

State Level Historic Documentation Report

State Project No. S311-47-11.33
Federal Project No. STP-0047(048)D

Fink Creek W-Beam Bridge Gilmer County



Prepared by:

Randy Epperly, Historian

Department of Transportation
Division of Highways
Engineering Division
Environmental Section

February 8, 2017

STATE LEVEL HISTORIC DOCUMENTATION
FINK CREEK W-BEAM BRIDGE

Location: West Virginia Route 47, spanning Fink Creek
Gilmer County
West Virginia

USGS Vadis Quadrangle

Date of Construction: 1939

Builder: Federal Emergency Administration of Public Works

Present Owner: West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard, Building 5, Room A-110
Charleston, WV 25305

Present Use: Vehicular Bridge

Significance: The Fink Creek W-Beam Bridge is eligible for the National Register of Historic Places under Criterion A for its association with the Public Works Administration and Franklin Roosevelt's New Deal.

Project Information: The project has been undertaken due to the poor condition of the structure. The project will provide a bridge meeting current bridge standards to cross Fink Creek. The new bridge will also decrease the potential for flooding in the area. The existing bridge warrants replacement. The documentation was undertaken in December 2016 in accordance with a Memorandum of Agreement among the Federal Highway Administration, West Virginia Department of Transportation, and West Virginia State Historic Preservation Office. The bridge is scheduled to be replaced in 2018.

Attached are plans for a bridge deck overlay dated 1989. No original plans have been found.

Randy Epperly, Historian
West Virginia Division of Highways
Charleston, WV 25305
February 8, 2016

The Fink Creek W-Beam Bridge carries WV Route 47 over Fink Creek in Gilmer County, just upstream from the confluence with Leading Creek. The bridge was built in 1939 by the Federal Emergency Administration of Public Works. Although original plans could not be found, attached are 1989 plans for a bridge deck overlay. The bridge is eligible under Criterion A of the National Register of Historic Places for its “significant association with a historic transportation system, program, event, trend, or policy” (KCI, 2013)

Fink Creek W-Beam Bridge is a three simple span steel girder. Each span is 55 feet long and the overall length from end to end parapet walls is 173 feet 4 inches. It is a curved structure with a 45 degree right backward skew and supported by concrete spill through abutments and 2 three-column concrete bents. The bridge has 27 foot superstructure width and a 24 foot roadway width. There is a 2 feet 9 inch high concrete balustrade type parapet wall with guardrail in front along each side. There are 2 plaques on the upstream side of the bridge, one has the bridge number, year of construction, and WV state seal. The other plaque states: “Federal Emergency, Administration of Public Works Franklin D. Roosevelt, President of the United States, Harold L. Ickes, Administrator of Public Works, Fink Creek Bridge, 1939” (WVDOH, 2012).

The Fink Creek W-Beam Bridge was built to upgrade the crossing of Fink Creek when WV Route 47 was being upgraded and realigned. Originally the Staunton Parkersburg Turnpike was located in the area. In 1822 Claudius Crozet began to survey a route from Staunton, Virginia to the Ohio River. The Virginia General Assembly appropriated the money in 1824, construction began in 1838, and the road was completed in 1845. The turnpike was the primary route during the Civil War between eastern and western Virginia (Staunton-Parkersburg Turnpike Alliance).

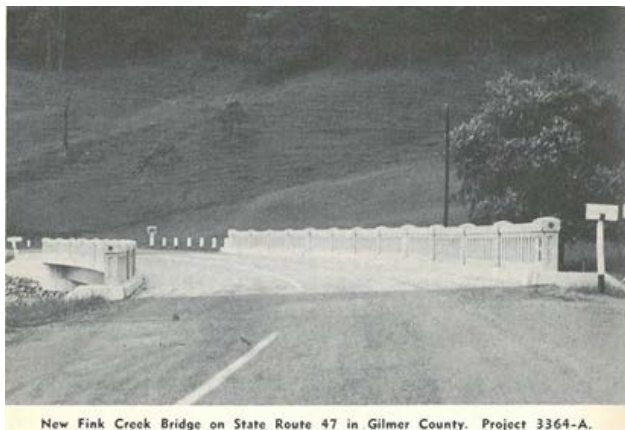


Photo taken by WV State Road Commission, 1940-41.

The Public Works Administration (PWA) was created on June 16, 1933 as part of the National Industrial Recovery Act. The act was part of Franklin Roosevelt's New Deal to aid economic growth and provide employment (Public Works Administration). Although the PWA spent billions and constructed many public projects like the Fink Creek Bridge, employment and the economy did not grow as expected. The PWA was abolished in 1941 as spending and industries began supporting the World War II effort (Eleanor Roosevelt Papers Project).

BIBLIOGRAPHY

Mead & Hunt, KCI. West Virginia Historic Bridge Survey Inventory Form. 2013.

Public Works Administration. Encyclopedia Britannica. Retrieved 12 July 2016.

<https://www.britannica.com/topic/Public-Works-Administration>

West Virginia Division of Highways. Turnpike Files. Staunton-Parkersburg Turnpike.

The Eleanor Roosevelt Papers Project. Public Works Administration. George Washington University. <https://www.gwu.edu/~erpapers/supporterpp.cfm> Retrieved 12 July 2016.

West Virginia Division of Highways, Bridge Files, Maintenance Division, Building 5, Capitol Complex, Charleston, WV 25305. 2012.

West Virginia State Road Commission. Annual Report of the State Road Commission of WV. 1940-41.

STATE LEVEL HISTORIC DOCUMENTATION
INDEX TO PHOTOGRAPHS

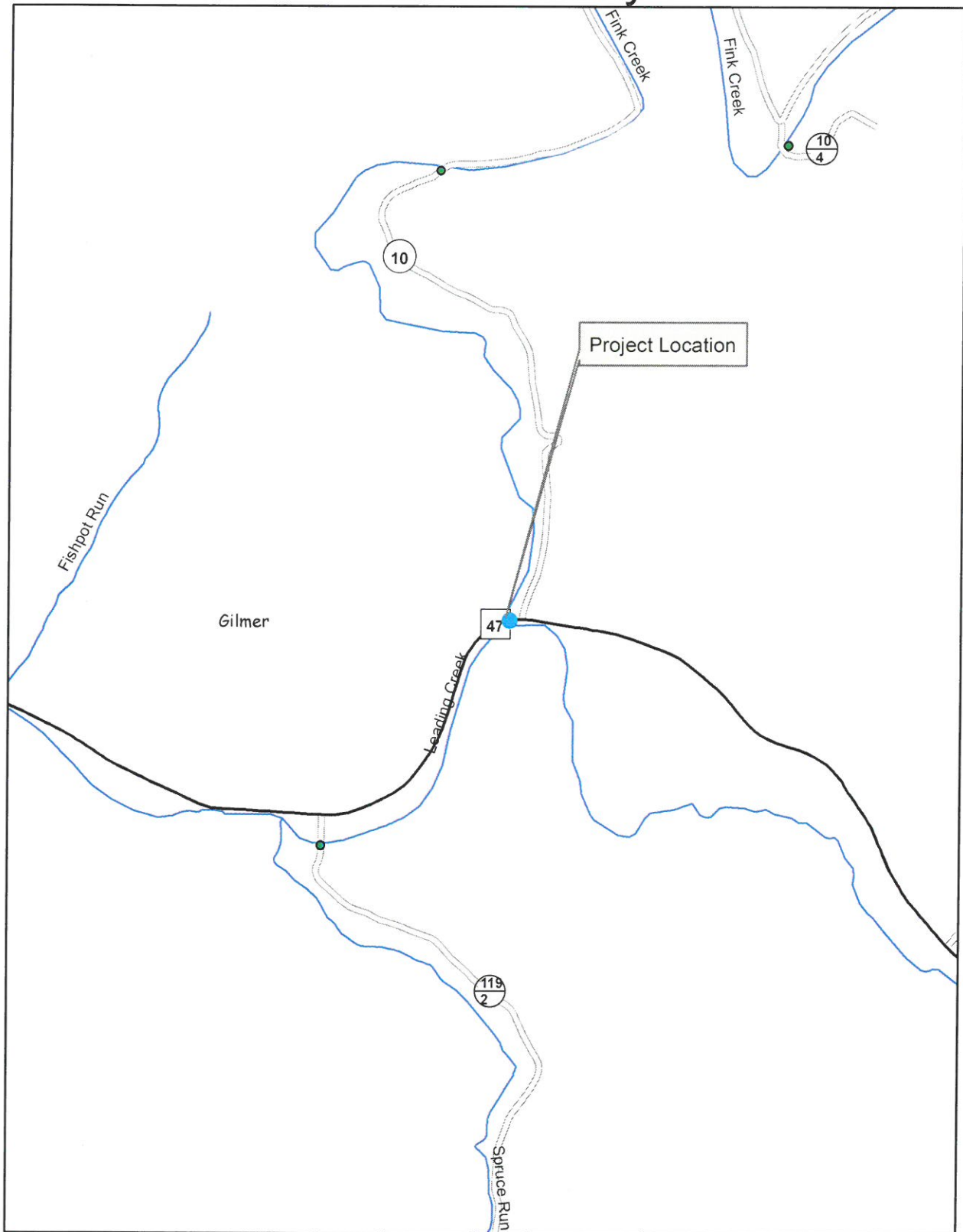
Fink Creek W-Beam Bridge
West Virginia Route 47
Fink Creek
Gilmer County, West Virginia

Photographer: Randy Epperly

May 2016

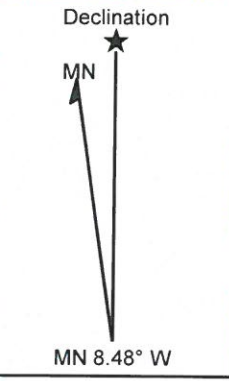
FINK CREEK W-BEAM BRIDGE-1	View of Fink Creek W-Beam looking west.
FINK CREEK W-BEAM BRIDGE-2	View of Fink Creek W-Beam looking east.
FINK CREEK W-BEAM BRIDGE-3	Downstream side of Fink Creek W-Beam looking west.
FINK CREEK W-BEAM BRIDGE-4	Upstream side of Fink Creek W-Beam looking west.
FINK CREEK W-BEAM BRIDGE-5	Downstream side of Fink Creek W-Beam looking east.
FINK CREEK W-BEAM BRIDGE-6	Downstream parapet looking east.
FINK CREEK W-BEAM BRIDGE-7	Downstream parapet showing guardrail on east end.
FINK CREEK W-BEAM BRIDGE-8	Downstream side of bridge showing piers.
FINK CREEK W-BEAM BRIDGE-9	Bridge plates behind guardrail on upstream side.
FINK CREEK W-BEAM BRIDGE-10	Federal Emergency of Public Works plate.

Fink Creek W-Beam
S311-47-11.33
STP-0047(049)D
Gilmer County





Fink Creek
W-Beam
Project Area



Fink Creek W-Beam
Gilmer County

**MEMORANDUM OF AGREEMENT
BY AND AMONG
THE FEDERAL HIGHWAY ADMINISTRATION
THE WEST VIRGINIA STATE HISTORIC PRESERVATION OFFICE
AND THE WEST VIRGINIA DIVISION OF HIGHWAYS
REGARDING IMPLEMENTATION OF THE FINK CREEK W-BEAM BRIDGE
REPLACEMENT PROJECT
STATE PROJECT: S311-47-11.33
FEDERAL PROJECT: STP-0047(048)D
GILMER COUNTY, WEST VIRGINIA
OCTOBER 2016**

WHEREAS, the Federal Highway Administration (FHWA), in cooperation with the West Virginia Division of Highways (WVDOH), proposes to replace the Fink Creek W-Beam Bridge, which spans Fink Creek in Gilmer County, hereinafter referred to as the Project. The improvements involve the construction of a new bridge on the existing alignment and the removal of the existing bridge; and

WHEREAS, the FHWA has determined that the Project will have an adverse effect upon the Fink Creek W-Beam Bridge, a property eligible for the National Register of Historic Places (NRHP); and

WHEREAS, the FHWA has consulted with the West Virginia State Historic Preservation Officer (WVSHPO) pursuant to 36 CFR Part 800 Implementing Section 106 of the National Historic Preservation Act; (16 U.S.C., 470f); and

WHEREAS, the FHWA has determined that the Project will not affect archaeological properties; and

WHEREAS, the WVDOH contacted the Gilmer County Historical Society and the Preservation Alliance of West Virginia regarding the Project. Neither group has responded;

WHEREAS, in accordance with 36 CFR 800.6 (a) (1), the FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination providing the specified documentation, and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR 800.6 (a) (1) (iii);

NOW, THEREFORE, the FHWA, the WVSHPO, and the WVDOH, agree that the undertaking will be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following stipulations are carried out:

Fink Creek W-Beam Bridge

- I. The Fink Creek W-Beam Bridge will be documented in its present historic setting. The documentation package will include 5"x7" black and white digital prints in accordance with the National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion of January 2009.
- II. A brief history of the structure will be included along with fully completed West Virginia Historic Property Inventory forms and copies of any available plan sheets and drawings of the bridge from WVDOH bridge files
- III. West Virginia Division of Highways staff will provide the Gilmer Public Library a copy of the Fink Creek W-Beam Bridge State Level Historic Documentation for references and educational purposes.
- IV. 50 color brochures of the Fink Creek W-Beam Bridge will be developed by the WVDOH and distributed to the Gilmer Public Library. The WVSHPO will be given the opportunity to review all educational materials developed for this stipulation. A CD containing the brochure will also be given to the library to print brochures when the original total has been exhausted.
- V. The Fink Creek W-Beam Bridge will be documented on the West Virginia historic bridge website.

VI. Duration

This MOA will expire if its stipulations are not carried out within five (5) years from the date of its execution. At such time, and prior to work continuing on the undertaking, the FHWA shall either (a) execute an MOA pursuant to 36 CFR 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR 800.7. Prior to such time, FHWA may consult with other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation X below. FHWA shall notify the signatories as to the course of action it will pursue.

VII. Post-Review Discoveries

If any unanticipated discoveries of historic properties or archaeological sites, including human burial sites and/or skeletal remains, are encountered during the implementation of this undertaking, work shall be suspended in the area of the discovery until the

WVDOH has developed and implemented an appropriate treatment plan in consultation with the WVSHPO pursuant to 800.13 (b).

VIII. Monitoring and Reporting

Each year following the execution of this MOA until it expires or is terminated, FHWA shall provide all parties to this MOA a summary report detailing work carried out pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in FHWA's efforts to carry out the terms of this MOA.

IX. Dispute Resolution

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with such party to resolve the objection. If FHWA determines that such objection cannot be resolved, FHWA will:

- A. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the ACHP. The ACHP shall provide FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. FHWA will then proceed according to its final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.
- C. FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

X. Amendments

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

XI. Termination

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation X, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

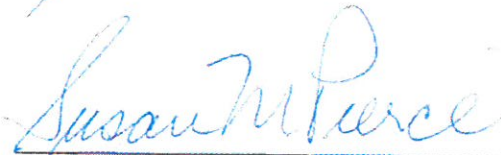
Once the MOA is terminated, and prior to work continuing on the undertaking, FHWA must either (a) execute a MOA pursuant to 36 CFR 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR 800.7. FHWA shall notify the signatories as to the course of action it will pursue.

EXECUTION of the Memorandum of Agreement by the FHWA, WWSHPO, the WVDOT and the Council, and implementation of its terms evidence that the FHWA has afforded the Council an opportunity to comment on the Fink Creek W-Beam Bridge Replacement project and its effects on historic properties, and that the FHWA has taken into account the effects of the undertaking on the historic property.

