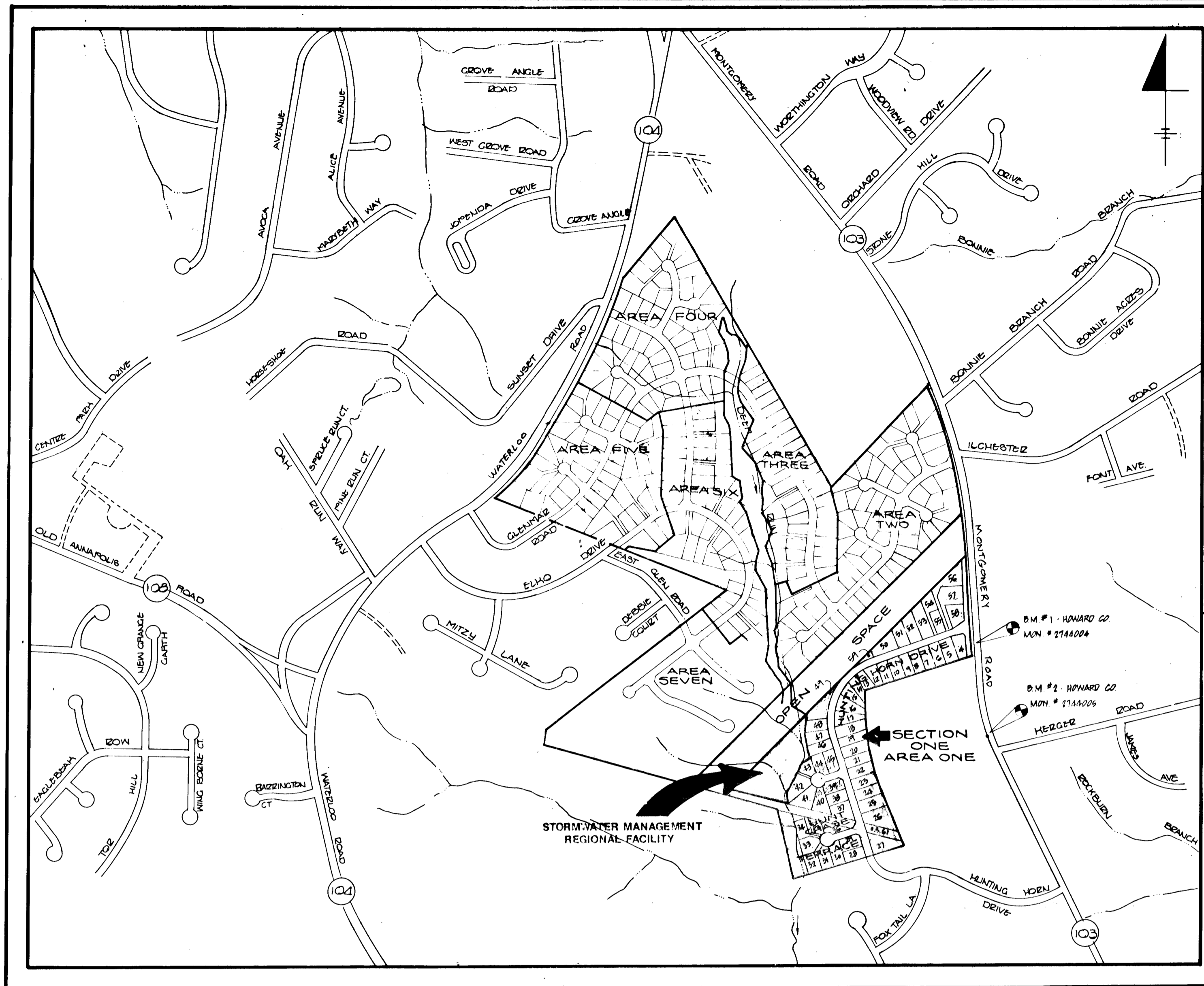
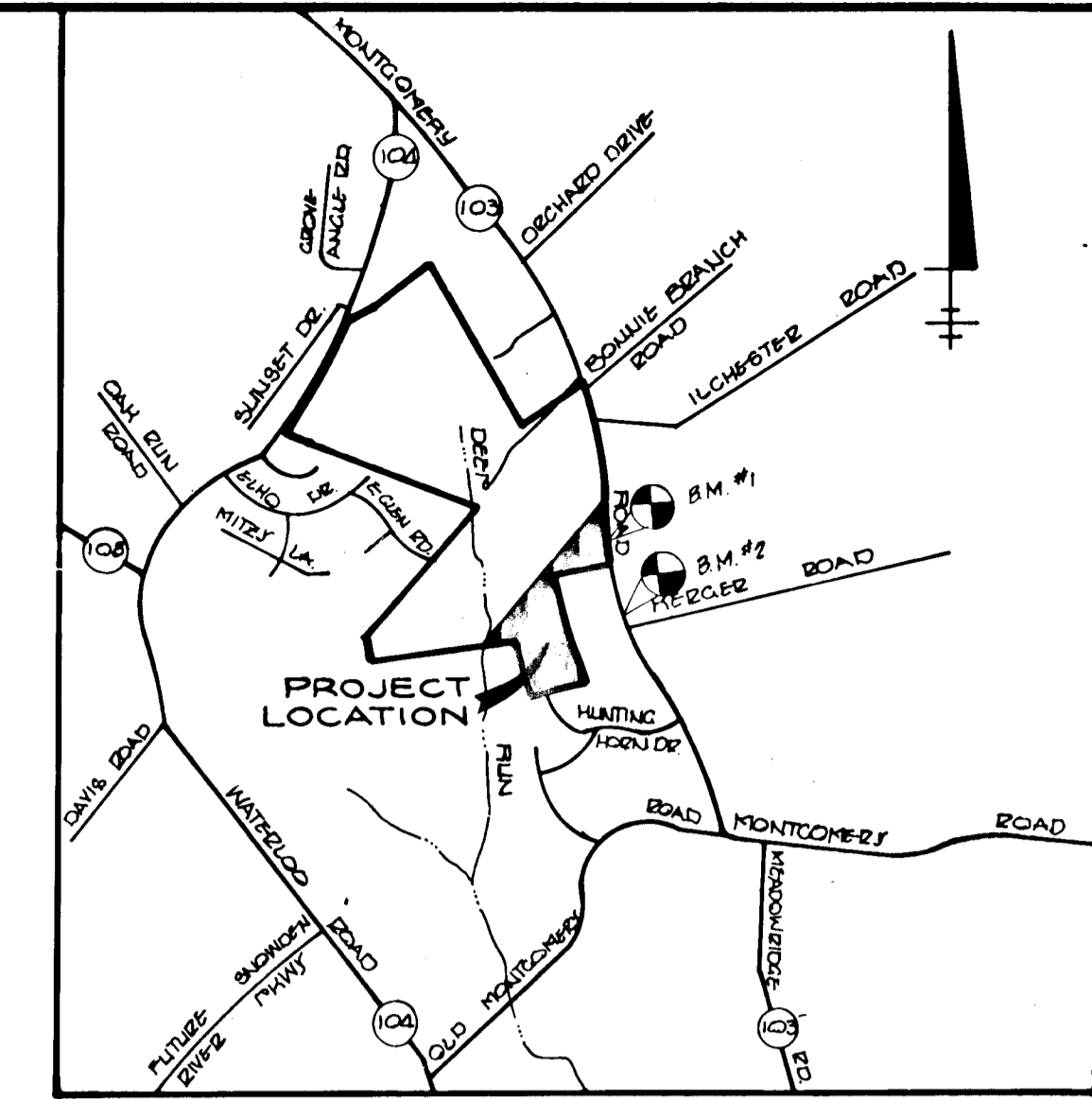


INDEX OF SHEETS	
SHEET NO.	TITLE
1	TITLE SHEET
2	PLAN AND PROFILE - MARYLAND ROUTE 103 (MONTGOMERY ROAD), DETAILS
3	PLAN AND PROFILE - HUNTING HORN DRIVE
4	PLAN AND PROFILE - HUNTING HORN DRIVE
5	PLAN AND PROFILE - HUNTING HORN DRIVE, HUNT CHASE TERRACE, DETAILS
6	DRAINAGE AREA MAP, SOILS MAP, STORM DRAIN PROFILE AND DETAILS
7	STORM DRAIN PROFILES
8	GRADING AND SEDIMENT CONTROL PLAN, DRAINAGE AREA MAP, LANDSCAPE
9	GRADING AND SEDIMENT CONTROL PLAN, DRAINAGE AREA MAP, LANDSCAPE
10	GRADING AND SEDIMENT CONTROL PLAN, DRAINAGE AREA MAP, LANDSCAPE
11	TEMPORARY STORMWATER BASIN PROFILES
12	SEDIMENT CONTROL DETAILS



LOCATION MAP  
SCALE: 1" = 600'



VICINITY MAP  
SCALE: 1" = 2000'

GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- ALL UTILITY COMPANIES MUST BE NOTIFIED 24HRS IN ADVANCE OF ANY CONSTRUCTION.
- STORM DRAINAGE TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION AND SURVEY DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE: 792-7272.
- 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 TO MAINTAIN UNINTERRUPTED SERVICE.
- ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1984 EDITION.
- STREET TREES TO BE PROVIDED AS REQUIRED BY SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- PRIOR TO EXCAVATION IN THE COLONIAL PIPELINE RIGHT-OF-WAY, THE CONTRACTOR SHALL NOTIFY COLONIAL PIPELINE OF CONSTRUCTION ACTIVITY.
- A COLONIAL PIPELINE REPRESENTATIVE SHALL BE ON SITE DURING ALL CONSTRUCTION ACTIVITY WITHIN COLONIAL PIPELINE RIGHT-OF-WAY.
- STAFF NOTIFICATION: 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 393-3533; COLONIAL PIPELINE COMPANY 795-1390; BUREAU OF UTILITIES HOWARD COUNTY 992-2366.
- CLASS OF BEDDING FOR STORM DRAIN SYSTEMS TO BE CLASS 'C' BEDDING.

**INSPECTOR'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 SOIL CONSERVATION DISTRICT.

*Thomas L. Wiley* 5/1/89  
THOMAS L. WILEY, MD REG. NO. 2273 DATE

**DEVELOPER'S CERTIFICATE**  
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND 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 SEDIMENT AND EROSION 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."

*Thomas L. Wiley* 5/1/89  
THOMAS L. WILEY, MD REG. NO. 2273 DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*Thomas L. Wiley* 5/1/89  
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Thomas L. Wiley* 5/1/89  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Thomas L. Wiley* 5/1/89  
CHIEF, LAND DEVELOPMENT DIVISION DATE

*Thomas L. Wiley* 5/1/89  
CHIEF, BUREAU OF HIGHWAY DATE

*Thomas L. Wiley* 5/1/89  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Thomas L. Wiley* 5/1/89  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

# MONTGOMERY MEADOWS

## SECTION ONE AREA ONE

### ROAD CONSTRUCTION DRAWINGS

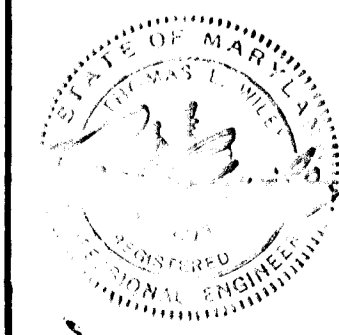
#### 1 ST ELECTION DISTRICT

#### HOWARD COUNTY, MARYLAND

LANDSCAPE		TABULATION			
SYMBOL	NO.	NAME	SIZE	REMARKS	
	191	ACER SACCHARUM (SUGAR MAPLE)	2 1/2" CAL (MIN)	BALLED & BURLAPPED	
	5	QUERCUS PHANEROPHORUM (WASHINGTON HAWTHORN)	2 1/2" CAL (MIN)	BALLED & BURLAPPED	

DESIGNED		DATE		BY		DESCRIPTION	
H. SHIH	5/1/88						
W. E. OWENS	5/1/88						
B. D. BURTON	5/1/88						
T. L. WILEY	5/1/88						

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



**OWNER / DEVELOPER**  
F.G. MARKER CO.  
5900 PRINCESS GARDEN PKWY.  
LANDHAM, MD. 20706  
(301) 459-5586

**TITLE SHEET**  
**MONTGOMERY MEADOWS**  
SECTION ONE AREA ONE  
LOT 4 THRU LOT 61  
TAX MAP 31 PARCEL 423  
1 ST ELECTION DISTRICT HOWARD CO., MARYLAND  
SCALE AS SHOWN PREVIOUS SUBMITTALS FILE NO. SHEET 1 OF 12



ENGINEER'S CERTIFICATE

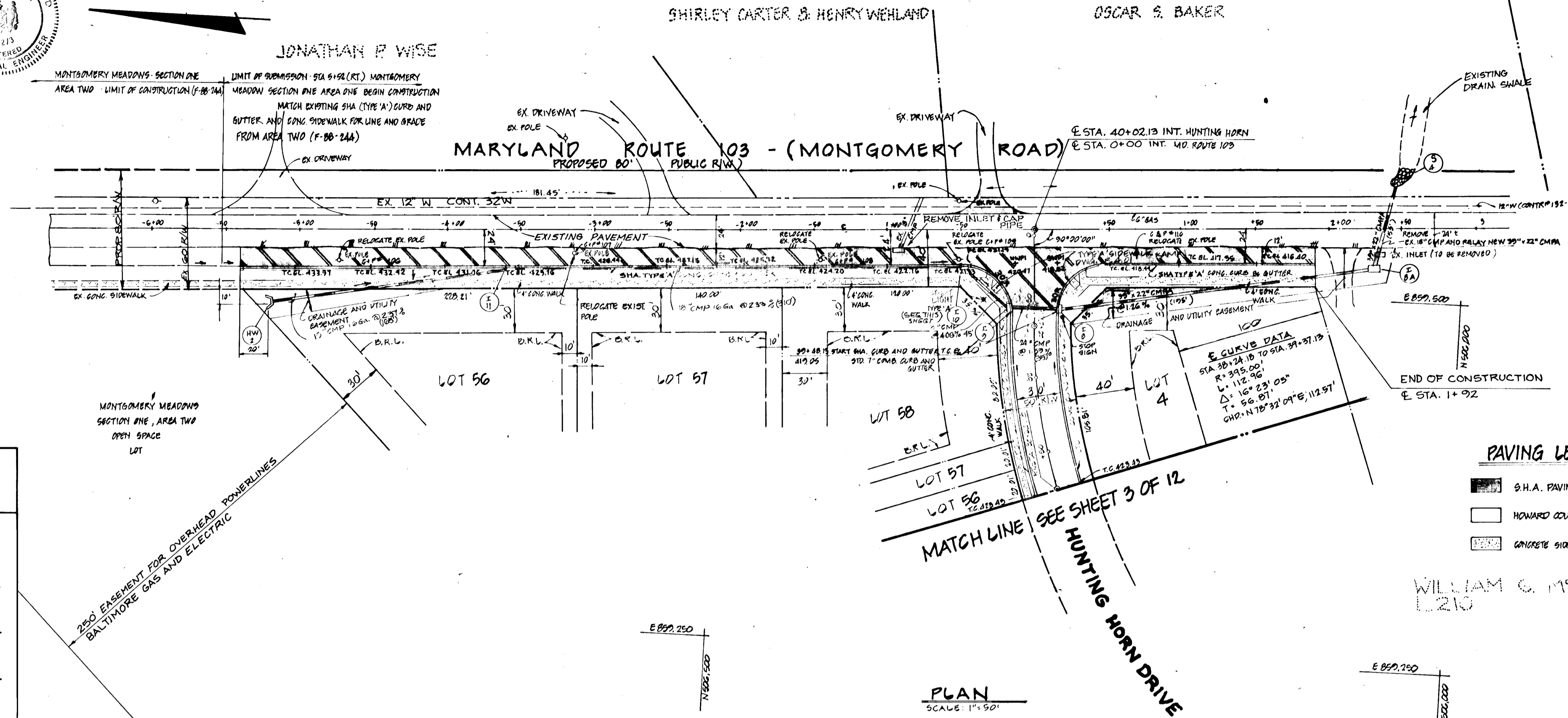
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Thomas L. Wiley, M.D. REG. NO. 9273 DATE 2/1/89

DEVELOPER'S CERTIFICATE

WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND 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 SEDIMENT AND EROSION 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.

Daniel G. Marker, F.G. Marker Co. DATE 3-22-89



LIGHTING LEGEND

- Type 'A' - 250 WATT MERCURY VAPOR LAMP MOUNTED IN A 30' HIGH GALVANIZED STEEL POLE
Type 'B' - 175 WATT MERCURY VAPOR LAMP MOUNTED ON A 18' HIGH PESTLESS BRONZE POLE.

- NOTE 2: CONTRACTOR SHALL MAINTAIN ACCESS TO EXISTING DRIVEWAY ENTRANCES FROM MD. ROUTE 103 DURING ALL PHASES OF CONSTRUCTION.
1. SEE SHEET 7 OF 12 FOR STORM DRAIN PROFILES.
2. CONTRACTOR TO TRANSPORT TYPE 'A' 9" DIA CONC. CURB AND GUTTER (FULL HEIGHT) STA 99+48.19 TO STA 99+19.10. (25' TRANSITION).
3. CONTRACTOR TO SUCK HOWARD COUNTY DRAINING SECTION STA 99+48.19.
4. TYPICAL SECTION FOR PAVING AND ROAD CONSTRUCTION. SEE SHEET 2, 5 OF 12.
5. CONTRACTOR TO RELOCATE EXISTING POWER POLES ALONG MARYLAND ROUTE 103 (RIGHT AND LEFT SIDES) AS SHOWN ON THIS PLAN. CONTRACTOR TO COORDINATE RELOCATION WITH UTILITY COMPANY.
6. CONTRACTOR TO REMOVE EXISTING INLET STA 0+195.00 EX. 18" CMP (BOTH ENDS) AND LEAVE IN PLACE.

