

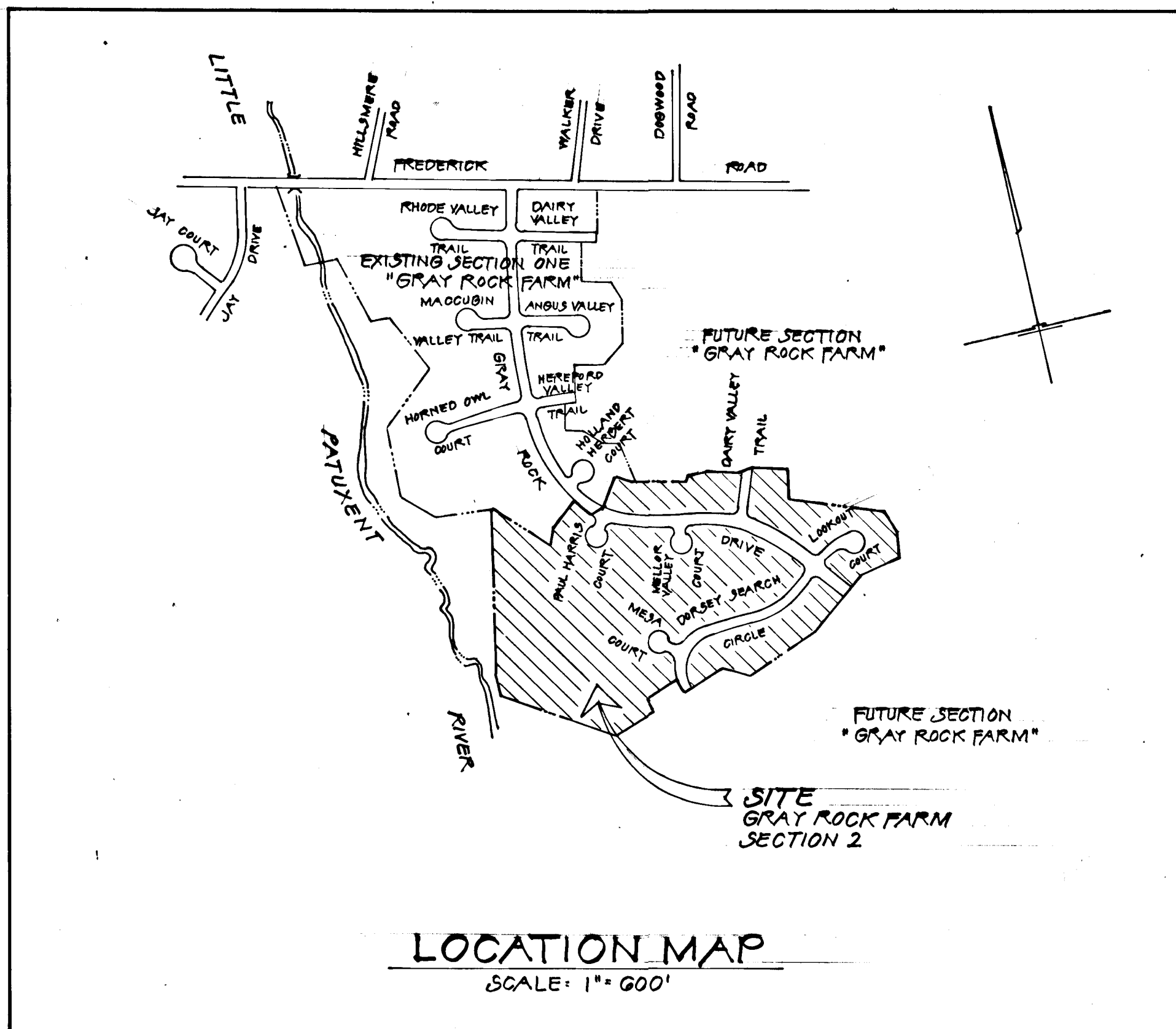
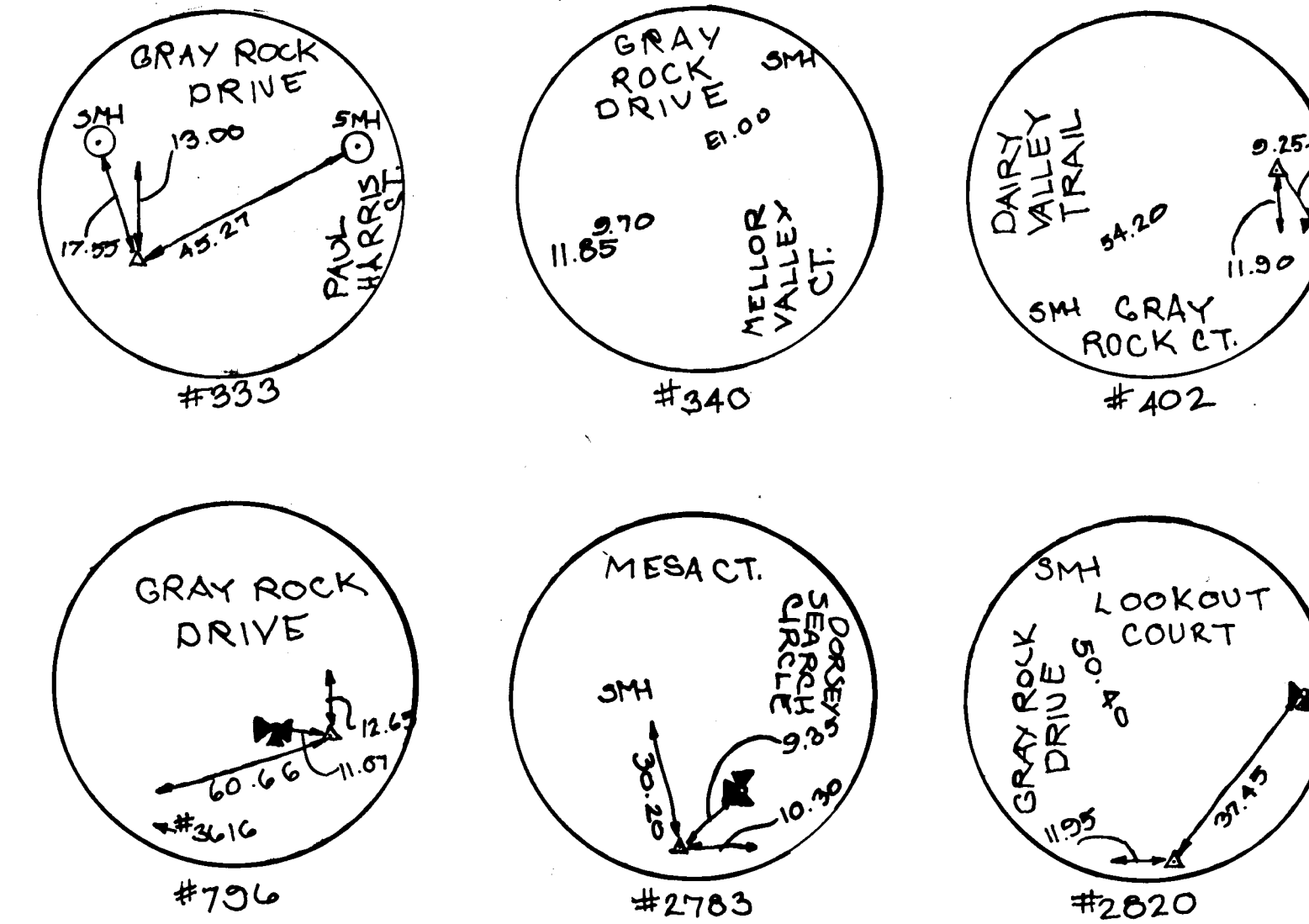
GENERAL NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR ROAD CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE.
- ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES WHERE DIRECTED BY THE ENGINEER WITH A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 OR 3554
BALTIMORE GAS AND ELECTRIC	538-8000 EXT. 691
HOWARD COUNTY BUREAU OF UTILITIES	992-2386
HOWARD COUNTY CONSTRUCTION INSPECTION SURVEY DIVISION	992-2477/2418
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL STREET CURB RETURNS SHALL HAVE 25.0' RADIUS UNLESS OTHERWISE NOTED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1971 EDITION.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- DESIGNATED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:

ALL COL-DE-SAC DESIGNED FOR 30 M.P.H.	ALL LOCAL STREETS DESIGNED FOR 30 M.P.H.
MINOR COLLECTOR	DESIGNED FOR 35 M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% OF MAXIMUM OBTAINABLE DENSITY DETERMINED BY MARSHALL PROCTOR.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- SUBJECT PROPERTY ZONED R-20 PER 10-3-77 COMPREHENSIVE ZONING PLAN.
- THIS PROJECT HAS BEEN GRANTED A STORMWATER MANAGEMENT WAIVER. SEE D.P.W. LETTER OF SEPT. 12, 1983.

CONCRETE MONUMENTS



REFERENCE:
HOWARD COUNTY
CONTROL STATION
#324102

INDEX OF SHEETS	
SHEET NUMBER	DESCRIPTION
1	TITLE SHEET
2	DRAINAGE AREA MAP
3	PLAN & PROFILE GRAY ROCK DRIVE, PAUL HARRIS CIRCLE
4	PLAN & PROFILE GRAY ROCK DRIVE, WELLS VALLEY COURT, DAIRY VALLEY TRAIL
5	PLAN & PROFILE GRAY ROCK DRIVE, LOOKOUT COURT
6	PLAN & PROFILE DORSEY SEARCH CIRCLE
7	PLAN & PROFILE DORSEY SEARCH CIRCLE
8	STORM DRAIN PROFILES
9	STORM DRAIN PROFILES & ROAD SECTIONS
10	SEDIMENT CONTROL PLAN
11	SEDIMENT CONTROL DETAILS
12	LANDSCAPING PLAN & DETAILS

CONTRACT

GRAY ROCK FARM

SECTION 2

STORM DRAINAGE & ROAD CONSTRUCTION PLANS

HOWARD COUNTY MARYLAND DEPARTMENT OF PUBLIC WORKS

AS-BUILTS

NOTE: HOUSING SHOWN IS FOR CONVENIENCE ONLY. LOTS WILL BE DEVELOPED FROM A SELECTION OF VARIOUS HOUSING MODELS.

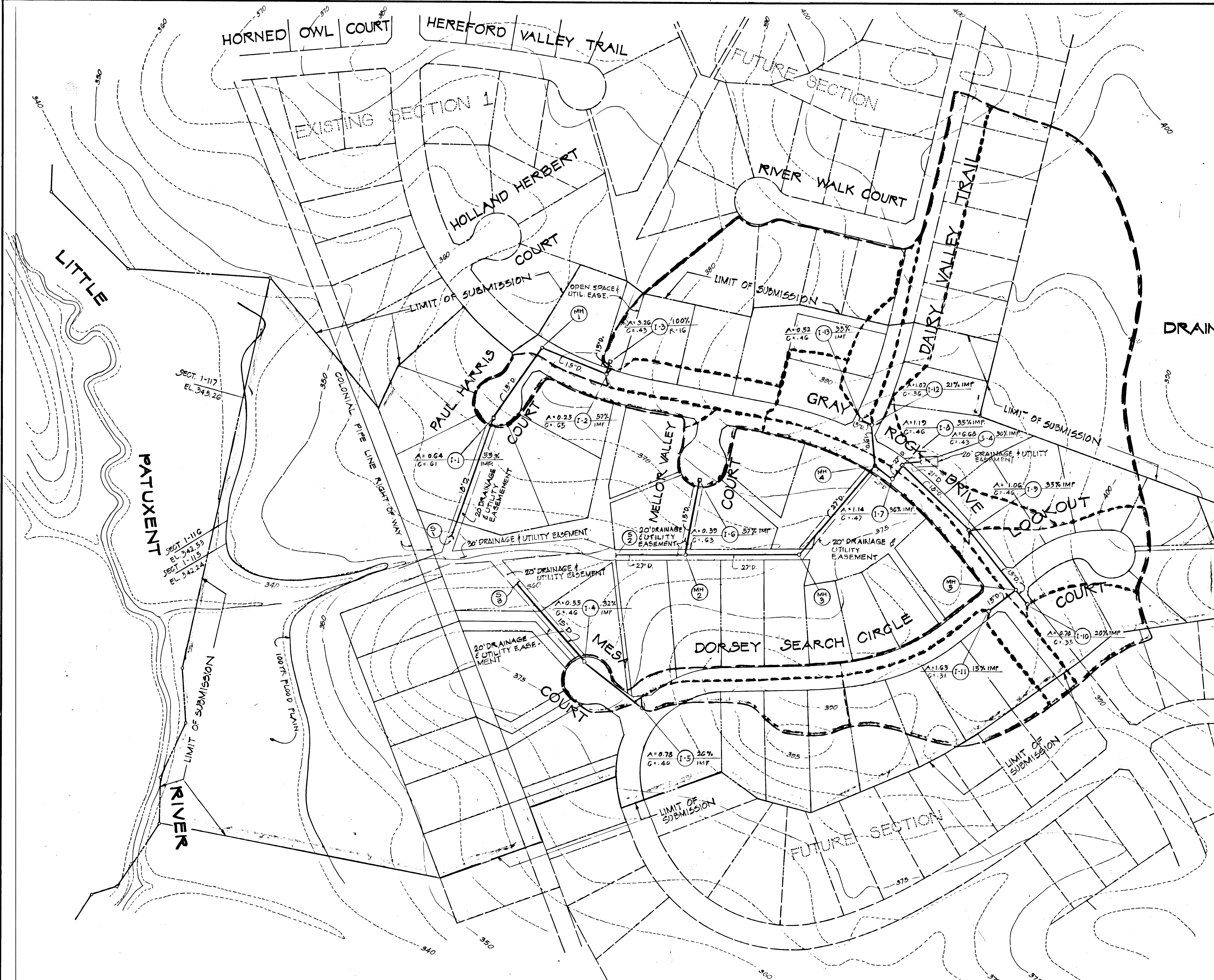
AS-BUILT SURVEY CERTIFIED BY
THOMAS L. CHURCH REG.-P.E.
NO. 6479 ON FEB. 1984



AS-BUILT
#242
[Signature]

Drafting R.H.	DATE	REVISIONS	KIDDE CONSULTANTS, INC. ENGINEERS • ARCHITECTS • PLANNERS	APPROVED: DEPT. OF PUBLIC WORKS	OFFICE OF PLANNING & ZONING	OWNER-DEVELOPER: THE MILLER LAND COMPANY 3035 BALTIMORE NATIONAL PIKE ELLIOTT CITY, MD. #210 43	CONTRACT	TITLE SHEET	SHEET 1 OF 12	DATE FEB. 1984	JOB NUMBER K.C.I. 77110 B
Check R.B.				CHIEF, BUREAU OF ENGINEERING DATE <i>[Signature]</i>	CHIEF, DIV. OF LAND DEVELOPMENT DATE AND ZONING ADMIN.					SCALE 1" = 600'	
Design R.B.											

