

ENGINEER'S CERTIFICATE
 I, CHARLES J. CROVO, SR., a duly Licensed Professional Engineer in the State of Maryland, do hereby certify that the above described plan for EROSION AND SEDIMENT CONTROL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DATE: 10/20/85
 CHARLES J. CROVO, SR.

DEVELOPER'S CERTIFICATE
 I, ERWIN GUDLSKY, do hereby certify that the above described plan for EROSION AND SEDIMENT CONTROL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DATE: 10-21-85
 ERWIN GUDLSKY

APPROVED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 DATE: 12-11-85
 STEPHEN R. GARDNER

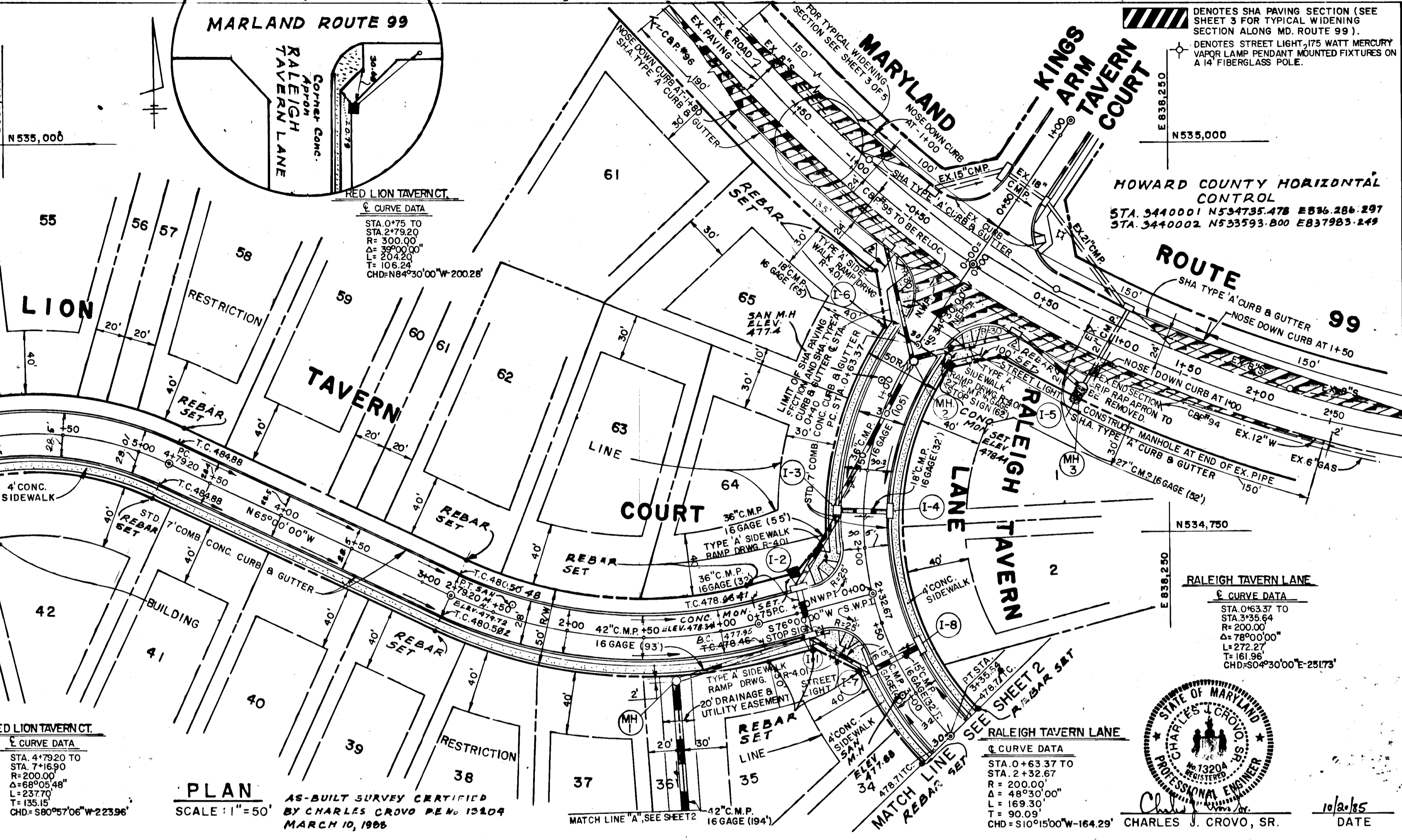
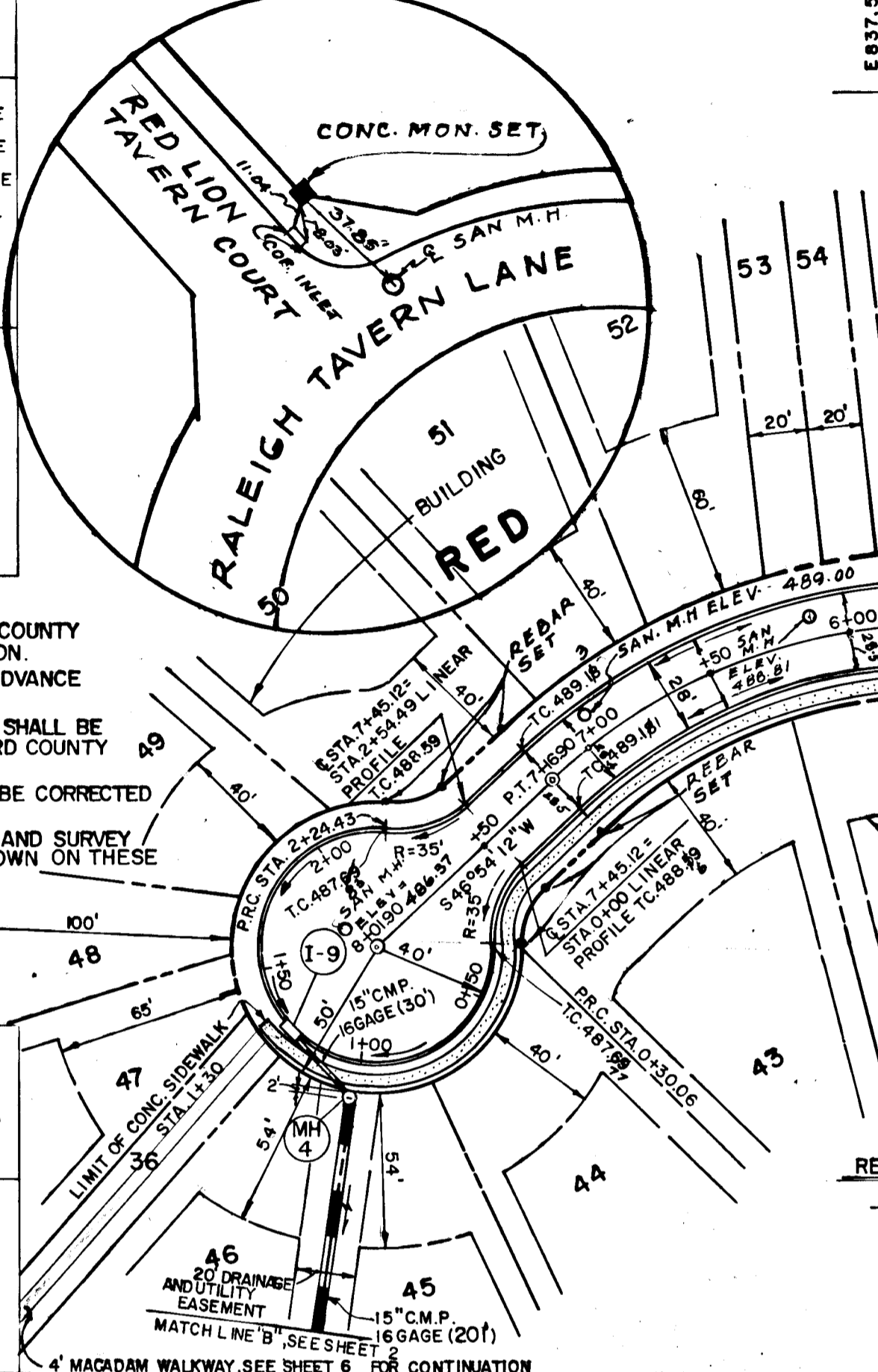
GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HRS. IN ADVANCE OF ANY CONSTRUCTION.
- STORM DRAINAGE TRENCHES WITHIN ROAD RIGHTS-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
- ANY DAMAGE TO PUBLIC RIGHTS-OF-WAYS OR PAVING 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.
- ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH THE MUTCD, 1978 EDITION.
- STREET SIGNS SHALL BE INSTALLED AT ALL INTERSECTIONS.

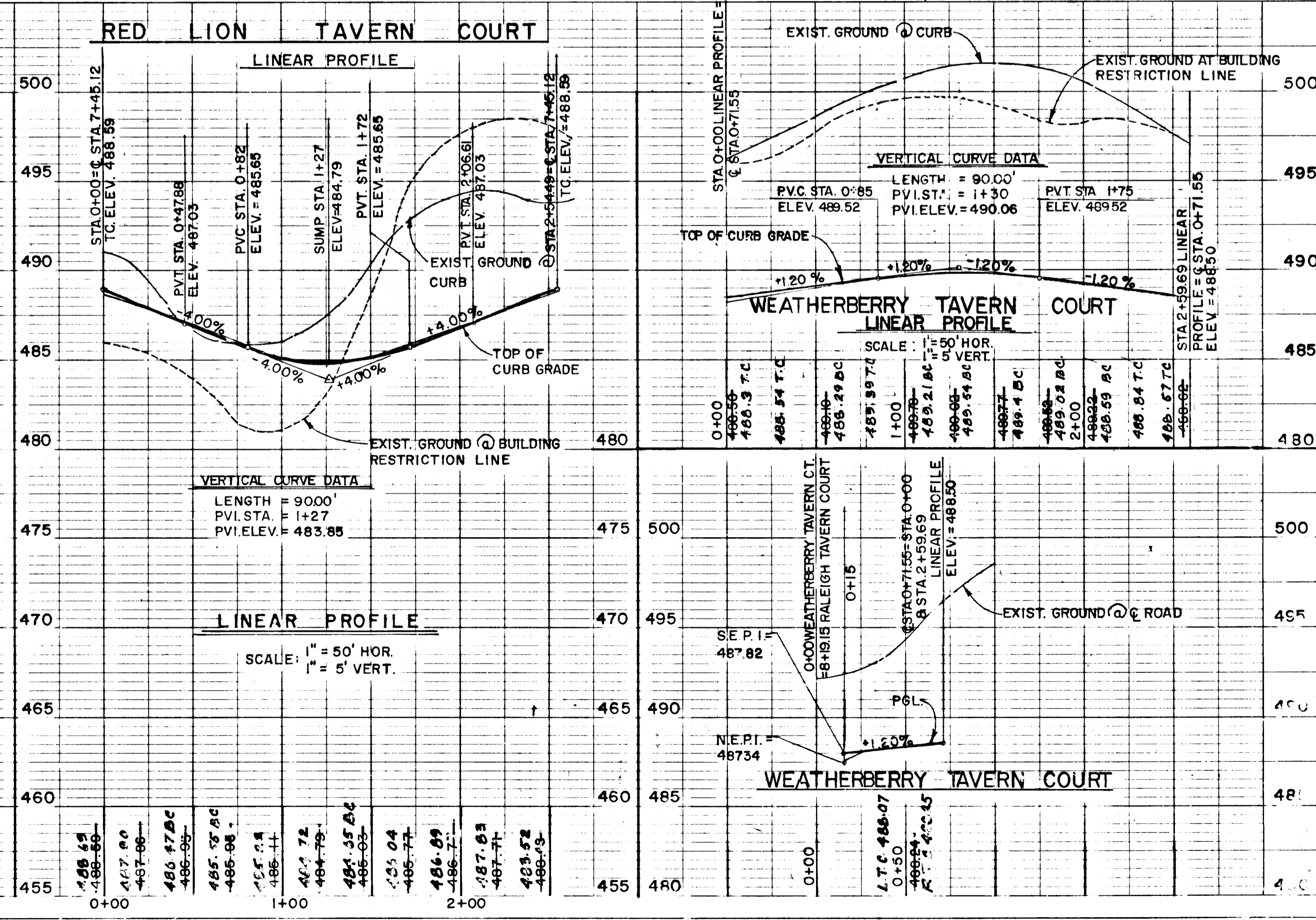
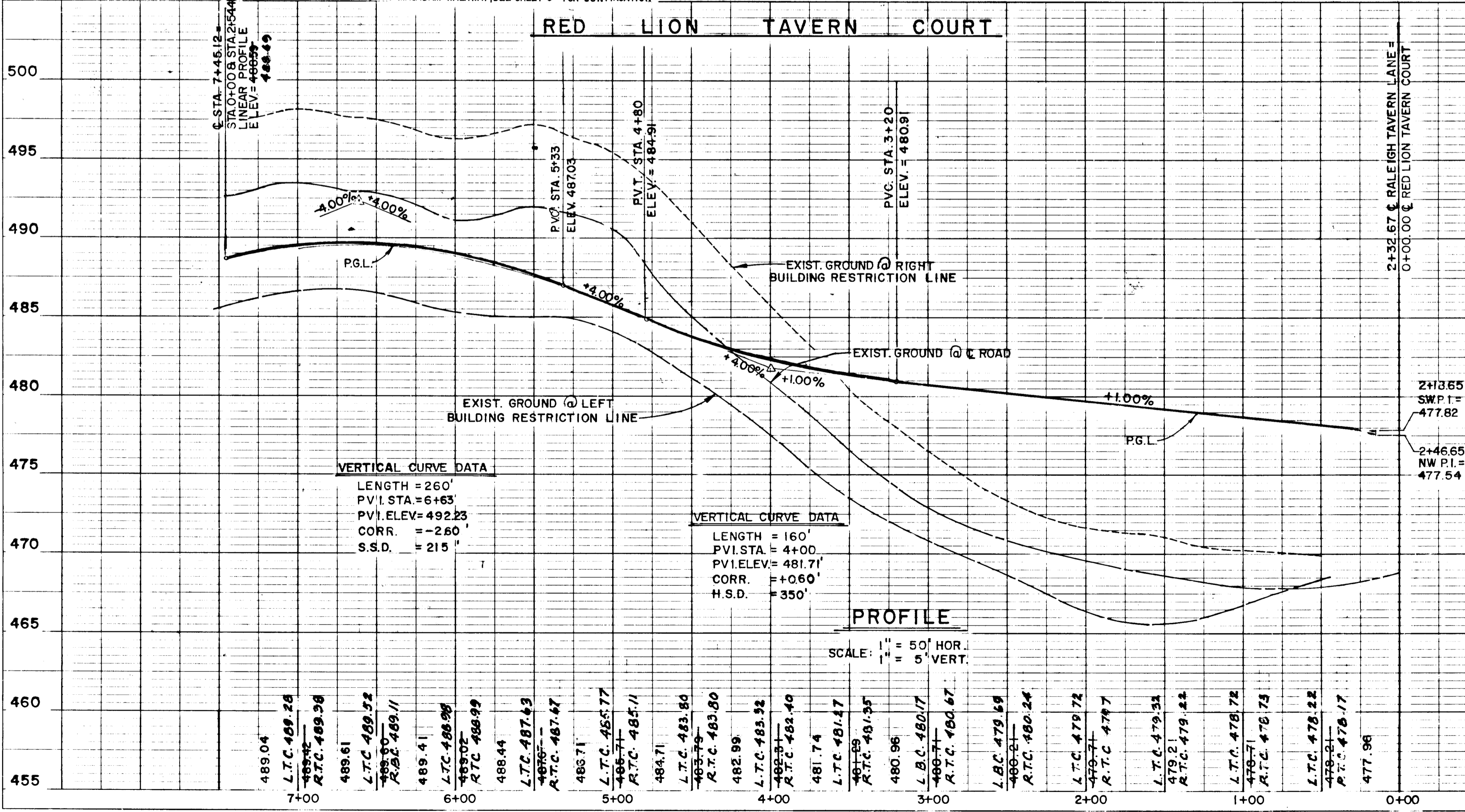
APPROVED DEPARTMENT OF PUBLIC WORKS
 DATE: 12-11-85
 ERWIN G. REED

