ON JULY 19, 1993. THE LOTS WERE DETERMINED TO BE EXEMPT FROM STORMWATER MANAGEMENT REQUIREMENT.
- ROAD IMPROVEMENT FEE-IN-LIEU LETTER WAS APPROVED ON FEBRUARY 25, 1994.
- DRIVEWAY CULVERTS REFERENCED ON THIS PLAN ARE FOR INFORMATIONAL PURPOSES ONLY. DRIVEWAY CULVERTS ARE NOT TO BE CONSTRUCTED AS A PORTION OF THESE CONSTRUCTION PLANS.
- PARKING SHALL BE PROHIBITED ADJACENT TO 10' WIDE ROADWAYS.
- WATER QUALITY MEASURES FOR STORMWATER MANAGEMENT FOR THE ROADWAYS HAVE BEEN PROVIDED THROUGH THE USE OF ENLARGED RIP-RAP APRONS AT THE STORM DRAIN OUTFALLS AND VEGETATIVE BUFFERS.
- ALL CURB MUST BE ALLUMINIZED, 14 GAUGE (MINIMUM).

SEWER MANHOLE/NIGHT OF WAY INFO.

CRABPUKY CT.	3146	13.0 FT. SMH	469.00
CRABPUKY CT.	3142	13.0 FT. SV	469.10
CRABPUKY CT.	4+55	13.0 FT. SMH	470.40
CRABPUKY CT.	4+53	13.0 FT. SV	470.40
CRABPUKY CT.	4+53	13.0 FT. SV	470.40
CHARLTON CT.	12+14	13.0 FT. SV	481.70
CHARLTON CT.	12+11	13.0 FT. SMH	482.10
CHARLTON CT.	12+00	13.0 FT. SV	482.00
CHARLTON CT.	7+46	13.0 FT. SV	477.10
CHARLTON CT.	7+43	13.0 FT. SMH	477.34
CHARLTON CT.	7+40	13.0 FT. SV	477.10
CHARLTON CT.	4+21	13.0 FT. SV	474.00
CHARLTON CT.	4+21	13.0 FT. SMH	474.10
CHARLTON CT.	4+27	13.0 FT. SV	473.04

SMH = SEWER MANHOLE  
SV = SEWER VALVE



LOCATION MAP  
SCALE 1" = 400'

### LEGEND

- PLAN**
- CENTERLINE ROADWAY
  - RIGHT-OF-WAY
  - PROPERTY LINE
  - DR. EASEMENT
  - PROPOSED STORM DRAIN
  - EXISTING STORM DRAIN
  - PROPOSED 90° ELEVATION
  - LIMIT OF WETLANDS
  - 25' WETLAND BUFFER
  - CENTERLINE STREAM
  - 75' STREAM BUFFER
  - 100' NEAR FLOODPLAIN
  - PROPOSED CONTOUR
  - EXISTING CONTOUR
  - EARTH PIKE
  - SILT FENCE
  - LIMIT OF DISTURBANCE
  - TEMPORARY SHALE
  - DRAINAGE DRAIN
  - FENCE LINE
  - SAFETY FENCE
  - SEWER EASEMENT
- PROFILE**
- EXISTING GROUND @ CENTERLINE
  - EXISTING GROUND @ LEFT DR. EASEMENT
  - EXISTING GROUND @ RIGHT DR. EASEMENT
  - PROPOSED GRADE LINE

HOWARD COUNTY  
BENCHMARK 40FB  
ELEV = 505.297

LOCATED 100± NORTH OF INTERSECTION  
OF MD. RT. 216 AND HALL SHOP ROAD.  
MONUMENT IS 10.5' TO EDGE OF PAVEMENT,  
2" BELOW SURFACE.

HOWARD COUNTY  
BENCHMARK 40FA  
ELEV = 497.648

LOCATED 67.6' NORTH-WEST  
OF BG&E POLE #71729

APPROVED:  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Chieff* 5/16/95  
CHIEF, LAND DEVELOPMENT DIVISION

*Andrew M. Donker* 5-12-95  
CHIEF, BUREAU OF HIGHWAYS

*Paul J. Simpson* 5/16/95  
CHIEF, BUREAU OF ENGINEERING

APPROVED:  
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*Anna J. Jaramany* 5/19/95  
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

**OWNER/DEVELOPER**  
WINCHESTER HOMES, INC.  
6305 Ivy Lane, Suite 800  
Greenbelt, Maryland 20770  
(301)474-4411  
Attn: Mr. Keith Kubista

**ENGINEER**  
R.M. MOCHI GROUP, P.C.  
3300 North Ridge Road, Suite 235  
Ellicott City, Maryland 21043  
(410)461-0079  
Attn: Mr. Robert M. Mochi, P.E.

ROAD NAME	PAVING TYPE	ROAD CLASS	DESIGN SPEED	LIMITS
WOLVERTON COURT	P-2	QUL-VE-SAC	30 MPH	1+24.50 TO 8+98.30
PAWN CROSSING DRIVE	P-2	LOCAL ROAD	30 MPH	0+00 TO 14+01.37
CHARLTON COURT	P-2	QUL-VE-SAC	30 MPH	0+00 TO 6+47.39
CRABPUKY COURT	P-2	QUL-VE-SAC	30 MPH	0+00 TO 9+44.67



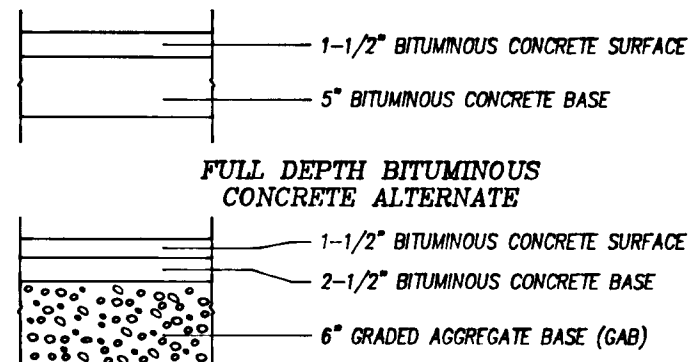
1669

date	11/02/94
project	94027.00
illustration	LIG
LIG	LIG
TJP	TJP
approval	RMK
scale	1" = 400'

date	11/02/94
description	REVISED PER 10/10/93 COMMENTS
date	3/14/95
description	REVISED PER 1/20/95 COMMENTS
date	3/14/95
description	REVISED PER 1/20/95 COMMENTS
date	11/17/94
description	1st SUBMITTAL TO HOWARD COUNTY DPZ
date	
description	
date	
description	

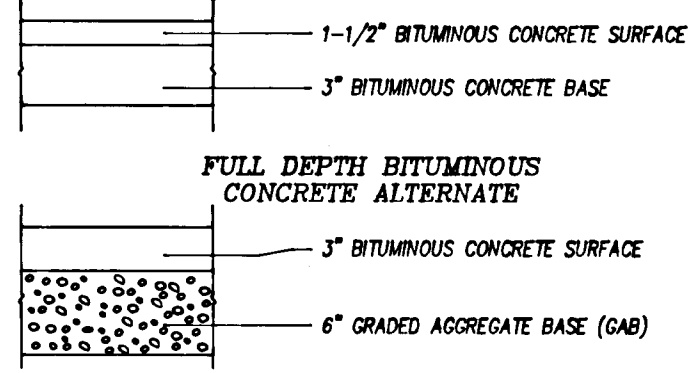
PHASE 4  
ASHLEIGH KNOLLS  
ELECTION DISTRICT No. 5 ASBUILT  
HOWARD COUNTY, MARYLAND  
COVER SHEET

R.M. MOCHI GROUP, P.C.  
3300 N. Ridge Road, Suite 235  
Ellicott City, MD 21043-3305  
(410) 461-0079  
Fax: (410) 750-6340



PAVING SECTION P-2  
NOT TO SCALE

NOTE:  
AGGREGATE BASE PAVEMENT SECTION MUST BE USED WHERE MICACEOUS SOIL SUBGRADE EXISTS. FULL DEPTH ASPHALT SECTIONS MAY BE USED OVER MICACEOUS SOILS ONLY IF CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER AND APPROVED IN ADVANCE BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.



PAVING SECTION P-8  
NOT TO SCALE

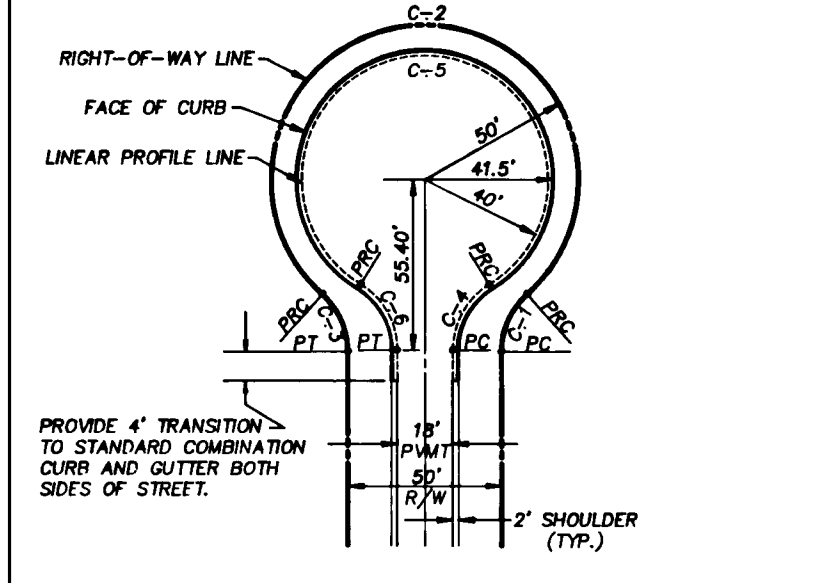
APPROVED:  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Chad Williams* 5/16/95  
CHIEF, LAND DEVELOPMENT DIVISION  
*Andrew M. Dorek* 5-12-95  
CHIEF, BUREAU OF HIGHWAYS  
*Paul J. Sisson* 5/16/95  
CHIEF, BUREAU OF ENGINEERING

APPROVED:  
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Chia Surinanya* 5/19/95  
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

Curve Data  
STA. 1+49.25 to STA. 3+69.18  
Radius = 350.00'  
Length = 219.93'  
Tan = 113.73'  
Delta = 36°00'14"  
Chord = N 10°31'22" W, 216.33'  
Length of curve to be constructed = 174.50'

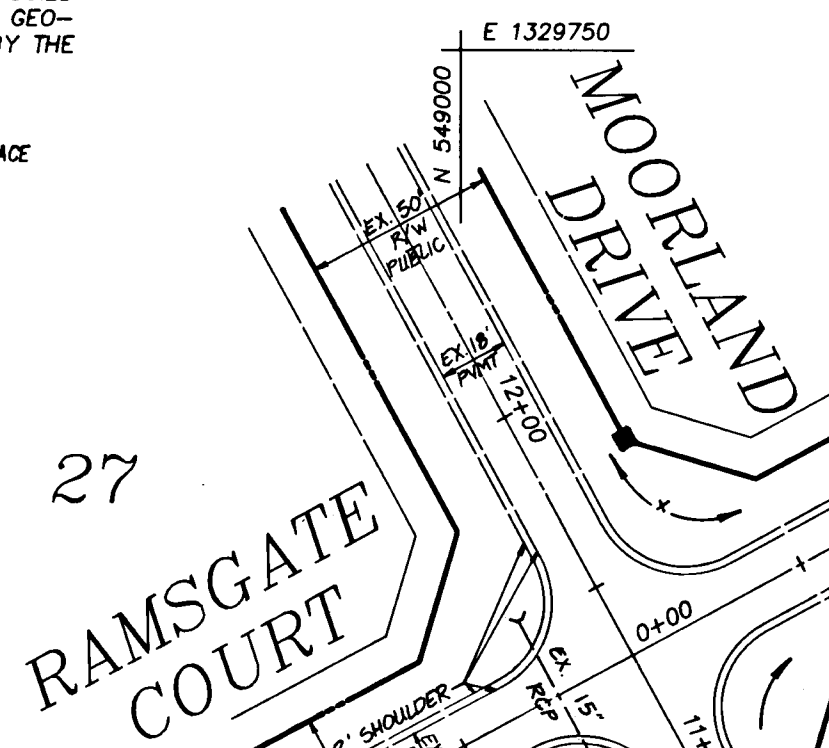
SIDE DITCH TREATMENT						
ROAD NAME	BEGIN STATION	END STATION	O <sub>10</sub> (cfs)	DEPTH OF FLOW, ft.	AREA, ft <sup>2</sup>	VELOCITY (fps)
WOLVERTON COURT	1+54.50 (Right)	2+90.2	3.2	0.55	0.76	4.2
	1+54.50 (Left)	2+90.2	1.0	0.35	0.31	3.3
	2+90.2 (Right)	4+00.2	1.3	0.40	0.40	3.3
	2+90.2 (Left)	4+00.2	0.3	0.24	0.14	2.1
	4+00.2 (Right)	End of Ditch	4.9	0.70	1.23	4.0
	4+00.2 (Left)	End of Ditch	2.3	0.52	0.68	3.4
	2+90.2 (Right)	2+90.2	1.0	0.35	0.31	3.3
	2+90.2 (Left)	2+90.2	1.0	0.35	0.31	3.3
	4+00.2 (Right)	4+00.2	1.0	0.35	0.31	3.3
	4+00.2 (Left)	4+00.2	1.0	0.35	0.31	3.3

CURVE DATA						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA	
C-1	25.00'	21.00'	11.18'	28.41'	276°22'46"	
C-2	25.00'	21.00'	11.18'	28.41'	276°22'46"	
C-3	25.00'	21.00'	11.18'	28.41'	276°22'46"	
C-4	25.00'	21.00'	11.18'	28.41'	276°22'46"	
C-5	25.00'	21.00'	11.18'	28.41'	276°22'46"	
C-6	25.00'	21.00'	11.18'	28.41'	276°22'46"	



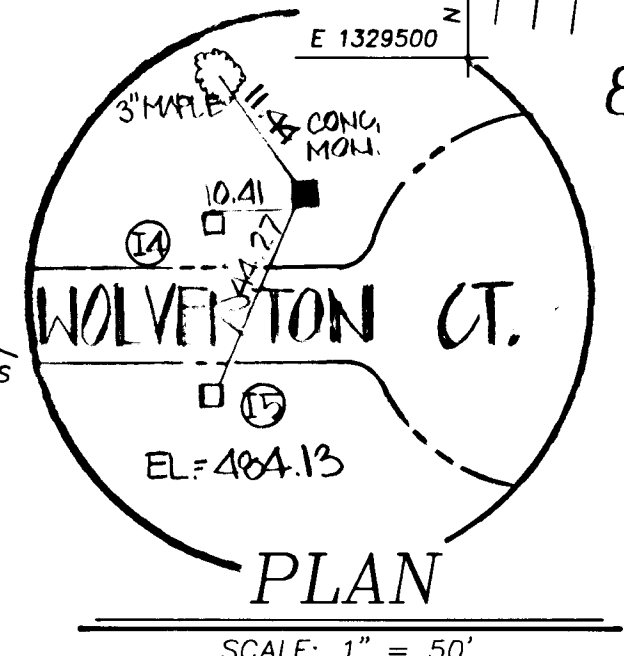
WOLVERTON COURT CUL-DE-SAC DETAIL (DESCENDING STREET)  
NOT TO SCALE

NOTES:  
1. PROVIDE STANDARD COMBINATION CONCRETE CURB AND GUTTER IN CUL-DE-SAC.  
2. THE MAXIMUM GRADE OF THE CIRCULAR AREA SHALL NOT EXCEED 6% IN ANY DIRECTION.  
3. LINEAR PROFILE START AND END STATIONS SHALL BE AS SHOWN IN PLAN VIEW FOR EACH CUL-DE-SAC STREET.