Signatories Page



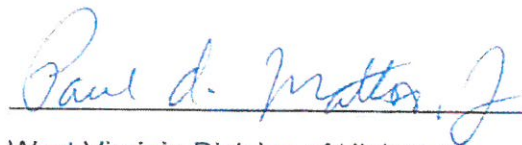
Federal Highway Administration
Date 11/17/16



West Virginia Deputy State Historic Preservation Officer
Date 10/25/16

Advisory Council on Historic Preservation
Date _____

CONCUR:



West Virginia Division of Highways
Date 11/2/16

West Virginia Historic Bridge Inventory Form

Bridge No. 11-047/00-011.33 **BARS No.** 11A100 **Federal Bridge No.** 0000000011A100 **Bridge Design No.** 1534.0

IDENTIFICATION INFORMATION

SHPO Survey No. GL-0163 **Owner** State Highway Agency
Local Name FINK CREEK W-BEAM **Status** Extant - in service
Other Local Name

LOCATIONAL AND SETTING INFORMATION

District 07 **County** Gilmer **Latitude** 39011800 **Longitude** 080443600
Location 0.04 MI W OF CO 10 **UTM-Northing**
Facility Carried By Structure WV 47 **UTM-Easting**
 UTM Zone
Features Intersected FINK CREEK **Surrounding Land Use** Residential
 Type of Development Rural - (undeveloped area outside communities)

STRUCTURAL INFORMATION

Main Span Type Steel Stringer/Multi-beam or Girder	Structure Length (ft)	173	
Main Span Type Code 302	Length of Maximum Span (ft)	55	
Number of Spans in Main Unit 003	Average Daily Traffic	000950	Year 2003
Number of Approach Spans 0000	Sufficiency Rating	0596	Skew 45

(Note: Data current as of April 2006 database)

BRIDGE DESCRIPTIVE INFORMATION

Year Built 1939	Arrangement
Year Reconstructed	Connection Type
Truss Bridge Type	Truss Details
Alteration(s)	Date of Alterations (Year)

Architectural Treatment(s)

Bridge Plate Text
 (2) plaques. "FEDERAL EMERGENCY, ADMINISTRATION OF PUBLIC WORKS FRANKLIN D. ROOSEVELT, PRESIDENT OF THE UNITED STATES, HAROLD L. ICKES, ADMINISTATOR OF PUBLIC WORKS, FINK CREEK BRIDGE, 1939" and "1939, BRIDGE 1594, WVA STATE SEAL"

BRIDGE HISTORY

Engineer or Designer

Builder or Fabricator Public Works Administration

Bridge Plan Location

Additional Details: Common pierced concrete parapet with attached guardrails. Concrete piers, abutments, and wing walls. Bridge constructed on a curve. Bridge plaque notes the bridge was constructed by the Federal Emergency Administration of Public Works. The bridge has a significant association with the WPA/CCC context.

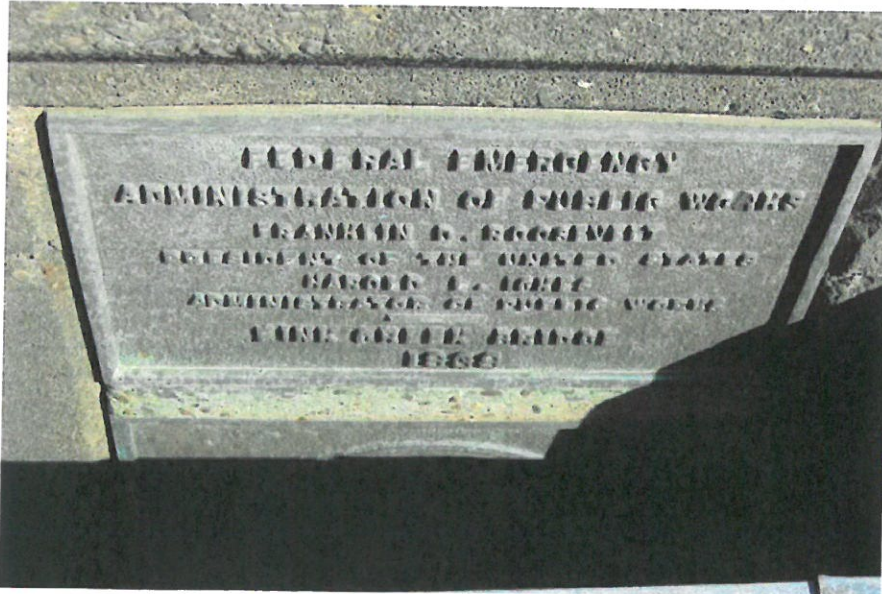
NATIONAL REGISTER EVALUATION INFORMATION

National Register Determination Eligible Reason Not Evaluated

National Register Determination Date 2013

This bridge has a significant association with a historic transportation system, program, event, trend, or policy identified through contextual research and survey activities. It retains the historic integrity necessary to convey its historical significance, and, therefore, is eligible for the National Register under Criterion A.

This bridge is not eligible for the National Register under Criterion C as it does not illustrate the evolution or transition of a bridge type or an important variation in design, fabrication, or construction of a bridge type. Additionally, it is not a distinguishable representation of a master's work and does not possess high artistic value as identified through contextual research.



West Virginia Historic Bridge Inventory Form
Form Prepared By Mead & Hunt and KCI
Form Preparation Date 2013



Photo #1



Photo #2



Photo #3



Photo #4



Photo #5



Photo #6



Photo #7



Photo #8



Photo #9

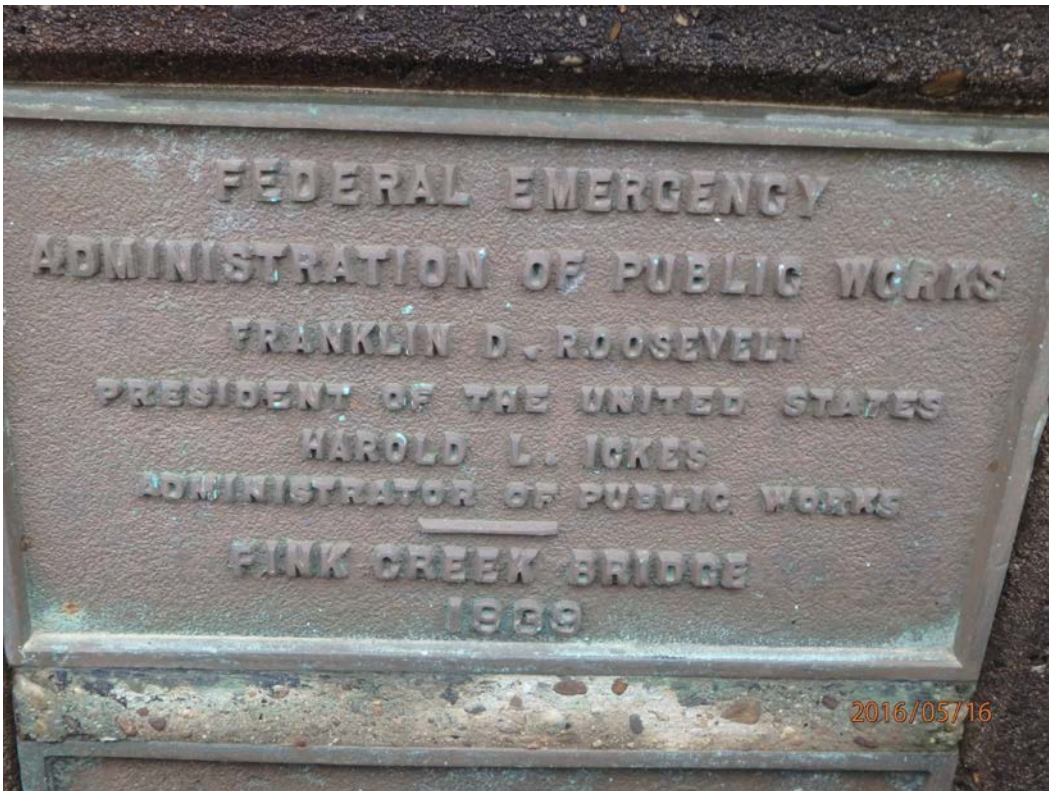
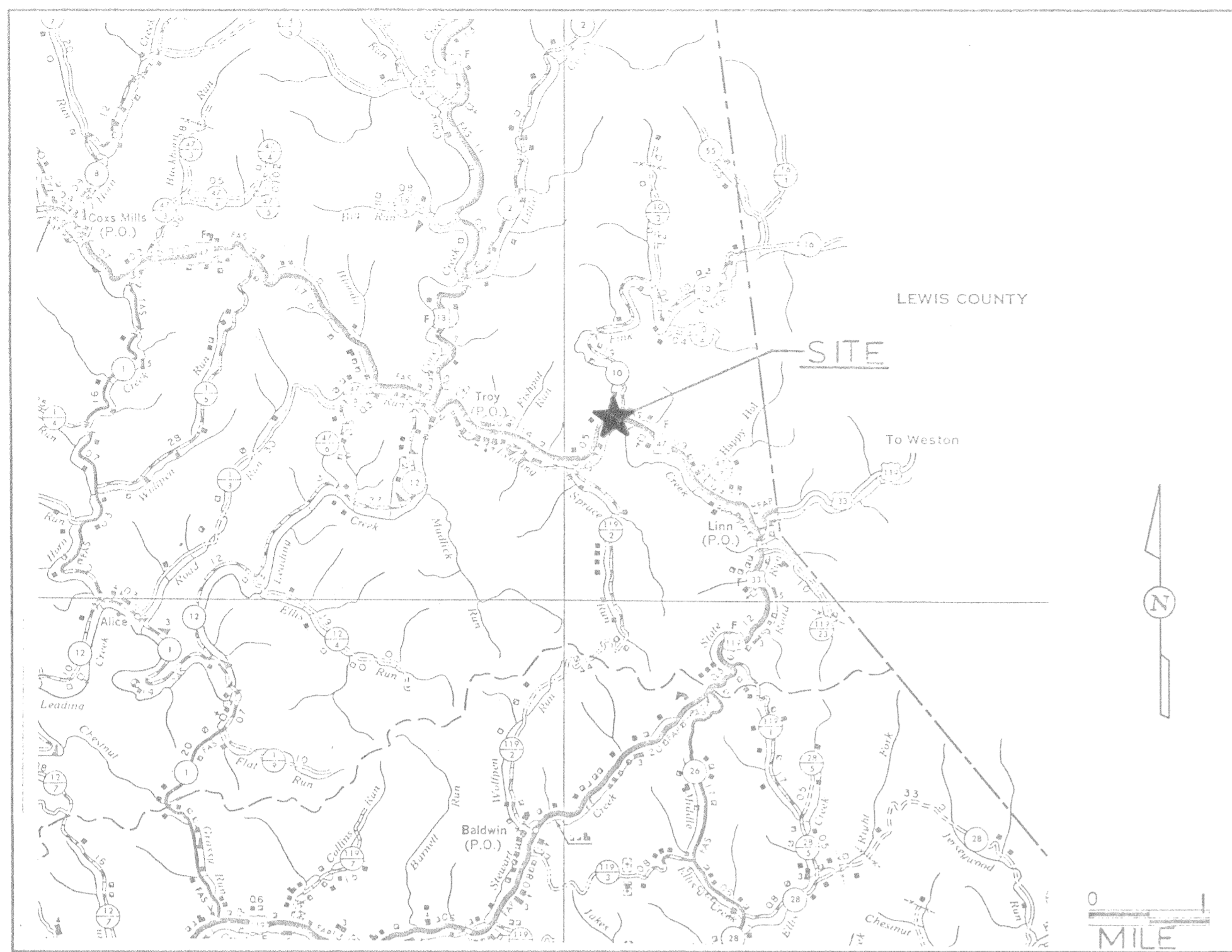


Photo #10



UTILITIES ENCOUNTERED

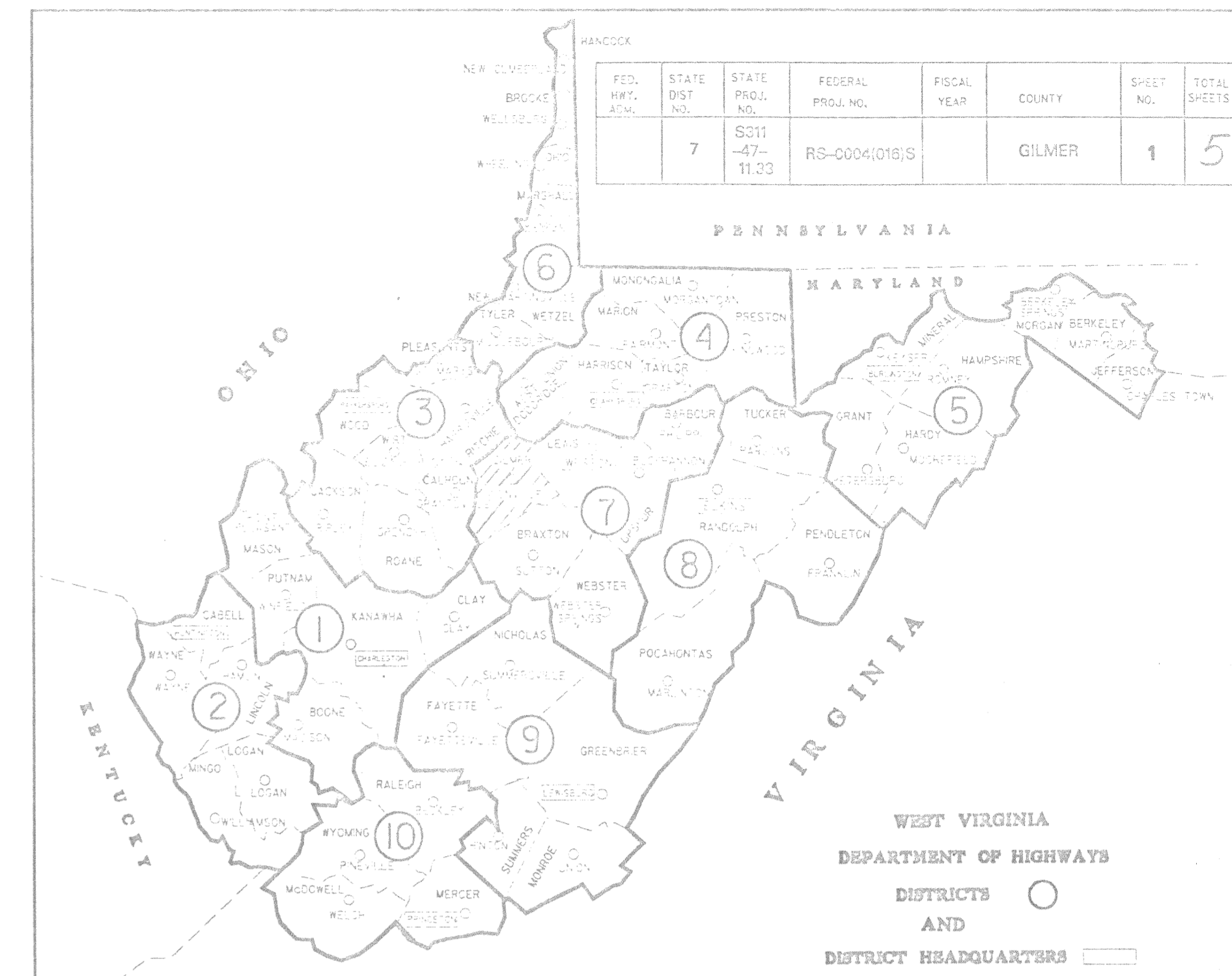
NONE

WEST VIRGINIA DEPARTMENT OF HIGHWAYS

PLANS FOR CONSTRUCTION OF STATE HIGHWAY

FEDERAL PROJECT NO. RS-0004(016)S
STATE PROJECT NO. S311-47-11.33
ROUTE NO. WV 47

GILMER COUNTY

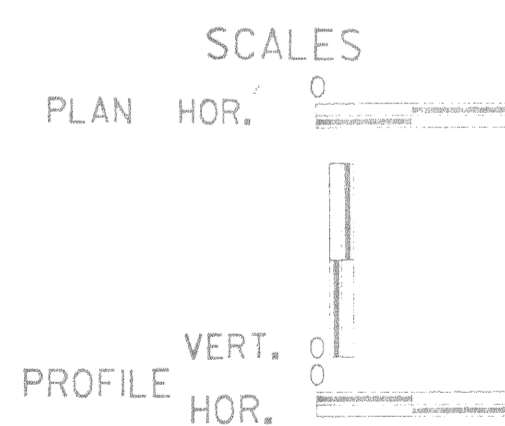


TYPE OF CONSTRUCTION

BRIDGE DECK OVERLAY WITH

LATEX MODIFIED CONCRETE

FINK CREEK BRIDGE NO. 1534



DESIGN	DESIGNATION
A.D.T. (1986)	= 250
A.D.T. ()	=
D.H.V.	=
D.	=
T.	=
V.	=

CONVENTIONAL	SIGNS
---	STATE LINE
---	COUNTY LINE
---	CORPORATION LINE
---	PROPOSED R/W LINE
---	PROPERTY LINE
X	EXISTING FENCE
XX	PROPOSED FENCE
---	EDGE OF STREAM
---	PROPOSED GUARD RAIL
---	EXISTING GUARD RAIL
---	RAILROAD
G	GAS LINE
W	WATER LINE
T	TELEPHONE LINE
E	ELECTRIC LINE
○	TELEPHONE POLE
○	POWER POLE
○	COMBINED POWER AND TELEPHONE POLE
○	TREE
○	SHRUB
○	RIGHT OF WAY MARKER

INDEX TO SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2	NOTES AND QUANTITIES
3	MAINTENANCE OF TRAFFIC
4, 5	INFORMATION SHEETS

NUMBER	REVISIONS	DATE	BY

DATE May 19, 1989
 I HEREBY CERTIFY THAT THIS IS A CORRECT COPY OF THE
 PLANS OF PROJECT S311-47-11.33 RS-0004(016)S
Sam Kelly
 BUSINESS MANAGER
 NOTE: STANDARD DETAIL BOOK DATED APRIL 1, 1982 &
 VOLUME II DATED APRIL 2, 1985, SHALL APPLY
 TO THIS PROJECT.

