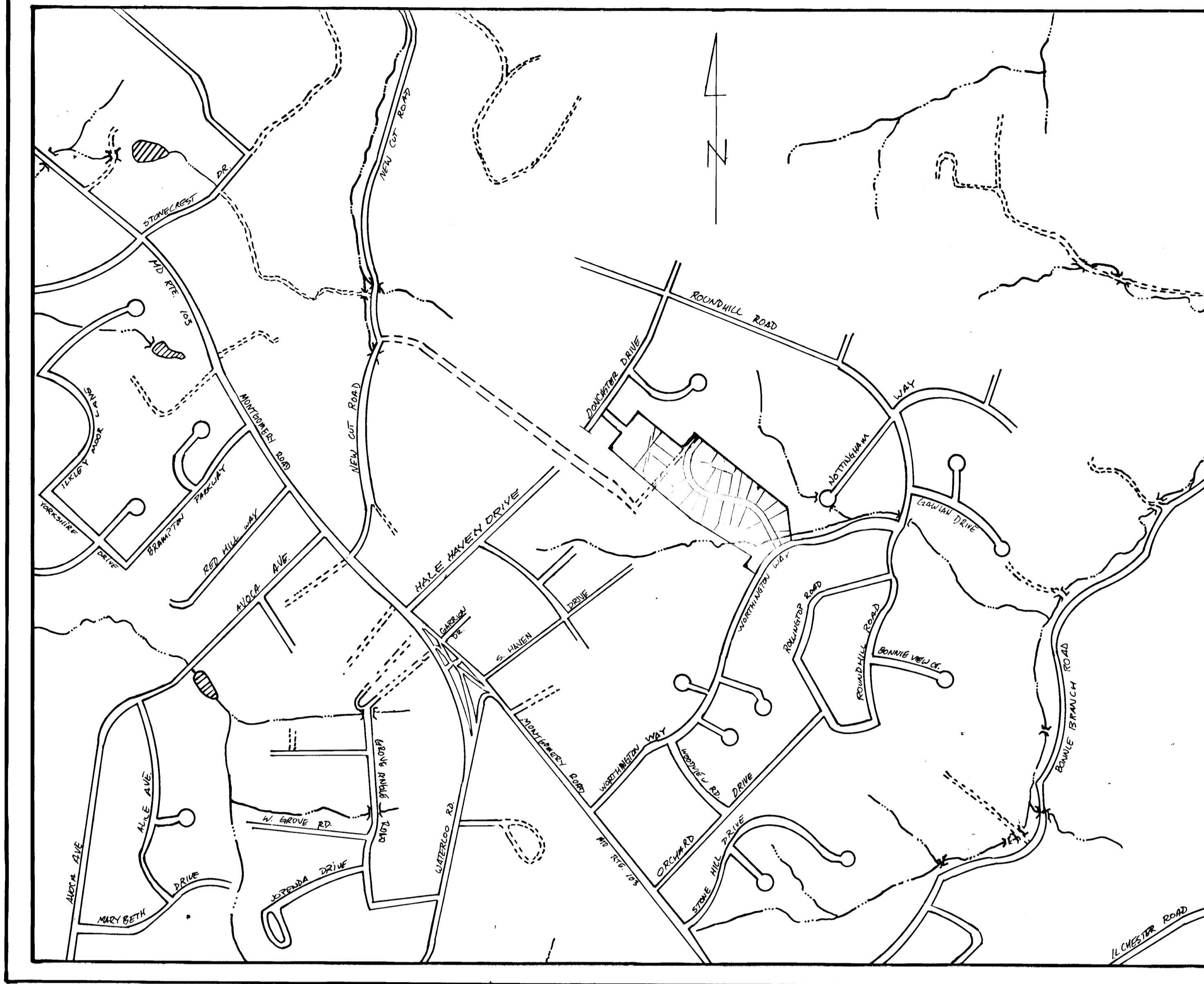
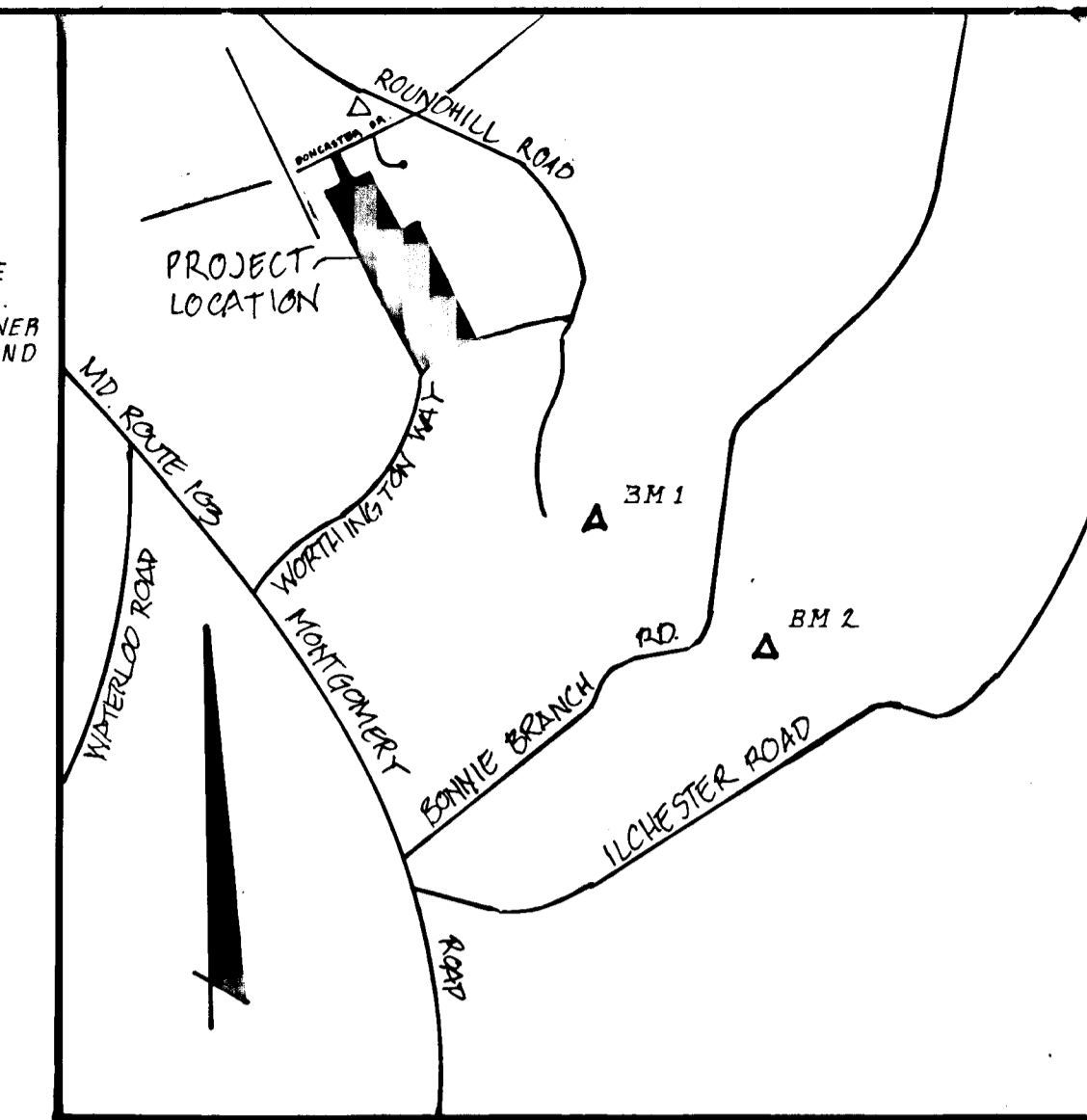


INDEX OF SHEETS	
SHEET NO.	TITLE
1	COVER SHEET
2	PLAN & PROFILE - ELLICOTT WOODS LANE Sta. 0+00 to 0+108.21
3	PLAN & PROFILE - ELLICOTT WOODS LANE AND NORTHINGTON WAY
4	ROAD CONSTRUCTION DETAILS
5	GRADING & SEDIMENT CONTROL PLAN
6	GRADING & SEDIMENT CONTROL PLAN
7	STORM DRAIN PROFILES
8	STORMWATER MANAGEMENT DETAILS
9	SEDIMENT CONTROL DETAILS
10	STORMWATER MANAGEMENT DETAILS
11	STORMWATER MANAGEMENT DETAILS



LOCATION MAP  
SCALE: 1" = 600'



VICINITY MAP  
SCALE: 1" = 1200'

**BENCHMARK**

BM1: CONCRETE MONUMENT @ SURFACE  
10' S. NW. OF TWIN 12" APPLE TREE  
10' S. OF GRAVEL DRIVE ACROSS POWER  
LINE FROM INTERSECTION OF ROUND  
HILL ROAD AND ROLLING ROAD.  
ELEVATION: 494.838

BM2: CONCRETE MONUMENT @ SURFACE  
ELEVATION: 431.131

**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 HOURS IN ADVANCE OF ANY CONSTRUCTION.
- STORM DRAINAGE TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTIONS AND SURVEY DIVISION AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE: 792-7272
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
- ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION.
- STREET TREES TO BE PROVIDED AS REQUIRED BY SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS.
  - STATE HIGHWAY ADMINISTRATION: 531-5533
  - BALTIMORE GAS & ELECTRIC COMPANY UNDERGROUND
  - ELECTRIC DISTRIBUTION CUSTOMER SERVICE: 685-0123
  - ENGINEERING DAMAGE CONTROL: 234-5611
  - MISS UTILITY: 1-559-0100
  - CHESAPEAKE & POTOMAC (C&P) TELEPHONE CO.: 725-9976
  - AMERICAN TELEPHONE & TELEGRAPH, CABLE LOCATION DIVISION: 393-3533
  - COLONIAL PIPELINE COMPANY: 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY: 992-2366
- RIP-RAP AT OUTFALLS SHALL BE UNPAVED UNLESS OTHERWISE NOTED.
- 401 PERMIT # 90 WQ-0066  
404 PERMIT # CENAD-OP-RN (ELLICOTT WOODS) 88-410-4  
WATERWAY CONSTRUCTION PERMIT #
- THESE PLANS ARE SUBJECT TO THE FOLLOWING WAIVERS:
  - WP-80-83 From Section 16.116.04
  - WP-80-83 From Section 16.120
  - WP-80-137 From Section 16.120.1

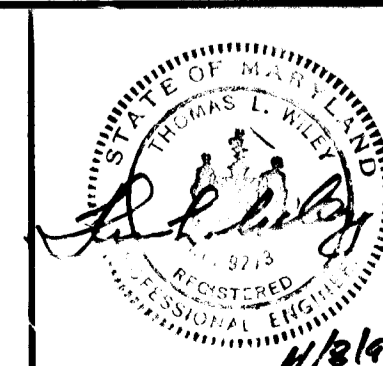
# ELLICOTT WOODS LOTS 1-29 ROAD CONSTRUCTION DRAWINGS 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Alan M. Ferguson</i> CHIEF, LAND DEVELOPMENT DIVISION	2/2/91 DATE
<i>Lawrence W. Wehland</i> CHIEF, BUREAU OF HIGHWAY	2/1/91 DATE
<i>William S. Reay</i> CHIEF, BUREAU OF ENGINEERING	2-4-91 DATE
APPROVED HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>Richard Blood</i> CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	2/2/91 DATE

LANDSCAPE SCHEDULE					
SYMBOL	QUANTITY	BIOLOGICAL NAME	COMMON NAME	SIZE	REMARKS
	60	ACER RUBRUM	AUTUMN FLAME	60 FT.	BALLED AND BURLAPED

DESIGNED		DATE		BY		DESCRIPTION	
AMC	9-89						
DATE	9-89						
DRAWN	D.C.B./E.B.J.	9-89					
DATE	9-89						
CHECKED	A.M.C.	9-89					
DATE	9-89						
APPROVED	T.L.W.	9-89					
DATE							

**Dewberry & Davis**  
ARCHITECTS - ENGINEERS - PLANNERS - SURVEYORS  
200 Harry S. Truman Parkway, Annapolis, Maryland 21401  
8411 Arlington Boulevard, Fairfax, Virginia 22030



**OWNER/DEVELOPER**

HOWARD RESNYCK  
4645 NEW CUT ROAD  
ELLICOTT CITY, MD 21043  
PATRICIA A. KING  
4622 DONCASTER ROAD  
ELLICOTT CITY, MD 21043  
DAVID E. SEVINSKY  
c/o VERNON J. ROBINSON  
7872 SANDY PINE ROAD  
SEVERN, MD 21144

**COVER SHEET**

**ELLICOTT WOODS LOTS 1-29**  
TAX MAP 31 PARCELS: 556, 768, 769, 308, 22  
2ND ELECTION DISTRICT SEPT 1989  
HOWARD COUNTY, MARYLAND

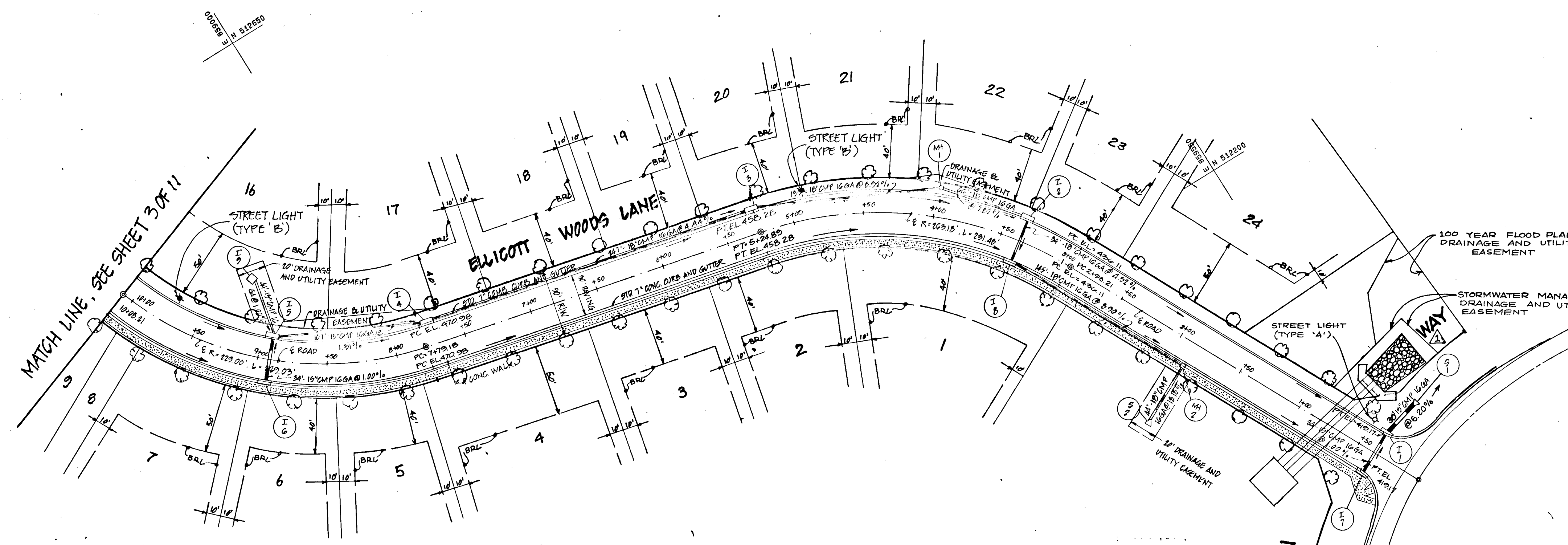
SCALE: AS SHOWN PREVIOUS SUBMITTAL: 8-88-34, P.R.R.-62 FILE NO. P-90-88 SHEET 1 OF 11

F-70-88

1616

**LIGHTING LEGEND**

- Type A street light - 100 watt High pressure Sodium Vapor pendant, AT A 25' HEIGHT MOUNTED ON A GALVANIZED STEEL POLE.
- Type B street light - 100 watt Traditional Sodium Vapor Post Top on 4" FIBERGLASS POLE.



ELLICOTT WOODS LANE  
 C/L CURVE DATA  
 STA. 7+00.10 TO 10+00.41  
 R = 229.00  
 L = 229.03  
 TAN = 125.12  
 DELTA = 57-48-09  
 CHD. = 219.60  
 CHD. BEARING = N48-16-03

ELLICOTT WOODS LANE  
 C/L CURVE DATA  
 STA. 2+00.11 TO 5+00.99  
 R = 263.18  
 L = 231.48  
 TAN = 123.83  
 DELTA = 50-23-36  
 CHD. = 224.09  
 CHD. BEARING = N51-43-19W

PLAN VIEW  
 SCALE: 1" = 50'

**PLAN AND PROFILE**  
**ELLICOTT WOODS LANE**  
 WASHINGTON, MARYLAND

2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 PREVIOUS SUBMITTALS: S-88-34, P-88-63, S-89-54, WP-89-83

OWNER / DEVELOPER:  
 HOWARD SPURLOCK  
 4645 NEW CITY ROAD  
 ELLICOTT CITY, MD 21043

ARCHITECTS: ENGINEERS - PLANNERS - SURVEYORS  
**DEWBERRY & DAVIS**  
 200 Henry B. Truman Parkway, Annapolis, Maryland 21401  
 8411 Ardenwood Parkway, Fairfax, Virginia 22030

DESIGNED BY MJT DRAWN BY GRG CHECKED BY H9/TW  
 DATE SEPTEMBER, 1989 SHEET 2 OF 11

**REVISIONS**

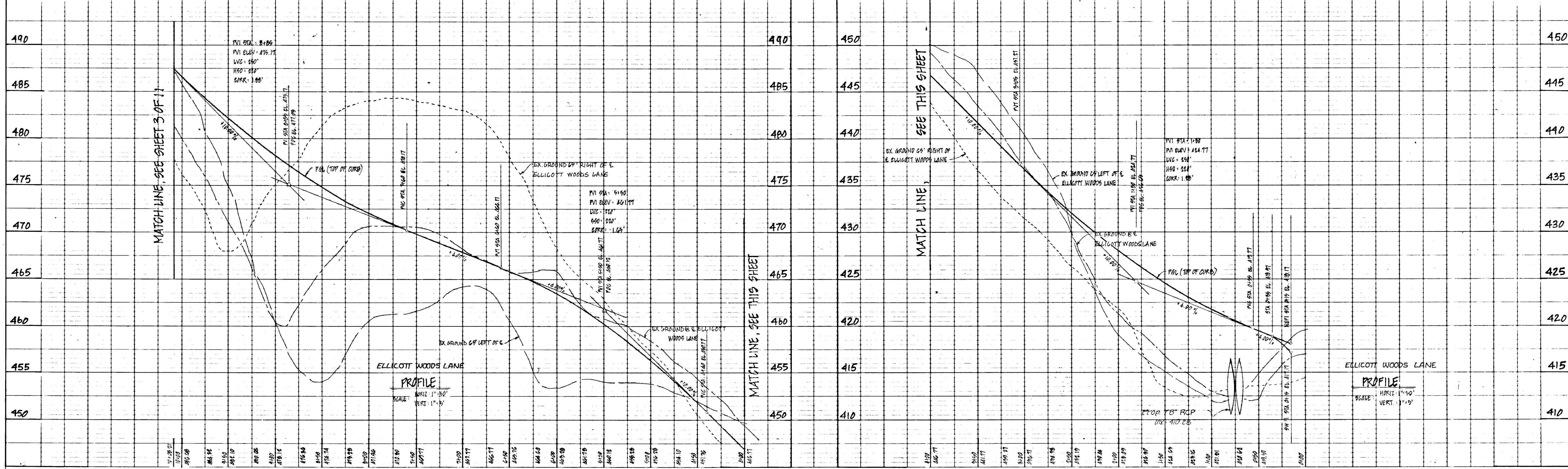
1	REVISED STORMWATER MANAGEMENT EASEMENT, RIP-RAP & ENDWALL SECTION. BY E.R.B. ON 11-27-91
---	--

APPROVED HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 Richard Blood 2/7/91  
 DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Olaf M. Dreyer 2/4/91  
 CHIEF ENGINEER

Francis W. Wallace 2/1/91  
 CHIEF ENGINEER

2-4-91



DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_

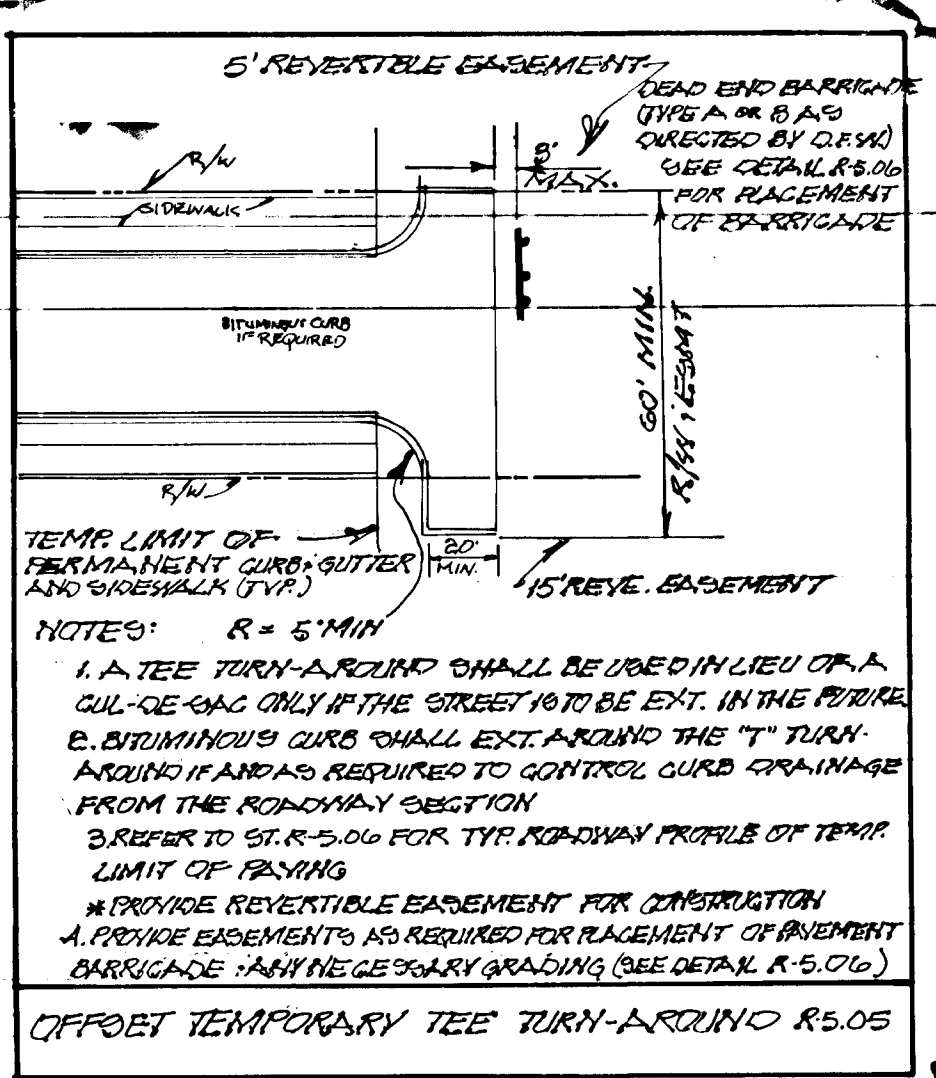
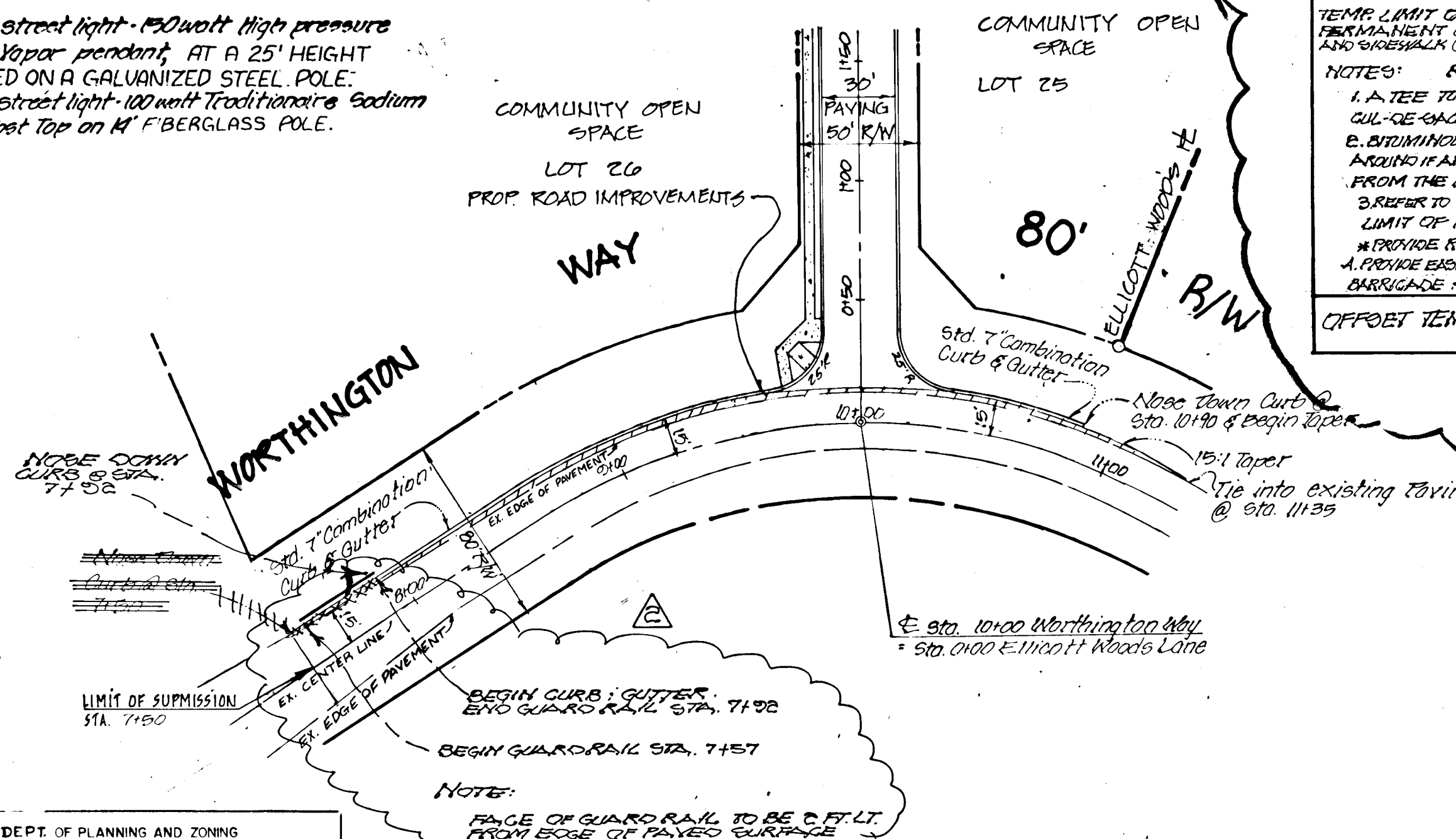
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 BY: \_\_\_\_\_  
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1616

