

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

HOLMES COUNTY  
HOL-77-(4.18-4.24)

1  
26

**CONVENTIONAL SIGNS**

Township Line	-----
Center Line of Road	-----
Street Line	-----
Property Line	-----
Existing Right of Way	-----
Right of Way Only	----- RW -----
Corporation Line	-----
Limits of Cut or Fill	-----
Slope Easement	----- SL -----
Building	▭
Tree	○
Stream	~~~~~
Guard Rail	Existing: --- New: ---
Power Pole	⊕
Telephone Pole	⊙
Fire Hydrant	⊕
Fence Line	-----

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS

HOL-77-(4.18-4.24)

HOLMES COUNTY

VILLAGE OF KILLBUCK  
AND KILLBUCK TOWNSHIP

The Standard Specifications of The State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare the making of this improvement will require the closing of the highway to traffic and that detours will be provided as indicated on the plans.

The right of way for this improvement will be provided by the State of Ohio.

Approved: Wm. G. McKenna  
Date: 3-20-61 Division Deputy Director

Approved: \_\_\_\_\_  
Date: \_\_\_\_\_ Engineer of Bridges

Approved: \_\_\_\_\_  
Date: \_\_\_\_\_ Engineer of Location and Design

Approved: \_\_\_\_\_  
Date: \_\_\_\_\_ Deputy Director of Design and Construction

Approved: \_\_\_\_\_  
Date: \_\_\_\_\_ Deputy Director of Right of Way

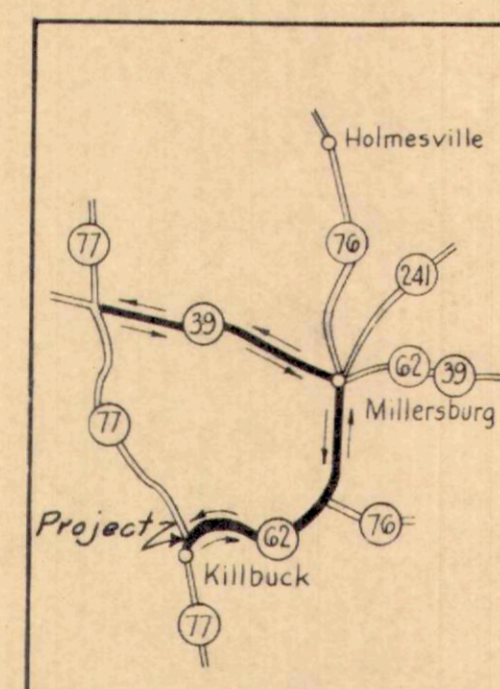
Approved: \_\_\_\_\_  
Date: \_\_\_\_\_ Deputy Director of Planning and Programming

Approved: \_\_\_\_\_  
Date: \_\_\_\_\_ First Assistant Director

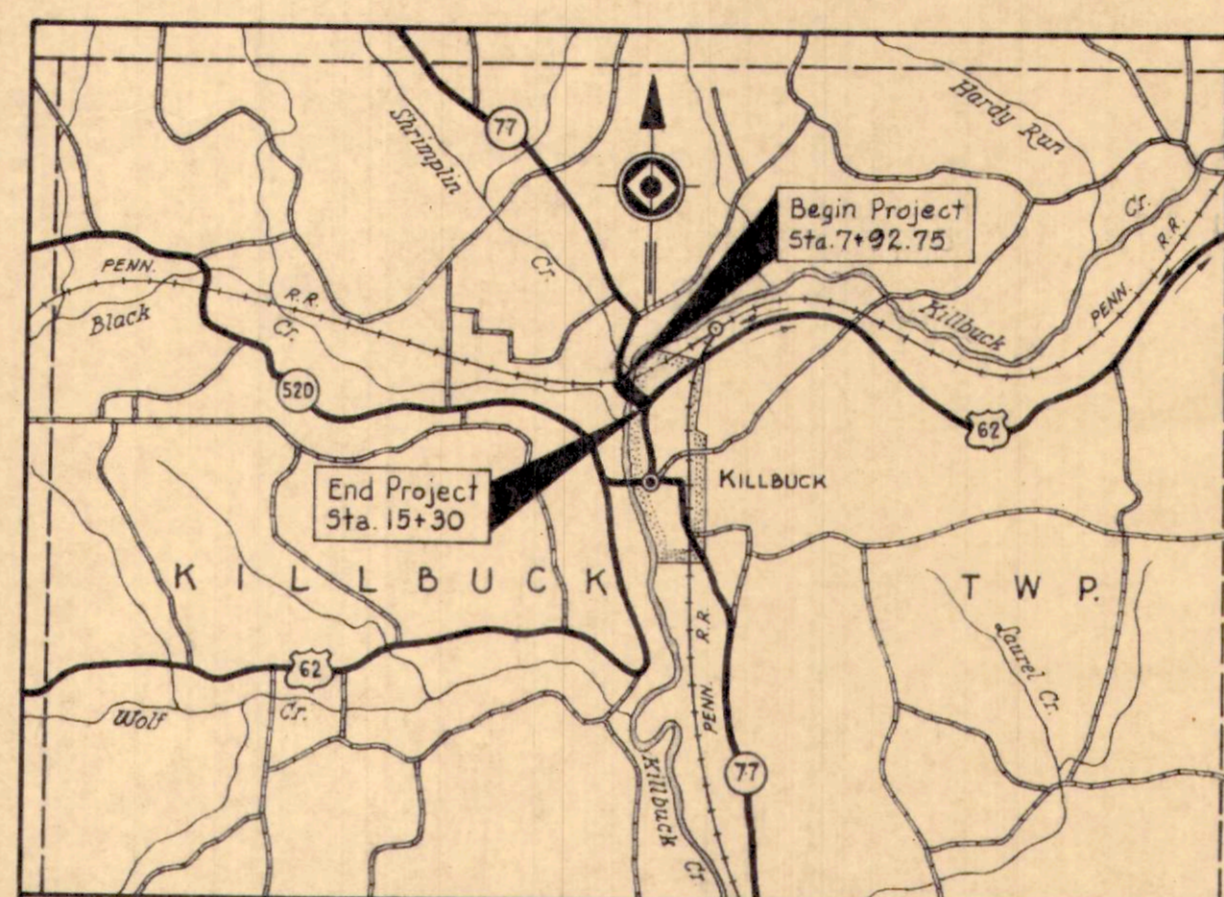
Approved: \_\_\_\_\_  
Date: \_\_\_\_\_ Director of Highways

**INDEX OF SHEETS**

Title Sheet	1
Typical Sections & General Notes	2
Quantities & General Summary	3
Plan & Profile	4-6
Cross Sections	7-16
Structures Over 20' Span	17-24
Right of Way Plans	25-26