APPROVED OFFICE OF PLANNING AND ZONING
 DATE: 12-12-85
 JOHN W. BACHMAN

D.A.N.	REVISION	DATE
2A.66	REVISE ROAD PROFILES ON RED LION TAVERN CT. AND WEATHERBERRY TAVERN CT.	2/10/86
	REVISE LOCATION OF T-5 AND T-6	



RALEIGH TAVERN LANE PLAN	RED LION TAVERN COURT PLAN & PROFILE	WEATHERBERRY TAVERN COURT PROFILE
OWNER AND DEVELOPER 99/70 PROPERTY CORPORATION C/O ELLICOTT CITY LAND HOLDING CO. INC. 1076 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043		
SCALE AS SHOWN DATE: OCT 8, 1985 L.A.G. NO. 1 OF 6		
DES. C. CROVO DRN. D. NEWTON CHK. R. CARTER		
FISHER, COLLINS AND CARTER, INC. CIVIL ENGINEERS AND LAND SURVEYORS 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043		

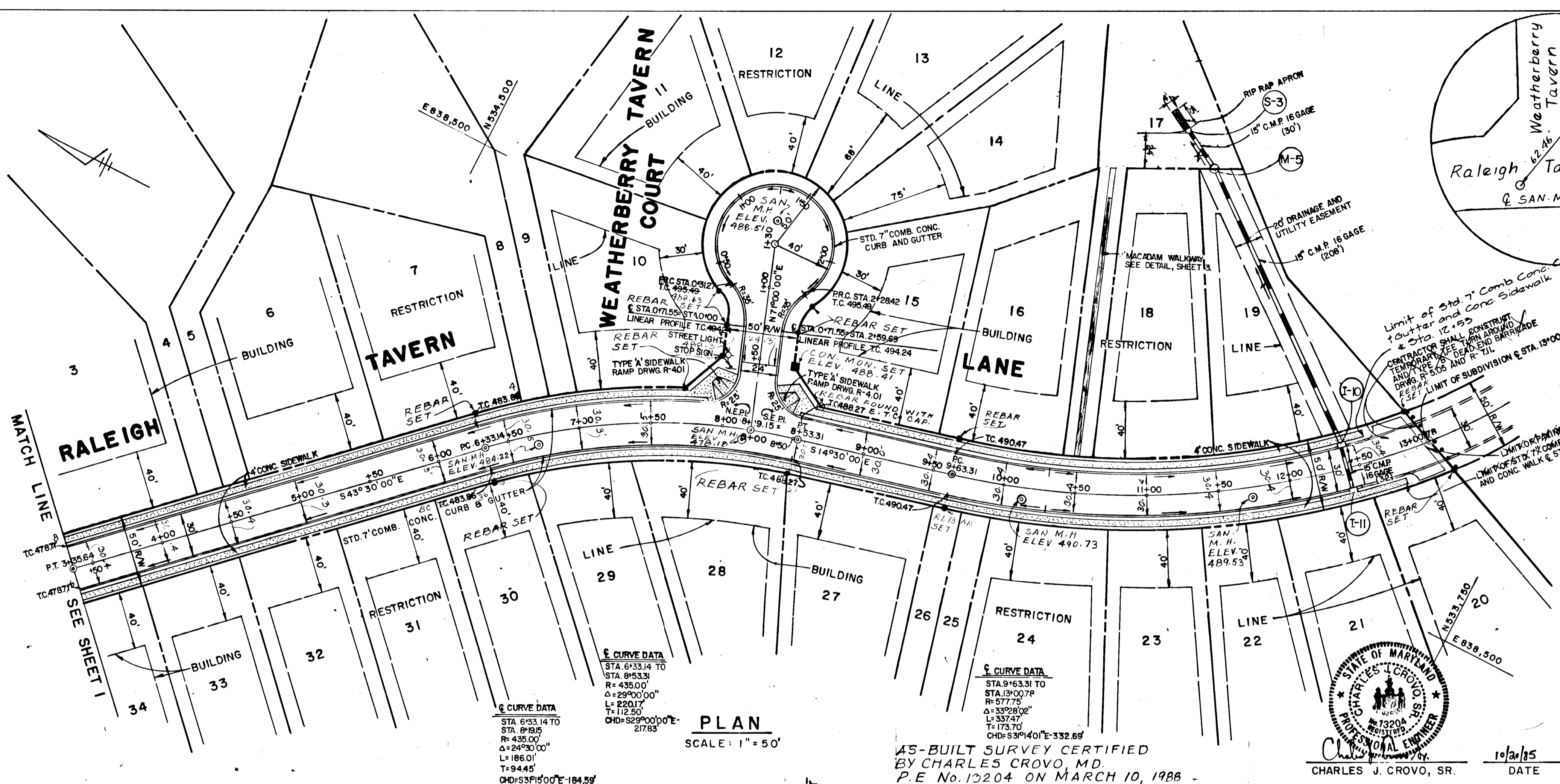
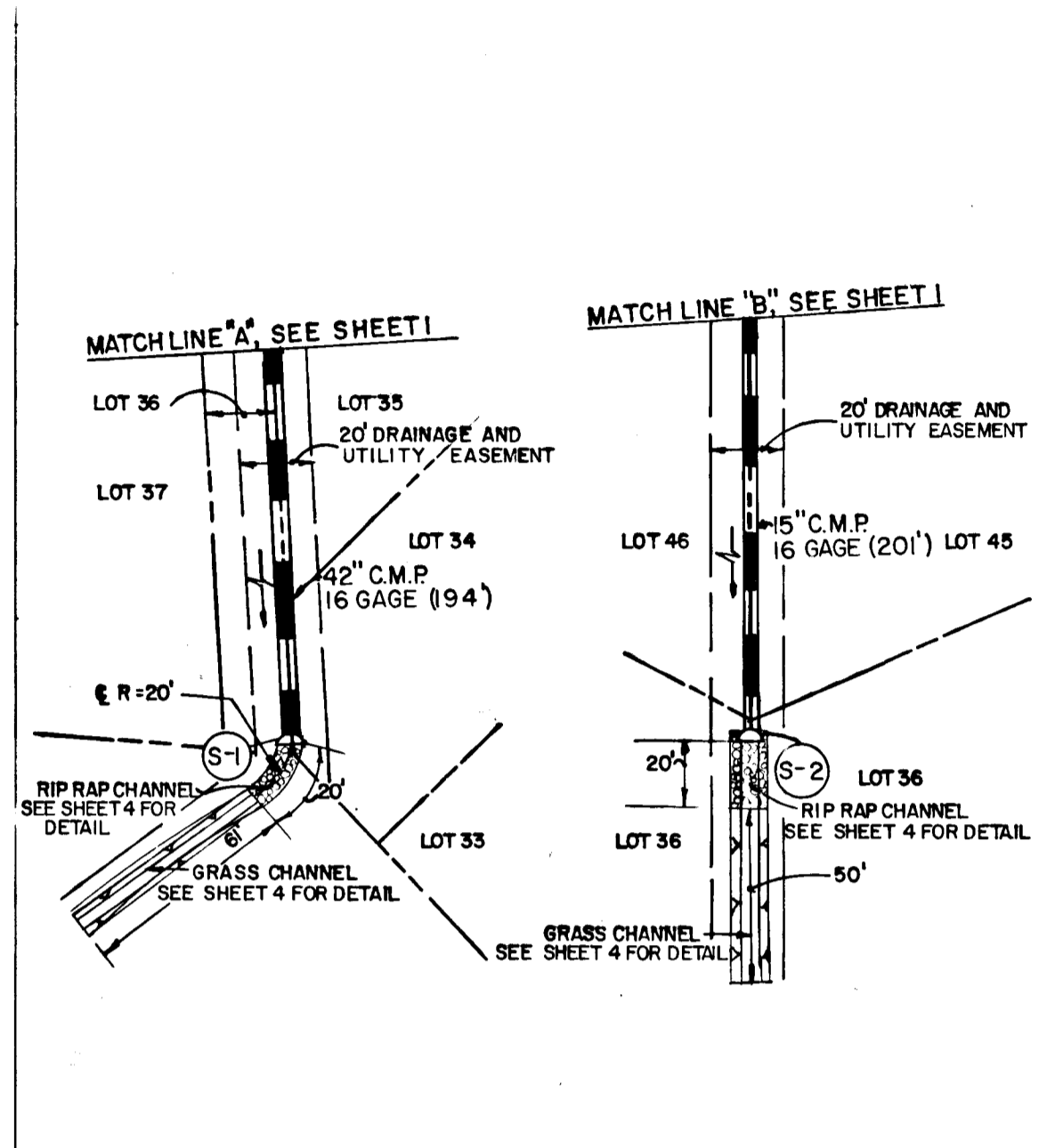


#1161

NOTE: S.W.M.P. Removed in Accordance with Meeting on May 10, 1988 with Mr. Riley and Mel Loria.

D.A.N.	REVISION ROAD PROFILE	2/6/86
M.C.F.	Remove S.W.M. Pond	7.22.86
BY	NO.	REVISION
		DATE

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	



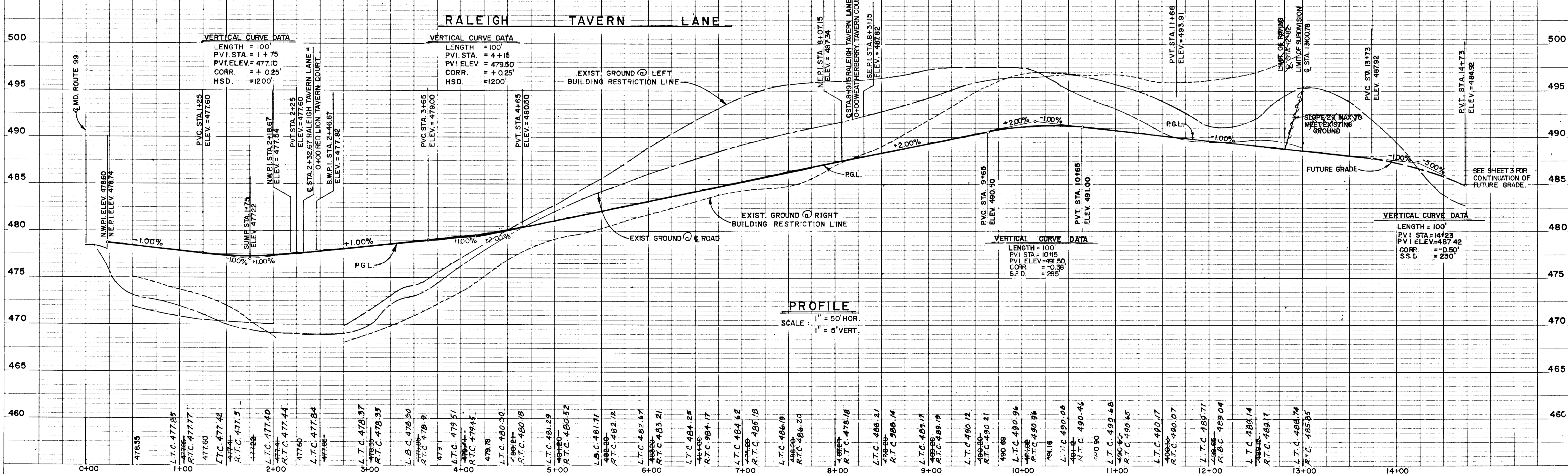
MARKET SQUARE SOUTH
LOTS 1-65
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

