

MICROFILMED
JUN 24 1987

STATE OF OHIO DEPARTMENT OF TRANSPORTATION HOL-60-04.93 HOLMES COUNTY BRIDGE NO.-HOL-60-0809 MONROE TOWNSHIP

PLAN NO. BR-34-75

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

HOL-60-04.93

1/5

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1975 SPECIFICATIONS

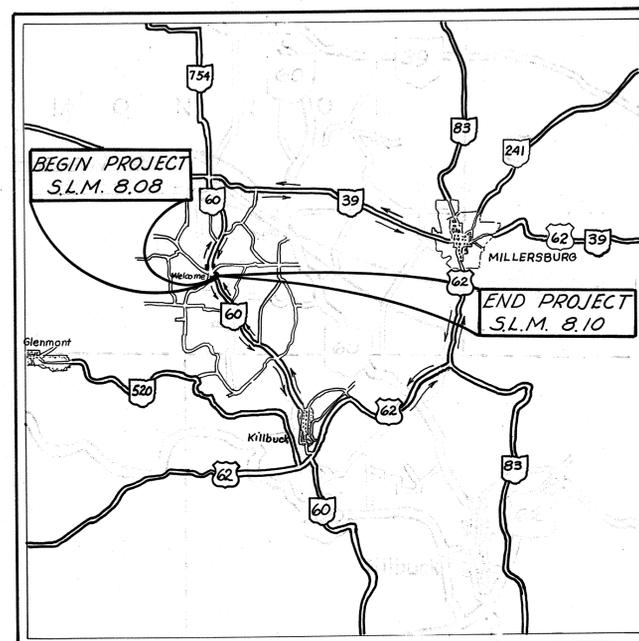
The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

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

I hereby approve these plans and declare that the making of this improvement will require the closing of this road.

INDEX OF SHEETS

Site plan	-----	2
General notes	-----	3
Superstructure	-----	4
General summary & Notes	-----	5



LOCATION MAP

LINE DATA

Begin Work *at work* S.L.M. 8.08
End Work *at work* S.L.M. 8.12
Length Work *at work* 180 Lin. Ft. or 0.034 Miles

Portion to be improved	-----	
State Roads	-----	
Other Roads	-----	
Detour	-----	

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS		
MC-3	dated	6-1-73
BP-5	dated	8-11-75
PSBD-1-71	dated	9-1-71
DBR-2-73	dated	4-10-73
GR-4	dated	11-9-71
GR-2B	dated	11-9-71
GR-5	dated	1-1-71
GR-2A	dated	1-1-71