- BENCHMARKS
B.M.#1 HOWARD COUNTY MONUMENT # 2144008
3/4" REBAR 0.8' BELOW SURFACE 1' N. OF RTE. 103.
1400' E. S. OF INT. WITH LECHESTER RD. ELEV. = 419.967'
B.M.#2 HOWARD COUNTY MONUMENT # 2144009
3/4" REBAR 0.8' BELOW SURFACE 10' N. EDGE OF RTE. 103.
630' N. OF E. KERGER RD. ELEV. = 419.625'

PAVING LEGEND

- S.H.A. PAVING SECTION
HOWARD COUNTY PAVING SECTION
CONCRETE SIDEWALK

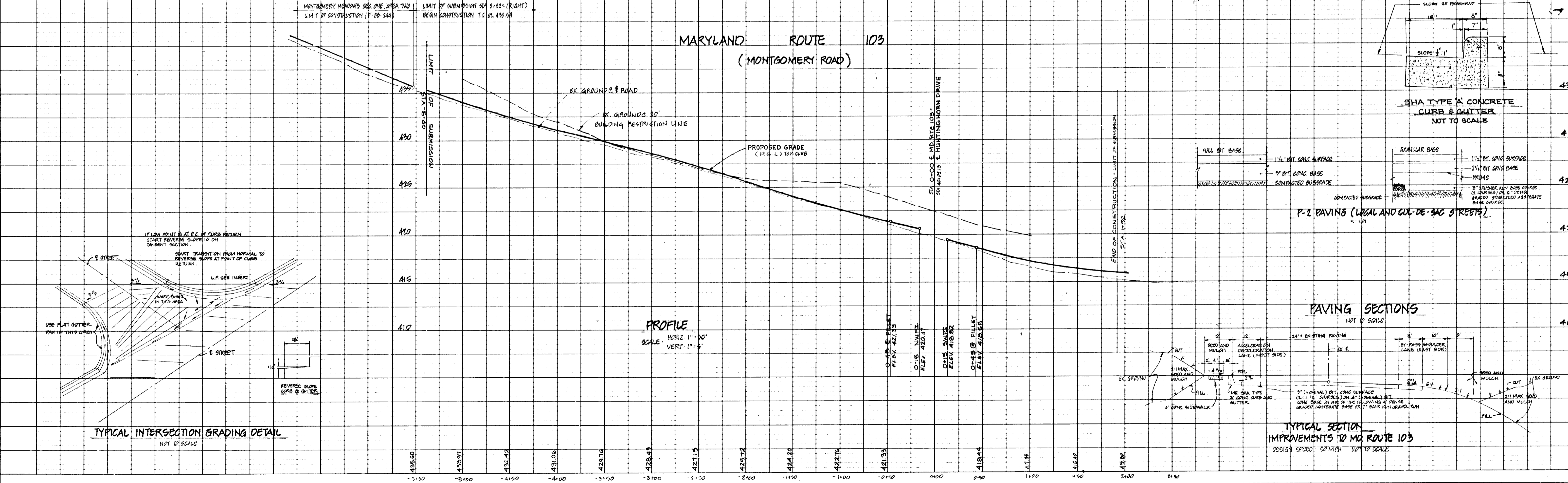
MONTGOMERY MEADOWS

SECTION ONE, AREA ONE
LOT 4 THRU LOT 6
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PLAN AND PROFILE
MARYLAND ROUTE 103 (MONTGOMERY ROAD)
OWNER/DEVELOPER: F.G. MARKER CO.
SCALE: AS SHOWN
DATE: JUNE 30, 1988
DES. H.S. DRN. J.A. UDICH CHK. B.D. BURTON
DEWBERRY & DAVIS
ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS

PLAN SURVEYED, PLOTTED, CHECKED, & M.A. NOTED BY DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, LAND DEVELOPMENT DIVISION
CHIEF, BUREAU OF HIGHWAYS
CHIEF, BUREAU OF ENGINEERING

PROFILE SURVEYED, PLOTTED, CHECKED, & M.A. NOTED BY DATE

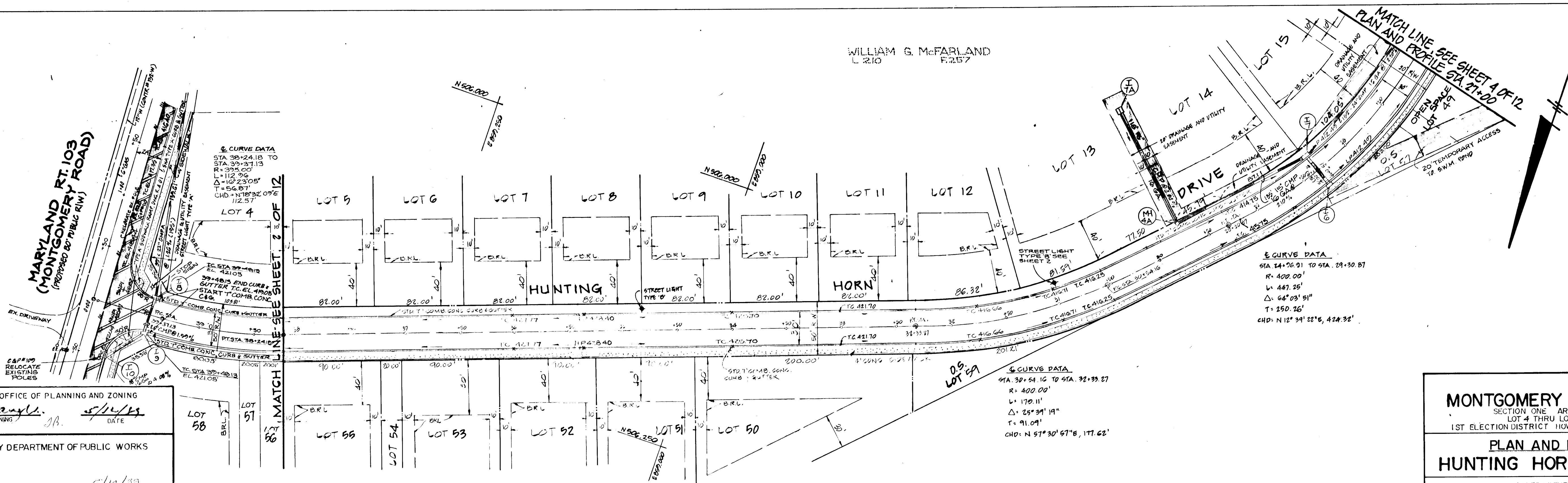


1443



DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
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 PLOTTED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 ALIGNMENT CHECKED: \_\_\_\_\_  
 FT. OF WAY CHECKED: \_\_\_\_\_  
 No. \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 E. M. V. NOTED: \_\_\_\_\_  
 STRUCTURE LOCATIONS CHECKED: \_\_\_\_\_  
 No. \_\_\_\_\_



APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*[Signature]* 5/14/89 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 5/13/89 DATE

*[Signature]* 5/10/89 DATE  
 CHIEF, BUREAU OF ENGINEERING

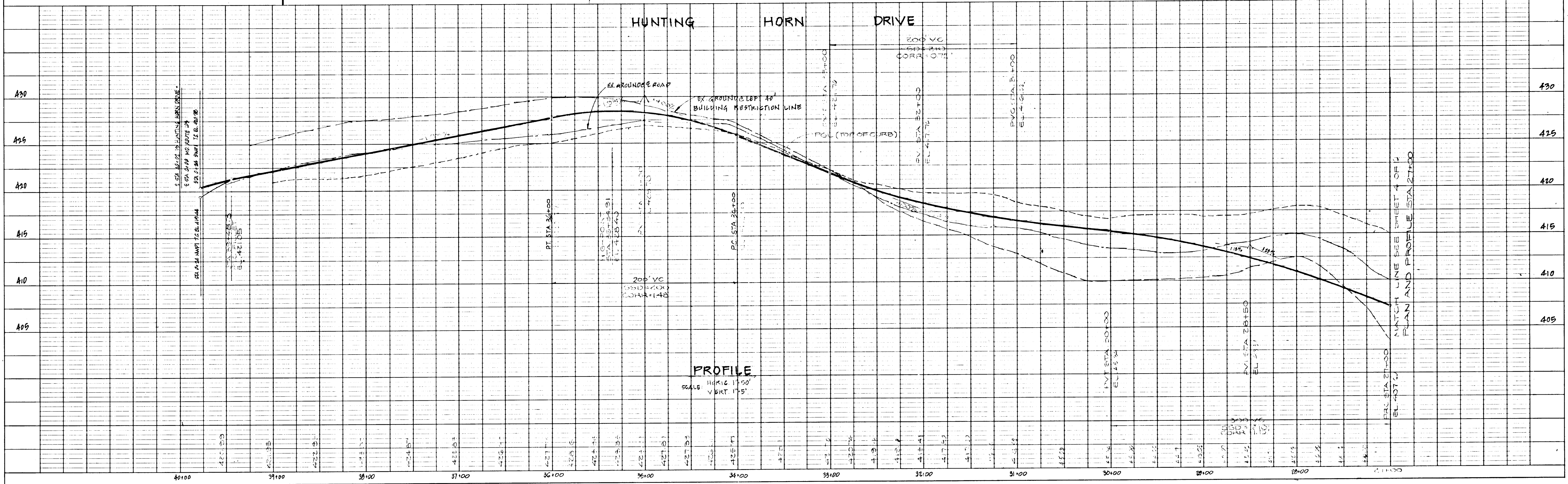
**MONTGOMERY MEADOWS**  
 SECTION ONE AREA ONE  
 LOT 4 THRU LOT 61  
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**PLAN AND PROFILE  
 HUNTING HORN DRIVE**

OWNER/DEVELOPER  
 F.G. MARKER CO.  
 5900 PRINCESS GARDEN PKWY.  
 SUITE 707  
 LANHAM, MARYLAND 20706

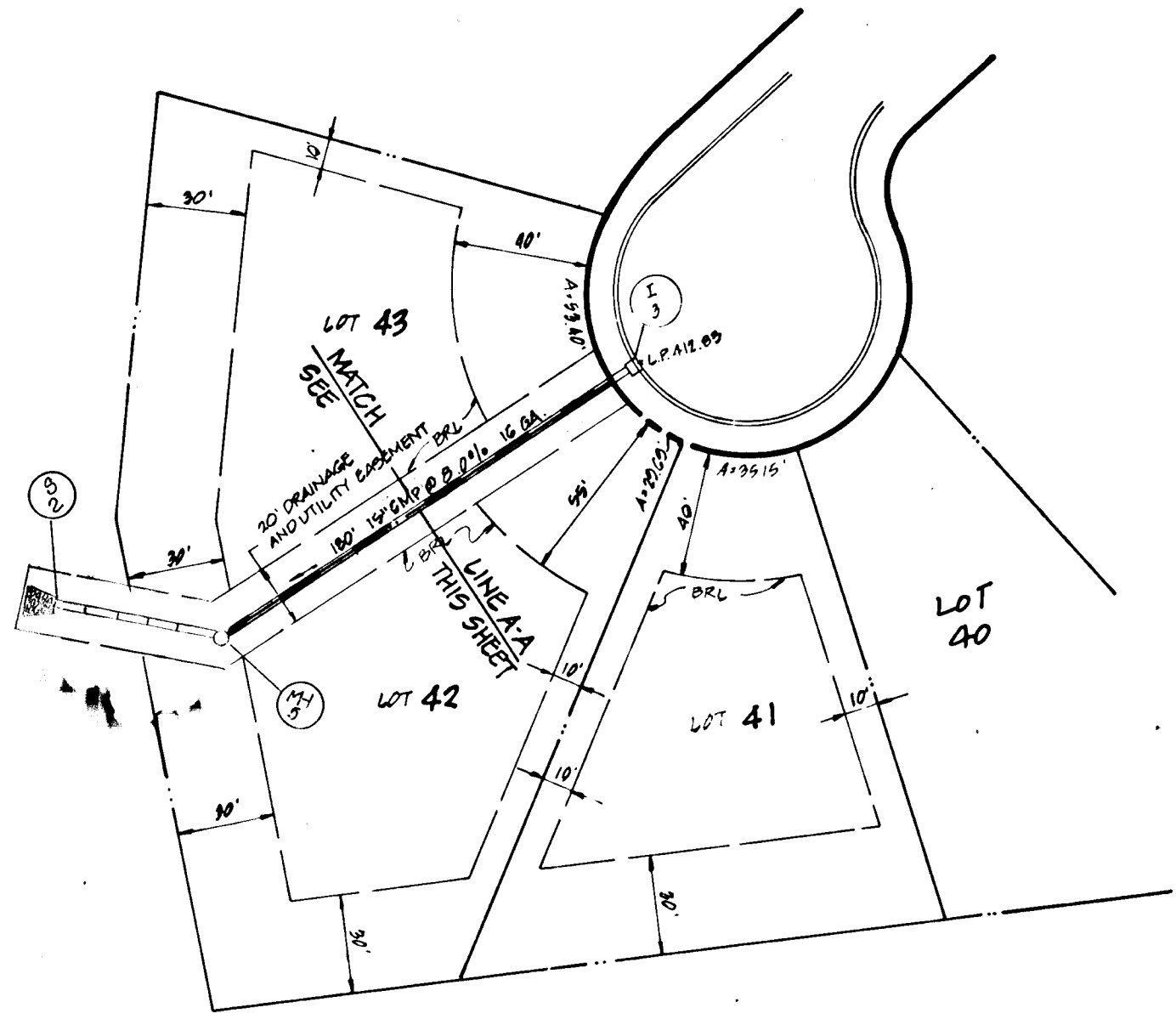
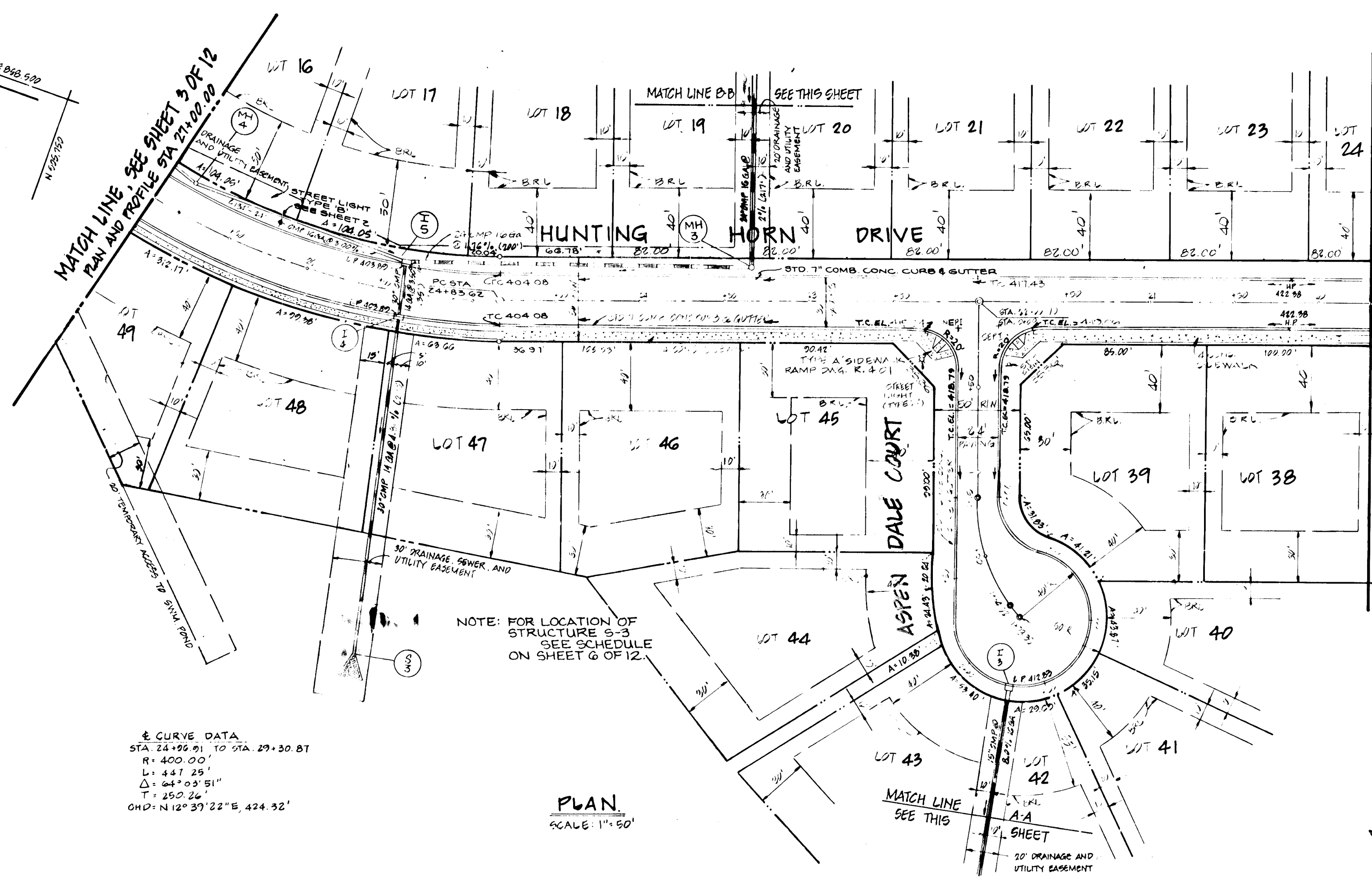
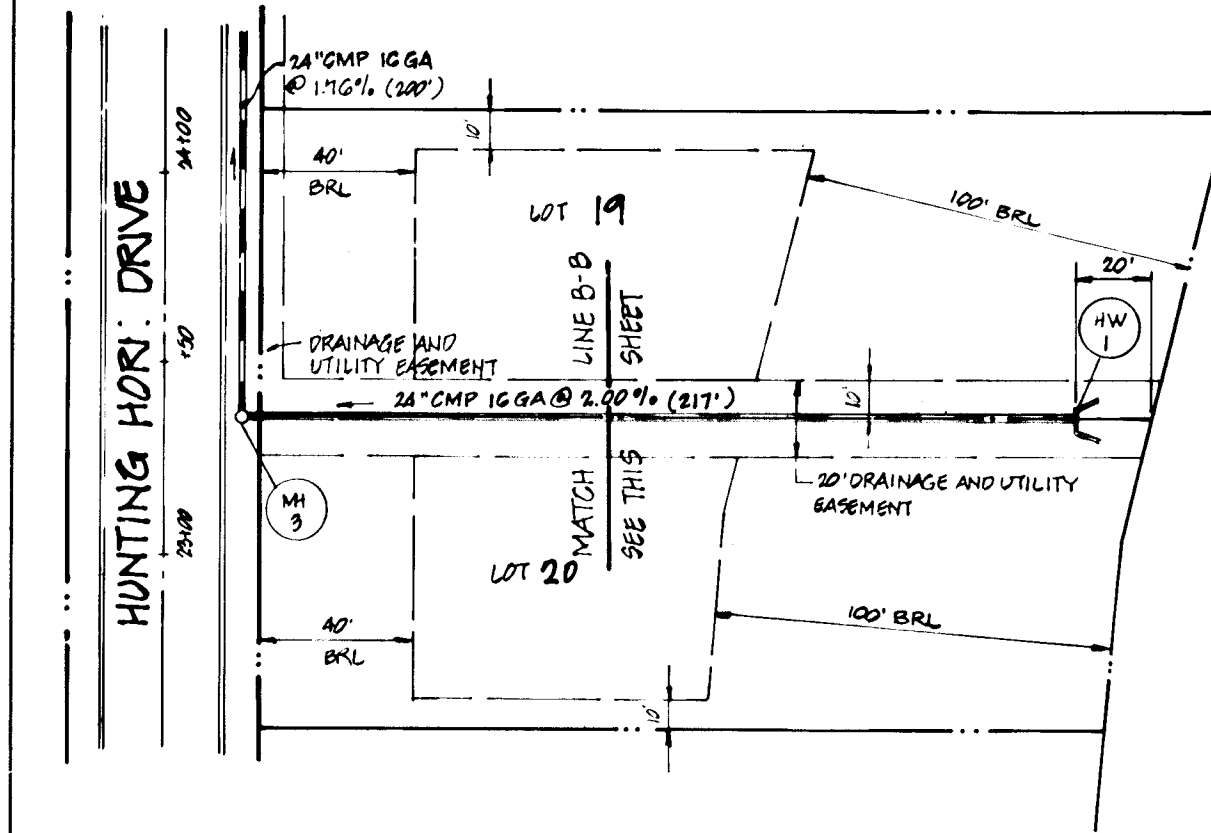
SCALE: AS SHOWN DATE: JUNE 30, 1988 DWG. 3 OF 12  
 DES: J.A. UDICH DWN: J.A. UDICH CHK: B.D. BURTON

DEWBERRY & DAVIS  
 ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS  
 3300 N. RIDGE RD. SUITE 100 ELLICOTT CITY, MD 21117 481-7476





DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 ALIGNMENT CHECKED \_\_\_\_\_  
 8 A.M. NOTED \_\_\_\_\_  
 #. FT. OF WAY CHECKED \_\_\_\_\_  
 No. \_\_\_\_\_



APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Mark S. Langley* 5/10/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*William J. McManus* 5/10/89  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE

*William S. Riley* 5-10-89  
 CHIEF, BUREAU OF ENGINEERING  
 DATE

± CURVE DATA  
 STA 24+96.91 TO STA 29+30.87  
 R = 400.00'  
 L = 441.25'  
 Δ = 64° 23' 51"  
 T = 250.26'  
 CHD = N 12° 37' 22" E, 424.32'

PLAN  
 SCALE 1" = 50'

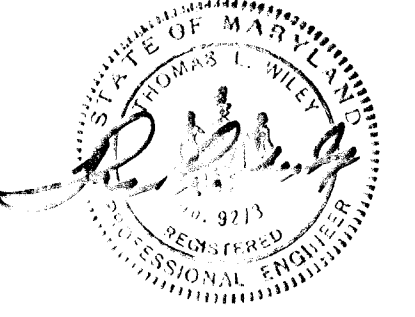
**MONTGOMERY MEADOWS**  
 SECTION ONE AREA ONE  
 LOT 4, SHEET 42  
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**PLAN AND PROFILE**  
 HUNTING HORN DRIVE 8