RALEIGH TAVERN LANE WEATHERBERRY TAVERN COURT
 PLAN AND PROFILE PLAN

OWNER AND DEVELOPER
 5970 PROPERTY CORPORATION
 C/O ELLICOTT CITY LAND HOLDING CO. INC.
 10176 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN DATE OCT. 8, 1985 DIV. NO. 2 OF 6
 DES. C. CROVO DRN. D. NEWTON CHK. R. CARTER

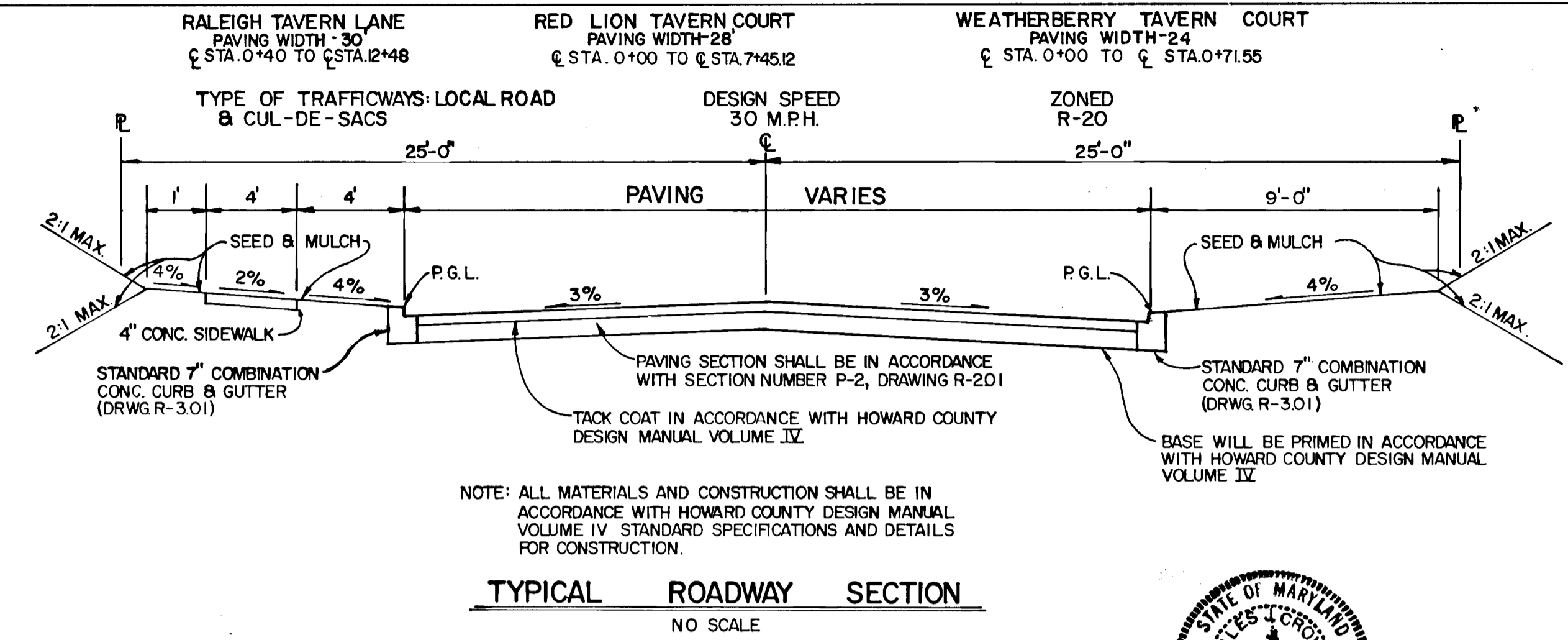
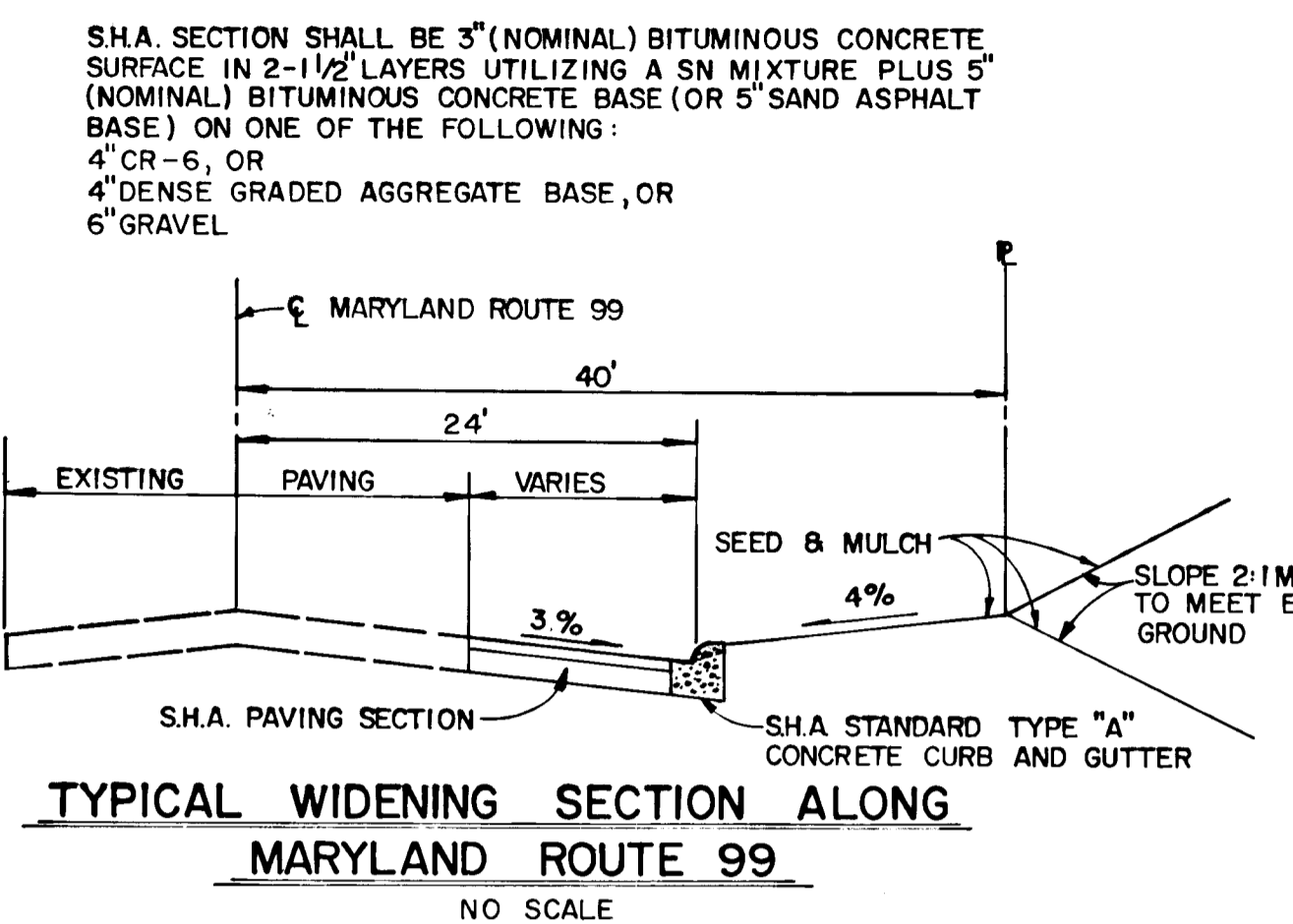
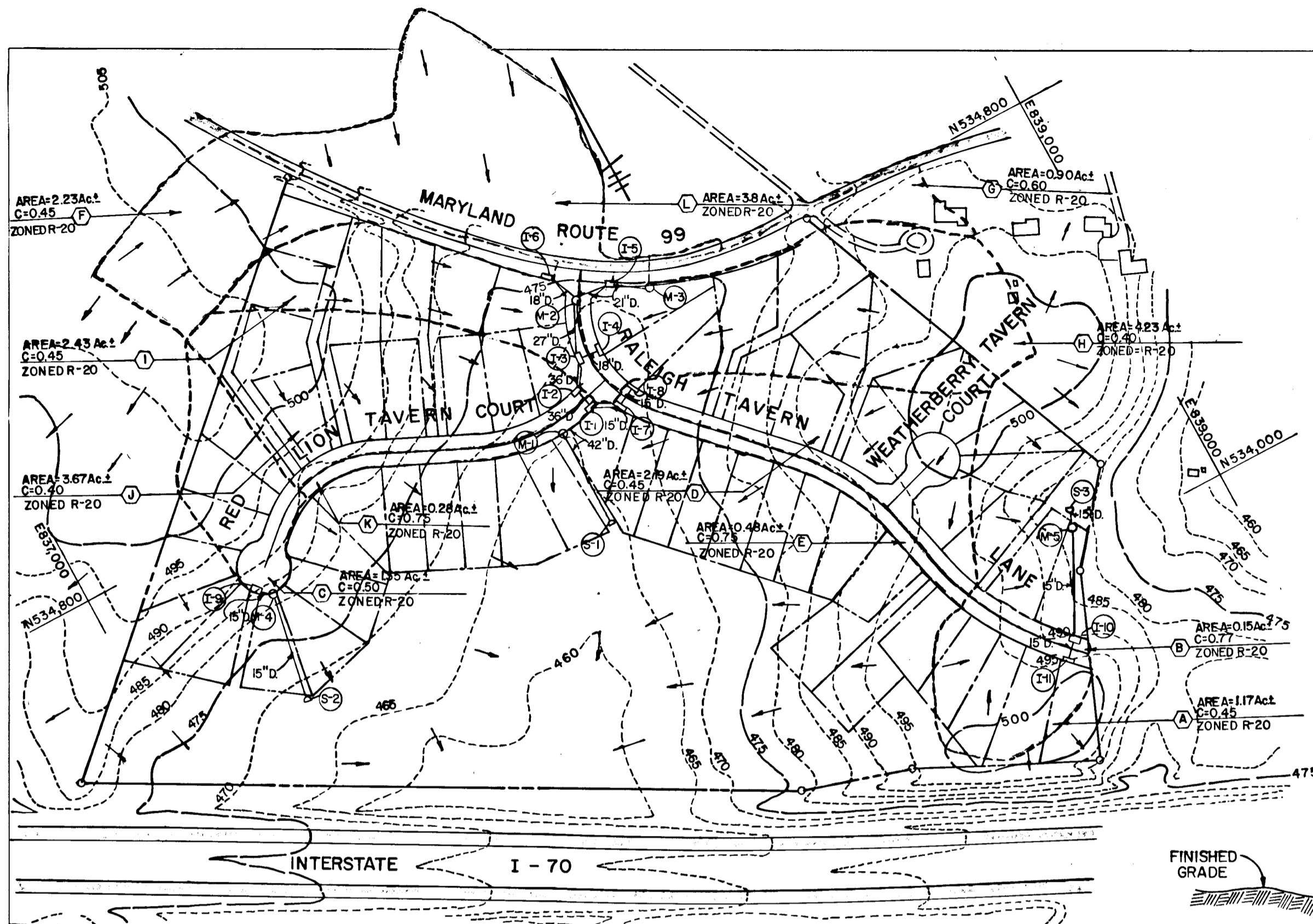
FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043



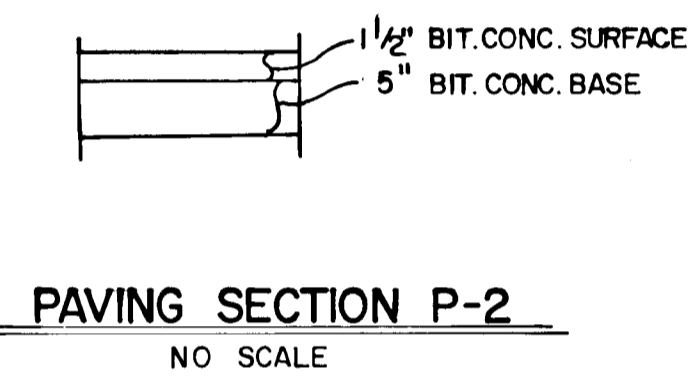
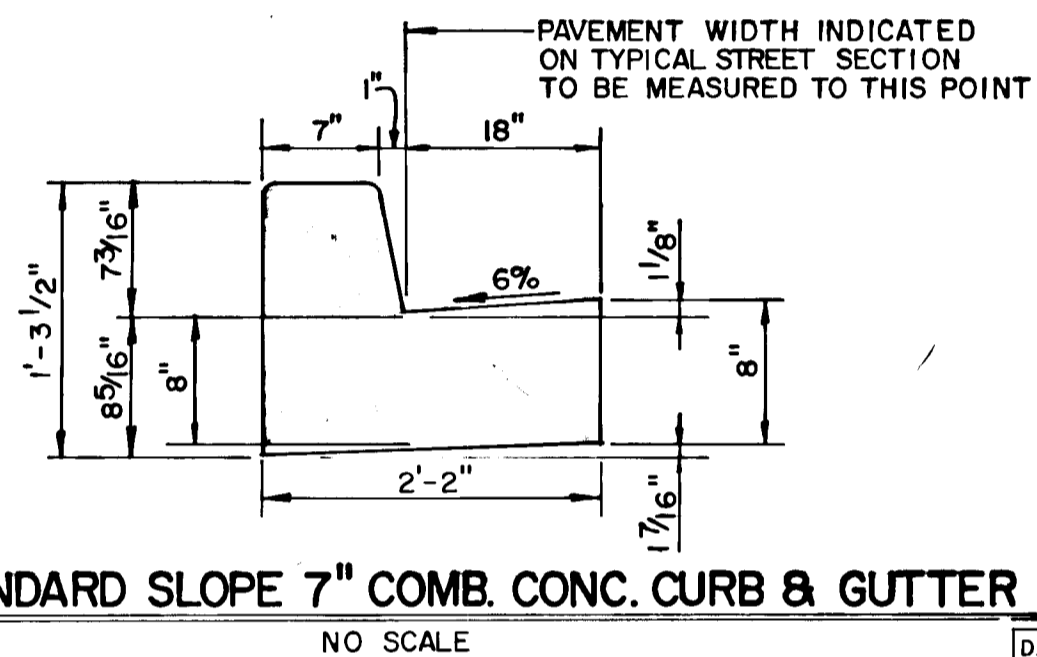
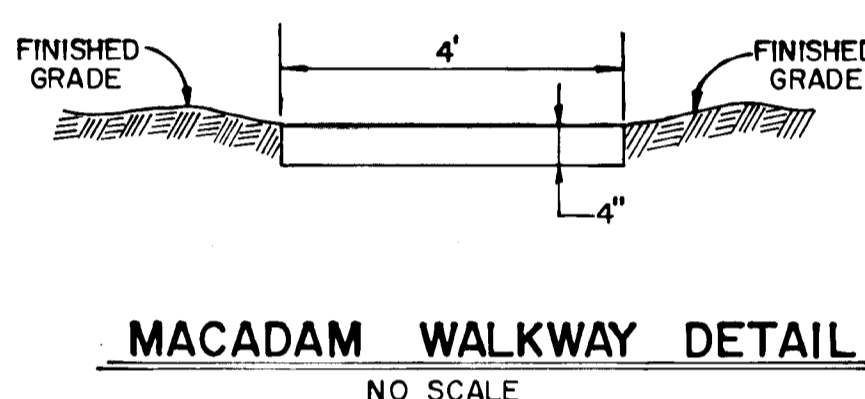
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#1161