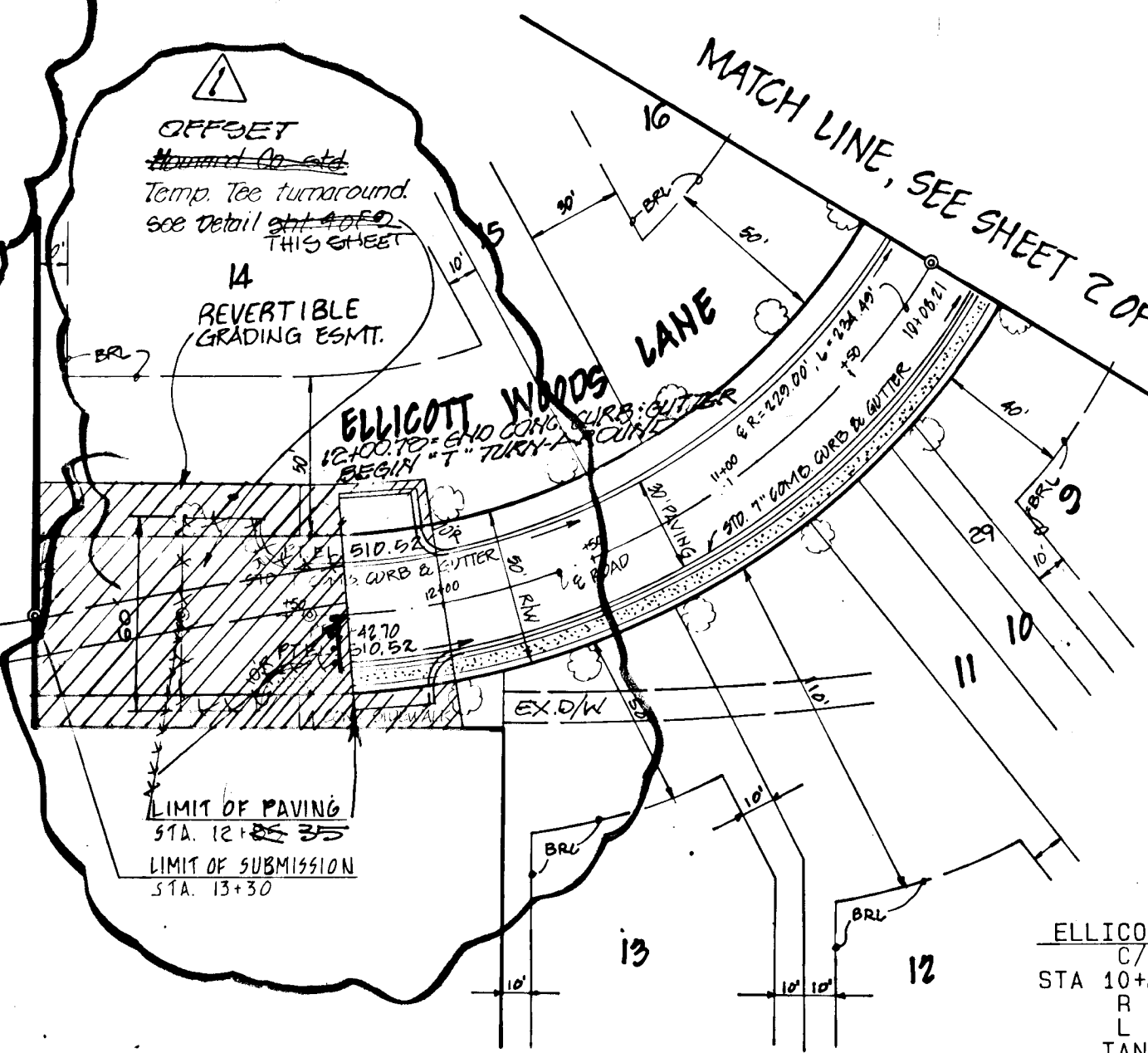
**LIGHTING LEGEND**

- Type A street light - 100 watt High pressure Sodium Vapor pendant, AT A 25' HEIGHT MOUNTED ON A GALVANIZED STEEL POLE.
- Type B street light - 100 watt Traditional Sodium Vapor Post Top on 4' FIBERGLASS POLE.

ELLCOTT WOODS LANE



5' REVERSIBLE EASEMENT  
 LEAD END BARRIERS OVER THE EAS. AS REQUESTED BY CIVILIAN FOR PLACEMENT OF REVERSIBLE EASEMENT  
 TEMP. LIMIT OF PERMANENT CURB-GUTTER AND SIDEWALK (TYP)  
 NOTES: R = 5' MIN  
 1. A TEE TURN-AROUND SHALL BE USED IN LIEU OF A CUL-DE-SAC ONLY IF THE STREET IS TO BE EXT. IN THE FUTURE.  
 2. BITUMINOUS CURB SHALL EXT. AROUND THE TEE TURN-AROUND IF AND AS REQUIRED TO CONTROL CURB GRADUATION FROM THE ROADWAY SECTION.  
 3. REFER TO ST. R-500 FOR THE ROADWAY PROFILE OF TEMP. LIMIT OF PAVING.  
 4. PROVIDE REVERSIBLE EASEMENT FOR CONSTRUCTION.  
 5. PROVIDE EASEMENTS AS REQUIRED FOR PLACEMENT OF BARRIERS. HAVING NECESSARY GRADING (SEE DETAIL R-500).  
 OFFSET TEMPORARY TEE TURN-AROUND R5.05



ELLCOTT WOODS LANE  
 C/L CURVE  
 STA 10+28.11 TO 12+42.70  
 R = 239.00  
 L = 234.49  
 TAN = 128.69  
 DELTA = 58-40-07  
 CHD = 224.38  
 CHD BEARING = N09-43-05E



**PLAN AND PROFILE  
 ELLCOTT WOODS LANE**

ELLCOTT WOODS LANE, LOTS 1-29  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 PREVIOUS SUBMITTALS: S-88-34, P-88-63 S-89-54 WP-89-83  
 OWNER / DEVELOPER

HOWARD RESERVE  
 845 NEW CUT ROAD  
 ELLCOTT CITY, MD 21043  
 PATRICIA A. KING  
 4622 DONCASTER ROAD  
 ELLCOTT CITY, MD 21043  
 DAVID E. SERVINSEK  
 c/o VERNON J. ROBINSON  
 7872 SANDY PINE ROAD  
 SEVERN, MD 21144

DEWBERRY & DAVIS  
 ARCHITECTS • ENGINEERS • PLANNERS • SURVEYORS  
 200 Harry S. Truman Parkway, Annapolis, Maryland 21401  
 8411 Arlington Boulevard, Fairfax, Virginia 22030

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 Richard Blood, 2/7/91  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 John M. Taylor, 2/4/91  
 CHIEF, DIVISION OF PUBLIC WORKS

APPROVED: HOWARD COUNTY DEPARTMENT OF ENGINEERING  
 Lawrence W. Wallace, 2/1/91  
 CHIEF, DIVISION OF ENGINEERING

MRG	NO	REVISION	DATE
MRG	2	REMOVE CURB/GUTTER AND REPLACE W/ GUARD RAIL	7/1/90
MRG	1	REVISE TEE TURN-AROUND; ADD DETAIL	6/3/88
BY	NO	REVISION	DATE

PLAN  
 SCALE: 1" = 50'

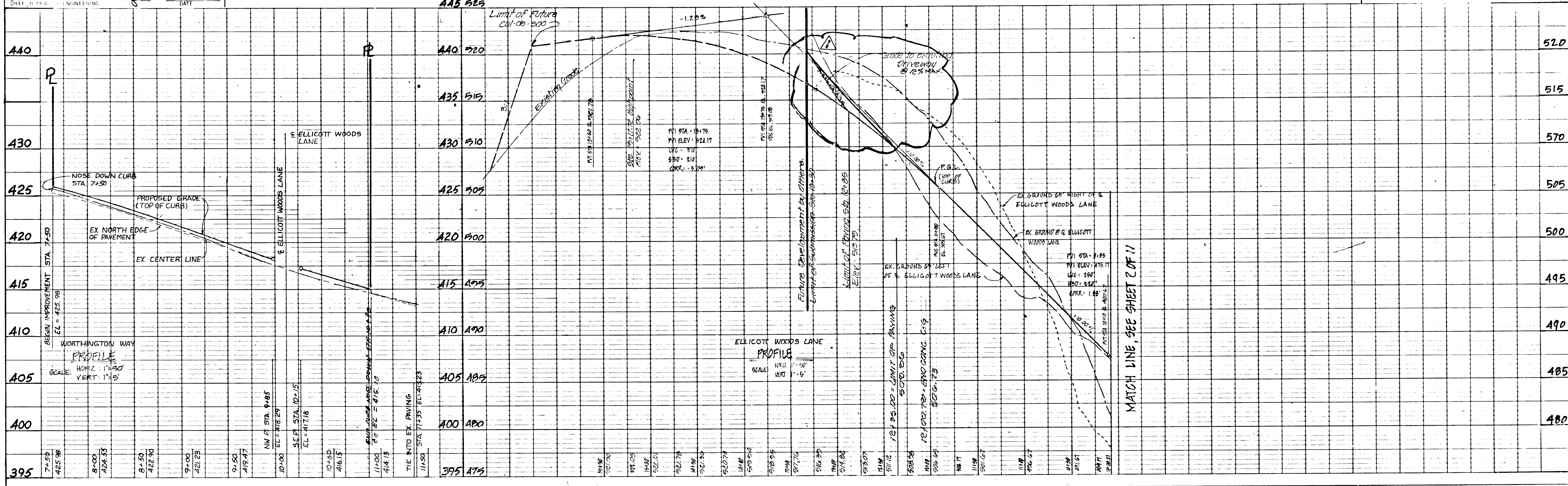
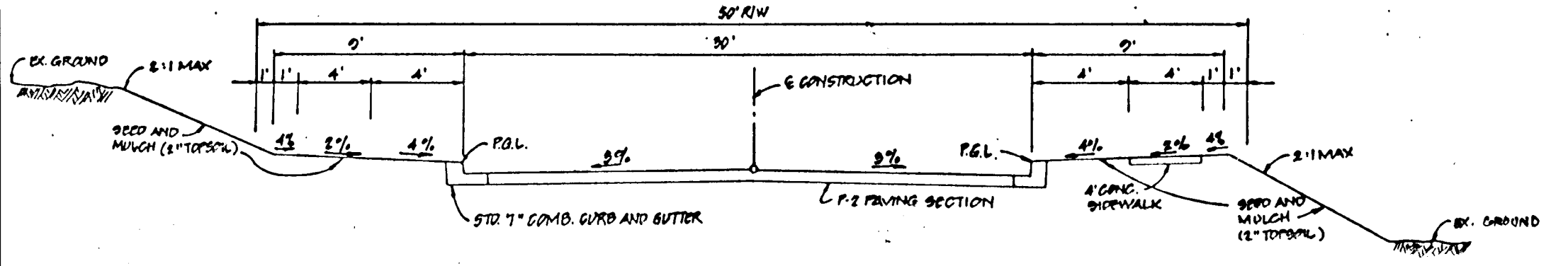
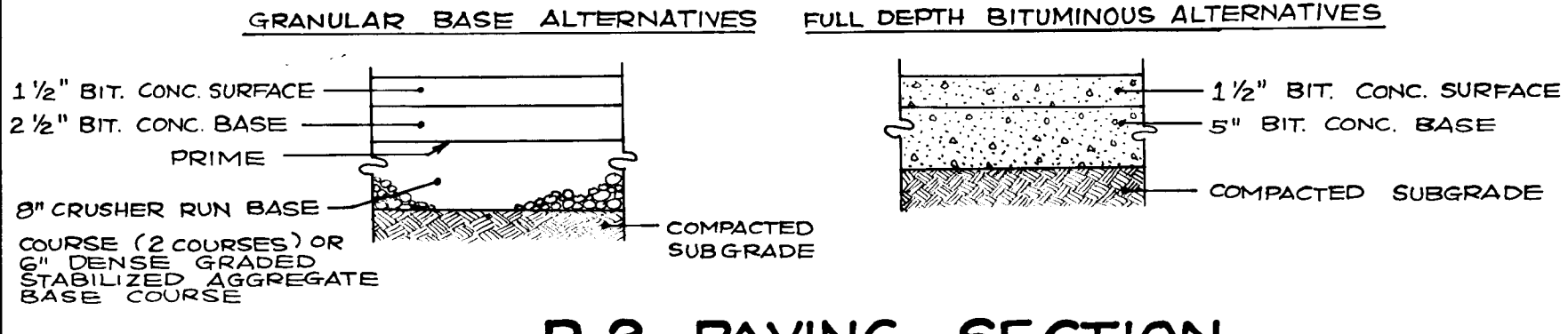


PLATE 1 - SINGLE PLAN AND PROFILE - FULL LINE  
 PRINTED IN U.S.A.

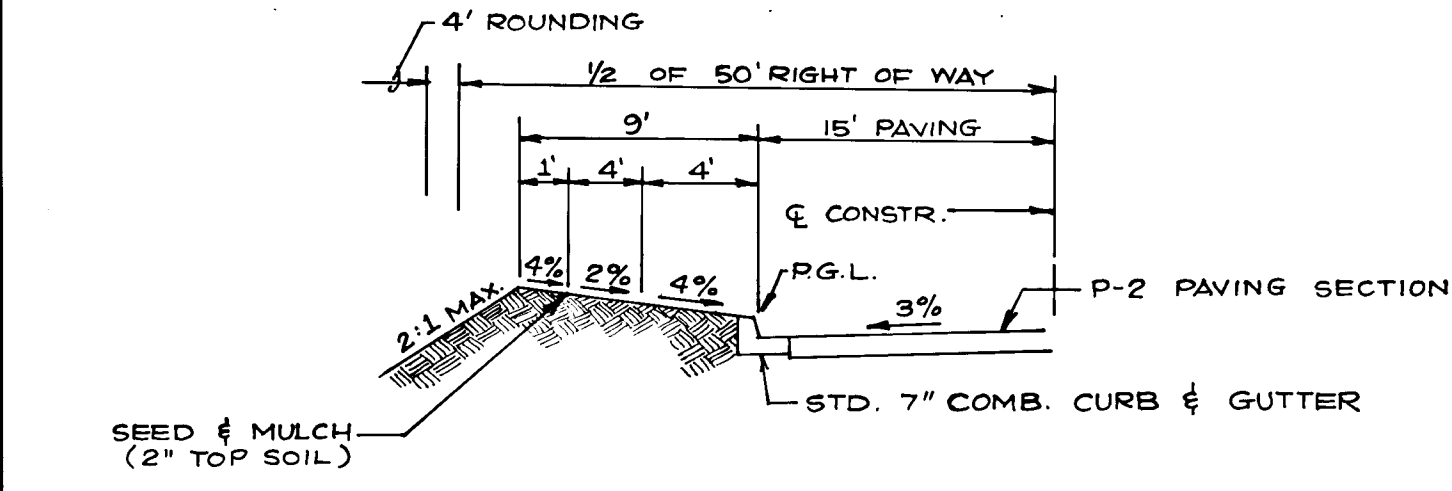
1616



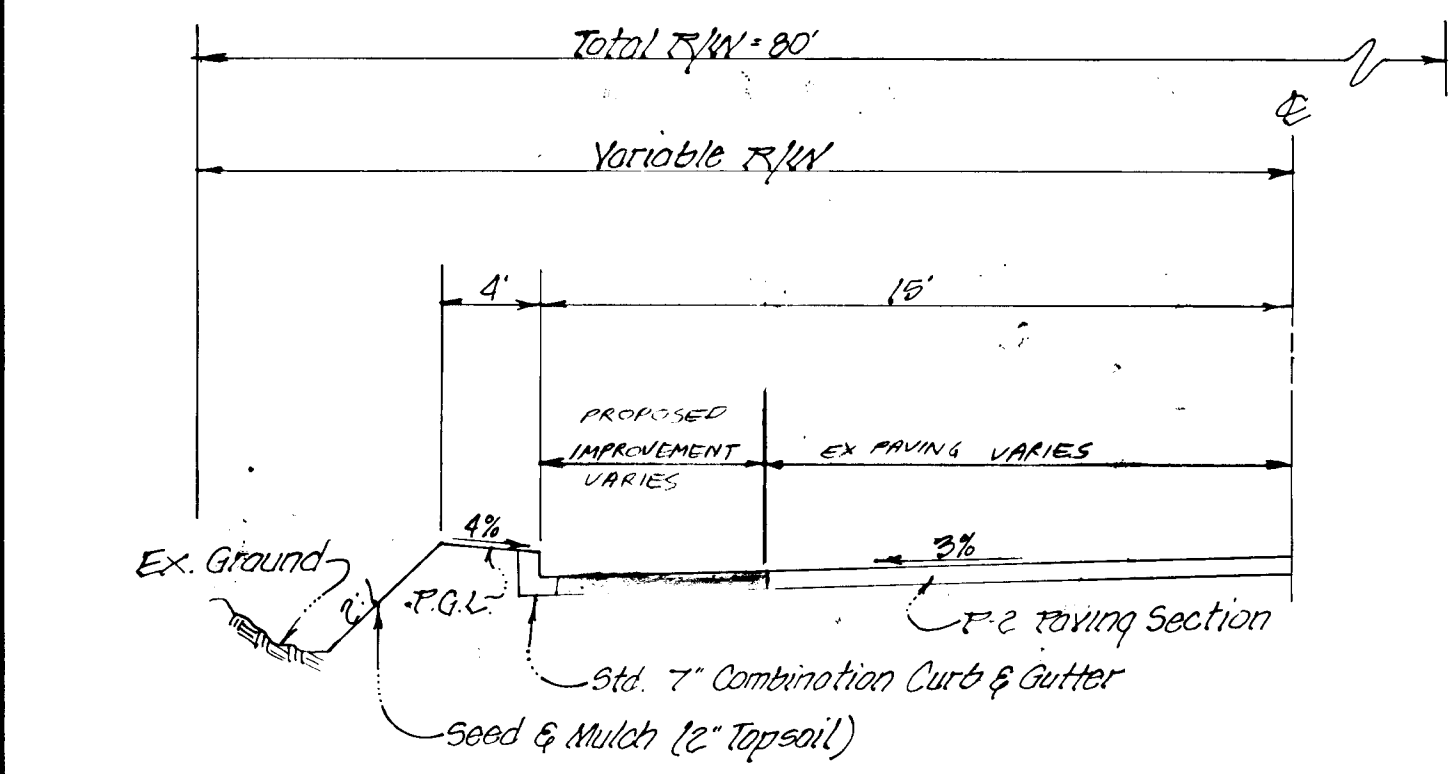
**TYPICAL SECTION - LOCAL STREET**  
**ELLCOTT WOODS LANE**  
STA. 0+15 TO STA. 13+20  
NOT TO SCALE  
EX. ZONING: R-20; DESIGN SPEED: 30 MPH  
30' PAVING



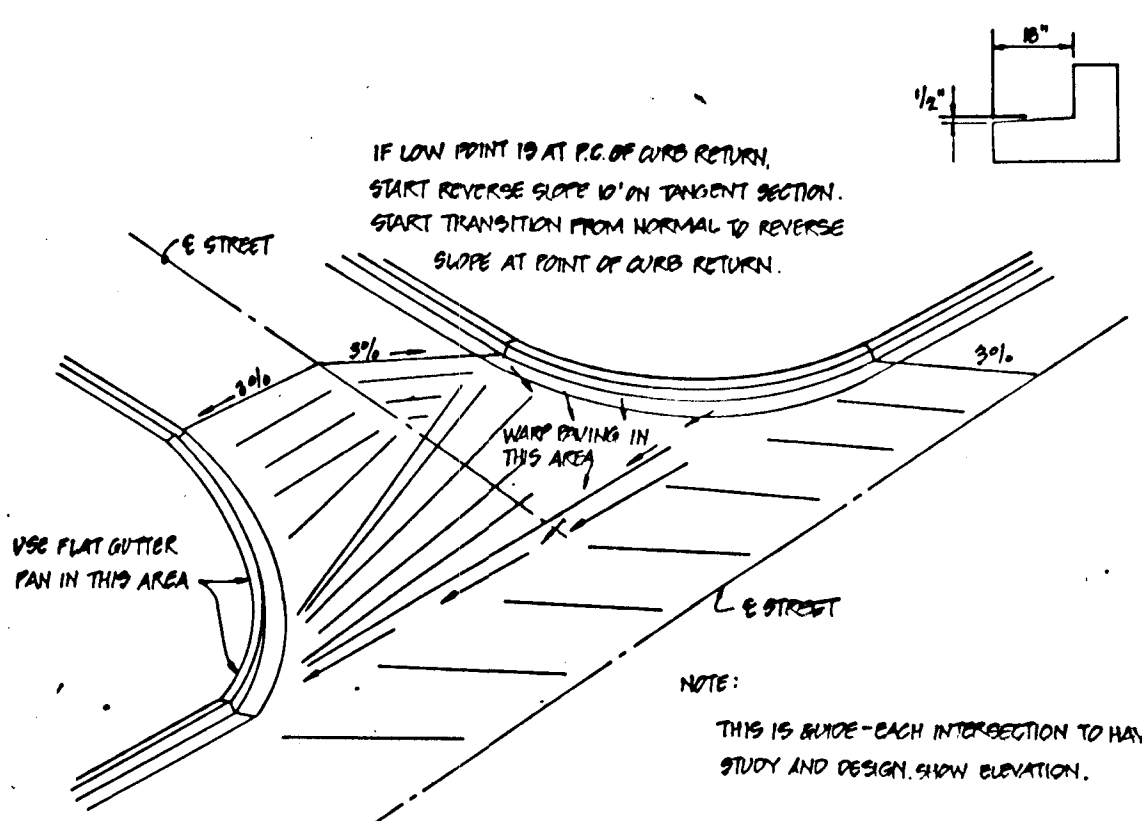
**P-2 PAVING SECTION**  
NOT TO SCALE



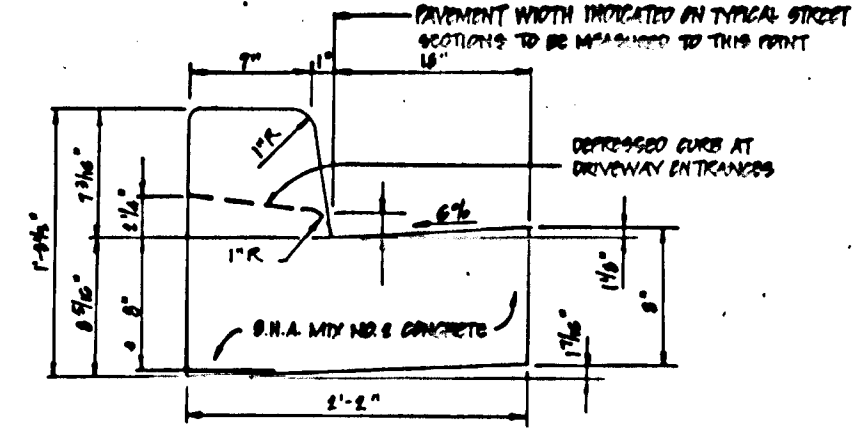
**LOCAL STREET**  
**WORTHINGTON WAY**  
STA. 1+25 TO STA. 2+55  
EX. ZONING: R-20; DESIGN SPEED: 30 MPH; 15' PAVING  
NOT TO SCALE



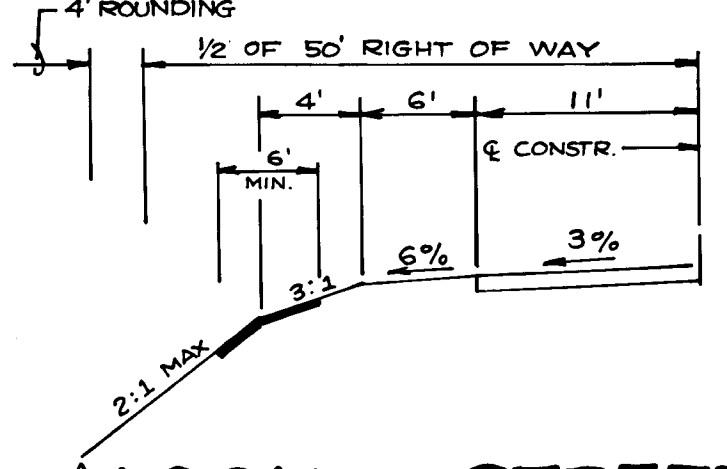
**TYPICAL HALF SECTION IMPROVEMENT**  
**LOCAL STREET - WORTHINGTON WAY**  
Sta. 7+50 to Sta. 10+70  
Not to scale



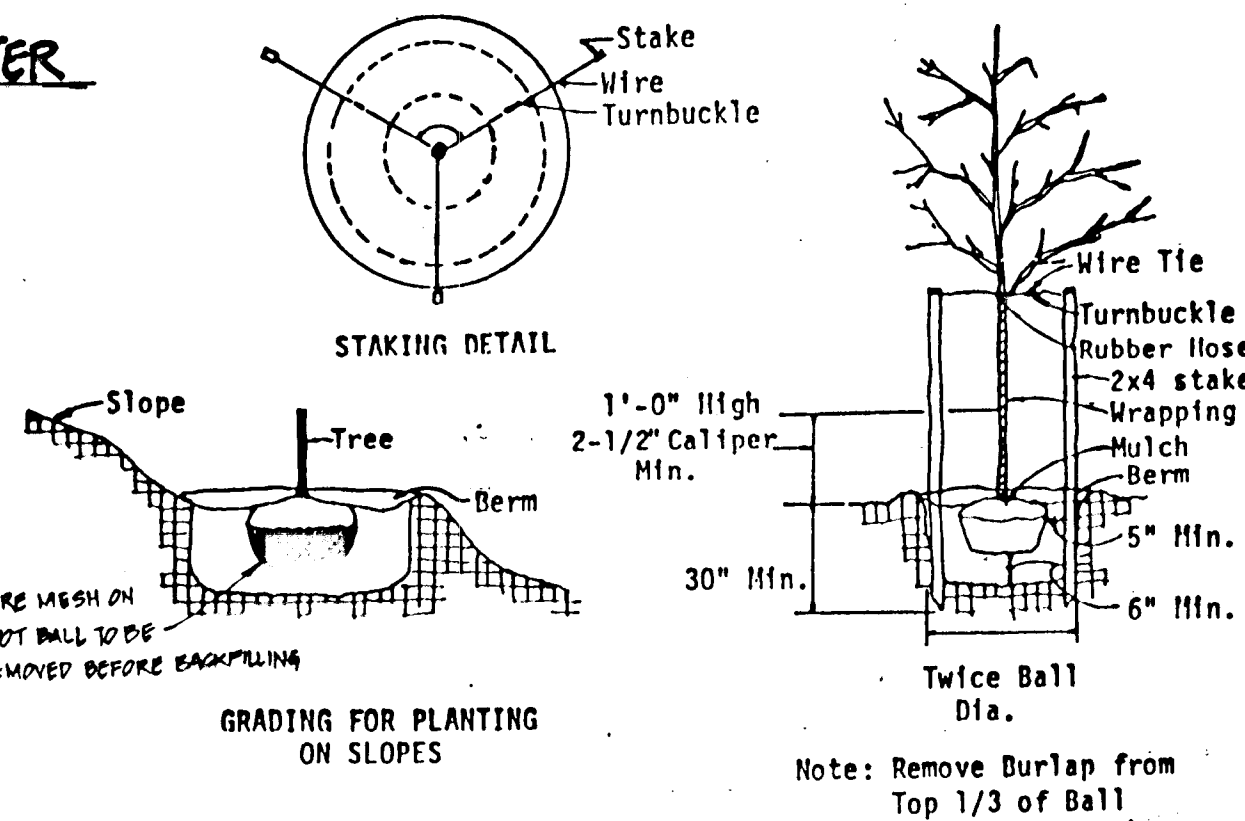
**TYPICAL INTERSECTION GRADING DETAIL**  
NOT TO SCALE



