

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
CONTRACT MAINTENANCE**

VARIOUS ROUTES
SECTION D6 BDGE PAINTING 2015-1

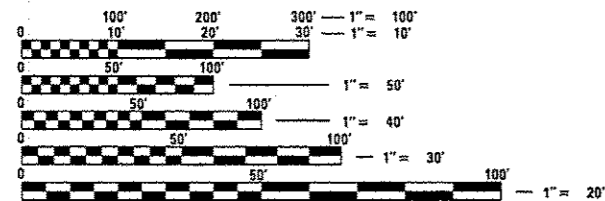
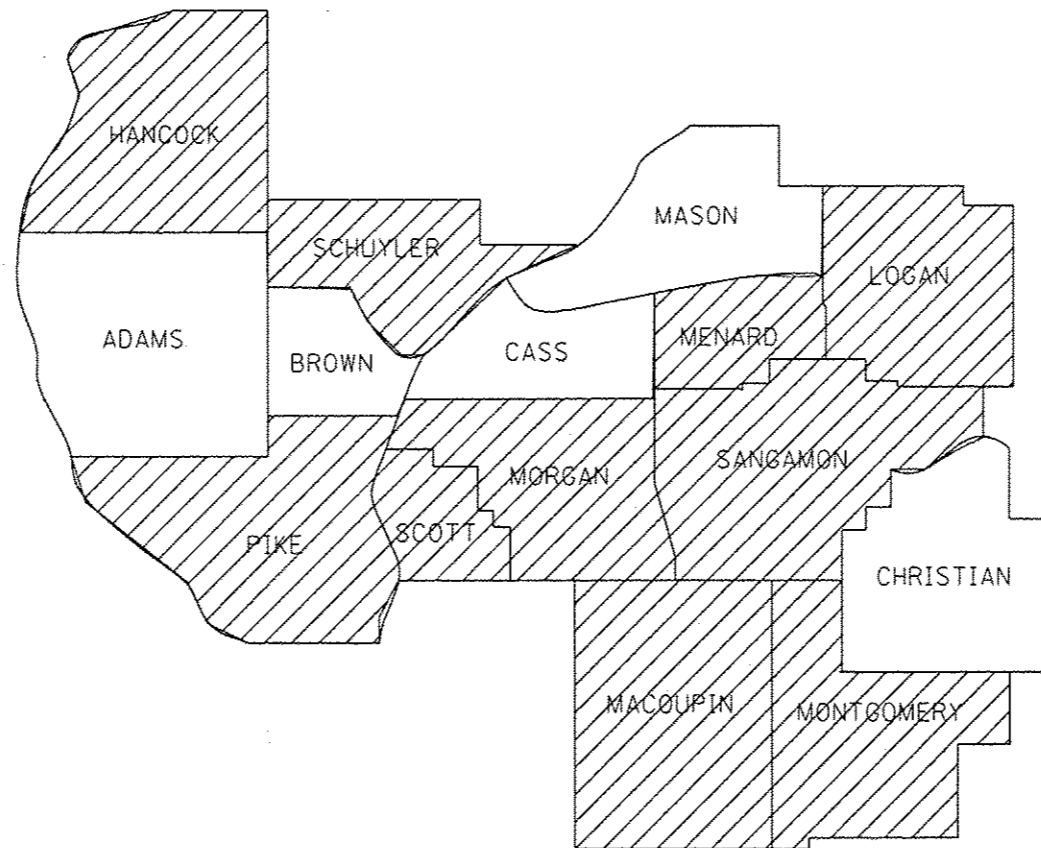
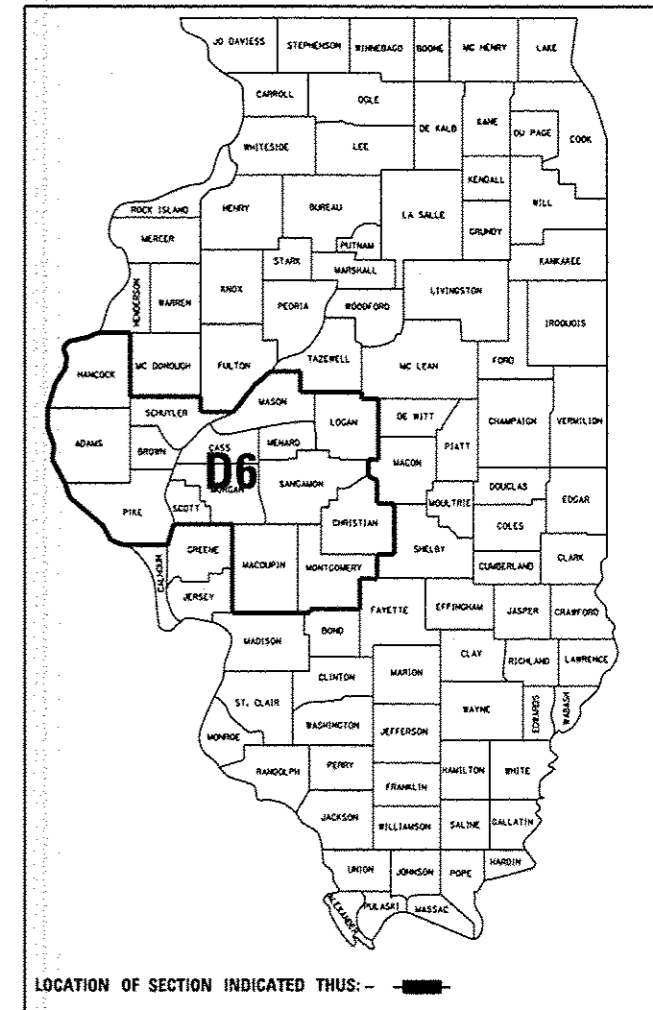
BRIDGE PAINTING
VARIOUS COUNTIES

C-96-008-15

FOR INDEX OF SHEETS, SEE SHEET NO. 2

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. D6 BDGE PAINTING 2015-1	VARIOUS	ILLINOIS	58	1
ILLINOIS			CONTRACT NO. 72H37	

* 58 - 12 = 46 TOTAL SHEETS
D-96-008-15



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

BRIDGE MAINTENANCE ENGINEER - BRANDON DUDLEY (217) 785-9290
BRIDGE INSPECTION ENGINEER - DAVE COPENBARGER (217) 785-5306

GROSS LENGTH = NA
NET LENGTH = NA

CONTRACT NO. 72H37

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 21 20 14
Rog. Z. Sush
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Oct 17 20 14
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Oct 17 20 14
Chris Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX, STANDARDS, GENERAL NOTES, SIGNATURES, & SUMMARY OF QUANTITIES
- 3-7 BRIDGE LOCATION MAPS
- * 8-58 EXISTING BRIDGE PLANS (FOR INFORMATION ONLY)

* SHEETS 16-22 AND 53-57 HAVE BEEN DELETED.

HIGHWAY STANDARDS

- 701001-02
- 701006-05
- 701101-04
- 701106-02
- 701201-04
- 701301-04
- 701901-04

GENERAL NOTES:

1. STRUCTURES TO BE PAINTED SHALL BE AS SPECIFIED ON THE PLAN SHEETS. CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". THE AREAS TO BE PAINTED ON EACH BRIDGE SHALL BE AS SPECIFIED ON THE PLAN SHEETS. ALL AREAS TO BE PAINTED SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING PER SSPC SP 10. ALL EXISTING STEEL CLEANED SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/L. THE COLOR OF THE FINAL FINISH COAT FOR EACH BRIDGE SHALL BE AS SPECIFIED ON THE PLAN SHEETS. THE COLORS SPECIFIED ON THE PLAN SHEETS SHALL CORRESPOND WITH THE COLOR SPECIFICATIONS SHOWN IN THE TABLE ON THIS PAGE.
2. THE USE OF AIR MONITORS WILL BE REQUIRED AT STRUCTURES SPECIFIED ON THE PLAN SHEETS. A MINIMUM OF 2 MONITORS WILL BE REQUIRED AT EACH SPECIFIED BRIDGE TO MONITOR ABRASIVE BLASTING OPERATIONS AT THOSE SITES. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".
3. THE "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" AND "CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES" PAY ITEMS SHALL BE APPLICABLE AS CALLED OUT IN THE PLAN NOTES FOR EACH INDIVIDUAL STRUCTURE. THE ENGINEER SHALL PRORATE THESE PAY ITEMS FOR PAYMENT AS A PERCENTAGE OF THE LUMP SUM BID PRICE AT EACH STRUCTURE ONCE SATISFACTORY DISPOSAL OF CLEANING RESIDUES HAS BEEN COMPLETED AT EACH STRUCTURE.
4. THE SSPC-QP-1 AND SSPC-QP-2 PAINTING CONTRACTOR CERTIFICATIONS WILL BE REQUIRED FOR THESE BRIDGES.
5. CARE SHALL BE TAKEN NOT TO DAMAGE RUBBER BEARING OR JOINT COMPONENTS DURING BLASTING AND CLEANING OPERATIONS. ANY DAMAGE TO THESE COMPONENTS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
6. UPON COMPLETION OF PAINTING OPERATIONS AT EACH LOCATION, THE CONTRACTOR SHALL REMOVE ALL DEBRIS FROM PIER OR ABUTMENT CAPS UPON WHICH PAINTING OPERATIONS TOOK PLACE. FINAL CLEANUP SHALL BE CONSIDERED INCIDENTAL TO THE PAINT PAY ITEM FOR THE RESPECTIVE LOCATION. THE ENGINEER SHALL HAVE THE RIGHT TO WITHOLD PAYMENT UNTIL SATISFACTORY CLEANUP IS ACHIEVED.
7. LANE CLOSURES ON 2-LANE ROADS WILL BE PERMITTED ONLY DURING THE DAYTIME AND WILL ONLY BE ALLOWED WITH APPROVAL OF THE ENGINEER. NO LANE CLOSURES OF MULTI-LANE ROADS WILL BE PERMITTED.

COLOR SPECIFICATION TABLE	
COLOR SPECIFIED	COLOR SPECIFICATION
GRAY	MUNSELL 5B 7/1
GREEN	MUNSELL 7.5G 4/8
RED	FEDERAL COLOR STANDARD 595A 20045

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6**

EXAMINED AUGUST 14th 20 14
John C. Noyes
ENGINEER OF OPERATIONS

EXAMINED August 6 20 14
Ron Chamberlain
ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED August 6 20 14
Jerry P. Meyer
ENGINEER OF PROGRAM DEVELOPMENT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE
				BRIDGE
				0014
				VARIOUS
67100100	MOBILIZATION	L SUM	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1	1
Z0007114	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES	L SUM	1	1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1	1
Z0010503	CLEANING AND PAINTING STEEL BRIDGE NO. 3	L SUM	1	1
Z0010504	CLEANING AND PAINTING STEEL BRIDGE NO. 4	L SUM	1	1
Z0010505	CLEANING AND PAINTING STEEL BRIDGE NO. 5	L SUM	1	1
Z0010506	CLEANING AND PAINTING STEEL BRIDGE NO. 6	L SUM	1	1
Z0010507	CLEANING AND PAINTING STEEL BRIDGE NO. 7	L SUM	1	1
Z0010508	CLEANING AND PAINTING STEEL BRIDGE NO. 8	L SUM	1	1
Z0010509	CLEANING AND PAINTING STEEL BRIDGE NO. 9	L SUM	1	1
Z0010510	CLEANING AND PAINTING STEEL BRIDGE NO. 10	L SUM	1	1
Z0010511	CLEANING AND PAINTING STEEL BRIDGE NO. 11	L SUM	1	1
Z0010512	CLEANING AND PAINTING STEEL BRIDGE NO. 12	L SUM	1	1
Z0010513	CLEANING AND PAINTING STEEL BRIDGE NO. 13	L SUM	1	1
Z0010514	CLEANING AND PAINTING STEEL BRIDGE NO. 14	L SUM	1	1
Z0010515	CLEANING AND PAINTING STEEL BRIDGE NO. 15	L SUM	1	1
Z0010516	CLEANING AND PAINTING STEEL BRIDGE NO. 16	L SUM	1	1
Z0010517	CLEANING AND PAINTING STEEL BRIDGE NO. 17	L SUM	1	1
Z0010518	CLEANING AND PAINTING STEEL BRIDGE NO. 18	L SUM	1	1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1

22

CLEANING AND PAINTING STEEL BRIDGE NO. 1
 SN 054-0078, EMDEN ROAD OVER I-155
 1 MILE SOUTH OF US 136, 40.2934°N 89.4525°W

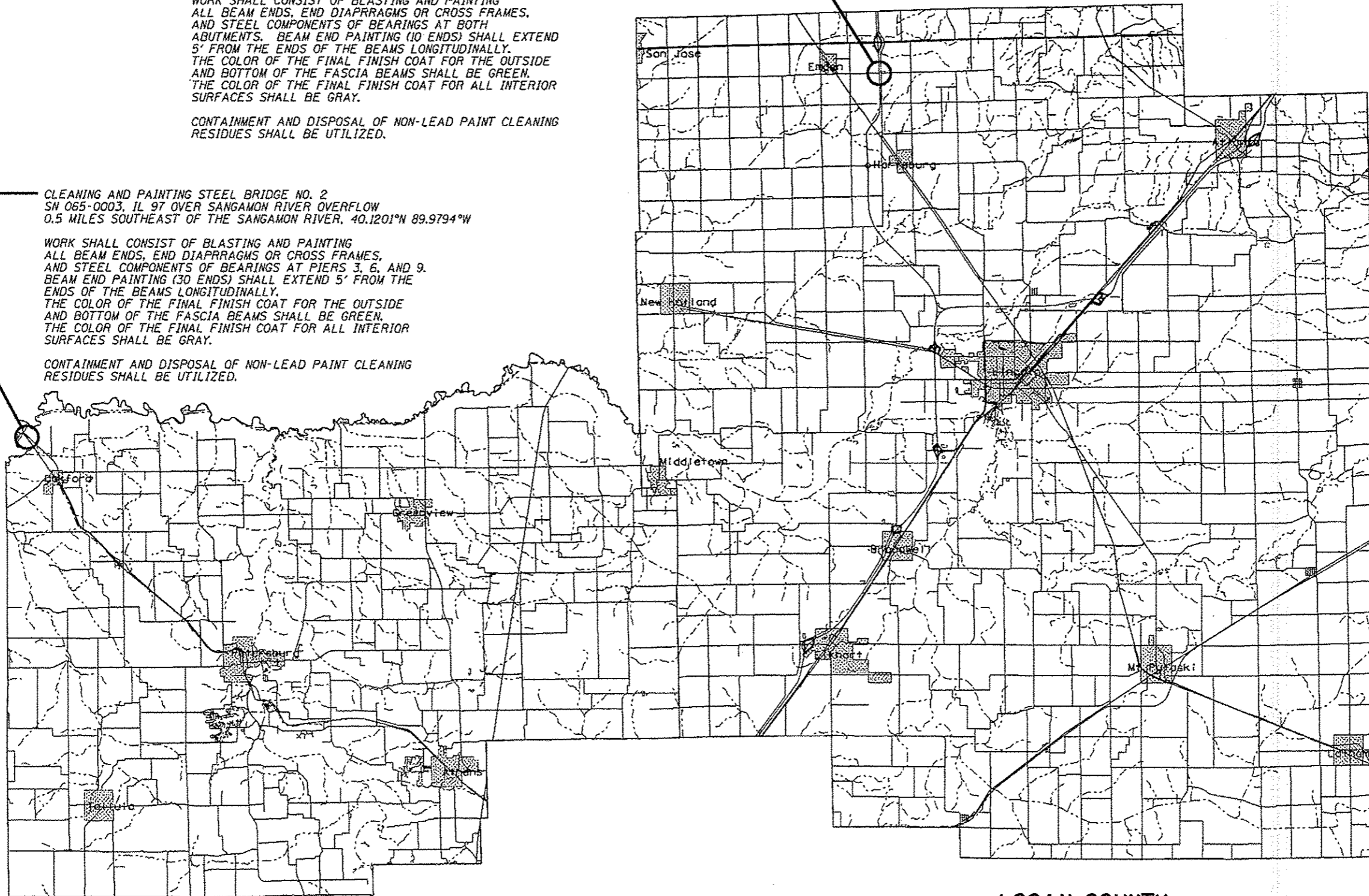
WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPHRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (10 ENDS) SHALL EXTEND 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED.

CLEANING AND PAINTING STEEL BRIDGE NO. 2
 SN 065-0003, IL 97 OVER SANGAMON RIVER OVERFLOW
 0.5 MILES SOUTHEAST OF THE SANGAMON RIVER, 40.1201°N 89.9794°W

WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPHRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT PIERS 3, 6, AND 9. BEAM END PAINTING (30 ENDS) SHALL EXTEND 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED.



MENARD COUNTY

LOGAN COUNTY

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
Q:\OPERATIONS\Bridges\plans\CAD\72H37 - beam and paint FY15 CH\plansheet.dgn	dudlaybn	DRAWN :	REVISED :
		CHECKED :	REVISED :
		DATE :	REVISED :

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

LOGAN & MENARD COUNTY
 STRUCTURE MAP

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BOGE PAINTING 2015-1	VARIOUS	58	3
			CONTRACT NO. 72H37	
[ILLINOIS] FED. AID PROJECT				

~~CLEANING AND PAINTING STEEL BRIDGE NO. 5
SN 068-0048, I-55 SB OVER BURLINGTON NORTHERN RR
1.8 MILES NORTH OF IL 16, 39.1973°N 89.6651°W~~

~~WORK SHALL CONSIST OF BLASTING AND PAINTING
ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES,
AND STEEL COMPONENTS OF BEARINGS AT BOTH
ABUTMENTS. BEAM END PAINTING (12 ENDS) SHALL EXTEND
5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY.
THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE
AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN.
THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR
SURFACES SHALL BE GRAY.~~

~~CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING
RESIDUES SHALL BE UTILIZED.~~

~~RAILROAD LIABILITY INSURANCE WILL BE REQUIRED~~

~~CLEANING AND PAINTING STEEL BRIDGE NO. 6
SN 068-0049, I-55 NB OVER BURLINGTON NORTHERN RR
1.8 MILES NORTH OF IL 16, 39.1973°N 89.6651°W~~

~~WORK SHALL CONSIST OF BLASTING AND PAINTING
ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES,
AND STEEL COMPONENTS OF BEARINGS AT BOTH
ABUTMENTS. BEAM END PAINTING (12 ENDS) SHALL EXTEND
5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY.
THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE
AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN.
THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR
SURFACES SHALL BE GRAY.~~

~~CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING
RESIDUES SHALL BE UTILIZED.~~

~~RAILROAD LIABILITY INSURANCE WILL BE REQUIRED~~

~~CLEANING AND PAINTING STEEL BRIDGE NO. 3
SN 068-0045, I-55 SB OVER ICRR (ABANDONED)
4.5 MILES SOUTH OF IL 108, 39.2160°N 89.6509°W~~

~~WORK SHALL CONSIST OF BLASTING AND PAINTING
ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES,
AND STEEL COMPONENTS OF BEARINGS AT BOTH
ABUTMENTS. BEAM END PAINTING (12 ENDS) SHALL EXTEND
5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY.
THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE
AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN.
THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR
SURFACES SHALL BE GRAY.~~

~~CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING
RESIDUES SHALL BE UTILIZED.~~

~~CLEANING AND PAINTING STEEL BRIDGE NO. 4
SN 068-0046, I-55 NB OVER ICRR (ABANDONED)
4.5 MILES SOUTH OF IL 108, 39.2160°N 89.6509°W~~

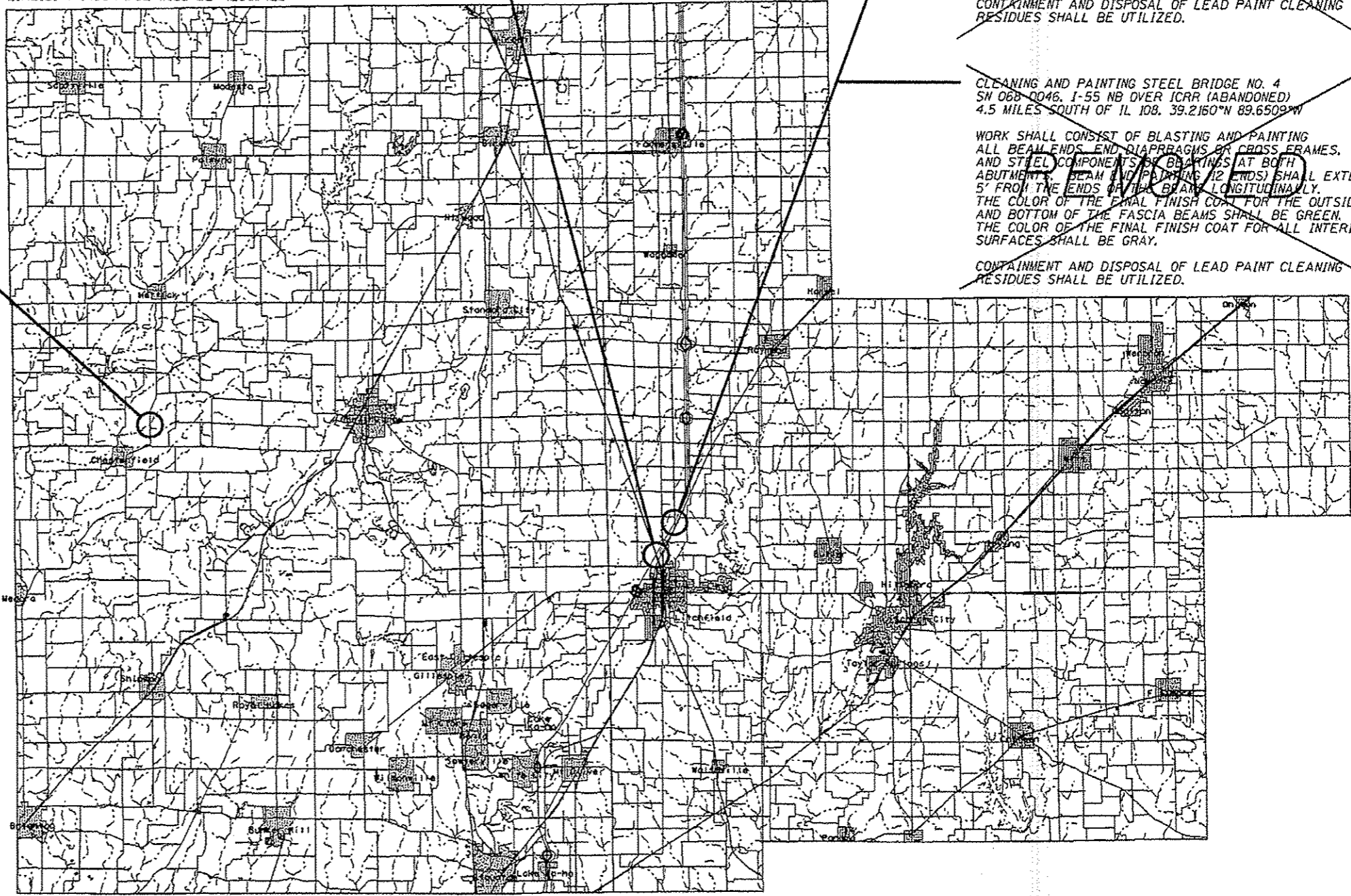
~~WORK SHALL CONSIST OF BLASTING AND PAINTING
ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES,
AND STEEL COMPONENTS OF BEARINGS AT BOTH
ABUTMENTS. BEAM END PAINTING (12 ENDS) SHALL EXTEND
5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY.
THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE
AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN.
THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR
SURFACES SHALL BE GRAY.~~

~~CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING
RESIDUES SHALL BE UTILIZED.~~

CLEANING AND PAINTING STEEL BRIDGE NO. 7
SN 059-0014, IL 111 OVER BEAR CREEK
1.2 MILES SOUTH OF IL 108, 39.2750°N 90.0457°W

WORK SHALL CONSIST OF BLASTING AND PAINTING
ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES,
AND STEEL COMPONENTS OF BEARINGS AT BOTH
ABUTMENTS. BEAM END PAINTING (12 ENDS) SHALL EXTEND
LONGITUDINALLY 5' FROM THE ENDS OF THE BEAMS EXCEPT FOR
THE EAST FASCIA, WHICH SHALL EXTEND 15' FROM THE NORTH
END AND 10' FROM THE SOUTH END. THE COLOR OF THE FINAL
FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA
BEAMS SHALL BE GREEN. THE COLOR OF THE FINAL FINISH
COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING
RESIDUES SHALL BE UTILIZED.



MACOUPIN COUNTY

MONTGOMERY COUNTY

FILE NAME *	USER NAME * dudlaybn	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MACOUPIN & MONTGOMERY COUNTY STRUCTURE MAP	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
D:\OPERATIONS\Bridges\Bridgplans.CAD\17	07 - beam and pain FY15 CH\plansheeb.dgn	DRAWN -	REVISED -			VAR.	06 BOGE PAINTING 2015-1	VARIOUS	58	4	
Default	PLOT SCALE * 100.0000 / in.	CHECKED -	REVISED -			SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____					
	PLOT DATE * Nov-26-2014 04:57:17PM	DATE -	REVISED -			ILLINOIS FED. AID PROJECT CONTRACT NO. 72H37					

CLEANING AND PAINTING STEEL BRIDGE NO. 8
 SN 075-0081, IL 104 OVER MCKEE CREEK
 EAST EDGE OF CHAMBERSBURG, 39.8175°N 90.6544°W

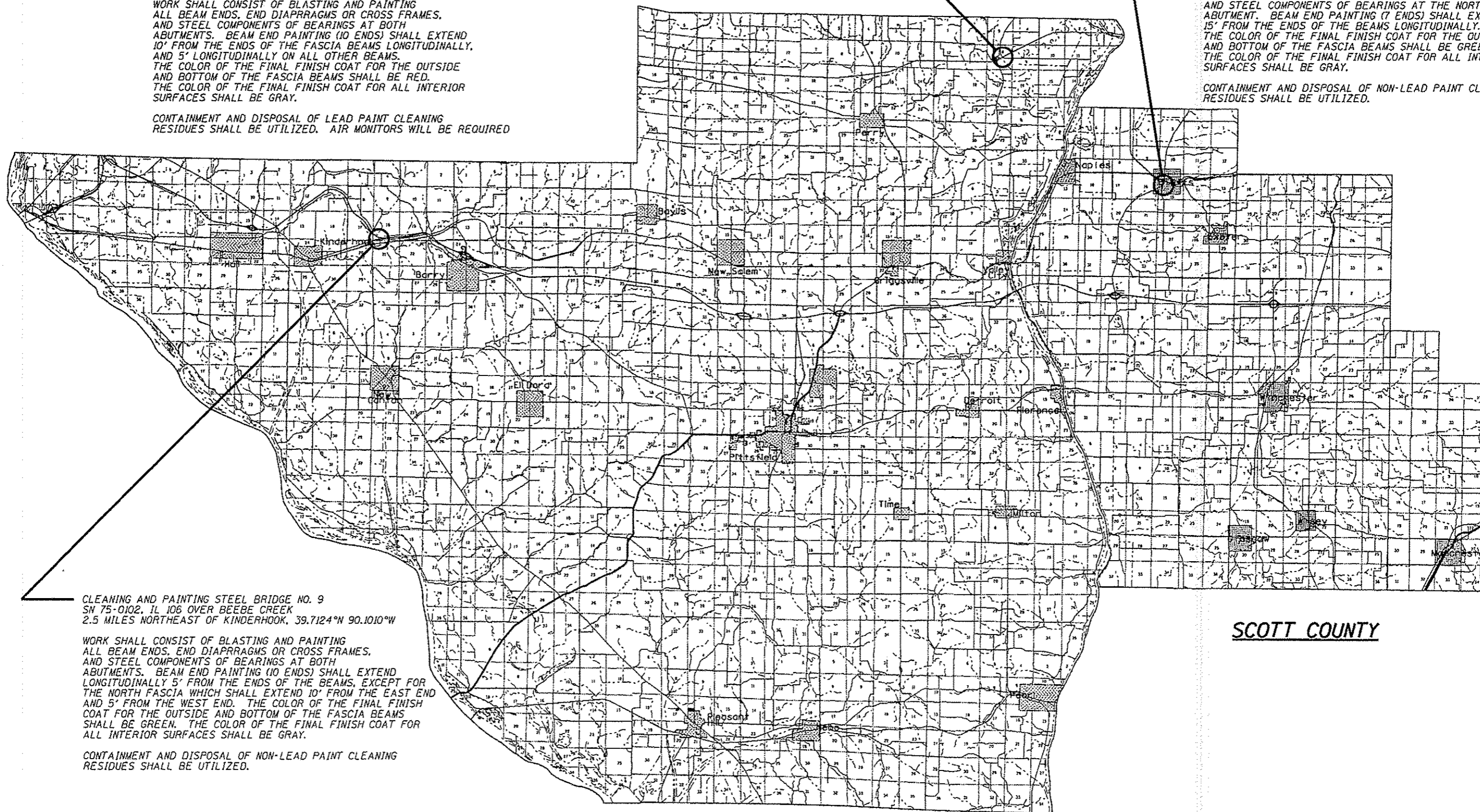
WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPHRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (10 ENDS) SHALL EXTEND 10' FROM THE ENDS OF THE FASCIA BEAMS LONGITUDINALLY, AND 5' LONGITUDINALLY ON ALL OTHER BEAMS. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE RED. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED. AIR MONITORS WILL BE REQUIRED

CLEANING AND PAINTING STEEL BRIDGE NO. 10
 SN 086-0006, IL 100 OVER WOLF RUN CREEK
 IN BLUFFS, 39.7478°N 90.5352°W

WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPHRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT THE NORTH ABUTMENT. BEAM END PAINTING (7 ENDS) SHALL EXTEND 15' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED.



CLEANING AND PAINTING STEEL BRIDGE NO. 9
 SN 75-0102, IL 106 OVER BEEBE CREEK
 2.5 MILES NORTHEAST OF KINDERHOOK, 39.7124°N 90.1010°W

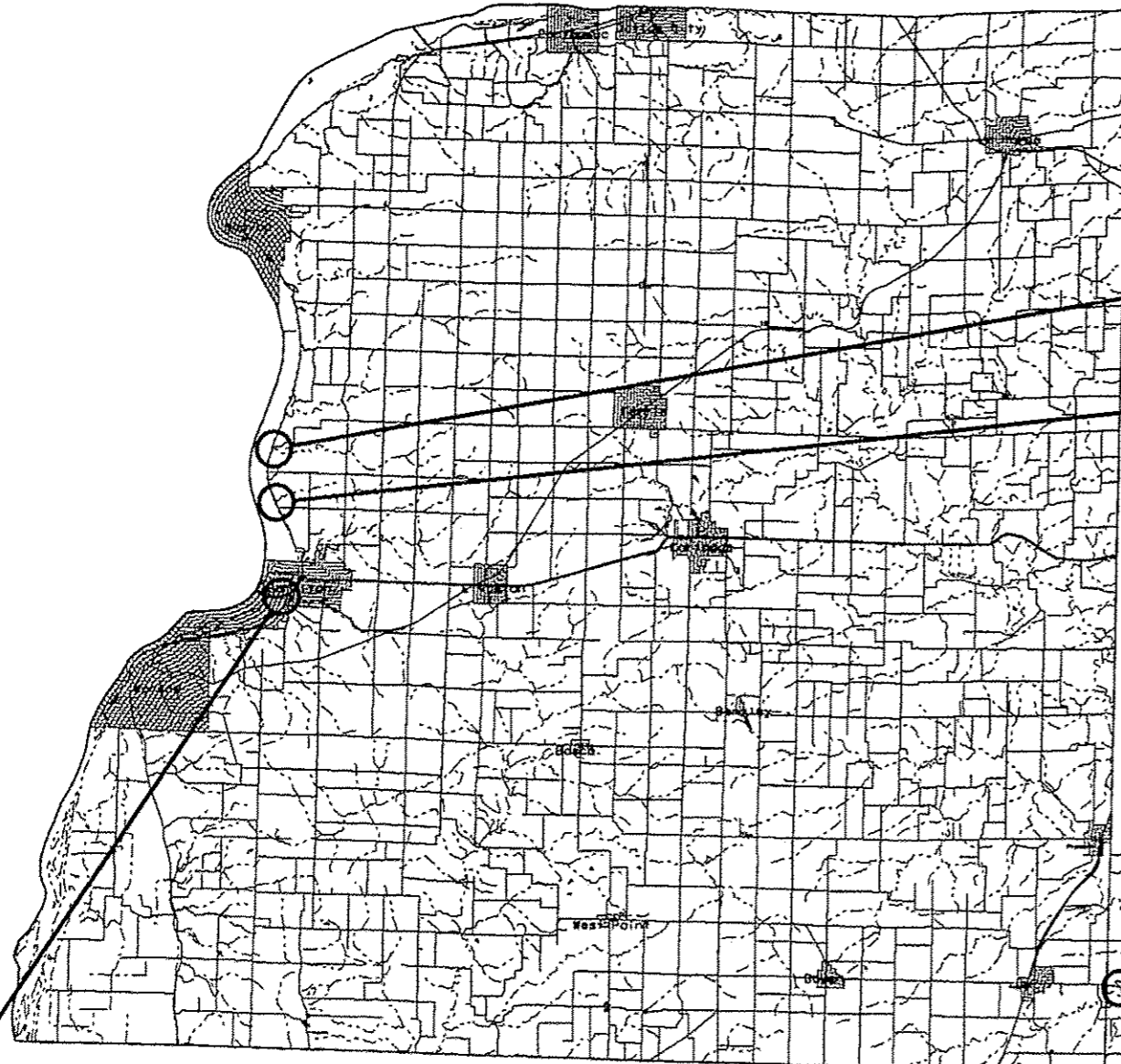
WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPHRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (10 ENDS) SHALL EXTEND LONGITUDINALLY 5' FROM THE ENDS OF THE BEAMS, EXCEPT FOR THE NORTH FASCIA WHICH SHALL EXTEND 10' FROM THE EAST END AND 5' FROM THE WEST END. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED.

SCOTT COUNTY

PIKE COUNTY

FILE NAME * G:\OPERATIONS\Bridges\plans_CAD\72H37 - beam and paint FY10 CH\plans\sheet.dgn	USER NAME * dudlejbn	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIKE & SCOTT COUNTY STRUCTURE MAP	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLT SCALE * 100.0000' / 1" =	CHECKED - _____	REVISED - / /			VAR. 06 BDGE PAINTING 2015-1	VARIOUS	58	5	
Default	PLT DATE * Oct-02-2014 10:27:03AM	DATE - _____	REVISED - _____	SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 72H37 ILLINOIS FED. AID PROJECT			



HANCOCK COUNTY

CLEANING AND PAINTING STEEL BRIDGE NO. 11
 SN 034-0001, US 136 OVER HAMILTON SLOUGH
 0.1 MILES EAST OF THE KEOKUK BRIDGE, 40.3891°N 91.3638°W

WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (22 ENDS) SHALL EXTEND 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE RED. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED.

CLEANING AND PAINTING STEEL BRIDGE NO. 12
 SN 034-0056, IL 96 OVER GRAY BAY
 2.5 MILES NORTH OF US 136, 40.4288°N 91.3670°W

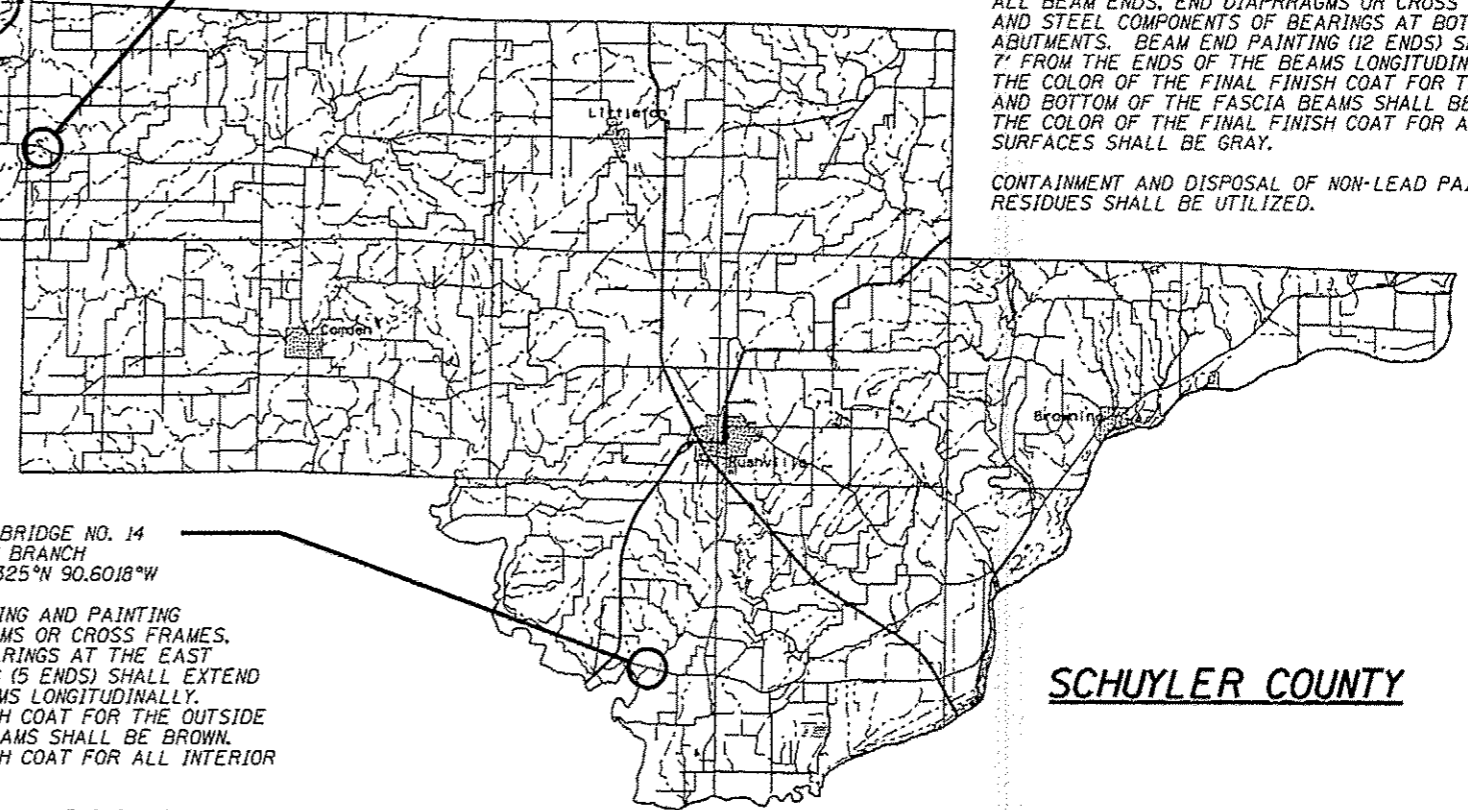
WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (12 ENDS) SHALL EXTEND 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE RED. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED. AIR MONITORS WILL BE REQUIRED

CLEANING AND PAINTING STEEL BRIDGE NO. 13
 SN 034-0058, IL 96 OVER WAGGONER CREEK
 4.2 MILES NORTH OF US 136, 40.4513°N 91.3693°W

WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (10 ENDS) SHALL EXTEND 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE RED. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED.



SCHUYLER COUNTY

CLEANING AND PAINTING STEEL BRIDGE NO. 14
 SN 085-0004, IL 103 OVER TOWN BRANCH
 1.3 MILES EAST OF US 24, 40.0325°N 90.6018°W

WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT THE EAST ABUTMENT. BEAM END PAINTING (5 ENDS) SHALL EXTEND 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE BROWN. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED.

CLEANING AND PAINTING STEEL BRIDGE NO. 15
 SN 085-0025, IL 101 OVER WILLIAMS CREEK
 2.5 MILES EAST OF IL 61, 40.2280°N 90.9035°W

WORK SHALL CONSIST OF BLASTING AND PAINTING ALL BEAM ENDS, END DIAPRRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (12 ENDS) SHALL EXTEND 7' FROM THE ENDS OF THE BEAMS LONGITUDINALLY. THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES SHALL BE UTILIZED.