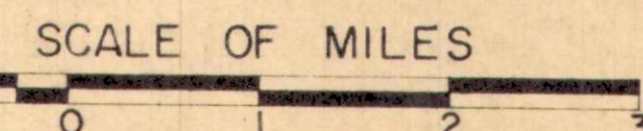


MAP OF DETOUR  
Scale: 1" = 4 Miles



Delivery Point: Killbuck, Ohio  
Average Haul from Siding: 0.5 Mile

**LOCATION PLAN**



Portion to be improved	▬▬▬▬
Other Roads	-----
Detours	▬▬▬▬

SCALE:

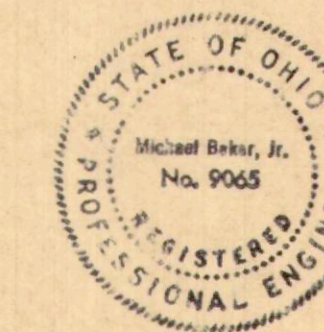
Plan:	1" = 20'
Profile: Horizontal	1" = 20'
Profile: Vertical	1" = 5'
Cross Sections	1" = 5'

**LINE DATA**

Begin Project	Sta. 7+92.75
End Project	Sta. 15+30.00
Net Length of Project	737.25 Lin. Ft. or 0.139 Mile
Begin Work	Sta. 7+92.75
End Work	Sta. 15+30.00
Gross Length of Work	737.25 Lin. Ft. or 0.139 Mile

Rural Length - Sta 7+92.75 to Sta 12+27.55 = 434.75 Lin. Ft. or 0.082 Mile  
Municipal Length Sta 12+27.50 to Sta 15+30 = 302.50 Lin. Ft. or 0.057 Mile

Plans Prepared by:  
MICHAEL BAKER, JR.  
Consulting Engineers  
Rochester, Pennsylvania



FILE NO.	HOLMES COUNTY	HOL-77-(4.18-4.24)
DATE OF LETTING	1961	
CONTRACT NO.		

Supplemental Prints of Standard Construction Drawings							
I-1	11-15-60	G-7.07	6-1-56	L-3-A	4-1-50	AS-1-54	12-1-54
		I-15 No.1	11-15-60	RI-1	7-15-58	CSB-2-56(1,2&3)	2-2-59
		I-15 No.2A	8-17-60	T-35	1-2-56	I-8 CB No.3-A	1-26-59
		L-3	4-1-50	I-12	7-1-54	DR-1	1-3-55
		T-35	1-2-56	L-1	4-1-50	HW-E	11-15-60

Supplemental Specifications	
S-101	12-2-59



# TYPICAL SECTIONS

## TYPE T-35 ON B-19

Scale: 1/4" = 1'-0"

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

2  
26

HOLMES COUNTY  
HOL-77-(4.18-4.24)

## GENERAL NOTES

### LEGEND

- ① T-35 1 1/4" Asphaltic Concrete Surface Course, Type C (85-100)
- ② B-35 1 3/4" Asphaltic Concrete Leveling Course (85-100)
- ③ T-30 Bituminous Prime Coat; Sec. M-5.7, RT-2 or RT-3 applied at the rate of 0.40 gal. per Sq. Yd.
- ④ B-19 5" Aggregate Base Course
- ⑤ I-22 4" Subbase
- ⑥ I-9 Stone Underdrain (No. 2)
- ⑦ L-9 Seeding & Protecting Roadway Areas
- ⑧ I-12 Combination Curb & Gutter, Type 2 T-8"
- ⑨ I-1 6" Pipe, Class I-3

### FIELD OFFICE

The Contractor shall provide a suitable Field Office for the exclusive use of State employees, in accordance with Sec. 5-0.01(b) having a minimum of 300 square feet of floor space. The Contractor shall have installed and shall maintain in the Field Office during the construction of this project a telephone and a 110 volt electrical circuit with suitable outlets for office equipment. Field Office will be furnished within 10 days after Contractor begins operations.

### UTILITIES

The Contractor shall notify at least 48 hours before breaking ground all Public Service Corporations having wire, poles, pipe, conduits, manholes or other structures that may be affected by this operation, including all structures which are affected and shown on these plans. Any and all work required for public or private utilities will be done by and at the expense of their respective owners.

### ROUNDING OF CORNERS ON CROSS SECTIONS

The rounded corners shown on the typical section apply to all cross sections even though otherwise shown in these plans.

### ELEVATION DATUM

All elevations are based on U.S.G.S. datum.

### MAINTENANCE OF TRAFFIC

State Route 77 will be closed to traffic during the construction of the bridge, approach slabs and roadway. The Contractor shall erect and maintain barricades, red lights and danger signals in accordance with Sec. G-7.07 of the Construction and Materials Specifications.

### SUBGRADE COMPACTION

The Subgrade under the B-19 material used for drives shall be compacted for a depth of six (6) inches to the density requirements shown in Table III, Item E-1. Payment for the subgrade compaction as specified above, shall be included in the unit price bid for Item E-1, Roadway Excavation.

### CONSTRUCTION LAYOUT STAKES

See note in proposal describing the work included in this lump sum pay item.

### SUPERELEVATION

Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in that portion between the beginning of the transition and the point where the superelevation equals twice the crown.

### PAVEMENT AT RAILROAD CROSSING

The pavement from Sta. 7+92.75 to Sta. 11+11.75 shall be constructed in accordance with the superelevation table on Sheet 4.

