03-06-2015 LETTING ITEM 078

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BRIDGE PAINTING 2014-1	*	21	1
	ILLINOIS	CONTRACT NO. 72G56		

* MONTGOMERY & SANGAMON

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

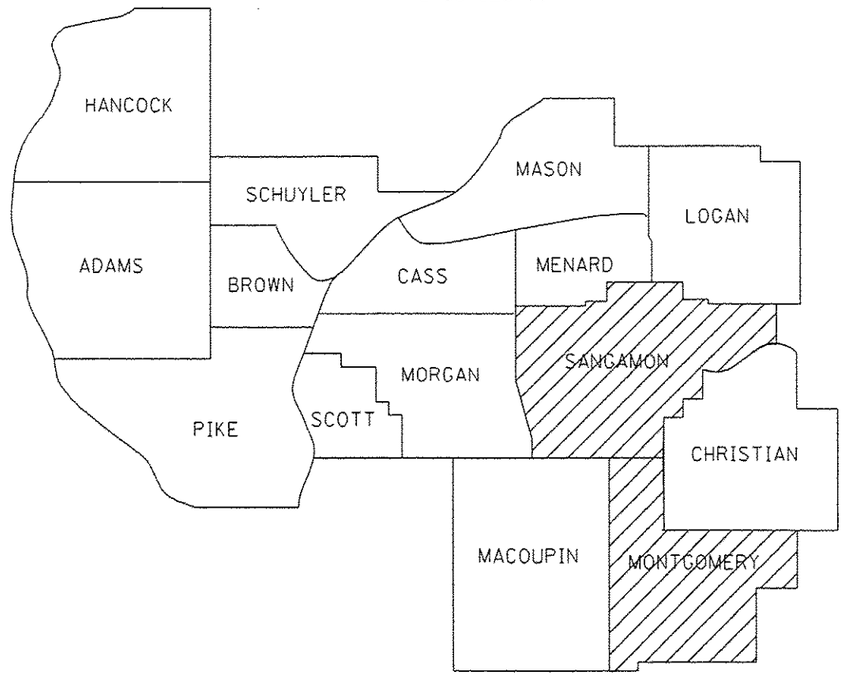
PROPOSED
BRIDGE PAINTING

VARIOUS ROUTES
SECTION D6 BRIDGE PAINTING 2014-1

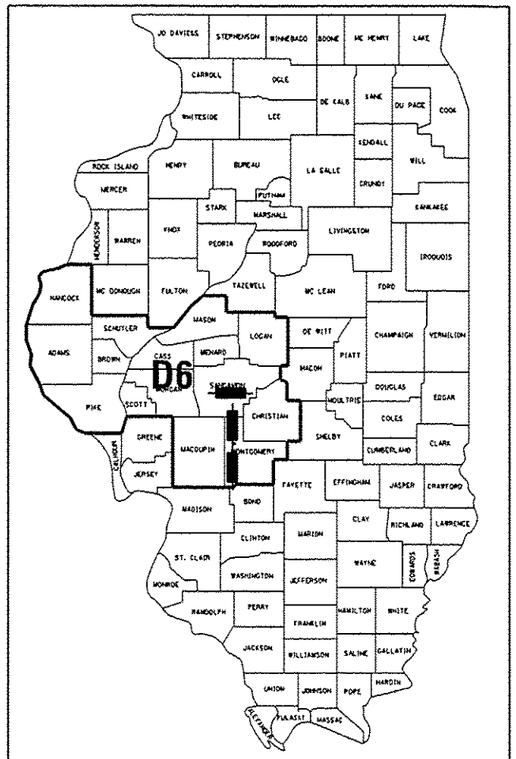
BRIDGE PAINTING
MONTGOMERY & SANGAMON COUNTIES

C-96-025-14

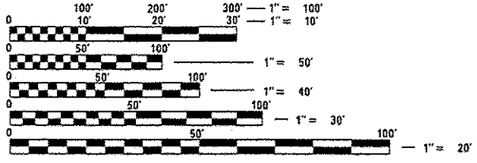
FOR INDEX OF SHEETS, SEE SHEET NO. 2



D-96-025-14



LOCATION OF SECTION INDICATED THUS: -



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED December 17 20 14

Ryan Z. Smith
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Jan 30 20 15

John D. Baranzelli, P.E. by acting
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 30 20 15

Omer Osman, P.E. by
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

GROSS LENGTH = NA
NET LENGTH = NA

CONTRACT NO. 72G56

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

HIGHWAY STANDARDS

701101-04
701106-02
701400-08
701401-09
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 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/U. 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 SSPC-OP-1 AND SSPC-OP2 PAINTING CONTRACTOR CERTIFICATIONS WILL BE REQUIRED FOR THESE BRIDGES.

4. 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.

5. 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.

6. NO LANE CLOSURES WILL BE PERMITTED FOR STRUCTURES 1 THROUGH 6. ALL WORK AT THESE STRUCTURES SHALL BE PERFORMED UNDER SHOULDER CLOSURES.

7. ANY DAMAGE TO THE EXISTING RIGHT OF WAY DUE TO THE CONTRACTOR'S ACTIVIITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. REPAIRS SHALL INCLUDE BUT NOT BE LIMITED TO REGRADING AND RESEEDING DISRUPTED AREAS AND SHALL BE AT THE DIRECTION OF THE ENGINEER.

COLOR SPECIFICATION TABLE	
COLOR SPECIFIED	COLOR SPECIFICATION
GRAY	MUNSELL 5B 7/1
GREEN	MUNSELL 7.5G 4/8

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6

EXAMINED December 8th 20 14
John C. Nyquist
ENGINEER OF OPERATIONS

EXAMINED December 4 20 14
Ron Archambeau
ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED December 4 20 14
Jeffrey P. Myers
ENGINEER OF PROGRAM DEVELOPMENT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE 100% STATE BRIDGE 0014 VARIOUS
67100100	MOBILIZATION	L SUM	1	1
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	3	3
70800105	TEMPORARY WATER FILLED BARRIER	FOOT	500	500
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1	1
Z0007103	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1	1
Z0007104	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	L SUM	1	1
Z0007105	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 5	L SUM	1	1
Z0007106	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 6	L SUM	1	1
Z0007107	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 7	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
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1

19

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STANDARDS, GENERAL NOTES, SIGNATURES, & SUMMARY OF QUANTITITES

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BRIDGE PAINTING 2014-1	MONT./SANG.	21	2
		CONTRACT NO. 72G56		
		ILLINOIS FED. AID PROJECT		

CLEANING AND PAINTING STEEL BRIDGE NO. 1
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 NO. 1 SHALL BE UTILIZED.

CLEANING AND PAINTING STEEL BRIDGE NO. 2
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 NO. 2 SHALL BE UTILIZED.

CLEANING AND PAINTING STEEL BRIDGE NO. 3
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 NO. 3 SHALL BE UTILIZED.

RAILROAD LIABILITY INSURANCE WILL BE REQUIRED

CLEANING AND PAINTING STEEL BRIDGE NO. 4
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 NO. 4 SHALL BE UTILIZED.

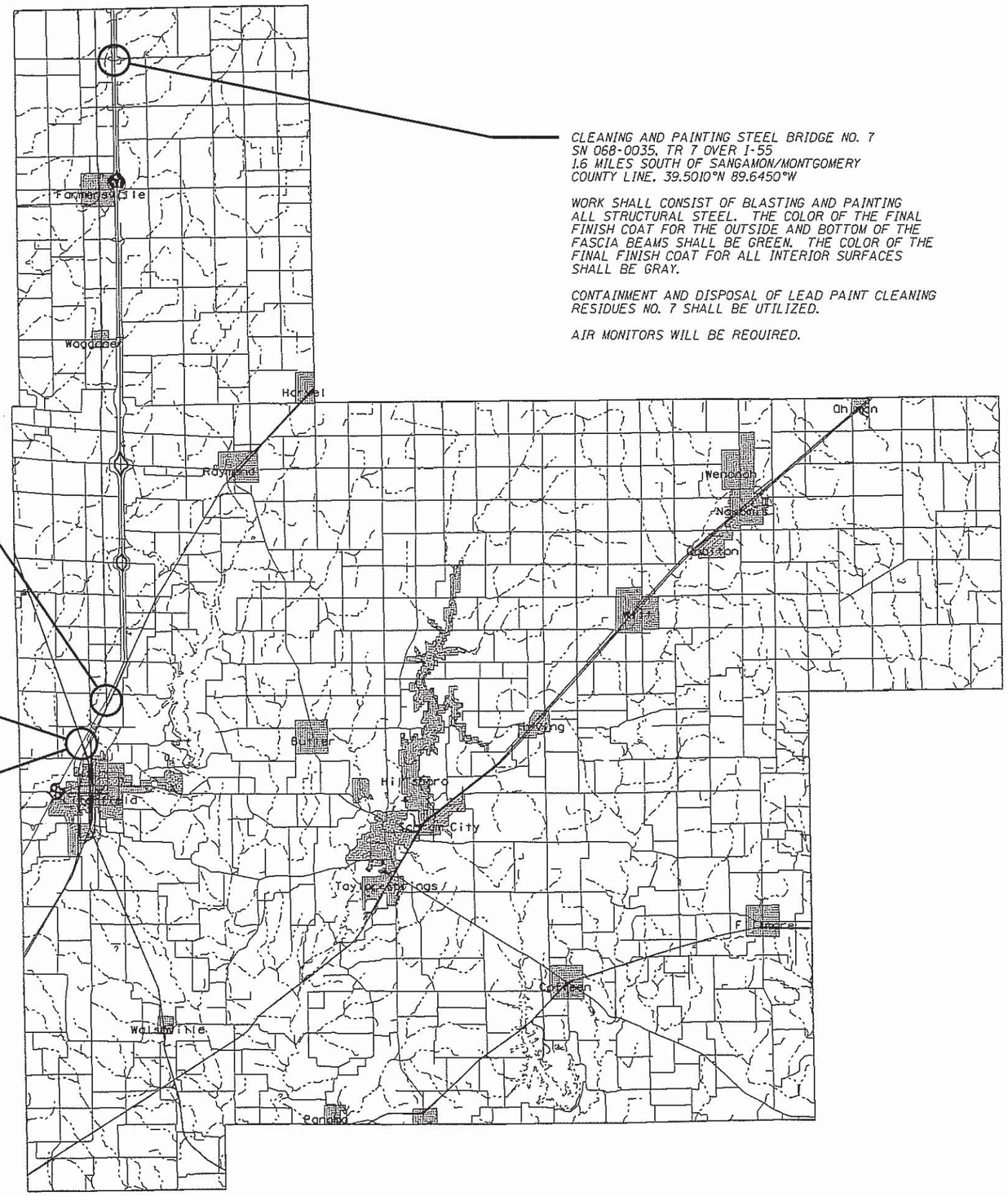
RAILROAD LIABILITY INSURANCE WILL BE REQUIRED

CLEANING AND PAINTING STEEL BRIDGE NO. 7
SN 068-0035, TR 7 OVER I-55
1.6 MILES SOUTH OF SANGAMON/MONTGOMERY COUNTY LINE. 39.5010°N 89.6450°W

WORK SHALL CONSIST OF BLASTING AND PAINTING ALL STRUCTURAL STEEL. 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 NO. 7 SHALL BE UTILIZED.

AIR MONITORS WILL BE REQUIRED.



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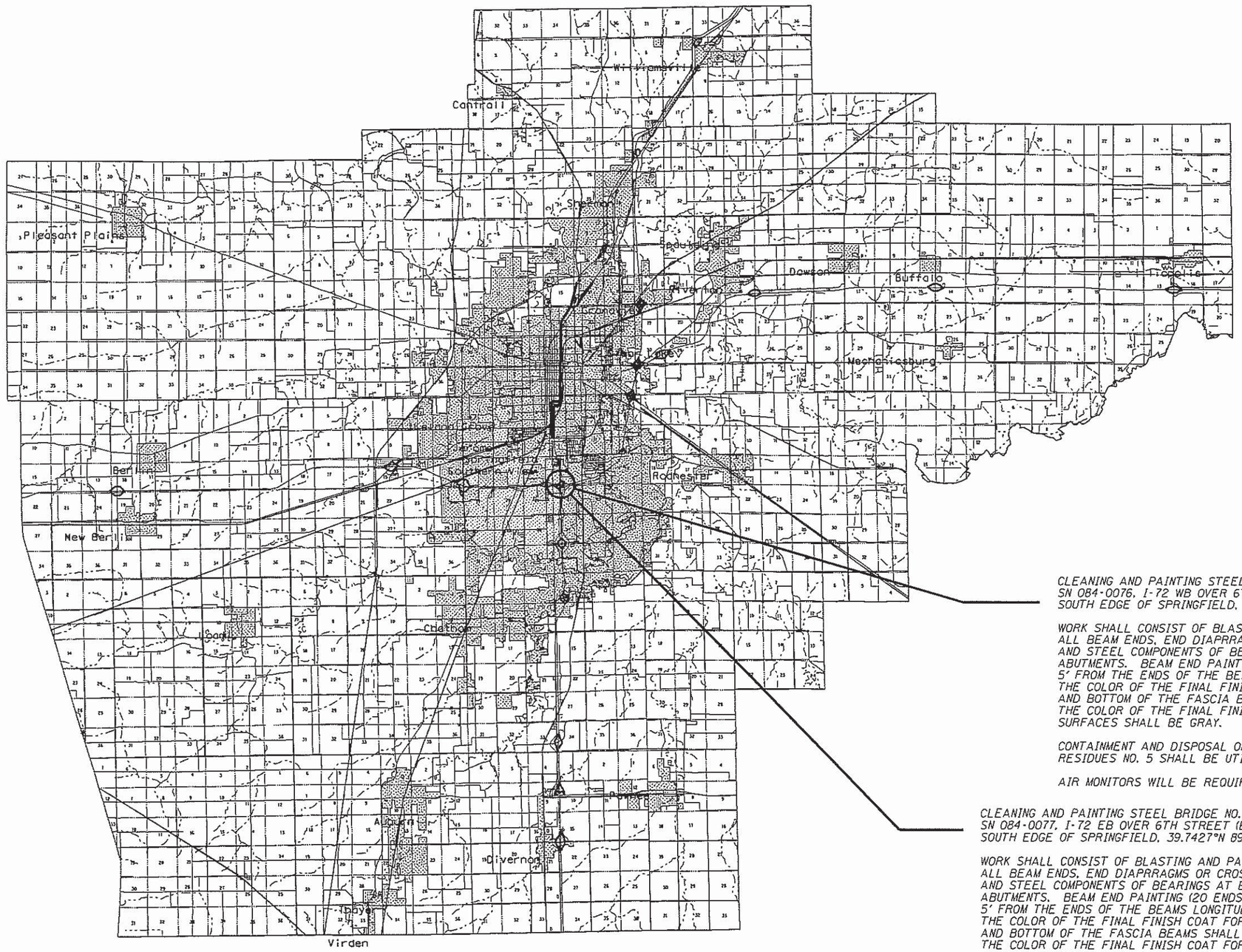
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MONTGOMERY COUNTY
STRUCTURE MAP

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	VAR. 06 BRIDGE PAINTING 2014-1	MONT./SANG.	21	3
		CONTRACT NO. 72G56		
		ILLINOIS FED. AID PROJECT		



CLEANING AND PAINTING STEEL BRIDGE NO. 5
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 DIAPRRAGMS 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 NO. 5 SHALL BE UTILIZED.

AIR MONITORS WILL BE REQUIRED.

CLEANING AND PAINTING STEEL BRIDGE NO. 6
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 DIAPRRAGMS OR CROSS FRAMES, AND STEEL COMPONENTS OF BEARINGS AT BOTH ABUTMENTS. BEAM END PAINTING (20 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 NO. 6 SHALL BE UTILIZED.

AIR MONITORS WILL BE REQUIRED.

