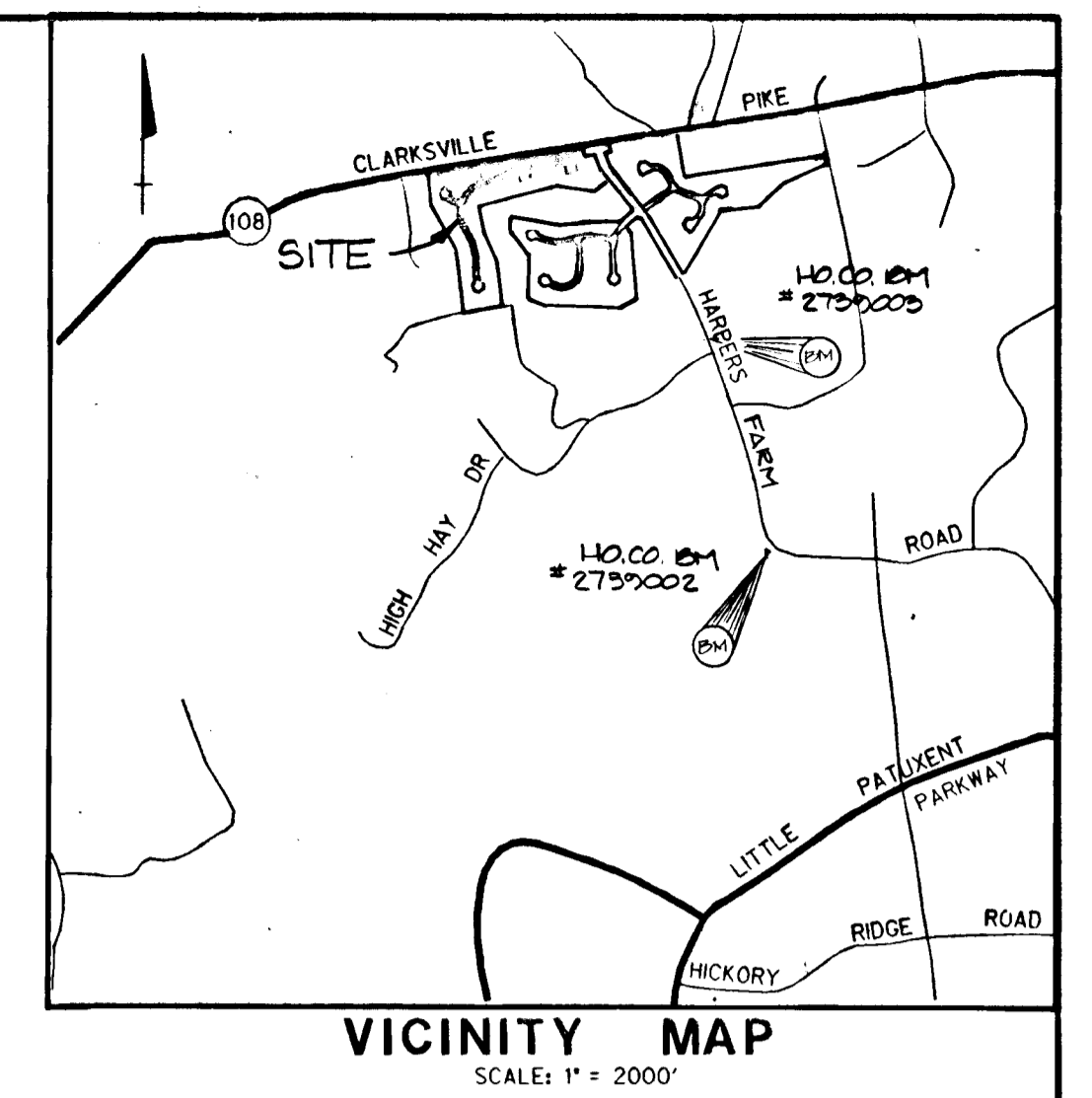


SHEET INDEX	
1	COVER SHEET & DRAINAGE AREA MAP
2	PLAN & PROFILE
3	PLAN & PROFILE
4	PROFILES, TYPICAL SECTIONS & DETAILS
5	PLAN OF MD RTE 108 WIDENING & TYP. SEC.
6	STORM DRAIN PROFILES
7	STORM DRAIN PROFILES & DETAILS
8	SEDIMENT & EROSION CONTROL PLAN
9	SEDIMENT & EROSION CONTROL PLAN
10	SEDIMENT & EROSION CONTROL PLAN
11	SEDIMENT & EROSION CONTROL DETAILS

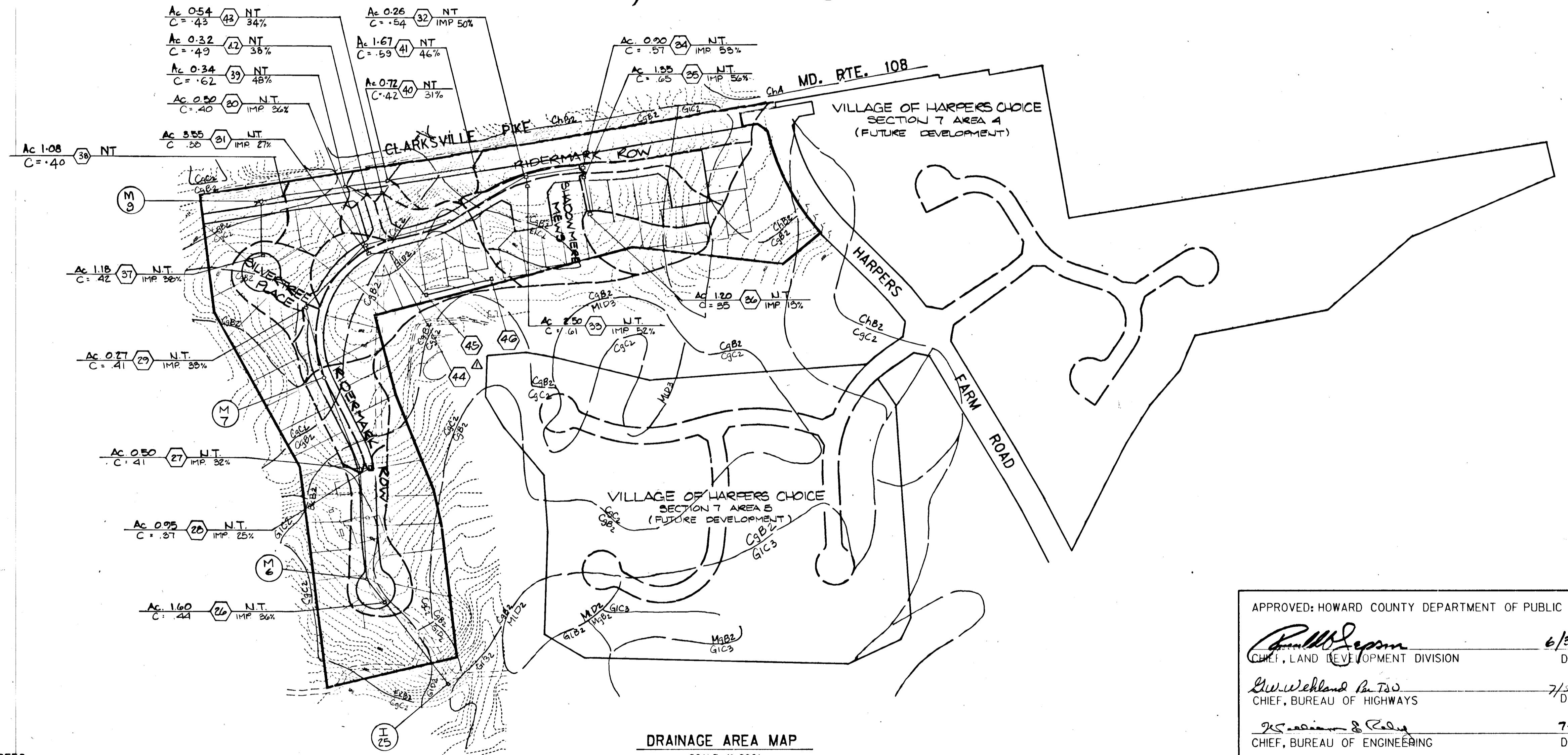
# VILLAGE OF HARPERS CHOICE SECTION 7 AREA 3 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



**GENERAL NOTES**

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:
 

MISS UTILITY	1-800-257-7777
C&P TELEPHONE COMPANY	752-9976
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
A&T CABLE LOCATION DIVISION	393-3553
BALTIMORE GAS AND ELECTRIC COMPANY	885-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD COUNTY CONSTRUCTION/SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272
- TOPOGRAPHY TAKEN FROM AERIAL SURVEY COMPILED BY "MAPS, INC." WITH SUBSEQUENT REVISIONS ACCORDING TO FIELD RUN TOPO & AS-BUILT DRAWINGS.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- THIS PLAT AND THE COORDINATES SHOWN HEREON ARE BASED ON THE MARYLAND STATE PLAN COORDINATE SYSTEM. REFERENCE HOWARD COUNTY CONTROL POINTS 2739002 & 2739003.
- STORM DRAIN STRUCTURES TO BE IN ACCORDANCE WITH HOWARD COUNTY STD. SPEC. & DETAILS, AND MD. S.H.A., ALL STORM DRAIN PIPE TO BE RCCP OR C.M.P.
- TRENCH COMPACTION FOR STORM DRAINS WITHIN ROADS OR STREET RIGHT OF WAY LIMITS SHALL BE IN ACCORDANCE WITH THE 1982 HOWARD COUNTY ROAD CODE.
- MINIMUM COVER OF 12" SHALL BE PROVIDED OVER STORM DRAIN PIPES IN ALL AREAS NOT BEING FINAL GRADED BY THESE PLANS.
- ALL TRAFFIC CONTROL SERVICES, PARKING AND SIGNING TO BE DONE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", 1978 REVISED EDITION.
- PROVIDE CONCRETE SIDEWALK RAMPS IN CURBS, WHERE SHOWN IN PLAN (MAX. 12:1 SLOPE; SEE HOWARD COUNTY STD. DETAILS, R-4.01.)
- STREET LIGHTS SHALL BE 175 WATT MODERN MERCURY VAPOR LAMP POST TOP FIXTURES ON 14-FOOT BRONZE FIBERGLASS POLES.
- STREET TREES WILL BE PROVIDED IN ACCORDANCE WITH SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- STORMWATER MANAGEMENT REQUIREMENT FOR THIS SUBDIVISION HAS BEEN WAIVED IN ACCORDANCE WITH D.P.W. ACTION DATED 9-16-88.
- MODIFIED CURB & GUTTER SHALL BE USED THROUGHOUT THIS SUBDIVISION EXCEPT AS SHOWN ON THE PLANS. TRANSITIONS TO STD. CURB & GUTTER AT "A" INLETS SHALL BE IN ACCORDANCE WITH R-3.06. OTHER TRANSITIONS, AS SHOWN ON THE PLANS, SHALL BE IN ACCORDANCE WITH R-3.02.



**STREET TREE LEGEND**

QUANTITY	TYPE	SIZE
150	P. Oak	2 1/2" MIN. DIA.

NOTE: SUBSTITUTIONS MAY BE REQUIRED AT TIME OF PLANTING DUE TO PLANTING SEASON AND PLANT MATERIAL AVAILABILITY

**STREET TREES:**  
THE LOCATION AND TYPES OF TREES SHOWN ON THESE PLANS ARE TENTATIVE AND ARE USED FOR BOND PURPOSES ONLY. THE FINAL LOCATION AND VARIETY OF TREES MAY VARY TO ACCOMMODATE FIELD CONDITIONS AND BUILDER'S LANDSCAPE PROGRAM. BOND RELEASE IS CONTINGENT UPON SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, AS APPROVED BY THE OFFICE OF PLANNING AND ZONING.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Paul W. Johnson* 6/30/89  
CHIEF, LAND DEVELOPMENT DIVISION DATE

*Blair Wehland B. Tisd* 7/1/89  
CHIEF, BUREAU OF HIGHWAYS DATE

*John S. ...* 7-5-89  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

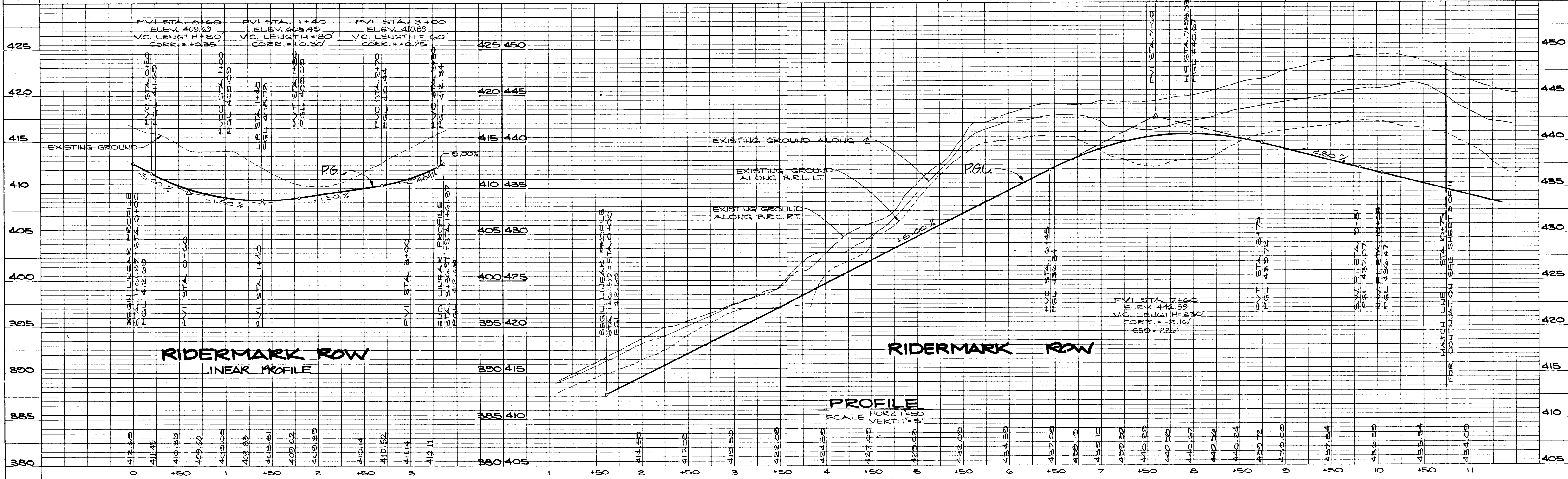
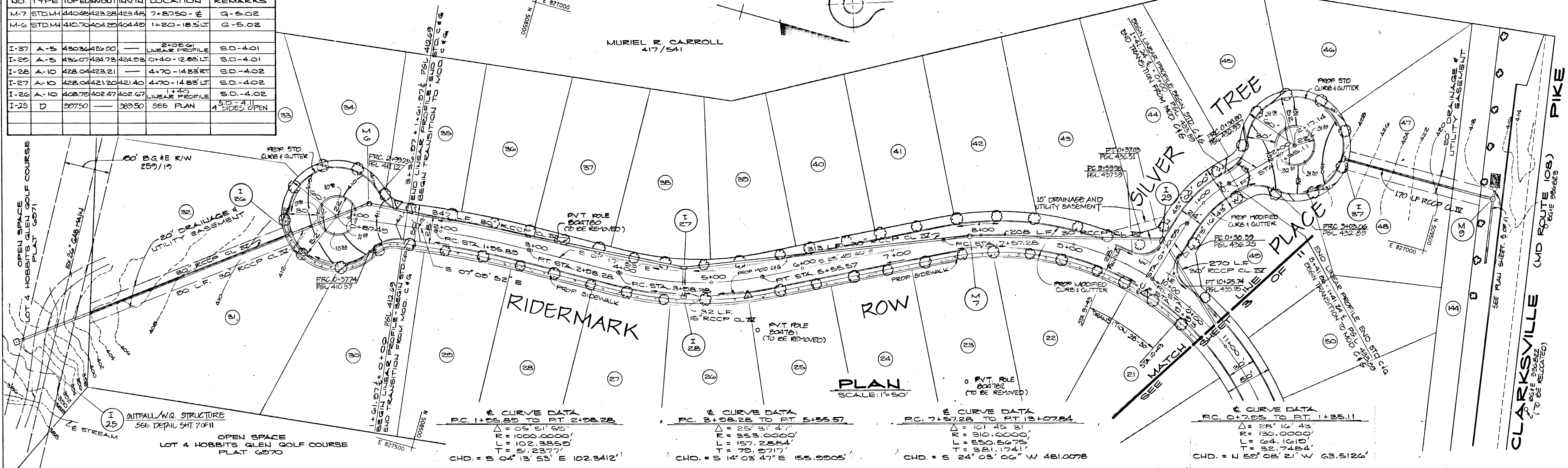
*Paula J. Langley* 7/2/89  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

OWNER/DEVELOPER THE HOWARD RESEARCH & DEVELOPMENT LAND CO. 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 (301) 772-6004	KIDDE CONSULTANTS, INC. ENGINEERS SURVEYORS PLANNERS 1020 CROMWELL BRIDGE ROAD TOWSON, MARYLAND 21204 (301) 321-5500	<i>Paul W. Johnson</i>	DES: _____ DRN: _____ CHK: _____ DATE: _____	COVER SHEET VICINITY MAP, DRAINAGE AREA MAP GENERAL NOTES	COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 7 AREA 3 ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 11
--	--	------------------------	---	---	---	---------------------------------

NO.	TYPE	TOE	IN	OUT	IN	OUT	LOCATION	REMARKS
M-7	STD. M.H.	440.4	423.28	423.48	7+87.50	-E	G-5.02	
M-6	STD. M.H.	410.7	404.29	404.49	1+20	-18.5	LT	G-5.02
I-37	A-5	430.3	426.00	—	2+08.01	—	S.D.-4.01	LINEAR PROFILE
I-29	A-5	436.07	434.73	424.93	0+40	-12.83	LT	S.D.-4.01
I-28	A-10	428.04	423.21	—	4+70	-14.83	RT	S.D.-4.02
I-27	A-10	428.04	421.20	421.40	4+70	-14.83	LT	S.D.-4.02
I-26	A-10	408.78	402.47	402.67	1+40	—	S.D.-4.02	LINEAR PROFILE
I-25	D	387.50	—	383.50	—	—	S.D.-4.11	SEE PLAN 4 SIDES OPEN

NOTE: TOP OF CURB ELEVATIONS ARE SHOWN ON CUL-DE-SAC ISLANDS AT 90° APART.