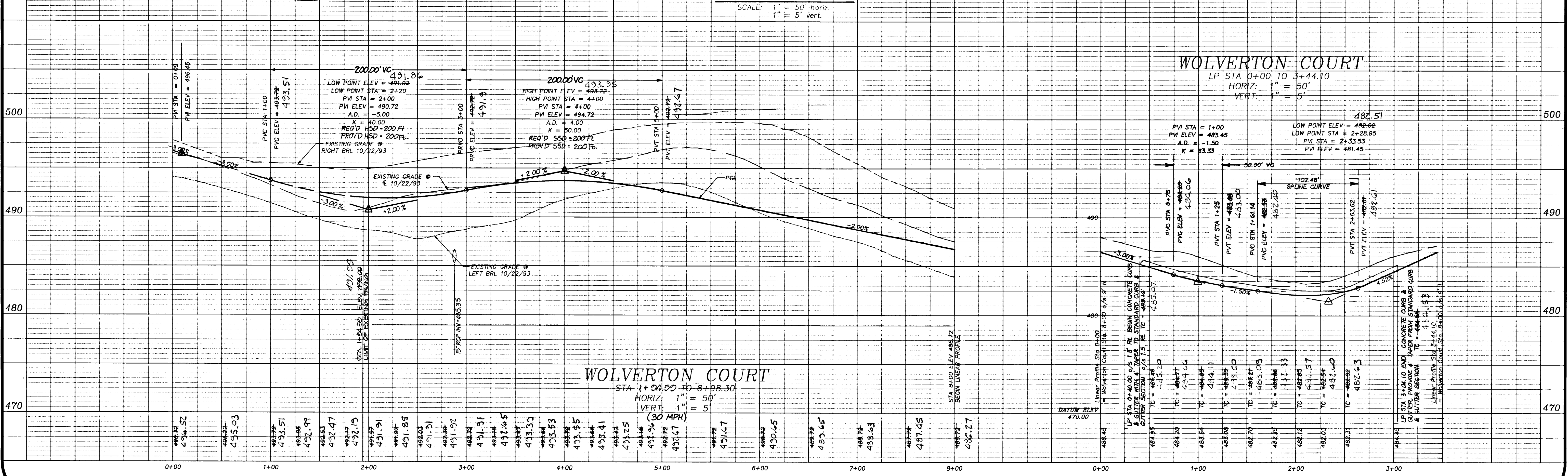


TYPICAL ROADWAY SECTION  
NOT TO SCALE

FOR STREETS: WOLVERTON COURT, WOLLINGFORD LANE, CHARDON COURT AND CRABBURY COURT  
LOCAL STREET AND CUL-DE-SAC  
HOWARD COUNTY STANDARD FIGURE 2.11  
OPEN SECTION (RURAL) ("RR" ZONING DISTRICT)  
MINIMUM DESIGN SPEED - 30 MPH



PROFILE  
SCALE: 1" = 50' horiz.  
1" = 5' vert.



OWNER/DEVELOPER  
WINCHESTER HOMES, INC.  
6305 Ivy Lane, Suite 800  
Greenbelt, Maryland 20770  
(301)474-4411  
ATTN: Mr. Keith Kubista

ENGINEER  
R.M. MOCHI GROUP, P.C.  
3300 North Ridge Road, Suite 235  
Ellicott City, Maryland 21043  
(410)461-0070  
ATTN: Mr. Robert Mochi, P.E.

PHASE 4  
ASHLEIGH KNOLLS  
ELECTION DISTRICT No. 5  
WOLVERTON COURT PLAN & PROFILE (1+24.50 TO 8+98.30)

Project date 11/8/94  
94027.00 engineering  
11/8/94 illustration LIG  
11/17/94 scale as shown  
11/17/94 approval RMM

4/10/95  
1. UNLIMITED TO DPZ FOR SHARPLESS  
2. REVISED PER PAV COMMENT & NEW LINEAR PROFILE  
3. REVISED PER 12/05 SEC COMMENTS  
4. 11/17/94  
1. 0.1  
2. 0.1  
3. 0.1  
4. 0.1

R.M. MOCHI GROUP, P.C.  
3300 N. Ridge Road, Suite 235  
Ellicott City, MD 21043-3305  
(410) 461-0079  
Fax: (410) 750-6340

2 OF 13

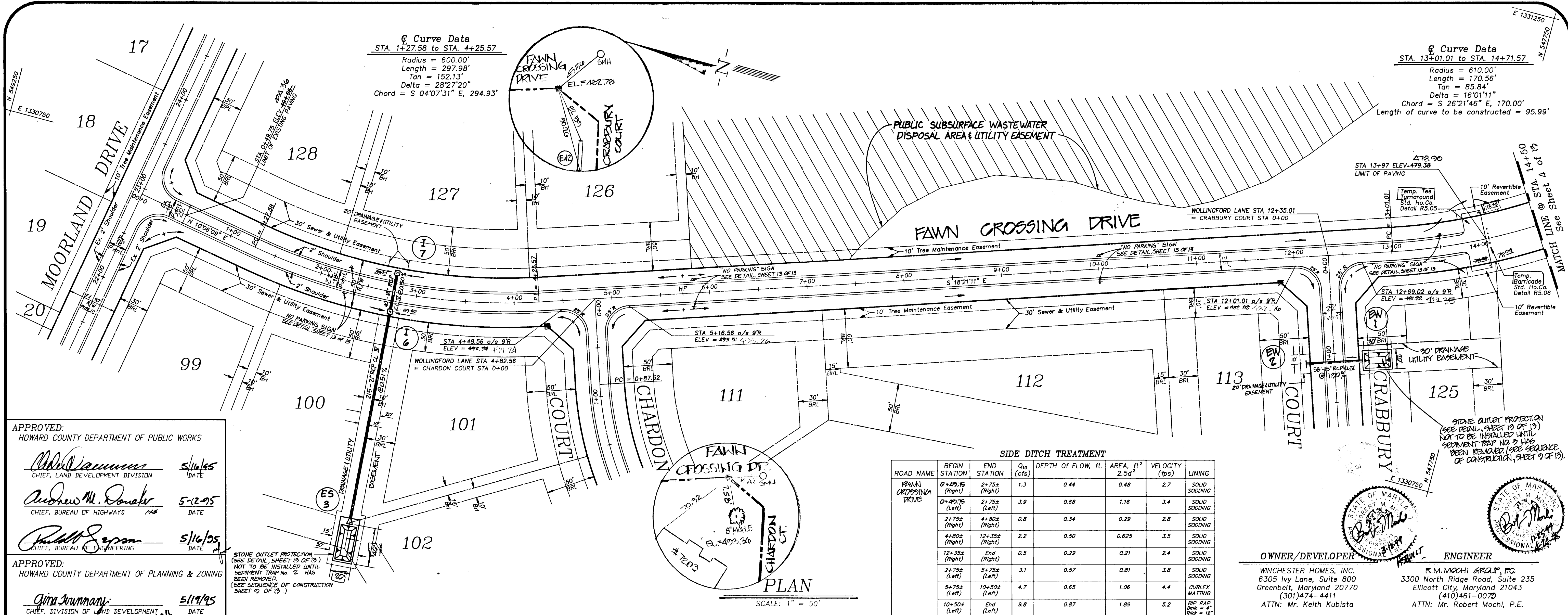
1669

project	date	11/19/94	engineering	TIP	approval
94027.00	illustration		LJG	scale	as shown

no.	date	description	revisions
4	6/13/95	REVISED PER HO. CO. PZ	
3	4/22/95	SUBMITTED TO PZ FOR SIGNATURES	
2	2/16/95	REVISED PER HO. CO. COMMENTS	
1	11/17/94	1st SUBMITTAL TO HOWARD COUNTY, PZ	

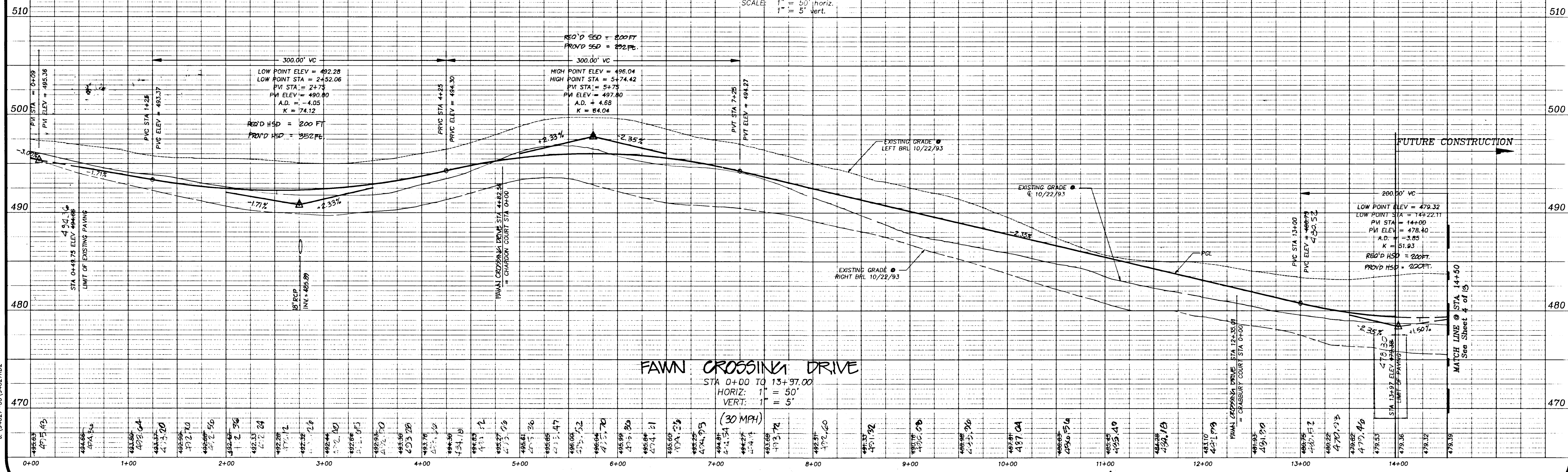
PHASE 4  
**ASHLEIGH KNOLLS**  
 ELECTION DISTRICT No. 5  
**WOLLINGFORD LANE PLAN & PROFILE (0+00 TO 13+97.00)**  
 HOWARD COUNTY, MARYLAND

**R.M. MOCHI GROUP, P.C.**  
 3300 N. Ridge Road, Suite 235  
 Ellicott City, MD 21043-3005  
 Tel: (410) 750-6340  
 Fax: (410) 461-0079

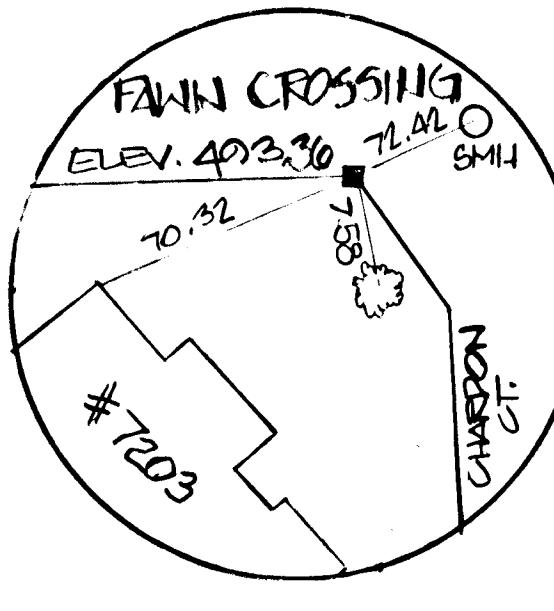
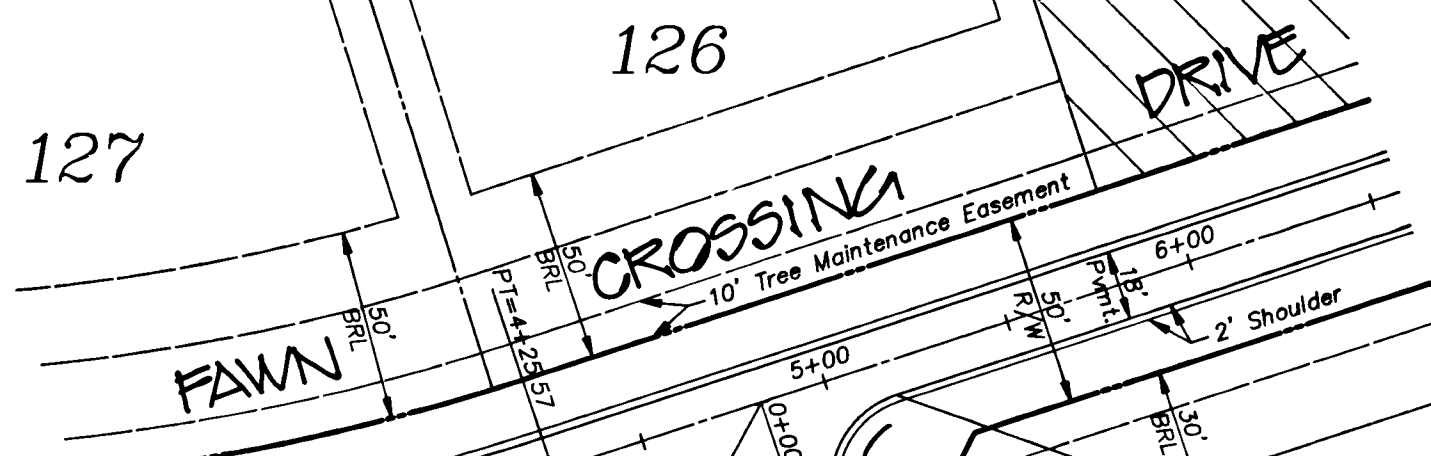


APPROVED:  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Robert D. ...* 5/16/95  
 CHIEF, LAND DEVELOPMENT DIVISION  
*Andrew M. ...* 5-12-95  
 CHIEF, BUREAU OF HIGHWAYS  
*Paul J. ...* 5/16/95  
 CHIEF, BUREAU OF ENGINEERING  
 APPROVED:  
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Gina ...* 5/16/95  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