RECOMMENDED *James E. Sothen*
 Acting DIRECTOR STRUCTURES DIVISION

RECOMMENDED *Randall J. Conley*
 Acting DIRECTOR ROADWAY DESIGN DIVISION

RECOMMENDED _____
 CHIEF ENGINEER DEVELOPMENT

RECOMMENDED _____
 STATE HIGHWAY ENGINEER

APPROVED *Fred VanHorn*
 COMMISSIONER OF HIGHWAYS

APPROVED _____
 DIVISION ADMINISTRATOR DATE _____

U. S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

PROJECT NO. **S311-47-11.33** **RS-0004(016)S**

STATE PROJECT NUMBER	FEDERAL PROJECT NUMBER	STATE DIST. NO.	COUNTY	SHEET NO.	TOTAL SHTS
S311-47-11.33	RS-0047 (016)S	7	Gilmer	2	5

GOVERNING SPECIFICATIONS:

The West Virginia Department of Highways Standard Specifications, Roads and Bridges adopted 1986, as amended by the Supplemental Specifications dated January 1, 1989, the contract documents and the contract plans are the governing provisions applicable.

SCOPE OF WORK:

The scope of this contract is limited to providing a latex modified concrete overlayment on the bridge deck and safety guardrail modifications while traffic is continually maintained.

The overlayment shall be done in two stages approximately one half deck at a time. The longitudinal construction joint shall be a sawed joint.

AVERAGE COVER OVER THE TOP MAT OF REINFORCING STEEL BARS = 2.00 IN.

NOTES:

- The machines or system used to place and finish the overlay shall be adjustable so as to provide a consistently uniform surface that does not reflect the highs and lows that may be found in the existing deck surface.
- The existing bridge deck has been overlaid with asphalt. Include the cost of removing the asphalt from the bridge deck in Item 680-07, "Class 1 Bridge Deck Removal".
- The Contractor shall furnish a representative to accompany the project supervisor when the amount of Class 2 Repair is being measured.
- Any areas of the backwall between the expansion device and the approach slab that are spalled, deteriorated or cracked shall be repaired at the direction of the Engineer. Removal of concrete or asphalt shall be paid as Item 680-08 "Class 2 Bridge Deck Removal" and the placement of the latex concrete shall be paid under Item 679-02 "Latex Modified Portland Cement Concrete Overlay Bridge Deck".
- The Contractor will not be permitted to begin paving operations until a law enforcement officer and a car with flashing lights are present on the job site.
- Any of the existing guardrail components may be reused on this project with the approval of the Engineer.

STATE PROJECT NO: S311-47-11.33
FEDERAL PROJECT NO: RS-0047(016)S

DESCRIPTION: FINK CREEK BRIDGE #1534.1
COUNTY: GILMER

DISTRICT: 07

ITEM	DESCRIPTION	ALTERNATE UNITS	QUANTITY
401-02(2)SG	HOT-LAID BITUMINOUS CONCRETE WEARING COURSE, STONE OR GRAVEL	AA1 TH	1.76 2.25
401-02(2)S	HOT-LAID BITUMINOUS CONCRETE WEARING COURSE, SLAG	AA2 TH	1.6
204-01	MOBILIZATION	LS	1 ✓
408-02	BITUMINOUS MATERIAL	GA	10 ✓
607-01(I)	TYPE 1 GUARDRAIL	LF	584 584.5
607-29	BREAKAWAY CABLE TERMINAL	EA	4.3
636-11	TRAFFIC CONTROL DEVICES	UN	2740 1792
636-13	CLEANING OF INDIVIDUAL TRAFFIC CONTROL DEVICES	EA	25 0
636-14	FLAGGER	HR	700 88
636-25(B)	WARNING LIGHTS	DA	402 12
636-25(C)	WARNING LIGHTS	DA	1608 357
679-02	LATEX MODIFIED PORTLAND CEMENT CONCRETE OVERLAY BRIDGE DECK	CY	43 43.07
680-07	CLASS 1 BRIDGE DECK REMOVAL	SY	445 ✓
680-08	CLASS 2 BRIDGE DECK REMOVAL	SY	220 171.74
680-08	CLASS 2 BRIDGE DECK REMOVAL	LS	1000
CONV. FR. WO. "L	Compensation for construction + placing of concrete deck to permit placement of latex mod. concrete on class 2. Removal of asphalt which extended through deck.		

NO	REVISION	DATE	BY

THE W. VA. DEPARTMENT OF HIGHWAYS
STRUCTURES DIVISION

LMC OVERLAY OF
FINK CREEK BRIDGE

DESIGNED BY <i>Brady</i>	DATE 5-89
DRAWN BY <i>HB</i>	DATE 5-89
CHECKED BY <i>JLB</i>	DATE 5-89
CHECKED BY	
REVIEWED BY	

NOTES AND QUANTITIES

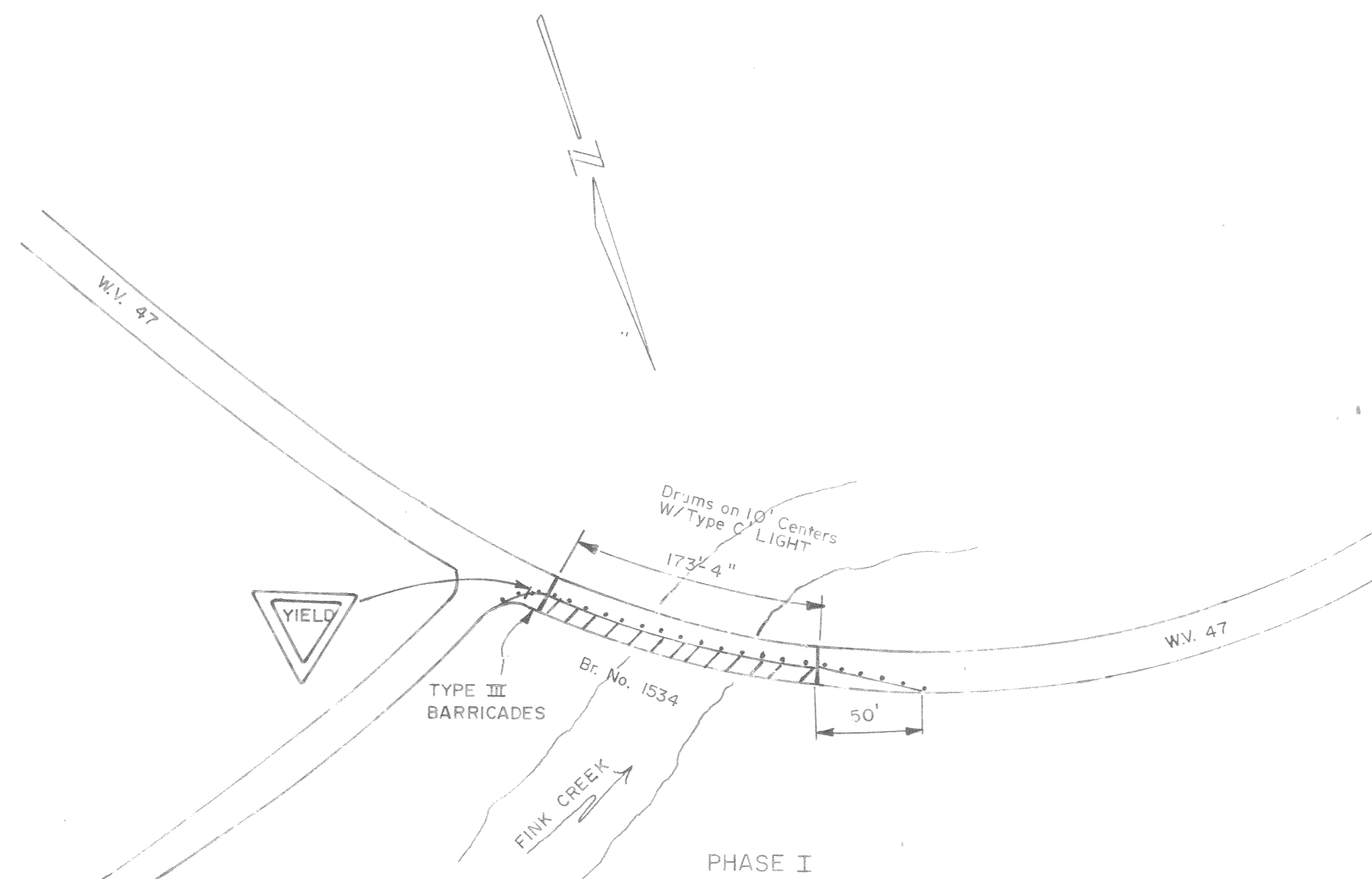
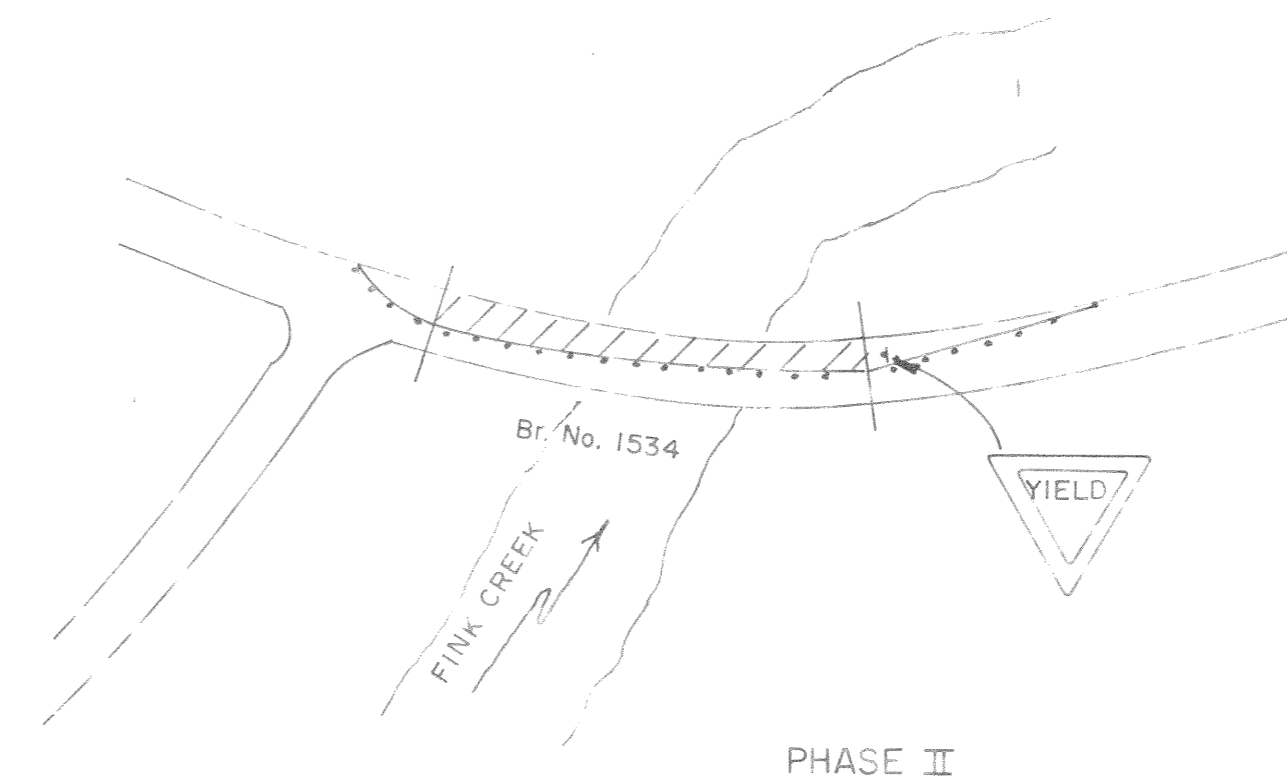
SHEET **2** OF **5**
BRIDGE NUMBER
1534.1

-NOTES-

- Maintenance of Traffic shall be in accordance with Section 636 of the West Virginia Department of Highways Standard Specifications, Roads and Bridges, adopted 1986, the Supplemental Specifications, January 1, 1989, and the manual, Traffic Control for Street and Highway Construction and Maintenance Operations, July 1985, which is made a part of this contract and the traffic plan for individual segments as described below.
- The quantities of traffic control devices have been increased by 15 percent for use as directed by the Engineer when unanticipated changes in the traffic control plan occur.
- Reflective sheeting on temporary traffic control devices shall be of new condition at the beginning of the project life. This is to ensure that night visibility and legibility is maintained.
- The Contractor is restricted to milling only the portion of the deck on which work is being performed inside the closure. Traffic may not be switched from one lane to another until overlay work is completed and concrete is cured on a given lane.
- Access to all houses and businesses shall be maintained at all times.
- Flagger** - When work is performed at night with a flagger, the flagger stations shall be adequately illuminated. This cost will be paid for under Item 636-14, "Flagger".

PUBLIC ROAD DIST.	STATE DIST. NO.	STATE PROJ. NO.	FEDERAL PROJ. NO.	FISCAL YEAR	COUNTY	SHEET NO.	TOTAL SHEETS
WV	7	5311-47-9.38		1989	Gilmer	3	5