▲ - LIGHT POLE LOCATION



COLUMBIA  
 VILLAGE OF HARPERS CHOICE  
 SECTION 7 AREA 3  
 HOWARD COUNTY, MD ELECTION DISTRICT No.5

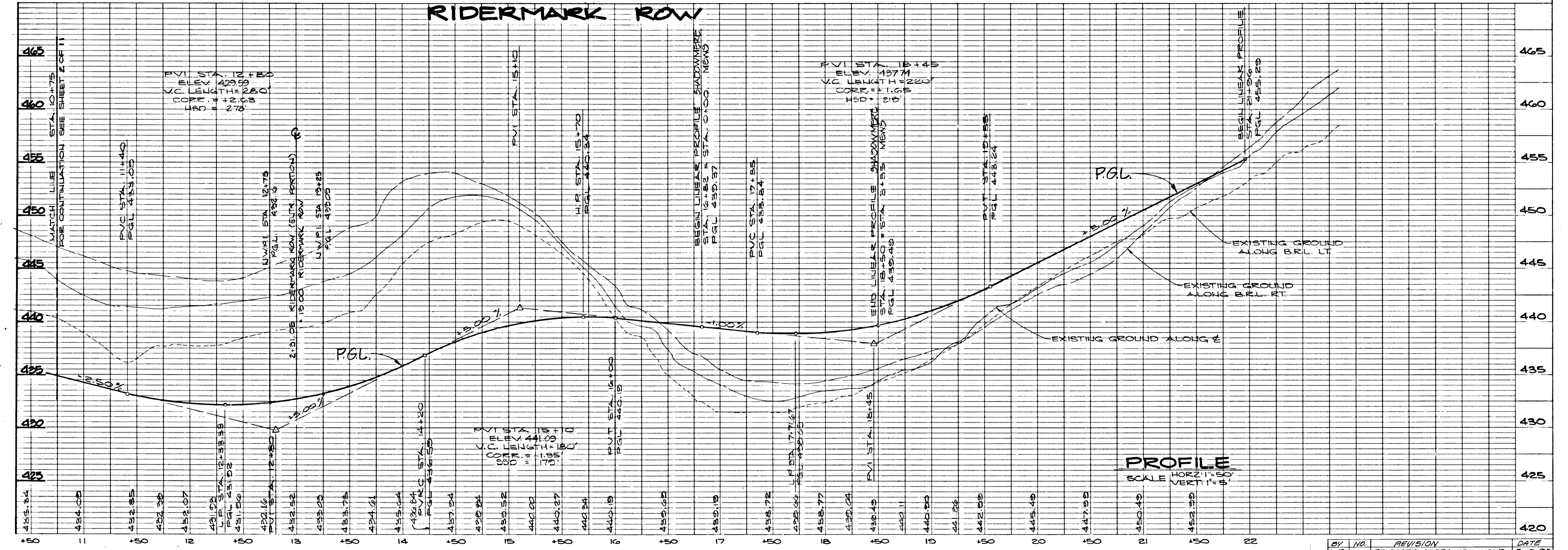
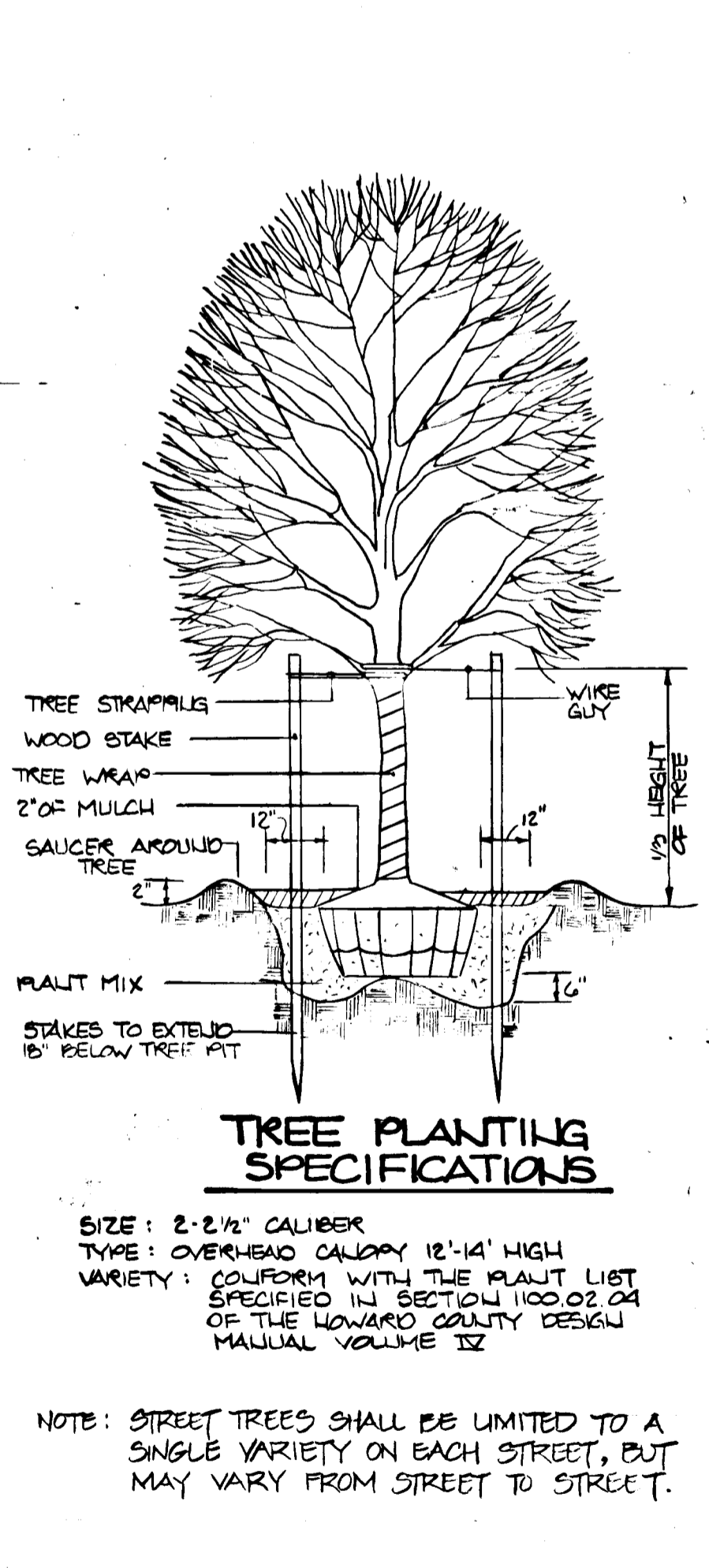
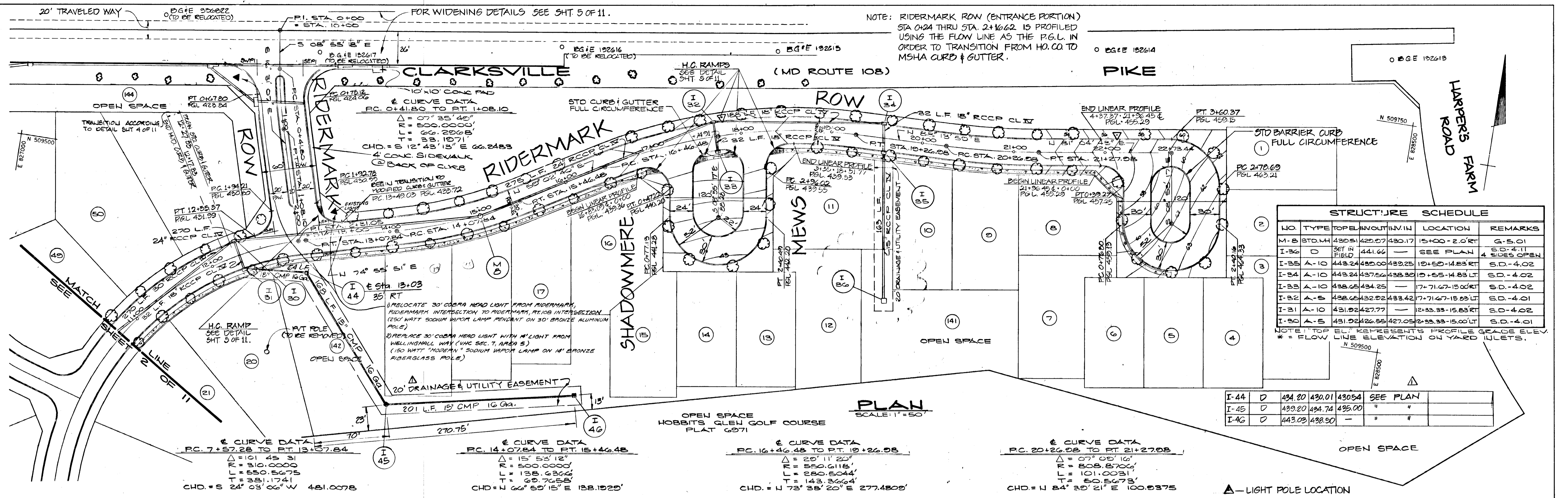
OWNER/DEVELOPER  
 THE HOWARD RESEARCH & DEVELOPMENT LAND CO.  
 10275 LITTLE PATENT ROAD  
 COLUMBIA, MARYLAND 21044  
 (301) 972-6004

**KIDDE CONSULTANTS, INC.**  
 ENGINEERS SURVEYORS PLANNERS  
 1020 CROMWELL BRIDGE ROAD  
 TOWSON, MARYLAND 21204  
 (301) 321-5500

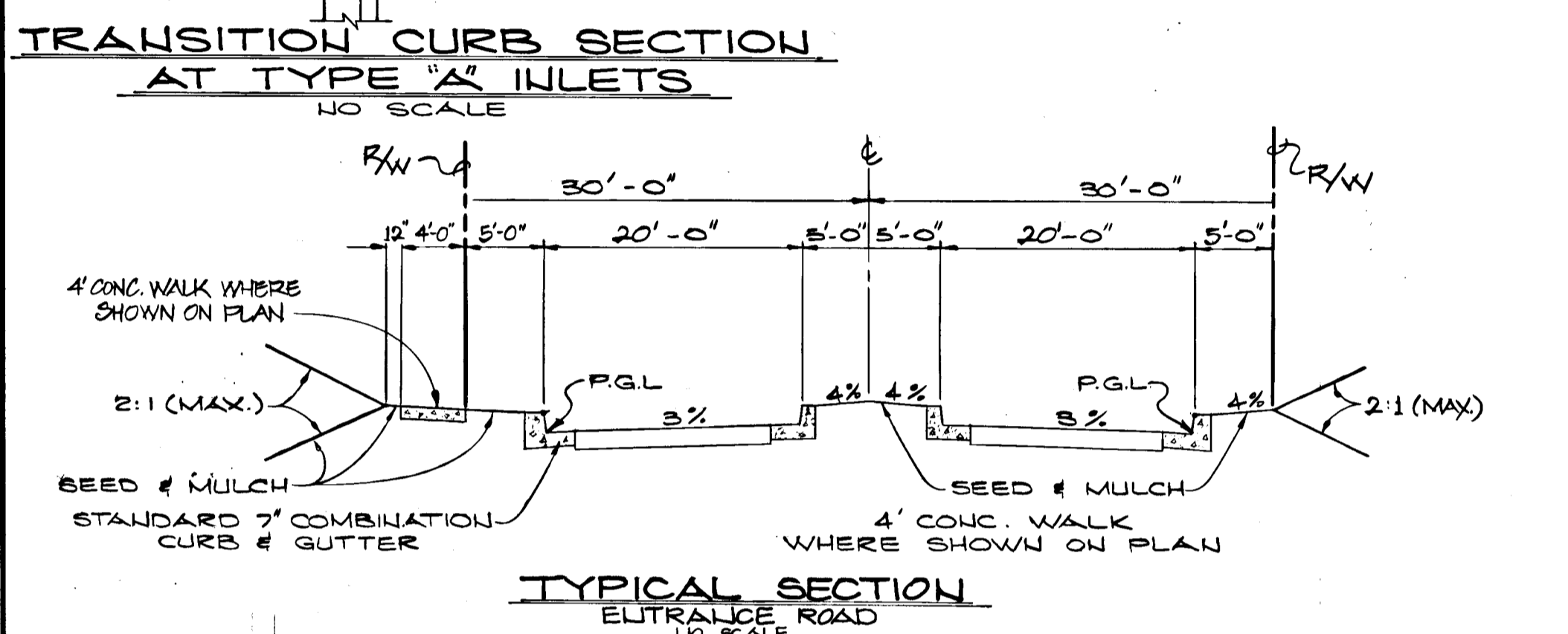
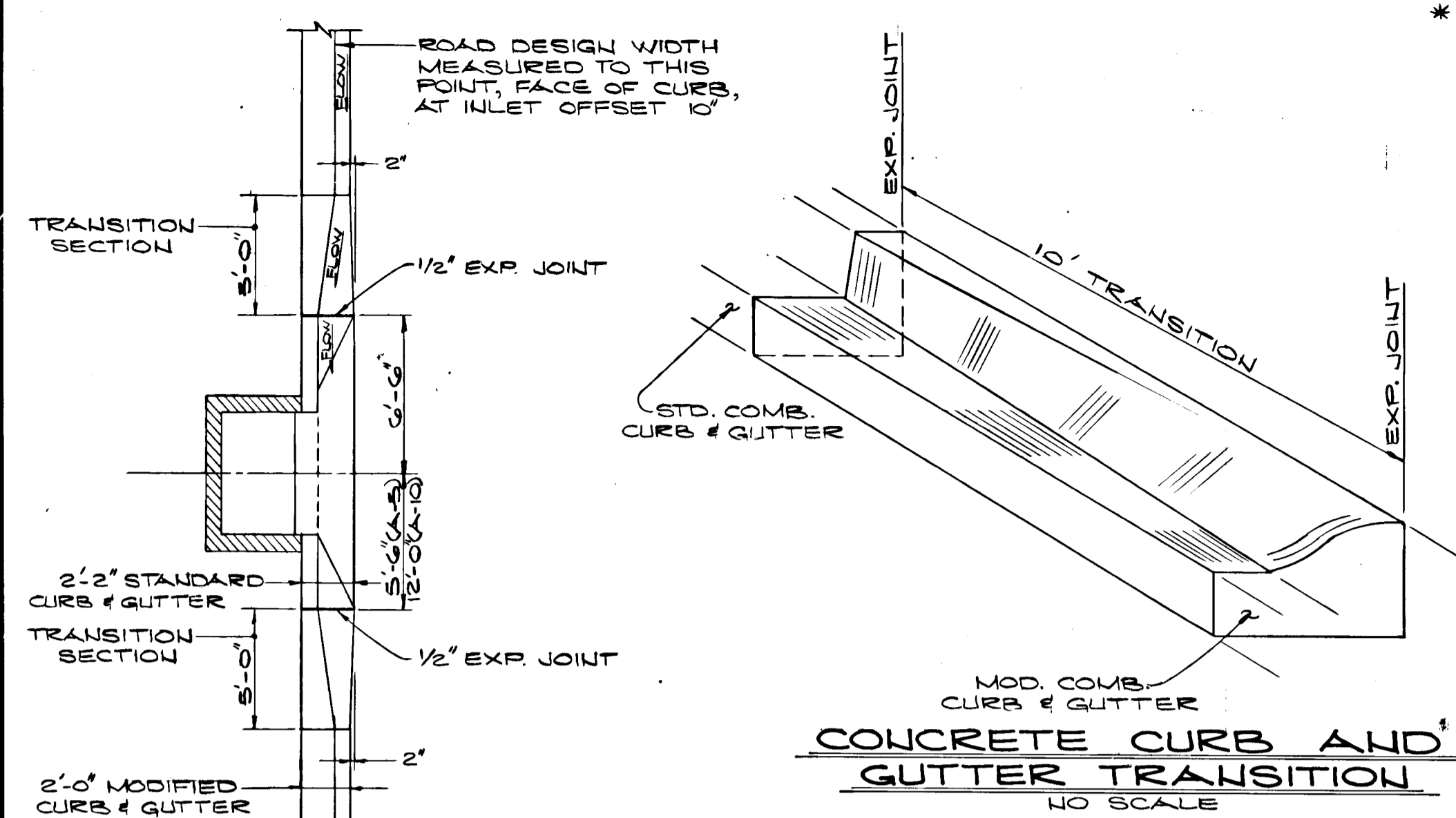
DES:  
 DRN:  
 CHK:  
 DATE:

BY	NO.	REVISION	DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DATE: 6/30/09  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 DATE: 7/5/09  
 SCALE AS SHOWN  
 SHEET 2 OF 11

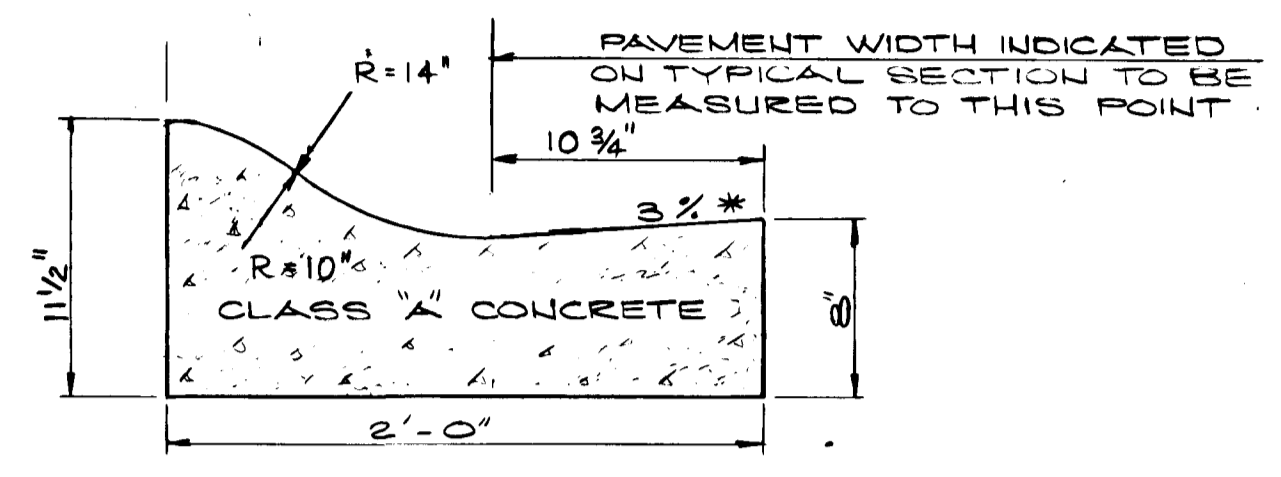


<b>COLUMBIA</b> VILLAGE OF HARPER'S CHOICE SECTION 7 AREA 3 HOWARD COUNTY, MD ELECTION DISTRICT No.5		<b>OWNER/DEVELOPER</b> THE HOWARD RESEARCH & DEVELOPMENT LAND CO. 10215 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 (301) 992-6084		<b>KIDDE CONSULTANTS, INC.</b> ENGINEERS SURVEYORS PLANNERS 1020 CROWMELL BRIDGE ROAD TOWSON, MARYLAND 21204 (301) 321-5500		<b>DESIGNER</b> JD 3 I-36 RELOCATED 11-90 KCI A REVISED SIDEWALK ALONG RIDERMARK 8-90 KCI A STORM DRAIN LAYOUT 12-89		<b>APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS</b> 6/30/89 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING 7/5/89		DATE: 3-9-92
<b>PLAN &amp; PROFILE</b>						SCALE AS SHOWN		SHEET 3 OF 11		

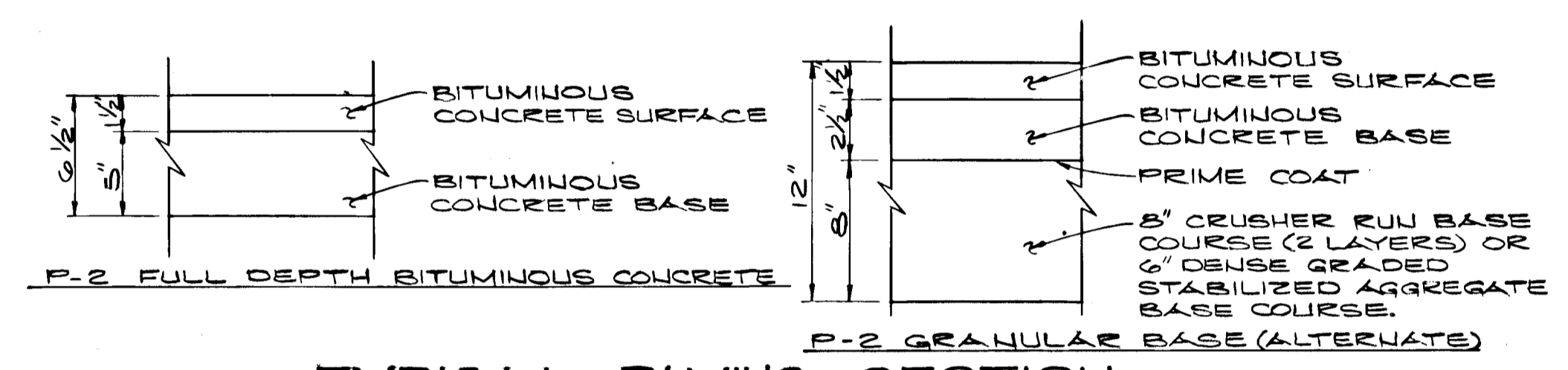


\* NOTE: GUTTER PAN AT THE MEDIAL EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.

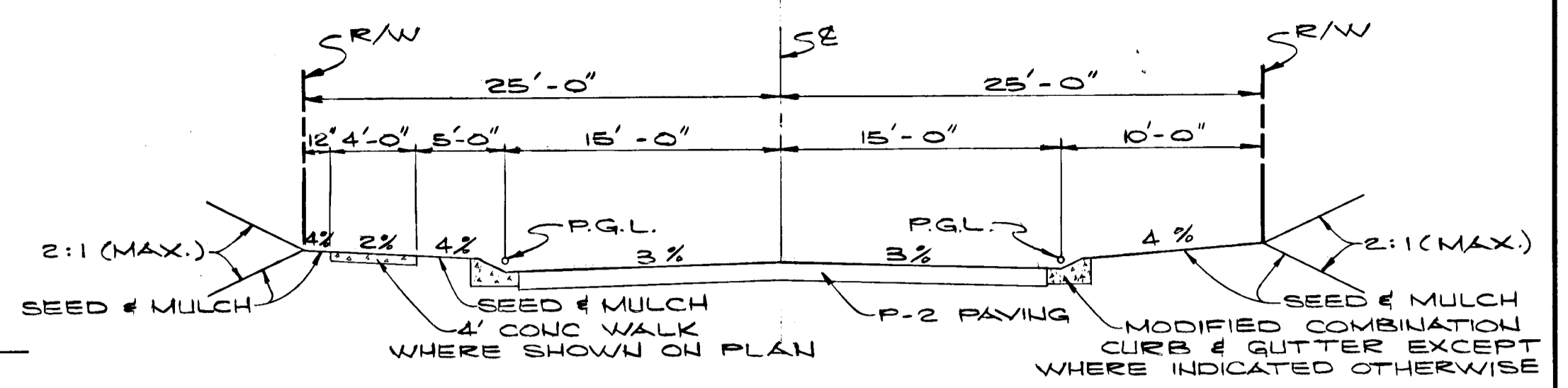
STANDARD 7" COMBINATION CURB & GUTTER  
NO SCALE



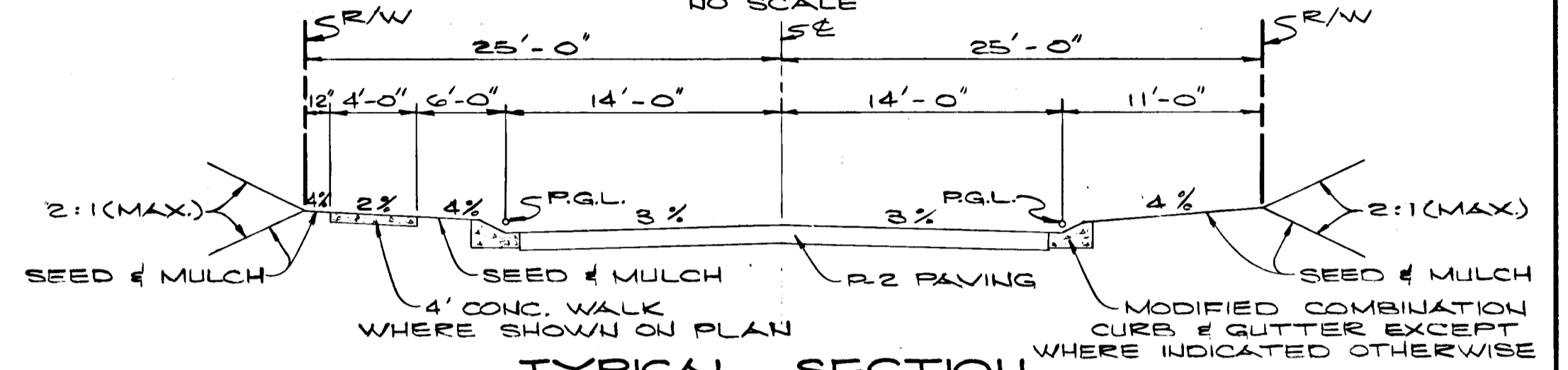
MODIFIED COMBINATION CURB & GUTTER  
NO SCALE