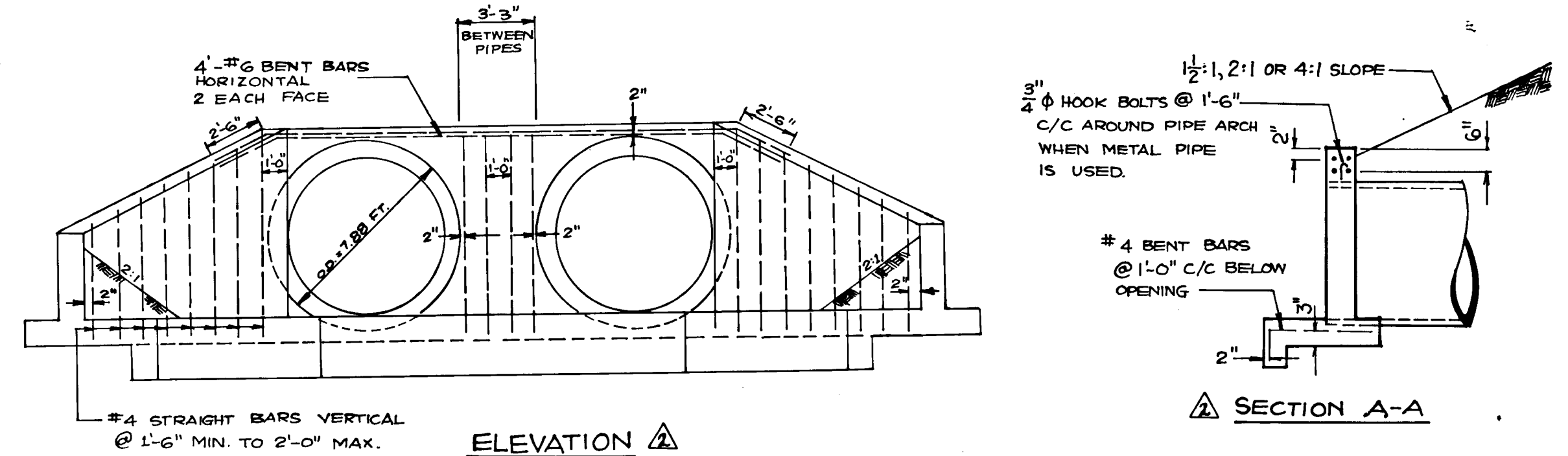
**STD. 7" COMBINATION CURB AND GUTTER**  
NOT TO SCALE



**LOCAL STREET**  
**WORTHINGTON WAY**  
STA. 1+00 TO STA. 1+25 & STA. 2+55 TO STA. 4+40  
EX. ZONING: R-20; DESIGN SPEED: 30 MPH; 11' PAVING  
NOT TO SCALE

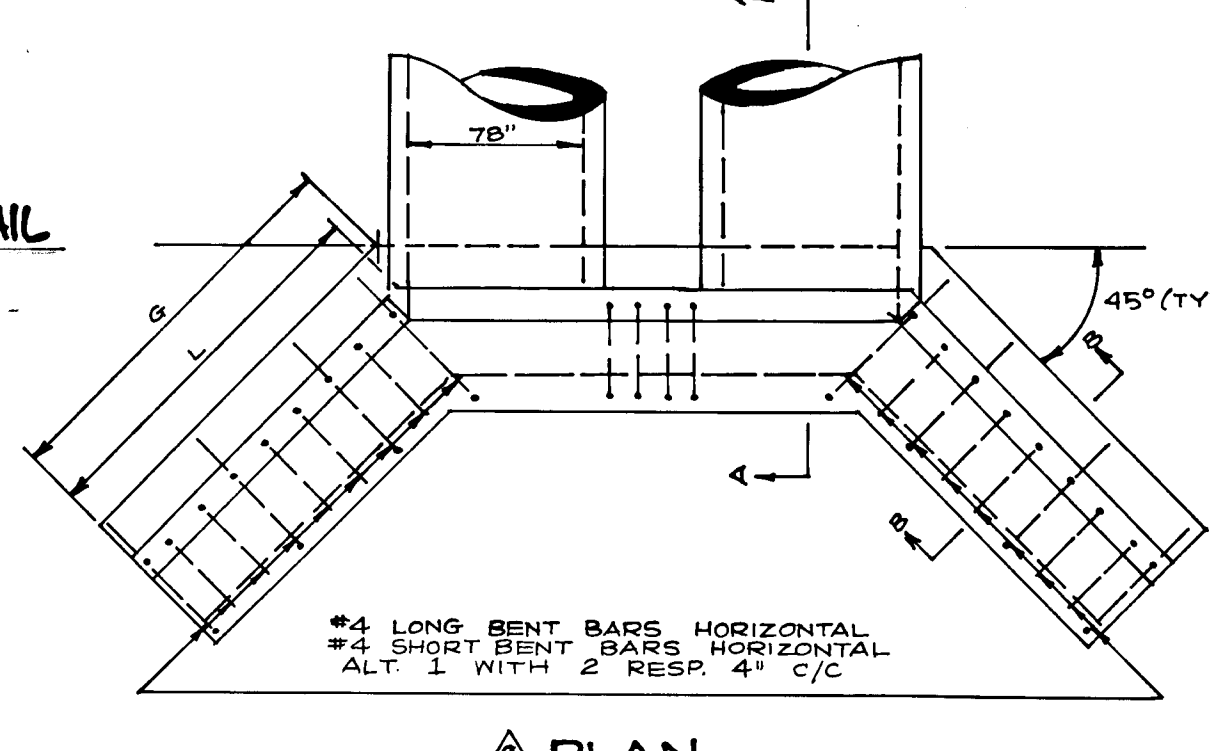


**TREE PLANTING DETAIL**  
NOT TO SCALE

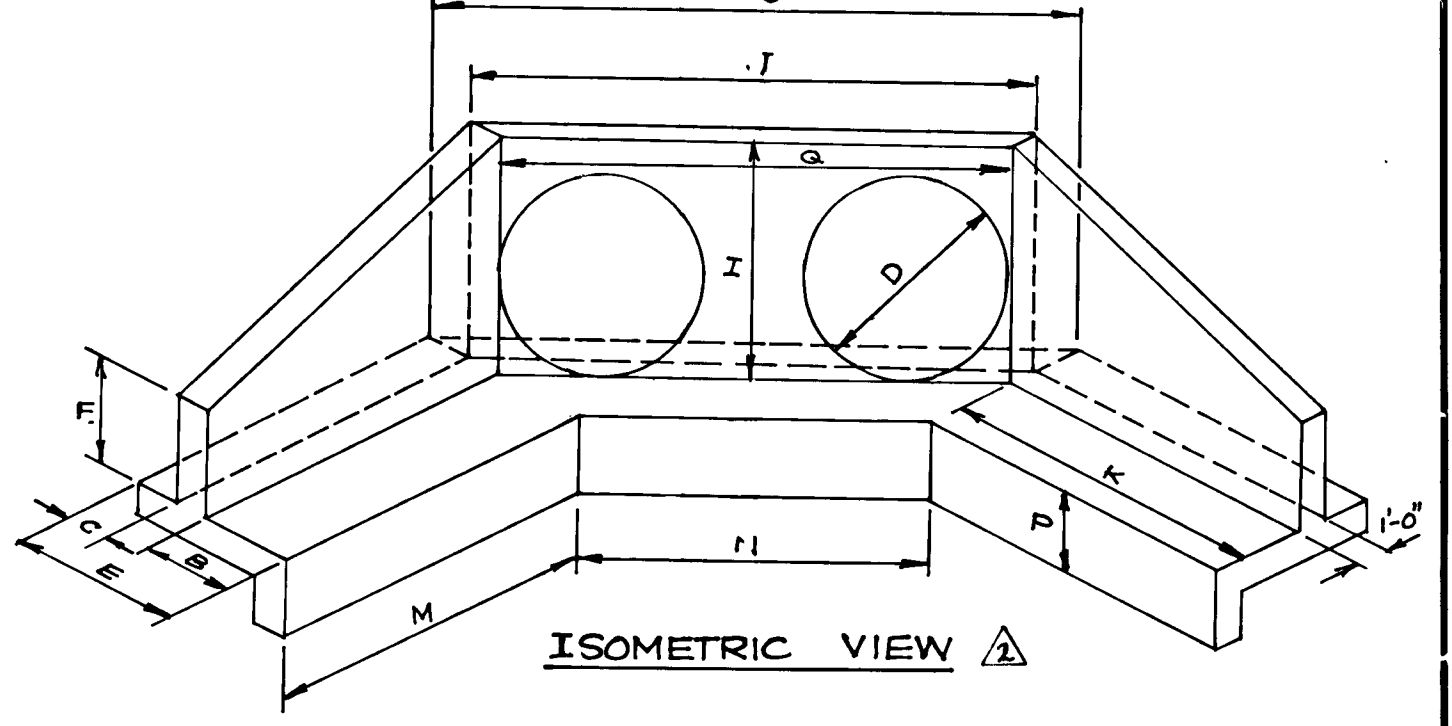


**ELEVATION**

**SECTION A-A**

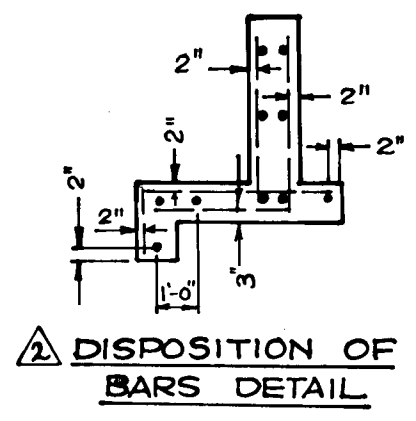


**PLAN**

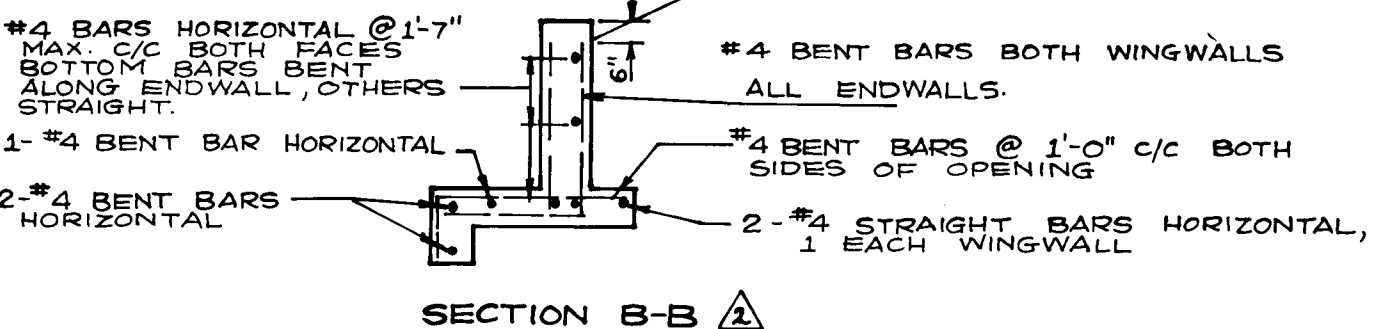


**ISOMETRIC VIEW**

OPENING IN INCHES	B	C	E	F	G	H	J	K	L	M	N	O	P	Q
78	3'-0"	1'-6"	5'-6"	3'-6"	13'-0 1/2"	7'-9 1/2"	18'-5 1/2"	12'-0"	12'-5"	10'-9"	15'-11"	19'-8 1/2"	2'-6"	17'-7 1/2"

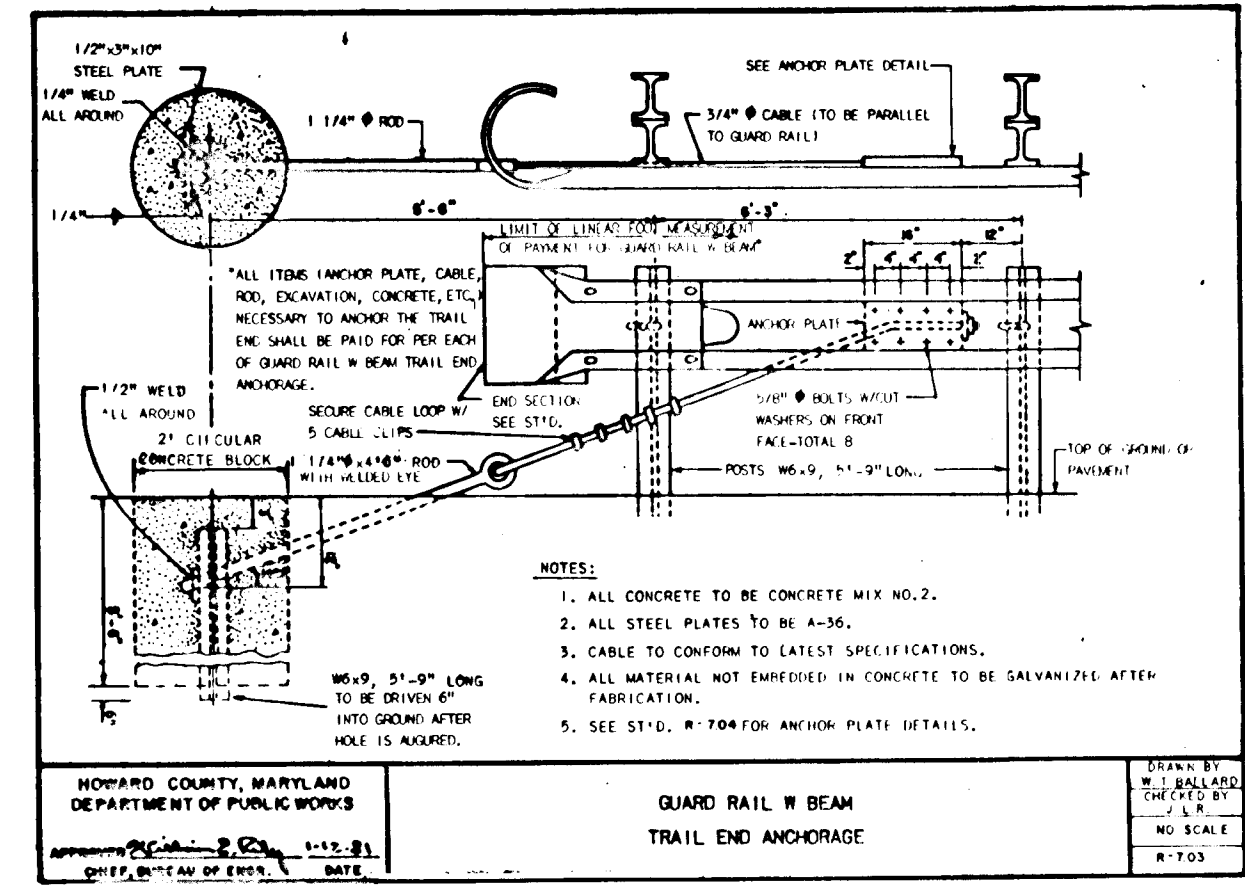


**DISPOSITION OF BARS DETAIL**

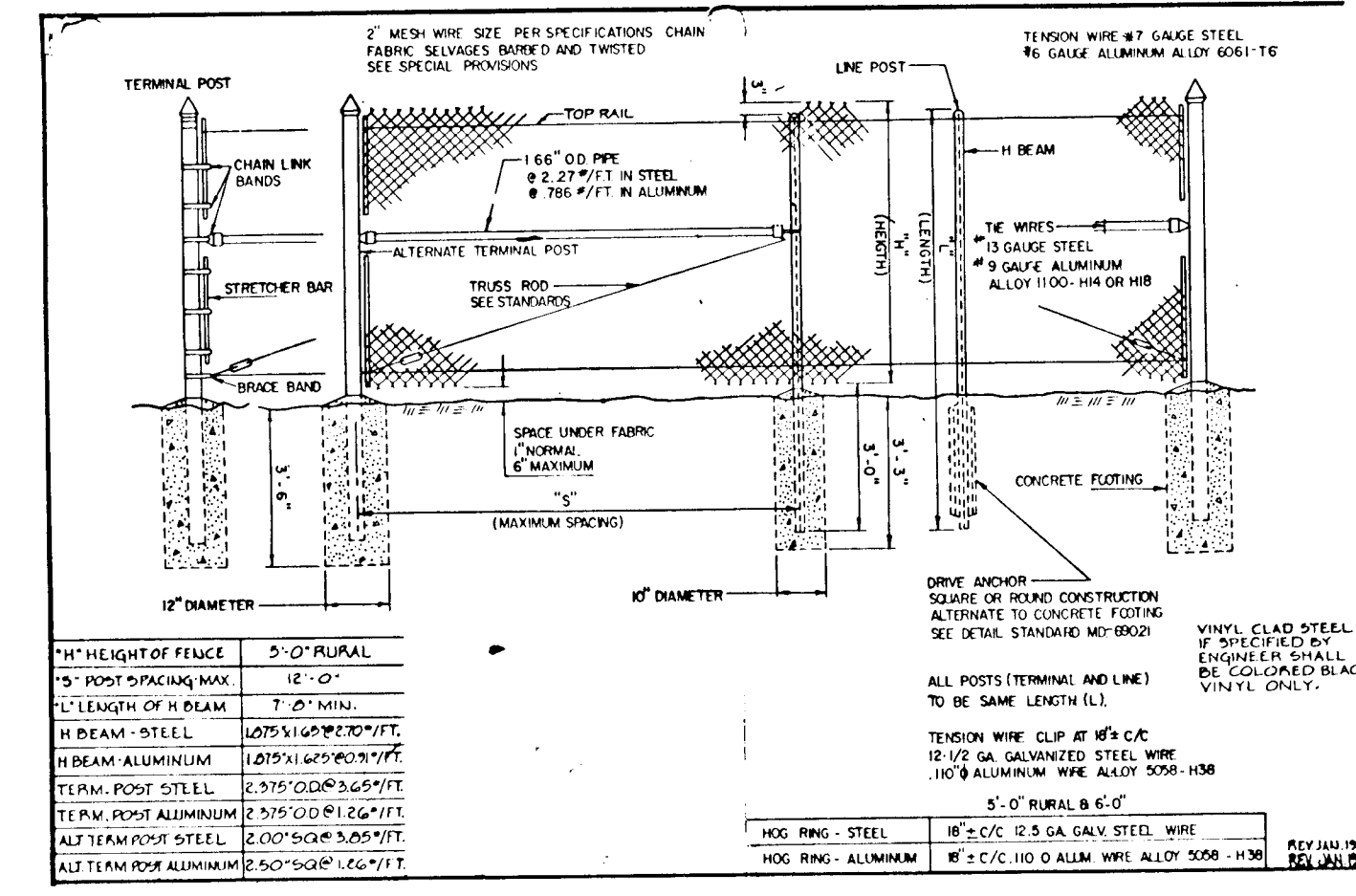


**SECTION B-B**

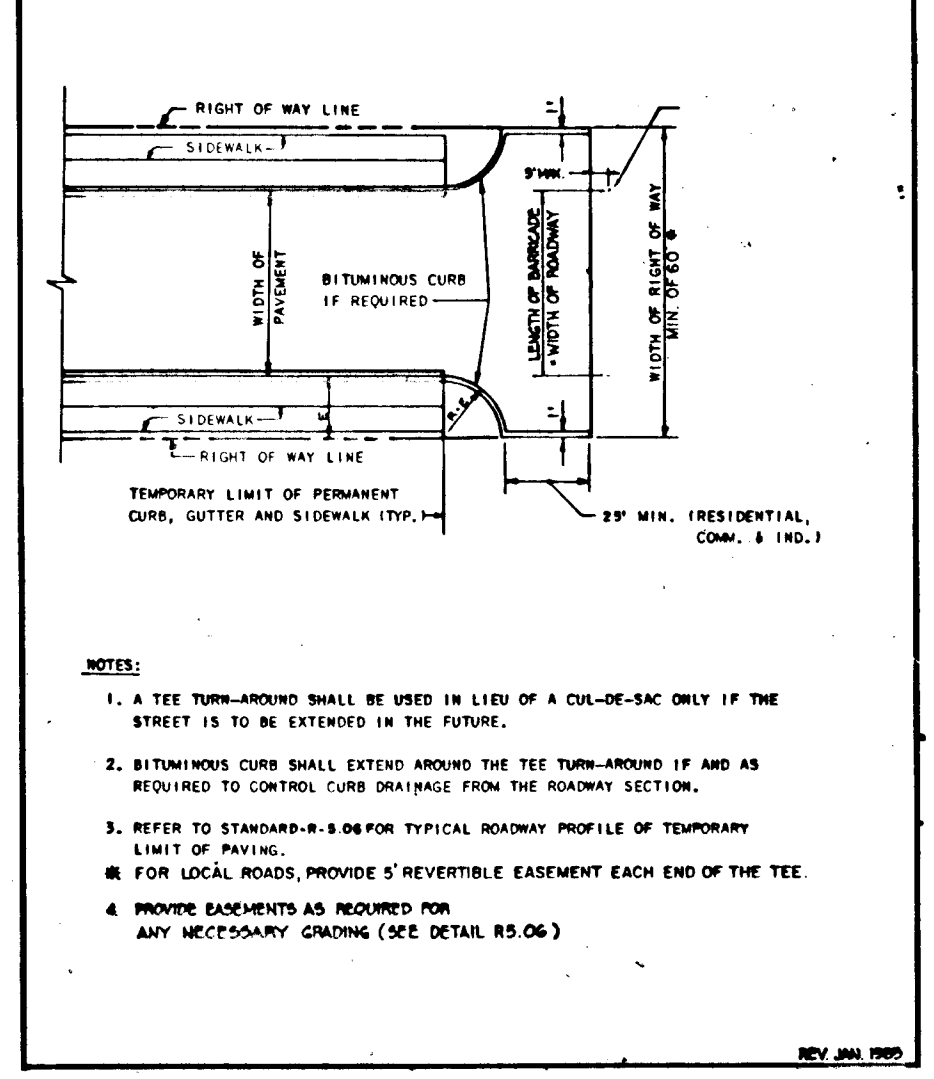
**GENERAL NOTES:**  
SPECIFICATIONS: LATEST S.H.A. CONCRETE; S.E.S. S.H.A. SPECIFICATIONS REINFORCING; DEFORMED STEEL BARS #4 & #6 CHAMFER; ALL EXPOSED EDGES 1" X 1" OR AS DIRECTED



**GUARD RAIL W BEAM TRAIL END ANCHORAGE**  
N.T.S.



**TYPICAL FENCE DETAIL**  
N.T.S.



**TYPICAL TEMPORARY TEE TURNAROUND**  
Not to Scale

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Chief, Land Development Division  
 Approved: Howard County Department of Planning and Zoning  
 Chief, Bureau of Engineering  
 Approved: Howard County Dept. of Planning and Zoning  
 Chief, Bureau of Planning and Land Development

DESIGNED	DATE	BY	DESCRIPTION
K.M.C.	2/80	E.R.B.	REVISED SECTION A-A, B-B, AND OTHER DETAILS AS NOTED BY A.
C.C.	2/80		
K.M.C.	2/80		
J.L.W.	2/80		

**Dewberry & Davis**  
 ARCHITECTS - ENGINEERS - PLANNERS - SURVEYORS  
 200 Harry S. Truman Parkway, Annapolis, Maryland 21401  
 8411 Arlington Boulevard, Fairfax, Virginia 22030

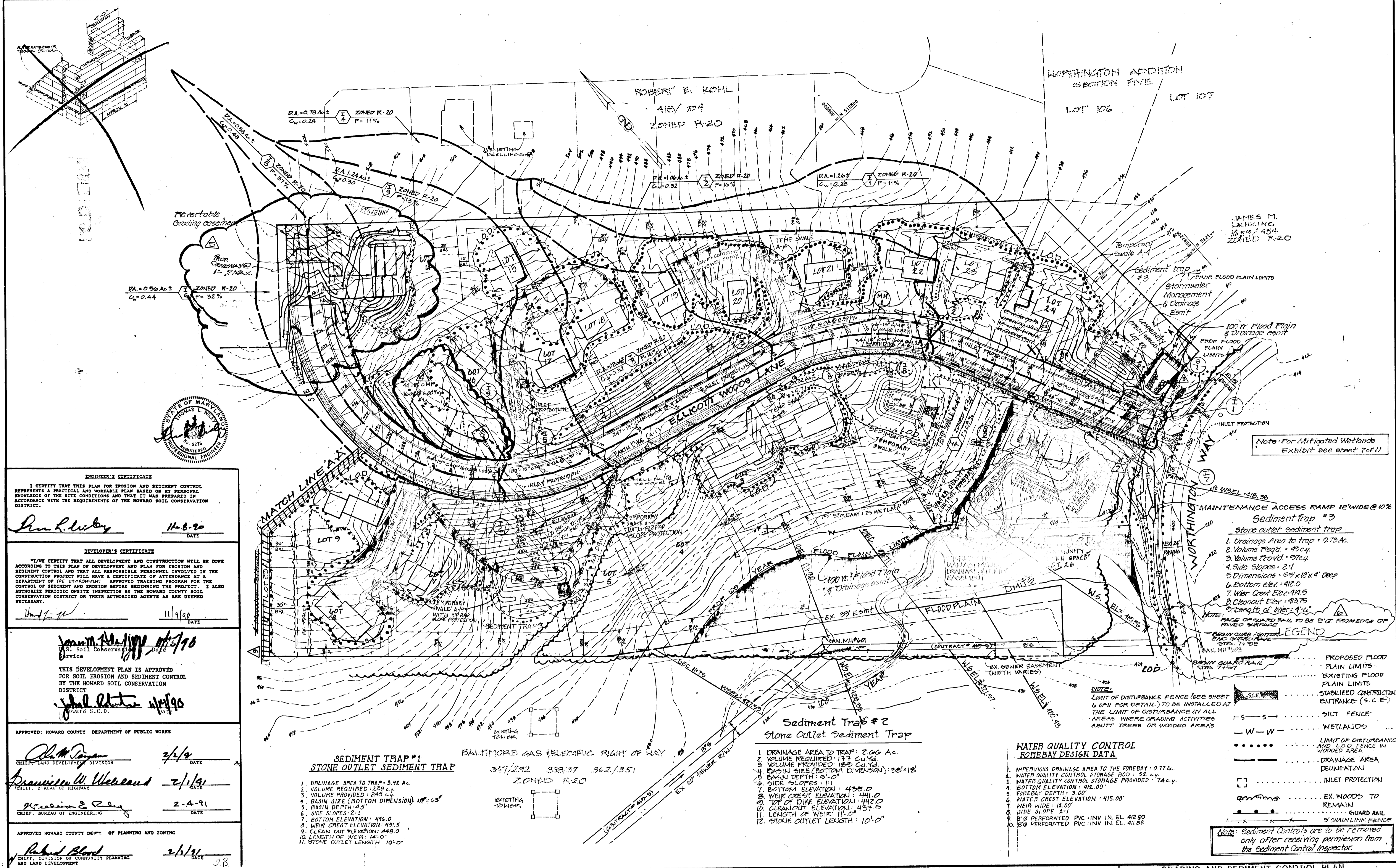


**OWNER**  
 HOWARD RESNECK  
 4645 NEW CUT ROAD  
 ELLICOTT CITY, MD 21043

**DEVELOPER**  
 HOWARD RESNECK  
 4645 NEW CUT ROAD  
 ELLICOTT CITY, MD 21043

DAVID E. SERVINSEY  
 c/o VERNON J. ROBINSON  
 7812 SANDY PINE ROAD  
 SEVERN, MD 21144

**ROAD CONSTRUCTION DETAILS**  
**ELLCOTT WOODS LOTS 1-29**  
 TAX MAP 31 PARCEL 768,769,308,22,558  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 PREVIOUS SUBMITTALS: S-88-34, P-88-63 S-89-54 WP-89-83  
 SUBMITTAL: S-88-34, P-88-63  
 SCALE: AS SHOWN  
 SHEET 4 OF 11