1/20/88 AS-BUILT F-84-82

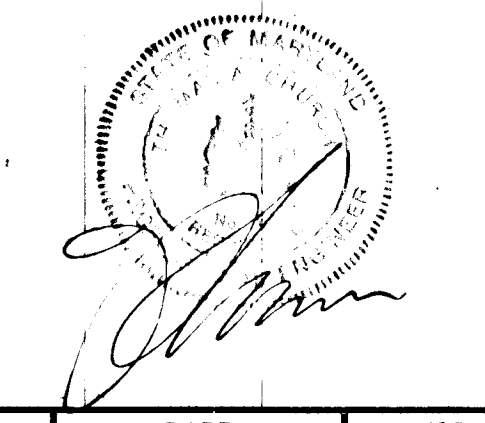


DRAINAGE AREA MAP

DESIGN COMPUTATIONS

AREA NO.	REMARKS	INCR. ACRES	TOTAL ACRES	C	CXA	AGGUM. CXA	TIME	I IN/HR	R OPS	PIPE SIZE	SLOPE %	VEL. FT. / S	L. FT.	PIPE TIME
I-3	I-3 TO I-2	3.26	3.26	.43	1.40		13.0	5.9	8.3	15"	1.80	1.80	6.6	35'
I-2	I-3+I-2 TO M-1	0.25	3.51	.65	0.16	1.56	13.1	5.9	9.2	15"	2.10	2.68	145'	0.3
	M-1 TO I-1		3.51			1.56	13.4	5.9	9.2	15"	2.10	2.52	180'	0.4
I-1	I-3-I-1 OUT	0.64	4.15	.61	0.39	1.95	13.8	5.6	10.9	18"	1.20	5.4		
I-11	I-11 TO M-5	1.63		.31	0.51		7.0	7.5	3.8	15"	0.38	0.76	80'	0.4
I-10	I-10 TO M-5	0.78		.35	0.27		5.0	8.5	2.3	15"	0.12	1.00	42'	
	I-11+I-10 M-5 TO I-9		2.41			0.78	7.4	7.5	5.9	15"	0.93	1.88	164'	0.6
I-9	I-11-I-9 TO I-8	1.06	3.47	.49	0.52	1.30	8.0	7.2	9.4	18"	0.70	1.80	192'	0.6
S-1	S-1 TO I-8	6.68		.43	2.87		13.0	5.9	16.9	21"	1.30	4.68	48'	0.1
I-8	I-11-I-8 TO I-7	1.19	11.34	.46	0.55	4.72	13.2	5.9	27.8	27"	0.90	1.00	40'	0.1
I-7	I-11-I-7 TO M-4	1.14	12.48	.47	0.39	5.25	13.2	5.8	31.0	27"	1.10	1.50	50'	0.1
I-13	I-13 TO I-12	0.52		.46	0.24		5.0	8.5	2.0	15"	0.15	1.00	30'	0.4
I-12	I-13+I-12 TO M-4	1.07	1.39	.36	0.39	0.63	7.0	7.5	4.7	15"	0.60	3.24	95'	0.4
	I-11-I-7 M-4 TO M-2		14.07			5.88	13.3	5.8	34.1	27"	1.40	2.36	483'	1.0
I-6	I-6 TO M-2	0.39		.63	0.25		5.0	8.5	2.1	15"	0.12	4.84	165'	
	I-13-I-6 OUT		14.46			6.13	14.3	5.6	34.3	27"	1.40	1.40	8.4	158'
I-5	I-5 TO I-4	0.78		.40	.31		7.0	7.5	2.3	15"	0.14	3.00	182'	1.7
I-4	I-5+I-4 OUT	0.55	1.35	.46	.25	.56	8.7	7.0	3.9	15"	0.40	3.40	230'	

GRAY ROCK FARM, SECTION 2



#242

Drafting	DATE	REVISIONS
K.B.H.		
T.J.R.		
P.T.		
T.J.R.		

KIDDE CONSULTANTS, INC.
ENGINEERS • ARCHITECTS • PLANNERS

APPROVED: DEPT. OF PUBLIC WORKS
OFFICE OF PLANNING & ZONING
CHIEF, BUREAU OF ENGINEERING
DATE

OWNER - DEVELOPER
THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD.
#21043

CONTRACT

GRAY ROCK FARM, SECTION 2
DRAINAGE AREA MAP
ELECTION DISTRICT N^o 2
HOWARD COUNTY, MD.

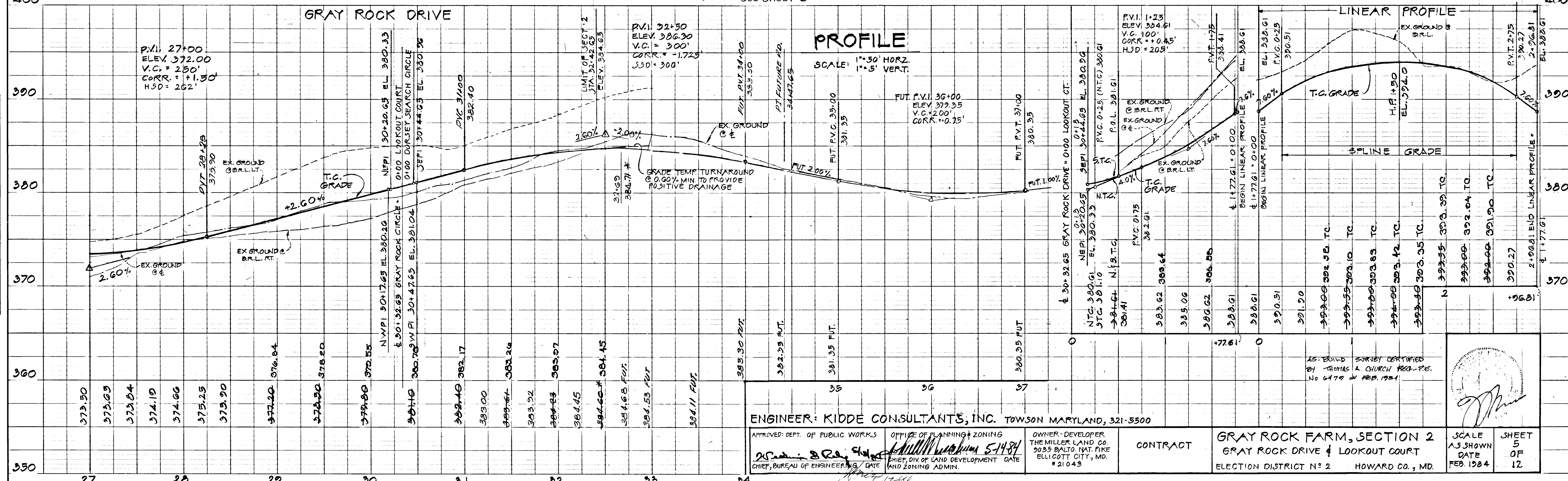
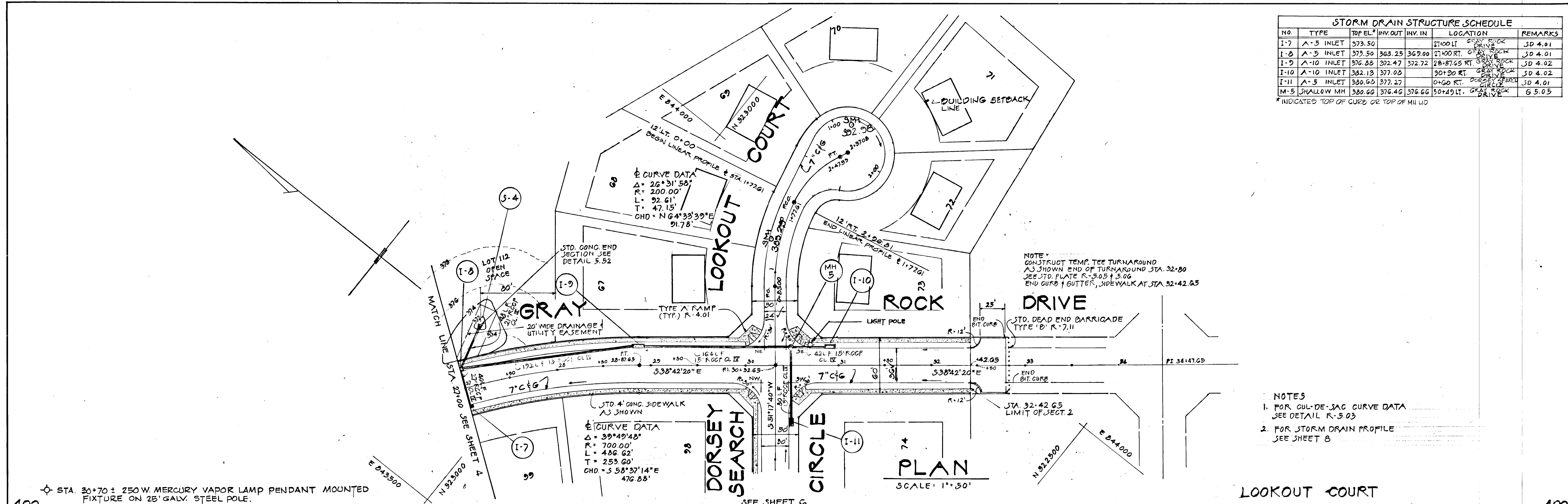
SHEET	DATE	JOB NUMBER
2 OF 12	FEB. 1984	K.C.I. 771108
	SCALE 1"=100'	

DATE	
BY	
REVISIONS	
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REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	

STORM DRAIN STRUCTURE SCHEDULE						
NO.	TYPE	TOP EL.	INV. OUT.	INV. IN.	LOCATION	REMARKS
I-7	A-5 INLET	373.50			27+00 LT. GRAY ROCK DRIVE	SD 4.01
I-8	A-5 INLET	373.50	368.25	369.00	27+00 RT. GRAY ROCK DRIVE	SD 4.01
I-9	A-10 INLET	376.28	372.47	372.72	28+87.65 RT. GRAY ROCK DRIVE	SD 4.02
I-10	A-10 INLET	382.13	377.28		30+30 RT. GRAY ROCK DRIVE	SD 4.02
I-11	A-5 INLET	380.65	377.27		0+60 RT. DORSEY SEARCH DRIVE	SD 4.01
M-5	SHALLOW MH	380.66	376.46	376.66	30+29 LT. GRAY ROCK DRIVE	6.5.0.5

* INDICATES TOP OF CURB OR TOP OF MH UD



ENGINEER: KIDDE CONSULTANTS, INC. TOWSON MARYLAND, 321-5500

APPROVED: DEPT. OF PUBLIC WORKS OFFICE OF PLANNING & ZONING OWNER-DEVELOPER THE MILLER LAND CO. 3035 BALTO. NAT. PIKE ELLICOTT CITY, MD. #21043

CHIEF, BUREAU OF ENGINEERING DATE: 5-14-84 CHIEF DIV. OF LAND DEVELOPMENT AND ZONING ADMIN. CONTRACT GRAY ROCK FARM, SECTION 2 GRAY ROCK DRIVE & LOOKOUT COURT ELECTION DISTRICT NO. 2 HOWARD CO., MD. SCALE AS SHOWN DATE FEB. 1984 SHEET 5 OF 12

#242

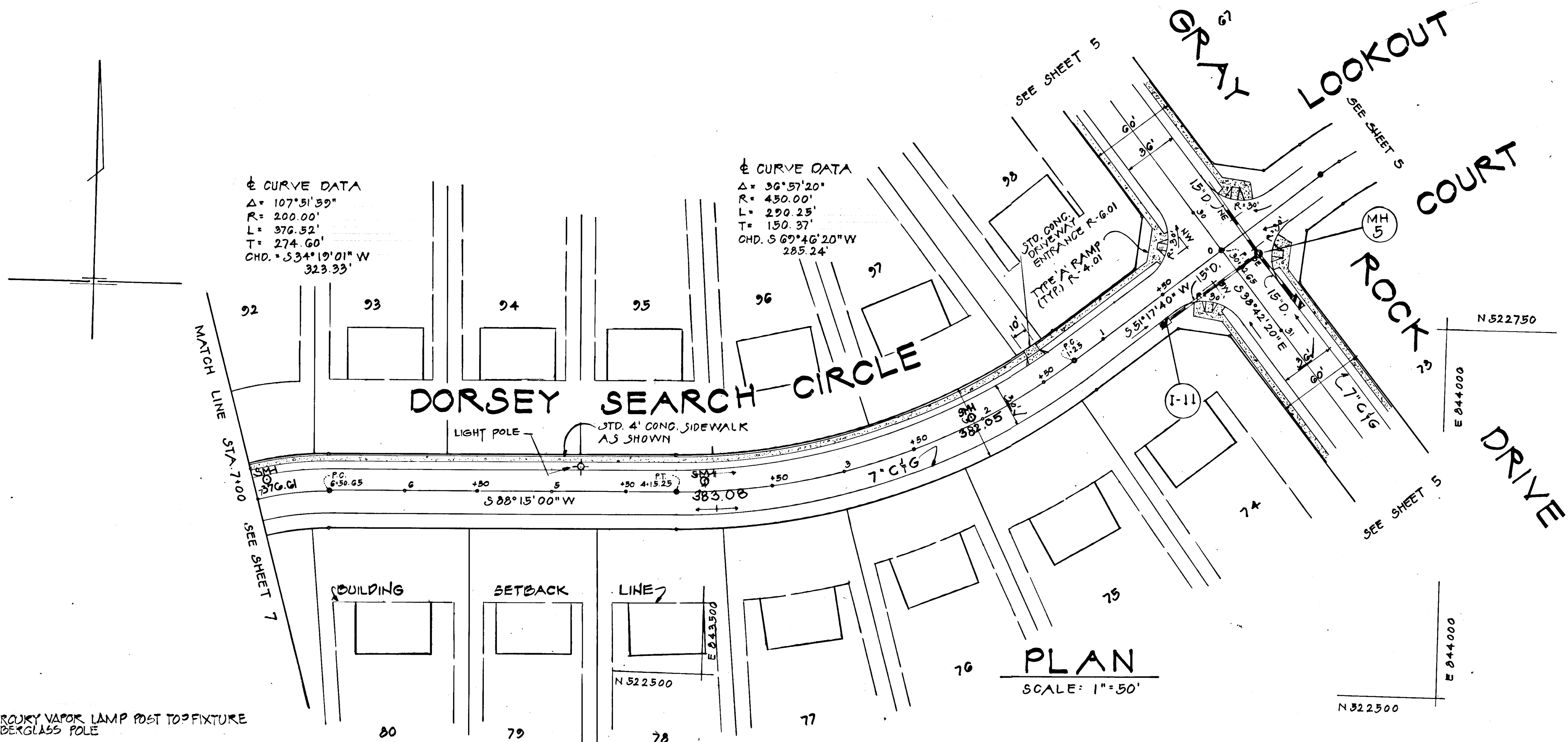
1/21/88

F-84-82

48 7024 MADE IN U.S.A.