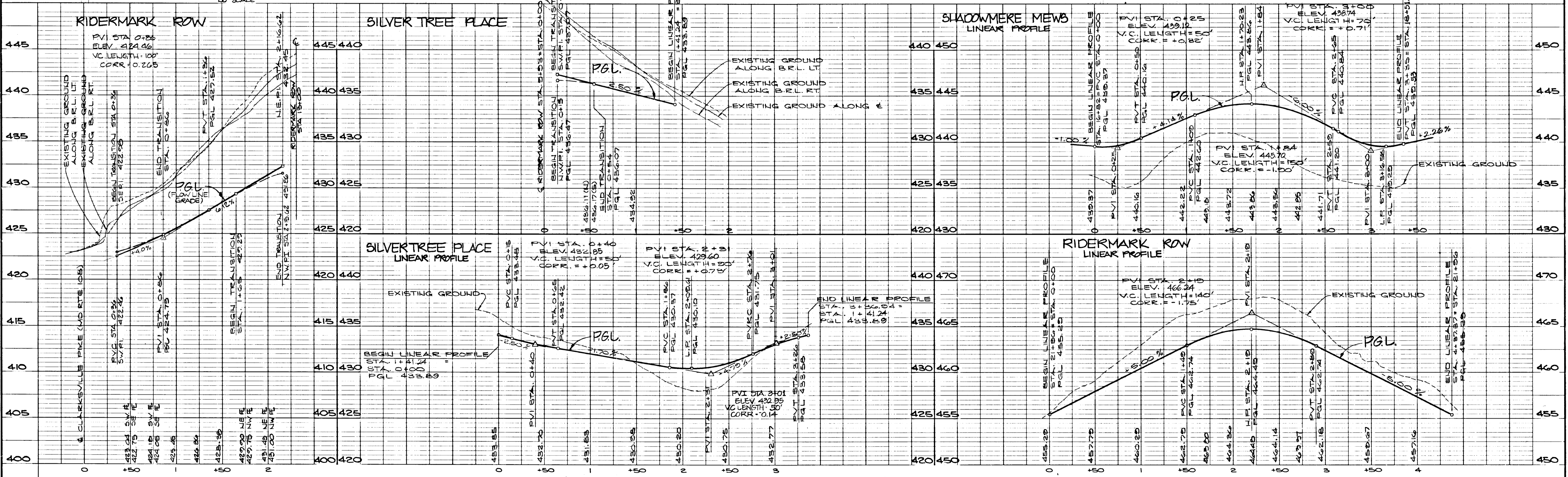
TYPICAL PAVING SECTION  
NO SCALE



TYPICAL SECTION  
50' R/W - 28' PAVEMENT  
NO SCALE



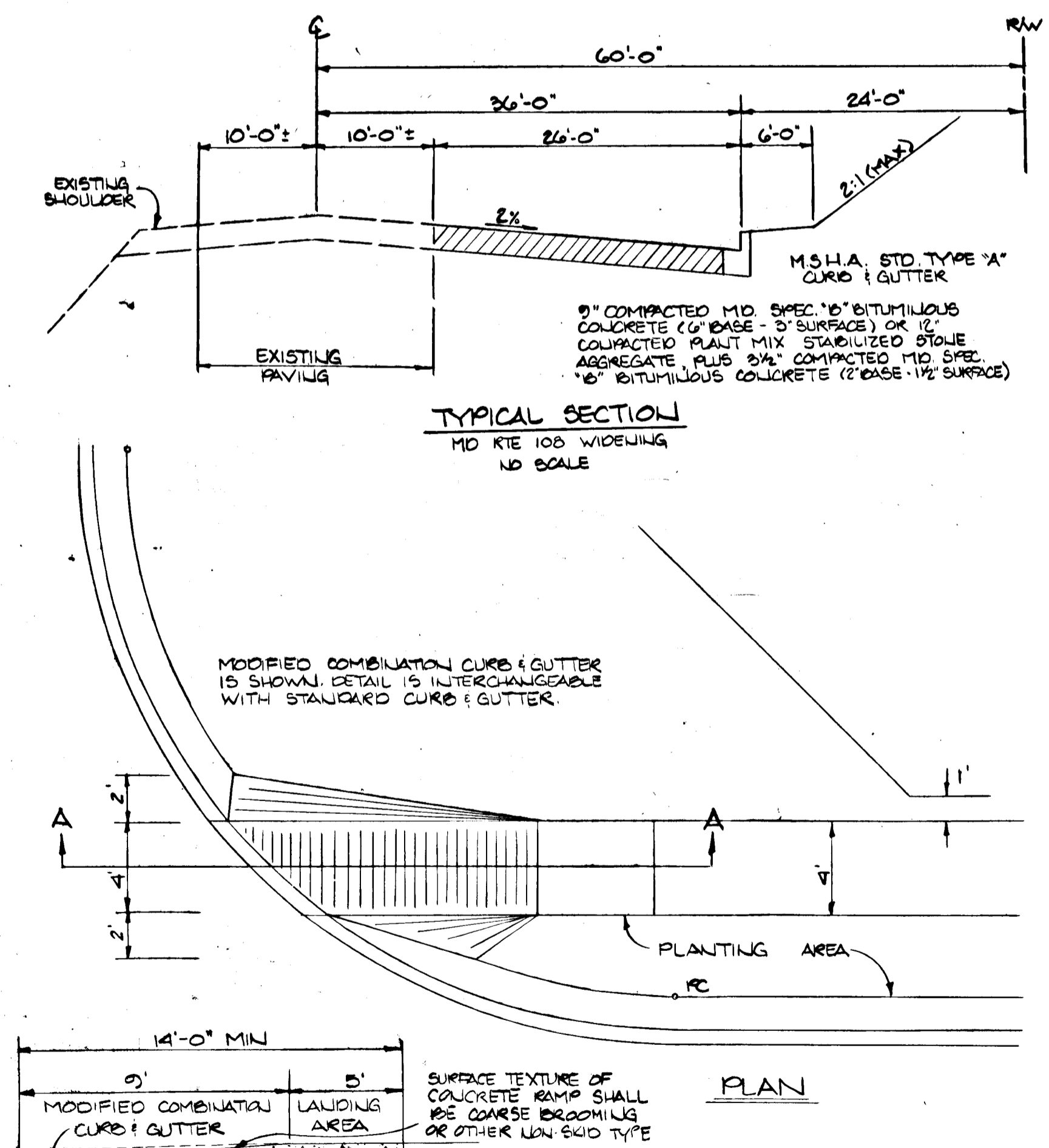
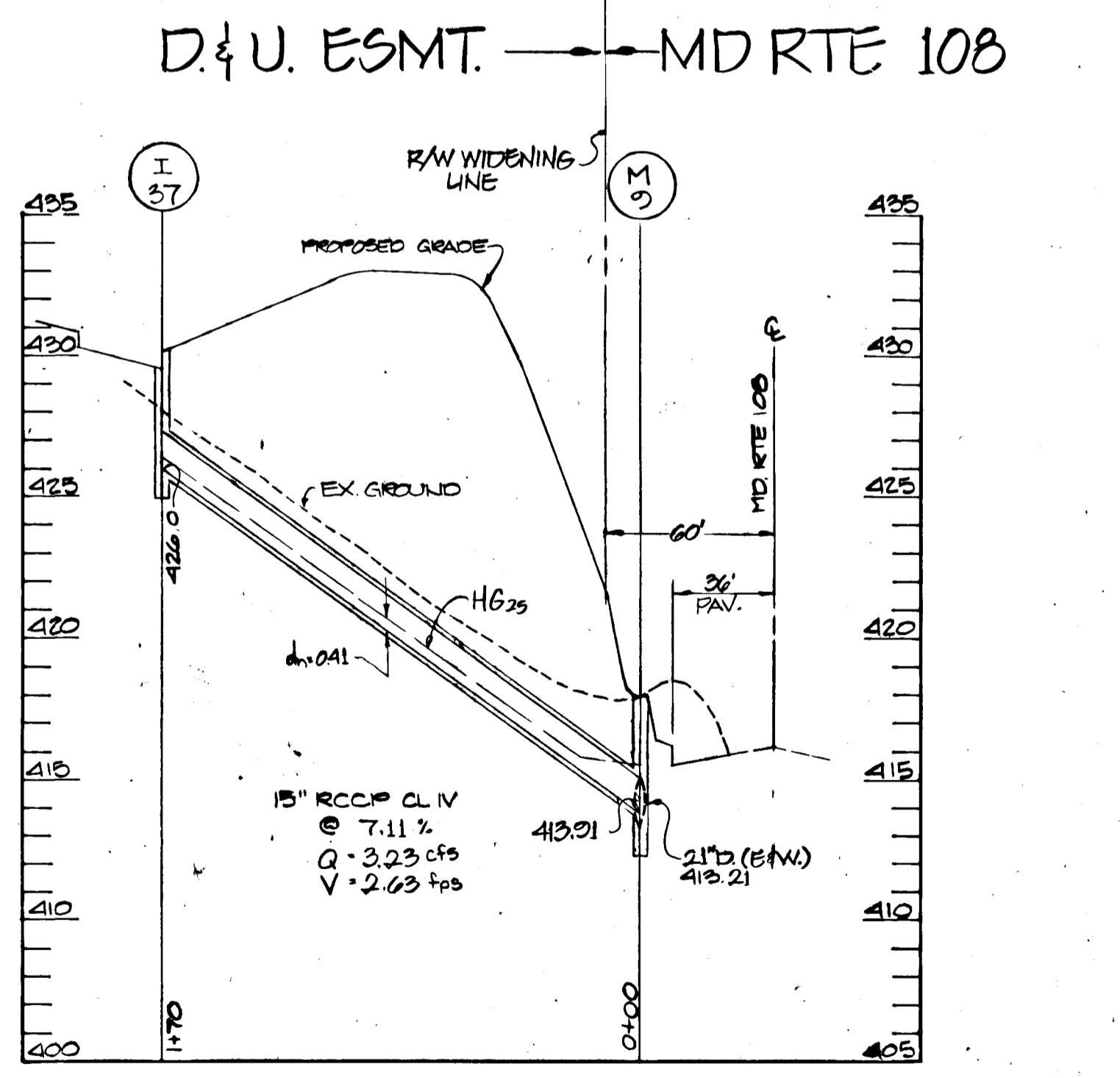
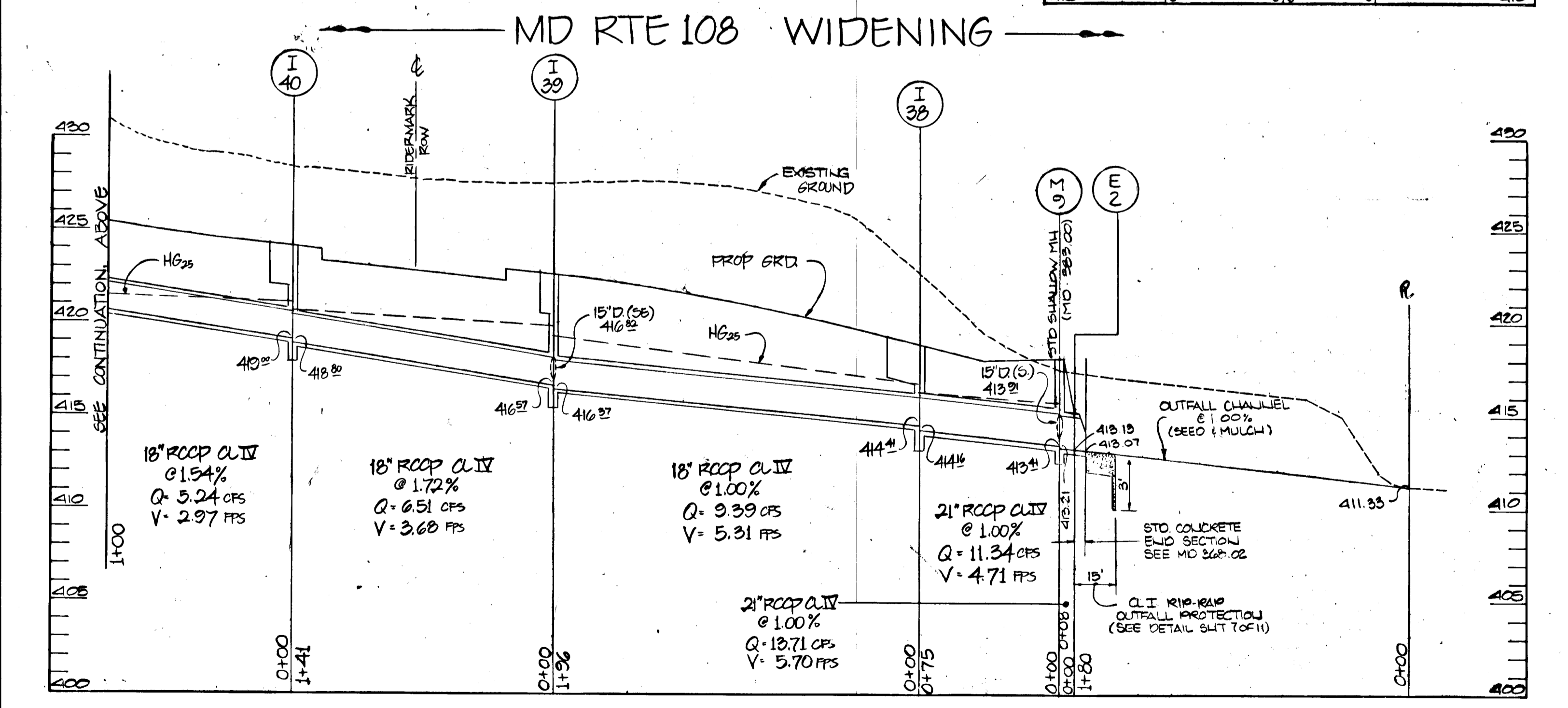
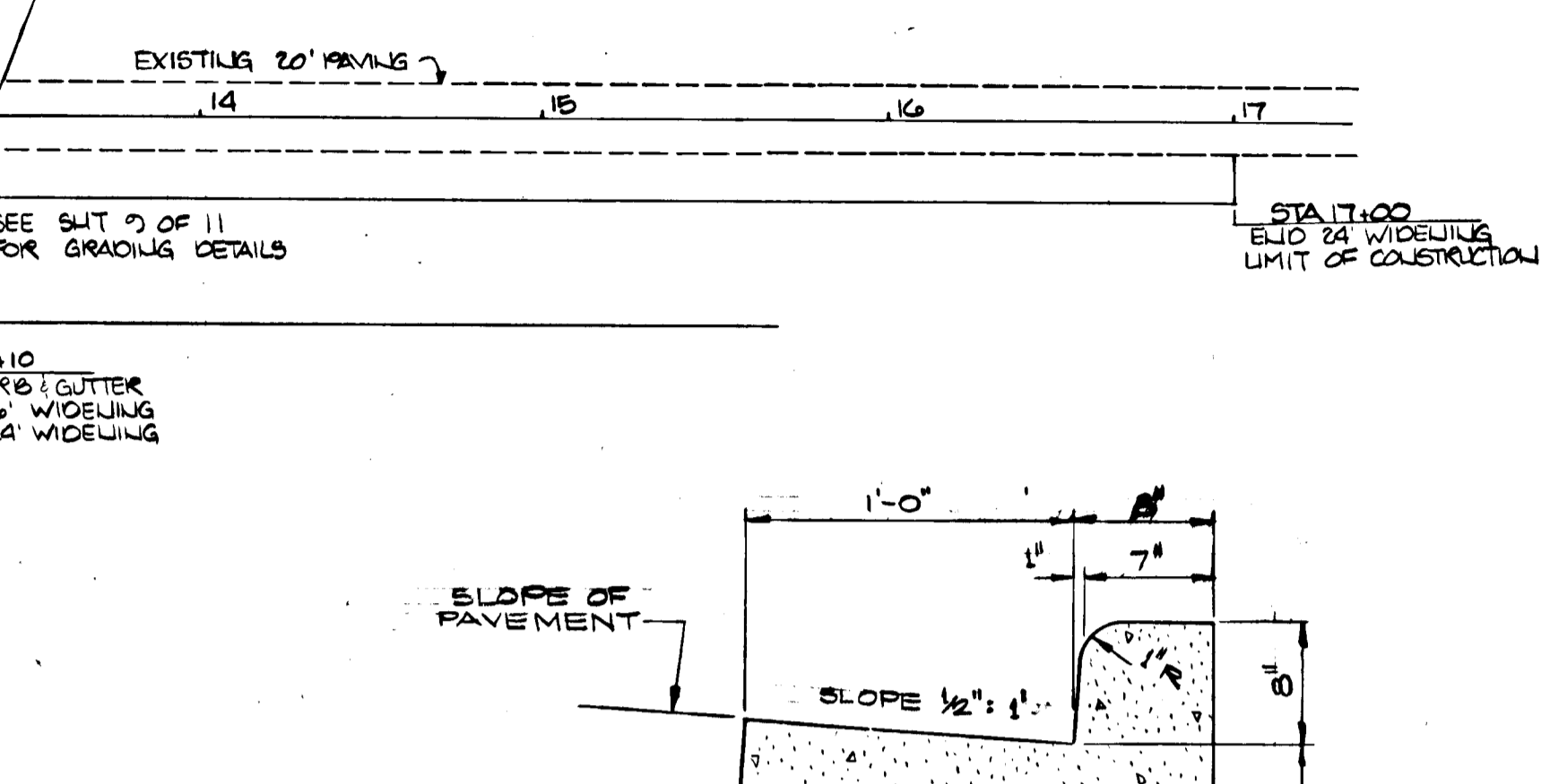
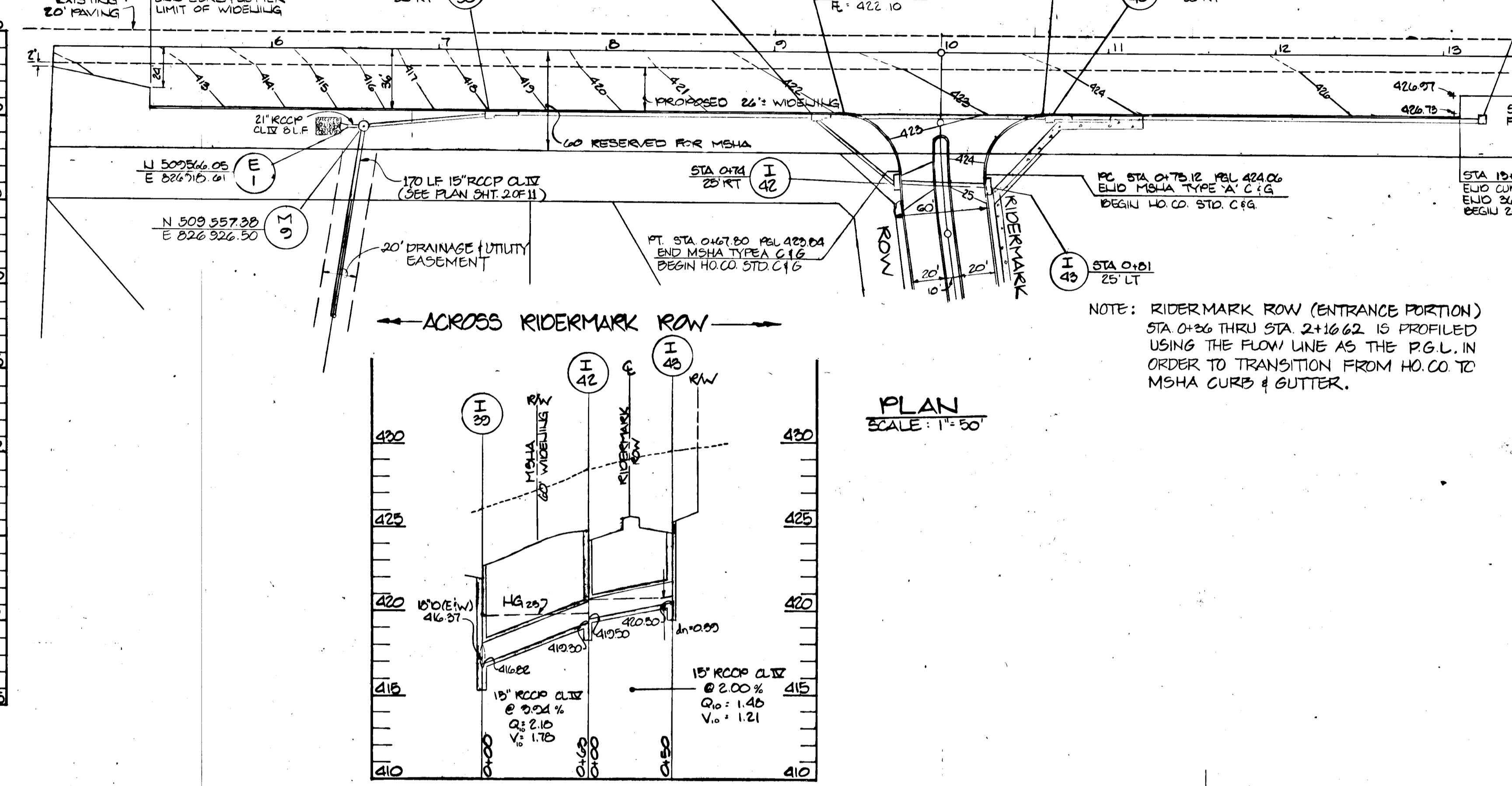
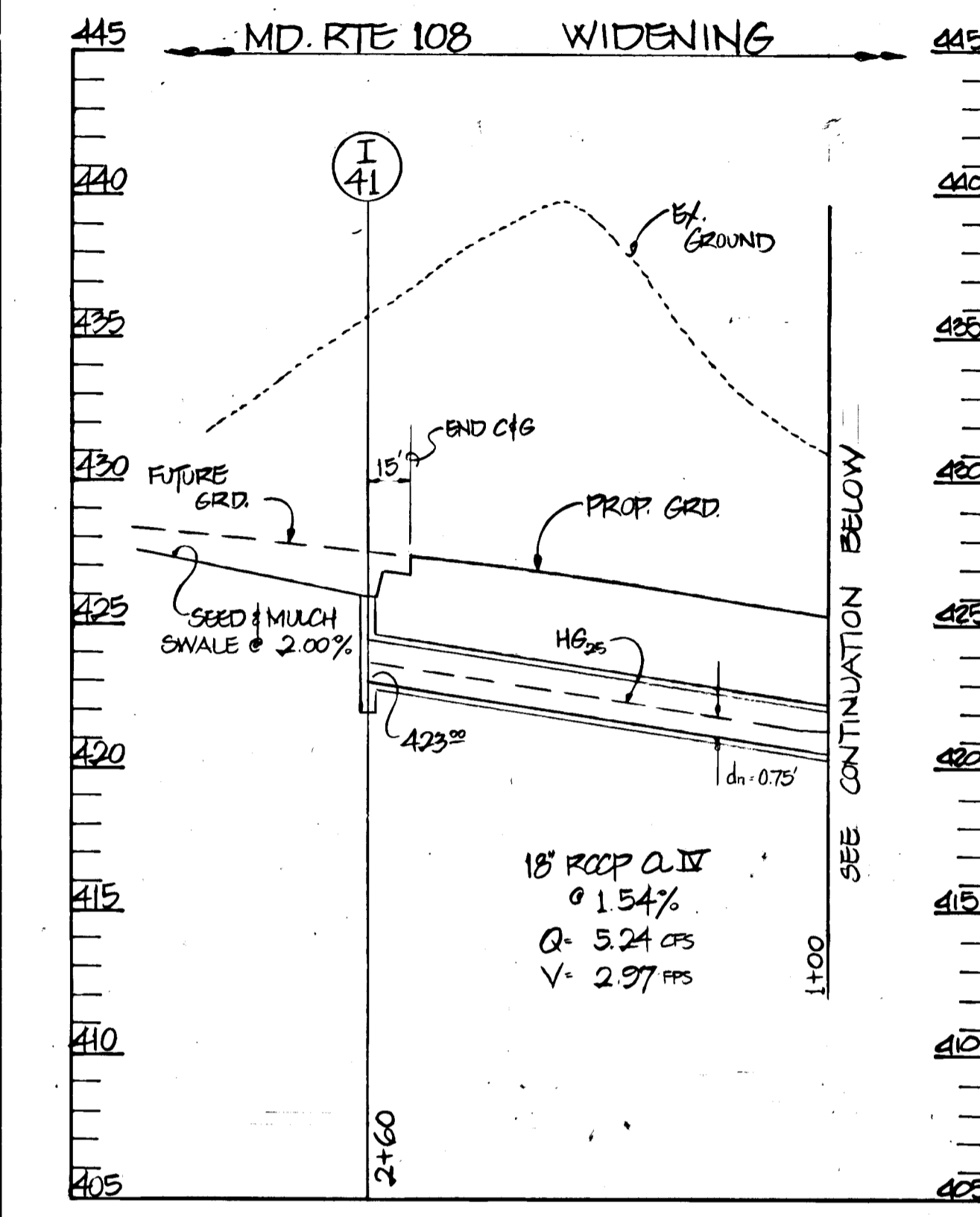
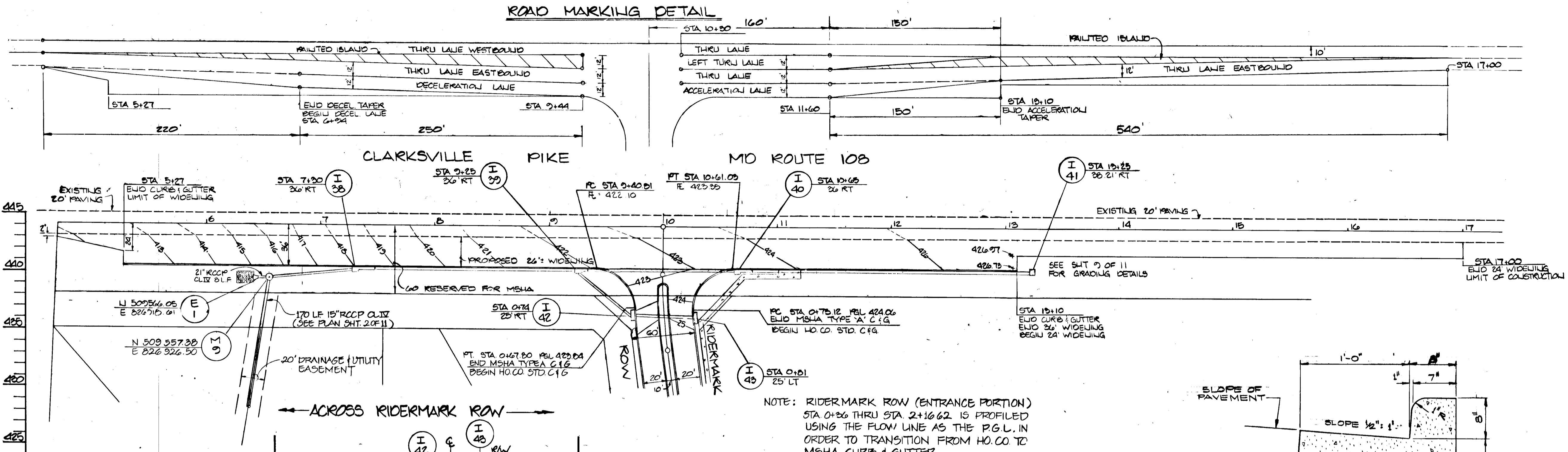
TYPICAL SECTION  
50' R/W - 24' PAVEMENT  
NO SCALE