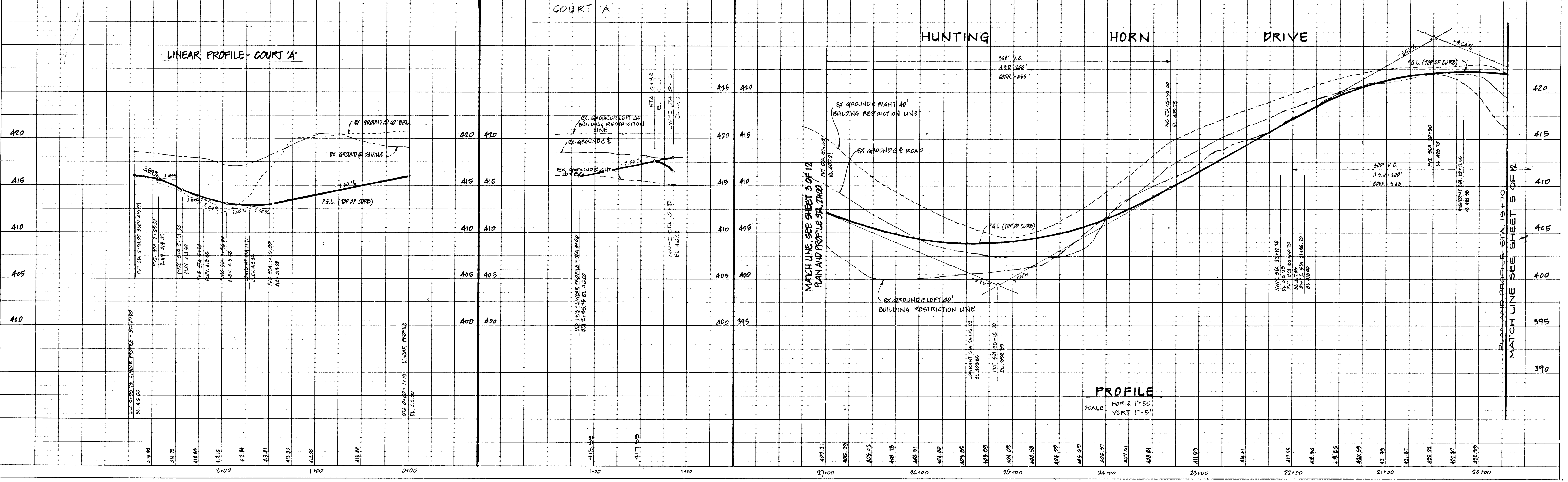
OWNER/DEVELOPER  
 F.G. MARKER CO.  
 5900 PRINCESS GARDEN PKWY.  
 SUITE 707  
 LANHAM, MARYLAND 20706

SCALE: AS SHOWN DATE: JUNE 30, 1988 DWG. 4 OF 12  
 DES: J.A. UDICH DRN: J.A. UDICH CHK: B.D. BURTON

DEWBERRY & DAVIS  
 ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS  
 3300 N. RIDGE RD. SUITE 100 ELLICOTT CITY, MD 461-7478



DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 8 A.M. NOTED \_\_\_\_\_  
 STRUCTURE NOTATIONS CHECKED \_\_\_\_\_  
 No. \_\_\_\_\_



1443



DATE  
BY  
NO. OF WAY CHECKED  
NO. OF SIDEWALK CHECKED  
NO. OF CURB CHECKED  
NO. OF GUTTER CHECKED  
NO. OF PAVEMENT CHECKED  
NO. OF UTILITY CHECKED  
NO. OF EASEMENT CHECKED  
NO. OF ELEVATION CHECKED  
NO. OF AREA CHECKED  
NO. OF VOLUME CHECKED  
NO. OF DISTANCE CHECKED  
NO. OF TOTAL CHECKED

DATE  
BY  
NO. OF WAY CHECKED  
NO. OF SIDEWALK CHECKED  
NO. OF CURB CHECKED  
NO. OF GUTTER CHECKED  
NO. OF PAVEMENT CHECKED  
NO. OF UTILITY CHECKED  
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NO. OF TOTAL CHECKED

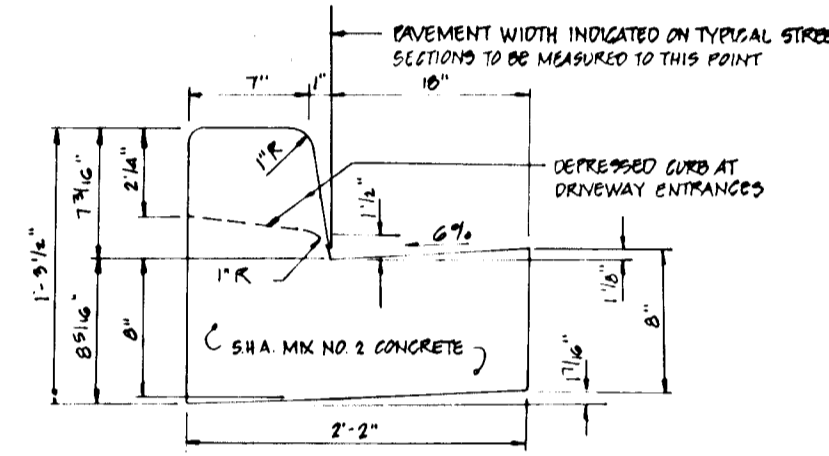
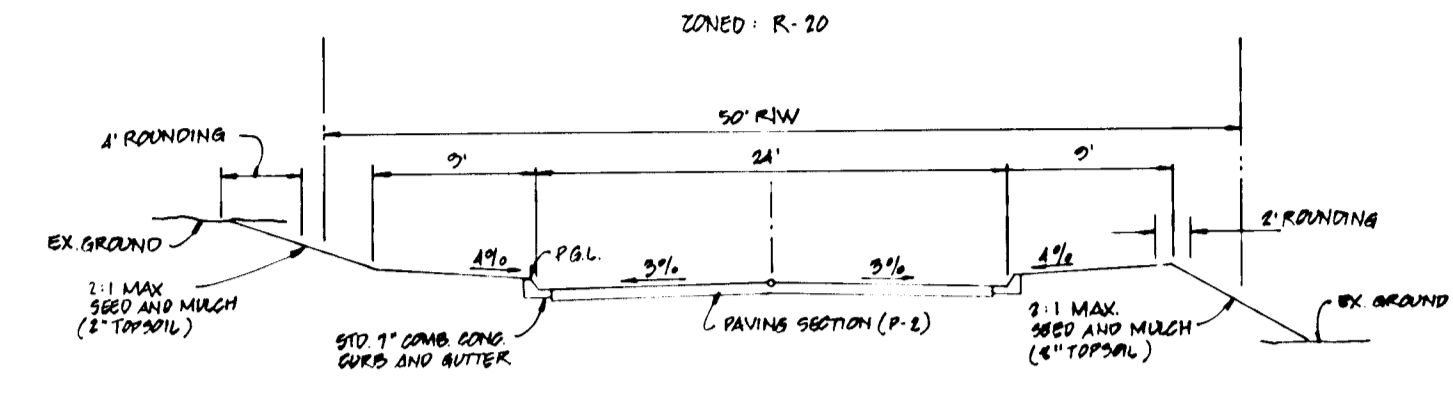
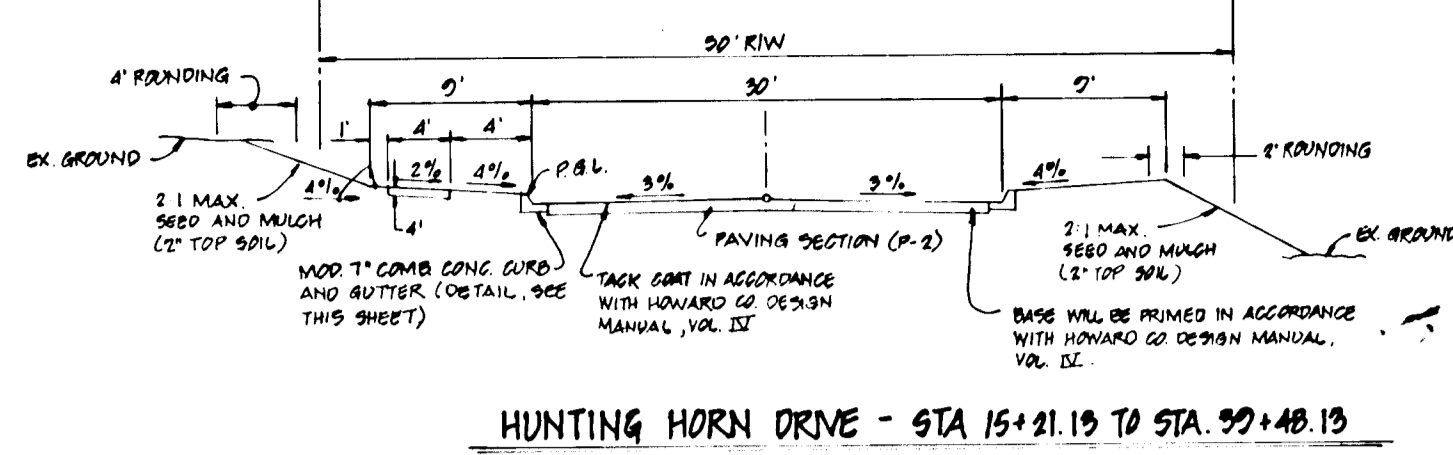
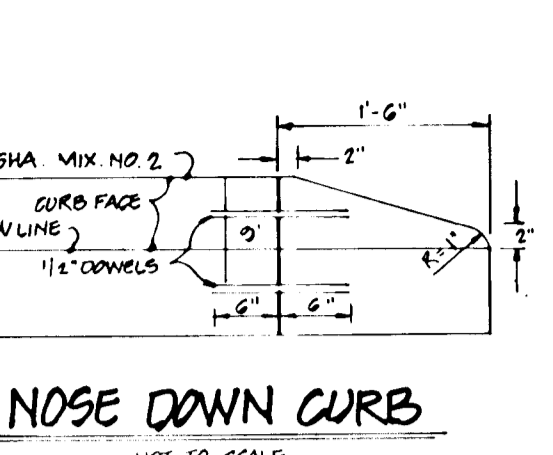
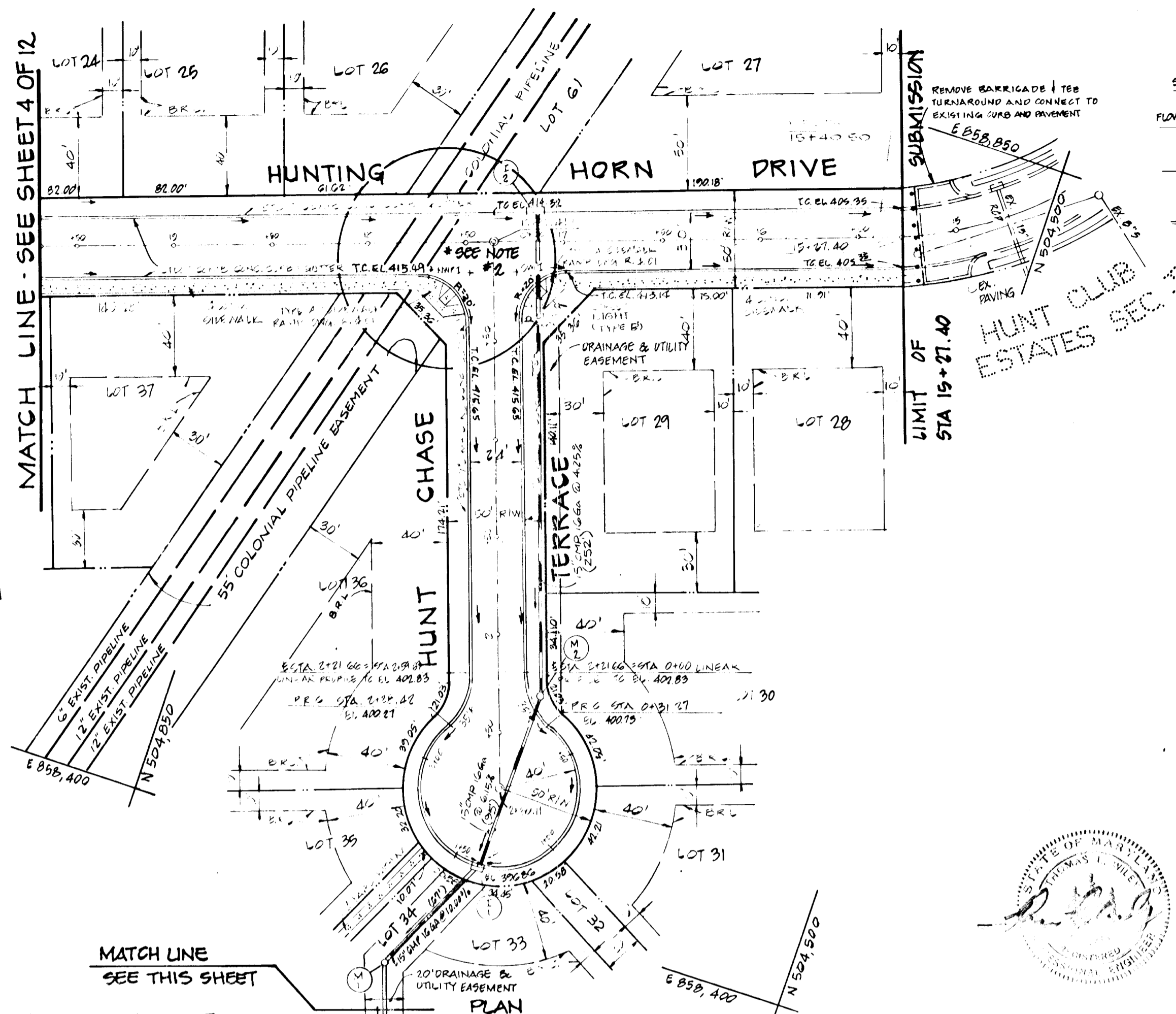
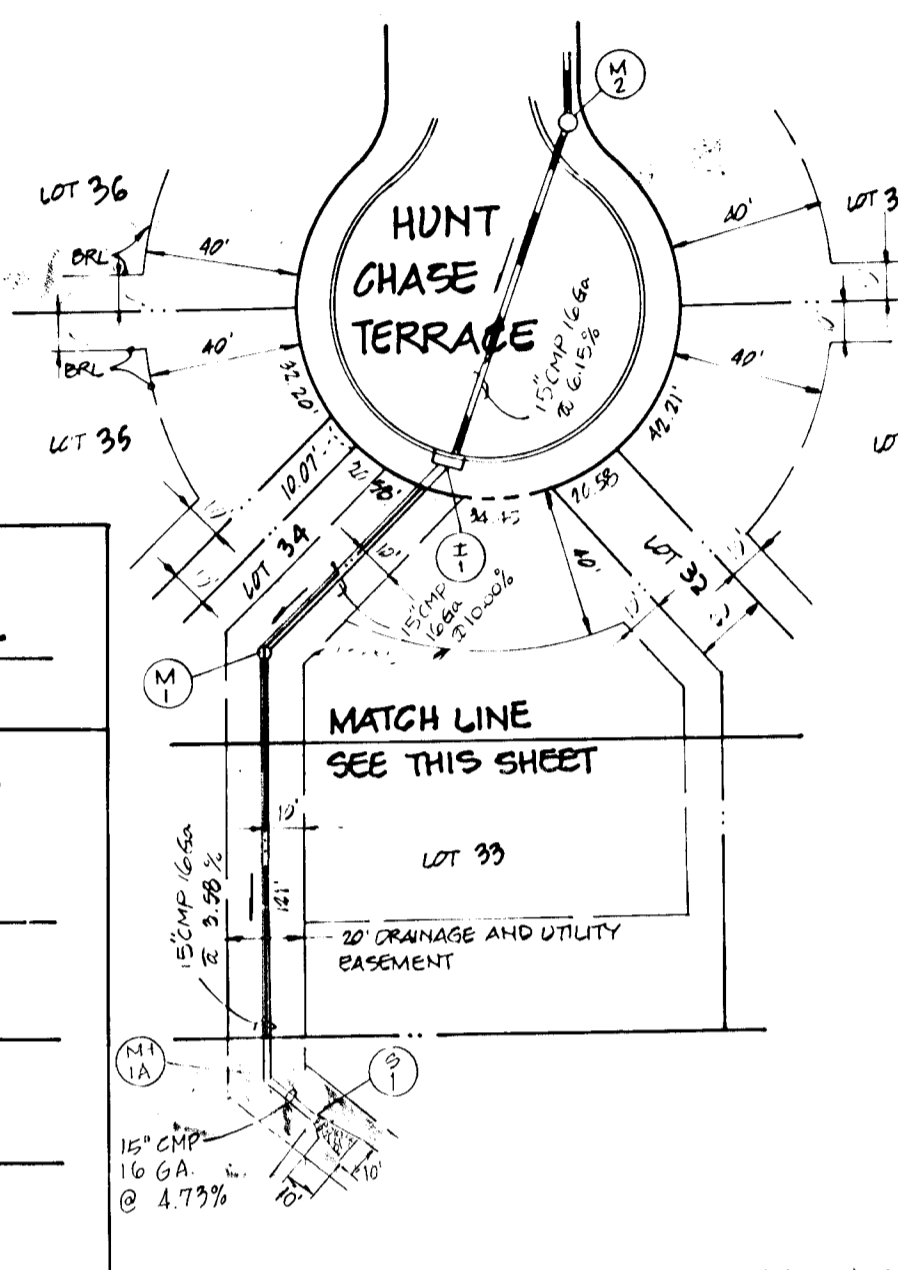
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NO. OF EASEMENT CHECKED  
NO. OF ELEVATION CHECKED  
NO. OF AREA CHECKED  
NO. OF VOLUME CHECKED  
NO. OF DISTANCE CHECKED  
NO. OF TOTAL CHECKED

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Mark J. J. ...* 5/12/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*...* 5/10/89  
 CHIEF, LAND DEVELOPMENT DIVISION

CHIEF, BUREAU OF HIGHWAYS  
*...* 5-10-89  
 CHIEF, BUREAU OF ENGINEERING

NOTES:  
 1. PRIOR TO EXCAVATION IN THE COLONIAL PIPELINE RIGHT-OF-WAY THE CONTRACTOR SHALL NOTIFY COLONIAL PIPELINE OF CONSTRUCTION ACTIVITY.  
 2. A COLONIAL PIPELINE REPRESENTATIVE SHALL BE ON SITE DURING ALL CONSTRUCTION ACTIVITY WITHIN COLONIAL PIPELINE RIGHT-OF-WAY.



COURT 'A' - STA 0+15 TO STA 1+45.21  
 HUNT CHASE TERRACE - STA 0+15 TO STA 2+21.66  
 CIV. DE. 546 STREET DESIGN SPEED 25 M.P.H.  
 ZONED - R-20

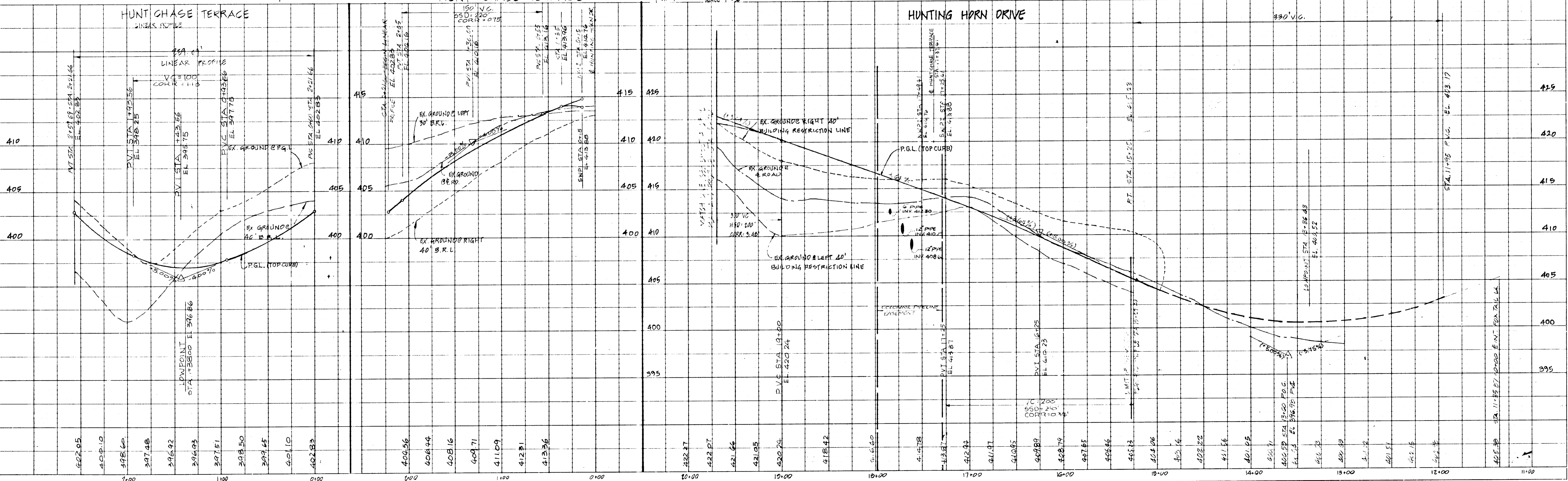
**MONTGOMERY MEADOWS**  
 SECTION ONE AREA ONE  
 LOTS 4 THRU LOTS 21  
 TAX MAP 31, PARCEL 423  
 1ST ELECTION DISTRICT HOWARD COUNTY, MD.

