STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAI ROUTE 280 (I-280) SECTION (81-1B)M-1

ROCK ISLAND COUNTY

C-92-106-06

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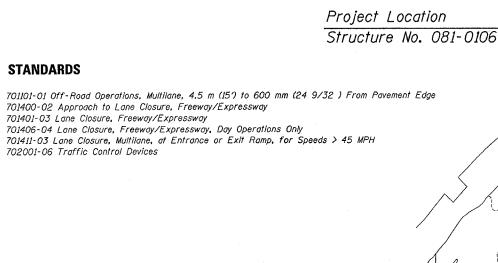
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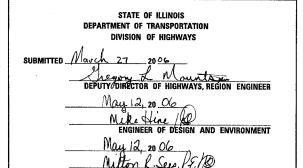
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J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1–800–892–0123

CONTRACT NO. 64C13



D-92-040-06



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

SUMMARY OF QUANTITIES

				50% IL. 50% IA.
paycode	description	units	quantity	
50501130	STRUCTURAL STEEL REPAIR	POUND	25990	
67100100	MOBILIZATION		L SUM	. 1
70100205	TRAFFIC CONTROL AND PROTECTION,	STANDARD 7Ø14Ø1	EACH	1
70100700	TRAFFIC CONTROL AND PROTECTION,	STANDARD 701406	L SUM	1
XØ322556	STIFFENER INTERSECTION MODIFICATION		EACH	2684

COUNTY TOTAL SHEE SHEETS NO. SECTION

280 (81-1B)M-1 Rock Island 18 2 TO STA._ FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT

CONTRACT NO. 64C13

GENERAL NOTES

This structure will retain the same number 081-0106.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

SBC/Ameritech

MidAmerican Energy

Following are the known utilities located within the project limits or immediately adjacent to the project construction limits which are not members of JULIE and should be notified individually by the contractor:

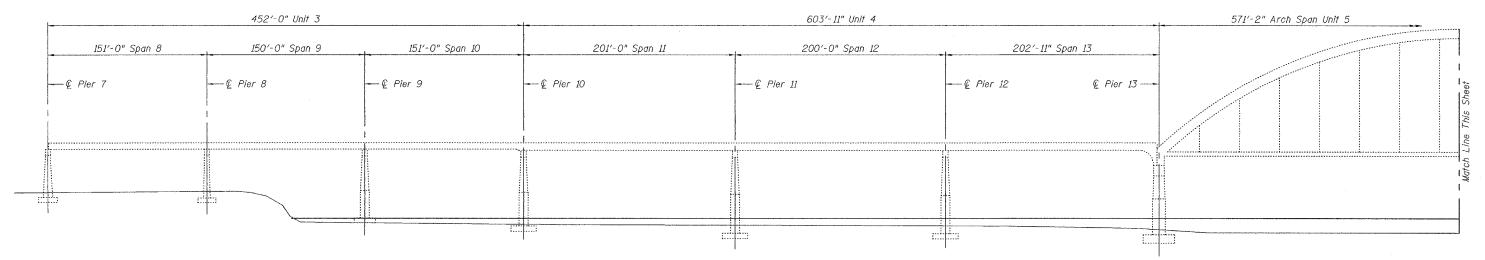
Mr. Scott Kullerstrand (IDOT) 815/284-5468

Work on this project will be in progress at the same time as work on the bridge painting project. Work on these projects shall be scheduled to keep interference between all the projects to a minimum. The contractors shall inform each other of progress of the projects and give fair warning to the other contractors when a problem might be encountered.

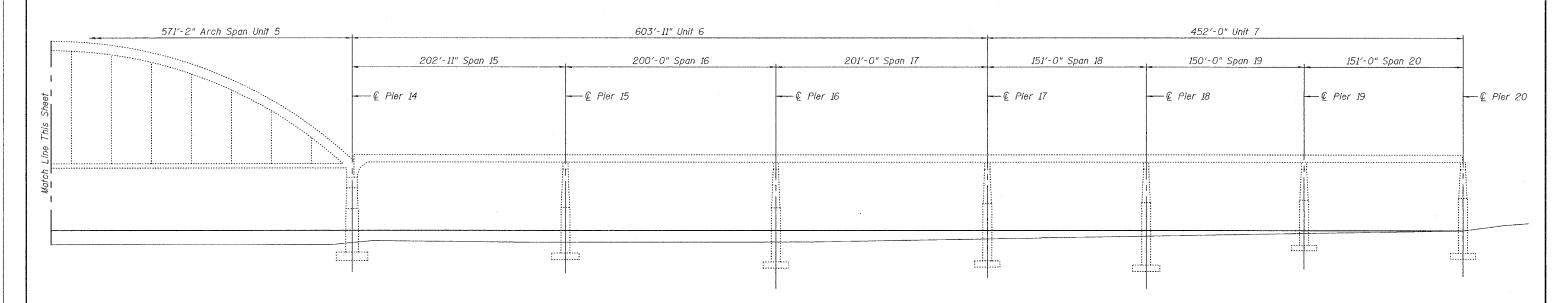
> Summary of Quantities & General Notes Interstate Route 280 over Mississippi River FAI Route 280 Section (81-1B)M-1 Rock Island County Structure No. 081-0106

	ROUTE NO.	SECTION	COUNTY		TOTAL SHEETS	SHEET NO.	SHEET	NO.	1
			Rock Island		18	3	<i>1</i> 6 shi	EETS	
į	FED. ROAD DIST. NO. 7		ILLINOIS	PEO, AID PROJECT-					

Contract Number: 64C13



PARTIAL ELEVATION



TOTAL BILL OF MATERIAL

UNIT	QUANTITY
Pound	25,990
Each	2,684
	Pound

CHECKED ATH PST

April 24, 2006

EXAMINED John a. Maria

PASSED RULL C. Aglicen

ENGINEER OF BRIDGES MO STRUCTURES



PARTIAL ELEVATION

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Fasteners shall be high strength bolts. Bolts 34 open holes 13 ₁₆ $^{\circ}$ $^{\phi}$, unless otherwise noted.

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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair. Cost of temporary support for lateral bracing is included with Structural Steel Repair.

The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Areas left exposed shall be painted using an aluminum epoxy mastic primer according to Article 506.05 of the Standard Specifications.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Structural Steel Repair.

