FED. RD. DIVISION	STATE	PROJECT	TYPE FUND
2	OHIO	STATE	

JEFFERSON COUNTY
JEF-152- (7.03-7.11)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

JEF-152-(7.03-7.11)
JEFFERSON COUNTY

WAYNE TOWNSHIP

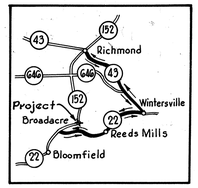
AUG 28 1963
GROUND PHOTOLAB

CONVENTIONAL SIGNS

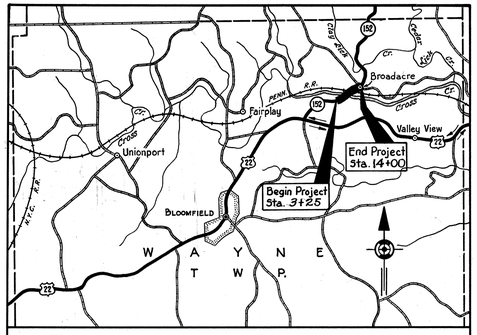
Township Line	
Center Line of Road	
Street Line	
Property Line	PL
Existing Right of Way	
Right of Way Only	RW
Corporation Line	
Limits of Cut or Fill	
Slope Easement	SL
Building	
Tree	
Stream	
Guard Rail – New	
Power Pole	
Telephone Pole	
Fire Hydrant	
Fence Line	

INDEX OF SHEETS

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RIGHT OF WAY PLAN	26-27



MAP OF DETOUR
Scale: 1" = 5 Miles



Delivery Point Broadacre, Ohio
Average Haul from Siding 0.10 Miles

LINE DATA

Begin Project & Work	STA. 3+25
End Project & Work	STA. 14+00
Gross Length of Project & Work	1075 LIN. FT.
DEDUCTION: R.R. CROSSING	
STA. 8+13 To STA. 8+59.43	46.43 LIN. FT.
NET LENGTH OF PROJECT & WORK	1028.57 LIN. FT. OR 0.194 MILES

LOCATION PLAN

SCALE OF MILES
0 1 2 3

Portion to be improved	
Other Roads	
Detours	

SCALE:

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

1961 SPECIFICATIONS

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 hearby 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 P McKenna
Date 3-20-61 Division Deputy Director

Approved D.P. Overman
Date 4-11-61 Engineer of Bridges

Approved D.P. Overman
Date 4-17-61 Engineer of Location and Design

Approved C.W. McCaughey
Date 4-18-61 Deputy Director of Design and Construction

Approved W.M. Linn
Date 4-17-61 Deputy Director of Right of Way

Approved Harry E. Hooper
Date 6-6-61 Deputy Director of Planning and Programming

Approved H.C. Berry
Date 6-6-61 First Assistant Director

Approved C.A. Preston
Date 6-6-61 Director of Highways

AUG 28 1963
GROUND PHOTOLAB

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

STATE OF OHIO
Michael Baker, Jr.
No. 9065
REGISTERED
PROFESSIONAL ENGINEER

FILE NO.	JEFFERSON COUNTY JEF-152-(7.03-7.11)
	DATE OF LETTING 196
	CONTRACT NO.

Supplemental Prints of Standard Construction Drawings						
I-15 No. 2	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 Shts 1,2&3 2-2-59
		I-15 No. 2A	8-17-60	T-35	1-2-56	I-8 C.B. 2-2-A&B 3-2-59
		L-3	4-1-50	RB-1-55	2-2-59	DR-1 1-3-55
		HW-E	11-15-60	I-1	11-15-60	L-1 4-1-50

Supplemental Specifications

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

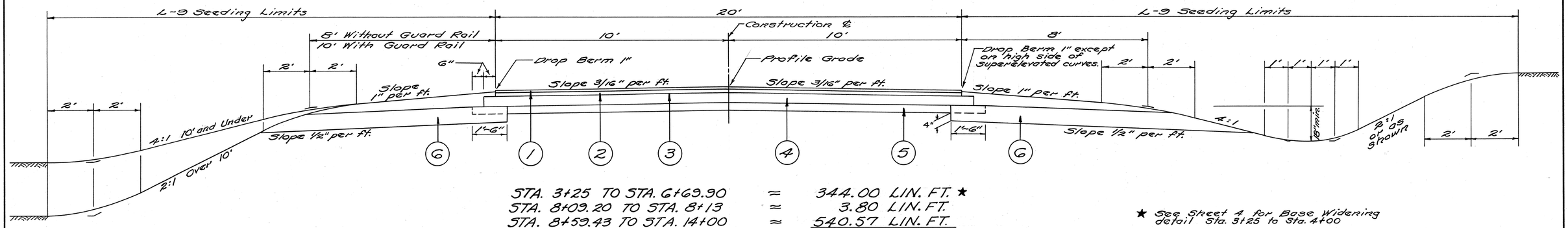
JEF-152-(7.03-7.11)

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TYPICAL SECTION

TYPE T-35 ON B-19

SCALE: ½" = 1'



STA. 3+25 TO STA. 6+69.90	=	344.00 LIN. FT. ★
STA. 8+09.20 TO STA. 8+13	=	3.80 LIN. FT.
STA. 8+59.43 TO STA. 14+00	=	540.57 LIN. FT.
TOTAL	=	888.37 LIN. FT.

★ See Sheet 4 for Base Widening detail Sta. 3+25 to Sta. 4+00

KEY

≠(1) T-35 1¼" Asphaltic Concrete Surface Course, Type C (85-100)
≠(2) B-35 1¾" 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)

≠ Thicknesses shown are "designed" thicknesses as described in Sections T-35.01 and B-35.01.

GENERAL NOTES

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

FIELD OFFICE: The contractor shall provide a suitable field office in accordance with Sec. S-0.01(b) having a minimum floor area of 150 square feet. The contractor shall have a telephone installed and maintained during the construction of this project. This office shall be provided within 10 days after work is started on the contract.

UTILITY ADJUSTMENT: Any or all work required for Public or Private Utilities will be done by and at the expense of their respective owners, unless otherwise noted on these plans.

ROUNDING OF CORNERS: The rounded corners and shoulder treatment on high side of superelevated curves shown on Standard Drawing RI-1 apply to all cross sections, even though otherwise shown on these plans.

STONE UNDERDRAINS: No 2 stone underdrains shall be constructed at intervals not to exceed 50 feet on each side of the pavement on tangents and on the low side of the pavement on curves. Additional underdrains may be required and shall be constructed at locations determined by the Engineer. An estimated quantity of 500 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.

SEEDING: Quantities for seeding are calculated for the soil areas within the work limits as shown on the cross sections and payment shall not be made for seeding beyond these limits.

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.

CONSTRUCTION LAYOUT STAKES: See note in proposal describing the work included in this lump sum pay item.

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 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" (4), 18"-24" (1) and 24"-30" (1).

CROWN AT RAILROAD CROSSING: The crown shall be worked out of the pavement between Station 7+89.20 and Station 8+13 by raising the edge of the pavement to meet the rail elevations. The pavement from Station 8+59.43 to Station 12+00 shall be constructed in accordance with the curve table on Sheet 12.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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JEF-152-(7.03-7.11)

SUMMARY OF QUANTITIES

PAVEMENT CALCULATIONS

Net Length of Pavement — 888.37 Lin. Ft.
Area of Pavement — 888.37 × 20 ÷ 9 = 1,974 Sq.Yds.

Item I-7 Approach Slabs
T = 13" Sta. 6+69.00 to Sta. 6+94.00 = 25 × 20 ÷ 9 = 56 Sq.Yds.
T = 11½" Sta. 7+89.20 to Sta. 8+09.20 = 20 × 20 ÷ 9 = 44 Sq.Yds.

Item E-1, Compacted Subgrade
Area of Pavement = 1974 Sq.Yds.
Deduct for Sta. 3+25 to Sta. 4+00 — 75×20÷9 = 167 Sq.Yds.
Add for Approach Slabs = 100 Sq.Yds.
Net Area of Compacted Subgrade = 1,907 Sq.Yds.

Item I-22, Subbase
Sta. 3+25 to Sta. 4+00 = 75×3×0.3333÷27 = 3 Cu.Yds.
Sta. 4+00 to Sta. 6+94.00 = 294'
Sta. 7+89.20 to Sta. 8+13 = 23.80'
Sta. 8+59.43 to Sta. 14+00 = 540.57'
858.37×22×0.3333÷27 = 233 Cu.Yds.
Total I-22 = 236 Cu.Yds.

Item B-19, Aggregate Base
Sta. 3+25 to Sta. 4+00 — 75×2.5×0.4167÷27 = 3 Cu.Yds.
Sta. 4+00 to Sta. 6+69.00 = 269'
Sta. 8+09.20 to Sta. 8+13 = 3.80'
Sta. 8+59.43 to Sta. 14+00 = 540.57'
813.37×21×0.4167÷27 = 264 Cu.Yds.
Estimated for Maintaining Local Traffic = 50 Cu.Yds.
Total B-19 = 317 Cu.Yds.

Item T-30, Prime Coat
1974 × 0.4 = 790 Gals.
Add for 6" Extension of B-19 = 38 Gals.
Total T-30 = 828 Gals.

Item B-35, Leveling
1974 × 1¾ ÷ 36 = 96 Cu.Yds.

Item T-35, Surface
1974 × 1¼ ÷ 36 = 69 Cu.Yds.

EARTHWORK AND SEEDING

Station From	Station To	Excavation Cu.Yds.	Embankment Cu.Yds.	Seeding Sq.Yds.	Fertilizer Lbs.	Lime Lbs.
3+25	8+13	617	903	1879	338	1691
8+59.43	14+00	161	8231	5310	956	4779
Totals		778	9134	7189	1294	6470

Item E-11 Water (Emb. + B-19 + I-22)
(9134 + 444 + 236) = 9814 × 5 ÷ 1000 = 49 M-Gals.

GENERAL SUMMARY

Carried from Sheet Nº

2	3	4	5	10	11	12	26	27	Item	Quantity	Unit	DESCRIPTION
												ROADWAY
	778								E-1	778	Cu.Yds.	Roadway Excavation, Method A.
	9134								E-1	9134	Cu.Yds.	Embankment, Method A.
	1907				238				E-1	2145	Sq.Yds.	Compacted Subgrade.
Lump									E-9	Lump	Lump	Removal of Trees and Stumps.
	49								E-11	49	M-Gals.	Water
		29							E-12	29	Lin.Ft.	Pipe Removed, Over 15".
		1	3						I-8	4	Each	Standard Monument Assemblies.
		69.35	500						I-15	569.35	Lin.Ft.	Guard Rail, Steel Beam Standard Type (Deep).
			208						I-15	208	Lin.Ft.	Guard Rail, Wire Cable Type (3 Cables)
	7189								L-9	7189	Sq.Yds.	Seeding and Protecting.
	0.65								L-9	0.65	Ton	Commercial Fertilizer (12-12-12).
	3.24								L-9	3.24	Tons	Agricultural Liming material.
												DRAINAGE
				72					I-1	72	Lin.Ft.	12" Pipe, Class F-1
					26				I-1	26	Lin.Ft.	15" Pipe, Class A-1
		76							I-1	76	Lin.Ft.	18" Pipe, Class A-1
						80			I-1	80	Lin.Ft.	30" Pipe, Class C-1 Sec. M-6.8(b) or Sec. M-6.6(b)
		0.3			0.3				I-2	0.6	Cu.Yds.	Masonry
		1							I-8	1	Each	Standard No. 2-2-A Catch Basin.
					1				I-8	1	Each	Standard No. 2-2-B Catch Basin.
500									I-9	500	Lin.Ft.	Stone Underdrains, No. 2
		5							I-10	5	Sq.Yds.	Riprap, Grout Filled, as per Plan.
		13			11				I-10	24	Cu.Yds.	Dumped Rock Channel Protection.
		3				1			S-22	4	Cu.Yds.	Removal of Portions of Existing Structures.
												PAVEMENT
	236								I-22	236	Cu.Yds.	Subbase
	317	12		25	47	43			B-19	444	Cu.Yds.	Aggregate Base Course.
	828	34		81	102	122			T-30	1167	Gals.	Bituminous Prime Coat; Sec. M-5.7, RT-2 or RT-3.
	96								B-35	96	Cu.Yds.	Asphaltic Concrete Leveling Course (85-100).
	69	5		10	13	16			T-35	113	Cu.Yds.	Asphaltic Concrete Surface Course, Type C, (85-100).
	56								I-7	56	Sq.Yds.	Reinforced Concrete Approach Slab (T = 13").
	44								I-7	44	Sq.Yds.	Reinforced Concrete Approach Slab (T = 11½").
										Lump	Lump	Construction Layout Stakes
												STRUCTURE OVER 20' SPAN
												See Sheet 18 for Quantities Bridge No. JEF-152-0711
												BUILDING REMOVALS
							1		E-10	1	Each	Parcel No. 2 - Removal Of Concrete Block Garage.
								Lump	E-10	Lump	Lump	Parcel No. 7 - Removal Of One 2 Story Frame Dwelling with Concrete Block Attachment, ... One Frame Garage, and one Out House.
								Lump	E-10	Lump	Lump	Parcel No. 8 - Removal Of One 2 Story Frame Dwelling and One Tile Garage.
								Lump	E-10	Lump	Lump	Parcel No. 9 - Removal Of One 2 Story Frame Dwelling, One Frame Garage, One Frame Shed and One Stone Water Trough.

FED. RD. DIVISION	STATE	PROJECT		4
2	OHIO			27

JEFFERSON COUNTY
JEF-152- (7.03-7.11)

PROPOSED STRUCTURE

Type: Single span welded deck girder with reinforced concrete deck and abutments
Span: 90' ℄ Brgs.
Roadway: 28'-0" f/f of 2'-3" safety curbs
Load Frequency: CF 130 (57)
Skew: 30°00' R.F.
Wearing Surface: 3/4" Mono. Concrete
Appr. Slabs: Rear: AS-1-5A (25' Long) - Fwd: AS-1-5A (20' Long)
Alignment: Tangent

EXISTING BRIDGE DATA

Type; Pony Truss
Span: 80'
Roadway: 16'
Abutments: Stone
Load Reduction 25% (To be removed)

CROSS CREEK

BILLY GENE CAIN

Light Woods

Guy cables

2-Car Conc. Block Garage

F.L. Elev. 866.40

End Approach Slab Sta. 6+94.00

PROPOSED BRIDGE

Begin Work Sta. 3+25

P.I. Sta. 5+00 Δ = 10°-00'-00" Rt.

To State Route 22

N-36°-08'-56"-E (Mag.)

Survey ℄

EXISTING STATE ROUTE 152 Macadam

Const. ℄

N-36°-52'-52"-E (Mag.)

N-46°-08'-56"-E (Mag.)

Pavement Widening

Slag

Wood Planking

Inv. 864.40 Conc. Hdw.

Stone Abutment 7

Const. ℄ 7

N-76°-00'-00"-E (Mag.)

Existing Bridge

Begin Approach Slab Sta. 7+89.20

F.L. Elev. 867.00

Wood Steps Inv. 864.78

Conc. Hdw.

P.I. Sta. G+82.04 Δ = 20°-05'-56" Lt.

Conc. Steps

Conc. Walk

28" Maple

18" Maple

L-37'

1½-Sty. Fr. Res.

Hog Wire Fence

Barb Wire Fence

Slag Drive

Pine Trees

6" Ash

10" Ash

Apple

8" Chestnut

4" Pine

30" Maple

20" Poplar

18" Poplar

Cribbing

Main Tracks

PENNSYLVANIA RAILROAD

Channel ℄

Sta. 1+00 Channel ℄ = P.I. Sta. 8+31.41 Survey ℄ Δ = 20°-38'-19" Rt.

Gravel Road

R.R. Sig. Light

Conc. Base

Stone Abutment 7

70°-57'-30"

R.R. Signal Light

To Richmond

EXISTING STATE ROUTE 152 N 46°-38'-19"-E

Conc. Boxes

Metal Signal Box

Side Track

Deduct 46.43' No Work Req'd R. R. Crossing

PROPERTY OF PENNSYLVANIA RAILROAD CO.

B.M. Std. disc in stone bridge Abutment @ Sta. 7+25-11' Lt. Elev. 866.56

B.M. R.R. Spike in power pole @ Sta. 9+29.2 - 39.5' Rt. Elev. 859.57

Ref. Pl. Sta. 5+00.00
20" Locust
Survey ℄
R.R. Spike
3 Tacks in Fence Posts

Ref. Pl. Sta. G+82.04
3 Tacks in 4" Locust
R.R. Spike
Survey ℄
3 Tacks in 18" Maple
Power Pole O.P.Co.# 1146 118

Ref. Pl. Sta. 8+31.41
R.R. 3 Tacks in P.P.
Survey ℄
R.R. Spike
3 Tacks in P.P.