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AS-BUILT SURVEY CERTIFIED
 By Charles Crovo,
 P.E. No. 13204
 MARCH 10, 1988

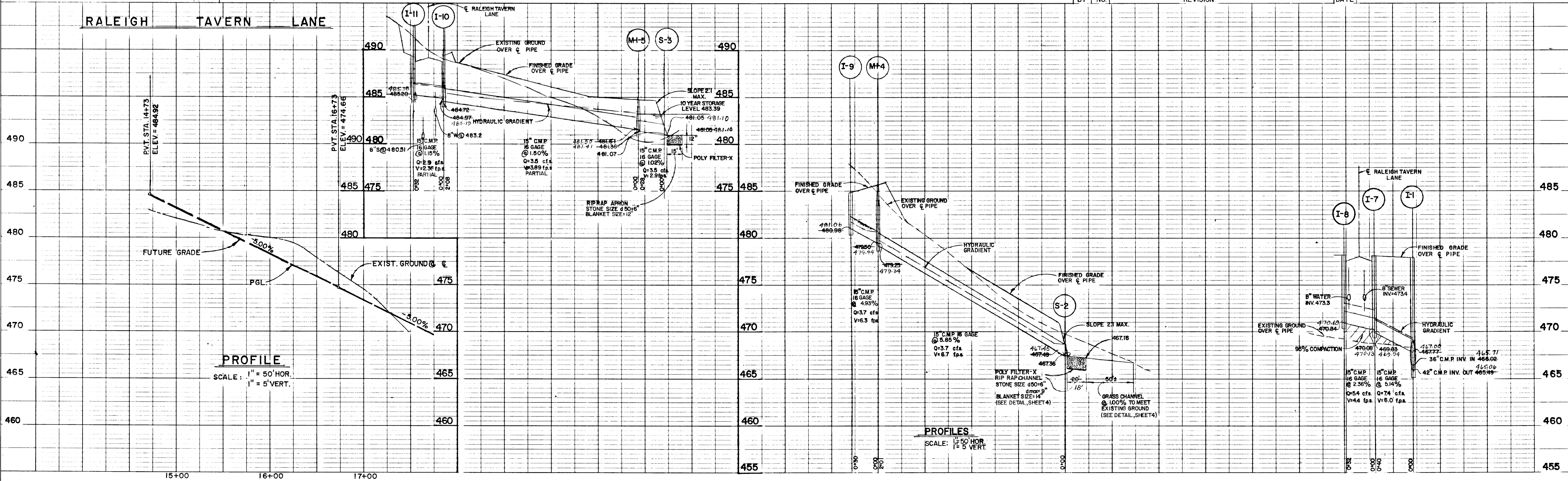


APPROVED DEPARTMENT OF PUBLIC WORKS
 APPROVED OFFICE OF PLANNING AND ZONING
 DATE 12-28-85

DRAINAGE AREA MAP
 SCALE: 1" = 200'

MARKET SQUARE SOUTH
 LOTS 1-65
 2 ND. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 DRAINAGE AREA MAP, ROAD SECTION,
 STORM DRAIN PROFILES
 AND DETAILS
 OWNER AND DEVELOPER
 99/70 PROPERTY CORPORATION
 C/O ELLICOTT CITY LAND HOLDING CO. INC.
 10176 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21043
 SCALE AS SHOWN DATE OCT. 8, 1985 DWG. NO. 3 OF 6
 DES. C. CROVO DRN. D. NEWTON CHK. R. CARTER
 FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

DATE	
BY	
SURVEYED	
ALIGNED	
CHECKED	
STRUCTURE	
NOTATIONS	
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#1161

RIP RAP CHANNEL DESIGN DATA

STRUCTURE	A	P	R	R2/3	S	S1/2	n	Q	V	d	w	RIP RAP SIZE	b
S-1	13.22'	13.08'	1.01	1.01	100%	0.10	0.04	49.58cfs	3.75fps	1.36'	7'	6"	9" 14"
S-2	1.89'	4.87'	3.88'	5.304'	100%	0.10	0.04	3.72cfs	1.97fps	0.53'	2.5'	6"	9" 14"

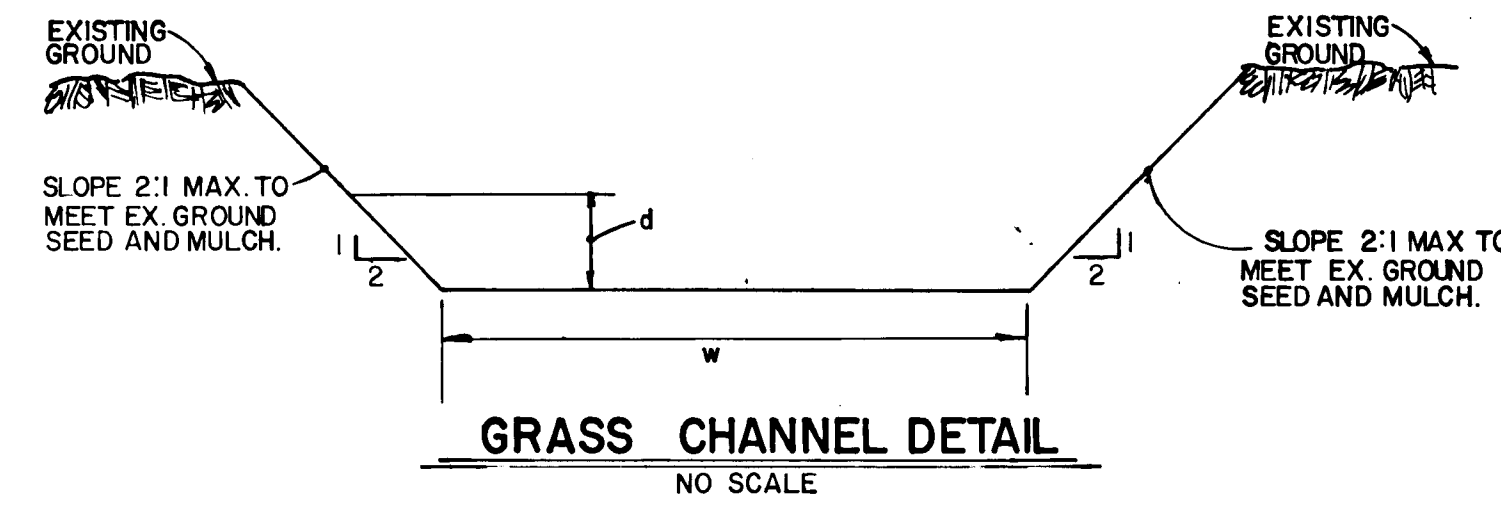
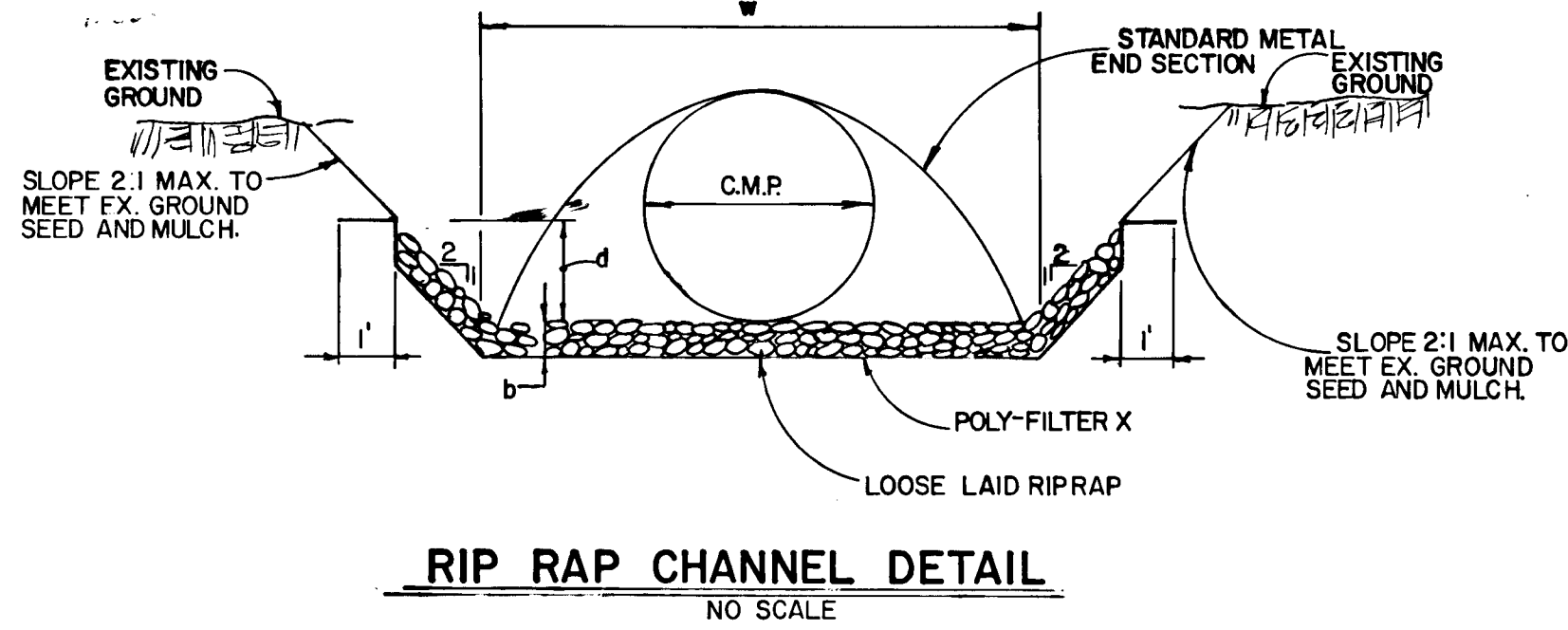
GRASS CHANNEL DESIGN DATA

STRUCTURE	A	P	R	R2/3	S	S1/2	n	Q	V	d	w
S-1	10.81'	12.19'	1.87	9.23	100%	0.10	0.03	49.40cfs	4.57fps	1.16'	7'
S-2	1.49'	4.47'	3.33	4.79	100%	0.10	0.03	3.53cfs	2.37fps	0.44'	2.5'

STRUCTURE SCHEDULE

NO.	TYPE	INVERT IN	INVERT OUT	Q TOPELEV.	Q STATION	REMARKS
I-1	A-5	466.02	465.49	478.16	0+45.50 RED LION TAVERN COURT	DWG.S.D. 4.01
I-2	A-10	466.09	466.44	478.16	0+45.50 RED LION TAVERN COURT	DWG.S.D. 4.02
I-3	A-5	466.66	467.15	477.22	1+75 RALEIGH TAVERN LANE	DWG.S.D. 4.01
I-4	A-10	466.66	467.15	477.22	1+75 RALEIGH TAVERN LANE	DWG.S.D. 4.02
I-5	WR	470.00	469.03	478.40	2+75 RALEIGH TAVERN LANE	DWG.MD. 374.04
I-6	WR	470.00	469.03	478.40	2+75 RALEIGH TAVERN LANE	DWG.MD. 374.04
I-7	A-5	470.00	469.03	478.40	2+75 RALEIGH TAVERN LANE	DWG.S.D. 4.01
I-8	A-10	470.00	469.03	478.40	2+75 RALEIGH TAVERN LANE	DWG.S.D. 4.02
I-9	A-5	470.00	469.03	478.40	1+27 RED LION TAVERN COURT LINEAR PROF.	DWG.S.D. 4.01
MH-1	STAND MANHOLE	464.72	464.41	473.00	0+75 RALEIGH TAVERN LANE	DWG. G. 5.03
MH-2	STAND MANHOLE	468.71	468.46	477.00	0+75 RALEIGH TAVERN LANE	DWG. G. 5.02
I-12	STAND MANHOLE	471.84	470.93	473.00	4+78.4	DWG. G. 5.01
MH-4	STAND MANHOLE	479.50	479.08	485.33	4+78.4	DWG. G. 5.03
S-1	METAL END SECT.	462.47	462.80	466.34		DWG.S.D. 5.61
S-2	METAL END SECT.	468.75	467.49	468.74		DWG.S.D. 5.61
I-10	A-5 w/deflector	484.57	484.72	489.22	12+43 RALEIGH TAVERN LANE	DWG.S.D. 4.01 & S.D. 4.83
I-11	A-5 w/deflector	485.20	485.20	489.22	12+43 RALEIGH TAVERN LANE	DWG.S.D. 4.01 & S.D. 4.83
MH-5	SHALLOW MANHOLE	481.61	481.36	489.48	12+43 RALEIGH TAVERN LANE	DWG. G. 5.05
S-3	METAL END SECT.	481.1	481.07	484.92		DWG.S.D. 5.81