**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 Dan L. Lundy 11-8-90  
 DATE

**DEVELOPER'S CERTIFICATE**  
 I, THE DEVELOPER, 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 THE ENVIRONMENT 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 NECESSARY.  
 David J. ... 11/9/90  
 DATE

**APPROVED FOR SOIL CONSERVATION DISTRICT**  
 John M. ... 11/9/90  
 DATE

**APPROVED FOR HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS**  
 ... 2/1/91  
 DATE

**APPROVED FOR HOWARD COUNTY DEPT. OF PLANNING AND ZONING**  
 ... 2/1/91  
 DATE

**SEDIMENT TRAP #1**  
**STONE OUTLET SEDIMENT TRAP**  
 1. DRAINAGE AREA TO TRAP: 5.42 AC.  
 2. VOLUME REQUIRED: 128 C.Y.  
 3. VOLUME PROVIDED: 245 C.Y.  
 4. BASIN SIZE (BOTTOM DIMENSION): 10' x 63'  
 5. BASIN DEPTH: 4.5'  
 6. SIDE SLOPES: 2:1  
 7. BOTTOM ELEVATION: 416.0  
 8. WEIR CREST ELEVATION: 415.5  
 9. CLEAN OUT ELEVATION: 418.0  
 10. LENGTH OF WEIR: 14'-0"  
 11. STONE OUTLET LENGTH: 10'-0"

**Sediment Trap #2**  
**Stone Outlet Sediment Trap**  
 1. DRAINAGE AREA TO TRAP: 2.06 AC.  
 2. VOLUME REQUIRED: 177 C.Y.  
 3. VOLUME PROVIDED: 183 C.Y.  
 4. BASIN SIZE (BOTTOM DIMENSION): 38' x 18'  
 5. BASIN DEPTH: 5'-0"  
 6. SIDE SLOPES: 1:1  
 7. BOTTOM ELEVATION: 435.0  
 8. WEIR CREST ELEVATION: 441.0  
 9. TOP OF DIKE ELEVATION: 442.0  
 10. CLEANOUT ELEVATION: 437.5  
 11. LENGTH OF WEIR: 11'-0"  
 12. STONE OUTLET LENGTH: 10'-0"

**WATER QUALITY CONTROL FOREBAY DESIGN DATA**  
 1. IMPERVIOUS DRAINAGE AREA TO THE FOREBAY: 0.77 AC.  
 2. WATER QUALITY CONTROL STORAGE ROD: 52 C.Y.  
 3. WATER QUALITY CONTROL STORAGE PROVIDED: 74 C.Y.  
 4. BOTTOM ELEVATION: 411.00'  
 5. FOREBAY DEPTH: 3.00'  
 6. WATER CREST ELEVATION: 415.00'  
 7. WEIR WIDE: 12.00'  
 8. WEIR SLOPE: 2:1  
 9. PERFORATED PVC: INV IN. EL. 412.00  
 10. 80 PERFORATED PVC: INV IN. EL. 411.82

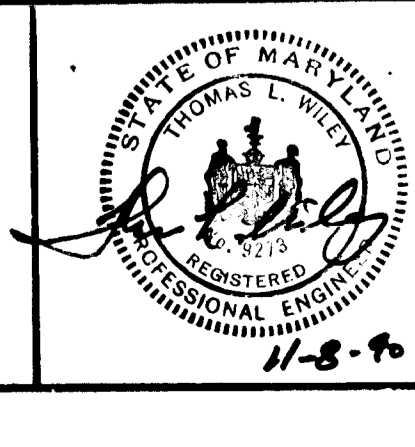
**LEGEND**  
 PROPOSED FLOOD PLAIN LIMITS  
 EXISTING FLOOD PLAIN LIMITS  
 STABILIZED CONSTRUCTION ENTRANCE (S.C.E.)  
 SILT FENCE  
 WETLANDS  
 LIMIT OF DISTURBANCE AND L.O.D. FENCE IN WOODED AREA  
 DRAINAGE AREA DELINEATION  
 INLET PROTECTION  
 EX. WOODS TO REMAIN  
 GUARD RAIL  
 CHAIN LINK FENCE

Note: Sediment Controls are to be removed only after receiving permission from the Sediment Control Inspector.

1616

DESIGNED		DATE		BY		DESCRIPTION	
AS, KC	9/89	11-27-91	ERS	REVISED	15' CAMP AND ENDWALL AND RIP-RAP SECTION. SEE A		
DP	9/89	1-10-93	WED	REVISED	GRADING OLD		
KAC	9/89	5-9-95	MRO	REVISED	"TURBIDITY" GRADING LOT 14		
TLW	9/89	7-21-95	MRO	REVISED	REMOVE CURB, SUTTER AND REFERENCE HIGHWAY 282. REMOVE CURB, SUTTER AND REFERENCE HIGHWAY 282. REMOVE CURB, SUTTER AND REFERENCE HIGHWAY 282.		

**Dewberry & Davis**  
 ARCHITECTS - ENGINEERS - PLANNERS - SURVEYORS  
 200 Harry S. Truman Parkway, Annapolis, MD 21401  
 (301)261-8707 Fax (301)970-2124



**OWNERS**  
 HOWARD RESERVE  
 4645 NEW CUT ROAD  
 ELLICOTT CITY, MD 21043

**DEVELOPERS:**  
 HOWARD RESERVE  
 4645 NEW CUT ROAD  
 ELLICOTT CITY, MD 21043

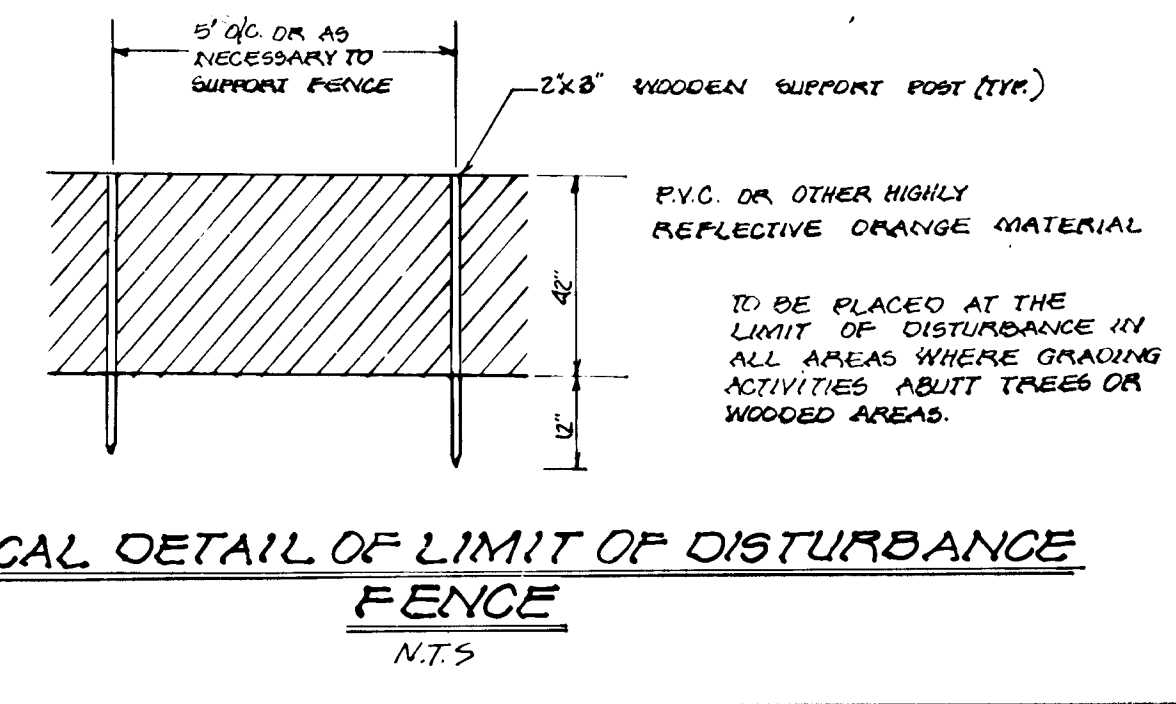
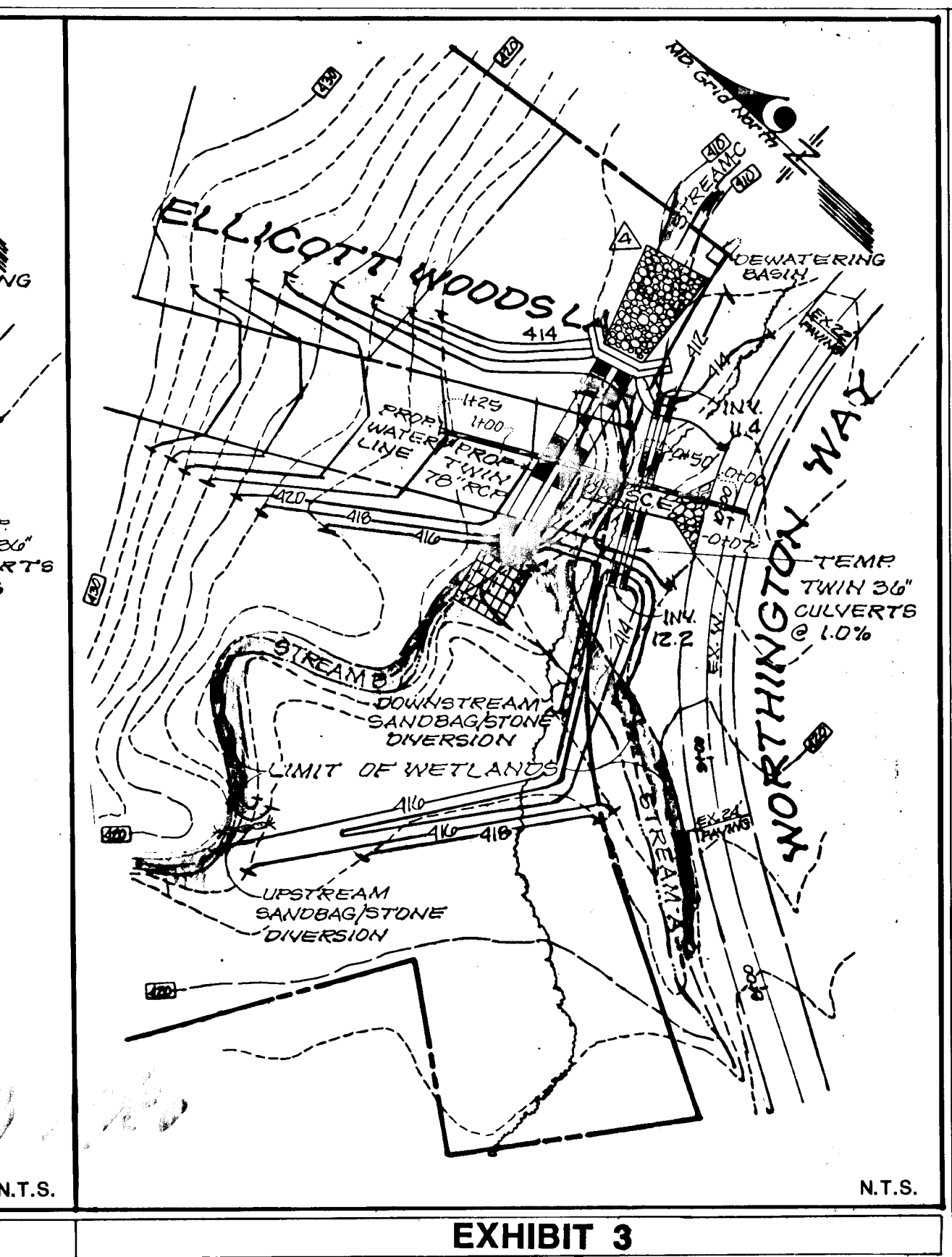
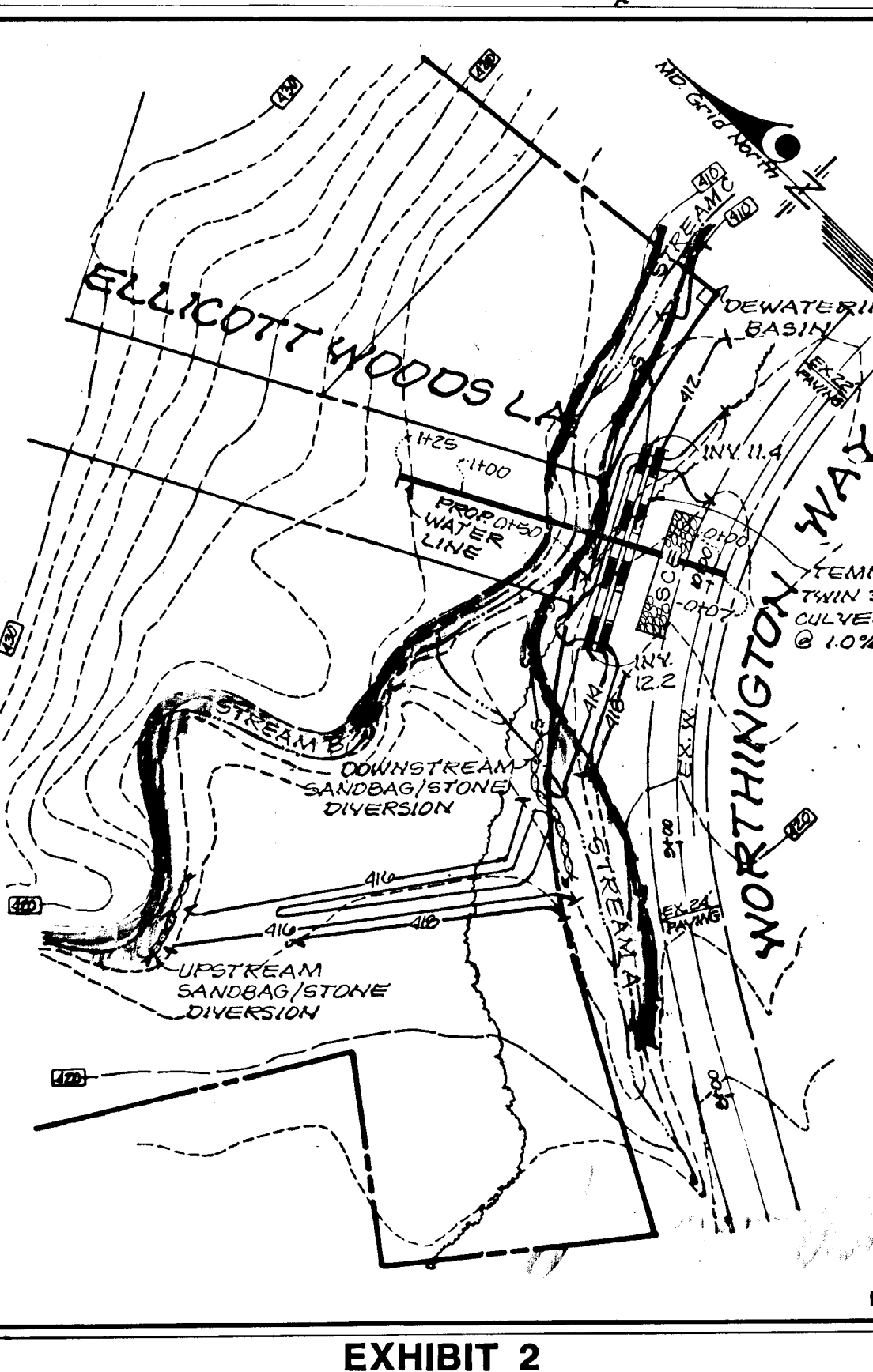
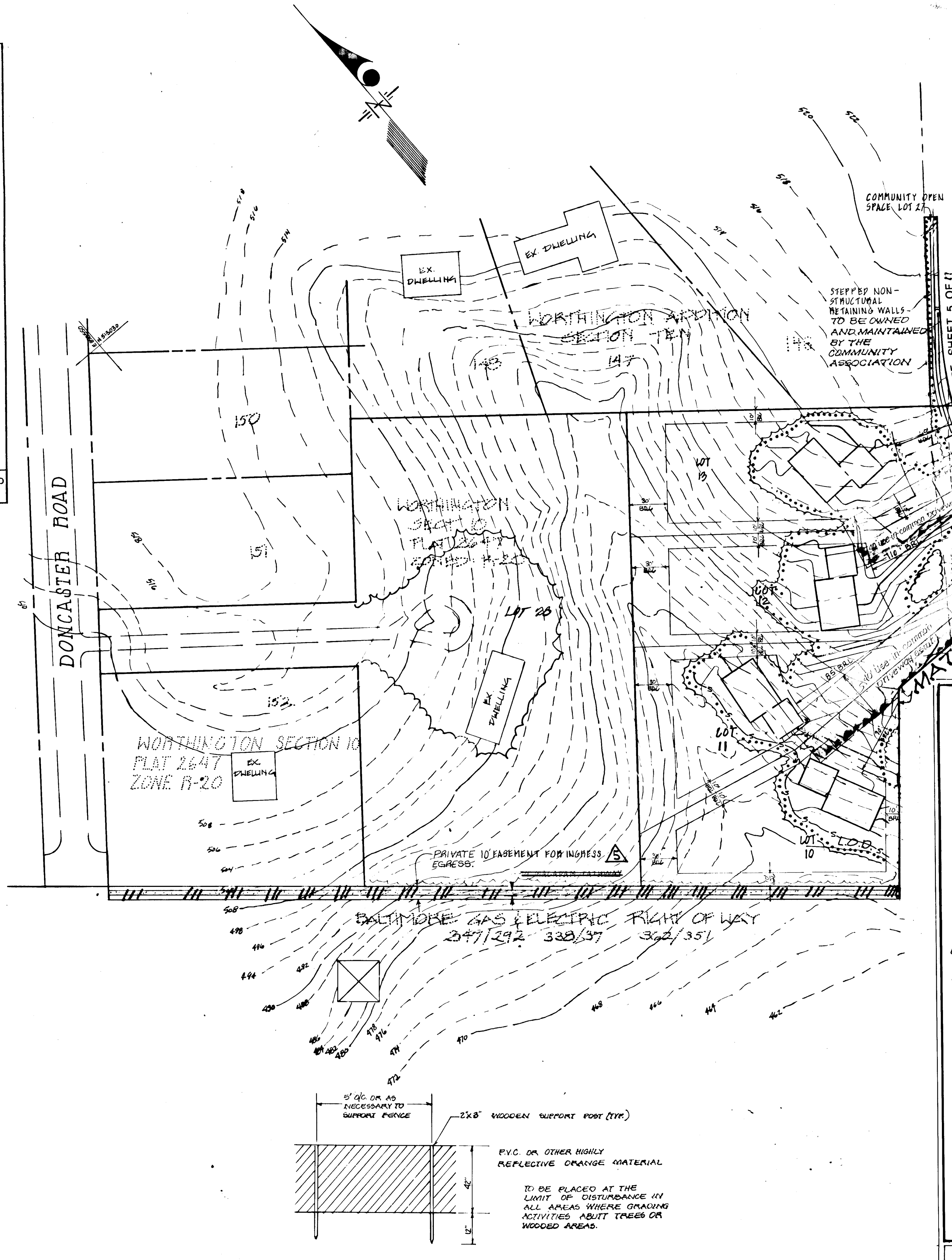
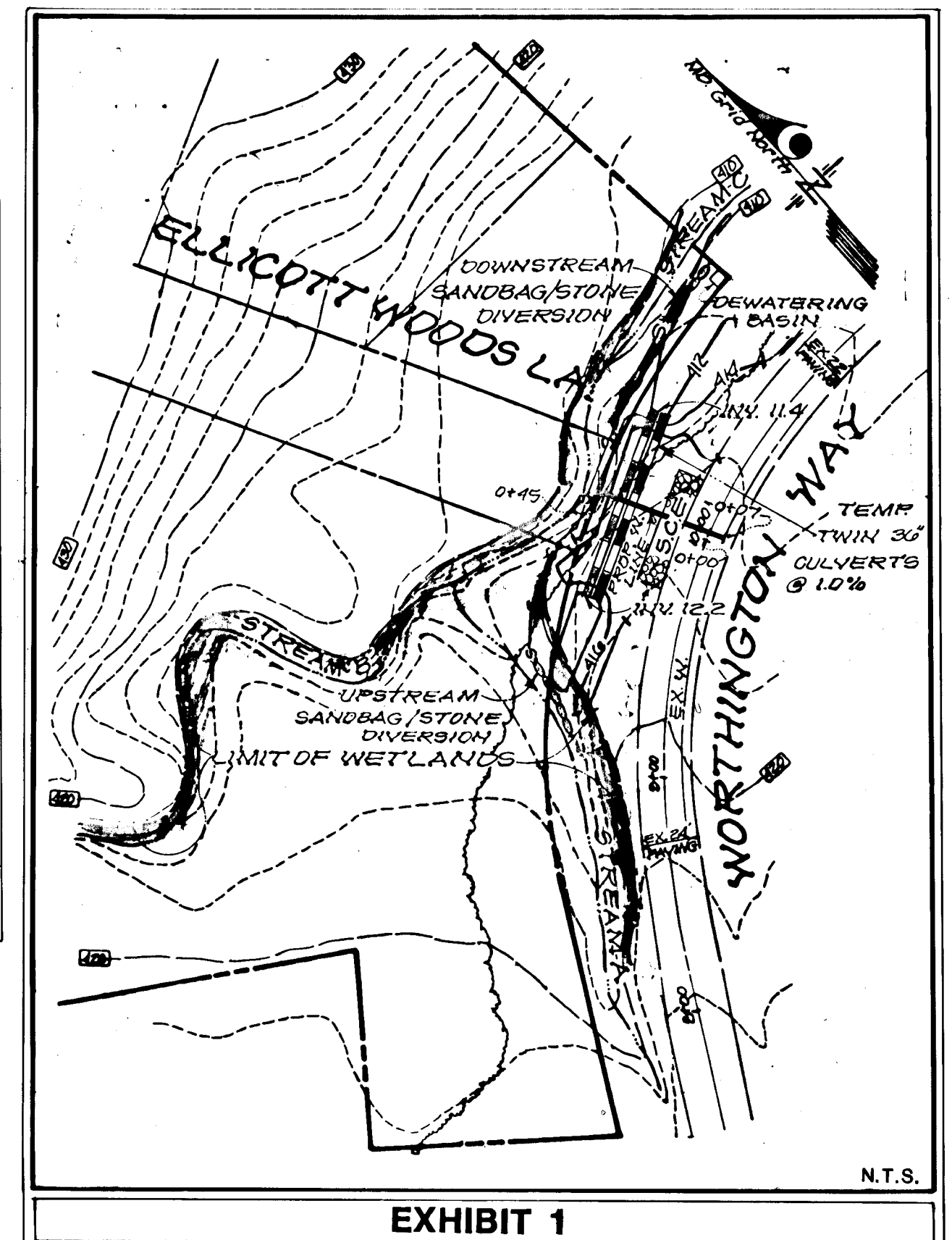
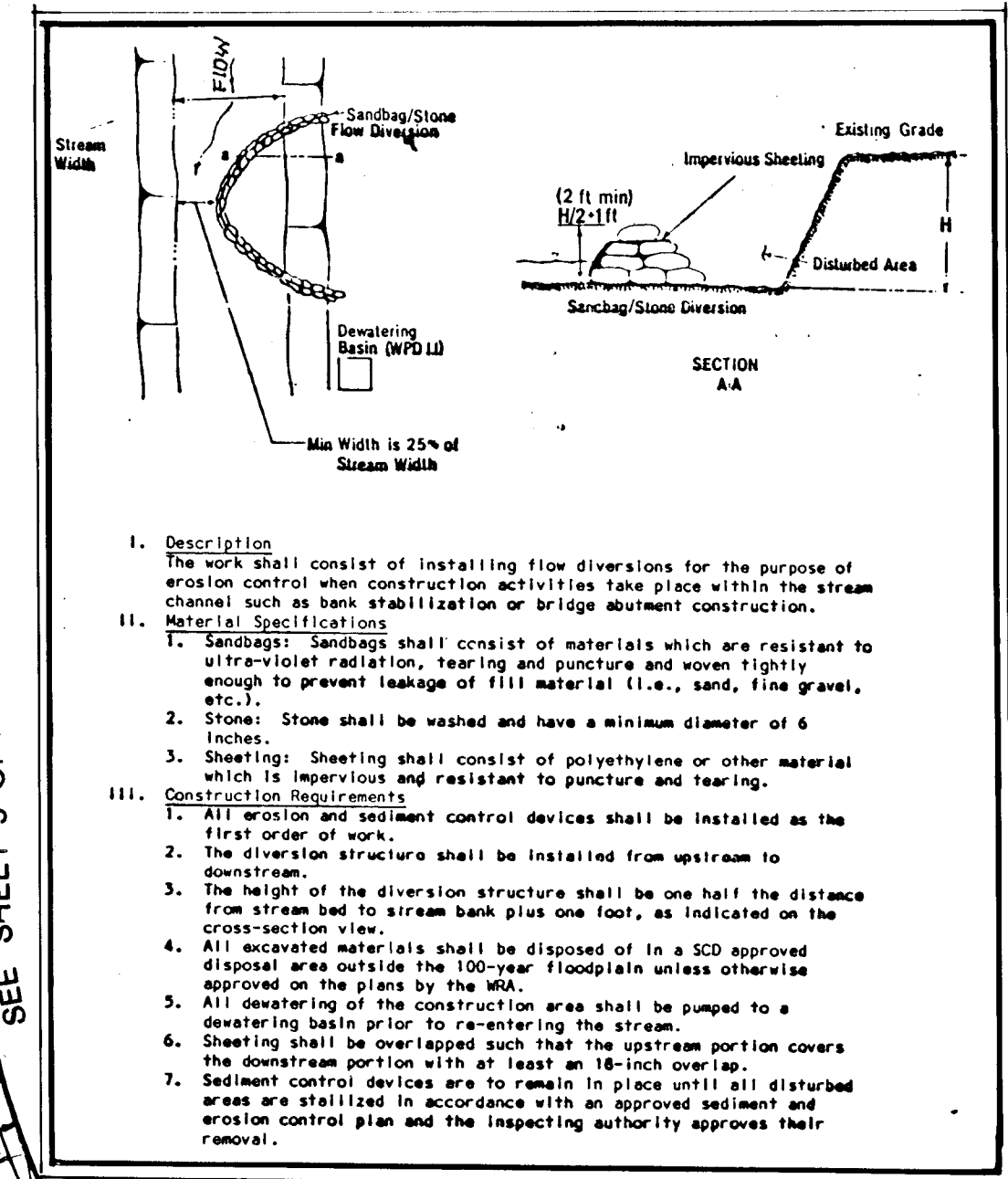
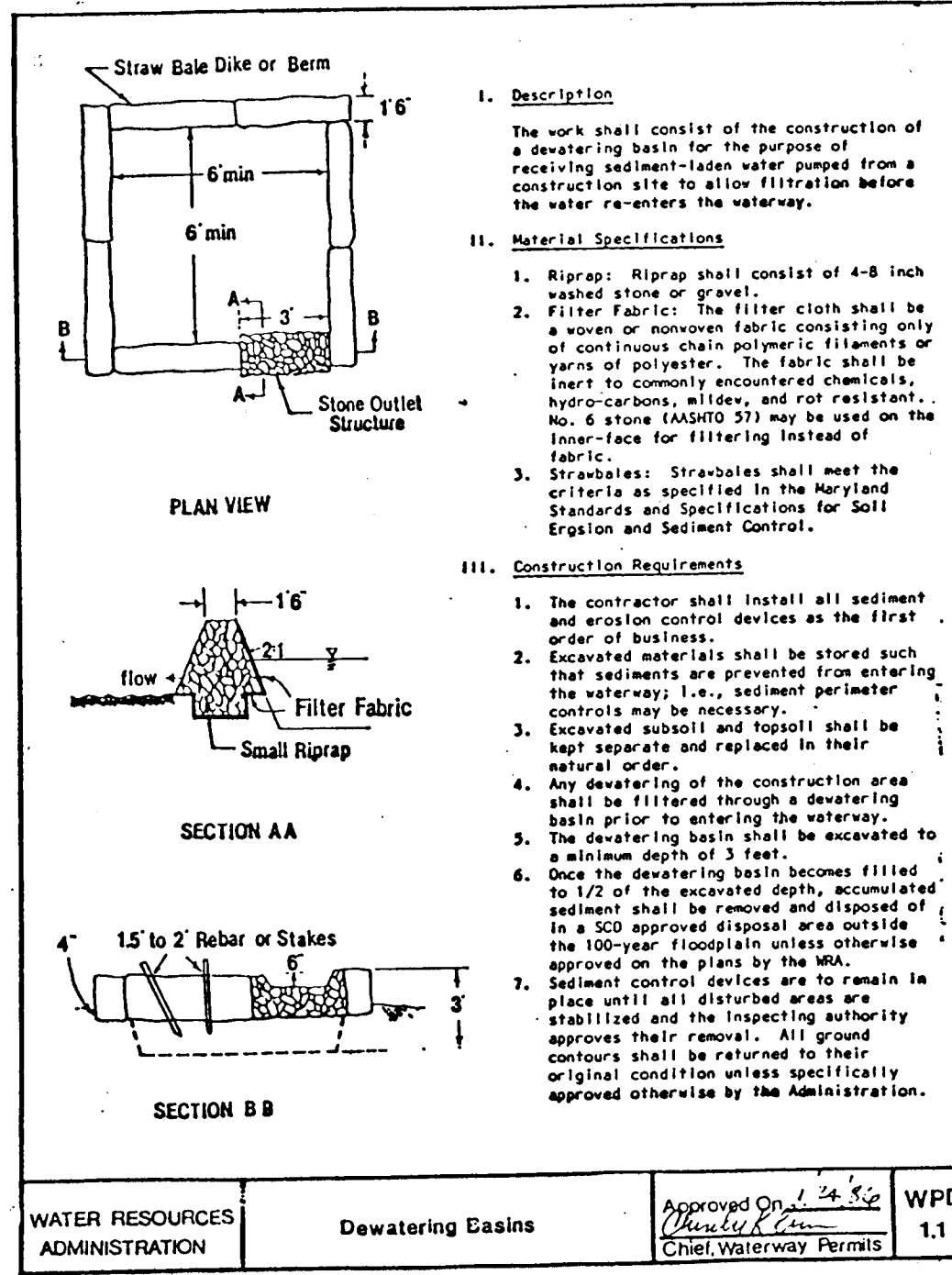
DAVID E. SEVINSKY  
 c/o VERNON J. ROBINSON  
 7872 SANDY PINE ROAD  
 SEVEN, MD 21144