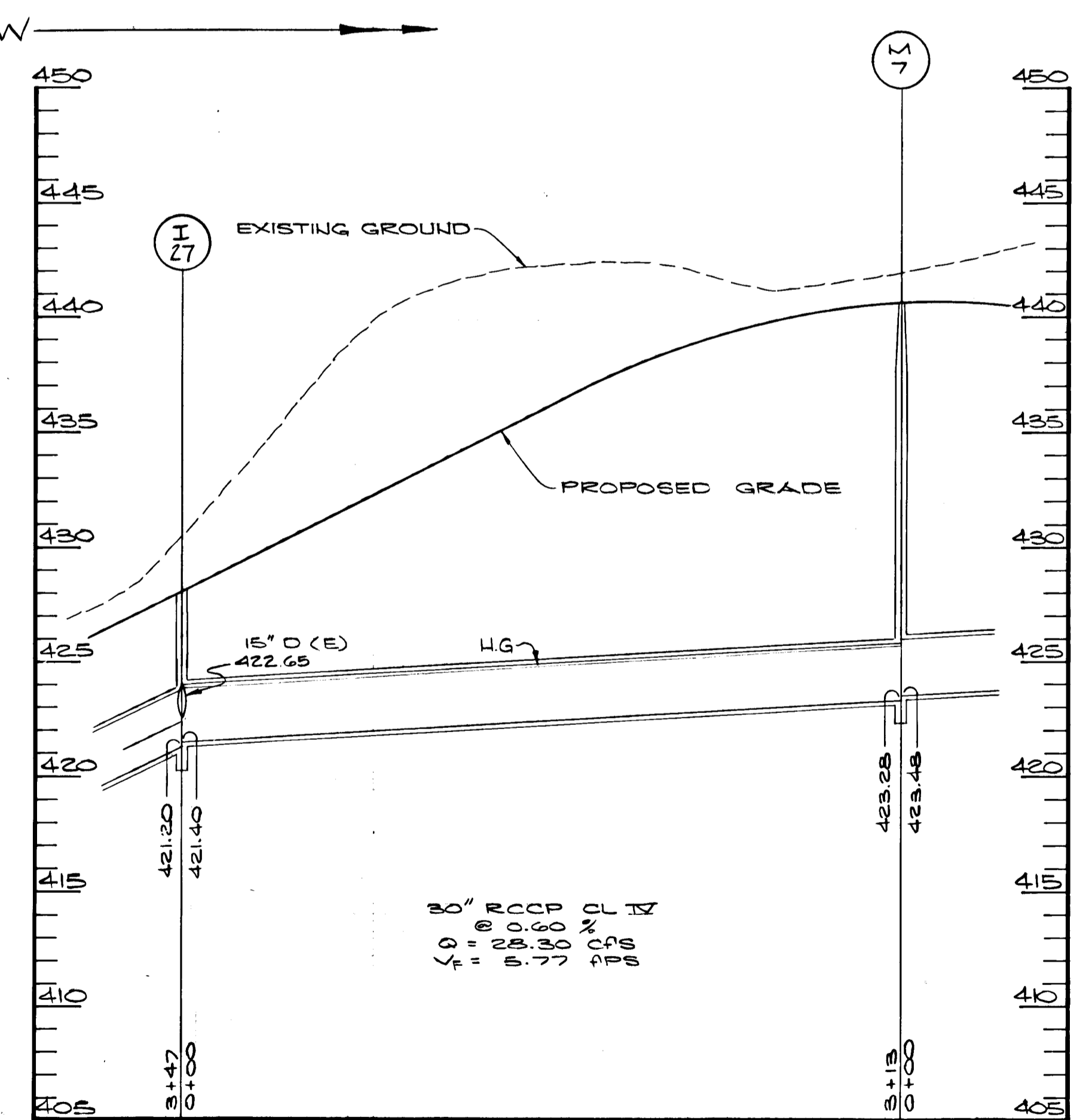
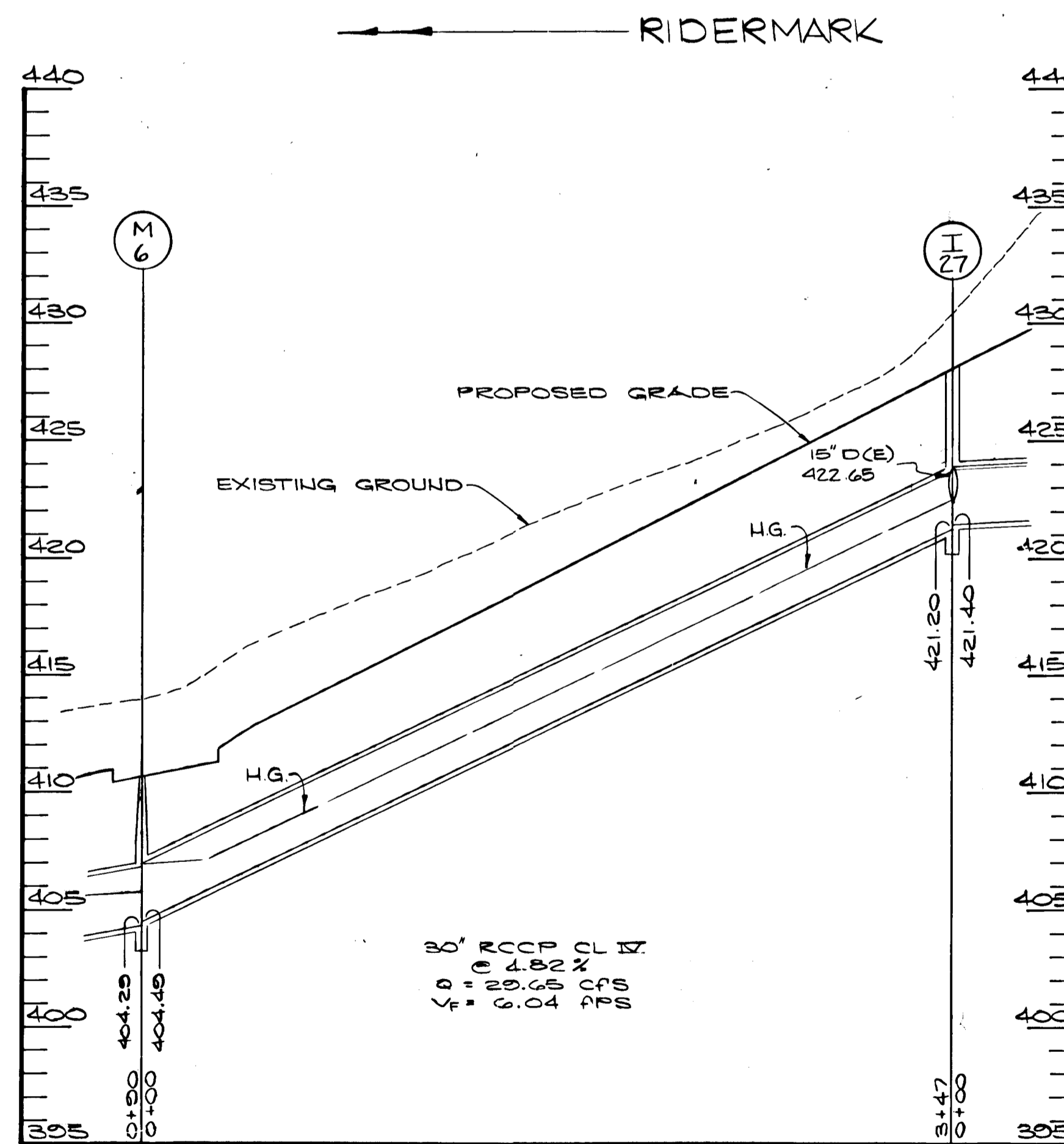
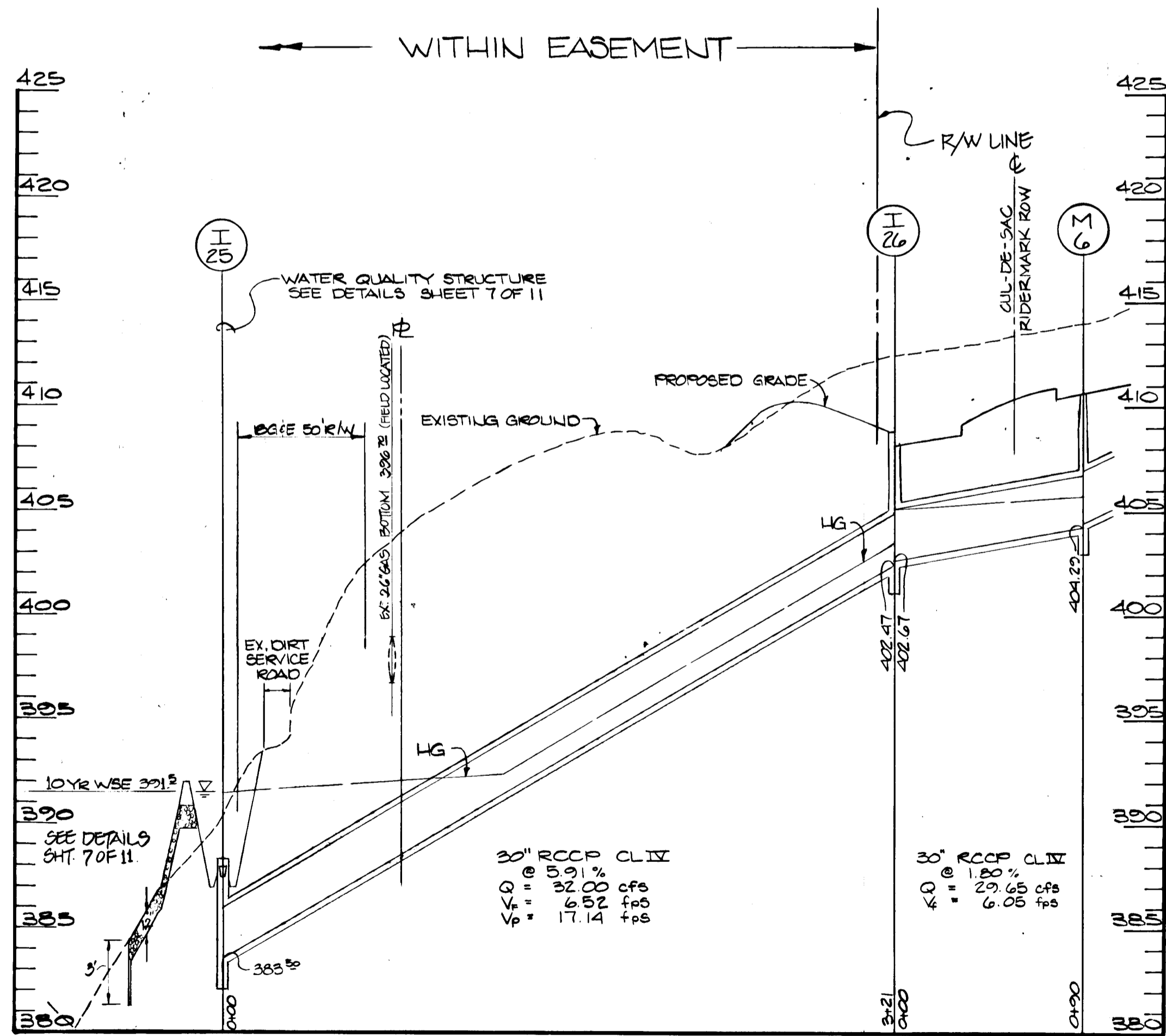
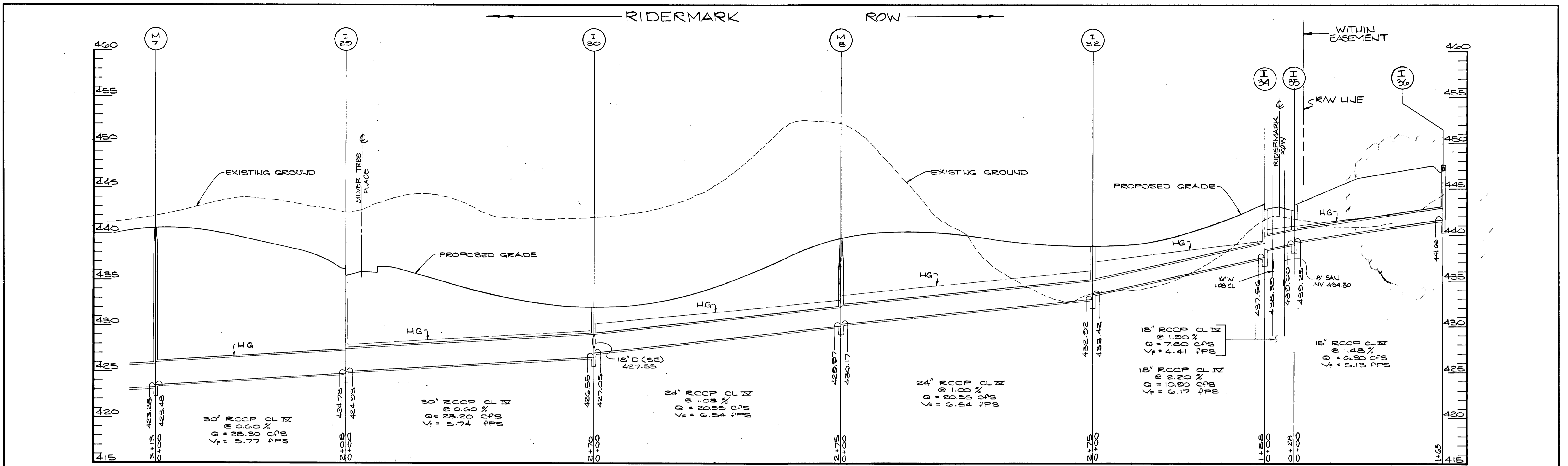
COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 7 AREA 3 HOWARD COUNTY, MD ELECTION DISTRICT No.5	OWNER / DEVELOPER THE HOWARD RESEARCH & DEVELOPMENT LAND CO. 10215 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 (301) 972-6084	KIDDE CONSULTANTS, INC. ENGINEERS SURVEYORS PLANNERS 1020 CROWMELL BRIDGE ROAD TOWSON, MARYLAND 21204 (301) 321-5500	DES:		ROAD PROFILES & DETAILS	APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>[Signature]</i> 6/29/05 CHIEF, BUREAU OF HIGHWAYS DATE	APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING <i>[Signature]</i> 7/1/05 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE	SCALE AS SHOWN  SHEET 4 OF 11
			DRN:					

STRUCTURE SCHEDULE						
NR	TYPE	TOP EL.	INVT	LOC.	REMARKS	
I-43	A-10	425.25	420.50	STA 0+51 25' LT	HO CO 50 4.02	
I-42	A-10	424.73	419.50	STA 0+74 25' RT	HO CO 50 4.02	
I-41	SUBLE	426.00	423.00	STA 13+25 22' RT	MO 378.01	
I-40	15' COG	424.06	418.80	STA 10+75 26' RT	MO 374.91	
I-39	10' COG	422.58	416.87	416.57	STA 2+25 26' RT	MO 374.91
I-38	20' COG	418.49	414.16	414.16	STA 7+20 26' RT	MO 374.91
I-27	A-5	430.26	426.00	STA 2+09.61 L.R.	HO CO 50 4.01	
M-2	SHAL. M.	410.00	413.21	413.41	SEE PLAN	MO 283.00 #1
E-1	STO. CONC. ES.	-	-	412.18	SEE PLAN	MO 360.02

\*\* UEE STD. TYPE 'D' MANHOLE FRAME & COVER.



COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 7 AREA 3 HOWARD COUNTY, MD ELECTION DISTRICT No.5	OWNER/DEVELOPER THE HOWARD RESEARCH & DEVELOPMENT LAND CO 10275 LITTLE PATENT PARKWAY COLUMBIA, MARYLAND 21044 (301) 972-6084	KIDDE CONSULTANTS, INC. ENGINEERS SURVEYORS PLANNERS 1020 CROMWELL BRIDGE ROAD TOWSON, MARYLAND 21204 (301) 321-5500	DES:		PLAN OF MD. RTE 108 WIDENING & TYPICAL SECTIONS	APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS DATE: 6/30/89 CHIEF, LAND DEVELOPMENT DIVISION	APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING DATE: 7/13/89 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	SCALE AS SHOWN
			DRN:			DATE:	DATE:	SHEET 5 OF 11



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

COLUMBIA  
 VILLAGE OF HARPER'S CHOICE  
 SECTION 7 AREA 3  
 HOWARD COUNTY, MD ELECTION DISTRICT No.5

OWNER / DEVELOPER  
 THE HOWARD RESEARCH &  
 DEVELOPMENT LAND CO.  
 10215 LITTLE PATUMENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 (301) 992-6084

KIDDE CONSULTANTS, INC.  
 ENGINEERS SURVEYORS PLANNERS  
 1020 CROMWELL BRIDGE ROAD  
 TOWSON, MARYLAND 21284  
 (301) 321-5500

*[Signature]*

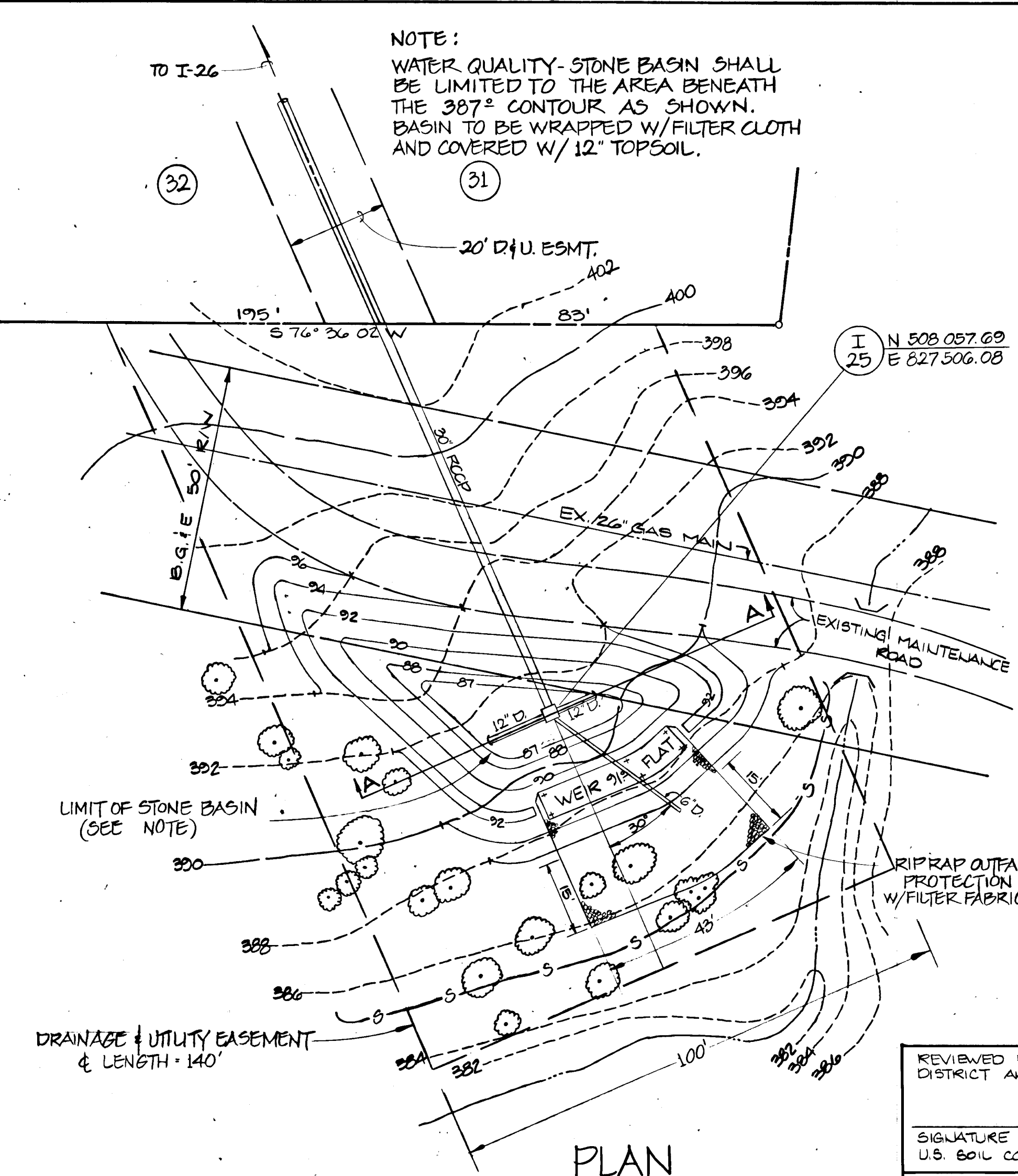
DES:	
DRN:	
CHK:	
DATE:	JUD 3 11:00
BY:	NO. I-36 RELOCATED
NO.:	
REVISION:	
DATE:	

STORM DRAIN  
 PROFILES

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 CHIEF, LAUD DEVELOPMENT DIVISION  
 DATE: 6/30/89

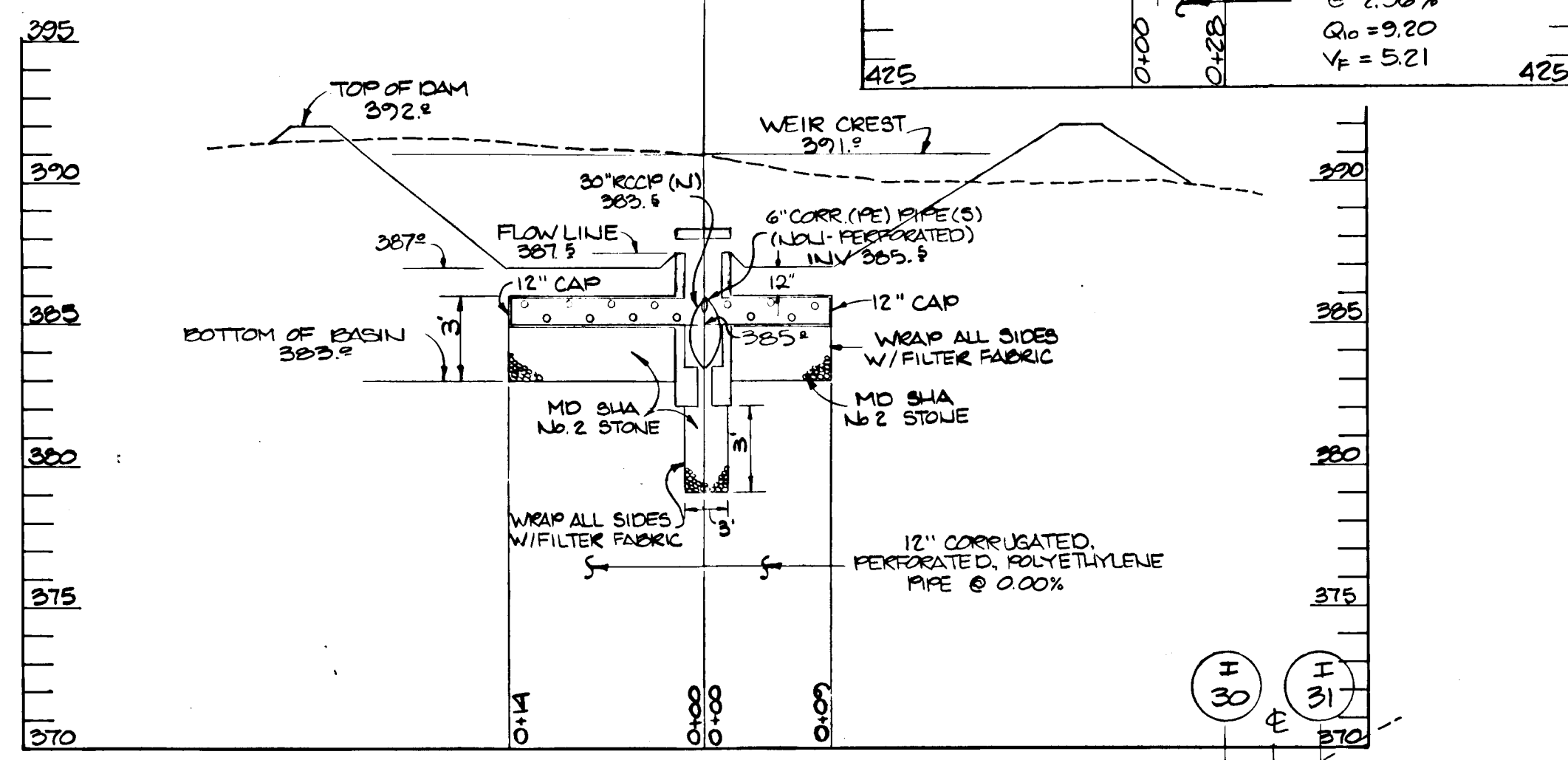
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAUD DEVELOPMENT  
 DATE: 7/5/89

SCALE AS SHOWN  
 SHEET 6 OF 11

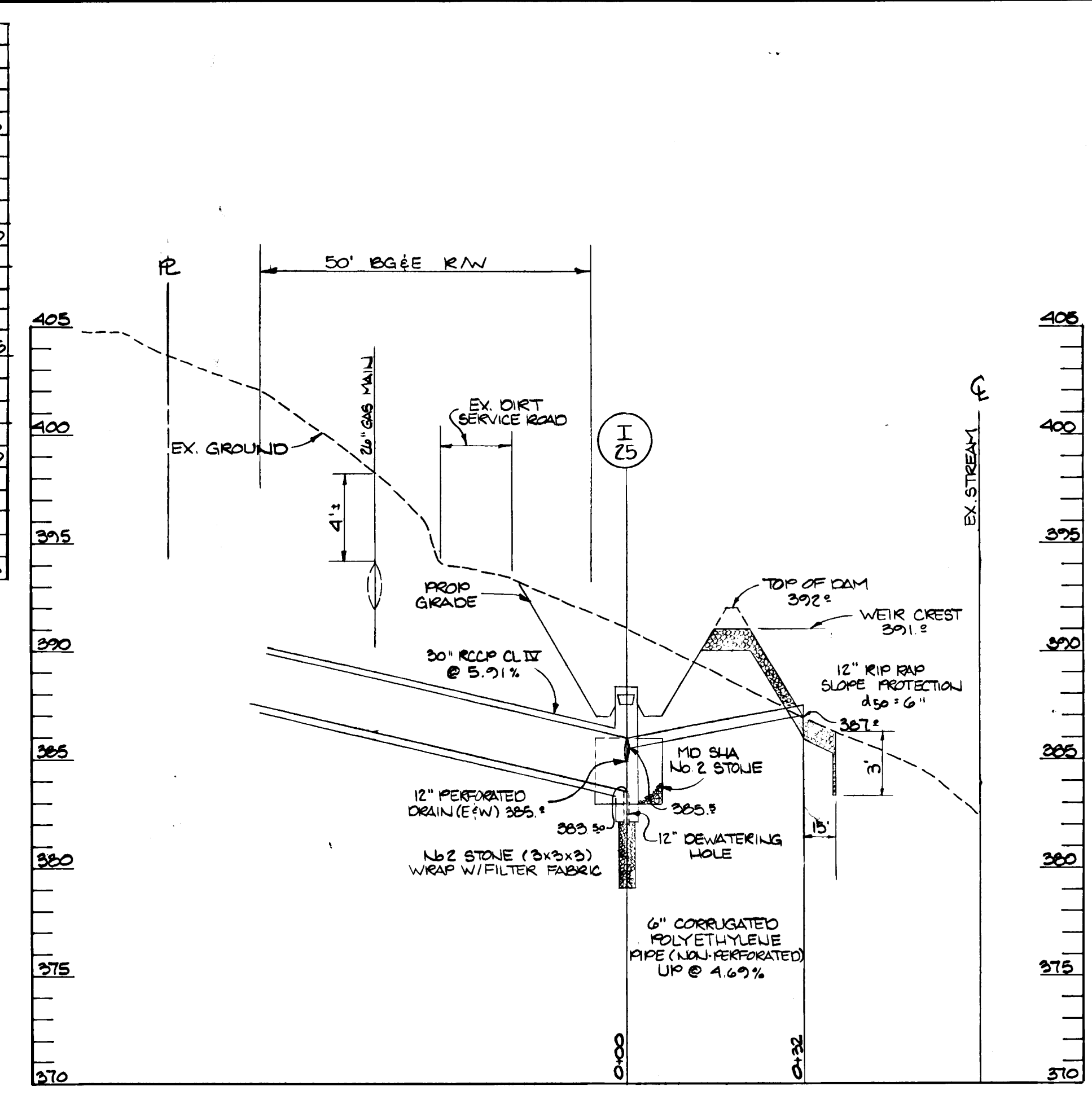


NOTE:  
WATER QUALITY- STONE BASIN SHALL BE LIMITED TO THE AREA BENEATH THE 387' CONTOUR AS SHOWN. BASIN TO BE WRAPPED W/ FILTER CLOTH AND COVERED W/ 12\"/>

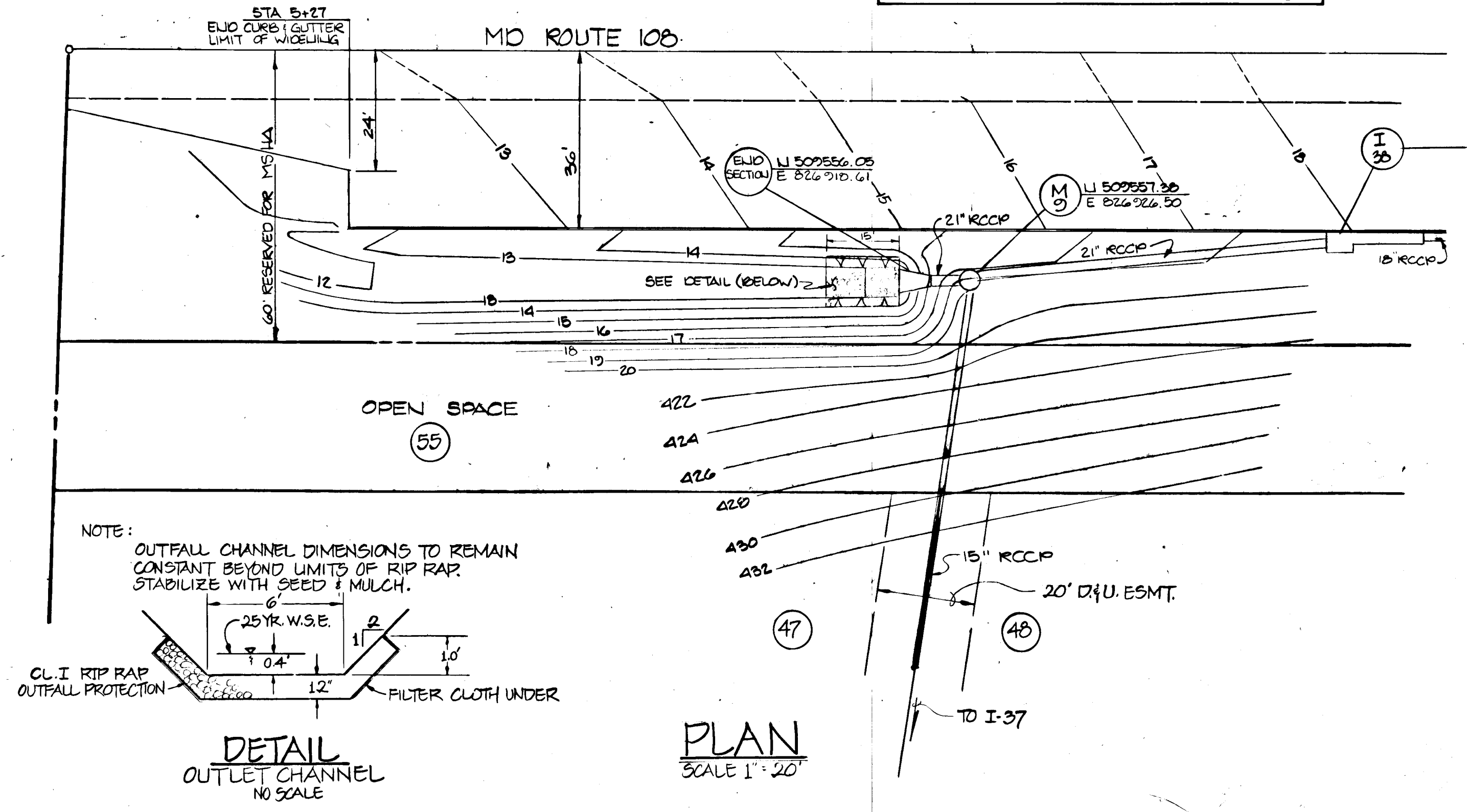
- CONSTRUCTION SEQUENCE WATER QUALITY- STONE BASIN**
1. INSTALL SILT FENCE
  2. EXCAVATE FOR AND INSTALL I-25 WITH DEWATERING PIPE BELOW AND 6\"/>