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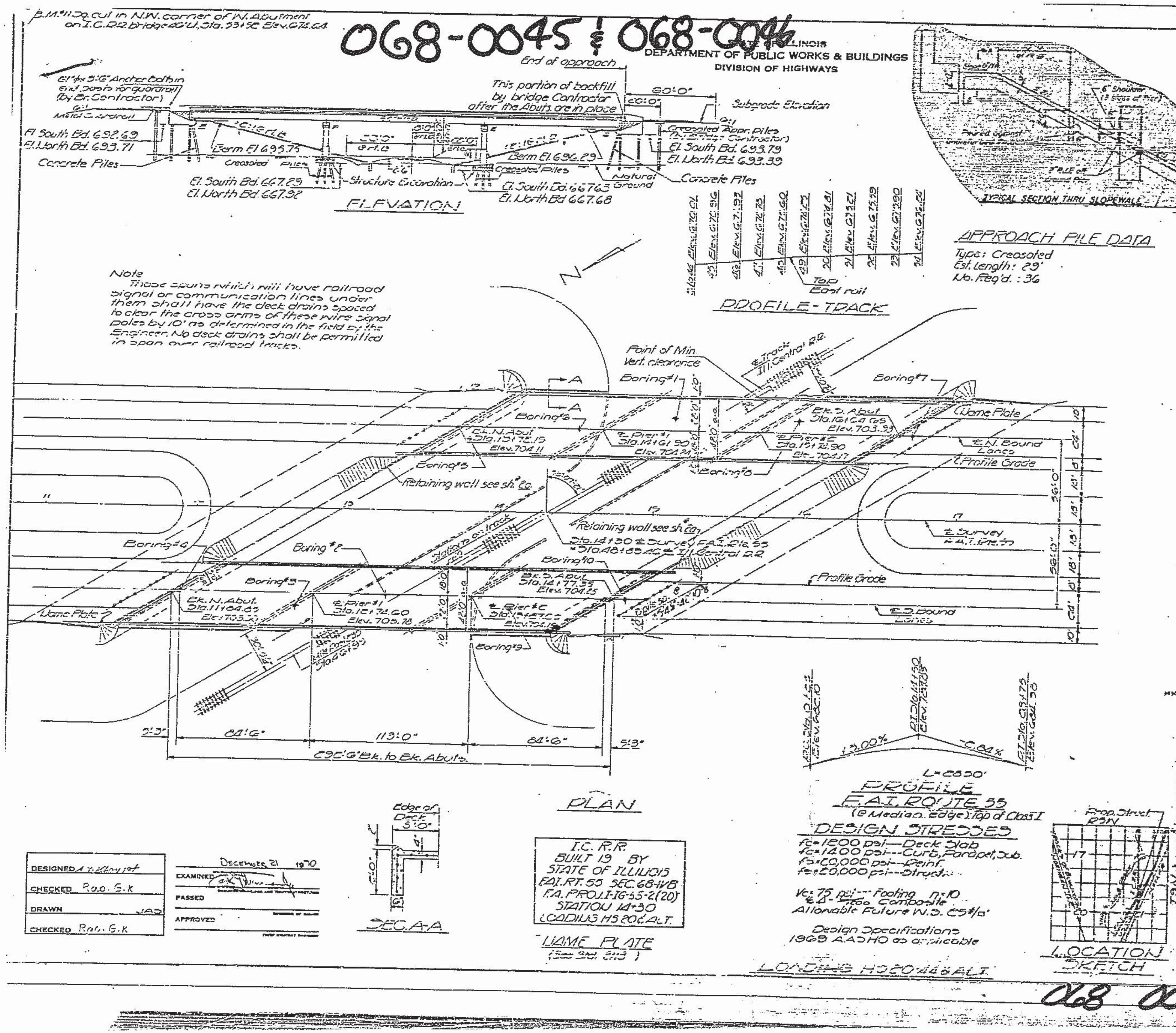
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SANGAMON COUNTY
STRUCTURE MAP

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BRIDGE PAINTING 2014-1	MONT./SANG.	21	4
		CONTRACT NO. 72G56		
		ILLINOIS FED. AID PROJECT		



GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Fasteners shall be high strength bolts. Bolts 7/8", open holes 15/16", unless otherwise noted.

Calculated weight of Structural steel = 220,560 lbs.

The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.

Field welding of construction accessories 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 cross frames over supports.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 sq. ft.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

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

Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.

Protective Coat shall not be applied to surfaces to which Coal Tar Interface Protective Coat is applied.

The Contractor shall drive Two Concrete test piles in permanent locations, one at South Abut. No. Bd. lanes, and one at North Abut. So. Bd. lanes and Two Timber test piles in permanent locations, one at Pier 1 No. Bd. lanes, and one at Pier 2 So. Bd. lanes ... the remainder of which ...

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Bituminous Concrete Surface Course Class I	Tons	202.5		202.5
Structure Excavation	Cu. Yds.			760
Protective Coat	Sq. Yds.	515		515
** Class X Concrete	Cu. Yds.	744.1	1012.8	1756.9
Structural Steel	L.S.	L.S.		L.S.
Stud Shear Connectors	Each	7272		7272
Aluminum Railing	Lin. Ft.	1145		1145
Reinforcement Bars	Lbs.	197750	109370	307120
Creosoted Piles Ext. to 36	Lin. Ft.			9166
Concrete Piles	Lin. Ft.		3430	3430
Test Pile Timber	Each		2	2
Test Pile Concrete	Each		2	2
Name Plates	Each			2
Slope wall 4"	Sq. Yds.			4560
Bridge Seat Sealer	L.S.			[illegible]
Coal Tar Interface				
Protective Coat	Sq. Yds.	2465		2465

*Applied at Abutments only.

** Includes quantities for Retaining Walls. See Sh. 20.

GENERAL PLAN & ELEVATION
F.A. PROJ. I-IG-55-2(20)50
F.A.I. RT. 55 OVER ILLINOIS CENT. R.R.
F.A.I. RT. 55 SEC. 68-1VB
MONTGOMERY COUNTY
STATION 14+30

SHEET NO. 1 / 20 SHEETS — F.A.I. 55, 68-1VB, MONTGOMERY

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 068-0045 & 068-0046
(FOR INFORMATION ONLY)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	MONTGOMERY	21	5

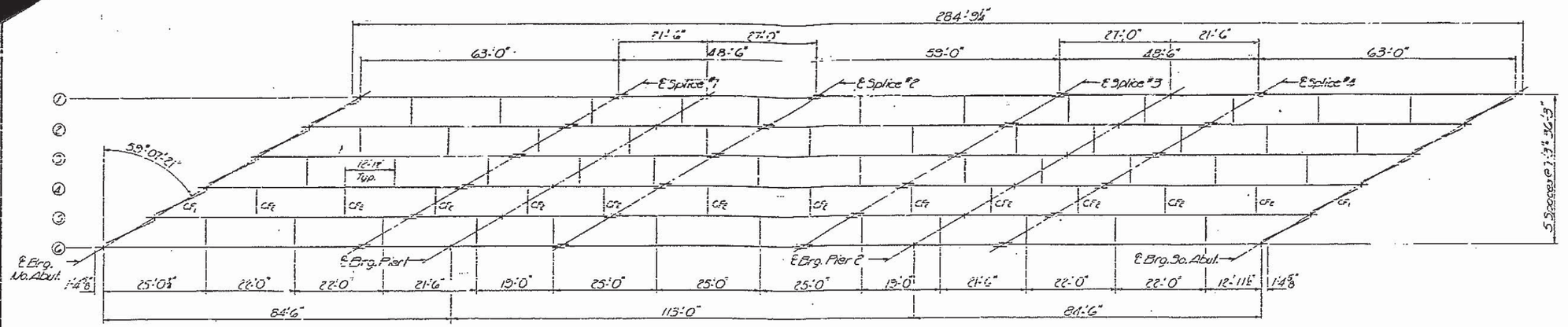
CONTRACT NO. 72C56

ILLINOIS FED. AID PROJECT

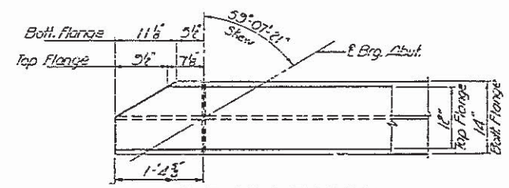
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

0045 E, 46

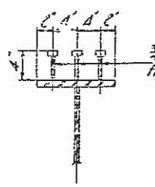
					SHEET NO. 8
I-I 55	68-IVB	MONTGOMERY	268	21	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



FRAMING PLAN
North & South Bound Lanes



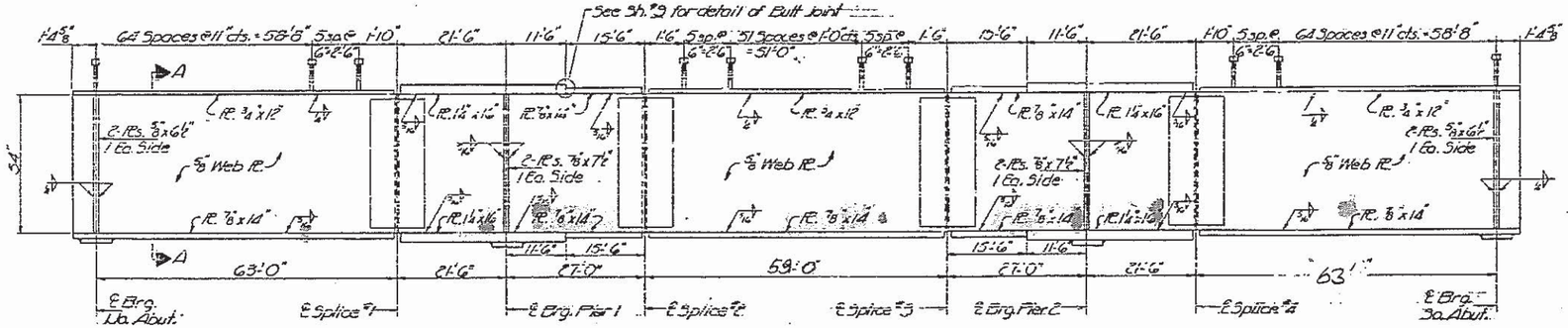
END OF GIRDERS (At Abutments)
North Abutment shown
South Abutment by rotation of 180°



¾"ø x 4" C.R. 1030.5TL granular or solid flux filled headed studs automatically end welded.

SEC. A-A

See Sh. #9 for detail of Built Joint



ELEVATION

DESIGNED	A.Y. Mangat
CHECKED	Rao. G.K
DRAWN	J.D.
CHECKED	Rao. G.K

EXAMINED Dec. 21 1970
PASSED
APPROVED

STRUCTURAL STEEL
F.A.I. RT. 55 SEC. 68-IVB
MONTGOMERY COUNTY
SDA 14 - 0.000
DISTRICT 3 - 0.000

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

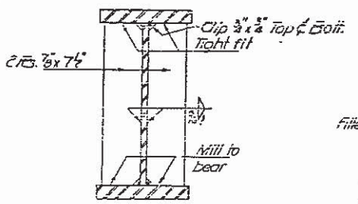
EXISTING PLANS SN 068-0045 & 068-0046
(FOR INFORMATION ONLY)
SCALE: ____ SHEET ___ OF ___ SHEETS STA. ____ TO STA. ____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	MONTGOMERY	21	6
		CONTRACT NO. 72G56		
		ILLINOIS FED. AID PROJECT		

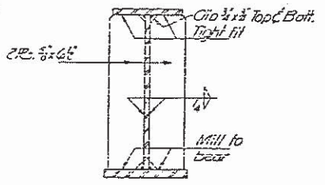
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

0045 & 46

				SHEET NO. 9
	SN-045	MONTGOMERY	268	52 SHEETS

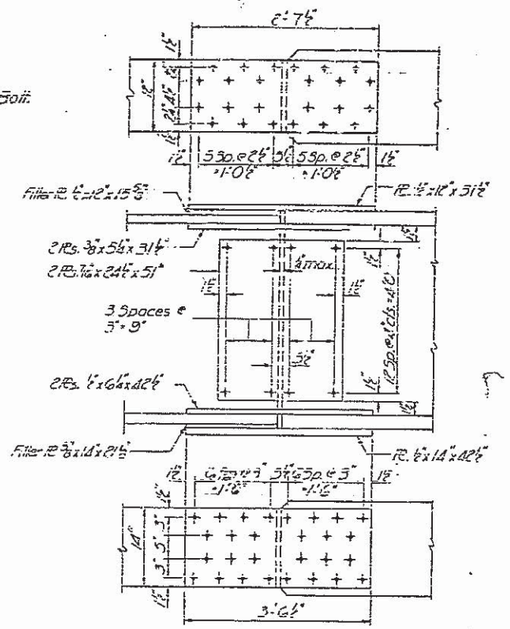


AT PIERS

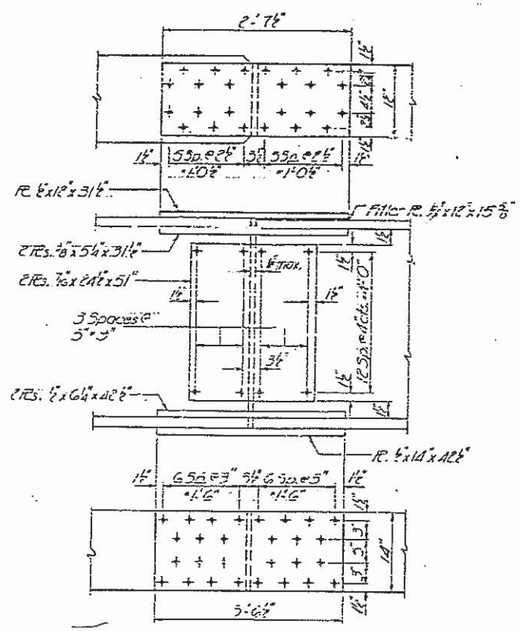


AT ABUTS.

BEARING STIFFENERS



FIELD SPLICES 1 & 4
(24 req'd)
(Use ⅞" ϕ H.S. Bolts)



FIELD SPLICES 2 & 3
(24 req'd)
(Use ⅞" ϕ H.S. Bolts)

*TOP OF WEB ELEVATIONS NO. BOUND LANES

Location / Girder	1	2	3	4	5	6
℄ Brg. No. Abut.	702.98	703.11	703.20	703.24	703.09	702.93
℄ Splice #1	702.91	703.11	703.22	703.28	703.15	703.00
℄ Brg. Pier 1	702.95	703.12	703.25	703.31	703.19	703.04
℄ Splice #2	703.00	703.17	703.30	703.36	703.24	703.10
℄ Splice #3	702.96	703.11	703.25	703.33	703.23	703.10
℄ Brg. Pier 2	702.85	703.08	703.17	703.25	703.16	703.04
℄ Splice #4	702.77	702.95	703.10	703.19	703.10	702.99
℄ Brg. So. Abut.	702.61	702.81	702.98	703.08	703.01	702.91

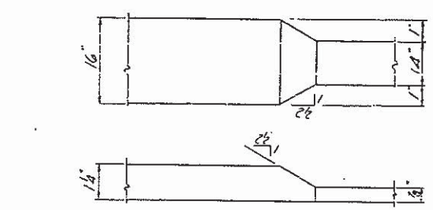
*TOP OF WEB ELEVATIONS SO. BOUND LANES

Location / Girder	1	2	3	4	5	6
℄ Brg. No. Abut.	702.36	702.43	702.47	702.33	702.14	701.91
℄ Splice #1	702.61	702.69	702.74	702.62	702.44	702.23
℄ Brg. Pier 1	702.76	702.80	702.86	702.76	702.57	702.36
℄ Splice #2	702.85	702.94	703.01	702.90	702.73	702.53
℄ Splice #3	703.01	703.11	703.20	703.10	702.95	702.76
℄ Brg. Pier 2	703.06	703.13	703.22	703.13	702.99	702.80
℄ Splice #4	703.03	703.15	703.24	703.16	703.04	702.84
℄ Brg. So. Abut.	703.12	703.26	703.37	703.30	703.18	703.01

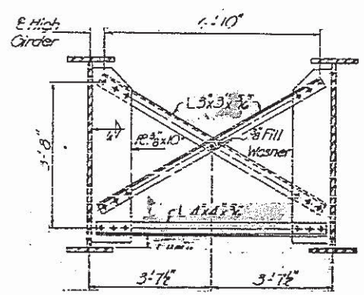
*For fabrication only

INTERIOR GIRDER REACTION TABLE

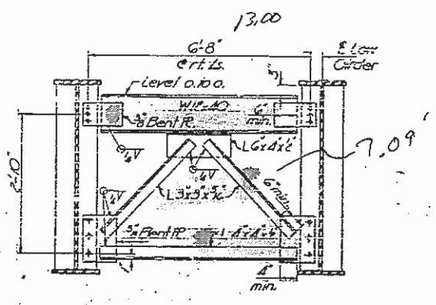
		Abut's.	Pier 1 or 2
RϵD	(k)	28.33	108.45
RsϵD	(k)	15.89	55.18
RϵL	(k)	41.23	45.42
Imp.	(k)	9.83	14.65
Total	(k)	95.33	243.70



BUTT JOINT DETAIL



TYPICAL CROSS FRAME-CF2
(120 req'd)
(Use ¾" ϕ H.S. Bolts)



TYPICAL CROSS FRAME-CF1
(20 req'd)
(Use ¾" ϕ H.S. Bolts)

INTERIOR GIRDER MOMENT TABLE

	Abut's. to 0.4 Sp. 1	Pier 1 or 2	0.5 Sp. 2
I_s (in⁴)	24022.6	38732.1	24022.6
I_c (in⁴)	58628.4		58628.4
S_s (in³)	915.4	1371.0	915.4
S_c (in³)	1306.0		1306.0
ϕ (k/i)	.970	1.474	.970
M ϕ (ik)	403.60	1526.22	473.58
f_b ϕ (ksi)	5.29	13.36	6.29
f_s ϕ (ksi)	.504		.504
Ms ϕ (ik)	248.93		347.17
M ℓ (ik)	693.53	603.46	781.46
M IMP (ik)	165.06	135.18	164.11
Total (ik)	1107.52	738.64	1292.73
f_b (ϕ+ℓ) (ksi)	10.18	6.46	11.88
f_s max (ksi)	15.47	19.82	18.16
VR	57.34		50.11

I_s and S_s = the moment of inertia and section modulus of the steel section.
I_c and S_c are the moment of inertia and section modulus of the composite section used in computing f's.
VR is the maximum ℓ + Impact shear range.