MARY HEASTON

BILLY GENE CAIN

PROPERTY OF PENNSYLVANIA RAILROAD CO.

BEGIN PROJECT Sta. 3+25

JEF-152-7.03

Sta. 4+00 Elev. 882.83

300' V.C.

P.V.C. Sta. 5+25 Elev. 875.96

STA. 8+13

STA 8+59.43

P.V.T. Sta. 8+25 Elev. 867.20

Sta. 8+35.3 Elev. 867.16

G+94.00

Bridge Limits

7+89.20

-5.52%

-5.5%

-0.34%

-0.4%

0.80%

F.L. Elev. 867.00

F.L. Elev. 866.40

Sta. 5+89.5 28' Rt.

Sta. 6+45 27.5' Lt.

P.V.I. Sta. G+75 Elev. 867.71

P.C. 8+75

Cross Creek

ROADWAY AND DRAINAGE

Side	Ref. No.	Station From	Station To	T-35 2" Asphaltic Conc. Surf. Course, Type C (85-100) Cu. Yds.	T-30 Bit. Prime Coat Sec. M-57 RT-2 or RT-3 0.4 Gal. per Sq. Yd. Gal.	B-19 5" Aggregate Base Course Cu. Yds.	I-8 Monument Assemblies Each	I-15 Guard Rail Std. Type Deep Lin. Ft.	I-1 Pipe Class A-1 18" dia. Lin. Ft.	I-8 Catch Basins Type 2-2-A Each	I-2 Masonry Cu. Yds.	I-10 Rip-rap Sq. Yds.	I-10 Dumped Rock Channel Protection 2' Deep Cu. Yds.	E-12 18" Pipe Removed Lin. Ft.	S-22 Removal of Portions of Existing Structures Cu. Yds.
℄	1-R	4+00					1								
Lt.	2-R	5+73	G+43	1.7	12.3	4.3									
Rt.	3-R	3+27	3+55	0.5	3.7	1.3									
Lt.	4-R	G+31.27	G+44.37					13.30							
Rt.	5-R	G+30	G+48											29	3
Rt.	6-R	G+30	G+60	2.6	18.4	6.4									
Rt.	7-R	G+76.43	7+03.38					27.40							
Lt.	8-R	7+79.82	7+93.37					13.75							
Rt.	9-R	7+98.58	8+12.90					14.90							
Lt. & Rt.	11-D	5+89.5	G+45						76	1	0.3	5	13		
Totals				4.8	34.4	12.0	1	69.35	76	1	0.3	5	13	29	3

Quantities Carried to Sheet No 3

Excavation	617	Cu. Yds.
Embankment	903	Cu. Yds.
Seeding	1,879	Sq. Yds.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

PLAN & PROFILE
STATE ROUTE 152
Sta. 3+00 to Sta. 8+13

M.S. P.C. 8+64.68

Tack in hub P.I. 10+08.21

GUARD RAIL

Station From	Station To	Side ℄	See Sheet	Lin. Ft. Rdwy.	Lin. Ft. Appr.
2+92*	10+55	Lt.	5	250	
9+05.71	10+90	Rt.	5	175	
1+80	2+80	Lt.	12		112
1+80	2+80	Rt.	12		96
10+95	11+67.85	Lt.	5	75	
TOTAL				500	208

* On Appr. Lt. - Sta. 9+01.75

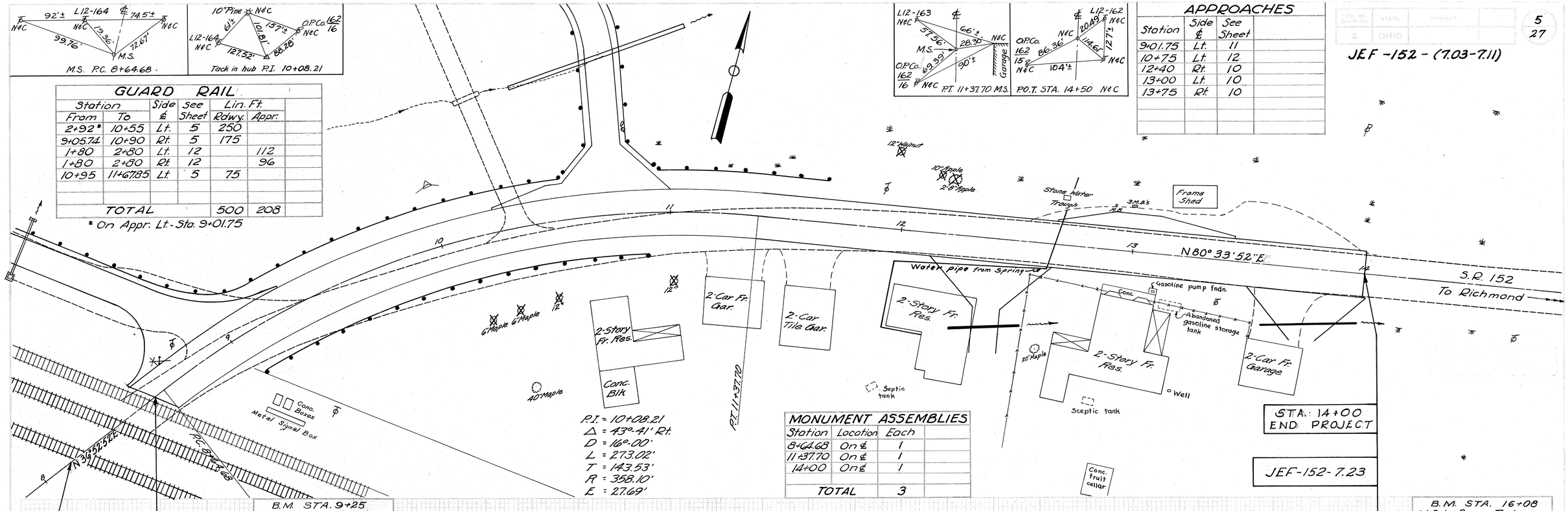
APPROACHES

Station	Side ℄	See Sheet
9+01.75	Lt.	11
10+75	Lt.	12
12+40	Rt.	10
13+00	Lt.	10
13+75	Rt.	10

FED. NO. DIVISION	STATE	PROJECT	
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JEF -152 - (7.03-7.11)



MONUMENT ASSEMBLIES

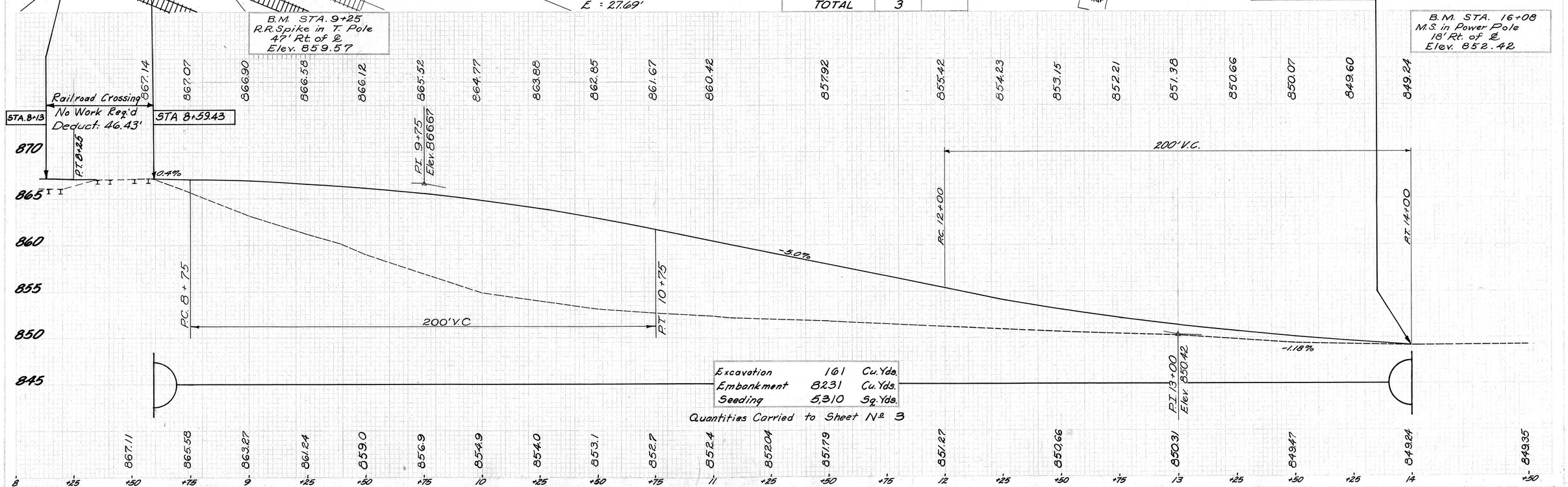
Station	Location	Each
8+64.68	On ℄	1
11+37.70	On ℄	1
14+00	On ℄	1
TOTAL		3

STA. 14+00
END PROJECT

JEF-152-7.23

B.M. STA. 9+25
R.R. Spike in T. Pole
47' Rt. of ℄
Elev. 859.57

B.M. STA. 16+08
M.S. in Power Pole
18' Rt. of ℄
Elev. 852.42



Excavation	161	Cu. Yds.
Embankment	8231	Cu. Yds.
Seeding	5,310	Sq. Yds.

Quantities Carried to Sheet Nº 3

PLAN & PROFILE STA. 8+59.43 TO 14+75

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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JEFFERSON COUNTY
JEF-152- (7.03 - 7.11)

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
52		880	100	25	
501				341	48
39	Ahd.	Ahd.	86	1	
29	Bk. Sta. 4+00	Bk.	09	0	
				63	0
102		Sta. 3+53	3	0	
10	Sta. 3+53 Begin Seeding			3	0
		Sta. 3+25	2	0	

Survey ℄

2:1

877.39
4+99
875.50

4:1

874.98

2:1

Survey ℄

N

4:1

880.42

880

882.83
4+00
882.78

Total Seeding = 1879 Sq. Yds.

Quantities Carried to Sheet No 4

Sta. 4+00
Ahead - Full Area
Back - Area Rt. of ℄

Sta. 3+27 to Sta. 3+55 Drive Rt.
1.3 Cu. Yds. B-19 Aggregate
0.5 Cu. Yds. T-35 Surface
3.7 Gals T-30 Prime

Quantities Carried to Sheet No 4

Total Excavation = 617 Cu. Yds.
Total Embankment = 903 Cu. Yds.

BEGIN WORK & PROJECT
STA. 3+25

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

Sta. 3+25 to Sta. 4+99

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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27

JEFFERSON COUNTY
JEF-152- (7.03~7.11)

STA. 8+13 to STA. 8+59.43
R.R. Xing
NO WORK REQUIRED

SEEDING END WIDTH	SEEDING SQ. YDS.		END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
20		Sta. 8+13, End Seeding				
	38					
18						
					7	96
	25	Seeding top of Channel Slopes See Sheet N° 13				
	282					
					0	39
0		Sta. 7+70, Begin Seeding				
0		Sta. 7+17, End Seeding				
	23					
17						
					0	7
	146					
	38					
	215					
					7	209
	49					
	30					
49		Ahd. Bk. Sta. 5+95				
45					2	22
	517					
					192	212
52		Sta. 4+99				

Sta. 8+13, End Earthwork — 22 | 0

860 — 0 | 288

Survey ℄ Sta. 8+00

867.38
7+95
855.5

Sta. 7+98.58 to Sta. 8+12.90 Rt.
14.52' Guard Rail

Survey ℄ Sta. 7+00

Sta. 7+89.2 Begin Earthwork — 0 | 76

Sta. 7+79.82 to Sta. 7+93.37 Lt.
13.75' Guard Rail

Sta. 6+94, End Earthwork, Use Area at Sta. 6+92.7 — 0 | 154

860 — 0 | 154

Sta. 6+76.43 to Sta. 7+03.38 Rt.
27.03' Guard Rail

869.16
6+92.7
865.6

Add for entry Rt. — 2 | 5

Culvert ℄ Sta. 6+17.5 @ 45° L.F. Skew

Estimated Quantities

I-1 18" Pipe Class A-1	76 Lin. Ft.
I-2 Masonry	0.3 Cu. Yds.
I-10 Dumped Rock Channel Protection (2' deep)	13 Cu. Yds.
I-8 Catch Basins, 2-2-A	1 Each
I-10 Riprap	5 Sq. Yds.

0 | 265

St'd End Wall
Sta. 6+45 - 27.5' Lt.

2:1 — 4:1 — 0.80% — 18" Pipe — I-10 Dumped Rock Channel Protection — 2' — Fl. Elev. 866.4

870.00
6+45 (Interpolated)
863.6

865 — 0 | 146

Sta. 6+31.27 to Sta. 6+44.37 Lt.
13.30' Guard Rail

Survey ℄ Sta. 6+00

Sta. 5+95 Use for Area back

Sta. 5+95 Use for Area ahead

Top of Grate - Elev. 869.30

Fl. Elev. 867.0

2:1 — 4:1 — 869.50

0.80% — 18" Pipe

FL. 868.8

Type 2-2-A Catch Basin
Sta. 5+89.5 - 28' Rt.

3'×3'×1' Cut-off wall (Cost included in Item I-10, Riprap)

2'

Place 5 Sq. Yds. Riprap as directed

10'

872.29
6+00.5
868.8

860 — 8 | 108

Earthwork, Sta. 5+95
Use back & ahead areas at Sta. 6+00.5

Sta. 5+95 Ahd. — 8 | 108

Sta. 5+95 Bk. — 8 | 94

Sta. 4+99 — 100 | 25

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

Sta. 6+00.5 to Sta. 8+13

JEFF-152-(7.03-7.11)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

855
850

2:1 F=763 2:1
864.77
10+00
854.9
C=4
El. 850.5

855
850

F=738
865.52
9+75
856.9
C=7
El. 850.6

855
850

F=620
866.12
9+50
859.0
2:1
C=4
El. 851.8

860
855

2:1 F=445 3:1
866.58
9+25
861.24
C=1
El. 858.0

Sta 9+01.25 Appr. Lt.
See Sheet 11

860
855

4:1 F=165 4:1
866.90
9+00
863.27

860
855

4:1 F=62 4:1
867.07
8+75
865.58

8+59.43

Sta 9+01.75 Appr. Lt.
See Sheet 11

Seeding Width	S.Y.	End Area Cut	Fill	Cu. Yds. Exc.	Emb.
98		4	763		
	275			5	695
100		7	738		
	279			5	652
101		4	670		
	263			2	516
88		1	445		
362				14	205
	192			1	282
50		0	165		
	125			0	105
40		0	62		
	35			6	18
0		22	0		

STA. 8+59.43 TO STA 10+00

JEF -152 (7.03-7.11)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

Seeding Width S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
88	11	441		
258			10	445
98	10	621		
737			2	1538
265			7	531
93	5	626		
257			4	603
92	4	677		
256			4	616
92	5	653		
264			4	656

850

2:1 F-441 4:1 Building C-11 2:1 2:1 El. 849.55

859.17
11+25
852.04

850

F-521 4:1 House C-10 El. 849.70

860.42
11+00
852.4

Sta 10+75 Type 2 Res Dr. Lt.
See Sheet 12

Sta. 10+75 Dr. Lt.
See Sheet 12

850

2:1 F-626 3:1 House C-5 El. 849.85

861.67
10+75
852.7

Excavation	161	Cu.Yds.
Embankment	8,231	Cu.Yds.
Seeding	5,310	Sq.Yds.