PLAN
 SURVEYED BY: _____
 NOTE BOOK NO. _____
 ALIGNED CHECKED BY: _____
 RT. OF WAY CHECKED BY: _____

PROFILE
 SURVEYED BY: _____
 NOTE BOOK NO. _____
 GRADES CHECKED BY: _____
 S. M. S. NOTES BY: _____
 STRUCTURE NOTATIONS CHECKED BY: _____

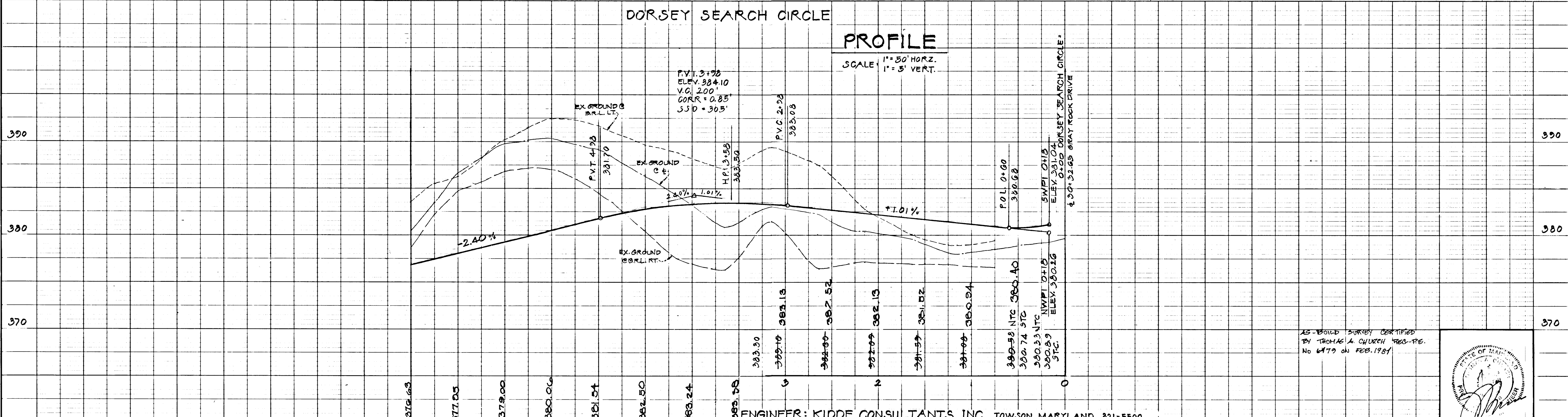


STA 4+80
 175-WATT MERCURY VAPOR LAMP POST TOP FIXTURE
 ON A GRAY FIBERGLASS POLE

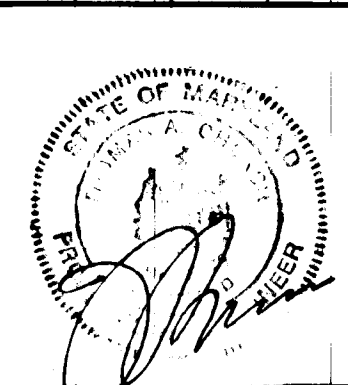
DORSEY SEARCH CIRCLE

PROFILE

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



AS-BUILD SURVEY CERTIFIED
 BY THOMAS A. CHURCH FEB-88
 NO. 6479 ON FEB. 1981



ENGINEER: KIDDE CONSULTANTS, INC. TOWSON MARYLAND, 321-5500

APPROVED: DEPT. OF PUBLIC WORKS
 OFFICE OF PLANNING & ZONING
 CHIEF, BUREAU OF ENGINEERING
 CHIEF, DIV. OF LAND DEVELOPMENT AND ZONING ADMIN.

OWNER-DEVELOPER
 THE MILLER LAND CO.
 3035 BALTO NAT. PIKE
 ELLICOTT CITY, MD
 # 210 43

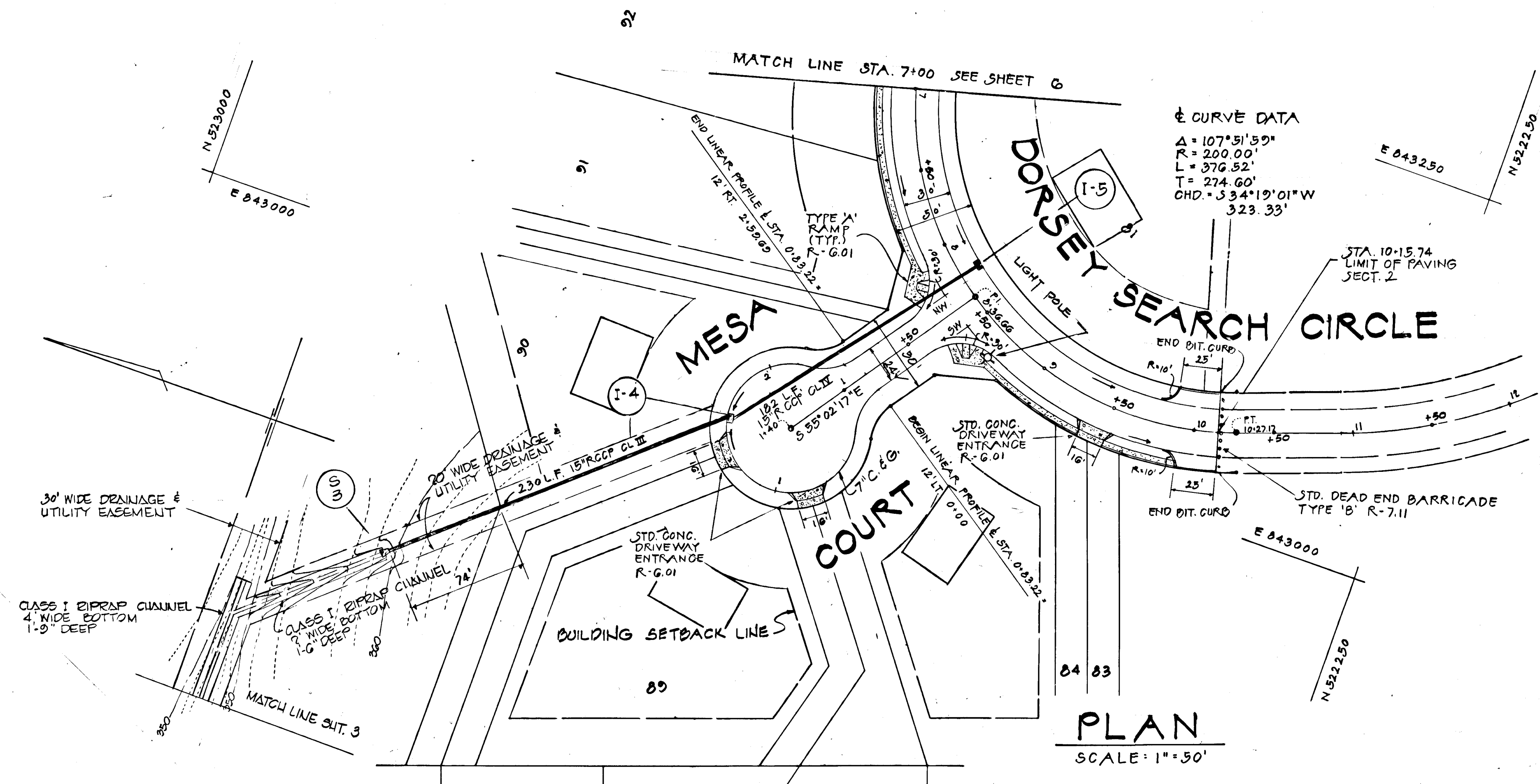
CONTRACT
 GRAY ROCK FARM, SECTION 2
 DORSEY SEARCH CIRCLE
 ELECTION DISTRICT N° 2 HOWARD CO., MD.

SCALE AS SHOWN
 DATE FEB. 1984
 SHEET 6 OF 12

#242

STORM DRAIN STRUCTURE SCHEDULE						
NO.	TYPE	TOP ELEV.	INV. OUT	INV. IN	LOCATION	REMARKS
I-4	DBL 15' COMB	363.25	363.80	364.00	1+60 LT MESA COURT	S.D. 4.34
I-5	DBL 15' COMB	373.85	369.46		8+25 RT. DORSEY SEARCH CIRCLE	S.D. 4.34

* INDICATES TOP OF CURB OR TOP OF MH LID

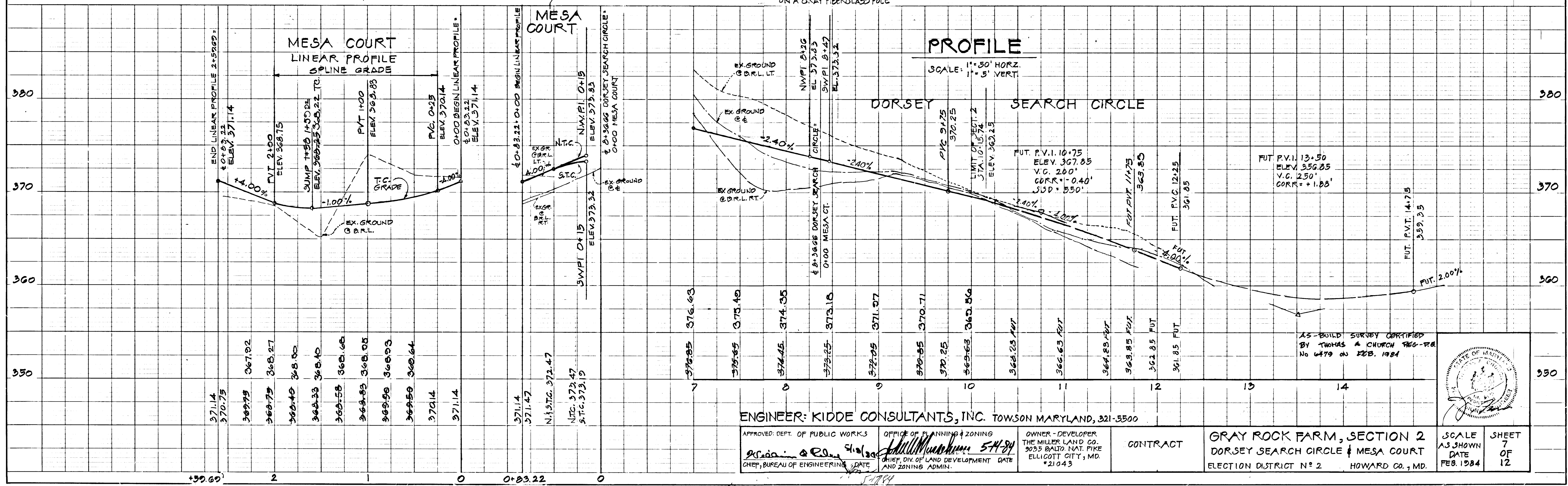


NOTE:
 CONSTRUCT TEMP TEE TURNAROUND AS SHOWN
 SEE STD. PLATE R-505 & R-506
 END CURB & GUTTER STA. 9+75 ON LT.
 END CURB & GUTTER & SIDEWALK STA. 9+82 ON RT.

NOTES:
 1. FOR CUL-DE-SAC CURVE DATA
 SEE DETAIL R-3.01
 2. FOR STORM DRAIN PROFILE
 SEE SHT. 9

PLAN
 SCALE: 1" = 50'

175-WATT MERCURY VAPOR LAMP POST TOP FIXTURE
 ON A GRAY FIBERGLASS POLE



ENGINEER: KIDDE CONSULTANTS, INC. TOWSON MARYLAND, 321-5500

APPROVED: DEPT. OF PUBLIC WORKS <i>[Signature]</i> CHIEF, BUREAU OF ENGINEERING	OFFICE OF PLANNING & ZONING <i>[Signature]</i> CHIEF DIV. OF LAND DEVELOPMENT AND ZONING ADMIN.	OWNER - DEVELOPER THE MILLER LAND CO. 3035 BALD NAT. PIKE ELLICOTT CITY, MD. #21043	CONTRACT	GRAY ROCK FARM, SECTION 2 DORSEY SEARCH CIRCLE & MESA COURT ELECTION DISTRICT NO. 2 HOWARD CO., MD.	SCALE AS SHOWN DATE FEB. 1984	SHEET 7 OF 12
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PLAN	DATE	BY	CHKD.

PROFILE	DATE	BY	CHKD.

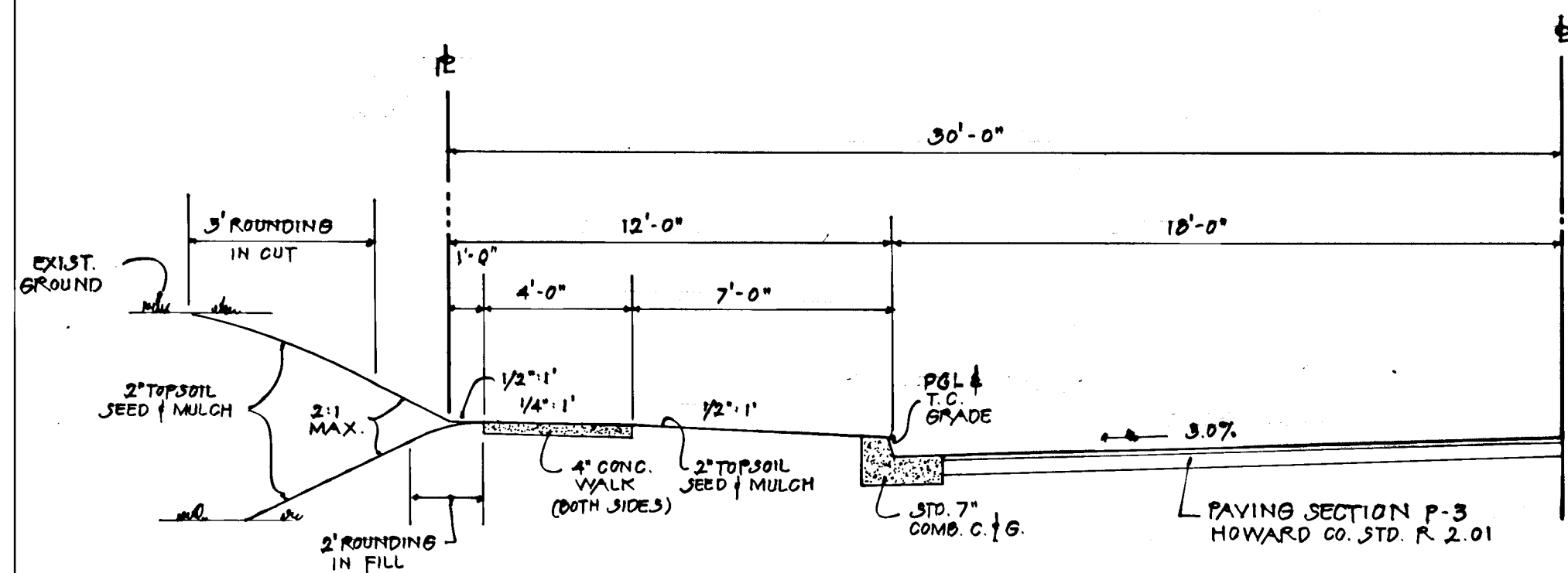
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1/21/88

AS BUILT

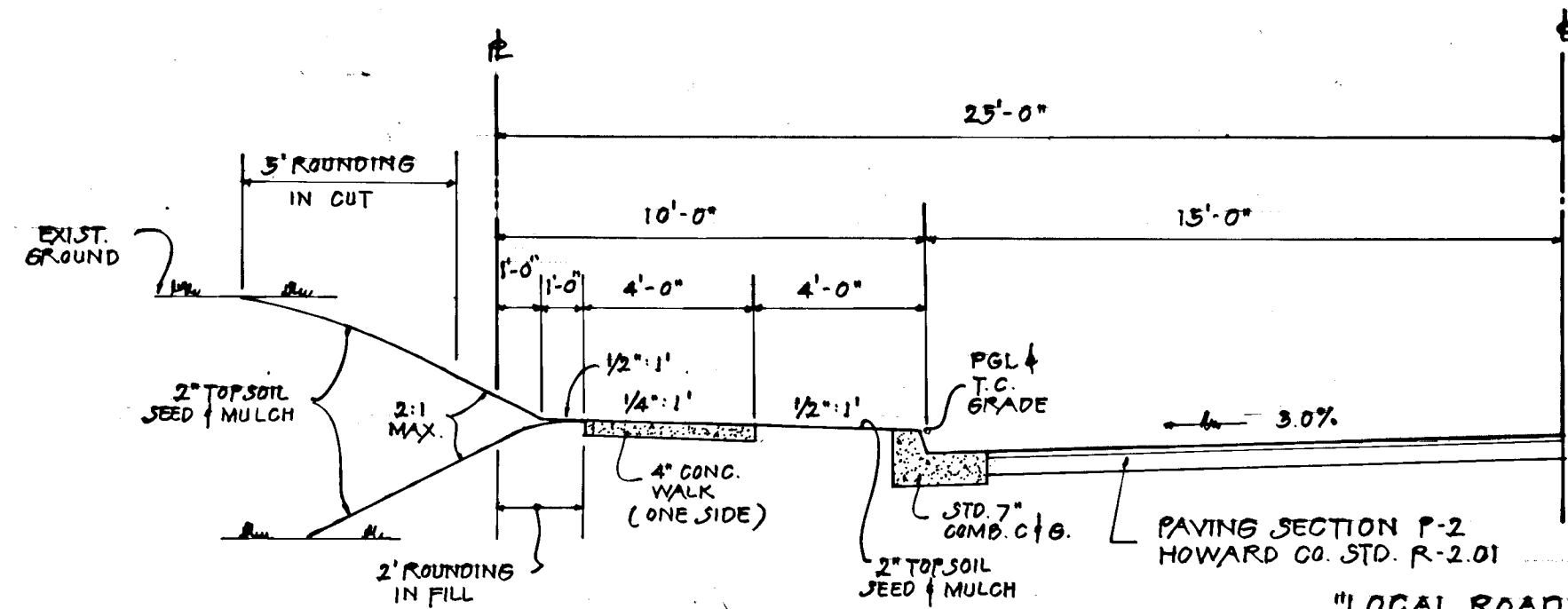
F-84-82

E.B.