ELEVATION

F.A.I. RT. 280 OVER

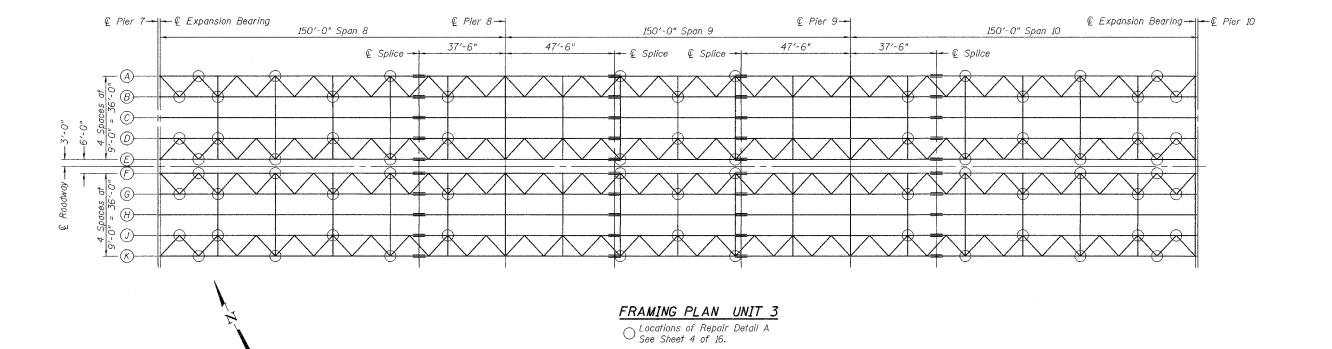
MISSISSIPPI RIVER

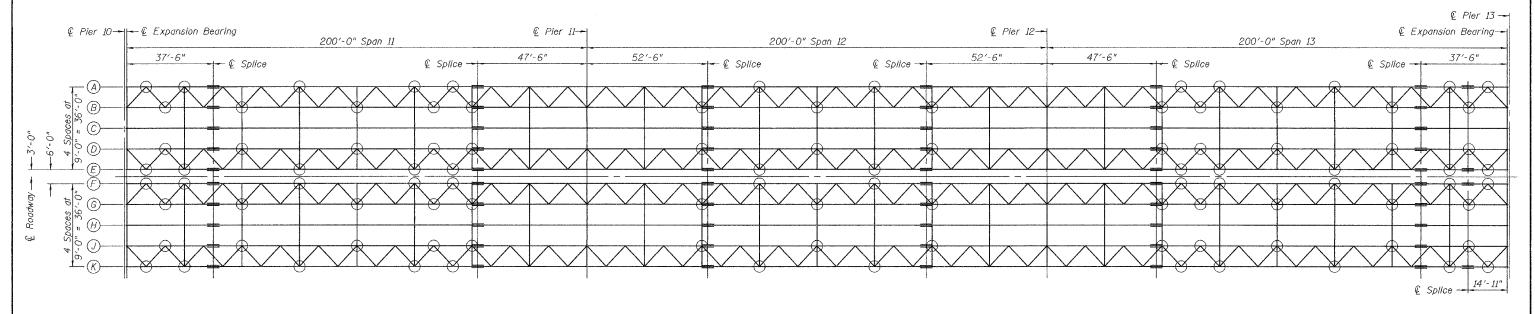
ROCK ISLAND COUNTY

SN 081-0106

ROUTE NO.	SECTION	COUNTY		TOTAL SHEETS	SHEET NO.	SHEET NO. 2
		Rock Island		18	4	16 SHEETS
FED. RGAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-			

Contract Number: 64C13





FRAMING PLAN UNIT 4

Locations of Repair Detail A See Sheet 4 of 16.

DESIGNED A.T.H.

CHECKED P.S.J.

DRAWN Drew Christopher

CHECKED A.T.H. P.S.J.

April 24, 2006

EXAMINED COM O. Monia

ENGINEER OF STRUCTURE. SERVICES

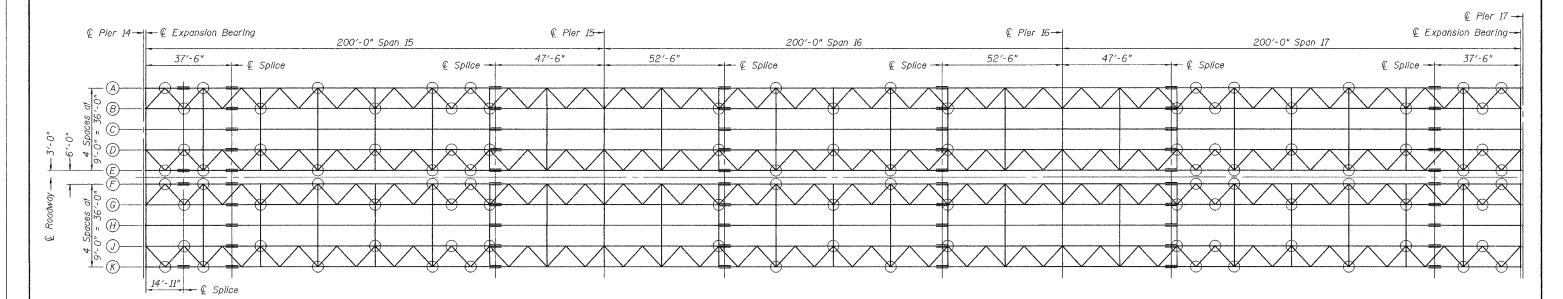
ASSED SALPLE. Underson

ENGINEER OF BRIDGES AND STRUCTURES

FRAMING PLANS
F.A.I. RT. 280 OVER
MISSISSIPPI RIVER
ROCK ISLAND COUNTY
SN 081-0106

ROUTE NO.	SECTION	COUNTY		TOTAL SHEETS	SHEET NG.	SHEET NO. 3
		Rock Island		18	5	<i>1</i> 6 SHEETS
FED. ROAD CIST, NO. 7		BLLINOIS	FED. AZD PRI	DJECT-		

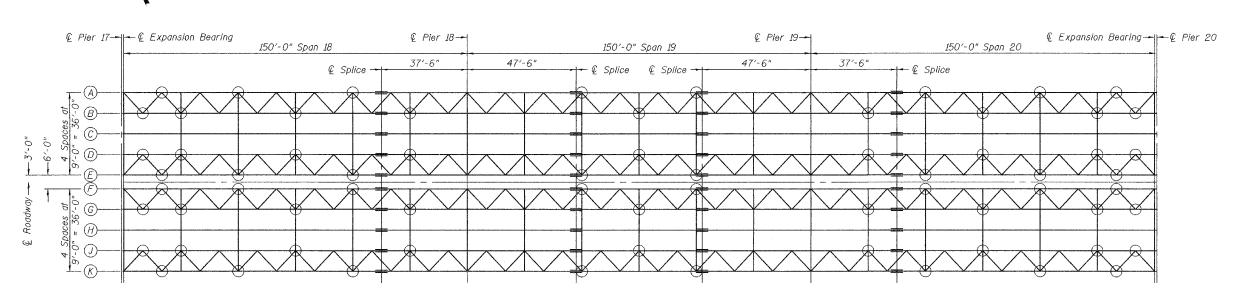
Contract Number: 64€13





FRAMING PLAN UNIT 6

Cocations of Repair Detail A See Sheet 4 of 16.



FRAMING PLAN UNIT 7

Locations of Repair Detail A See Sheet 4 of 16.