Quantities Carried to Sheet No. 5

850

F-677 2:1 C-4 El. 850.00

862.85
10+50
853.1

850

2:1 F-653 2:1 C-5 El. 850.20

863.88
10+25
854.0

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

STA 10+25 TO 11+25

DIST. NO.	STATE	PROJECT	
2	OHIO		

10
27

JEF -152- (7.03-7.11)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

Seeding Width	S.Y.	End Area Cut	Fill	Cu. Yds. Exc.	Emb.
27		26	0		
	164			31	6
32		7	7		
	222			18	19
48		12	14		
	300			16	106
60		5	101		
	369			11	281
73		7	203		
	444			13	541
87		7	381		
	243			8	381

845 / 850 / 845

849.24
14+00
849.24

END PROJECT

C:2 C:22 C:2 E1. 847.6

Sta. 13+75. Type 2 Res. Drive Rt. 20' Long
6 Cu. Yds B-19 Aggregate (5" Thick)
2.5 Cu Yds T-35 Surface (2" Thick)
42 Lin Ft. 12" Pipe, Class F-1
28 Gals. T-30 Prime

850.07
13+50
849.47

F-3 C:3 F-4 C:4 E1. 847.9

House

851.38
13+00
850.31

C:5 F-5 F-9 C:7 E1. 848.2

Sta. 13+00 M.B. Approach Lt. (4 Boxes)
5 Cu. Yds. B-19 Aggregate (5" Thick)
1.9 Cu. Yds. T-35 Surface (2" Thick)
14 Gals. T-30 Prime

853.15
12+50
850.66

4:1 F-101 -8.5% C:5 E1. 848.4 F-40

Sta 12+40, Type 2 Res. Drive Rt. 40' Long
14 Cu. Yds B-19 Aggregate (5" Thick)
5.4 Cu Yds T-35 Surface (2" Thick)
30 Lin. Ft. 12" Pipe, Class F-1
39 Gals. T-30 Prime

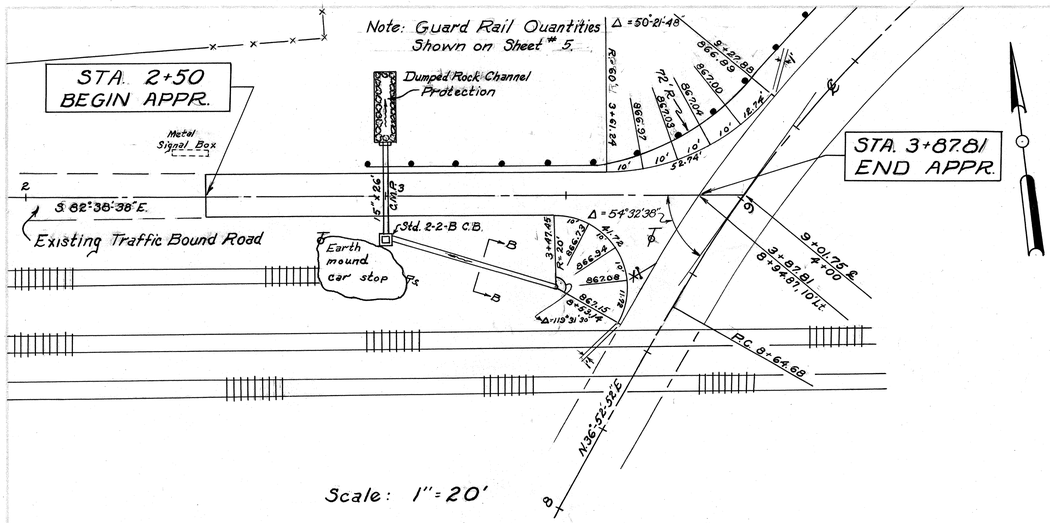
855.42
12+00
851.27

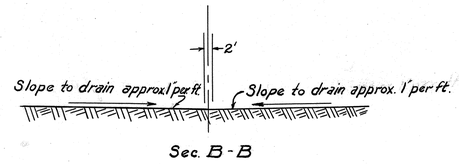
4:1 F-203 Building C:7 E1. 849.10

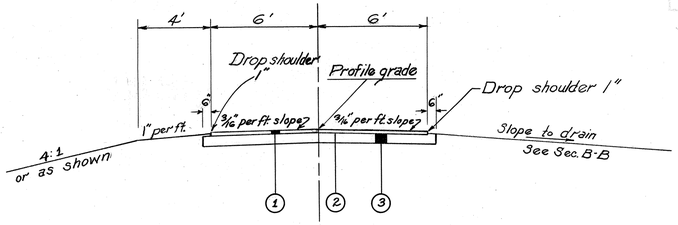
857.92
11+50
851.79

3:1 F-381 4:1 C:7 E1. 849.40

STA. 11+50 TO 14+00







1. T-35 2" Asphaltic Concrete Surface Course
2. T-30 Bituminous Prime Coat, 0.4 Gal per Sq. Yd.
3. B-19 7" Aggregate Base Course

TYPICAL SECTION

Scale: 1" = 4'-0"

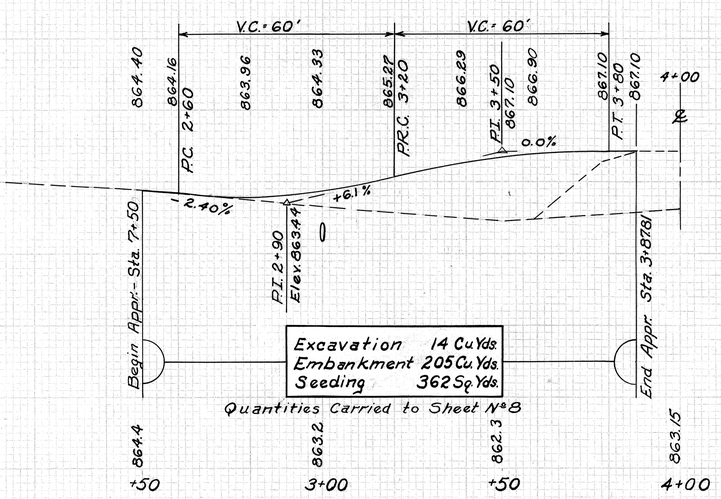
ESTIMATED QUANTITIES

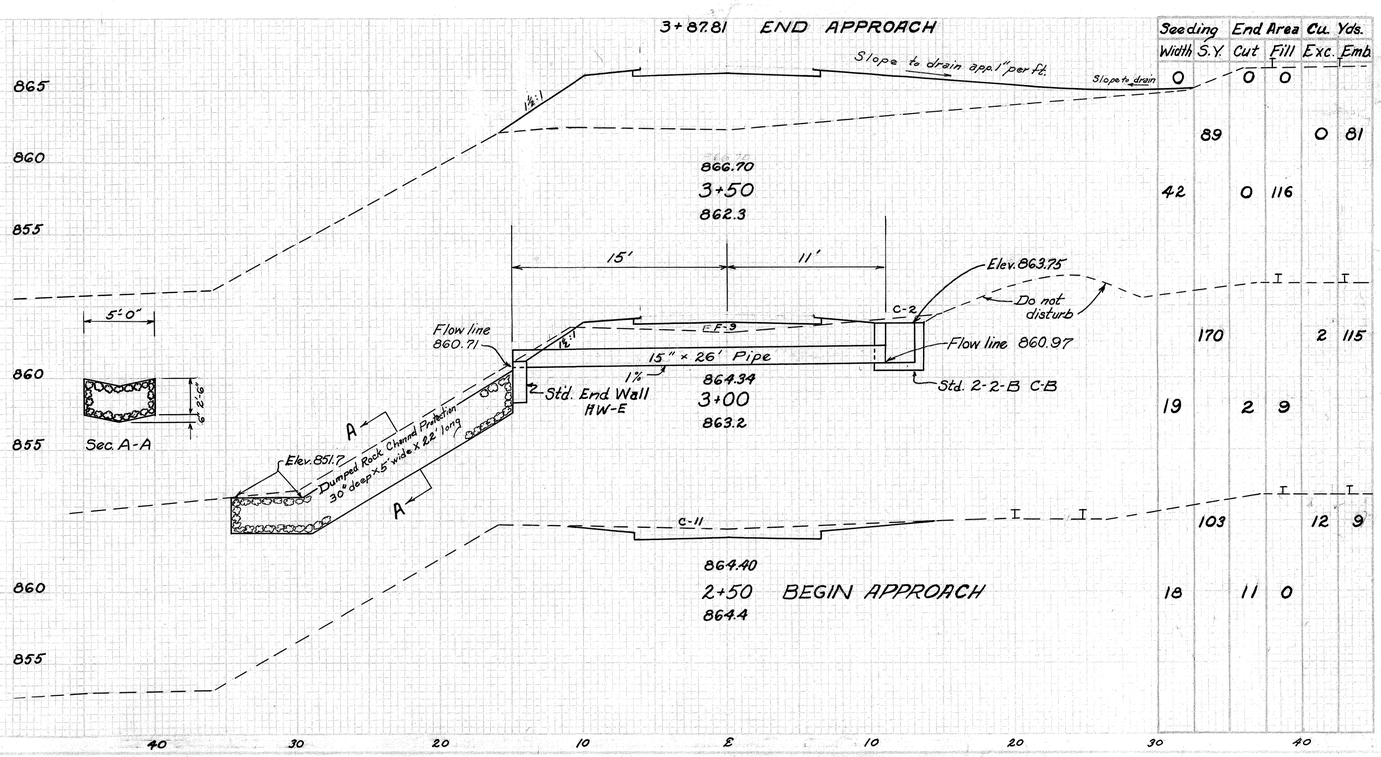
I-1	15" Pipe, Class A-1	26	Lin. Ft.
I-8	Std. 2-2-B Catch Basin	1	Each
I-2	Masonry	0.3	Cu. Yd.
I-10	Dumped Rock Channel Protection	11	Cu. Yds.
E-1	Compacted Subgrade	238	Sq. Yds.
T-35	2" Asphaltic Concrete Surface Course	13.2	Cu. Yds.
T-30	Bituminous Prime Coat Sec M-5.7, RT-2 or RT-3	102	Gals.
B-19	7" Aggregate Base Course	47	Cu. Yds.

SHEET NO.	STATE	PROJECT	
2	OHIO		

11
27

JEF-152-(7.03-7.11)





Seeding Width	End Area S.Y.	Cu. Yds. Cut	Fill	Exc. Emb.
0		0	0	
89			0	81
42		0	116	
170			2	115
19		2	9	
103			12	9
18		11	0	

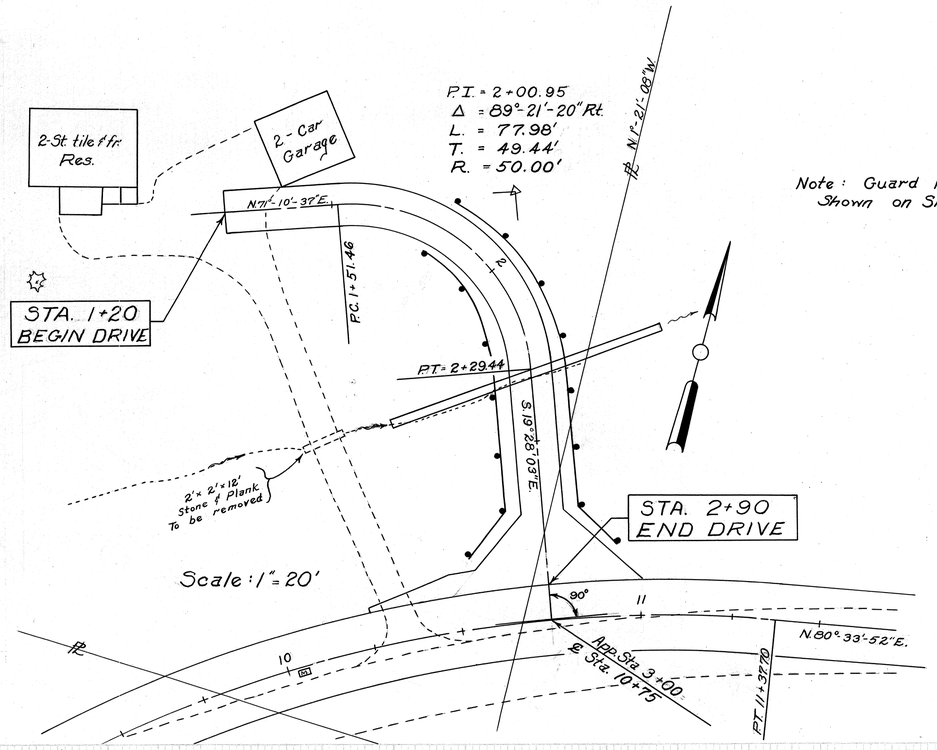
APPROACH LT. STA. 9+01.75

FED. ROAD DIVISION	STATE			12
2	OHIO			27

JEF-152 - (7.03 - 7.11)

CURVE TABLE

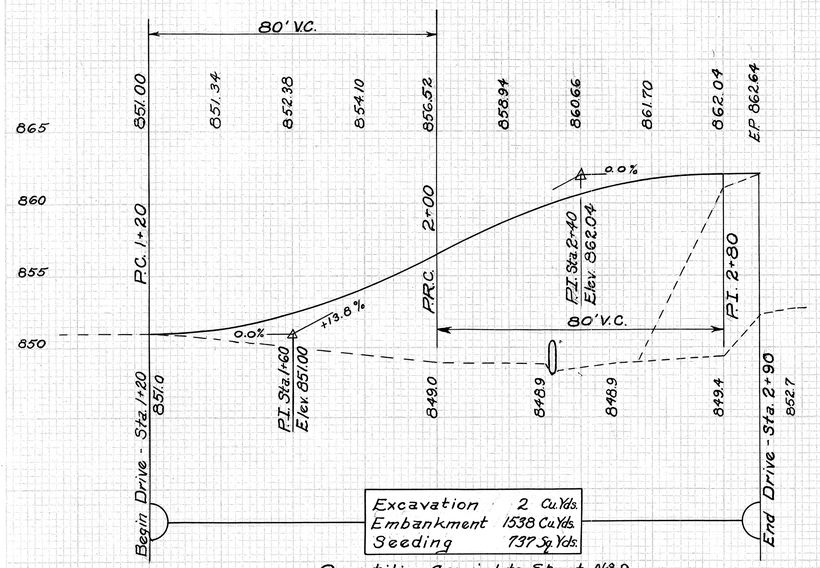
P.C. 8+64.68		D = 16°-00' Rt.		P.T.-11+37.70	
LEFT		TABLE "A"			RIGHT
Edge Pvmt. Grade	Add Super	STATION	Profile Grade	Deduct Crown	Edge Pvmt. Grade
867.15		8+53.69	867.14		—
867.15		8+59.43	867.13		—
867.15		PC. 8+64.68	867.11		867.09
867.15		8+65.17	867.11		867.09
867.15		8+75	867.07		867.04
867.10		8+94.87	866.94		—
867.07	Obtained Graphically	9+00	866.90	Obtained Graphically	866.82
866.91		9+25	866.58		866.43
866.62		9+50	866.12	-.16	865.96
866.14		9+75	865.52		865.36
865.52	+.91	10+00	864.77		864.61
864.61		10+25	863.88		863.72
863.42		10+50	862.85		862.69
862.04	Obtained Graphically	10+75	861.67		861.51
860.65		11+00	860.42		860.26
859.24		11+25	859.17		859.01
858.54		P.T. 11+37.70	858.54		858.38
857.86		11+50	857.92		857.76
856.53		11+75	856.67		856.51
855.26	-.16	12+00	855.42	-.16	855.26

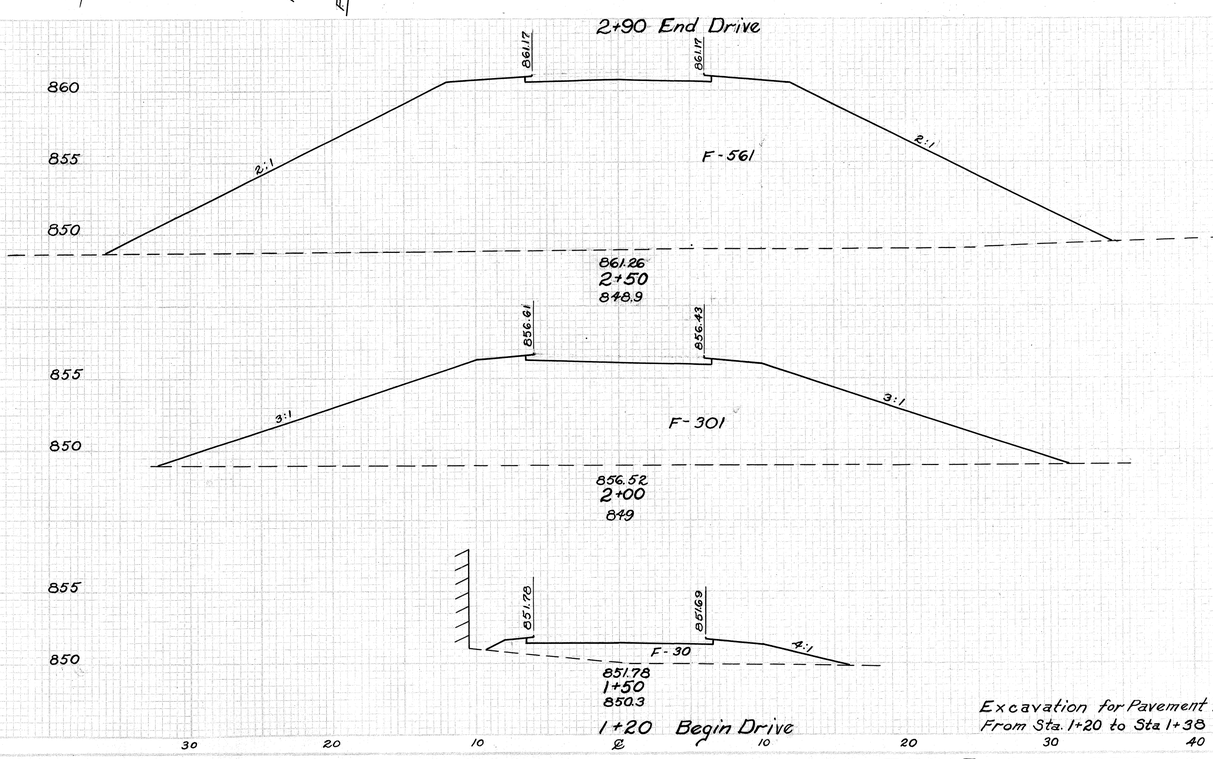


Note: Guard Rail Quantities Shown on Sheet No. 5

ESTIMATED QUANTITIES

T-35	2" Asphaltic Concrete Surface Course	15.9	Cu. Yds.
T-30	Bituminous Prime Coat	12.2	Gals.
B-19	5" Aggregate Base Course	43	Cu. Yds.
I-1	30" Pipe, Class C-1 Sec. M.G. 8(b) or Sec. M.G. 4(b)	80	Lin. ft.
S-22	Removal of Portions of Existing Structure	1	Cu. Yds.