SUPPLEMENTAL SPECIFICATIONS	
SS 803	1-22-76

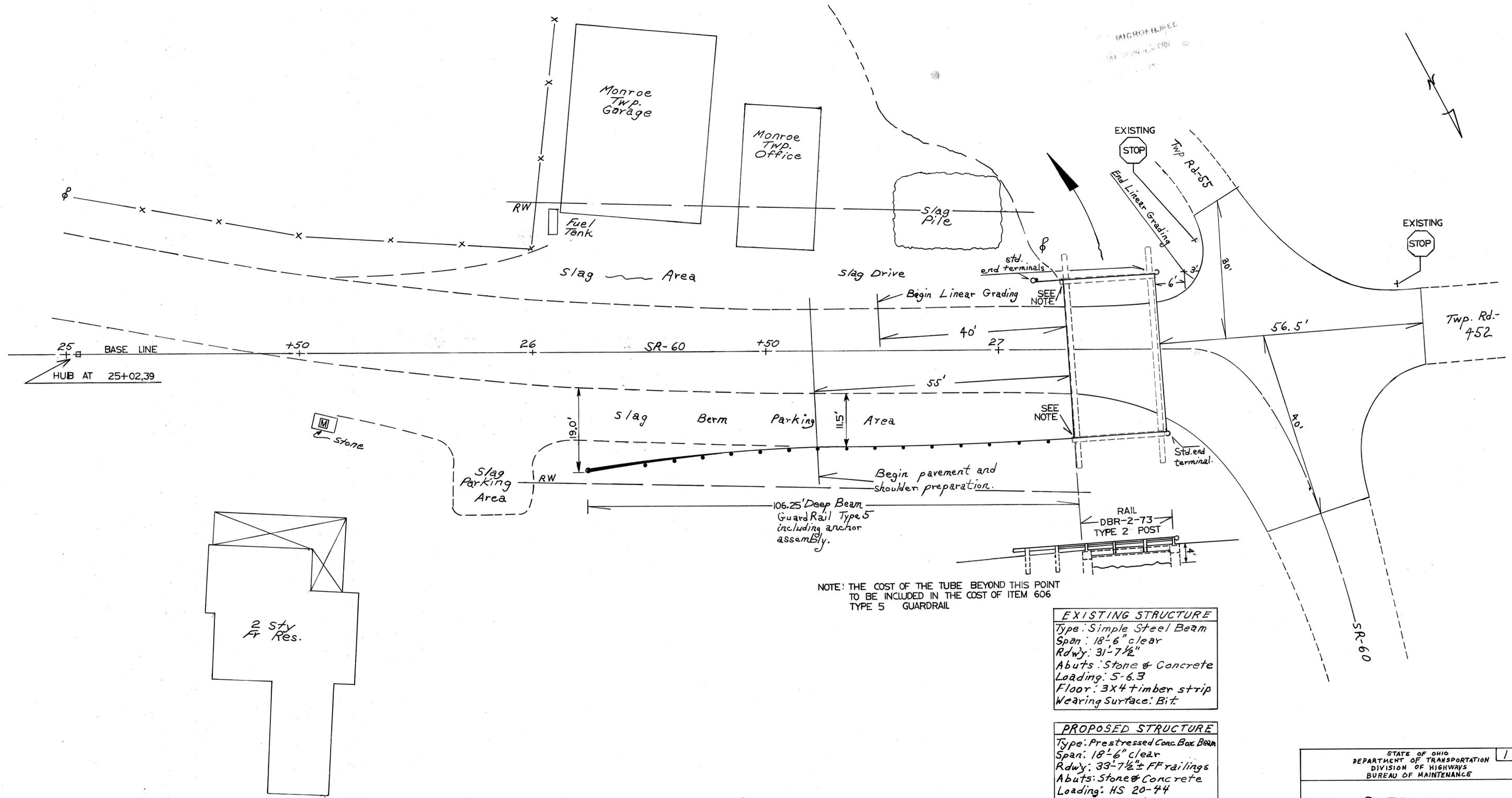
- Approved Gene C. Melms
Date 8-21-75 District Deputy Director of Transportation
- Approved Robert B. Pfeifer
Date 11-17-75 Engineer of Bridges
- Approved R. L. Zook
Date 2-26-76 Engineer of Maintenance
- Approved Thomas M. Major
Date 2-26-76 Chief Engineer, Operations
- Approved Howard E. Nolan
Date 2-26-76 Assistant Deputy Director, Program Development
- Approved Lynn Stickleman
Date 2-26-76 Chief Engineer, Construction
- Approved _____
Date _____ Chief Engineer, Design
- Approved David L. Wain
Date 2-26-76 Assistant Director, Department of Transportation
- Approved Richard R. Jackson
Date 2-26-76 Director, Department of Transportation

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JUN 24 1987

FHWA REGION	STATE	PROJECT
5	OHIO	

2
5

HOL-60-0493



NOTE: THE COST OF THE TUBE BEYOND THIS POINT TO BE INCLUDED IN THE COST OF ITEM 606 TYPE 5 GUARDRAIL

EXISTING STRUCTURE
 Type: Simple Steel Beam
 Span: 18'-6" clear
 Rdwy: 31'-7 1/2"
 Abuts: Stone & Concrete
 Loading: 5-6.3
 Floor: 3X4 timber strip
 Wearing Surface: Bit

PROPOSED STRUCTURE
 Type: Prestressed Conc. Box Beam
 Span: 18'-6" clear
 Rdwy: 33'-7 1/2" ± FF railings
 Abuts: Stone & Concrete
 Loading: HS 20-44
 Deck: Concrete
 Wearing Surface: Bit