DESIGNED	A. K. Kennedy
CHECKED	Rao. G. K
DRAWN	JD
CHECKED	Rao. G. K

EXAMINED Dec. 21 1970
PASSED
APPROVED

STRUCTURAL STEEL DETAILS
I.A.I.R.T. 55 SEC. 68-1VR
MONTGOMERY COUNTY
STA. 14+87.07

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 068-0045 & 068-0046
(FOR INFORMATION ONLY)
SCALE: ____ SHEET ___ OF ___ SHEETS STA. ____ TO STA. ____

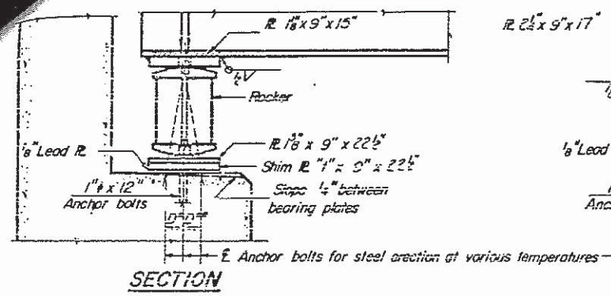
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BDGE PAINTING 2014-1	MONTGOMERY	21	7
		CONTRACT NO. 72G56		
	ILLINOIS FED. AID PROJECT			

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

0045 & 46

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	68-1VB	MONTGOMERY	268	93

SHEET NO. 10
20 SHEETS



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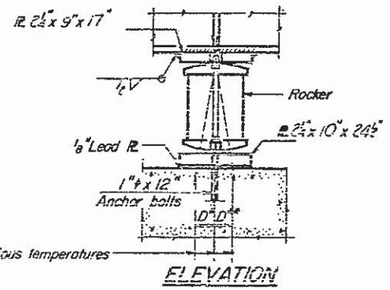

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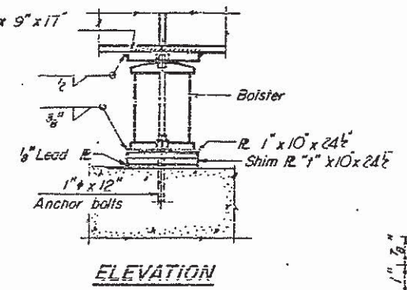
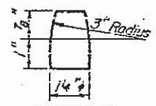
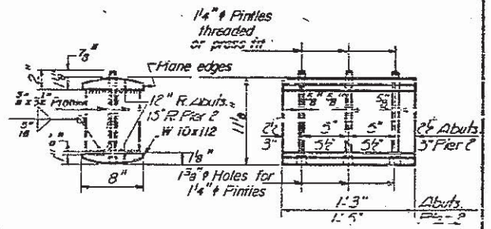


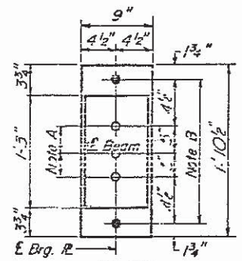
ELEVATION



PINTLE



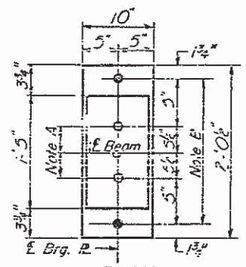
ROCKER
ABUTS. & PIER 2



PLAN

AT ABUTMENTS

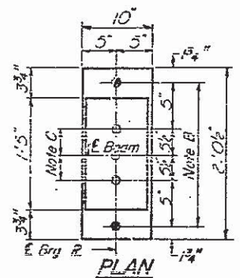
NOTE A
1⅜"ϕ Holes – 1" deep in top R. for pintles. Thread or press fit pintles into bottom R.



PLAN

AT PIER 2

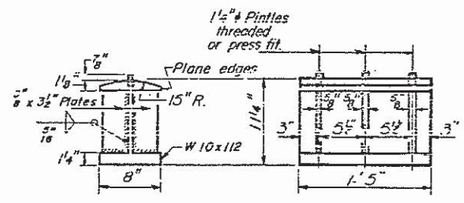
NOTE B
1½"ϕ Holes for 1"ϕ anchor bolts. ⅜ x 2½" x 2½" R. Washers under nut.



PLAN

AT PIER 1

NOTE C
1⅜"ϕ Holes 1" deep in top R. only for 1¼"ϕ pintles.



BOLSTER
PIER 1

BEARING ASSEMBLY DETAILS

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

a) D* (Side of brg. away from fixed brg.)
D* = ⅛" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = ⅛" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

SHIM PLATE "t" inches

North Bound Lanes	South Bound Lanes
North Abut. Girder 1 = 5/8	North Abut. Girder 3 = 0
North Abut Girder 4 = ¼	
Pier 1 Girder C = 3/8	

DESIGNED	A.Y. Killingsworth
CHECKED	Rao G.K
JD DRAWN	P.G. Barnett
CHECKED	Rao. G.K

EXAMINED Dec. 21 1970
PASSED
APPROVED

I-2-B 9-1-65, 8-1-70

BEARING DETAILS
F.A.I. RT. 55 SEC. 68:1VB
MONTGOMERY COUNTY
STA. 14+30.00

NO. NNE = 46

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 068-0045 & 068-0046
(FOR INFORMATION ONLY)
SCALE: ____ SHEET ___ OF ___ SHEETS STA. ____ TO STA. ____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	MONTGOMERY	21	B
		CONTRACT NO. 72G56		
	ILLINOIS FED. AID PROJECT			

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

068-0048 & 0049

					SHEET NO. 1
					15 SHEETS
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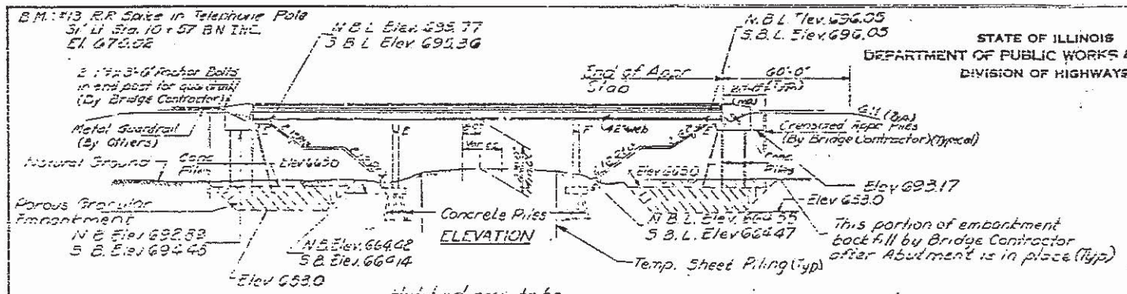
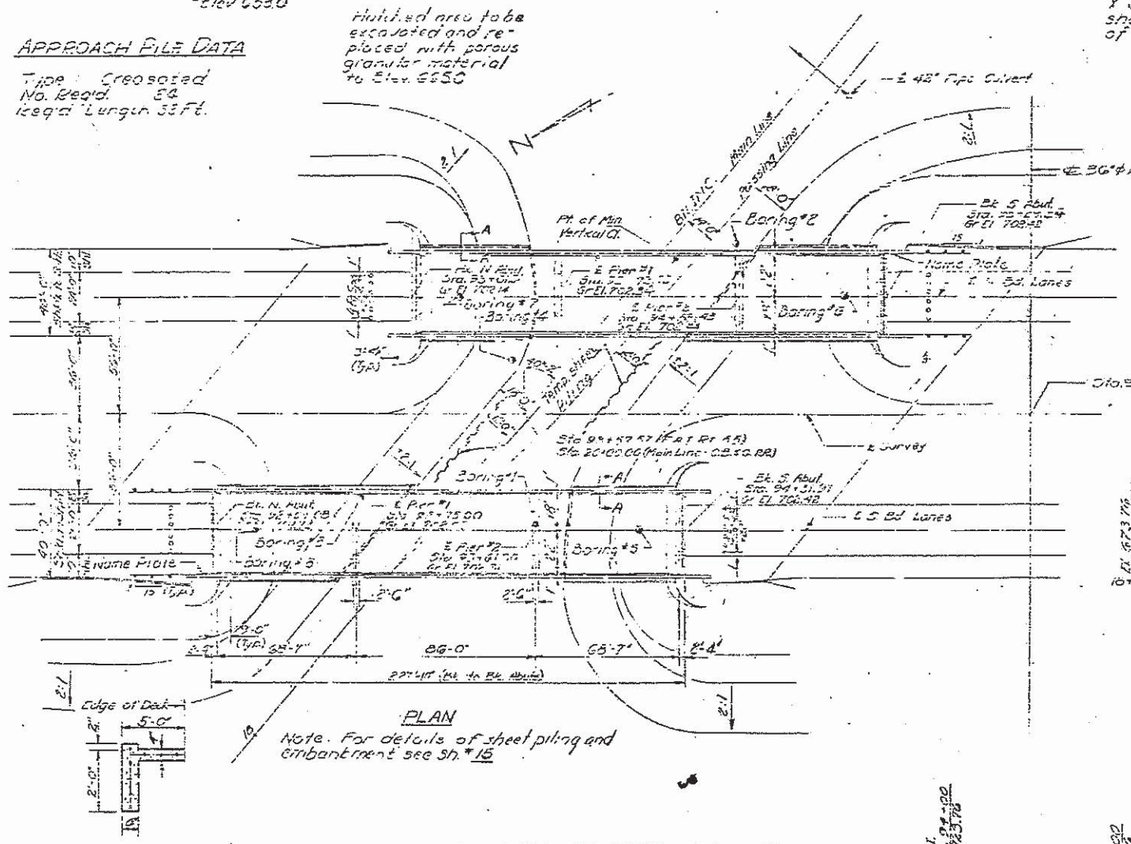


APPROACH FILL DATA

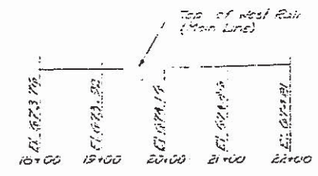
Type: Creosoted
No. Req'd. 54
Req'd. Length 33 Ft.

Hatched area to be excavated and replaced with porous granular material to Elev. 665.0



PLAN

Note. For details of sheet piling and embankment see Sh. #15



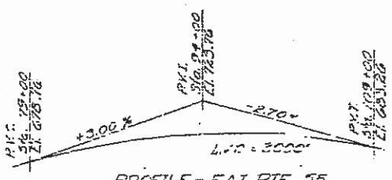
PROFILE - TRACK

SEC. A-A

DESIGNED	[illegible]	
DETAILED	[illegible]	
DRAWN	F. Mercado	
CHECKED	[illegible]	
EXAMINED	[illegible]	September 9, 1970
PASSED		
APPROVED		

STATION 35+37.57
BUILT 197 BY
STATE OF ILLINOIS
F.A.I. RT. 55 SEC. 68-1VB-1
F.A. PROJ. I-IG-55-2(20)
LOADING H-20 ALT.

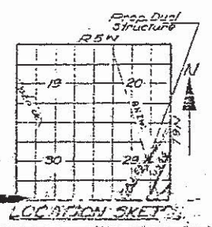
NAME PLATE
See Std. 2113



PROFILE - F.A.I. RTE. 55
(Median Edge of Pavt.)

DESIGN STRESSES

f'c = 1200 p.s.i. - Deck Slab
f'c = 1400 p.s.i. - Parapet, Sub
fs = 20,000 p.s.i. - Reinf.
fs = 20,000 p.s.i. - Struct. Steel
n = 10
Allowable Future W.S. 25#/sq. Ft.
Allowable f.o = 4/1000
LOADING H-20-44 & ALL



LOCATION SKETCH

PROJ. I-IG-55-2(20)50
GENERAL PLAN & ELEVATION
OVER BN INC.
F.A.I. ROUTE 55
SECTION 68-1VB-1
MONTGOMERY COUNTY
STATION 93+37.57

EXHIBIT - 1

Rev. 12-8-71 N.C.C.

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Fasteners shall be high strength bolts. Bolts ⅞", open holes 15/16" unless otherwise noted.

Diaphragm connections may be adapted to shop welding subject to approval by the Engineer.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 sq. ft.

Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.

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

Calculated weight of Structural Steel = 479,460 lbs.

The Basic Lead Silica Chromate paint system shall be used for shop and field painting of Structural Steel.

Anchor bolts shall be set before bolting diaphragms over supports.

The Contractor shall drive 4 Concrete Test piles in permanent locations, before ordering remainder of piles, as follows: 1@ N Abut. N.B.L., 1@ Pier 1 N.B.L., 1@ S. Abut. S.B.L., 1@ Pier 1 S.B.L.

Protective coat shall not be applied to surfaces to which Coal Tar Interlayer Protective Coat is applied.

The Engineer shall determine in the field the location of the deck drains in the spans where E.E. signal and communication conduits are involved. No deck drains shall be permitted in spans over E.E.

Field welding of construction accessories 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.

The concrete non-skid non above the mandatory construction joint at the top of the slab shall be constructed of Class 1 concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

TOTAL BILL OF MATERIAL

Item	Unit	Super Str.	Sub Str.	Total
Bit. Concr. Surf. Crs. (Class 1)	Tons	156		156
Coal Tar Interlayer Protective Coat	Sq. Yds.	1331		1331
Structure Excavation	Cu. Yds.		1141	1141
Protective Coat	Sq. Yds.	555		555
Class 1 Concrete	Cu. Yds.	557.0	500.8	1057.8
Aluminum Railing	Lin. Ft.	639		639
Reinforcement Bars	Lbs.	139970	147990	287960
Creosoted Piles (20' to 36')	Lin. Ft.		765	765
Concrete Piles	Lin. Ft.		5163	5163
Test Piles (Concrete)	Each		4	4
Name Plates	Each	2		2
Slope wall (4")	Sq. Yds.		1765	1765
Bridge Seat Sealer	L.S.		L.S.	L.S.
Preformed Joint Sealer	Lin. Ft.		84	84
Structural Steel	L.S.			L.S.
Porous Granular Embankment	Cu. Yds.		9,200	9,200
Temporary Sheet Piling	Sq. Ft.		12500	18,500

* N. Abuts. only.
+ S. Abuts. only.