FILE NAME *	USER NAME * dudngbn	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HANCOCK & SCHUYLER COUNTY STRUCTURE MAP	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
OPERATIONS\0-ldgeplans,CAO\72H37	beam and paint FY15 CM\plansheet.dgn	DRAWN -	REVISED -			VAR.	08 BDGE PAINTING 2015-1	VARIOUS	58	6	
Default	PLOT SCALE * 100.0000' / in.	CHECKED -	REVISED -			SCALE:					CONTRACT NO, 72H37
	PLOT DATE * Oct-02-2014 10:42:32AM	DATE -	REVISED -			SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT

CLEANING AND PAINTING STEEL BRIDGE NO. 17
 SN 084-0076, I-72 WB OVER 6TH STREET (BL 55)
 SOUTH EDGE OF SPRINGFIELD, 39.7427°N 89.6445°W

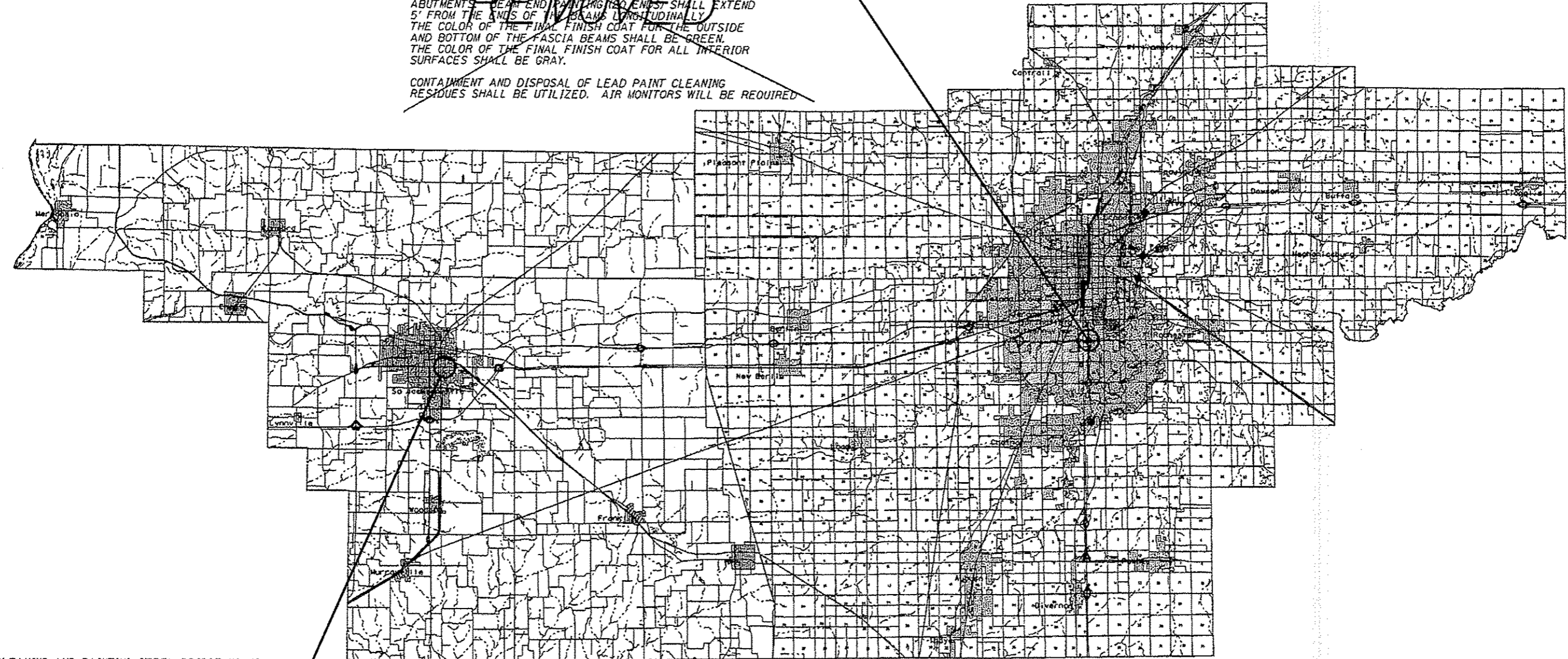
WORK SHALL CONSIST OF BLASTING AND PAINTING
 ALL BEAM ENDS, END DIAPHRAGMS OR CROSS FRAMES,
 AND STEEL COMPONENTS OF BEARINGS AT BOTH
 ABUTMENTS. BEAM END PAINTING (18 ENDS) SHALL EXTEND
 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY.
 THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE
 AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN.
 THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR
 SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING
 RESIDUES SHALL BE UTILIZED. AIR MONITORS WILL BE REQUIRED

CLEANING AND PAINTING STEEL BRIDGE NO. 18
 SN 084-0077, I-72 EB OVER 6TH STREET (BL 55)
 SOUTH EDGE OF SPRINGFIELD, 39.7427°N 89.6445°W

WORK SHALL CONSIST OF BLASTING AND PAINTING
 ALL BEAM ENDS, END DIAPHRAGMS OR CROSS FRAMES,
 AND STEEL COMPONENTS OF BEARINGS AT BOTH
 ABUTMENTS. BEAM END PAINTING (18 ENDS) SHALL EXTEND
 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY.
 THE COLOR OF THE FINAL FINISH COAT FOR THE OUTSIDE
 AND BOTTOM OF THE FASCIA BEAMS SHALL BE GREEN.
 THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR
 SURFACES SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING
 RESIDUES SHALL BE UTILIZED. AIR MONITORS WILL BE REQUIRED



CLEANING AND PAINTING STEEL BRIDGE NO. 16
 SN 069-0009, MORTON AVE. OVER MAUVAISE TERRE CREEK
 0.7 MILES EAST OF IL 267 IN JACKSONVILLE, 39.7232°N 90.2169°W

WORK SHALL CONSIST OF BLASTING AND PAINTING
 ALL BEAM ENDS, END DIAPHRAGMS OR CROSS FRAMES,
 AND STEEL COMPONENTS OF BEARINGS AT BOTH
 ABUTMENTS. BEAM END PAINTING (24 ENDS) SHALL EXTEND
 5' FROM THE ENDS OF THE BEAMS LONGITUDINALLY.
 THE COLOR OF THE FINAL FINISH COAT FOR ALL AREAS
 SHALL BE GRAY.

CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING
 RESIDUES SHALL BE UTILIZED. AIR MONITORS WILL BE REQUIRED

MORGAN COUNTY

SANGAMON COUNTY

FILE NAME =	USER NAME = audlejon	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MORGAN & SANGAMON COUNTY STRUCTURE MAP	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\OPERATIONS\Bridges\Bridges\opera.CAD	HD7 - beam end paint FY15 CH\plan\test.dgn	DRAWN -	REVISED -			VAR.	D6 BOGE PAINTING 2015-1	VARIOUS	58	7
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -			SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 72H37		(ILLINOIS) FED. AID PROJECT
	PLOT DATE = Nov-26-2014 01:57:44PM	DATE -	REVISED -							

054-0078

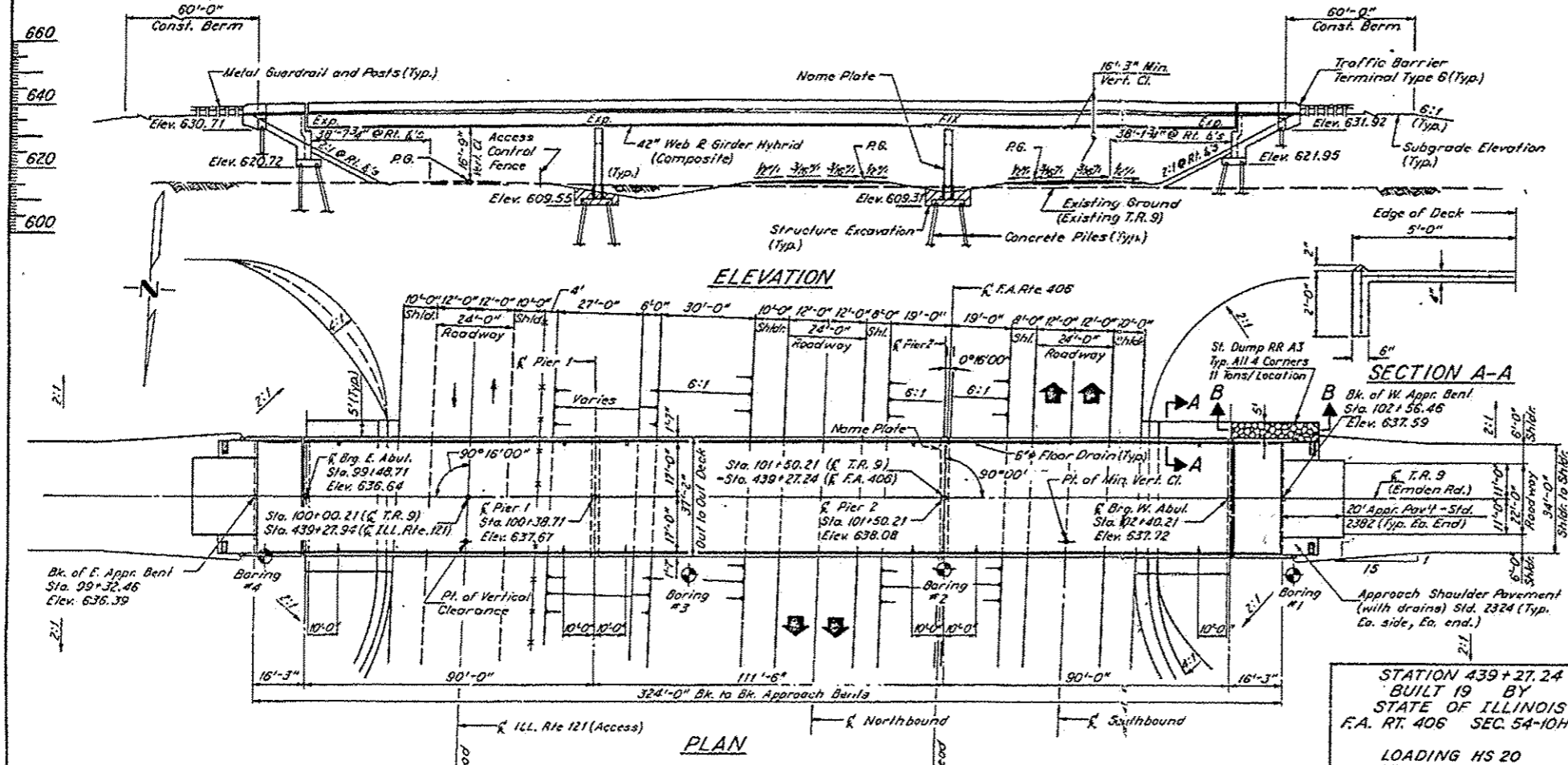
054-0078

SHEET 1 OF 16

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
406	54-10HB-3	LOGAN	51	18
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJ.		

B.M. No. 507 *C* at S.W. Corner of Hdwy. - Sta. R.R. Sta. 100+31 T.R. 9 (Emden Rd.) Elev. 615.12.

No Existing Structure.



GENERAL NOTES:

See Proposal for Boring Data.

Fasteners shall be high strength bolts. Bolts 7/8" ϕ open holes 1 1/8" unless otherwise noted.

Calculated Weight of Structural Steel: M223 = 132450 Lbs. and M183 = 136620 Lbs.

The zinc-silicate and vinyl paint system shall be used for shop and field painting of structural steel. THE COLOR OF THE FINAL FINISH COAT SHALL BE MUNSELL NO. 756 416.

Field welding of construction accessories will not be permitted to the bottom flange of girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting diaphragms over supports.

The contractor shall drive one concrete test pile in a permanent location of each substructure unit as directed by the Engineer before ordering the remainder of piles.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustments shall be made either by grinding the surface or by shimming the bearing. Two 1/2" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, shims of the dimensions of the top plate shall be provided and placed as detailed.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These Components are the tension flanges, webs and all splice plate material of the steel girders.

Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53 Grade 60.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

Concrete piles at approach bents shall be driven in holes precast thru the embankment in accordance with Article 513.09(C) of the Standard Specifications.

APPROVED FOR STRUCTURAL ADEQUACY ONLY

STATION 439+27.24 BUILT BY STATE OF ILLINOIS F.A. RT. 406 SEC. 54-10HB-3

LOADING HS 20 STR. NO. 054-0078

NAME PLATE See Std. 2113

DESIGN SPECIFICATIONS

LOADING HS 20-44

DESIGN STRESSES
 $f_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)
 $f_y = 50,000$ psi (M223, GR50) Flange
 36,000 psi (M183) Hybrid Girder

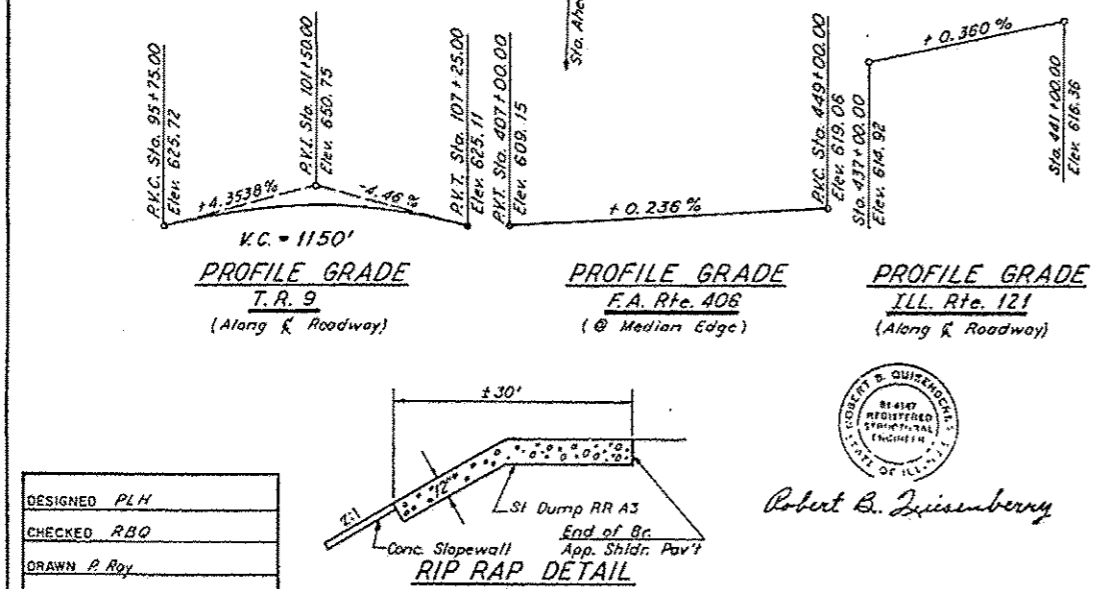
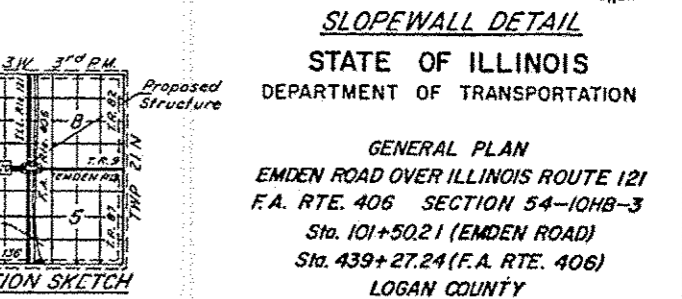
Slopes shall be reinforced with welded wire fabric, 6" x 6" W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER-STRUCT.	SUB-STRUCT.	TOTAL
Structure Excavation	Cu. Yds.		132	132
Protective Coat *	Sq. Yds.	1490		1490
Class X Concrete Superstructure	Cu. Yds.	374.7		374.7
Class X Concrete	Cu. Yds.		273.5	273.5
Furnishing and Erecting Structural Steel	Tump. Sum	1		1
Reinforcement Bars	Lbs.	4870	29840	34710
Reinforcement Bars - Epoxy Coated	Lbs.	70760	6450	77210
Concrete Piles	Lin. Ft.		3956	3956
Test Piles - Concrete	Each		4	4
Neoprene Expansion Joint (4")	Lin. Ft.	36		36
Preformed Joint Seal (4")	Lin. Ft.	37		37
Name Plates	Each		1	1
Slope Wall	Sq. Yds.		326	326
Stud Shear Connectors	Each	2775		2775
Sand Backfill	Cu. Yds.		156	156
Elastomeric Bearing Assembly, Type I	Each		10	10
Elastomeric Bearing Assembly, Type II	Each		5	5
Floor Drains	Each	12		12
STONE PUMPED RIPRAP CLASS AS	TON		44	44
BRIDGE SEAT SEALER	L-SUM		1	1

EST. AREA FOR BRIDGE SEAT SEALER = 125 SQ. FT.
 *INCLUDES BRIDGE DECK, APPROACH SLABS, AND FACE AND TOP OF PARAPETS AND WINDWALLS

REV 4-12-10 BY HLC CHANGED REINFORCEMENT BARS FROM 2534C TO 54110 LBS. CHANGED REINFORCEMENT BARS - EPOXY COATED FROM 72450 TO 70760 LBS. ADDED STONE PUMPED RIPRAP CLASS AS 44 TON. ADDED BRIDGE SEAT SEALER - 1 L-SUM



DESIGNED	PLH
CHECKED	RBC
DRAWN	P. Roy
CHECKED	PLH & RBC

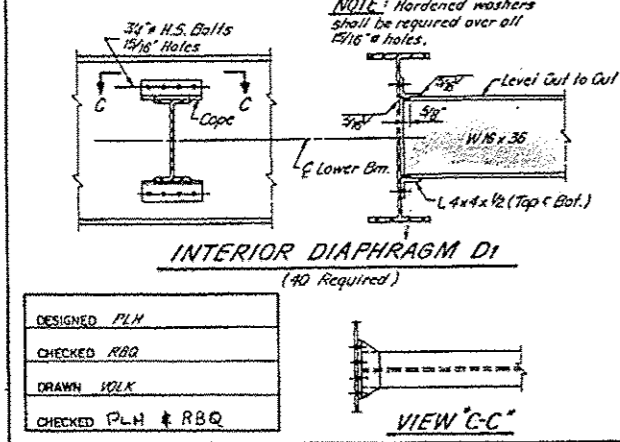
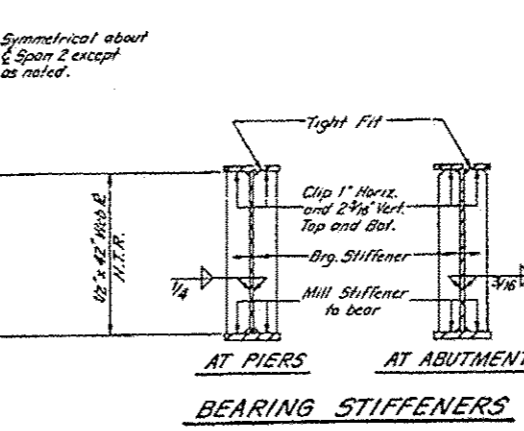
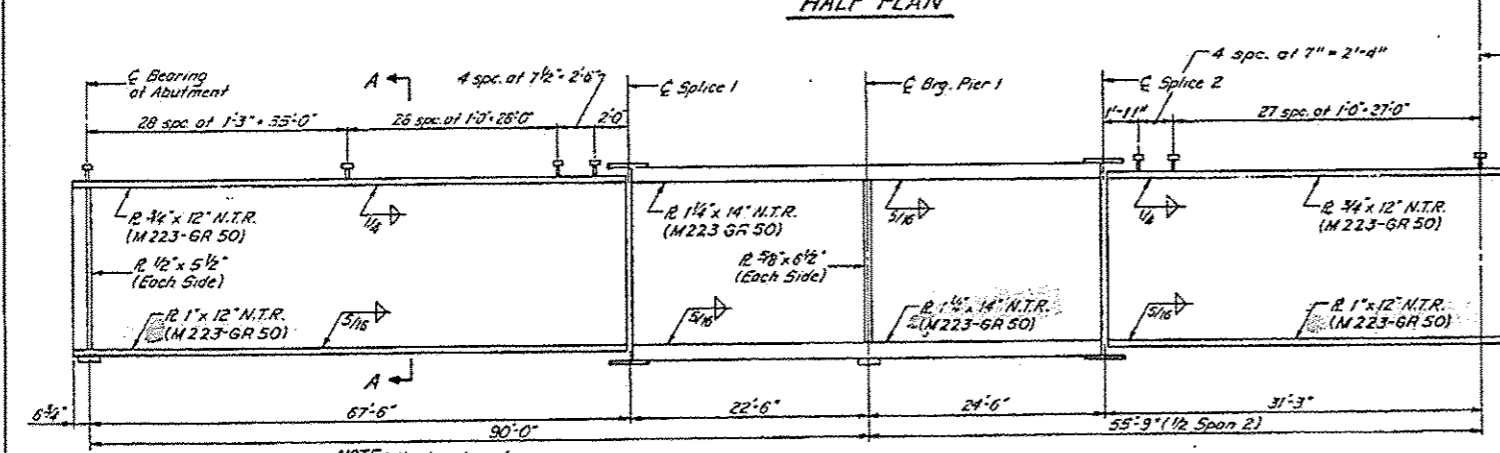
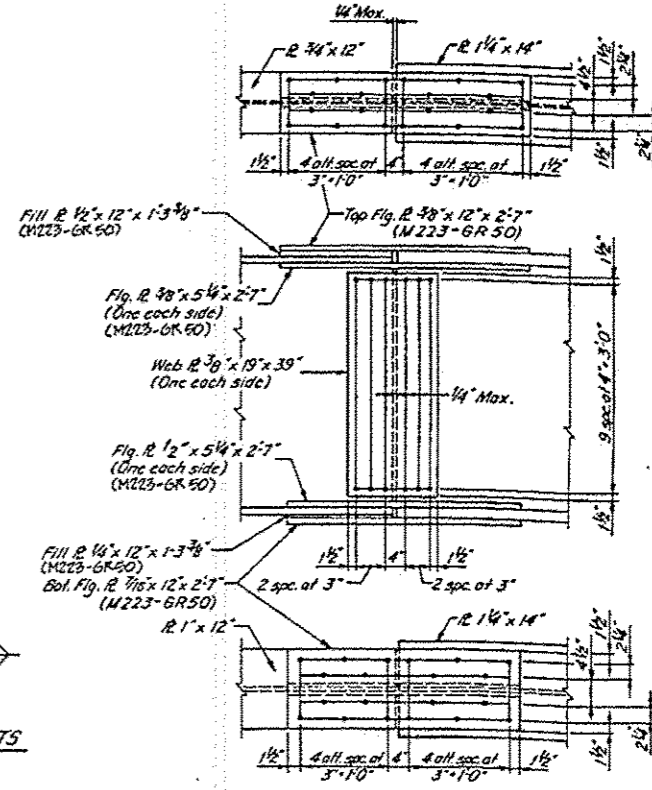
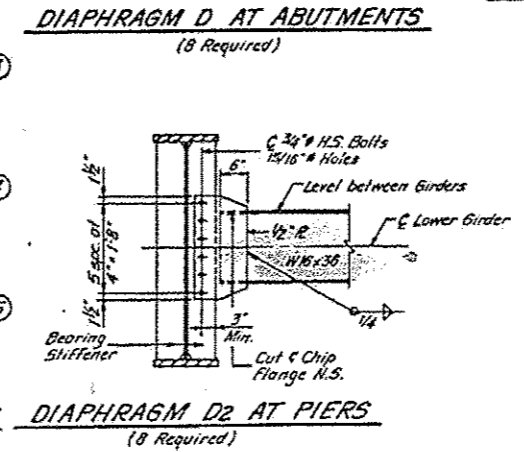
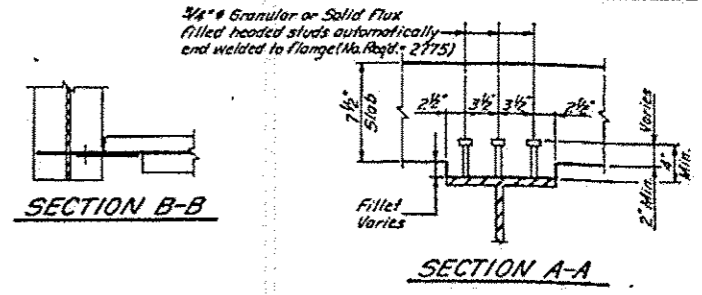
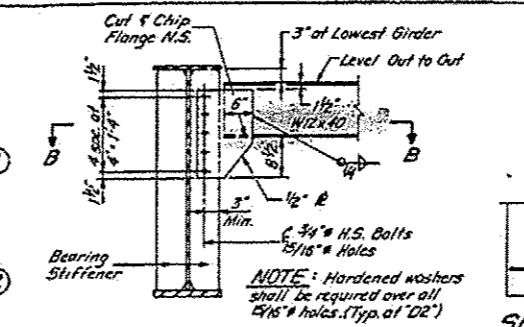
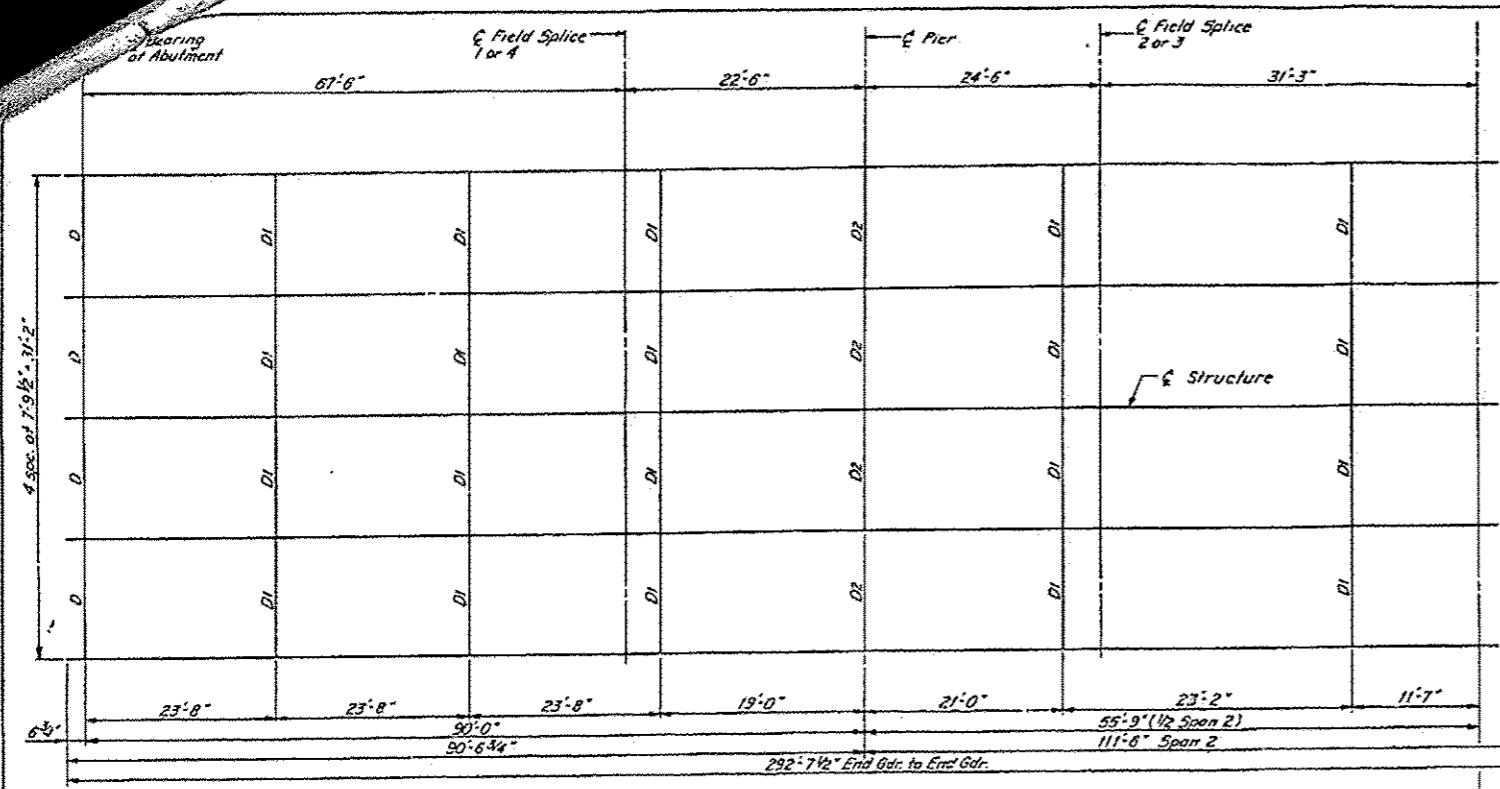
Robert B. Ziesenberg



054-0078 STRUCTURE NUMBER 054-0078

054-0070

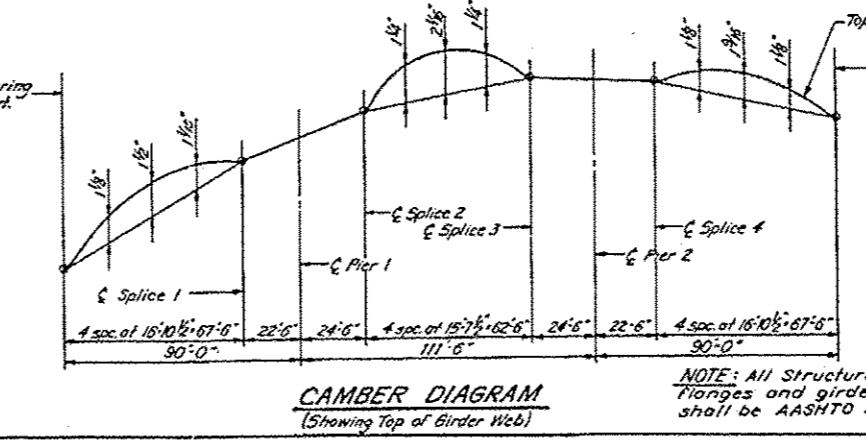
SHEET 8 OF 16	ROUTE NO. 406	SECTION 54-10HB-3	COUNTY LOGAN	TOTAL SHEETS 51	SHEET NO. 25
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJ.			



NOTE: Hardened washers shall be required over all 5/16" holes.

⊗ Elevations for fabrication only

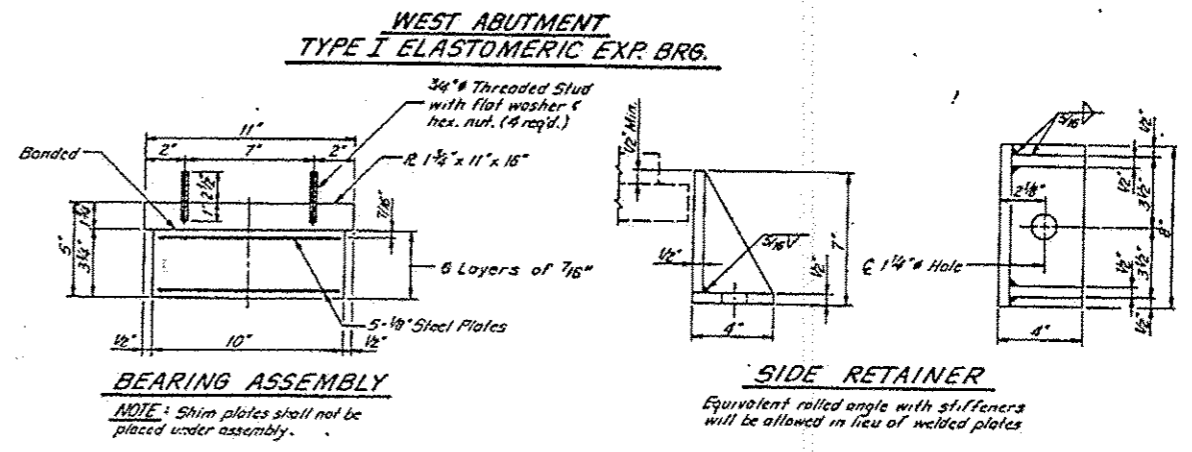
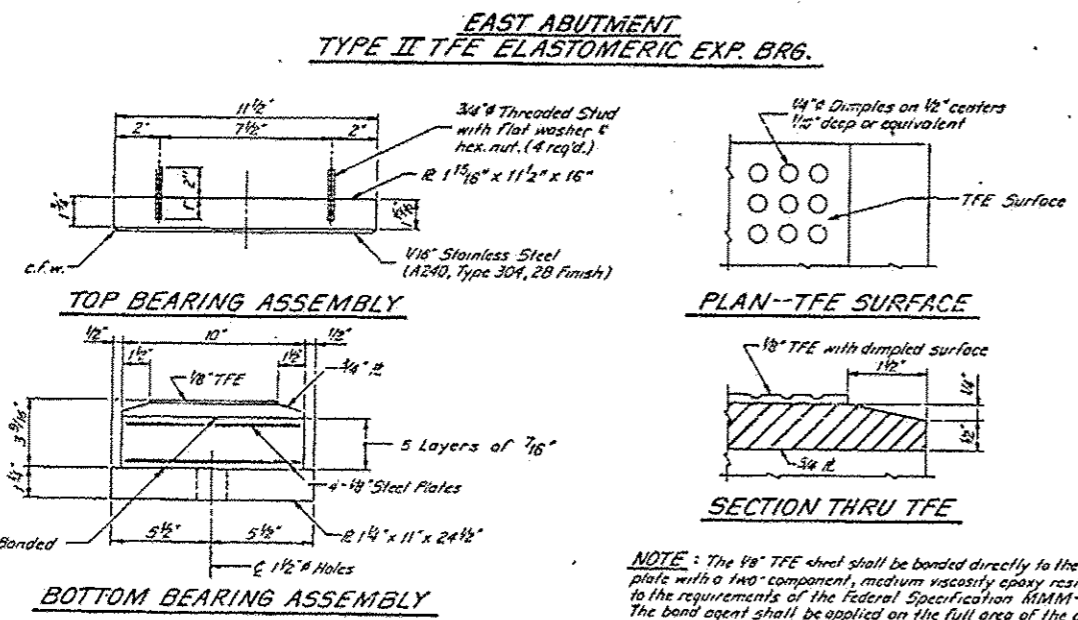
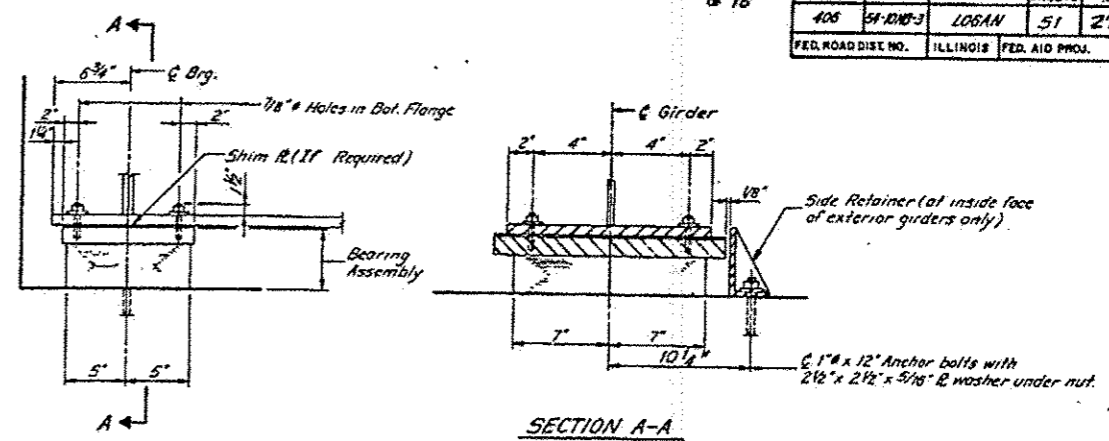
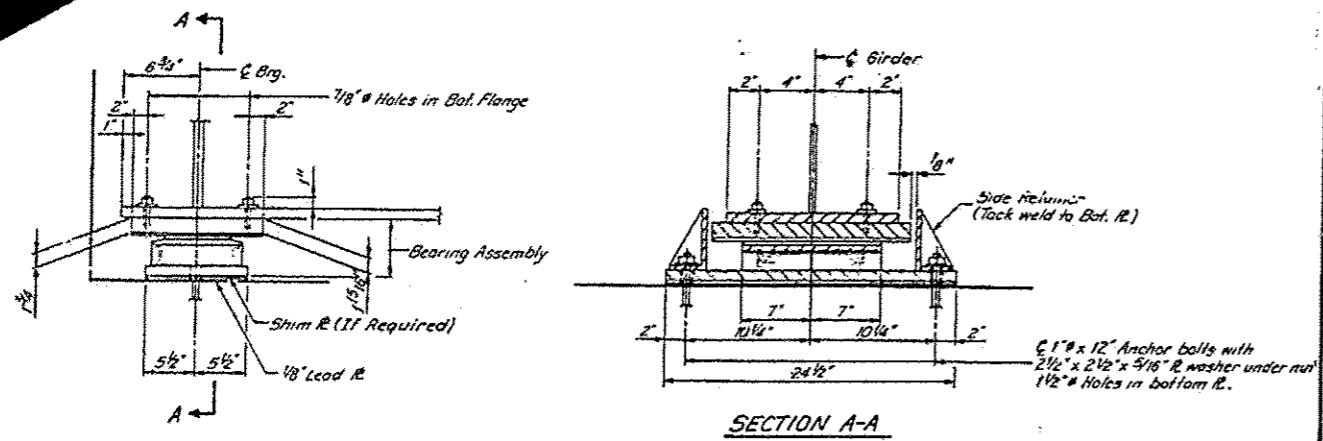
GIRDER LOCATION	①	②	③	④	⑤
C Brg. E. Abut.	635.62	635.77	635.89	635.77	635.62
Splice 1	636.42	636.57	636.69	636.57	636.42
C Pier 1	636.61	636.76	636.88	636.76	636.61
Splice 2	636.79	636.94	637.06	636.94	636.79
Splice 3	637.02	637.17	637.29	637.17	637.02
C Pier 2	637.02	637.17	637.29	637.17	637.02
Splice 4	637.00	637.15	637.27	637.15	637.00
C Brg. W. Abut.	636.70	636.85	636.97	636.85	636.70



NOTE: All Splice Bolts are 7/8" High Strength with 5/16" Holes.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
STRUCTURAL STEEL DETAILS
EMDEN ROAD OVER ILLINOIS ROUTE 121
F.A. RTE. 406 SECTION 54-10HB-3
Sta. 101+50.21 (EMDEN ROAD)
Sta. 439+27.24 (F.A. RTE. 406)
LOGAN COUNTY
STRUCTURE NO. 054-0078

SHEET 10 OF 16		ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		406	54-10NB-3	LOGAN	51	27
		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJ.		

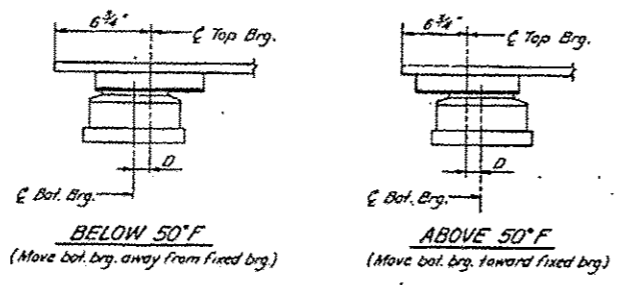
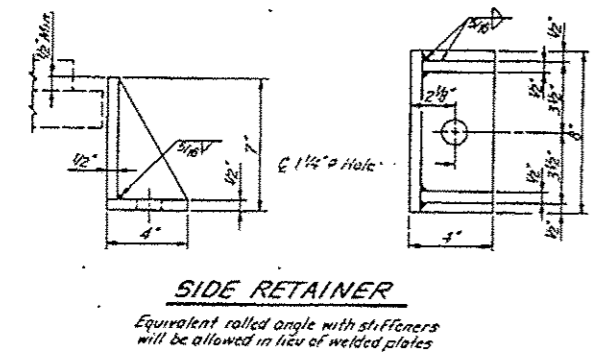


NOTE: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification RMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

BILL OF MATERIAL

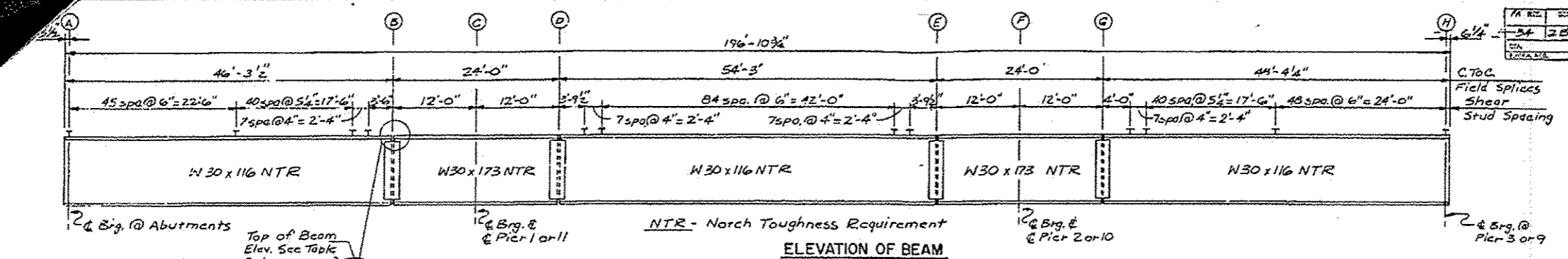
ITEM	UNIT	TOTAL
Elastomeric Bearing Assembly Type I	Each	10
Elastomeric Bearing Assembly Type II	Each	5



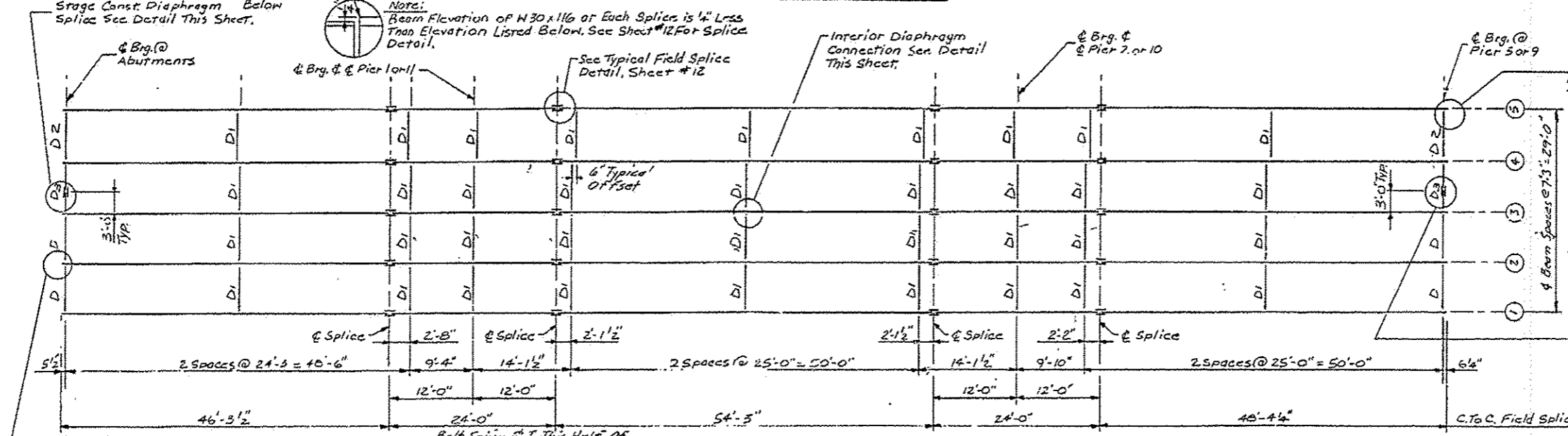
D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. 50°F.