DESIGNED A.T.H.

CHECKED P.S.J.

DRAWN Drew Christopher

CHECKED A.T.H. P.S.J.

April 24, 2006

EXAMINED Com a. Mous
PASSED Nalph E. Mollisan
ENGINEER OF BRIDGES AND STRUCTURES

FRAMING PLANS
F.A.I. RT. 280 OVER
MISSISSIPPI RIVER
ROCK ISLAND COUNTY
SN 081-0106

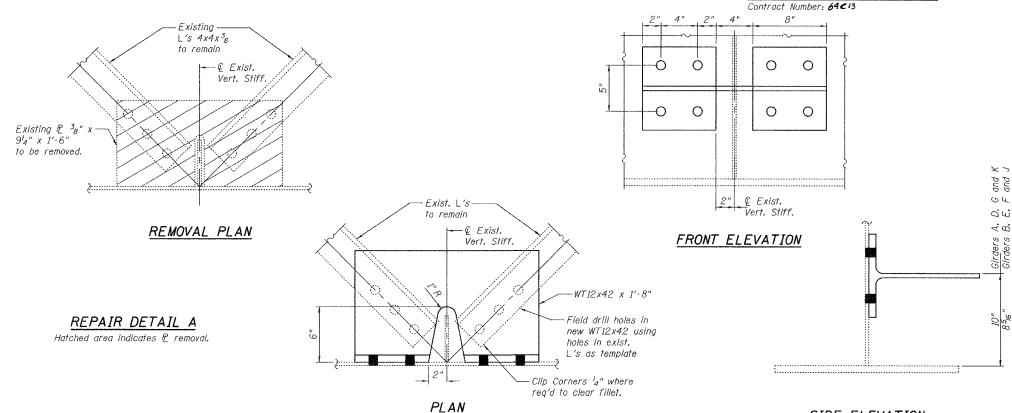
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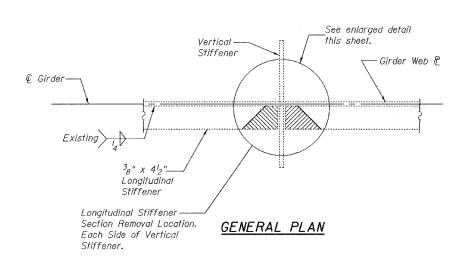
SIDE ELEVATION

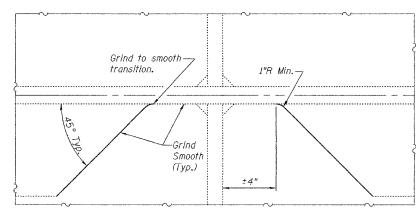
16 SHEETS

- Procedure for Hoan Repair Detail 1. Remove existing 3g " connecting pE . The minimum distance from cut to face of web shall be the larger of l_4 " or web to R weld size, with removal of remaining material by grinding as described below. The cut shall be made parallel to the web without angling the cut towards the web. Equipment and method of cutting shall be approved by the Engineer. Any method of removal to be used shall ensure that no damage is done to the existing web, vertical stiffener or welds connecting these elements. Cutting shall be done in a manner such that the paint on the opposite face of the web is not damaged. If damage to the paint occurs due to cutting, the damaged area shall be repainted at the contractor's expense and procedures shall be modified to prevent damage at subsequent removal locations.
- 2. Remove material between cut and web by grinding and grind smooth at web surface. Web $I\!\!P_c$ surfaces shall have a roughness average (Ra) of 250 μ in. or less. Grinding equipment shall be approved by the Engineer. The grinding operation should not gouge the girder web P.
- 3. The web surface at the modification shall be inspected using dye penetrant or magnetic particle (MT) methods. Any cracks found shall be identified and reported to the Bureau of Bridges and Structures for further disposition.

Cost of above described work shall be included with Structural Steel Repair.







ENLARGED DETAIL

REPAIR DETAIL B

Hatched area indicates section removal. (Showing 2 Locations)

Procedure for Repair Detail

- 1. Cut existing longitudinal stiffener ±4" from face of vertical stiffener and along web as shown, with a 1"R (Min) at Web. The minimum distance from cut to face of web shall be the larger of ${}^{I}_{4}{}^{"}$ or web to plate weld size, with removal of remaining material by grinding as described below. The cut shall be made parallel to the web without angling the cut towards the web. Equipment and method of cutting shall be approved by the Engineer. Any method of removal to be used shall ensure that no damage is done to the existing web, vertical stiffener or welds connecting these elements. Cutting shall be done in a manner such that the paint on the opposite face of the web is not damaged. If damage to the paint occurs due to cutting, the damaged area shall be repainted at the contractor's expense and procedures shall be modified to prevent damage at subsequent removal locations.
- 2. Remove material between cut and web by grinding and grind smooth at web surface and cut end of stiffener. Web R surfaces and cut end of stiffener shall have a roughness average (Ra) of 250 μ in. or less, Grinding equipment shall be approved by the Engineer. The grinding operation should not gouge the girder web R.
- 3. The web surface at the modification shall be inspected using dye penetrant or magnetic particle (MT) methods. Any cracks found shall be identified and reported to the Bureau of Bridges and Structures for further disposition.
- 4. The exposed steel surfaces shall be cleaned and painted using an aluminum epoxy mastic primer according to Article 506.05 of the Standard Specifications.

Each 4" stiffener removal area is to be considered as one retrofit. Accepted above referenced work will be paid for at the contract unit price each for Stiffener Intersection Modification, which price shall include all materials, equipment, labor, cleaning, testing and painting.

> REPAIR DETAILS F.A.I. RT. 280 OVER MISSISSIPPI RIVER ROCK ISLAND COUNTY SN 081-0106

DESIGNED A.T.H. CHECKED P.S.J. DRAWN Drew Christopher CHECKED A.T.H. P.S.J.

April 24, 2006 EXAMINED John a. Morris PASSED

SHEET NO. 5 STATE OF ILLINOIS 18 7 *16* SHEETS Rock Island DEPARTMENT OF TRANSPORTATION FEG. ROAD DIST. NO. 7 ILLINOIS FEG. AND PROJECT-Contract Number: 64€13 € Pier 7 ← € Expansion Bearing € Pier 8-Span 8 Repair A — Repair A — Repair A----I GIRDER A AND F (Looking North) © Expansion Bearing — ← © Pier 7 ├-- @ Pier 8 Span 8 Repair A-Repair A — Repair A — J Repair A-GIRDER B AND G (Looking South) © Expansion Bearing → Pier 7 Span 8 GIRDER C AND H (Looking South) © Pier 7— ← © Expansion Bearing © Pier 8→ Span 8 Repair A-Repair A — Repair A — GIRDER D AND J (Looking North) © Expansion Bearing - Pier 7 Pier 8 Span 8 Repair A-Repair A — Repair A---GIRDER E AND K (Looking South) April 24, 2006 BEAM ELEVATIONS F.A.I. RT. 280 OVER MISSISSIPPI RIVER DRAWN Drew Christopher ROCK ISLAND COUNTY CHECKED A.T.H. P.S.J. SN 081-0106

DESIGNED A.T.H.