*Q M-2 IS 4' LEFT OF Q STA. 0+75

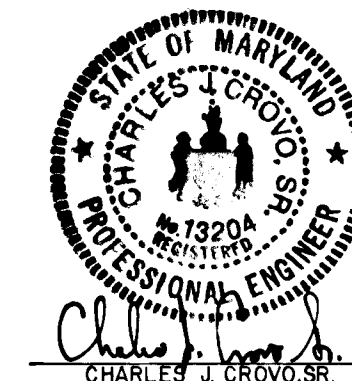


D.A.N.	REVISION	REVISION	DATE
	Δ	REVISE STRUCTURE SCHEDULE	2/5/86
	Δ	REVISE STORM DRAIN PIPES FROM MH-3, I-5, MH-2, I-1-3	2/10/86
McF	Δ	Remove S.W.M. End Details	7-22-86
BY	NO.	REVISION	DATE

APPROVED
DEPARTMENT OF PUBLIC WORKS
William B. P... 11-11-85

APPROVED
OFFICE OF PLANNING AND ZONING
John M. ... 12-12-85

AS-BUILT SURVEY CERTIFIED
BY CHARLES CROVO P.E. # 13204
MARCH 10, 1988



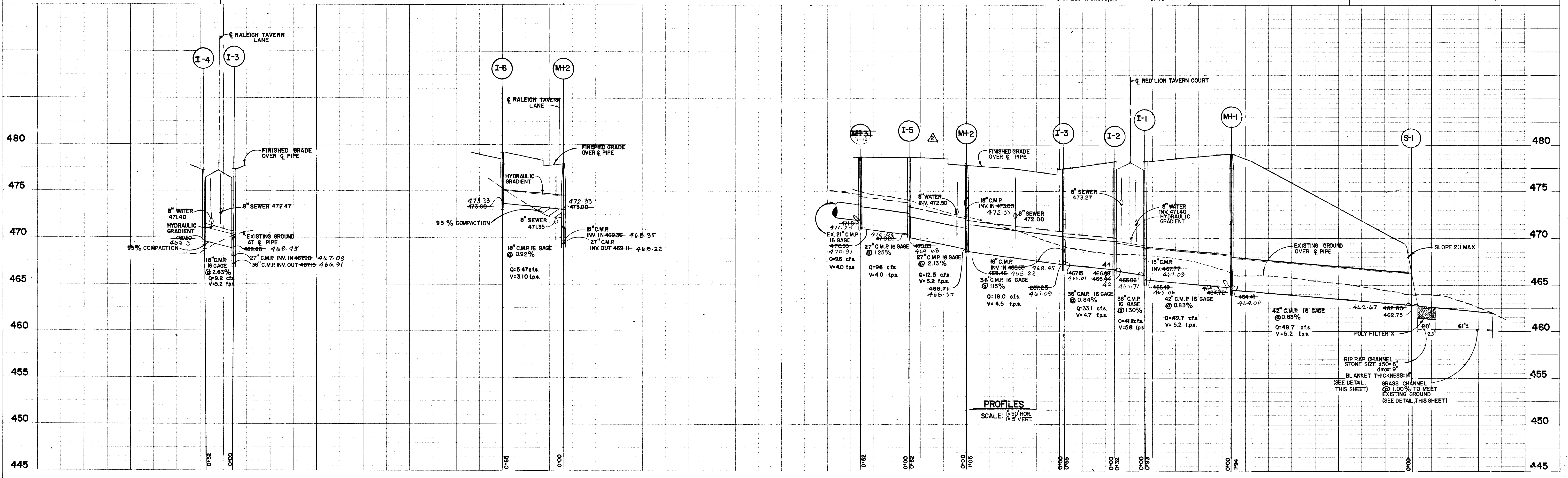
MARKET SQUARE SOUTH LOTS I-65
2 ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

STORM DRAIN PROFILES AND DETAILS

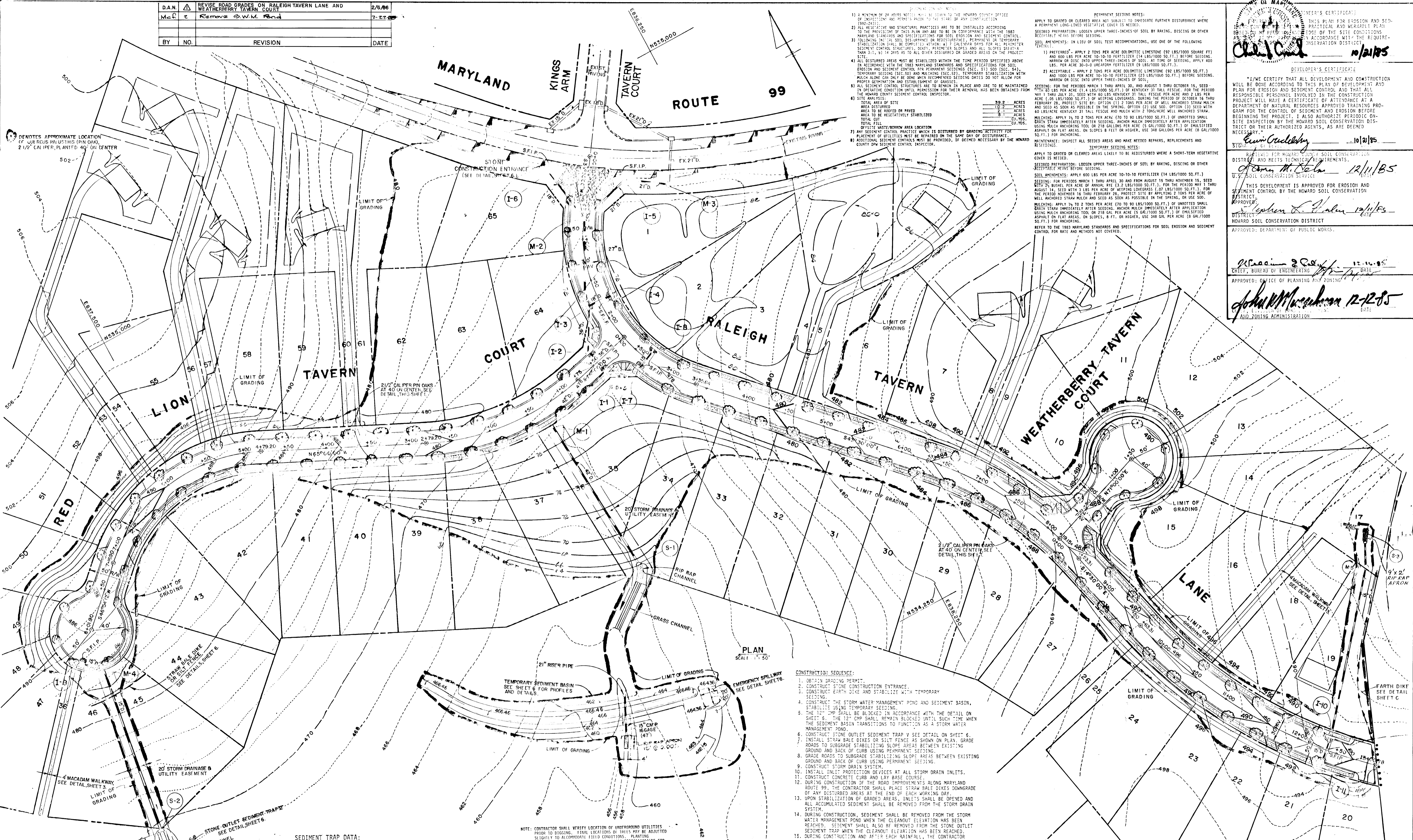
OWNER AND DEVELOPER
99.70 PROPERTY CORPORATION
C/O ELLICOTT CITY LAND HOLDING CO. INC.
1076 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN DATE OCT. 8, 1985 DWG. NO. 4 OF 6
DES. C. CROVO DRN. D. NEWTON CHK. R. CARTER

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043



D.A.N.	REVISE ROAD GRADES ON RALEIGH TAVERN LANE AND WEATHERBERRY TAVERN COURT	2/6/86
M.C.F.	Remove S.W.M. Pond	7-22-86
BY	NO.	REVISION
		DATE



- 1) A minimum of 24 hours notice shall be given to the Howard County Office of Inspection and Permitting prior to the start of any construction.
- 2) ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED ACCORDING TO THE PROJECT'S EROSION AND SEDIMENT CONTROL PLAN.
- 3) THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL SHALL BE FOLLOWED THROUGHOUT THE PROJECT.
- 4) 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. PERMANENT SEEDING SHALL BE APPLIED TO ALL DISTURBED AREAS WITHIN 14 DAYS OF THE DATE OF DISTURBANCE.
- 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. PERMANENT SEEDING SHALL BE APPLIED TO ALL DISTURBED AREAS WITHIN 14 DAYS OF THE DATE OF DISTURBANCE.
- 6) SITE ANALYSIS:
 - 39.2 ACRES AREA TO BE GRADED
 - 10.2 ACRES AREA TO BE ROOFED OR PAVED
 - 6.1 ACRES AREA TO BE REVEGETATED/STABILIZED
 - TOTAL CUT: 21,000 CU. YDS.
 - TOTAL FILL: 0 CU. YDS.
- 7) ANY WASTE/BORROW AREA LOCATION SHALL BE IDENTIFIED AND APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
- 8) ADDITIONAL SEDIMENT CONTROL MEASURES SHALL BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

REMAINING SEEDING NOTES:
 APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.
 SEEDING PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
 SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING METHODS:
 1) PREFERRED: APPLY 2 TONS PER ACRE DOMESTIC LIME (80 LBS/1000 SQ. FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING.
 2) ACCEPTABLE: APPLY 2 TONS PER ACRE DOMESTIC LIME (80 LBS/1000 SQ. FT.) AND 100 LBS PER ACRE 10-10-10 FERTILIZER (9 LBS/1000 SQ. FT.) BEFORE SEEDING.
 3) ALTERNATE: APPLY 2 TONS PER ACRE DOMESTIC LIME (80 LBS/1000 SQ. FT.) AND 100 LBS PER ACRE 10-10-10 FERTILIZER (9 LBS/1000 SQ. FT.) BEFORE SEEDING.
 SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 1 LBS PER ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 50 LBS PER ACRE OF TALL FESCUE PER ACRE AND 2 LBS PER ACRE OF WHEAT (0.7 LBS/1000 SQ. FT.) OF WHEAT. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, SEED WITH 1 LBS PER ACRE OF WHEAT (0.7 LBS/1000 SQ. FT.) OF WHEAT AND 2 LBS PER ACRE OF RYE (1.4 LBS/1000 SQ. FT.) OF RYE. SEED WITH 60 LBS PER ACRE OF WHEAT (0.7 LBS/1000 SQ. FT.) OF WHEAT AND 2 TONS PER ACRE OF WHEAT STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GAL PER ACRE (5 GAL/1000 SQ. FT.) OF CRUSHED ASPHALT ON FLAT AREAS, ON SLOPES 8 FT. OR HIGHER, USE 348 GAL PER ACRE (5 GAL/1000 SQ. FT.) FOR ANCHORING.
 MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS. INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.
 APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
 SEEDING PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
 SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) FOR PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 1 LBS PER ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 50 LBS PER ACRE OF TALL FESCUE PER ACRE AND 2 LBS PER ACRE OF WHEAT (0.7 LBS/1000 SQ. FT.) OF WHEAT. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, SEED WITH 1 LBS PER ACRE OF WHEAT (0.7 LBS/1000 SQ. FT.) OF WHEAT AND 2 LBS PER ACRE OF RYE (1.4 LBS/1000 SQ. FT.) OF RYE. SEED WITH 60 LBS PER ACRE OF WHEAT (0.7 LBS/1000 SQ. FT.) OF WHEAT AND 2 TONS PER ACRE OF WHEAT STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GAL PER ACRE (5 GAL/1000 SQ. FT.) OF CRUSHED ASPHALT ON FLAT AREAS, ON SLOPES 8 FT. OR HIGHER, USE 348 GAL PER ACRE (5 GAL/1000 SQ. FT.) FOR ANCHORING.
 MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS. INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

SEAL OF THE DISTRICT OF COLUMBIA

DEVELOPER'S CERTIFICATE

I HEREBY 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.