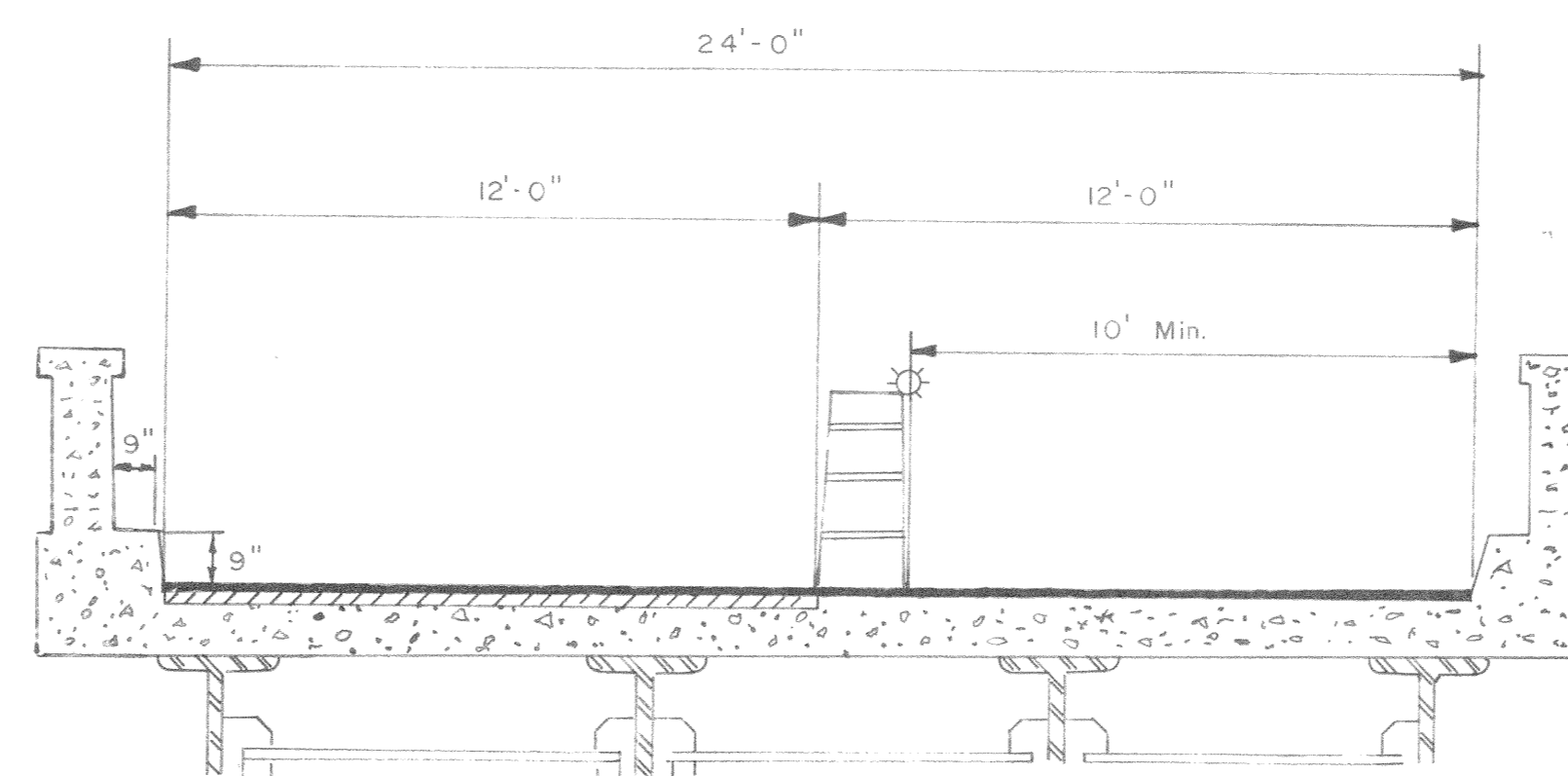
MAINTENANCE OF TRAFFIC SUMMARY			
ITEM NO.	DESCRIPTION	QUANTITY	
		UNIT	TOTAL
636-02	AGGREGATE FOR MAINTAINING TRAFFIC	TUN	
636-03	LIQUID ASPHALT OIL FOR DUST PALLATIVE	GAL.	
636-04	CALCIUM CHLORIDE FOR DUST PALLATIVE	TUN	
636-05	TEMPORARY STRUCTURES FOR MAINTAINING TRAFFIC	L.S.	
636-06	PILOT TRUCK AND DRIVER	DAY	
636-07	ERADICATION OF PAVEMENT MARKINGS - 4" SOLID LINE	L.F.	
636-08	TEMPORARY PAVEMENT MARKINGS - PAINT 4" SOLID LINE	L.F.	
636-09	TEMPORARY PAVEMENT MARKINGS - TAPE 4" SOLID LINE	L.F.	
636-10	TEMPORARY RAISED PAVEMENT MARKERS, TYPE	EACH	
636-11	TRAFFIC CONTROL DEVICES	UNIT	2740
636-12	CLEANING OF PROJECT TRAFFIC CONTROL DEVICES	EACH	
636-13	CLEANING OF INDIVIDUAL TRAFFIC CONTROL DEVICES	EACH	25
636-14	FLAGGER	HR.	700
636-15	TEMPORARY GUARDRAIL CHANNELIZATION DEVICE	L.F.	
636-16	REMOVE AND RESET TEMP GUARDRAIL CHANNELIZATION DEVICES	L.F.	
636-17	TEMPORARY CONCRETE BARRIER	L.F.	
636-18	REMOVE AND RESET TEMPORARY CONCRETE BARRIER	L.F.	
636-19	TEMPORARY GUARDRAIL BARRIER	L.F.	
636-20	REMOVE AND RESET TEMPORARY GUARDRAIL BARRIER	L.F.	
636-21	ELECTRIC ARROW	DAY	
636-22	CHANGEABLE MESSAGE SIGN	DAY	
636-23	TEMPORARY TRAFFIC SIGNAL	L.S.	
636-24	TEMPORARY PIPE FOR MAINTAINING TRAFFIC	L.F.	
636-25(A)	WARNING LIGHTS	DAY	
636-25(B)	WARNING LIGHTS	DAY	402
636-25(C)	WARNING LIGHTS	DAY	1608
636-26	TEMPORARY LIGHTING	L.S.	



TRAFFIC CONTROL

- INSTALL SIGNING ON CO. 18 AND W.V. 47 EAST AND WEST USING CASE 'A' 11
- USE CASE A5 SIGNING AND FLAGGERS FOR DAY OPERATION.
- FOR NIGHT AND NON-WORKING DAYS USE CASE A11 SIGNING.

TRAFFIC CONTROL DEVICES QUANTITIES						
QUANTITIES						
DEVICE	DESCRIPTION	PHASE I	PHASE II	TOTALS	UNIT VALUES	TOTAL UNITS
1	SIGNS ON PORTABLE MOUNTS AND BARRICADES (TOTAL SIGN AREA ≥ 16 sq. ft.)	3		3	90	290
2	SIGNS ON PORTABLE MOUNTS AND BARRICADES (TOTAL SIGN AREA < 16 sq. ft.)				60	
3	SIGNS ON PERMANENT POSTS (TOTAL SIGN AREA ≥ 16 sq. ft.)	9		9	100	900
4	SIGNS ON PERMANENT POSTS (TOTAL SIGN AREA < 16 sq. ft.)	4	4 & 1/4	5	70	350
5	BARRICADES - TYPE I				30	
6	BARRICADES - TYPE II				50	
7	BARRICADES - TYPE III	2		2	70	140
8	DRUMS	22	2	24	30	720
9	CONES				5	
10	VERTICAL PANELS OR GROUND MOUNTED DELINEATORS				10	
11	BARRIER OR GUARDRAIL MOUNTED DELINEATORS				0	0
				SUBTOTAL		2400
				15% of SUBTOTAL (See Note 2)		340
				TOTAL		2740



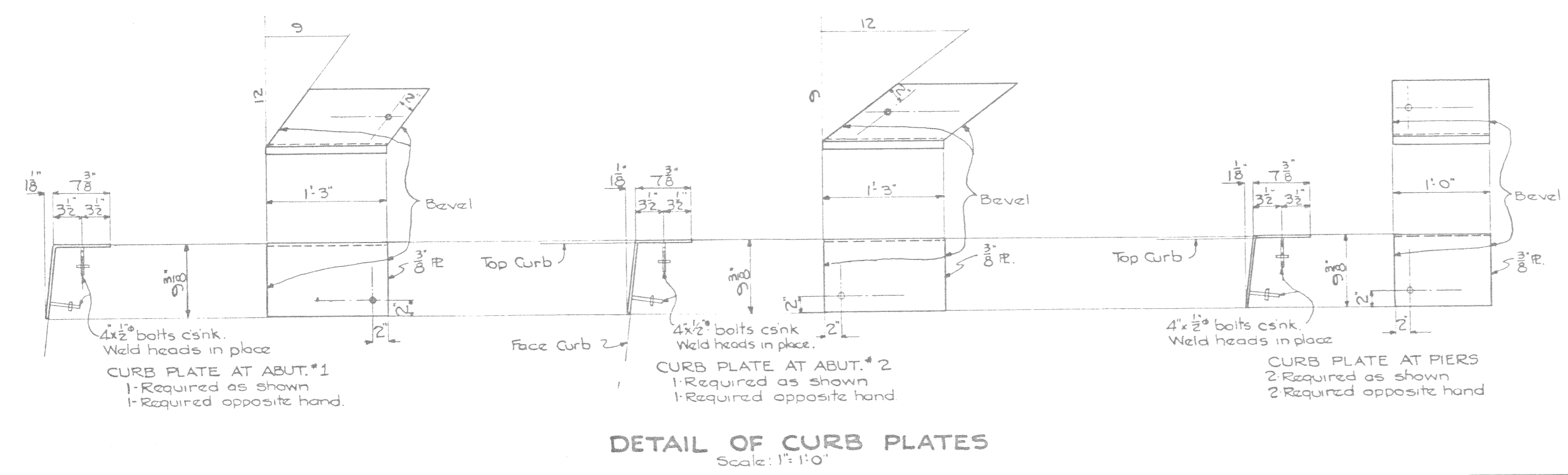
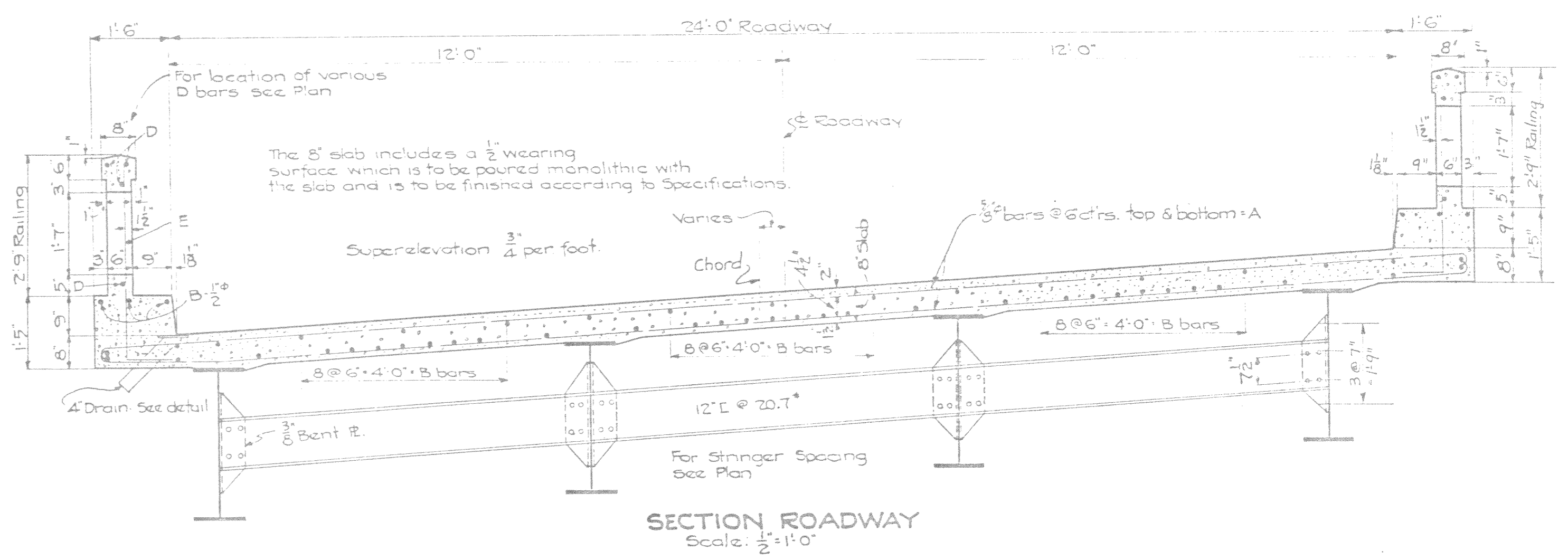
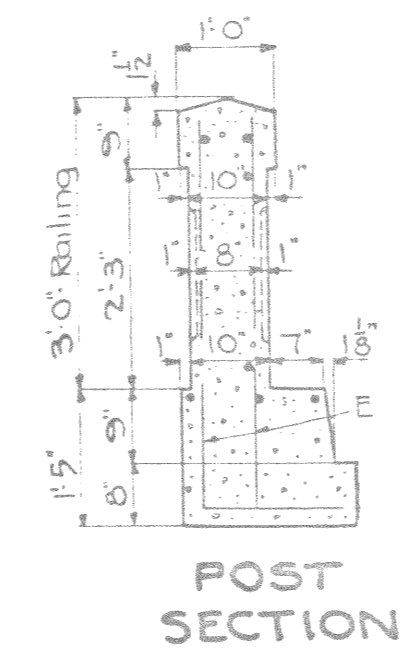
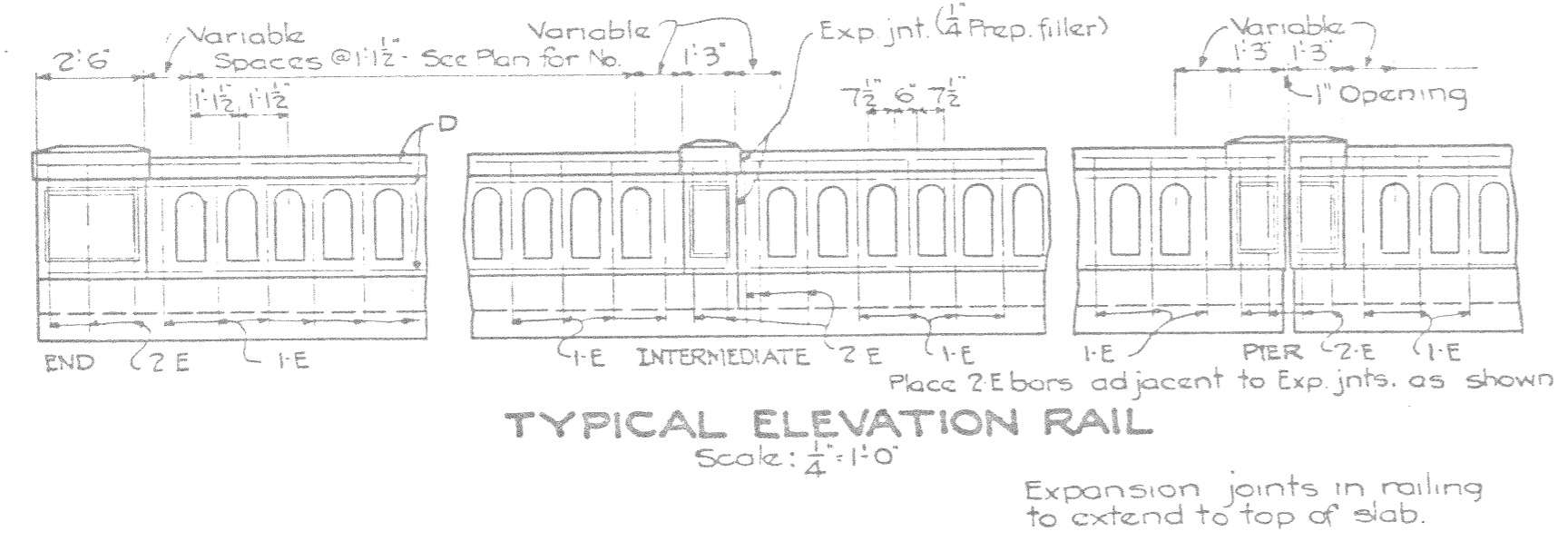
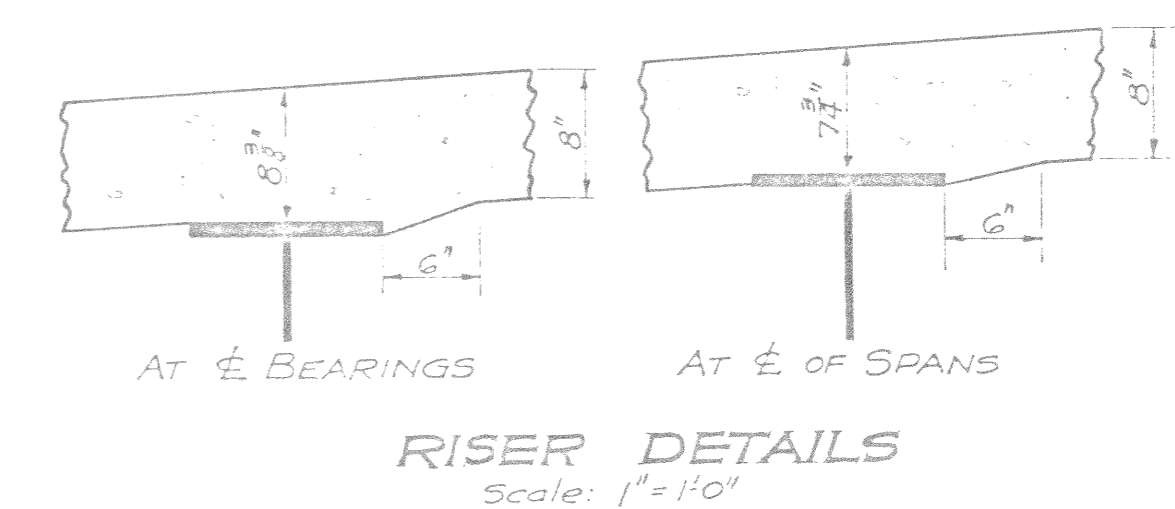
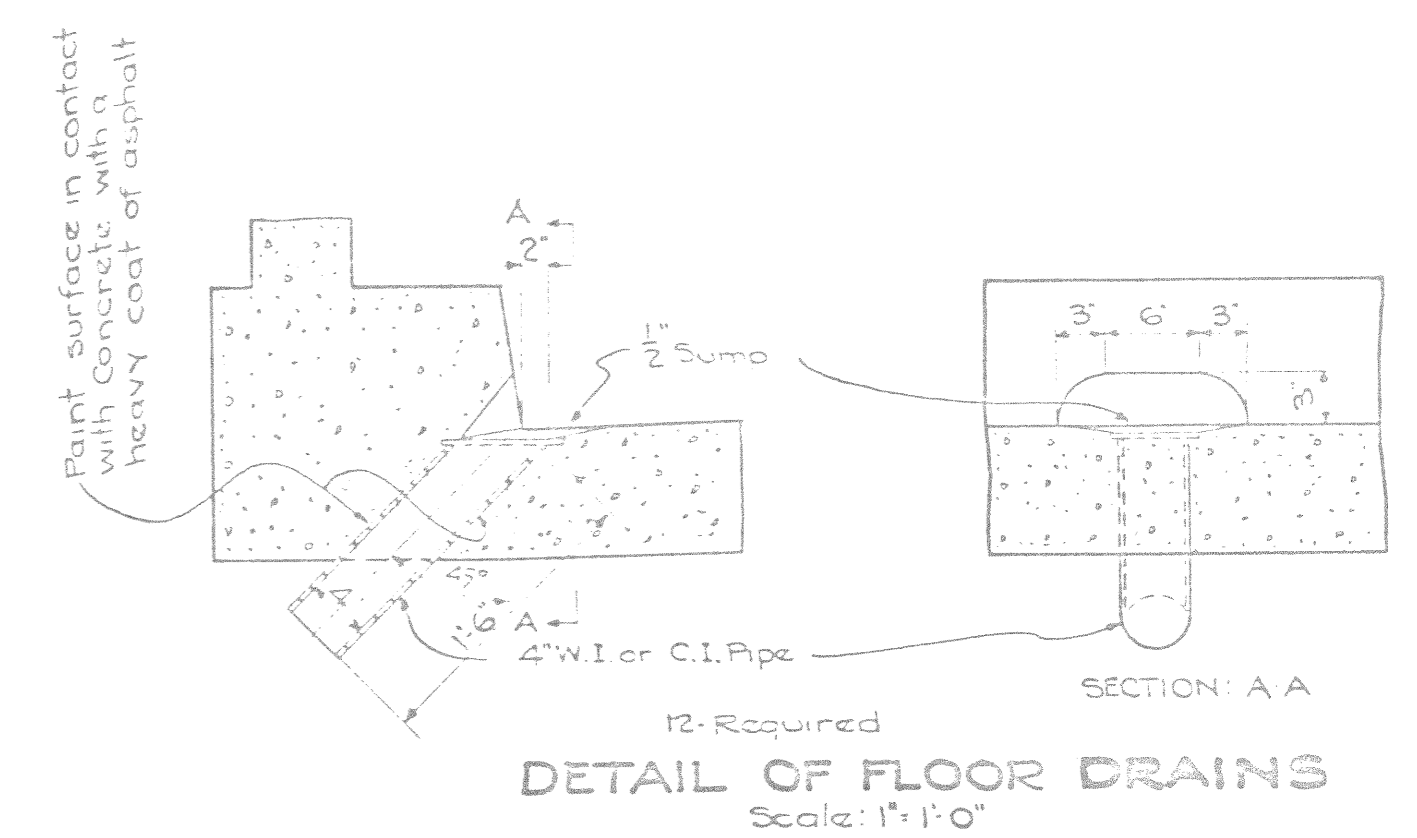
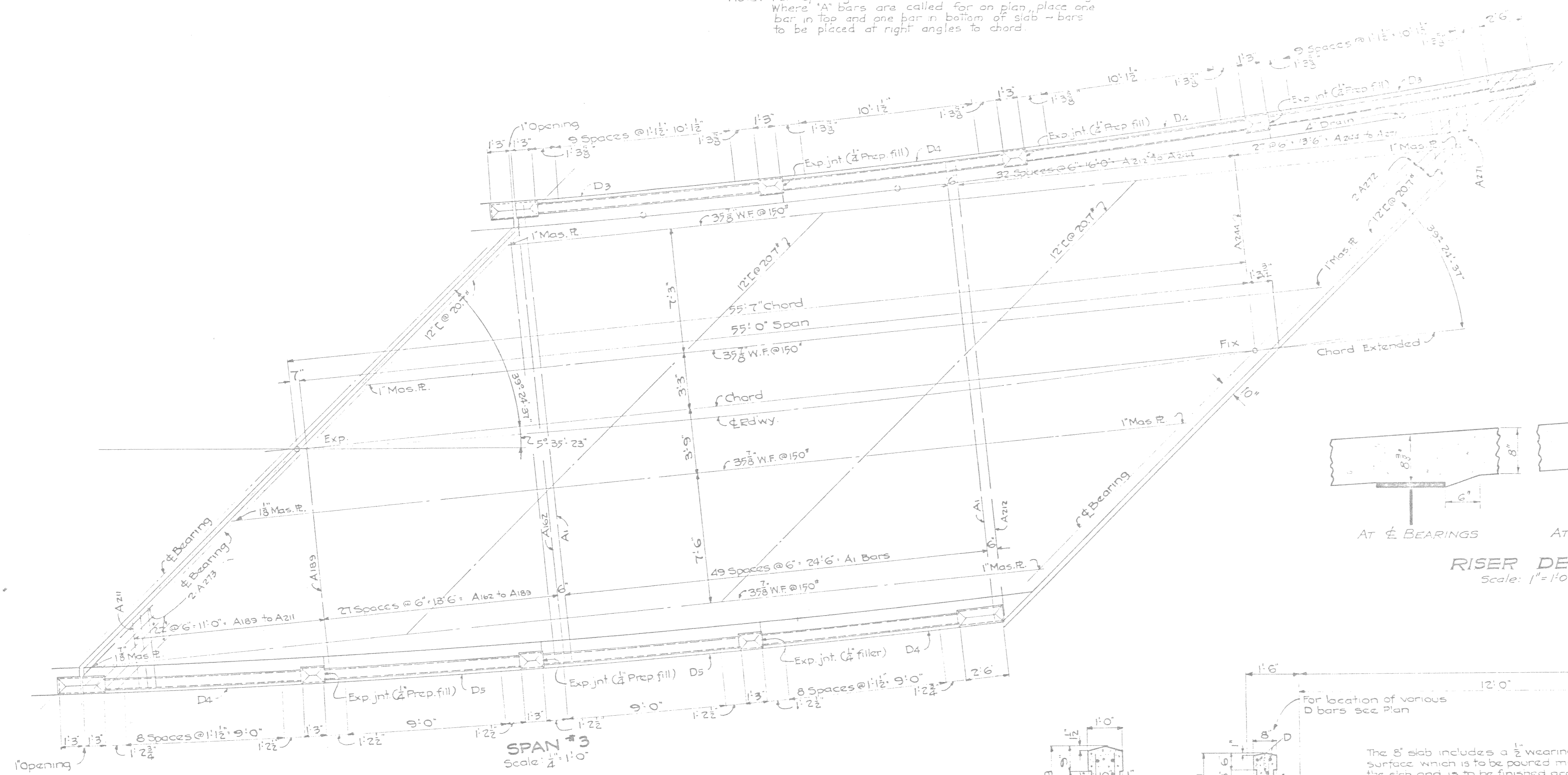
LANE CLOSURE
RT. NO. 1534