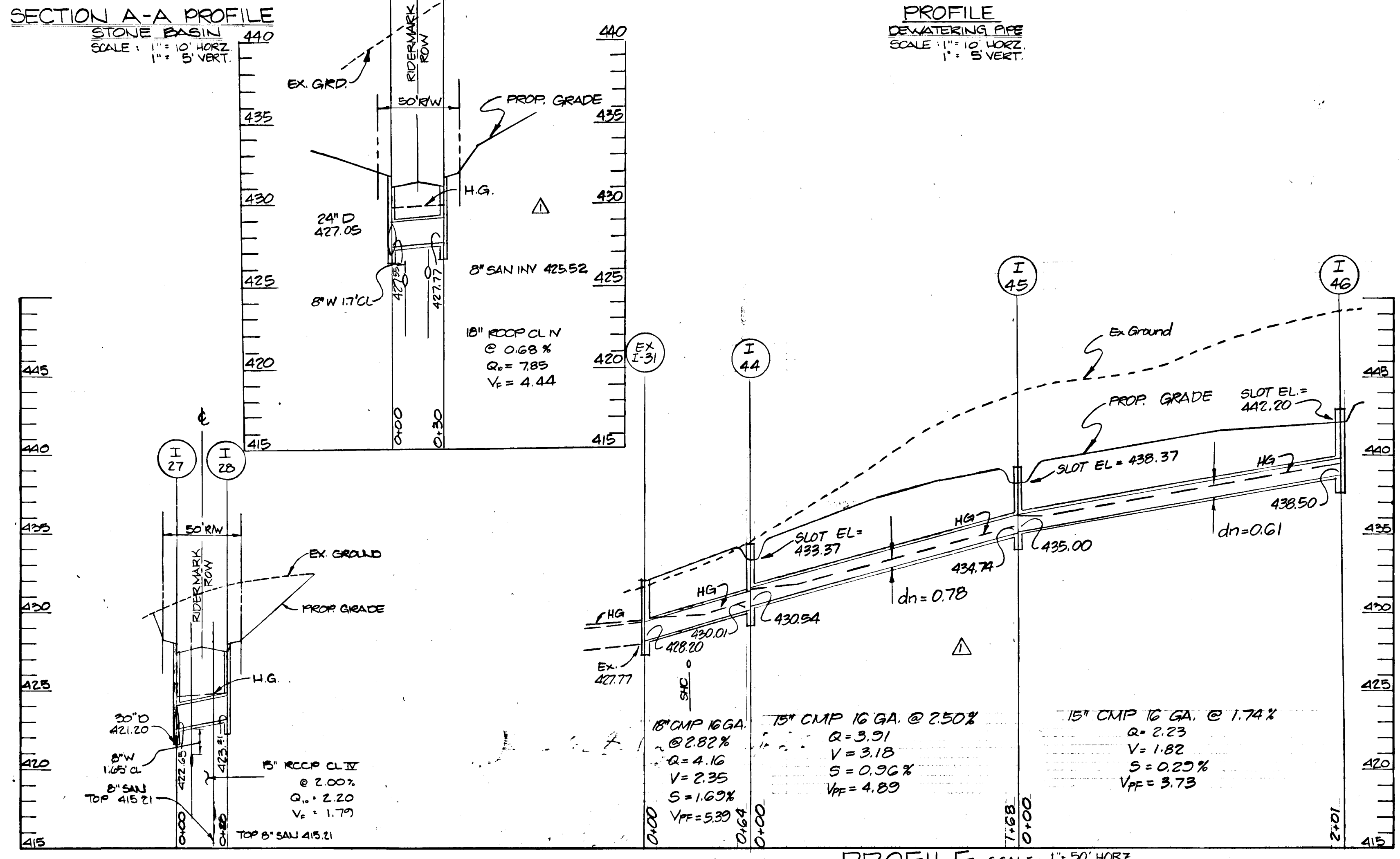
SECTION A-A PROFILE  
STONE BASIN  
SCALE: 1\"/>



PROFILE DEWATERING PIPE  
SCALE: 1\"/>



DETAIL OUTLET CHANNEL  
NO SCALE



PROFILE SCALE: 1\"/>

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
U.S. SOIL CONSERVATION DISTRICT

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

HOWARD S.C.D. \_\_\_\_\_ DATE \_\_\_\_\_

COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 7 AREA 3 HOWARD COUNTY, MD ELECTION DISTRICT No.5

OWNER/DEVELOPER THE HOWARD RESEARCH & DEVELOPMENT LAND CO 10275 LITTLE PATRIOT PARKWAY COLUMBIA, MARYLAND 21044 (301) 992-6084

**KIDDE CONSULTANTS, INC.**  
ENGINEERS SURVEYORS PLANNERS  
1020 CROMWELL BRIDGE ROAD TOWSON, MARYLAND 21204 (301) 321-5500

DES: \_\_\_\_\_  
DRN: \_\_\_\_\_  
CHK: \_\_\_\_\_  
DATE: \_\_\_\_\_

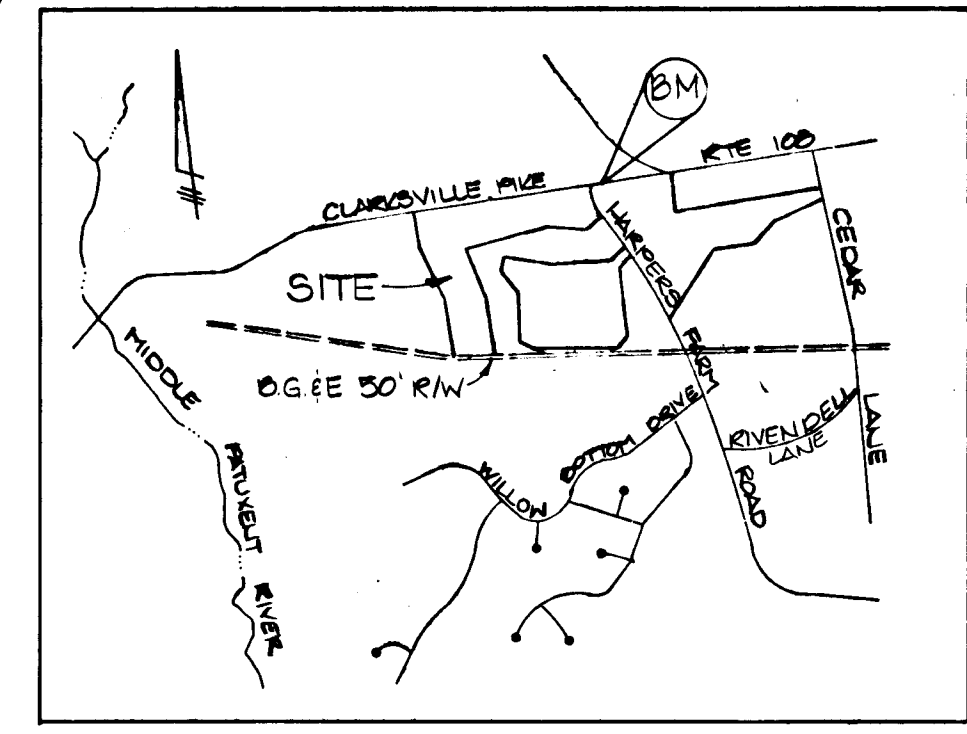
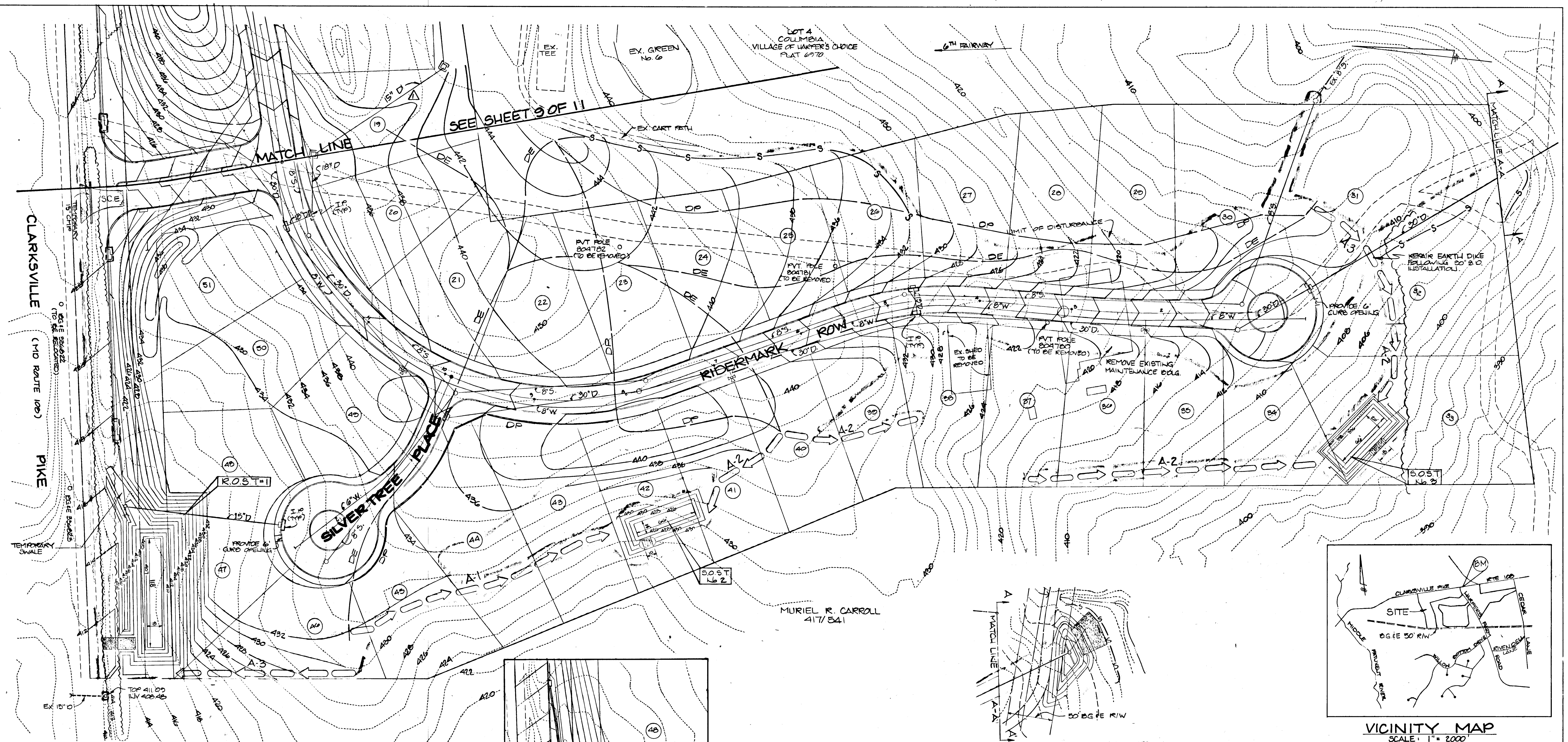
BY	NO.	REVISION	DATE
K.C.I.	1	STORM DRAIN LAYOUT	12-89

STORM DRAIN PLAN & PROFILES  
60' SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

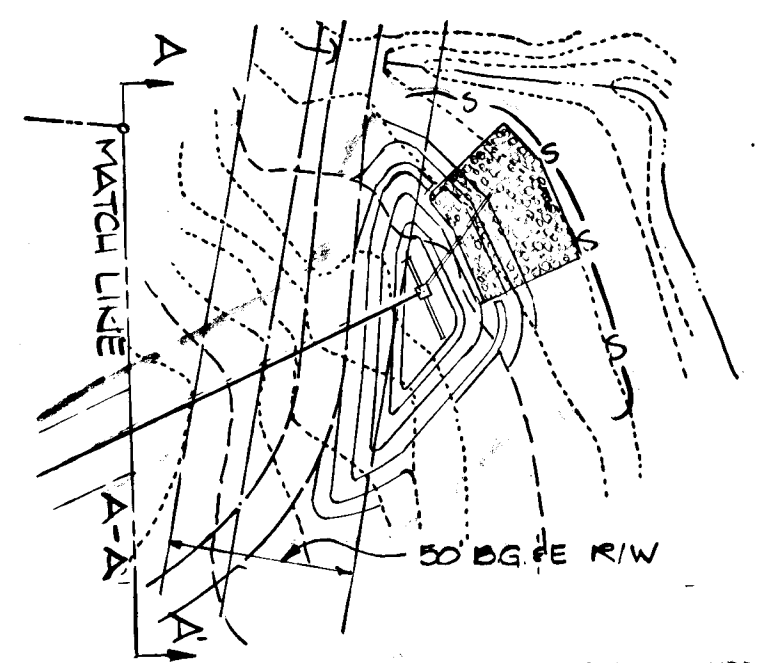
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
CHIEF, LAND DEVELOPMENT DIVISION DATE 12/1/89  
CHIEF, BUREAU OF HIGHWAYS DATE 12/1/89  
CHIEF, BUREAU OF ENGINEERING DATE 7/15/89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE 12/1/89

SCALE AS SHOWN  
SHEET 7 OF 11

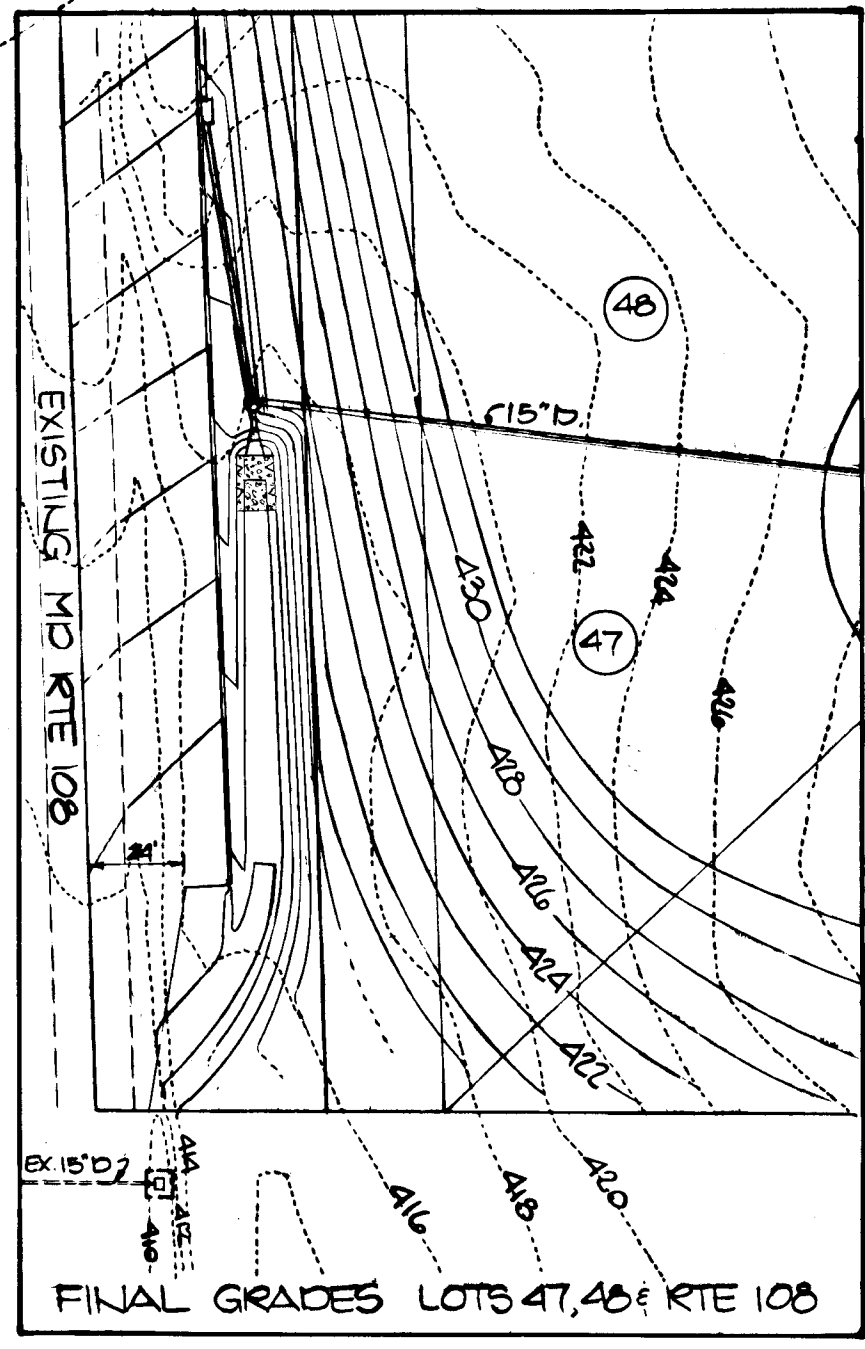


**VICINITY MAP**  
SCALE: 1" = 2000'  
HOWARD COUNTY B.M. #280025 ELEV. 406.54  
CONCRETE MONUMENT 0.2' BELOW SURFACE  
8' SOUTH OF EDGE OF RTE 100 AND 100' EAST OF E HARPER'S FARM RD



NOTE: FOR DETAILS OF SEDIMENT CONTROL FOR WATER QUALITY STAGE BASIN SEE SHIT TOF11

NOTE: SEE INSERT FOR FINAL GRADING IN VICINITY OF R.O.S.T. #1



FINAL GRADES LOTS 47, 46 & RTE 100

**OWNER/DEVELOPER CERTIFICATION**  
I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT, ALSO THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON SITE EVALUATION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS.  
*Gregory R. ...*  
DEVELOPER DATE: 5-16-89

**CONSULTANTS CERTIFICATION**  
I CERTIFY THAT THIS PLAN OF EROSION/SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.  
*Richard L. Umberger* 3/15/89  
DATE  
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
*James M. Helms* 6/15/89  
SIGNATURE DATE  
US SOIL CONSERVATION DISTRICT  
THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT  
*Stephen L. Fisher* 6/15/89  
HOWARD S.C.D.