**GRADING AND SEDIMENT CONTROL PLAN**  
**ELLICOTT WOODS LOTS 1-29**  
**DRAINAGE AREA MAP**

TAX MAP 31 PARCEL 758,769,308,22,558  
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 PREVIOUS SUBMITTALS: 8-88-34, P-88-63 8-89-54 WP-89-83

SEPTEMBER, 1989

PREVIOUS 5-89-54, WP-89-53, SUBMITTAL: 2-88-34, P-88-62 FILE NO. F-20 SHEET 5 OF 11



**ENGINEER'S CERTIFICATE**  
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
*Richard L. W. Davis*  
11-8-90  
DATE

**DEVELOPER'S CERTIFICATE**  
I 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 AS A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY.  
*Richard L. W. Davis*  
11/9/90  
DATE

**U.S. Soil Conservation Service**  
Date: \_\_\_\_\_  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Richard L. W. Davis*  
11/9/90  
HOWARD S.C.D.

**APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS**  
*Richard L. W. Davis*  
11/9/90  
DATE

**APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING**  
*Richard L. W. Davis*  
11/9/90  
DATE

**REVISIONS**

DESIGNED	DATE	BY	DESCRIPTION
H.S.W.	9/07		
DRAWN	11-27-91	ERB	REVISED ENDWALL & RIP-RAP SECTION
CHECKED	1-19-96	MRS	AND CONTOUR LINES. SEE A
APPROVED			REMOVE 4' MACADAM PATH

**Dewberry & Davis**  
ARCHITECTS — ENGINEERS — PLANNERS — SURVEYORS  
200 Harry S. Truman Parkway, Annapolis, Maryland 21401  
8411 Arlington Boulevard, Fairfax, Virginia 22030

**OWNER**  
RONARD RESNICK  
4645 NEW CUT ROAD  
ELICOTT CITY, MD 21043

**DEVELOPER**  
RONARD RESNICK  
4645 NEW CUT ROAD  
ELICOTT CITY, MD 21043

DAVID E. SERVINSEY  
c/o VERNON J. ROBINSON  
7872 SANDY PINE ROAD  
SEVERN, MD 21144

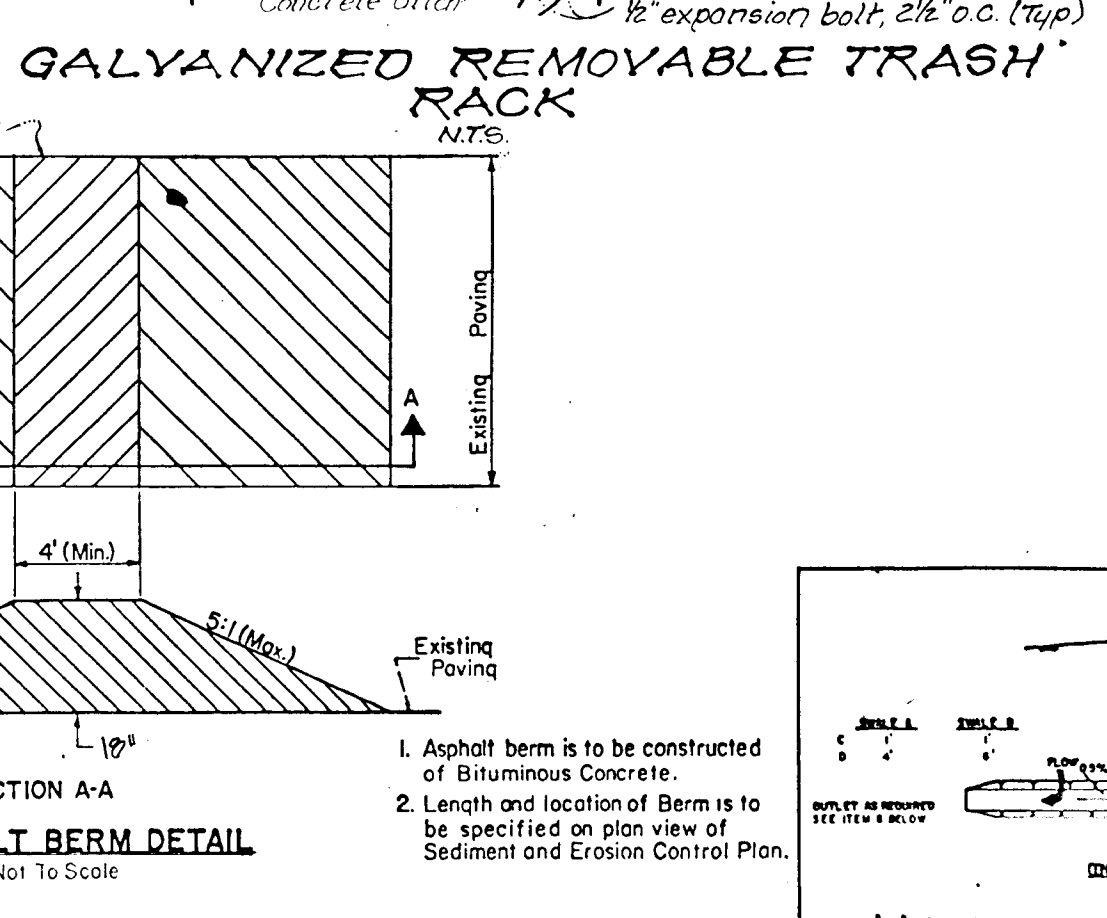
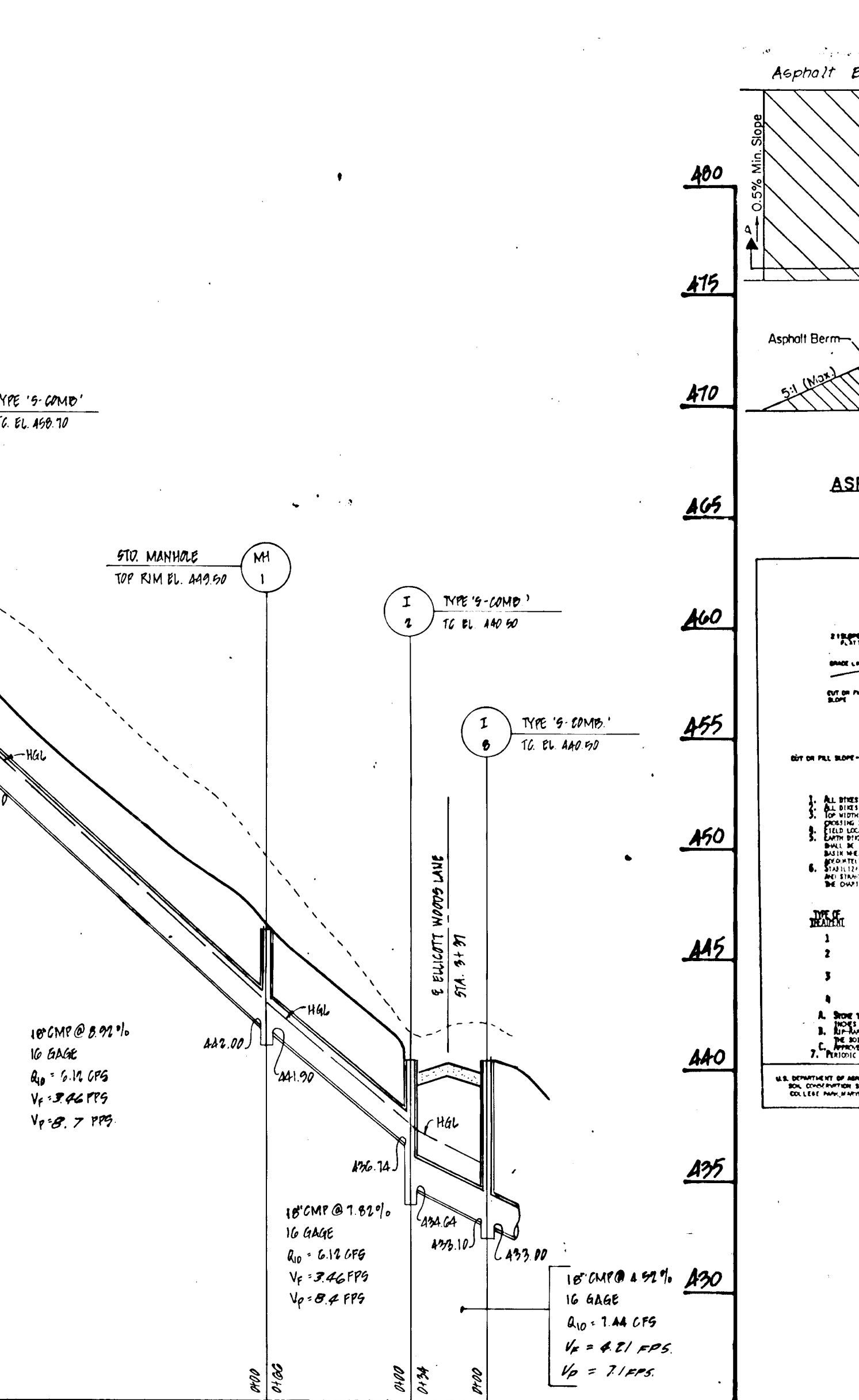
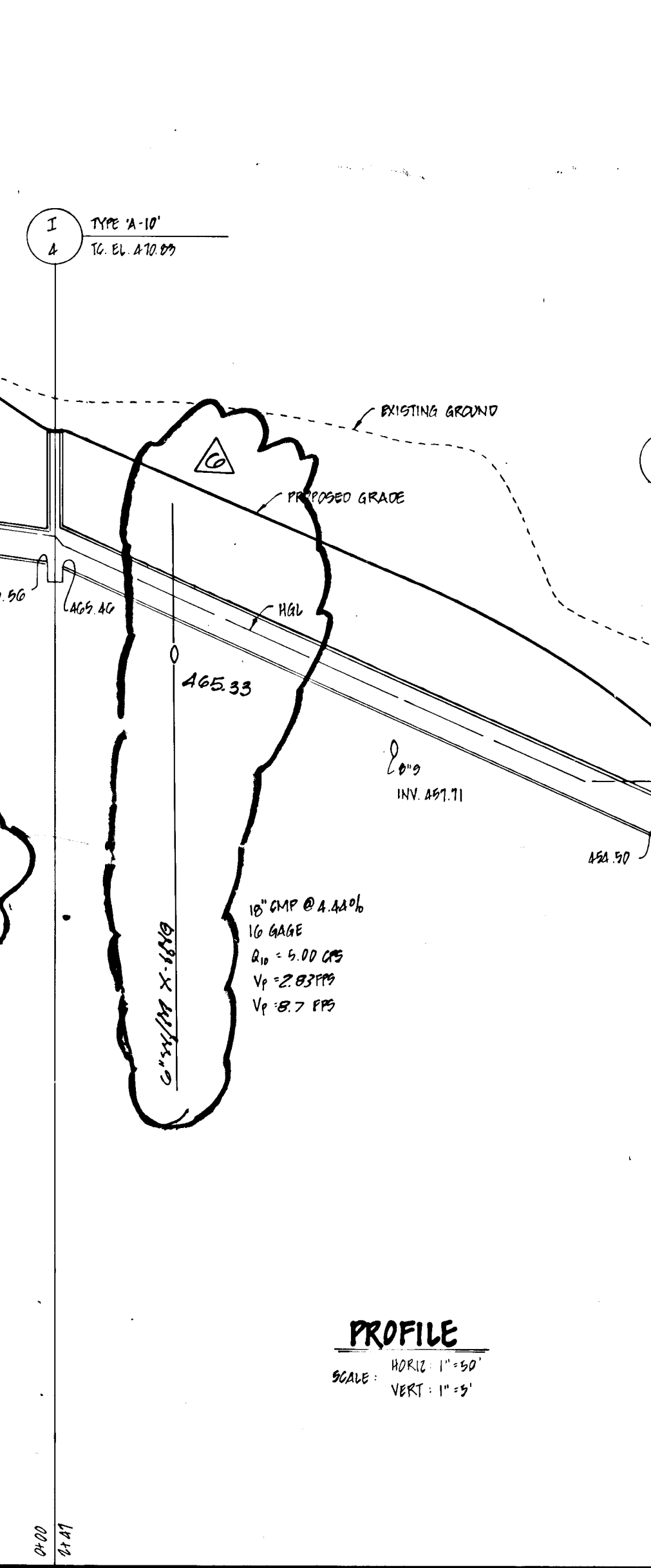
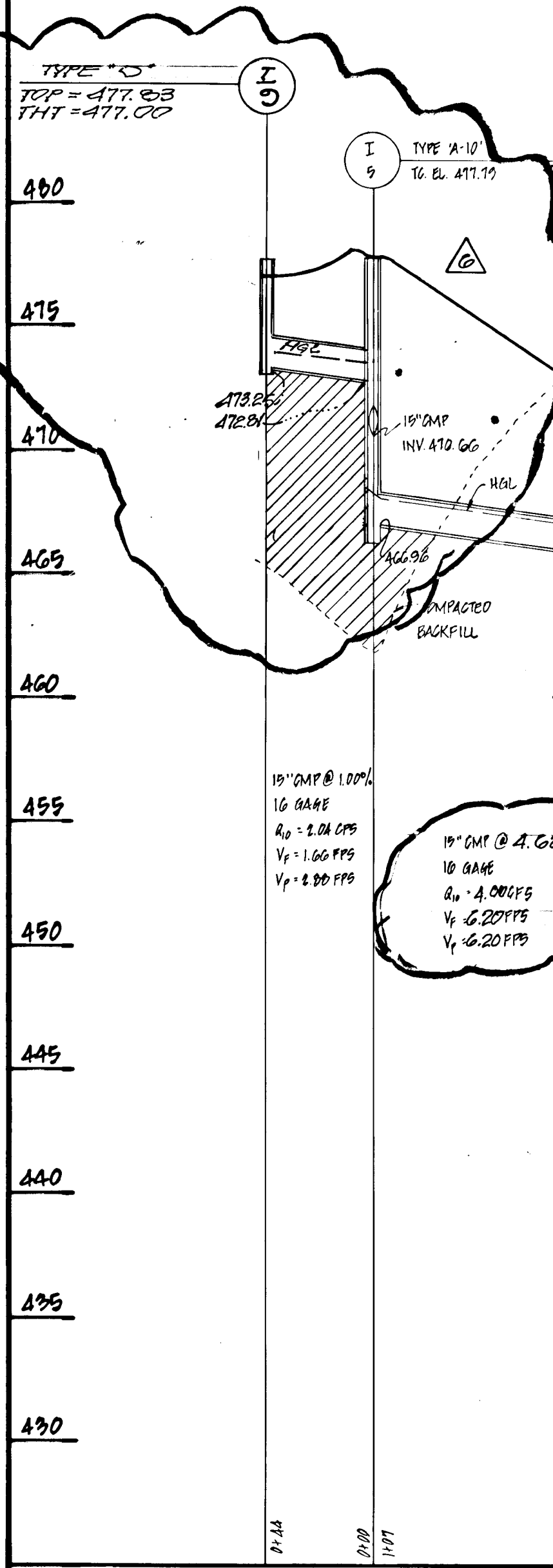
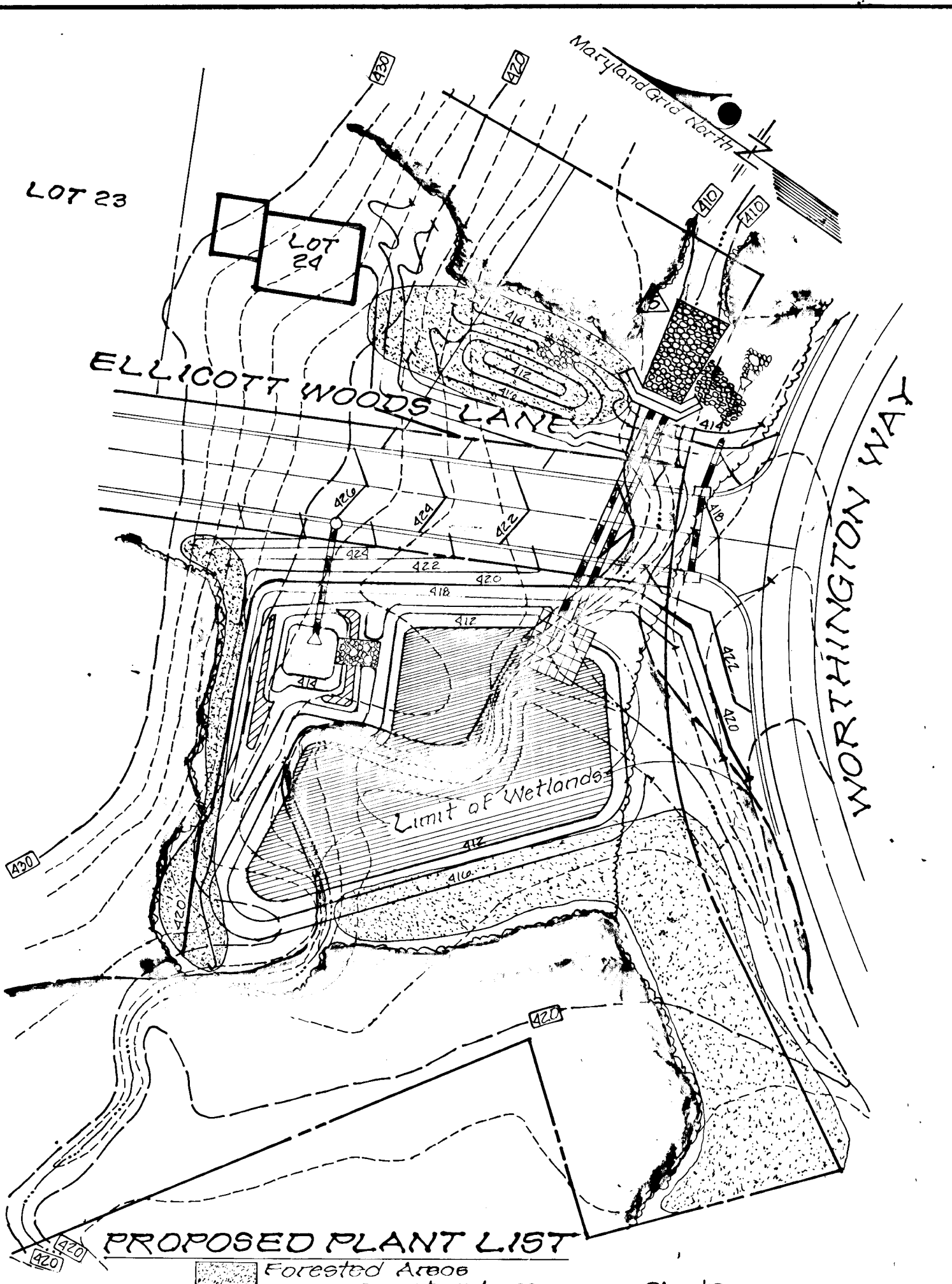
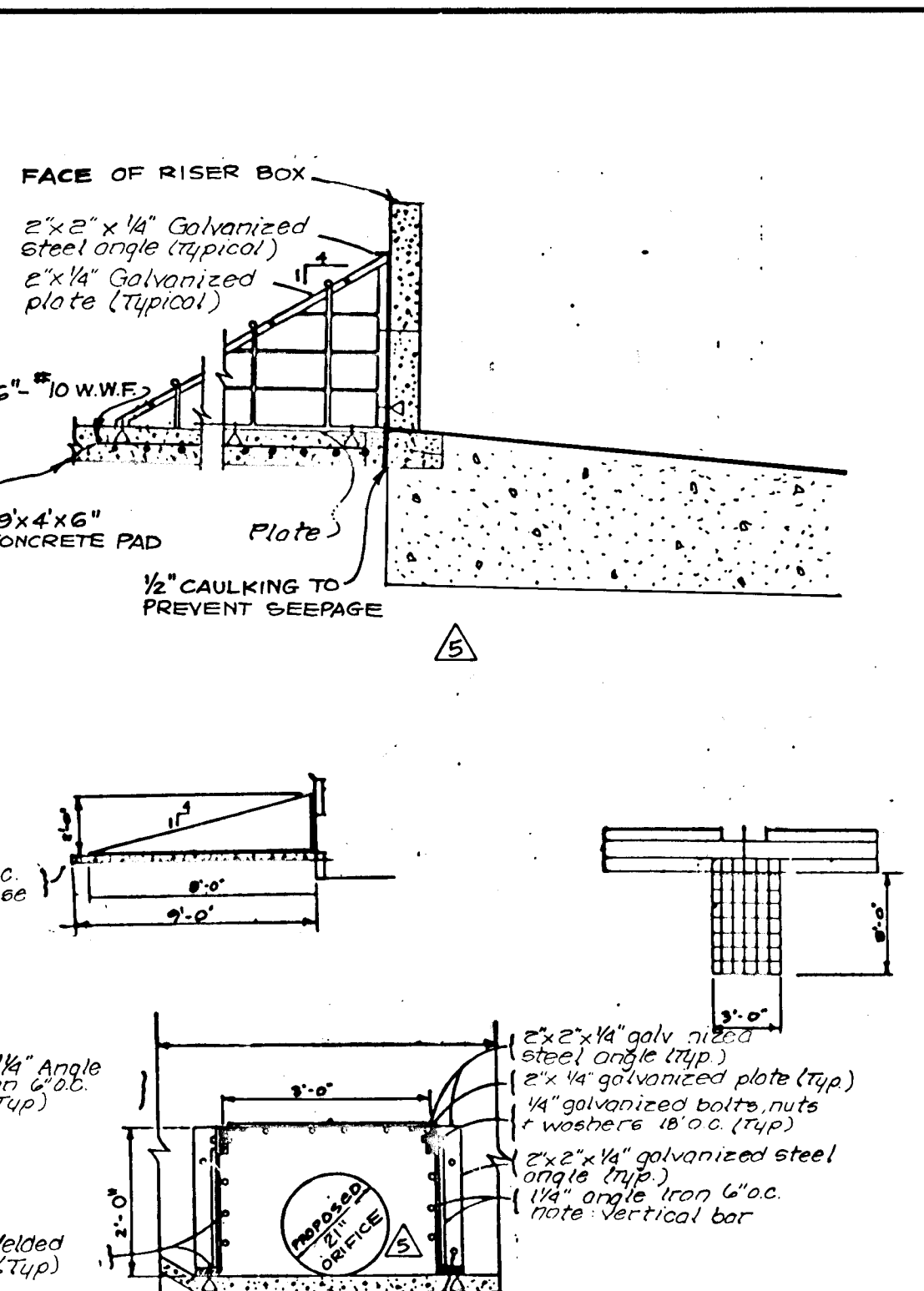
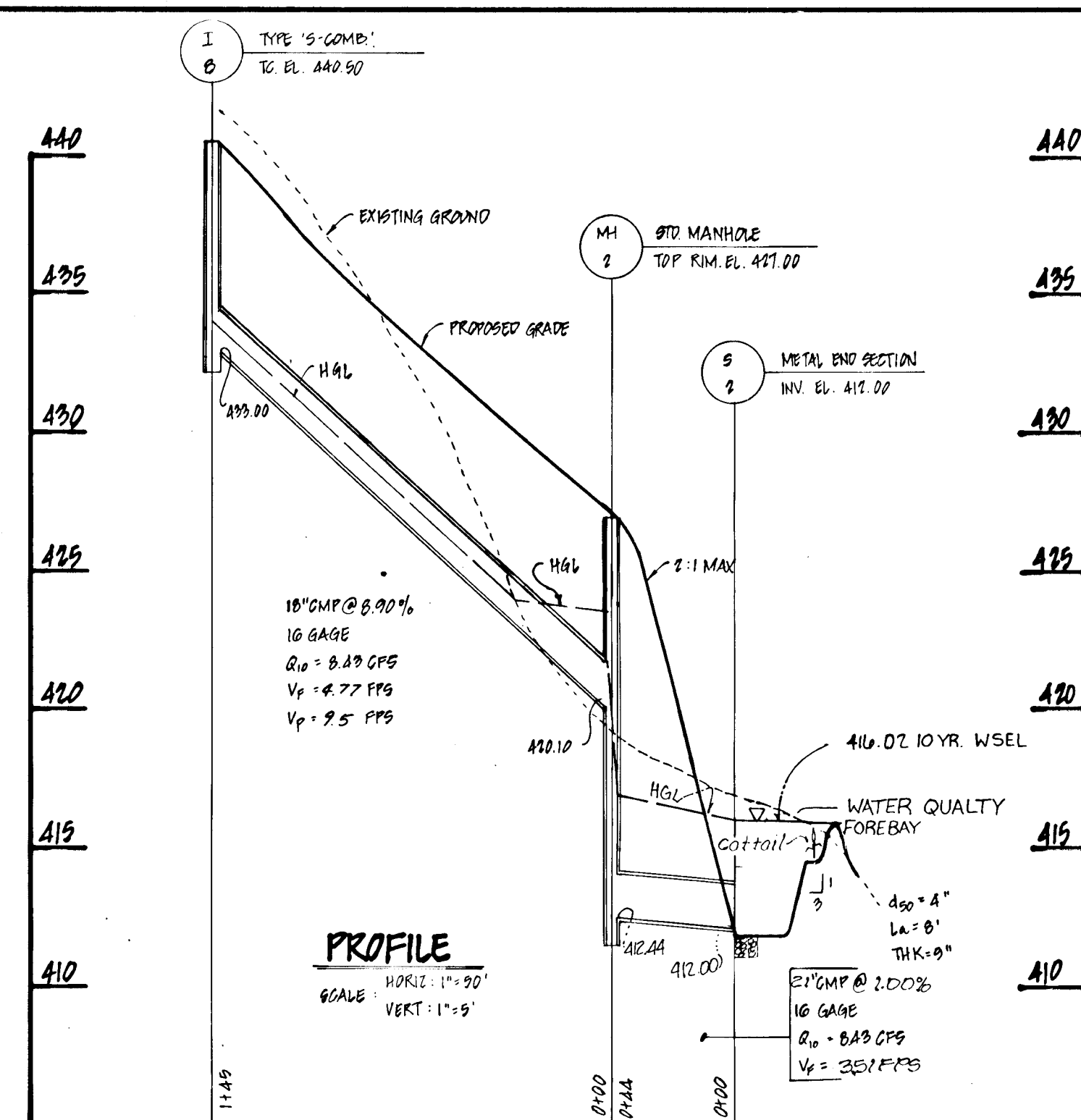
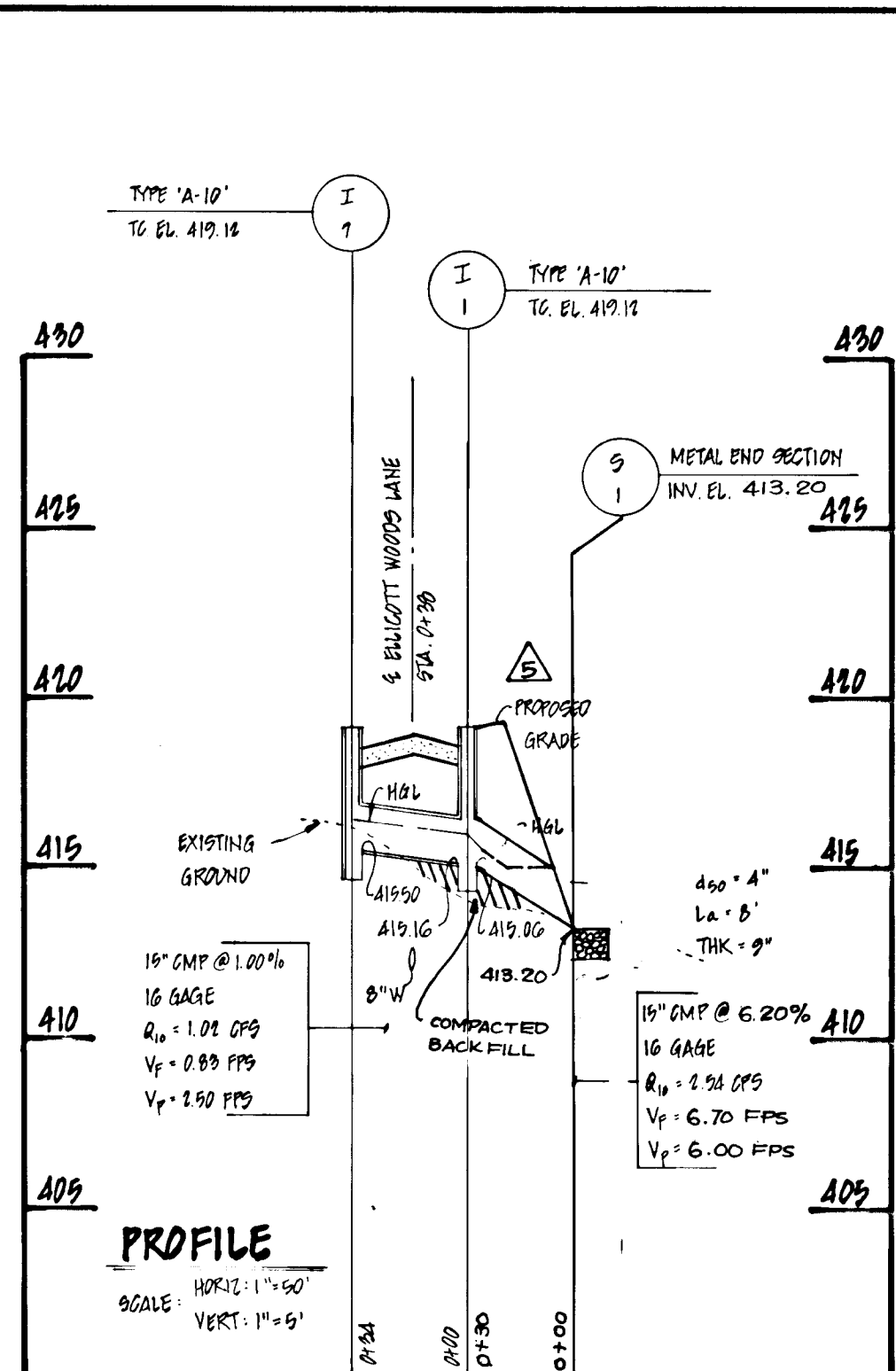
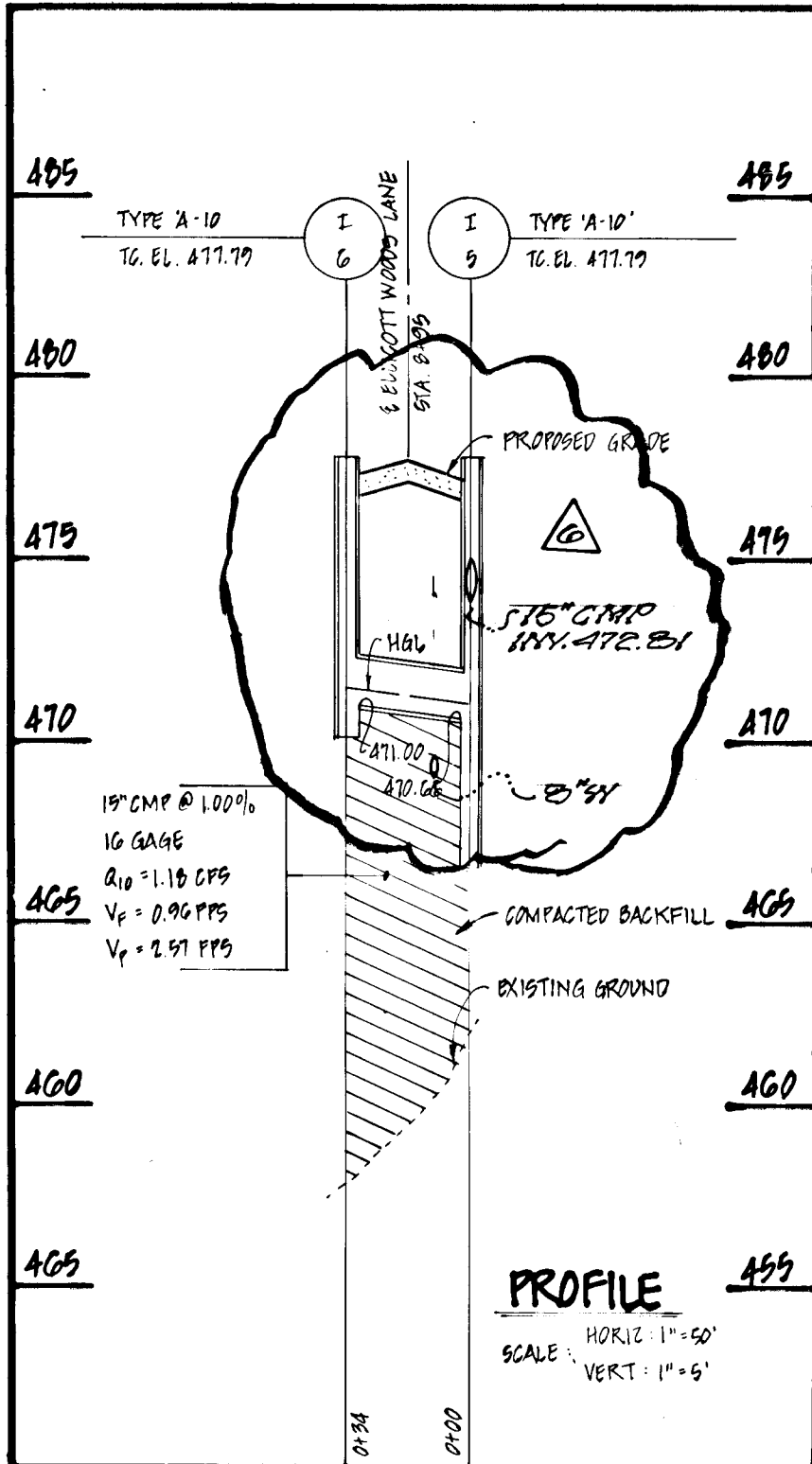
**GRADING AND SEDIMENT CONTROL PLAN**  
**ELICOTT WOODS LOTS 1-29**  
**DRAINAGE AREA MAP**