DESIGNED	PLH
CHECKED	RBQ
DRAWN	WOLK
CHECKED	PLH & RBQ

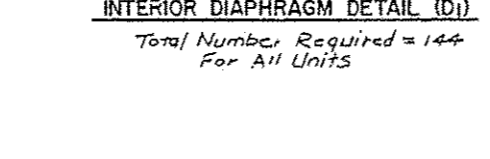
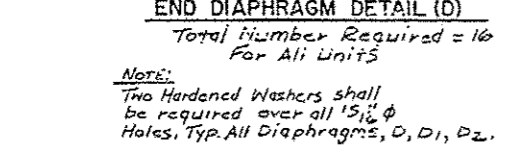
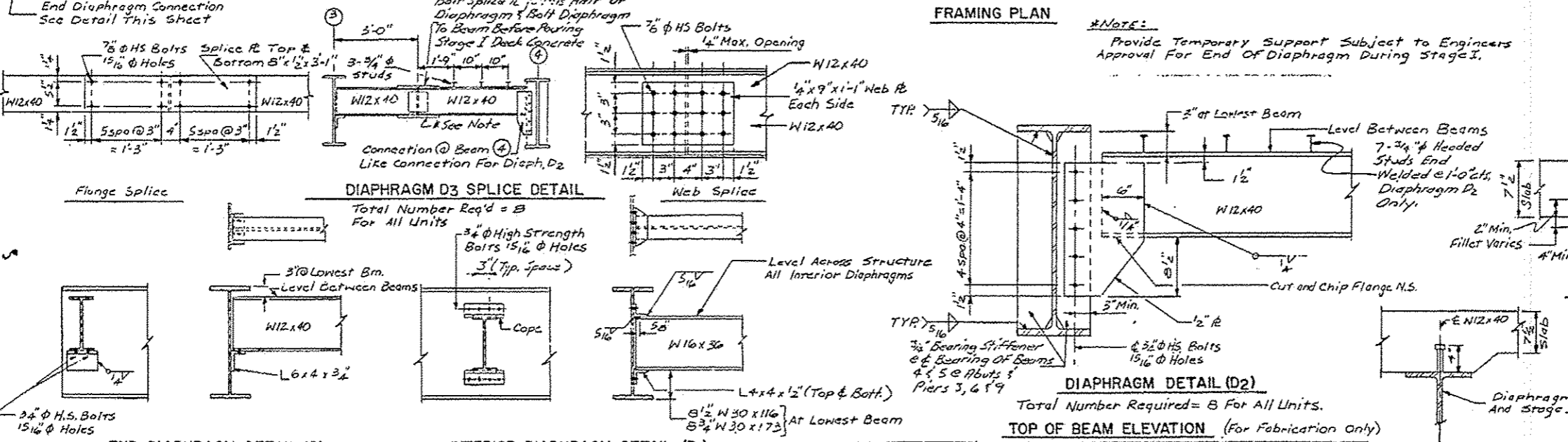
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
BEARING DETAILS
EMDEN ROAD OVER ILLINOIS ROUTE 121
E.A. RTE. 406 SECTION 54-10NB-3
Sta. 101+50.21 (EMDEN ROAD)
Sta. 439+27.24 (E.A. RTE. 406)
LOGAN COUNTY
STRUCTURE NO. 054 0078



NOTES:
 All Structural Steel to be M222.
 All Bolts to be High Strength M-164 Type 5



NOTE:
 Diaphragm Connection Angles @ Beam #4 Overlap 6". For Stage II Construction, Remove Two Bolts from Top & Bottom Angles, Install Diaphragm Between Beams #3 & #4, Replace Bolts. Bolts to be Replaced Before Loosening Bolts at Next Diaphragm Line.

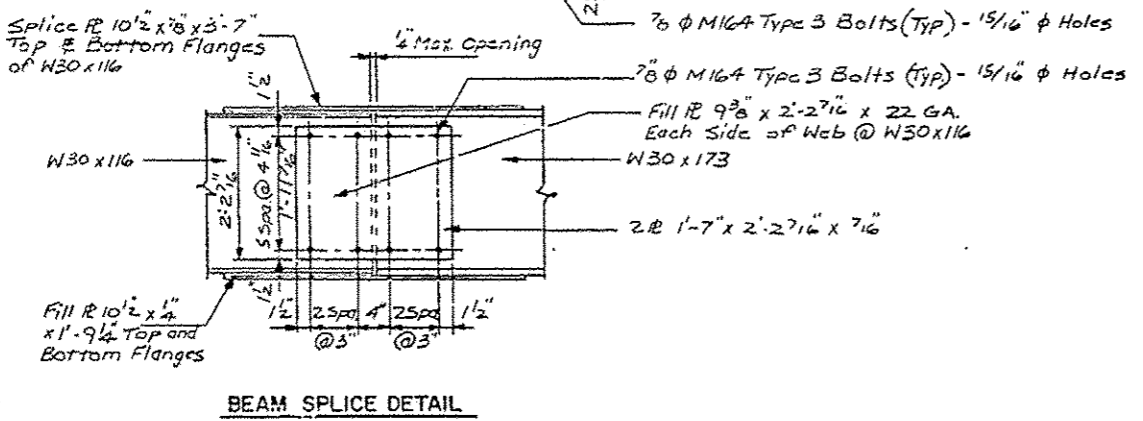
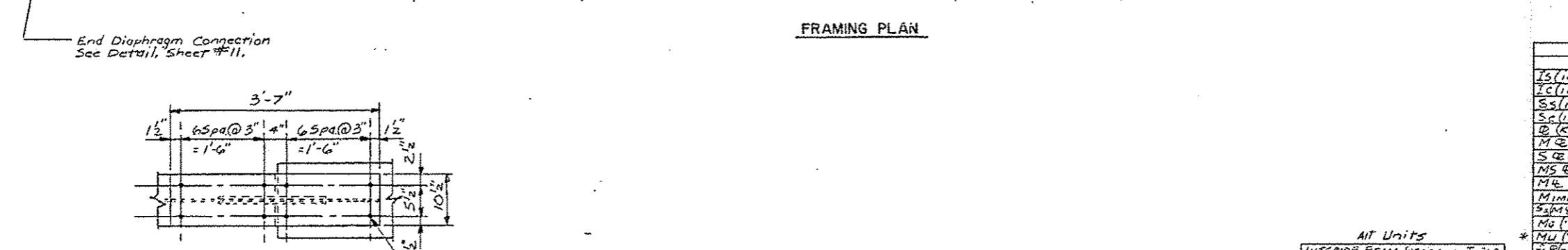
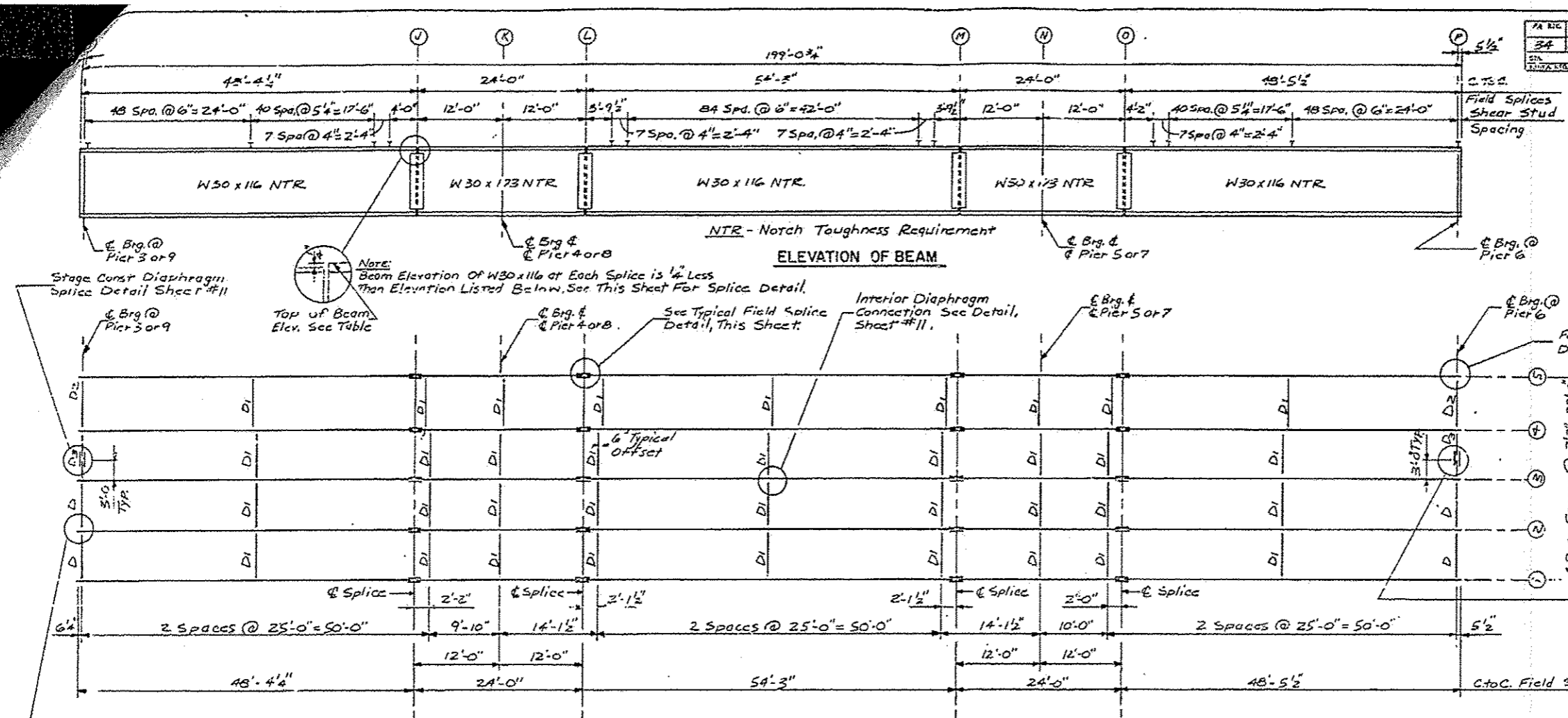


DIAPHRAGM SHEAR STUD DETAIL

TOP OF BEAM ELEVATION (For Fabrication Only)

Beam	(A) @ Brg @ Abutments	(B) @ Brg @ Pier 1 or 11	(C) @ Brg @ Pier 2 or 10	(D) @ Brg @ Pier 3 or 9	(E) @ Brg @ Pier 4 or 8	(F) @ Brg @ Pier 5 or 7	(G) @ Brg @ Pier 6 or 6	(H) @ Brg @ Pier 7 or 9
Beam #1	480.56	480.77	480.82	480.86	481.08	481.13	481.18	481.35
Beam #2	480.69	480.90	480.95	480.99	481.21	481.26	481.31	481.48
Beam #3	480.80	481.01	481.06	481.10	481.32	481.37	481.42	481.59
Beam #4	480.69	480.90	480.95	480.99	481.21	481.26	481.31	481.48
Beam #5	480.56	480.77	480.82	480.86	481.08	481.13	481.18	481.35

FRAMING PLAN - UNITS A & D
 SANGAMON RIVER OVERFLOW BRIDGE
 F.A. ROUTE 34 (ILLINOIS ROUTE 97)
 SECTION 2B-1
 MENARD COUNTY
 STATION 756+00



TOP OF BEAM ELEVATION

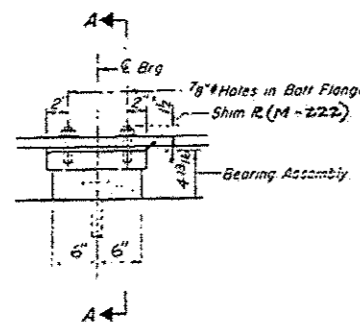
Beam	①	②	③	④	⑤	⑥	⑦
Beam #1	481.48	481.54	481.58	481.61	481.72	481.73	481.75
Beam #2	481.61	481.67	481.71	481.74	481.85	481.86	481.88
Beam #3	481.72	481.78	481.82	481.85	481.96	481.97	481.99
Beam #4	481.61	481.67	481.71	481.74	481.85	481.86	481.88
Beam #5	481.48	481.54	481.58	481.61	481.72	481.73	481.75

All Units

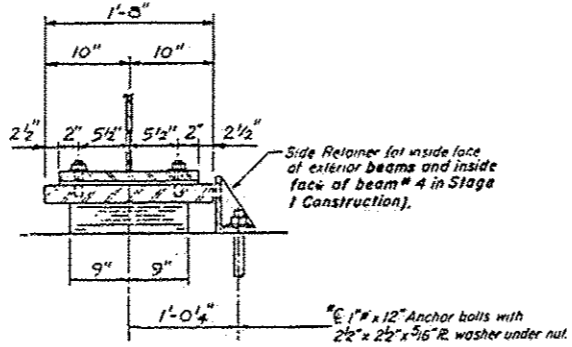
INTERIOR BEAM MOMENT TABLE

	0.85P1	Pier	5P1/5P2
I _s (in ⁴)	4930	8200	4930
I _c (in ⁴)	13700	—	13700
S _s (in ³)	329	539	529
S _c (in ³)	494	—	494
Q (C/I)	.887	.887	.887
M _E (K)	196	487	199
S _E (K/I)	.345	.345	.345
M _S (K)	90	145	119
M _L (K)	444	326	502
M _{IMP} (K)	120	84	124
S ₂ (M+T) (K)	940	683	1043
M _u (K)	1594	1700	1770
M _u (K)	2791	—	2791
S ₂ (non-comp) (K)	7.1	14.1	7.2
S ₂ (comp) (K)	2.2	—	2.9
R _E (K)	26.5	95.6	—
R _L (K)	43.6	55.1	—
IMP (K)	11.8	13.8	—
R _{TOTAL} (K)	81.9	164.5	—
M _u (K)	7.1	14.1	7.2
S ₂ (non-comp) (K)	7.1	14.1	7.2
S ₂ (comp) (K)	2.2	—	2.9
R _E (K)	26.5	95.6	—
R _L (K)	43.6	55.1	—
IMP (K)	11.8	13.8	—
R _{TOTAL} (K)	81.9	164.5	—

* M_u = Full Plastic Moment Capacity for Compact, Braced Section.
 M_a(Applied Moment) = 1.5(M_E + M_S) + 1/3(M_L + M_{IMP})



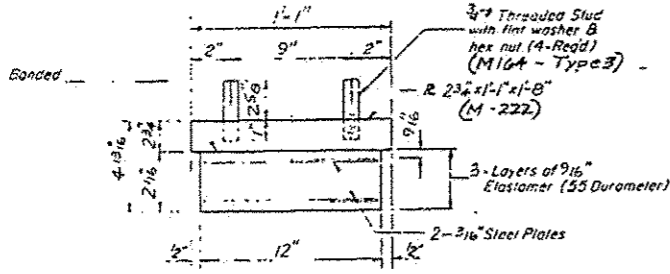
ELEVATION AT PIER



SECTION A-A

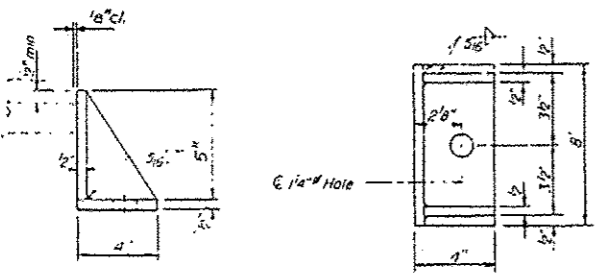
TYPE I ELASTOMERIC EXP BRG.

* Note: After beams have been erected holes at expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry.



BEARING ASSEMBLY

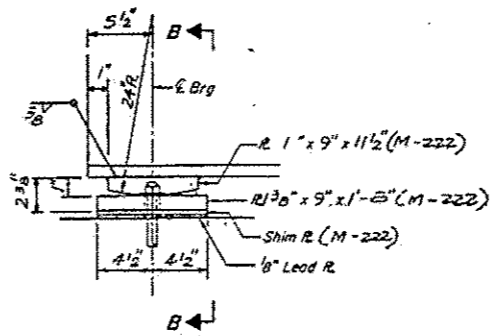
Note: Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

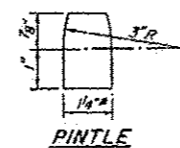
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

PIERS 1,5,7 & 11

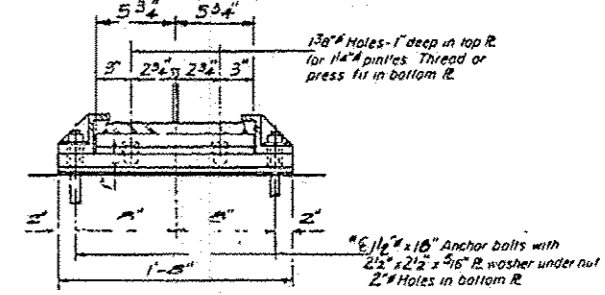


ELEVATION AT ABUT. OR PIER

FIXED BEARING

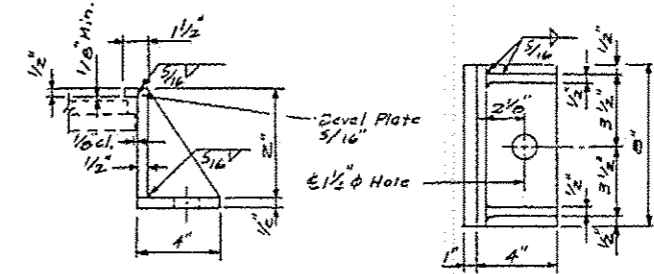


PINTLE



SECTION B-B

* Note: After beams have been erected holes at expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry.



SIDE RETAINER (20 - REQUIRED)

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

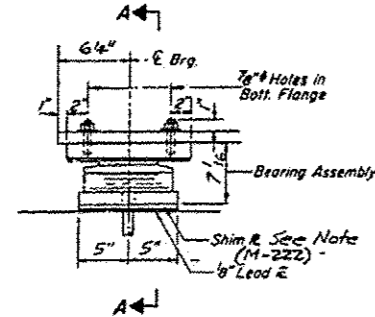
ABUTMENTS & PIER 6

BEARINGS AT ABUTS. & PIERS 1,5,6,7 & 11
SANGAMON RIVER OVERFLOW BRIDGE
F.A. ROUTE 34 (ILLINOIS ROUTE 97)
SECTION 2BR-1
MENARD COUNTY
STATION 756+00

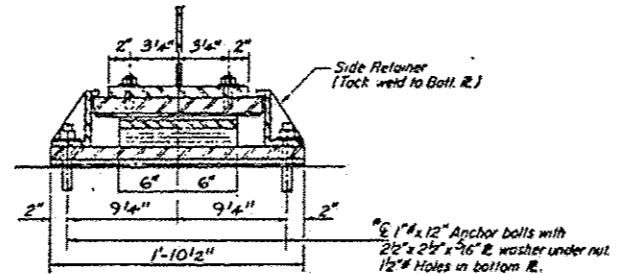
065-0003

DATE	DESIGNED	CHECKED	DATE	SHEET NO.
3/24/2011	Menard	'39	26	26 SHEETS

NOTES 1/2" x 10" x 1/4" Shim Plates (M-222)
 Required @ Beams 1, 2, 3, 4 & 5 @
 Piers 3 & 9, Unit B & C Only.

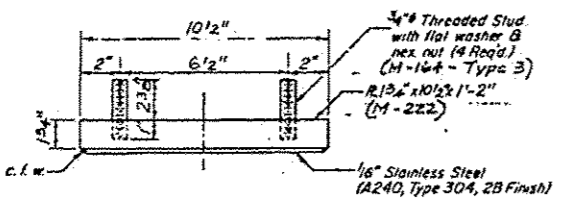


ELEVATION AT PIER

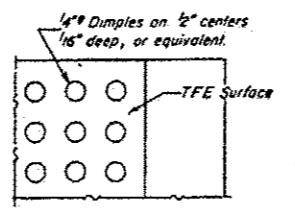


SECTION A-A

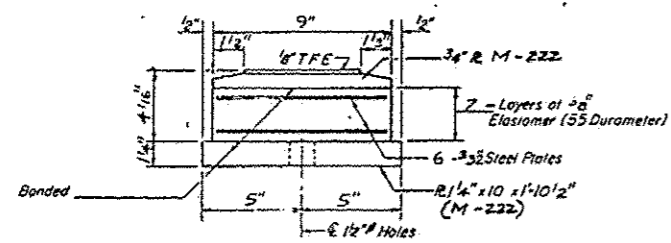
TYPE II TFE ELASTOMERIC EXP BRG.



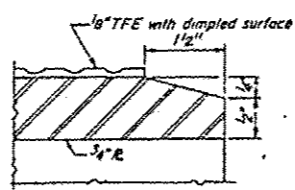
TOP BEARING ASSEMBLY



PLAN - TFE SURFACE



BOTTOM BEARING ASSEMBLY

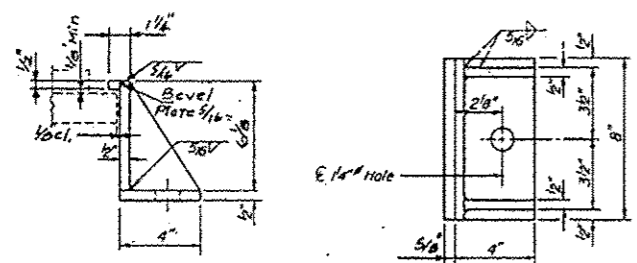


SECTION THRU TFE

Note: After beams have been erected holes of expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry.

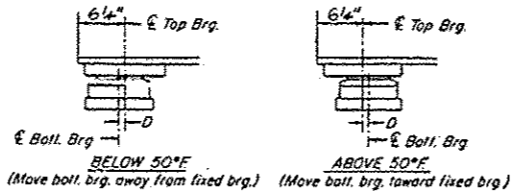
Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SETTING ANCHOR BOLTS AT EXP BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F

PIERS 3 & 9

BEARINGS AT PIERS 3 & 9
 SANGAMON RIVER OVERFLOW BRIDGE
 F.A. ROUTE 34 (ILLINOIS ROUTE 97)
 SECTION 2BR-1
 MENARD COUNTY
 STATION 756+00

F.A. ROUTE 34 (ILLINOIS ROUTE 97)
 SECTION 2BR-1
 MENARD COUNTY

065-0003

Ralph Hahn and Associates
 Consulting and Design Engineers Inc.
 1320 South State Street

FILE NAME: D:\OPERATIONS\Bridgplans_CAO\72137 -	USER NAME: dudleybn	DESIGNED: _____	REVISED: _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS SN 065-0003 (FOR INFORMATION ONLY)	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:	
beam and point F115 CHplansheet.dgn	PLOT SCALE: 1/8"=1'-0"	DRAWN: _____	REVISED: _____			VAR.:	06 BDGE PAINTING 2015-1	VARIOUS	58	15	
DATE: Aug-28-2014 01:42:38PM	CHECKED: _____	REVISED: _____	REVISED: _____			CONTRACT NO. 72H37					
SCALE: _____	DATE: _____	REVISED: _____	REVISED: _____			ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-608	125BR	MACOUPIN	53	7
SHEET NO. 1				
SHEETS: 17				

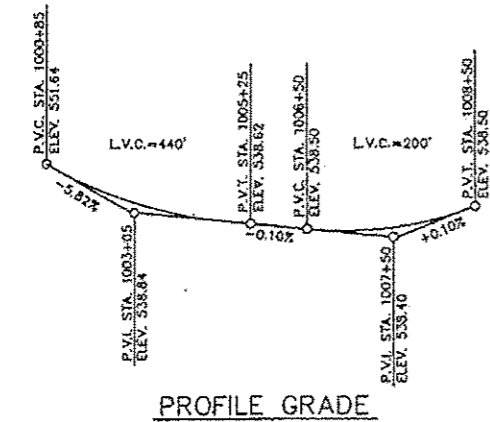
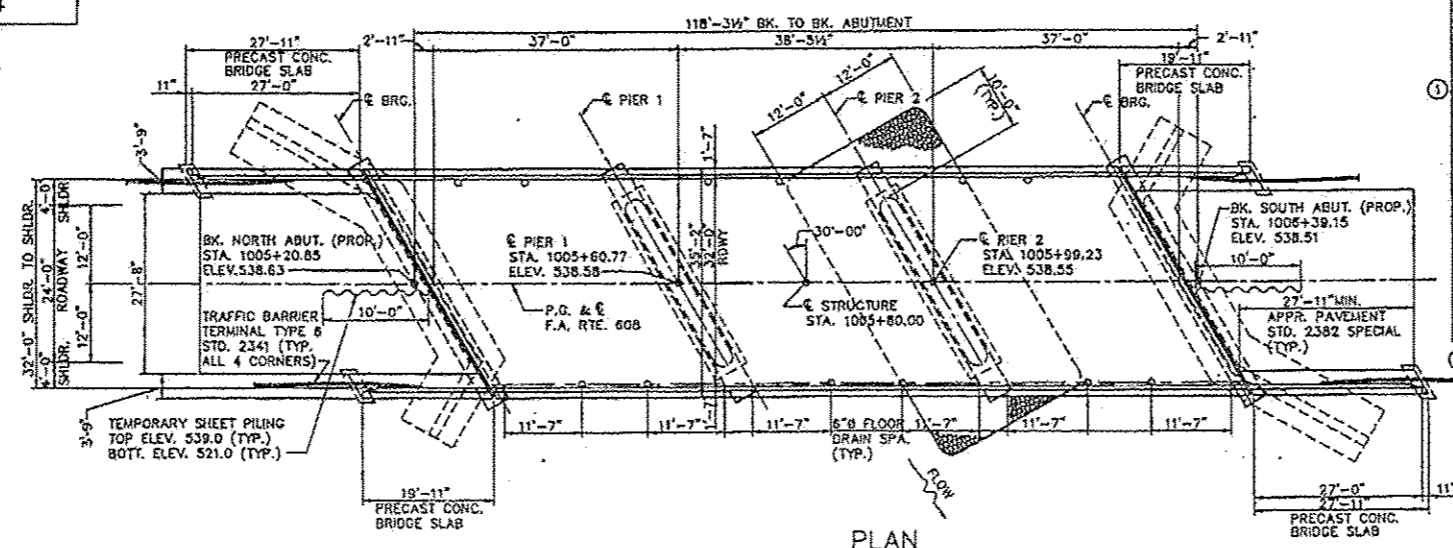
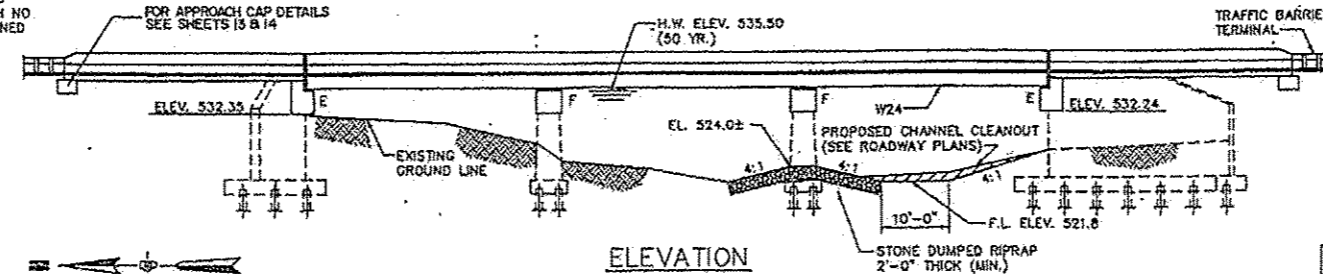
BENCH MARK:
B.M. #7 ELEVATION 533.10; CHISELED SQUARE IN NORTHWEST
WINGWALL OF BRIDGE 12.8' RT. STA. 1005+27

EXISTING STRUCTURE:
STA. 1005+80.00, FAP RTE. 608, MARKED IL. RTE. 111 SECTION
125BR, STRUCTURE NUMBER 059-0014, YEAR BUILT 1929
SUPERSTRUCTURE: 3 SIMPLE SPANS CAST-IN-PLACE
REINFORCED T-BEAM
SUBSTRUCTURE: 2 CLOSED ABUTMENTS & 2 SOLID PIERS
THE EXISTING SUPERSTRUCTURE IS TO BE REMOVED WITH NO
SALVAGE. EXISTING ABUTMENTS & PIERS SHALL BE WIDENED
AND REUSED.

STATION 1005+80.00
BUILT 199 BY
STATE OF ILLINOIS
F.A. ROUTE 608 SEC. 125BR
F.A. PROJ. ACBHF-608(12)

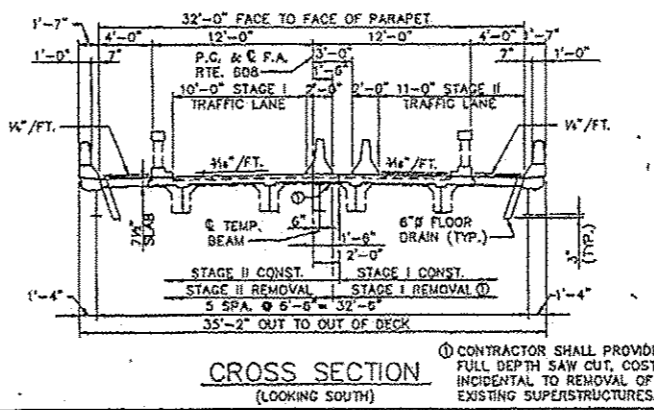
LOADING HS-20
STR. NO. 059-0014

NAME PLATE
(SEE STD. 2113)



WATERWAY INFORMATION

FLOOD YEAR	FREQ. C.F.S.	OPENING SQ. FT.	NAT. EXIST. PROP.	H.W.E. EXIST. PROP.	HEAD FT. EXIST. PROP.	HEADWATER ELEV. EXIST. PROP.
DESIGN	50 5940	730	765	535.5	1.81	537.11
BASE	100 6802	730	765	536.0	2.11	538.11
OVERTOPPING	100 6802	765	536.0	2.11	538.11	538.11
MAX. CALC.	500					



DESIGN STRESSES
FIELD UNITS:
FO = 3,500 PSI
FY = 60,000 PSI (REINFORCEMENT)
FY = 50,000 PSI (STRUCTURAL STEEL) AASHTO M223, GRADE 50
FY = 36,000 PSI (STRUCTURAL STEEL) AASHTO M183

PRECAST UNITS:
FC = 4,500 PSI
FC = 1,800 PSI
FS = 24,000 PSI
N = 8

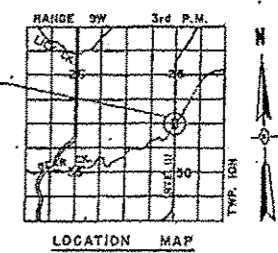
LOADINGS
HS 20-44 (ALLOW 25#/FT² FOR FUTURE WEARING SURFACE)

SPECIFICATIONS
1983 AASHTO AND INTERIM SPECIFICATIONS 1984 THRU 1988

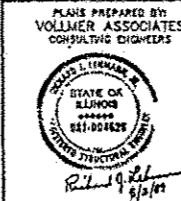
TOTAL BILL OF MATERIALS

ITEM	UNIT	SUPER	SUBSTR.	TOTAL
REMOVAL OF EXISTING SUPERSTRUCTURES	L. SUM	1		1
CONCRETE REMOVAL	CU. YD.		40.2	40.2
FLOOR DRAINS	EACH	12		12
PREFORMED JOINT SEAL, 2 1/2"	LIN. FT.	82		82
CLASS X CONCRETE SUPERSTRUCTURE	CU. YD.	133.9		133.9
PROTECTIVE COAT	SO. YD.	539.1		539.1
ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	12		12
CLASS X CONCRETE	CU. YD.		60.9	60.9
PRECAST CONCRETE BRIDGE SLAB	SO. FT.	358		358
FURNISHING & ERECTING STRUCTURAL STEEL	L. SUM	1		1
STUD SHEAR CONNECTORS	EACH	2052		2052
REINFORCEMENT BARS	POUND		3080	3080
REINFORCEMENT BARS (EPOXY COATED)	POUND	29560	4220	33780
NAME PLATES	EACH	1		1
STONE DUMPED RIPRAP, CLASS A5	TON		165	165
TEMPORARY SUPPORT SYSTEM	L. SUM	1		1
BRIDGE SEAT SEALER	L. SUM		1	1
STRUCTURE EXCAVATION	CU. YD.		42	42
TEMPORARY SHEET PILING	SO. FT.		360	360
FILTER FABRIC FOR USE W/ RIPRAP	SO. YD.		118	118

① INCLUDES BRIDGE DECK & PARAPET SURFACES



APPROVED
FOR STRUCTURAL ADEQUACY ONLY
John W. Clark
Registered Structural Engineer

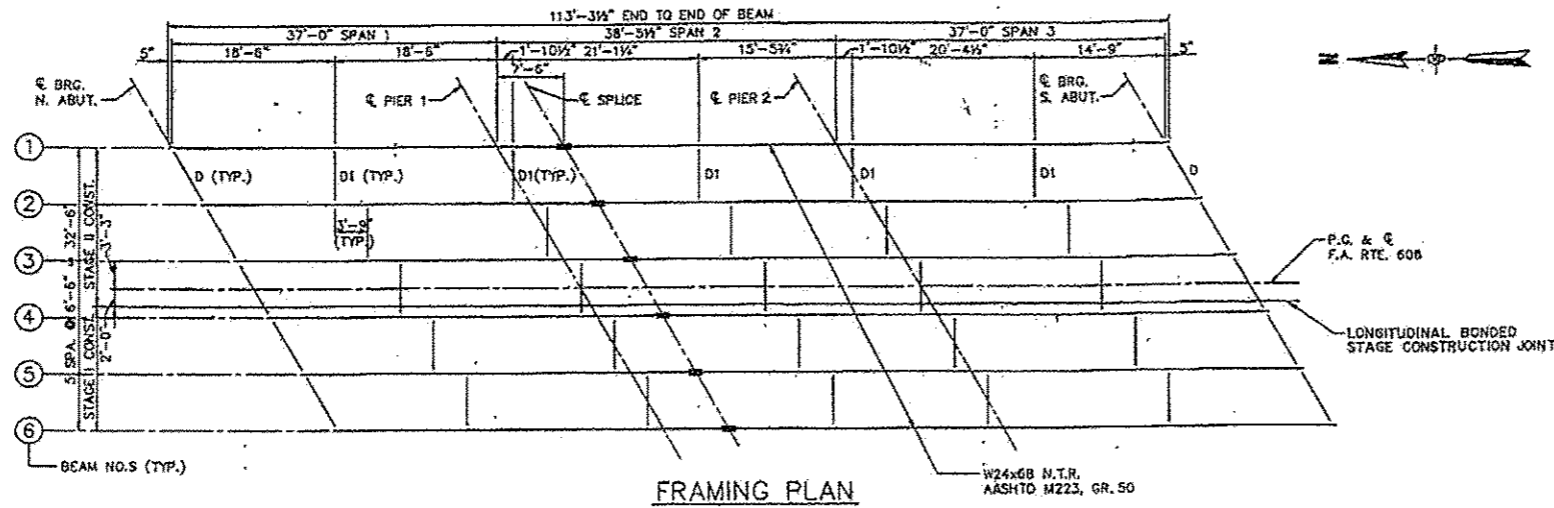


PLANS PREPARED BY:
VOLLMER ASSOCIATES
CONSULTING ENGINEERS

GENERAL PLAN
ILLINOIS ROUTE 111 OVER
BEAR CREEK
F.A. RTE. 608 SECTION 125BR
MACOUPIN COUNTY
STATION 1005 + 80.00
STRUCTURE NO. 059-0014

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-608	125BR	MACOUPIN	33	13
STA.	TO STA.		SHEETS: 17	
F.A. REGION 3		PROJECT		



	0.4 SP. 1 & 3	PIERS 1 & 2	0.4 SP. 2
I_x (IN. ⁴)	1830	1830	1830
I_c (IN. ⁴)	5880	5880	5880
S_x (IN. ³)	154	154	154
S_c (IN. ³)	247	247	247
\bar{Q} (K/I)	0.666	0.996	0.666
M_D (K)	77	135	28
M_L (K/I)	0.310	0.310	0.310
$M_D R$ (K)	38	22	22
$M_L R$ (K)	208	98	174
M_{DUP} (K)	62	29	52
$5/3(M_L + I)$ (K)	450	212	377
M_o (K)	735	451	555
M_{L+I} (K)	1440	1440	1440
$f_s R$ NON-COMP (K.S.I.)	6.0	10.5	2.2
$f_s R$ (COMP) (K.S.I.)	2.1	1.2	1.2
$f_s R$ 5/3(I + I) (K.S.I.)	21.9	16.5	16.3
f_s (OVERLOAD) (K.S.I.)	30.0	27.0	21.7
f_s (TOTAL) (K.S.I.)	36.0	35.1	21.7
VR (K)	48.5	45.0	45.0

	ABUTS.	PIERS
R_D (K)	15.2	41.5
R_L (K)	35.3	38.7
IMP. (K)	10.8	11.0
R_{TOTAL} (K)	61.1	89.2

NOTES:

- I_x AND S_x ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION USED IN COMPUTING f_s (TOTAL AND OVERLOAD).
- I_c AND S_c ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING f_s (TOTAL AND OVERLOAD).
- VR IS THE MAXIMUM \bar{Q} + IMPACT SHEAR RANGE IN SPAN.
- THE FULLY PLASTIC MOMENT CAPACITY (M_o) IS COMPUTED ACCORDING TO AASHTO 10.48.1 & 10.50.1.1.
- f_s (TOTAL) IS THE SUM OF THE STRESSES DUE TO $1.3[M_D + M_L R + 5/3(M_L + I)]$.
- f_s (OVERLOAD) IS THE SUM OF THE STRESSES DUE TO $[M_D + M_L R + 5/3(M_L + I)]$.
- M_D - MOMENT DUE TO DEAD LOADS ON NON-COMPOSITE SECTION.
- $M_L R$ - MOMENT DUE TO DEAD LOADS ON COMPOSITE SECTION.
- M_L - MOMENT DUE TO LIVE LOAD ON NON-COMPOSITE OR COMPOSITE SECTION.
- I - LIVE LOAD IMPACT.
- M_o (APPLIED MOMENT) = $1.3[M_D + M_L R + 5/3(M_L + I)]$.
- N.T.R. INDICATES NOTCH TOUGHNESS REQUIREMENT

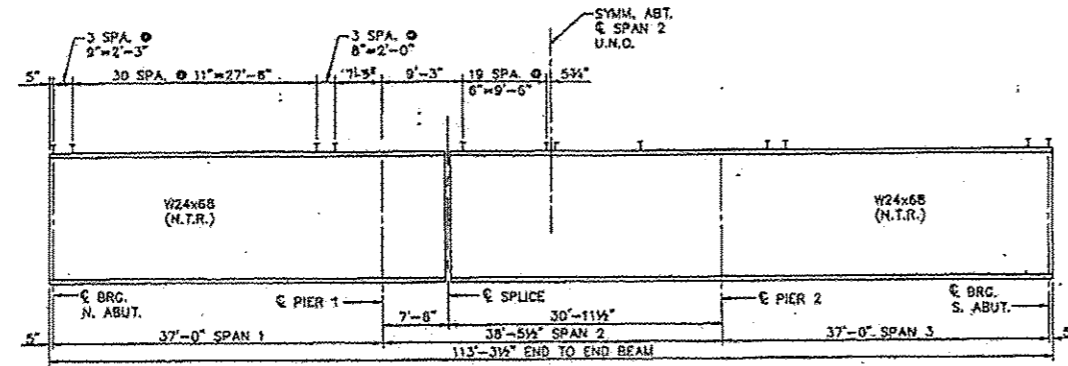
	BEAM #1	BEAM #2	BEAM #3	BEAM #4	BEAM #5	BEAM #6
BRG. N. ABUT.	537.66	537.75	537.84	537.84	537.73	537.63
BRG. PIER #1	537.62	537.71	537.81	537.80	537.70	537.60
SPLICE	537.61	537.70	537.80	537.79	537.69	537.59
BRG. PIER #2	537.58	537.67	537.76	537.76	537.66	537.56
BRG. S. ABUT.	537.54	537.63	537.73	537.73	537.62	537.52

* FOR FABRICATION ONLY

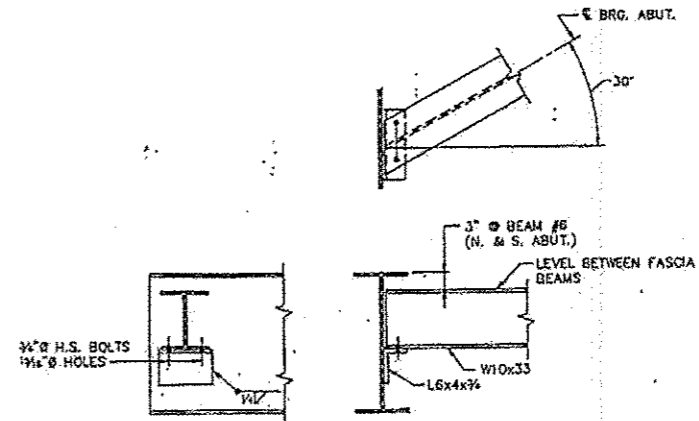
FRAMING PLAN
ILLINOIS ROUTE 111 OVER
BEAR CREEK
F.A. RTE.608 SECTION 125BR
MACOUPIN COUNTY
STATION 1005 + 80.00
STRUCTURE NO. 059-0014

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

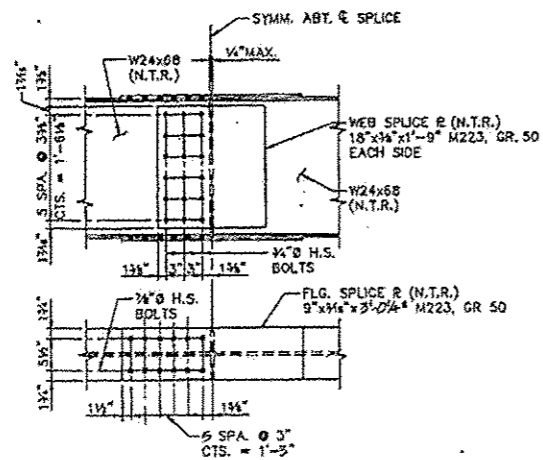
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-608	125BR	MACOUPIN	33	14
SHEET NO. 8 SHEETS: 17				



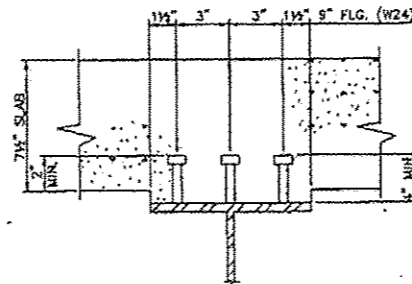
BEAM ELEVATION



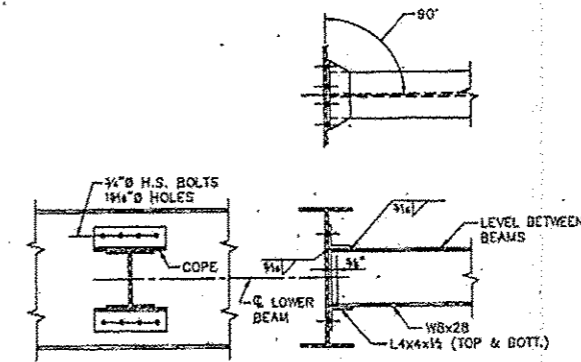
END DIAPHRAGM D



FIELD SPLICE DETAIL



TYPICAL SHEAR STUD DETAIL



INTERIOR DIAPHRAGM D1

NOTES:

1. BEAMS AND SPLICE MATERIAL SHALL BE M223. (GRD. 50)
2. ALL STUDS TO BE 1/4" GRANULAR OR SOLID FLUX FILLED HEADED STUDS AUTOMATICALLY END WELDED TO FLANGE. (NO. REQ'D = 2052)
3. USE TWO HARDENED WASHERS PER BOLT FOR ALL OVERSIZED HOLES IN DIAPHRAGM CONNECTIONS.
4. "NTR" - NOTCH TOUGHNESS REQUIREMENT.
5. PROVIDE 1 1/4" HOLES FOR ALL 1/4" BOLTS AND 1 1/4" HOLES FOR ALL 3/4" BOLTS. (UNLESS NOTED OTHERWISE)

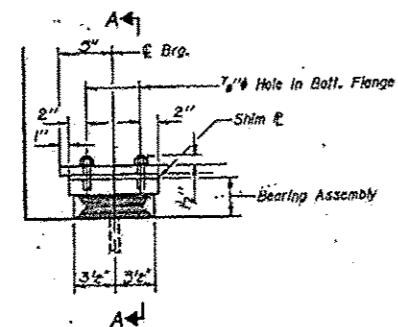
BEAM DETAILS
ILLINOIS ROUTE 111 OVER
BEAR CREEK
F.A. RTE.608 SECTION 125BR
MACOUPIN COUNTY
STATION 1005 + 80.00
STRUCTURE NO. 059-0014

REVISED BY HLC 6-10-01

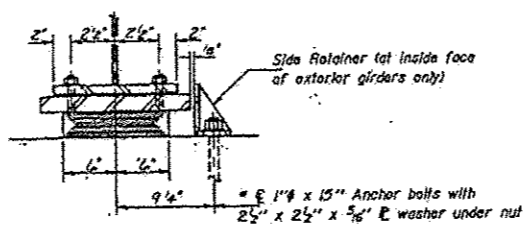
FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS SN 059-0014 (FOR INFORMATION ONLY)	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ONOPERATIONS\Bridges\plans\CAD\72H37	audleybn	-	-			VAR.	06 BDR PAINTING 2015-1	VARIOUS	58	25
Plot Scale: 1/8" = 1'-0"	Plot Date: Aug 20 2014 8:43:01PM	CHECKED	REVISED			SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 72H37		
ILLINOIS FED. AID PROJECT										

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

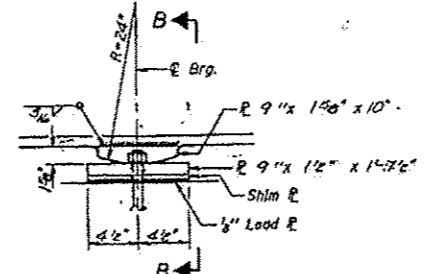
ROUTE NO.	SECTION	COUNTY	SHEET NO.
FA-608	125BR	MACOUPIN	33
STA.	TO STA.	SHEETS: 17	
FED. ROAD DIST. NO. 71 ILLINOIS PROJECT			



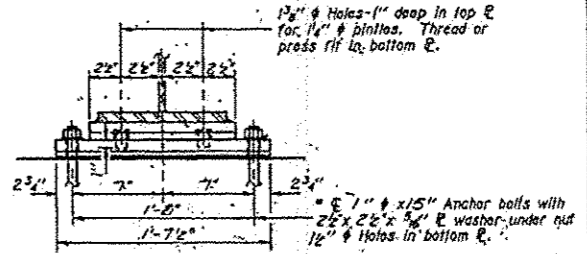
ELEVATION AT ABUT.