**PROFILE**

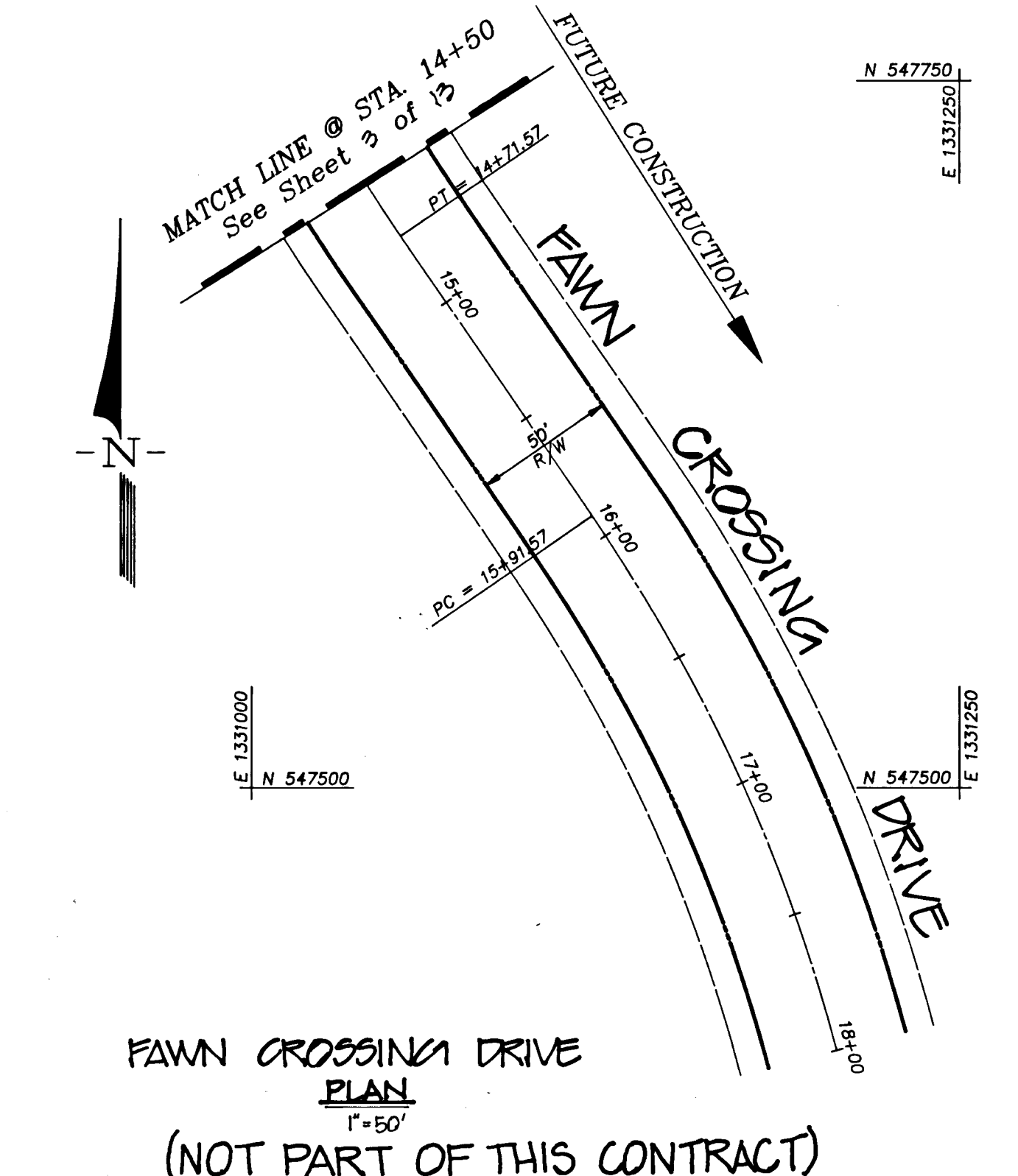
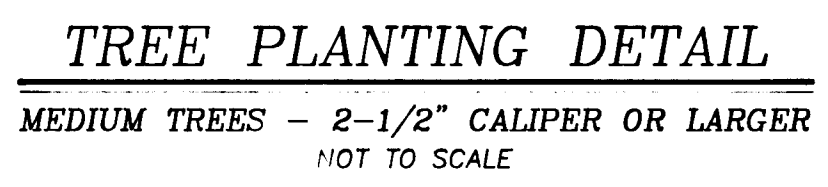


1669



**Curve Data**  
 STA. 0+87.52 to STA. 5+06.12  
 Radius = 316.00'  
 Length = 418.60'  
 Tan = 246.44'  
 Delta = 75°53'55"  
 Chord = S 33°41'52" W, 388.66'

- TREE PLANTING NOTES:**
- TREES TO BE PLANTED IN LOCATIONS INDICATED ON GRADING AND SEDIMENT CONTROL PLAN, SHEETS 6, 7 & 8 OF 13.
  - SMALL TREES TO BE PLANTED ALONG WOLVERTON COURT, CHARDON COURT AND CRABBRURY COURT SHALL BE PLANTED IN CLUSTERS AT LOCATIONS INDICATED ON GRADING AND SEDIMENT CONTROL PLAN, SHEETS 6, 7 & 8 OF 13.
  - TREES SHALL BE PLANTED A MINIMUM OF 4' FROM THE FLOW LINE OF THE SIDE DITCH.
  - NO TREES SHALL BE PLACED BETWEEN THE EDGE OF PAVEMENT AND THE FLOW LINE OF THE SIDE DITCH.
  - WHERE CURB AND GUTTER IS PRESENT, TREES SHALL BE PLANTED A MINIMUM OF 6' BEHIND THE FACE OF CURB.
  - TREES MAY BE PLANTED WITHIN RIGHT-OF-WAY OR WITHIN TREE MAINTENANCE EASEMENT AS REQUIRED TO ENSURE THAT TREES ARE NOT PRESENT WITHIN THE SIDE DITCHES.



**FAWN CROSSING DRIVE PLAN**  
 (NOT PART OF THIS CONTRACT)

**APPROVED:**  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*William J. ...* 5/16/95  
 CHIEF, LAND DEVELOPMENT DIVISION

*Andrew M. ...* 5-12-95  
 CHIEF, BUREAU OF HIGHWAYS

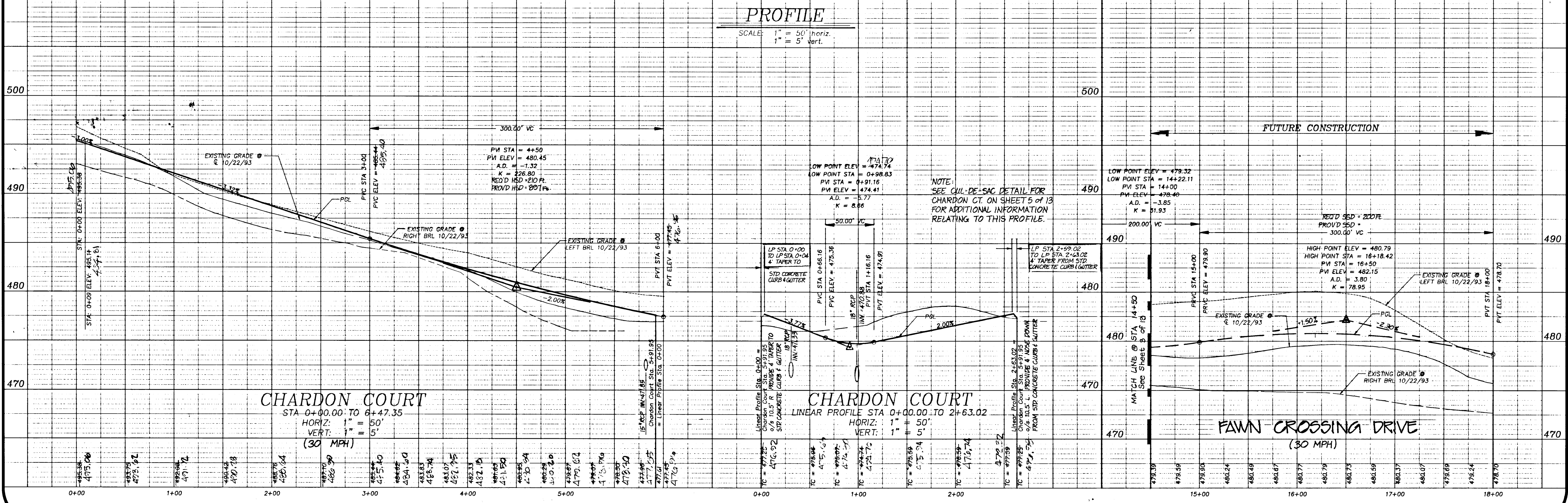
*Paul ...* 5/16/95  
 CHIEF, BUREAU OF ENGINEERING

**APPROVED:**  
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*Anna ...* 5/19/95  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

**SIDE DITCH TREATMENT**

ROAD NAME	BEGIN STATION	END STATION	Q <sub>10</sub> (cfs)	DEPTH OF FLOW, ft.	AREA, ft <sup>2</sup>	VELOCITY (fps)	LINING
CHARDON COURT	0+00 (Right)	End (Right)	1.5	0.40	0.40	3.7	SOLID SCODDING
	0+00 (Left)	5+00 (Left)	2.0	0.45	0.51	3.9	SOLID SCODDING
	5+00 (Left)	End (Left)	3.6	0.55	0.76	4.8	RIP RAP 3" DIA + 4" THICK - 12"



**OWNER/DEVELOPER**  
 WINCHESTER HOMES, INC.  
 6305 Ivy Lane, Suite 800  
 Greenbelt, Maryland 20770  
 (301) 474-4411  
 ATTN: Mr. Keith Kubista

**ENGINEER**  
 R.M. MOCHI GROUP, P.C.  
 3300 North Ridge Road, Suite 235  
 Ellicott City, Maryland 21043  
 (410) 481-0079  
 ATTN: Mr. Robert Mochi, P.E.

Project: 94027.00  
 date: 11/10/94  
 illustration: engineering  
 LUG  
 scale: as shown  
 approval: RMM

Revisions:

no.	description	date
1	REVISED PER 1/10/95 PER COMMENTS	1/10/95
2	REVISED PER 1/10/95 PER COMMENTS	1/10/95
3	REVISED PER 1/10/95 PER COMMENTS	1/10/95
4	REVISED PER 1/10/95 PER COMMENTS	1/10/95

PHASE 4  
**ASHLEIGH KNOLLS**  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 5  
**CHARDON COURT & WOLLINGFORD LANE PLAN & PROFILE**

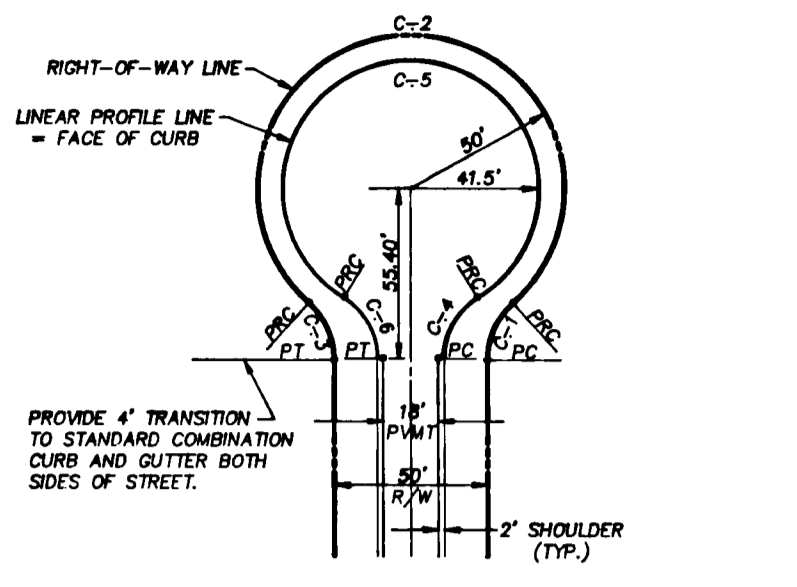
**R.M. MOCHI GROUP, P.C.**  
 3300 N. Ridge Road, Suite 235  
 Ellicott City, MD 21043-3305  
 Fax: (410) 750-8340

1669

194027-0019402704

**CURVE DATA**

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C-1	30.00'	21.03'	11.18'	20.41'	48°12'31"
C-2	30.00'	241.19'	44.72'	66.67'	272°22'46"
C-3	23.50'	21.03'	11.18'	20.41'	48°12'31"
C-4	23.50'	23.98'	13.15'	22.95'	38°27'40"
C-5	41.50'	215.08'	25.47'	43.42'	286°55'20"
C-6	23.50'	23.98'	13.15'	22.95'	38°27'40"



- NOTES:**
1. PROVIDE STANDARD COMBINATION CONCRETE CURB AND GUTTER IN CUL-DE-SAC.
  2. THE MAXIMUM GRADE OF THE CIRCULAR AREA SHALL NOT EXCEED 6% IN ANY DIRECTION.
  3. LINEAR PROFILE START AND END STATIONS SHALL BE AS SHOWN IN PLAN VIEW FOR EACH CUL-DE-SAC STREET.

**CUL-DE-SAC DETAIL FOR CHARDON COURT & CRABBRURY COURT (DESCENDING STREET)**  
NOT TO SCALE

**APPROVED:**  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

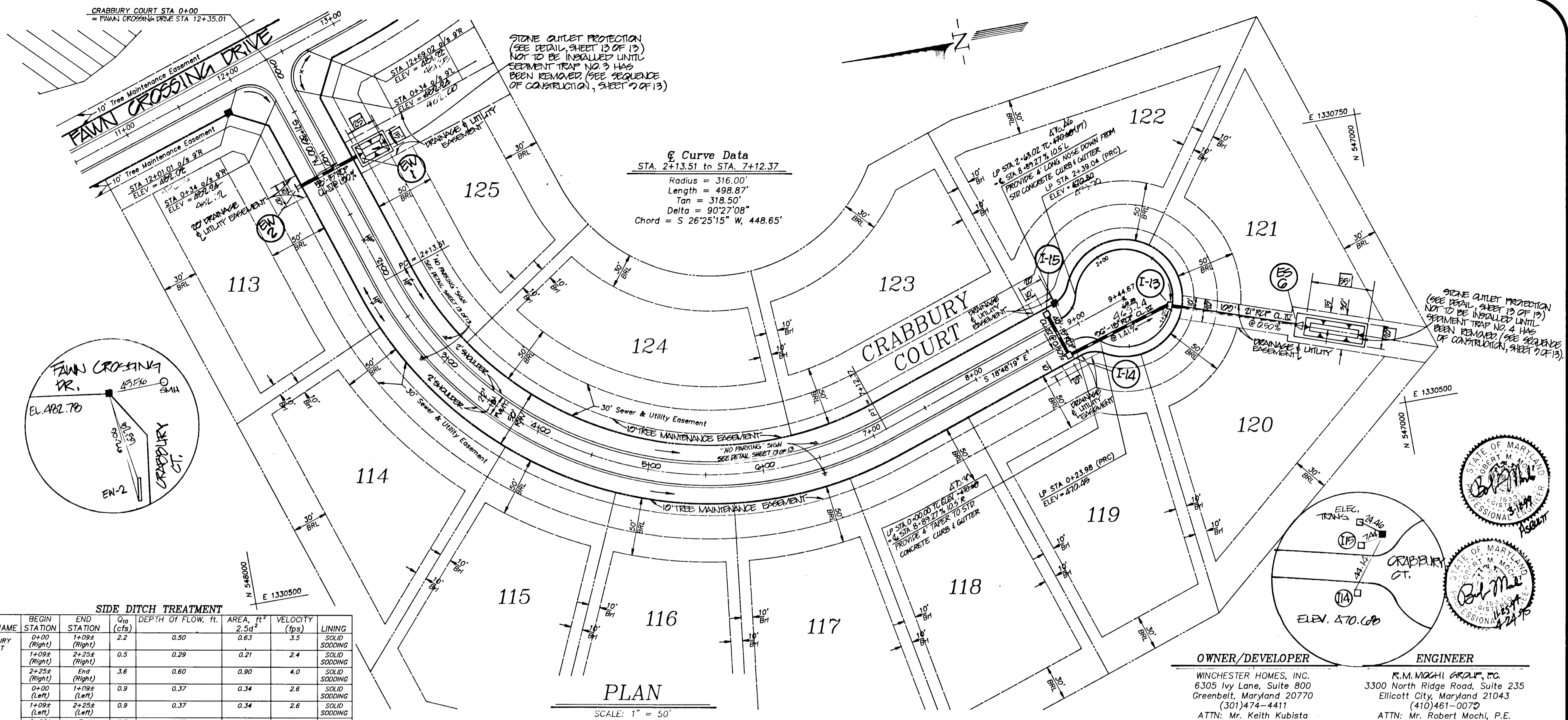
*John D. ...* 5/16/95  
CHIEF, LAND DEVELOPMENT DIVISION  
*Andrew M. ...* 5-12-95  
CHIEF, BUREAU OF HIGHWAYS  
*Paul ...* 5/16/95  
CHIEF, BUREAU OF ENGINEERING

**APPROVED:**  
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*Gina ...* 5/19/95  
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