Seeding Width	End Area S.Y.	Cu. Yds. Cut	Fill	Exc	Emb.
0		0	0		
	151			0	416
68		0	561		
	350			0	798
58		0	301		
	208			0	307
17		0	30		
	28			0	17
0		0	0		

Excavation for Pavement Trench From Sta. 1+20 to Sta. 1+38 → 2

DRIVE LT. STA 10 + 75

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

13
27

JEFFERSON COUNTY
JEF-152- (7.03-7.11)

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
16					
	38	860 0+50 864.5	342		230
11					
	15	860 0+25 864.2	168		85
0		860 0+00 864.2	15		25

2:1 Normal

f847.5

1½:1 Normal

f847.4

f847.3

Total Channel Seeding
282.5 Sq. Yds.

Carried to Sheet No 7

Total Channel Excavation
2408 C.Y.

Carried to Bridge Summary Sheet No 18

Sta. 0+89, Begin Earthwork

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

(Channel) Sta. 0+00 to Sta. 0+50

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

14
27

JEFFERSON COUNTY
JEF-152- (7.03-7.11)

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		860	350		
		1+25			
		864.9		104	
0		Sta 1+17 Zero Seeding			
		Sta. 1+17 Abd.	350		
		Sta. 1+17 Bk.	418		
	19	Sta. 1+17 - Use Area 1+25 Abd. Use Area 1+00 Bk.		263	
		860	418		
20		1+00			
		866.79			
	50			374	
		860	388		
16		0+75			
		865.2			
	44			338	
		Sta. 0+50	342		

140 130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

(Channel) Sta. 0+75 to Sta. 1+25

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

15
27

JEFFERSON COUNTY
JEF 152- (7.03-7.11)

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
24					
	16	860	218		97
0		2+00			
		865.1			
		Sta. 1+88	218		
					98
		Sta. 1+88 - Use Area of Sta. 2+00			
		860	190		
		1+75			
		865.0			
					203
		860	378		
		1+50			
		865.0			
					337
		Sta. 1+25	350		

16:1
848.2
Sta 1+88 Zero Seeding
2:1
848.1
2:1
848.0

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0

(Channel) Sta. 1+50 to Sta. 2+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

16
27

JEFFERSON COUNTY
JEF-152- (7.03-7.11)

SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
		Sta. 2+62, End Earthwork	0		
0					2
		860	9		
		2+50			
		865.3			
	33				45
24					
					141
		860	87		
		2+25			
		865.2			
	67				
		Sta. 2+00	218		

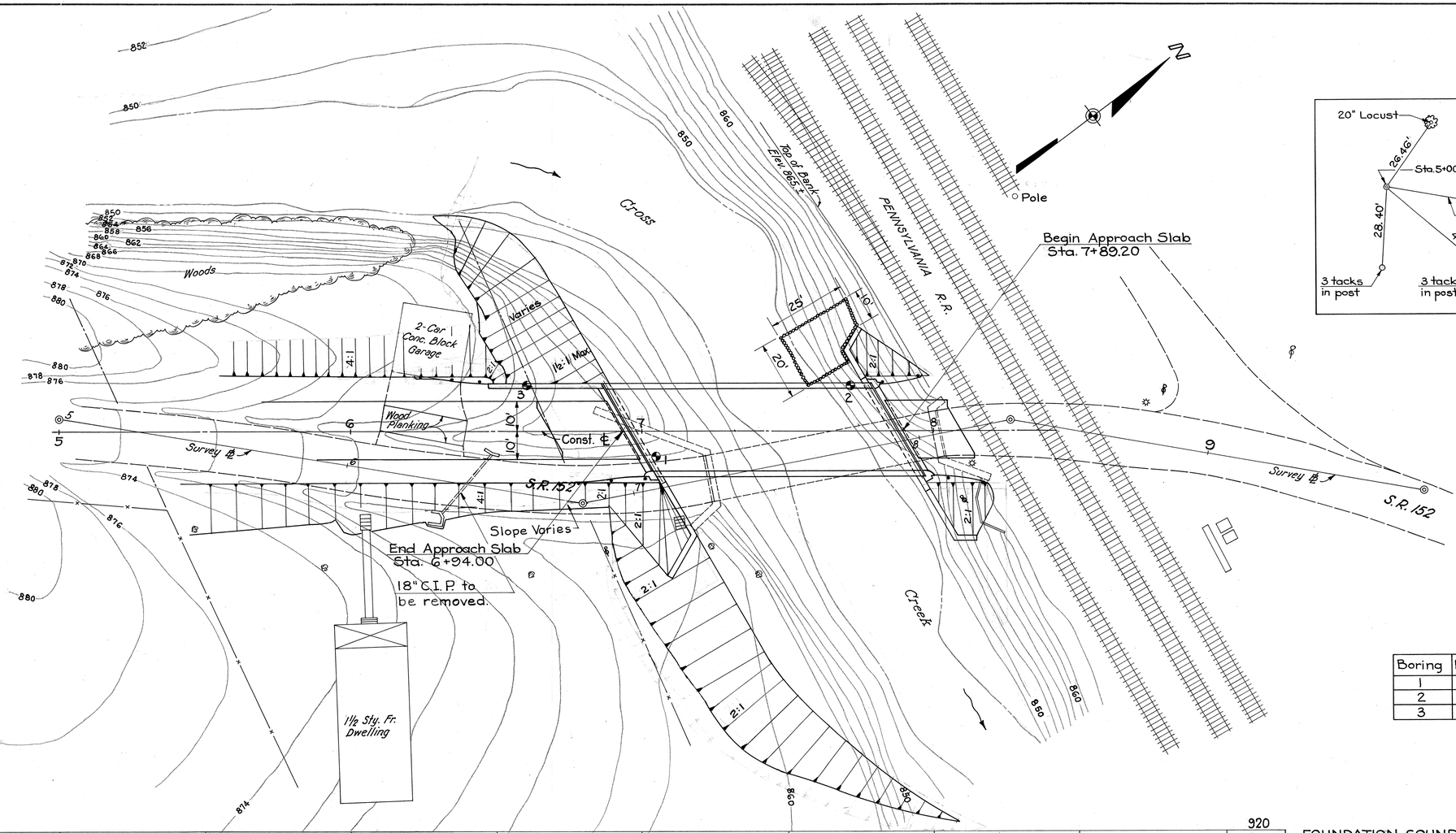
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0

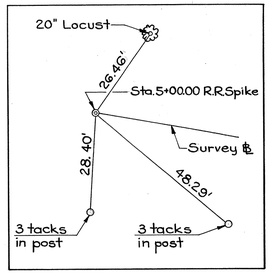
(Channel) Sta. 2+25 to Sta. 2+50

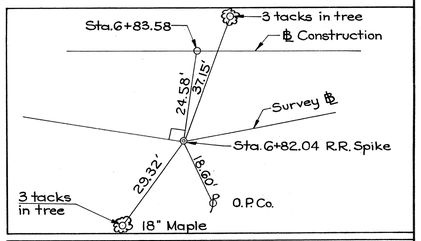
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

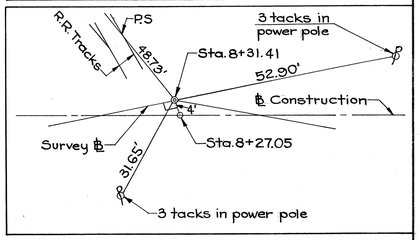
17
27

JEFFERSON COUNTY
JEF - 152 - (7.03 - 7.11)









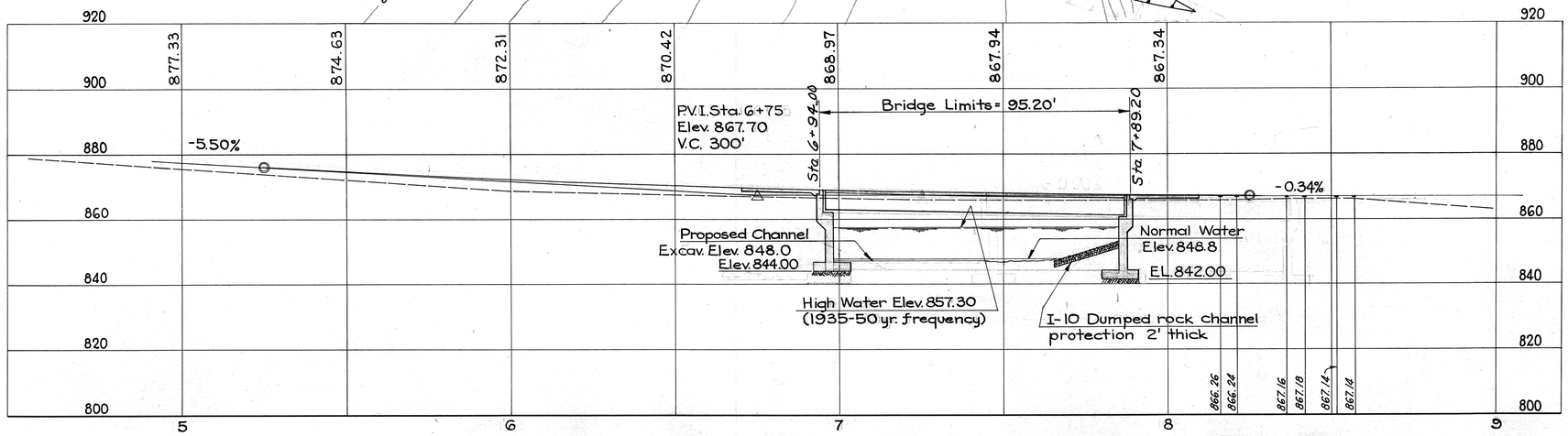
BENCH MARK
R.R. Spike in Power Pole
39.5' Rt. of Sta. 9+29.2
Elev. 859.57

● Denotes boring location

Boring	Rock El.
1	855.5
2	844.2
3	859.9

EXISTING BRIDGE DATA

YEAR BUILT: 1898
TYPE: Single Span Thru Truss.
SPAN: 79'-2" c/c Bearings
ROADWAY: 14'-0" Clear.
SKEW: 0°
SURFACE: 4" Wooden Planking with 2" Bit. Pav't.
ABUTMENTS: Stone Masonry.



FOUNDATION SOUNDINGS:

Foundation design and foundation quantities are based on a study of borings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division Office, but the State does not guarantee the accuracy thereof.

PROPOSED STRUCTURE

TYPE: Single span welded deck girder with reinforced concrete deck & abutments.
SPAN: 90' c.c. Bearings
ROADWAY: 28'-0" curb to curb with 2'-3" safety curbs.
LOAD FREQUENCY: C.F. 130 (57)
SKEW: 30° 00' R.F.
WEARING SURFACE: 3" monolithic concrete
APPROACH SLABS: Rear: AS-1-54 (25' long)
Forward: AS-1-54 (20' long)
ALIGNMENT: Tangent

Drainage Area = 54 Sq. Miles.

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SITE PLAN

BRIDGE NO. JEF.-152-0711
OVER CROSS CREEK

JEFFERSON COUNTY — STA. 6+94.00, STA. 7+89.20

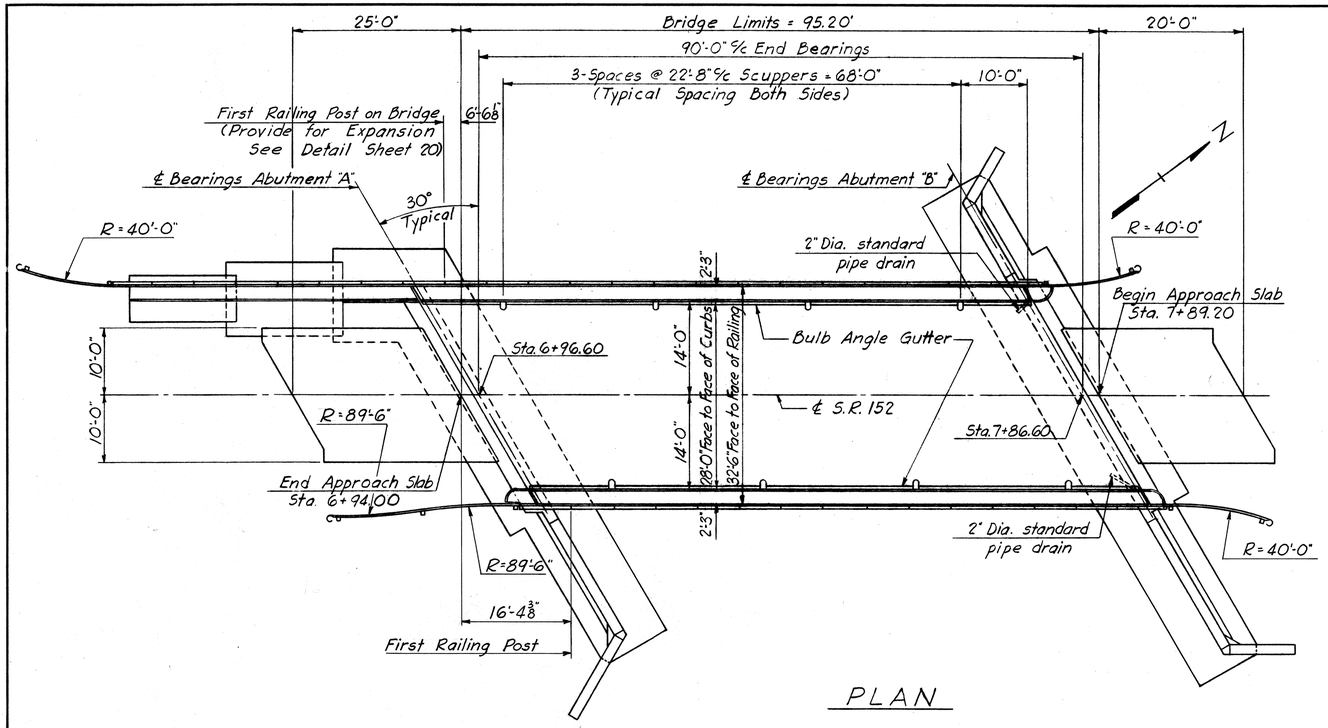
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
M.B. Jr.	J.H.	E.F.R.	P.T.R.	A.A.L.	GJK 11-1-60

BEAVER VALLEY ENGINEERING SUPPLIES CO.

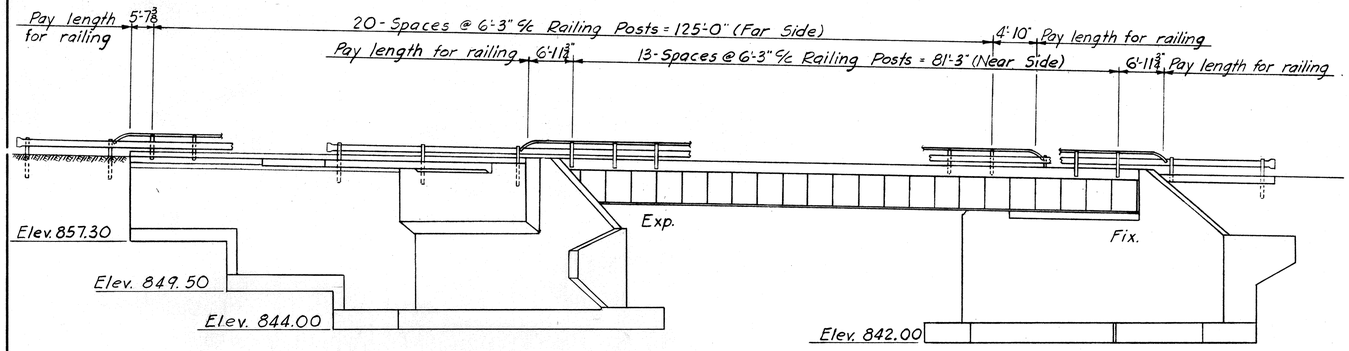
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

18
27

JEF.-152-(7.03-7.11)



PLAN



ELEVATION

GENERAL NOTES

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57 together with current revisions thereof.