SECTION A-A

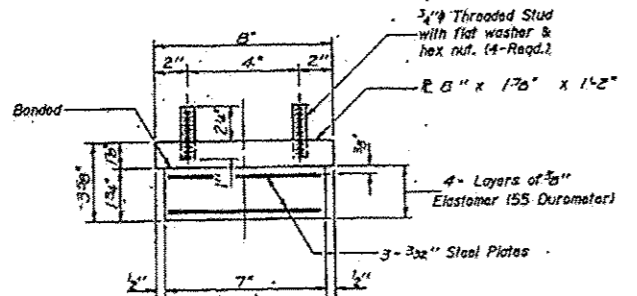


ELEVATION AT PIER



SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.
(N. of S. Abut.)

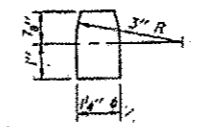


BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

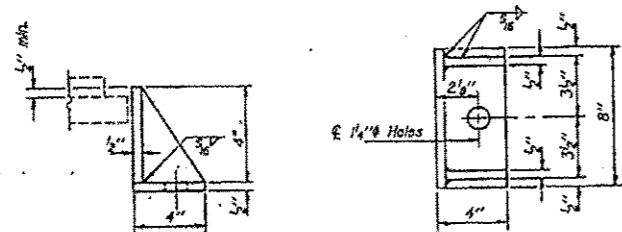
* Notes: Anchor bolts of fixed bearings may be built into the masonry. See sheet #14 for Anchor Bolt Installation.

FIXED BEARING
(Piers 1 & 2)



PINTLE

BEAM	N. ABUT.	PIER 1	PIER 2	S. ABUT.
1	0	0	0	0
2	0	0	0	0
3	0	1/8	1/8	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (6 REQUIRED)

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type 1	Each	12

BEARINGS
ILLINOIS ROUTE III OVER
BEAR CREEK
F.A. RTE. 608 SECTION 125BR
MACOUPIN COUNTY
STATION 1005 + 80.00
STRUCTURE NO. 059-0014

REVISED BY HLG 15-10-DT

Bench Mark: a Cut on South curb of East abutment, 12' R.L. Sta. 2258+54.00 Elev. 453.90 Old Structure No. 075-0031

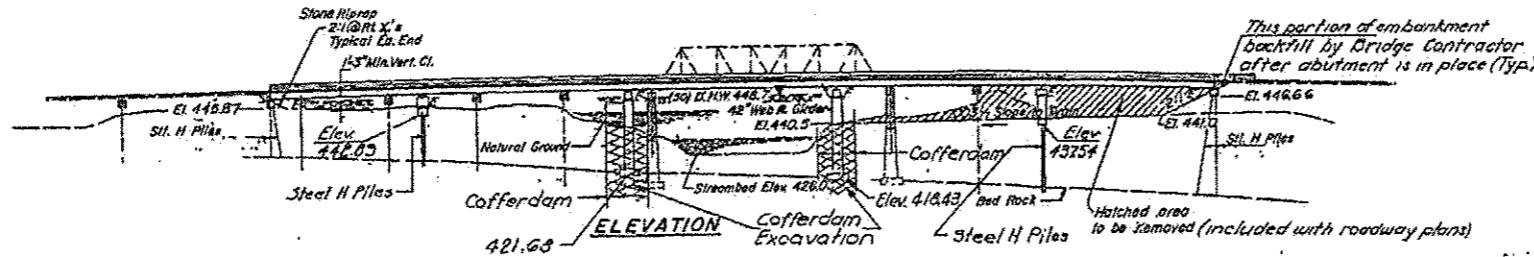
Existing Structure: 419' 1/2" long by 26'-8" c/c. to c/c. of Trusses wide, Built as S.B.I. Riv. 105, Sec. 109 B.C. at Sta. 2257+40.00 in 1934. The existing 7-WF Bm. simple spans and 1-Truss span shall be removed and a new 5-span continuous structure built. Traffic shall be maintained on a temporary bridge and runaround during construction.

No Salvage.

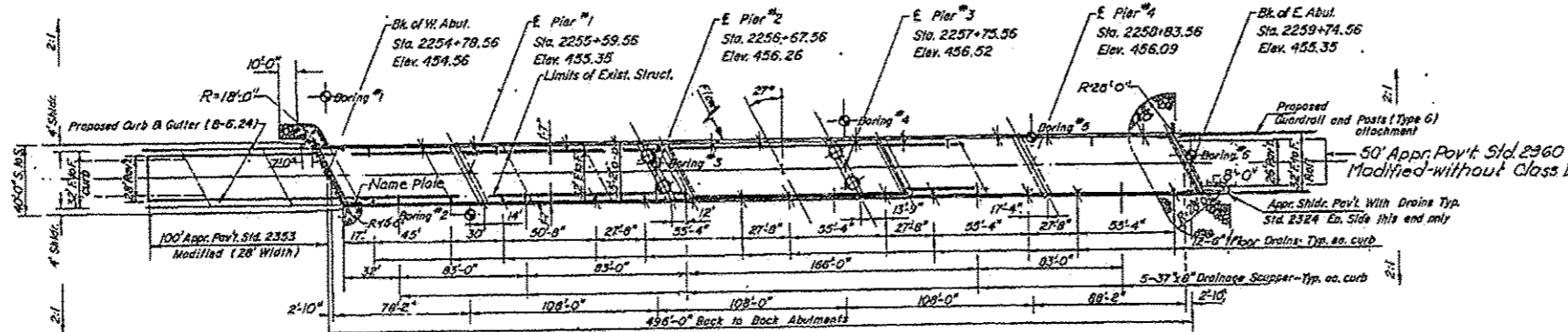
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104BR	PIKE	45	13	22

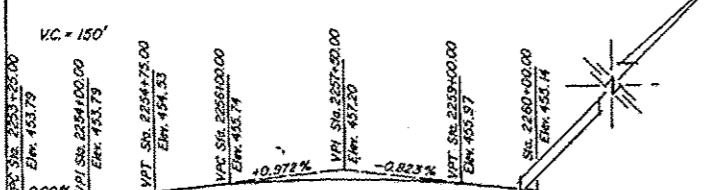
SHEET NO. 1
22 SHEETS



Note: Cofferdams required for Alternative A (Piers #2 & #3)



PLAN

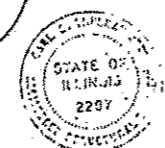


PROFILE GRADE
F.A.P. Riv. 742
(Along E. Roadway)

DESIGNED: *[Signature]*
CHECKED: *[Signature]*
DRAWN: *[Signature]*
CHECKED: *[Signature]*

EXAMINED: *[Signature]*
APPROVED: *[Signature]*

DATE: October 4, 1983



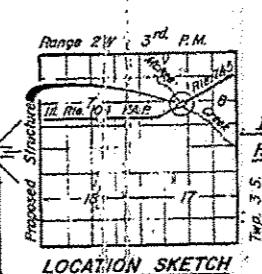
WATERWAY INFORMATION

Flood	Freq. Yr.	C.F.S.	Opening Sta. Ft.		Net H.W.E.	Head-Ft.		Headwater EL.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	18011	2795	3396	448.7	0.11	0.14	448.84	448.84
Base	100	20455	3057	3709	449.4	0.84	0.18	449.58	449.58
Overlapping									
Max. Calc.	500	26025	4303	430.9			0.29	451.19	451.19

*Excluding opening of overflow structure, 620 sq. ft. (below 1st low beam)

DESIGN STRESSES

FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (AASHTO M222) (Structural Steel)
LOADING HS 20-44
Design Specifications: AASHTO (1977) and applicable Interims (1978, thru 1982 Interim Specifications)
Allow 25' / sq. ft. for future wearing surface.

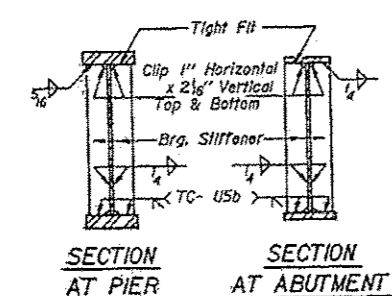
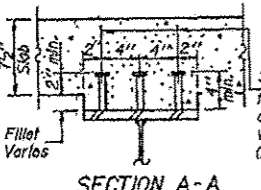
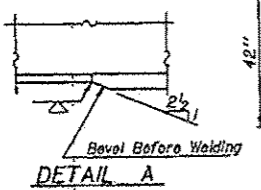
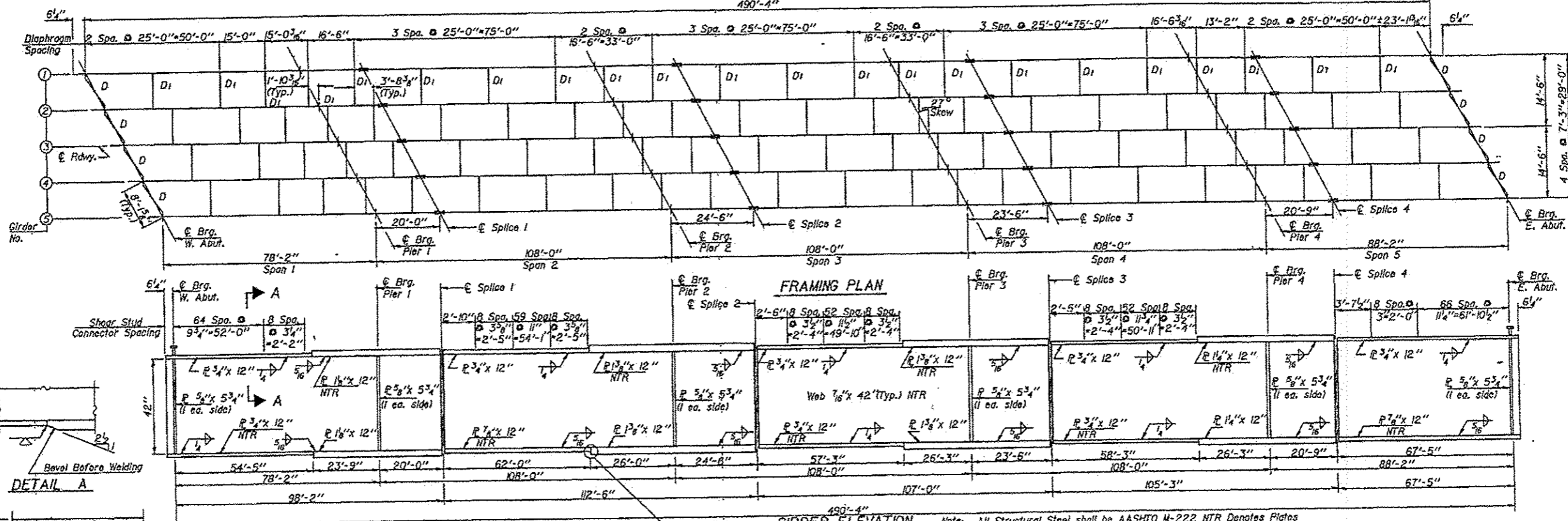


LOCATION SKETCH

GENERAL PLAN
Illinois Route 104 over McKee Creek
F.A.P. Riv. 745 SECTION 109 BR
PIKE COUNTY
Sta. 2257+40.00

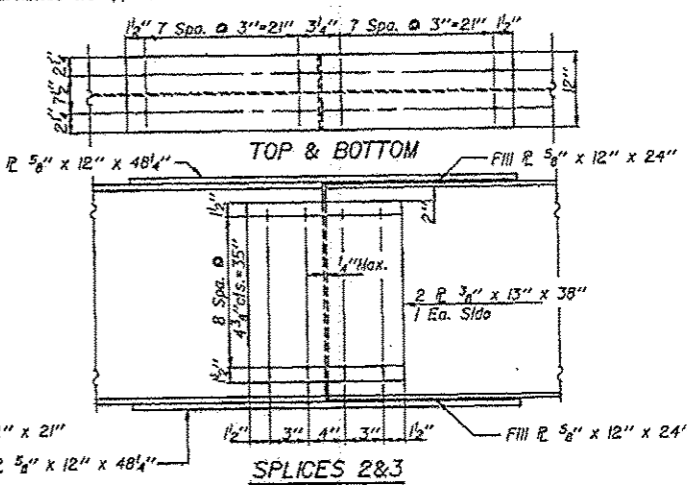
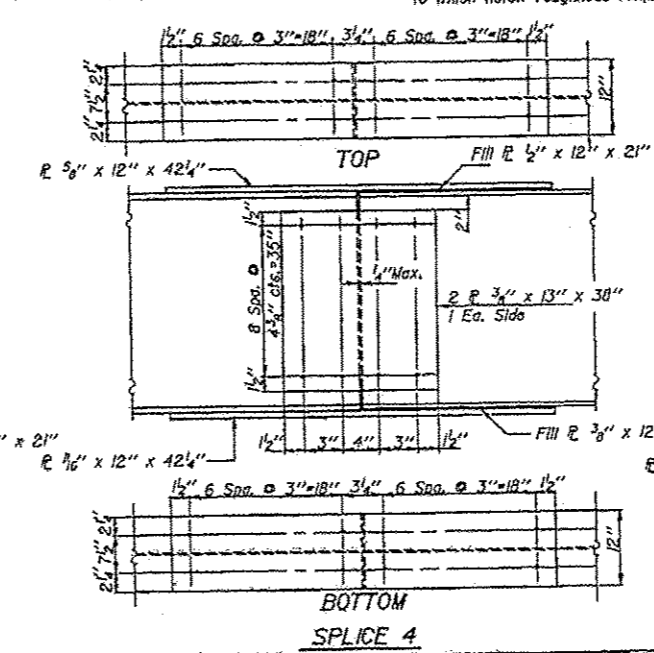
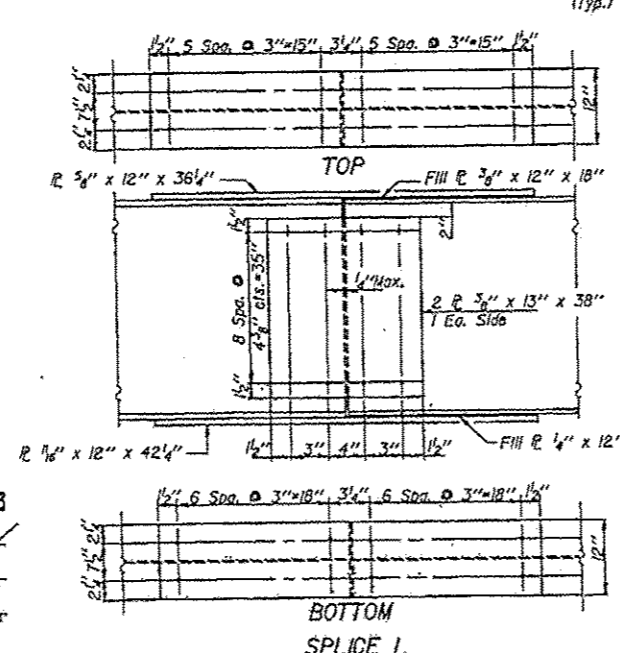
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
104BR	Pike	45	23	22 SHEETS



DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN	APPROVED
CHECKED	

OCT 4 1983
 [Signatures]

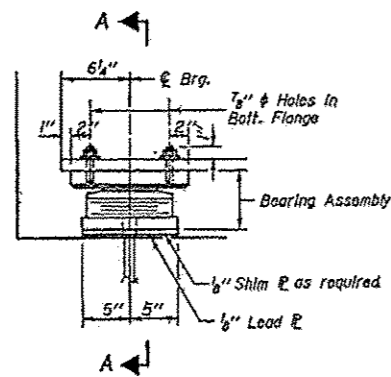


FRAMING PLAN AND GIRDER DETAILS
 F.A.P. RTE. 745 SECTION 109 BR
 PIKE COUNTY
 STA. 2257+40.00

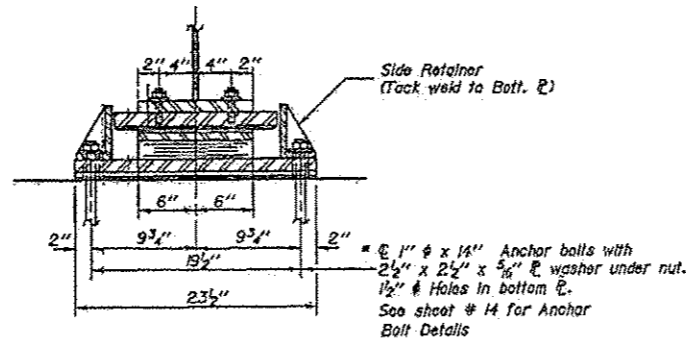
Note: For all Spllices use 7/8" H. S. Bolts throughout

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	DATE	SHEET NO.
745	109BR	Pike	45
TOTAL SHEETS			22

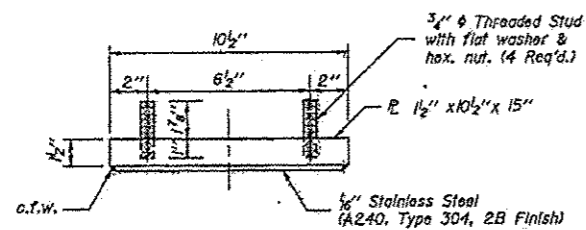


ELEVATION AT ABUTS

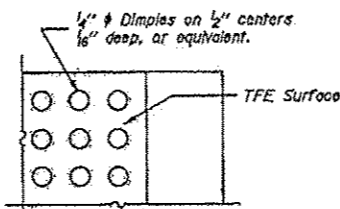


SECTION A-A

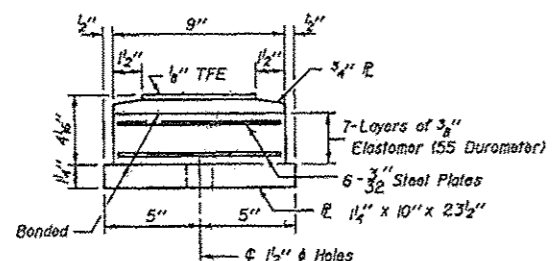
TYPE II TFE ELASTOMERIC EXP. BRG.



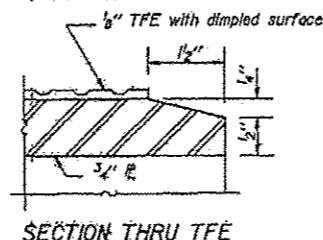
TOP BEARING ASSEMBLY



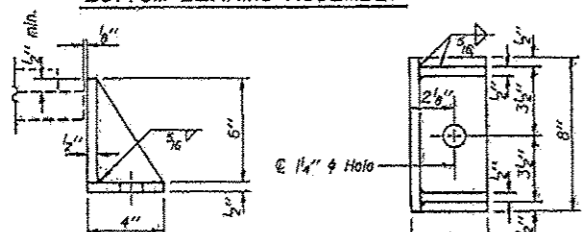
PLAN-TFE SURFACE



BOTTOM BEARING ASSEMBLY

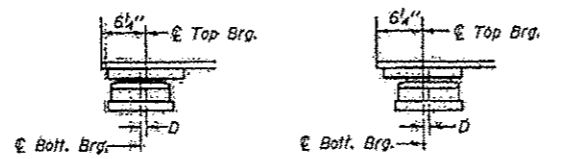


SECTION THRU TFE



SIDE RETAINER

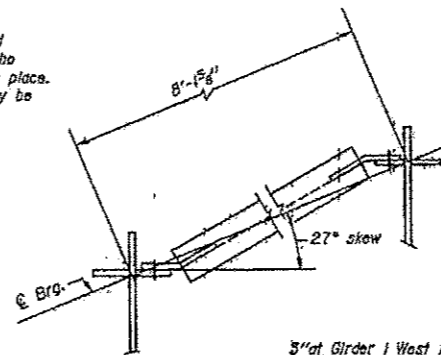
Note: The 1/2" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces. Bonding of 1/2" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SETTING ANCHOR BOLTS AT EXP. BRG.

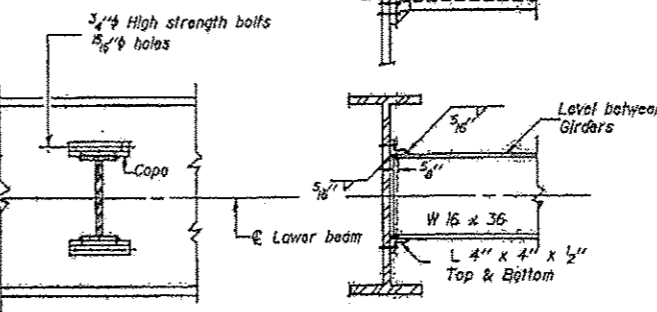
D=1/8" per each 100" of expansion for every 15" temp. change from the normal temp. of 50°F.

Note: After girders have been erected holes at expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry.



DIAPHRAGM D

8 Required



DIAPHRAGM D1

188 Required

INTERIOR GIRDER MOMENT TABLE

		4Sp.1	5Sp.2	5Sp.3	5Sp.4	6Sp.5				
Is	In ⁴	10926	15254	1611	18223	10926	18223	10926	16730	1611
Is	In ⁴	27956	-	30243	-	27956	-	27956	-	30243
Sc	In ³	502	689	553	814	502	814	502	752	553
Sc	In ³	713	-	779	-	713	-	713	-	779
W	K/ft	.868	1.192	.868	1.192	.868	1.192	.868	1.192	.868
M _D	K/ft	3.15	1043	389	1243	336	1202	349	1194	441
S _D	K/ft	.324	-	.324	-	.324	-	.324	-	.324
M _o	K/ft	142	-	205	-	179	-	191	-	193
M _u	K/ft	631	526	770	656	755	659	755	585	733
M _{max}	K/ft	156	121	165	141	162	142	162	132	172
S _y (M _u +I)	K/ft	132	1078	1558	1328	1528	1335	1528	1195	1508
M _o	K/ft	2300	2757	2798	3342	2656	3298	2688	3106	2785
W _u (M _u +I)	K/ft	7.5	18.2	8.4	10.3	8.0	17.7	8.3	19.1	9.6
W _o (M _o +I)	K/ft	2.4	-	3.2	-	3.0	-	3.2	-	3.0
S _y (M _u +I)	K/ft	22.1	18.8	24.0	19.6	25.7	19.7	25.7	19.1	23.2
S _o (M _o +I)	K/ft	32.0	37.0	35.6	37.9	36.7	37.4	37.2	38.2	36.8
S _{total}	K/ft	41.6	48.1	46.3	49.3	47.7	48.6	48.4	49.7	46.5
V _r	K/ft	46.5	-	48.8	-	48.8	-	48.7	-	56.6

W_u (Applied Moment) = 1.3 (M_u + I_u)
 I_s and S_y are the moment of inertia and section modulus of the steel section used in computing I_s (Total and Overload).
 I_o and S_o are the moment of inertia and section modulus of the composite section used in computing I_o (Total and Overload).
 V_r is the maximum V + Impact shear range in span.
 I_s (Total) is the sum of the stresses due to 1.3 (M_u + I_u)
 I_o (Overload) is the sum of the stresses due to M_o + I_o

INTERIOR GIRDER REACTION TABLE

	W _u Abut.	Pier 1	Pier 2	Pier 3	Pier 4	E. Abut.
R _o + S _o	33.2	122.4	131.0	128.4	130.4	39.0
R _u	40.8	63.1	68.5	68.3	65.7	34.5
R _o + R _u	10.0	14.5	14.7	14.7	14.8	8.1
R _{total}	84.0	200.0	214.2	211.4	210.9	81.6

TOP OF WEB ELEVATIONS

LOCATION	1	2	3	4	5
E Brg. W. Abut.	453.52	453.69	453.84	453.77	453.67
E Brg. Pier 1	454.19	454.35	454.50	454.42	454.33
E Splice 1	454.36	454.52	454.67	454.59	454.50
E Brg. Pier 2	455.03	455.19	455.31	455.22	455.11
E Splice 2	455.21	455.36	455.49	455.39	455.28
E Brg. Pier 3	455.33	455.46	455.57	455.45	455.32
E Splice 3	455.37	455.49	455.59	455.47	455.34
E Brg. Pier 4	454.96	455.06	455.15	455.01	454.86
E Splice 4	454.86	454.96	455.04	454.89	454.74
E Brg. E. Abut.	454.44	454.54	454.62	454.40	454.32

BEARINGS AND STRUCTURAL STEEL DETAILS
 F.A.P. RTE. 745 SECTION 109 BR
 PIKE COUNTY
 STA. 2257 + 40.00

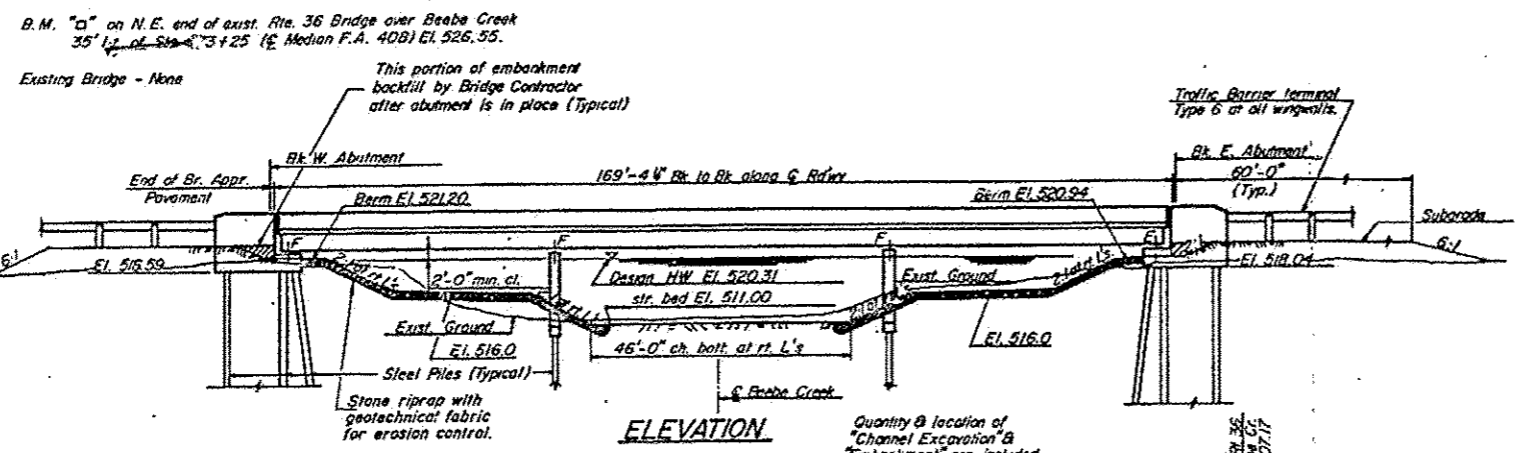
DESIGNED: *David Balin*
 CHECKED: *Kemp D. Carter*
 DRAWN: *F. Marocco*
 CHECKED: *KDC*

EXAMINED: *James J. Robinson*
 PASSED: *[Signature]*
 APPROVED: *[Signature]*

1-2-E2 1-1-79

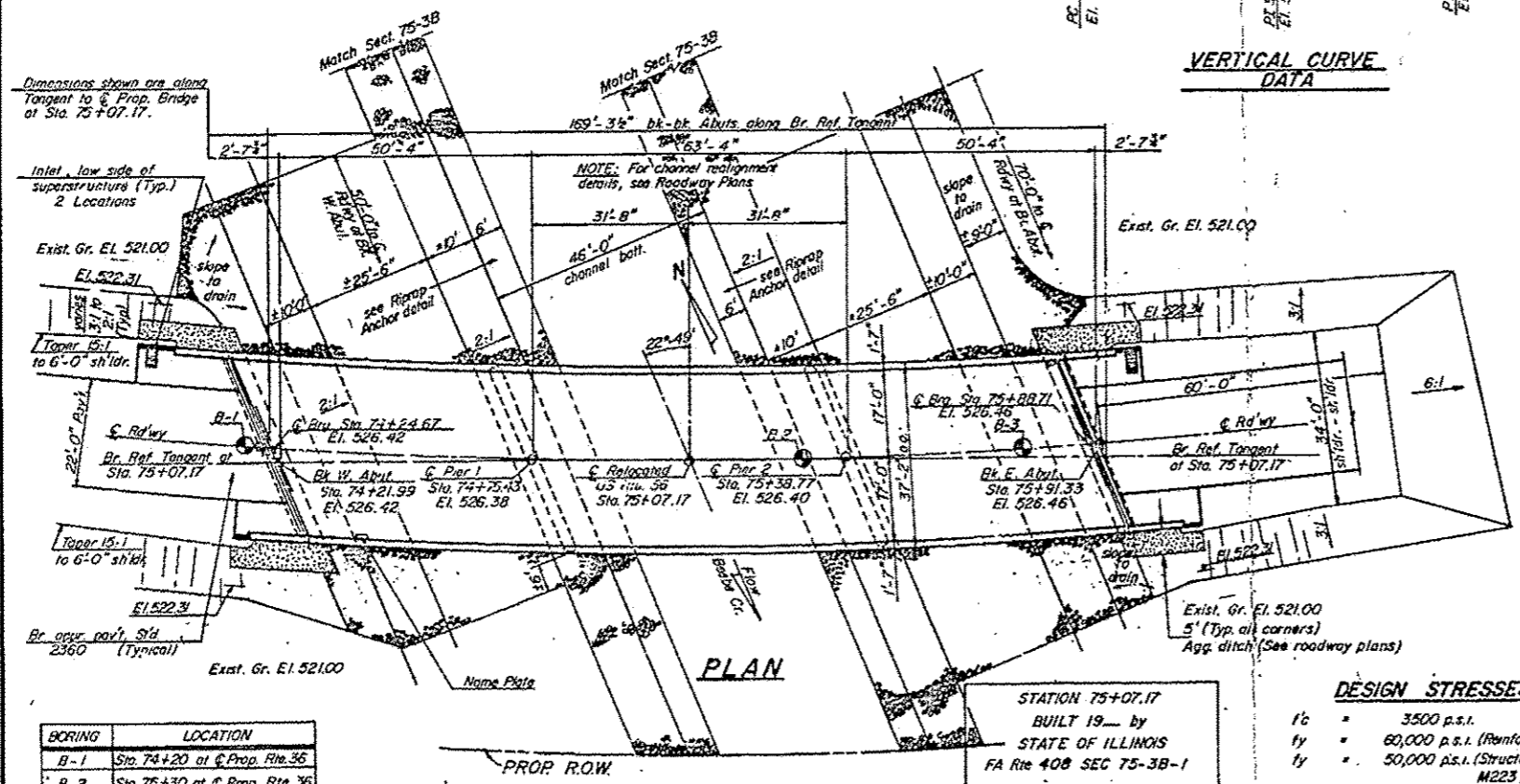
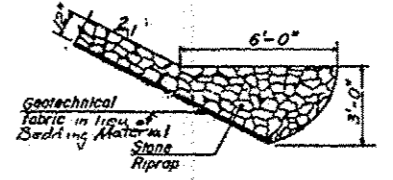
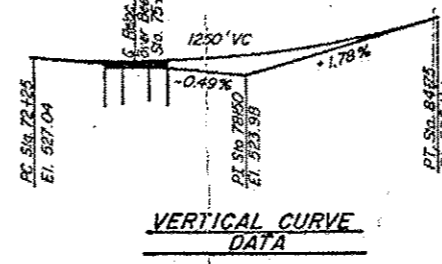
075-0102

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S. 36	75-3B-1	PIKE	79	19
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT		OF 13 SHEETS	



HORIZONTAL CURVE DATA RTE. 36

P.I. Sta. 78199.19	R = 3004.79'
Δ = 25°-04'-39"	L = 1316.15'
D = 1°-54'-25"	E = 73.42'
T = 668.28'	SE = 0.036%



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
Class X Concrete Superstructure	c.y.	187.8		187.8
Class X Concrete	c.y.		162.5	162.5
Reinforcement Bars	lb.		12,180	12,180
Reinforcement Bars (Epoxy Coated)	lb.	49,190		49,190
Furnish and Erect Structural Steel	lump sum	1		1
Floor Drains	ea.	10		10
Preformed Joint Seal (2 1/2")	lin. ft.	41		41
Preformed Joint Seal (4")	lin. ft.	40		40
Elastomeric Bearing Assembly, Type III	ea.	5		5
Steel Piles HP D x 42	lin. ft.		1,071	1,071
Test Piles Steel HP 10 x 42	ea.		2	2
Name Plates	ea.	1		1
Stone Riprap	sq. yd.		1,490	1,490
Protective Coat	sq. yd.			135
Structure Excavation	cu. yd.		54	54

BORING	LOCATION
B-1	Sta. 74+20 at Prop. Rte. 36
B-2	Sta. 75+30 at Prop. Rte. 36
B-3	Sta. 75+75 at Prop. Rte. 36

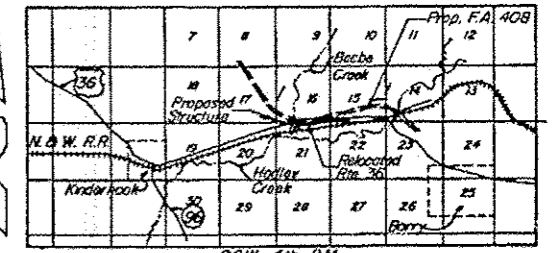
STATION 75+07.17
BUILT 19... by
STATE OF ILLINOIS
FA Rte 408 SEC 75-3B-1
LOADING HS-20
STR. NO. 075-0102

DESIGN STRESSES

f_c = 3500 p.s.i.
f_y = 60,000 p.s.i. (Reinforcement)
f_y = 50,000 p.s.i. (Structural AASHTO M223, Grade 50)
f_y = 36,000 p.s.i. (M183)

Loading HS-20-44
Design specification - 1983 AASHTO, 1984, & 1985
Interim & AASHTO 1990 Guide Specifications for horizontally curved highway bridges, 1981 & 1982 Interims
25% allowance for future wearing surface.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
James J. Reynolds

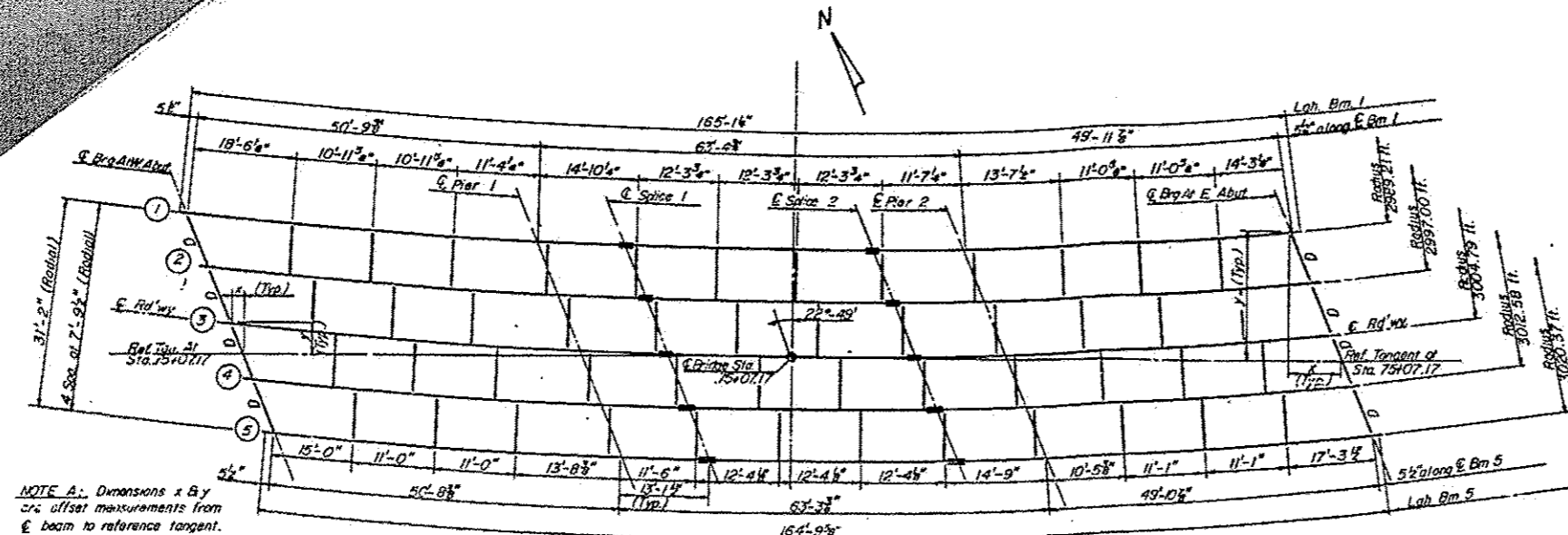


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
RELOCATED U.S. 36 OVER BEEBE CREEK
FA RTE 408 SEC 75-3B-1
PIKE COUNTY
STATION 75+07.17
GENERAL PLAN & ELEVATION

REVISIONS		
NO.	BY	DATE

SCALE: _____ JOB NO. _____
DATE: 12/1/84 SHEET 19 OF 79 SHEETS

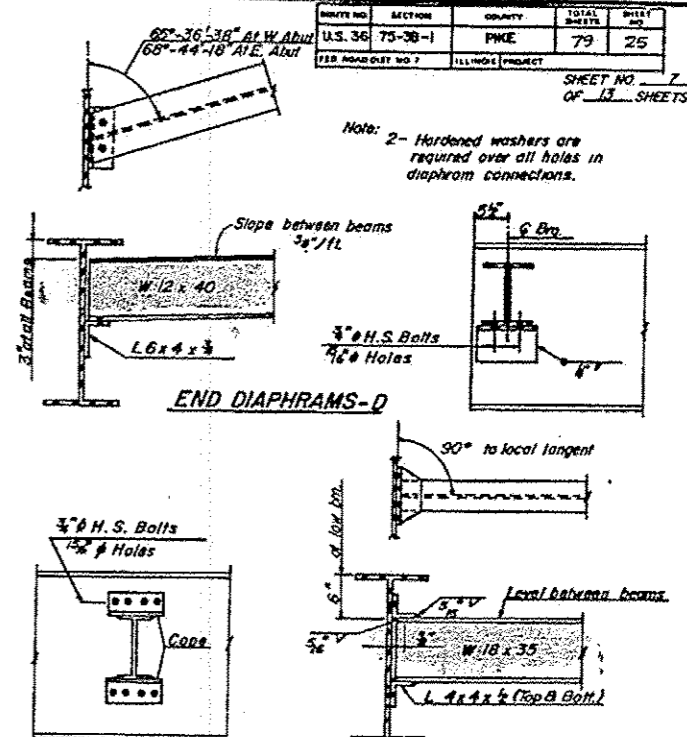
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S. 36	75-38-1	PIKE	79	25
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT	SHEET NO. 7 OF 13 SHEETS	



NOTE A: Dimensions x By are offset measurements from E beam to reference tangent.