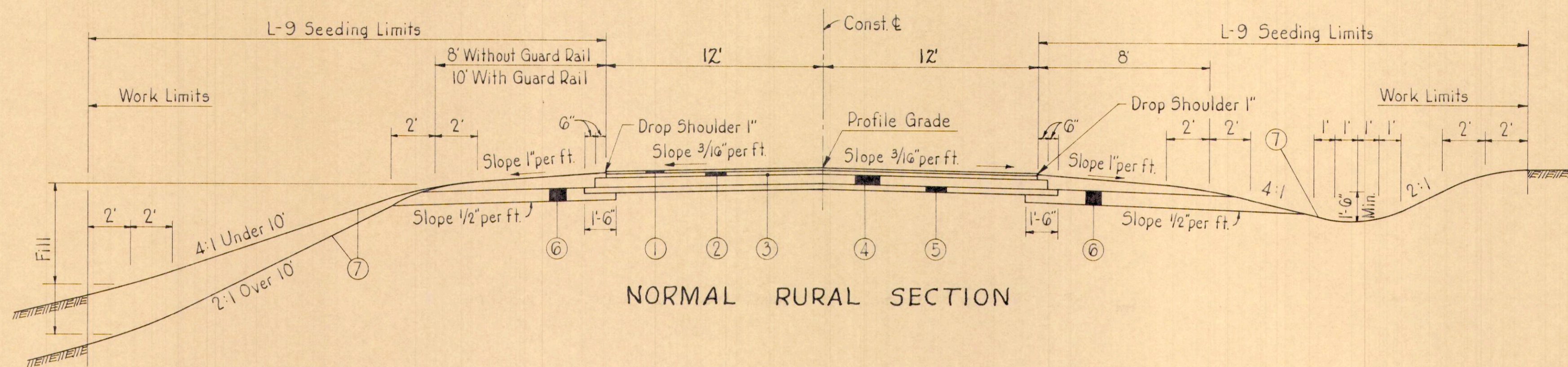
### REMOVAL OF TREES AND STUMPS

The number and size of trees and stumps shown below for removal under the construction as detailed on these plans are as nearly correct as available information permits. The State of Ohio will not be responsible for any variations found during the construction. The lump sum bid for Item E-3, Removal of Trees and Stumps, shall constitute full payment for this item and no additional compensation will be allowed. The number and size of trees and stumps are estimated as follows: 12'-18" (70), 18'-24" (14), 24'-30" (12), 30'-36" (5), 42'-48" (1) over 48" (1).

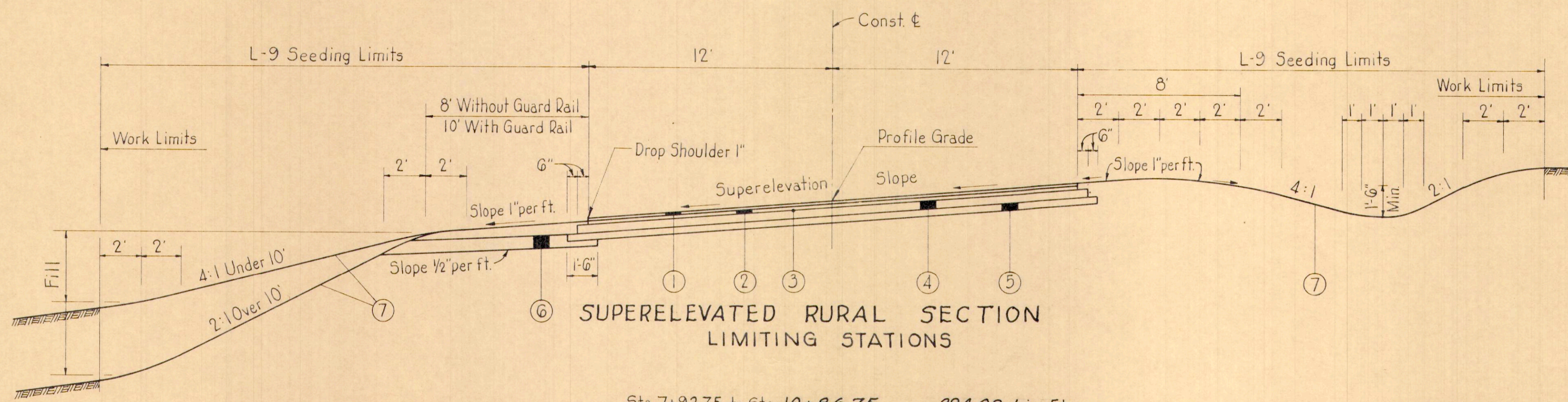
**NON-RIGID PAVEMENT REMOVAL:** Removal and disposal of existing non-rigid pavement, unless otherwise indicated on these plans, shall be measured and paid for as Item E-1, Roadway Excavation.

**STONE UNDERDRAINS:** No. 2 Stone underdrains shall be constructed at intervals not to exceed 50 ft. on each side of the pavement on tangents and on the low side of the pavement on curves, between Sta. 7+93 and Sta. 13+48. Additional underdrains may be required and shall be constructed at locations determined by the Engineer. An estimated quantity of 150 lin. ft. has been included in the General Summary. In the final finishing of slopes and ditches, care shall be exercised to assure that the exposed edges of the underdrains will be left free of earth cover that would impede free drainage.

**DEPRESSED CURB:** The curb of the drive left of Sta. 13+80 shall be depressed as directed by the Engineer. Cost of this work shall be included in the unit price bid for Combination Curb and Gutter.

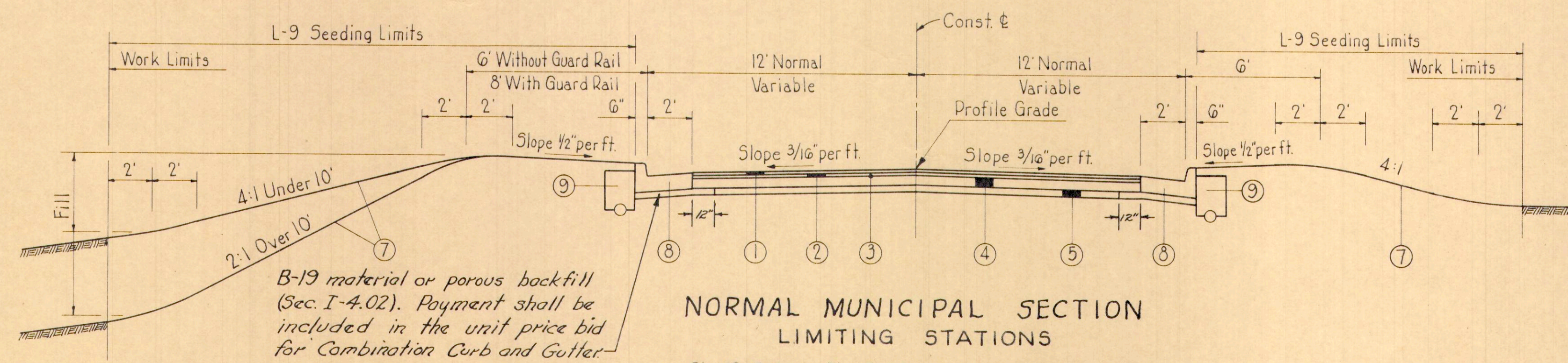


NORMAL RURAL SECTION



SUPERELEVATED RURAL SECTION  
LIMITING STATIONS

Sta. 7+92.75 to Sta. 10+86.75 294.00 Lin. Ft.



NORMAL MUNICIPAL SECTION  
LIMITING STATIONS

Sta. 12+81.28 to Sta. 15+30 248.72 Lin. Ft.

B-19 material or porous backfill (Sec. I-4.02). Payment shall be included in the unit price bid for Combination Curb and Gutter.