CHECKED P.S.J.

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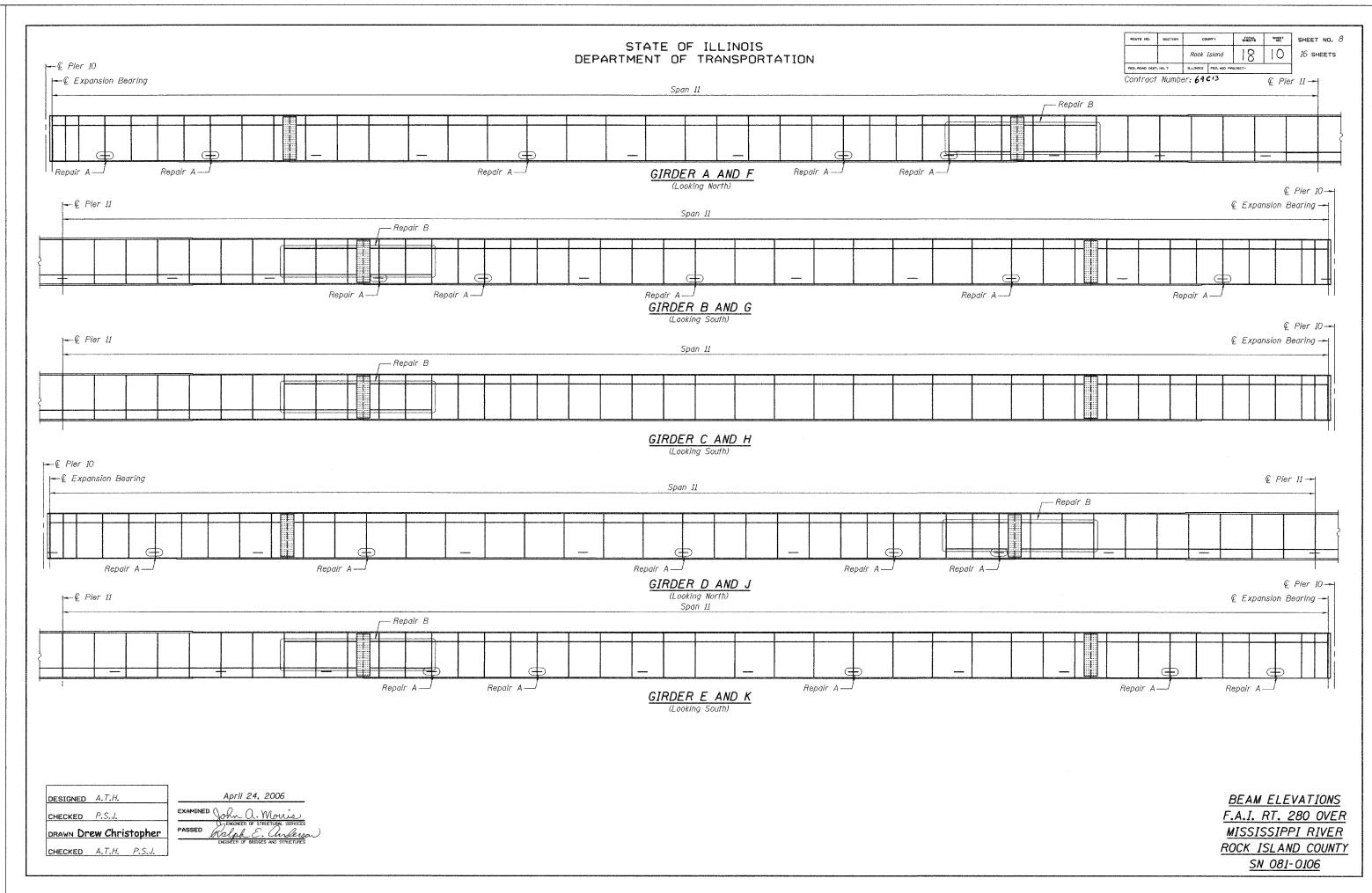
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	Pier 8	Span 9	€ Pier 9—
		F—Repair B	
	Repair A	Repair A	
		GIRDER A AND F (Looking North)	
	├— € Pier 9		€ Pier 8 →
		Span 9 ┌── Repair B	
		Repair A—— ^J GIRDER B AND G	l
		(Looking South)	
	Pier 9	Span 9	€ Pier 8 →
		_— Repair В	
		GIRDER C AND H (Looking South)	
	Pier 8	Span 9	€ Pier 9—
	,	г— Repair В	
			\[\tag{\frac{1}{2}}
	•	Repair A— ^J <u>GIRDER D AND J</u> (Looking North)	'
	© Pier 9	(Looking North) Span 9	© Pier 8 -
		Repair B	
	Repair A	Repair A	
	ropal A	GIRDER E AND K (Looking South)	
DESIGNED A.T.H.	April 24, 2006	·	BEAM ELEVATIONS
CHECKED P.S.J.	EXAMINED JOHN Q. WOULS DENGINEER OF STRUCTURAL SERVICES		F.A.I. RT. 280 OVER
CHECKED A.T.H. P.S.J.	PASSED WOLDE E. Underson ENGINEER OF BRIDGES AND STRUCTURES		<u>MISSISSIPPI RIVER</u> <u>ROCK ISLAND COUNTY</u> <u>SN 081-0106</u>