LAYTEX OVERLAY FOR BRIDGE 1534
FINK CREEK

WEST VIRGINIA DEPARTMENT OF HIGHWAYS		
TRAFFIC ENGINEERING DIVISION		
TRAFFIC CONTROL PLAN, NOTES, QUANTITIES, SEQUENCE OF CONSTRUCTION		
SCALE NONE	DATE 12-20-88	MT-1

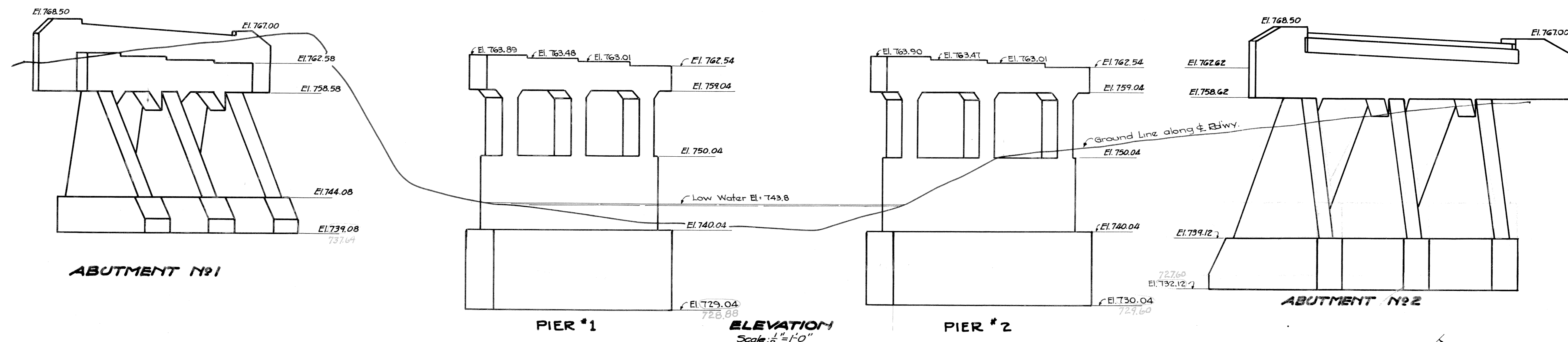
70	372	Ed. No.	Year	County	70	70
7	372	Ed. No.	38-39	Gilmer	X	X
					5	5

Note: For spacing of "B" bars see "Section of Roadway".
 Where "A" bars are called for on plan, place one bar in top and one bar in bottom of slab - bars to be placed at right angles to chord.

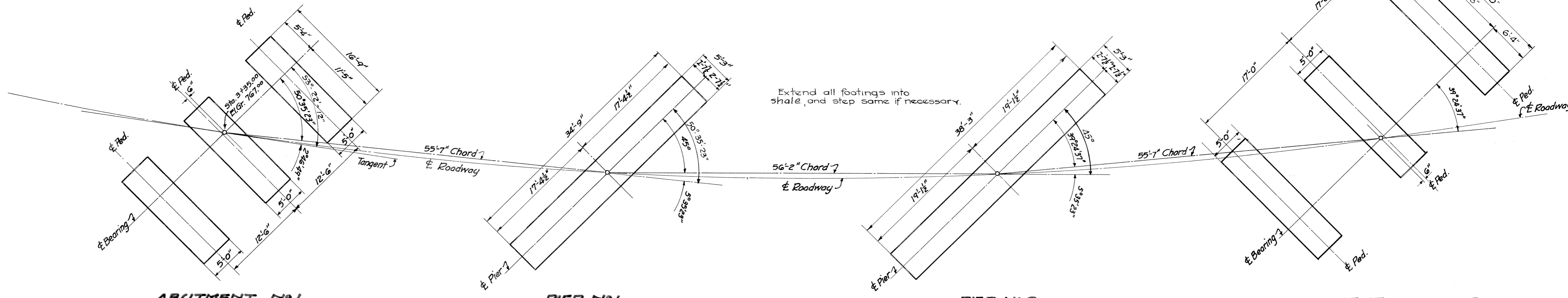


FOR INFORMATION ONLY

FINK CREEK BRIDGE
 3-55'-0" I BEAM SPANS - 24'-0" ROADWAY
 ON
 STATE ROUTE 47
 LINN-TROY ROAD
 OVER
 FINK CREEK
 NEAR
 TROY
 GILMER COUNTY, W.VA.
 DESIGNED BY
 STATE ROAD COMMISSION
 CHARLESTON, WEST VIRGINIA
 SCALE: AS NOTED NOVEMBER, 1935.
 PROJECT: FW.A.(191-F) 3364A SHEET #7 OF 25



ELEVATION
Scale: 1/8" = 1'-0"



FOUNDATION PLAN
Scale: 1/8" = 1'-0"

NOTES

All concrete in the superstructure to be Class A, except that in the railing, which shall be Class D. Concrete in substructure to be Class A, except footers of abutments, and below El. 750.04 for Piers, which shall be Class B.

The grading size for coarse aggregate of #26 for Class B concrete, #6 for Class A concrete, and #10 for Class D concrete, in the Road Specifications 1935, will be accepted.

All concrete for the bridge shall be Vibratory Concrete in accordance with the Amendment to Standard Specifications for Bridges, for "Vibratory Concrete" dated Oct. 1936.

Reinforcing bars shall be made of new billet steel of either structural or intermediate grade.

Where a prepared filler is called for use a prepared filler similar to Carey Elastite Rubber Expansion Joint or Serviced Cement Expansion Joint to be approved by the Engineer.

Bridge designed for 115 live loading and an additional wearing surface of 1 1/2" per sq. ft. of roadway. The additional wearing surface is not included in this contract.

Snap drawings shall be in ink on tracing cloth and the tracings delivered to the Commission upon completion of the contract.

All structural and rivet steel shall contain at least 0.2% copper.

Allowable unit stresses for structural and rivet steel, and cast steel, shall be increased 12 1/2% over those given in the Specifications with a maximum of 15000#/sq. in. in axial compression.

The final coat of field paint shall be aluminum according to the State Road Commission Specifications dated Dec. 1936.

floor & railing Item 23; a lump sum bid for steel superstructure complete in place excluding concrete item 33, and a unit bid on other items shown in the estimate.

The contractor is to maintain traffic at the bridge site, item 32. He may use the present superstructure for this purpose by shifting same to clear the new structure. The contractor shall provide and maintain all weather approaches to the temporary structure, and provide all necessary lights and barricades. The alignment and grade of the approaches to the temporary structure to be approved by the engineer. The State will provide any necessary flagmen for directing traffic over the temporary structure.

The lump sum bid for "Removing Present Superstructure" shall include the following: Remove the present superstructure without damage to members, match mark and store along the right of way near the bridge site as directed by the Engineer. All materials shall remain the property of the State.

The unit bid on Class A Concrete in Superstructure shall include the 4" Drains & Prepared Filler.

Rock excavation shall be made to the neat line of footings and no rock excavation will be paid for outside of these lines.

Specifications by the State Road Commission June 1928, with modifications & changes effective June 1933, Special Provisions for use on State Road Commission of West Virginia Public Works Administration Dockets Transferred to the United States Bureau of Public Roads for supervision, Approved Nov. 12, 1938, will govern this project. Bridge and Approaches are to be let in one contract.

See sheet No. 1 for title sheet.

See sheets 2 to 8 inclusive for Bridge Plans.

See sheets 9 to 25 inclusive for Approach Plans.

See sheet 9 for Specifications for Approach items.

ESTIMATE

No.	Item.	Unit	Bridge	Highway	Accessory	Total
1.	Dry Excavation	CY	755.			755.
2.	Wet Excavation	CY	610.			610.
3.	Rock Excavation	CY	35.			35.
5.	Class A Concrete (Super)	CY	127.6			127.6
6.	Class A Concrete (Sub.)	CY	235.1			235.1
7.	Class B Concrete	CY	352.5			352.5
10.	Concrete Railing	L.F.	336.3			336.3
11.	Reinforcing Bars	Lbs.	60,572			60,572.
23.	Steel Superstructure (Structural St. 123,000)	L. Sum	Lump Sum			Lump Sum
32.	Maintaining Traffic	L. Sum	Lump Sum			Lump Sum
33.	Removing Present Superstructure	L. Sum	Lump Sum			Lump Sum
34.	Clearing of Right of Way	L.F.	173.	1177.	360.	1710.
35.	Unclassified Excavation	CY	3000.	1300.	4300.	4300.
36.	Borrow Excavation	CY	4000.		4000.	4000.
37.	Overhaul	Sq. Yd.	10,000.		10,000.	10,000.
38.	Excavation for Structures	C.Y.	50.		50.	50.
39.	Macadam Base Course (2-4 Courses)	C.Y.	575.	3.	578.	578.
40.	Road Mix Aggr. Limestone 130 per Sq. Yd.	Ton	175.	1.	176.	176.
41.	Bitum. Material Tar Prime T.C. 3 0.4 gal. S.Y.	Gal.	1100.	5.	1105.	1105.
42.	Bitum. Material Tar . Mix TH-1 1.2 gal. S.Y.	Gal.	3200.	15.	3215.	3215.
43.	18" R.C. Pipe	L.F.	70.		70.	70.
44.	24" R.C. Pipe	L.F.	12.		12.	12.
45.	Class B Concrete	C.Y.	4.		4.	4.
46.	Special Rock Fill	C.Y.	450.		450.	450.