NOTE: For limits of pipe underdrain See Sh. 3

MICHAEL BAKER JR., CONSULTING ENGINEERS  
ROCHESTER, PENNSYLVANIA

TYPICAL SECTIONS & GENERAL NOTES

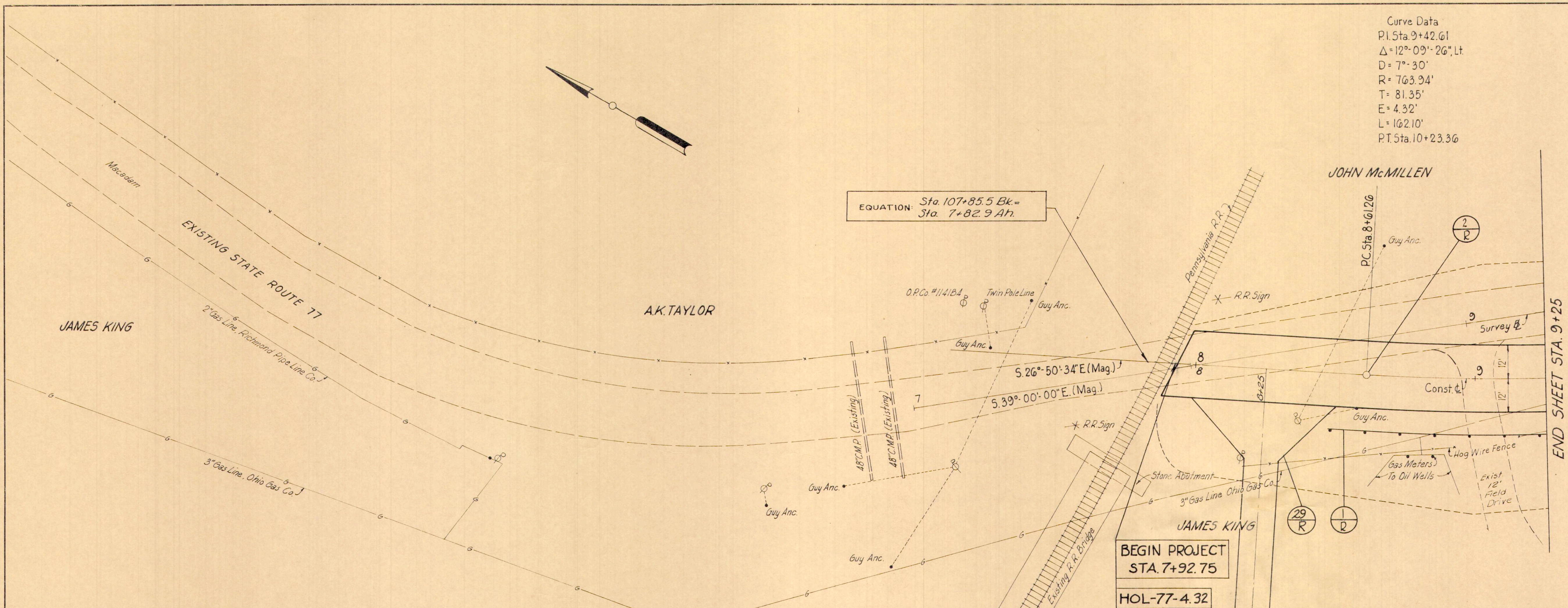
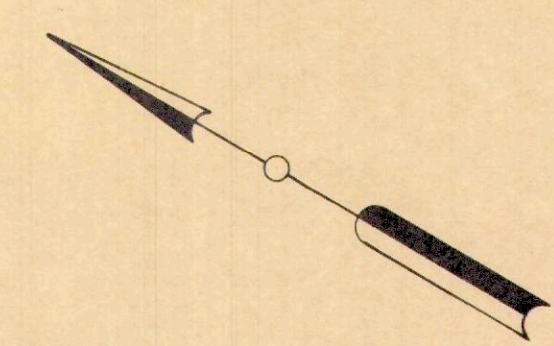
STATE ROUTE 77  
OVER KILLBUCK CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
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HOMES COUNTY  
HOL-77-(4.18-4.24)

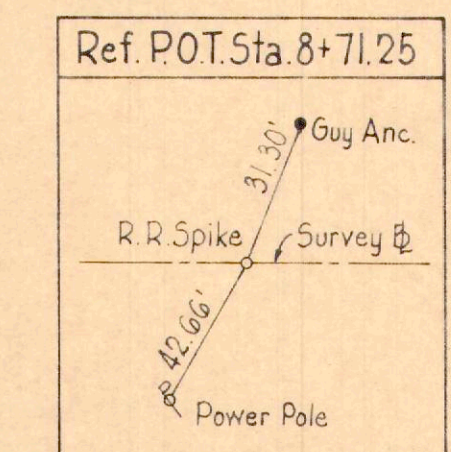
Curve Data  
P.I. Sta. 9+42.61  
 $\Delta = 12^{\circ} 09' 26''$  Lt.  
D = 7° 30'  
R = 763.94'  
T = 81.35'  
E = 4.32'  
L = 162.10'  
P.T. Sta. 10+23.36



EQUATION: Sta. 107+85.5 Bk. =  
Sta. 7+82.9 Ah.