**SIDE DITCH TREATMENT**

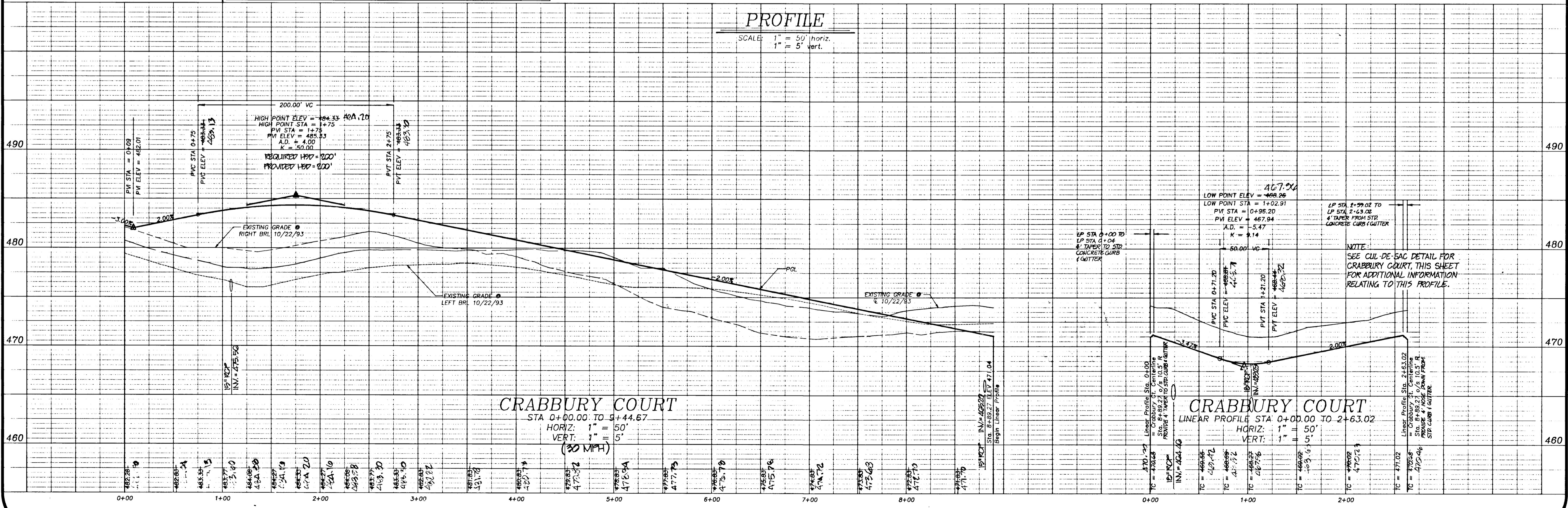
ROAD NAME	BEGIN STATION	END STATION	C <sub>100</sub> (cfs)	DEPTH OF FLOW, FT.	AREA, FT <sup>2</sup>	VELOCITY (fps)	LINING
CRABBRURY COURT	0+00	1+09.2	2.2	0.50	2.54	3.5	SOLID SODDING
	1+09.2 (Right)	2+25.2	0.5	0.29	0.21	2.4	SOLID SODDING
	2+25.2	End (Right)	3.6	0.60	0.90	4.0	SOLID SODDING
	0+00	1+09.2	0.9	0.37	0.34	2.6	SOLID SODDING
	1+09.2	2+25.2	0.9	0.37	0.34	2.6	SOLID SODDING
	2+25.2	End (Left)	2.7	0.55	0.76	3.6	SOLID SODDING



**Curve Data**  
STA 2+13.51 to STA 7+12.37  
Radius = 316.00'  
Length = 498.87'  
Tan = 318.50'  
Delta = 90°27'08"  
Chord = S 26°25'15" W, 448.65'

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

**PROFILE**  
SCALE: 1" = 50' horiz.  
1" = 5' vert.

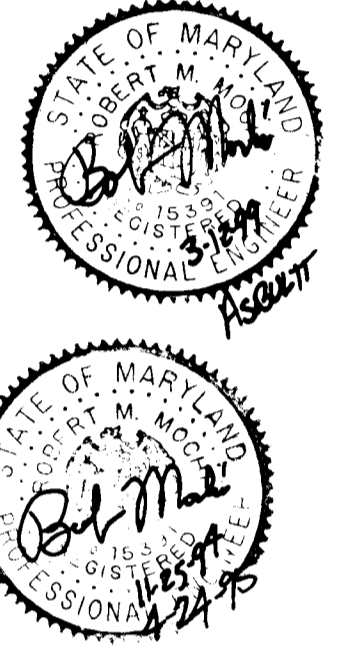


**CRABBRURY COURT**  
STA 0+00.00 TO 9+44.67  
HORIZ: 1" = 50'  
VERT: 1" = 5'  
(30 MPH)

**CRABBRURY COURT**  
LINEAR PROFILE STA 0+00.00 TO 2+63.02  
HORIZ: 1" = 50'  
VERT: 1" = 5'

**OWNER/DEVELOPER**  
WINCHESTER HOMES, INC.  
6305 Ivy Lane, Suite 800  
Greenbelt, Maryland 20770  
(301)474-4411  
ATTN: Mr. Keith Kubista

**ENGINEER**  
R.M. MOCHI GROUP, P.C.  
3300 North Ridge Road, Suite 235  
Ellicott City, Maryland 21043  
(410)461-0079  
ATTN: Mr. Robert Mochi, P.E.



Project: 94027.00  
Date: 11/10/94  
Engineering: [Signature]  
Illustration: [Signature]  
Scale: as shown

Revised: 4/10/95  
Revised: 4/10/95  
Revised: 4/10/95  
Revised: 4/10/95

**PHASE 4**  
**ASHLEIGH KNOLLS**  
ELECTION DISTRICT No. 5  
**CRABBRURY COURT PLAN & PROFILE (0+00 TO 9+44.67)**  
HOWARD COUNTY, MARYLAND

**R.M. MOCHI GROUP, P.C.**  
3300 N. Ridge Road, Suite 235  
Ellicott City, MD 21043-3305  
(410) 461-0079  
Fax: (410) 750-6340

1669

94027-00 194027501

DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*[Signature]* 5/16/95  
 CHIEF, LAND DEVELOPMENT DIVISION  
*[Signature]* 5-12-95  
 CHIEF, BUREAU OF HIGHWAYS  
*[Signature]* 5/16/95  
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*[Signature]* 5/19/95  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

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

*[Signature]* 5/2/95  
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*[Signature]* 5/2/95  
 U.S. NATIONAL RESOURCES CONSERVATION SERVICE

DEVELOPER'S CERTIFICATE

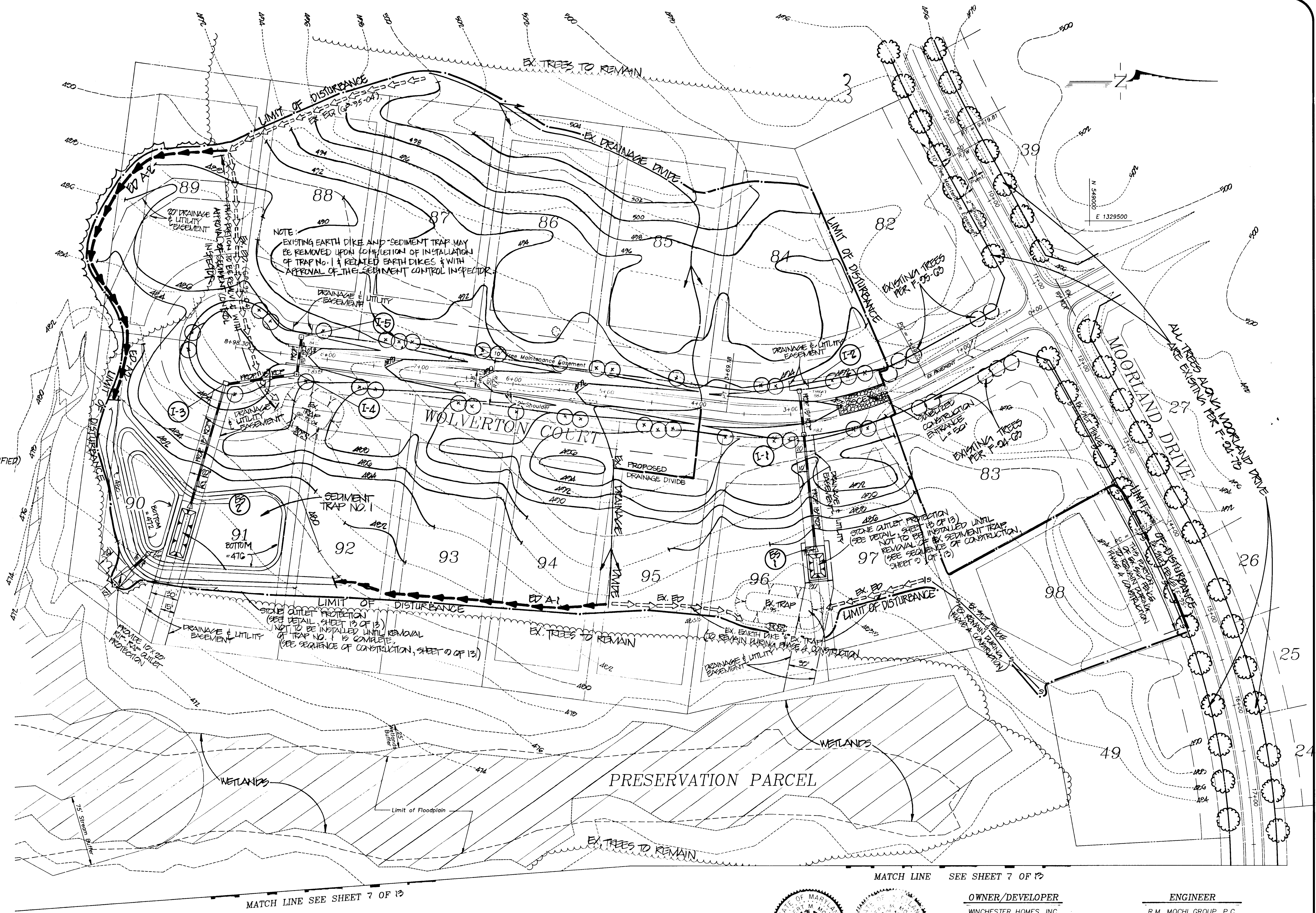
I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as deemed necessary.

*[Signature]* 11-16-94  
 Signature of Developer Date

ENGINEER'S CERTIFICATE

I hereby 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.

*[Signature]* 11-25-94  
 Robert M. Mochi, P.E. Date



**SEDIMENT TRAP NO. 1**  
**SEDIMENT TRAP TYPE ST. I (MODIFIED)**

INITIAL DRAINAGE AREA = 0.71 AC. ±  
 FINAL DRAINAGE AREA = 7.0 AC. ±  
 REQUIRED STORAGE = 12,000 CU. FT.  
 STORAGE PROVIDED = 13,213 CU. FT.  
 BOTTOM DIMENSIONS = SEE PLAN  
 STORAGE DEPTH = 4 FT.  
 BOTTOM ELEVATION = 472.0  
 RISER CREST ELEVATION = 478.0  
 EX. GROUND AT EMBANKMENT = 475.5  
 TOP OF EMBANKMENT = 480.0  
 CLEAN OUT ELEVATION = 474.0  
 SIDE SLOPES = 2:1  
 2 YR. 3 IN. CRUISE ELEV. = 476.0  
 (SEE PIPE PROFILE, SHEET 10 OF 13)

E 1329500  
 N 547250

E 1330250  
 N 547250

MATCH LINE SEE SHEET 7 OF 13

MATCH LINE SEE SHEET 7 OF 13



**OWNER/DEVELOPER**  
 WINCHESTER HOMES, INC.  
 6305 Ivy Lane, Suite 800  
 Greenbelt, Maryland 20770  
 (301)474-4411  
 Attn: Mr. Keith Kubista

**ENGINEER**  
 R.M. MOCHI GROUP, P.C.  
 3300 North Ridge Road, Suite 235  
 Ellicott City, Maryland 21043  
 (410)461-0079  
 Attn: Mr. Robert M. Mochi, P.E.

project	94027.00	date	10/18/94
illustration	LIG/BLP	engineering	TIP
scale	1"=50'	approval	RMK

no.	0	description	1st SUBMITTAL TO HOWARD COUNTY DEP	date	11/17/94
no.	1	description	REVISED PER 10/19/94 AND COMMENTS	date	4/29/95
no.	2	description	SUBMITTED TO DTP FOR EVALUATION	date	4/29/95

PHASE 4  
**ASHLEIGH KNOLLS**  
 ELECTION DISTRICT No. 5  
 HOWARD COUNTY, MARYLAND  
**GRADING AND SEDIMENT CONTROL PLAN**

**R.M. MOCHI GROUP, P.C.**  
 3300 N. Ridge Road, Suite 235  
 Ellicott City, MD 21043-3305  
 (410) 461-0079  
 Fax: (410) 750-6340



Project	94027.00	Date	11/01/94
Illustration	JLG/BLP	Engineering	TIP
Scale	1" = 50'	Approval	RMK

Author	G/S JAC	Date	11/17/94
Checked	A/DP/BS	Revisions	
Reviewed	1/16/95	DESCRIPTION	
1st Submittal	1/16/95	TO HOWARD COUNTY DPZ	
2nd Submittal	2/1/95		
3rd Submittal	2/1/95		

PHASE 4  
**ASHLEIGH KNOLLS**  
 ELECTION DISTRICT No. 5  
 HOWARD COUNTY, MARYLAND  
**GRADING AND SEDIMENT CONTROL PLAN**

**R.M. MOCHI GROUP, P.C.**  
 3300 N. Ridge Road, Suite 235  
 Ellicott City, MD 21043-3305  
 (410) 461-0079  
 Fax: (410) 750-6340

**OWNER/DEVELOPER**  
 WINCHESTER HOMES, INC.  
 6305 Ivy Lane, Suite 800  
 Greenbelt, Maryland 20770  
 (301) 474-4411  
 Attn: Mr. Keith Kubista

**ENGINEER**  
 R.M. MOCHI GROUP, P.C.  
 3300 North Ridge Road, Suite 235  
 Ellicott City, Maryland 21043  
 (410) 461-0079  
 Attn: Mr. Robert M. Mochi, P.E.

**SEDIMENT TRAP NO. 4**  
**SEDIMENT TRAP TYPE ST. I (MODIFIED)**

INITIAL DRAINAGE AREA = 7.1 AC.  
 FINAL DRAINAGE AREA = 7.4 AC.  
 REQUIRED STORAGE = 13,910 CU. FT.  
 STORAGE PROVIDED = 20,502 CU. FT.  
 BOTTOM DIMENSIONS = SEE PLAN  
 STORAGE DEPTH = 2.7  
 BOTTOM ELEVATION = 498.0  
 RISER CREST ELEVATION = 499.0  
 EX. GROUND AT EMBANKMENT = 491.5  
 TOP OF EMBANKMENT = 495.0  
 CLEAN OUT ELEVATION = 490.0  
 SIDE SLOPES = 2:1  
 2 YR SWM CRIFCE ELEV. = 499.7  
 (SEE PIPE PROFILE, SHEET 10 OF 12)

**PRESERVATION PARCEL B**  
**SEDIMENT TRAP NO. 3**  
**SEDIMENT TRAP TYPE ST. V**

INITIAL DRAINAGE AREA = 4.1 AC.±  
 FINAL DRAINAGE AREA = 3.1 AC.±  
 REQUIRED STORAGE = 7300 CU. FT.  
 STORAGE PROVIDED = 7912 CU. FT.  
 BOTTOM DIMENSIONS = 15' x 40'  
 STORAGE DEPTH = 4 FT.  
 BOTTOM ELEVATION = 474.5  
 CREST ELEVATION = 474.5  
 EX. GROUND AT EMBANKMENT = 475.9  
 TOP OF EMBANKMENT = 475.9  
 CLEAN OUT ELEVATION = 471.9  
 SIDE SLOPES = 2:1  
 WEIR LENGTH = 18 FT.