Rev. 12-8-71 N.C.C. Rev. 2-24-71 N.C.

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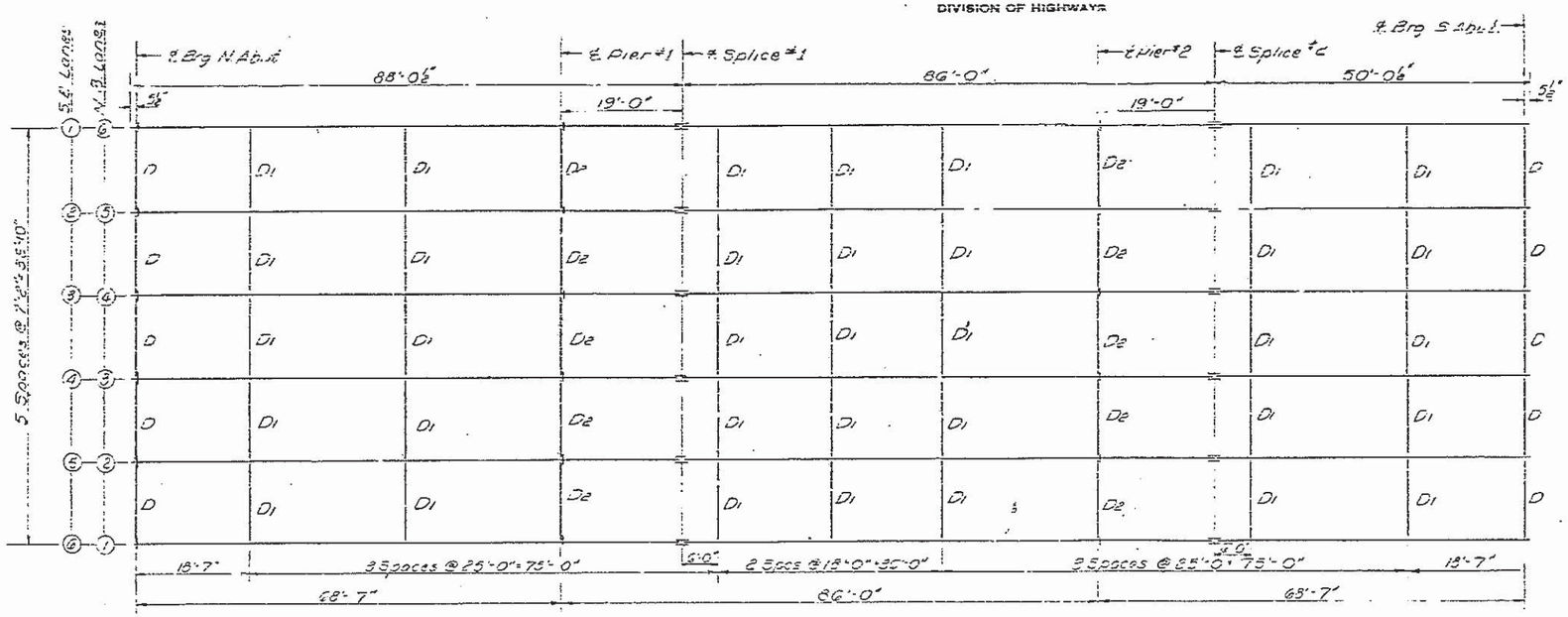
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 068-0048 & 068-0049
(FOR INFORMATION ONLY)
SCALE: ____ SHEET ___ OF ___ SHEETS STA. ____ TO STA. ____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	MONTGOMERY	21	9
		CONTRACT NO. 72056		
	ILLINOIS FED. AID PROJECT			

				SHEET NO. 7
11 55	068-0048	MONTGOMERY	068	70
				15 SHEETS

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



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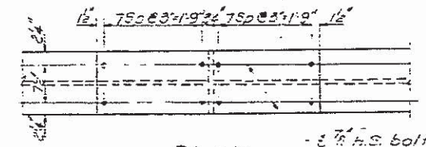

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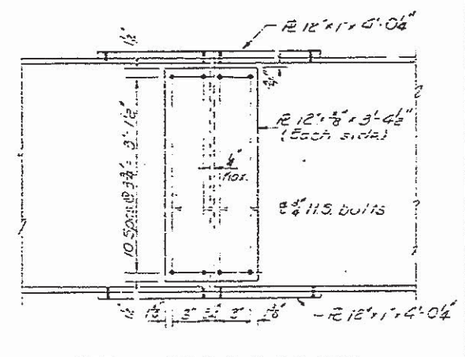
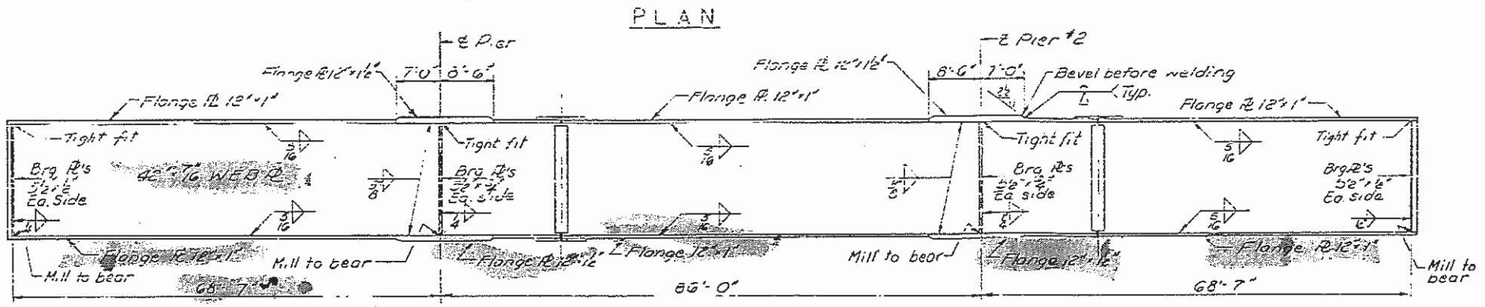


DETAIL OF FIELD SPLICES



ELEVATION

INTERIOR GIRDER MOMENTS

	45 pier 3	Pier for E	55 p
I in⁴	13800	13763	13500
D.L. K/ft	122	122	122
M.D.L 'K	377.29	778.89	349.60
M.L.L 'K	508.78	484.57	503.72
Imp 'K	125.16	119.20	123.91
M Total 'K	1011.23	1382.06	977.23
fs psi.	19340	18910	18700

INTERIOR GIRDER REACTIONS

	Abut.	Pier
D.L. K	30.94	105.64
L.L. K	31.70	45.14
Imp. K	7.80	11.10
Total K	69.99	161.88

TOP OF WEB ELEVATIONS
(For fabrication only)

NORTH BOUND LANE

Girder location	1	2	3	4	5	6
℄ Brg. N. Abt	701.19	701.32	701.43	701.37	701.25	701.10
℄ Pier #1	701.32	701.45	701.56	701.50	701.38	701.23
℄ Splice #1	701.36	701.49	701.60	701.54	701.42	701.27
℄ Pier #2	701.41	701.54	701.65	701.59	701.47	701.32
℄ Splice #2	701.43	701.56	701.67	701.61	701.49	701.34
℄ Brg. S. Abt	701.47	701.60	701.71	701.65	701.53	701.38

SOUTH BOUND LANE

Girder location	1	2	3	4	5	6
℄ Brg. N. Abt	700.78	701.91	701.03	700.96	700.84	700.69
℄ Pier #1	701.04	701.17	701.28	701.22	701.10	700.95
℄ Splice #1	701.11	701.24	701.35	701.29	701.17	701.02
℄ Pier #2	701.29	701.42	701.53	701.47	701.35	701.20
℄ Splice #2	701.34	701.47	701.58	701.52	701.40	701.25
℄ Brg. S. Abt	701.47	701.60	701.71	701.65	701.53	701.38

DESIGNED
CHECKED
DRAWN F. Mercado
CHECKED

EXAMINED Sept 9 1970
PASSED
APPROVED

STRUCTURAL STEEL
FAI RT. 55 SEC. 68-1 VB
MONTGOMERY COUNTY
STA. 93+57.57

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

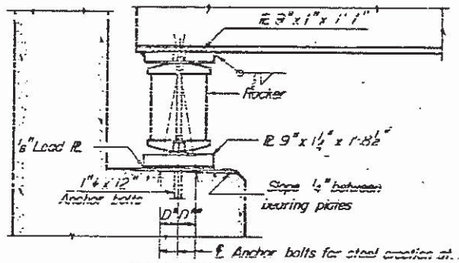
EXISTING PLANS SN 068-0048 & 068-0049
(FOR INFORMATION ONLY)

SCALE: ____ SHEET ___ OF ___ SHEETS STA. ____ TO STA. ____

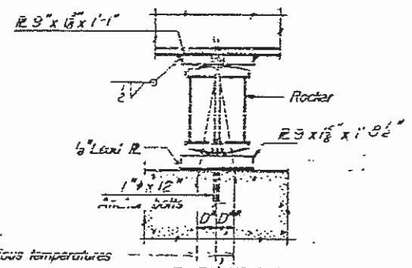
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BDGE PAINTING 2014-1	MONTGOMERY	21	10
		CONTRACT NO. 72G56		
		ILLINOIS FED. AID PROJECT		

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

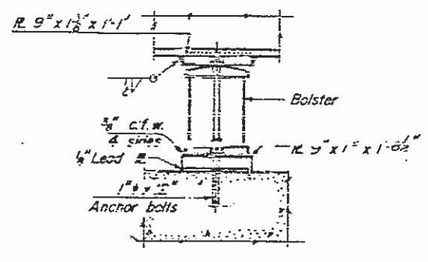
SHEET NO. 8
15 SHEETS



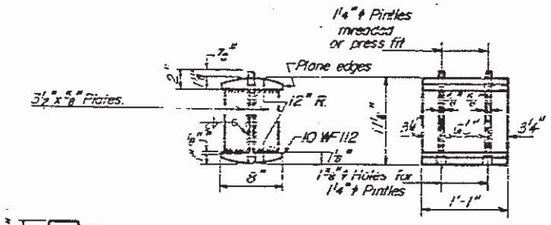
SECTION



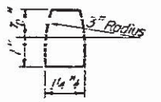
ELEVATION



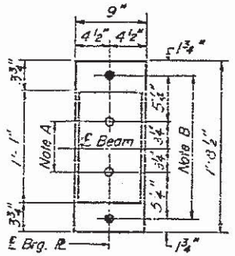
ELEVATION



ROCKER



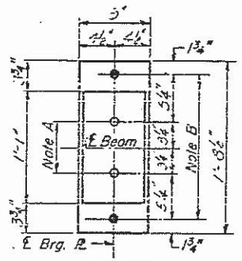
PINTLE



PLAN

AT ABUTMENT

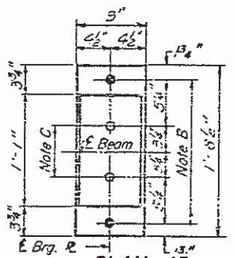
NOTE A
1⅜"ø Holes – 1" deep in top R for pintles. Thread or press fit pintles into bottom R.



PLAN

AT PIER #1

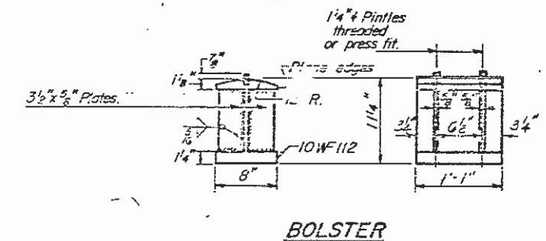
NOTE B
1½"ø Holes for 1"ø anchor bolts. 2½"x 2½"x 5/16" R. Washers under nut.



PLAN

AT PIER #2

NOTE C
1⅜"ø Holes 1" deep in top R only for 1¼"ø pintles.



BOLSTER

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

a) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

BEARING ASSEMBLY DETAILS

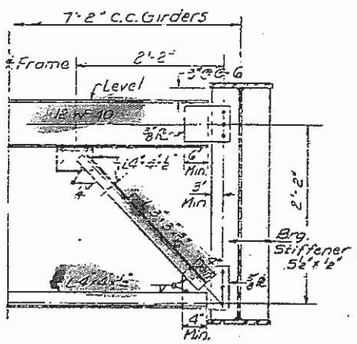


DIAGRAM D2
(20 Req'd.)

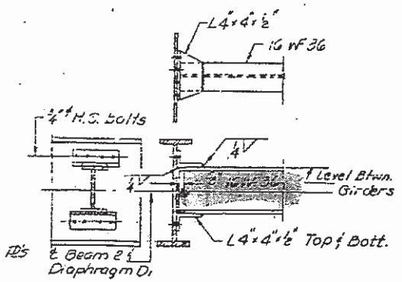
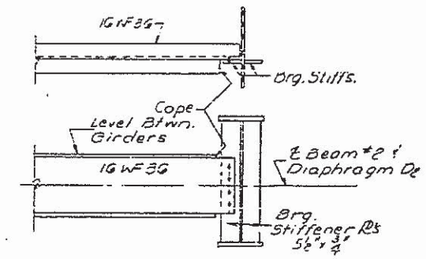


DIAGRAM D1
(70 Req'd.)



DIAPHRAGM D2
(20 Req'd.)

DESIGNED
CHECKED Hui-Yuan Lee
DRAWN P.G. Bonert

Sept. 9 1970
EXAMINED
PASSED

DIAPHRAGM & BEARING DETAILS
F.A.I. RT. 55 SEC. 68-1VB

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

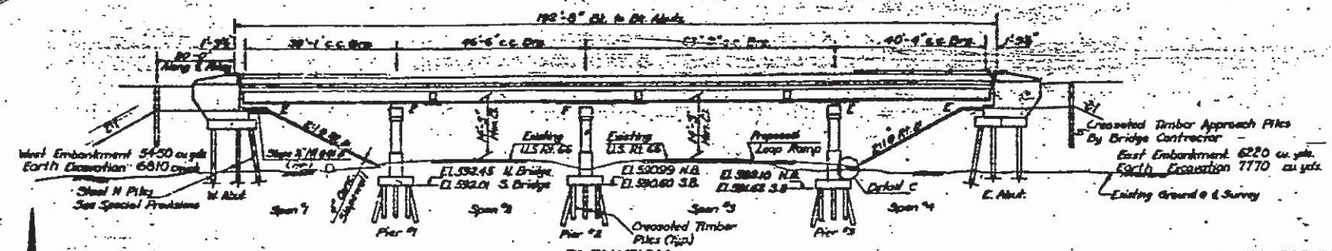
EXISTING PLANS SN 068-0048 & 068-0049
(FOR INFORMATION ONLY)
SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BDGE PAINTING 2014-1	MONTGOMERY	21	11
		CONTRACT NO. 72G56		
	ILLINOIS FED. AID PROJECT			