**PLAN & PROFILE  
 HUNTING HORN DRIVE  
 HUNT CHASE TERRACE**

OWNER/DEVELOPER  
 F. S. MARKER CO  
 5900 PRINCESS GARDEN PKWY  
 SUITE 707  
 LANHAM, MARYLAND 20706

SCALE AS SHOWN DATE JUNE 30/1988 DWG. 5 OF 12  
 DES. HS DRN. DP, JU CHK. BB, HS

**DEWBERRY & DAVIS**  
 ARCHITECTS ENGINEERS PLANNERS SURVEYORS  
 3300 N. RIDGE RD. SUITE 100 ELLICOTT CITY, MD 21114-7478



HIGHWAY FEDERAL AID SHEET  
 PLATE 1 - SINGLE PLAN AND PROFILE - FULL LINE  
 PRINTED IN U.S.A.



**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. Willey* 3/1/89  
 THOMAS L. WILEY, MD REG. NO. 9175 DATE

**DEVELOPER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND 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.

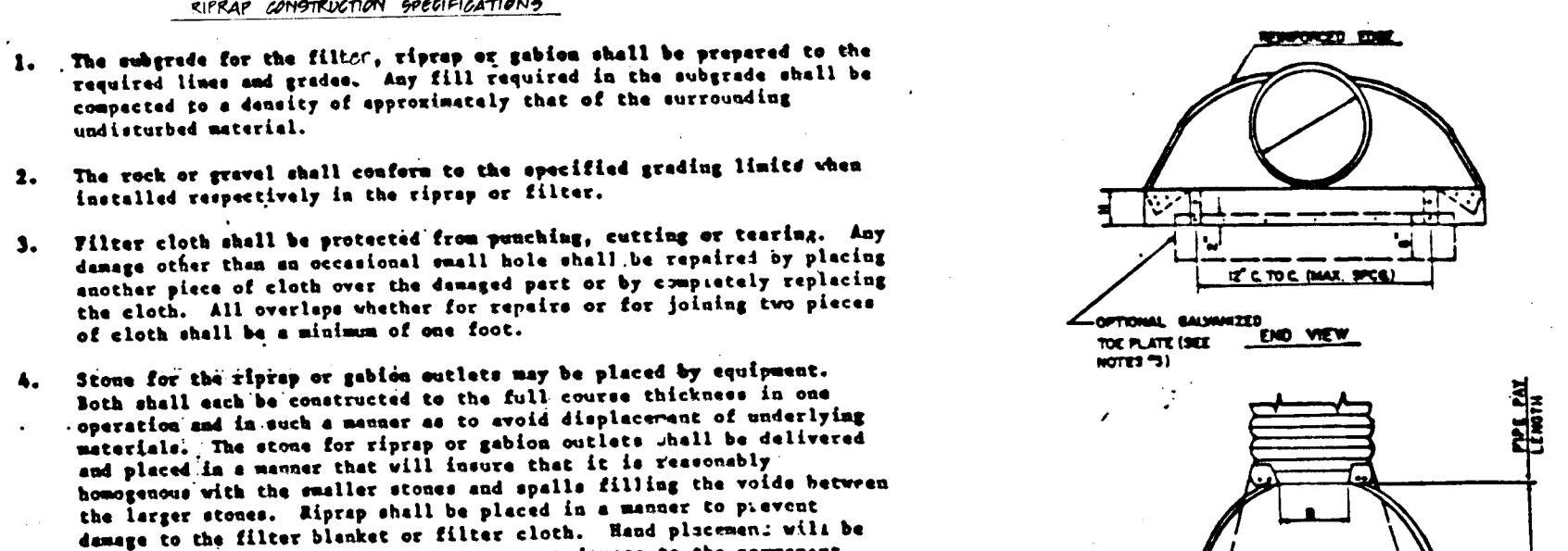
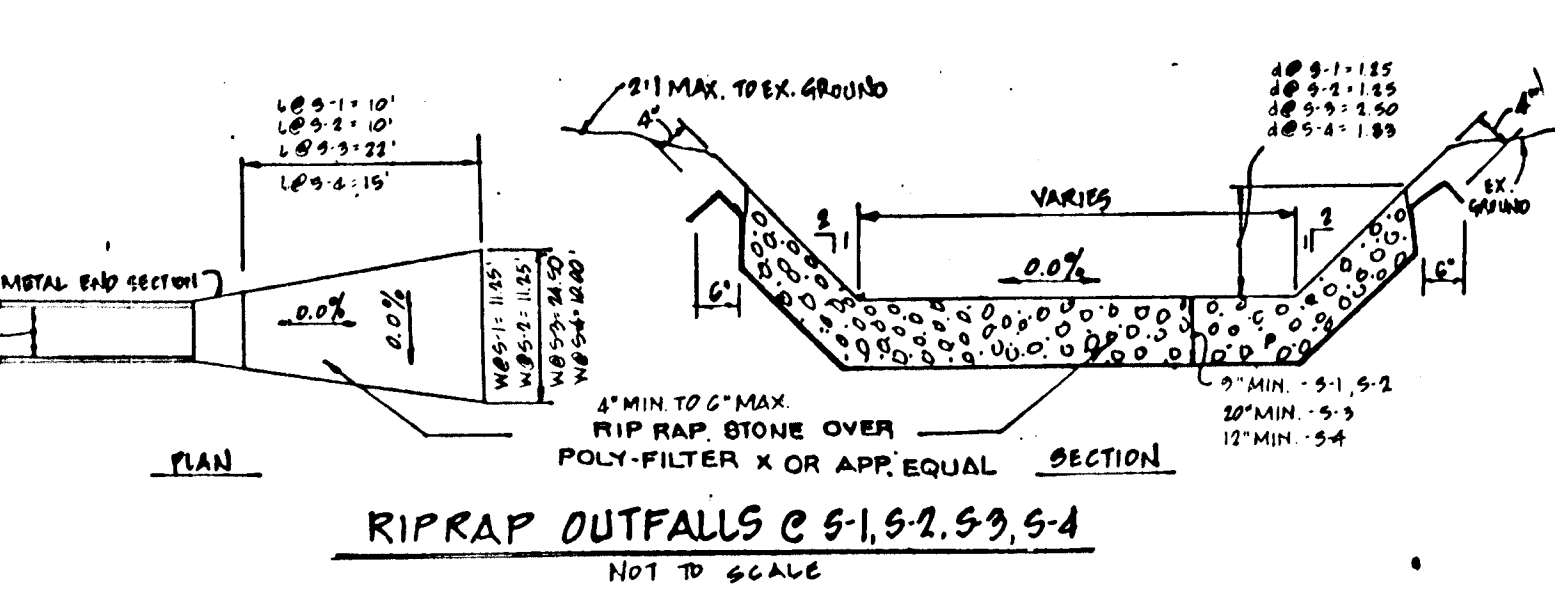
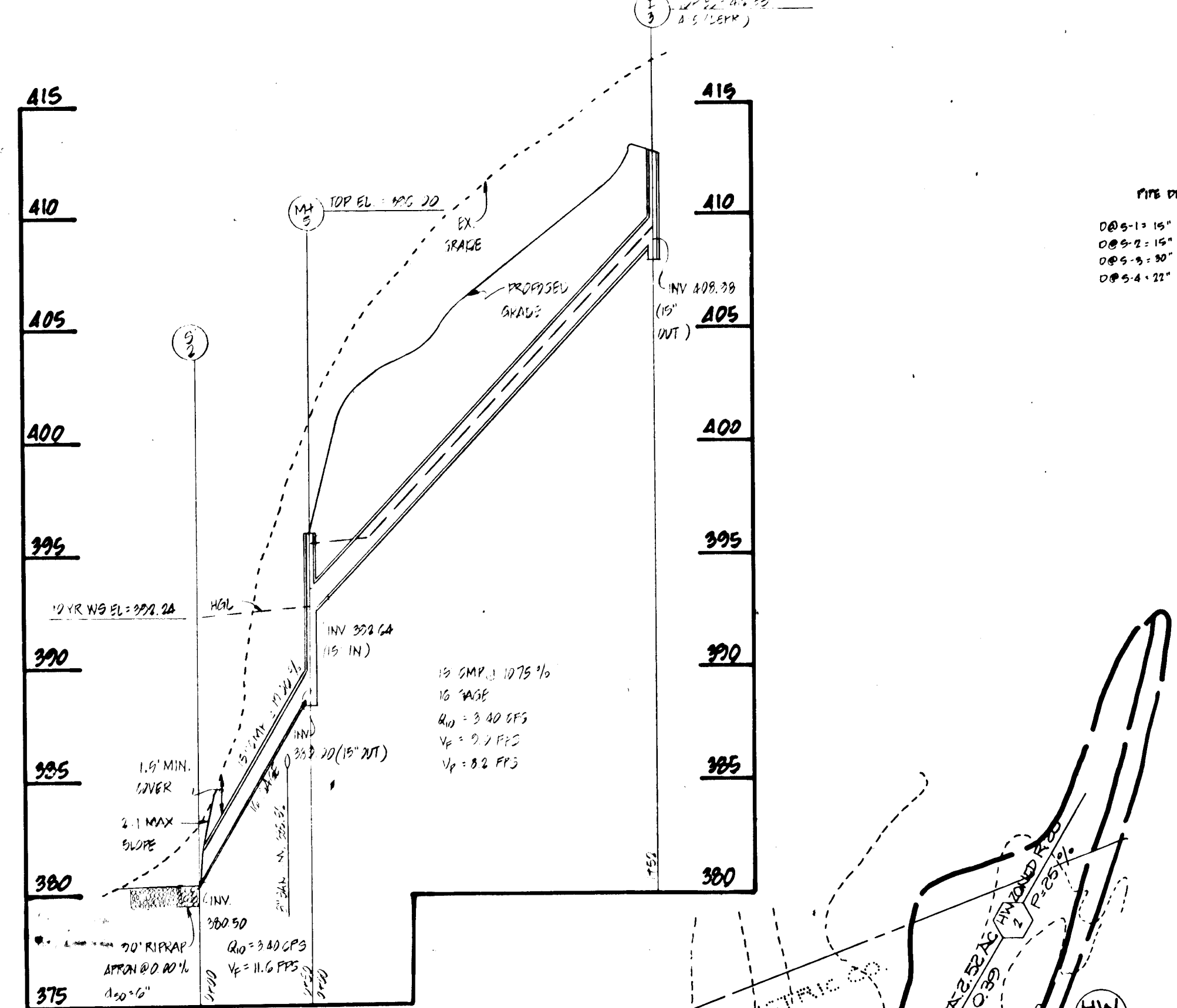
*Daniel G. Marker* 2-22-89  
 DANIEL G. MARKER, F.G. MARKER, INC. DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
*[Signature]* 4/17/89  
 U.S. SOIL CONSERVATION SERVICE DATE

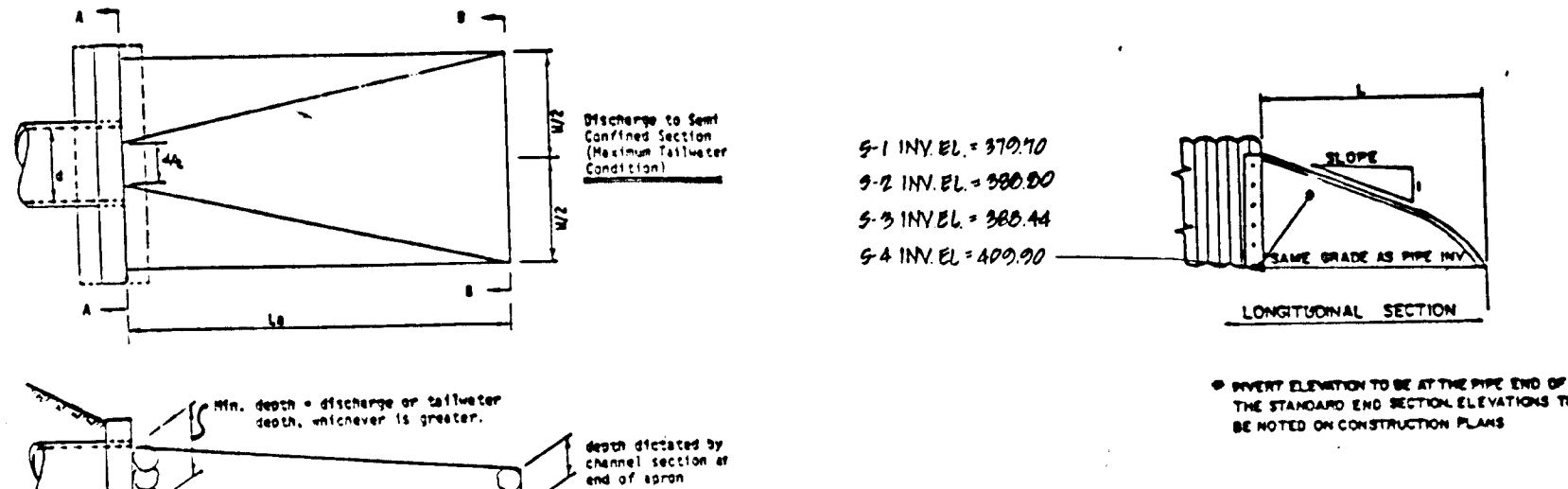
THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
 HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*[Signature]* 5/1/89  
 CHIEF, PLANNING AND ZONING DEPARTMENT DATE

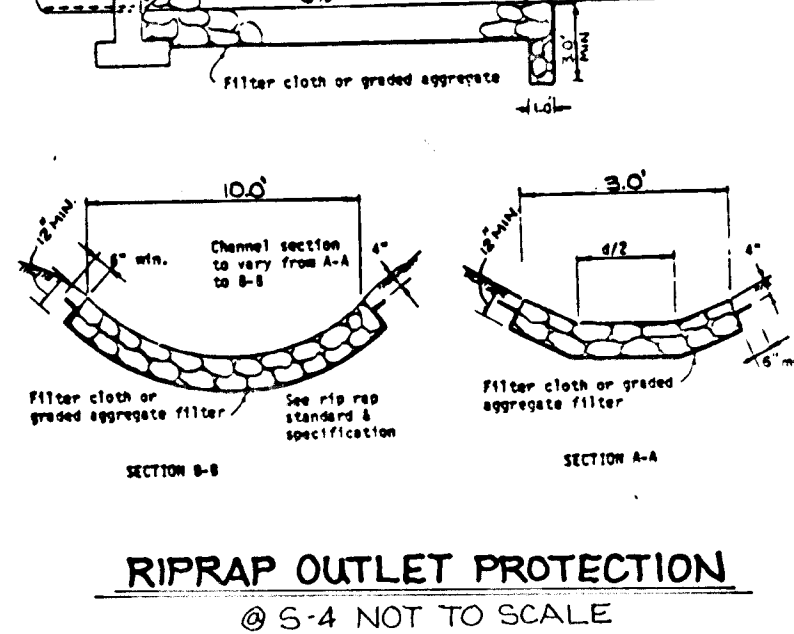
APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 5/10/89  
 CHIEF, BUREAU OF ENGINEERING DATE



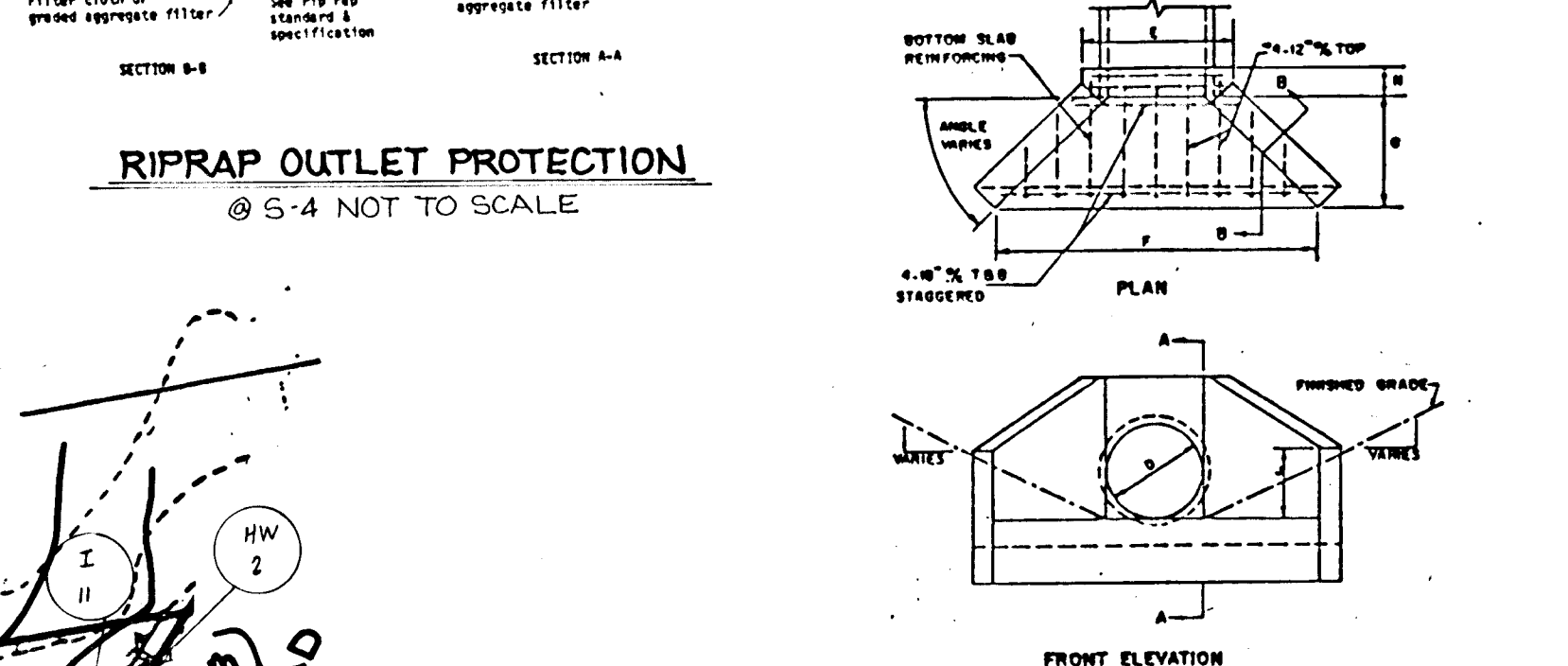
STR. #	TYPE	TOP ELEV.	INV. IN.	INV. OUT.	REMARKS	STATION
I-1	A-5 (DEPR.)	396.86	391.10	390.05	5.0 - 4.01	HUNT CHASE TERRACE LP STA. 11.32
I-2	A-10 (DEPR.)	419.42	408.00	408.00	9.0 - 4.02	HUNTING HORN DRIVE STA. 17.15 (R)
I-3	A-5 (DEPR.)	418.89	409.20	409.20	6.0 - 4.01	COURT 'A' LP STA. 14.71
I-4	A-5 (DEPR.)	409.79	398.85	398.70	8.0 - 4.01	HUNTING HORN DRIVE STA. 25.42 (L)
I-5	A-10 (DEPR.)	409.80	397.23	391.10	9.0 - 4.02	HUNTING HORN DRIVE STA. 29.42 (R)
I-6	A-10 (DEPR.)	412.00	409.20	409.20	5.0 - 4.02	HUNTING HORN DRIVE STA. 28.96 (L)
I-7	DOUBLE 'S' COMB (UNUSUAL & NORMAL)	412.00	408.25	406.00	9.0 - 4.99	OTA 28.34 (R)
I-8	A-5 (DEPR.)	421.05	414.37	414.00	9.0 - 4.01	HUNTING HORN DRIVE STA. 30.44 (R)
I-9	DOUBLE 'S' COMB (UNUSUAL & NORMAL)	421.05	415.58	414.85	9.0 - 4.99	HUNTING HORN DRIVE STA. 30.44 (L)
I-10	'S' COMB (DEPR.)	421.14	417.61	417.45	9.0 - 4.98	SEE PLAN FOR LOCATION
I-11	'S' COMB (DEPR.)	420.78	415.90	424.80	9.0 - 4.98	SEE PLAN FOR LOCATION
I-12	WR. COMB.	414.00	411.35	411.10	MD - 912.83	SEE PLAN FOR LOCATION
I-1A	TYPE 'D' INLET	420.35	414.61	414.61	6.0 - 4.11	LOT 10 - LOT 11
MH-1A	STD. MANHOLE	389.50	389.00	379.25	6 - 5.11	LOT 30 - LOT 31
S-1	METAL END SECTION	-	-	379.10	9.0 - 5.01	SEE PLAN FOR LOCATION
S-2	METAL END SECTION	-	-	380.50	9.0 - 5.01	SEE PLAN FOR LOCATION
S-3	METAL END SECTION	-	-	380.74	9.0 - 5.01	SEE PLAN FOR LOCATION
S-4	PIPE ARCH END SECTION	-	-	409.79	9.0 - 5.11	SEE PLAN FOR LOCATION
MH-5	STD. MANHOLE	396.00	392.64	389.00	4 - 5.11	SEE PLAN FOR LOCATION
MH-1	STD. MANHOLE	398.50	384.25	384.00	8 - 5.11	LOT 30 - LOT 31 (CONCRETE)
MH-2	STD. MANHOLE	402.00	397.09	397.14	4 - 5.11	HUNT CHASE TERRACE OTA 29.28 (L)
MH-3	STD. MANHOLE	409.61	409.12	401.81	4 - 5.11	HUNTING HORN DRIVE OTA 28.72 (L) (CONC.)
MH-4	STD. MANHOLE	406.60	401.20	401.09	6 - 5.11	HUNTING HORN DRIVE OTA 28.72 (R) (CONC.)
MH-4A	STD. MANHOLE	415.58	410.84	409.59	6 - 5.11	HUNTING HORN DRIVE OTA 28.72 (R) (CONC.)
HW-1	TYPE 'A' HEADWALL CIRCULAR	410.00	-	407.50	6.0 - 5.11	SEE PLAN
HW-2	TYPE 'A' HEADWALL CIRCULAR	422.30	-	424.30	5.0 - 5.11	SEE PLAN