TAX MAP 31 PARCEL 768,769,308,22,556  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

8-89-54 WP-89-83  
PREVIOUS SUBMITTALS: S-88-34, P-88-83  
FILE NO. F-90-88  
SHEET 6 OF 11

**F-70-88**

1616



**STRUCTURE SCHEDULE**

STRUCTURE NO.	TYPE	TOP ELEV.	INT. 18"	INT. 24"	INT. 30"	STATION & OFFSET ALONG ELLICOTT WOODS LN
I-1	A-10	419.12	415.18	415.96	SD-4.02	± STA. 0+37, 15' RIGHT
I-2	S-COBS.	410.50	436.74	434.64	SD-4.32	± STA. 3+34, 15' RIGHT
I-3	S-COBS.	458.70	454.50	454.40	SD-4.32	± STA. 5+29, 15' RIGHT
I-4	A-10	470.83	466.58	465.48	SD-4.02	± STA. 7+73, 15' RIGHT
I-5	A-10	477.78	473.53	473.43	SD-4.02	± STA. 8+90, 15' RIGHT
I-6	A-10	477.79	473.54	473.44	SD-4.02	± STA. 8+90, 15' LEFT
I-7	A-10	419.12	415.18	415.96	SD-4.02	± STA. 0+37, 15' LEFT
I-8	S-COBS.	410.50	433.10	433.00	SD-4.32	± STA. 3+34, 15' LEFT
I-9	TYPE 'D'	477.88	473.25	473.15	SD-4.30	± STA. 9+20, 54' RIGHT
ME-1	STD. MANHOLE	449.50	442.00	441.90	G-5.11	± STA. 3+98, 15' RIGHT
ME-2	STD. MANHOLE	427.00	420.1	420.00	G-5.11	± STA. 1+87, 19' LEFT
S-1	METAL END SECTION	414.95	413.20	413.20	SD-5.61	± STA. 0+35, 48' RIGHT
S-2	METAL END SECTION	413.25	412.00	412.00	SD-5.61	± STA. 1+87, 66' LEFT

**CONCEPTUAL MITIGATION PLAN**  
Scale 1"=50'

**EMERGENT AREA**  
Soft Rush  
Mixed Sedges  
Lizard's Tail  
Cat Tail

**FORESTED AREA**  
overstory trees  
Red Maple  
Yellow Birch  
Green Ash  
Sycamore  
Shrubs  
Cutleaf Coneflower  
Arrowwood  
Elderberry  
Silky Dogwood  
Gray Aster

**ADDITIONAL 0.60 AC. OF MITIGATED WETLANDS TO BE PROVIDED ON THE COPTON PROPERTY SUBDIVISION E-90-156**

**DESIGNED** H.S. 9/89  
**DRAWN** D.P. 9/91  
**CHECKED** K.M.C. 9/81  
**APPROVED** T.L.W. 9/89

**REVISIONS**

DATE	BY	DESCRIPTION
11-27-91	ERB	REVISED PROFILE, END WALL & RIP-RAP
1-10-93	MPS	REVISED INLETS 13-15

**Dewberry & Davis**  
ARCHITECTS — ENGINEERS — PLANNERS — SURVEYORS  
200 Harry S. Truman Parkway, Annapolis, Maryland 21401  
8411 Arlington Boulevard, Fairfax, Virginia 22030

**OWNERS DEVELOPERS**  
HOWARD RESNECK  
4645 NEW CUT ROAD  
ELLICOTT CITY, MD 21043

**BY THE DEVELOPER:**  
"I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Acceptance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

HOWARD RESNECK 11/9/90

**BY THE ENGINEER:**  
"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

THOMAS L. WILLY, P.E. 11-8-90

**APPROVED:** HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

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







**GENERAL NOTES**

**SPECIFICATIONS:**

Design -- AASHTO Standard Specifications For Highway Bridges, 1989 Including Current Interim Specifications.

Building Code Requirements For Reinforced Concrete, ACI 318-83, American Concrete Institute, Using Load Factor Design.

Construction -- Standard Specifications For Construction & Materials -- Maryland Department Of Transportation, State Highway Administration Dated January, 1982.

**DESIGN LOADS:**

Backfill = 2 Horizontal To 1 Vertical  
 Live Load Surcharge = None  
 Internal Friction Angle  $\phi = 27$  Degrees (Assumed)  
 Coefficient Of Friction Between Footing And Bearing Surface = 0.45  
 Rankine Non-Cohesive Active Soil Pressure = 45 PCF Per Foot  
 Rankine Non-Cohesive Active Soil Pressure = 84 PCF (\*) Per Foot  
 Rankine Non-Cohesive Passive Soil Pressure = 320 PCF Per Foot  
 (\*) = 21.6 PCF Bouyant Soil  
 62.4 PCF Water  
 84.0 PCF Total

**CONCRETE:**

Concrete Shall Be Mix No. 2 ( $f'c = 3,000$  PSI)

**REINFORCING STEEL:**

Deformed Reinforcing Bars Shall Conform To ASTM A615, Grade 60. All Reinforcing Bar Dimensions On The Detailed Drawings Are To The Centers Of Bars Except Where Otherwise Noted. Reinforcing Bars Shall Be Fabricated In Accordance With The Requirements Of The "Manual Of Standard Practice For Detailing Reinforced Concrete Structures" ACI-315.

All Reinforcement Shall Have A 2" Cover Unless Otherwise Noted.

Minimum Reinforcing Bar Splice Lengths: (Unless Otherwise Noted)

Bar Size	No. 4	No. 5	No. 6
Splice Length	1'-8"	2'-2"	2'-9"

**FOUNDATIONS:**

The Footing Is Designed To Exert A Maximum Foundation Pressure Of 2500 Pounds Per Square Foot.