REFERENCE shall be made to Standard Drawings CSB-2-56, Sheets 1, 2 & 3 of 6, revised 2-2-59; RB-1-55, revised 2-2-59

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed. Railing and stringers shall be carefully removed and piled along the right-of-way for disposal by the State's forces.

FOOTINGS are designed for maximum bearing pressure of 5.6 tons per sq. ft. The Engineer shall inspect the entire foundation area and insure that excavation goes to bed rock, and, if necessary, require that any over-excavation be filled with Class "E" concrete. Prolonged exposure of foundation area to atmospheric conditions shall be averted. The excavation shall be kept drained at all times. The footing shall extend a minimum of 3" into solid rock or to the elevation shown, which ever is lower.

UTILITY LINES: All labor and expense involved in relocating the affected utility lines shall be borne by the owners. The Contractor and Owners are requested to cooperate by arranging their work in such a manner that inconvenience to either will be held to a minimum.

RAILROAD SIGNAL shall be relocated by the railroad. The contractor shall use all precautions necessary to see that the signal and signal lines are not disturbed during the construction stage and shall cooperate with the railroad in the relocation of the signal. The cost of the relocation shall be included in the railroad force account work.

CONSTRUCTION CLEARANCE of 8'-0" horizontally from the center of tracks shall be maintained at all times.

SHEETING AND BRACING: Before construction is started, eight sets of prints showing details of the sheeting and bracing to be used for excavation adjacent to the railroad tracks shall be submitted to the Director, for approval by the Department of Highways and by the Railroad Company.

ALIGNING RAILROAD TRACKS: After the contractor has completed all excavation and backfill adjacent to the railroad tracks in compliance with Sec. E-2.04 and E-2.08 of the Construction and Material Specifications, subject to the supervision of the Railroad Company, nothing in Sec E-2.04, E-2.08 or G-8.07 of the Specifications shall be construed to hold the Contractor liable for aligning and re-surfacing the railroad tracks.

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	ABUT. A	ABUT. B	GEN.			
E-2	lump	sum	Cofferdams, cribs and sheeting				lump			
E-2	308	cu.yds.	Unclassified excavation		30	278				
E-2	290	cu.yds.	Shale excavation		220	70				
E-3	2408	cu.yds.	Channel excavation				2408			
S-1	86	cu.yds.	Class "C" concrete, superstructure	86						
S-1	299	cu.yds.	Class "E" concrete, abutment walls		160	139				
S-1	201	cu.yds.	Class "E" concrete, footings		109	92				
S-3	5	sq.yds.	Type "B" waterproofing			5				
S-3	136	lin.ft.	Waterproofing, premolded sealing strip		70	66				
S-4	55,376	lbs.	Reinforcing steel	23,496	17,244	14,636				
S-7	110,300	lbs.	Structural steel	110,300						
S-8	110,300	lbs.	Field painting of structural steel	110,300						
S-14	231	lin.ft.	Railing, (Type 1-15.11 with handrail & galv. steel posts & bolts)	231						
S-24	lump	sum	Removal of existing structure				lump			
S-29	219	cu.yds.	Porous backfill		129	90				
S-29	8	each	Scuppers	8						
I-10	40	cu.yds.	Dumped rock channel protection				40			

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

GENERAL PLAN & ELEVATION

BRIDGE NO. JEF.-152-0711
OVER CROSS CREEK

JEFFERSON COUNTY — STA. 6+94.00, STA. 7+89.20

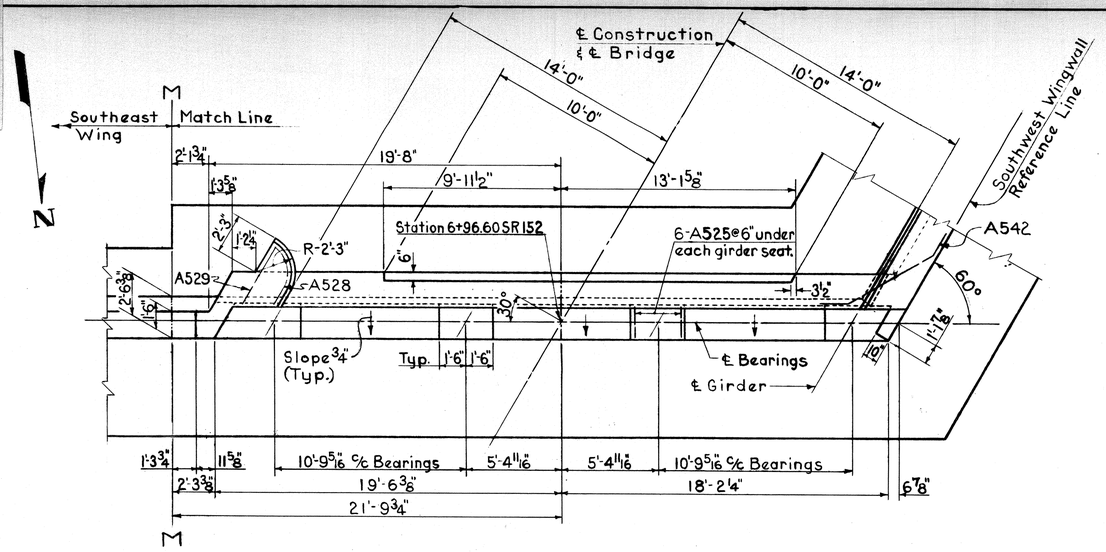
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E.F.R.	R.C.	R.C.	A.A.L.	11-1-60	

BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-57976

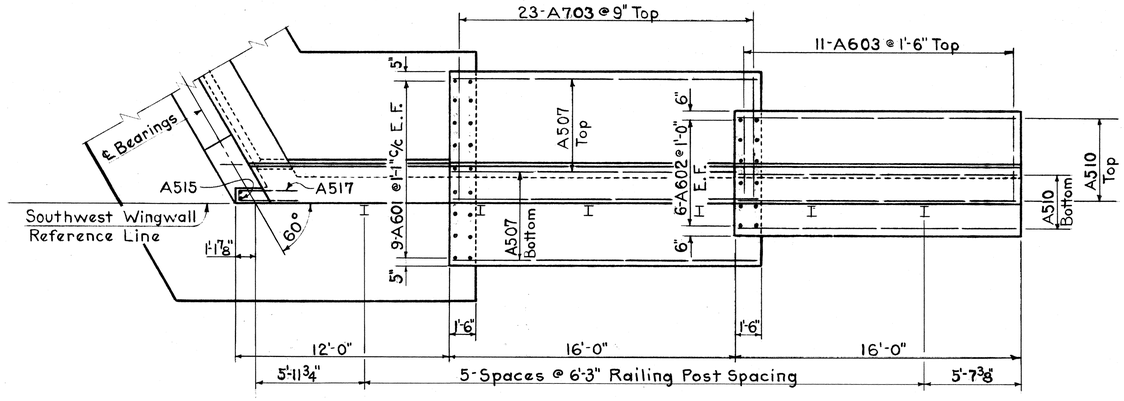
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

19
27

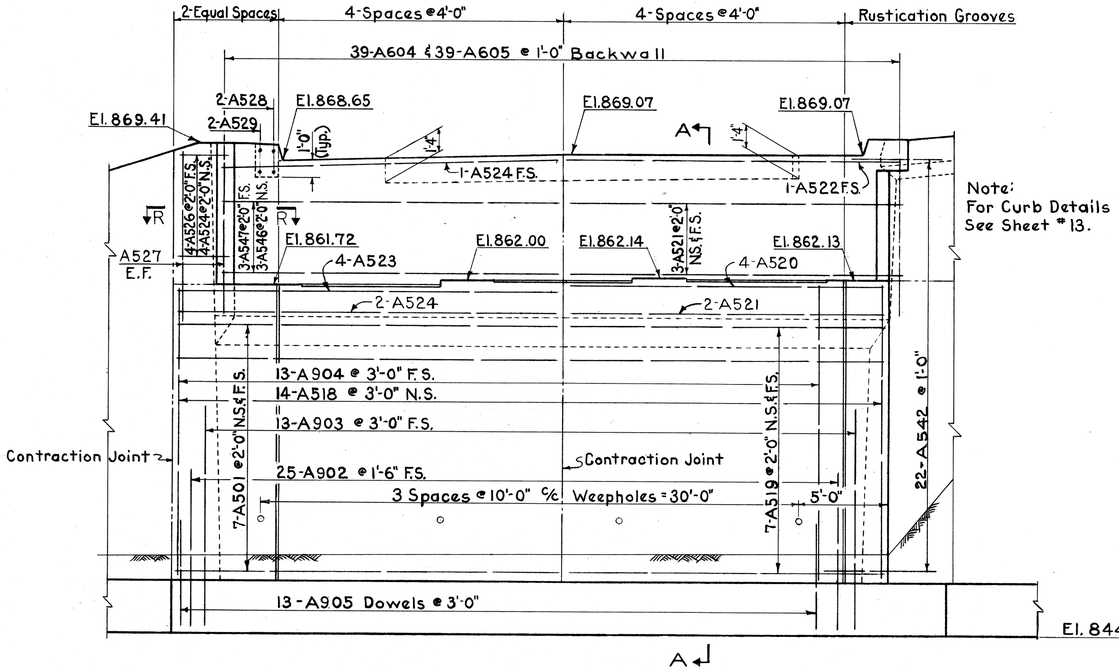
JEF.-152-(7.03-7.11)



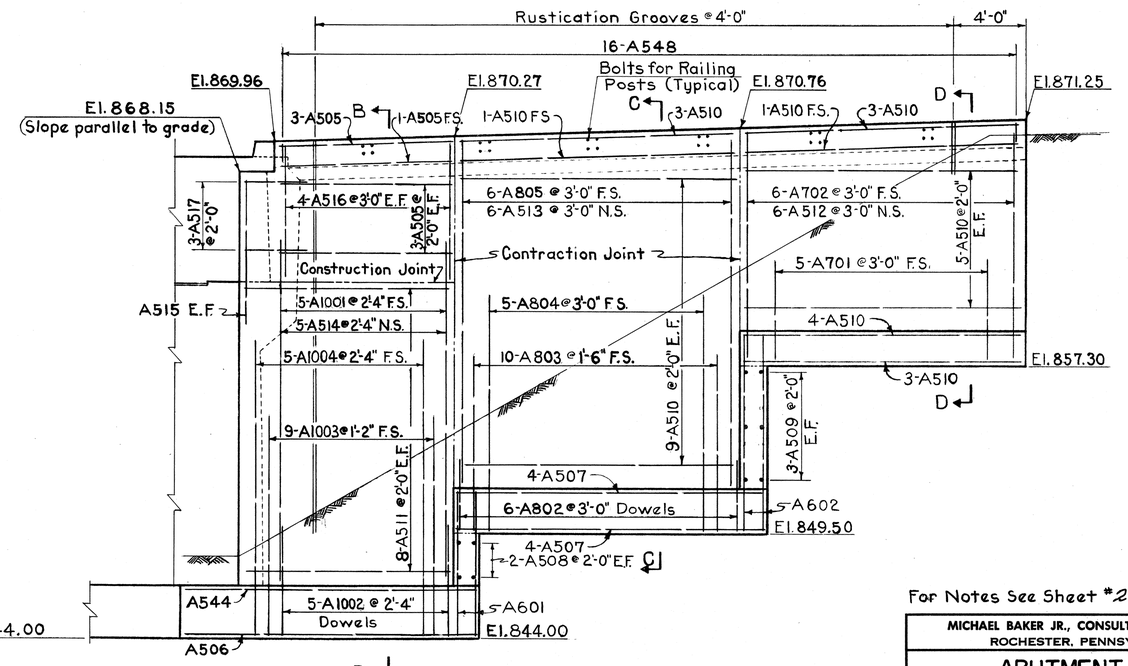
PLAN ABUTMENT "A"



PLAN SOUTHWEST WING



ELEVATION ABUTMENT "A"



ELEVATION SOUTHWEST WING

LEGEND
N.S. Near Side
F.S. Far Side
E.F. Each Face

For Notes See Sheet #23

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ABUTMENT "A"

BRIDGE NO. JEF.-152-0711 OVER CROSS CREEK

JEFFERSON COUNTY

STA. 6+94.00
STA. 7+89.20

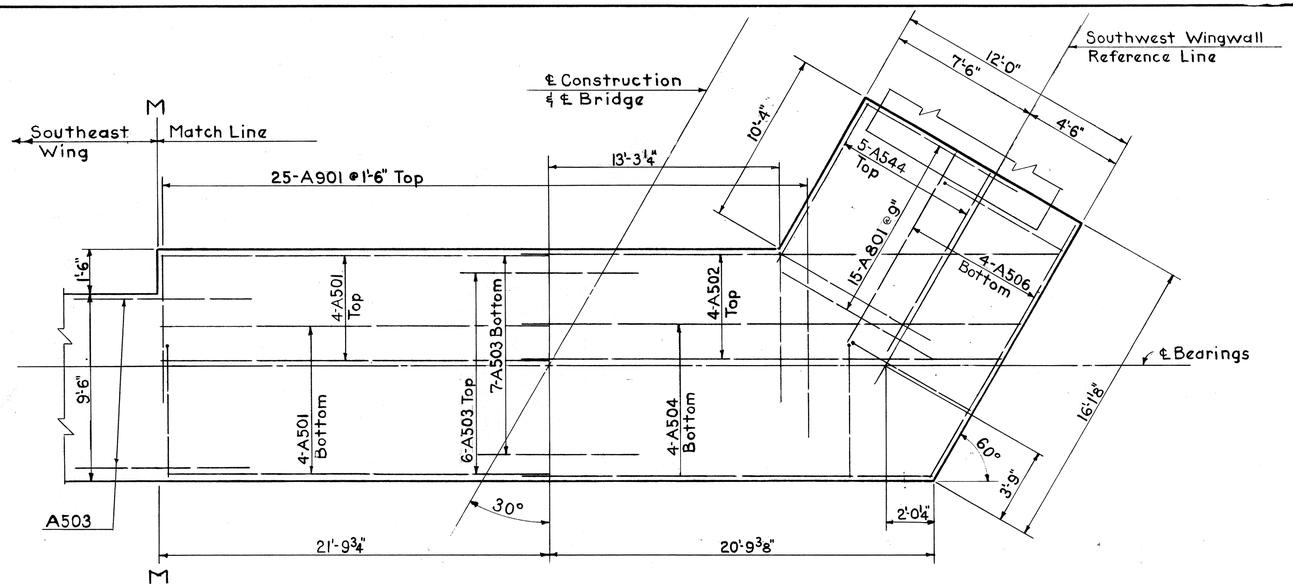
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BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-37078

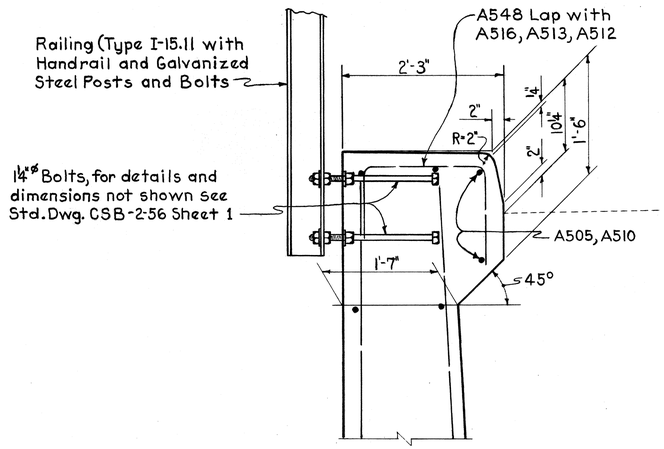
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2	OHIO		

JEF.-152-(7.03-7.11)