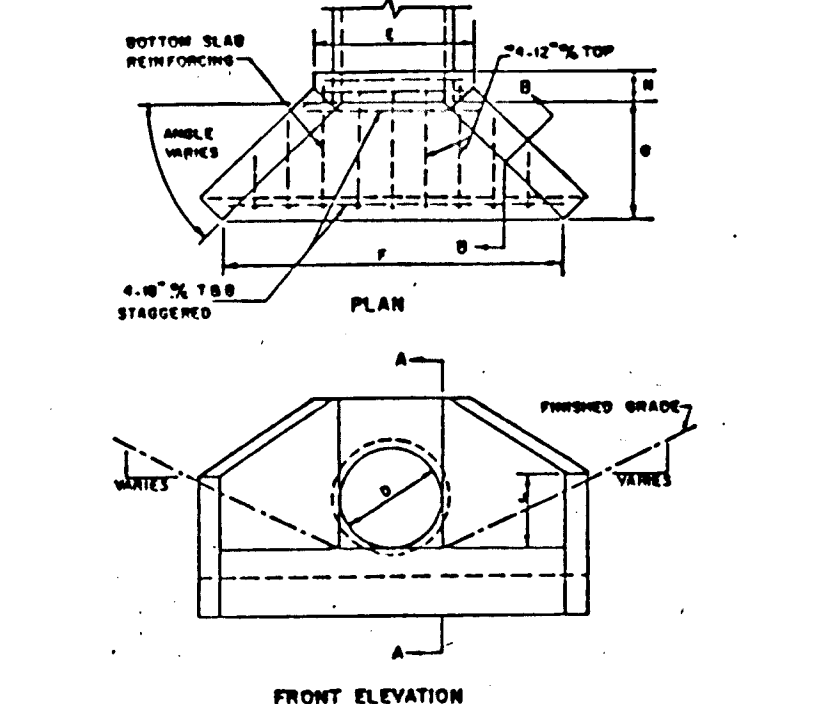
STR.	PIPE DIAM.	GA.	A 1"	B MAX	H 1"	L 1 1/2"	W 2"	APP. SLOPE	BODY
S-1	18"	10	7"	8"	5"	16"	30"	2 1/4	1.75
S-2	18"	16	7"	8"	5"	16"	30"	2 1/4	1.75
S-3	30"	14	12"	16"	8"	31"	60"	2 1/4	1.75



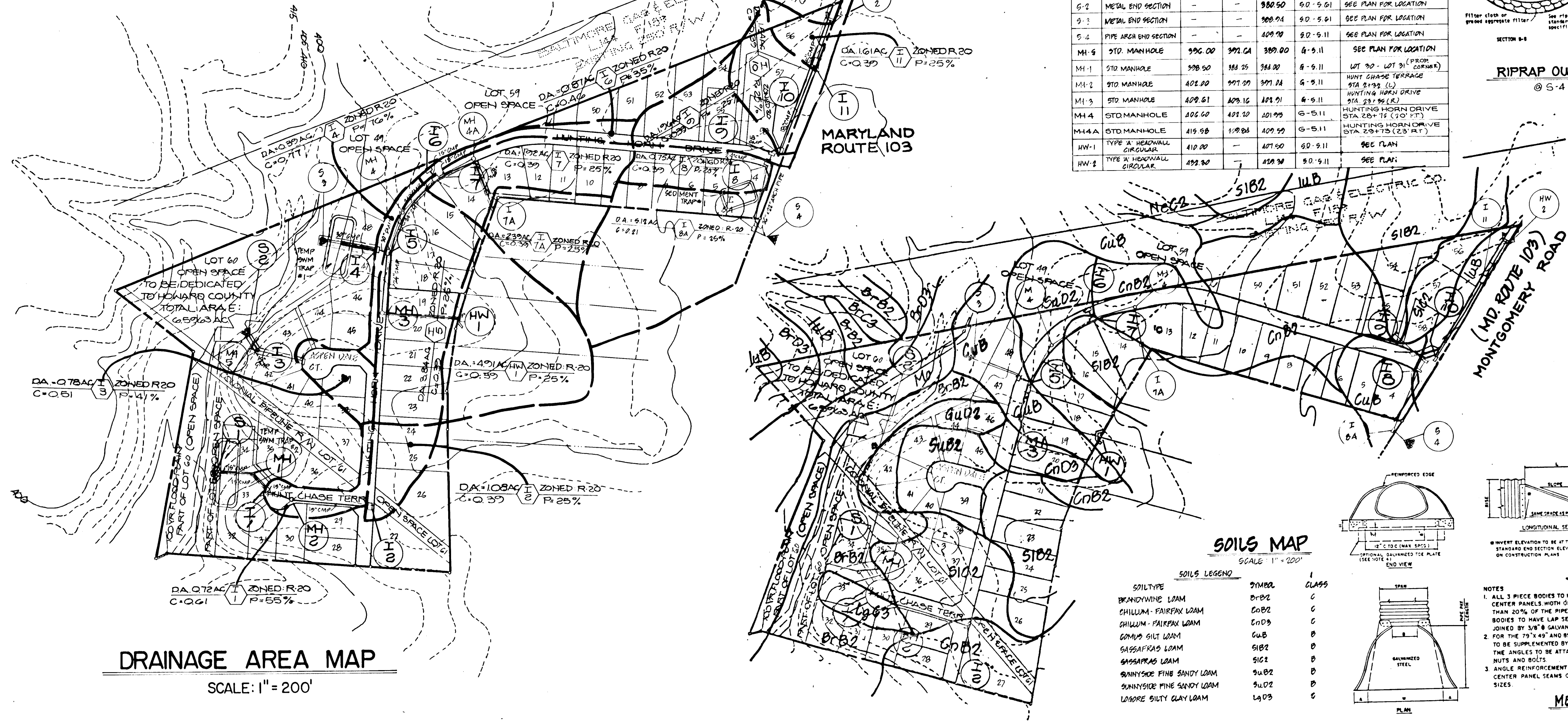
METAL END SECTIONS @ 5:1, 5:2, 5:4  
 NOT TO SCALE



RIPRAP OUTLET PROTECTION  
 @ 5:4 NOT TO SCALE

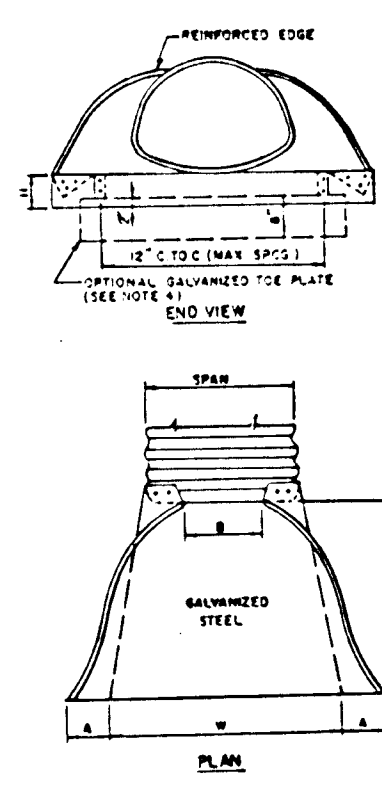


TYPE 'A' HEADWALL CIRCULAR @ HW-1, HW-3  
 NOT TO SCALE



SOILS MAP  
 SCALE: 1" = 200'

SOIL TYPE	SYMBOL	CLASS
BRANDYWINE LOAM	BWB	C
CHILLUM - FAIRFAX LOAM	COB	C
CHILLUM - FAIRFAX LOAM	COB	C
COMUS SILT LOAM	CUB	B
SASSAPARA LOAM	SLB	B
SASSAPARA LOAM	SLB	B
BUNNYSIDE FINE SANDY LOAM	SLB	B
BUNNYSIDE FINE SANDY LOAM	SLB	B
LABORE SULTY CLAY LOAM	LAB	C



METAL END SECTION ARCH METAL PIPE DETAIL @ 5:4  
 NOT TO SCALE

STR. #	D	E	F	G	H	J	K	L	N	R	VAL. BY
HW-1	24"	5'-8"	8'-0"	3'-0"	5'-0"	2'-0"	8"	8"	8"	5'-11 1/2"	1.75
HW-2	18"	5'-0"	7'-0"	3'-0"	5'-0"	2'-0"	8"	8"	8"	5'-11 1/2"	1.75

TABLE OF DIMENSIONS  
 TYPE 'A' HEADWALL CIRCULAR @ HW-1, HW-3  
 NOT TO SCALE

NOTES:  
 1. ALL 3" W/CE BODIES TO HAVE 12 GA SIDES AND 10 GA CENTER PANELS WITH CENTER PANELS TO BE GREATER THAN 20% OF THE PIPE PERIPHERY MULTIPLE PANEL BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 3/8" GALVANIZED RIVETS OR BOLTS.  
 2. FOR THE 79" X 49" AND 85" X 34" SIZES, REINFORCED EDGE TO BE SUPPLEMENTED BY 2" X 1/4" GALVANIZED ANGLES THE ANGLES TO BE ATTACHED BY 3/8" GALVANIZED NUTS AND BOLTS.  
 3. ANGLE REINFORCEMENT WILL BE PLACED UNDER THE CENTER PANEL SEAMS ON THE 79" X 49" AND 85" X 34" SIZES.  
 4. TOE PLATE SHALL BE USED WHEN SPECIFIED ON THE PLANS. COST OF TOE PLATE TO BE INCLUDED IN BID PRICE PER EACH OF METAL END SECTION.  
 5. TYPE 3 CONNECTION INCLUDES ONE FOOT OF PIPE LENGTH FOR 85" X 40" THRU 85" X 34" DIAMETER AS A CONNETOR TO THE END SECTION BY GALVANIZED RIVETS AND BOLTS.  
 6. WHERE END SECTION IS TO BE APPLIED TO STRUCTURAL PLATE ARCH PIPE, THE END SECTION SHALL BE ORDERED WITHOUT THE ONE FOOT OF PIPE LENGTH AS STIPULATED IN NOTE 5, INSTEAD DRILL HOLES AND FIELD BOLT THE END SECTION DIRECTLY TO THE STRUCTURAL PLATE ARCH PIPE.