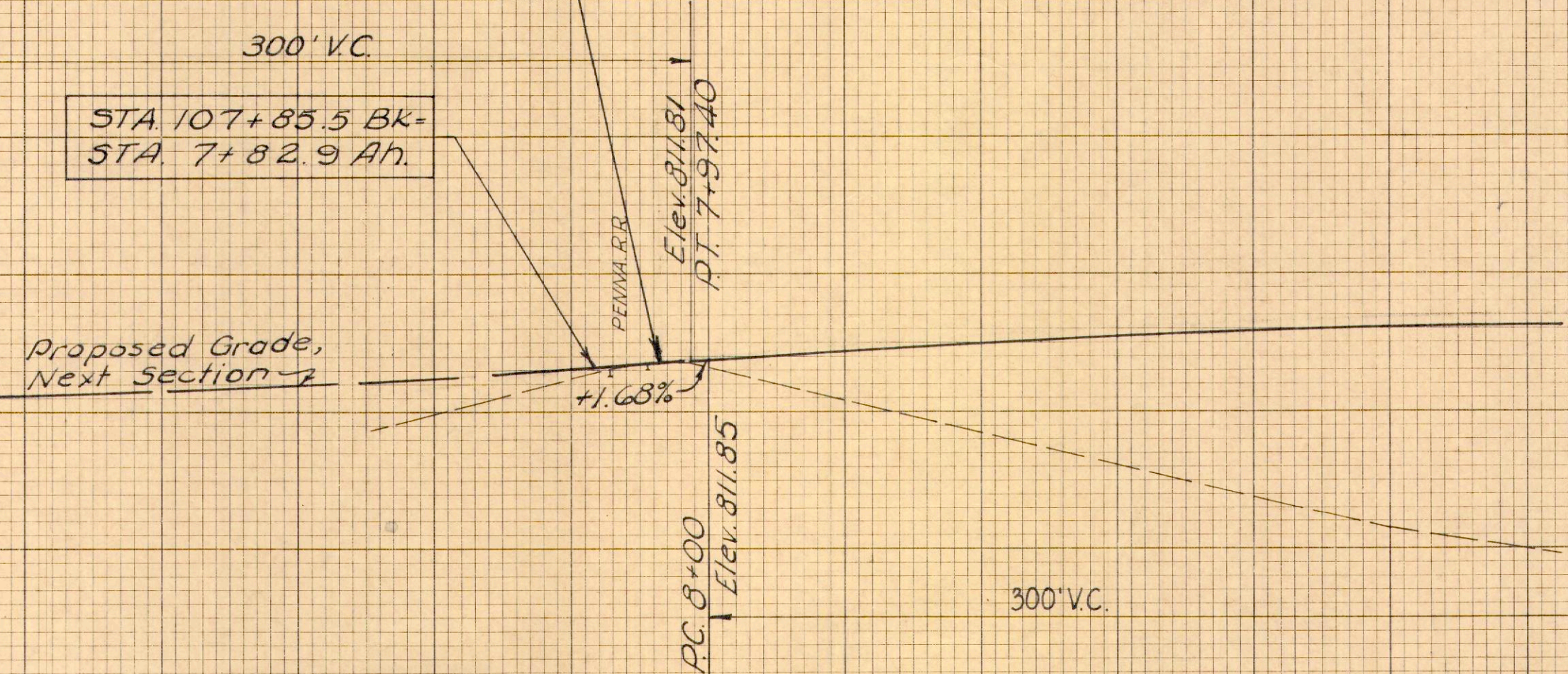
B.M. Std. disc in S.E. bridge seat  
stamped "J-33, 1934" @ Sta.  
7+80, 39.5 Rt. Elev. 805.53

For Quantities - See Sheet No. 3



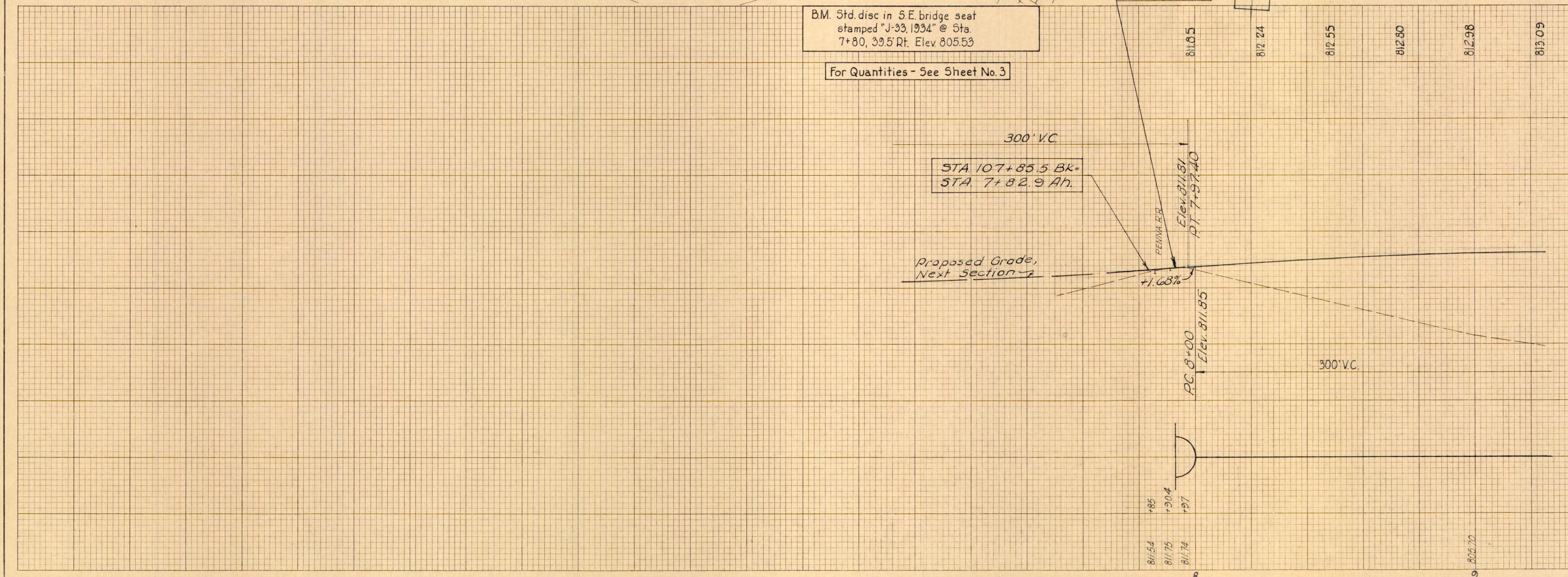
**SUPERELEVATION TABLES**

Station	Lt. Edge	Profile	Rt. Edge
7+92.75		811.73	811.75
+97.40		811.81	811.86
+98.50	811.89	811.83	811.89
8+00	811.92	811.85	811.92
+25	812.18	812.24	812.41
+50	812.25	812.55	812.84
+75	812.28	812.80	813.25
9+00	812.31	812.98	813.59
+25	812.33	813.09	813.84
+50	812.34	813.13	813.90
+75	812.35	813.11	813.72
10+00	812.33	813.01	813.43
+25	812.29	812.85	813.06
+50	812.22	812.61	812.62
+75	812.10	812.32	812.18
11+00	811.75	811.94	811.75
+11.75	811.56	811.75	811.56



MICHAEL BAKER JR. CONSULTING ENGINEERS  
ROCHESTER, PENNSYLVANIA

PLAN & PROFILE  
STATE ROUTE 77  
Sta. 7+92.75 to Sta. 9+25





**PROPOSED STRUCTURE**

TYPE: 2-Span continuous steel beam with reinforced concrete deck and substructure.  
 SPANS: 70'-70'  
 ROADWAY: 28'-0" curb to curb with 2'-3" safety curbs.  
 LOAD FREQUENCY: CF 130 (57)  
 SKEW: 0°  
 WEARING SURFACE: 3/4" Monolithic Concrete  
 APPROACH SLABS: Rear - A5-1.54 (25' Long) Forward - Special (25' Long)  
 ALIGNMENT: Tangent