1669

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*[Signature]* 5/16/95  
 CHIEF, LAND DEVELOPMENT DIVISION DATE

*[Signature]* 5-12-95  
 CHIEF, BUREAU OF HIGHWAYS DATE

*[Signature]* 5/16/95  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*[Signature]* 5/19/95  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

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

*[Signature]* 5/2/95  
 CHIEF, HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*[Signature]* 5/2/95  
 CHIEF, NATURAL RESOURCES CONSERVATION SERVICE DATE

**DEVELOPER'S CERTIFICATE**

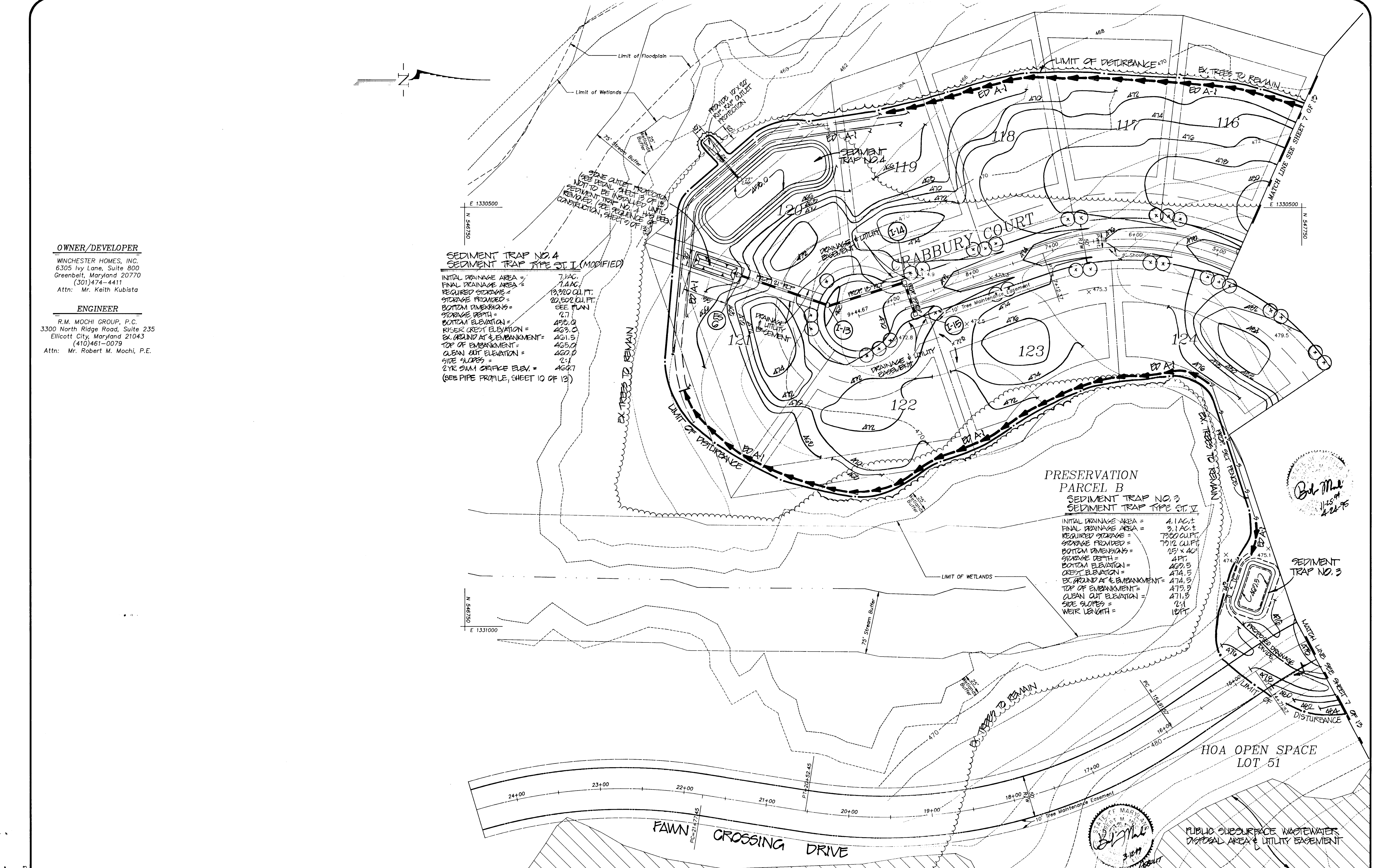
I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.

*[Signature]* 11-16-94  
 Signature of Developer Date

**ENGINEER'S CERTIFICATE**

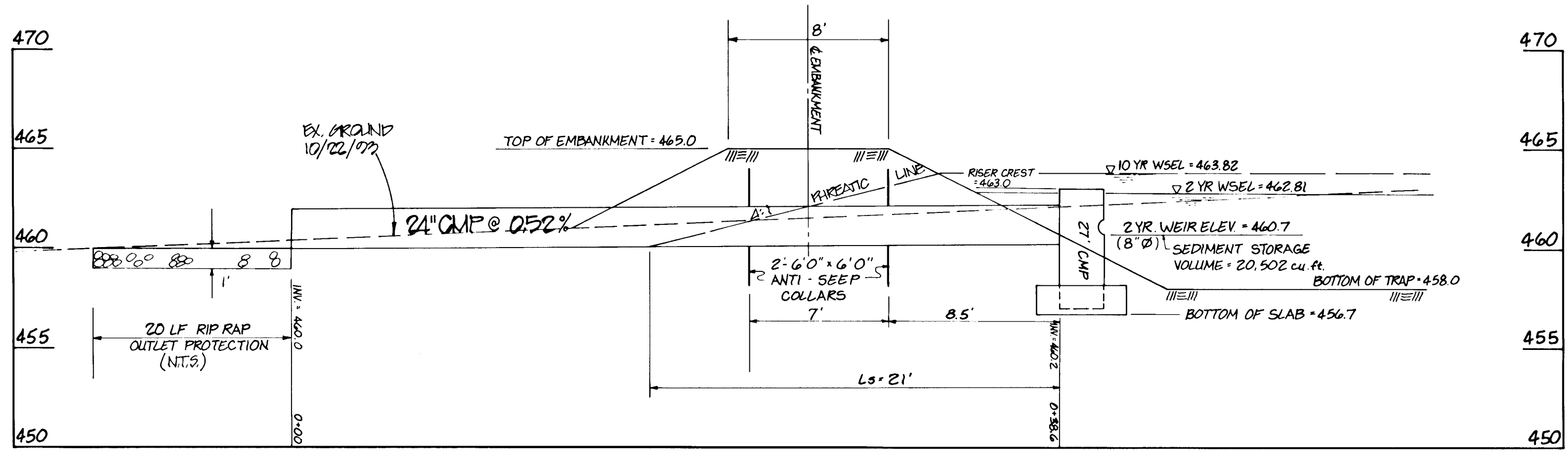
I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.

*[Signature]* 11-25-94  
 Robert M. Mochi, P.E. Date



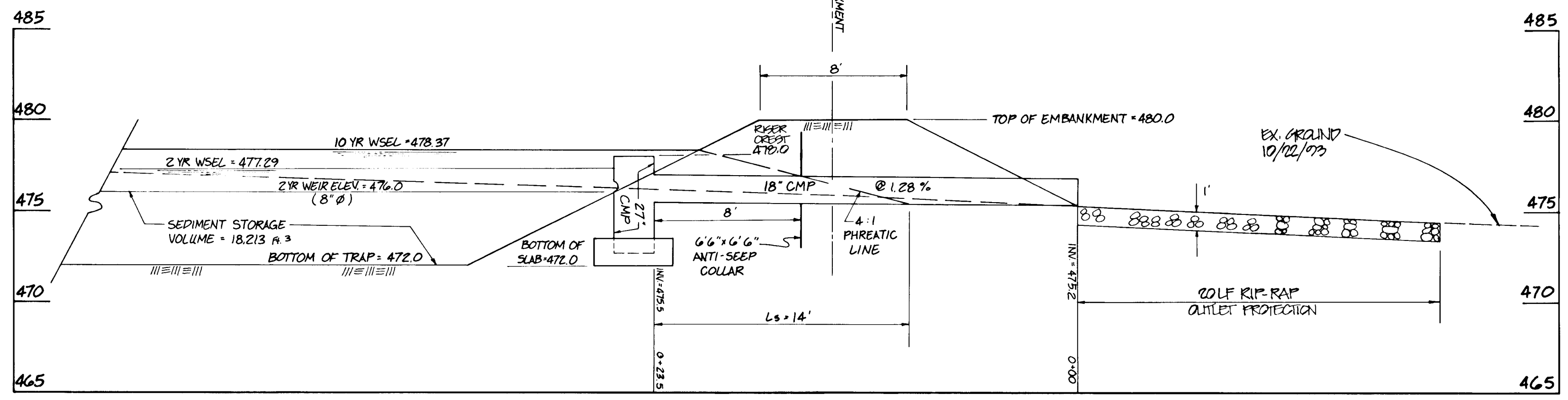






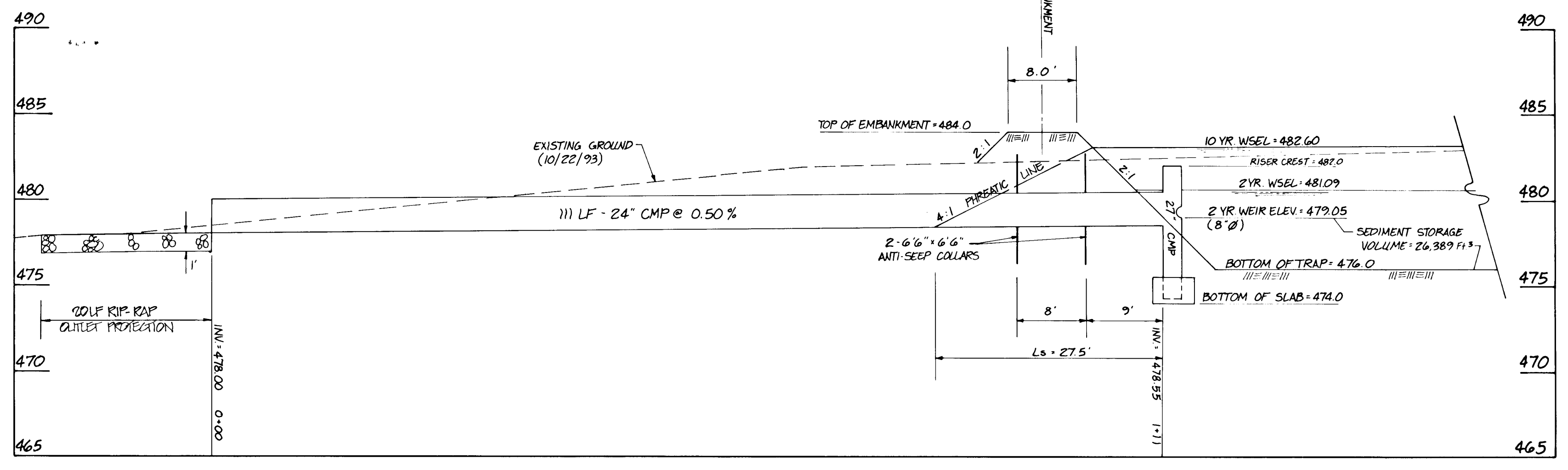
PRINCIPAL SPILLWAY PROFILE-PIPE OUTLET SEDIMENT TRAP No. 4

HORIZ. : 1" = 5'  
VERT. : 1" = 5'



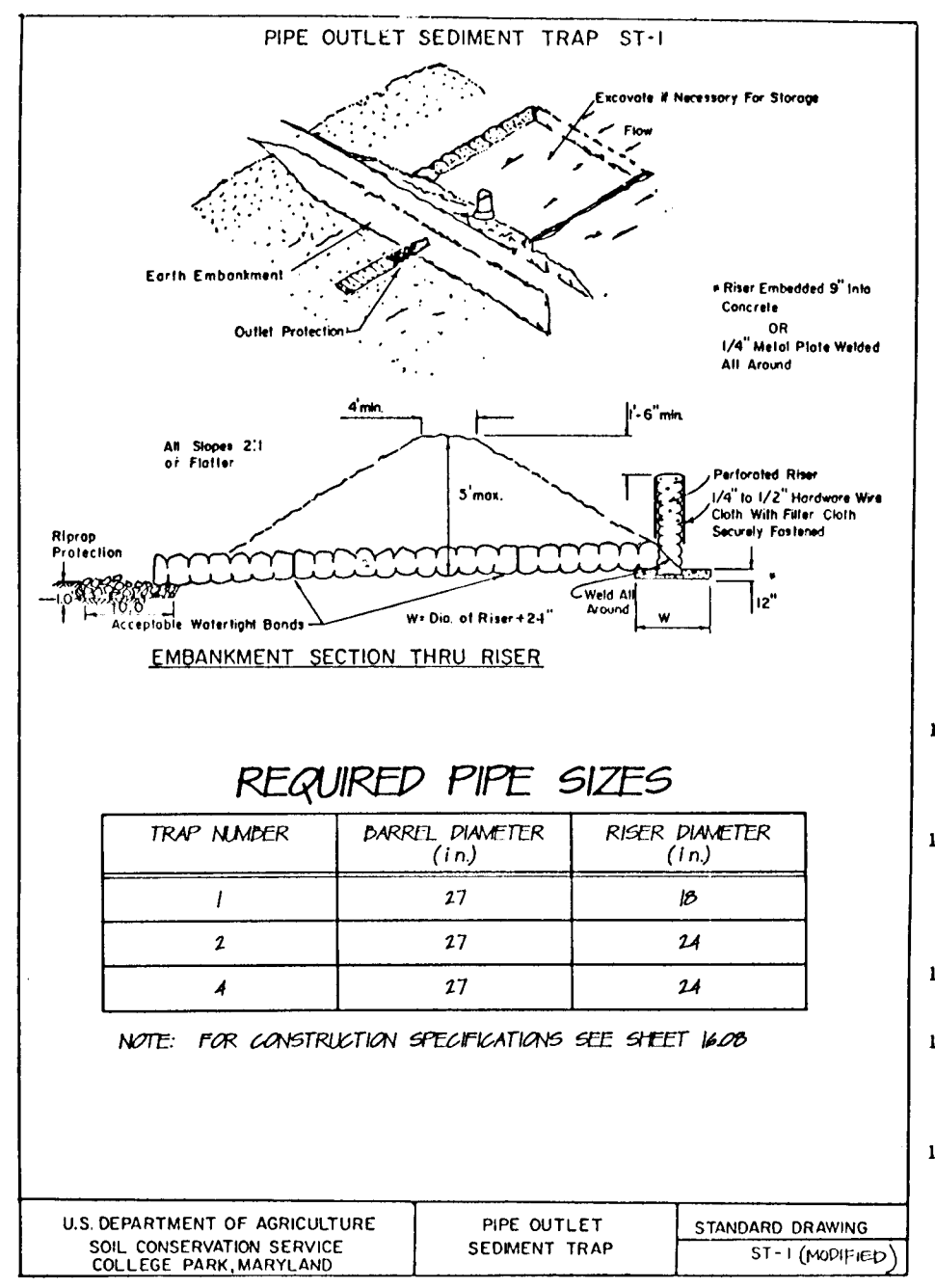
PRINCIPAL SPILLWAY PROFILE-PIPE OUTLET SEDIMENT TRAP No. 1

HORIZ. : 1" = 5'  
VERT. : 1" = 5'