DESIGNED	H. GIEH	6/30/88
DRAWN	D. PETERS	6/30/88
CHECKED	D. BURTON	6/30/88
APPROVED	T. WILEY	6/30/88

REVISIONS		
DATE	BY	DESCRIPTION
7-13-90	WAD	NO PER HOWARD CO COMMENT

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

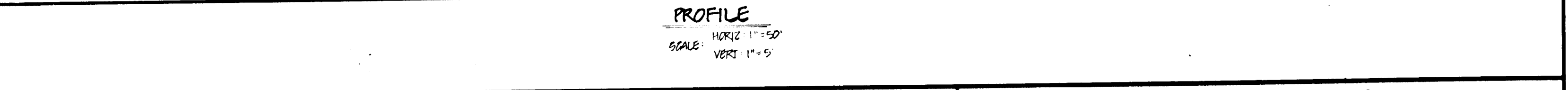
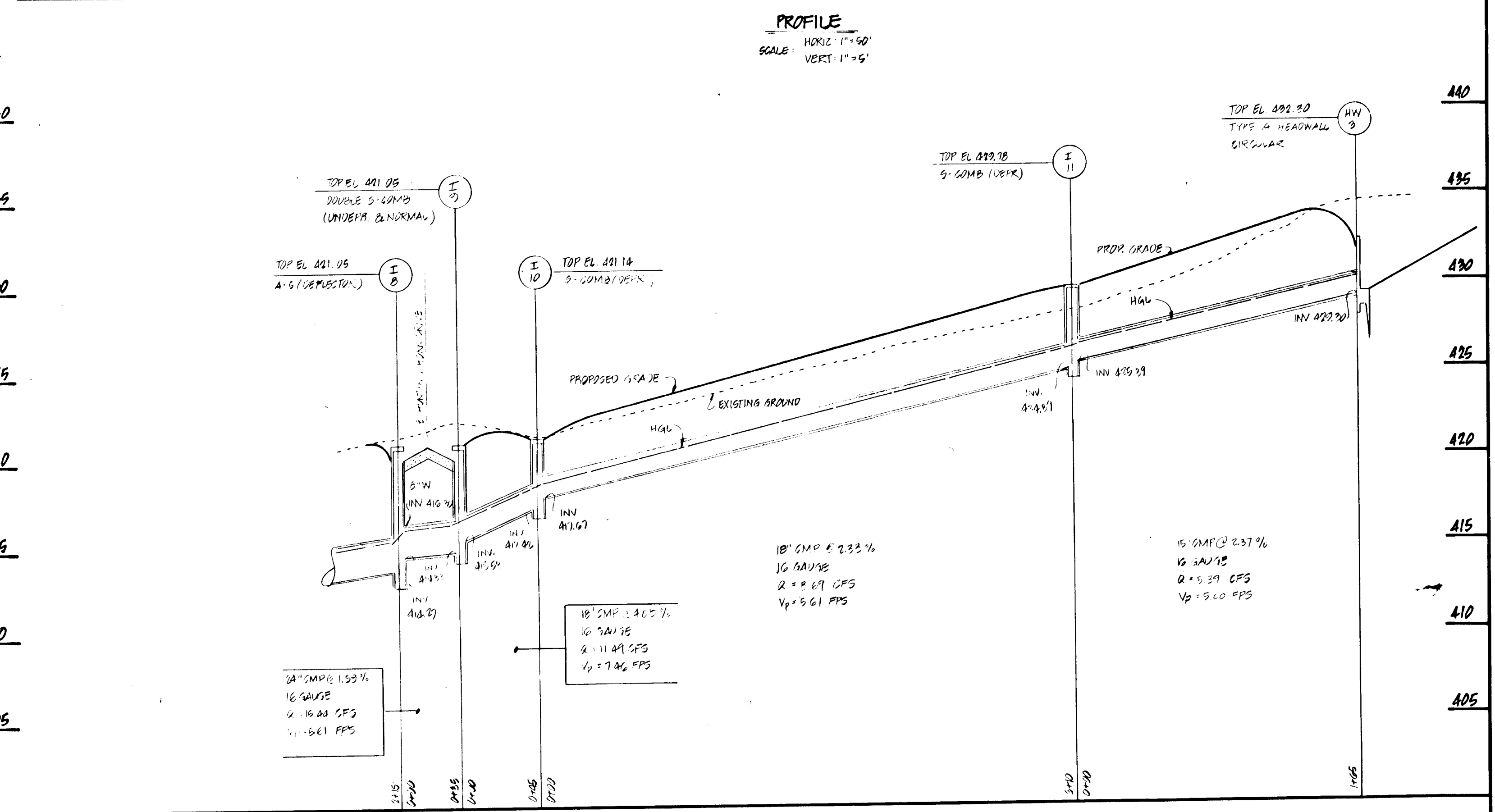
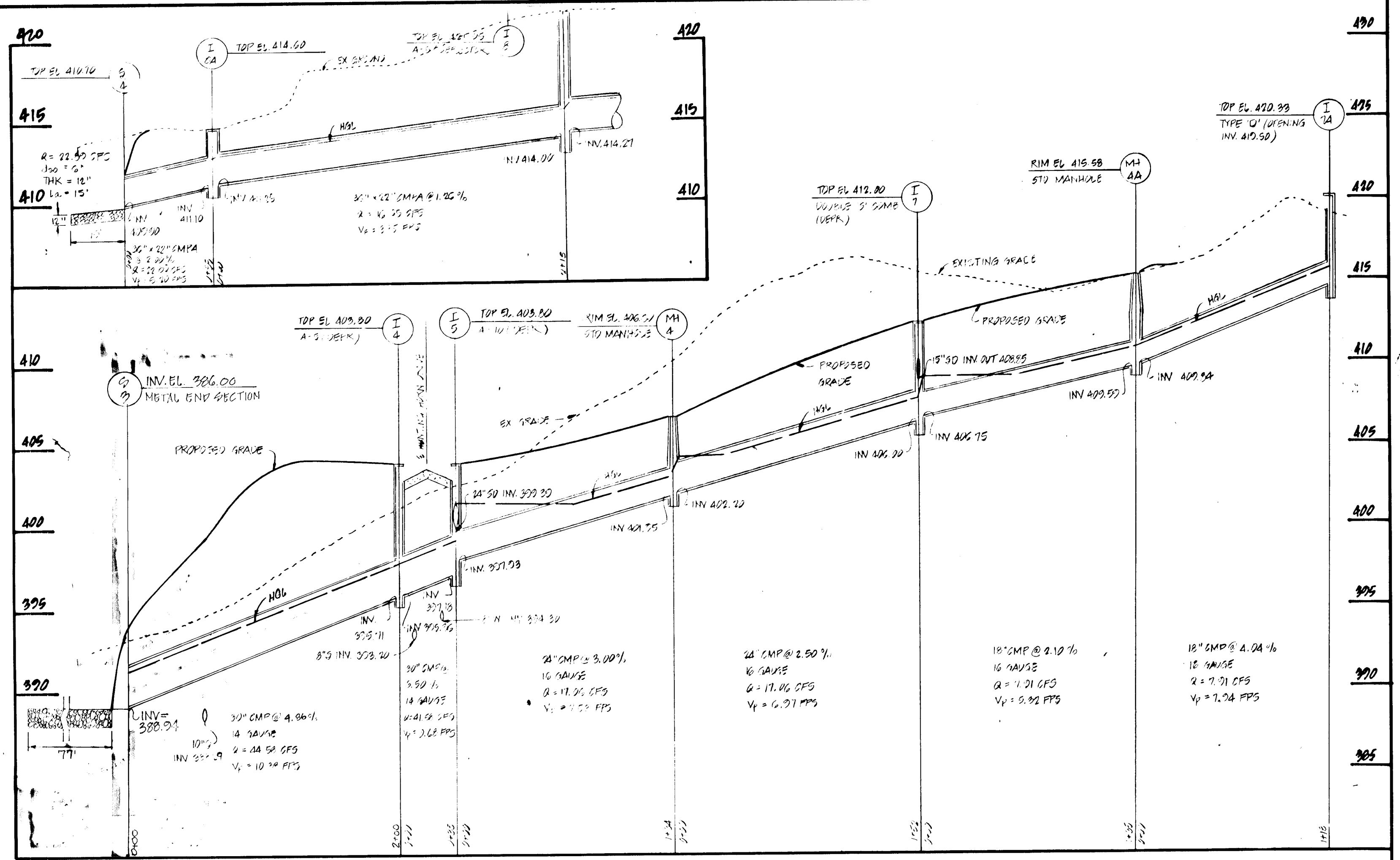
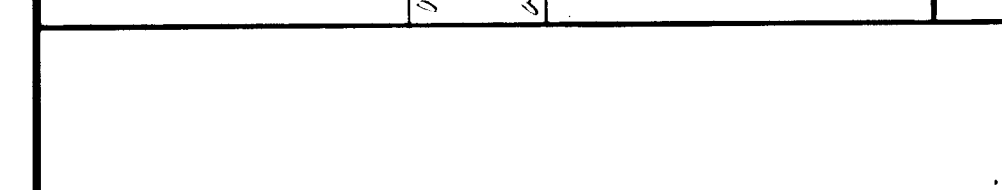
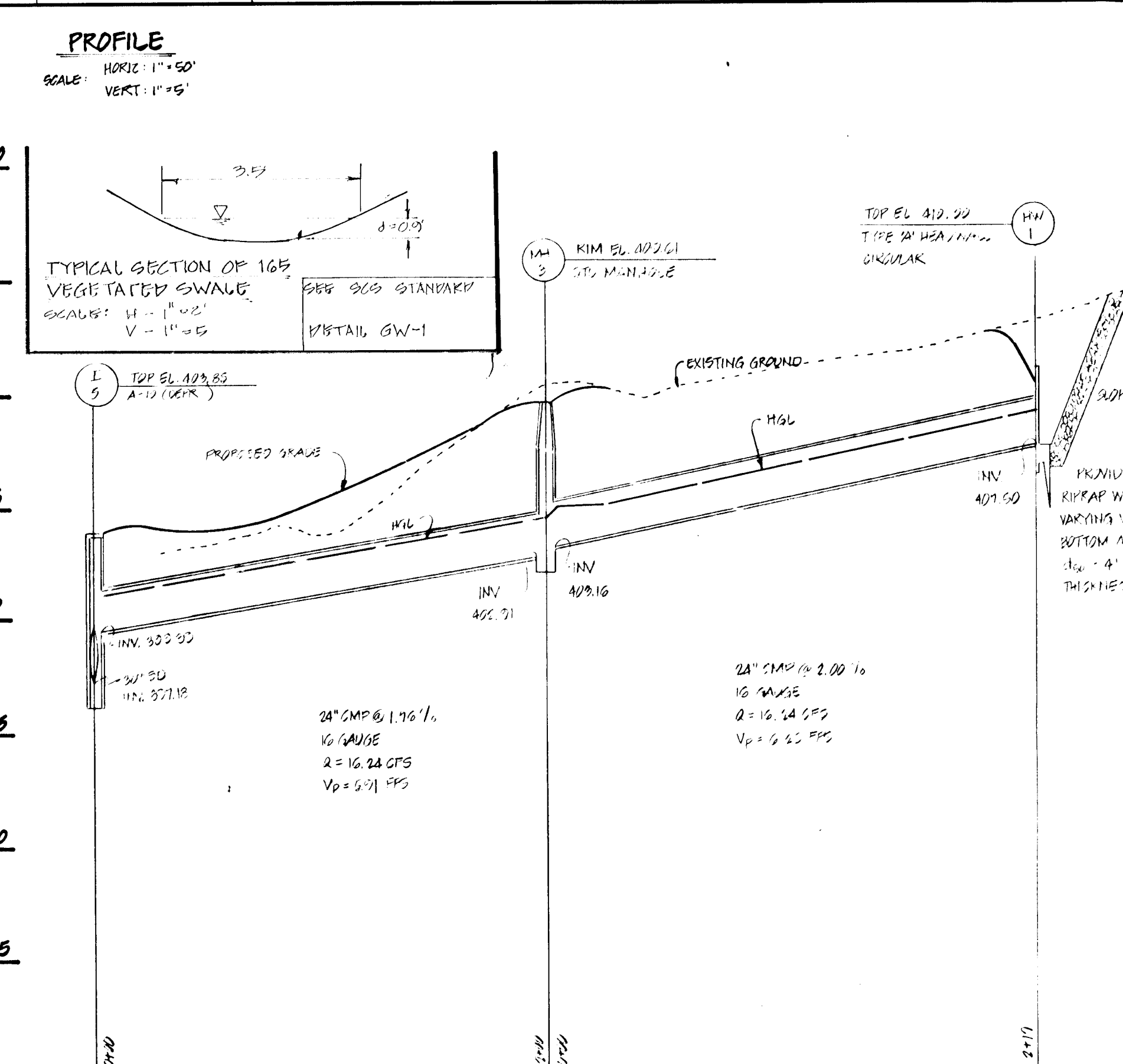
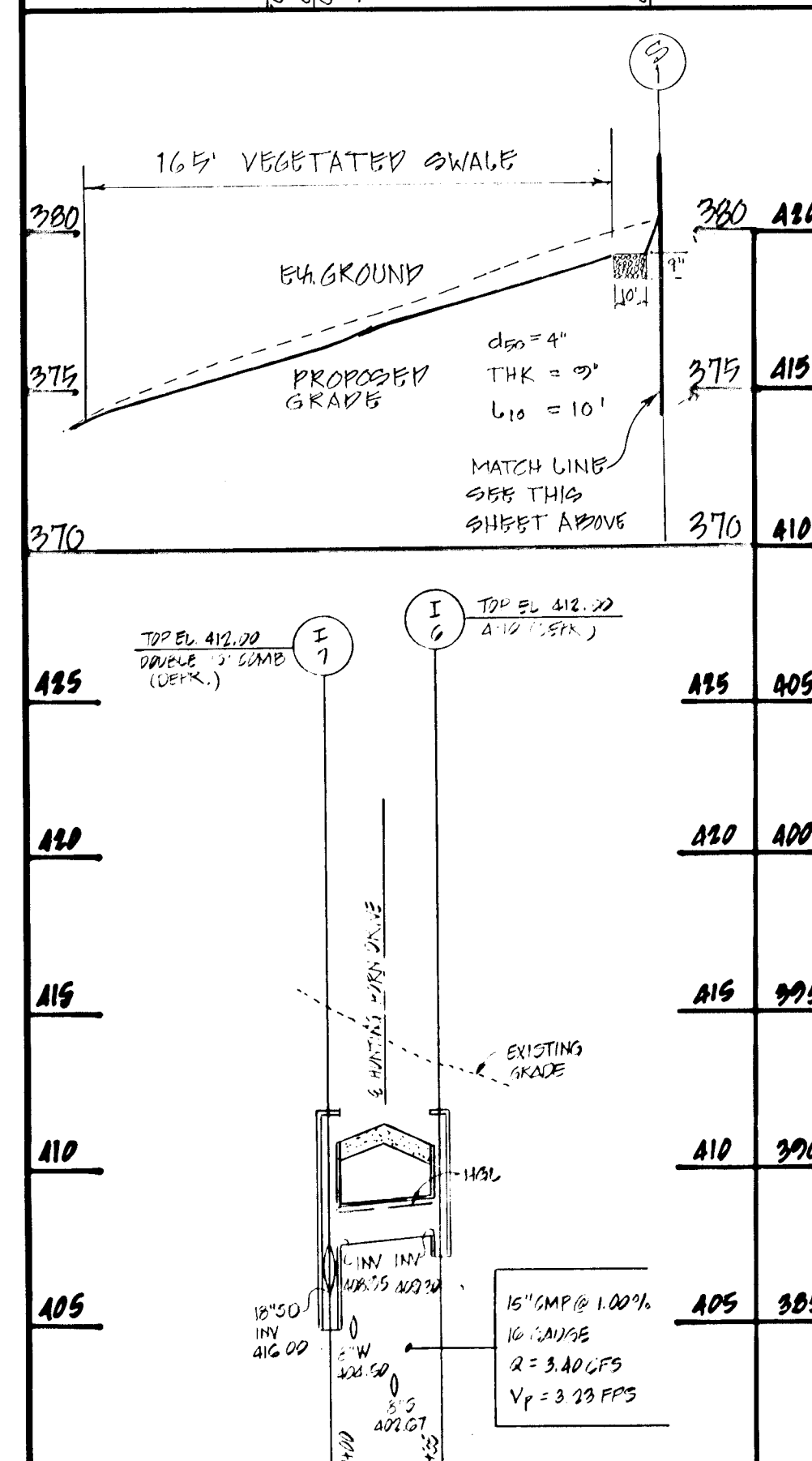
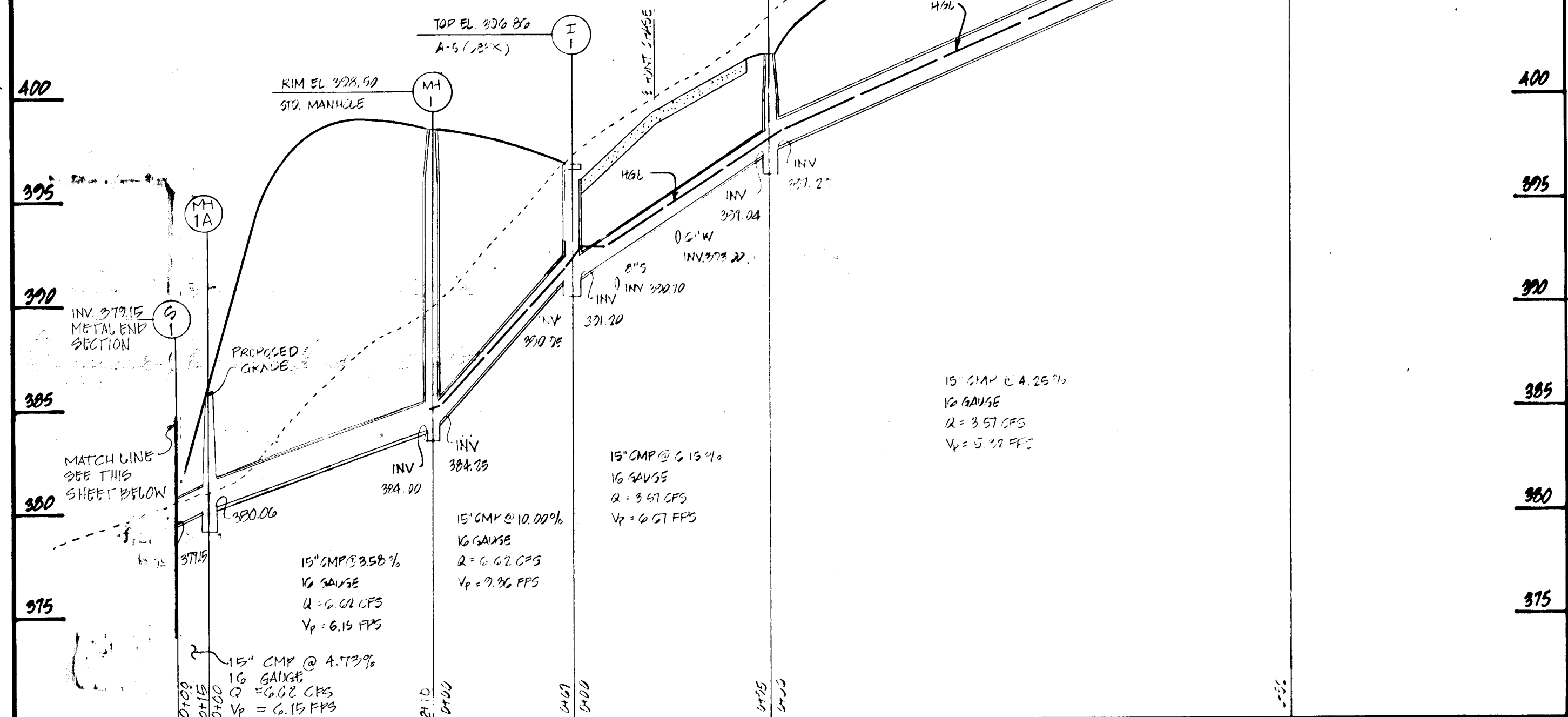


**OWNER / DEVELOPER**  
 F.G. MARKER COMPANY  
 5900 PRINCESS GARDEN PKWY.  
 LANDHAM, MARYLAND 20706  
 (301) 459-5586

**DRAINAGE AREA MAP, SOILS MAP, STORM DRAIN PROFILES & DETAILS**  
**MONTGOMERY MEADOWS**  
 SECTION ONE, AREA ONE  
 LOT 4 THRU LOT 61  
 TAX MAP 31 PARCEL 423 BLOCKS 13, 14, 15 AND 20  
 1 ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' JUNE 30, 1988

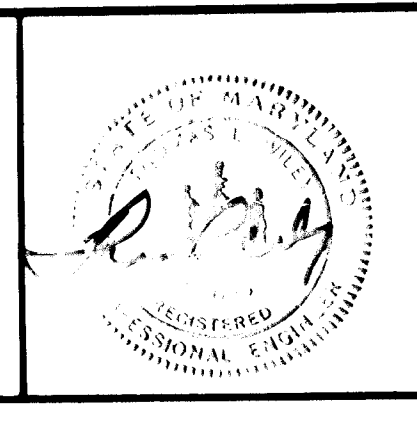


134350  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 CHIEF, LAND DEVELOPMENT DIVISION  
 DATE 5/10/89  
 CHIEF, BUREAU OF HIGHWAY  
 DATE 7/1/89  
 CHIEF, BUREAU OF ENGINEERING  
 DATE 5/10/89  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 DATE 5/2/89



DESIGNED		DATE		BY		DESCRIPTION	
H. GRIER	5/10/89	7/1/89	90	WAJ	AS PREPARED	HOWARD COUNTY COMMENTS	7/12/89
D. PETERS	6/15/89						
D. BURTON	6/15/89						
T. WILEY	6/15/89						

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



**OWNER / DEVELOPER**  
 F.G. MARKER COMPANY  
 5900 PRINCESS GARDEN PKWY.  
 LANDHAM, MARYLAND 20706  
 (301) 459-5586

**STORM DRAIN PROFILES**  
**MONTGOMERY MEADOWS**  
 SECTION ONE, AREA ONE  
 LOT 4, THRU LOT 61  
 TAX MAP 31 PARCEL 423 BLOCKS 13, 14, 19 AND 20  
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50'  
 JUNE 30, 1988

1473

**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 SOIL CONSERVATION DISTRICT.

*Thomas L. Wiley* 4/17/89  
 THOMAS L. WILEY, MD. REG. NO. 9273 DATE

**DEVELOPER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND 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 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.

*Wm. G. McFarland* 4/22/89  
 Wm. G. McFarland, F.G. MARKER CO. DATE

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

*Thomas L. Wiley* 4/27/89  
 U.S. SOIL CONSERVATION SERVICE DATE

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

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Thomas L. Wiley* 4/27/89  
 CHIEF, LAND DEVELOPMENT DIVISION DATE

*Thomas L. Wiley* 4/27/89  
 CHIEF, BUREAU OF HIGHWAY DATE

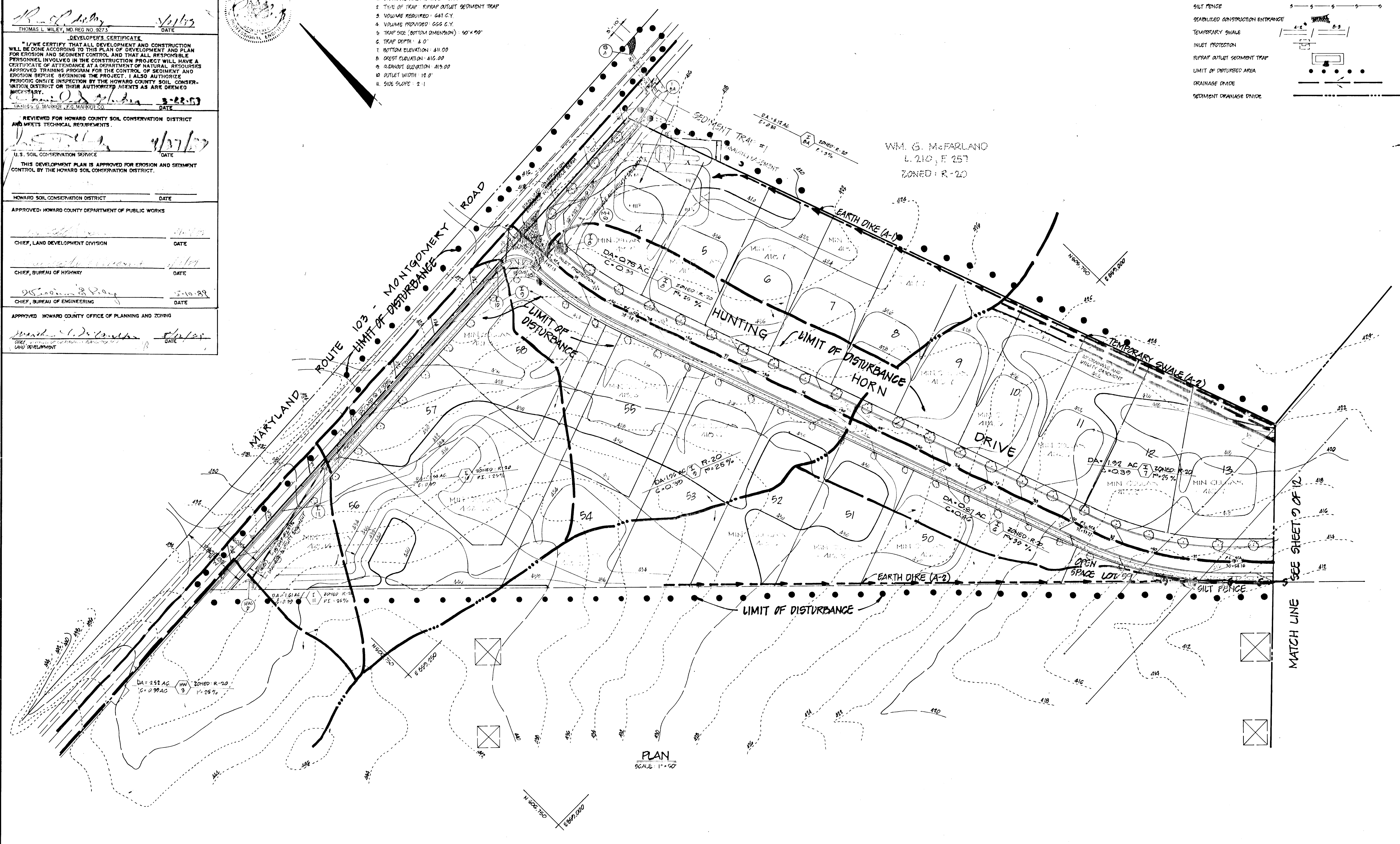
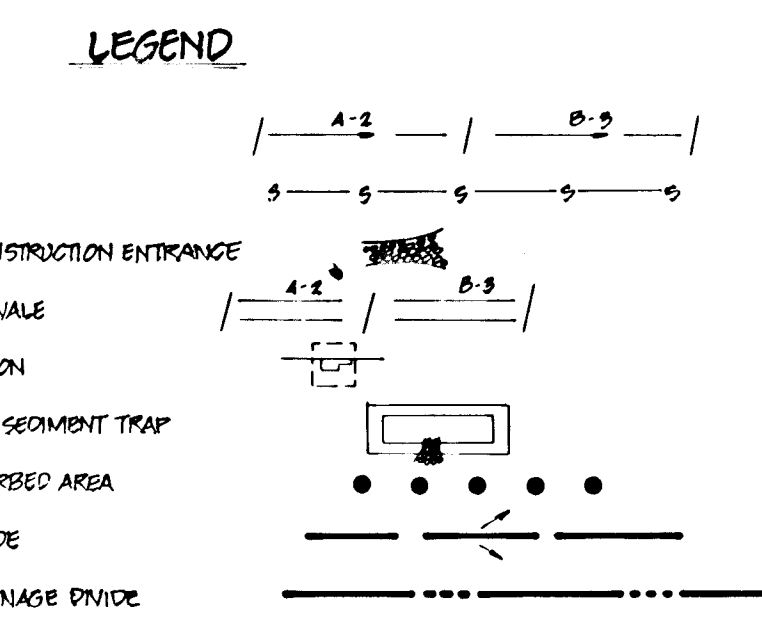
*Thomas L. Wiley* 5-10-89  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*Thomas L. Wiley* 5/12/89  
 CHIEF, LAND DEVELOPMENT DATE