Curve Data  
 P.I. Sta. 9+42.61  
 $\Delta = 12^{\circ}09'26''$  Lt.  
 D = 7^{\circ}30'  
 R = 763.94'  
 T = 81.35'  
 E = 4.32'  
 L = 162.10'  
 P.C. Sta. 8+61.26

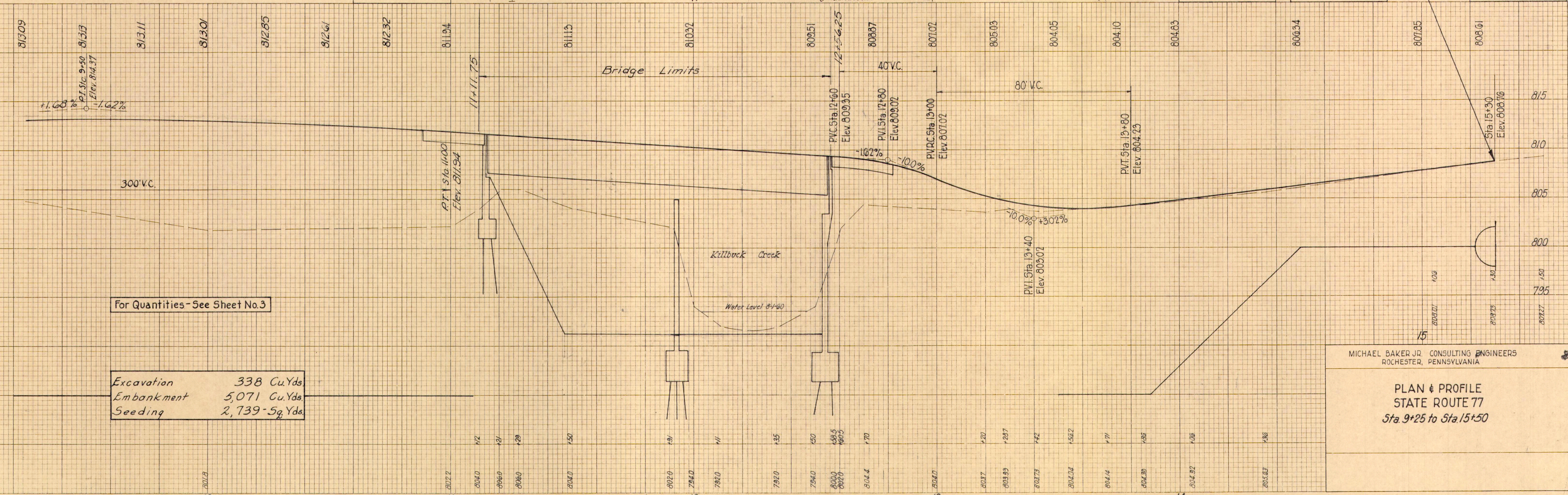
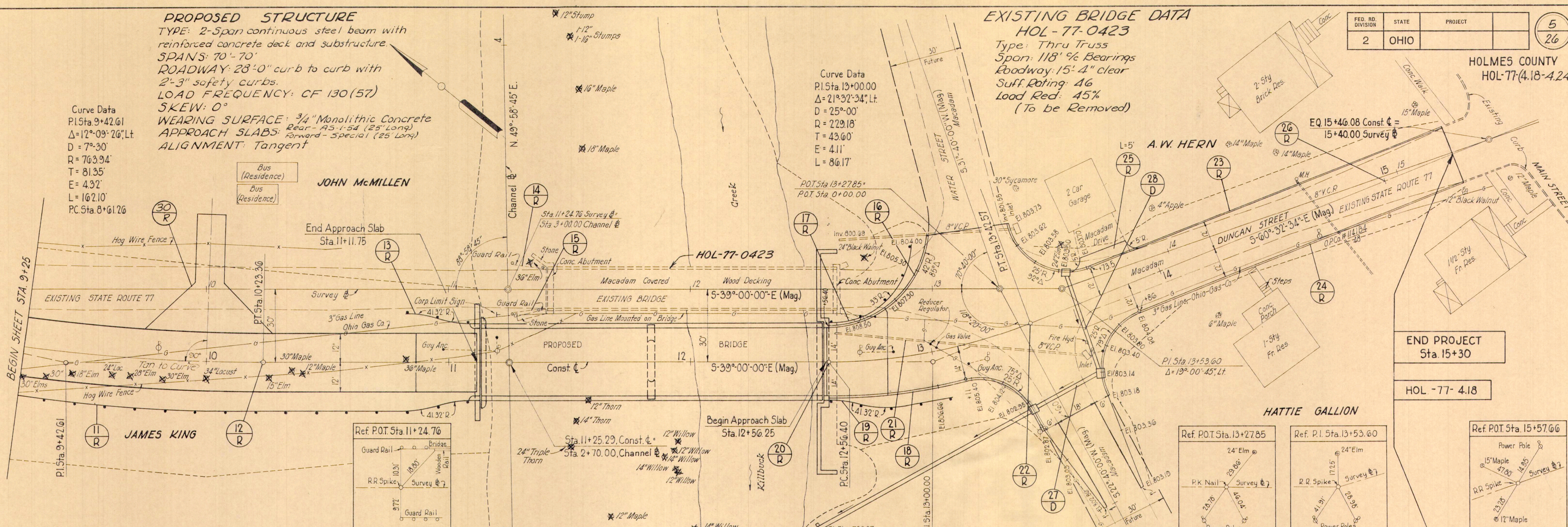
**EXISTING BRIDGE DATA**  
 HOL-77-0423

Type: Thru Truss  
 Span: 118' % Bearings  
 Roadway: 15'-4" clear  
 Suff. Rating: 46  
 Load Red: 45%  
 (To be Removed)

FED. RD. DIVISION	STATE	PROJECT	5 26
2	OHIO		

HOLMES COUNTY  
 HOL-77(4.18-4.24)

Curve Data  
 P.I. Sta. 13+00.00  
 $\Delta = 21^{\circ}32'34''$  Lt.  
 D = 25^{\circ}00'  
 R = 229.18'  
 T = 43.60'  
 E = 4.11'  
 L = 86.17'



For Quantities - See Sheet No. 3

Excavation 338 Cu.Yds.  
 Embankment 5,071 Cu.Yds.  
 Seeding 2,739 Sq.Yds.