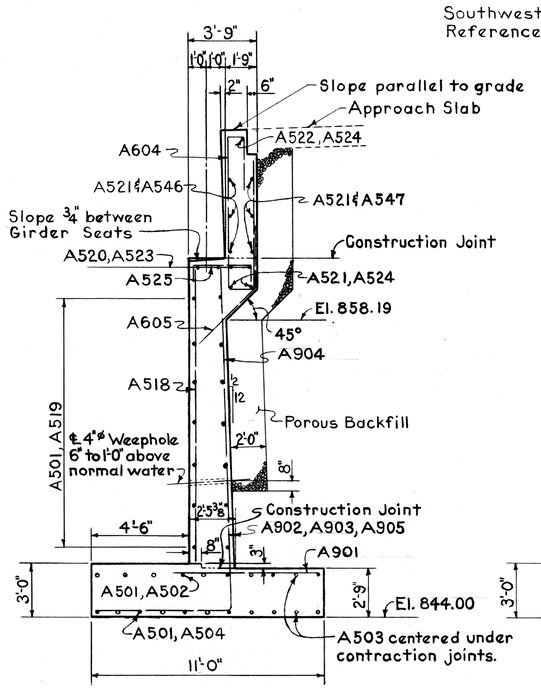
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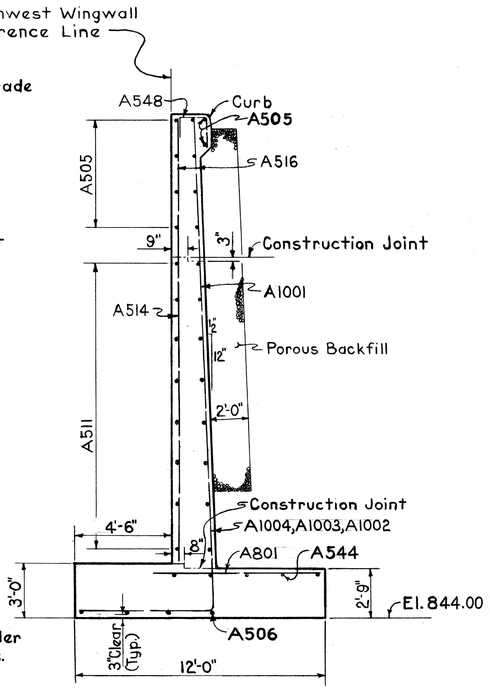
FOOTING PLAN ABUTMENT "A"



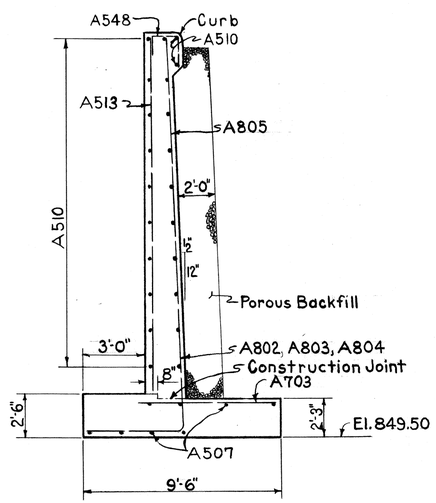
DETAIL OF CURB



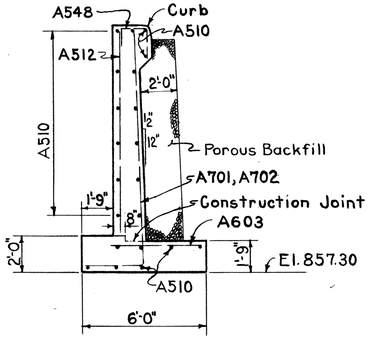
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

For Notes See Sheet #23

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

ABUTMENT "A" FOOTING PLAN & DETAILS

BRIDGE NO. JEF.-152-0711 OVER CROSS CREEK

JEFFERSON COUNTY

STA. 6+94.00
STA. 7+89.20

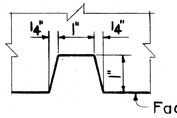
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BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-37878

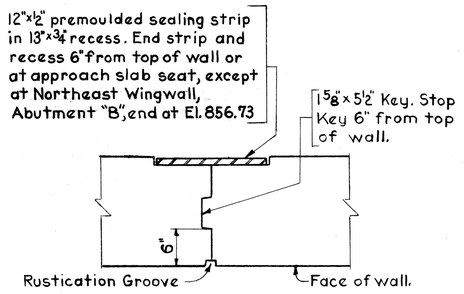
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

JEF. - 152 - (7.03 - 7.11)

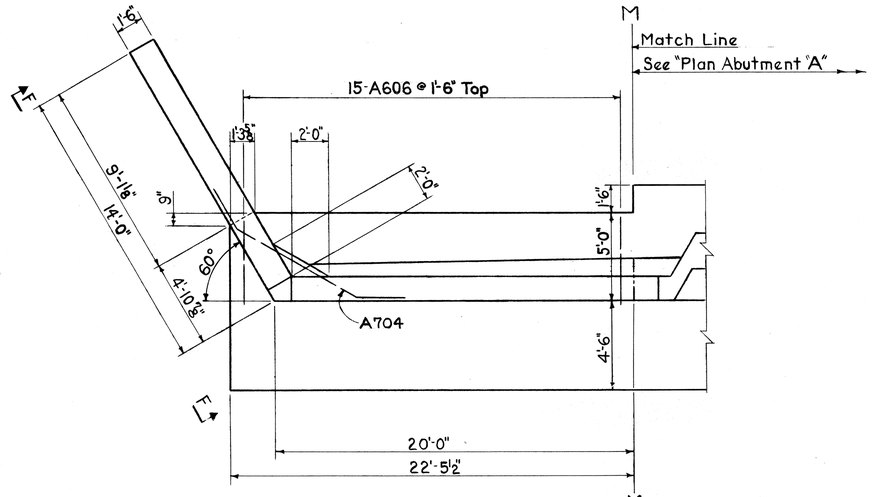
21
27



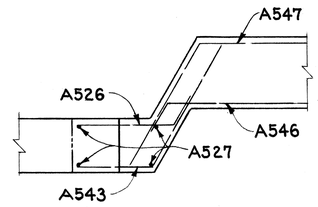
DETAIL OF RUSTICATION GROOVE



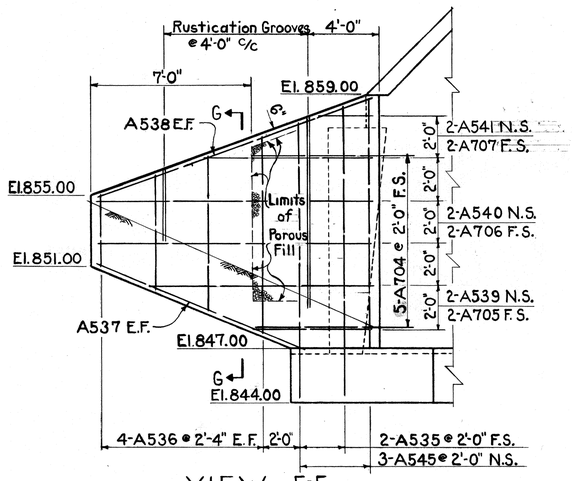
CONTRACTION JOINT DETAIL



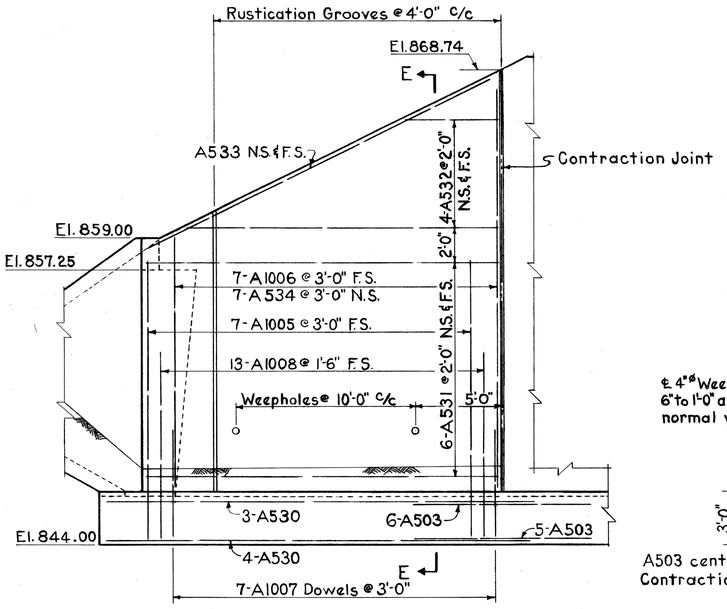
PLAN SOUTHEAST WING



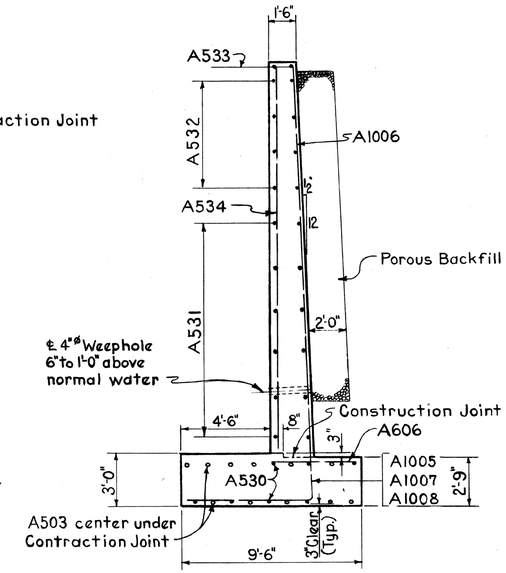
SECTION R-R



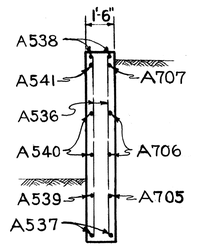
VIEW F-F



ELEVATION



SECTION E-E



SECTION G-G

LEGEND
N.S. = Near Side
F.S. = Far Side
E.F. = Each Face

For Notes See Sheet #23

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

SOUTHEAST WINGWALL & DETAILS

BRIDGE NO. JEF. - 152 - 0711 OVER CROSS CREEK

JEFFERSON COUNTY — STA. 6 + 94.00 = STA. 7 + 89.20

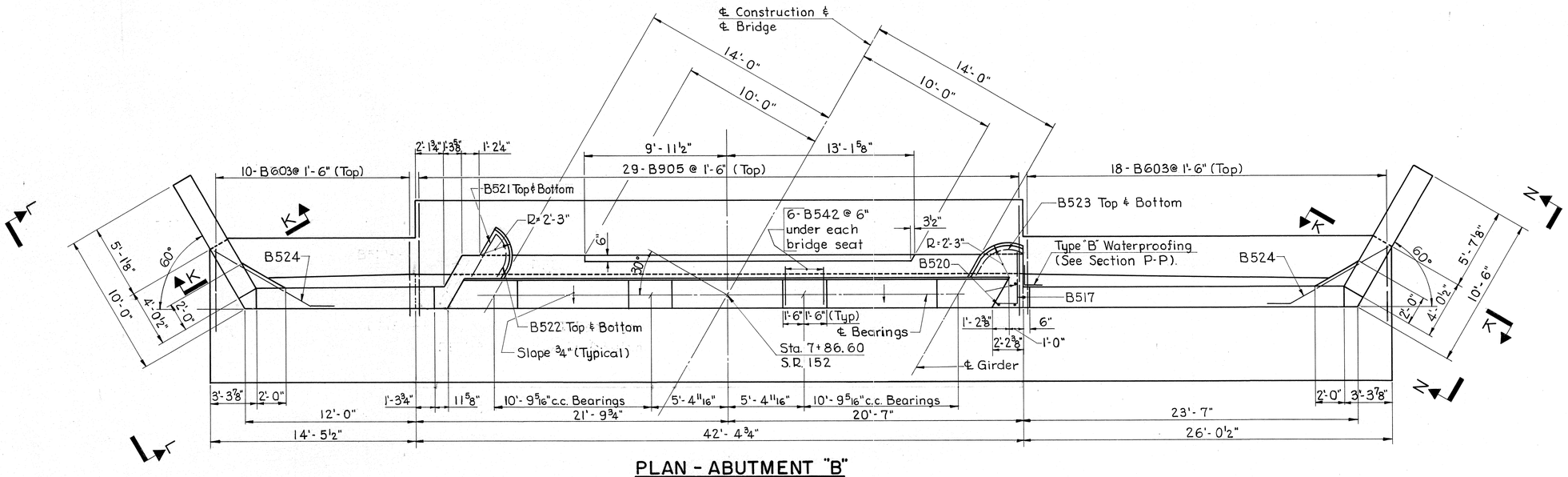
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BEAVER VALLEY ENGINEERING SUPPLIES COMPANY REORDER A-37678

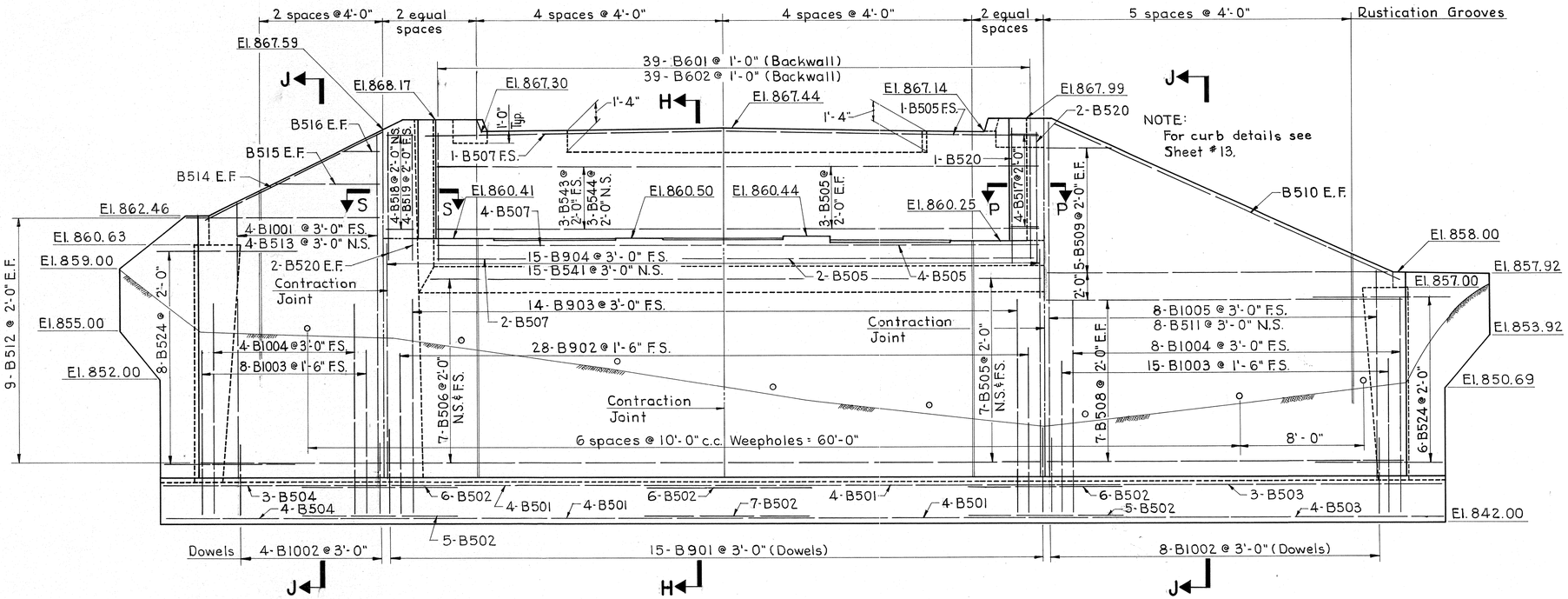
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

JEF. - 152 - (7.03-7.11)

22
27



PLAN - ABUTMENT "B"



NOTE:
For curb details see Sheet #13.