DESIGN DATA TRAP #1

1. DRAINAGE AREA TO TRAP: 0.66 AC ±
2. TYPE OF TRAP: RIPRAP OUTLET SEDIMENT TRAP
3. VOLUME REQUIRED: 647 C.Y.
4. VOLUME PROVIDED: 666 C.Y.
5. TRAP SIZE (BOTTOM DIMENSION): 60" x 90"
6. TRAP DEPTH: 4.0'
7. BOTTOM ELEVATION: 411.00
8. CREST ELEVATION: 416.00
9. GRADIENT ELEVATION: 419.00
10. OUTLET WIDTH: 12.0'
11. SIDE SLOPE: 2:1

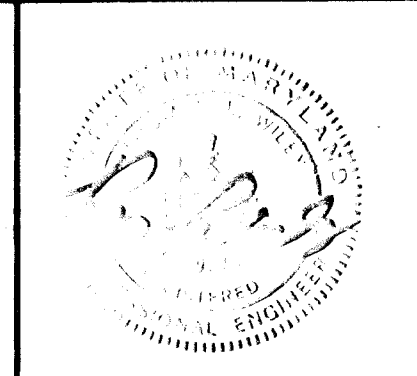


PLAN SCALE: 1" = 50'

3777

DESIGNED		DATE		BY		DESCRIPTION	
H. GIEH	4/30/88						
J.A. UDICH	5/10/88						
B.D. BURTON	5/10/88						
T.L. WILEY	5/10/88						

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



**OWNER / DEVELOPER**  
 F. G. MARKER, CO.  
 5900 PRINCESS GARDEN PKWY.  
 SUITE 707  
 LANHAM, MARYLAND 20706

**DRAINAGE AREA MAP, LANDSCAPE, GRADING & SEDIMENT CONTROL PLAN**  
**MONTGOMERY MEADOWS**  
 SECTION ONE, AREA ONE  
 LOT 4 THRU LOT 6  
 TAX MAP 31 PARCEL 423 BLOCKS 13, 14, 19 AND 20  
 1 ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' JUNE 30, 1988

SCALE: AS SHOWN CONTRACT NO. FILE NO. SHEET 8 OF 14



134350

**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 SOIL CONSERVATION DISTRICT.

THOMAS L. WILEY, MD REG. NO. 3273 DATE 3/1/89

**DEVELOPER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND 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 SEDIMENT AND EROSION 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 3-23-89

**REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND METS TECHNICAL REQUIREMENTS.**

U.S. SOIL CONSERVATION SERVICE DATE 4/21/89

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

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

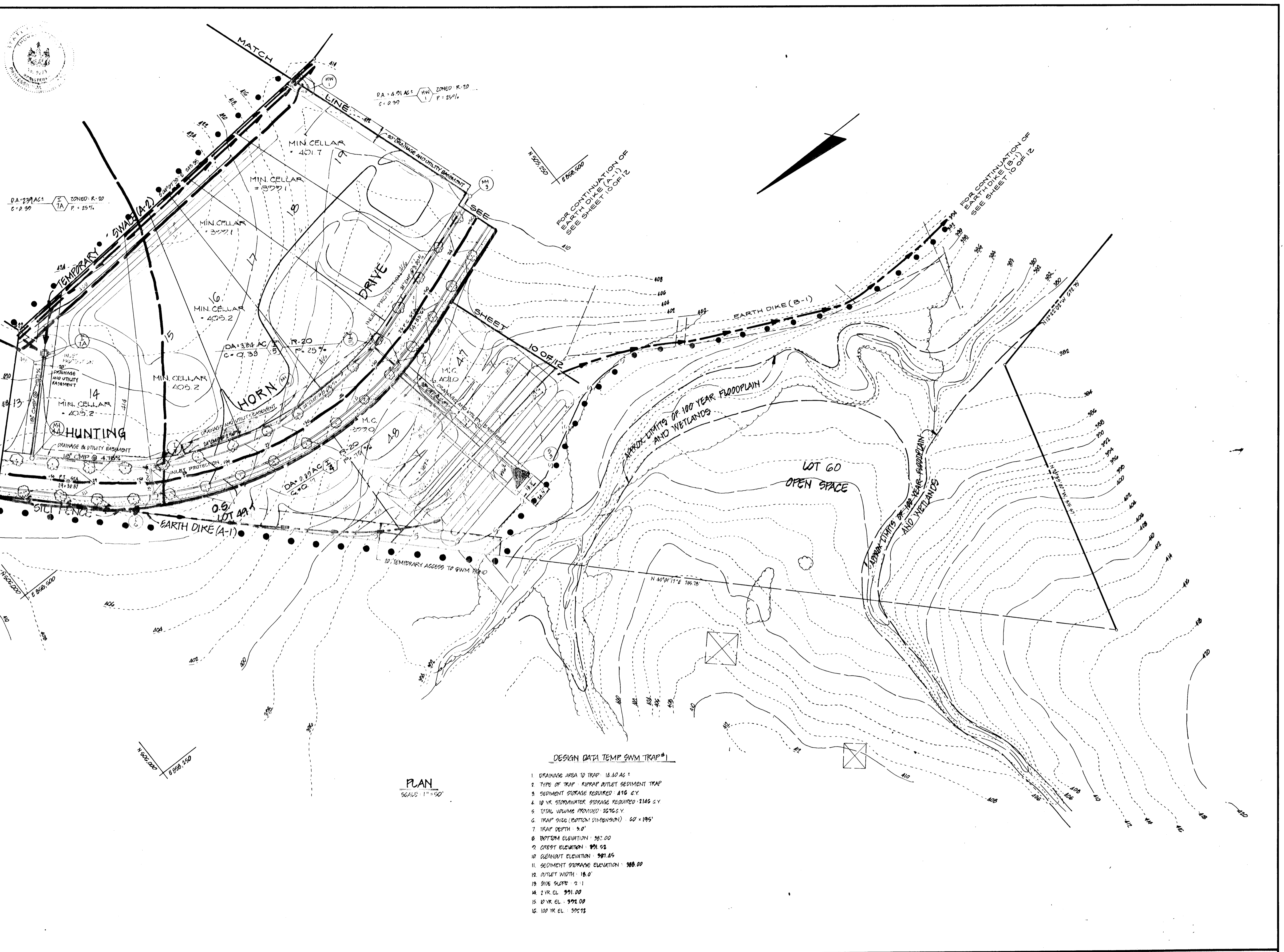
CHIEF, LAND DEVELOPMENT DIVISION DATE

CHIEF, BUREAU OF HIGHWAY DATE

CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



- DESIGN DATA TEMP SWM TRAP #1**
1. DRAINAGE AREA TO TRAP: 13.00 AC
  2. TYPE OF TRAP: RUPAR OUTLET SEDIMENT TRAP
  3. SEDIMENT STORAGE REQUIRED: 816 CY
  4. 10 YR STORMWATER STORAGE REQUIRED: 2186 CY
  5. TOTAL VOLUME PROVIDED: 2276 CY
  6. TRAP SIZE (BOTTOM DIMENSIONS): 60' x 195'
  7. TRAP DEPTH: 3.0'
  8. BOTTOM ELEVATION: 397.00
  9. CREST ELEVATION: 399.52
  10. CLEANOUT ELEVATION: 398.45
  11. SEDIMENT STORAGE ELEVATION: 388.00
  12. OUTLET WIDTH: 18.0'
  13. SIDE SLOPE: 2:1
  14. 2 YR EL: 391.00
  15. 10 YR EL: 392.00
  16. 100 YR EL: 395.15

PLAN  
 SCALE: 1" = 50'

1443

DESIGNED		DATE		BY		DESCRIPTION	
H. SMITH	3/23/89						
J. ALOICH	3/23/89						
B.D. BURTON	3/23/89						
T.L. WILEY	3/23/89						

**Dewberry & Davis**  
 ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS  
 3300 N. RIDGE ROAD, SUITE 100  
 ELLICOTT CITY, MD. 21043  
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**OWNER / DEVELOPER**  
 F.G. MARKER, CO.  
 5900 PRINCESS GARDEN PKWY.  
 SUITE 707  
 LANHAM, MARYLAND 20706

**DRAINAGE AREA MAP, LANDSCAPE, GRADING & SEDIMENT CONTROL PLAN**  
**MONTGOMERY MEADOWS**  
 SECTION ONE, AREA ONE  
 LOT 4 THRU LOT 61  
 TAX MAP 31 PARCEL 423 BLOCKS 13, 14, 19 AND 20  
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' JUNE 30, 1988

SCALE: AS SHOWN CONTRACT NO. FILE NO. SHEET 9 OF 14



**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 SOIL CONSERVATION DISTRICT.

THOMAS L. WILEY, MD REG. NO. 9273 DATE 4/21/87

**DEVELOPER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND 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 SEDIMENT AND EROSION 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 3-22-87

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. DATE 4/17/87

U.S. SOIL CONSERVATION SERVICE DATE

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

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

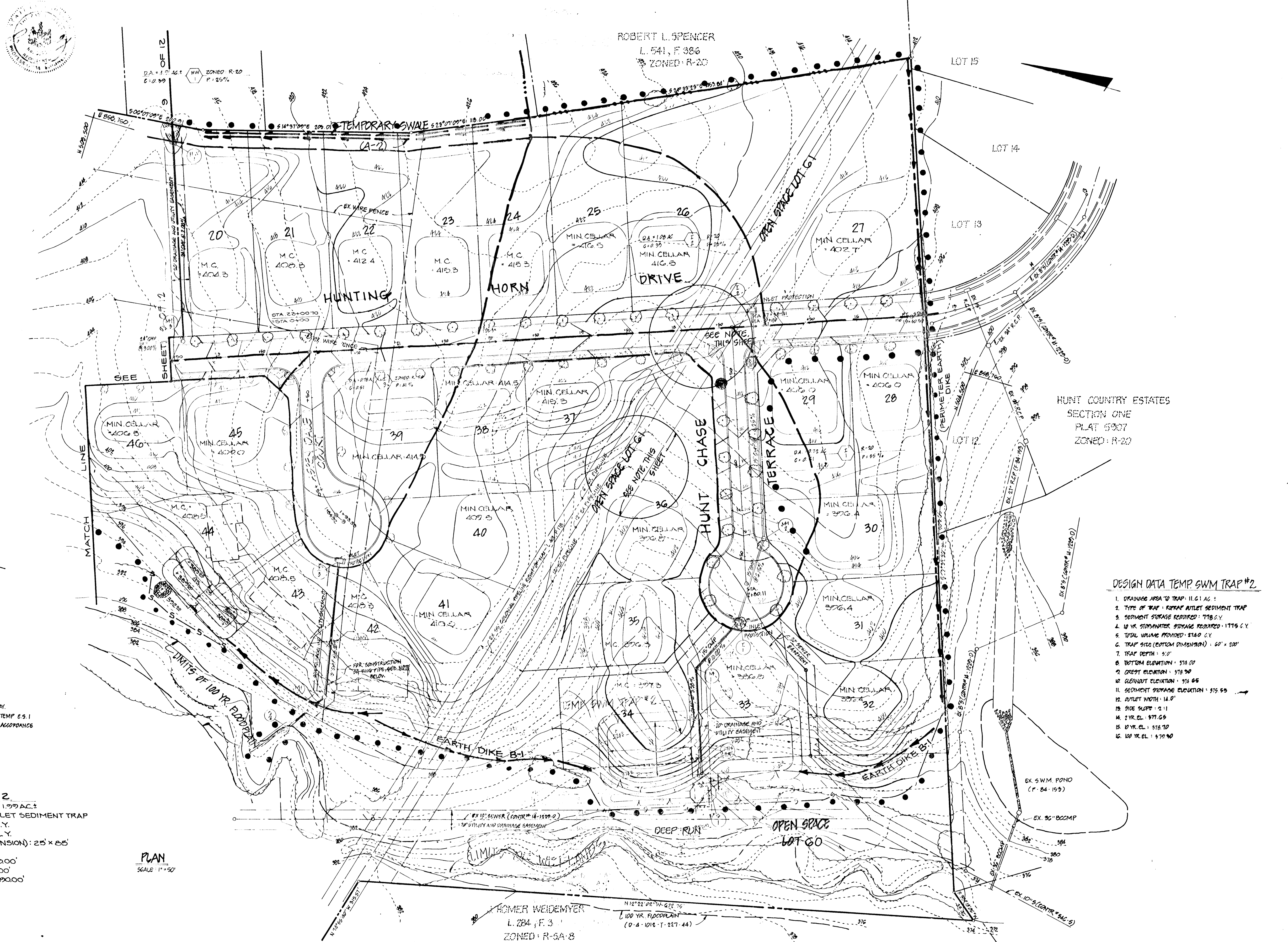
CHIEF, LAND DEVELOPMENT DIVISION DATE

CHIEF, BUREAU OF HIGHWAY DATE

CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, PLANNING AND ZONING DATE



- NOTES:**
- A COLONIAL PIPELINE REPRESENTATIVE SHALL BE ON SITE DURING ALL CONSTRUCTION ACTIVITY WITHIN 100' RIGHT OF WAY.
  - AFTER AREA UPSTREAM OF INLET 3-1, 3-2, 3-3 ARE STABILIZED, REMOVE TEMP. E.S. 1, E.S. 2, E.S. 3. REGRADE TEMP. SWM TRAP #2 AND INSTALL PIPES IN ACCORDANCE WITH PLAN AND PROFILE SHOWN.
  - FOR LOTS 42 THRU 46, FINAL GRADES ARE SHOWN.

**DESIGN DATA TRAP #2**

- DRAINAGE AREA TO TRAP: 1.29 AC ±
- TYPE OF TRAP: STONE OUTLET SEDIMENT TRAP
- VOLUME REQUIRED: 133 C.Y.
- VOLUME PROVIDED: 157 C.Y.
- TRAP SIZE (BOTTOM DIMENSION): 25' x 25'
- TRAP DEPTH: 2.0'
- BOTTOM ELEVATION: 389.00'
- CREST ELEVATION: 392.00'
- CLEANOUT ELEVATION: 390.00'
- OUTLET WIDTH: 5.0'
- SIDE SLOPES: 2:1

- DESIGN DATA TEMP. SWM TRAP #2**
- DRAINAGE AREA TO TRAP: 11.61 AC ±
  - TYPE OF TRAP: REFRAP OUTLET SEDIMENT TRAP
  - SEDIMENT STORAGE REQUIRED: 178 C.Y.
  - 10 YR. STORMWATER STORAGE REQUIRED: 1775 C.Y.
  - TOTAL VOLUME PROVIDED: 2140 C.Y.
  - TRAP SIZE (BOTTOM DIMENSION): 60' x 200'
  - TRAP DEPTH: 5.0'
  - BOTTOM ELEVATION: 378.00'
  - CREST ELEVATION: 378.90'
  - SEDIMENT STORAGE: 378.66'
  - SEDIMENT STORAGE ELEVATION: 375.50'
  - OUTLET WIDTH: 14.0'
  - SIDE SLOPES: 2:1
  - 10 YR. EL.: 377.65'
  - 10 YR. EL.: 376.70'
  - 100 YR. EL.: 376.90'

PLAN  
SCALE: 1" = 50'

DESIGNED		DATE		BY		DESCRIPTION	
J. SHUEH	4/21/87						
J. A. LUCH	4/21/87						
B. D. BURTON	4/21/87						
T. L. WILEY	4/21/87						

**Dewberry & Davis**  
 ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS  
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 ELLICOTT CITY, MD. 21043  
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**OWNER / DEVELOPER**  
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 5900 PRINCESS GARDEN PKWY.  
 SUITE 707  
 LATHAM, MARYLAND 20706

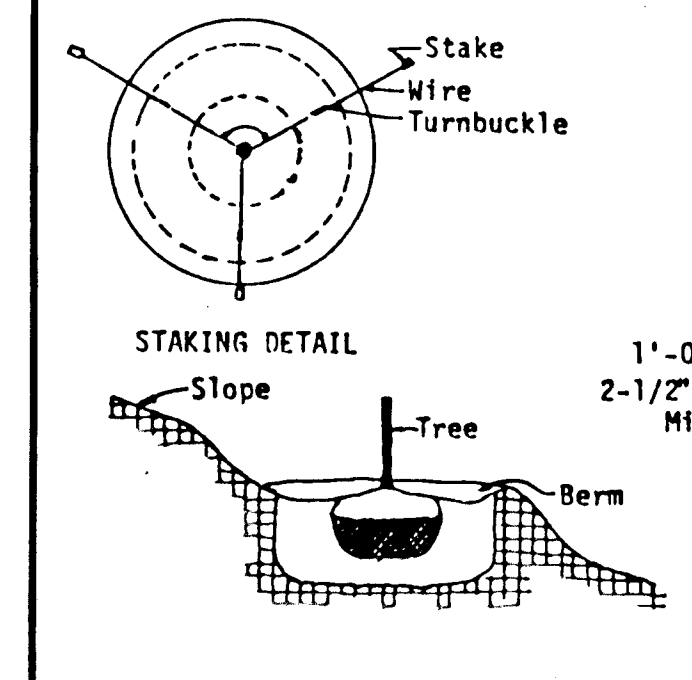
**DRAINAGE AREA MAP, LANDSCAPE, GRADING & SEDIMENT CONTROL PLAN**  
**MONTGOMERY MEADOWS**  
 SECTION ONE, AREA ONE  
 LOT 4 THRU LOT 61  
 TAX MAP # 31 PARCEL # 423 BLOCKS # 13, 14, 19 AND 20  
 1 ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50' JUNE 30, 1988

3771

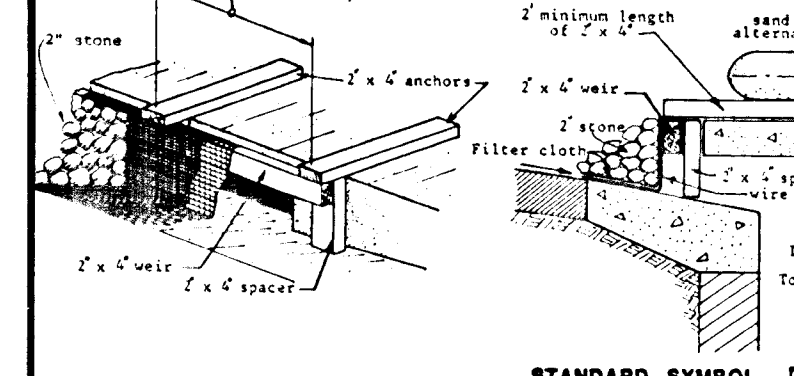
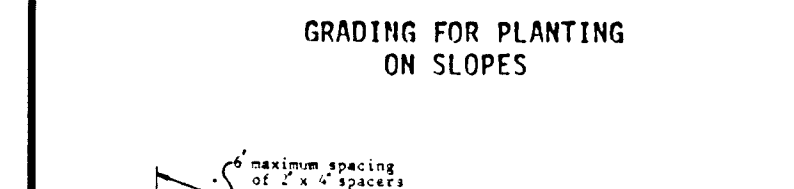