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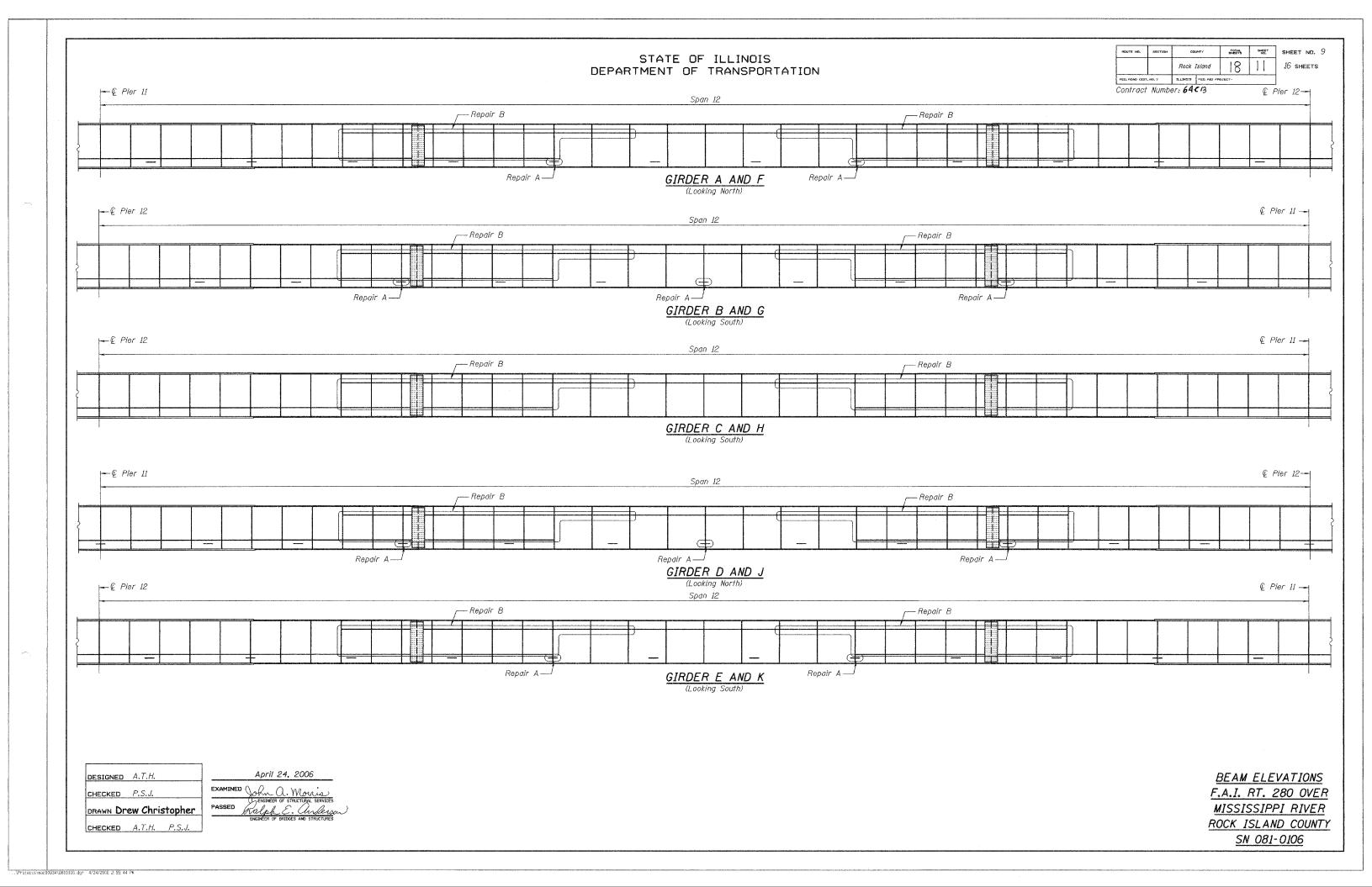
TOTAL SHEET NO. 7 ROUTE NO. SECTION STATE OF ILLINOIS 9 16 SHEETS 18 Rock Island DEPARTMENT OF TRANSPORTATION ILLINOIS FED. AID PROJECT Contract Number: 64C13 **-** € Pier 9 © Expansion Bearing → © Pier 10 Span 10 Repair A — Repair A — Repair A — GIRDER A AND F (Looking North) © Pier 10 → | Expansion Bearing € Pier 9 → Span 10 Repair A — GIRDER B AND G (Looking South) € Pier 10 → E Expansion Bearing ₽ Pier 9 → Span 10 GIRDER C AND H **-**- € Pier 9 Span 10 Repair A-GIRDER D AND J (Looking North) © Pier 10 → | Expansion Bearing € Pier 9 — Span 10 Repair A — Repair A — GIRDER E AND K (Looking South) April 24, 2006 BEAM ELEVATIONS F.A.I. RT. 280 OVER MISSISSIPPI RIVER DRAWN Drew Christopher ROCK ISLAND COUNTY CHECKED A.T.H. P.S.J. SN 081-0106