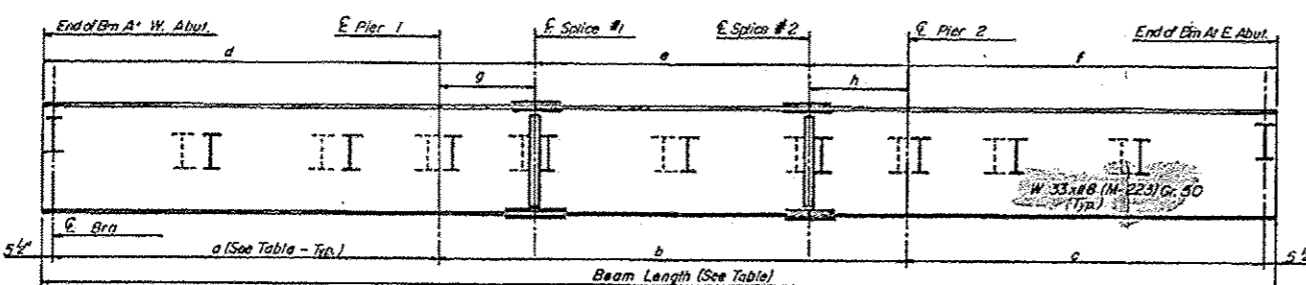
FRAMING PLAN

All structural steel fabricators performing work on the main load carrying components of steel structures shall be certified under Category I (AISC) of the Quality Certification Program.



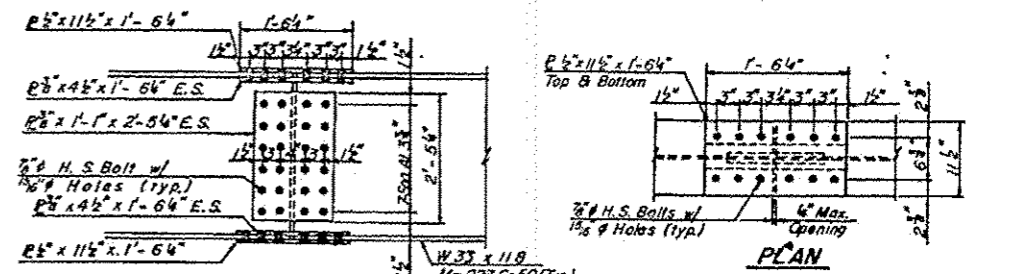
END DIAPHRAMS-D

INTERIOR DIAPHRAMS



BEAM ELEVATION
Interior Beams Illustrated

NOTE: 1. All beams W33 x 118 and splice plates shall be M-223 Gr. 50, B NTR.
2. NTR designates Notch Toughness Requirements



ELEVATION

SPLICE DETAILS
All material M-223 - Gr. 50, and NTR

Beam No.	Radius	Measured along E beam							Total Length
		a	b	c	d	e	f	g	
1	2989.21'	50'-9 3/8"	63'-4 1/2"	49'-11 3/8"	64'-4 1/2"	37'-1 1/2"	63'-6 3/4"	13'-1 1/2"	165'-1 1/2"
2	2997.00'	50'-9 3/8"	63'-4 1/2"	49'-11 3/8"	64'-4 1/2"	37'-1 1/2"	63'-6 3/4"	13'-1 1/2"	165'-0 1/2"
3	3004.79'	50'-9 3/8"	63'-4 1/2"	49'-11 3/8"	64'-4 1/2"	37'-1 1/2"	63'-6 3/4"	13'-1 1/2"	164'-11 3/8"
4	3012.58'	50'-8 3/8"	63'-3 3/4"	49'-11 3/8"	64'-3 3/4"	37'-0 3/4"	63'-6 3/4"	13'-1 1/2"	164'-10 3/8"
5	3020.37'	50'-8 3/8"	63'-3 3/4"	49'-10 3/8"	64'-3 3/4"	37'-0 3/8"	63'-5 3/4"	13'-1 1/2"	164'-9 3/8"

At E. Brq. W. Abut.	At E. Pier 1		At E. Splice #1		At E. Splice #2		At E. Pier 2		At E. Brq. E. Abut.	
	x	y	x	y	x	y	x	y	x	y
7'-1 1/2"	16'-11"	6'-7 3/8"	15'-10"	6'-7 3/8"	15'-8 1/2"	6'-6 3/4"	15'-7 1/2"	6'-7 3/8"	15'-8 1/2"	6'-11 3/8"
3'-9 1/2"	9'-0 1/2"	3'-4 3/8"	8'-0"	3'-3 3/8"	7'-10 1/2"	3'-3 3/8"	7'-10"	3'-4"	7'-11 1/2"	3'-8 3/8"
0'-5 1/2"	1'-1 1/2"	0'-0 3/8"	0'-2"	0'-0 3/8"	0'-0 3/8"	0'-0 3/8"	0'-0 3/8"	0'-2"	0'-5 3/8"	1'-1 1/2"
2'-10 3/8"	6'-9"	3'-2 3/8"	7'-7 3/8"	3'-3 3/8"	7'-9"	3'-3"	7'-8 3/8"	3'-2 3/8"	7'-7 3/8"	6'-7 3/8"
6'-1 1/2"	14'-7 3/8"	6'-6 3/8"	15'-5 3/8"	6'-6 3/8"	15'-6 3/8"	6'-6 3/8"	15'-5 3/8"	6'-5 3/8"	15'-4 3/8"	14'-3 3/8"

	Abuts.	Piers
RQ	(K) 23.4	79.4
R/L	(K) 39.8	49.0
Imp	(K) 11.3	13.5
R (Total)	(K) 74.5	141.9

	0.4 Sp1	Pier 1	0.5 Sp 2
Is	(in ⁴) 5900	5900	5900
Sx	(in ³) 359	359	359
Sly	(in ³) 16.3	16.3	16.3
Q	(K/ft) 1237	1237	1237
MQ	(K) 219.7	412.4	215.5
Mk	(K) 401.6	283.4	390.3
M (Imp)	(K) 114.1	77.6	103.7
Sy (Mk+I)	(K) 859.5	601.7	823.3
Mo	(K) 1402.9	1318.3	1350.4
fs	(k.s.i.) 7.3	13.8	7.2
fs (L+I)	(k.s.i.) 28.7	20.1	27.5
fw	(k.s.i.) 1.3	1.8	1.2
fs (Overload)	(k.s.i.) 36.0	33.9	34.7
fs Total	(k.s.i.) 46.8	44.1	45.1
fs+fw	(k.s.i.) 48.1	45.9	46.3

Location	Bm 1	Bm 2	Bm 3	Bm 4	Bm 5
E Brq. W. Abut.	525.12	525.40	525.67	525.95	526.23
E Pier 1	525.07	525.35	525.63	525.91	526.19
E Splice #1	525.07	525.35	525.63	525.91	526.19
E Splice #2	525.07	525.36	525.64	525.92	526.20
E Pier 2	525.08	525.36	525.65	525.93	526.21
E Brq. E. Abut.	525.14	525.42	525.71	526.00	526.28

Is and Sx are the moment inertia and section modulus of the steel section used in computing fs (Total B. Overload)
Mo (Applied Moment) = 1.3 CMQ + MsR + 3/4(Mk + T)J
fs (Overload) is the sum of the stresses due to MQ + MsR + 3/4(Mk + I)J
fs (Total) (Non-compact section) is the sum of the stresses due to 1.3 CMQ + MsR + 3/4(Mk + I)J
MR Moment due to dead loads

Mk - Moment due to live loads
I - Live load impact
Sx is the section modulus for one flange plate for lateral flange bending
fw is the calculated normal stress at the edge of flange due to lateral flange bending (factored)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIKE COUNTY
F.A. RTE. 408
SECTION 75-38-1
STATION 75+07.17

STRUCTURAL DETAILS

REVISIONS

DESIGNED BY: DLS
DRAWN BY: PLS
CHECKED BY:
APPROVED BY:

SCALE: _____ JOB NO. _____
DATE: 12/15/06 SHEET 25 OF 79 SHEETS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S. 36	75-3B-1	PIKE	79	26
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT			

SHEET NO. 26
OF 13 SHEETS

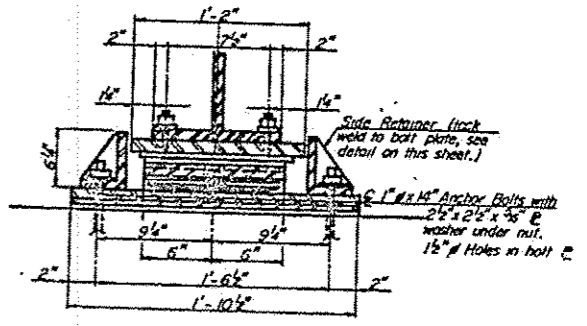
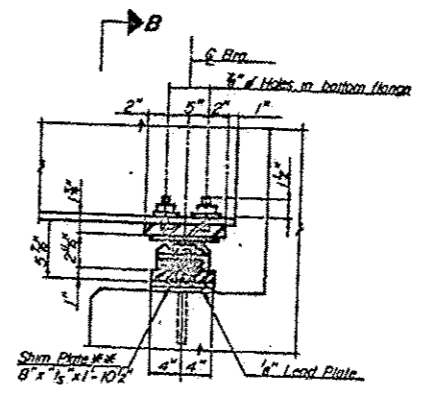
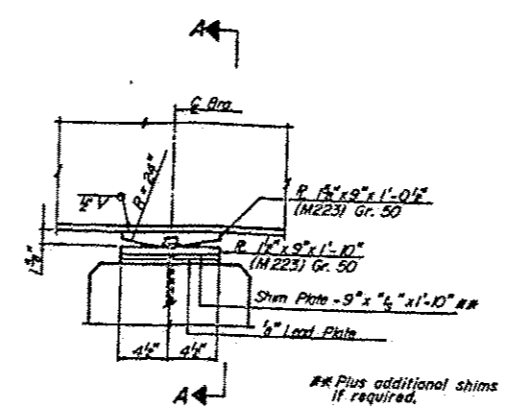
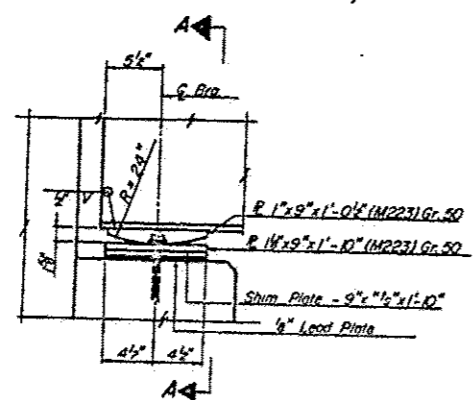
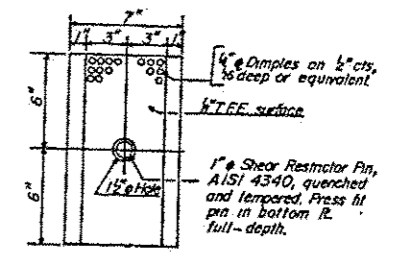
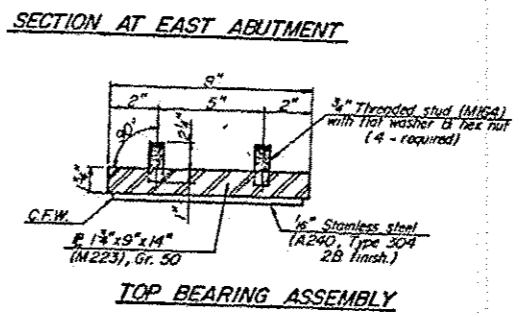
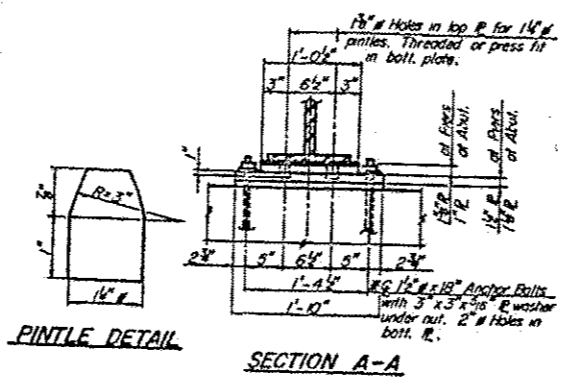
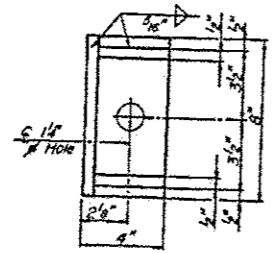
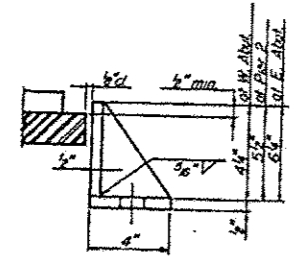


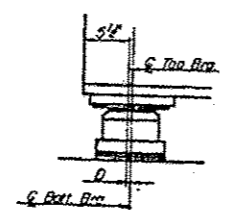
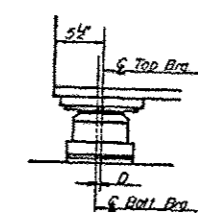
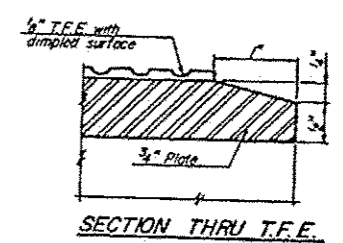
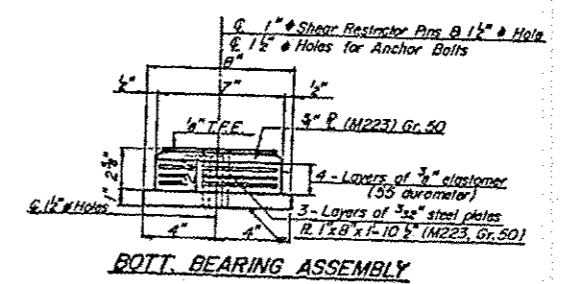
TABLE OF SHIM R DIMENSIONS "1/8"

	Brn. 1	Brn. 2	Brn. 3	Brn. 4	Brn. 5
at W. Abut. Brgs.	0	0	0	0	0
at Pier 2 Brgs.	0	0	0	0	0
at Pier 1 Brgs.	0	0	0	0	0
at E. Abut. Brgs.	0	0	0	0	0



NOTE: Equivalent rolled angle with stiffeners will be allowed in lieu of the welded plates.

FIXED BEARING DETAILS
* After beams have been erected, holes of expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts of fixed bearing at one of the piers may be built into the masonry.



SETTING ANCHOR BOLTS AT EXP. BRG.

Δ = 3/8" for every 15° temp. change from the normal temp. of 50°F.

- NOTES:
- The 1/2" T.F.E. sheet shall be bonded directly to top steel plate with a two (2) component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specifications MMM-A-134, Type 1. The bond agent shall be applied on the full area of the contact surfaces.
 - Bonding of the 1/2" T.F.E. sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the engineer.
 - Threaded studs shall be at right angles to surfaces of plates, typical all bearings.

TYPE III ELASTOMERIC EXP. BRG. AT E. ABUT.

NOTE: Work this sheet with sheets 7-8-9 of 13.

BILL OF MATERIAL

Item	Unit	Quantity
Elastomeric Brg. Assy. Type III	ea.	5

REVISIONS

NO.	BY	DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PIKE COUNTY
F.A. RTE. 408
SECTION 75-3B-1
STATION 75+07.17
BEARING DETAILS

SCALE: _____ JOB NO.: _____
DATE: 12/13/86

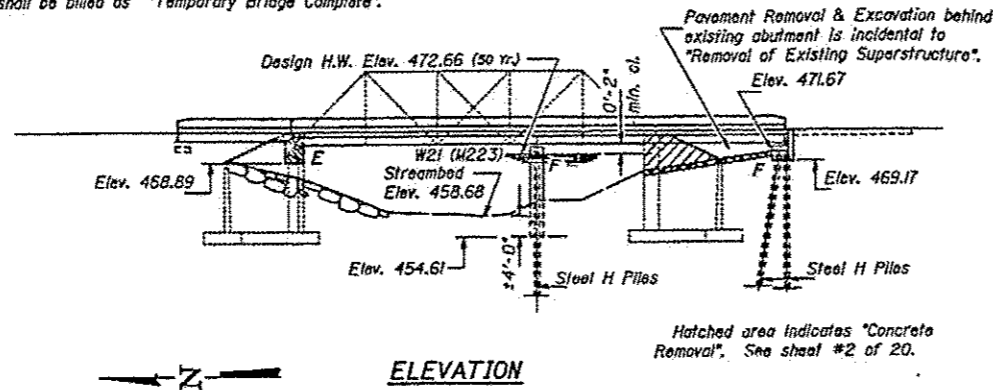
SANDOVAL ENGINEERS, INC.

Bench Mark: *U-245 Sta. 274+53.10 (15.5' S. tablet stamped "1-2" top of post end of north abutment of bridge, 15.6' Lt. Elev. 472.28)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	BY	NO.	REV.	SHEET NO.
10/25/15	SCOTT	32	10	20 SHEETS

Existing Structure: Sta. 274+90.00 S.D.I. Rte. 100, Section 116-C, Built in 1931, Structure Number *086-0006
Superstructure is a one span pony truss 75'-10" Bk. to Bk. abut. with a clear roadway width of 22'-6" and a 4'-0" sidewalk on closed abutments. The south abutment and superstructure are to be removed and replaced with a 2 span WF superstructure on pile bent pier and new south abutment. Existing north abut. will be reused. Stage construction shall be utilized, and the contractor shall provide for pedestrian traffic during all stages of construction. Contractors plans for temporary pedestrian structure shall be submitted to the district office for approval. Temporary pedestrian structure shall be billed as "Temporary Bridge Complete".
No Salvage.

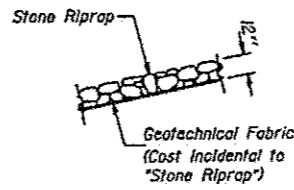
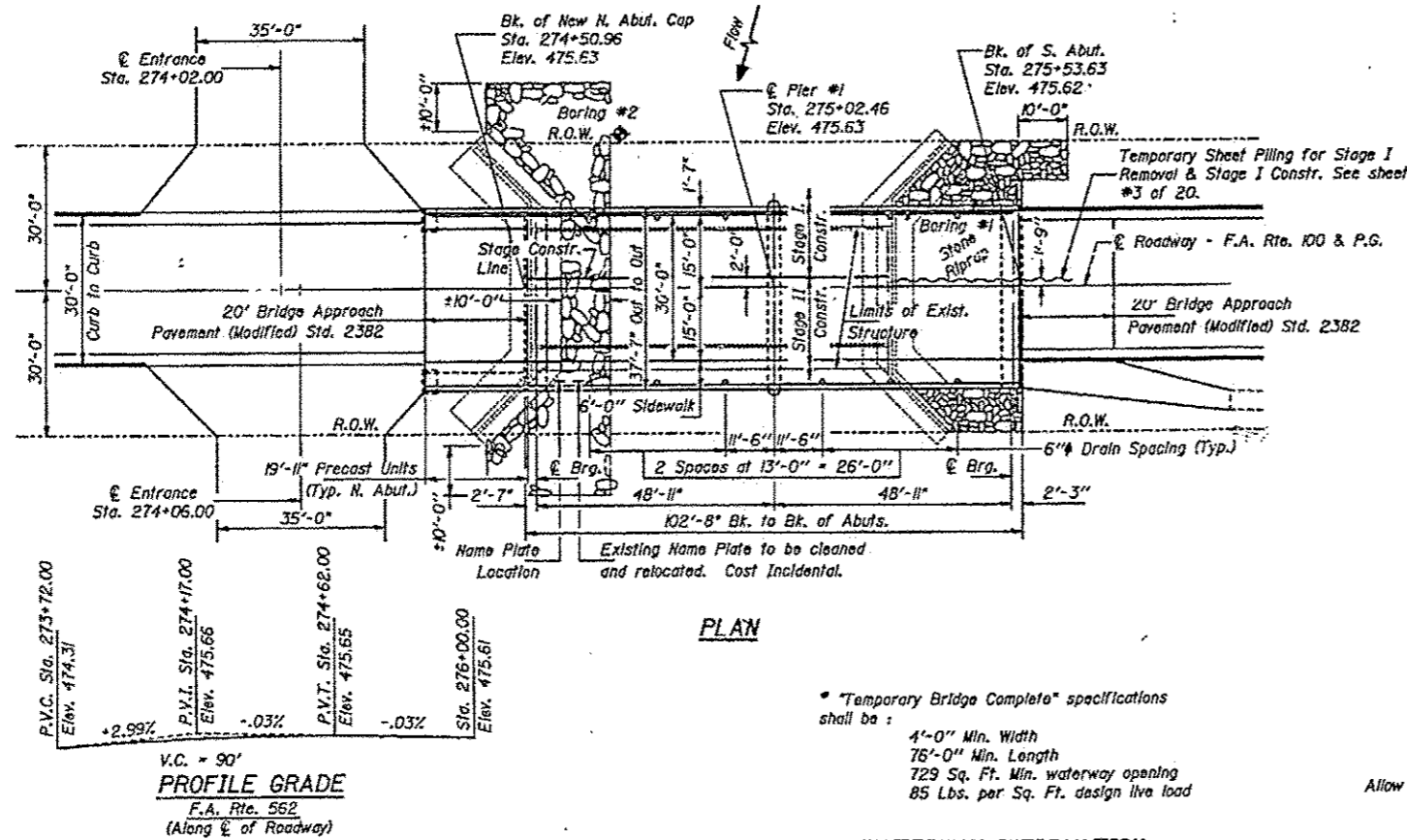


See Proposal for Boring Data.
Fasteners shall be high strength bolts. Bolt 7/8", open holes 5/8", unless otherwise noted.
All high strength bolt connections shall conform to the requirements of the latest issue of the "Specifications for Structural Joints Using ASTM A325 (M54) or A490 (M253) Bolts" for slip-critical connections. Except tightening methods using either the load indicating washers or the calibrated wrench are not allowed.
Calculated weight of Structural Steel: 12,910 Lbs. (AASHTO M183)
Calculated weight of Structural Steel: 58,640 Lbs. (AASHTO M223)
The Zinc-silicate and vinyl paint system shall be used for shop and field painting of Structural Steel except where otherwise noted.
Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier support. Field welding in other areas will be permitted only when approved by the Engineer.
Anchor bolts shall be set before bolting diaphragms over supports.
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beam (W21x83) and all splice plate material of the wide flange beams.
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.

GENERAL NOTES

Shoulder transition to wingwall shall be shaped with broken concrete. Cost incidental.
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,080 lbs., and 3/4" x 12" hooked bolts.
Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8" inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
The contractor shall drive one steel (HP10x42) test pile in a permanent location at the South Abutment as directed by the Engineer before ordering the remainder of piles.
For cantilever forming brackets see special provisions.

Note: The Contractor shall provide temporary timber shoring to protect the roadway at the North Abutment during Stage I and II Construction and at the new South Abutment during Stage II Construction. Cost is incidental to "Structure Excavation".

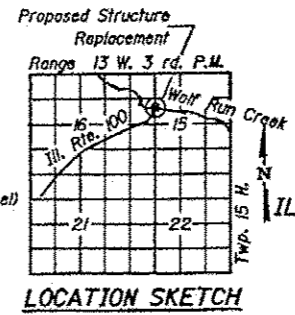


STATION 275+02.30
REBUILT BR BY
STATE OF ILLINOIS
F.A. RT. 562 SEC. 16BR-1
F.A. PROJ. BHF-562 (3)
LOADING HS20
STR. NO. 086-0006

NAME PLATE
See Std. 2113

DESIGN SPECIFICATIONS
AASHTO 1983, 1984 and 1985 Interims.
LOADING HS 20-44
Allow 25#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (AASHTO M223 Gr. 50) (Structural Steel)
fy = 36,000 psi (AASHTO M183) (Structural Steel)
PRECAST UNITS
f'c = 4,500 psi
ts = 20,000 psi (Reinf.)
fc = 1,800 psi



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Class X Concrete Superstructure	Cu. Yd.	133.0		133.0
Class X Concrete	Cu. Yd.		89.2	89.2
Floor Drains	Each	12		12
Reinforcement Bars (Epoxy Coated)	Lbs.	25,480		25,480
Reinforcement Bars	Lbs.	820	9,340	10,160
Steel Piles (HP10x42)	Lin. Ft.		793	793
Test Piles Steel (HP10x42)	Each		1	1
Guide Plates	Each	1		1
Stone Riprap	Tons		150	150
Structure Excavation	Cu. Yd.		124	124
Preformed Joint Seal (1 1/2")	Lin. Ft.	40		40
Preformed Joint Seal (4")	Lin. Ft.	40		40
Temporary Bridge Roll	Lin. Ft.	143		143
Protective Coat	Sq. Yd.	133		133
Structural Steel	L.S.			1
Temporary Support System	L.S.			1
Aluminum Rolling, Type I	Lin. Ft.	119		119
Elastomeric Bearing Assembly, Type II	Each	7		7
Expansion Bolts (3/4")	Each	30		30
Removal of Existing Superstructure	Each			1
Concrete Removal	Cu. Yd.		35	35
Precast Concrete Bridge Slab	Sq. Ft.		150	150
Stud Shear Connectors	Each	1,736		1,736
Furnishing Steel Pile (HP8x36)	Lin. Ft.		15	15
Epoxy Crack Sealing	Lin. Ft.		8	8
Temporary Sheet Piling	Sq. Ft.		936	936
Temporary Bridge Complete	Each			1

WATERWAY INFORMATION

Drainage Area = 9.57 sq. mi. Low Grade Elev. 472.42 @ Sta. 272+50.00

Flood	Freq. Yr.	C.F.S.	Q	Opening Sq. Ft.	Nat.	Hood - Ft.	Headwater El.
			Exlst.	Prop.	H.W.E.	Exlst.	Prop.
Design	50	410	729	741	472.66	0.38	473.04
Base	100	4730	729	741	473.39	0.44	473.83
Overtopping	35	3750	-	703	472.18	0.22	472.4
Max. Calc.	500	-	-	-	-	-	-

DESIGNED Vector Veliz
CHECKED Y Esmaili
DRAWN John F. Schneller Jr.
CHECKED V.V.

APPROVED [Signature]
DIRECTOR OF HIGHWAYS

PROFILE GRADE
F.A. Rte. 562
(Along E of Roadway)

GENERAL PLAN
ILL. ROUTE 100 OVER WOLF RUN CREEK
F.A. ROUTE 562 SECTION 116 BR-1
SCOTT COUNTY
STATION 275+02.30
STRUCTURE NUMBER 086-0006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

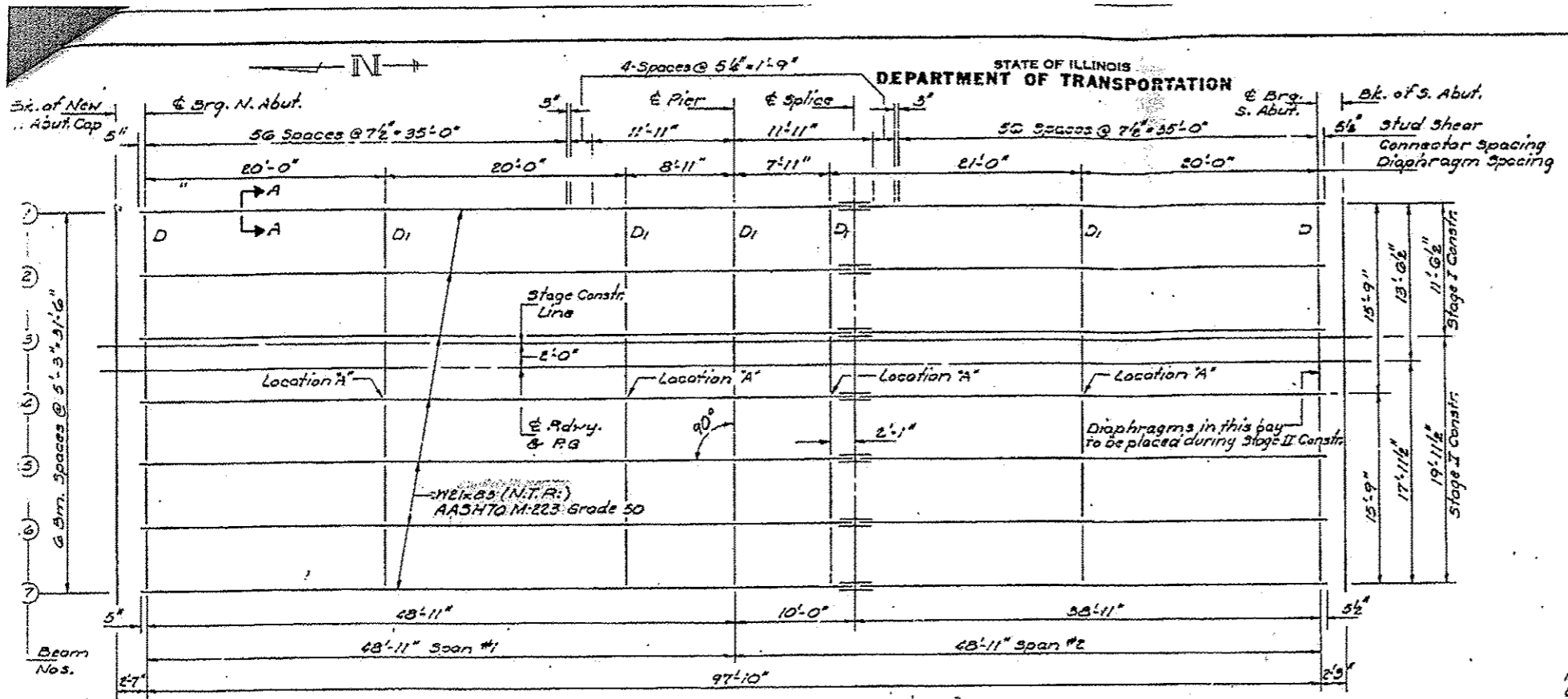
EXISTING PLANS SN 086-0006
(FOR INFORMATION ONLY)

FILE NAME	USER NAME	DESIGNED	REVISED	SCALE	SHEET	OF	SHEETS	STA.	TO	SCALE	SHEET	OF	SHEETS	STA.	TO	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
QAOPERATIONS\bridgeplans\2015\214	duleym	-	-	1/8" = 1'-0"	108	0006	1	108	214	1/8" = 1'-0"	108	0006	1	108	214	06	BDGE PAINTING 2015-1	VARIOUS	58	33

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
1168A	SCOTT	32	24

SHEET NO. 15
20 SHEETS



INTERIOR BEAM MOMENT TABLE

	At Sp. #1 or 6 Sp. #2	Pier
I_s (in ⁴)	1830	1830
I_c (in ⁴)	5799	
S_s (in ³)	171	171
S_c (in ³)	276.8	
R (K/I)	0.607	0.921
* M_R (K)	102	247.1
* M_S (K)	0.314	
* M_{sE} (K)	64.3	
* M_E (K)	250.1	117.6
* M_{imp} (K)	71.8	53.8
* $S_s(E+I)$ (K)	536.5	252.5
* M_s (K)	473.9	649.2
* I_s non-comp (K/s)	7.16	17.34
* I_s comp (K/s)	2.79	
* $S_s(E+I)$ (K/s)	29.24	17.71
* I_s (Overload) (K/s)	53.19	35.05
* I_s Total (K/s)	45.17	45.56
* V_R (K)	37.3	

INTERIOR BM REACTION TABLE

	Abut.	Pier
R_R (K)	17.6	55.2
R_E (K)	27.0	31.9
V_{imp} (K)	7.5	9.2
R_{Total} (K)	52.4	96.3

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing I_s (Total & Overload).

I_c and S_c are the moment of inertia and section modulus of the composite section used in computing I_s (Total & Overload).

V_R is the maximum Live Load + Impool shear range in span.

M_s (Applied Moment) = $1.5[M_R + M_S + 1/2(M_E + I)]$.

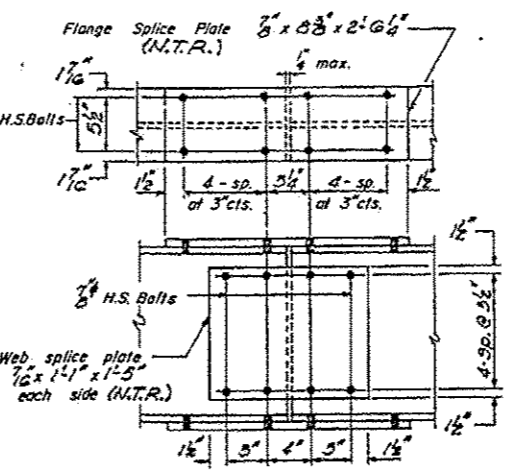
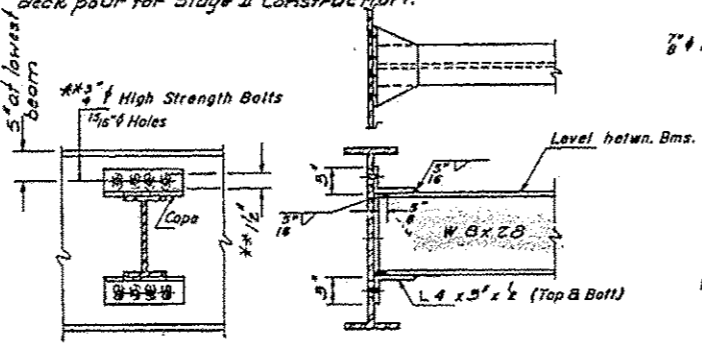
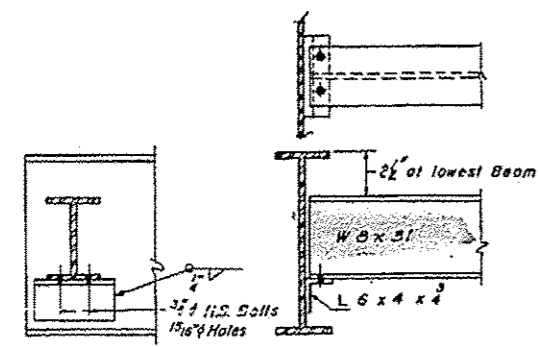
I_s (Overload) is the sum of the stresses due to $M_E + M_{sE} + 1/2(M_E + I)$.

I_s (Total) is the sum of the stresses due to $1.5[M_R + M_S + 1/2(M_E + I)]$.

* Service Load Values.

FRAMING PLAN
(N.T.R. denotes Notch Toughness Requirements)

**Use 1/2" x 1/2" slotted holes in Bm. #4, Location 'A' only. Provide 3/16" structural plate washers for slotted holes. Bolts shall be finger-tightened prior to the deck pour for Stage II Construction and then be fully tightened after completion of the deck pour for Stage II Construction.



TOP OF FLANGE ELEVATION

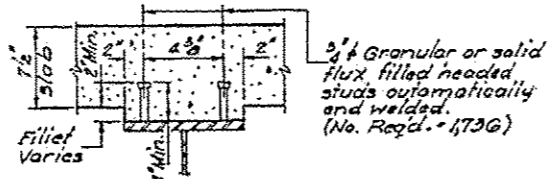
	#1	#2	#3	#4	#5	#6	#7
E Brg. N. Abut.	474.75	474.80	474.92	474.94	474.85	474.77	474.66
E Pier	474.65	474.74	474.85	474.86	474.76	474.67	474.56
E Splice	474.65	474.72	474.80	474.82	474.73	474.65	474.54
E Brg. S. Abut.	474.73	474.82	474.91	474.92	474.84	474.75	474.64

***For fabrication only

DESIGNED VECTOR VELER
CHECKED Y. Esmaili
DRAWN J. SCHNELLER
CHECKED V.V.

APRIL 2, 2014
EXAMINED
PASSED
APPROVED

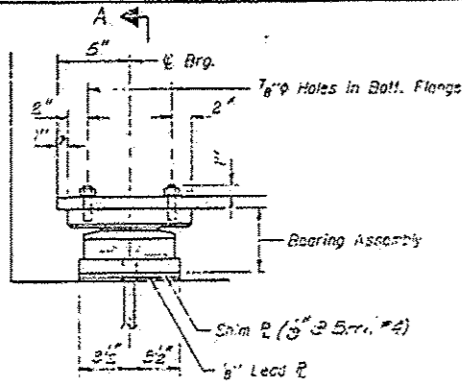
Note: Two hardened washers shall be required over all 1 1/2" holes. All structural steel shall be AASHTO M-183 except 1887 as noted.



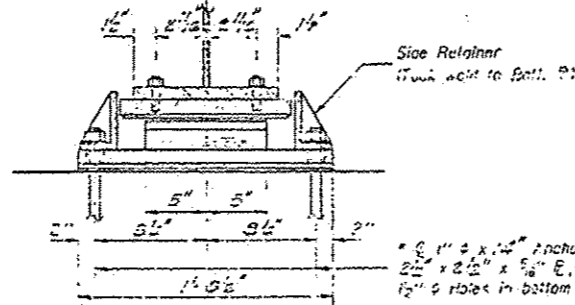
STRUCTURAL STEEL
E.A. RT. 562 SEC. 116BR-I
SCOTT COUNTY
STA. 275+02.30

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

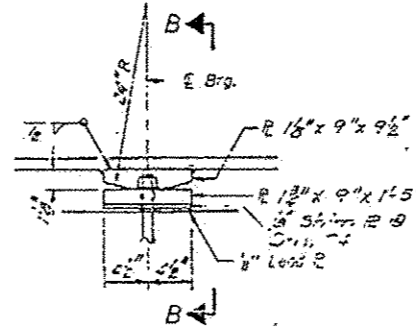
SHEET NO.	20	OF SHEETS	20
DATE	11/03/17	SCALE	AS SHOWN



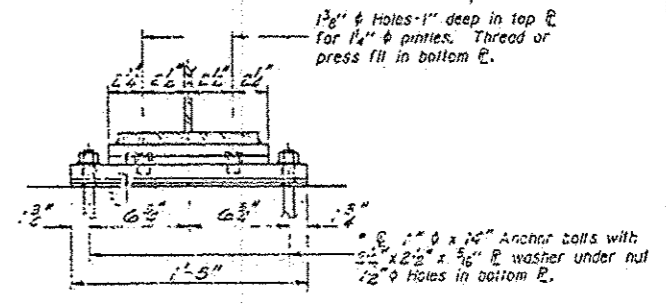
ELEVATION AT N. ABUT.



SECTION A-A

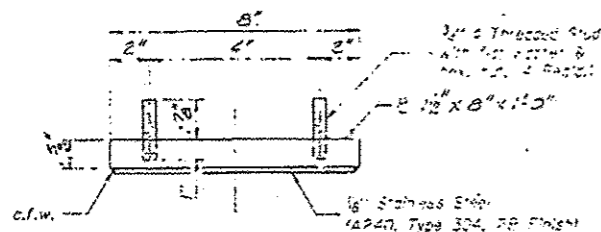


ELEVATION AT PIER

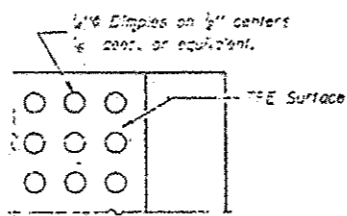


SECTION B-B

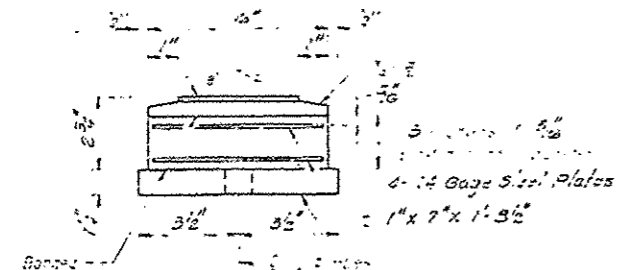
TYPE II TFE ELASTOMERIC EXP. BRG.



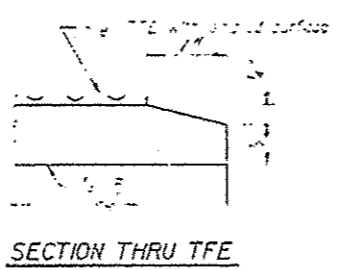
TOP BEARING ASSEMBLY



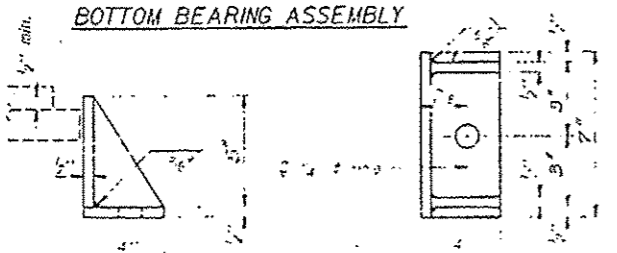
PLAN-TFE SURFACE



BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

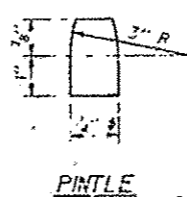


SIDE RETAINER

DESIGNED	VECTOR FELTZ	EXAMINED	April 2, 1967
CHECKED	Y. Esmaili	PASSED	Jan 17, 1968
DRAWN	G. SCHNEIDER	APPROVED	
CHECKED	J. J.		