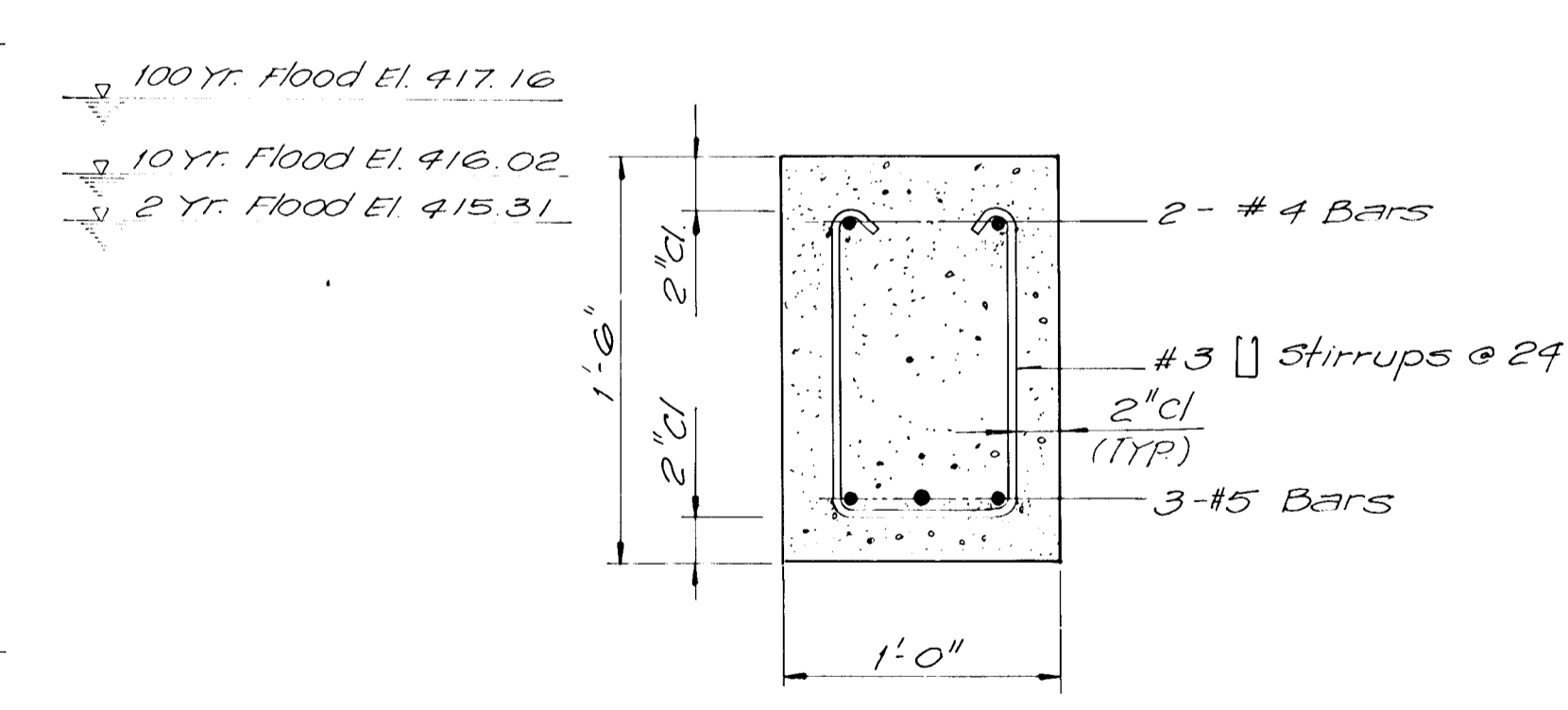
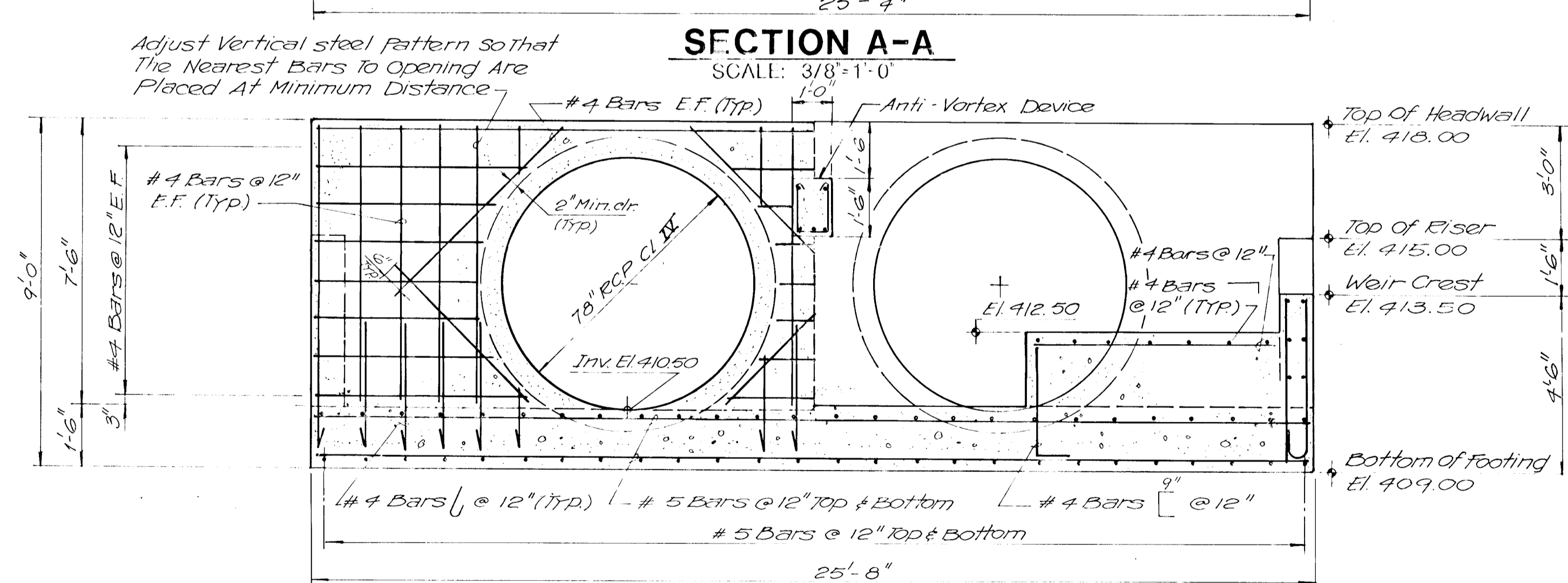
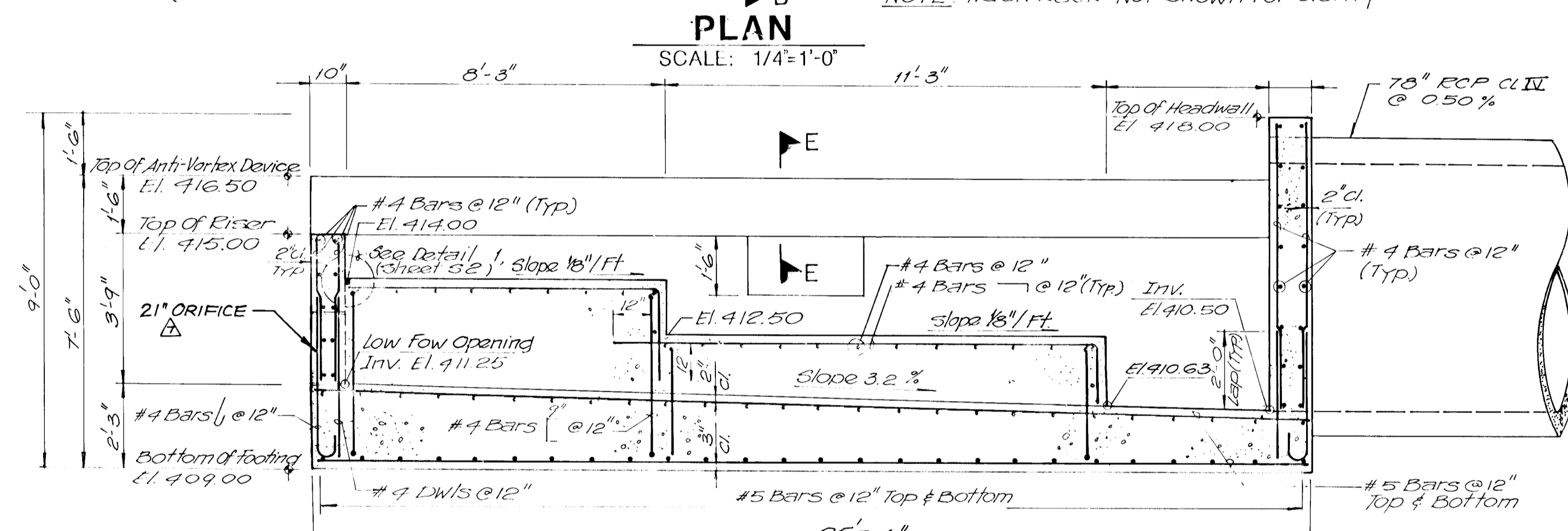
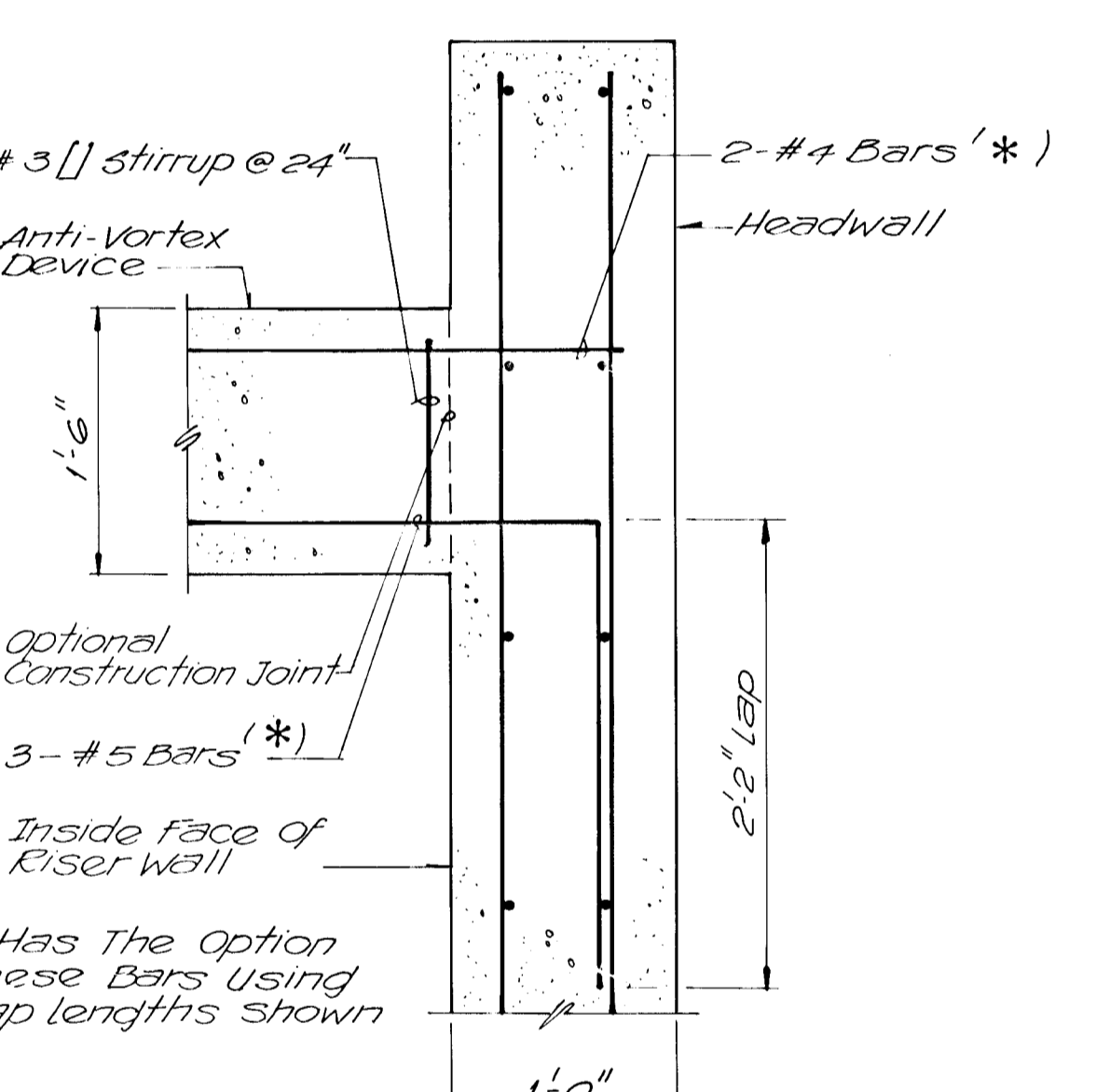
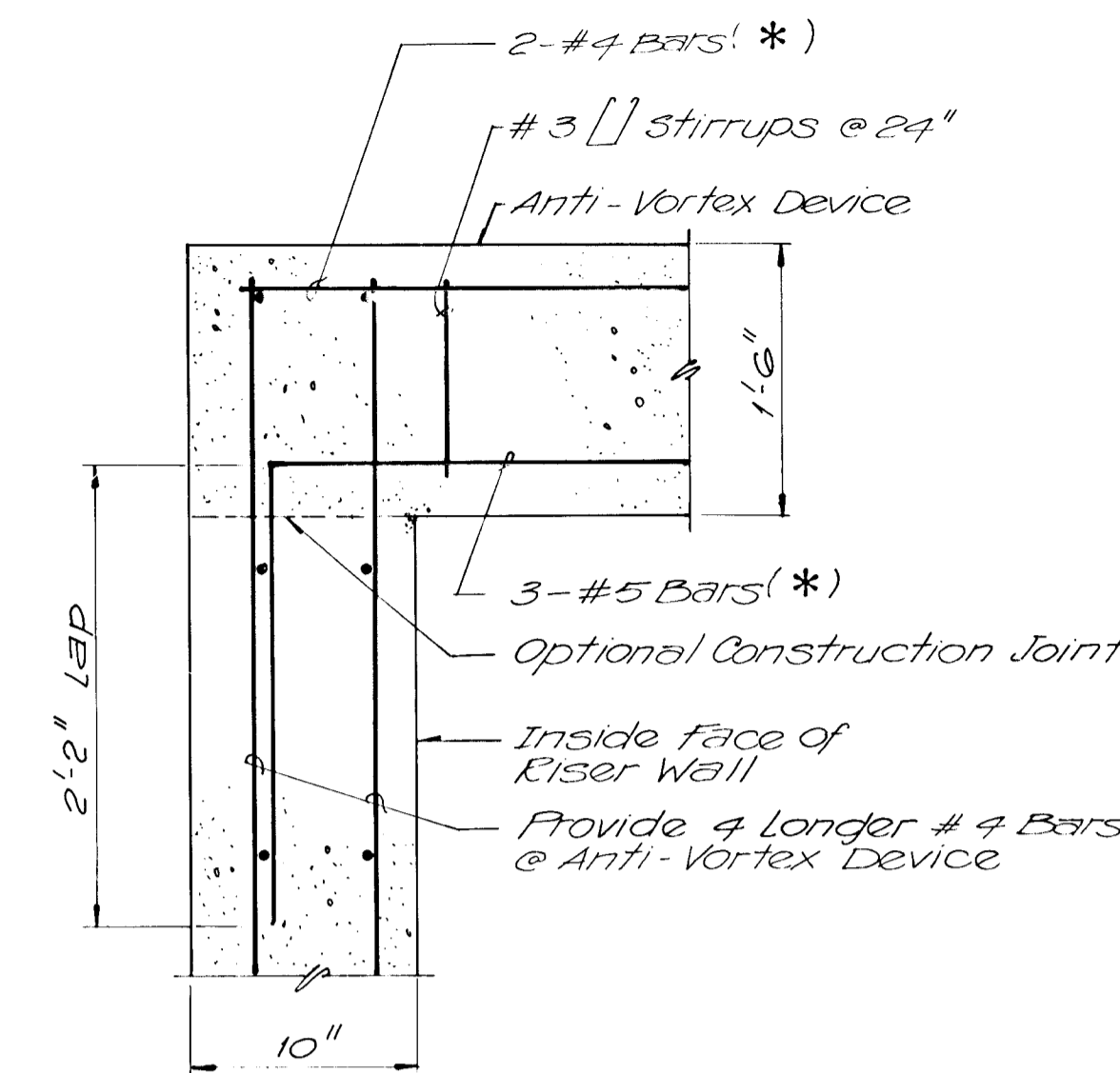
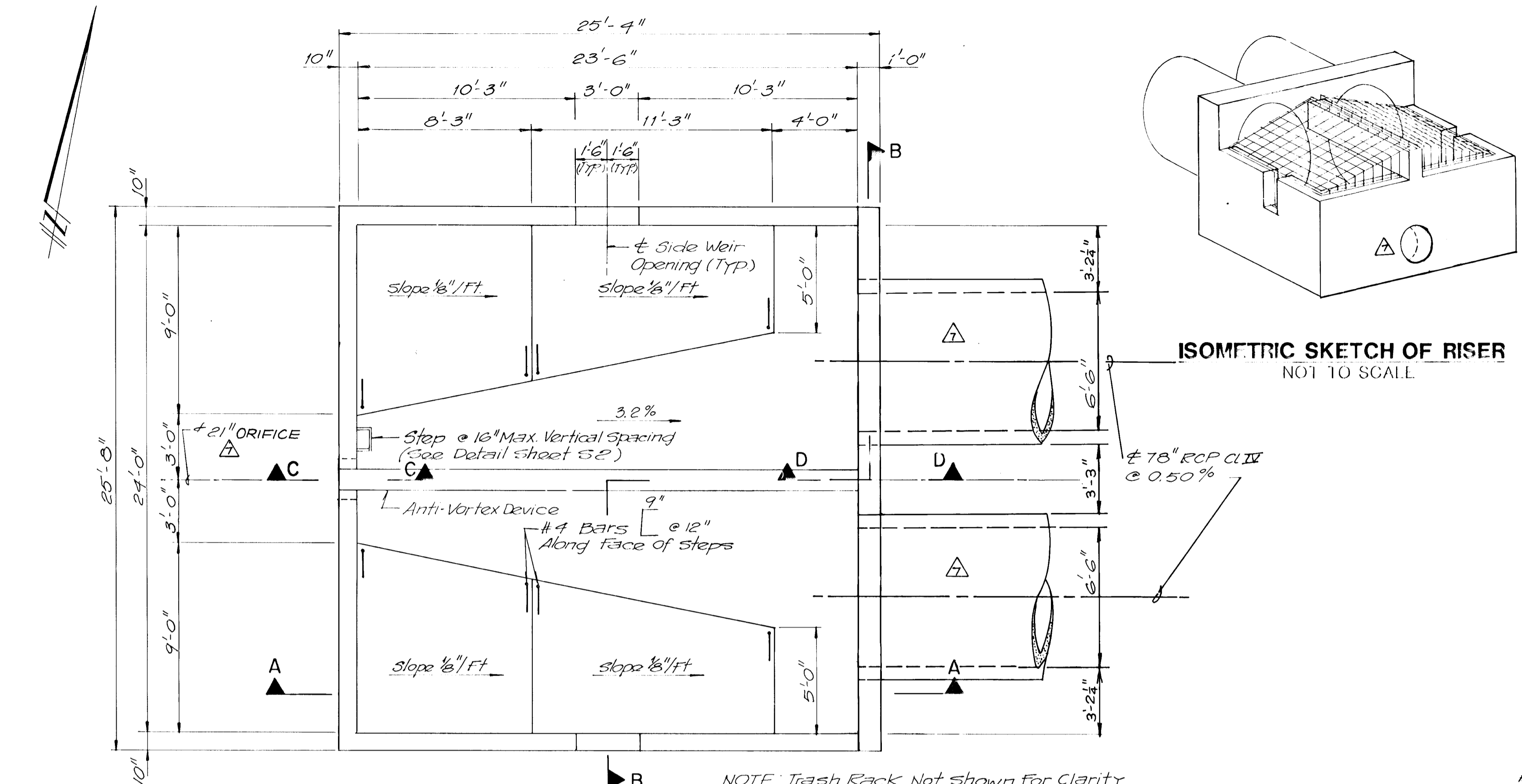
Bottom Of Footings Shall Be Located In Virgin Soil Or Compacted Fill That Has Been Approved By The Geotechnical Engineer Or The Project Inspector To Be Adequate To Support The Design Bearing Pressure Prior To Placement Of Footing Concrete. If Required, Subgrade Shall Be Prepared By Removing Unsuitable Material And Backfilling With Select Material As Directed By The Geotechnical Engineer.

**BACKFILL:**

Contractor Shall Take All Necessary Precautions To Brace Walls When Backfilling. Care Shall Be Taken During Placement Of Backfill Adjacent To The Wall So As Not To Overload The Wall Due To Heavy Equipment. Only Lightweight Compaction Equipment (Not Exceeding 2,000 Pounds) Shall Be Permitted Within The Critical Zone Defined As Beginning At The Base Of The Wall And Widening Upward From The Base At A 1:1 Slope. All Precautions Shall Be Taken To Provide Adequate Drainage Prior To And After Construction. Backfill Materials Approved By The Geotechnical Engineer Shall Be Placed In 8 Inch Loose Lifts And Compacted To At Least 95% Of The Maximum Standard Proctor Dry Density Per ASTM D698.

**CONSTRUCTION NOTES:**

The Structure Is To Be Located In The Field As Shown On The Site Plans (Sheet No. 5). All Dimensions And Elevations Of Existing Structures, Property Lines, Easements, Utilities, Existing And Proposed Contours, And Other Existing Or Proposed Features Shown On The Structural Drawings, Have Been Obtained By Scaling From The Referenced Site Plans. The Contractor Shall Verify These Dimensions And Elevations Prior To Start Of Construction Of The Structure And Shall Report Any Significant Discrepancies To The Engineer.

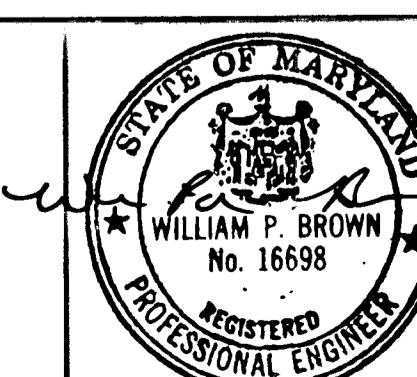


SHEET S1 OF 2

APPROVED BY HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>William W. Wassenaar</i>	2/1/91
<i>Richard E. Blodgett</i>	2/4/91
APPROVED BY HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Richard Blodgett</i>	2/1/91

DESIGNED	DATE	BY	DESCRIPTION
MGU	JAN 90	ERB	REVISED PLAN DETAIL, ISOMETRIC & SECTION A-A DETAILS. SEE $\Delta$
DRAWN	JAN 90		
CHECKED	JAN 90		
APPROVED	JAN 90		

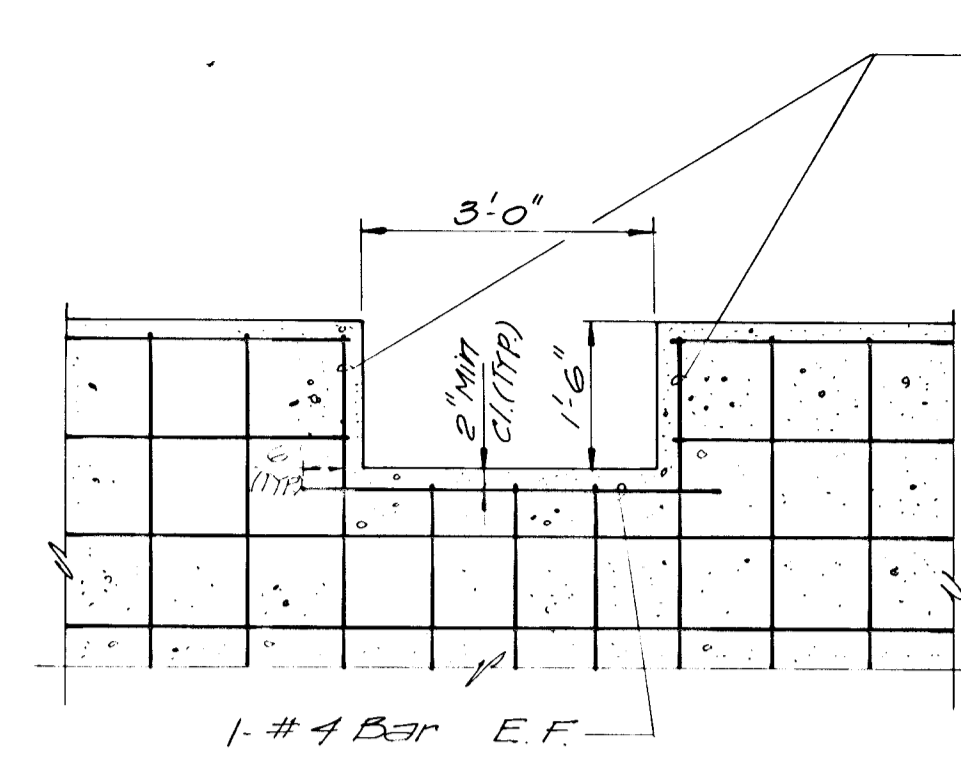
**Dowberry & Davis**  
 ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS  
 200 Harry S. Truman Parkway, Annapolis, MD 21401  
 (301) 261-8707 Fax (301) 970-2124



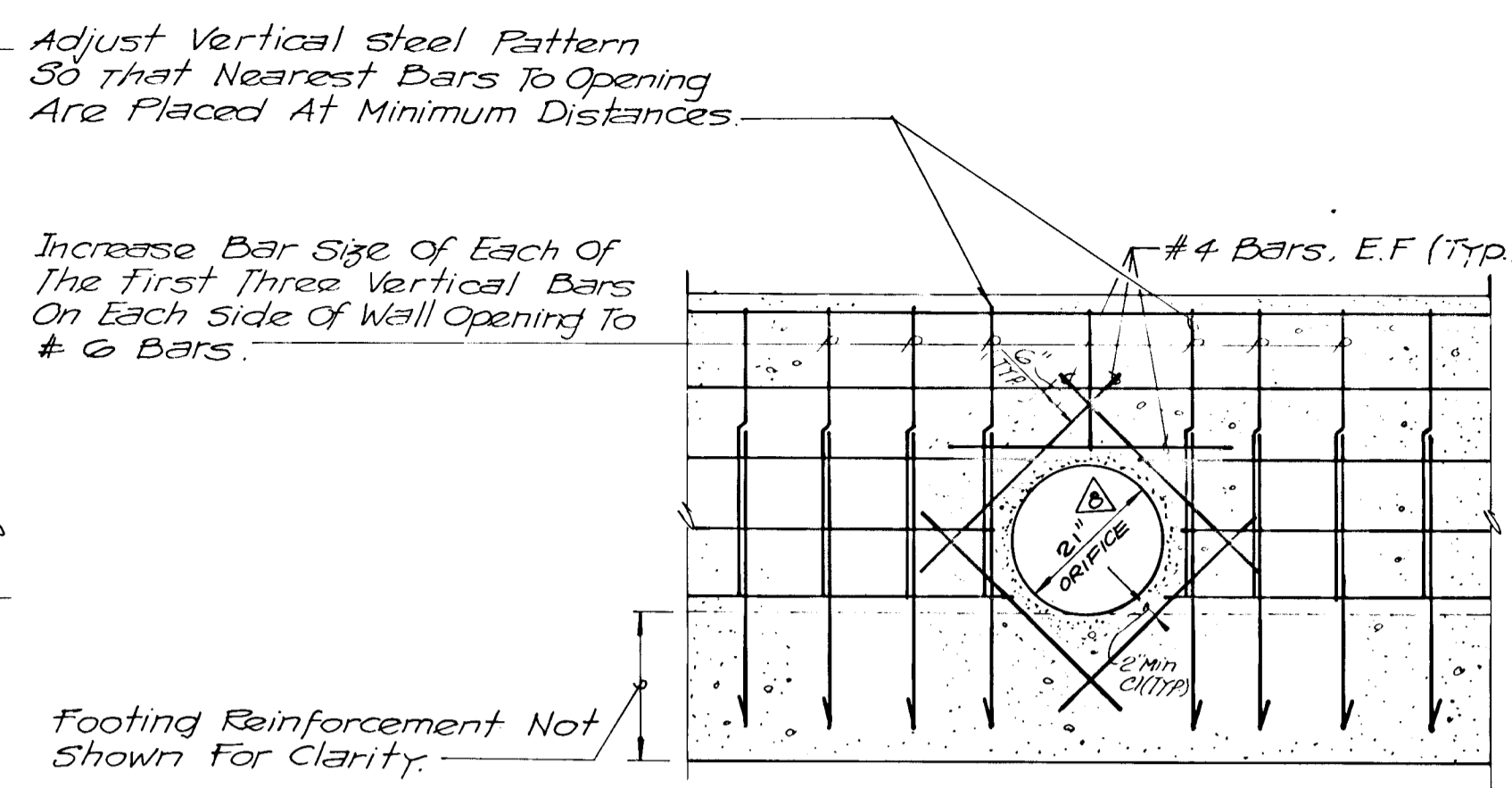
**OWNERS DEVELOPERS**  
 HOWARD RESNECK  
 4645 NEW CUT ROAD  
 ELLICOTT CITY, MD 21043  
 PATRICIA A. KING  
 4622 BONGASTER ROAD  
 ELLICOTT CITY, MD 21043  
 DAVID E. SERVINSKY  
 c/o VERNON J. ROBINSON  
 7872 SANDY PINE ROAD  
 SEVERN, MD 21144

**STORMWATER MANAGEMENT DETAILS**  
**ELLICOTT WOODS**  
 TAX MAP 31 PARCEL 768,769,308,22,558  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 PREVIOUS SUBMITTALS: S-89-34, P-88-63, S-89-54, WP-89-83  
 SCALE: AS NOTED CONTRACT NO. FILE NO. F-90 SHEET 10 OF 11

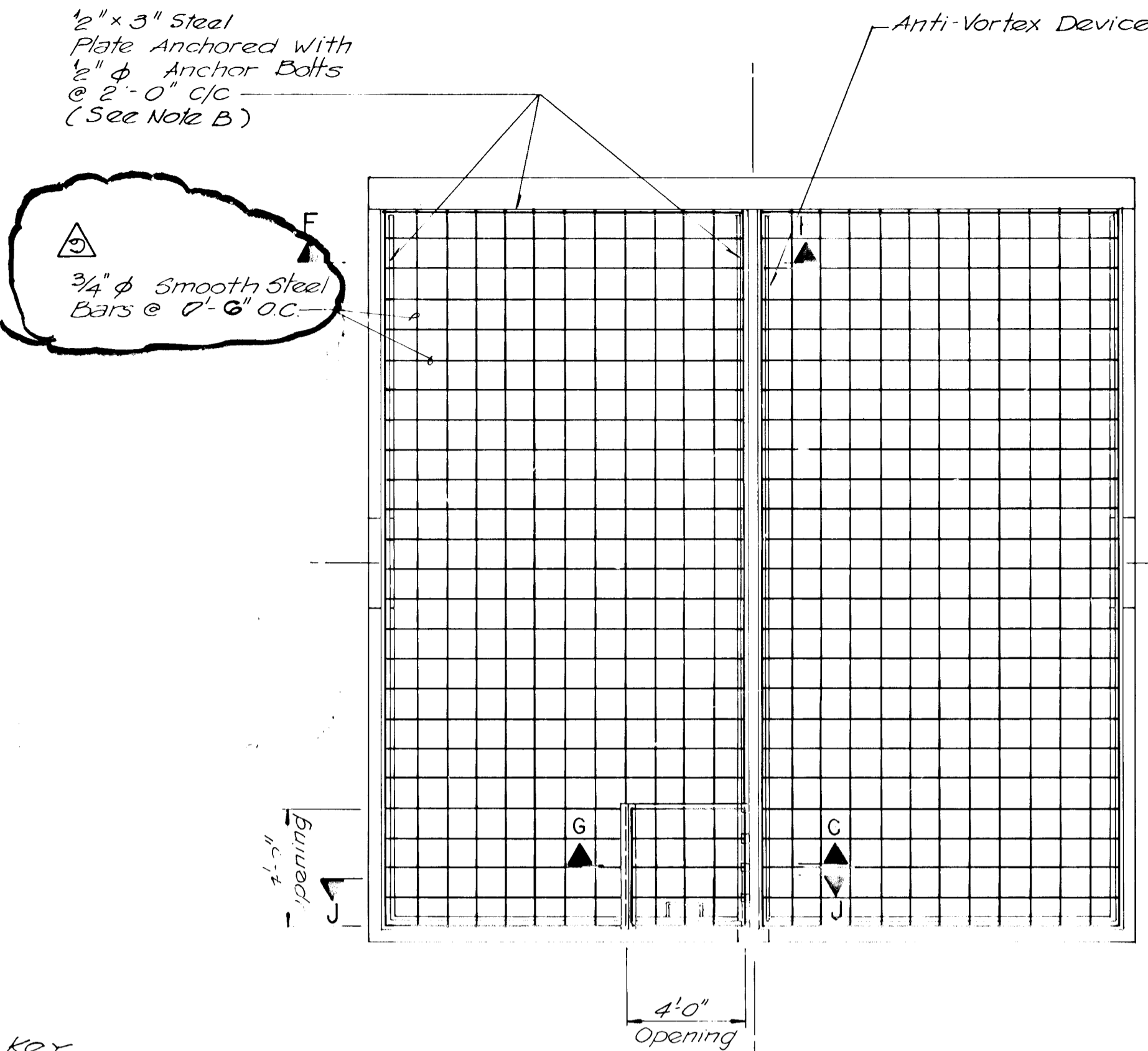
F-90-88



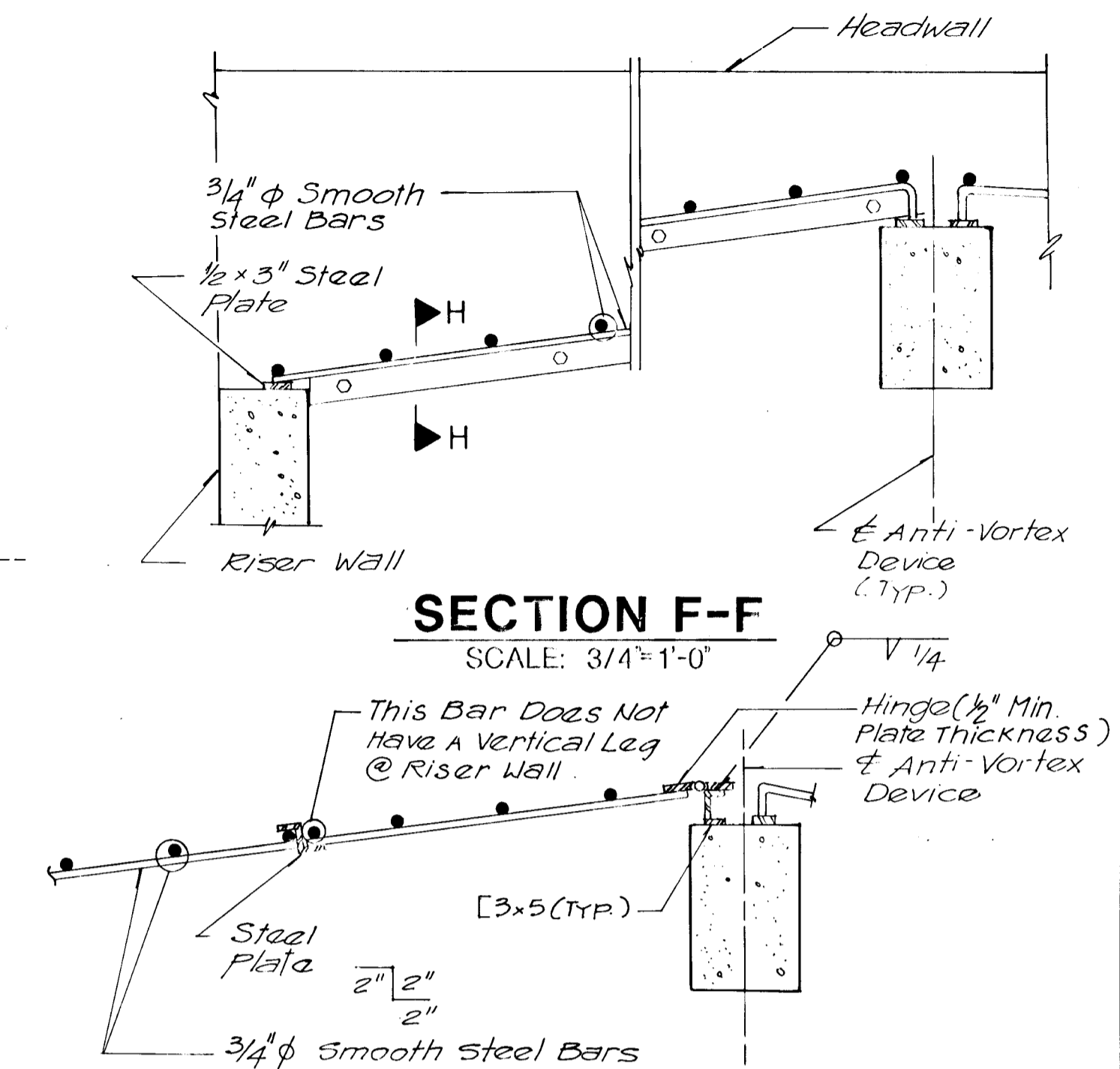
**SIDE WEIR OPENING DETAIL**  
SCALE: 1/2"=1'-0"