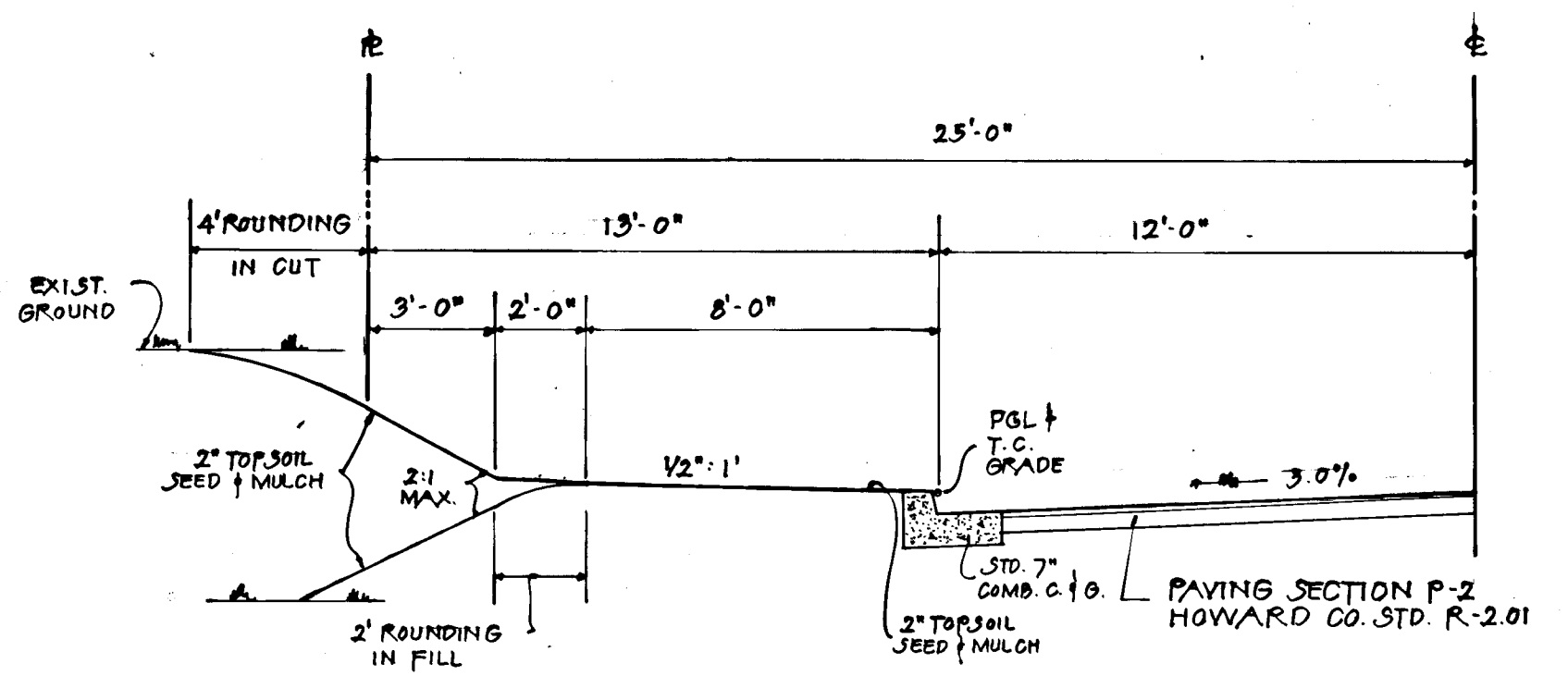


30' PAVING ON 60' R/W
SCALE: 1" = 4'-0"
"MINOR COLLECTOR" 35 MPH DESIGN SPEED
GRAY ROCK DRIVE 18+36 TO 32+42.65

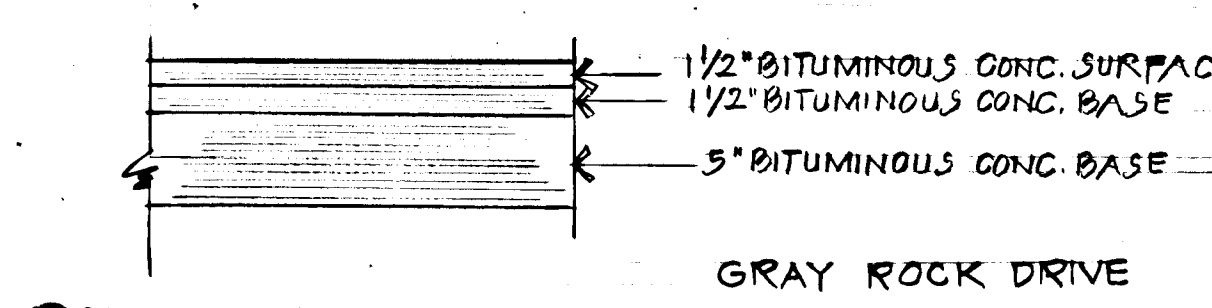
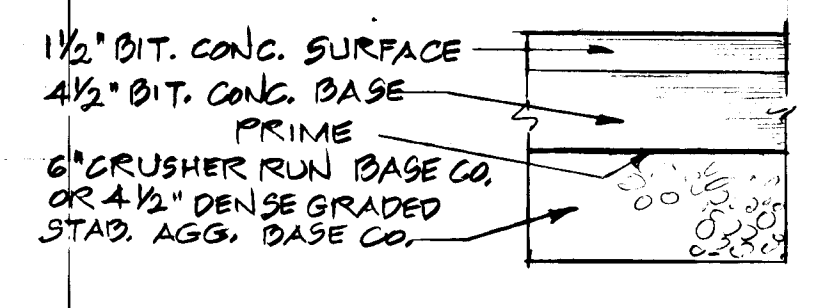
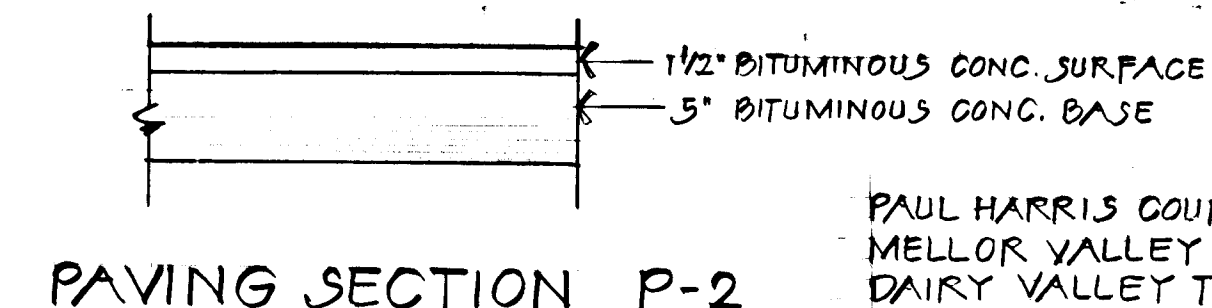
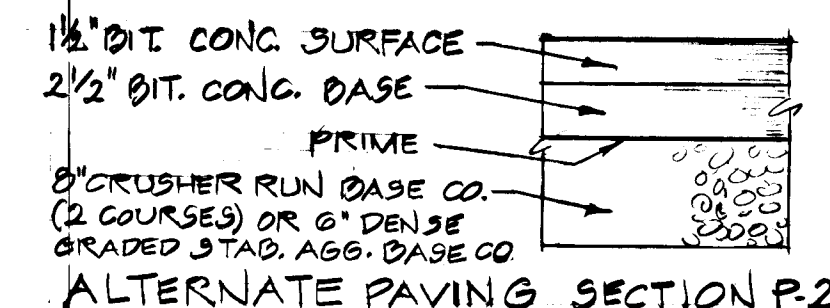
SITE ZONED R-20



30' PAVING ON 50' R/W
SCALE: 1" = 4'-0"
"LOCAL ROADWAYS" 30 MPH DESIGN SPEED
DAIRY VALLEY TRAIL 0+00 TO 2+88.45
DORSET SEARCH CIRCLE 0+00 TO 9+78

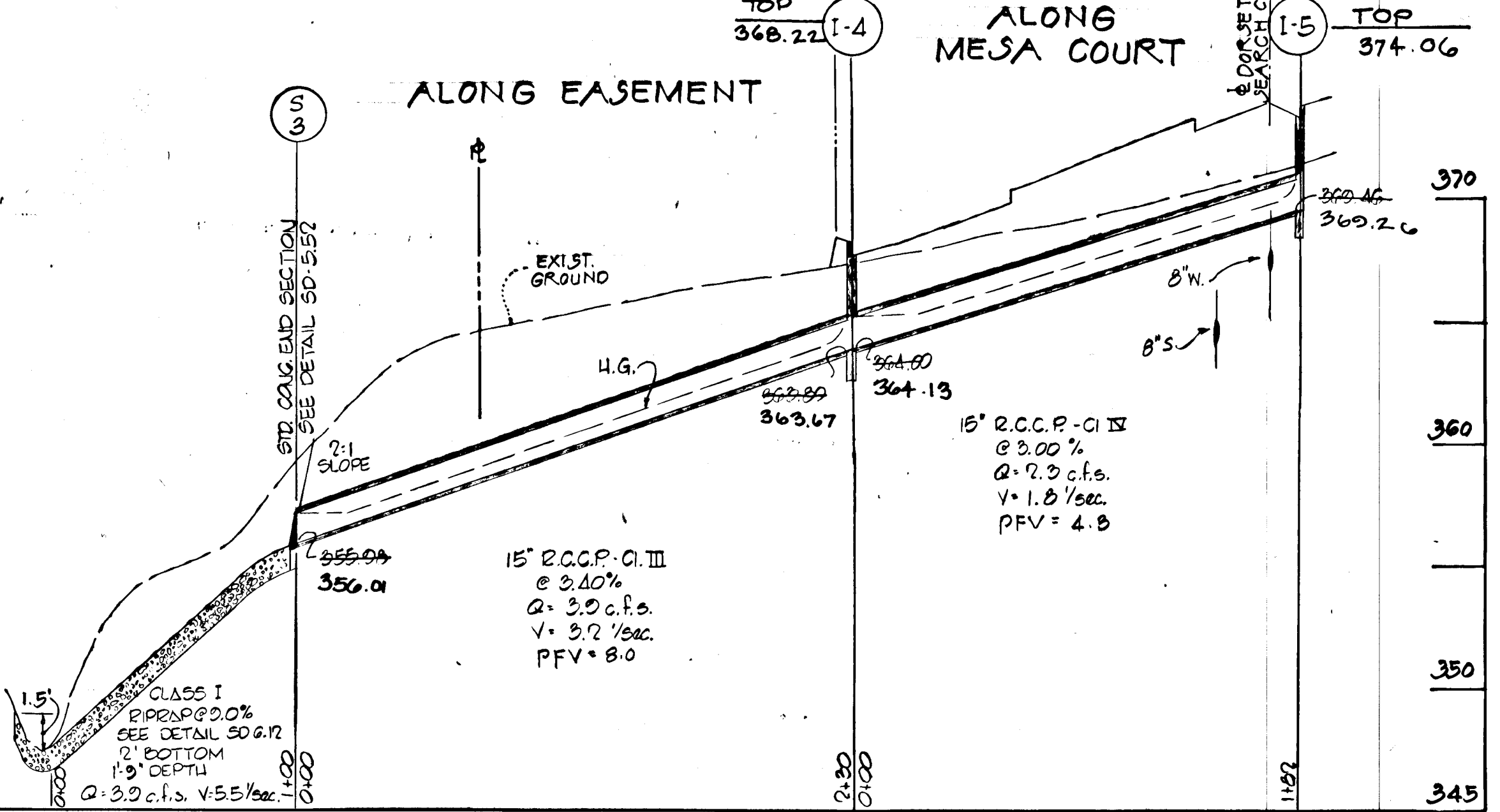
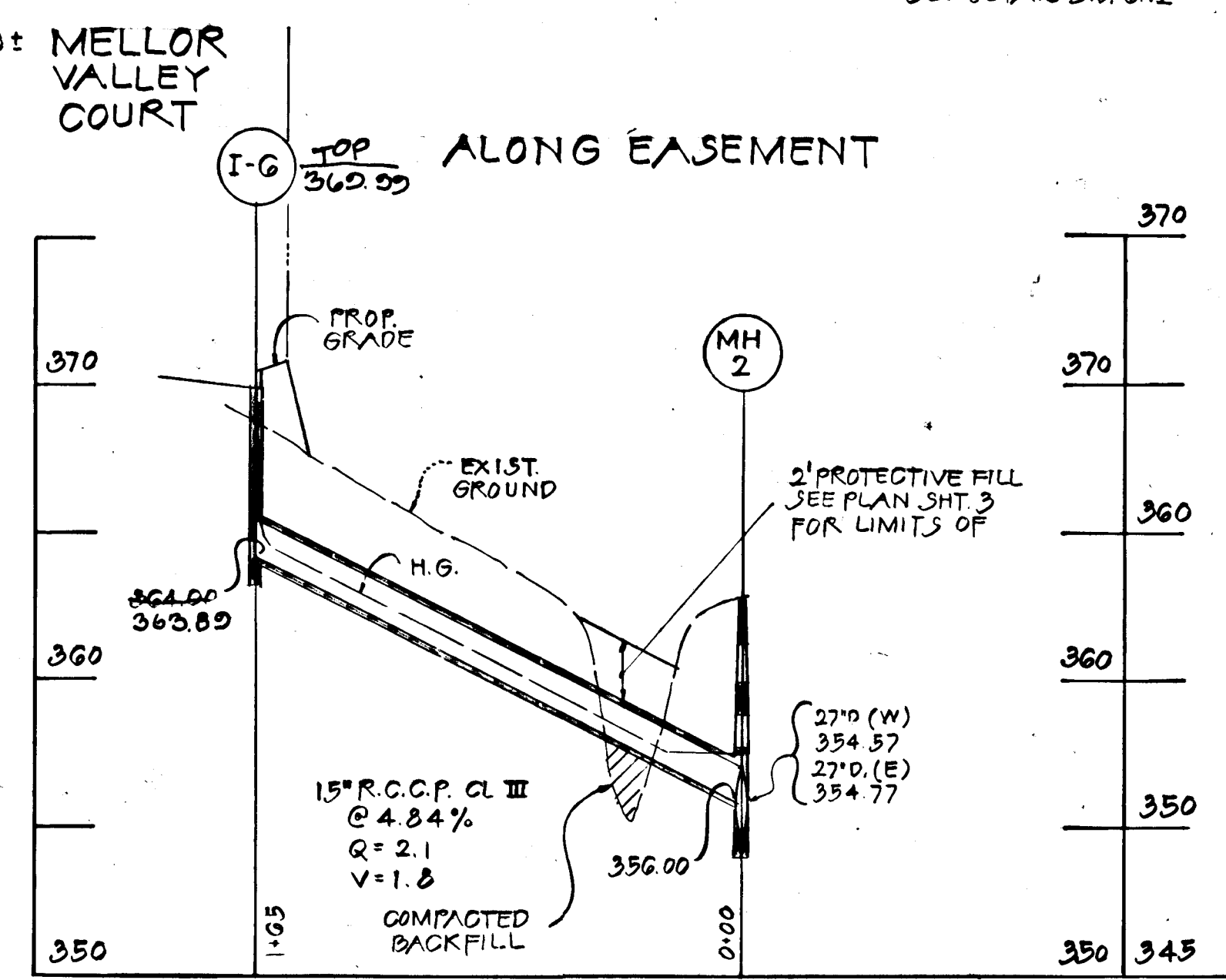
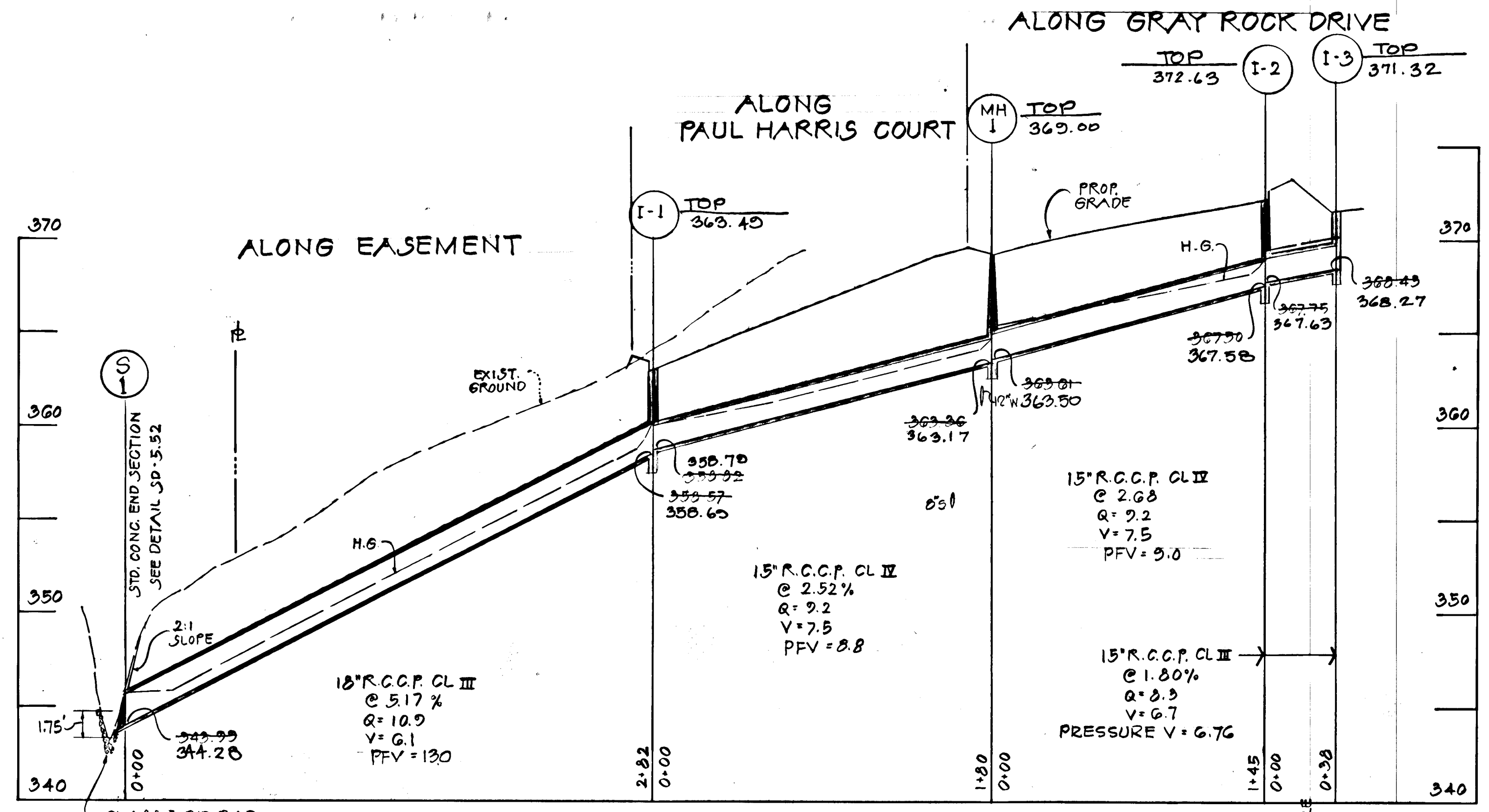