AS BUILT

682.32
610
None
127.60
235.10
352.26
336.26
60,572.
100%
100%
173

FINK CREEK BRIDGE
3-55 ft. I-BEAM SPANS — 24'-0" ROADWAY
ON
STATE ROUTE No. 47
LIHN-TROY ROAD
OVER
FINK CREEK
NEAR
TROY
GILMER COUNTY, W.VA.
DESIGNED BY
STATE ROAD COMMISSION
CHARLESTON, WEST VIRGINIA

Scale: As Noted
Project: P.W.A. (1197-F) 3364-A
November, 1938
Sheet #2 of 25
#1534

AS BUILT NOVEMBER 20, 1939

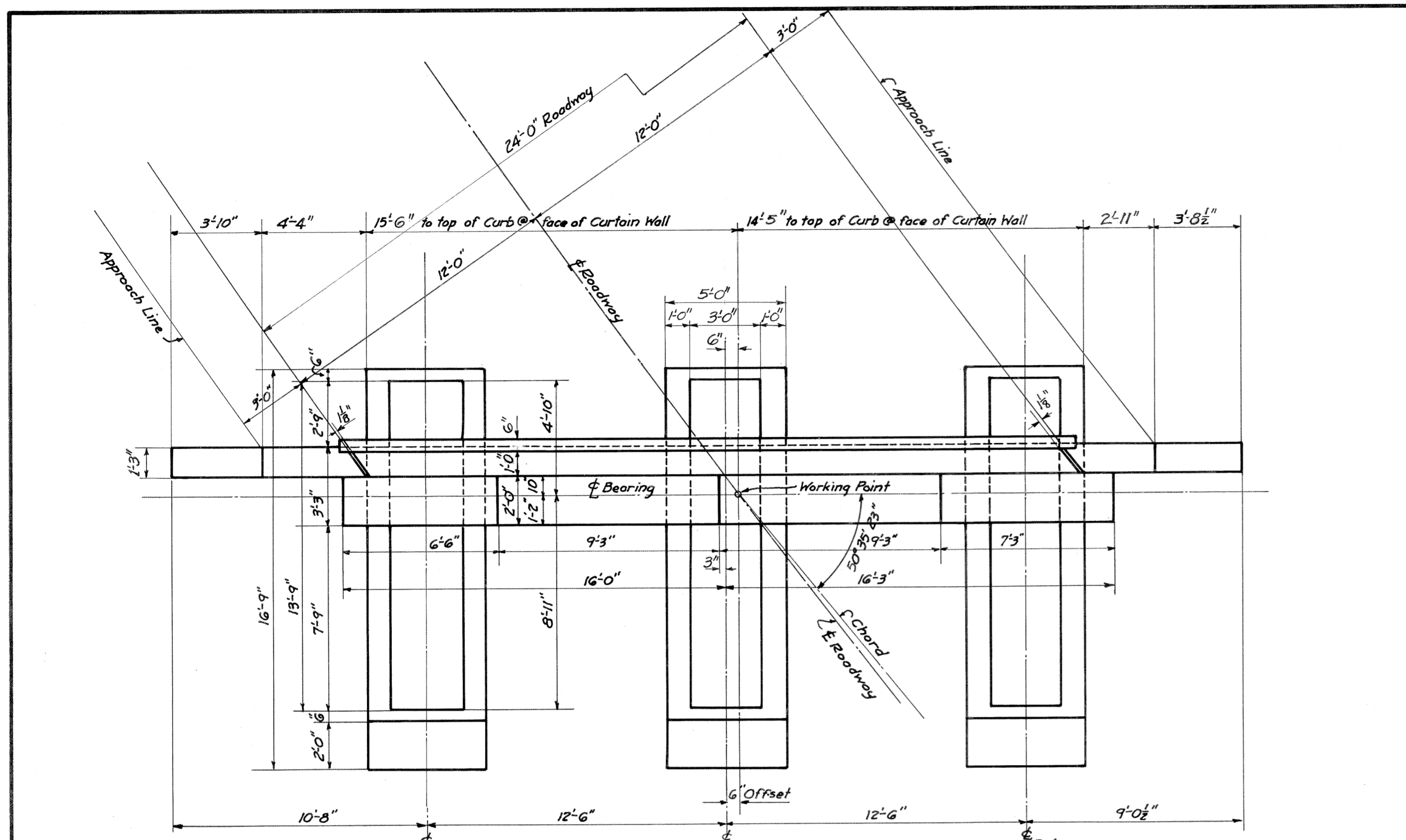
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326

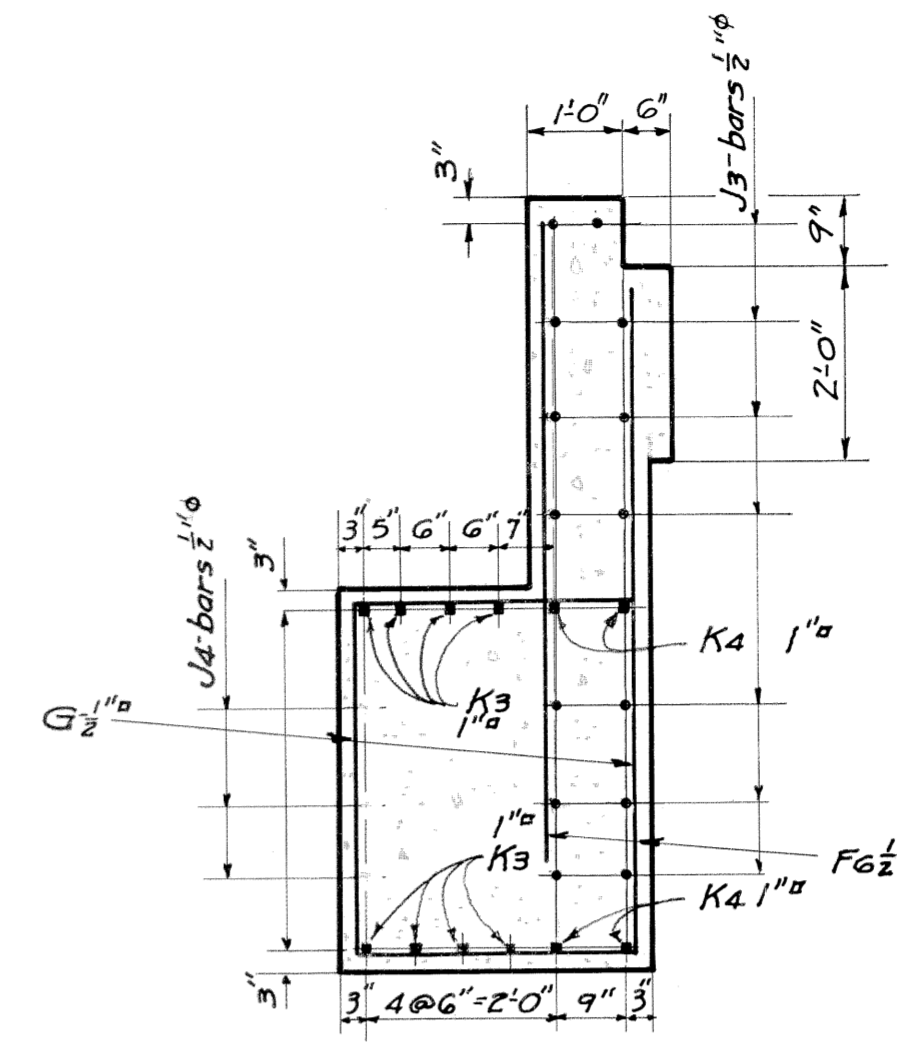
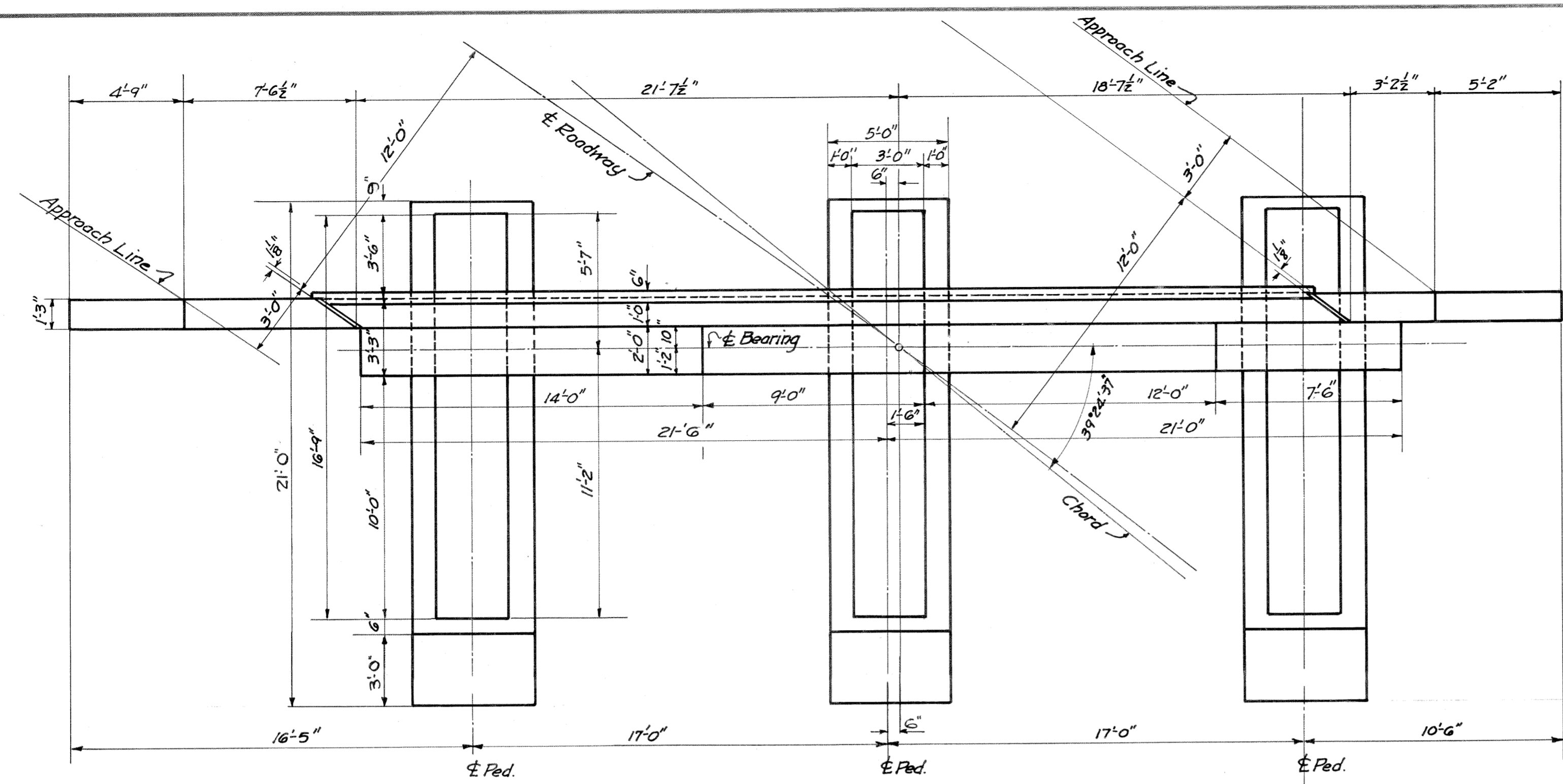
Dist. No.	State	Fed. Aid Proj. No.	Fiscal Year	County	Sheet No.	Total Sheets
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BILL OF REINFORCING STEEL

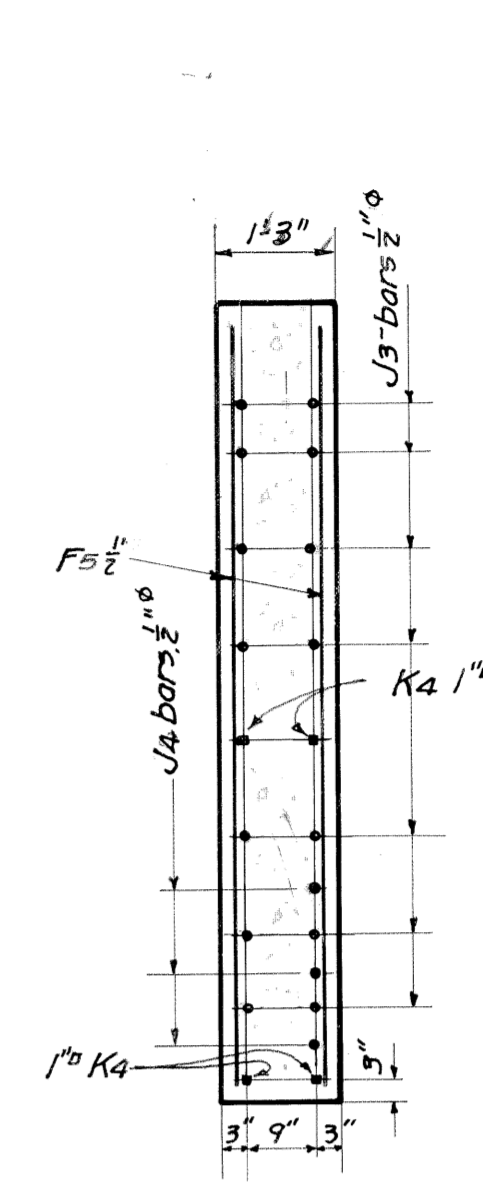
SUPERSTRUCTURE			SUPERSTRUCTURE			SUPERSTRUCTURE			SUPERSTRUCTURE			SUPERSTRUCTURE			PIERS								
NO.	MARK	SIZE	LENGTH	NO.	MARK	SIZE	LENGTH	NO.	MARK	SIZE	LENGTH	NO.	MARK	SIZE	LENGTH	NO.	MARK	SIZE	LENGTH				
368	A1	3/8"	27'-6"	2	A65	3/8"	10'-1"	2	A129	3/8"	19'-10"	2	A113	3/8"	12'-6"	2	A297	3/8"	9'-5"	48	T	7/8"	8'-0"
2	A2	1/2"	26'-7"	2	A66	1/2"	9'-6"	2	A130	1/2"	19'-4"	2	A191	1/2"	12'-1"	2	A298	1/2"	9'-0"	112	U	3/4"	7'-8"
2	A3	1/2"	25'-10"	2	A67	1/2"	8'-11"	2	A131	1/2"	18'-10"	2	A192	1/2"	11'-8"	2	A299	1/2"	8'-8"	55	V	3/8"	12'-6"
2	A4	1/2"	25'-3"	2	A68	1/2"	8'-4"	2	A132	1/2"	18'-5"	2	A193	1/2"	11'-3"	2	A300	1/2"	8'-4"	12	W1	3/4"	23'-0"
2	A5	1/2"	24'-8"	2	A69	1/2"	7'-9"	2	A133	1/2"	17'-11"	2	A194	1/2"	10'-10"	2	A301	1/2"	8'-0"	12	W2	do	32'-6"
2	A6	1/2"	23'-4"	2	A70	1/2"	7'-2"	2	A134	1/2"	17'-6"	2	A195	1/2"	10'-4"	2	A302	1/2"	7'-7"	12	X	do	12'-9"
2	A7	1/2"	22'-9"	2	A71	1/2"	6'-8"	2	A135	1/2"	17'-0"	2	A196	1/2"	9'-10"	2	A303	1/2"	7'-3"	29	Y	3/4"	10'-7"
2	A8	1/2"	22'-1"	2	A72	1/2"	6'-1"	2	A136	1/2"	16'-6"	2	A200	1/2"	9'-4"	2	A304	1/2"	6'-10"	28	a1	1 1/8"	20'-6"
2	A9	1/2"	21'-6"	2	A73	1/2"	5'-8"	2	A137	1/2"	16'-0"	2	A201	1/2"	9'-0"	2	A305	1/2"	6'-5"	28	a2	do	22'-3"
2	A10	1/2"	21'-6"	2	A74	1/2"	4'-10"	2	A138	1/2"	15'-7"	2	A202	1/2"	8'-7"	2	A306	1/2"	6'-0"	7	b1	do	29'-6"
2	A11	1/2"	20'-3"	2	A75	1/2"	4'-2"	2	A139	1/2"	15'-1"	2	A203	1/2"	8'-2"	2	A307	1/2"	5'-7"	5	b2	do	33'-0"
2	A12	1/2"	19'-8"	2	A76	1/2"	2'-7"	2	A140	1/2"	14'-8"	2	A204	1/2"	7'-9"	2	A308	1/2"	5'-2"	49	d1	do	8'-0"
2	A13	1/2"	19'-8"	2	A77	1/2"	2'-7"	2	A141	1/2"	14'-2"	2	A205	1/2"	7'-3"	2	A309	1/2"	4'-10"	84	d2	1 1/8"	22'-0"
2	A14	1/2"	18'-3"	2	A78	1/2"	2'-0"	2	A142	1/2"	13'-8"	2	A206	1/2"	6'-10"	2	A310	1/2"	4'-6"				
2	A15	1/2"	17'-8"	2	A79	1/2"	2'-11"	2	A143	1/2"	13'-2"	2	A207	1/2"	6'-5"	4	A311	1/2"	4'-2"				
2	A16	1/2"	17'-8"	2	A80	1/2"	2'-3"	2	A144	1/2"	12'-8"	2	A208	1/2"	6'-11"	30	A312	1/2"	10'-0"				
2	A17	1/2"	17'-0"	2	A81	1/2"	2'-3"	2	A145	1/2"	12'-2"	2	A209	1/2"	5'-6"	30	A313	1/2"	6'-0"				
2	A18	1/2"	16'-5"	2	A82	1/2"	2'-2"	2	A146	1/2"	11'-9"	2	A210	1/2"	5'-0"	324	B	1/2"	29'-0"				
2	A19	1/2"	15'-10"	2	A83	1/2"	2'-1"	2	A147	1/2"	11'-3"	2	A211	1/2"	4'-8"	20	D1	1/2"	14'-3"				
2	A20	1/2"	15'-2"	2	A84	1/2"	2'-1"	2	A148	1/2"	10'-10"	2	A212	1/2"	4'-8"	20	D2	1/2"	13'-0"				
2	A21	1/2"	14'-6"	2	A85	1/2"	2'-0"	2	A149	1/2"	10'-4"	2	A213	1/2"	4'-8"	12	D3	1/2"	13'-0"				
2	A22	1/2"	13'-11"	2	A86	1/2"	2'-0"	2	A150	1/2"	9'-10"	2	A214	1/2"	4'-8"	12	D4	1/2"	13'-0"				
2	A23	1/2"	13'-3"	2	A87	1/2"	2'-0"	2	A151	1/2"	9'-4"	2	A215	1/2"	4'-8"	8	D5	1/2"	12'-3"				
2	A24	1/2"	12'-8"	2	A88	1/2"	1'-6"	2	A152	1/2"	8'-11"	2	A216	1/2"	4'-8"	462	E	1/2"	5'-4"				
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2	A51	1/2"	1'-8"	2	A115	1/2"	5'-3"	2	A179	1/2"	1'-8"	2	A243	1/2"	4'-8"								
2	A52	1/2"	1'-7"	2	A116	1/2"	4'-9"	2	A180	1/2"	1'-8"	2	A244	1/2"	4'-8"								
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2	A54	1/2"	1'-0"	2	A118	1/2"	2'-8"	2	A182	1/2"	1'-7"	2	A246	1/2"	4'-8"								
2	A55	1/2"	1'-11"	2	A119	1/2"	2'-8"	2	A183	1/2"	1'-7"	2	A247	1/2"	4'-8"								
2	A56	1/2"	1'-4"	2	A120	1/2"	2'-4"	2	A184	1/2"	1'-6"	2	A248	1/2"	4'-8"								
2	A57	1/2"	1'-8"	2	A121	1/2"	2'-3"	2	A185	1/2"	1'-6"	2	A249	1/2"	4'-8"								
2	A58	1/2"	1'-4"	2	A122	1/2"	2'-2"	2	A186	1/2"	1'-5"	2	A250	1/2"	4'-8"								
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Dist. No	State Proj. No	Fed. Ad. Proj. No	Fiscal Year	County	Sheet No	Total Sheets
7	3364-A	PWA (1977) 3364-A	38-39	Gilmer	4	25