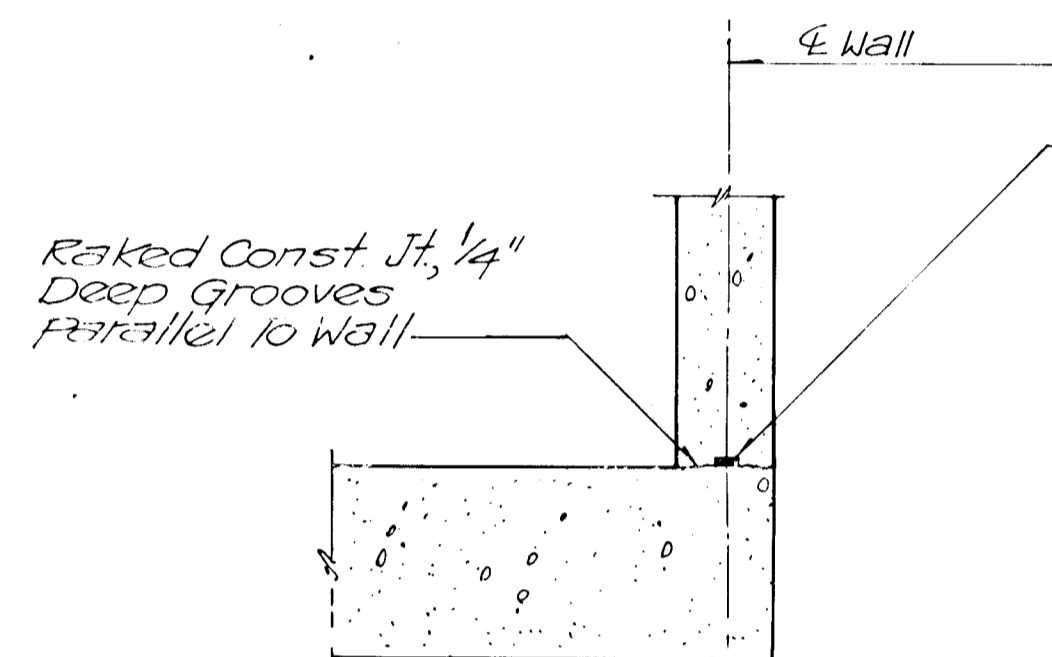
**LOW FLOW OPENING DETAIL**  
SCALE: 1/2"=1'-0"



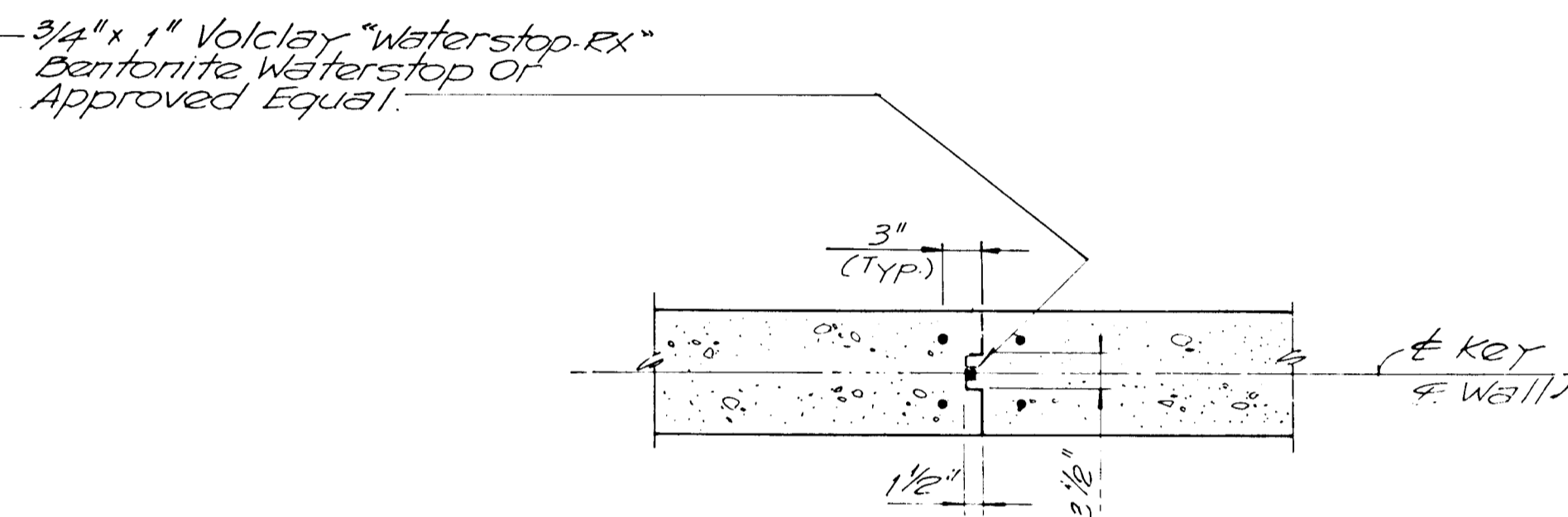
**REMOVEABLE TRASH RACK**  
SCALE: 1/4"=1'-0"



**SECTION F-F**  
SCALE: 3/4"=1'-0"

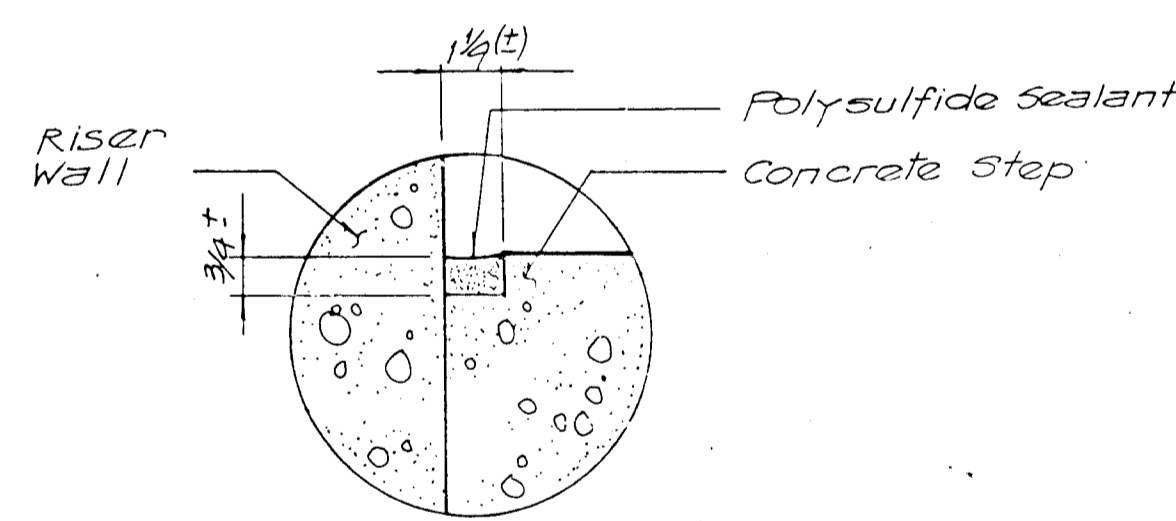


**HORIZONTAL**

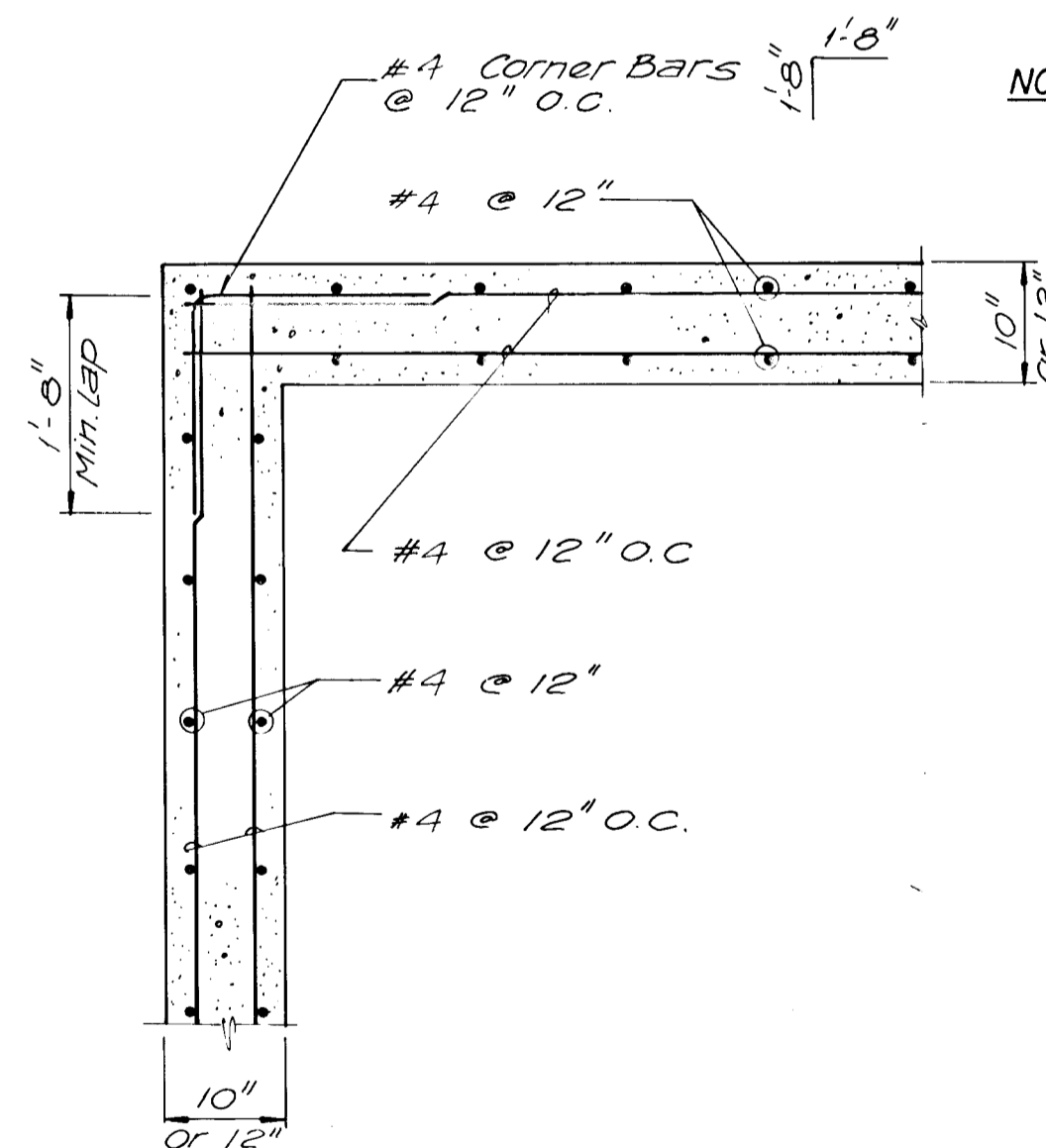


**VERTICAL**  
(Contractor to locate Joints As Required)

**TYP. CONSTRUCTION JOINTS**  
SCALE: 3/4"=1'-0"



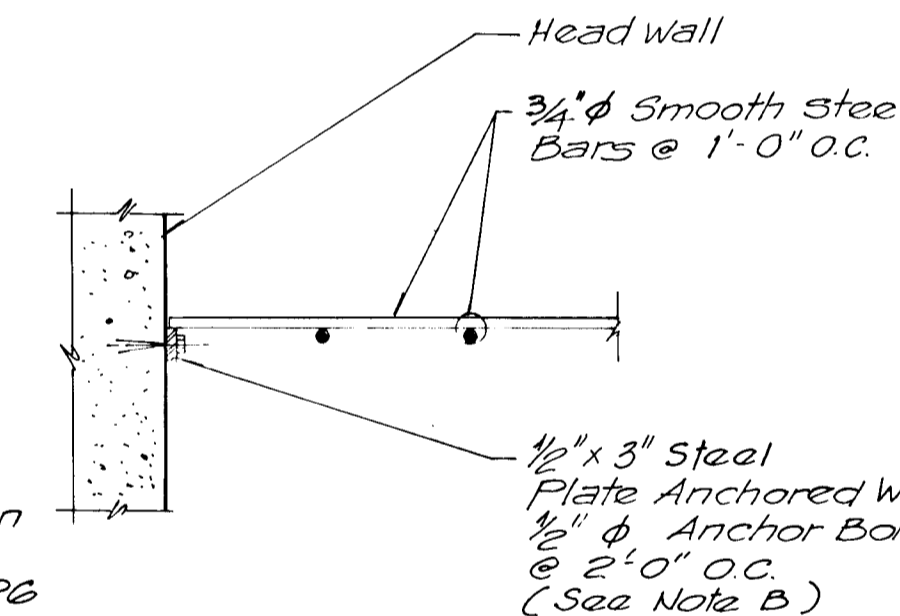
**DETAIL 1**  
NOT TO SCALE



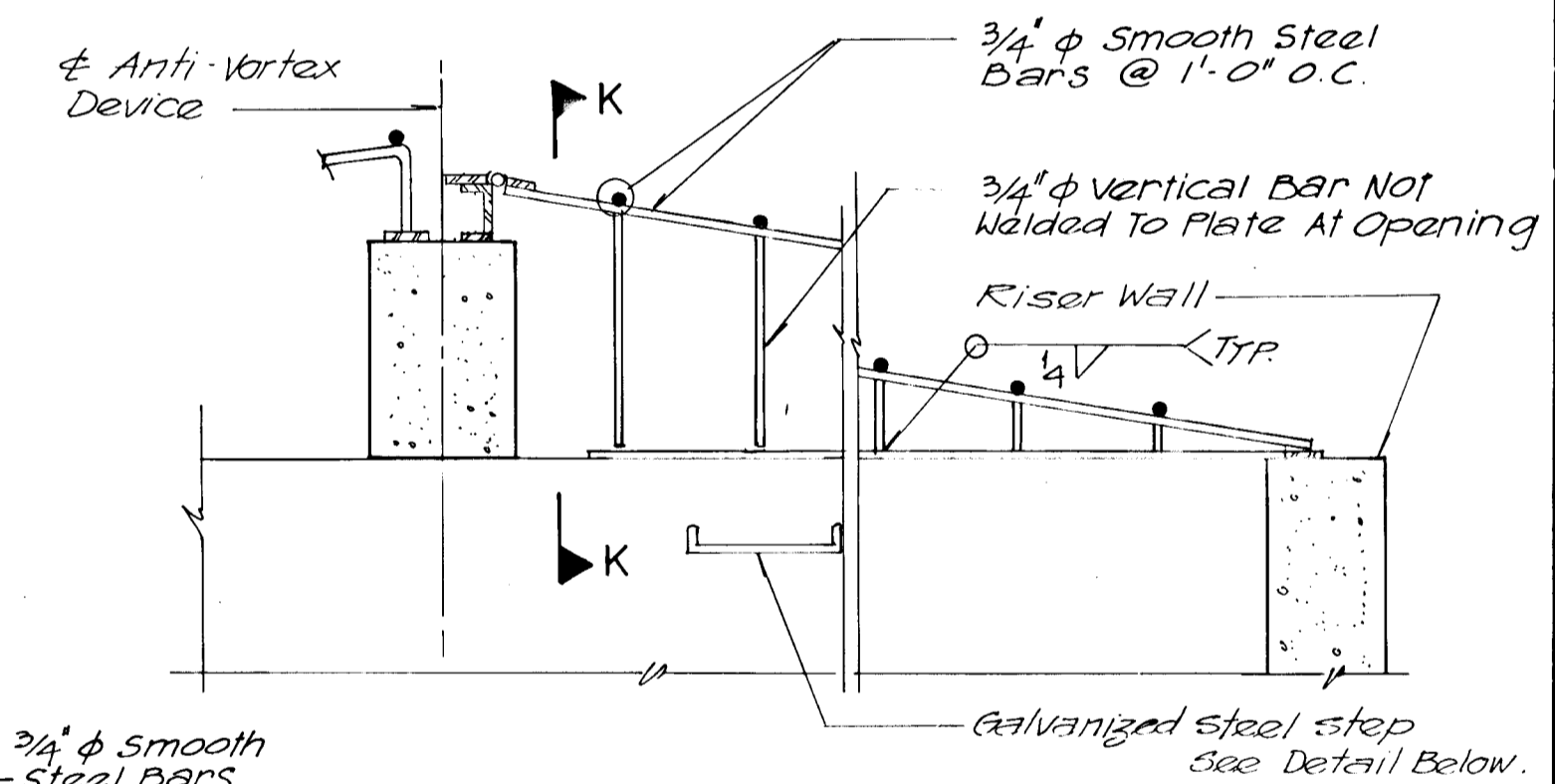
**RISER CORNER DETAIL**  
SCALE: 3/4"=1'-0"

**NOTE A:** Trash Rack shall Be A30 Steel And Shall Be Galvanized In Accordance With M.S.H.A. Specification 014.10.02 Either Galvanize Trash Rack After Fabrication Or Repair Galvanizing After All Welds Have Been Made.

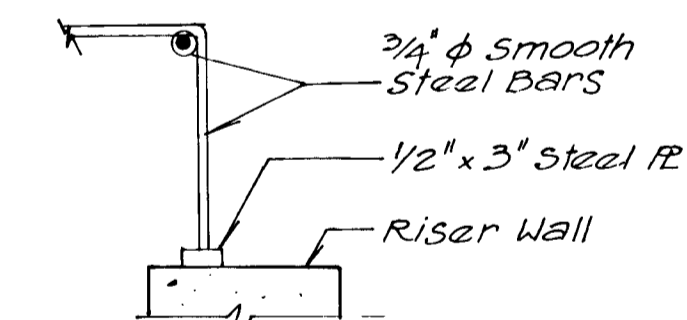
**NOTE B:** Provide Stainless Steel Expansion Anchor Bolts Red-Head Wedge Anchors Catalog Number WW-1226 Or Approved Equal



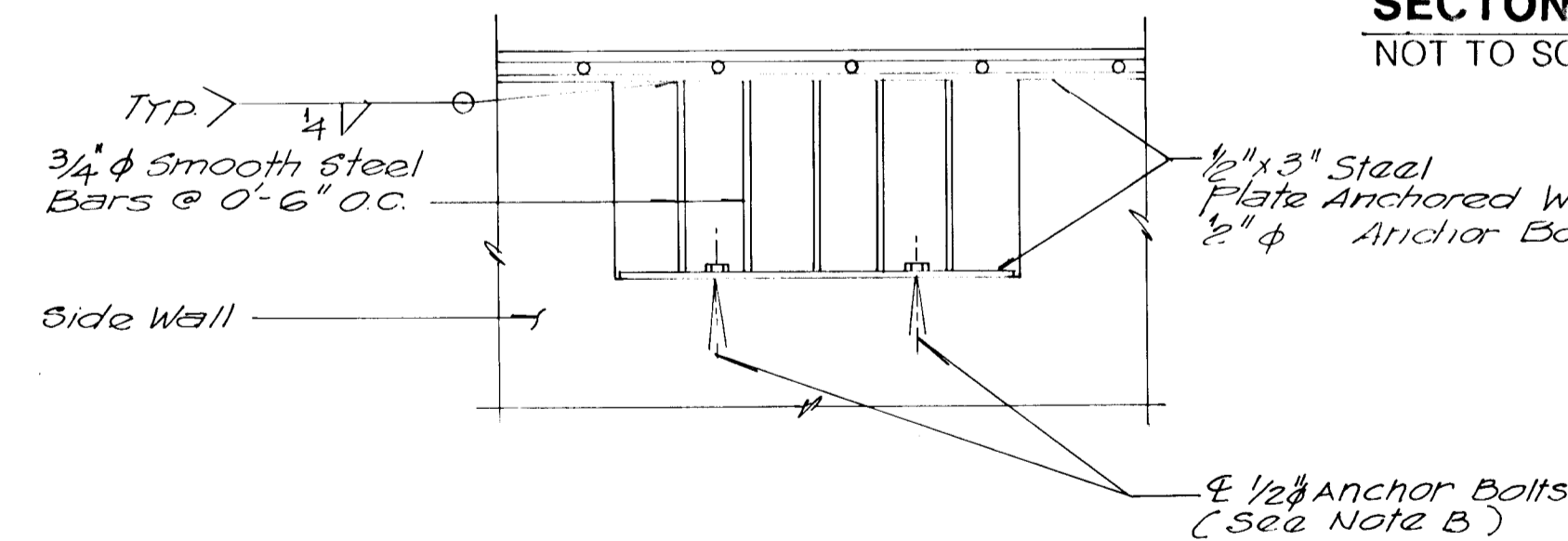
**SECTION H-H**  
SCALE: 3/4"=1'-0"



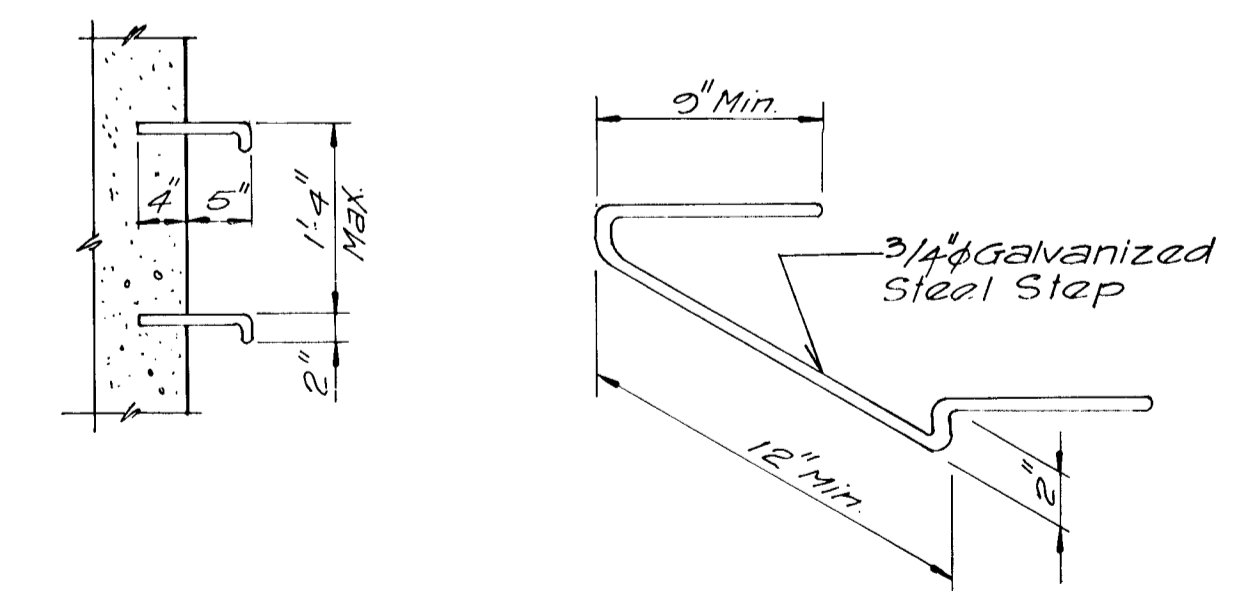
**SECTION J-J**  
SCALE: 3/4"=1'-0"



**SECTION K-K**  
NOT TO SCALE



**SIDE WEIR OPENING**  
SCALE: 3/4"=1'-0"

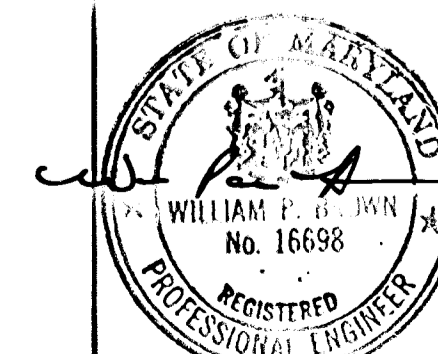


**STEP DETAILS**  
SCALE: 1"=1'-0"

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>William W. Weiland</i>	2/4/91
DATE	DATE
<i>William W. Weiland</i>	2/1/91
DATE	DATE
<i>William E. Reed</i>	2-4-91
DATE	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Richard Blood</i>	2/2/91
DATE	DATE
<i>J.B.</i>	
DATE	DATE

DATE	BY	DESCRIPTION
11-27-91	ERB	REVISED LOW FLOW OPENING DETAIL
1-10-93	MFO	REVISE TRASH RACK BAR SPACING

**Dewberry & Davis**  
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HOWARD RESNICK  
4645 NEW CUT ROAD  
ELLICOTT CITY, MD 21043  
DAVID E. SERVINSEY  
c/o VERNON J. ROBINSON  
7872 SANDY PINE ROAD  
SEVERN, MD 21144

**STORMWATER MANAGEMENT DETAILS**  
**ELLICOTT WOODS**  
TAX MAP 31 PARCEL 768,769,308,22,558  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
PREVIOUS SUBMITTALS: S-88-34, P-88-63, S-89-54 WP-89-83  
SCALE: AS NOTE D CONTRACT NO. FILE NO. F-90 SHEET 11 OF 11

F-90-88

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