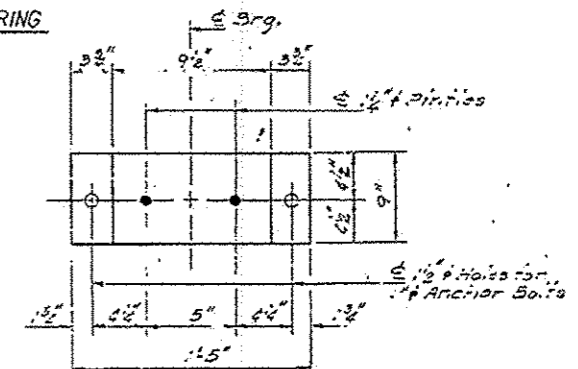
I-2-E2 12-1-63

* Notes: Anchor bolts of fixed bearings may be built into the masonry. See sheet #17 of 20 for Anchor Bolt Installation.

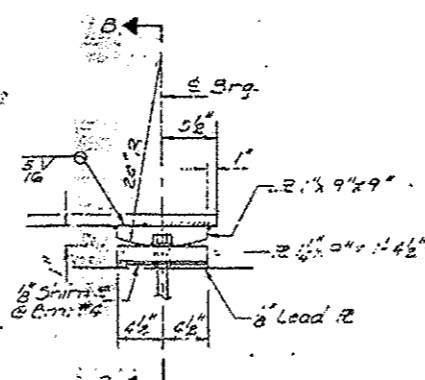


PINTLE

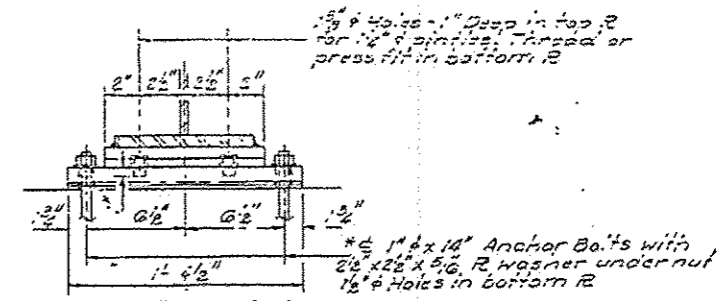
FIXED BEARING



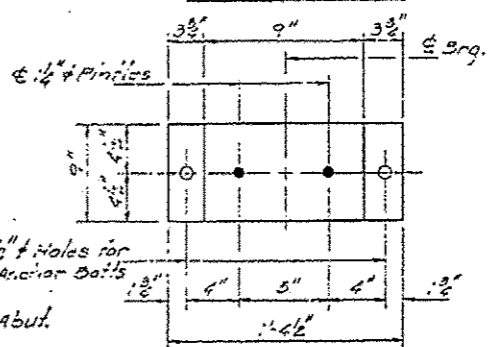
PLAN BOTTOM PLATE (At Pier)



ELEVATION AT S. ABUT.



SECTION 3-B



PLAN BOTTOM PLATE (At Abut.)

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	7

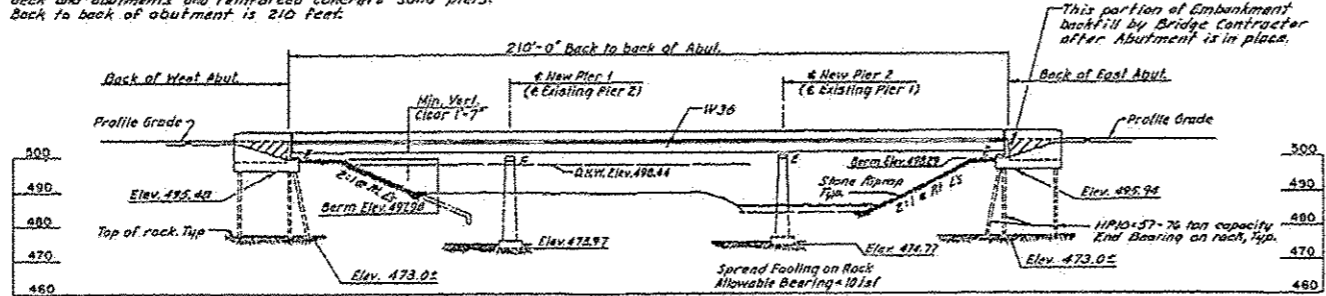
BEARING DETAILS
I.A. RT. 562 SEC. 1103R-1
SCOTT COUNTY
STA. 275+02.50

SETTING ANCHOR BOLTS AT EXP. BRG.

D=3/8" per each 100' of expansion for every 15° temp. change from the normal temp. at 50°F.

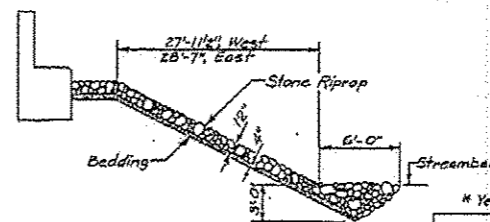
Existing Structure Data:

The existing structure, built in 1956, carries one lane of traffic in each direction over Hamilton Slough. It is a three span, continuous rolled beam bridge with reinforced concrete deck and abutments and reinforced concrete solid piers. Back to back of abutment is 210 feet.



ELEVATION

Note: Top of rock taken from 1/4 built drawings and 1982 borings.

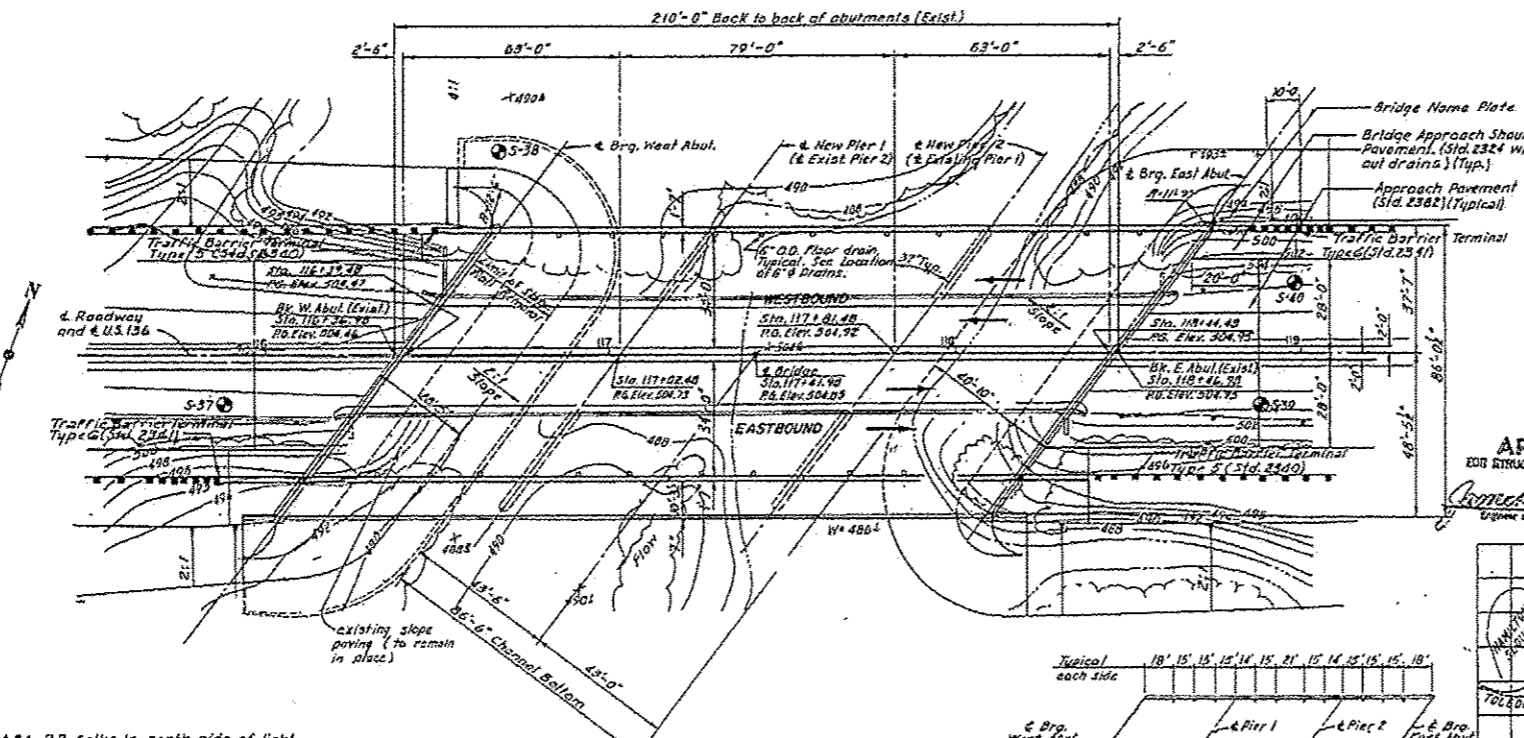


STONE RIPRAP DETAIL

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 53	23 BR	HANCOCK	57	14
FED. ROAD DIST. NO. 7	ILLINOIS	FEDERAL AID PROJECT NO.		OF 16 SHEETS

BRIDGE NAME PLATE
(5' x 2 1/2')

XX STR. NO. shall be provided by the Engineer.



PLAN

WATERWAY INFORMATION

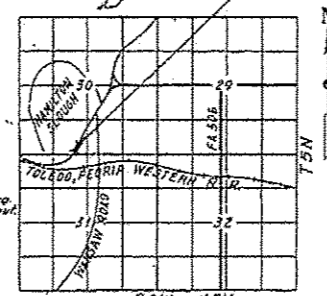
Drainage Area 10.26 sq. miles Low Grade Elev. 502.8 @ Sta. 110 + 30

Flood	Freq. Yr.	O. C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	50	4300	866	866	498.44	0	0	498.44	498.44
Base	100	5000	884	884	498.54	0	0	498.54	498.54
Overlapping (BOP Full)	5	2000	848	848	498.34	0	0	498.34	498.34
Max. Cata.	500	6550	902	902	498.64	0	0	498.64	498.64

Bank Full Design Flood = 2000 cfs

The structure is sized as an overflow structure for the Mississippi River. Total waterway opening under low beam is about 1130 ft². Due to the configuration of the upstream flood plain, overland flow to the Mississippi River occurs when the channel banks fill with a 5 year or greater flood. The flow conditions reported are based upon headwater conditions only. (When the Mississippi River is not in flood stage.)

APPROVED
ENGINEER'S SIGNATURE



LOCATION SKETCH

SIGNED: *Paul L. Heineman*
DATE: 11/28/84
PAUL L. HEINEMAN S.E., ILL. REG. NO. 81-317

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION

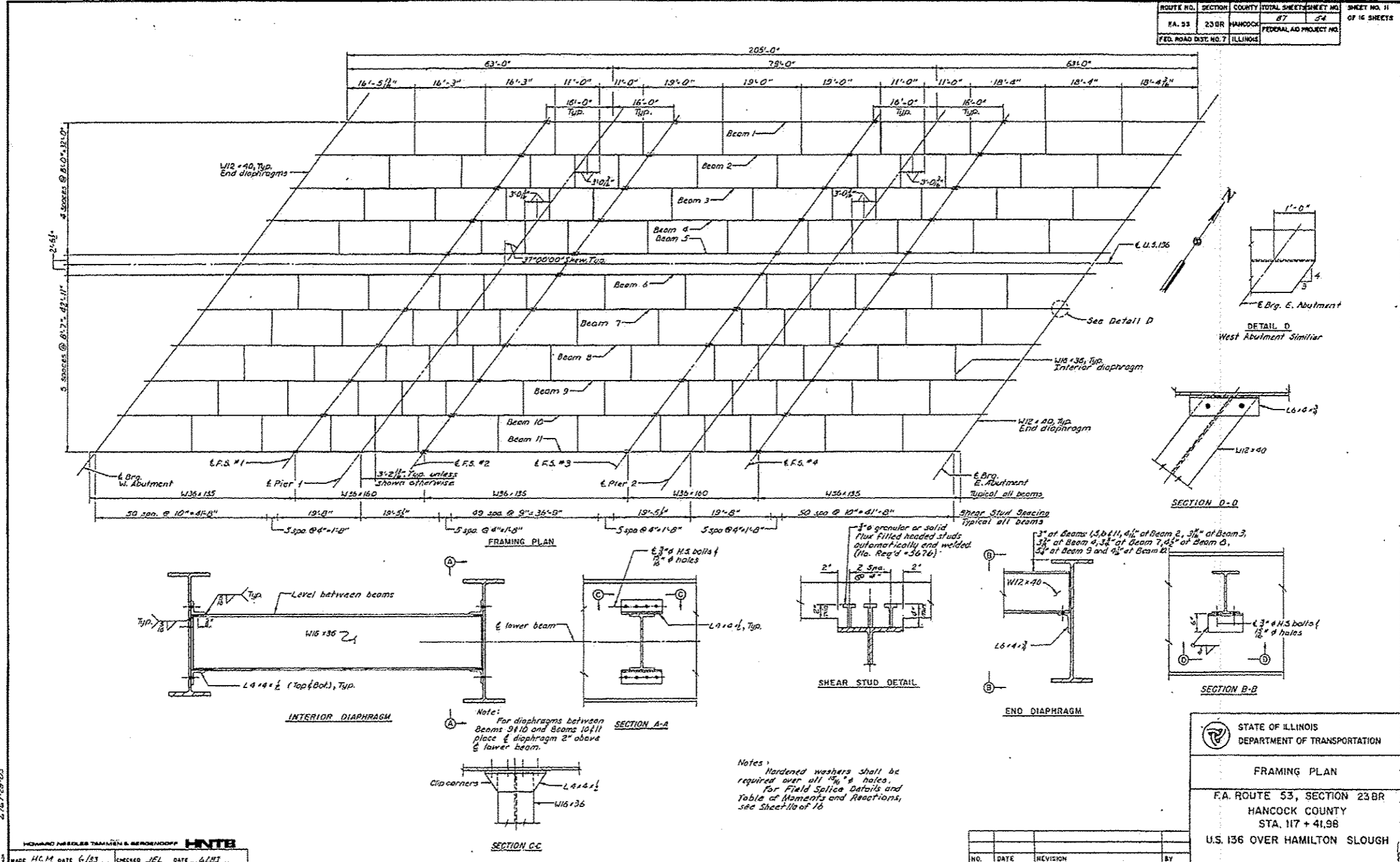
F.A. ROUTE 53, SECTION 23BR
HANCOCK COUNTY
STA. 117 + 41.98
U.S. 136 OVER HAMILTON SLOUGH

PBM #4 R.R. spike in north side of light pole in median at intersection of Rt. #136 and Warsaw Rd. Elev. 503.36.

PBM #3 chiseled 'D' in S.E. headwall of first bridge west of intersection of Warsaw Road and Rt. #136 Elev. 505.24.

HNTB
DATE 7-20-82 CHECKED D.L.M. DATE 6-15-83

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA. 53	23 BR	HANCOCK	87	54
FED. ROAD DIST. NO. 7 ILLINOIS			FEDERAL AID PROJECT NO.	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

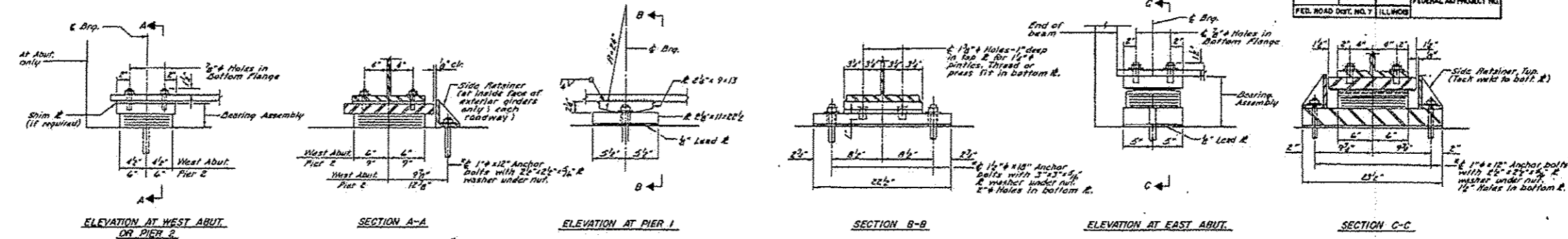
F.A. ROUTE 53, SECTION 23 BR
HANCOCK COUNTY
STA. 117 + 41.98
U.S. 136 OVER HAMILTON SLOUGH

NO.	DATE	REVISION	BY

HOWARD NEEDLES TAMMEN & BERENSON
HNTB
MADE H.C.M. DATE 6/83 CHECKED J.E.L. DATE 4/87

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS SN 034-0001 (FOR INFORMATION ONLY)	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
OPERATIONS\Bridges\plans\CAD\72H37 - beam end point FY15 CH\plans\heat.dgn	DRAWN -	REVISED -	VAR. 06			BDGE PAINTING 2015-1	VARIOUS	56	37	
PLOT SCALE = 1/8" = 1'-0" / in.	CHECKED -	REVISED -	CONTRACT NO. 72H37							
PLOT DATE = Aug-28-2014 01:43:29PM	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							

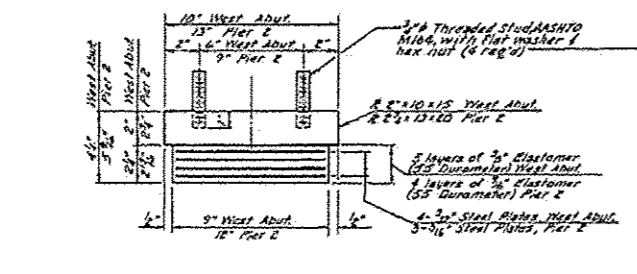
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA. 53	23 BR	HANCOCK	87	50
FED. ROAD DIST. NO. 7 ILLINOIS			FEDERAL AID PROJECT NO.	



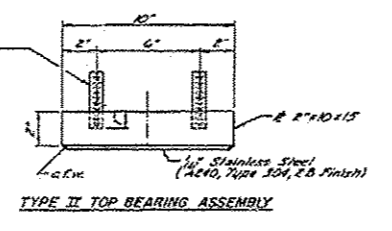
TYPE I ELASTOMERIC EXP. BRG.
(West Abut. and Pier 2)

FIXED BEARING
(Pier 1)

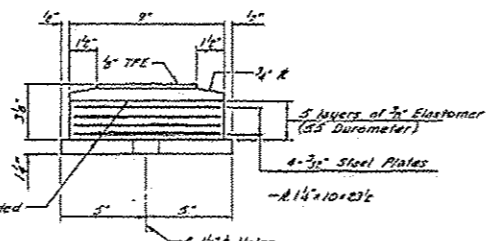
TYPE II TFE ELASTOMERIC EXP. BRG.
(East Abut.)



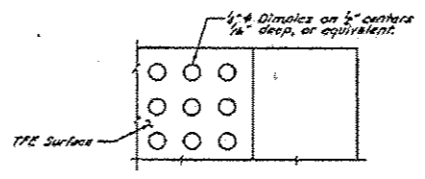
TYPE I BEARING ASSEMBLY
Note: Shim plates shall not be placed under Bearing Assembly



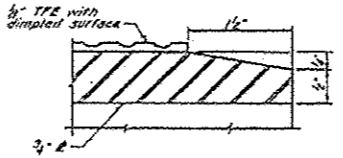
TYPE II TOP BEARING ASSEMBLY



TYPE II BOTTOM BEARING ASSEMBLY

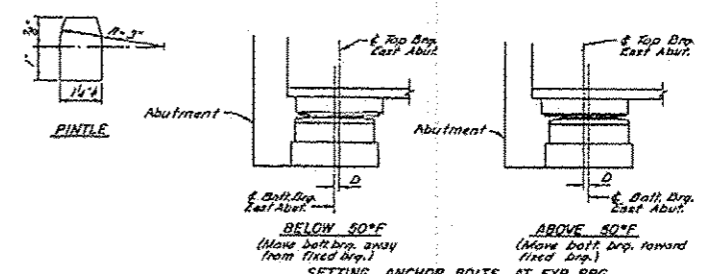


PLAN-TFE SURFACE



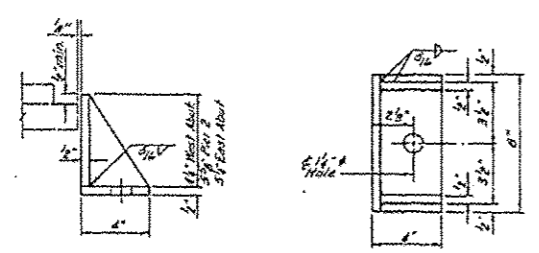
SECTION THRU TFE

Note: The 1/2 TFE sheet shall be bonded directly to the top steel plate with a two component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MS-144-1, Type I. The bond agent shall be applied on the full area of the contact surfaces.
Bonding of 1/2 TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SETTING ANCHOR BOLTS AT EXP. BRG.
D = 5" per each 100' of expansion for every 15" temp. change from the normal temp. of 50° F.

Notes: Bearings at Pier 1 shall be included in Structural Steel bid item. See Sheet 5 for anchor bolt details.



SIDE RETAINER

4 req'd West Abut.
22 req'd East Abut.
4 req'd Pier 2

STEEL FILL PLATE AT EXISTING PIER

	BEAM 4	BEAM 5	BEAM 6	BEAM 7
PIER 1	1 1/2"	3"	2"	---

** Thickness shown

BILL OF MATERIALS

Items	UNITS	TOTAL
Elastomeric Bearing Assembly TYPE I	Each	22
Elastomeric Bearing Assembly TYPE II	Each	11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DEVICES

F.A. ROUTE 53, SECTION 23 BR
HANCOCK COUNTY
STA. 117 + 41.98

U.S. 136 OVER HAMILTON SLOUGH

MADE JCL DATE 5/83 CHECKED DLM DATE 6/83

D.M. of Child's in Hubbard, SW Corner of Bridge, Rt. Sta. 975+21 El. 525.49
 Existing Structure: No. 034-0023 Built as SB1 Rte. 96
 Sec. 120 B-WPH of Sta. 974+37. Built in 1935.
 The existing R.C. structure is to be removed by
 stage construction, replaced with WEI on pile bent
 abut. Traffic shall be maintained during constr.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

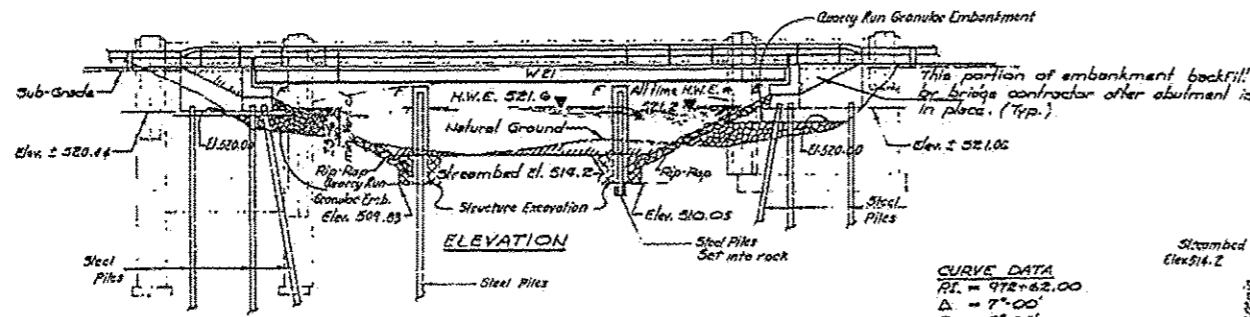
PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
120 BR-4	Hancock 25	12	11 SHEETS

GENERAL NOTES

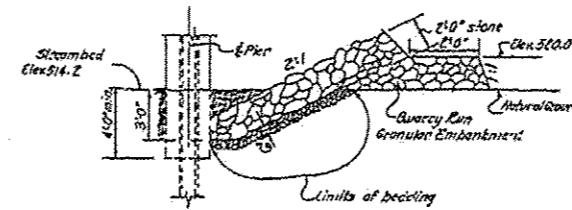
See Proposal for Boring Data.
 Fasteners shall be high strength bolts. Bolts 3/4", cover holes 1/8",
 unless otherwise noted. H 222 - 31390 Finish
 Calculated weight of Structural Steel = 185,170 Pounds
 All structural steel shall be AASHTO H 222 unpainted except
 expansion joint angles and attached base which shall be AASHTO H 163
 and shop primed with two coats of basic red silico chromate paint.
 Field welding of construction necessities will not be permitted to the
 bottom flange of beams or girders nor to the top flange for a distance equal
 to one-fourth the span length each way from the pier supports. Field welding
 in other areas will be permitted only when approved by the Engineer.
 Anchor bolts shall be set before bolting diaphragms over supports.

The concrete curb section above the mandatory construction joint
 at the top of the slab shall be constructed of Class A concrete, except
 the aggregate shall conform to the requirements of Handbook Concrete.
 Bearing and surfaces shall be constructed or adjusted to the
 designated elevations within a tolerance of 1/8". Adjustment shall be
 made either by grinding the surface or by shimming the bearing. No
 adjusting shims of the dimensions of the bottom bearing plate shall be
 provided for each bearing in addition to all other plates or shims.
 The Contractor shall drive two steel test piles in approximate location
 one test pile NP8-36 and one test pile NP8-36. About as directed by
 the Engineer. Before accepting the contractor's plan
 layout of rip-rap may be varied in the field to suit ground
 conditions as directed by the Engineer.
 The main load carrying members comprising subject to traffic
 stress shall conform to the Specifications Requirements for AASHTO
 Roughness Zone C. These components are the tension floor plates, ribs
 and all spine plate material of the steel deck floor beams.

Reinforcement bars shall conform to the requirements of
 AASHTO 10-51 Grade 60.

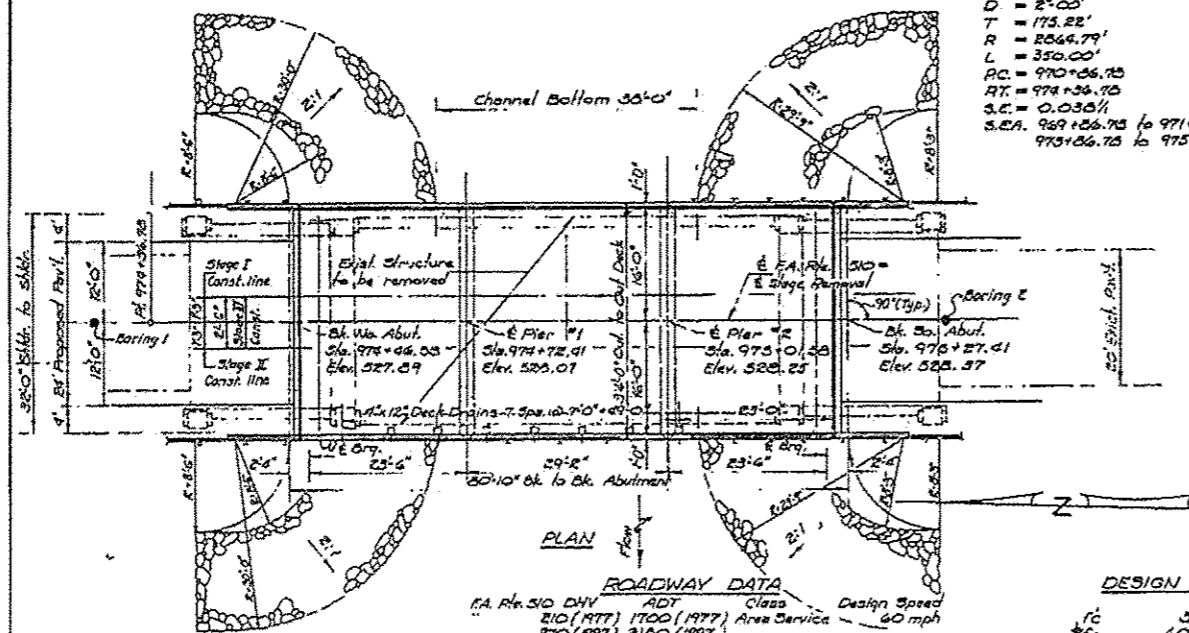


CURVE DATA
 RT = 974+82.00
 Δ = 7°00'
 D = 2°00'
 T = 175.22'
 R = 2044.77'
 L = 350.00'
 PC = 970+06.75
 PT = 974+36.75
 SC = 0.035%
 S.C.A. 967+26.75 to 971+06.75
 973+26.75 to 975+26.75



SKETCH OF RIP-RAP

- 1) Quarry Run Granular Embankment is to be used as fill material up to an elevation of 520.00
- 2) Built 6" bedding material in these areas where Quarry Run Granular Embankment is placed.



STATION 974+87
 BUILT 197 BY
 STATE OF ILLINOIS
 R.A. RT 510, SEC. 120 BR-4
 PROJECT 034-0023
 LOADING HS 20
 STRONG

NAME PLATE

(See Std. 215)
 ** Structure Number to be supplied by District.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Cast-in-place	Each	2	2	
Structure Excavation	Cu.Yd.	63	63	
Removal of Existing Structure	Each		1	
Protective Coat	Sq.Yd.	312	312	
Structural Steel	L.S.		1.5	
Class A Concrete	Cu.Yd.	71.3	324	395.3
Reinforcement Bars	Pounds	270	1000	1270
Reinforcement Bars (Epoxy coated)	Pounds	11230		11230
Steel Piles NP8-36	Lin.Ft.	246	246	
Steel Piles NP8-36	Lin.Ft.	553	553	
Test Pile Steel NP8-36	Each	2	2	
Name Plates	Each		1	
Stone Riprap	Sq.Yd.	593	593	
Temporary Bridge Roll	Lin.Ft.	100	100	
Set Pile in Rock	Each	6	6	
Preformed Joint Sealer, 2 1/2"	Lin.Ft.	36	36	
Steel Rolling, Type T	Lin.Ft.	110	110	
Aluminum Concrete Surface Course, Class I	Sq.Yd.	151	151	
Floor Drains	Each	8	8	

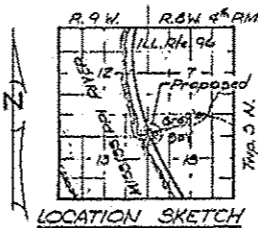
PROFILE GRADE FA. Rte. 510
 +1.012%
 200' W.C.
 +0.1400%

DESIGN STRESSES

f_c 3,500 psi
 f_y 40,000 psi (Reinf.)
 30,000 psi (Struct.)
 Epoxy coated Reinf. Bars shall be used in the top layer of the slab.

LOADING HS 20-44

Allow 25% eq. fl. future wearing surface.
 Design Specification: 1977 AASHTO,
 1978 Interim Specifications.



GENERAL PLAN & ELEVATION
 FA. Rte. 510 Over GRAY'S BAY
 FA. Rte. 510 SECTION 120 BR-4
 HANCOCK COUNTY
 Sta. 974+87.00

DESIGNED	Michael K. T. L.
CHECKED	Michael K. T. L.
DRAWN	Michael K. T. L.
CHECKED	Michael K. T. L.

EXAMINED	October 12, 1978
PASSED	
APPROVED	

ROADWAY DATA

FA. Rte. 510 DNY	ADT	Class	Design Speed
210 (1977)	1700 (1977)	Area Service	40 mph
270 (1997)	2120 (1997)		

WATERWAY INFORMATION

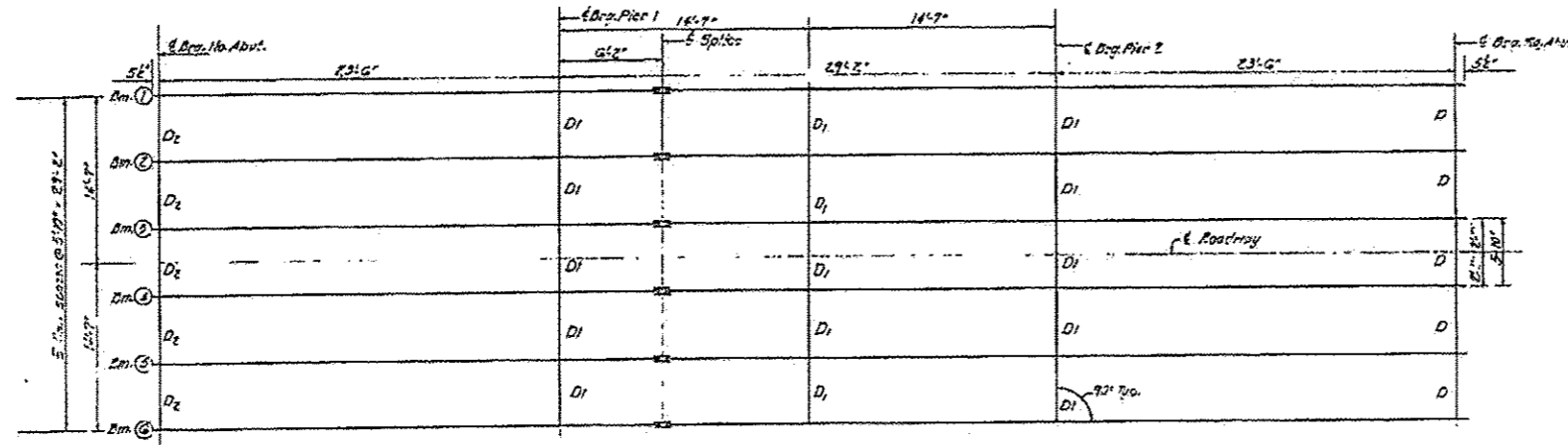
Opening	Area
Existing Opening	320 sq. ft.
Required Opening	360 sq. ft.
Proposed Opening	360 sq. ft.
Drainage Area	1.70 sq. mi.
Q 50 yr.	1600 c.f.s.
Created Head 50 yr.	0.75'
Q 100 yr.	1850 c.f.s.
Created Head 100 yr.	0.94'
50 yr. Elev.	521.6 el.
100 yr. Elev.	522.0 el.
All time Mississippi River high water	521.2 el.



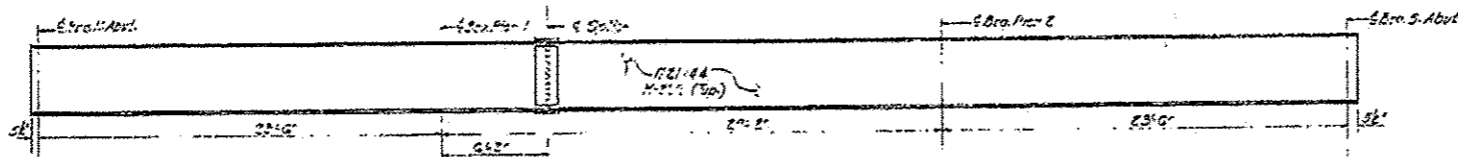
Rev. 50-3-27-1979

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

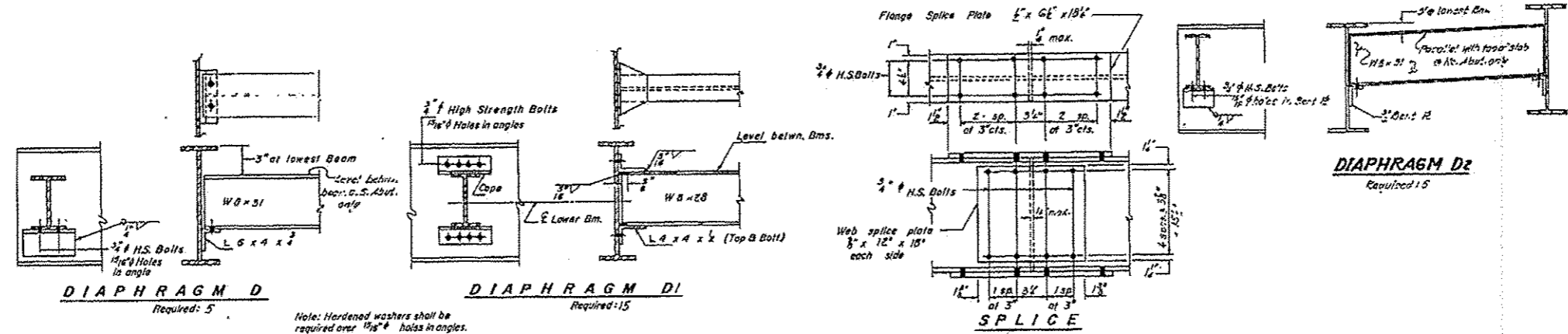
PROJECT NO.	120	SHEET	25	TOTAL SHEETS	18
SECTION	BR-4	COUNTY	Hancock	DATE	11/18/73



FRAMING PLAN



BEAM ELEVATION



DESIGNED: *John J. DeWitt*
 CHECKED: *Michael K. Tenhart*
 DRAWN: *J.D.*
 CHECKED: *Michael K. Tenhart*

EXAMINED: *Oct 13 1973*
 PASSED: _____
 APPROVED: _____

I-2-D 4-13-73

STRUCTURAL STEEL
 F.A. RT. 510 SEC. 120 BR-4
 HANCOCK COUNTY
 STA. 974+87.00

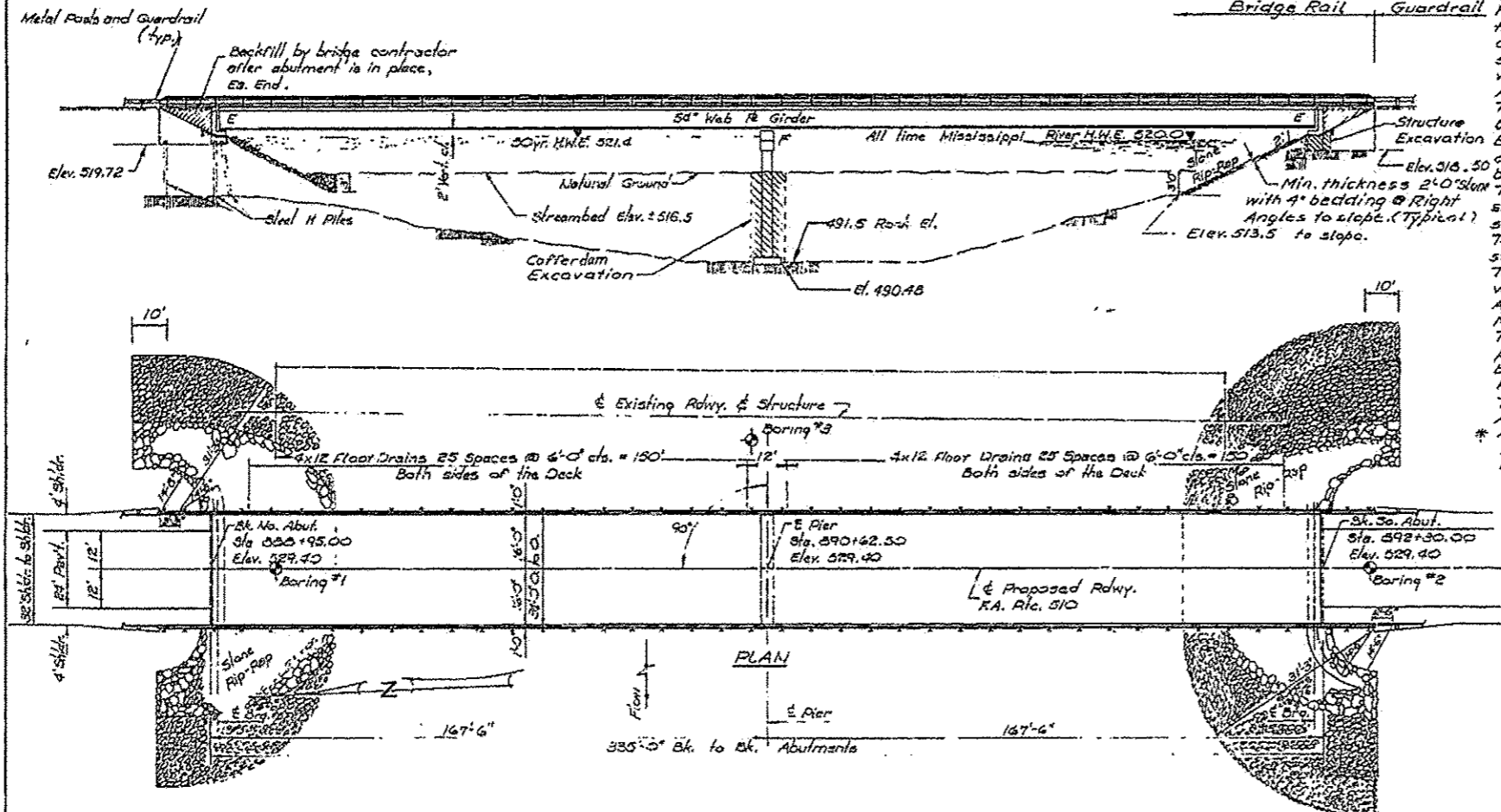
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	NO.	BY	REVISION	SHEET NO.
7-1-01	1	HANCOCK	40	23

GENERAL NOTES

See Proposal for Boring Data.
Fasteners shall be high strength bolts. Bolts 2", open holes 1 1/2", unless otherwise noted.
Calculated weight of Structural Steel-449440 lbs. M-222
Field welding of construction accessories will not be permitted to the bottom flange of girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
Anchor bolts shall be set before bolting cross frames over supports.
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutment. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These Components are the tension flanges, webs and all splice plate material of the steel girders.
All reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, Grade 50.
The Contractor shall drive one Steel HP8x36 test pile in permanent location at the N. Abut., as directed by the Engineer before ordering the remainder of piles.
Fasteners shall conform to requirements of AASHTO M 164 (A525) Type 3 High strength bolts.
All Structural Steel shall be AASHTO M 222 unpainted Steel.
* All railings and accessories shall be painted with basic lead silicon chromate paint system except that the final field coat shall be a maroon finish coat. See Special Provisions.