MICHAEL BAKER JR. CONSULTING ENGINEERS  
 ROCHESTER, PENNSYLVANIA

PLAN & PROFILE  
 STATE ROUTE 77  
 Sta. 9+25 to Sta. 15+50

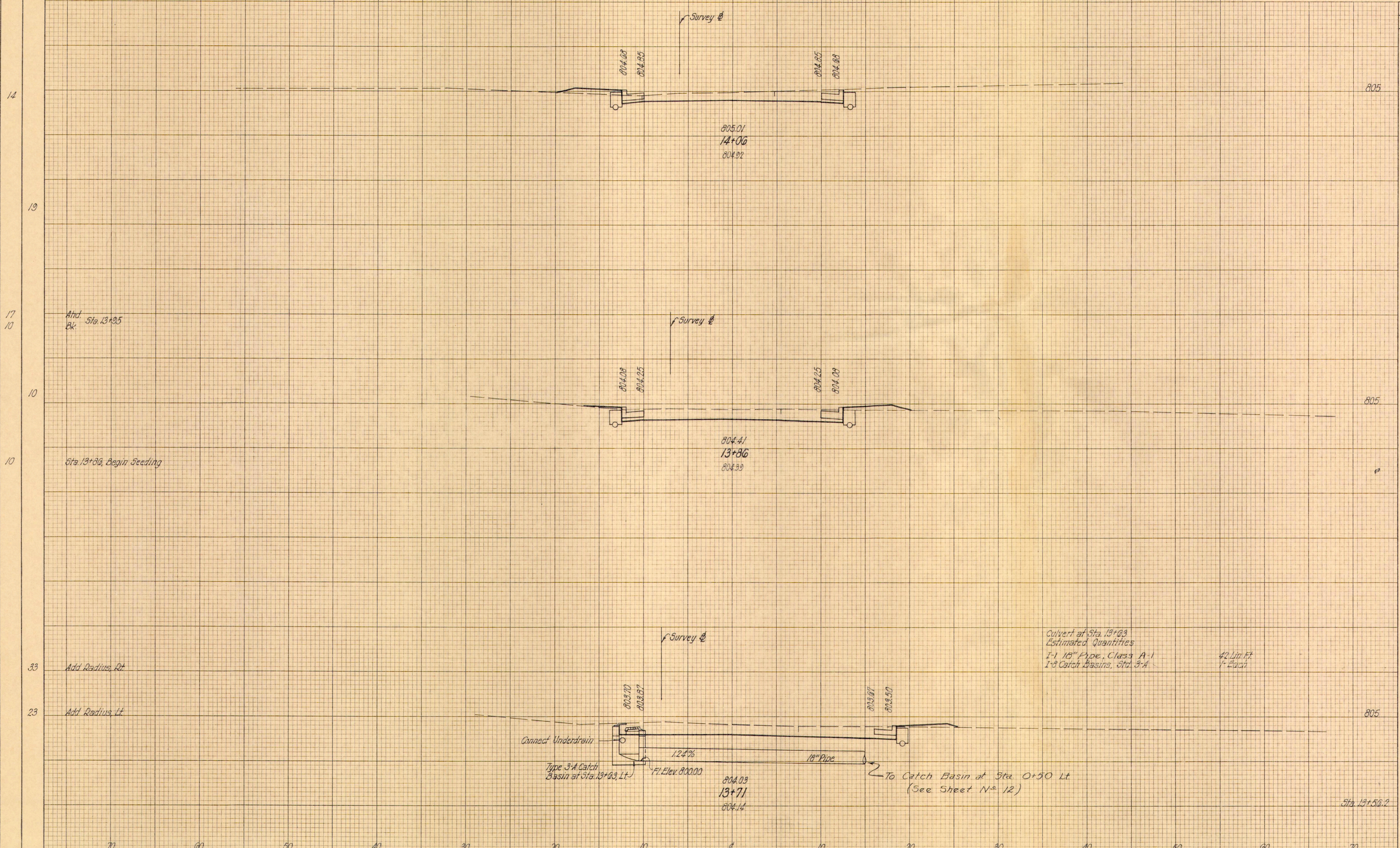


SEEDING  
END WIDTH SQ. YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

10  
26

HOLMES COUNTY  
HOL-77(4.18-4.24)



END AREA		VOLUME	
CUT	FILL	CUT	FILL
22	5		
		18	3
26	4		
		8	6
		17	2
36	2		
		27	1
62	0		

Culvert at Sta. 13+03  
Estimated Quantities  
1-1 18" Pipe, Class A-1  
1-3 Catch Basins, Std. 3-A  
42 Lin. Ft.  
1- Each

Connect Underdrain  
Type 3-A Catch Basin at Sta. 13+03, Lt.  
Fl. Elev. 800.00  
1.24%  
12" Pipe  
To Catch Basin at Sta. 13+50 Lt. (See Sheet No. 12)