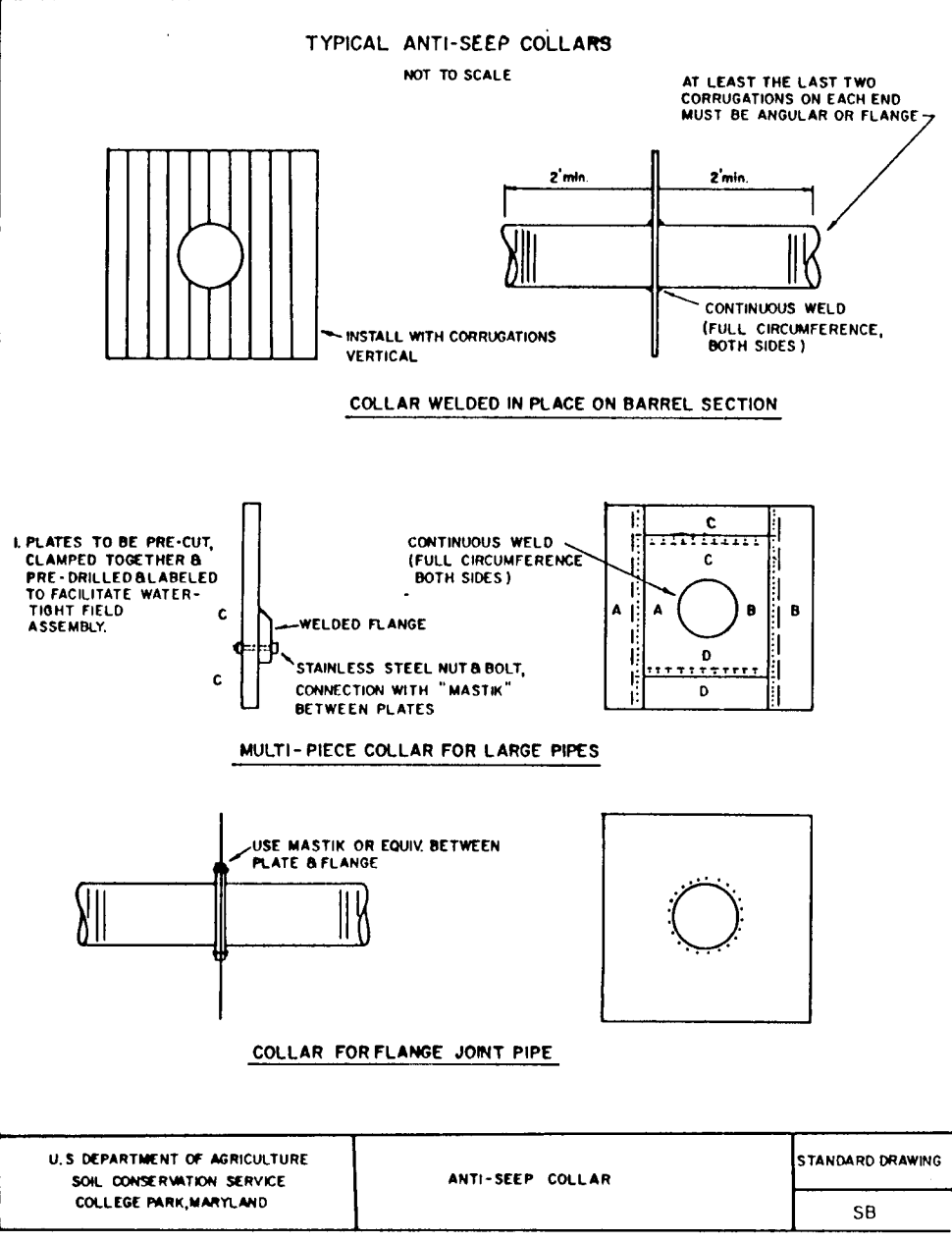


PRINCIPAL SPILLWAY PROFILE-PIPE OUTLET SEDIMENT TRAP No. 2

HORIZ. : 1" = 10'  
VERT. : 1" = 5'



- Pipe Outlet Trap CONSTRUCTION SPECIFICATION FOR ST-1
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
  - The fill material for the embankment shall be free of roots or other woody vegetation as well as oversized stones, rocks, organic material, or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
  - Volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
  - Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
  - 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 are minimized.
  - The structure shall be removed and area stabilized when the drainage area has been properly stabilized.
  - All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
  - All pipe connections shall be watertight.
  - The top 2/3 of the riser shall be perforated with one (1) inch diameter holes or slits spaced six (6) inches vertically and horizontally and placed in the concrete portion of pipe. No holes will be allowed within six (6) inches of the horizontal barrel.
  - The riser shall be wrapped with 1/4 to 1/2 inch hardware cloth wire then wrapped with filter cloth (having an equivalent sieve size of 40 - 80). The filter cloth shall extend six (6) inches above the highest hole and six (6) inches below the lowest hole. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent bypass.
  - Straps or connecting bands shall be used to hold the filter cloth and wire fabric in place. They shall be placed at the top and bottom of the cloth.
  - Fill material around the pipe spillway shall be hand compacted in four (4) inch layers. A minimum of two (2) feet of hand-compacted backfill shall be placed over the pipe spillway before closing it with construction equipment.
  - The riser shall be anchored with either a concrete base or steel plate base to prevent flotation. For concrete bases the depth shall be 12 inches with the riser embedded nine (9) inches. A 1/4 inch minimum thickness steel plate shall be attached to the riser by a continuous weld around the bottom to form a watertight connection and then place two (2) feet of stone, gravel, or tamped earth on the plate.



Project	94027.00	Date	11/10/94
Illustration	Engineering	Approval	RAM
Log/BLP	TJP	Scale	AS NOTED

Date	4/09/95
Date	2/10/95
Date	1/17/94
Description	REVISED TO PER PER SUBMITTALS
Description	REVISED PER VARIOUS SAC COMMENTS
Description	1ST SUBMITTAL TO HOWARD COUNTY DEP.
NO.	0

PHASE 4  
ASHLEIGH KNOLLS  
HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 5  
GRADING & SEDIMENT CONTROL - PROFILES & DETAILS



OWNER/DEVELOPER  
WINCHESTER HOMES, INC.  
6305 Ivy Lane, Suite 800  
Greenbelt, Maryland 20770  
(301)474-4411  
Attn: Mr. Keith Kubista

ENGINEER  
R.M. MOCHI GROUP, P.C.  
3300 North Ridge Road, Suite 235  
Ellicott City, Maryland 21043  
(410)461-0079  
Attn: Mr. Robert M. Mochi, P.E.

16691

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
[Signature] 5/16/95  
[Signature] 5/12/95  
[Signature] 5/16/95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
[Signature] 5/19/95

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
[Signature] 5/2/95

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
[Signature] 5/2/95

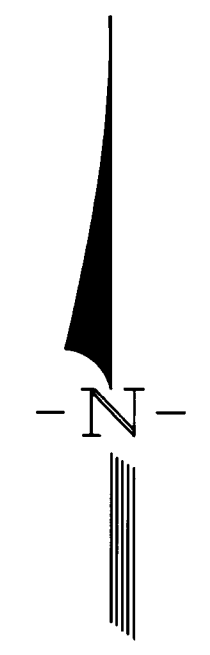
DEVELOPER'S CERTIFICATE  
I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.  
[Signature] 5/16/94

ENGINEER'S CERTIFICATE  
I hereby 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.  
[Signature] 5/16/95

R.M. MOCHI GROUP, P.C.  
3300 N. Ridge Road, Suite 235  
Ellicott City, MD 21043-3505  
(410) 461-0079  
Fax: (410) 750-6340



**PLAN**  
SCALE: 1" = 200'



Project	94027.00	Date	10/27/94
Illustration	LIG/BLP	Engineering	TUP
Scale	1" = 200'	Approval	BMM

no.	1	description	REVISED PER NO. 02, DTG 4/10/95	date	4/10/95
no.	2	description	REVISION TO NO. 1, DTG 5/11/95	date	5/11/95
no.	3	description	REV. SUBMITTAL TO HOWARD COUNTY, MD	date	11/17/94

PHASE 4  
**ASHLEIGH KNOLLS**  
ELECTION DISTRICT No. 5  
SECTION 2 AREA 1  
DRAINAGE AREA MAP  
HOWARD COUNTY, MARYLAND



**OWNER/DEVELOPER**  
WINCHESTER HOMES, INC.  
6305 Ivy Lane, Suite 800  
Greenbelt, Maryland 21043  
(301)474-4411  
Attn: Mr. Keith Kubista

**ENGINEER**  
R.M. MOCHI GROUP, P.C.  
3300 North Ridge Road, Suite 235  
Ellicott City, Maryland 21043  
(410)461-0079  
Attn: Mr. Robert M. Mochi, P.E.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
  
 DATE: 5/16/95  
 Andrew M. Daniels  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 5/16/95  
 DATE: 5/16/95  
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
  
 DATE: 5/19/95  
 DATE: 5/19/95  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
  