ELEVATION - ABUTMENT "B"

LEGEND

N.S. = Near Side
F.S. = Far Side
E.F. = Each Face

For Sections see Sheet # 23

For notes see Sheet # 23

MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER PENNSYLVANIA

ABUTMENT "B"

BRIDGE NO. JEF. - 152 - 0711 OVER CROSS CREEK

JEFFERSON COUNTY

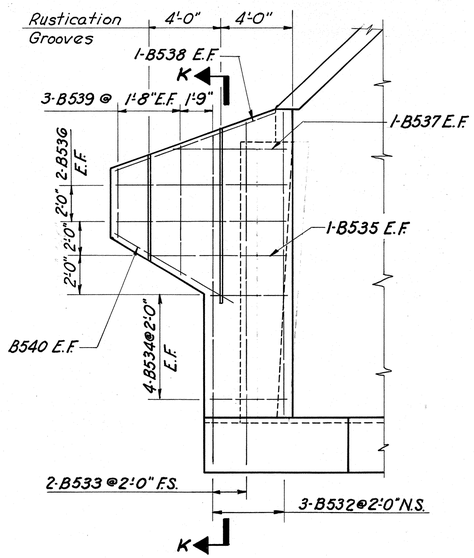
STA. 6+94.00
STA. 7+89.20

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
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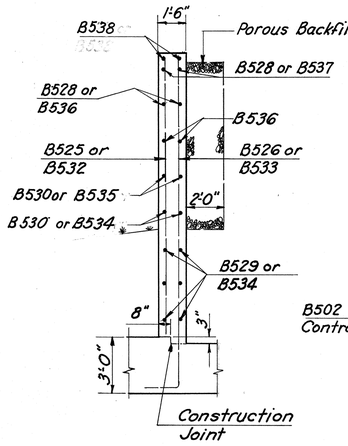
FED. RD. DIVISION	STATE	PROJECT	TYPE I FUNDS
2	OHIO		

JEF.-152-(7.03-7.11)

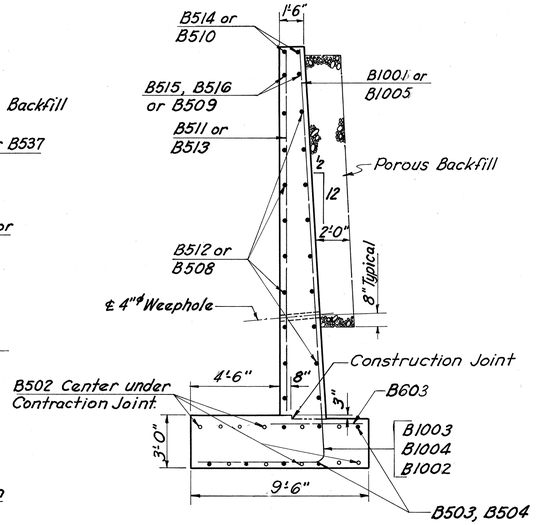
23
27



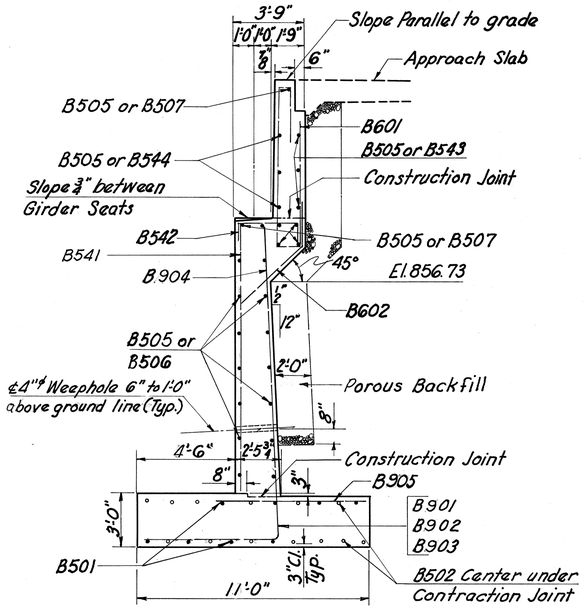
VIEW L-L



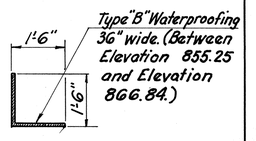
SECTION K-K



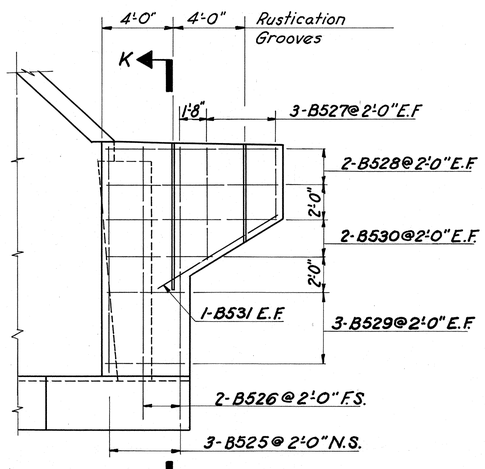
SECTION J-J



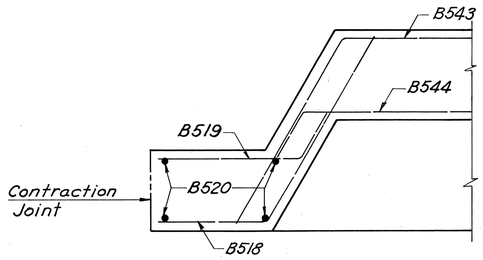
SECTION H-H



SECTION P-P



VIEW N-N



SECTION S-S

NOTES:

1. All concrete shall be Class "E".
2. Porous backfill 2 feet thick, full length of the abutments and wings (except as shown) shall extend up to the underside of the approach slab or to the finished ground surface.
3. For details of rustication grooves and construction joints see Sheet Nº 21

LEGEND

E.F. indicates Each Face
F.S. indicates Far Side
N.S indicates Near Side

MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER PENNSYLVANIA

ABUTMENT "B" DETAILS

BRIDGE NO. JEF.-152-0711
OVER CROSS CREEK

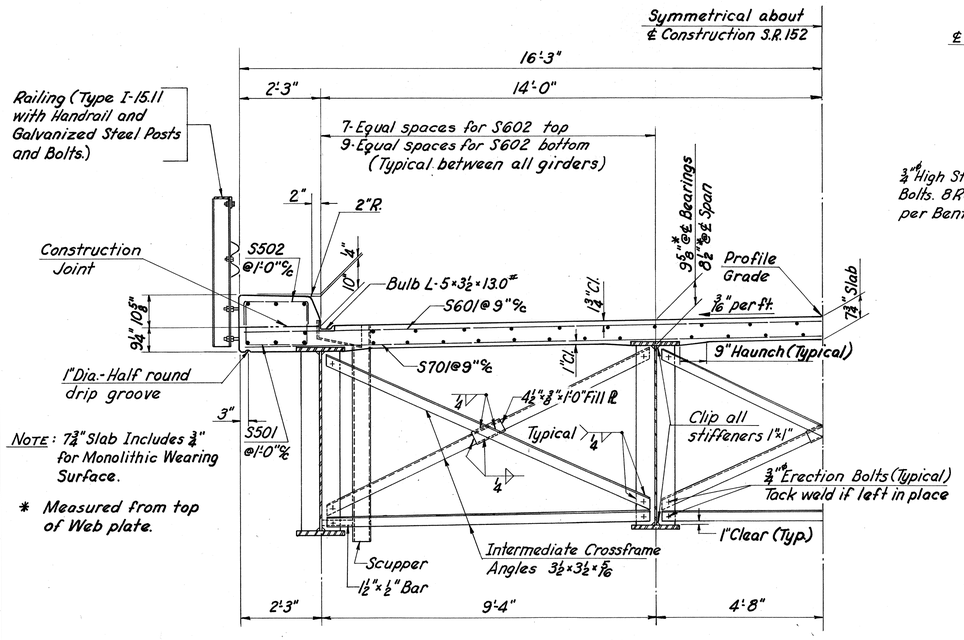
JEFFERSON COUNTY — STA. 6+94.00, STA. 7+89.20

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
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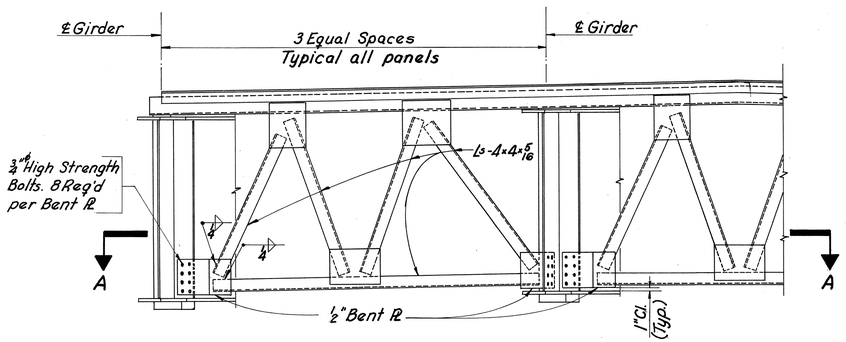
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

24
27

JEF.-152-(7.03-7.11)

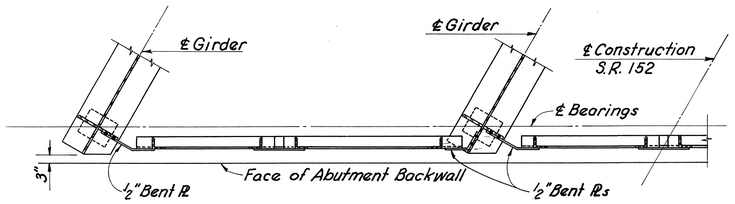


HALF TRANSVERSE SECTION

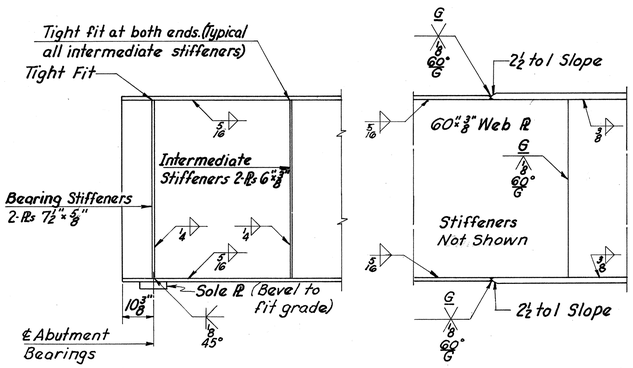


HALF ELEVATION OF ABUTMENT END DAM

For details not shown see Standard Drawing CSB-2-56, Sheet 2 of 6.



SECTION A-A



GIRDER DETAILS

NOTE: Locate web shop splice near the center of span.

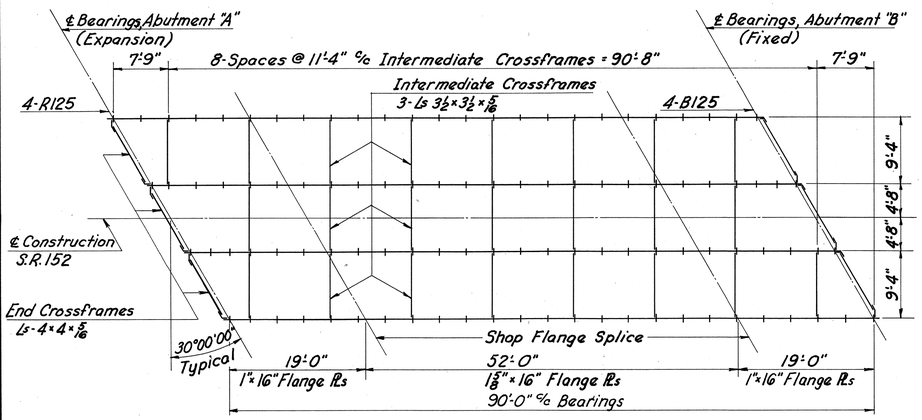
NOTES:

Refer to standard Drawing CSB-2-56, Sheets 1, 2 and 3 of 6 for details of Railing, End Dams, End Crossframes, Scuppers, Gutters, 2" Pipe Drains and additional notes.

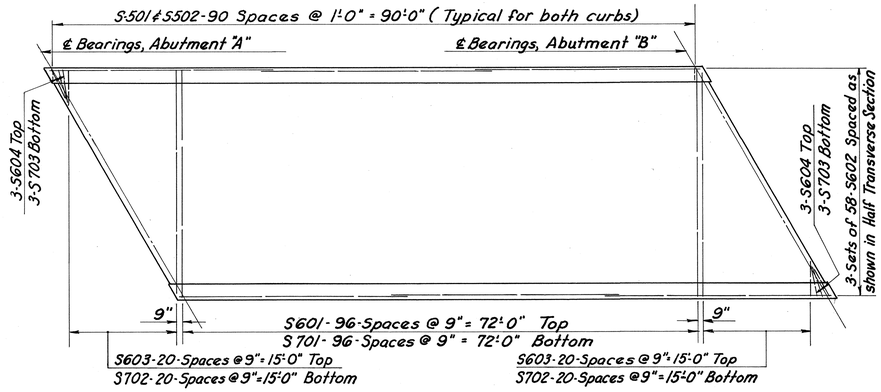
Refer to Standard Drawing RB-1-56 for details of Rockers and Bolsters.

Refer to General Plan and Elevation for location of Scuppers, 2" Pipe Drains and Railing Posts.

High Strength Bolts included with Structural Steel for payment.

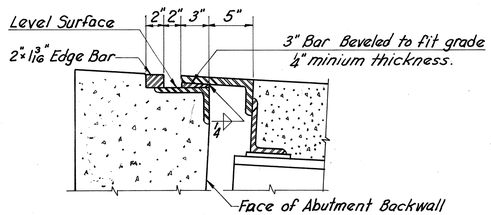


FRAMING PLAN



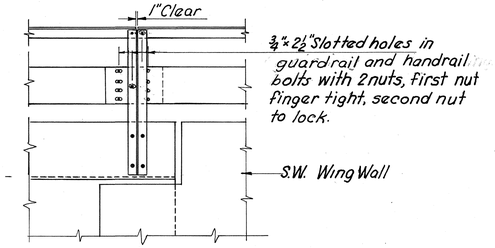
DECK PLAN SHOWING REINFORCING STEEL

DEFLECTION AND CAMBER		
LOCATION	OUTSIDE GIRDER	INSIDE GIRDER
Deflection due to weight of steel	— ¼"	¼"
Deflection due to remaining dead load	¾"	⅛"
Convexity required for vertical curve	-2⅛"	-2⅛"
Sum of deflection and convexity	-1⅛"	-1"
Required camber	0	0



END DAM DETAIL AT ABUTMENT "A"

For details not shown see Standard Drawing CSB-2-56, Sheet 2 of 6.



DETAIL OF EXPANSION JOINT IN GUARD RAIL

MICHAEL BAKER, JR., CONSULTING ENGINEERS
ROCHESTER PENNSYLVANIA

SUPERSTRUCTURE DETAILS

BRIDGE NO. JEF.-152-0711
OVER CROSS CREEK

JEFFERSON COUNTY

STA. 6+94.00
STA. 7+89.20

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
E.F.R.	P.M.	BJ	KAE	11-1-60	

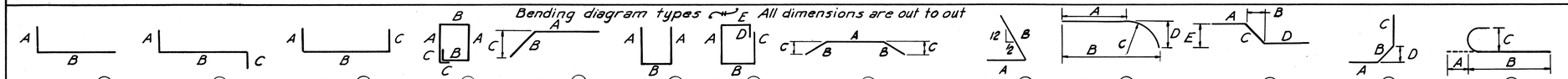
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

JEF.-152-(7.03-7.11)

25/27

REINFORCING STEEL BAR SCHEDULE

Bending diagram types ↷E All dimensions are out to out



ABUTMENT "A"

MARK	TOTAL	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A1001	5	17'-0"	Str.						366
A1002	5	12'-0"	9	6'-7"	5'-9"				258
A1003	9	16'-9"	9	6'-7"	10'-0"				629
A1004	5	20'-6"	9	6'-7"	14'-3"				441
A1005	7	19'-4"	9	6'-2"	13'-6"				617
A1006	7	12'-5" to 21'-5"	Str.	Vary by 1'-6"					510
A1007	7	11'-7"	9	6'-2"	5'-9"				349
A1008	13	15'-4"	9	6'-2"	9'-6"				858
A901	25	6'-10"	Str.						581
A902	25	15'-10"	9	6'-7"	9'-6"				1306
A903	13	18'-4"	9	6'-7"	12'-0"				811
A904	13	14'-9"	Str.						652
A905	13	11'-8"	9	6'-7"	5'-4"				516
A801	16	7'-7"	Str.						304
A802	6	9'-3"	9	4'-11"	4'-7"				148
A803	10	13'-2"	9	4'-11"	8'-6"				352
A804	5	16'-5"	9	4'-11"	11'-9"				219
A805	6	18'-4"	Str.						294
A701	5	9'-2"	9	3'-4"	6'-0"				94
A702	6	14'-8"	9	3'-4"	11'-6"				180
A703	23	6'-6"	Str.						306
A704	5	12'-6"	8	8'-0"	2'-3"	1'-1½"			128
A705	2	7'-3" & 11'-9"	Str.						39
A706	2	14'-0"	Str.						57
A707	2	4'-0" & 10'-6"	Str.						30
A601	18	7'-3"	Str.						196
A602	12	9'-0"	Str.						162
A603	11	4'-2"	Str.						69
A604	39	20'-4"	7	8'-6"	1'-4"	7'-2"	3'-2"	10"	1191
A605	39	7'-0"	5	4'-10"	2'-3"	1'-7"			410
A606	15	4'-11"	Str.						111
A501	22	21'-4"	Str.						489
A502	4	24'-7" to 28'-4"	Str.	Vary by 1'-3"					110
A503	24	10'-0"	Str.						250
A504	4	22'-5" to 26'-2"	Str.	Vary by 1'-3"					101
A505	10	9'-6"	Str.						99
A506	4	11'-9" to 13'-9"	Str.	Vary by 1'-4"					57
A507	8	17'-0"	Str.						142
A508	4	9'-0"	Str.						38
A509	6	5'-6"	Str.						34
A510	43	15'-6"	Str.						696
A511	16	11'-8"	Str.						195
A512	6	11'-3"	Str.						70
A513	6	18'-1"	Str.						113
A514	5	16'-9"	Str.						87
A515	2	7'-7"	Str.						16
A516	8	7'-8"	Str.						64
A517	3	7'-0"	6	3'-5"	6"				22
A518	14	14'-6"	Str.						212
A519	14	17'-10"	Str.						260
A520	4	17'-10" to 19'-7"	Str.	Vary by 7"					78
A521	8	19'-0"	Str.						159
A522	1	19'-7"	Str.						20
A523	4	18'-0" to 19'-9"	Str.	Vary by 7"					79
A524	3	18'-0"	Str.						56
A525	24	4'-5"	6	8"	3'-5"				111
A526	4	3'-6"	5	2'-7"	1'-0"	10½"			15
A527	4	9'-4"	Str.						39
A528	2	3'-6"	10	8"	2'-7"	1'-11"	1'-9"		7
A529	2	3'-11"	Str.						8
A530	7	24'-0"	Str.						176