CUL-DE-SAC
SCALE: 1" = 4'-0"
MELLOR VALLEY COURT,
LOOKOUT COURT &
MESA COURT

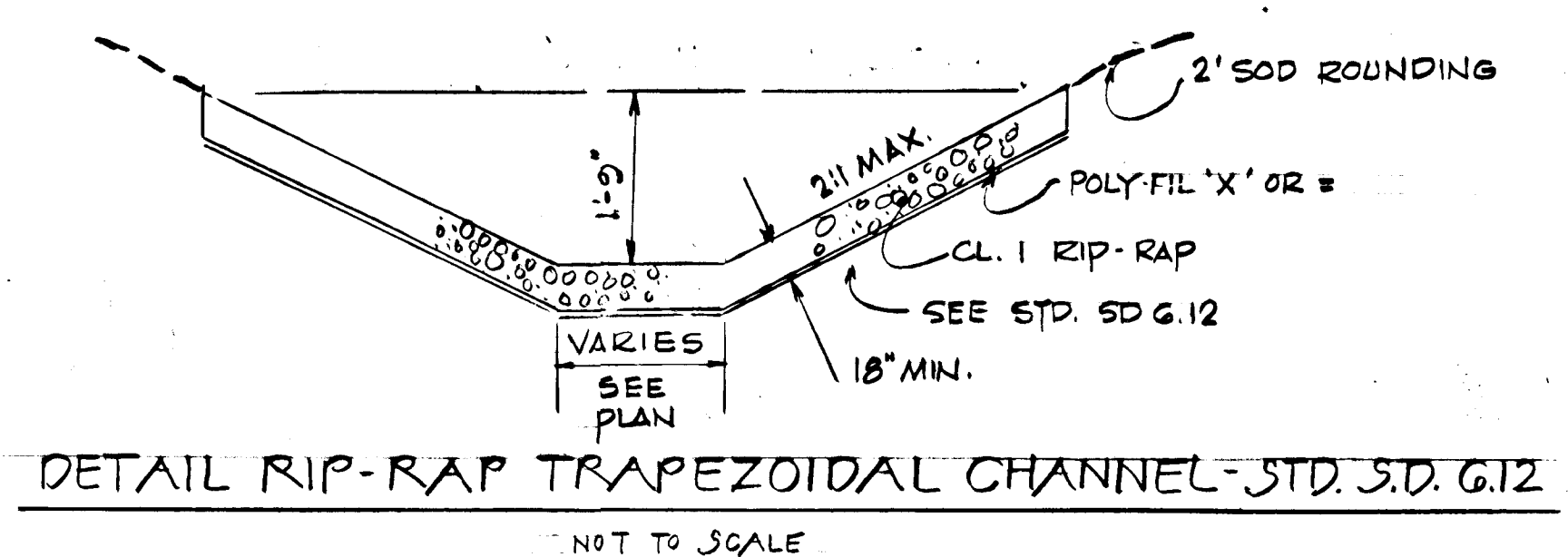


PAUL HARRIS COURT
MELLOR VALLEY COURT
DAIRY VALLEY TRAIL
LOOKOUT COURT
DORSET SEARCH CIRCLE
MESA COURT

GRAY ROCK DRIVE



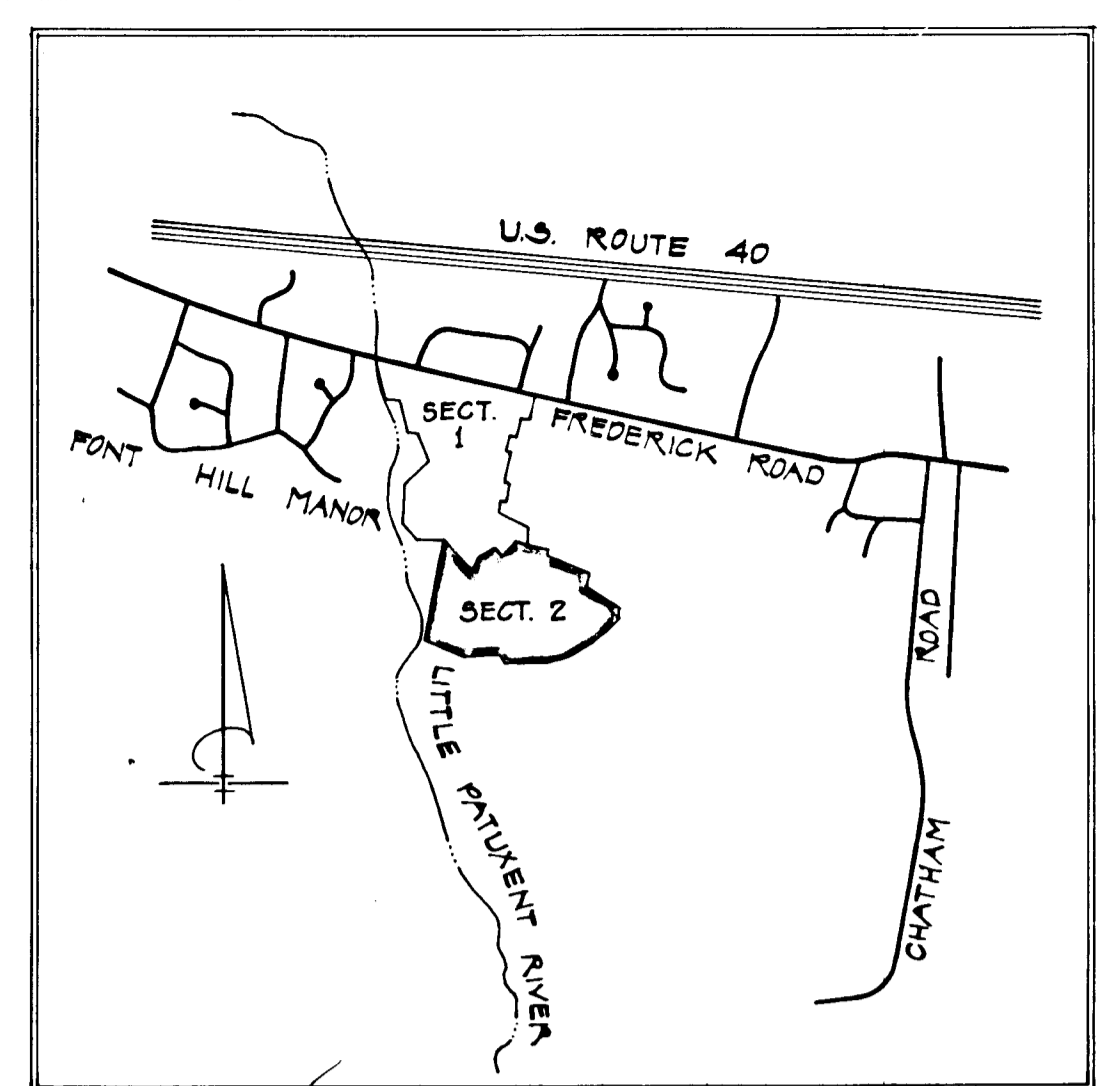
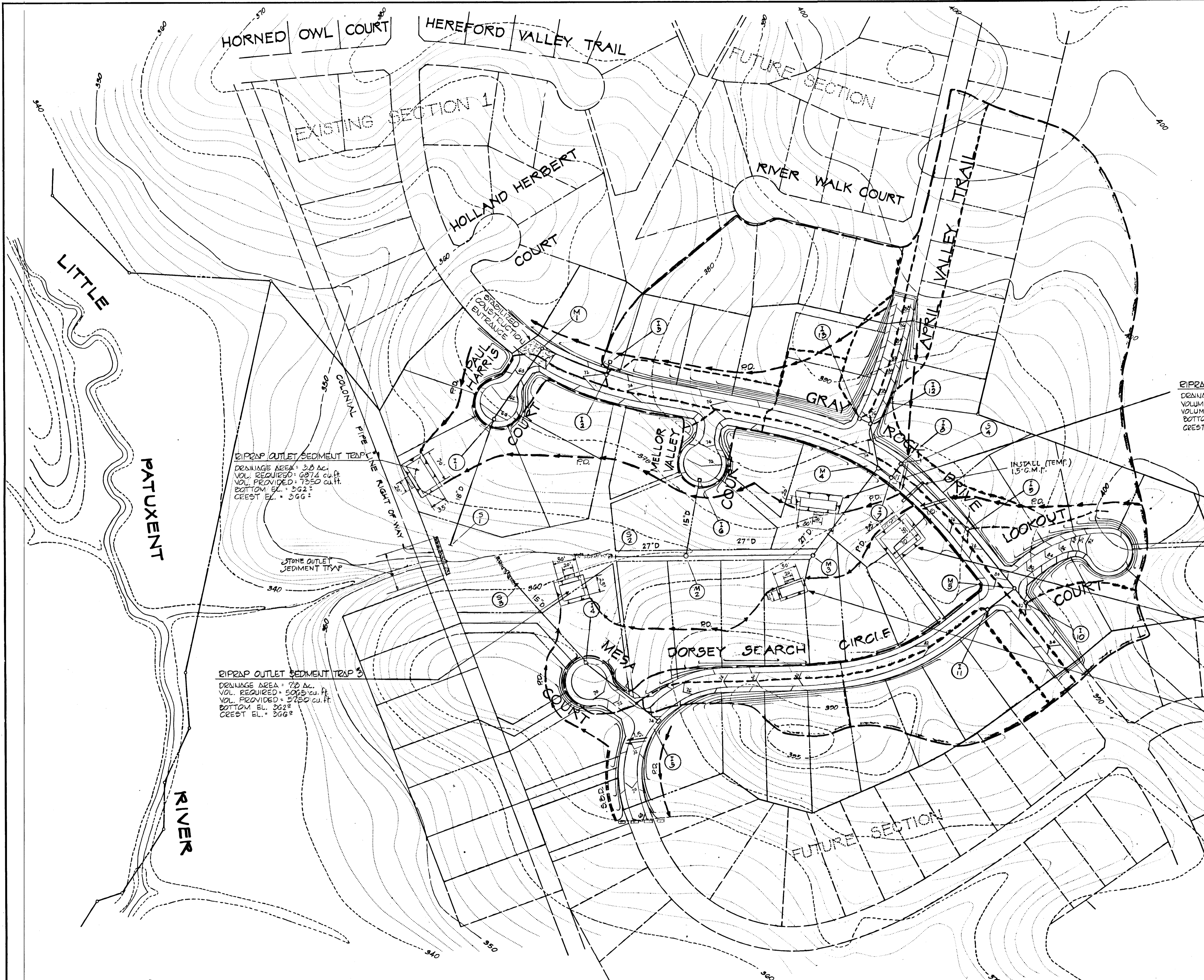
PROFILES
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.