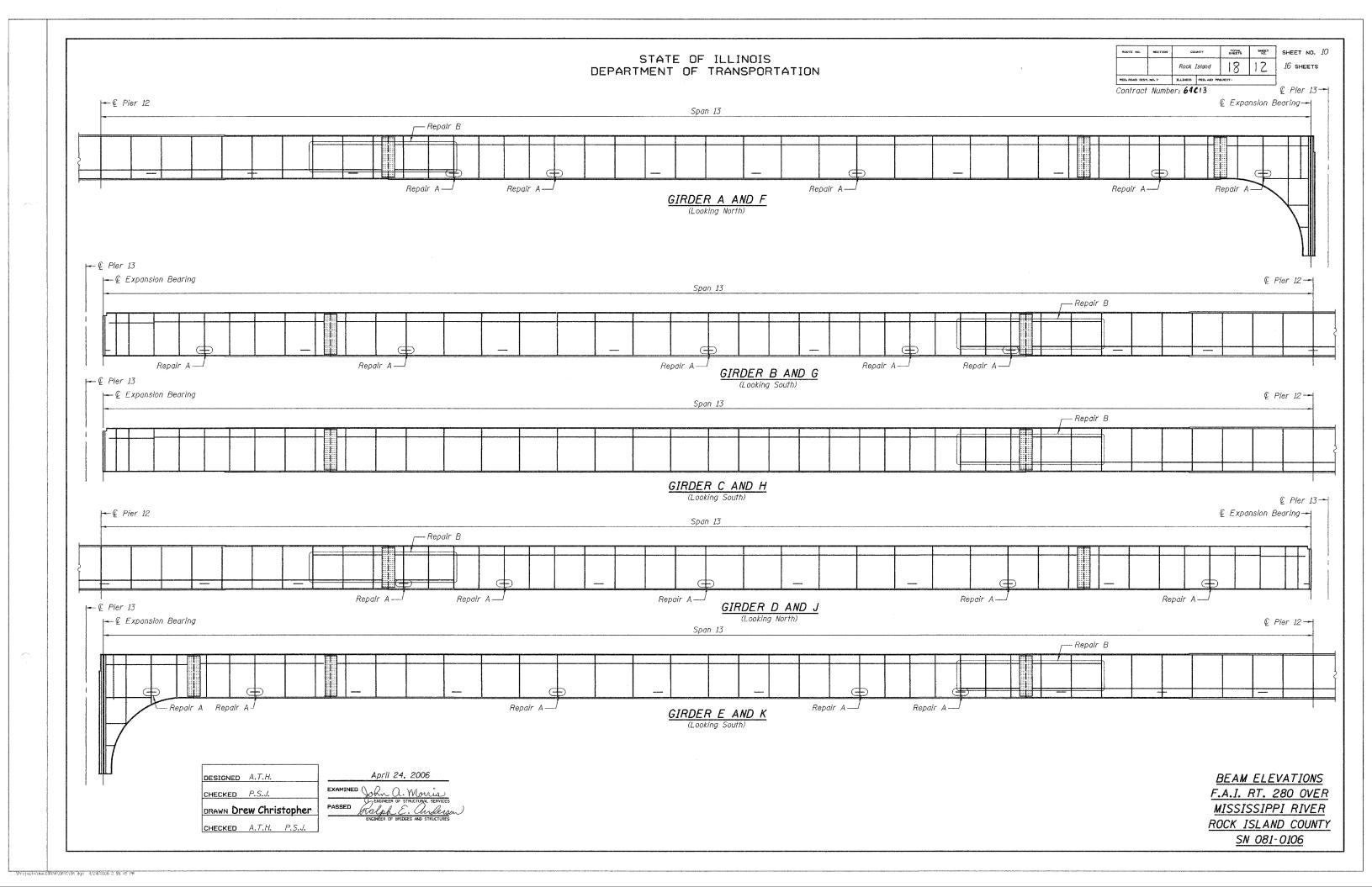
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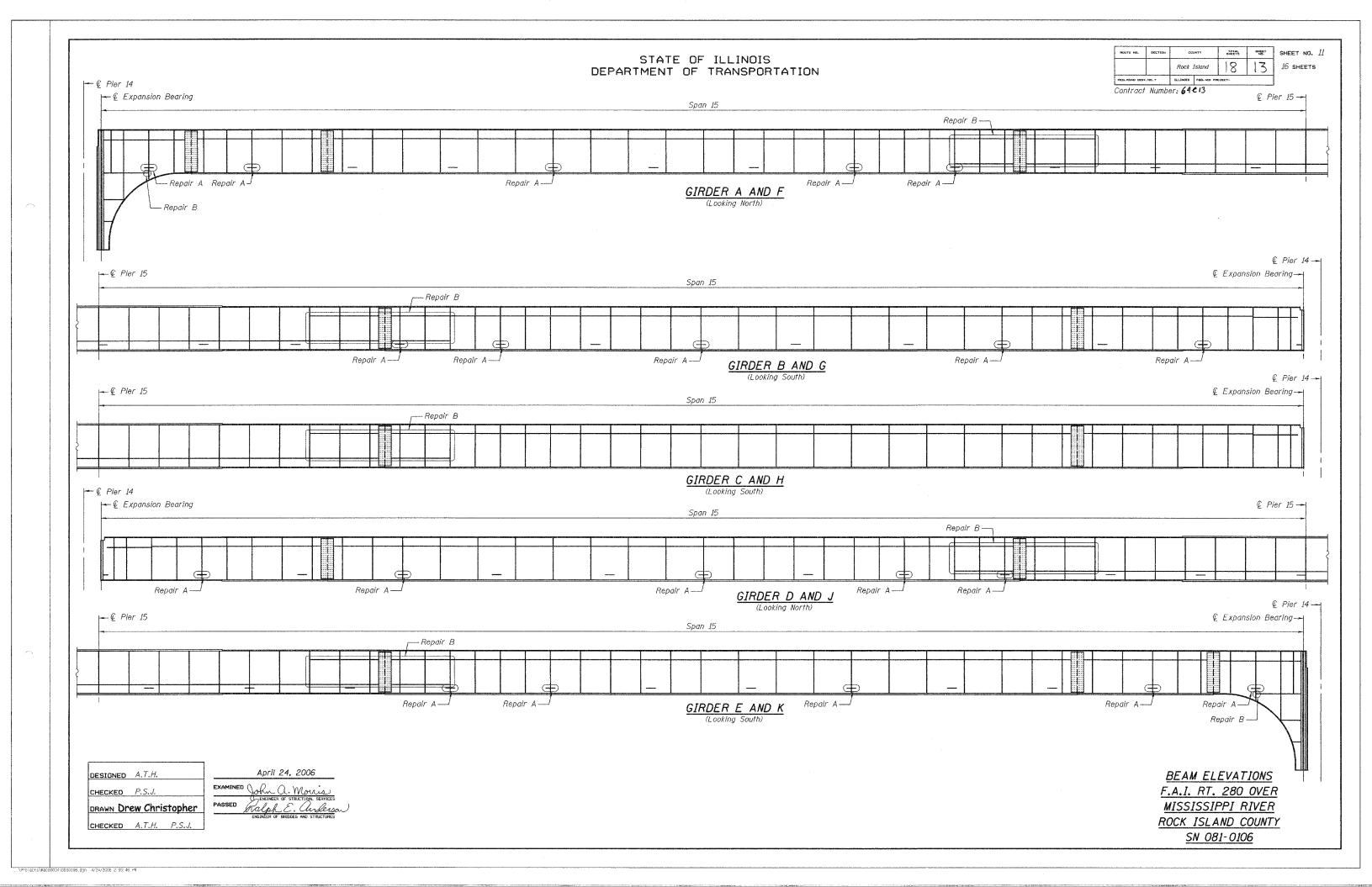
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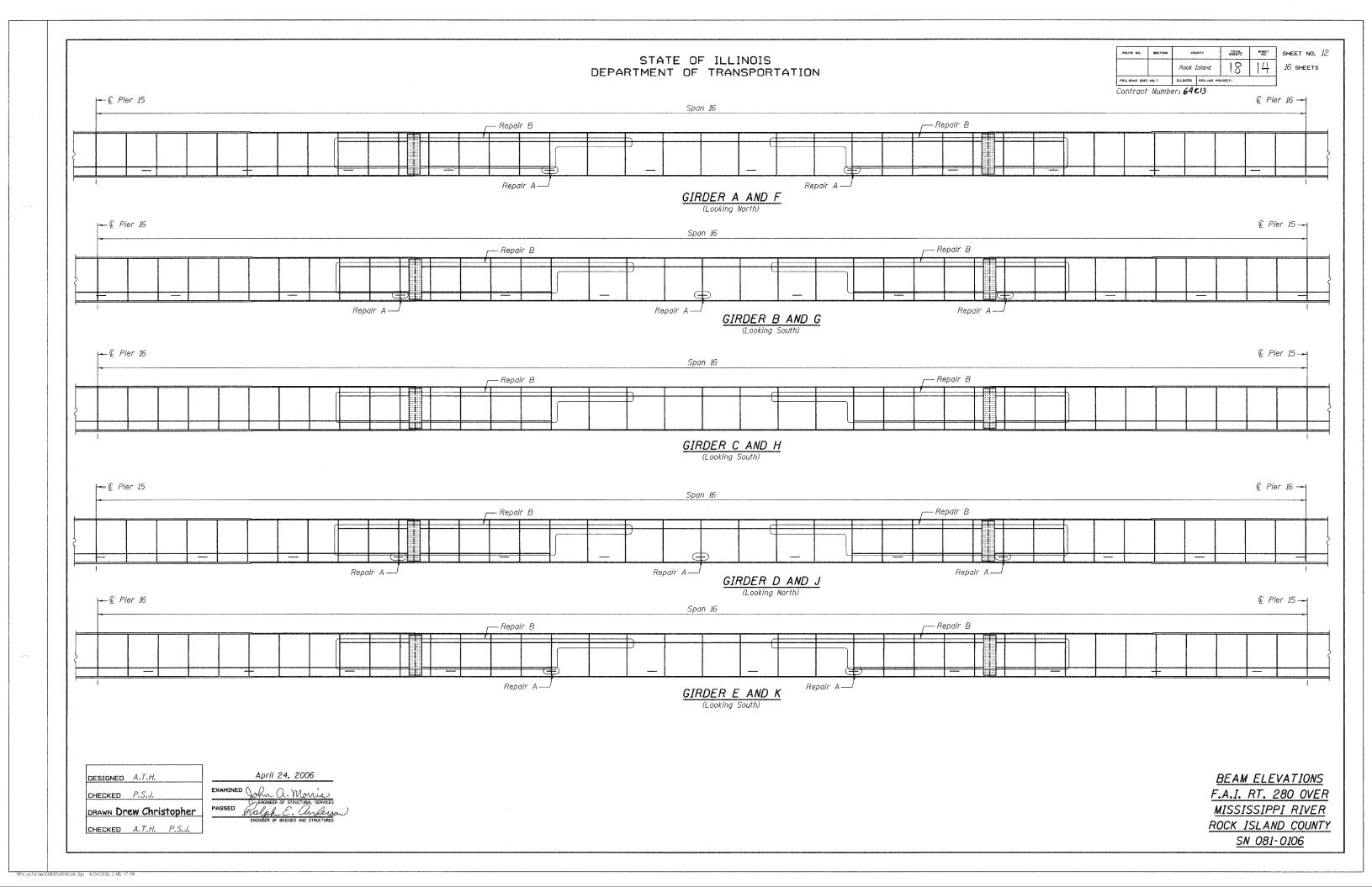