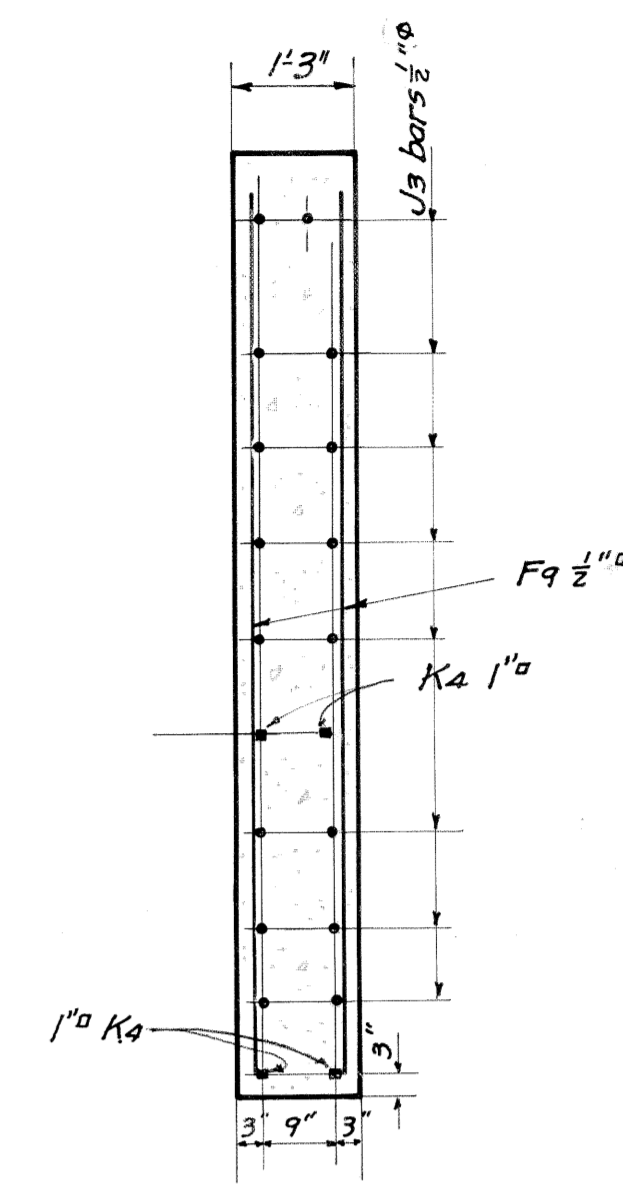


SECTION H-H



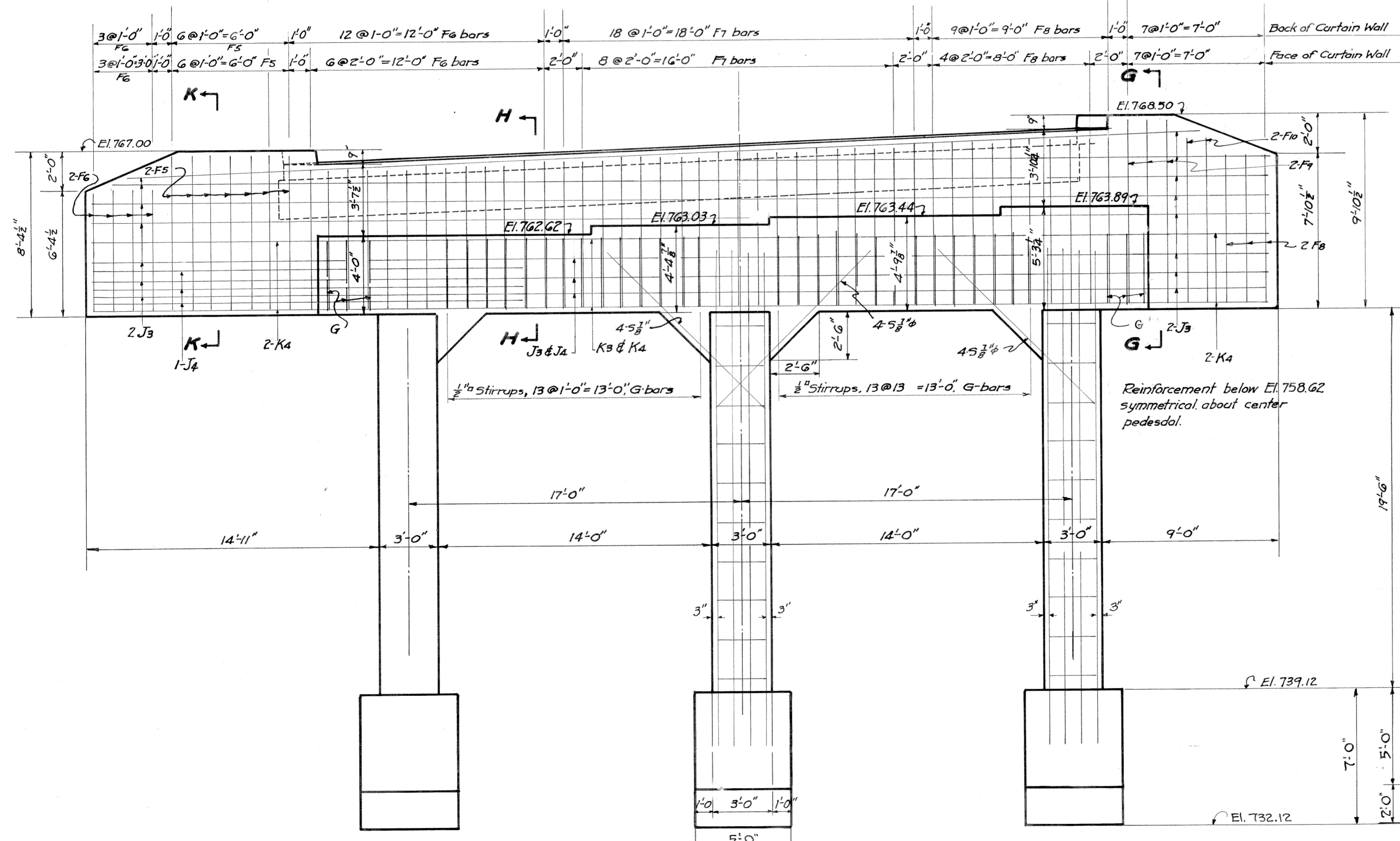
SECTION K-K

Scale: 1/2"=1'-0"

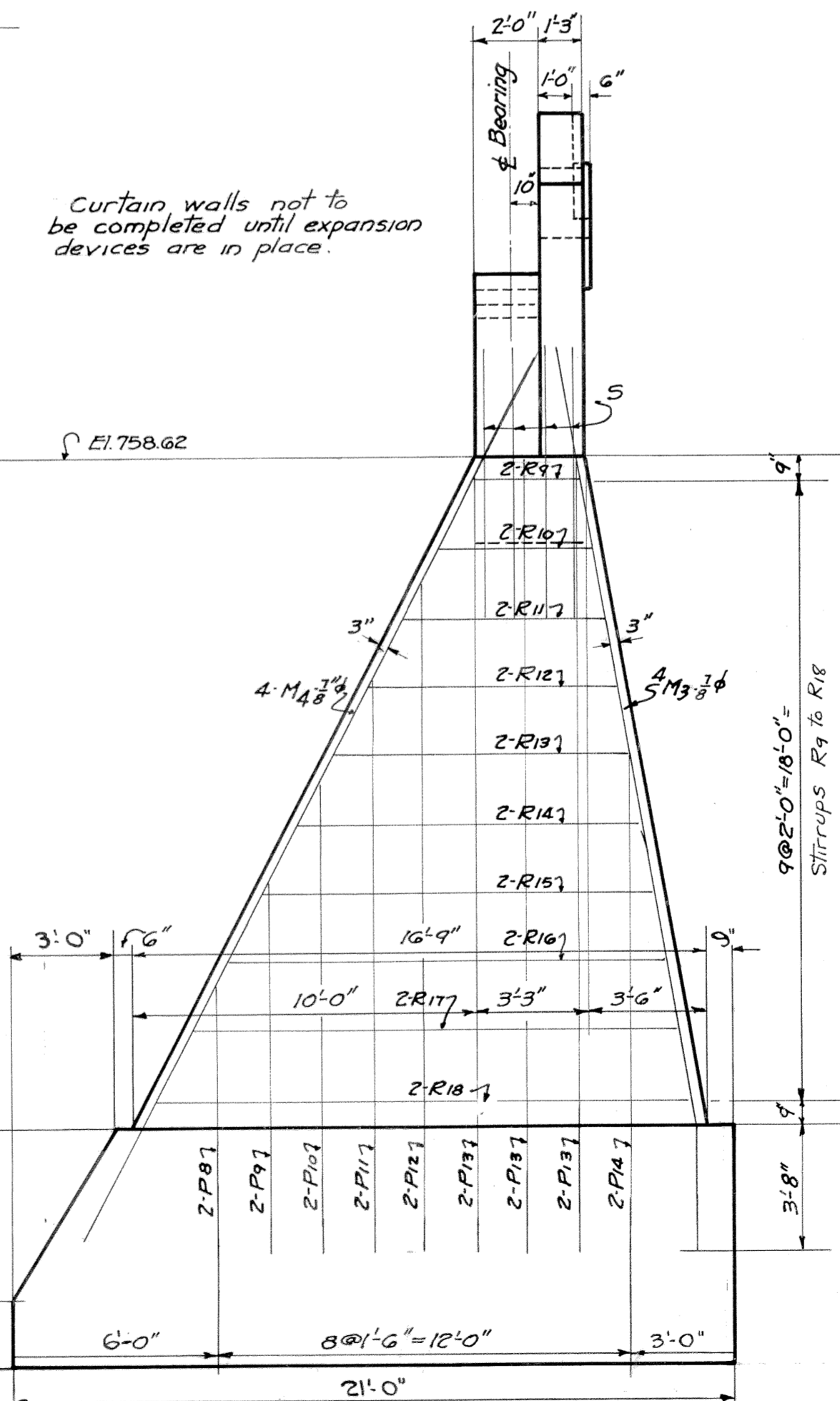


SECTION G-G

Note: Bend reinforcing bars for abutments in field where necessary.



ABUTMENT #2
Scale: 1/2"=1'-0"