SEDIMENT TRAP TABLE					
TRAP No.	1	2	3	5	6
TYPE OF TRAP	R.O.S.T.	S.O.S.T.	S.O.S.T.	R.O.S.T.	R.O.S.T.
EX. D.A. (AC.)	7.28	2.28	5.12	7.89	12.40
PROP. D.A. (AC.)	7.66	1.29	4.59	7.96	12.90
STORAGE REQ. (CF)	17,300	4,284	8,262	14,320	23,220
STORAGE PROVIDED	17,920	4,320	8,280	14,352	23,256
BOTTOM DIM. (FT)	10'x110'	14'x66'	20'x60'	10'x130'	30'x145'
SIDE SLOPES	2:1	2:1	2:1	2:1	2:1
OUTLET SIZE (FT)	12.0	10.0	10.0	10.0	14.0
BOTTOM ELEV.	407.0	426.0	396.0	425.0	405.0
WEIR ELEV.	413.0	429.0	400.0	429.0	409.0
CLEANOUT ELEV.	411.0	427.5	398.0	427.0	407.0
EMBANKMENT ELEV.	417.0	430.0	401.0	430.0	413.0
EX. GRADE @ WEIR	416.0	428.0	399.0	429.0	410.0

COLUMBIA  
VILLAGE OF HARPER'S CHOICE  
SECTION 7 AREA 3  
HOWARD COUNTY, MD ELECTION DISTRICT No.5

OWNER / DEVELOPER  
THE HOWARD RESEARCH & DEVELOPMENT LAND CO.  
10275 LITTLE PATENT PARKWAY  
COLUMBIA, MARYLAND 21044  
(301) 792-6084

**KIDDE CONSULTANTS, INC.**  
ENGINEERS SURVEYORS PLANNERS  
1020 CROWMELL BRIDGE ROAD  
TOWSON, MARYLAND 21284  
(301) 321-5500

*Richard L. Umberger*

DES:			
DRN:			
CHK:			
DATE:	K.C.I.	STORM DRAIN LAYOUT	12-89
	8:	NO.	REVISION

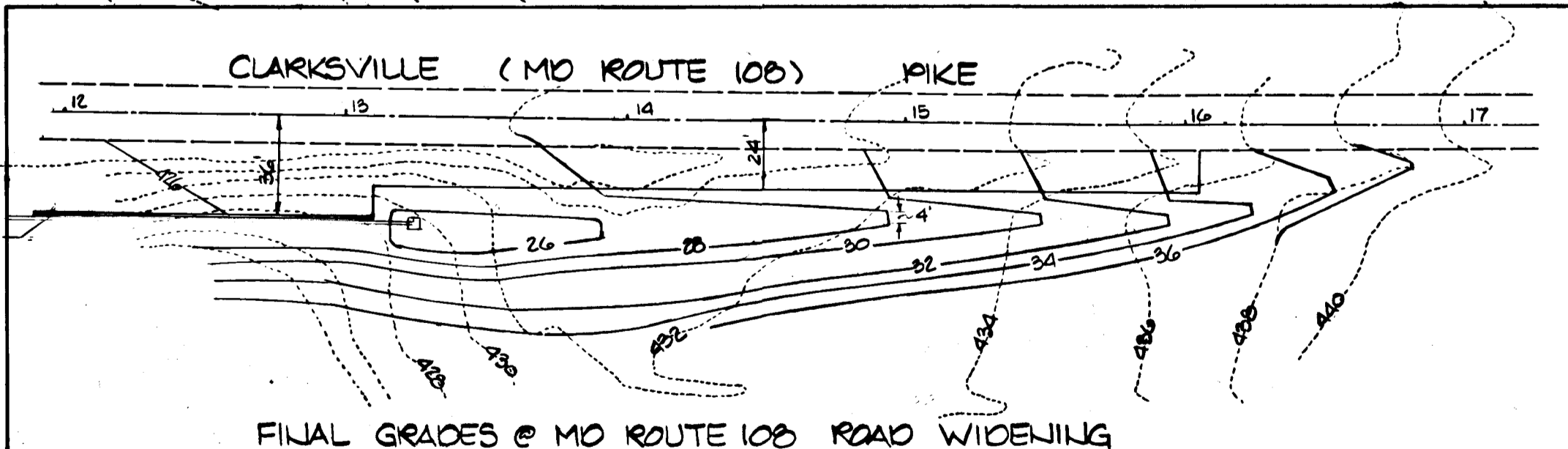
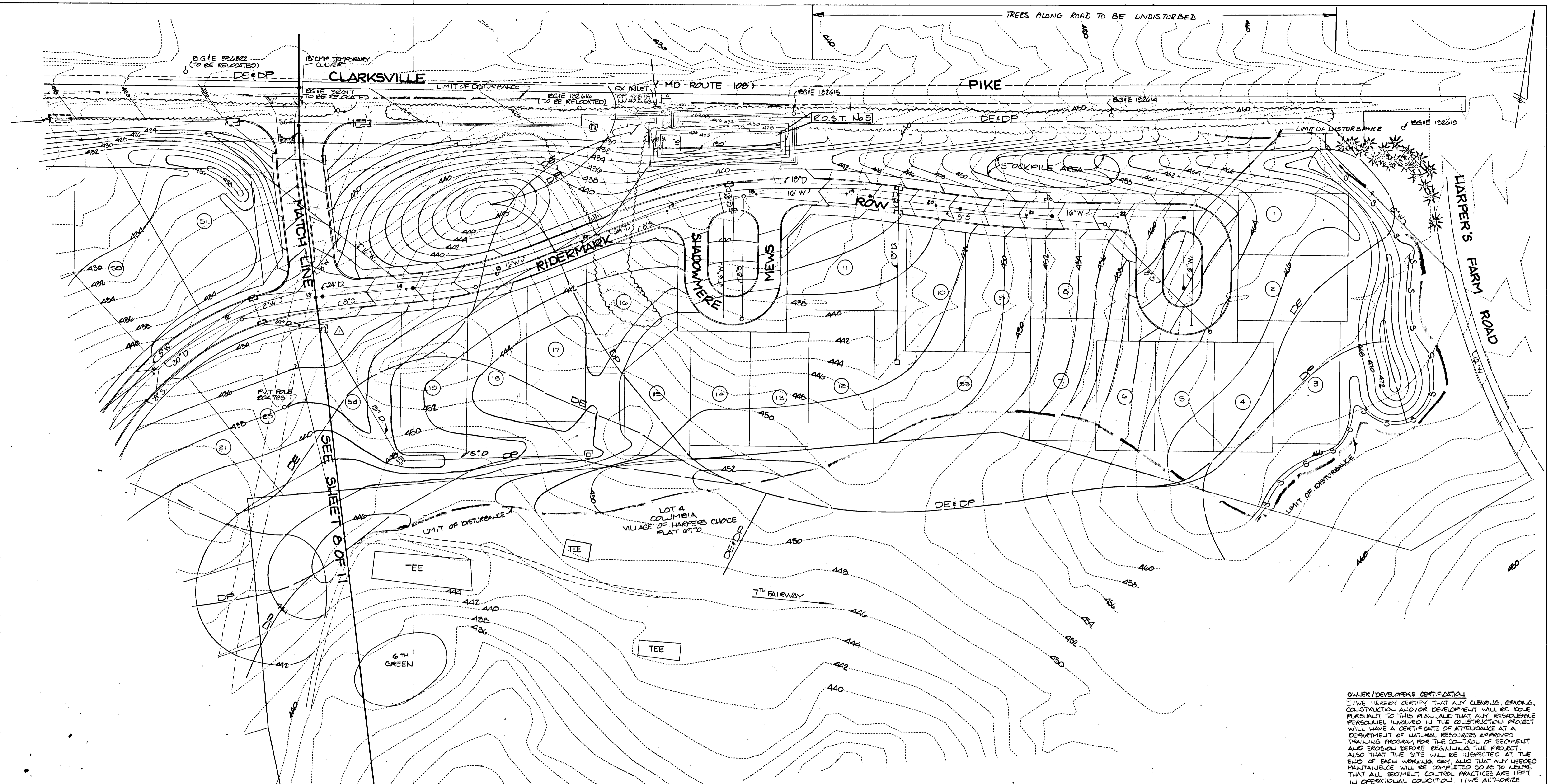
**SEDIMENT & EROSION CONTROL PLAN**  
SCALE: 1" = 50'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James M. Helms* 6/30/89  
CHIEF, LAND DEVELOPMENT DIVISION DATE  
*William B. ...* 7/5/89  
CHIEF, BUREAU OF HIGHWAYS DATE  
*Richard L. Umberger* 7/5/89  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Neil ...* 7/15/89  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

SCALE AS SHOWN  
SHEET 8 OF 11





**OWNER/DEVELOPER CERTIFICATION**  
 I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ALSO THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS.

*Gregory R. ...* 5-16-89  
 DEVELOPER DATE

**CONSULTANTS CERTIFICATION**  
 I CERTIFY THAT THIS PLAN OF SEDIMENT EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

SIGNATURE *Richard L. Umbarger* MD LICENSE NO. 10568  
 RICHARD L. UMBARGER DATE 3/1/89

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
*James M. Helm* 6/15/89  
 SIGNATURE DATE  
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
*Stephen L. ...* 4/15/87  
 HOWARD S.C.D. DATE

COLUMBIA  
 VILLAGE OF HARPER'S CHOICE  
 SECTION 7 AREA 3  
 HOWARD COUNTY, MD ELECTION DISTRICT No.5

OWNER/DEVELOPER  
 THE HOWARD RESEARCH & DEVELOPMENT LAND CO.  
 10075 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 (301) 972-6084

**KIDDE CONSULTANTS, INC.**  
 ENGINEERS SURVEYORS PLANNERS  
 1020 CROMWELL BRIDGE ROAD  
 TOWNSON, MARYLAND 21204  
 (301) 321-5500

*Richard L. Umbarger*

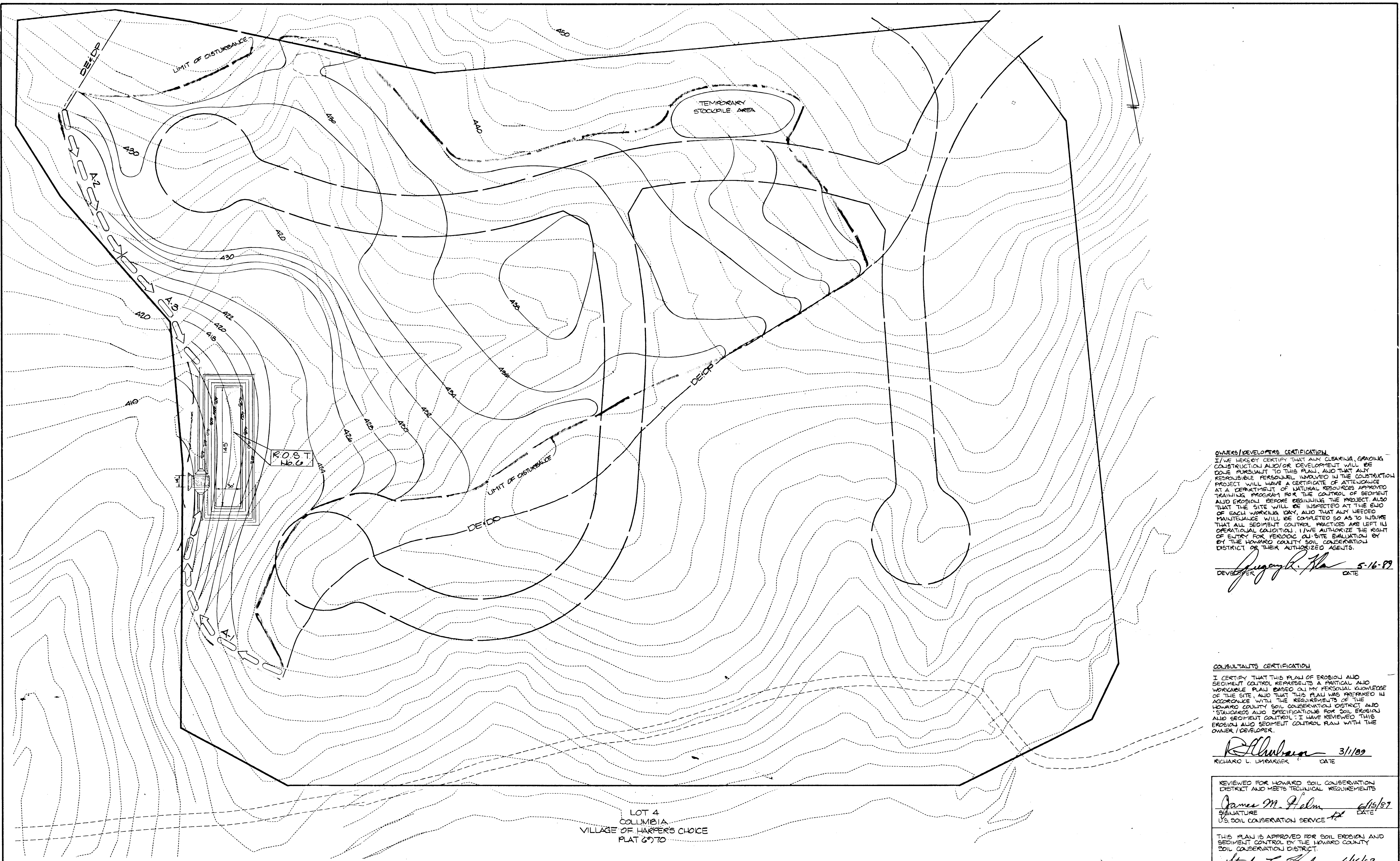
DES:					
DRN:					
CHK:	3	I-36 RELOCATED			11-90
DATE:		KCI	STORM DRAIN LAYOUT & GRADING		12-89
BY:	NO.	REVISION			DATE

**SEDIMENT EROSION CONTROL PLAN**

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Charles W. ...* 6/30/89  
 CHIEF, LAND DEVELOPMENT DIVISION DATE  
*William ...* 7/5/89  
 CHIEF, BUREAU OF HIGHWAYS DATE  
*William ...* 7/15/89  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*David J. ...* 2/2/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

SCALE AS SHOWN  
 SHEET 9 OF 11  
 165



LOT 4  
COLUMBIA  
VILLAGE OF HARPER'S CHOICE  
PLAT 6970

**OWNER/DEVELOPER CERTIFICATION**  
I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ALSO THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, ALSO THAT ALL WEED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS.

*Joseph R. Ha* 5/16/89  
DEVELOPER DATE

**CONSULTANTS CERTIFICATION**  
I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

*Richard L. Umberger* 3/1/89  
RICHARD L. UMBERGER DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
*James M. Helm* 6/16/87  
SIGNATURE DATE  
U.S. SOIL CONSERVATION SERVICE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
*Stephen F. Fisher* 6/16/87  
HOWARD S.C.D. DATE

COLUMBIA  
VILLAGE OF HARPER'S CHOICE  
SECTION 7 AREA 3  
HOWARD COUNTY, MD ELECTION DISTRICT No. 5

OWNER/DEVELOPER  
THE HOWARD RESEARCH & DEVELOPMENT LAND CO.  
10275 UTLE PATENT PARKWAY  
COLUMBIA, MARYLAND 21044  
(301) 972-6004

**KIDDE CONSULTANTS, INC.**  
ENGINEERS SURVEYORS PLANNERS  
1020 CROWWELL BRIDGE ROAD  
TOWSON, MARYLAND 21284  
(301) 321-5500

*Richard L. Umberger*

DES:					
DRN:					
CHK:					
DATE:	BY	NO.	REVISION	DATE	

**SEDIMENT & EROSION CONTROL PLAN**  
SCALE 1"=50'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Charles E. Brown* 6/30/89  
CHIEF, LAND DEVELOPMENT DIVISION DATE  
*Edward R. T. 7/5/89*  
CHIEF, BUREAU OF HIGHWAYS DATE  
*James R. 7/5/89*  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Mark J. Taylor* 7/12/89  
CHIEF, DIVISION OF PLANNING AND LAND DEVELOPMENT DATE  
SCALE AS SHOWN  
SHEET 10 OF 11