Signature: *John M. Selman* 12/11/85
 Signature: *John M. Selman* 12/11/85
 Signature: *John M. Selman* 12-12-85

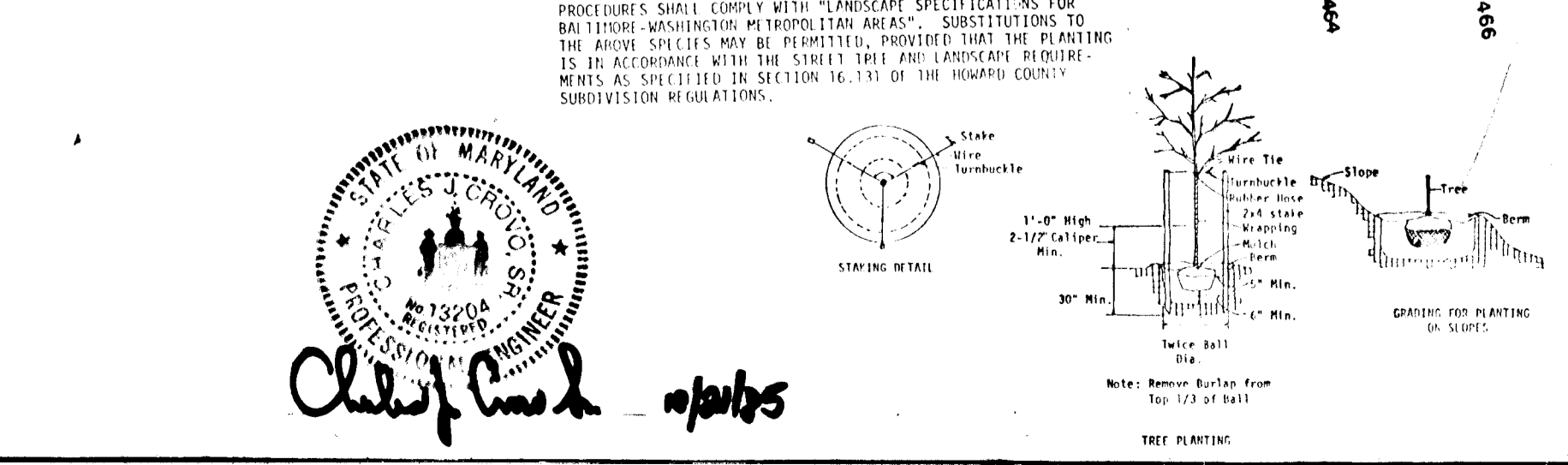
APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING 12-11-85
 APPROVED: OFFICE OF PLANNING AND ZONING

APPROVED: DEPARTMENT OF PUBLIC WORKS

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 TELEPHONE: (301) 461-2855

SEDIMENT TRAP DATA:
 DRAINAGE AREA: 1.35 AC.
 VOLUME REQUIRED: 91 CU. YDS.
 VOLUME PROVIDED: 94 CU. YDS.
 TOP DIMENSION: 54" x 23"
 BOTTOM DIMENSION: 42" x 11"
 SIDESLOPES: 2:1
 DEPTH: 3.0'
 WEIR CREST ELEVATION: 467.87
 BOTTOM ELEVATION: 463.87
 CLEANOUT ELEVATION: 465.37



AS-BUILT SURVEY CERTIFIED BY CHARLES CROVO, MD PE No. 13204 ON MARCH 10, 1988

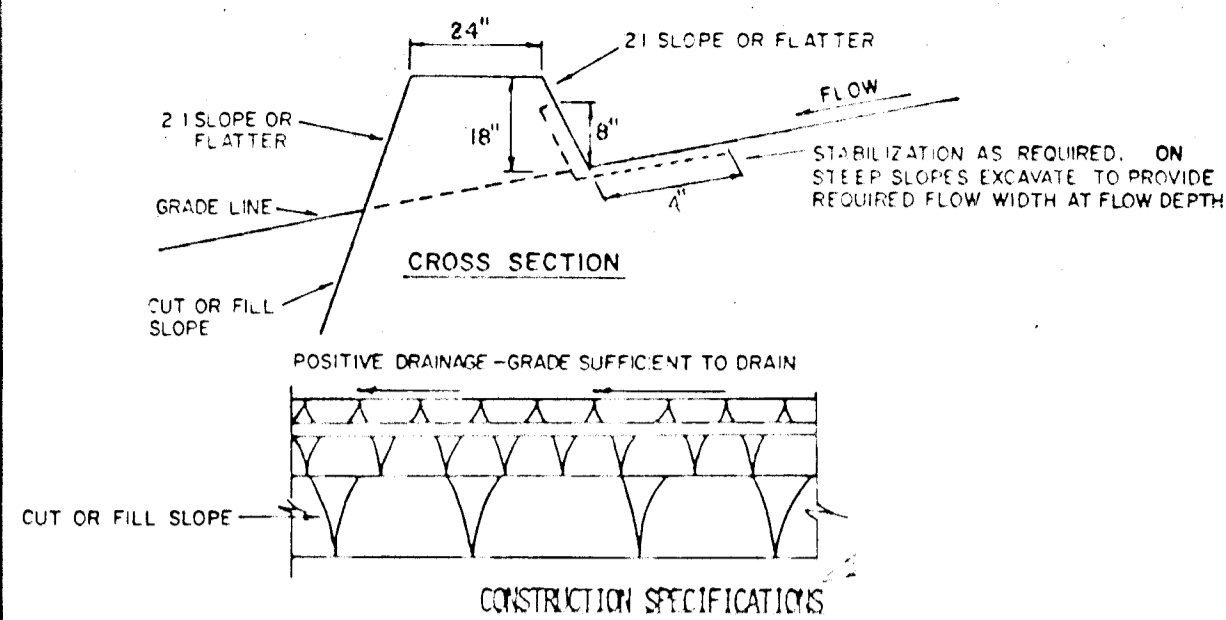
OWNER AND DEVELOPER
 5070 HIGHLY CONCENTRATION
 C/O ELLICOTT CITY LAND HOLDING CO. INC.
 10776 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21043

STREET TREE GRADING
 SEDIMENT CONTROL PLAN
 AND STORM WATER MANAGEMENT POND
 MARKET SQUARE SOUTH

2ND ELECTION DISTRICT HOWARD COUNTY, MD.
 SCALE AS SHOWN OCT. 8, 1985
 SHEET 50F 6

STONE OUTLET SEDIMENT TRAP

CURB INLET PROTECTION DETAIL

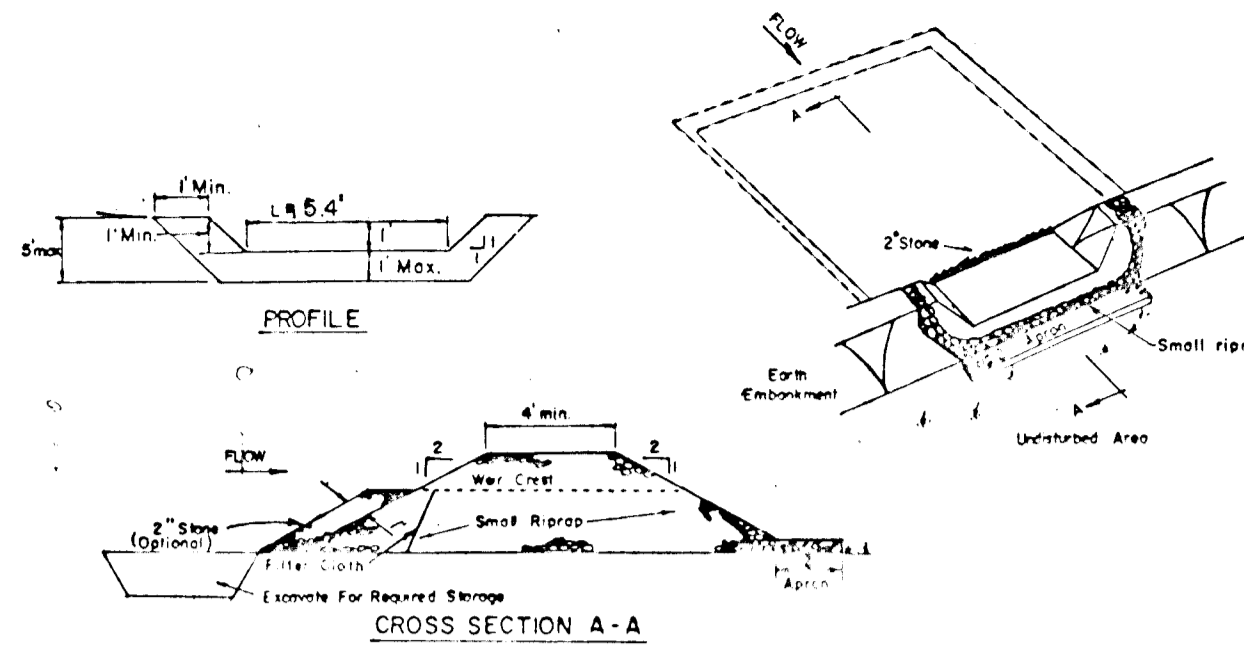


1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTFLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTFLET.
5. EARTH DIKES SHALL HAVE AN OUTFLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. PLACES SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSDORF SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

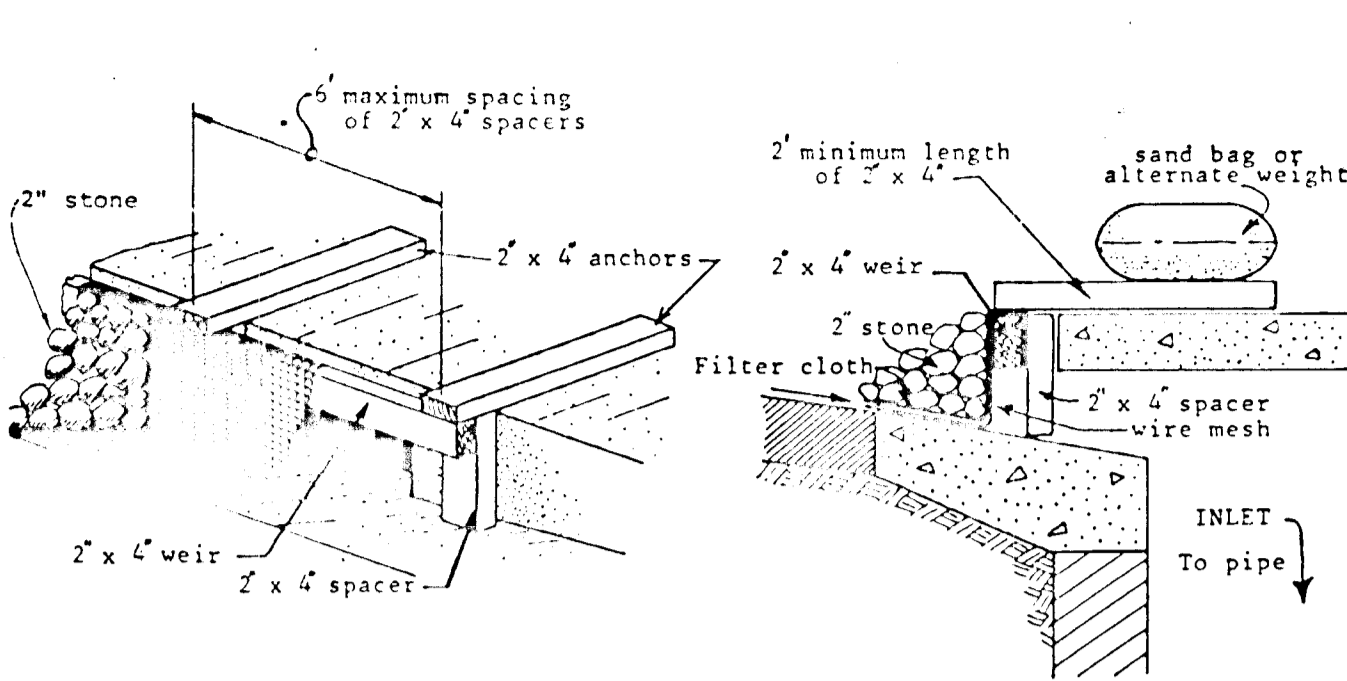
- A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
- B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
- C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.



OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

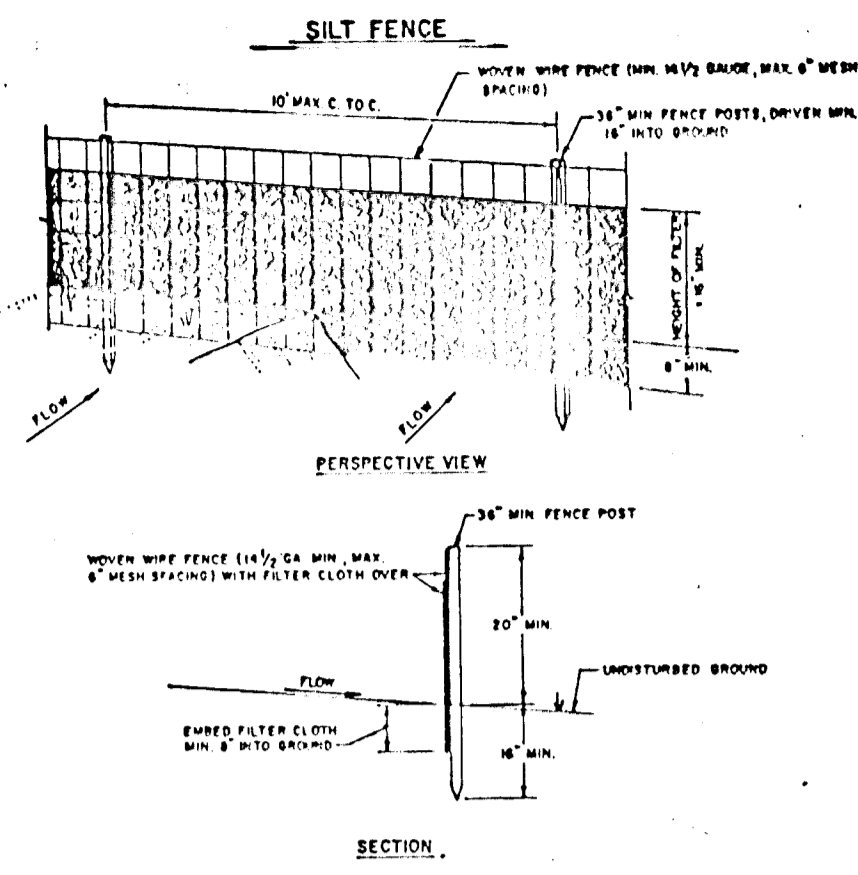
CONSTRUCTION SPECIFICATIONS FOR ST-Y

1. 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 and 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.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the upstream side on the small riprap and embedded filter cloth in the riprap.
5. 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.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.