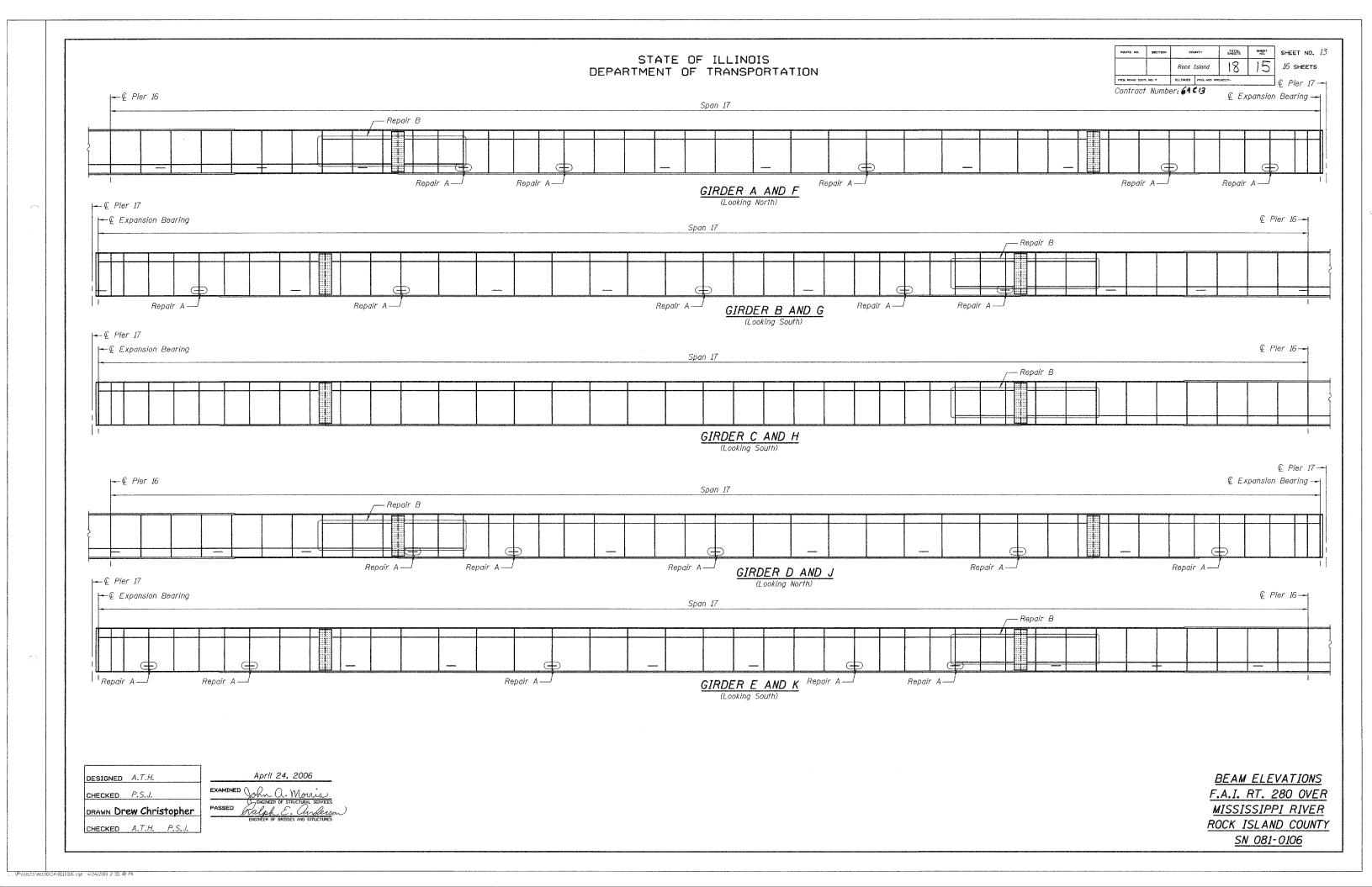
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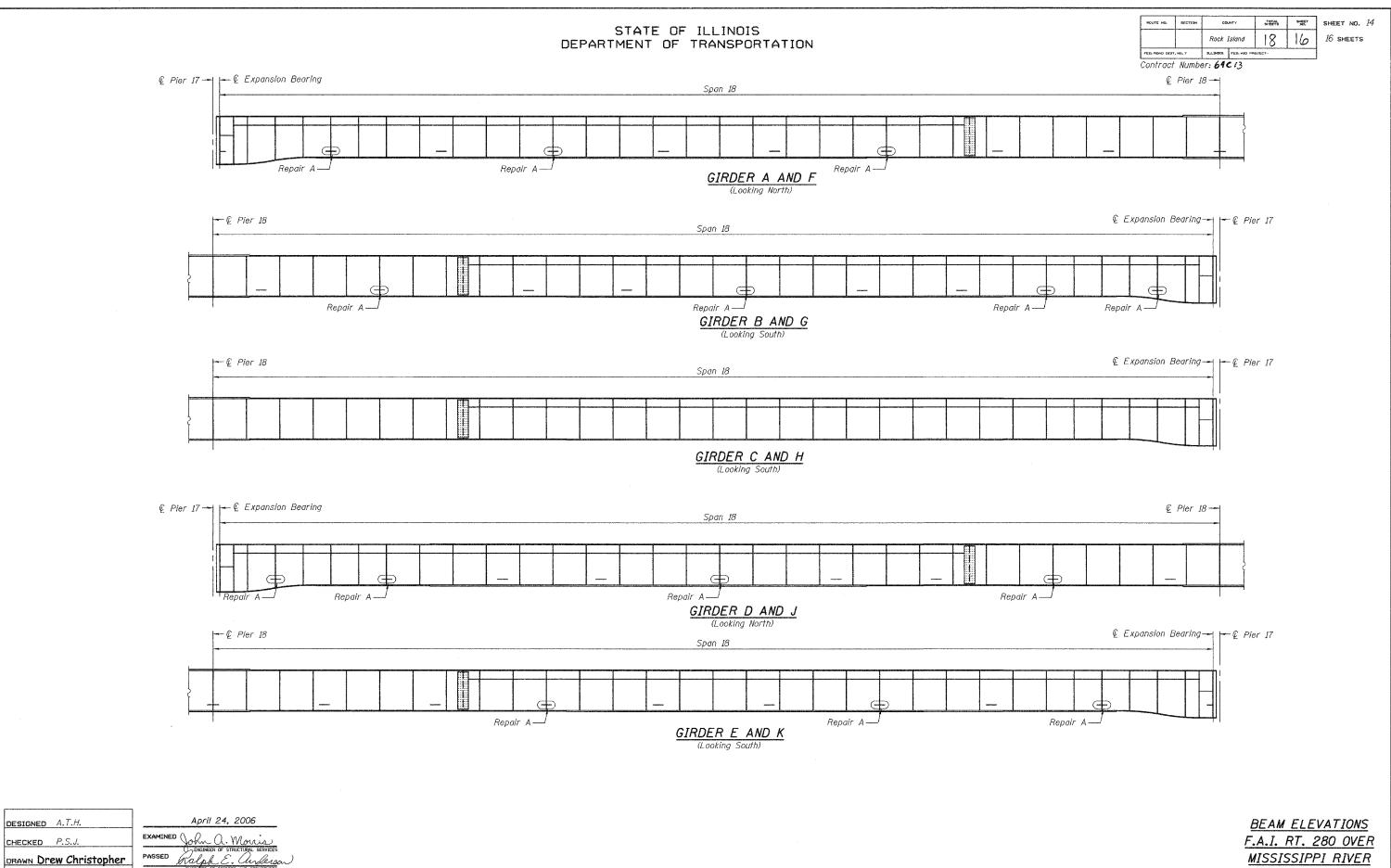