 DATE: 5/2/95  
 JOHN R. ROBERTSON  
 CHIEF, SOIL CONSERVATION DISTRICT

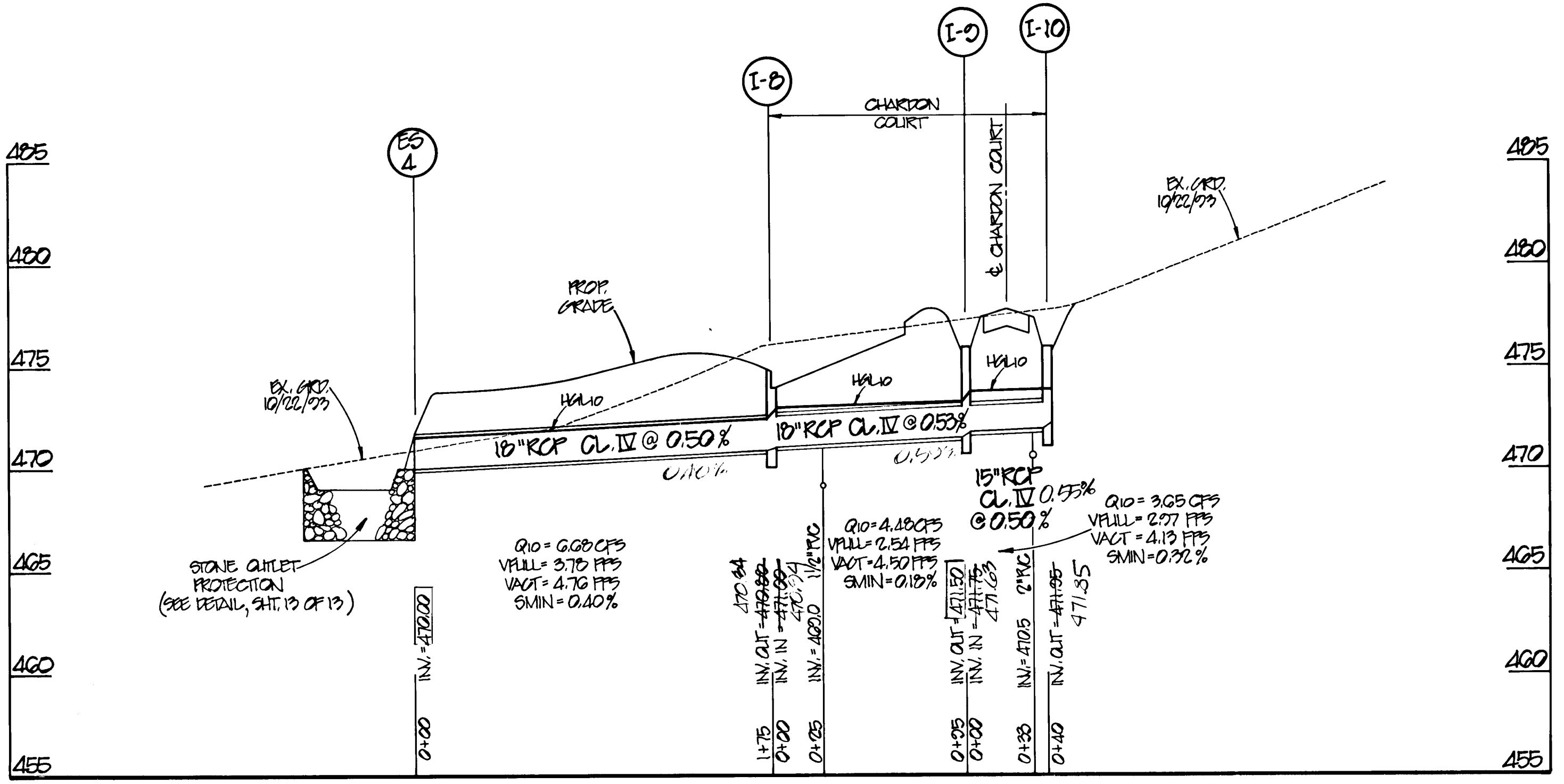
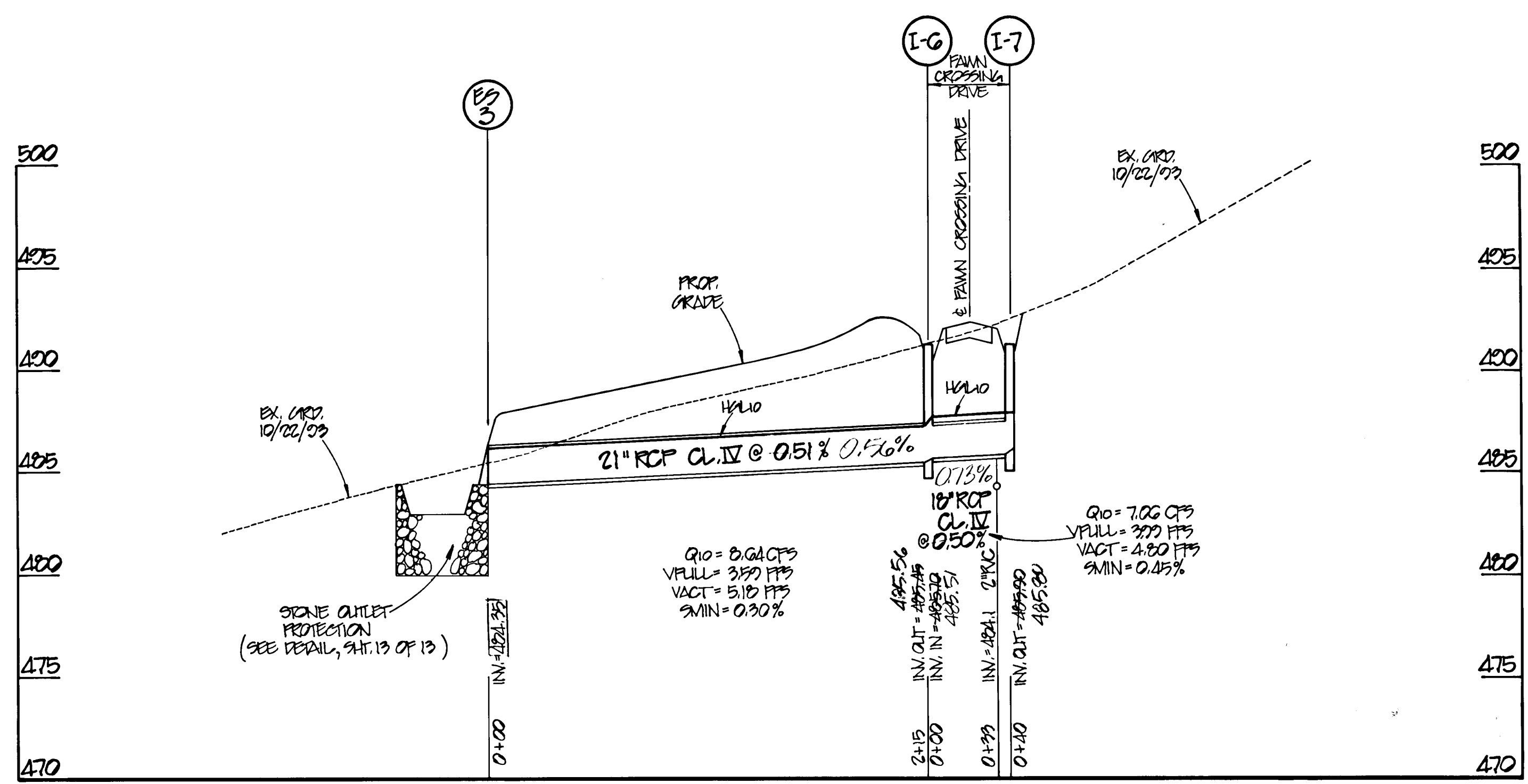
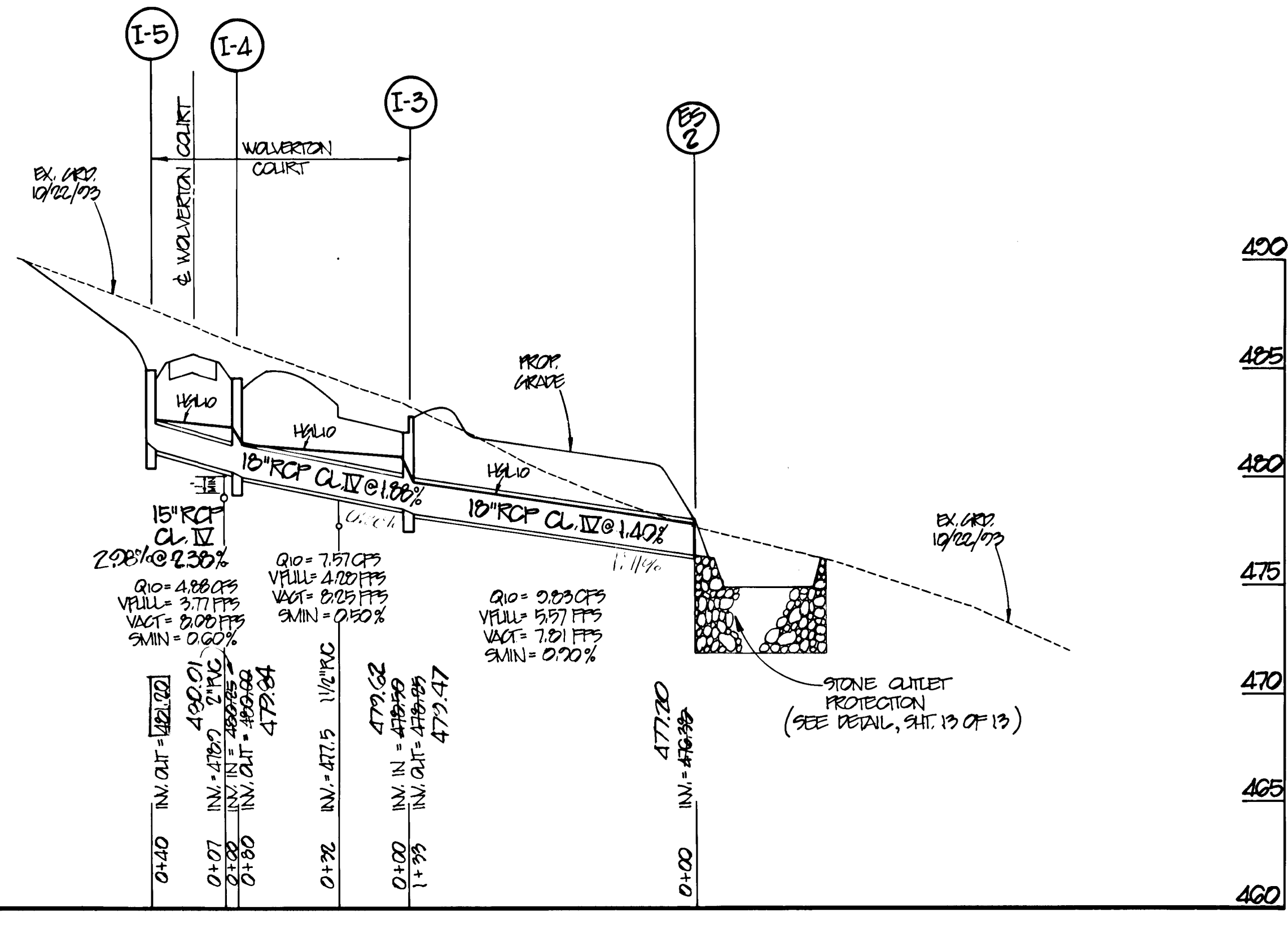
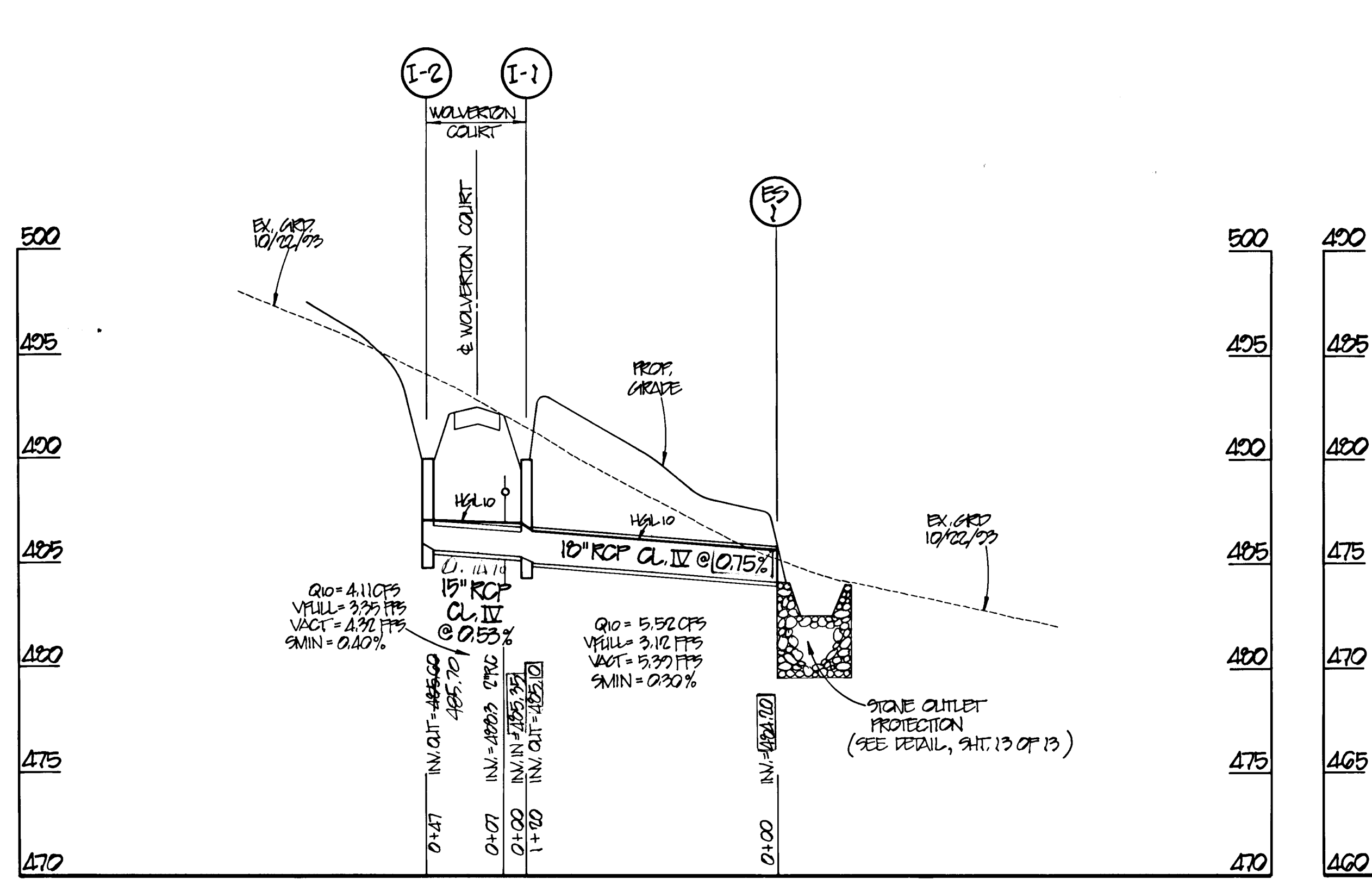
APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
  
 DATE: 5/2/95  
 PATRICIA ENGLER  
 SUPERVISOR, SOIL CONSERVATION SERVICE

**DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.  
  
 DATE: 11-16-94  
 Signature of Developer

**ENGINEER'S CERTIFICATE**  
 I hereby 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.  
  
 DATE: 11-25-94  
 Robert M. Mochi, P.E.

1669

R.M. MOCHI GROUP, P.C.  
 3300 N. Ridge Road, Suite 235  
 Ellicott City, MD 21043-5305  
 (410) 461-0079  
 Fax: (410) 750-6340



PROFILE  
 SCALE: 1" = 50' horiz.  
 1" = 5' vert.



OWNER/DEVELOPER  
 WINCHESTER HOMES, INC.  
 6305 Ivy Lane, Suite 800  
 Greenbelt, Maryland 20770  
 (301)474-4411  
 Attn: Mr. Keith Kubista

ENGINEER  
 R.M. MOCHI GROUP, P.C.  
 3300 North Ridge Road, Suite 235  
 Ellicott City, Maryland 21043  
 (410)461-0079  
 Attn: Mr. Robert M. Mochi, P.E.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 [Signature] 5/16/95  
 [Signature] 5-12-95  
 [Signature] 5/16/95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 [Signature] 5/17/95  
 [Signature]

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
 [Signature] 5/2/95  
 [Signature]

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
 [Signature] 5/2/95  
 [Signature]

DEVELOPER'S CERTIFICATE  
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.  
 [Signature] 11-16-94  
 [Signature]

ENGINEER'S CERTIFICATE  
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 [Signature] 11-25-94  
 [Signature]