B. Curb Inlet Protection.

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. Three 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

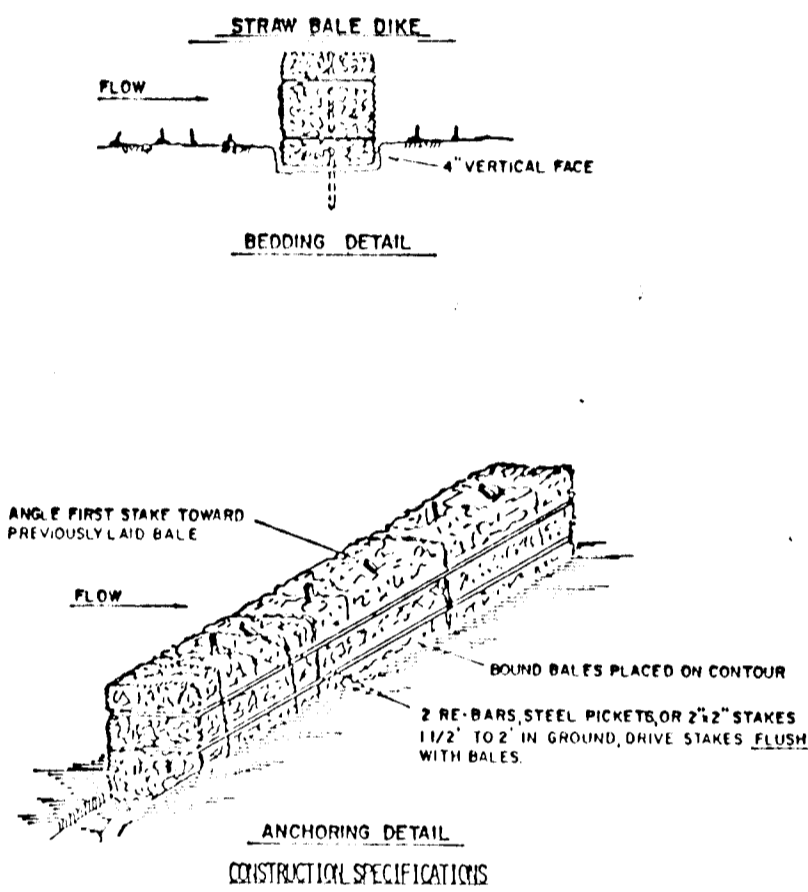
1. WIRE MESH FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WIRE MESH FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS REFERRED AND MATERIAL REPLACED WHEN "BAGS" DEVELOP IN THE SILT FENCE.

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL IS A PRACTICAL AND WORKABLE PLAN BASED ON KNOWLEDGE OF THE SITE CONDITIONS AND IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 Charles Crovo 10/1/85

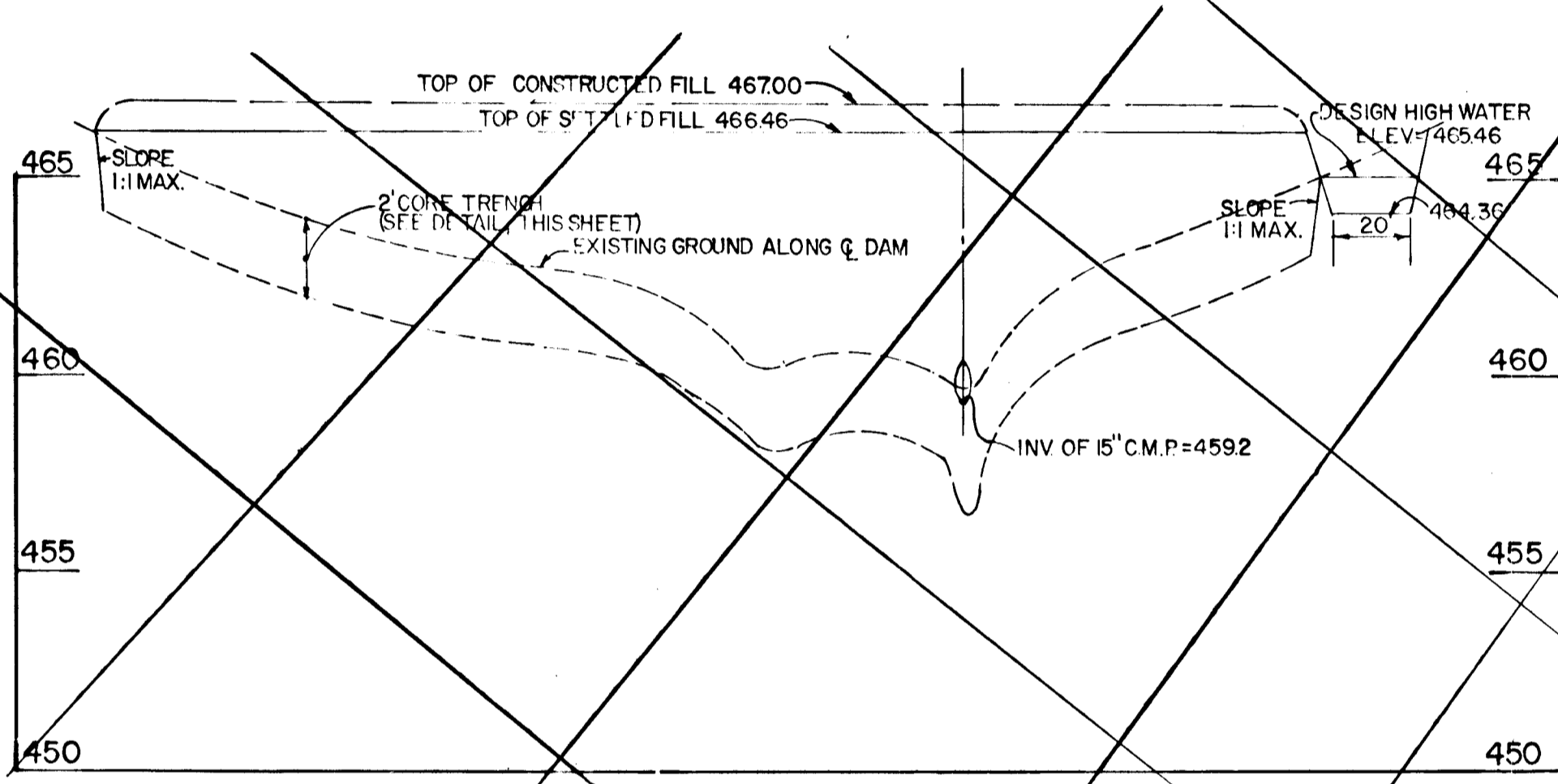
DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING 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.
 Edward Cuddady 10/1/85

APPROVED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 Stephen L. Fisher 12-11-85
 DISTRICT CHIEF, HOWARD COUNTY SOIL CONSERVATION DISTRICT
 APPROVED: DEPARTMENT OF PUBLIC WORKS.

APPROVED: OFFICE OF PLANNING AND ZONING
 John M. MacMahon 12-12-85
 DISTRICT CHIEF, BUREAU OF ENGINEERING AND ZONING ADMINISTRATION

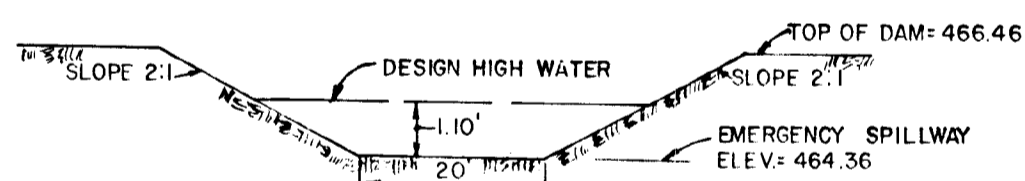


1. BALES SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH EDGES TIGHTLY ADJOINING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (6) INCHES, AND PLACED SO THE BINDING IS TOWARD SLOPE.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAPLES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAPLE IN EACH BALE SHALL BE DRIVEN THROUGH THE PREVIOUSLY Laid BALE AT AN ANGLE TO FORCE THE BALE TOGETHER. STAPLES SHALL BE DRIVEN THROUGH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPAIR STORM FLOW OR DRAINAGE.



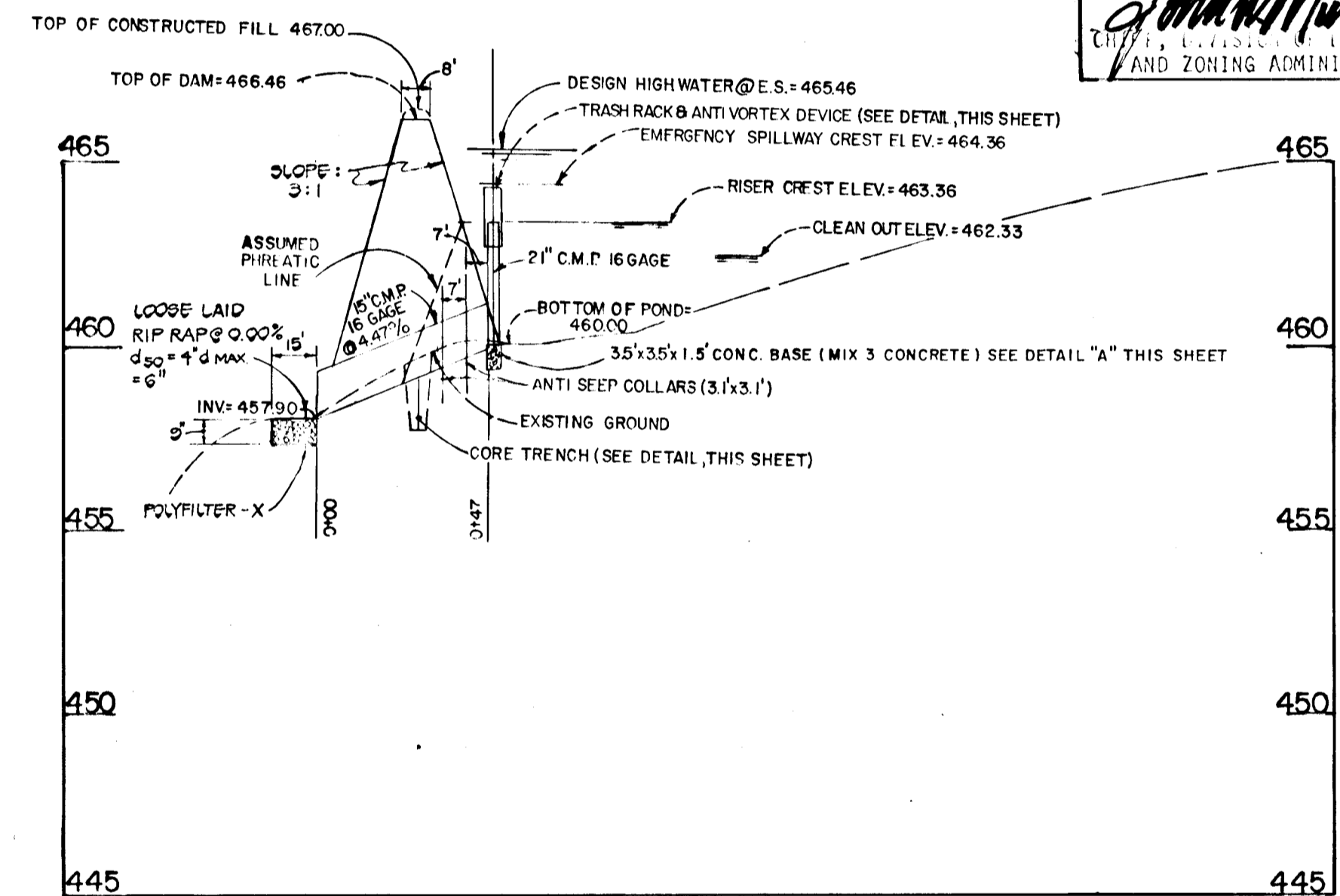
PROFILE ALONG C BASIN

SCALE: 1/4" VERT. 1'-40" HOR.



EMERGENCY SPILLWAY DETAIL

NO SCALE



SEDIMENT BASIN PROFILE

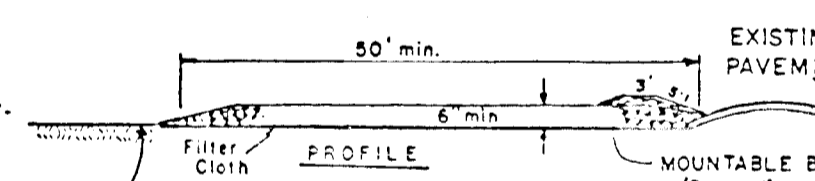
SCALE: 1/4" VERT. 1'-40" HOR.