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS BUREAU OF MAINTENANCE		1/4
SITE PLAN		
BRIDGE NO. HOL-60-0809 OVER Br. SHRIMPLIN CREEK		

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JUN 24 1987

FHWA REGION	STATE	PROJECT	
5	OHIO		

3
5

HOL-60-0493

GENERAL NOTES

WORK REQUIRED:

1. Remove and dispose of existing superstructure.
2. Rebuild existing abutments as per plan.
3. Place new superstructure.
4. Waterproof and surface new deck.
5. Place new approach pavement.

REFERENCE shall be made to Standard Drawings:

MC-3	Dated (revised)	6-1-73
BP-5	Dated (revised)	8-11-75
PSBD-1-71	Dated	9-1-71
DBR-2-73	Dated	4-10-73
GR-4	Dated	11-9-71
GR-2 B	Dated	11-9-71
GR-5	Dated	1-1-71
GR-2 A	Dated	1-1-71

DESIGN DATA:

Loading - HS20-44 and the Interstate Alternate Loading
Concrete Class "C" - Unit stress 1333 p.s.i. for Substructure
Reinforcing Steel - ASTM A615, A616 or A617 - unit stress 20,000 p.s.i.
Concrete for prestressed concrete beams -
unit stress - 2200 p.s.i. compression
444 p.s.i. tension

Prestressing strand ASTM A416
f_s 270,000 p.s.i. Initial stress = 0.70 f_s

REMOVAL OF PORTIONS OF EXISTING STRUCTURE:

When no longer needed to maintain traffic the existing superstructure shall be removed.

MAINTAINING TRAFFIC:

The road may be closed to traffic for a period not to exceed 30 days.

ASPHALT CONCRETE:

A quantity of 14 Cu. Yds. 404 asphalt concrete has been provided to adjust the approaches. This material shall be used as directed by the engineer.

LINEAR GRADING: This item shall cover the adjustment of the shoulders at the four (4) corners of the bridge and the seeding and mulching of areas disturbed as per Item 659.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BUREAU OF MAINTENANCE

2 / 4

GENERAL NOTES

BRIDGE NO. HOL-60-0809
OVER Bv. SHRIMPLIN CREEK

Dist. II	Dist. II	Dist. II			
J.J.N.	J.J.N.	J.J.N.			

MICROFILMED
JUN 24 1987

FHWA REGION	STATE	PROJECT
5	OHIO	

5
5

HOL-60-04.93

GENERAL SUMMARY

ITEM	UNIT	DESCRIPTION
202	Lump	Portions of structure removed
203	0.46 Station	Linear Grading, including Seeding & mulching
404	14 Cu yds.	Asphalt Concrete (AC-20)
407	19 Gals	Tack Coat, SS-1, SS-1H, MS-2, RS-1 or RC-250
407	1.32 Tons	Cover Aggregate
509	337 lbs	Reinforcing Steel
510	84 Lin. ft.	Dowel Holes
511	2.42 Cu Yds.	Class "C" Concrete Abutments
512	81 Sq. Yds.	Type "D" Waterproofing
515	11 Each	Prestressed concrete bridge members
516	15.28 Sq. ft.	1/2 inch elastomeric bearing pads
516	139 Sq. ft.	1/2 inch Preformed expansion joint filler
517	39.62 Lin. ft.	Railing (single deep beam with tubular backup, Type 2 steel post)
606	112.50 Lin. ft.	Guard rail, Type 5
614	Lump	Maintaining Traffic
617	84 Sq. Yds.	Shoulder preparation
617	4 Cu. Yds.	Compacted aggregate
Special	22.44 Sq. Ft.	Galvanized steel drip strip
403	15 Cu. Yds.	Asphalt Concrete
606	1 Each	Anchor Assembly

NOTES

PRESTRESSED CONCRETE BOX BEAM DETAILS: The following notes and details shown on Standard Drawing PSBD-1-71 shall apply.