AS-BUILD SURVEY CERTIFIED BY
THOMAS A. CHURCH
180-P.E. No. 6179
ON FEB. 1984



Drafting R.H. Check F.D.T. Design F.D.T. Check F.D.T.	DATE REVISIONS	KIDDE CONSULTANTS, INC. ENGINEERS • ARCHITECTS • PLANNERS	APPROVED: DEPT. OF PUBLIC WORKS <i>[Signature]</i> CHIEF, BUREAU OF ENGINEERING	OFFICE OF PLANNING & ZONING <i>[Signature]</i> CHIEF, DIV. OF LAND DEVELOPMENT & ZONING ADMIN.	OWNER - DEVELOPER THE MILLER LAND COMPANY 2035 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MD. 21043	CONTRACT	GRAY ROCK FARM, SECTION 2 STORM DRAIN PROFILES & DETAILS ELECTION DISTRICT No. 2 HOWARD COUNTY, MD.	SHEET 9 OF 12	DATE FEB. 1984 SCALE AS SHOWN	JOB NUMBER KCI 77110B
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LOCATION PLAN
SCALE: 1" = 2000'

RIPRAP OUTLET SEDIMENT TRAP #2
DRAINAGE AREA = 7.4 AC.
VOLUME REQUIRED = 4342 cu. ft.
VOLUME PROVIDED = 4800 cu. ft.
BOTTOM EL. = 309'[±]
CREST EL. = 373'[±]

RIPRAP OUTLET SEDIMENT TRAP #1
DRAINAGE AREA = 3.0 AC.
VOL. REQUIRED = 6874 cu. ft.
VOL. PROVIDED = 7350 cu. ft.
BOTTOM EL. = 302'[±]
CREST EL. = 366'[±]

RIPRAP OUTLET SEDIMENT TRAP #4
DRAINAGE AREA = 6.0 AC.
VOLUME REQUIRED = 10154 cu. ft.
VOLUME PROVIDED = 11550 cu. ft.
BOTTOM EL. = 272'[±]
CREST EL. = 376'[±]

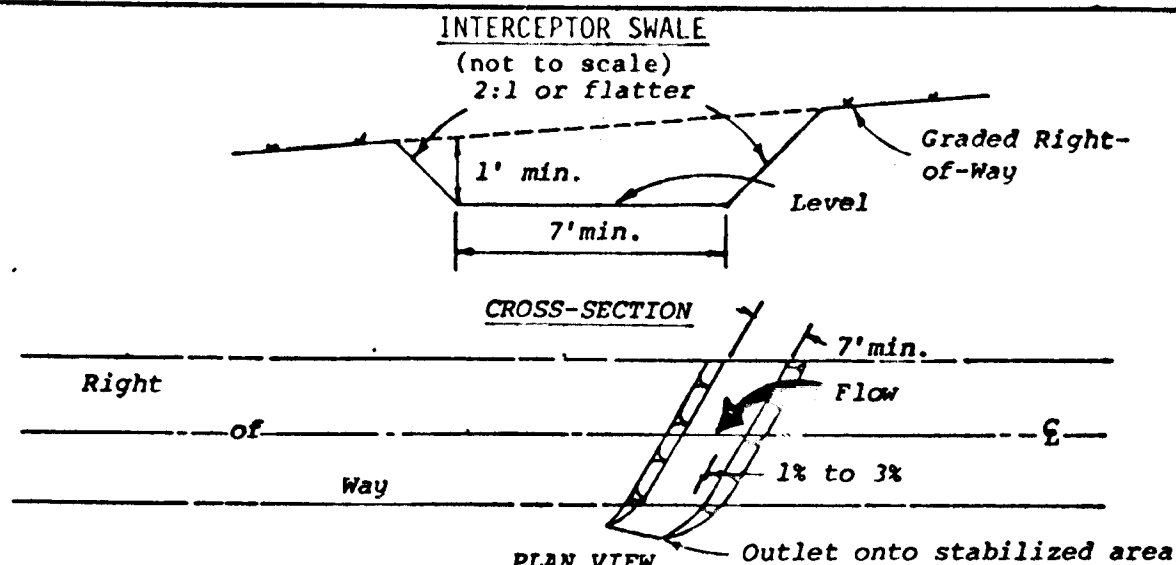
RIPRAP OUTLET SEDIMENT TRAP #3
DRAINAGE AREA = 7.0 AC.
VOL. REQUIRED = 5005 cu. ft.
VOL. PROVIDED = 5750 cu. ft.
BOTTOM EL. = 302'[±]
CREST EL. = 366'[±]

RIPRAP OUTLET SEDIMENT TRAP #5
DRAINAGE AREA = 1.5 AC.
VOLUME REQUIRED = 2714 cu. ft.
VOLUME PROVIDED = 3000 cu. ft.
BOTTOM EL. = 372'[±]
CREST EL. = 375'[±]

DRAINAGE AREA MAP
SCALE: 1" = 100'

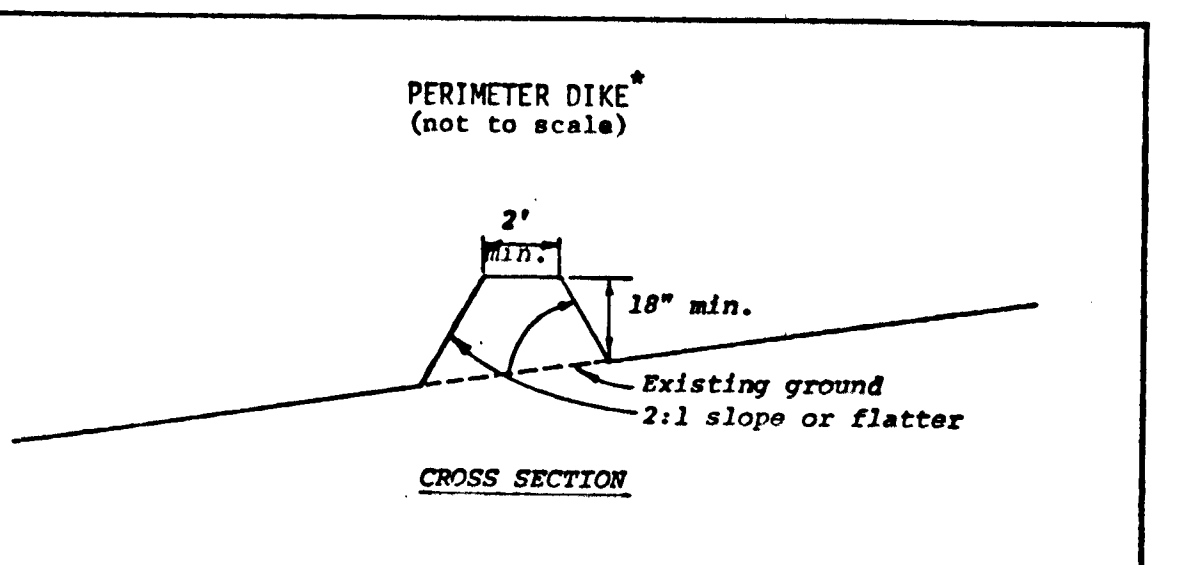
Drafting: K.B.H.	DATE: _____	REVISIONS: _____	KIDDE CONSULTANTS, INC. ENGINEERS • ARCHITECTS • PLANNERS	APPROVED: DEPT. OF PUBLIC WORKS	OFFICE OF PLANNING & ZONING	OWNER - DEVELOPER	CONTRACT GRAY ROCK FARM, SECTION 2 SEDIMENT CONTROL PLAN ELECTION DISTRICT N° 2 HOWARD COUNTY, MD.	SHEET 10 OF 12	DATE FEB. 1984	JOB NUMBER KCI-77110B
Check: T.J.R. II				APPROVED: _____ CHIEF, BUREAU OF ENGINEERING	APPROVED: _____ CHIEF, DIV. OF LAND DEVELOPMENT AND ZONING ADMIN.	THE MILLER LAND COMPANY 2035 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MD. #21043		SCALE 1"=100'		
Design: P.C.										
Check: T.J.R. III										

[Handwritten signature]



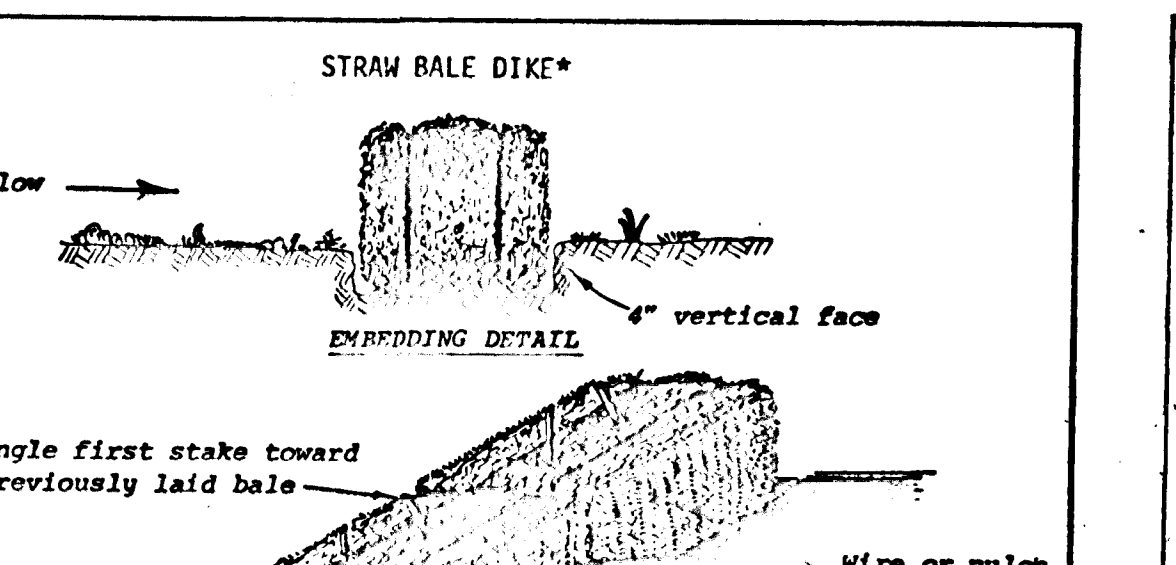
- Construction Specifications**
- All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
 - The swale shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
 - Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the complete swale.
 - All earth removed and not needed in construction shall be spread or disposed of so that it will not interfere with the functioning of the swale.
 - Interceptor swales shall have a minimum grade of one percent and the bottom shall be level.
 - An interceptor swale shall have an outlet that functions with a minimum of erosion.
 - Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin.
 - The on-site location may need to be adjusted to meet field conditions in order to utilize the most suitable outlet.
 - Stabilization shall be: (1) in accordance with the Standard and Specifications for Grassed Waterway; or (2) by lining the flow area with stone that meets MSHA size No. 2 or AASHTO M43 size No. 2 or 24 in a layer at least 3 inches in thickness and pressed into the soil. The lining shall extend across the bottom and up both sides of the channel a height of at least 8 inches vertically above the bottom.
 - Periodic inspection and required maintenance shall be provided.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	INTERCEPTOR SWALE	Standard Drawing IS-1
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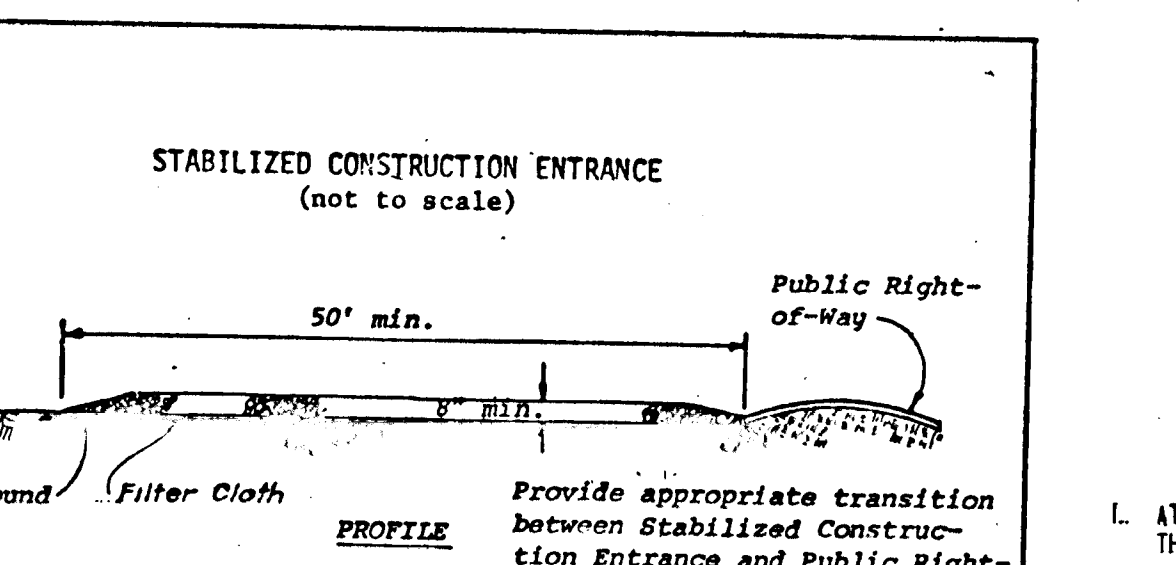
- Construction Specifications**
- All dikes shall be machine compacted.
 - All perimeter dikes shall have positive drainage to an outlet.
 - A. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area or into a level spreader or grade stabilization structure.
B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as sediment trap or a sediment basin or to an area protected by any of these practices.
 - Stabilization, when required, shall be done in accordance with Standard and Specifications for Grassed Waterway. The minimum area to be stabilized shall be the channel flow area.
 - Periodic inspection and required maintenance shall be provided.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	PERIMETER DIKE	Standard Drawing PD-1
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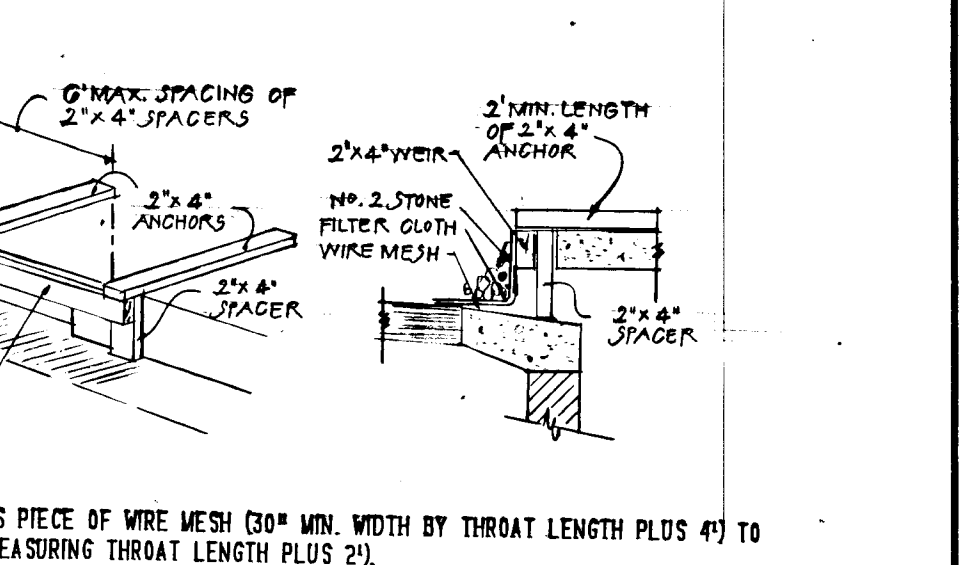
- Construction Specifications**
- Bales shall be placed in a row with ends tightly abutting the adjacent bales.
 - Each bale shall be embedded in the soil a minimum of 4".
 - Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
 - Inspection shall be frequent and repair or replacement shall be made promptly as needed.
 - Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STRAW BALE DIKE	Standard Drawing SBD-1
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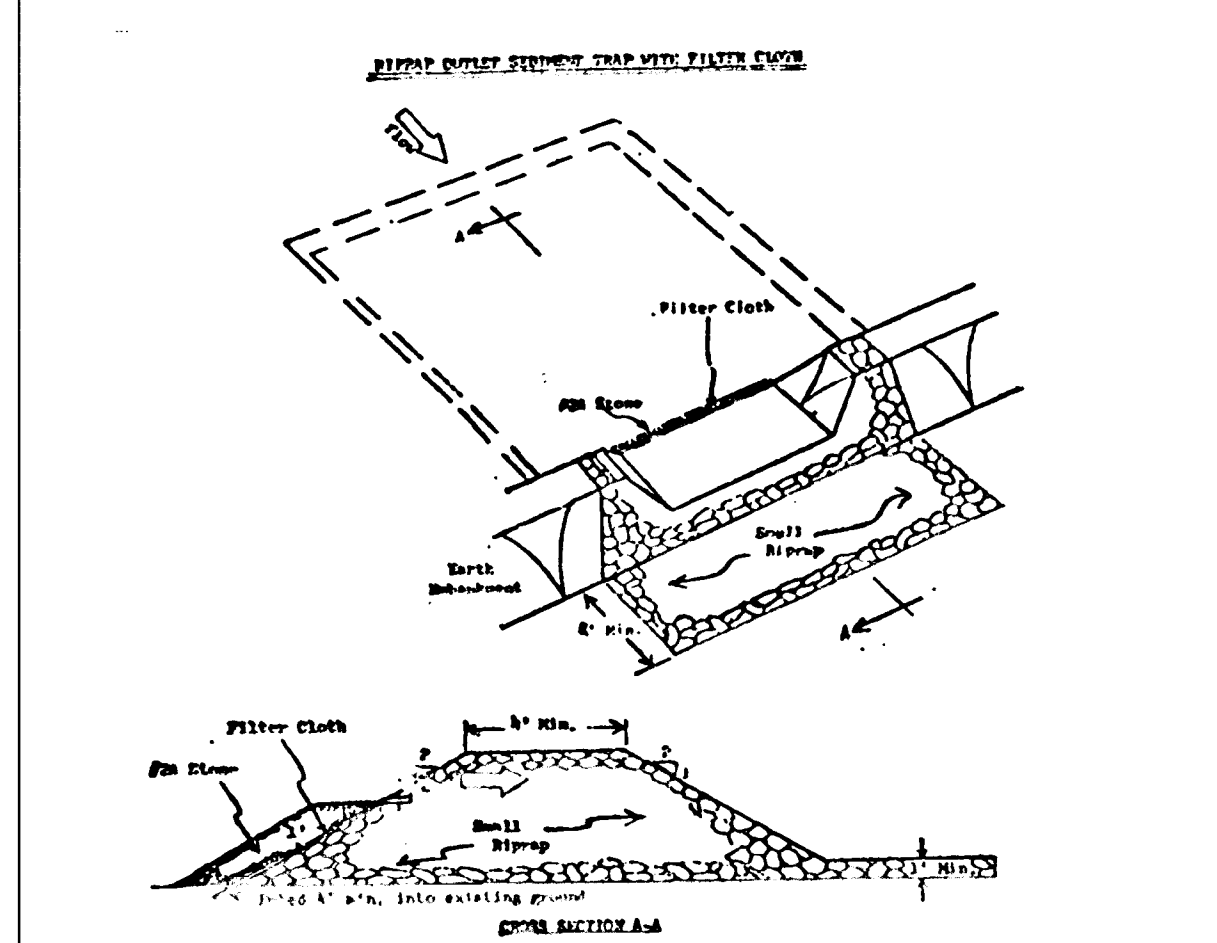
- Construction Specifications**
- Stone size - Use MSHA size No. 2 (2-1/2" to 1") or AASHTO designation M43, size No. 2 (2-1/2" to 1-1/2"). Use crushed stone.
 - Length - As effective, but not less than 50 feet.
 - Thickness - Not less than eight (8) inches.
 - Width - Not less than full width of all points of ingress or egress.
 - Washing - When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sand bags, gravel, boards or other approved methods.
 - Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or removal of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STABILIZED CONSTRUCTION ENTRANCE	Standard Drawing SCE-1
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- CURB INLET SILTING PROTECTION**
NOT TO SCALE
- 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".
 - PLACE A PIECE OF APPROVED FILTER FABRIC (40-85 SEVE) OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2" X 4" WEIR.
 - SECURELY NAIL THE 2" X 4" WEIR TO 9" LONG FILTER SPACERS TO BE LOCATED BETWEEN THE WEIR & INLET FACE (MAX. 6" APART).
 - PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL MIN. 2" LENGTHS OF 2" X 4" ANCHORS TO THE TOP OF THE WEIR AT SPACER LOCATIONS. THESE ANCHORS SHALL BE HELD IN PLACE WITH SANDBAGS OR ALTERNATE WEIGHT.
 - THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE 1.0' MIN. BEYOND BOTH ENDS OF THE THROAT OPENING.
 - FORM THE WIRE MESH & FILTER FABRIC TO THE CONCRETE GUTTER AND AGAINST THE FACE OF CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN NO. 2 STONE OVER THE WIRE MESH & FILTER FABRIC SO AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE FILTER FABRIC.
 - THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY & THE FABRIC & STONE REPLACED WHEN CLOGGED BY SEDIMENT.
 - ASSURE THAT STORM FLOW DOES NOT BY-PASS INLET BY INSTALLING TEMPORARY EARTH OR ASPHALT DIKES DIRECTING INTO INLET.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STABILIZED CONSTRUCTION ENTRANCE	Standard Drawing SCE-1
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- Construction Specifications**
- 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 over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
 - All cut and fill slopes shall be 2:1 or flatter.
 - The stone used in the outlet shall be small riprap 3" - 15", with a 1' thickness of #2-A crushed stone placed on the up-grade side of the small riprap.
 - Filter cloth will be placed between riprap and #2-A stone along inlet face of trap. It shall be embedded a minimum of 6" into existing ground at toe of riprap and extended onto crest of exit channel.
 - 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 is minimized.
 - The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STONE OUTLET SEDIMENT TRAP	Standard Drawing SOT-1
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- PERMANENT SEEDING NOTES**
- All disturbed areas shall be stabilized as follows:
- Seedbed Preparation:** Loosen upper 3 inches of soil by raking, disking or other acceptable means before seeding.
- Soil Amendments:** Apply 2 tons per acre dolomitic limestone (92 lbs./1,000 sq. ft.). Harrow or disc lime and fertilizer into upper three inches of soil. At time of seeding, apply 400 lbs. per acre (9.2 lbs./1,000 sq. ft.) of 38-0-0 ureaform fertilizer and 500 lbs. per acre (11.5 lbs./1,000 sq. ft.) of 10-20-20 fertilizer.
- Seeding:** For the periods March 1 thru April 30, and August 1 thru October 15, seed with 100 lbs. per acre (1.4 lbs./1,000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1,000 sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - use sod. Option (3) - seed with 60 lbs./acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- Mulching:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1,000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using 200 gallons per acre (5 gallons/1,000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gallons/1,000 sq. ft.) for anchoring.
- Maintenance:** Inspect all seeded areas and make needed repairs, replacements, and reseedings.