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

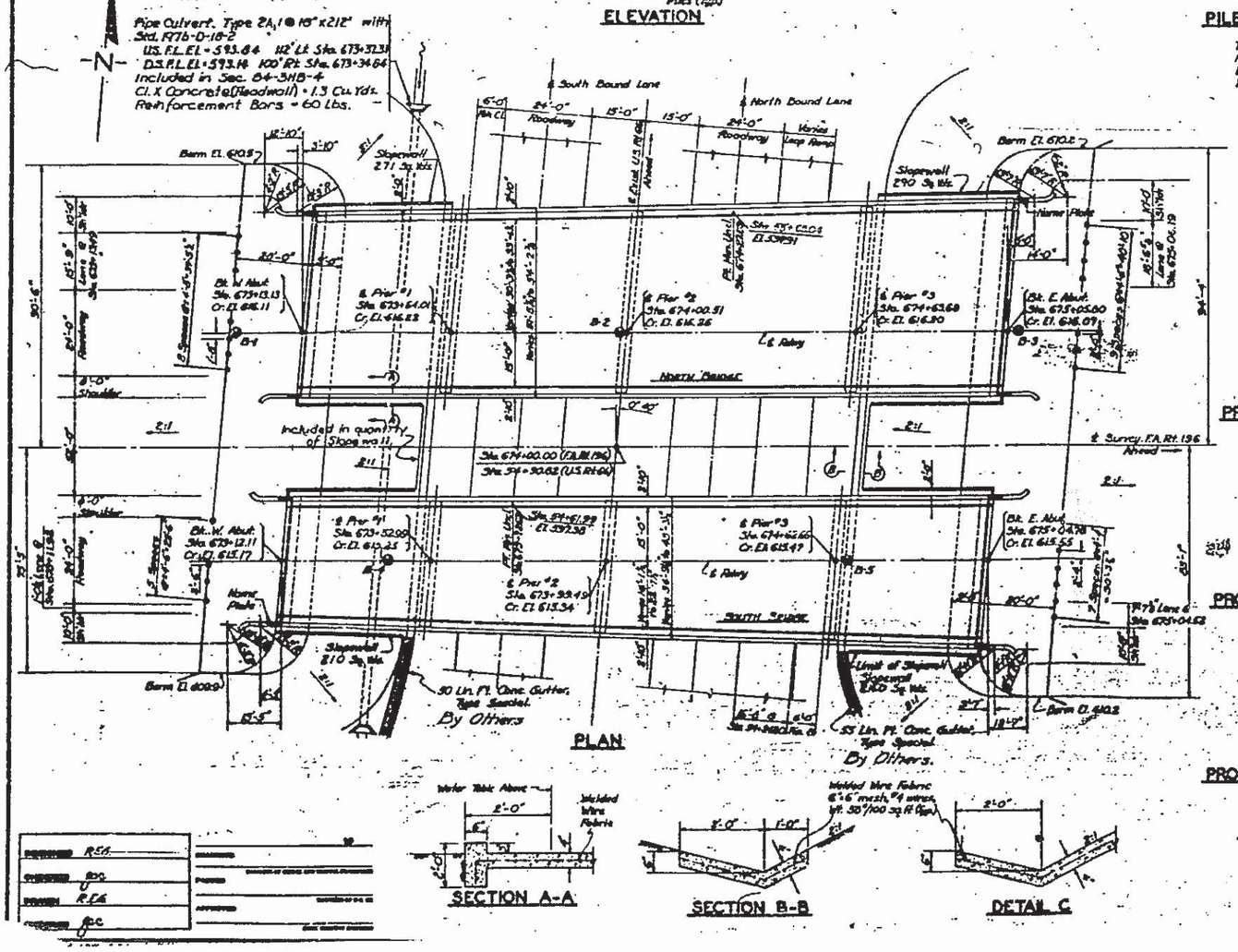
F.A. RTE. 196	SECTION 06 BDGE PAINTING 2014-1	Sangamon	TOTAL SHEETS 21	SHEET NO. 1
				F.A.277(1)

SHEET 1 OF 19



ELEVATION

Pipe Culvert, Type 2A,1 @ 15"x212" with Std. 967b-D-18-2
U.S. F.L. EL = 593.84 112' Lt. Sta. 673+31.33
D.S. F.L. EL = 593.14 100' Rt. Sta. 673+34.64
Included in Sec. 84-3HB-4
Cl. X Concrete (Headwall) = 1.3 Cu. Yds.
Reinforcement Bars = 60 Lbs.



PLAN

SECTION A-A

SECTION B-B

DETAIL C

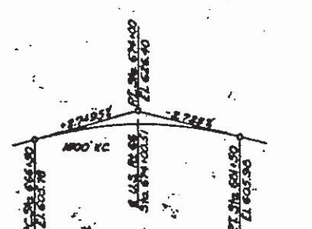
PILES FOR METHOD II
Standard 909-3

Type	Crossotted
Min. Capacity	15 Tons
Est. Length	30 Ft.
No. Req'd	33

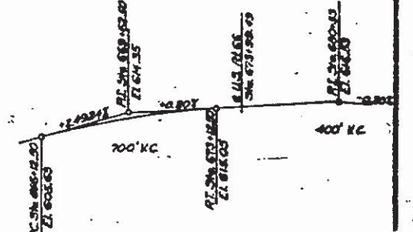
990 Lin. Ft. Total

STATION 674+00
BUILT IN BY
STATE OF ILLINOIS
FA. RT. 196 SEC. 84-3HB-4
FA. PROJ. U-277(1)
LOADING H20-S16

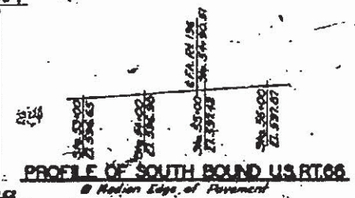
LETTERING FOR NAME PLATE
See Std. 2113



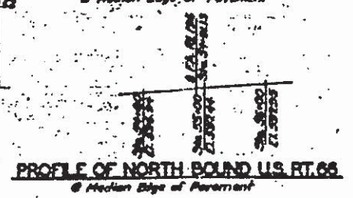
PROFILE OF WEST BOUND F.A.RT.196
@ Median Edge of Pavement



PROFILE OF EAST BOUND F.A.RT.196
@ Median Edge of Pavement



PROFILE OF SOUTH BOUND U.S. RT.66
@ Median Edge of Pavement



PROFILE OF NORTH BOUND U.S. RT.66
@ Median Edge of Pavement

DESIGN STRESSES
f_c = 1400 p.s.i.
f_s = 20,000 p.s.i. (Reinf.)
f_s = 16,000 p.s.i. (Struct.)
v = 75 p.s.i. (Footings)
n = 10
Loading:- H20-S16-44

NOTE:
For Borings, General Notes, and Bill of Material see Sh. 2 of 19

Marvin J. Rice
Illinois Structural #2134

GENERAL PLAN & ELEVATION
F.A. RT. 196 OVER U.S. RT 66
PROJECT U-277(1)
F.A. ROUTE 196 SEC. 84-3HB-4
SANGAMON COUNTY
STATION 674+00.

DESIGNED	RSA	CHECKED	RSA
DRAWN	BDC	QUANTITIES	
TRACED	R.F.A.	APPROVED	
CHECKED	BDC		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

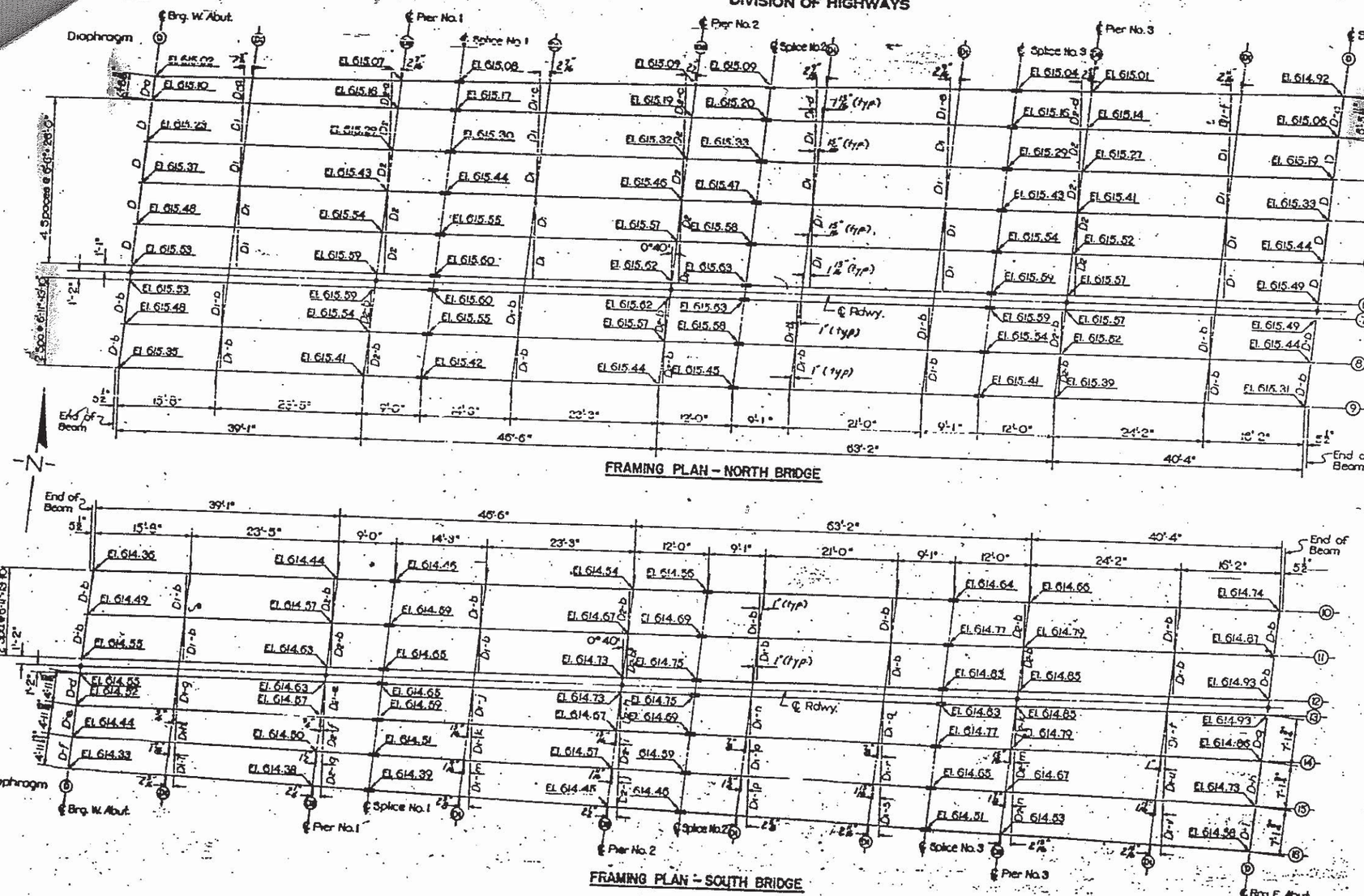
EXISTING PLANS SN 084-0076 & 084-0077
(FOR INFORMATION ONLY)
SCALE: ____ | SHEET ___ OF ___ SHEETS | STA. ____ TO STA. ____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	SANGAMON	21	12
		CONTRACT NO. 72056		
		ILLINOIS FED. AID PROJECT		

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

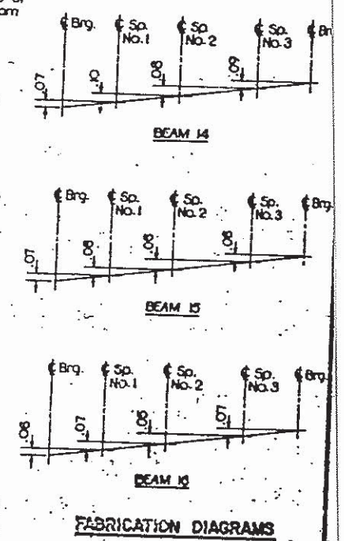
F.A.	84-3HB-4	Sangamon	54
Rt. No.	84-3HB-4		55

SHEET 6 OF 19



FRAMING PLAN – NORTH BRIDGE

FRAMING PLAN – SOUTH BRIDGE



FABRICATION DIAGRAMS

DESIGNED	TCS
CHECKED	gcc
DRAWN	D.D.O.
CHECKED	gcc

Notes:
All beams 33 W 130.
All elevations shown are given at the top of the top flange of the beams @ ℄ Brg. or ℄ Splice.
Diaphragms D, ℄ D, to be perpendicular to ℄ Rdwy.
Work this sheet with sheet 7 of 19

STRUCTURAL STEEL
F.A. RT. 196 OVER U.S. RT. 66

F.A. ROUTE 196 SEC. 84-3HB-4-F
SANGAMON COUNTY
STATION 674+00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

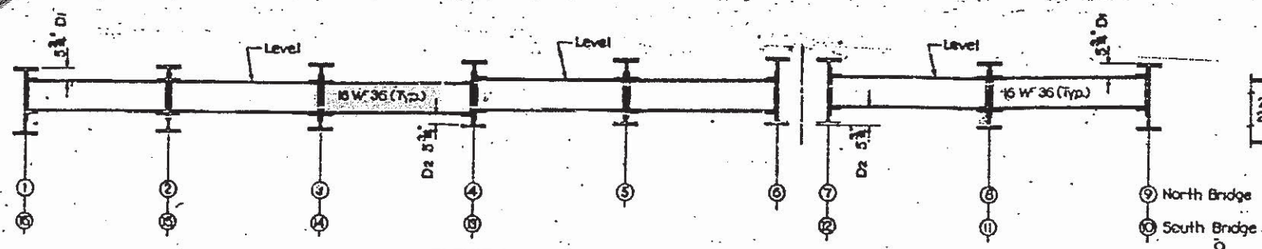
EXISTING PLANS SN 084-0076 & 084-0077
(FOR INFORMATION ONLY)
SCALE: ____ | SHEET ___ OF ___ SHEETS | STA. ____ TO STA. ____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BDGE PAINTING 2014-1	SANGAMON	21	13
		CONTRACT NO. 72056		
		ILLINOIS FED. AID PROJECT		

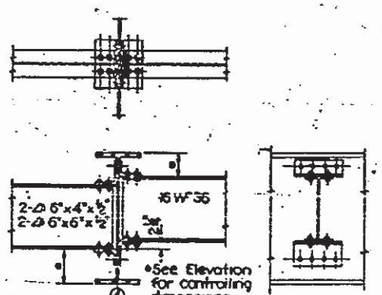
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

DISTRICT NO.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.	Sangamon	19	15
Rt. No.		23	19

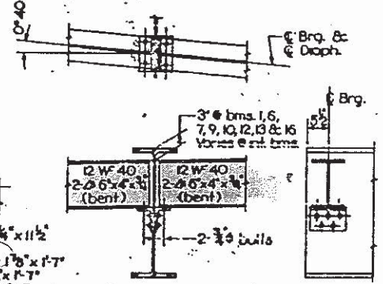
SHEET 7 OF 19



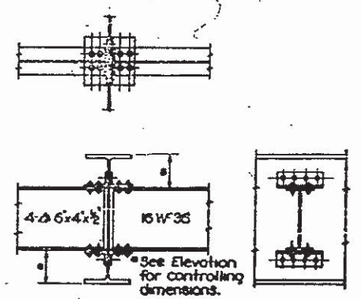
ELEVATION OF DIAPHRAGMS D1 & D2



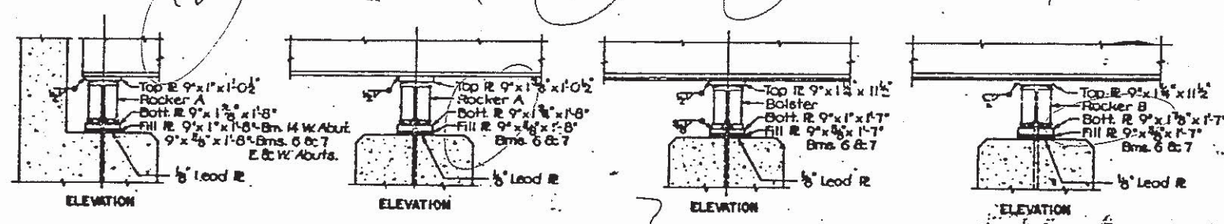
DIAPHRAGMS D1 & D2
At Beam No. 4

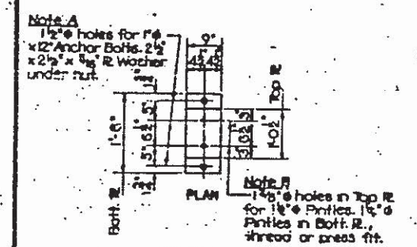


DIAPHRAGM D

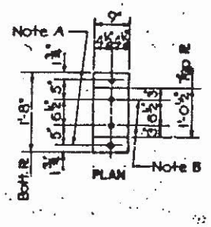


DIAPHRAGMS D1 & D2
Typical except ⌀ Bm. No. 4

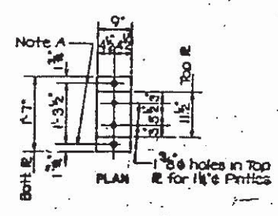




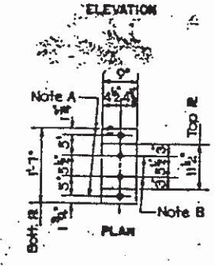
ABUTMENTS



PIER 1



PIER 2



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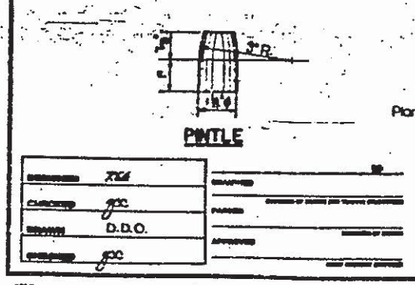
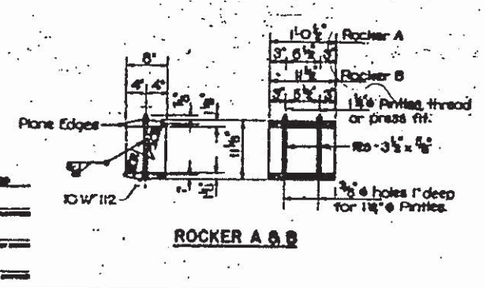
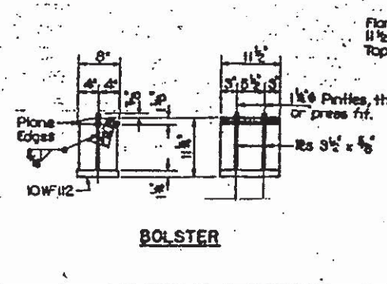