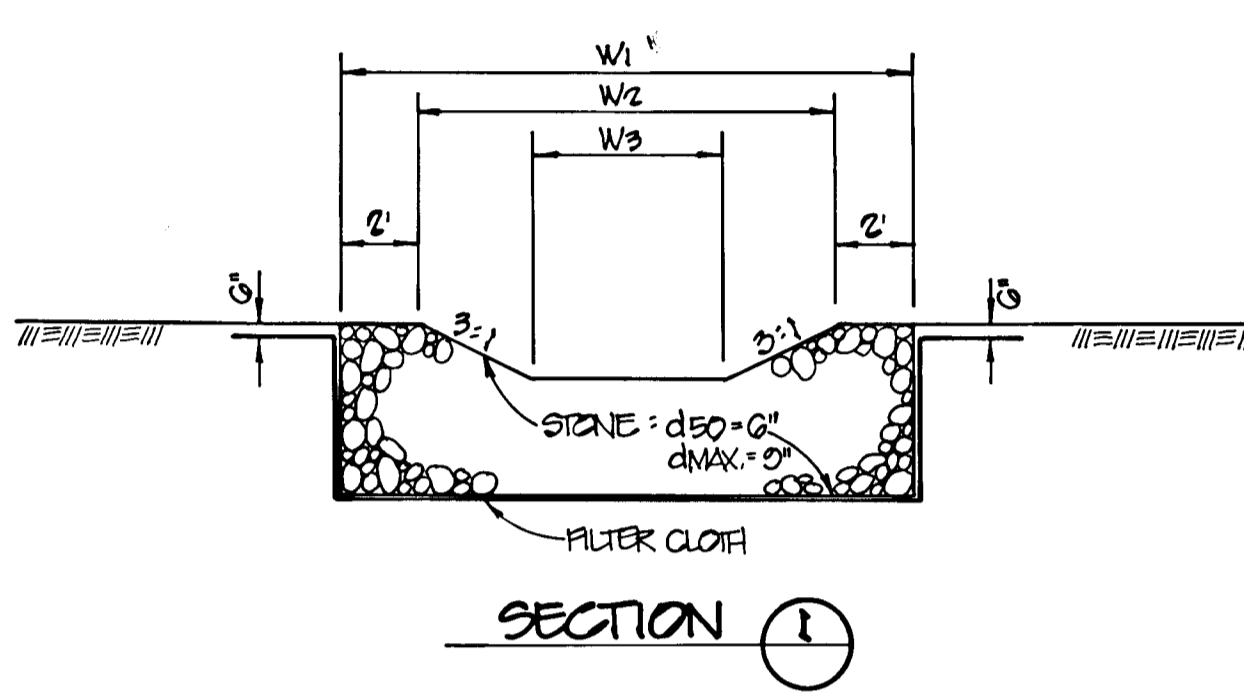
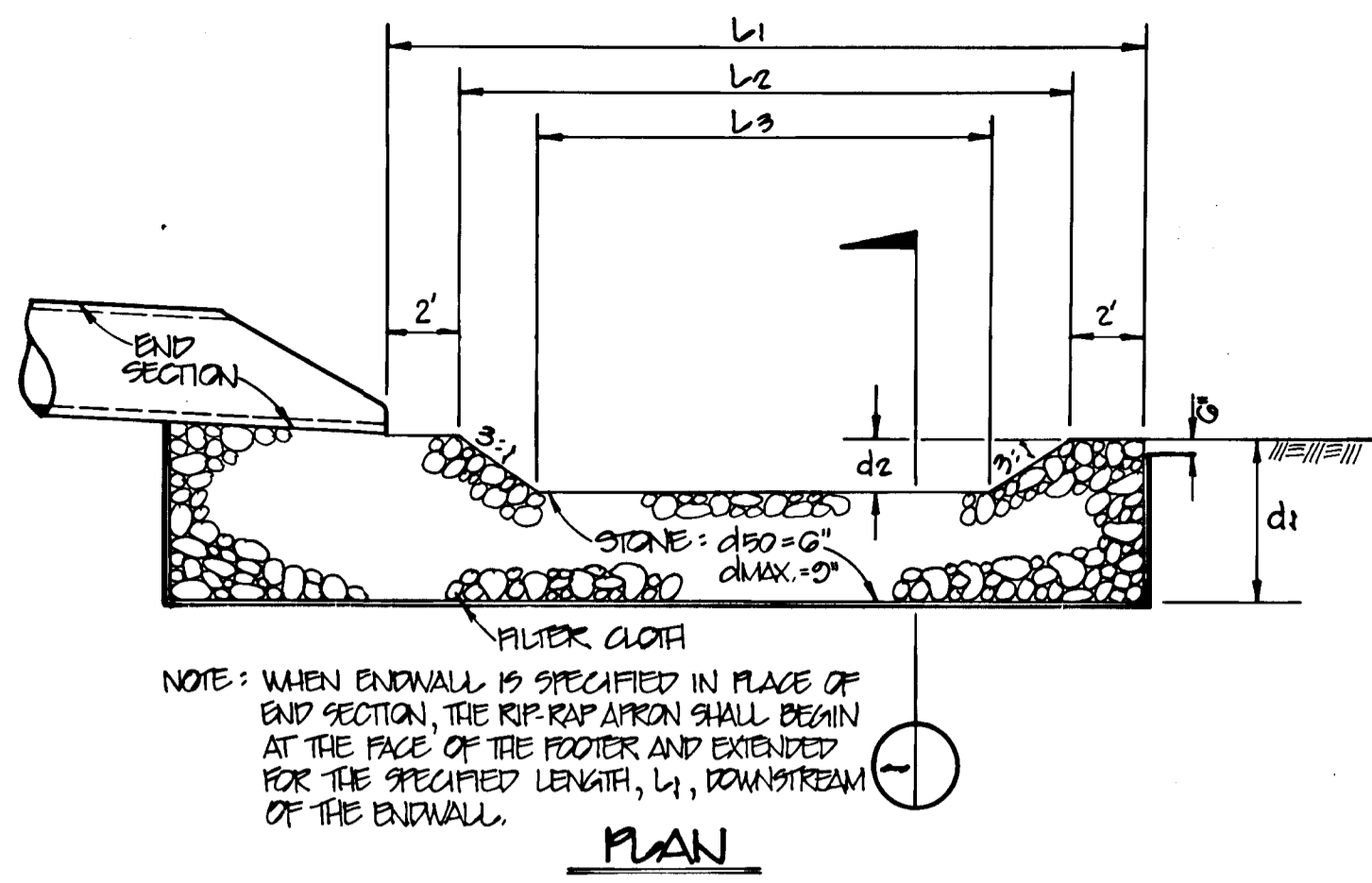
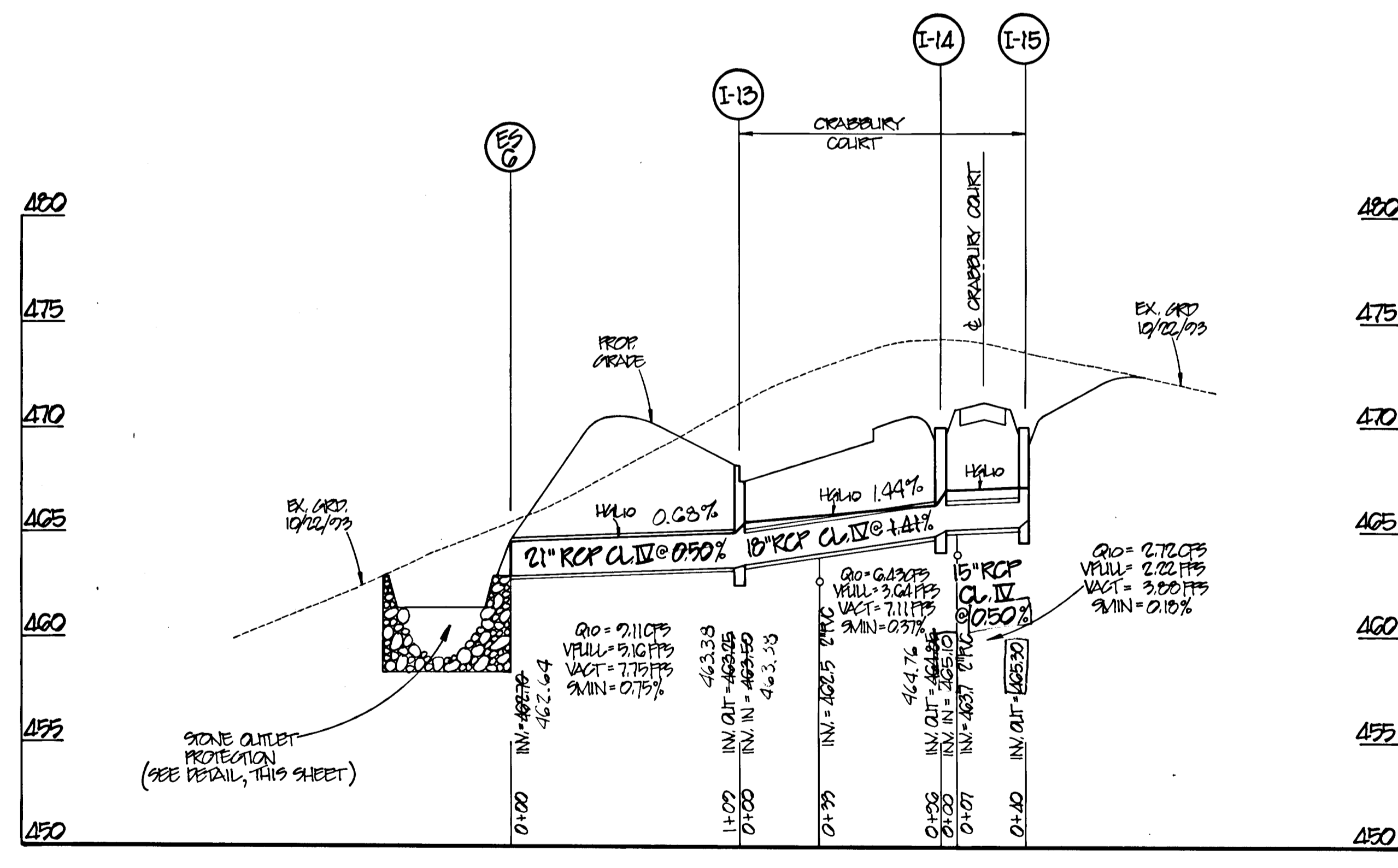
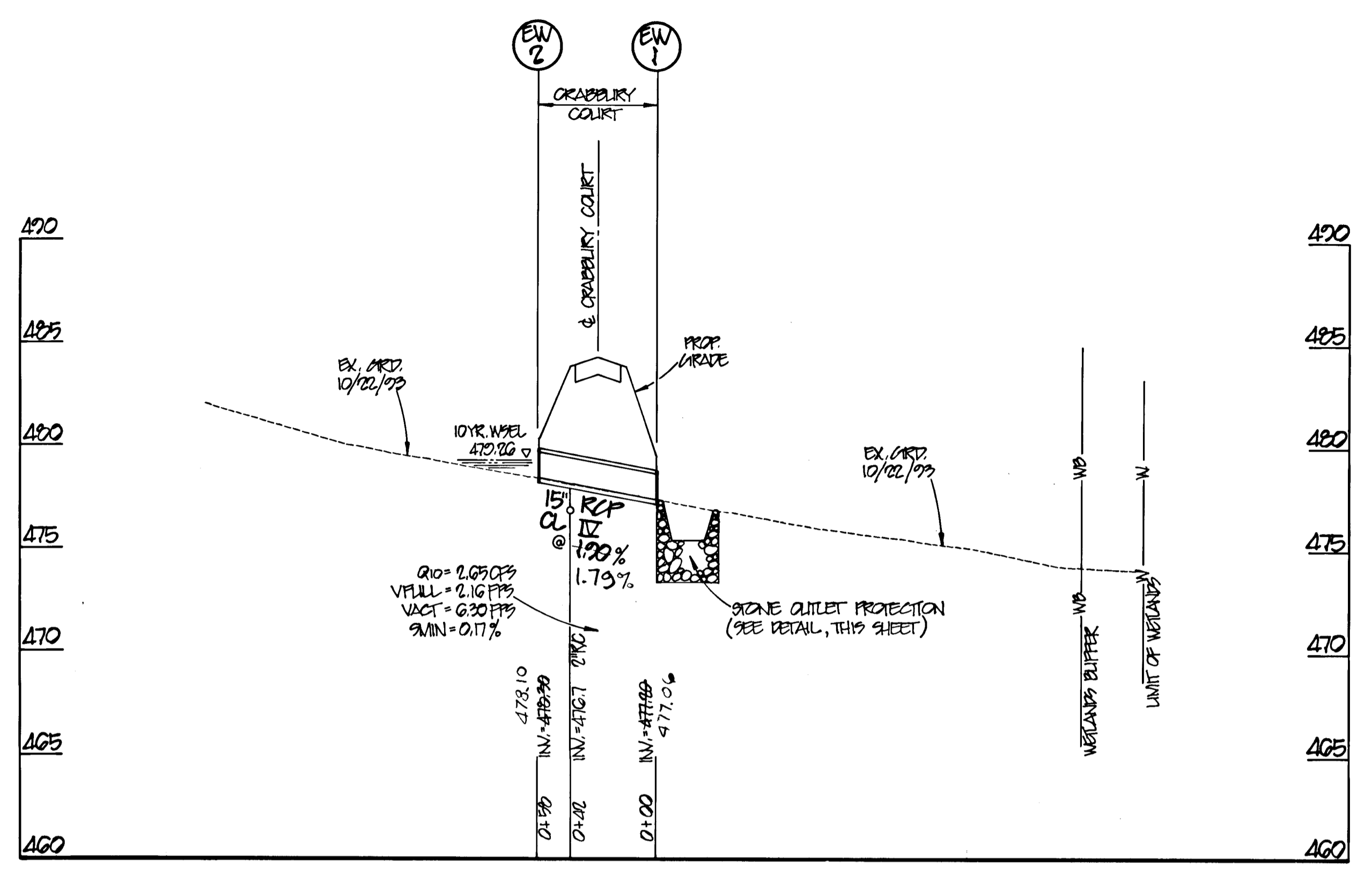
1699

Project	94027.00	Date	11/9/94
Illustration	BLP	TYP	engineering
Scale	as shown	approval	

Revised	11/17/94	By	BLP	For	11/17/94
Revised	11/17/94	By	BLP	For	11/17/94
Revised	11/17/94	By	BLP	For	11/17/94

PHASE 4  
 ASHLEIGH KNOLLS  
 ELECTION DISTRICT No. 5  
 HOWARD COUNTY, MARYLAND

STORM DRAIN PROFILES  
 R.M. MOCHI GROUP, P.C.  
 3300 N. Ridge Road, Suite 235  
 Ellicott City, MD 21043-3305  
 (410) 461-0079  
 Fax: (410) 750-6340  
 12 OF 13  
 F95-60



STONE OUTLET PROTECTION DETAIL  
NOT TO SCALE

STRUCTURE NO.	L1	L2	L3	W1	W2	W3	d1	d2
ES-1	30'	20'	17'	20'	16'	7'	4.5'	1.5'
ES-2	55'	51'	42'	20'	16'	7'	4.5'	1.5'
ES-3	40'	36'	27'	20'	16'	7'	4.5'	1.5'
ES-4	30'	26'	27'	20'	16'	7'	3.5'	1.5'
EW-1	30'	26'	17'	20'	16'	7'	3.5'	1.5'
EW-6	55'	51'	42'	20'	16'	7'	4.5'	1.5'



1. SIGN SHALL BE PLACED 2 FT. FROM OUTSIDE EDGE OF PAVED SHOULDER AT LOCATIONS INDICATED ON PLAN.
2. SIGN SHALL MATCH SPECIFICATIONS FOR SIGN TYPE R7-1 AS DETAILED IN MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION.

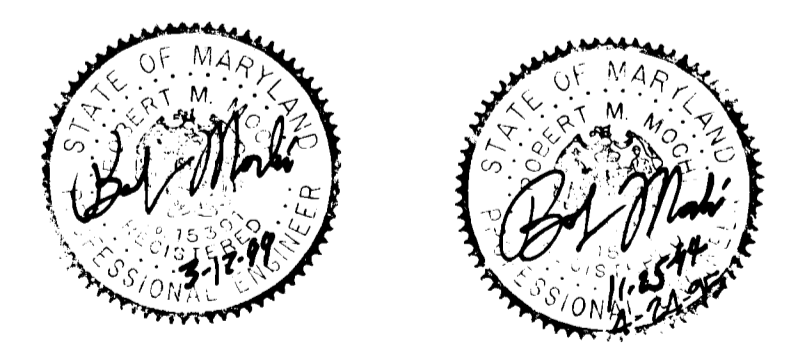
NO PARKING SIGN DETAIL  
NOT TO SCALE

PROFILE

SCALE: 1" = 50' horiz.  
1" = 5' vert.

STRUCTURE SCHEDULE				
NO.	TYPE	LOCATION	ELEVATION	REMARKS
ES-1	END SECTION 18" RCP	N 548,706.27 E 1,320,247.91	INV. = 482.22	90 5.51
ES-2	END SECTION 18" RCP	N 548,099.09 E 1,320,500.92	INV. = 475.30	90 5.51
ES-3	END SECTION 21" RCP	N 548,807.61 E 1,320,498.93	INV. = 484.35	90 5.51
ES-4	END SECTION 18" RCP	N 547,970.57 E 1,320,291.00	INV. = 470.00	90 5.51
ES-6	END SECTION 18" RCP	N 547,050.86 E 1,320,524.97	INV. = 462.70	90 5.51
I-1	"K" INLET	2+22.30 WOLVERTON CT. 9% 23.5' LT.	NOTCH = 488.70	90 4.12
I-2	"K" INLET	2+22.30 WOLVERTON CT. 9% 23.5' RT.	NOTCH = 488.70	90 4.12
I-3	"A-10" INLET	1P 92A, 0+05.93 WOLVERTON CT. 9% 1.5' RT.	TC = 482.62	90 4.02
I-4	"K" INLET	2+30.00 WOLVERTON CT. 9% 20' LT.	NOTCH = 489.83	90 4.12
I-5	"K" INLET	2+30.00 WOLVERTON CT. 9% 20' RT.	NOTCH = 489.83	90 4.12
I-6	"K" INLET	2+76.45 PAIN CROSSING DRIVE 9% 20' RT.	NOTCH = 489.80	90 4.12
I-7	"K" INLET	2+76.45 PAIN CROSSING DRIVE 9% 20' LT.	NOTCH = 489.80	90 4.12
I-8	"A-10" INLET	1P 92A, 0+05.93 CHARLTON CT. 9% 0.0'	TC = 474.74	90 4.02
I-9	"K" INLET	5+22.00 CHARLTON CT. 9% 20' RT.	NOTCH = 475.67	90 4.12
I-10	"K" INLET	5+22.00 CHARLTON CT. 9% 20' LT.	NOTCH = 475.67	90 4.12
EW-1	TYPE "C" ENDWALL	1+09.00 CRABBEURY CT. 9% 20' LT.	INV. = 477.00	90 5.21
EW-2	TYPE "C" ENDWALL	1+09.00 CRABBEURY CT. 9% 20' RT.	INV. = 478.90	90 5.21
I-13	"A-10" INLET	1P 1+02.91 CRABBEURY CT. 9% 0.0'	TC = 469.26	90 4.02
I-14	"K" INLET	2+80.00 CRABBEURY CT. 9% 20' RT.	NOTCH = 468.95	90 4.12
I-15	"K" INLET	2+80.00 CRABBEURY CT. 9% 20' LT.	NOTCH = 468.95	90 4.12

1. ALL STANDARDS REFER TO HOWARD COUNTY STANDARD DETAILS UNLESS OTHERWISE NOTED.
2. % TO & OF STRUCTURE, INDICATED IN TABLE.



OWNER/DEVELOPER  
WINCHESTER HOMES, INC.  
6305 Ivy Lane, Suite 800  
Greenbelt, Maryland 20770  
(301)474-4411  
Attn: Mr. Keith Kubista

ENGINEER  
R.M. MOCHI GROUP, P.C.  
3300 North Ridge Road, Suite 235  
Ellicott City, Maryland 21043  
(410)461-0079  
Attn: Mr. Robert M. Mochi, P.E.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*John M. Damasco* 5/16/95  
CHIEF, LAND DEVELOPMENT DIVISION  
*Andrew M. Damasco* 5-12-95  
CHIEF, BUREAU OF HIGHWAYS  
*Robert J. Gannon* 5/16/95  
CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Aime Swinmank* 5/19/95  
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
*John P. Kubista* 5/2/95  
HOWARD COUNTY SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*Patricia Engler* 5/2/95  
U.S. NATURAL RESOURCES CONSERVATION SERVICE

DEVELOPER'S CERTIFICATE  
I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.  
*Keith Kubista* 11-12-94  
Signature of Developer Date

ENGINEER'S CERTIFICATE  
I hereby 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.  
*Robert M. Mochi* 11-25-94  
Robert M. Mochi, P.E. Date

project	date	as shown
94027.00	11/3/94	BMM
illustration	engineering	
BLP	TIP	
scale	approval	

no.	date	description	revisions
4	6/16/95	REVISED PER 10.00 D.P.C. SUBMITTED TO THE HOWARD COUNTY DEPT. OF PUBLIC WORKS FOR REVIEW PER 1/16/95 PER LOCAL ORDINANCE 1ST SUBMITTAL TO HOWARD COUNTY DEPT.	
3	4/17/95		
2	6/10/94		
1	11/17/94		

PHASE 4  
ASHLEIGH KNOLLS  
ELECTION DISTRICT No. 5  
HOWARD COUNTY, MARYLAND  
STORM DRAIN PROFILES, NOTES & DETAILS

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Ellicott City, MD 21043-3365  
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