Sta. 13+71 to Sta. 14+06

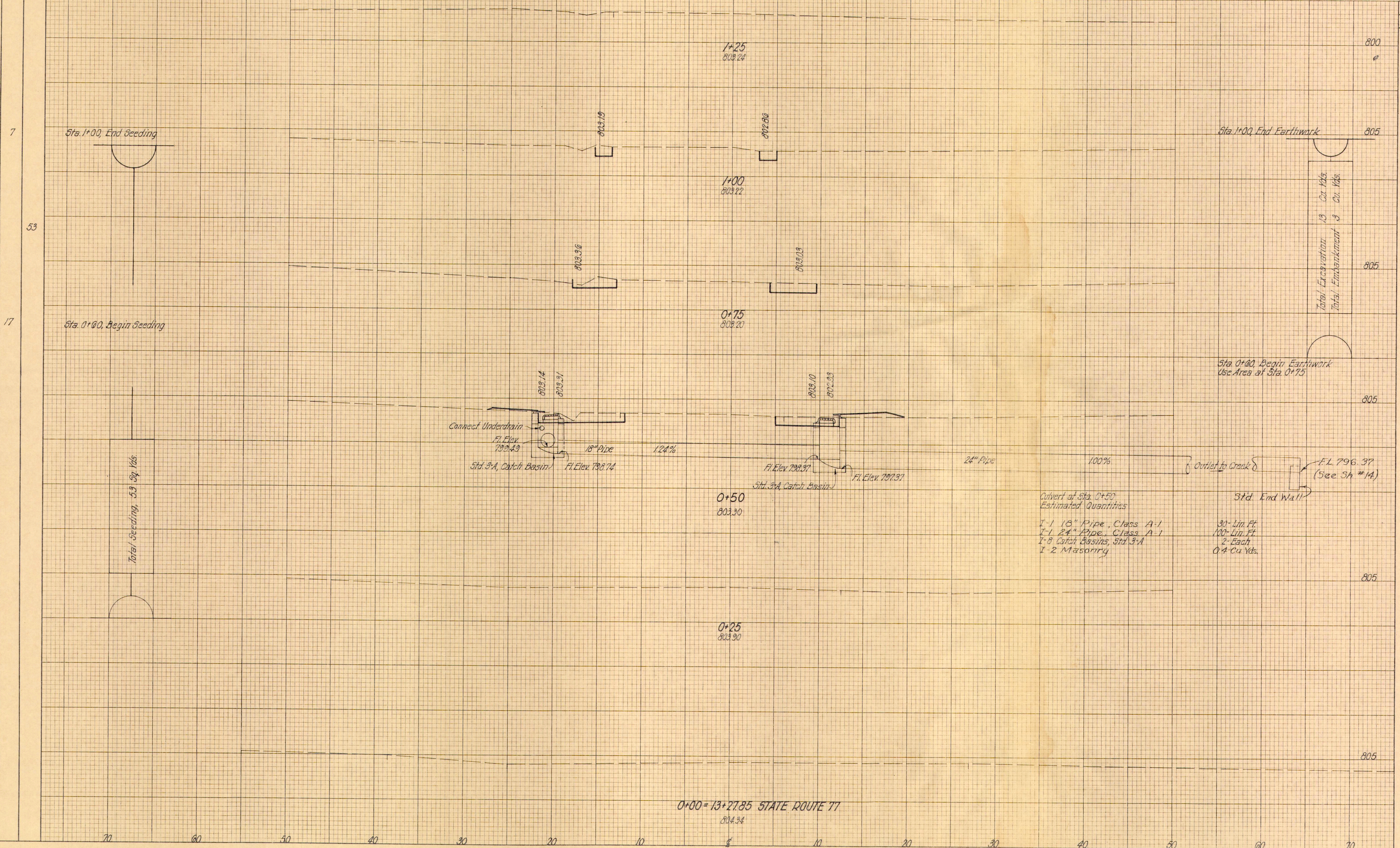


SEEDING  
END WIDTH  
SO. YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

12  
26

HOLMES COUNTY  
HOL-77(4.18-4.24)



END AREA	VOLUME	
	CUT	FILL
800		
805	5	1
805		
805	10	2
805		
805	10	2
805		
805		
805		

Total Excavation 13 Cu Yds  
Total Embankment 3 Cu Yds

Culvert at Sta. 0+50  
Estimated Quantities  
1-1 18" Pipe, Class A-1  
1-1 24" Pipe, Class A-1  
1-8 Catch Basins, Std. 3-A  
1-2 Masonry

30' Lin. Ft.  
100' Lin. Ft.  
2-Each  
0.4 Cu Yds.

0+00 = 13+27.85 STATE ROUTE 77  
804.34

Water Street Sta. 0+00 to Sta. 1+25

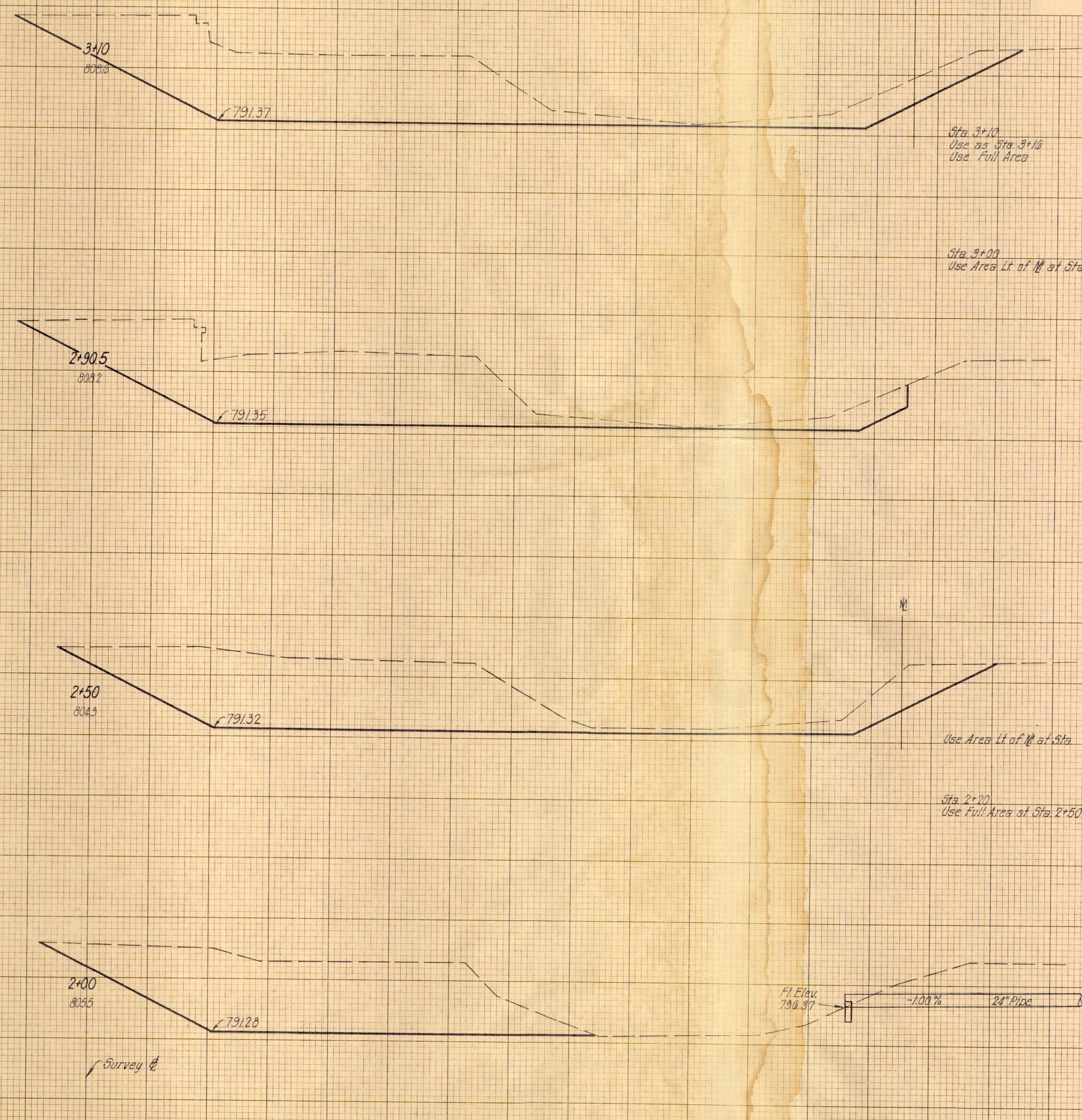


SEEDING  
END WIDTH SQ YDS.

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

14  
26

HOLMES COUNTY  
HOL-77(4.18-4.24)



END AREA		VOLUME	
CUT	FILL	CUT	FILL
800			
1000			
		577	
		943	
		332	
		940	
		1364	
		878	
		488	
		504	
		935	
		639	
		790	
		1380	
		700	

(Channel) Sta 2+00 to Sta. 3+10