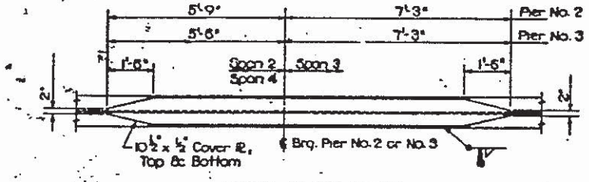
PINTLE



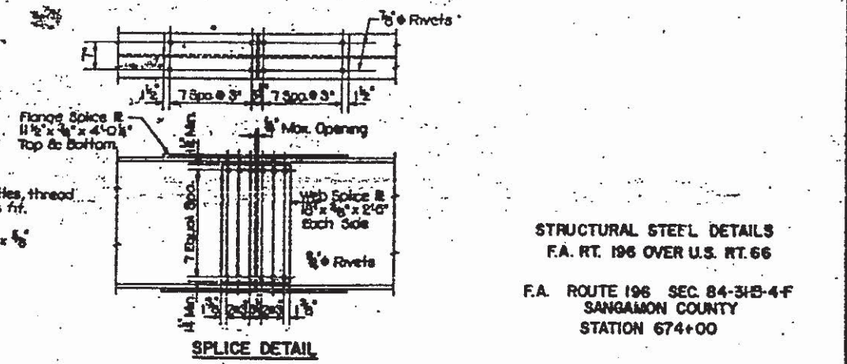
ROCKER A & B



BOLSTER



COVER PLATE DETAIL



SPLICE DETAIL

STRUCTURAL STEEL DETAILS
F.A. RT. 196 OVER U.S. RT. 66

F.A. ROUTE 196 SEC. 84-3HB-4-F
SANGAMON COUNTY
STATION 674+00

	ZKM		
	gac		
	D.D.O.		
	gac		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

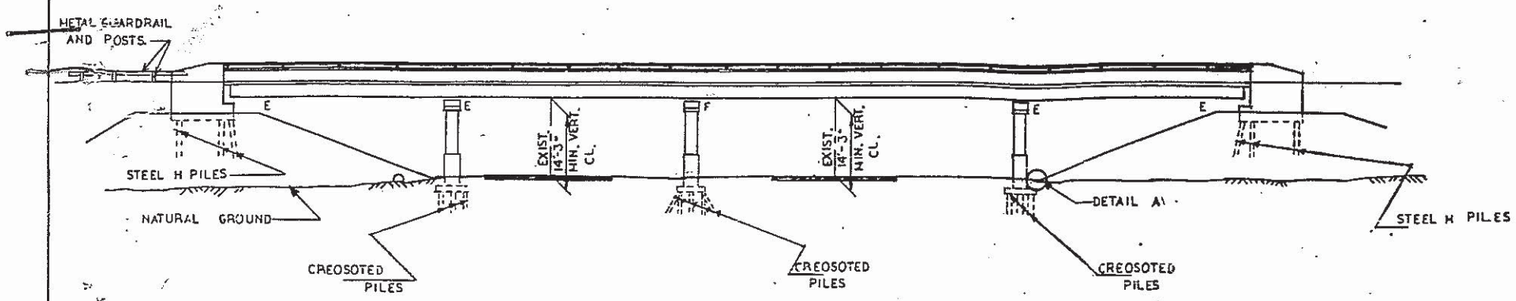
EXISTING PLANS SN 084-0076 & 084-0077
(FOR INFORMATION ONLY)
SCALE: ____ SHEET ___ OF ___ SHEETS STA. ____ TO STA. ____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	SANGAMON	21	14
		CONTRACT NO. 72G56		
		ILLINOIS FED. AID PROJECT		

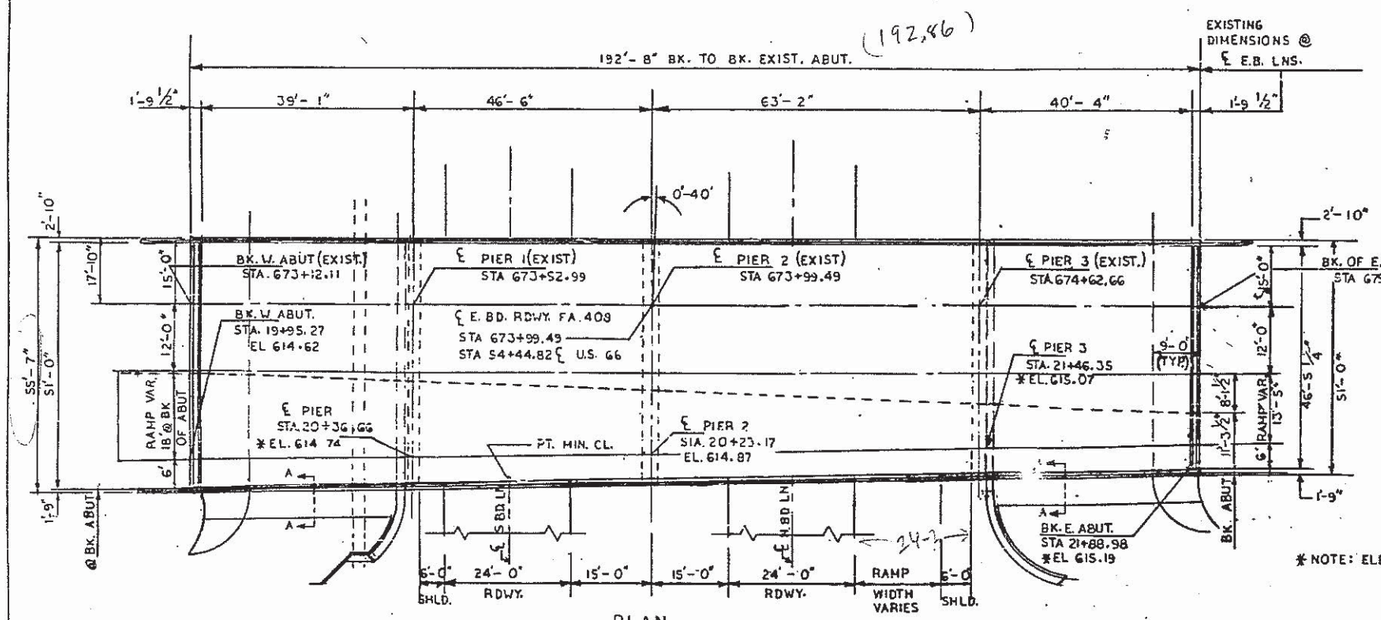
084-0077

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 319	*	SANGAMON	4	2
MILE	TO MILE			
PROJECT REF. NO. 6 ILLINOIS FED. AID PROJECT				

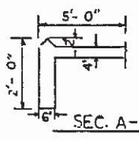
*(84-9-4HB-2)I



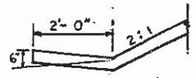
ELEVATION



PLAN



SEC. A-A



DETAIL A

GENERAL NOTES

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO CLASSIFICATION M-31, M-42 OR M-53 GRADE 60.

TRAFFIC CONTROL SHALL BE DETERMINED BY THE DISTRICT.

PRIOR TO POURING THE NEW CONCRETE FOR THE DECK, ALL LOOSE RUST, LOOSE MILL SCALE, LOOSE PAINT AND ALL OTHER FOREIGN MATERIAL SHALL BE REMOVED FROM THE EMBEDDED PORTIONS OF FLANGES OF STRINGERS (GIRDERS). THE REMOVAL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SSPC SURFACE PREPARATION SPECIFICATIONS SP11 FOR POWER TOOL CLEANING OR SP2 FOR HAND TOOL CLEANING. COST SHALL BE INCIDENTAL TO CONCRETE REMOVAL.

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 JOINT PLATES AND ATTACHED BARS SHALL BE SHOP PAINTED WITH THE ZINC-SILICATE PRIMER.

* NOTE: ELEVATION TOP OF CLASS I

EXAMINED 19
DISTRICT TRAFFIC ENGINEER
EXAMINED 19
DISTRICT MAINTENANCE ENGINEER
EXAMINED 19
DISTRICT CONSTRUCTION ENGINEER
EXAMINED 19
DISTRICT MATERIALS ENGINEER
EXAMINED 19
DISTRICT DESIGN ENGINEER

EXAMINED 19
DISTRICT TRAFFIC ENGINEER
EXAMINED 19
DISTRICT MAINTENANCE ENGINEER
EXAMINED 19
DISTRICT
EXAMINED 19
DISTRICT MAT.
EXAMINED 19
DISTRICT E.

084-0077

GENERAL PLAN & ELEVATION
EAST-BOUND BRIDGE
F.A. ROUTE 319 (U.S. 36)
SECTION (84-9-4HB-2)I
SANGAMON COUNTY
STATION 673+99.49

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 084-0076 & 084-0077
(FOR INFORMATION ONLY)
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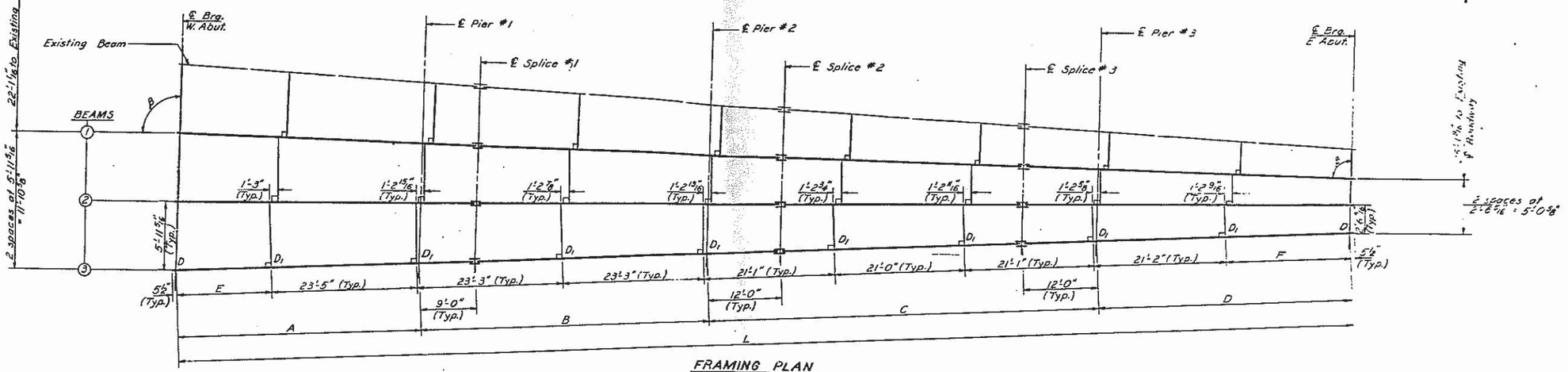
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	DB BDGE PAINTING 2014-1	SANGAMON	21	15
		CONTRACT NO. 72G56		
		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

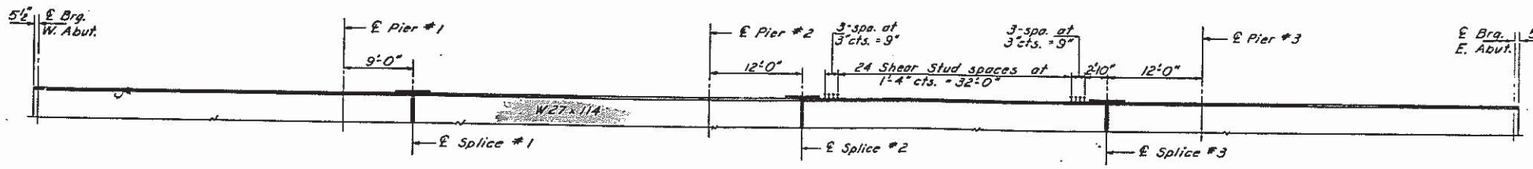
SECTION NO.	DESIGNATION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.R.S. P.A.408	84-9(4) 4HB-21	Sangamon	109	40

SHEET NO. 6
13 SHEETS



FRAMING PLAN
Longitudinal Dimensions are along £ of Beams

For Angle B see Sheet #7.



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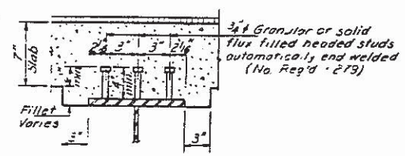

SHEAR STUDS

BEAM DIMENSIONS

Dim. / Beams	L	A	B	C	D	E	F
1	189'-0⅞"	39'-1"	46'-5 15/16"	63'-1 15/16"	40'-4"	17'-2"	17'-7⅞"
2	189'-11⅛"	39'-1"	46'-6"	63'-2⅛"	40'-4"	16'-0"	18'-10⅛"
3	189'-2"	39'-1 3/16"	46'-6¼"	63'-2 5/16"	40'-4¼"	14'-11 3/16"	19'-11 1/16"

DESIGNED Suresh T. Dessi
CHECKED Jiunfun Lee
DRAWN R. P. Summer
CHECKED Lee

EXAMINED July 24, 1973
PASSED H.C. Beermann
Roger F. Nusbaum

STRUCTURAL STEEL
SOUTH BRIDGE
F.A. RT. 408 SEC. 84-9-(4,4HB-21)
SANGAMON COUNTY
STATION 673+99.49

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 084-0076 & 084-0077
(FOR INFORMATION ONLY)
SCALE: ____ SHEET ____ OF ____ SHEETS STA. ____ TO STA. ____