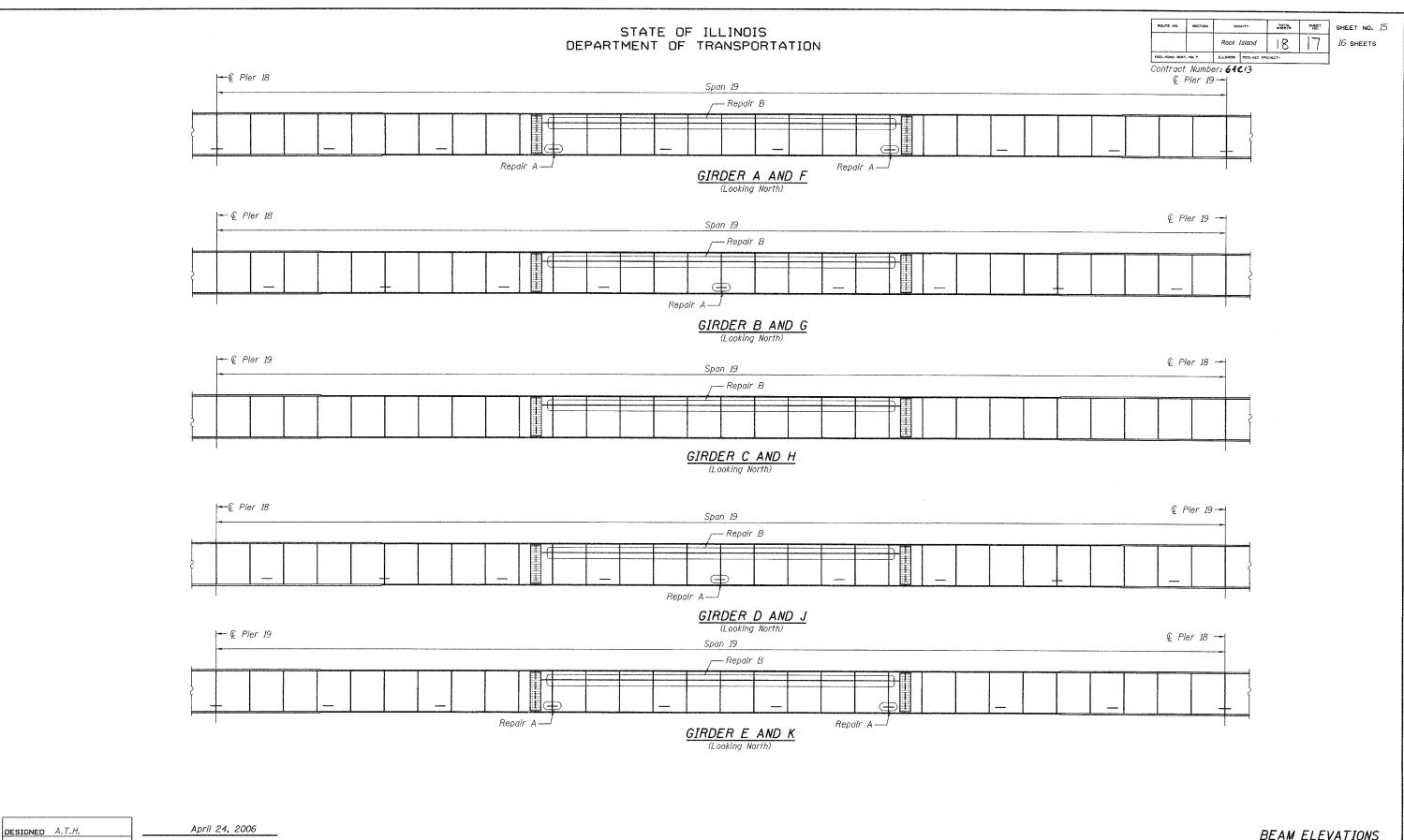




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CHECKED A.T.H. P.S.J.

ROCK ISLAND COUNTY SN 081-0106



BEAM ELEVATIONS
F.A.I. RT. 280 OVER
MISSISSIPPI RIVER
ROCK ISLAND COUNTY
SN 081-0106

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CHECKED P.S.J.

DRAWN Drew Christopher

CHECKED A.T.H. P.S.J.

EXAMINED John a. Morris