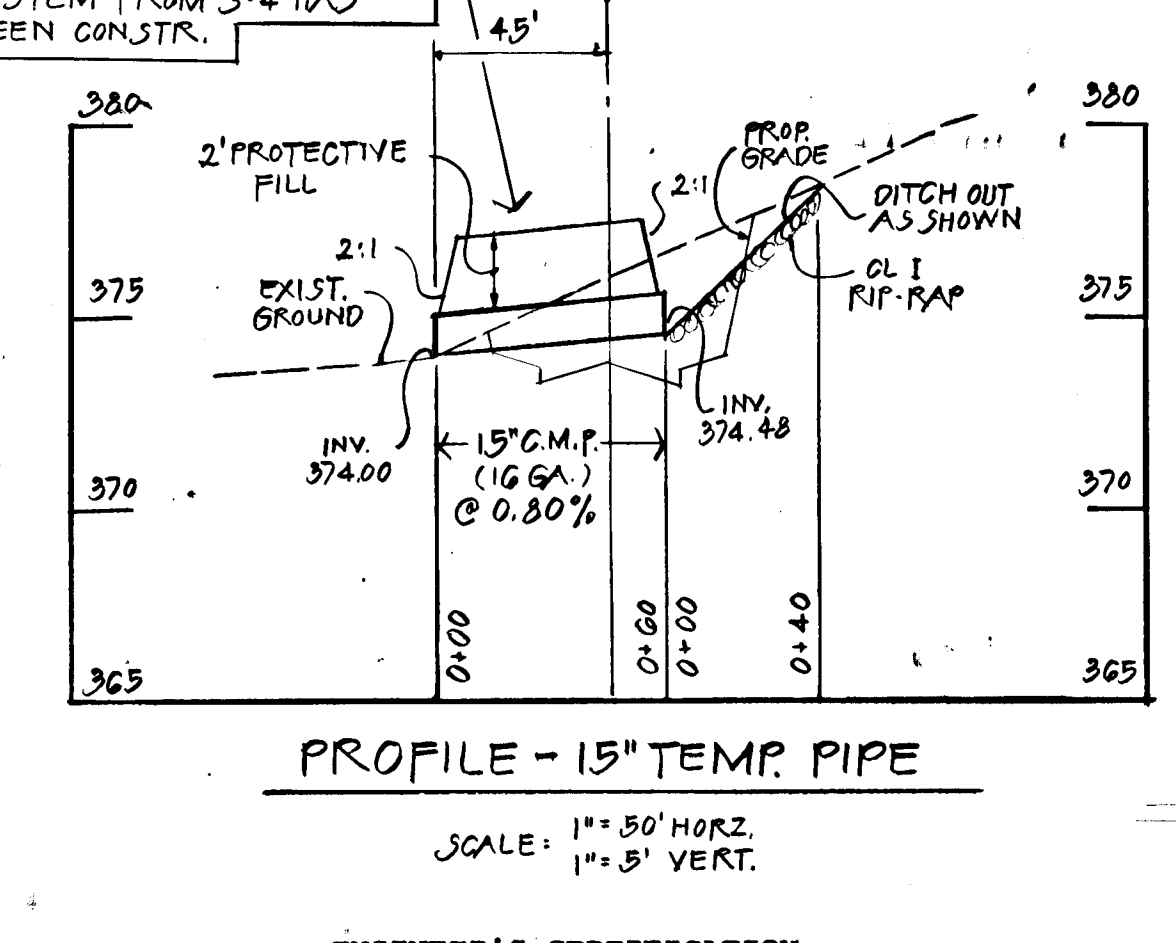
- TEMPORARY SEEDING NOTES**
- Seedbed Preparation:** Loosen upper 3 inches by disking, raking, or other acceptable means.
- Soil Amendments:** Apply 600 lbs. per acre (15 lbs./1,000 sq. ft.) of 10-20-20 fertilizer.
- Seeding:** For periods March 1 thru April 30, and from August 15 thru November 15, seed with 2 1/2 bushels per acre (3.2 lbs./1,000 sq. ft.) of annual rye. For the period May 1 thru August 14 seed with 3 lbs./acre (0.07 lbs./1,000 sq. ft.) of weeping lovegrass.
- Mulching:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1,000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using 200 gallons per acre (5 gallons/1,000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher use 348 gallons per acre (8 gallons/1,000 sq. ft.) for anchoring.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STONE OUTLET SEDIMENT TRAP	Standard Drawing SOT-1
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- GENERAL NOTES**
- Refer to USDA - Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" for standard details and detailed specifications of each practice specified herein.
 - With the approval of the sediment control inspector, minor field adjustments can and will be made to insure the control of any sediment. Changes in sediment control practices require prior approval of the sediment control inspector and the Howard County Soil Conservation District.
 - At the end of each working day, all sediment control practices will be inspected and left in operational condition.
 - Any disturbed earth left idle for periods exceeding 30 days shall be stabilized according to temporary stabilization specifications.
 - Any change to the grading proposed on this plan requires re-submission to Howard County Soil Conservation District for approval.
 - Dust control will be provided for all disturbed areas. Refer to USDA - Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas", pp 67-61 and 62-67 for acceptable methods and specifications for dust control.
 - Any variation from the sequence of operations stated on this plan requires the approval of the sediment control inspector and the Howard County Soil Conservation District prior to the initiation of the change.

- SEQUENCE OF CONSTRUCTION**
- NOTIFY THE SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION.
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE.
 - CLEAR AND GRUB FOR SEDIMENT CONTROL DEVICES ONLY.
 - INSTALL ALL SEDIMENT CONTROL DEVICES.
 - CLEAR, GRUB AND ROUGH GRADE ROADWAYS.
 - INSTALL UTILITIES. (ALL INLETS TO HAVE SILT PROTECTION)
 - INSTALL STONE BASE, CURBING AND ROADWAY PAVING.
 - DRESS UP SLOPES AND ALL AREAS DISTURBED BY CONSTRUCTION AND STABILIZE ACCORDING TO SEEDING NOTES.
 - REMOVE TEMPORARY SEDIMENT CONTROL MEASURES AFTER OBTAINING PERMISSION FROM THE S.C.D. INSPECTOR. FINE GRADE DISTURBED AREAS AND SEED AND MULCH.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STONE OUTLET SEDIMENT TRAP	Standard Drawing SOT-1
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ENGINEER'S CERTIFICATION

I CERTIFY THAT THE PLAN OF DEVELOPMENT AND PLAN FOR CONTROL OF SILT & EROSION MEET THE REQUIREMENTS, STANDARDS AND SPECIFICATIONS OF THE SOIL CONSERVATION DISTRICT.