A.M. 'X' cut on N.W. corner of W. Wing - N. Abutment - Right
Sta. 309+15 Elev. 525.31
Existing Structure: #034-2027 Built as S.B.T. Rte. 96
Sec. 120-B1 of Sta. 090+57.00 in 1936. Width 25'-0"; length 286'-0"
The existing two span steel truss superstructure, on R.C.S. abutments and pier shall be removed after the new two span plate girder structure is built. The existing structure shall be used for traffic during construction of the new bridge.
No salvage.



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Removal of Existing Structures	Each			1
Structure Excavation	Cu.Yds.		82	82
Protective Coat	Sq.Yds.	1307		1307
Class 'X' Concrete	Cu.Yds.	303.3	159.0	462.3
Structural Steel	L.Sum			L.S.
Stud Shear Connectors	Each	2610		2610
Reinforcement Bars	Lbs.	29830	20220	50050
Reinf. Bars (Epoxy Cfd)	Lbs.	15380		15380
Steel Piles (HP8x36)	Lin.Ft.		204	204
Test Pile Steel (HP8x36)	Each		1	1
Name Plates	Each			1
Stone Rip Rap	Sq.Yd.			500
Neoprens Exp. Jt. 22"	Lin.Ft.	67		67
Cofferdams	Ea		1	1
Cofferdam excavation	Cu.Yd.		292	292
Steel Railing (Type T)	Lin.Ft.	722		722
Rock Excavation for Structure	Cu.Yds.		11	11
Floor Drains	Each	104		104

STATION 890+62.50
BUILT 198 BY
STATE OF ILLINOIS
F.A.R.T.E. 510 SEC 120BR-3
LOADING HS20
*STR. NO.

NAME PLATE
(See Std. 2113)

* Structure number shall be supplied by District

DESIGNED	Steve H. Muegler
CHECKED	[Signature]
DRAWN	[Signature]
CHECKED	[Signature]

EXAMINED	July 13, 2017
APPROVED	[Signature]

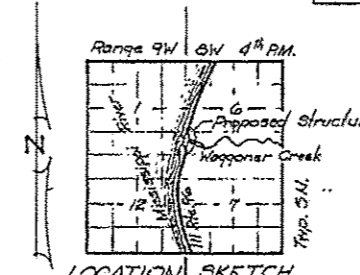
WATERWAY INFORMATION

Drainage Area	==	7.2 sq. miles
Existing Opening	==	1200 sq. ft.
Required Opening	==	800 sq. ft.
Proposed Opening	==	1200 sq. ft.
Design Discharge	==	3000 cfs.
Created Head for Design Flood	==	0.0'
100yr Discharge	==	3150 cfs.
100yr Flood	==	0.0'
H.W.E. (50yr)	==	521.4 Elev.
H.W.E. (100yr)	==	521.9 Elev.
All time Mississippi River high water	==	520.0

DESIGN STRESSES
F_c = 3,500 psi
F_y = 60,000 psi (Reinforcement)
F_y = 50,000 psi (Structural)
Epoxy coated Reinforcement Bars shall be used in top layer of slab.

LOADING HS 20-44

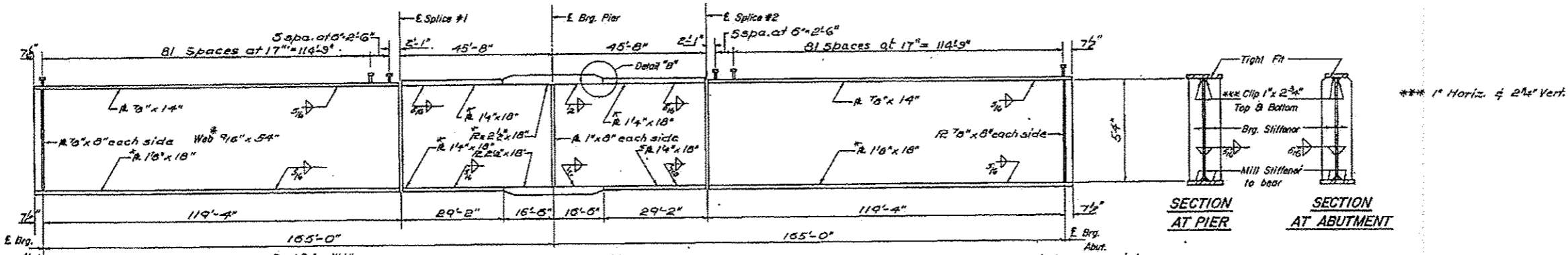
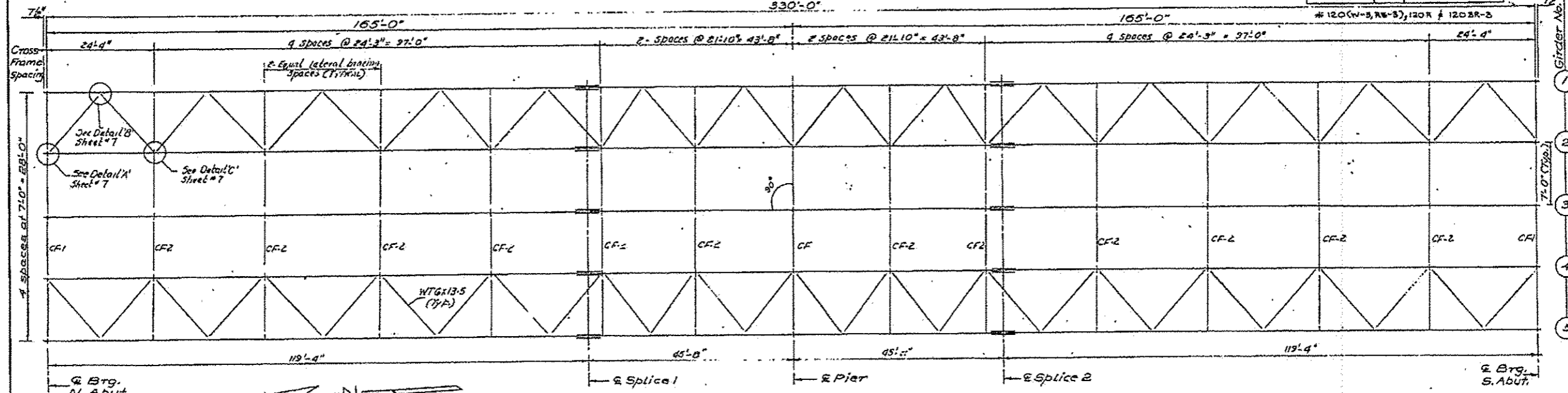
Allow 25%/sq.ft. future wearing surface.
Design Specification: M77 AASHTO,
and 78 AASHTO Interim specifications



GENERAL PLAN & ELEVATION
F.A. Rte. 510 Over WAGONER CREEK
F.A. Rte. 510 SECTION 120 BR-3
HANCOCK COUNTY
Sta. 890+62.50

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-510	HANCOCK	AO	28	11



SECTION A-A

DESIGNED: Steve K. No. 10

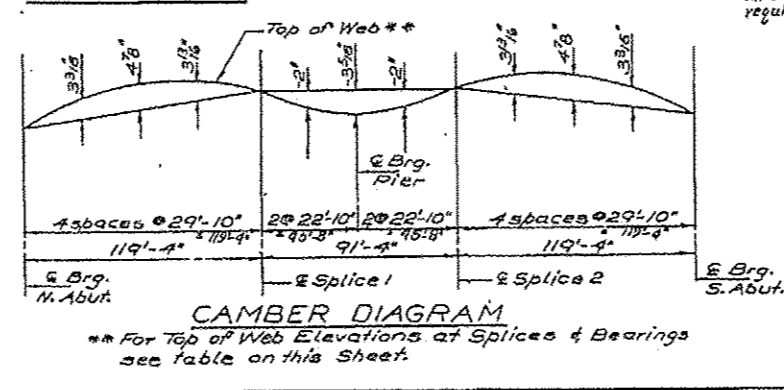
CHECKED: [Signature]

DRAWN: V.E.Z.

CHECKED: [Signature]

DATE: 7-1-72

APPROVED: [Signature]



TOP OF WEB ELEVATIONS
(For Fabrication only)

Stationing	Brg. N. Abut.	Splice #1	Brg. Pier	Splice #2	Brg. S. Abut.
1	528.41	528.85	528.78	528.55	528.41
2	528.83	528.67	528.40	528.67	528.83
3	528.64	528.78	528.31	528.78	528.44
4	528.53	528.67	528.40	528.67	528.53
5	528.41	528.85	528.78	528.55	528.41

STRUCTURAL STEEL

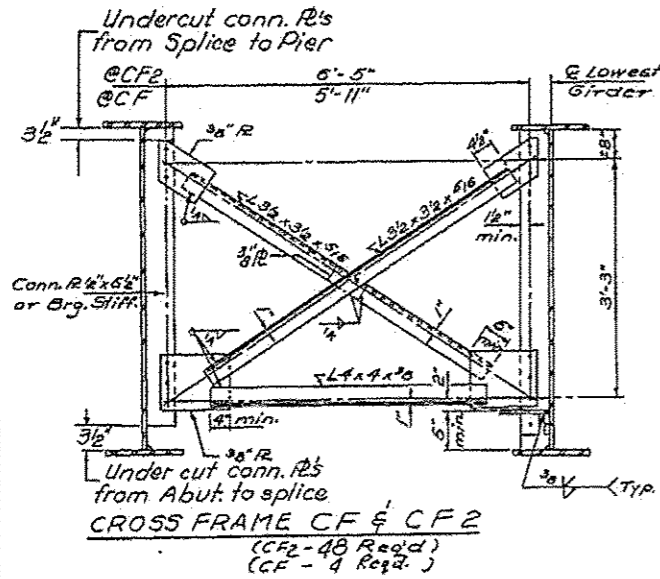
FA.RTE.510 SEC. 120 BR-3

HANCOCK COUNTY

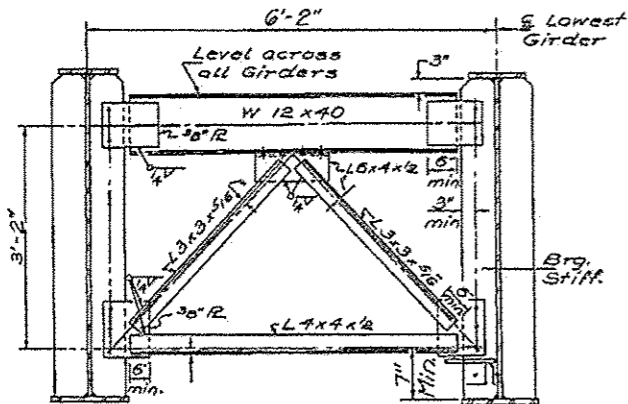
STA. 890+62.50

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGN NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
108.0000	#	HANCOCK	40	29
SHEETS // SHEETS				
#120(C)-3, R5-3), 120R #120 BR-3				

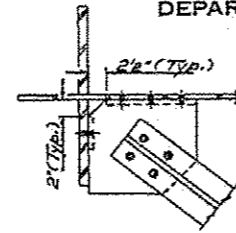


Note: Hardened washers shall be required over 1 5/8" holes in gusset R's.

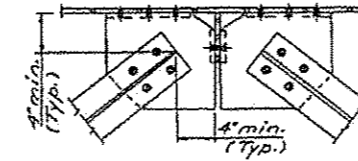


CROSS FRAME CF-1
(3 Req'd)

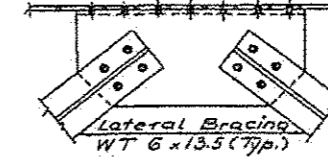
DESIGNED	Steve A. Kuehn	EXAMINED	[Signature]	DATE	July 18 1979
CHECKED	[Signature]	PASSED	[Signature]		
DRAWN	V.J.Z.	APPROVED	[Signature]		
CHECKED	[Signature]				



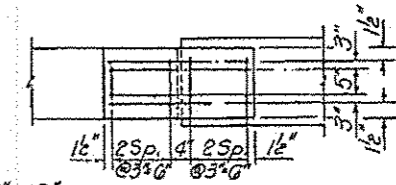
DETAIL A



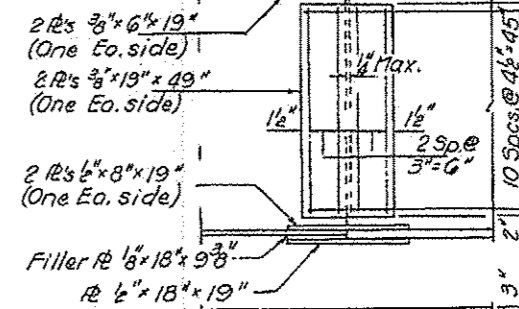
DETAIL B



DETAIL C



FIELD SPLICE DETAIL
(Use 7/8" H.S. Bolts
1 5/16" open holes)



STRUCTURAL STEEL DETAILS

Note: All splice plates shall conform to the Supplemental Requirements for Notch Toughness (Zone 2).

INTERIOR GIRDER MOMENT TABLE		
	Abutments	Pier
I _s (in ⁴)	31213	19260
I _c (in ⁴)	69236	---
S _s (in ³)	1269	2687
S _c (in ³)	1644	---
V _s (in ²)	942	1173
M _B (k)	1983	6038
M _{max} (k)	18.8	670
S _E (ft)	231	---
M _{1/4} (k)	583	---
M _{1/8} (k)	3155	3691
M _{imp} (k)	540	636
TOTAL (k)	4321	4827
V _s (k)	315	193
V _c (k)	30.3	46.3
V _R (k)	60.6	---

INTERIOR GIRDER REACTION TABLE		
	Abutments	Pier
R _a (k)	60.6	249.8
R _b (k)	46.0	100.1
Imp (k)	7.9	17.2
R _{TOTAL} (k)	122.5	367.1

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing P_s TOTAL
I_c and S_c are the moment of inertia and section modulus of the composite section used in computing P_s TOTAL
V_R is the maximum $\frac{1}{4}$ Impact shear range in span used to determine shear connector spacing.
Moments in the table include the appropriate load factors
DL factor = 1.3
LL factor = 1.3 x 1.3 = 2.17

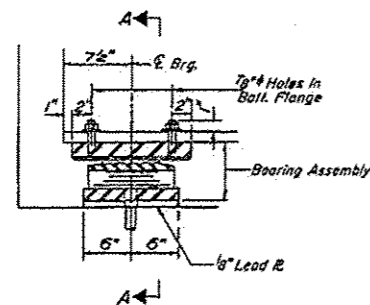
STRUCTURAL STEEL DETAILS

F.A. RTE. 510 SEC. 120 BR - 3

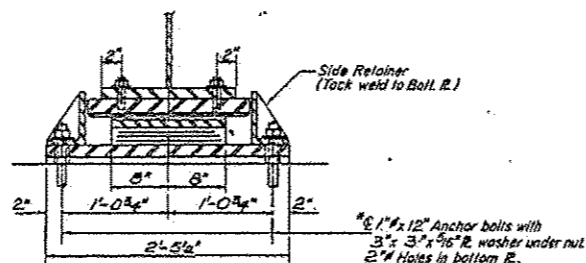
HANCOCK COUNTY
STA. 890+62.50

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

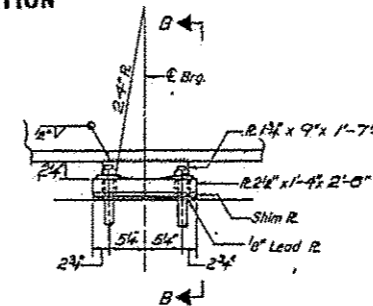
DATE	ISSUE	NO.	DATE	NO.
F.A. # HANCOCK		40	30	
F.A. SHEET NO. 1		SHEET NO. 3		
		11 SHEETS		



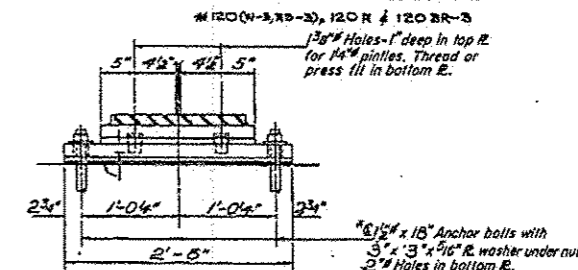
SECTION AT ABUT.



SECTION A-A



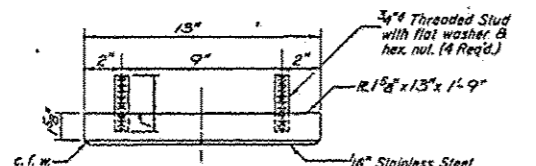
ELEVATION AT PIER



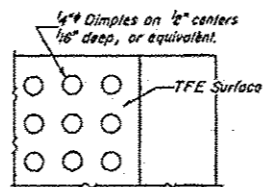
SECTION B-B

FIXED BEARING

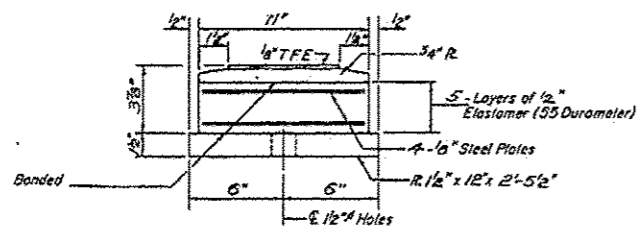
TYPE II TFE ELASTOMERIC EXP. BRG.



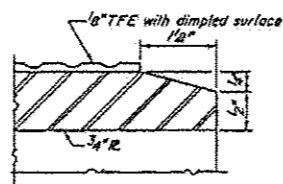
TOP BEARING ASSEMBLY



PLAN-TFE SURFACE



BOTTOM BEARING ASSEMBLY

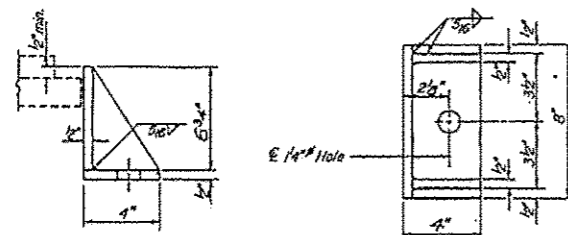


SECTION THRU TFE

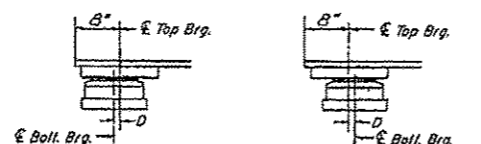
*Note: After girders have been erected holes at expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry.

Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

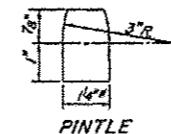
Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



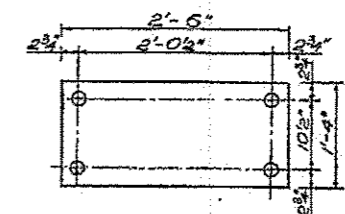
SIDE RETAINER



BELOW 30°F (Move bolt. brg. away from fixed brg.)
ABOVE 50°F (Move bolt. brg. toward fixed brg.)
SETTING ANCHOR BOLTS AT EXP. BRG.
D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F



PINTLE



BOTT. PLATE FOR PIER

DESIGNED	Steve K. Meyer	EXAMINED	John B. Meyer
CHECKED	R. E. Meyer	PASSED	
DRAWN	R. E. Meyer	CHECKED	
CHECKED	R. E. Meyer	APPROVED	

I-2-E2 12-1-78

BRG. DETAILS
E.A.R.T.E. 510 SEC. 120 BR-3
HANCOCK COUNTY
STA. 890+62.50

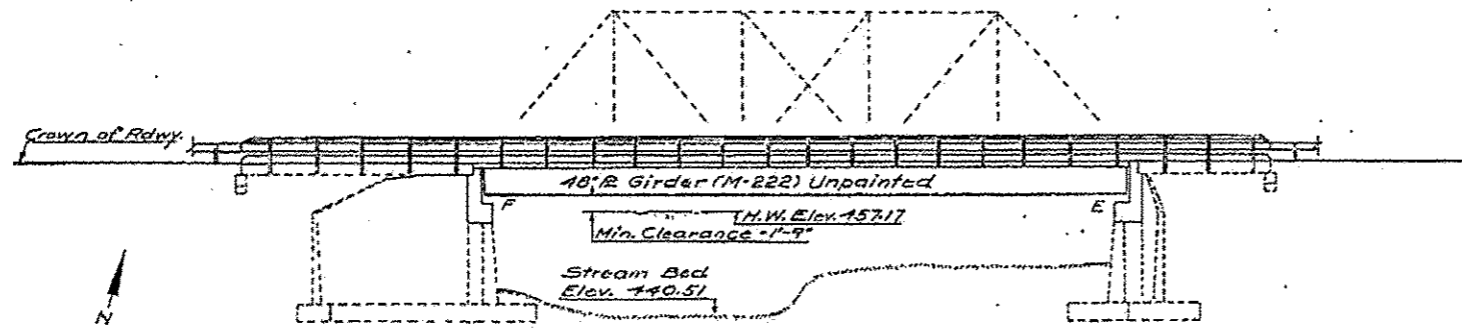
FILE NAME	USER NAME	DESIGNED	REVIS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS SN 034-0058 (FOR INFORMATION ONLY)	F.A. #	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
OPERATIONS\Bridges\ene_CAD\72437	dudleybn					40	D6 EDGE PAINTING 2015-1	VARIOUS	58	45
	plan and point FY15 CHYplansheet.dgn	DRAWN	REVIS							
	PLOT SCALE = 100.0000 * 1/4"	CHECKED	REVIS							
	PLOT DATE = Aug-29-2014 02:17:53PM	DATE	REVIS							
						SCALE	SHEET	OF	SHEETS	STA. TO STA.
										ILLINOIS/FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

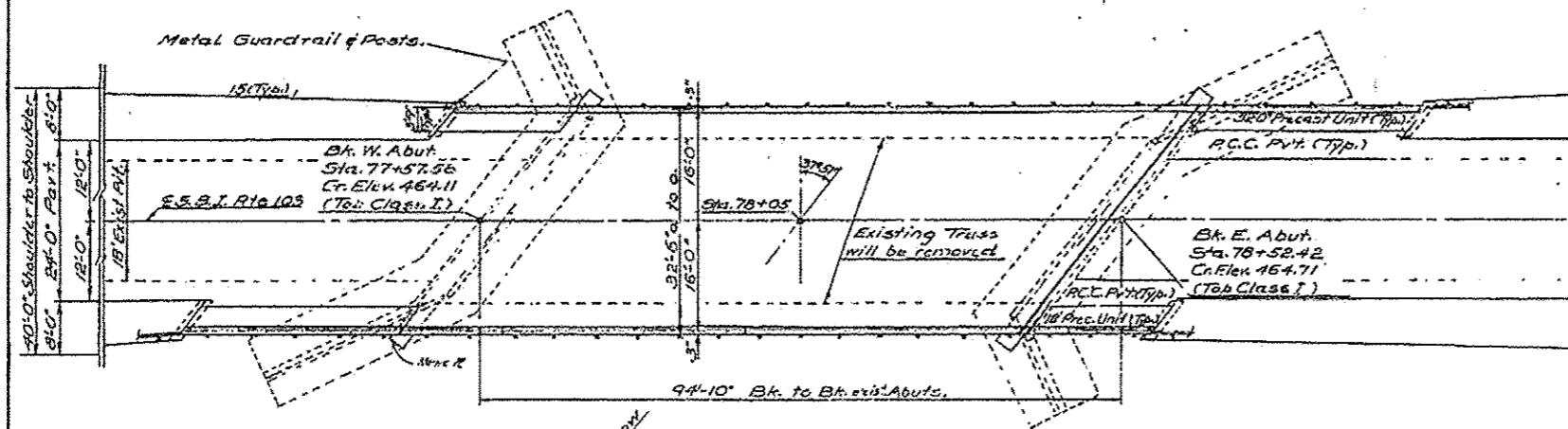
DESIGNED	BY	DATE	NO.	REV.	SHEET NO.
H.A. Lee	EXBR	SCHUYLER	35	12	11 SHEETS

B.M.: \square Cut S.E. Corner Bridge on top of Wing
15'0" Rt. Sta. 78+41 Elev. 464.33
Existing Structure: Built as S.B.I. Route 103
Section 101-B-C at Station 78+05 in 1926.
Structure consists of a Steel Truss on R.C.
Closed Abutments. Existing Superstructure
shall be removed by the Contractor.

No Salvage.



ELEVATION



PLAN

STATION 78+05
REBUILT BY
STATE OF ILLINOIS
S.B.I. RTE. 103 SEC. 101 B/C
LOADING H-20

NAME PLATE
Sec. 5th 2113

WATERWAY INFORMATION

Drainage area 93+4 ac. ±
Character: hilly, clay, wooded
Pre-cult opening 819 sq. ft.
Required opening 819 sq. ft.
Proposed opening 619 sq. ft.
H.W. El. 457.17
Genl. \approx 4290 cfs.

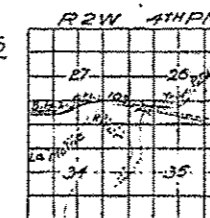
DESIGN STRESSES

$f_c = 1,200$ psi (Deck slab)
 $f_c = 1,400$ psi (Curb, Parapet, Sub)
 $f_s = 20,000$ psi (Reinft)
 $f_s = 27,000$ psi (Struct. M-222)
 $n = 10$

PRECAST UNITS

$f_c = 4,500$ psi
 $f_c = 1,800$ psi
 $f_s = 20,000$ psi
 $n = 8$

Loading H-20-44
Allow 25#10' for future W.S.
Design Specifications 1973 AASHTO, as applicable.



LOCATION SKETCH

GENERAL NOTES

- Reinforcement bars shall be lapped 24 diameters unless otherwise shown.
- It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.
- Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
- Calculated weight of Structural Steel - 63,500 Lbs.
- Excavation shall consist of 20" drilling excavation rotors and 1/2" x 12" hooked bolts.
- Anchor bolts shall be set before battening diaphragms over supports.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\pm 1/8"$. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/2" adjusting shims, of the dimensions of the bearing bearing sole, shall be provided for each bearing in addition to all other plates or shims.
- The main load carrying member components subject to the Supplemental Requirements for Match Qualities are the flanges, ribs, and splice plates of the steel girders.
- Field welding of construction accessories will not be permitted in the bottom flange of beams. Field welding in other areas will be permitted only when approved by the Engineer.
- All structural steel shall be AASHTO M 222 unpainted except expansion joint angles and attached bars which shall be AASHTO M 103 and shop painted with two coats of basic lead silico chromate paint.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bifuminous Concrete Surface Course, Class T	Tons	27		27
Portland Cement Concrete Pavement (70')	Sq. Yds.	39		39
Pavement Fabric	Sq. Yds.	39		39
Concrete Removal	Cu. Yds.		40	40
Expansion Balls (4" P)	Each	62		62
Class I Concrete	Cu. Yds.	15.0	73.1	158.1
Structural Steel	L. S.			63.5
Steel Bolts, Type T	Lbs.	286		286
Reinforcement Bars	Lbs.	23,920	6,280	30,200
Protective Coat	Sq. Yds.	40		40
Removal of Existing Superstructures	Each	1		1
Waterproofing Membrane System	Sq. Yds.	37		37
Name Plates	Each		1	1
Stud Shear Connectors	Each	915		915
Preformed Joint Seals (4')	Lbs.	67		67
Precast Concrete Bridge Slab	Sq. Ft.	373		373

Proposed reconstruction
GENERAL PLAN & ELEVATION
S.B.I. RTE. 103 OVER TOWN BRANCH
S.B.I. RTE. 103 SECTION 101 BR
SCHUYLER CO.
STA: 78+05.00

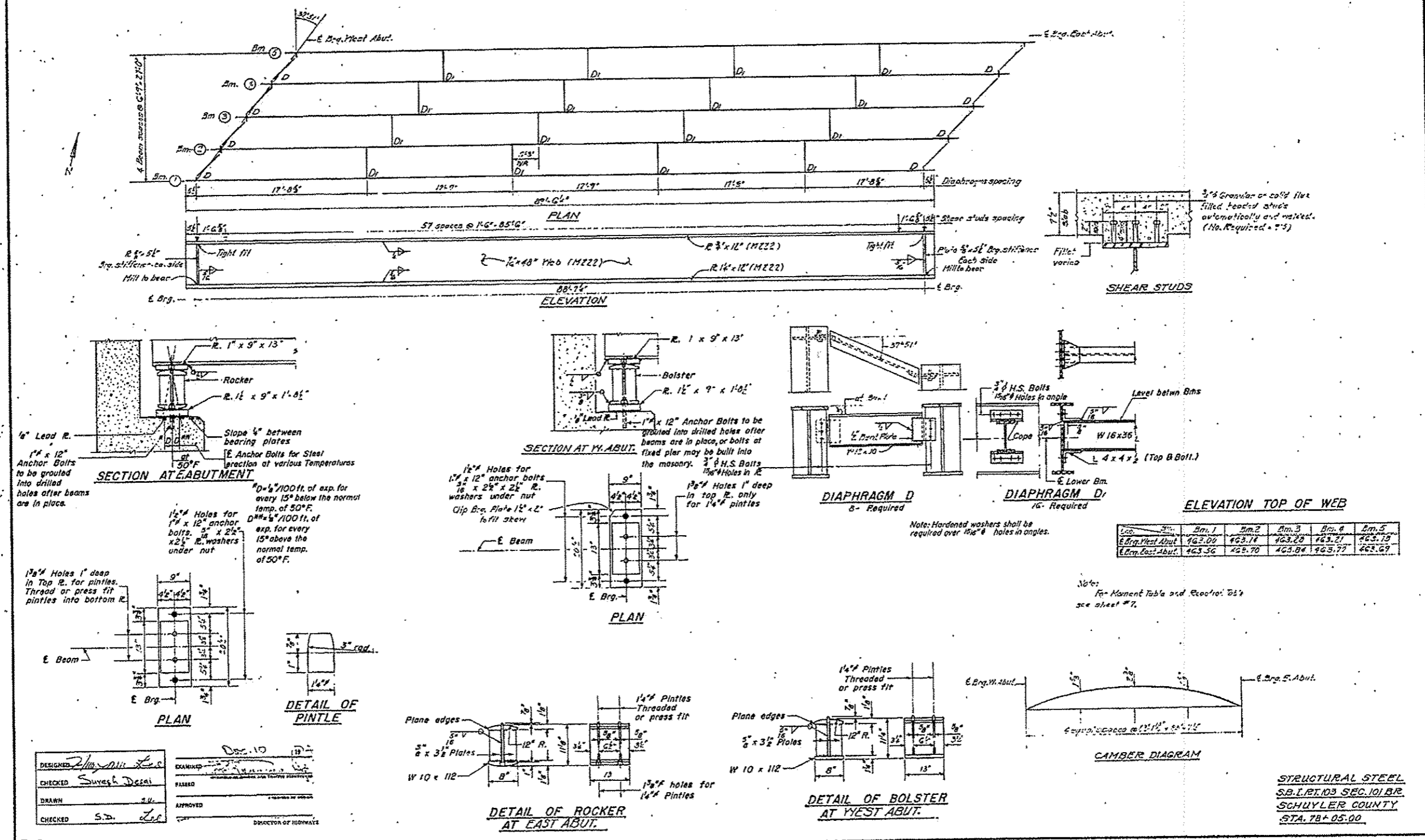
DESIGNED: H.A. Lee
CHECKED: Suresh Desai
DRAWN: V.H. S.E.
CHECKED: S.D. Lee

EXAMINED: [Signature]
PASSED: [Signature]
APPROVED: [Signature]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	BY	CHKD	APP'D
11/17	10/25	SCHUYLER	33

SHEET NO. 6
11 SHEETS



3/4 Granular or cold flux filled leaded steel automatically and welded. (No. Required = 5)

SHEAR STUDS

SECTION AT ABUTMENT

SECTION AT WEST ABUT.

DIAPHRAGM D

DIAPHRAGM D1

ELEVATION TOP OF WEB

Loc.	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5
E. Brg. West Abut.	463.00	463.78	463.28	463.21	463.19
E. Brg. East Abut.	463.56	463.70	463.84	463.77	463.69

Note: For Moment Table and Reaction Tab see sheet #7.

DESIGNED	DR. 10
CHECKED	S. D. Desai
DRAWN	S. D.
CHECKED	S. D.

I-2 4-15-73

085-0025

6-52, 171

Bench Mark: Chiseled "a" on N.W. wingwall of bridge over Williams Creek 15.0 feet left of Sta. 142+27.00, Elev. 594.10 -

Existing Structure: #085-0025 Built as S.B.T. Rte. 101, Section 119-B at Station 143+00 in 1928. The existing (3 simple spans) R.C.D.G. superstructure 24'-8" wide by 144'-0" long shall be removed and the existing substructure modified to carry a new widened W24 beam superstructure. Stage construction shall be utilized so as to maintain one way traffic during reconstruction. No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

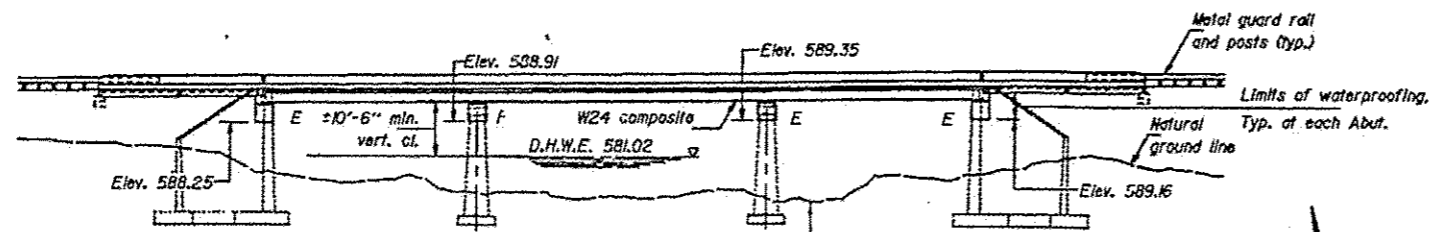
PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
1088	SCHUYLER	36	75

GENERAL NOTES

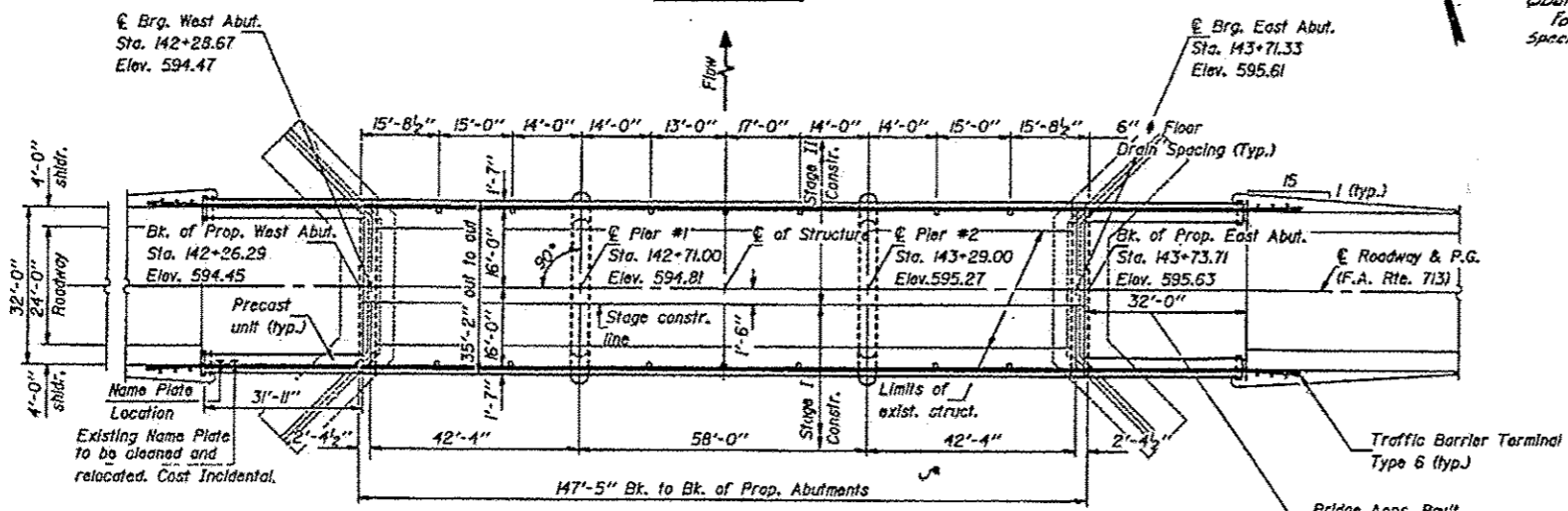
Fasteners shall be high strength bolts. Bolts 7/8" open holes 5/8".
Unless otherwise noted.
Calculated weight of Structural Steel M-103 = 15,150 Lbs.
M-223 = 75,400 Lbs.
The Zinc-silicate and vinyl paint system shall be used for shop and field painting of Structural Steel except where otherwise noted.
The structural steel bearing plates of the Elastomeric Bearing Assembly and the Fixed Bearing shall conform to the requirements of AASHTO M-223 Gr. 50.
The back face of Closed Abutments shall be waterproofed according to Article 503.11 of the Standard Specifications.
Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

GENERAL NOTES CONTINUED

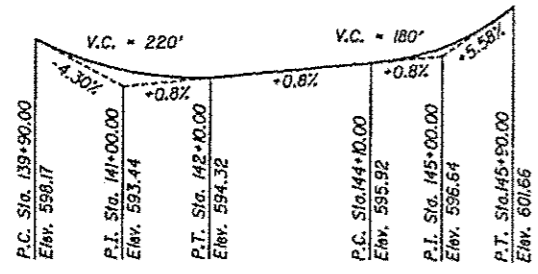
All seat areas of abutments shall receive Bridge Seat Sealer. Estimated Quantity = 123 sq. Ft.
For Cantilever Forming Brackets see Special Provisions.



ELEVATION



PLAN



PROFILE GRADE
(Ill. Route 101 - F.A. Route 713)

STATION 143+00.00
BUILT 198 BY
STATE OF ILLINOIS
F.A. RTE. 713 SEC. 119BR
F.A. PROJ.
LOADING HS20
STR. NO. 085-0025
NAME PLATE
See Std. 2113

WATERWAY INFORMATION

Drainage Area = 30.0 sq. mi. Low Grade Elev. 594.24 @ Sta. 142+00									
Flood	Freq. Yr.	C.F.S.	Exist.	Prod.	H.W.E.	Exist.	Prod.	Exist.	Prod.
Design	50	4635	836	836	581.0	0.02	0.02	581.02	581.02
Base	100	5306	916	916	581.6	0.0	0.0	581.6	581.6
Overtopping									
Max. Calc.	500	6867		1076	582.8		0.0		582.8

DESIGN STRESSES
Field Units
f_c = 3,500 p.s.i.
f_y = 60,000 p.s.i. (relief)
f_y = 50,000 p.s.i. (struct. steel) AASHTO M-223-Grade 50
f_y = 36,000 p.s.i. (struct. steel) AASHTO M-103
Precast Units
f_c = 4,500 p.s.i.
f_c = 1,800 p.s.i.
f_s = 20,000 p.s.i. n=8

DESIGN SPECIFICATIONS

AASHTO 1983, 1984, 1995 Interims

LOADING HS20-44

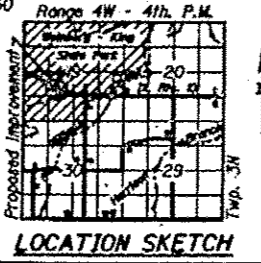
(New Construction)
Allow 25#/sq. ft. for future wearing surface.