BLOCKING DETAIL FOR 12" CMP AT STORM WATER MANAGEMENT POND

NO SCALE

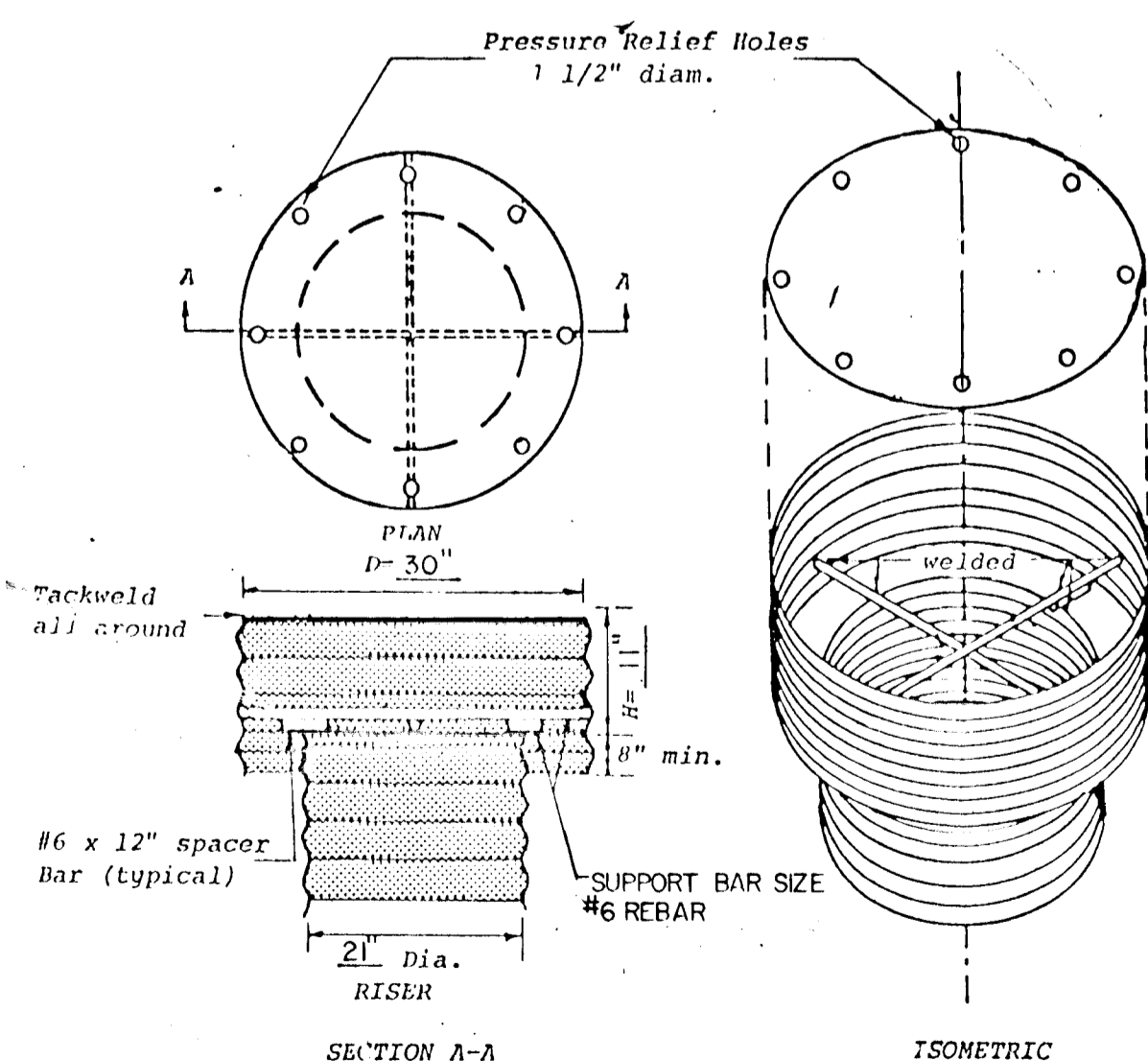
STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



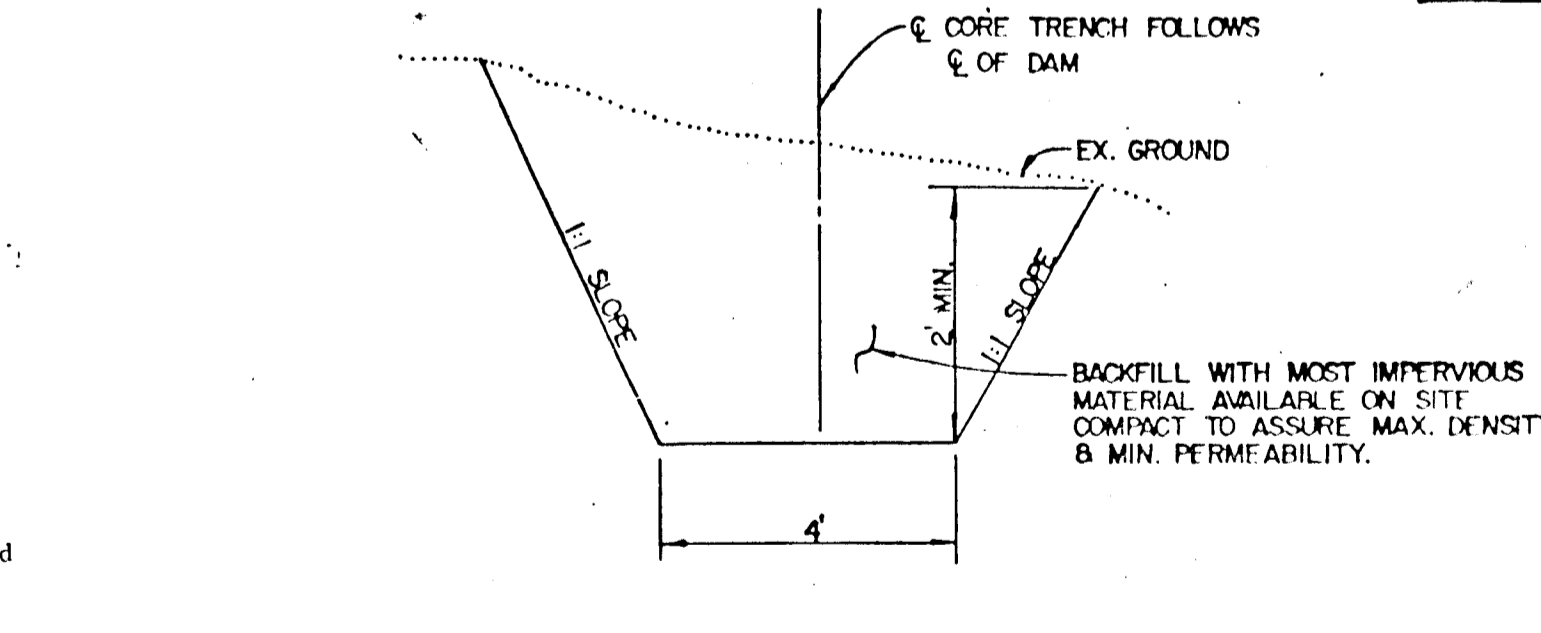
CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 30 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a portable berm with 2:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.



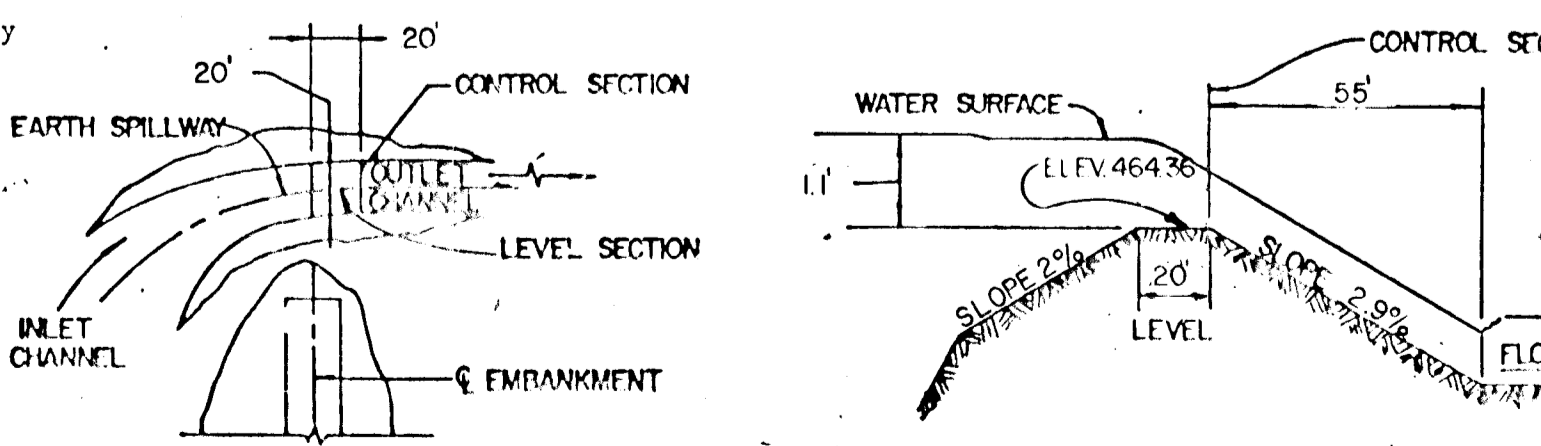
CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE DETAIL

NOT TO SCALE



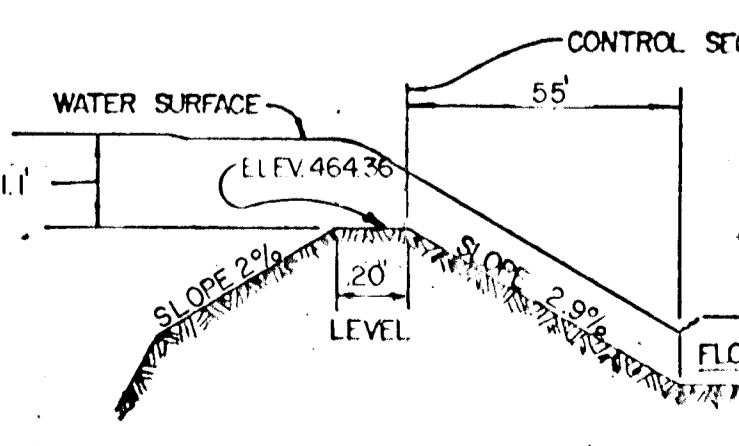
CORE TRENCH DETAIL

NO SCALE



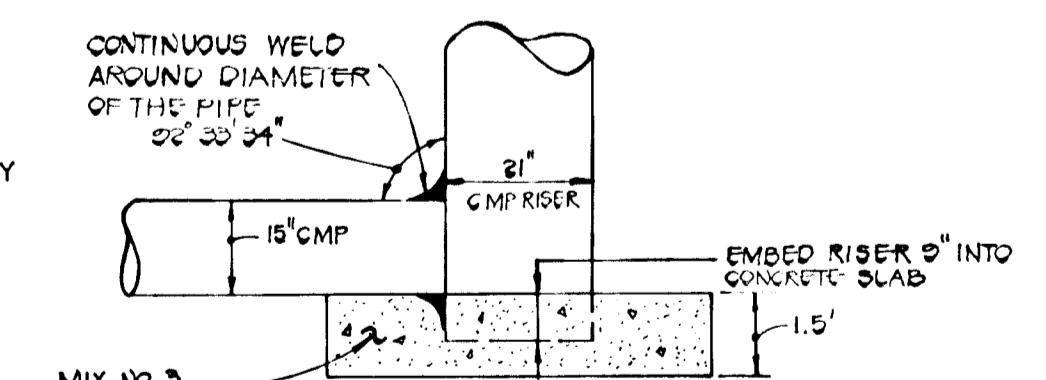
PLAN OF EARTH SPILLWAY

NO SCALE



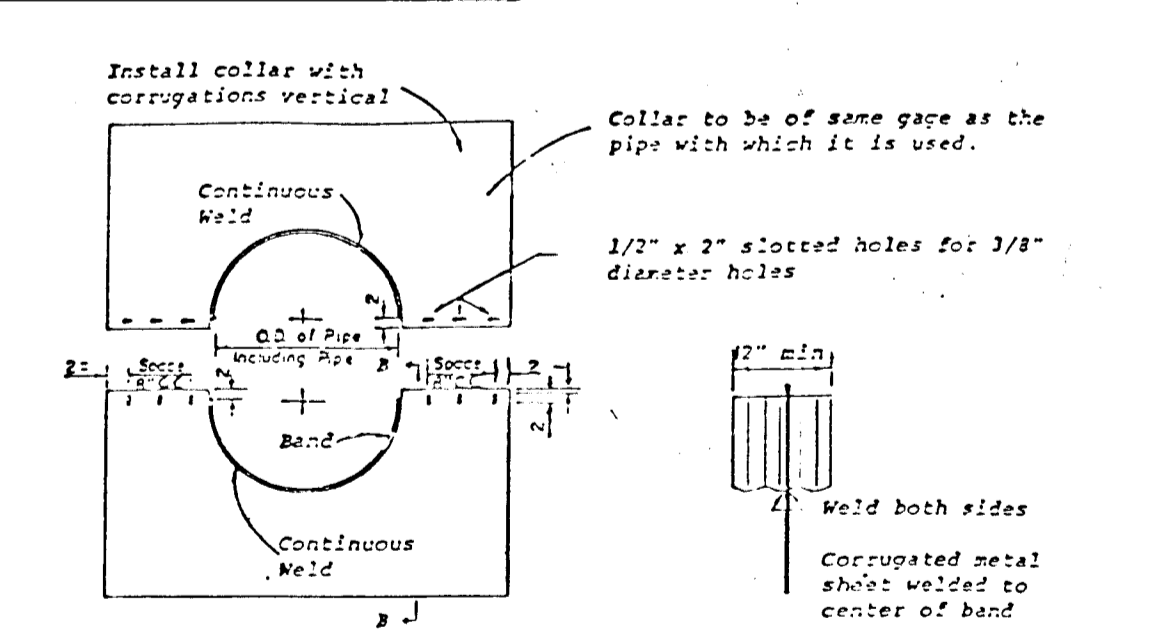
PROFILE ALONG C EARTH SPILLWAY

NO SCALE



DETAIL "A"

NO SCALE



CORRUGATED METAL ANTI SEEP COLLAR DETAIL

NO SCALE

1. All materials to be in accordance with construction and construction material specifications.
2. When specified on the plans, coating of collars shall be in accordance with construction and construction material specifications.
3. Unassembled collars shall be marked by painting or tagging to identify matching pairs.
4. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at time of installation.
5. Each collar shall be furnished with two 1/2" diameter rods with standard tank lugs for connecting collars to pipe.

SEDIMENT CONTROL DETAILS AND PROFILES

MARKET SQUARE SOUTH

2ND ELECTION DISTRICT HOWARD COUNTY, MD.
 SCALE: AS SHOWN OCT. 8, 1985
 SHEET 6 OF 6

FISHER, COLLINS & CARTER, INC.
 CONSULTING ENGINEERS & LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043

45-BUILT SURVEY CERTIFIED
 BY CHARLES CROVO
 P.E. No. 13204
 MARCH 10, 1988
 Charles Crovo 10/1/85