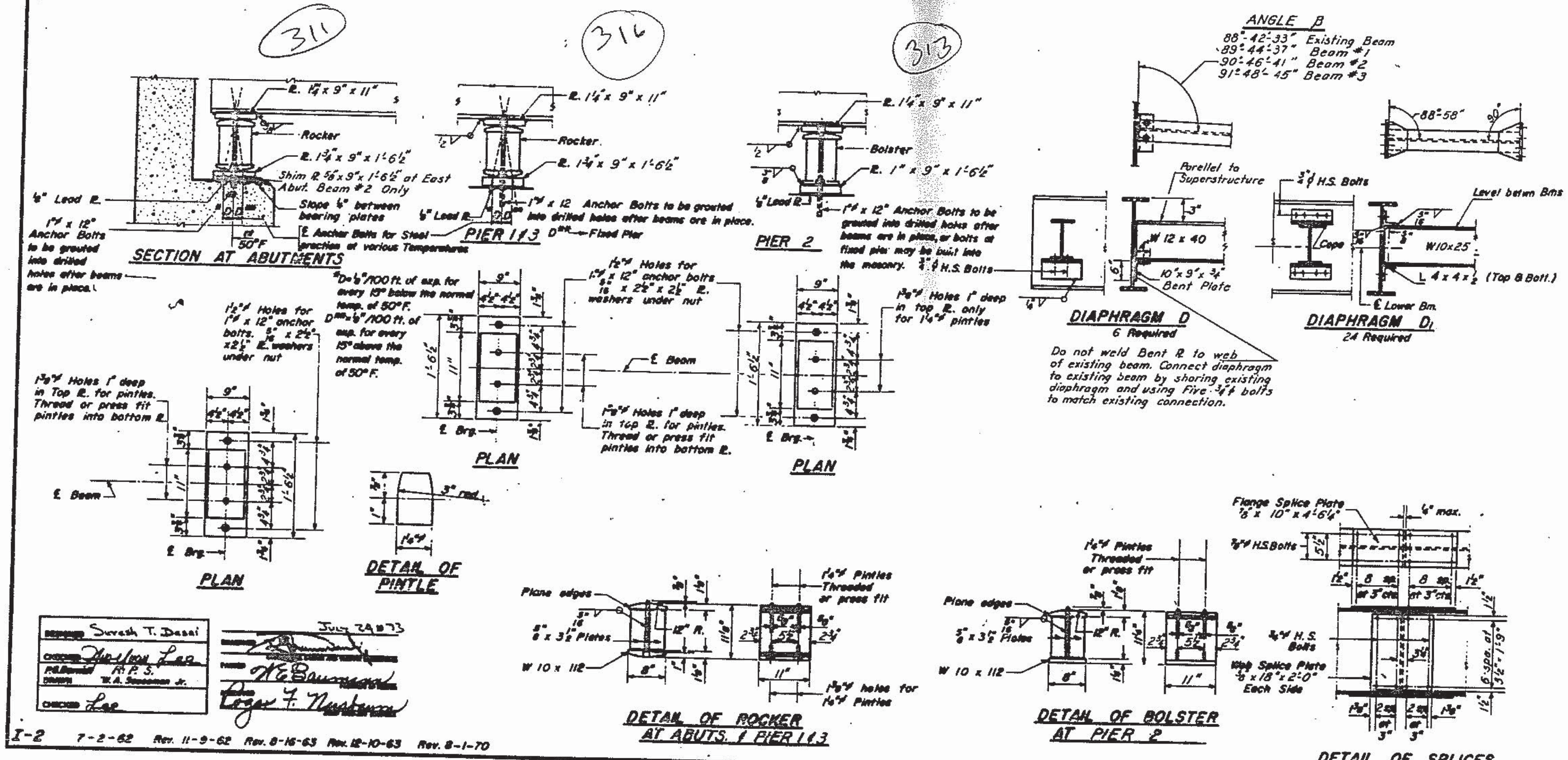
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	SANGAMON	21	16
		CONTRACT NO. 72056		
		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 7 — 13 SHEETS — F.A. 408 — 84-9-(4,4HB-21) — Sangamon — 109 — 41

TOP OF BEAM ELEVATIONS

Beams \ Loc.	℄ Brg. W. Abut.	℄ Brg. Pier 1	℄ Splice #1	℄ Brg. Pier 2	℄ Splice #2	℄ Splice #3	℄ Brg. Pier 3	℄ 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



STRUCTURAL STEEL
SOUTH BRIDGE
F.A. RT. 408 SEC. 84-9-(4,4HB-21)
SANGAMON COUNTY
STATION 673+99.49

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

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CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 084-0076 & 084-0077
(FOR INFORMATION ONLY)

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BDGE PAINTING 2014-1	SANGAMON	21	17
		CONTRACT NO. 72G56		

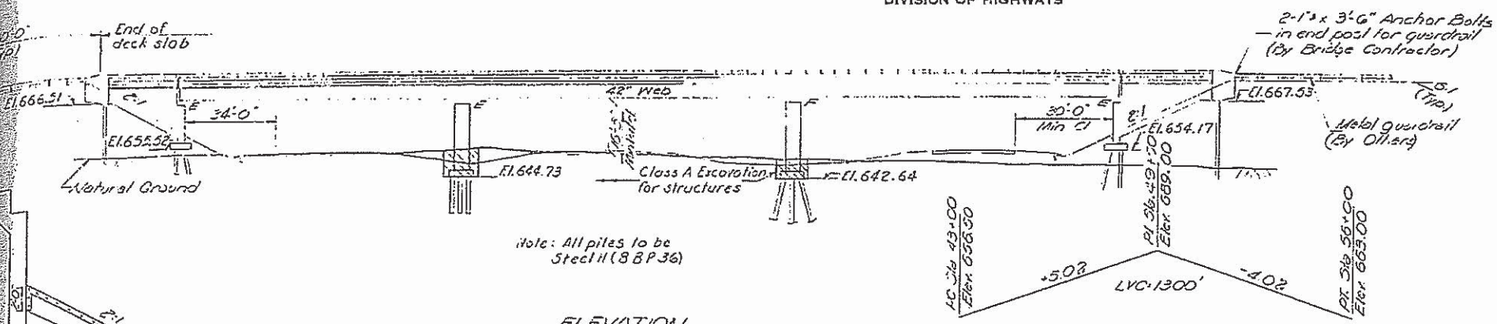
ILLINOIS FED. AID PROJECT

Top of concrete ROW Monument on West line @ Sta 835+00 Elev 651.44

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	68-5HB-2	Montgomery	39	8

SHEET NO. 1
19 SHEETS



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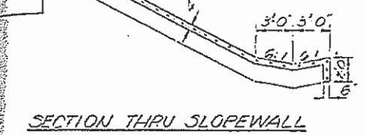
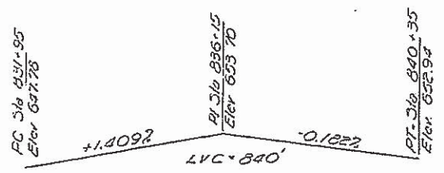
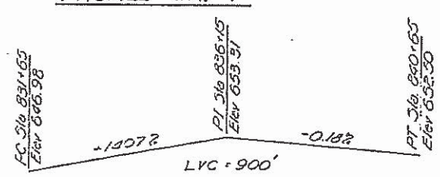


SECTION THRU SLOPEWALL



PROFILE FAI 55 (SB)



PROFILE FAI 55 (NB)
(Grade applies @ Median Edge)

PROFILE T.R. 7

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Fasteners shall be high strength bolts. Bolts ⅞"ø; open holes 15/16"ø, unless otherwise noted.

Calculated weight of Structural Steel = 241,590 Lbs.

Field welding of construction accessories 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.

Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 sq ft.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

The Basic Lead Silica Chromate paint system shall be used for shop and field painting of structural steel.

The Contractor shall drive Two steel test piles in a permanent location One at West Abut. and One at Pier #2 as directed by the Engineer before ordering the remainder of piles.

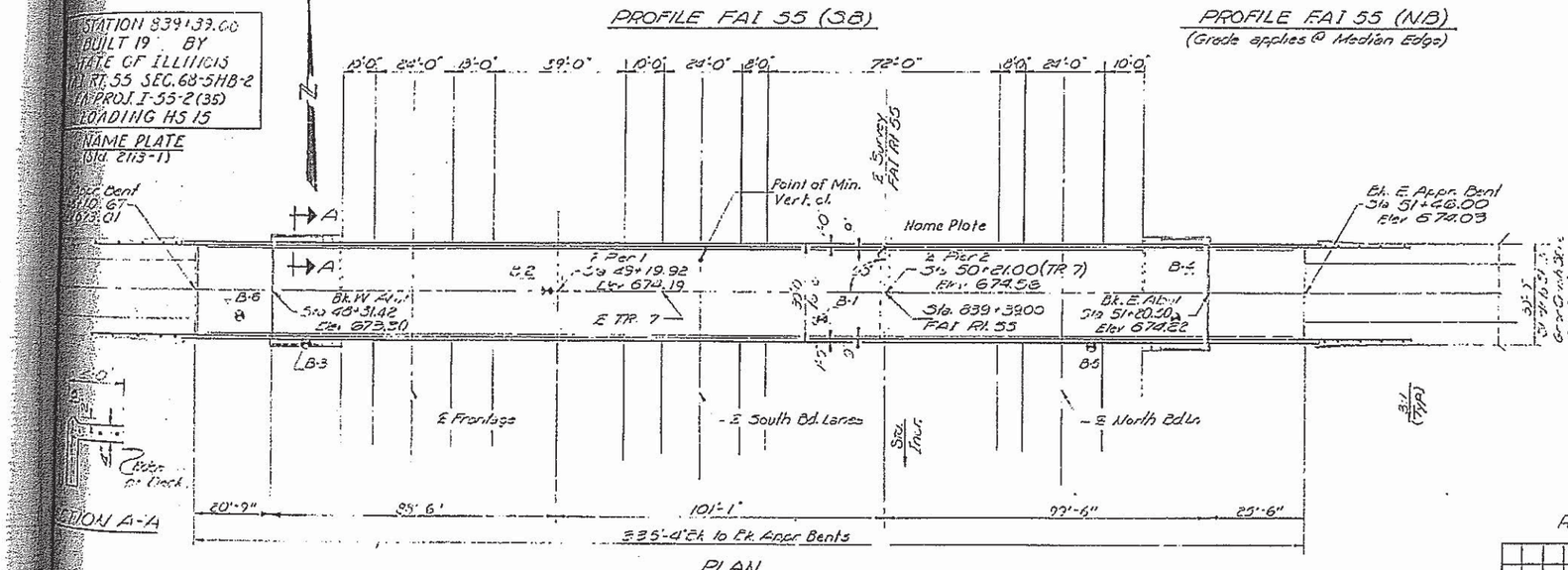
Class A Excavation for structures includes excavation for slope wall.

An alternate strand pattern, using Extra High Strength Prestressing strand (270 K. S. I.) is permitted.

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

STATION 839+33.00
BUILT 19 BY
STATE OF ILLINOIS
(F.A.I. RT. 55 SEC. 68-5HB-2
(M) PROJ. I-55-2(35)
LOADING HS 15

NAME PLATE
(Std. 2113-1)



PLAN

SECTION A-A

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Class A Excavation for Struct	Cu. Yds.		100	100
Protective Coat	Sq. Yds.	1240		1240
Class X Concrete	Cu. Yds.	315.4	228.5	543.9
Structural Steel	L.S.	L.S.		L.S.
Stud Shear Connectors	Each	1944		1944
Aluminum Railing	Lin. Ft.	660		660
Reinforcement Bars	Lbs.	72500	34330	106830
Steel Piles BEP 36	Lin. Ft.		1324	1324
Test Piles, Steel, BBP36	Each		2	2
Name Plates	Each		1	1
Slope Wall (4")	Sq. Yds.		224	224
Bridge Seat Seajort	L.S.			L.S.
Precast Prestressed Concrete I Beams, 36"	Lin. Ft.	132		132

* Applied at Abutments only

DESIGN STRESSES

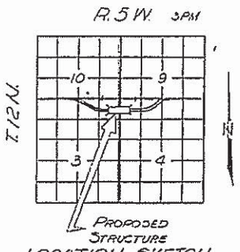
PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,200 psi
fs = 248,000 psi (Strands)
fsi = 173,600 psi (Strands)

FIELD UNITS

fc = 1200 psi (Deck Slab)
fc = 1400 psi (Curb, Parapet, Sub)
fs = 20,000 psi (Reinf.)
Fs = 20,000 psi (Struct)
vc = 75 psi (Figs)
n = 10
Allowable Δ Deflection = L/800
Future W.S. = 25#/o'

LOADING HS 15-44



LOCATION SKETCH

DESIGNED T.D.N.
CHECKED
DRAWN E.A.F.
CHECKED R.W.G.

EXAMINED April 23 1970
PASSED
APPROVED

GENERAL PLAN & ELEVATION
T.R. 7 OVER F.A.I. RT. 55
PROJ. I-55-2(35)75
F.A.I. RT. 55 SEC. 68-5HB-2
MONTGOMERY COUNTY
STA 839+39.00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 068-0035
(FOR INFORMATION ONLY)

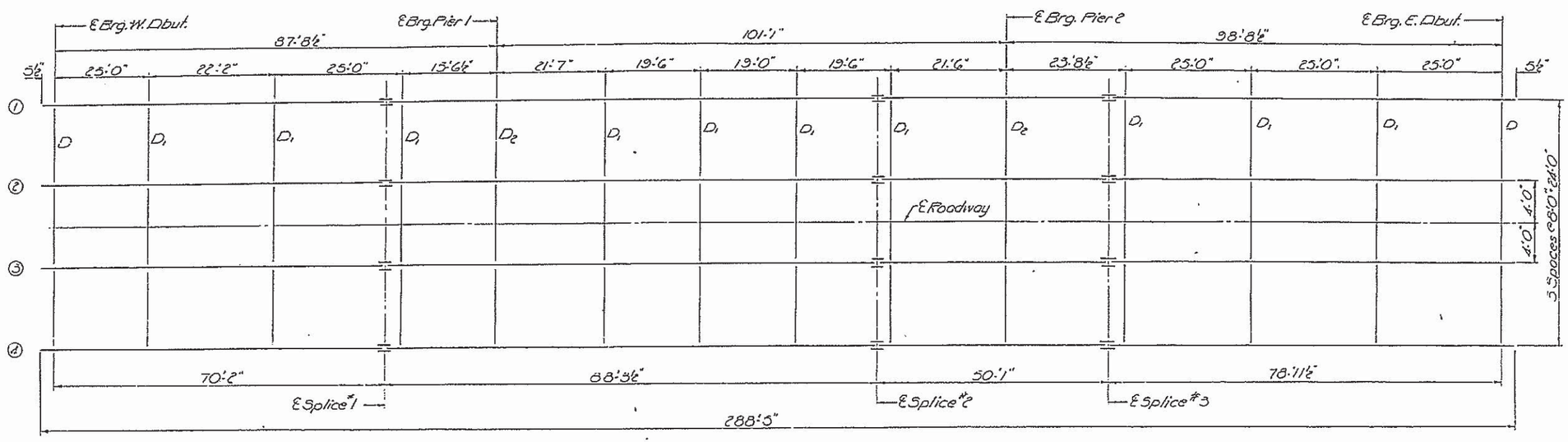
SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	MONTGOMERY	21	18
		CONTRACT NO. 72G56		
	ILLINOIS FED. AID PROJECT			

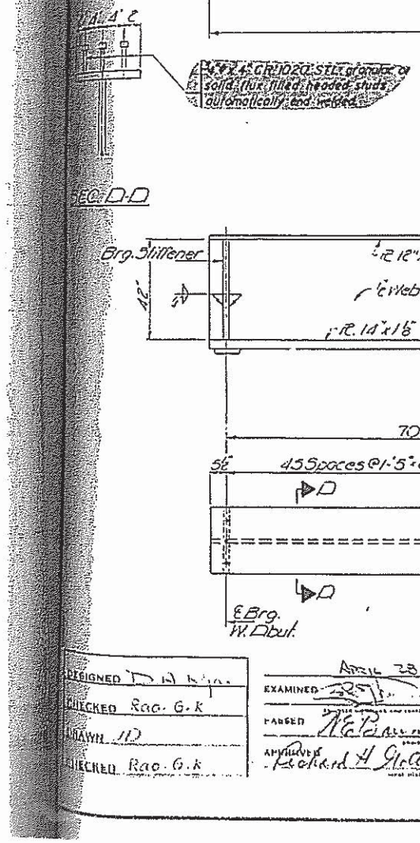
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