1. Transverse Tie Rods.
2. Galvanizing.
3. Anchor Dowels: Fixed and expansion with dowels that both clear and pass thru bearing pads.
4. Non-Shrinking mortar and grout.
5. Mortaring of shear keys.
6. Section showing wall thickening at Bridge Railing Anchors.
7. Beam lifting inserts.
8. Details and reinforcement of Beam ends.
9. Normal crown treatment at Roadway: Joint at 1'-6" from Bridge.
10. End details of Transverse Tie Rods.
11. Beam Dimensional Tolerances:
 - a. Plan
 - b. Elevation
 - c. Section C-C
12. B 12-36: With all the data for 36" wide beam.
13. The Fabricator's shop drawings shall show complete details of the non prestressed reinforcing steel.

ANCHOR INSERTS of a type different from that shown on Standard Drawing DBR-2-73 will be permitted if approved by the Director.

GALVANIZED STEEL DRIP STRIP: Prior to applying type "D" waterproofing a bent galvanized steel drip strip, 8" x 0.105 shall be installed along the edges of the deck as shown in Detail "A" on sheet 2/3. The strips shall be fastened at 3'-0" c/c maximum with power driven pins or No 10 galvanized expansion screws, subject to the approval of the Engineer. The strips shall be placed the full length of the deck. Where splices are required a 3" (min.) lap shall be used, with a fastener through the lap. Steel shall meet the requirements of ASTM A568 and galvanizing shall be in accordance with T11.02. Payment shall be at the contract price bid for Item Special, Sq. ft., Galvanized steel drip strip, which shall include all materials, labor, tools and incidentals necessary to complete the item.

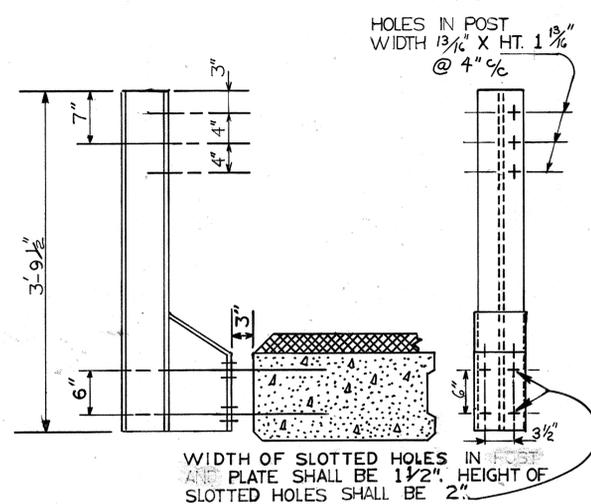
PRESTRESSING STRANDS, 1/2" Dia. 270* seven-wire, uncoated, stress relieved strands. $A_s = 0.154$ sq. in. each. Initial tension 28,900 lbs per strand. CONCRETE STRESS, minimum concrete strength at 28 days $f'_c = 5500$ psi, and at time of initial tension $f'_c = 4000$ psi.

BEARING PAD SHIMS: Two 5" x 1/8" x 10" preformed bearing pads per beam shall be provided for use as shims where needed for the proper seating of the prestressed beams and shall be included with Item 516 elastomeric bearing pads for payment. Unused shims shall become the property of the state.

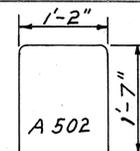
ALL ANCHOR BOLTS, NUTS and STUDS shall conform to the physical properties of ASTM A325 except that the minimum elongation shall be 10%. The chemical properties are waived.

STANDARD TERMINALS on west ends of bridge railing, included in item 517 for payment.

Detail Type 2 Steel Post and Bolts.



REINFORCING STEEL LIST				
Mark	No.	Length	Weight	Shp.
Abutment				
A501	8	18'-5"	154	S
A502	42	4'-2"	183	B



STATE OF OHIO DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS BUREAU OF MAINTENANCE			4/4
GENERAL SUMMARY NOTES			
BRIDGE NO. HOL-60-0809 OVER BRANCH OF SHRIMPLIN RUN			
Dist. II	Dist. II	Dist. II	
99.11	99.11	99.11	