Paul L. Miller
SIGNATURE OF DEVELOPER

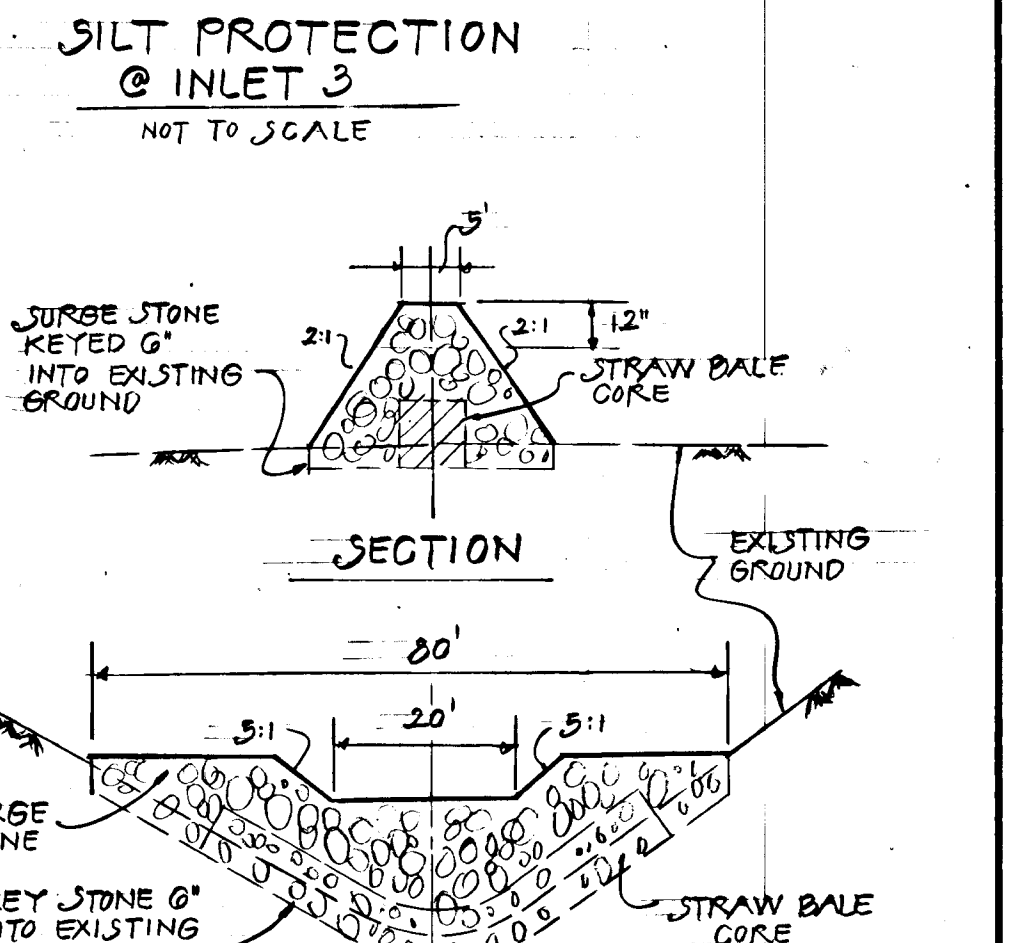
11-14-83
DATE

DEVELOPER'S CERTIFICATION

"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 SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Paul L. Miller
SIGNATURE OF DEVELOPER

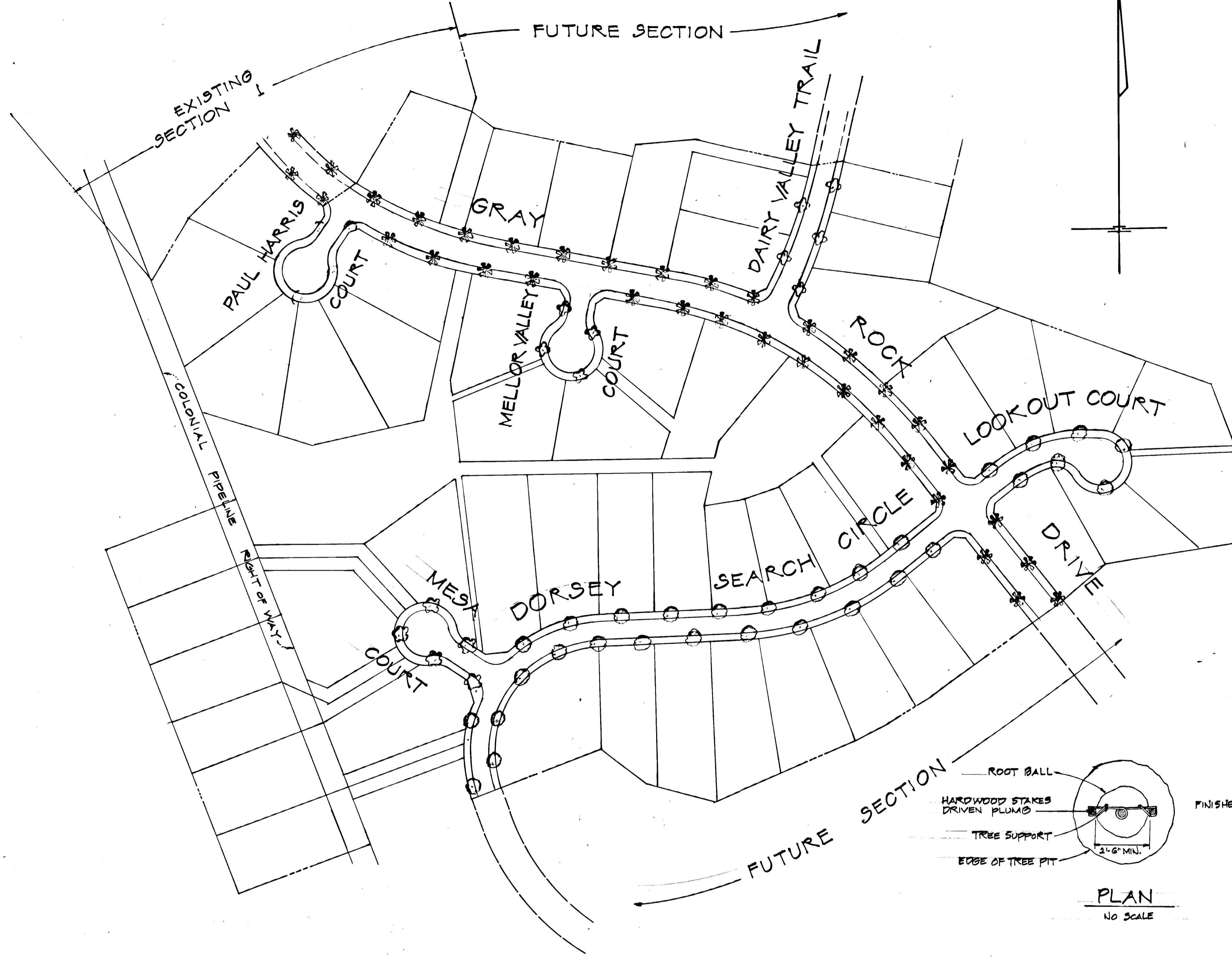
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STONE OUTLET SEDIMENT TRAP
NOT TO SCALE

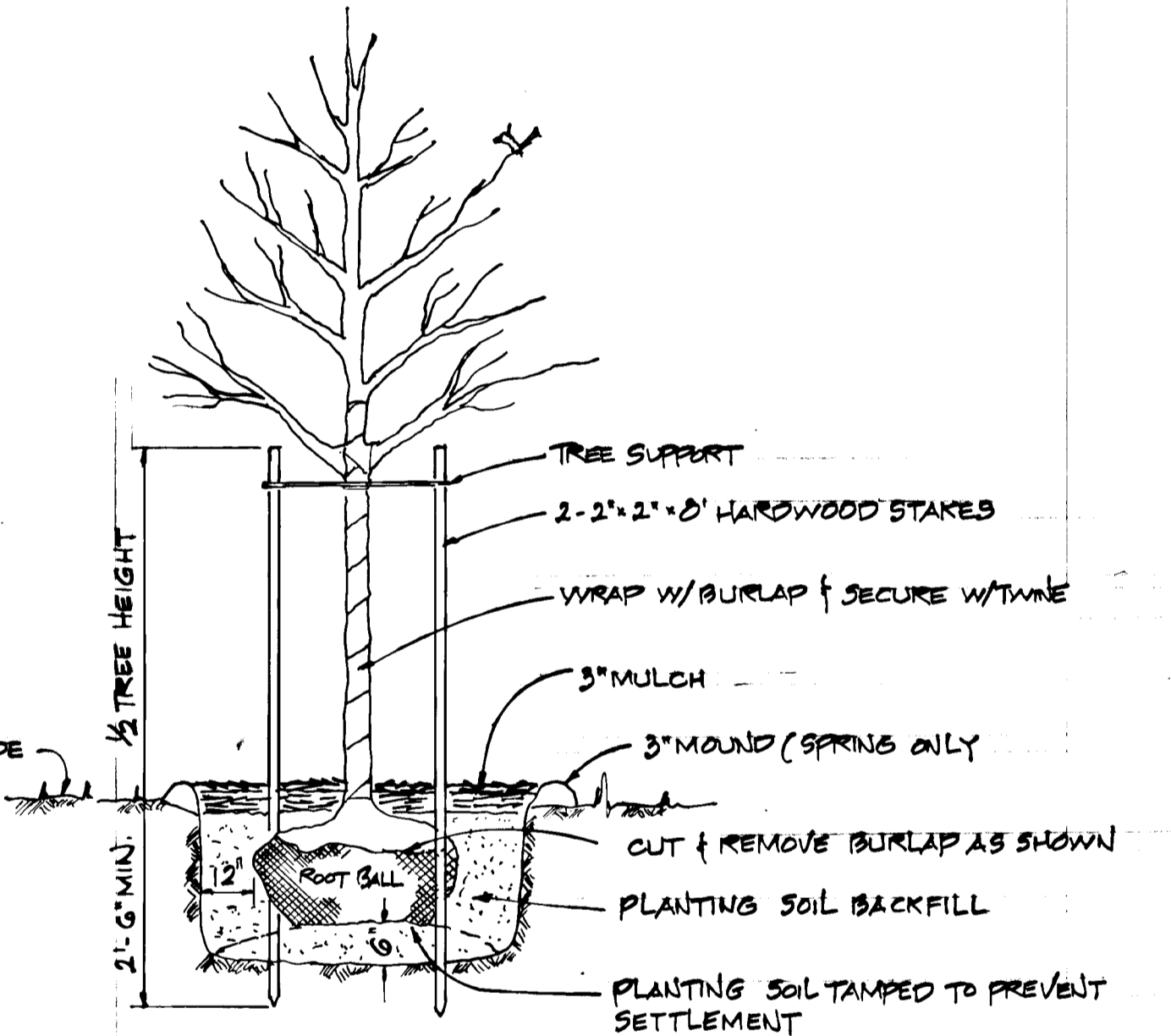
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STONE OUTLET SEDIMENT TRAP	Standard Drawing SOT-1
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Drafting: K.O.H. Check: F.T. Design: F.T. Check: K.G.B.	APPROVED: DEPT. OF PUBLIC WORKS <i>Joseph R. Fogarty</i> CHIEF, BUREAU OF ENGINEERING	OFFICE OF PLANNING & ZONING <i>William M. ...</i> CHIEF, DIV. OF LAND DEVELOPMENT AND ZONING ADMIN.	OWNER - DEVELOPER: THE MILLER LAND COMPANY 2035 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MD 21042	CONTRACT	GRAY ROCK FARM, SECTION 2 SEDIMENT CONTROL DETAILS ELECTION DISTRICT NO. 2 HOWARD COUNTY, MD	SHEET 11 OF 12 DATE: FEB. 1984 SCALE: NONE	JOB NUMBER: K.C.I. 77100
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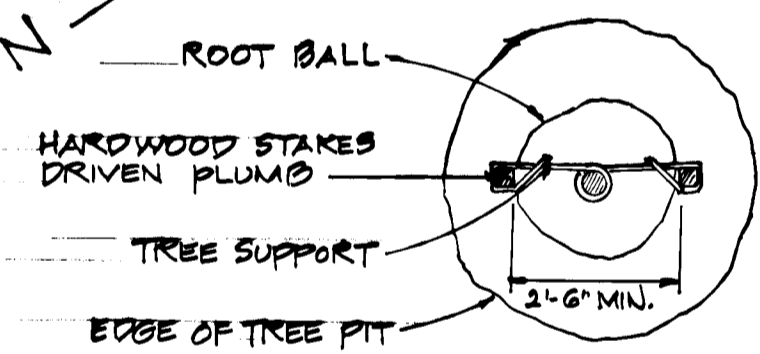


KEY

☼	SHADEMASTER HONEYLOCUST	32	GRAY ROCK DRIVE
○	SUGAR MAPLE	30	DORSEY SEARCH CIRCLE, LOOKOUT COURT
◐	WILLOW OAK	5	PAUL HARRIS COURT
◑	RED MAPLE	5	MESA COURT
⊕	NORWAY MAPLE	9	APRIL VALLEY TRAIL, MELLOR VALLEY COURT

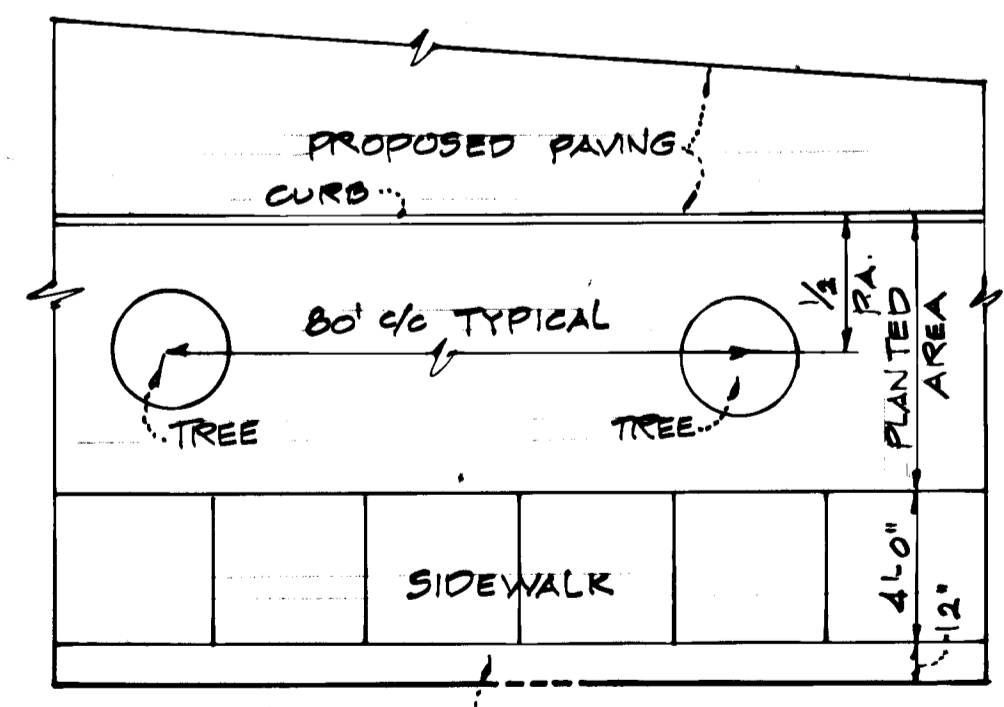


DECIDUOUS TREE STAKING
NO SCALE



PLAN
NO SCALE

PLAN
SCALE: 1"=100'

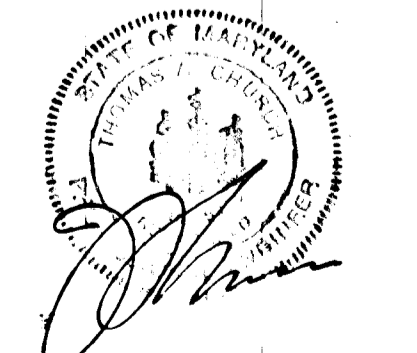


PLANTING WITHIN R/W
NOT TO SCALE

QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
DECIDUOUS TREES						
5	A.R.	ACER RUBRUM	RED MAPLE	1 1/2" CAL. MIN.	8' ± 0"	MIN. 8' HEIGHT ABOVE GROUND
32	G.S.	GLEDITSIA TRIA. SHADEMASTER	SHADEMASTER HONEYLOCUST	"	"	"
30	A.S.	ACER SACCHARUM	SUGAR MAPLE	"	"	"
5	Q.P.	QUERCUS PHELLOUS	WILLOW OAK	"	"	"
9	A.P.	ACER PLATANOIDES	NORWAY MAPLE	1 1/2" CAL. MIN.	8' ± 0"	MIN. 8' HEIGHT ABOVE GROUND

NONE:

1. THE COUNTY MAY REQUIRE THE DEVELOPER TO PROVIDE FOR TREES TO BE PLANTED IN THE RIGHT OF WAY OR ON PRIVATE PROPERTY.
2. THE DEVELOPER SHALL REPLACE ANY TREE THAT DIES WITHIN ONE (1) YEAR AFTER INITIAL PLANTING.



Drafting	WB	DATE	REVISIONS
Check	RGB		
Design	WB		
Check	RGB		

KIDDE CONSULTANTS, INC.
ENGINEERS • ARCHITECTS • PLANNERS

APPROVED: DEPT. OF PUBLIC WORKS
OFFICE OF PLANNING & ZONING
CHIEF, DIV. OF LAND DEVELOPMENT DATE AND ZONING ADMIN.

OWNER - DEVELOPER:
THE MILLER LAND COMPANY
3035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD.
21043

CONTRACT

GRAY ROCK FARM, SECTION 2
LANDSCAPING PLAN & DETAILS
ELECTION DISTRICT No. 2 HOWARD CO., MD.

SHEET	12	DATE	FEB. 1984	JOB NUMBER	K.A.I.
OF	12	SCALE	1"=100'		771100