ABUTMENT "A" (CONTINUED)

MARK	TOTAL	LENGTH	TYPE	A	B	C	D	E	WEIGHT
A531	12	19'-6"	Str.						244
A532	8	5'-6" to 17'-3"	Str.	2 Each vary by 3'-11"					95
A533	2	22'-0"	Str.						46
A534	7	12'-2" to 21'-2"	Str.	Vary by 1'-6"					122
A535	2	14'-8" & 15'-4"	1	1'-6"	12'-2" to 16'-0"				31
A536	8	3'-10" to 9'-1"	Str.	2 Each vary by 1'-9"					54
A537	2	10'-0"	Str.						21
A538	2	14'-0"	Str.						29
A539	2	6'-9" & 11'-3"	Str.						19
A540	2	13'-6"	Str.						28
A541	2	3'-5" & 10'-0"	Str.						14
A542	22	8'-6"	8	5'-3"	1'-8"	10"			195
A543	4	5'-10"	5	2'-0"	3'-11"	3'-5"			24
A544	5	12'-6"	Str.						65
A545	3	10'-5" to 11'-9"	Str.	Vary by 8"					35
A546	3	19'-10"	5	18'-11"	1'-0"	10½"			62
A547	3	21'-11"	5	18'-1"	3'-11"	3'-5"			69
A548	16	3'-10"	3	1'-0"	1'-9"	1'-4"			64
				ABUTMENT "A" TOTAL:					17,244

ABUTMENT "B"

MARK	TOTAL	LENGTH	TYPE	A	B	C	D	E	WEIGHT
B1001	4	18'-3" to 22'-6"	Str.	Vary by 1'-5"					351
B1002	12	11'-7"	9	6'-2"	5'-9"				598
B1003	23	15'-4"	9	6'-2"	9'-6"				1518
B1004	12	19'-4"	9	6'-2"	13'-6"				998
B1005	8	13'-8" to 23'-0"	Str.	Vary by 1'-4"					631
B901	15	11'-8"	9	6'-7"	5'-4"				595
B902	28	15'-10"	9	6'-7"	9'-6"				1507
B903	14	18'-4"	9	6'-7"	12'-0"				873
B904	15	15'-4"	Str.						782
B905	29	6'-10"	Str.						674
B601	39	20'-4"	7	8'-6"	1'-4"	7'-2"	3'-2"	10"	1191
B602	39	7'-0"	5	4'-10"	2'-3"	1'-7"			410
B603	28	4'-11"	Str.						207
B501	16	22'-0"	Str.						367
B502	35	10'-0"	Str.						365
B503	7	28'-6"	Str.						208
B504	7	16'-0"	Str.						117
B505	27	20'-3"	Str.						570
B506	14	21'-5"	Str.						312
B507	7	18'-0"	Str.						131
B508	12	23'-3"	Str.						291
B509	10	3'-11" to 21'-7"	Str.	2 Each vary by 4'-5"					133
B510	2	25'-0"	Str.						52
B511	8	13'-5" to 22'-9"	Str.	Vary by 1'-4"					151
B512	18	11'-8"	Str.						219
B513	4	18'-0" to 22'-3"	Str.	Vary by 1'-5"					84
B514	2	12'-9"	Str.						27
B515	2	6'-10"	Str.						14
B516	2	2'-6"	Str.						5
B517	4	9'-0"	1	3'-4"	1'-10"				21
B518	4	5'-10"	5	2'-0"	3'-11"	3'-5"			24
B519	4	3'-6"	5	2'-7"	1'-0"	10½"			15
B520	7	9'-4"	Str.						68
B521	2	3'-8"	Str.						8
B522	2	3'-6"	10	8"	2'-7"	1'-11"	1'-9"		7
B523	2	3'-10"	10	1'-0"	2'-11"	1'-11"	1'-9"		8
B524	14	9'-8"	5	8'-2"	1'-7"	9½"			141
B525	3	12'-8"	Str.						40
B526	2	16'-9"	1	15'-5"	1'-6"				35
B527	6	3'-9" to 6'-1"	Str.	Vary by 1'-2"					31
B528	4	10'-2"	Str.						42

ABUTMENT "B" (CONTINUED)

MARK	TOTAL	LENGTH	TYPE	A	B	C	D	E	WEIGHT
B529	6	4'-6"	Str.						28
B530	4	6'-0" to 9'-6"	Str.	2 Each vary by 3'-6"					32
B531	2	8'-0"	Str.						17
B532	3	15'-8" to 17'-2"	Str.	Vary by 9"					51
B533	2	19'-8" to 21'-2"	1	18'-4" to 18'-10"	1'-6"	Vary "A" by 9"			43
B534	8	4'-6"	Str.						38
B535	2	8'-0"	Str.						17
B536	4	9'-8"	Str.						40
B537	2	6'-0"	Str.						13
B538	2	9'-9"	Str.						20
B539	6	4'-0" to 6'-8"	Str.	2 Each vary by 1'-4"					33
B540	2	7'-6"	Str.						16
B541	15	15'-0"	Str.						235
B542	24	4'-5"	6	8"	3'-5"	8"			101
B543	3	21'-11"	5	18'-1"	3'-11"	3'-5"			69
B544	3	19'-9"	5	18'-10"	1'-0"	10½"			62
				ABUTMENT "B" TOTAL:					14,636

SUPERSTRUCTURE

S701	97	32'-2"	Str.						6378
S702	42	5'-5" to 31'-3"	Str.	2 Each vary by 1'-3½"					1574
S703	6	5'-0"	Str.						61
S601	97	32'-2"	Str.						4686
S602	174	31'-9"	Str.						8298
S603	42	5'-5" to 31'-3"	Str.	2 Each vary by 1'-3½"					1157
S604	6	5'-0"	Str.						45
S501	182	4'-1"	6	1'-4"	1'-8"				775
S502	182	2'-9"	6	8"	1'-8"				522
				SUPERSTRUCTURE TOTAL					23496
				TOTAL WEIGHT					55,376

REPLACEMENT BARS			
MARK	No	LENGTH	TYPE
RE1001	1	7'-3"	Str.
RE901	1	6'-10"	Str.
RE801	1	6'-7"	Str.
RE701	1	6'-3"	Str.
RE601	1	5'-11"	Str.
RE501	1	5'-7"	Str.

REPLACEMENT BARS

If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Hwy. Testing Laboratory, test sample as provided in Section 5.402 need not be furnished and replacement bars will not be required

BAR SIZE

Bar size is indicated in the bar mark. The first digit where three digits are used and the first two where four are used, indicates the bar number. For example PB01 is a number 8 bar and P1102 is a number 11 size bar

MICHAEL BAKER JR., CONSULTING ENGINEERS
ROCHESTER, PENNSYLVANIA

REINFORCING BAR SCHEDULE

BRIDGE NO. JEF.-152-0711
OVER CROSS CREEK

JEFFERSON COUNTY — STA. 6+94.00, STA. 7+89.20

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
E.F.R.	—	m.m. R.M.	A.A.L.	JK 11-1-60	

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

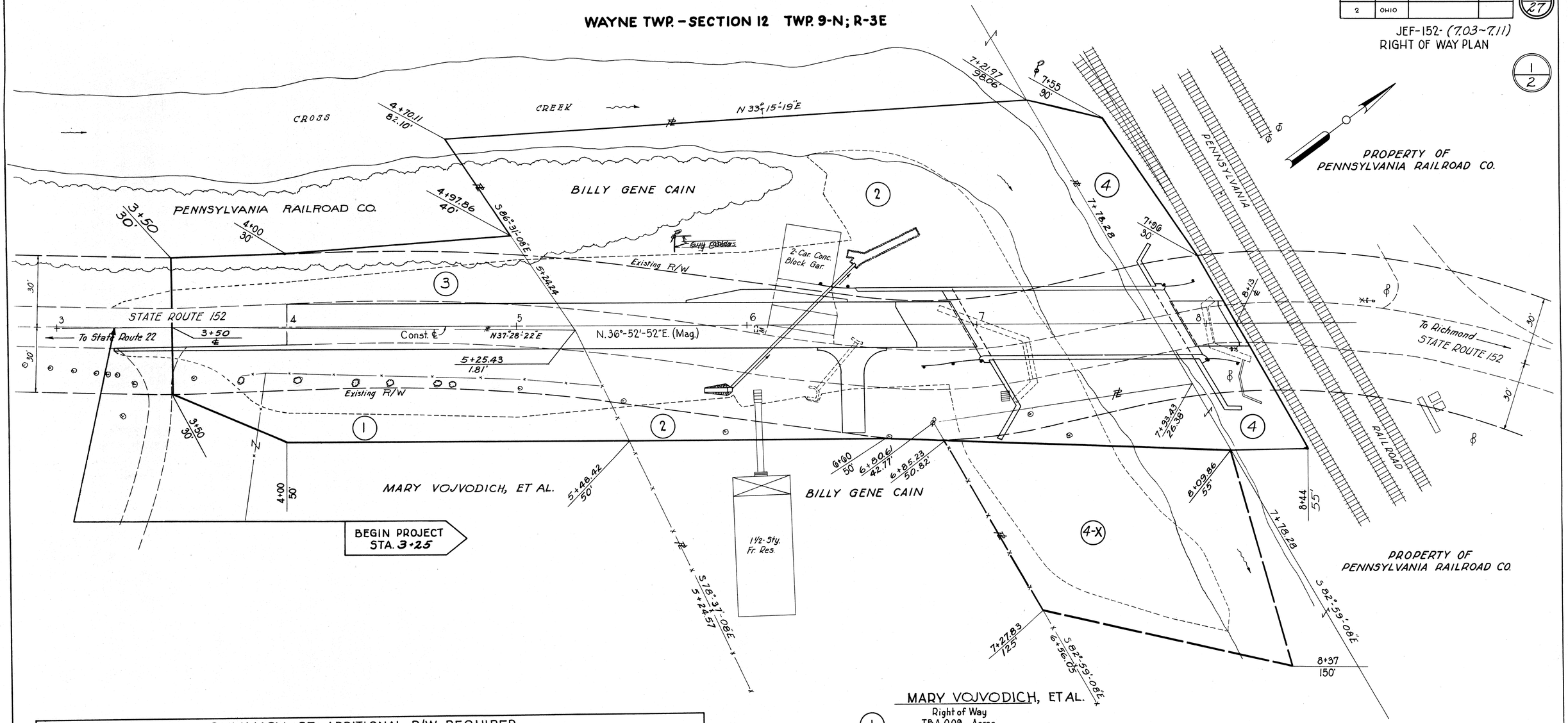
26/27

JEF-152- (7.03~7.11)

RIGHT OF WAY PLAN

1/2

WAYNE TWP. - SECTION 12 TWP. 9-N; R-3E



SUMMARY OF ADDITIONAL R/W REQUIRED

PARCEL NO.	OWNER	DEED BOOK	DEED PAGE	DEED AREA	TO BE ACQUIRED LAND	TO BE ACQUIRED BLDG.	RESIDUE LEFT	RESIDUE RIGHT	SHEET NO.	REMARKS
1	MARY VOJVODICH, ET AL	308	32	50.545	0.09 Ac.	No.	—	50.345	1	
2	BILLY GENE CAIN	377	430	1.42	0.45 Ac.	Yes	—	.63	1	
3	PENNSYLVANIA RAILROAD CO.	253	448	30.464	0.01 Ac.	No.	30.334	—	1	
4-X	PENNSYLVANIA RAILROAD CO.				0.22 Ac.	No.			1	
4	PENNSYLVANIA RAILROAD CO.				0.10 Ac.	No.			1	
5	PENNSYLVANIA RAILROAD CO.								2	
6	GUISEPPE & MADDALENA GERMANO	147	169	1.26	0.19	No	0.99		2	
6-WA	GUISEPPE & MADDALENA GERMANO	147	169	1.26	—	—	—	—	2	
7	ANGELINA SIRAQUSANO	372	364	0.28	0.28	Yes		0	2	
8	MADDALENA & GUISEPPE GERMANO	188	437	0.35	0.07	Yes	—	0.24	2	
9	EARL H. FURBEE	251	313	16.48	0.23	Yes	0.92	14.91	2	
9-WA	EARL H. FURBEE	251	313	16.48	—	—	—	—	2	

MARY VOJVODICH, ET AL.

(1) Right of Way
T.B.A. 0.09 Acres
P.R.O. 0.11 Acres

BILLY GENE CAIN

(2) Right of Way
T.B.A. 0.45 Acres
P.R.O. 0.34 Acres

PENNSYLVANIA RAILROAD CO.

(3) Right of Way
T.B.A. 0.01 Acres
P.R.O. 0.12 Acres

(4-X) Agreement for Channel Change
T.B.A. 0.22 Acres
P.R.O. None

(4) *Right of Way*
T.B.A. 0.10 Acres
P.R.O. 0.07 Acres

MICHAEL BAKER, JR, CONSULTING ENGINEERS
ROCHESTER PENNSYLVANIA

PLANS COMPLETED	3/20/61
Revised	

STA. 3+00 TO STA. 8+13

WAYNE TWP. - SECTION 12 TWP. 9-N; R-3 E

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

27/27

JEF-152-(7.03-7.11)
RIGHT OF WAY PLAN

2/2

PENNSYLVANIA RAILROAD CO.
(5) Right of Way
T.B.A. Acres
P.R.O. Acres

GUISEPPE & MADDALENA GERMANO
(6) Right of Way
T.B.A. 0.19 Acres
P.R.O. 0.08 Acres
6-WA

ANGELINA SIRAQUSANO
(7) Right of Way
T.B.A. 0.28 Acres
P.R.O. 0.00 Acres

MADDALENA & GUISEPPE GERMANO
(8) Right of Way
T.B.A. 0.07 Acres
P.R.O. 0.04 Acres

EARL H FURBEE
(9) Right of Way
T.B.A. 0.23 Acres
P.R.O. 0.42 Acres
9-WA

10+8.7 / 155' Lt.
10+10 / 140' Lt.
10+27 / 131' Lt.
10+39.39 / 121.14' Lt.
N 1° 21' 08" W
2 car Tile & Fr. Gar.
2 St. Tile & Fr. Res.
6-WA
9-WA
11+25 / 58.60' Lt.
11+50 / 60' Lt.
14+00 / 30' Lt.
10+84.90 / 60' Lt.
10+05 / 110' Lt.
10+25 / 70' Lt.
Slope Limits
Existing R/W
10+66.95
EARL H. FURBEE
Fr. Shed
Water Trough
N 80° 33' 52" E
Gasoline pump fndn.
Conc.
Abandoned gasoline storage tank
2 car Fr. Garage
2 St. Frame
Well
Septic Tank
END PROJECT STA. 14+00
14+00 / 40' Rt.
12+57.17 / 8.47' Rt.
11+63.45 / 20.46' Rt.
11+62.46 / 30.47' Rt.
2 St. Fr.
2 car Fr. gar.
2 car Tile gar.
P.T.
10+49.95 / 42.20' Rt.
11+37.70
11+65.49
Slope Limits
12+53.24 / 55' Rt.
12+27.50
Conc. Fruit Cellar
O.H.
Grape arbor
Shed
MADDALENA & GUISEPPE GERMANO
S 3° 45' 08" E
S 5° 50' 08" E
11+50.58 / 149.82' Rt.
12+46.49 / 178.14' Rt.
ANGELINA SIRAQUSANO
S 82° 59' 08" E
11+58.03 / 75' Rt.
10+41.91 / 58.66' Rt.
N 60° 02' 22" E
Conc. Boxes
Metal Signal Box
9+40.73 / 54.32' Rt.
P.I. = 10+08.21
Δ = 43° 41' Rt.
D = 16° 00'
T = 143.53'
L = 273.02'
R = 358.10'
P.C. 8+64.68
8+59.43 / R.
N 36° 52' 52" E
8+77.81 / 122.42' Lt.
9+01.31 / 75' Lt.
9+78.64
S 87° 06' 08" E
PENNSYLVANIA RAILROAD CO.
Metal Signal Box
GUISEPPE & MADDALENA GERMANO
(5) (6) (7) (8) (9)

PLANS COMPLETED	3/20/61
Revised	

STA. 8+59.43 TO STA. 14+00