6 beams

Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,000 lbs. and 3/4" x 12" hooked bolts.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Class X Concrete	Cu. Yd.		58.3	58.3
Reinforcement Bars	Lbs.		6920	6920
Reinforcement Bars (Epoxy Coated)	Lbs.	39310	40	39350
Temporary Bridge Roll	Lin. Ft.	144		144
Elastomeric Bearing Assembly, Type I	Each		12	12
Elastomeric Bearing Assembly, Type II	Each		6	6
Floor Drains	Each	14		14
Name Plates	Each	1		1
Stud Shear Connectors	Each	2232		2232
Preformed Joint Seal 2 1/2"	Lin. Ft.	35		35
Preformed Joint Seal 4"	Lin. Ft.	35		35
Protective Coat	Sq. Yd.	117		117
Epoxy Crack Sealing	Lin. Ft.		73	73
Removal of Existing Superstructure	Each	1		1
Structure Excavation	Cu. Yd.		34	34
Concrete Removal	Cu. Yd.		25	25
Structural Steel	L.S.	1		1
Precast Concrete Bridge Slab	Sq. Ft.	479		479
Expansion Bolts (3/4")	Each		96	96
Turnishing Steel Piles HPBx36	Lin. Ft.		26	26
Bridge Seat Sealer	L.S.		1	1
Class X Concrete Superstructure	Cu. Yd.	170.0		170.0



GENERAL PLAN
ILLINOIS ROUTE 101 OVER
WILLIAMS CREEK
F.A. ROUTE 713 SECTION 119BR
SCHUYLER COUNTY
STATION 143+00.00
STRUCTURE NO. 085-0025

DESIGNED: D. W. K. [Signature]
CHECKED: Kelly J. [Signature]
DRAWN: RON [Signature]
CHECKED: D.K.M. [Signature]
DATE: June 6, 1985

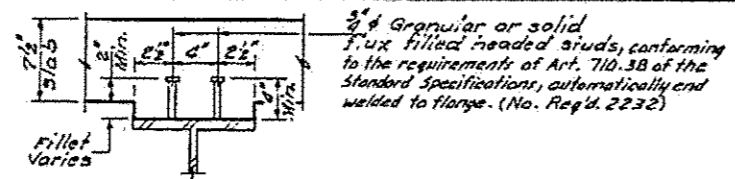
AS REVISED: 7-20-88 R.E.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

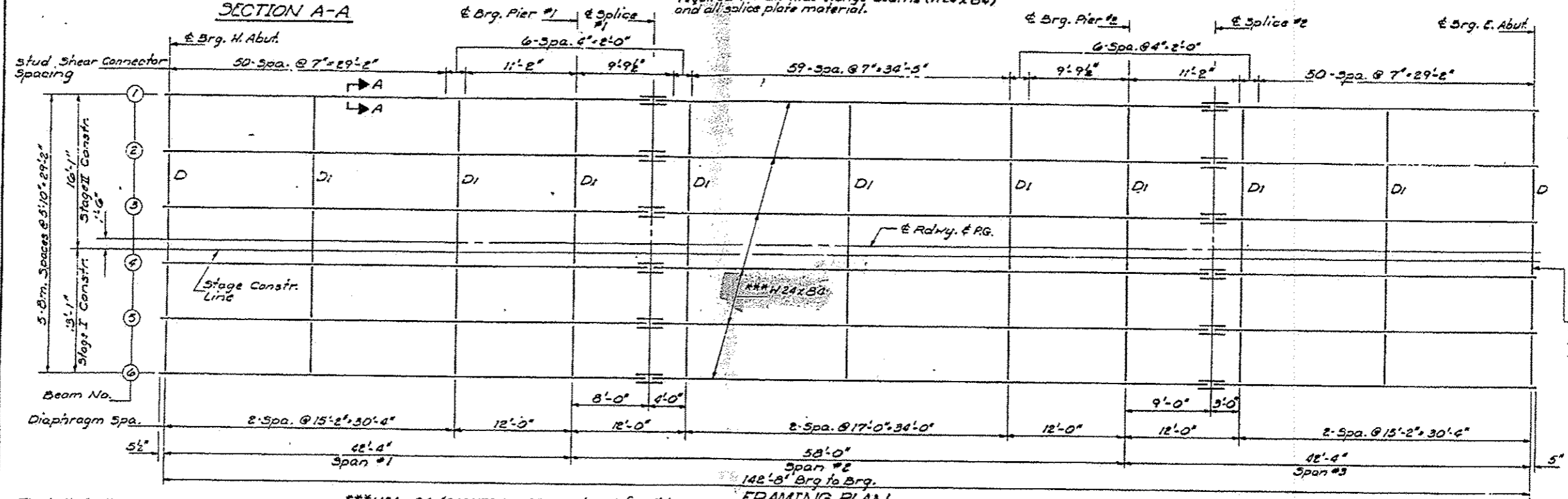
**TOP OF FLANGE ELEVATION

Loc. E. Brg.	E. Brg.	E. Brg.	E. Brg.	E. Brg.	E. Brg.	
Brms.	H. Abut.	Pier #1	Splice #1	Pier #2	Splice #2	E. Abut.
#1 @ 0	593.80	593.80	593.80	594.20	594.33	594.60
#2 @ 5	593.36	593.70	593.97	594.56	594.66	594.70
#3 @ 9	593.65	593.99	594.06	594.80	594.55	594.79

DATE	11/28/88	BY	SCHUYLER	SCALE	2/0	1/9	1/6
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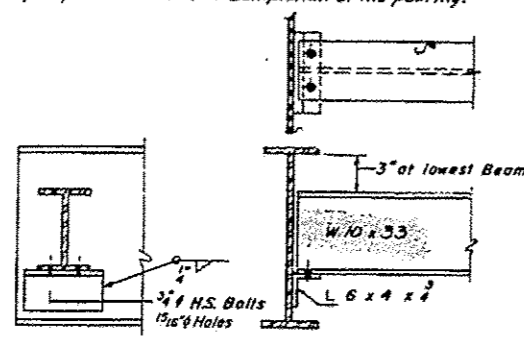
Note: Notch Toughness Requirements shall be required for all wide flange beams (W24x84) and all splice plate material.



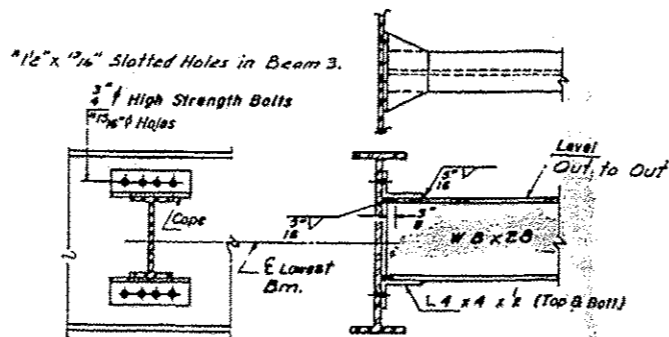
The bolts for the slotted holes shall only be finger-tightened prior to the deck slab pouring and then be fully-tightened after the completion of the pouring.

***W24x84 (AASHTO M-223, Grade 50) for all beams.

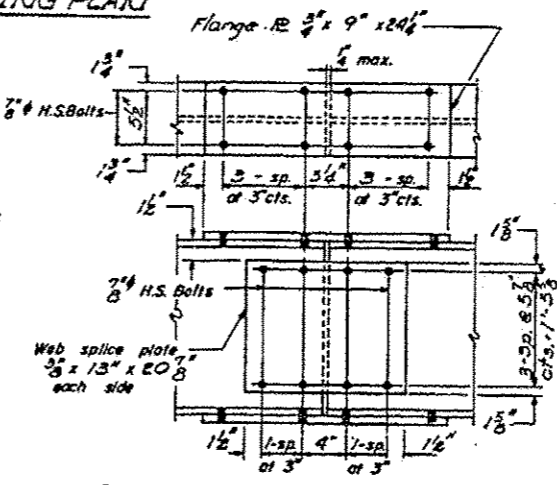
FRAMING PLAN



DIAPHRAGM D
(10 Required)



DIAPHRAGM D1
(45 Required)



SPLICE #1 & #2
(AASHTO M-223, Grade 50)

INTERIOR BEAM MOMENT TABLE

	Span #1	Piers	0.5
	Span #1	#1 & #2	Span #2
Ia (in ⁴)	2370	2370	2370
Ic (in ⁴)	72.54	72.54	72.54
Ie (in ⁴)	196	196	196
Ic (in ⁴)	303	303	303
e (ft)	0.668	0.668	0.668
Ma (k)	75.7	174.9	103.9
Me (k)	0.287	0.287	0.287
Mb (k)	59.3	56.1	64.6
Md (k)	217.8	133.5	302.5
Mim (k)	65.4	38.2	82.6
M (M+I) (k)	472.0	286.2	641.8
Ma (k)	760.5	672.4	1036.0
Mu (k)	1723.2	1723.2	1723.2
Ic non-composite (ksi)	4.51	14.14	6.48
Ic composite (ksi)	1.53		2.51
Ic (kft) (ksi)	18.39	17.92	25.00
Ic (overload) (ksi)	24.43	31.66	33.99
Ic (total) (ksi)	31.75	41.16	44.18
VR (k)	40.3		39.3

*INTERIOR BEAM REACTION TABLE

	E. Brg. #1	Piers #1 & #2
Rb (k)	14.7	33.3
Rc (k)	22.6	55.3
Rd (k)	8.6	10.6
Rtotal (k)	51.9	99.2

DESIGNED: D. SCHUYLER
CHECKED: J. SCHUYLER
DRAWN: J. SCHUYLER
CHECKED: DKM

EXAMINED: J. SCHUYLER
PASSED: J. SCHUYLER
APPROVED: J. SCHUYLER

DATE: June 6, 1988

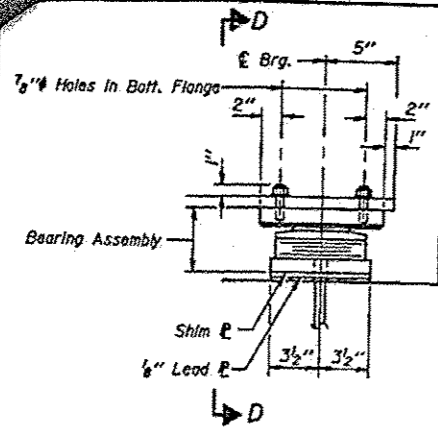
Ia and Ia are the moment of inertia and section modulus of the steel section used in computing Ia (Total & Overload).
Ic and Ic are the moment of inertia and section modulus of the composite section used in computing Ia (Total & Overload).
VR is the maximum Live Load + Impact shear range in span.
Ma (Applied Moment) = 1.3CM + Me + 1/2(Mb + Id).
Mu is the full Plastic Moment Capacity for Compact, Braced section.
Ic (overload) is the sum of the stresses due to Me + Ma + 1/2(Mb + Id).
Ic (total) is the sum of the stresses due to 1.3CM + Me + 1/2(Mb + Id).
* Service Load values.

STRUCTURAL STEEL
FA. RT. 715 SEC. 119B
SCHUYLER COUNTY
STA. 143+00.00

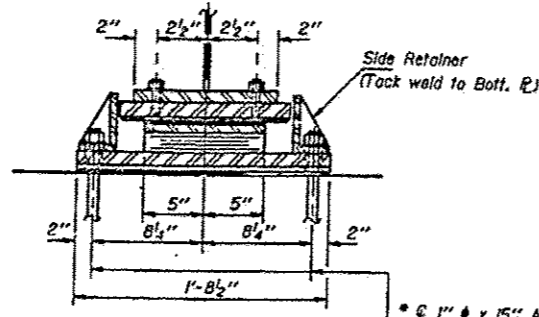
I-2-D 8-30-80
AS REVISED: 7-20-88 R.E.A.

DEPARTMENT OF TRANSPORTATION
STATE OF ILLINOIS

NO.	DATE	BY	CHKD	REV	SHEET NO.
1198R	11/83	SCHUYLER	26	20	16 SHEETS



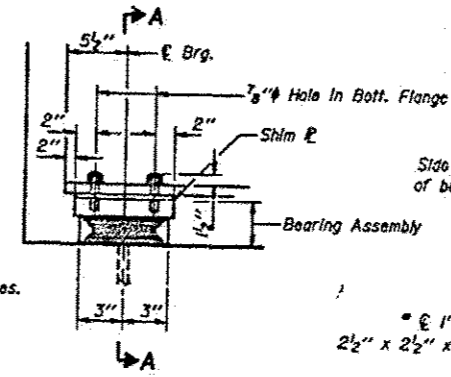
ELEVATION AT E. ABUT.



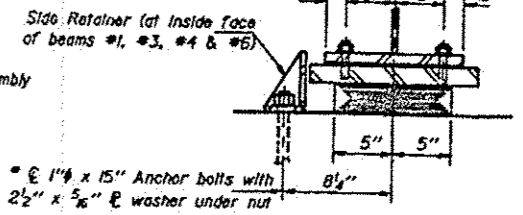
SECTION D-D

TYPE II TFE ELASTOMERIC EXP. BRG.

Notes: Anchor bolts at fixed bearings may be built into the masonry.
See sheet #13 of 16 for Anchor Bolt Installation.
The Structural Steel bearing plates for the Elastomeric Bearing Assembly and Fixed Bearing shall be A.A.S.H.T.O. M223, Grade 50.
Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MM-A-144, Type I. The bond agent shall be applied on the full area of the contact surfaces.
Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

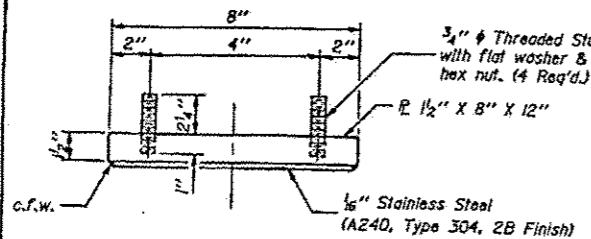


ELEVATION AT W. ABUT.

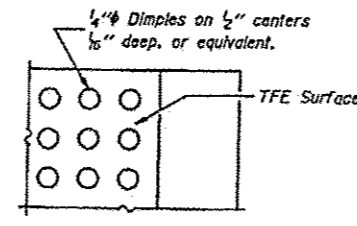


SECTION A-A

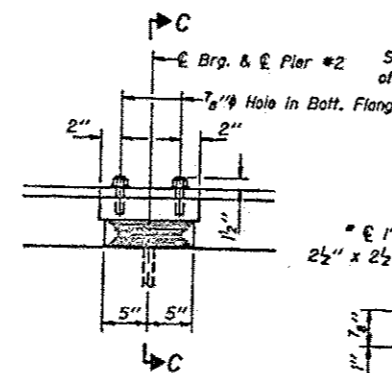
TYPE I ELASTOMERIC EXP. BRG.



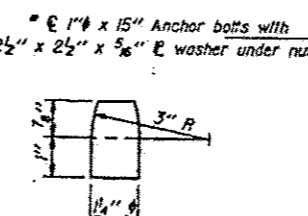
TOP BEARING ASSEMBLY



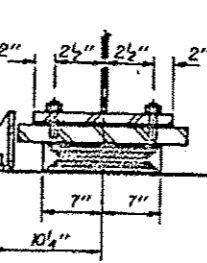
PLAN-TFE SURFACE



ELEVATION AT PIER #2

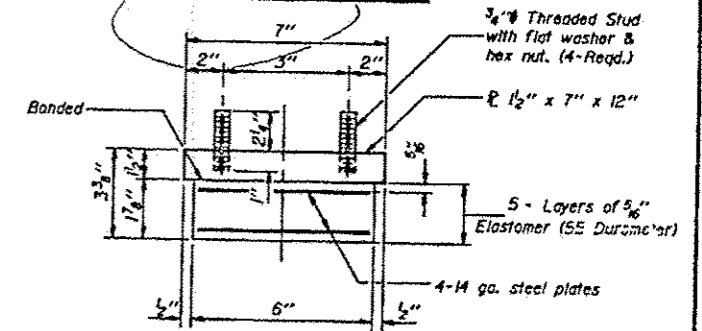


PINTLE

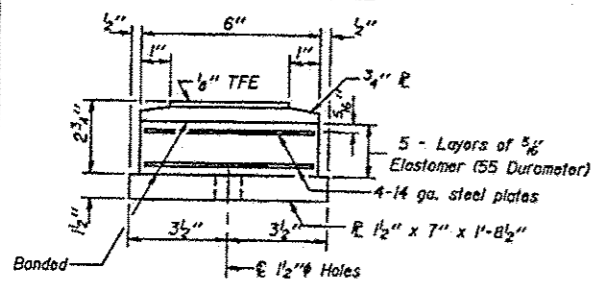


SECTION C-C

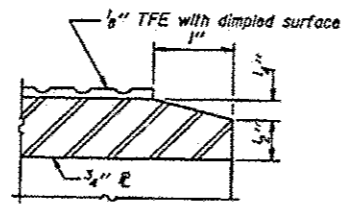
Note: Shim plates shall not be placed under Bearing Assembly.



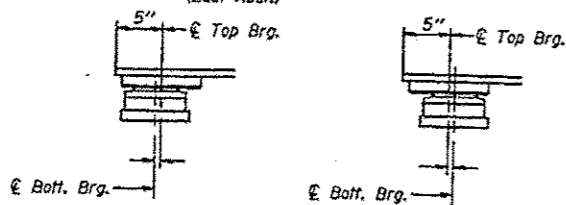
BEARING ASSEMBLY (West Abut.)



BOTTOM BEARING ASSEMBLY (East Abut.)



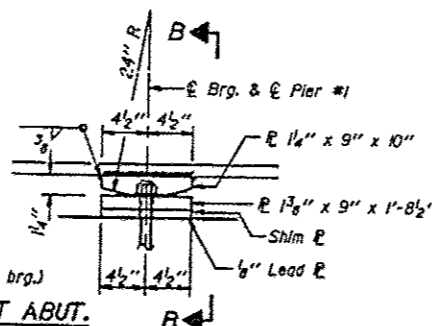
SECTION THRU TFE



BELOW 50°F.

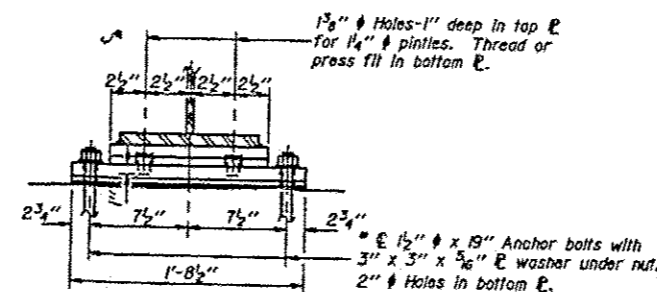
ABOVE 50°F.

SETTING ANCHOR BOLTS AT EXP. BRG. AT EAST ABUT.
D = 1/8" per each 100° of expansion for every 15° temp. change from the normal temp. of 50°F.

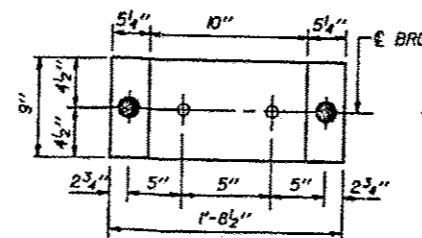


ELEVATION AT PIER #1

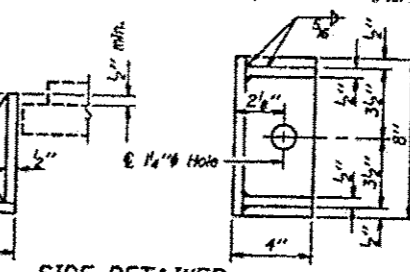
FIXED BEARING



SECTION B-B

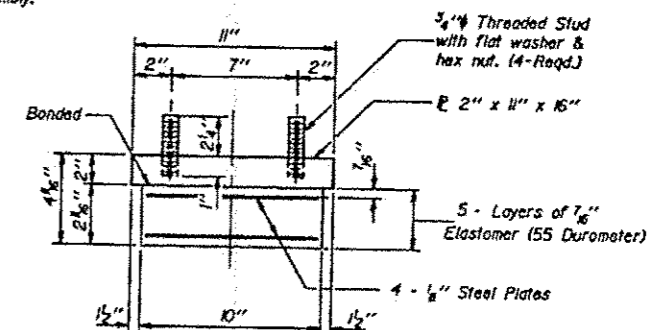


PLAN-BOTTOM PLATE (Fixed Bearing)



SIDE RETAINER (20 Req'd.)

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BEARING ASSEMBLY (Pier #2)

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Elastomeric Bearing Assembly Type II	Each	6

BEARING DETAILS
F.A. RTE. 713 SECTION 198R
SCHUYLER COUNTY
STA. 143+00.00

DESIGNED: D. Okamoto
CHECKED: R. Schuyler
DRAWN: R. Schuyler
CHECKED: DKM

EXPANDED: R. Schuyler
PASSED: R. Schuyler
APPROVED: R. Schuyler

I-2-E2 12-1-83

AS REVISED: 7-20-88 R.E.A.

069-0009

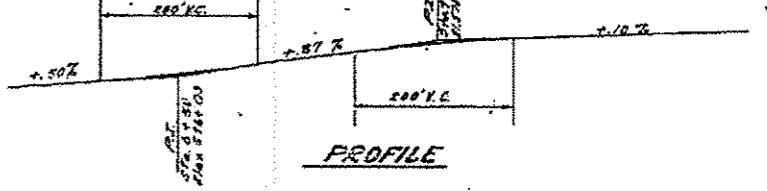
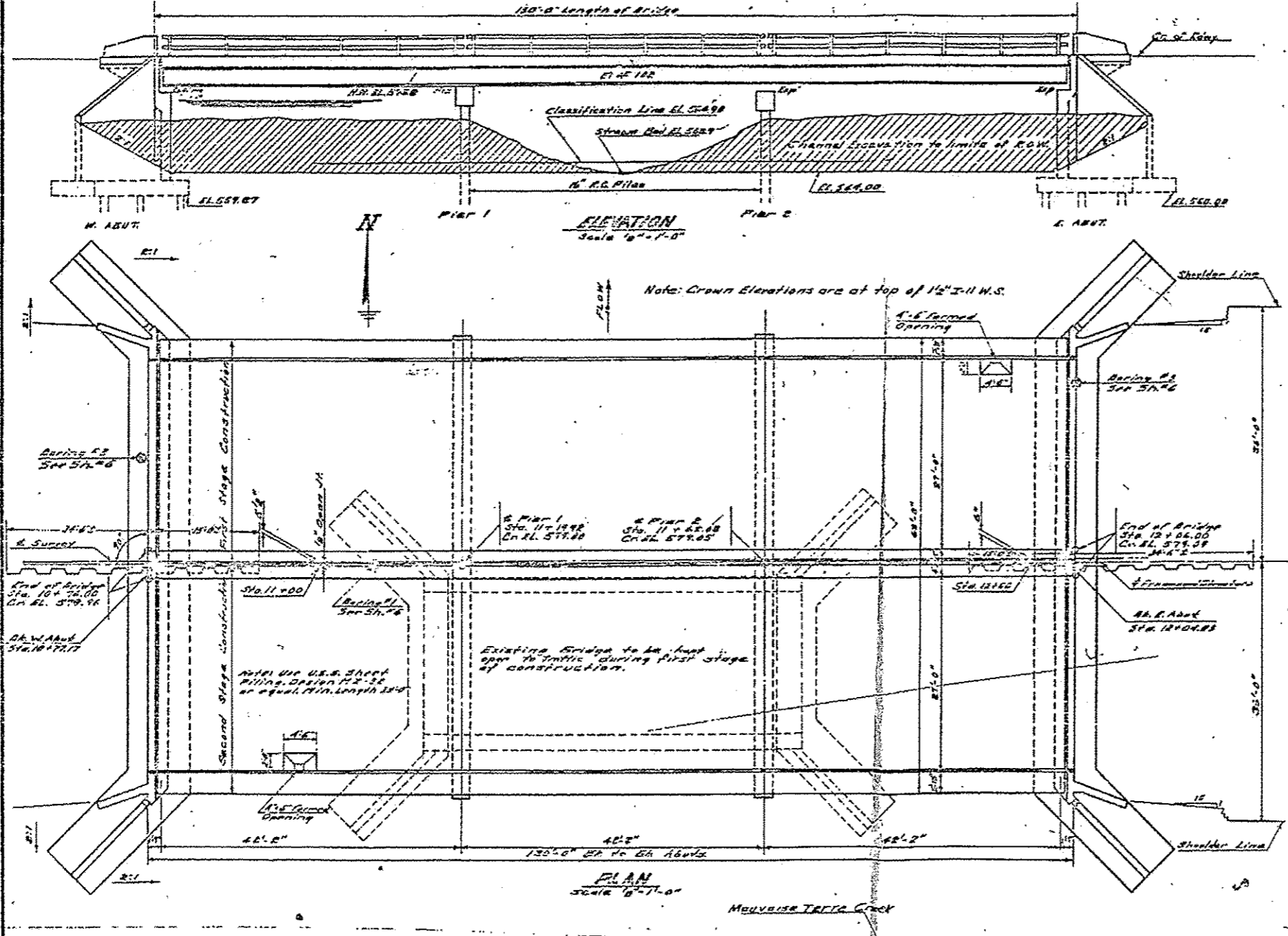
C.M. 75' cut over N.E. Corner for N.H. Winward of Bridge, I.R. 42, Sta. 11 413 Elev. 575.37
 Existing Structure: E.T.C. 1 Span 80' clear with a 24' deep or C.C. closed abut. Bridge to be removed by Bridge Contractor after N.H. of proposed structure is completed.
 Salvage: None

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS
 DIVISION OF HIGHWAYS

DATE	BY	CHKD	REV	SHEET NO.
11/10/55	J.S.B.			7 SHEETS
Project Name				
Section				
County				
Total Sheets				

GENERAL NOTES

Class B Concrete shall be used thruout except in End Piers. Handrail Concrete shall be used in End Piers. The Concrete Floor Slab shall be poured in one continuous operation between joints and shall be finished in accordance with Art. 51.12 (c) of the Standard Specifications. The Curbs and Slab outside of Longitudinal Construction Joints shown on cross section, shall be poured monolithically. No Transverse Construction Joints shall be made in the slab except by written permission of the Engineer. Metal Handrail and Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint after inspection by the Illinois Division of Highways. See Article 57.1 to 57.5 inclusive of the Standard Specifications. All paint shall be furnished and applied by the Contractor. All I Beam Splices shall be subanchored 1/2" and reamed to proper size. All I Beams shall be assembled to their proper grade and alignment, with or without diaphragms, and inspected and reamed while so assembled. Rollings shall be adjusted to true alignment after Curbs have been poured. All Rollings shall be vertical. All Rollings, all Rockers, Seating Rollers, Pivots, and Anchor Bolts shall be furnished, painted and set in accordance with Article 51.14 of the Standard Specifications and are included for payment as Structural Steel. Estimated weight of this steel is 12,350 lbs. Anchor Bolts shall be set before riveting diaphragms over abutments and piers. Expansion Guards shall be fabricated and erected in accordance with Article 51.18 (d) of the Standard Specifications. All Metal Handrail, including Rail Post Anchors, is included for payment as Metal Handrail. The number of linear feet is measured face to face of concrete and posts. The Contract Unit Price for metal handrail includes installing and painting the handrail. The Contractor shall drive & Test Piles, in permanent locations, as shown on plans, before ordering or casting the remainder of piles. Welding shall comply with Article 55.4 (c) of the Std. Specs. Back of Abutments and Wing Walls from top of embankment to bottom of walls shall be waterproofed in accordance with Article 21.22 of the Standard Specifications. Boring Data are given on the plans only as a guide to Builders in estimating soil conditions which may be encountered in the work.



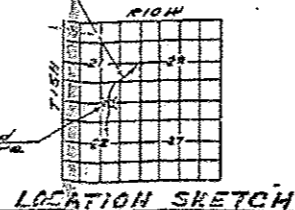
TOTAL BILL OF MATERIAL

ITEM	SUPER	SUB	TOTAL	TOTAL
			SEC. 1505	SEC. 1507
Class B Concrete	Cu.Yd.	2076	414.5	622.5
Handrail Concrete	Cu.Yd.	18		18
Reinforcement Bars	Lbs.	38,770	31,500	69,270
Structural Steel	Lbs.	185,180		185,180
Metal Handrail	Lin.Ft.	257		257
Name Plates	EA	1		1
12" Precast Concrete Piles	Yd.		880	650
16" Precast Conc Test Piles	EA		2	2
CLASS A Excavation for Street Cuts			1,080	1,080
CLASS B Excavation for Street Cuts			620	620
Channel Excavation	Cu.Yd.		3,500	3,600
Removal of Existing Structure	EA			1
Unretained Timber Piles	Lin.Ft.		4,450	4,450
Test Piles (Timber)	EA		2	2
Temporary Steel Sheet Piling	Sq.Ft.		3,760	3,760

DESIGNED	Regina	DATE	MAR 13 1956
CHECKED	OK	DRAWN	W. H. G. Gendall
DRAWN	W. H. G. Gendall	APPROVED	R. B. [Signature]
CHECKED	OK		

WATERWAY INFORMATION

Drainage Area - 21,500 Acres
 Character - Rolling, Cultivated
 Required Opening (25 yr. Flood) - 1200' x 430'
 Present Opening - 430' x 180'
 Proposed Opening - 1800' x 430'



STATIONS
 P2 = 1400' p.g.l. Super
 P0 = 500' p.g.l. Sub.
 P4 = 20,400' p.g.l. Intake
 P6 = 18,200' p.g.l. Street
 n = 10
 Loading H20-S16-44

STATION 1141
 BUILT BY
 STATE OF ILLINOIS
 S.B.I. 71.10-565,328
 P.A. PROJECT 0-4500
 LOADING H20-S16
 PLAN 12-DATA
 1955 STA. 015

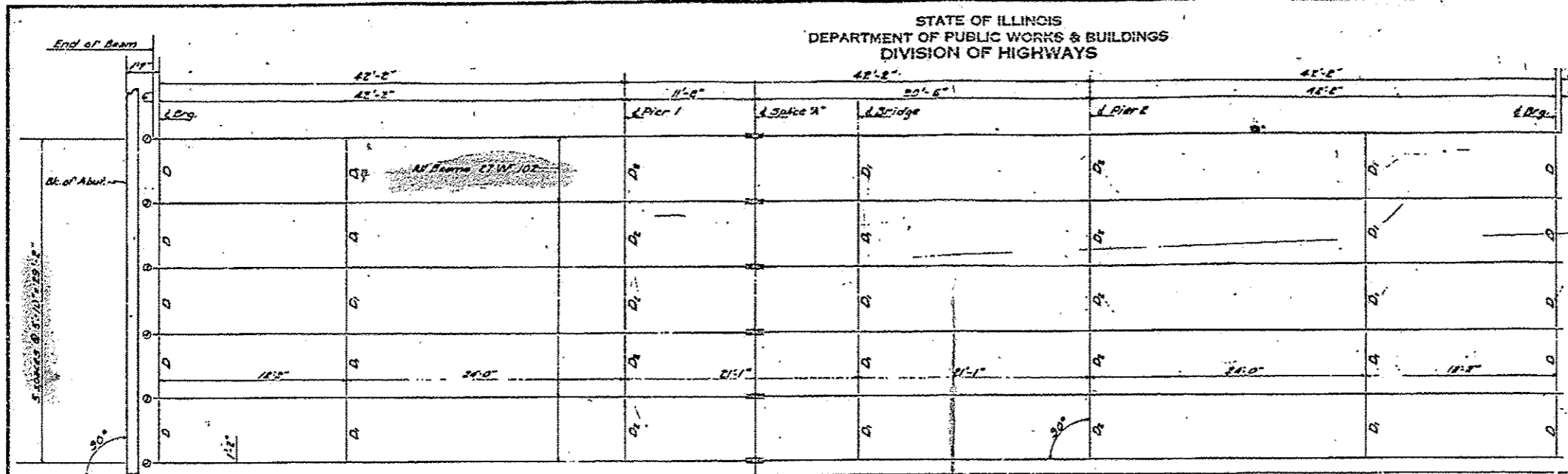
GENERAL PLAN ELEVATION

BRIDGE OVER
 MAURICE TRACY CREEK
 E.T.C. 1 SPAN 80' CLEAR
 R.A. FRONZ 0-4500
 MORGAN COUNTY
 STATION 1141

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

DATE	NO.	BY	TOTAL SHEETS	SHEET NO.
10/10/54	3378	Morgan	7	6
10/10/54	3388		16	8

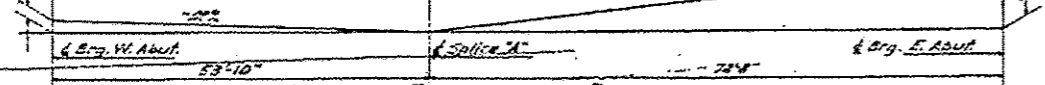
SHEET NO. 7
7 SHEETS



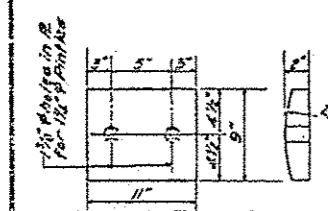
TOP OF BEAM ELEVATIONS AT SPURCE A HALF FRAMING PLAN

Beam	1, 2, 3	4, 5	6, 7	8, 9	10, 11	12
Systems	578.04	578.04	578.04	578.04	578.04	578.04

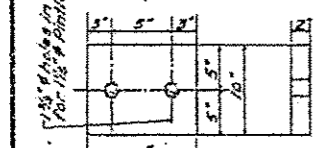
Fabrication Diagram same for all Beams.



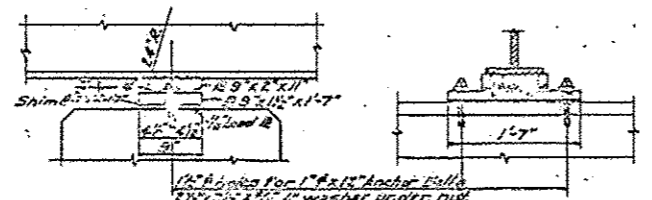
FABRICATION DIAGRAM



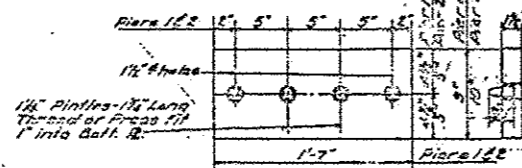
TOP OF PIER 1
12 Required



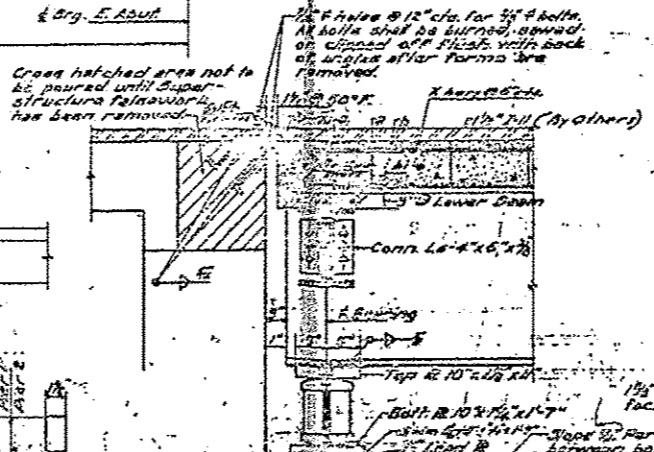
TOP OF PIER 2
12 Required



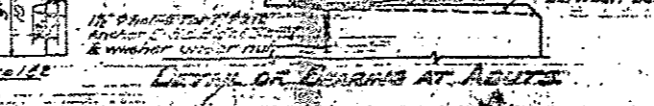
DETAIL OF BEARING AT PIER 1



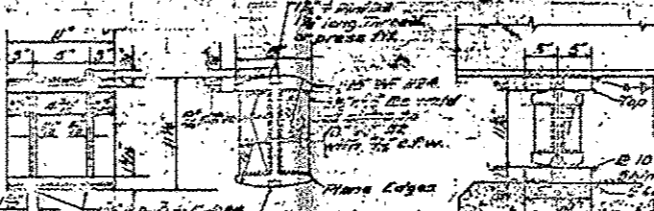
BOTTOM OF PIERS 1 & 2
12 Co. Required



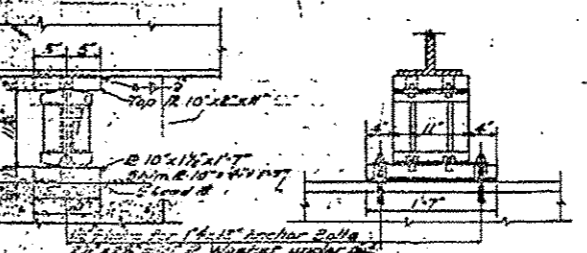
DETAIL OF BEAM SPLICE



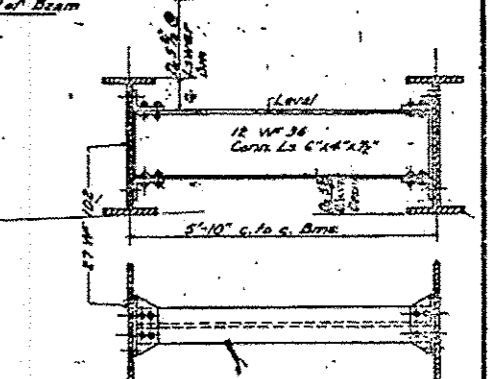
DETAIL OF BEARING AT ABUTS



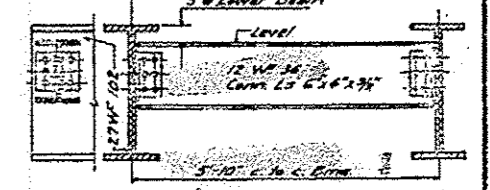
ROUGNESS AT PIER & ABUTS
36 Required



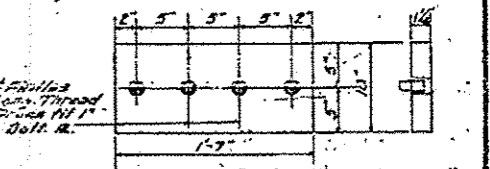
DETAIL OF BEARING AT PIER 2



DETAIL OF DIAPHRAGM D1
50 Required



DETAIL OF DIAPHRAGM D
20 Required



BOTTOM OF ABUTS
12 Required

Location	7	8	9	10	11	12
Beam No.	1	2	3	4	5	6
Abutment No.	1	2	3	4	5	6

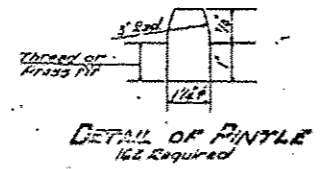
SHIM 1/2" THICKNESS

BILL OF MATERIAL
Structural Steel 175,380 Lbs.

DETAILS
BRIDGE OVER
MAUVAISE TERRE CREEK
3.61 RT. 10 SEC. 33 BR-PR
MORGAN COUNTY
STATION 11+41

DESIGNED	Doyles
CHECKED	GEC
DRAWN	W. J. G. G. G.
CHECKED	J. L. H. C.

DATE	NOV. 13 1954
DESIGNED	W. J. G. G. G.
CHECKED	W. J. G. G. G.
APPROVED	W. J. G. G. G.



DETAIL OF PINTLE
162 Required

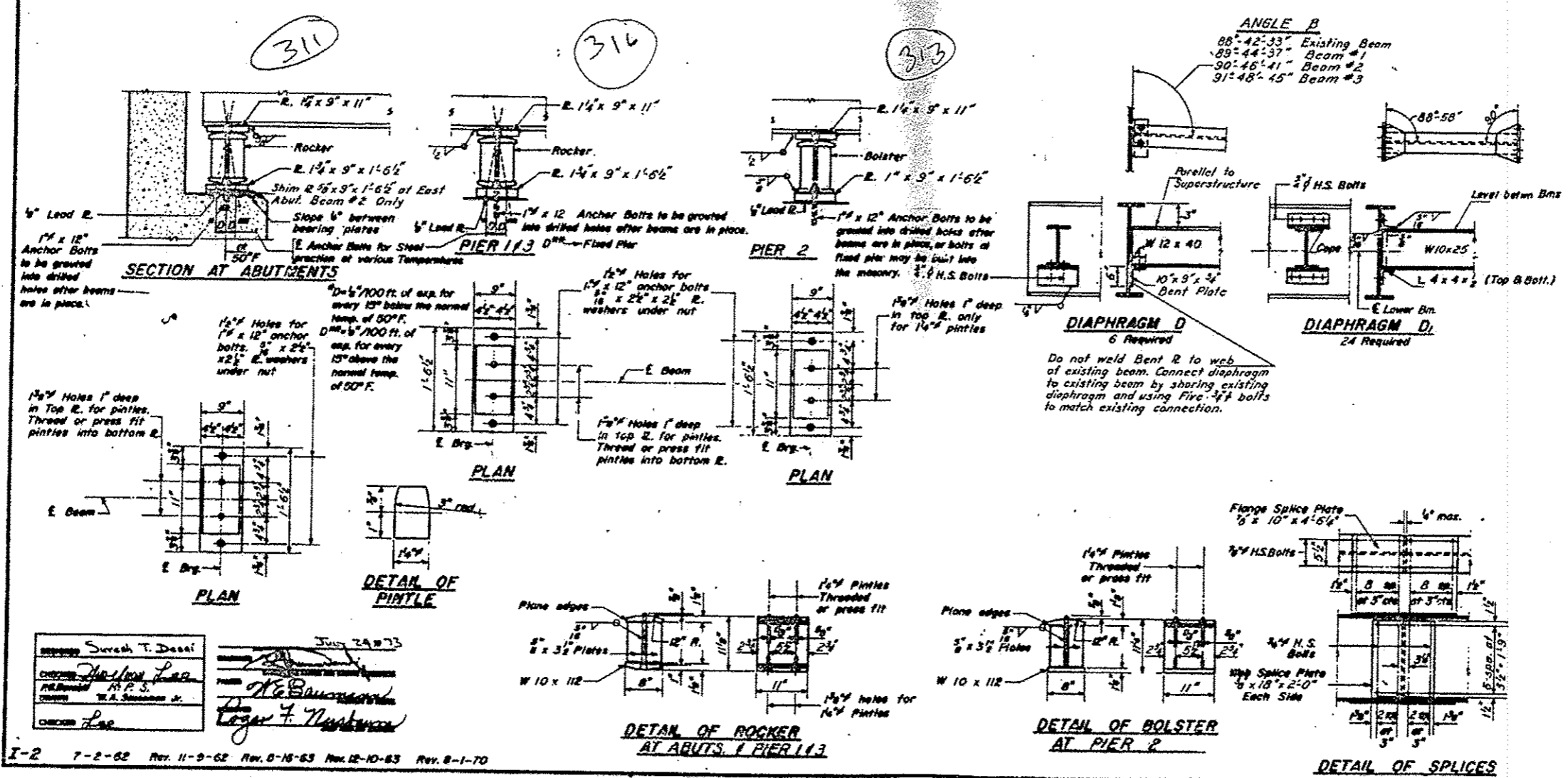
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	BY	CHECKED	SCALE	SHEET NO.
04-27-04	418-27	Sangamon	109	41

311 316 313 310 311

TOP OF BEAM ELEVATIONS

Loc. Beams	E. Brg. W. Abut.	E. Brg. Pier 1	E. Splice #1	E. Brg. Pier 2	E. Splice #2	E. Splice #3	E. Brg. Pier 3	E. Brg. E. Abut.
1	614.06	614.08	614.09	614.16	614.18	614.26	614.30	614.44
2	613.90	613.94	613.95	614.04	614.07	614.18	614.23	614.39
3	613.74	613.80	613.81	613.92	613.96	614.10	614.15	614.34



DESIGNED: *Suresh T. Desai*
 DRAWN: *Harlan Lee*
 CHECKED: *W.A. Stinson Jr.*
 DATE: *July 24, 2013*

STRUCTURAL STEEL
SOUTH BRIDGE
 E.A. RT.108 SEC.84-9-(4,4HB27)
 SANGAMON COUNTY
 STATION 673+99.49

I-2 7-2-62 Rev. 11-9-62 Rev. 6-16-63 Rev. 12-10-63 Rev. 8-1-70