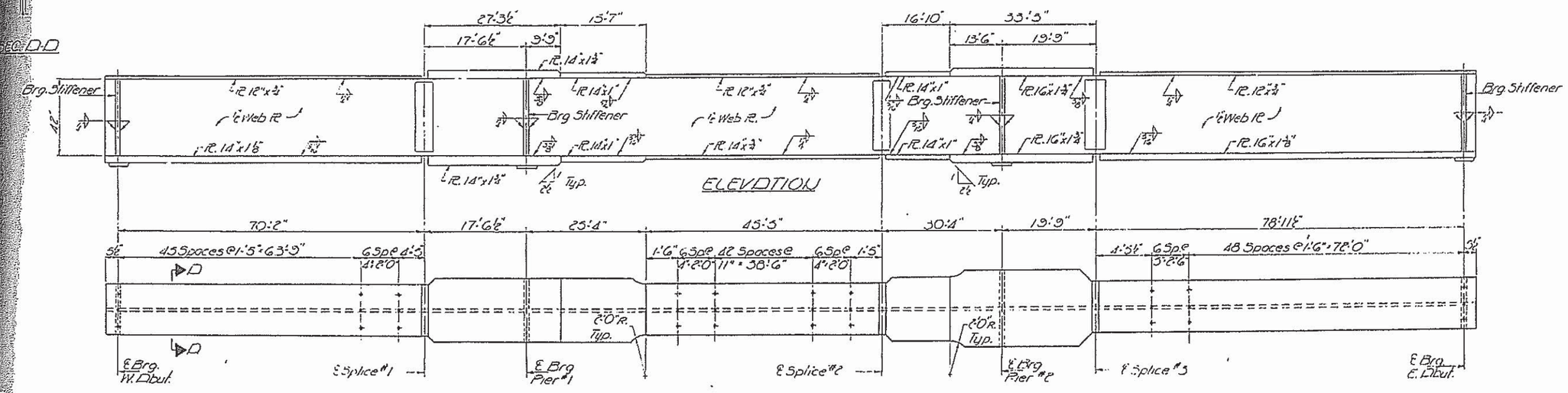
F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 55	68-3-1	Montgomery	39	12
FED. PROJECT NO.	ILLINOIS	FED. AID PROJECT		

19 SHEETS



FRAMING PLAN





PLAN
Showing Stud Spacing

DESIGNED D. M. Kuhn
CHECKED Rao. G. K
DRAWN JD
CHECKED Rao. G. K

EXAMINED April 28 1972
PASSED
APPROVED Richard H. Gletteman

STRUCTURAL STEEL
F.A.S. 55 SEC. 5HB-2
MONTGOMERY COUNTY
STA. 839+39.00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 068-0035
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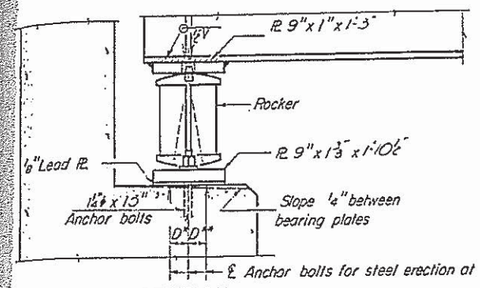
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BDGE PAINTING 2014-1	MONTGOMERY	21	19
		CONTRACT NO. 72056		
		ILLINOIS FED. AID PROJECT		

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 55	68-5 & 68-2	Montgomery	39	12

SHEET NO. 9
13 SHEETS



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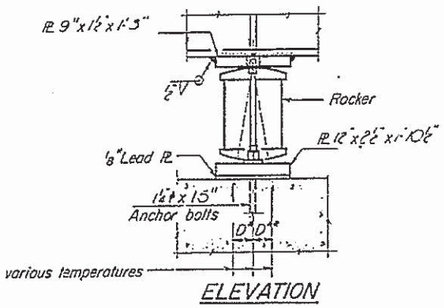

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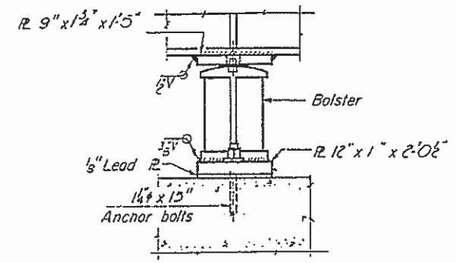

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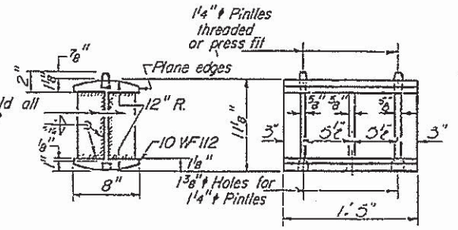
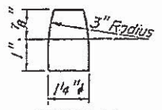
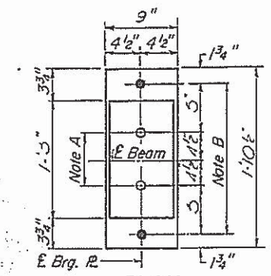


ROCKER
AT EAST ABUTMENT

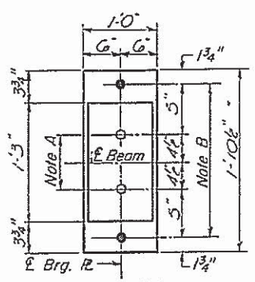


PINTLE



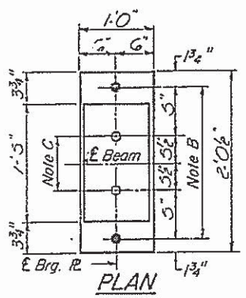
PLAN
AT WEST ABUTMENT

NOTE A
1⅜"ϕ Holes – 1" deep in top ℘ for pintles. Thread or press fit pintles into bottom ℘.



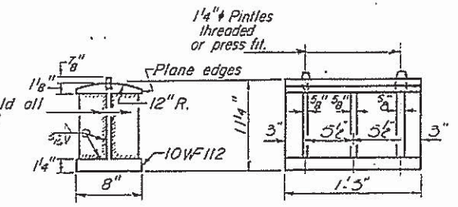
PLAN
AT PIER #1

NOTE B
1⅜"ϕ Holes for 1¼"ϕ anchor bolts. 2½"x 2½"x 5/16" ℘. Washers under nut.



PLAN
AT PIER #2

NOTE C
1⅜"ϕ Holes 1" deep in top ℘ only for 1¼"ϕ pintles.



BOLSTER
AT PIER #2

BEARING ASSEMBLY DETAILS

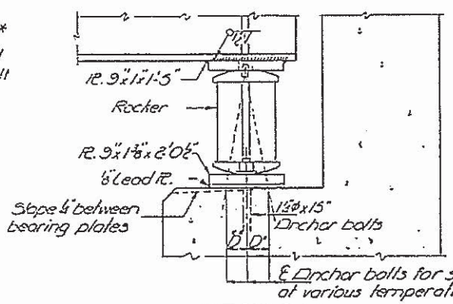
NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

D* (Side of brg. away from fixed brg.)
D* = ⅛" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = ⅛" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

DESIGNED	D.A.R.Jr.
CHECKED	R.A.O. G.K.
DRAWN	I.D.
CHECKED	R.A.O. G.K.
	9-1-65

EXAMINED — April 20 1970
PASSED — H.E. Baumann
APPROVED — Richard H. Gutterman



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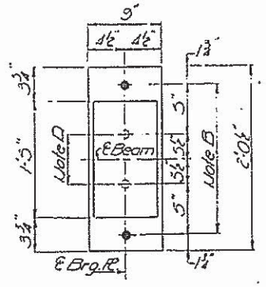

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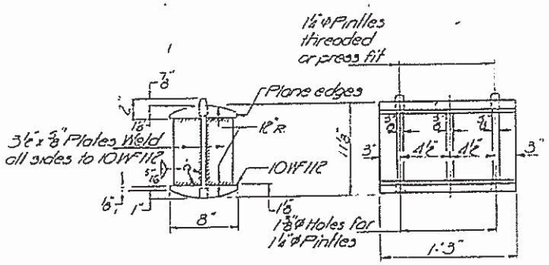

ROCKER AT WEST ABUTMENT
℄ PIER #1

BEDRING DETAILS
F.A.I. RT. 55 SEC. 5HB-2
MONTGOMERY COUNTY
STA. 839+39.00

AT EAST ABUTMENT

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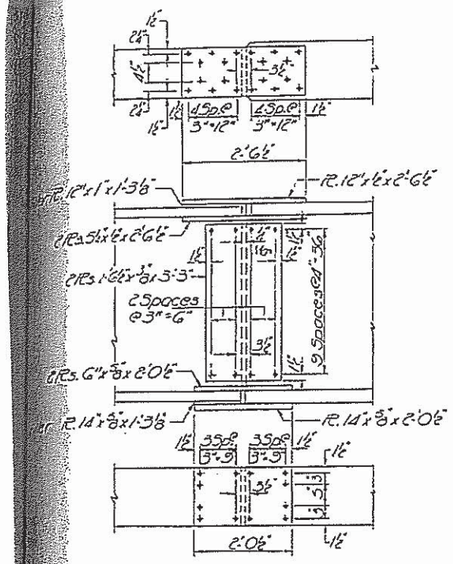
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 068-0035
(FOR INFORMATION ONLY)
SCALE: ____ | SHEET ___ OF ___ SHEETS | STA. ____ TO STA. ____

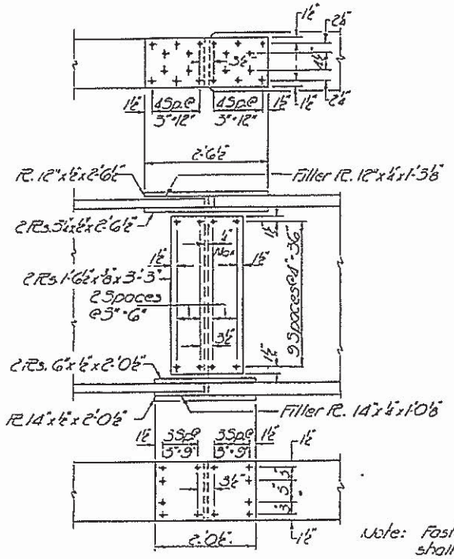
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	06 BDGE PAINTING 2014-1	MONTGOMERY	21	20
		CONTRACT NO. 72056		
		ILLINOIS FED. AID PROJECT		

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

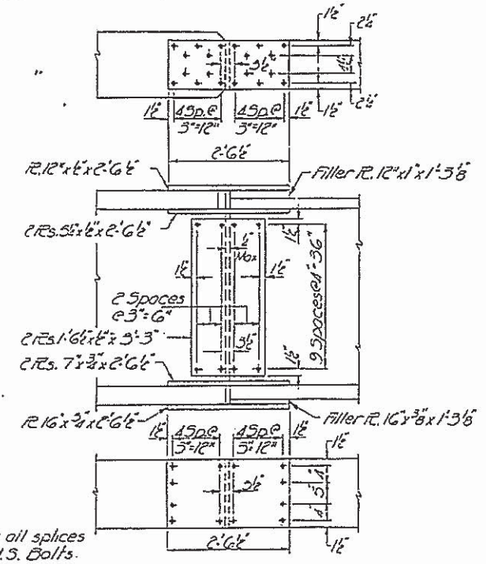
F.A.I. 55	SECTION 5HB-2		39	15	19 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



FIELD SPLICE #1



FIELD SPLICE #2



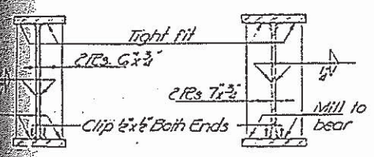
FIELD SPLICE #3

Note: Fasteners for all splices shall be ⅞" H.S. Bolts.

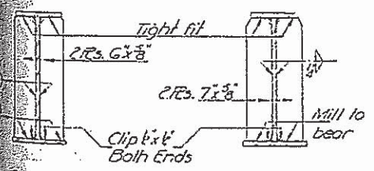
TOP OF WEB ELEVATIONS

Location / Girder	1 & A	2 & 3
℄ Brg. W. Abut.	672.50	672.60
℄ Field Splice #1	673.17	673.27
℄ Brg. Pier #1	673.23	673.33
℄ Field Splice #2	673.65	673.75
℄ Brg. Pier #2	673.65	673.75
℄ Field Splice #3	673.69	673.79
℄ Brg. E. Abut.	673.42	673.52

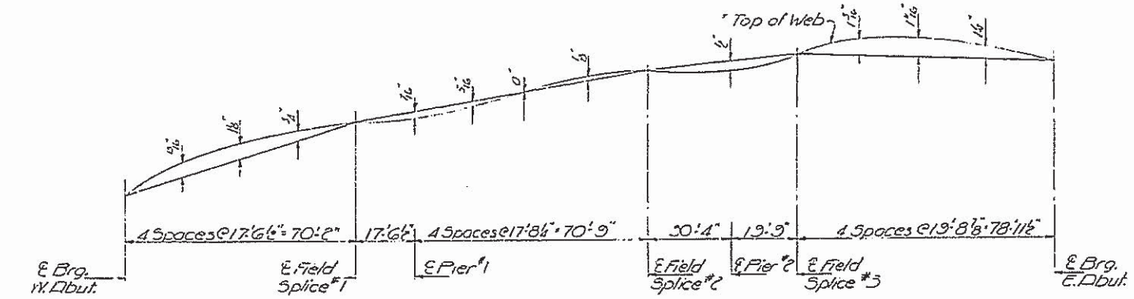
*For fabrication only



PIER #1 PIER #2
BEDRING STIFFENERS



WEST ABUT. EAST ABUT.
BEDRING STIFFENERS



CAMBER DIAGRAM

*For Top of Web Elevations of Splices & Bearings see table on this sheet.

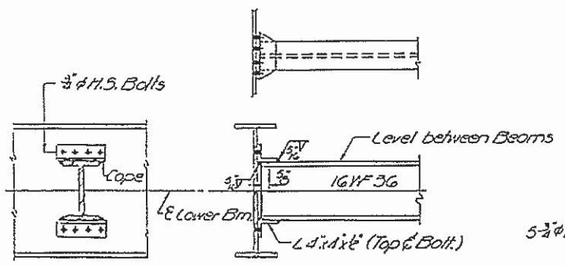
INTERIOR GIRDER REACTION TABLE

	West Abut	Pier 1	Pier 2	East Abut.
R℄ (K)	44.69	136.24	152.46	52.04
R℄ (K)	34.31	52.36	55.07	34.89
Imp. (K)	8.06	11.94	12.23	7.77
R Total (K)	87.06	200.54	219.76	94.70

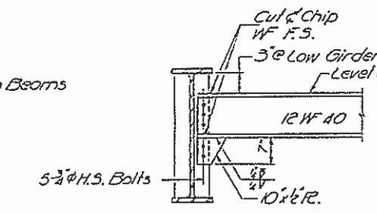
INTERIOR GIRDER MOMENT TABLE

	0.45D 1	Pier 1	0.55D 2	Pier 2	0.65D 3
Is (in⁴)	140.48	26.534	111.974	23884	13988
Ic (in⁴)	351.42		284.78		422.82
Ss (in³)	74.3	11.66	53.1	13.14	9.46
Sc (in³)	100.6		78.5		12.73
℄ (K/i)	0.972	1.330	0.972	1.345	1.003
MD (1K)	5.34	11.96	2.10	14.93	7.11
fsD (ksi)	8.62	12.31	4.74	13.64	9.01
S℄ (K/i)	0.358		0.358		0.358
MS℄ (1K)	2.15		1.44		2.83
M℄ (1K)	6.01	4.75	5.31	5.33	6.94
Mimp (1K)	1.36	1.08	1.20	1.20	1.57
Total (1K)	9.52	8.83	7.95	6.53	11.34
fs℄ (ksi)	11.36	6.00	12.18	5.96	10.69
fstotal (ksi)	19.98	18.31	16.92	19.60	19.70
VR (K)	38.53	48.31	39.44	45.34	39.61

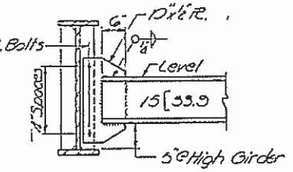
Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in compuling fs.
VR is the maximum ℄ + impact shear range.



INTERIOR DIAPHRAGM D1
(30 Required)



DIAPHRAGM D
(6 Required)



DIAPHRAGM D2
(6 Required)

STRUCTURAL STEEL DETAILS
F.A.I. RT. 55 SEC. 5HB-2
MONTGOMERY COUNTY
STA. 839+39.00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS SN 068-0035
(FOR INFORMATION ONLY)
SCALE: ____ SHEET ___ OF ___ SHEETS STA. ____ TO STA. ____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 BDGE PAINTING 2014-1	MONTGOMERY	21	21
		CONTRACT NO. 72G56		
	ILLINOIS FED. AID PROJECT			