**TREE PLANTING**  
NOT TO SCALE

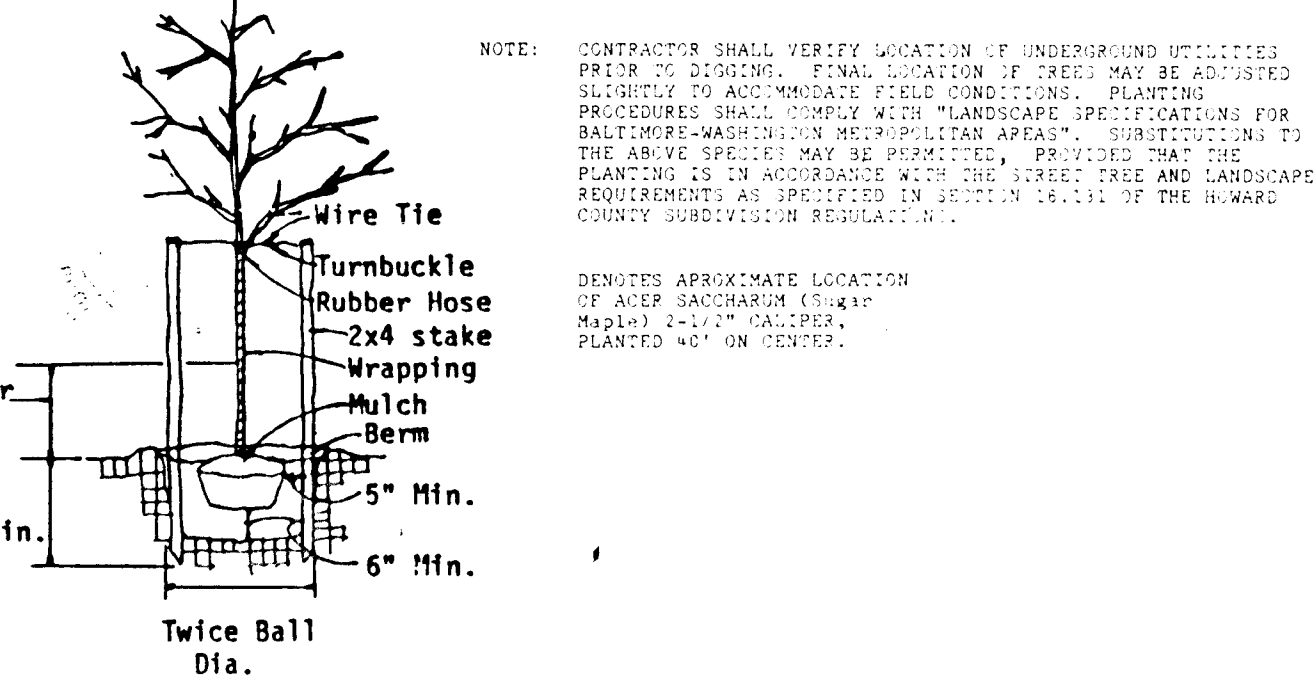


**CONSTRUCTION SPECIFICATIONS**

1. All stakes shall be constructed of 2" x 4" construction grade lumber.
  2. Wire mesh must be of sufficient strength to support filter fabric, and secure for curb inlet with water fully impounded adjacent to it.
  3. Filter cloth must be of a type approved for this purpose resistant to sunlight with a tensile strength of 500-800 lbs. to allow sufficient passage of water and removal of sediment.
  4. Stone to be 2" in size and clean, since fines would clog the cloth.
- Procedure**
1. Excavate completely around inlet to a depth of 18" below notch elevation.
  2. Drive 2 x 4 post 1' into ground at four corners of inlet. Place mesh between posts on ends of inlet. Assemble top portion of 2 x 4 frame using over 2x4 shown. Top of frame (weir) must be 4" below edge of roadway adjacent to inlet.
  3. Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
  4. Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
  5. Backfill around inlet in compacted 4" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
  6. If the inlet is not in a low point, construct a compacted earth dike in the ditch below inlet. The top of this dike is to be at least 8" higher than the top of frame (weir).
  7. This structure must be inspected frequently and the filter cloth cleaned when clogged.

**CURB INLET PROTECTION**  
NOT TO SCALE

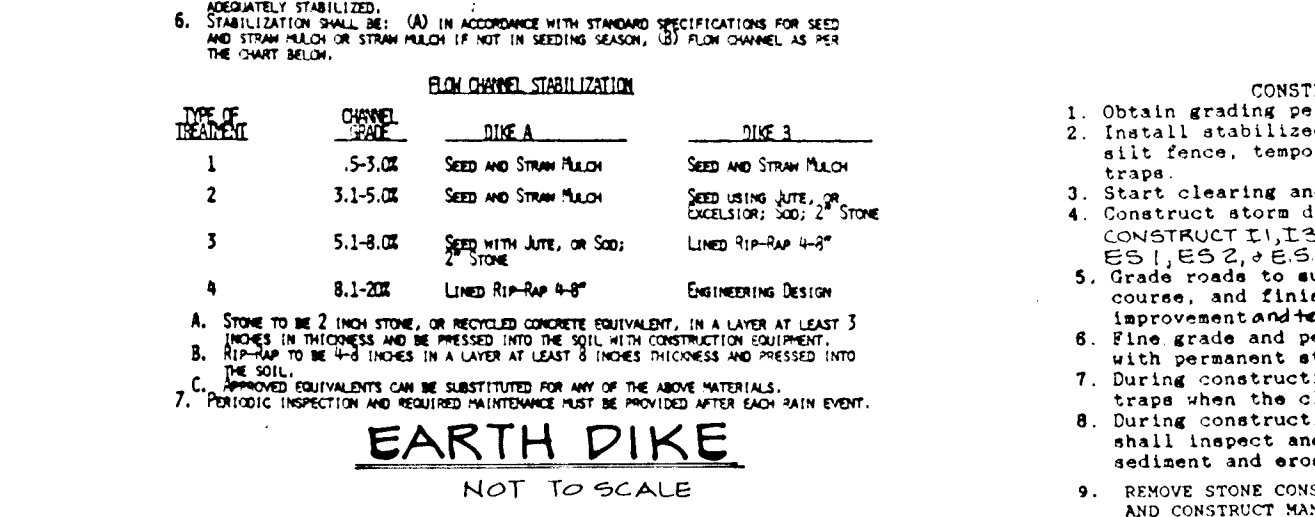
1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
3. Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6" apart).
4. Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
6. Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.



**SILT FENCE**  
NOT TO SCALE

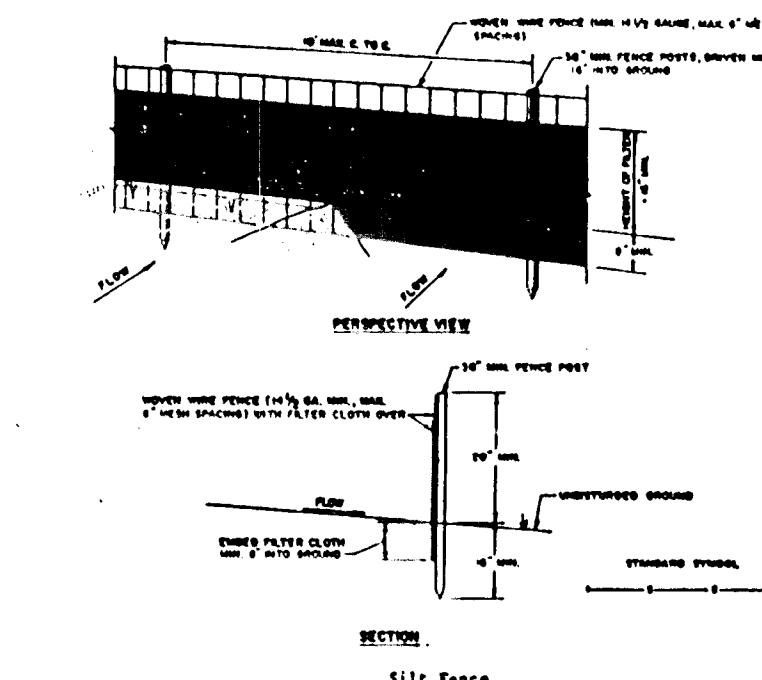
1. Silt fence must be embedded, as shown in, at least 8 inches into the ground. Leaving the top edge of the filter fabric on the ground and covering it with soil is not an acceptable method of laying in. The top edge of the filter fabric must be maintained in a condition which will prevent seepage or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and credit toward clearance of any measure used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.
2. Fence posts must be:
  - a. at least 36 inches long, and
  - b. have a cross sectional area of at least 3 square inches if wooden, or
  - c. weigh at least 1 pound per linear foot if steel T or U type, and
  - d. be 10 foot center centers, and
  - e. driven at least 16 inches into the ground.
3. The filter fabric must be fastened securely to the fence posts.
4. When two sections of filter fabric are joined together, the joint must occur at a fence post. The ends of the filter fabric should be overlapped by least 6 inches, folded, and fastened to the fence post so that no gaps in the fence occur. Manufacturer's recommendations for joining fabric sections may be followed as long as the resulting joint does not create gaps in the silt fence.
5. Silt fences must be inspected periodically and after each rain event and maintenance performed as necessary.

**EARTH DIKE**  
NOT TO SCALE

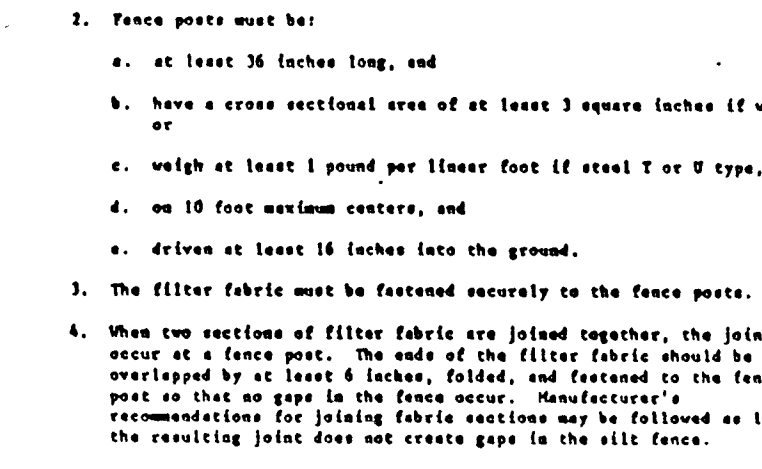


**SEDIMENT CONTROL NOTES:**

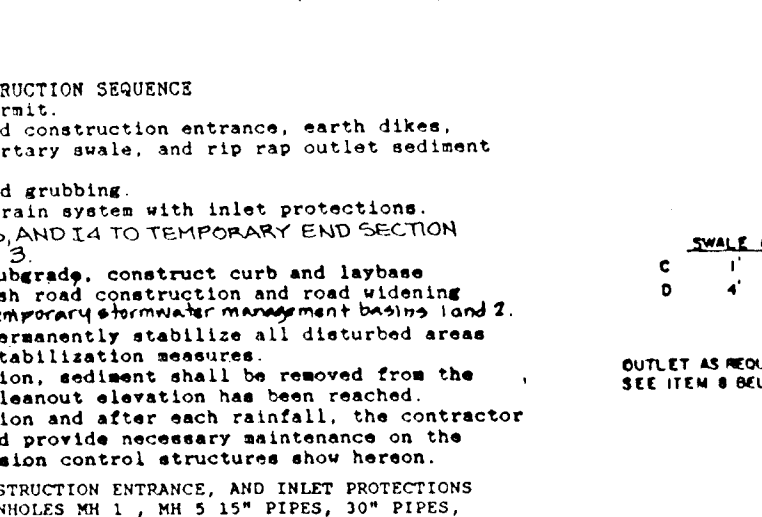
1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (193-2-1437)
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND 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, 8:1 OR 14:1 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 12, 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 (ISDC, 51) AND (ISDC, 54), TEMPORARY SEEDING (ISDC, 50) AND MULCHING (ISDC, 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 PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:
  - TOTAL AREA OF SITE: 32.22 ACRES
  - AREA TO BE ROOFED OR PAVED: 11.22 ACRES
  - AREA TO BE VEGETATIVELY STABILIZED: 21.00 ACRES
  - TOTAL CUT: 10,000 CU.YDS.
  - TOTAL FILL: 10,000 CU.YDS.
  - OPPOSITE WASTE/BORROW AREA LOCATION: [Blank]
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.



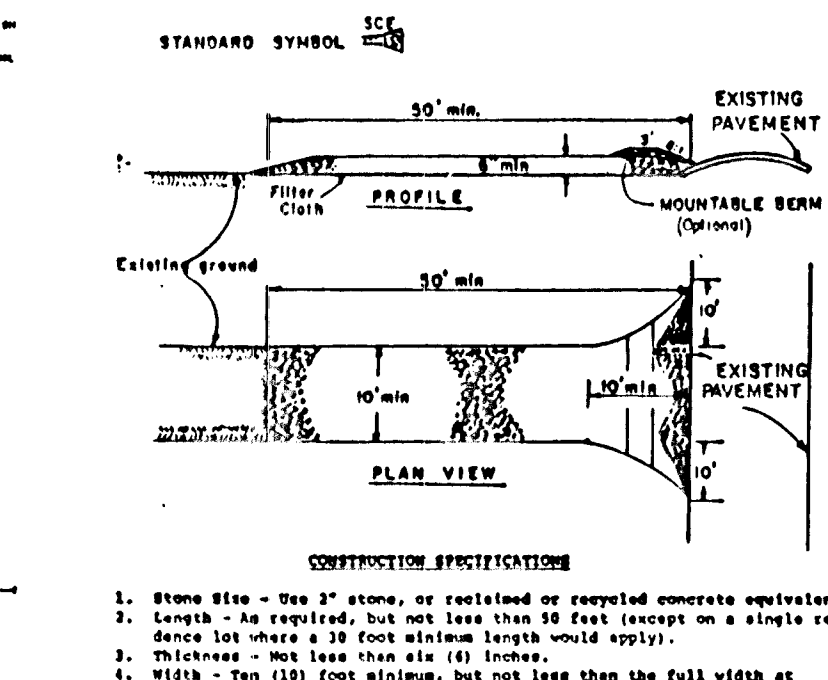
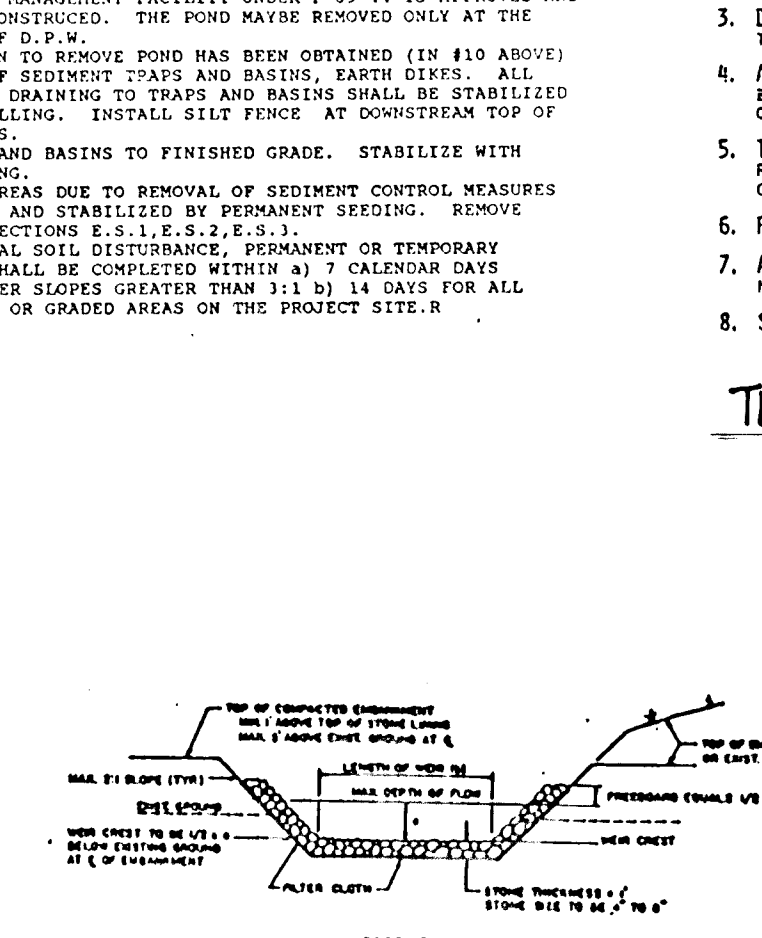
**STRAW BALE DIKE**  
NOT TO SCALE



**TEMPORARY SWALE**  
NOT TO SCALE



**RIPRAP OUTLET SEDIMENT TRAP**  
NOT TO SCALE



**CONSTRUCTION SEQUENCE**

1. Obtain grading permit.
2. Install stabilized construction entrance, earth dike, silt fence, temporary swale, and rip rap outlet sediment trap.
3. Start clearing and grubbing.
4. Construct storm drain system with inlet protection, construct ST-W and ST-T to temporary final section (ES 1, ES 2, ES 3).
5. Grade roads to subgrade, construct curb and laydown concrete, and finish road construction and road widening improvement and temporary stormwater management basins (land 2).
6. Fine grade and permanently stabilize all disturbed areas with permanent stabilization measures.
7. During construction, sediment shall be removed from the traps when the cleanout elevation has been reached.
8. During construction and after each rainfall, the contractor shall inspect and provide necessary assistance on the sediment and erosion control structures shown herein.
9. REMOVE STONE CONSTRUCTION ENTRANCE, AND INLET PROTECTIONS AND CONSTRUCT RANGLING 18" x 18" 5' 5" PIPES, 10" PIPES, AND END SECTIONS ACCORDING TO PLANS AND PROFILES SHOWN.
10. NOTE: ALL SEDIMENT TRAPS & TEMPORARY STORMWATER MANAGEMENT BASINS SHALL REMAIN IN PLACE UNTIL THE PLAN FOR THE REGIONAL STORMWATER MANAGEMENT FACILITY UNDER F-89-44 IS APPROVED AND THE BOND CONSTRUCTED. THE BOND MAY BE RECEIVED ONLY AT THE APPROVAL OF D.P.W.
11. AFTER PERMIT TO REMOVE POND HAS BEEN OBTAINED (IN #10 ABOVE) BEGIN REMOVAL OF SEDIMENT TRAPS AND BASINS, EARTH DIKES. ALL DISTURBED AREAS DRAINING TO TRAPS AND BASINS SHALL BE STABILIZED PRIOR TO BACKFILLING. INSTALL SILT FENCE AT DOWNSTREAM TOP OF TRAP AND BASIN.
12. BACKFILL TRAPS AND BASINS TO FINISHED GRADE. STABILIZE WITH PERMANENT SEEDING.
13. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING. REMOVE TEMPORARY END SECTIONS 2-1, 2-2, 2-3, 2-4.
14. FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL PERIMETER SLOPES GREATER THAN 3:1; 8:1; 14:1 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

**CONSTRUCTION SPECIFICATIONS FOR ST-W**

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT MIN-POSITIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBSTRUCTIVE MATERIAL SHALL BE REMOVED AND DISPOSED OF AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS SHOWN ON THE STANDARD SYMBOL AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPAIR NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT USED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE CHART BELOW:

**CONSTRUCTION SPECIFICATIONS FOR ST-W**

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be five (5) feet, measured at centerline of embankment.
3. All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed the height of embankment.
5. Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest.
6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel.
7. Stone used in the outlet channel shall be four (4) to eight(8) inches (rip rap). To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet.
8. 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.
9. The structure shall be inspected after each rain and repaired as needed.
10. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
11. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
12. Drainage area for this practice is limited to 15 acres or less.

**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 DISTRICT.

Thomas L. Wiley, MD REG NO. 9273

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

U.S. SOIL CONSERVATION SERVICE

DATE: 4/27/89

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

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: 4/18/89

**DEVELOPER'S CERTIFICATE**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND 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 SEDIMENT AND EROSION 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: 3-22-89

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: 5-10-89

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING

DATE: 5/14/89

**REVISIONS**

DESIGNED	DATE	BY	DESCRIPTION
J.A. UDICH	6/30/88		
DRAWN	J.A. UDICH	6/30/88	
CHECKED	B.O. BURTON	6/30/88	
APPROVED	T. WILEY	6/30/88	

**DESIGNED** J.A. UDICH 6/30/88

**DRAWN** J.A. UDICH 6/30/88

**CHECKED** B.O. BURTON 6/30/88

**APPROVED** T. WILEY 6/30/88

**Dewberry & Davis**

ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS

3300 N. RIDGE ROAD, SUITE 100  
ELLICOTT CITY, MD. 21043  
(301) 461-7478

**OWNER / DEVELOPER**

F. G. MARKER, CO.  
5900 PRINCESS GARDEN PKWY.  
SUITE 707  
LANHAM, MARYLAND 20706

**SEDIMENT CONTROL DETAILS**

**MONTGOMERY MEADOWS**  
SECTION ONE, AREA ONE  
LOT 4 THRU LOT 6

TAX MAP 31 PARCEL 423 BLOCKS 13, 14, 19 AND 20  
1 ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50'  
JUNE 30, 1988

SCALE AS SHOWN CONTRACT NO. FILE NO. SHEET 17 OF 22

1443