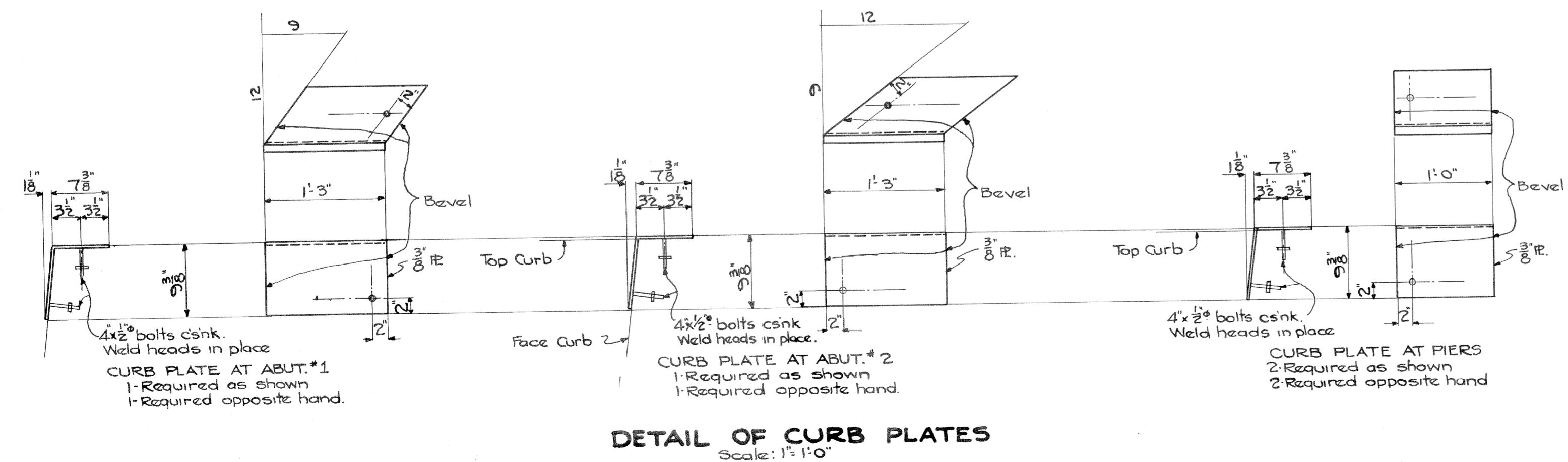
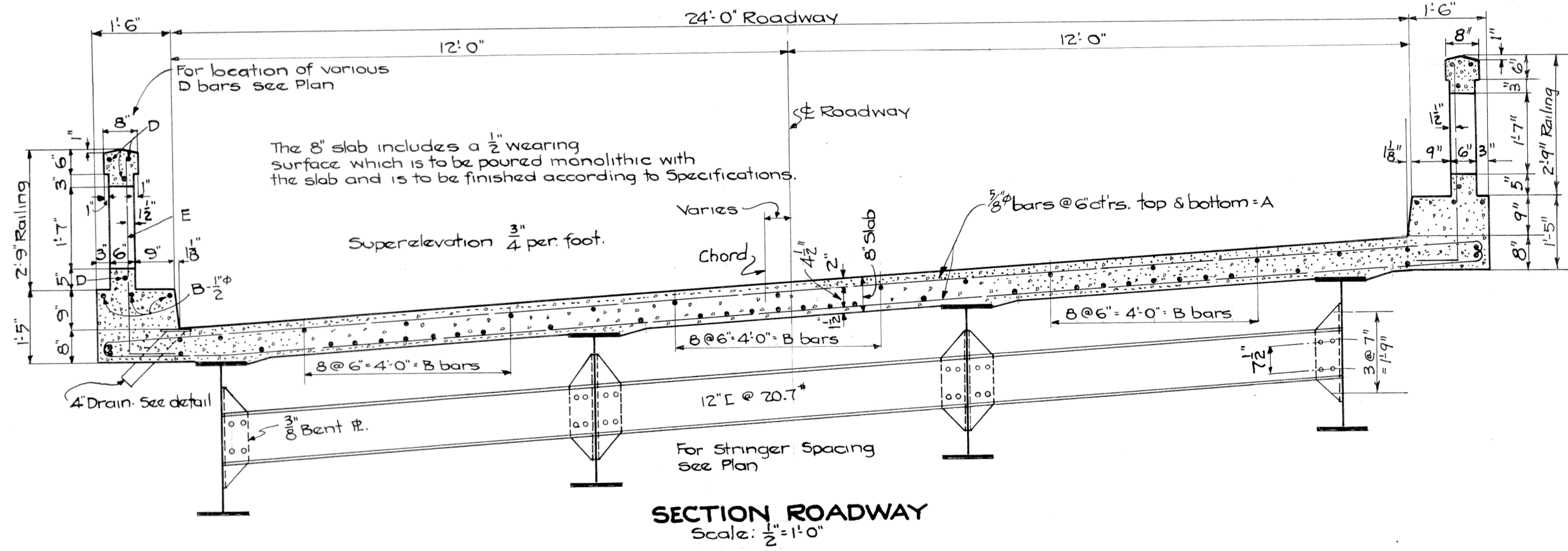
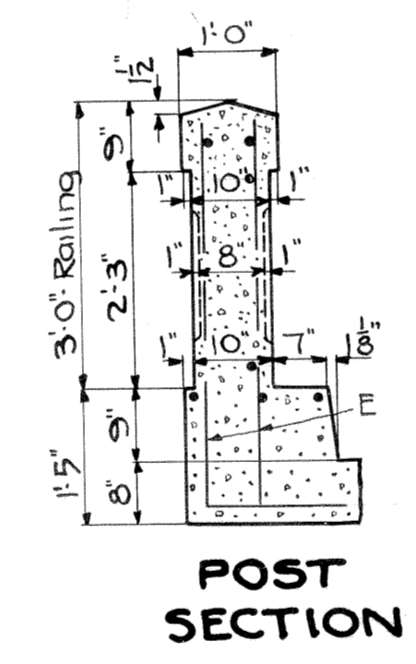
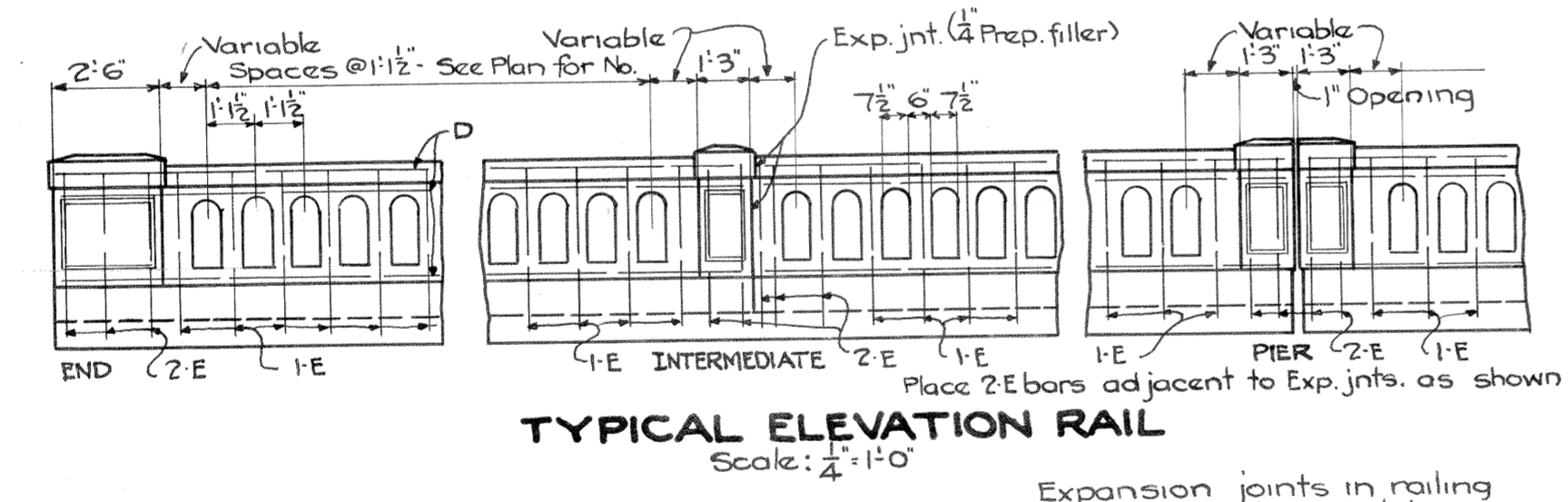
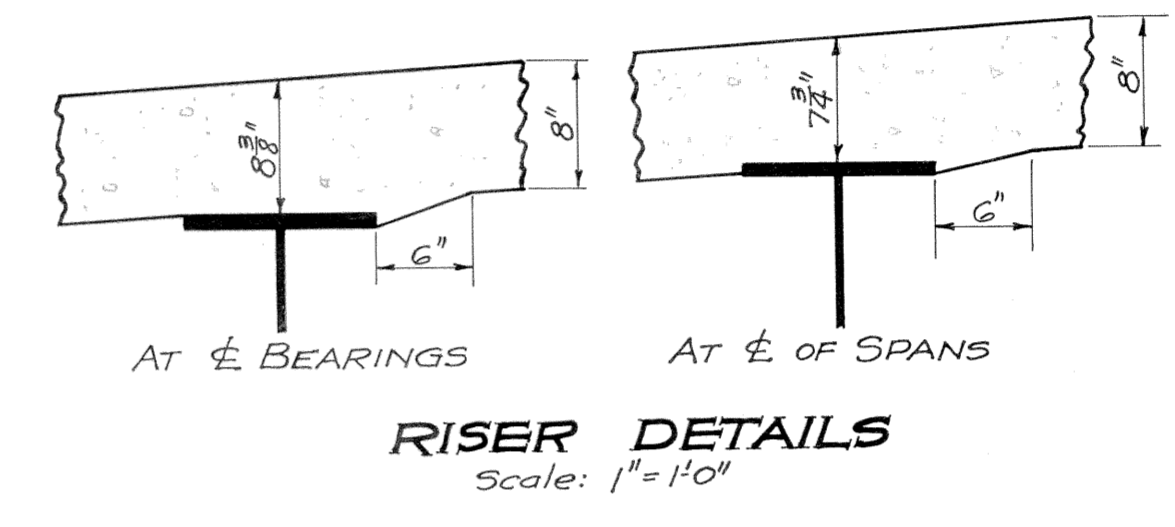
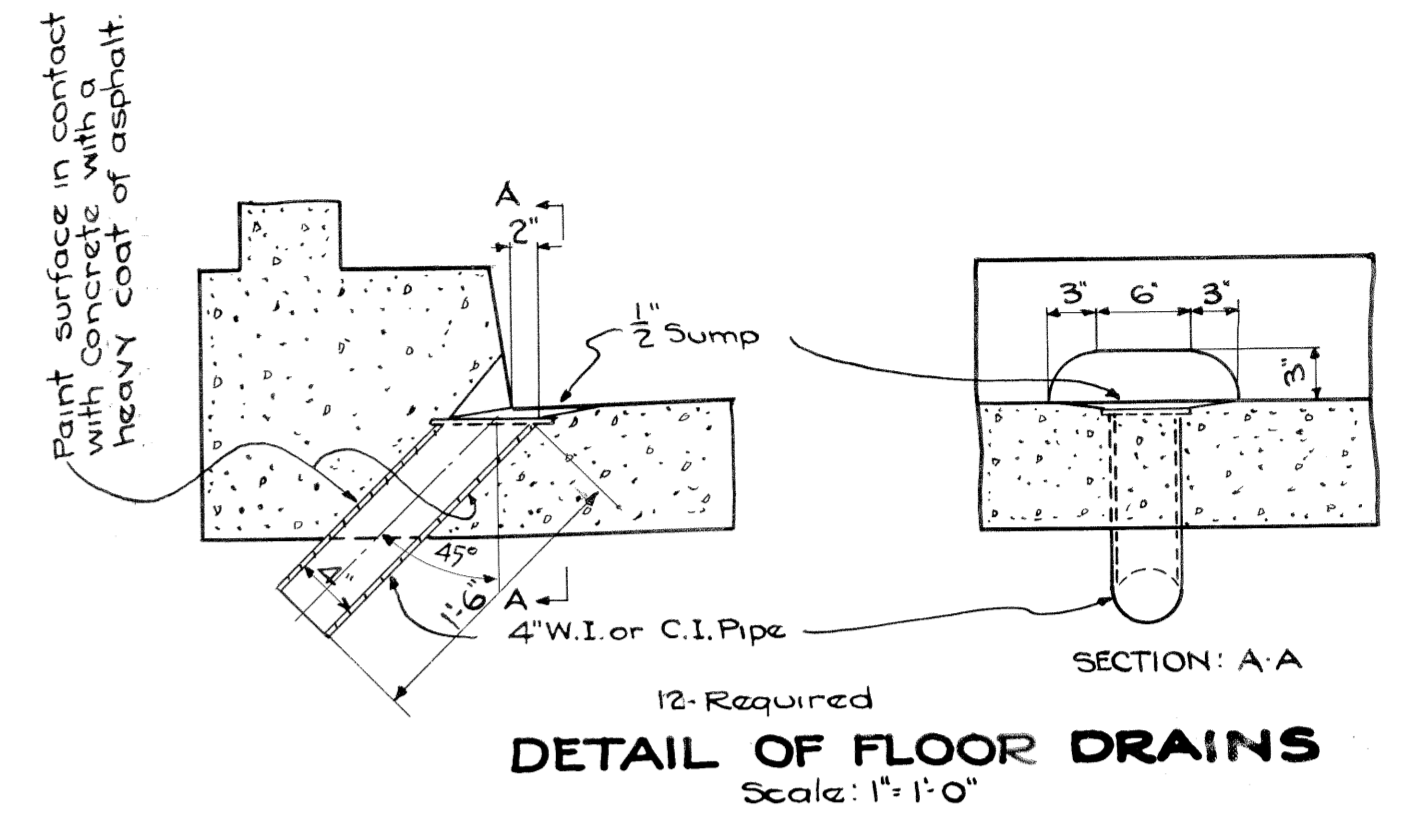
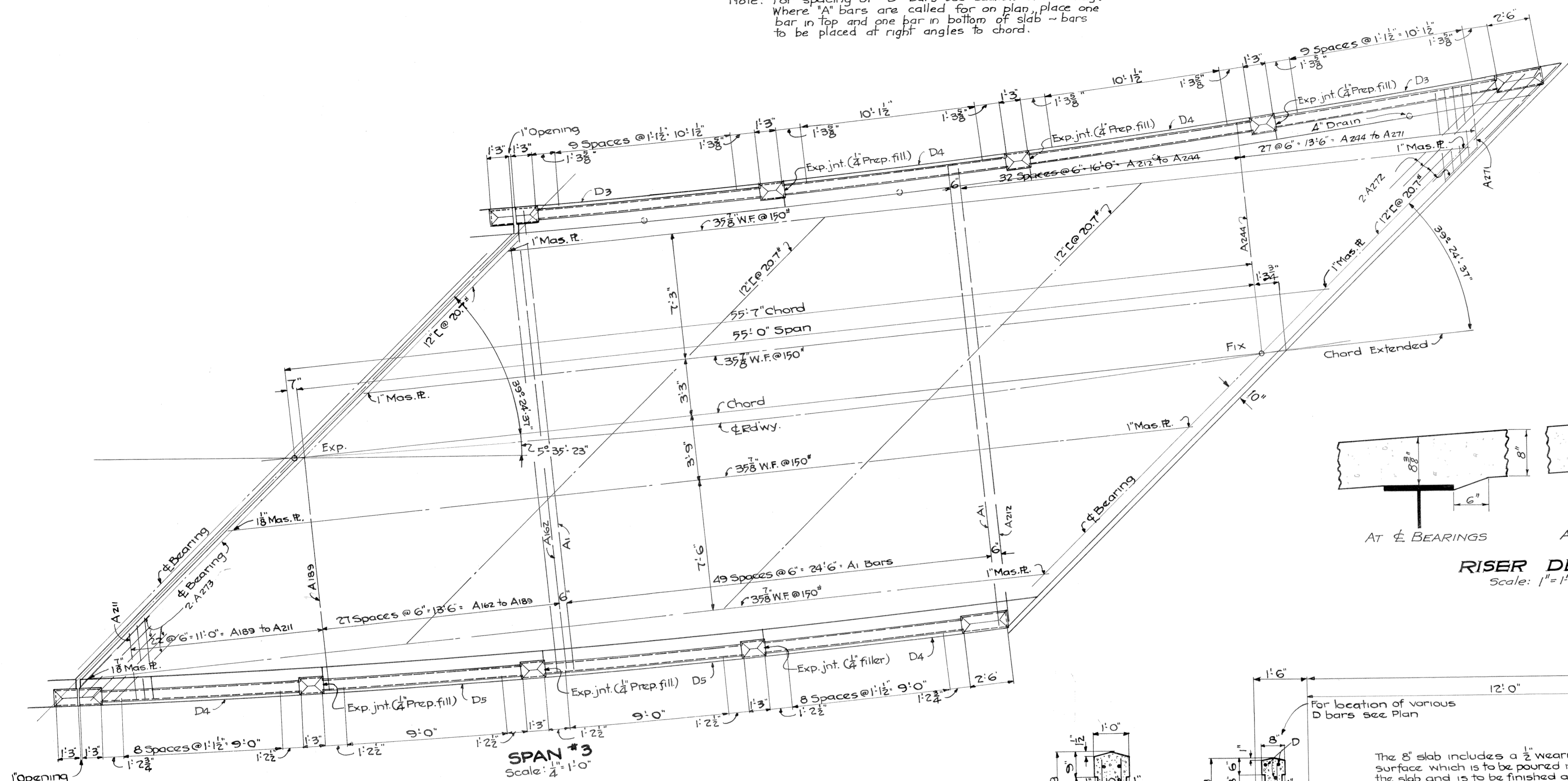
END VIEW

FINK CREEK BRIDGE
 3-55 ft. I-BEAM SPANS - 24'-0" ROADWAY
 ON
 STATE ROUTE #47
 LINN-TROY ROAD
 OVER
 FINK CREEK
 NEAR
 TROY
 GILMER COUNTY, W.VA.
 DESIGNED BY
 STATE ROAD COMMISSION
 CHARLESTON, WEST VIRGINIA
 Scale: As Noted
 Project: PWA (1977) 3364-A
 November, 1938
 Sheet #4 of 25

#1534

Dist. No.	State Proj. No.	Fed. Aid Proj. No.	Fiscal Year	County	Sheet No.	Total Sheets
7	3364A	P.W.A. (1197-F) 3364A	38-39	Gilmer	7	25

Note: For spacing of "B" bars see "Section of Roadway".
 Where "A" bars are called for on plan, place one bar in top and one bar in bottom of slab - bars to be placed at right angles to chord.



FINK CREEK BRIDGE
 3-55'-0" I-BEAM SPANS - 24'-0" ROADWAY.
 ON
 STATE ROUTE 47
 LINN-TROY ROAD
 OVER
 FINK CREEK
 NEAR
 TROY
 GILMER COUNTY, W.VA.
 DESIGNED BY
 STATE ROAD COMMISSION
 CHARLESTON, WEST VIRGINIA
 SCALE: AS NOTED NOVEMBER, 1938.
 PROJECT: P.W.A. (1197-F) 3364A SHEET #7 OF 25

#1534
 W.F.T.