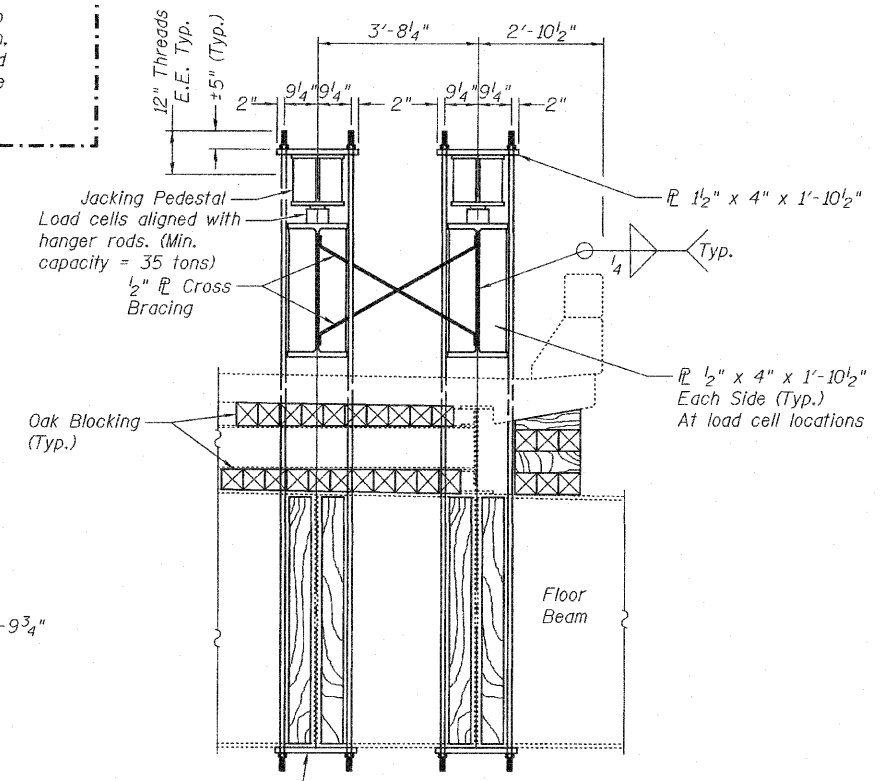


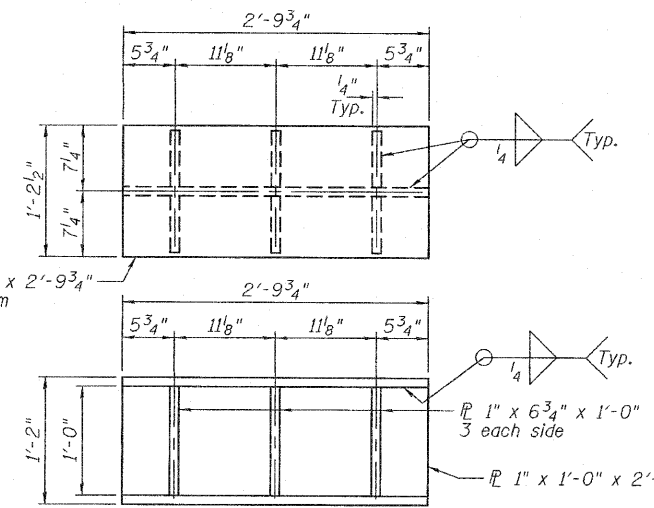
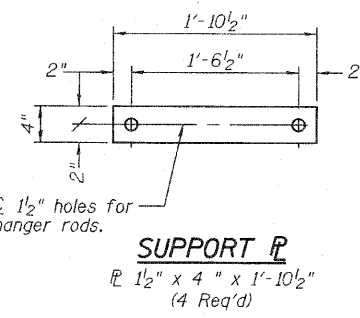
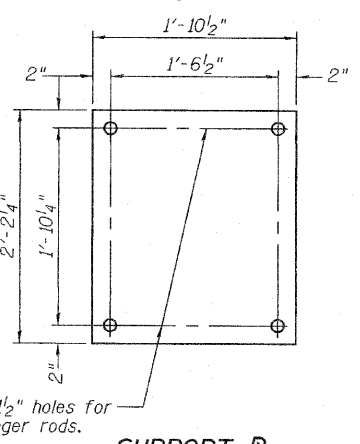
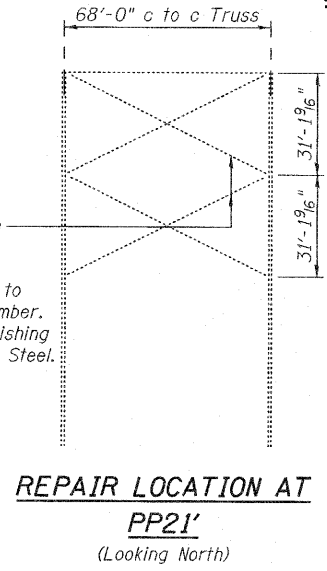
**SECTION A-A**  
(L20' and L22')

**Note:**  
Temporary support system for the floorbeam at L21' shown on this sheet is a suggested one. The design of the temporary support system accounts for dead loads from the bridge and did not include the effect of the contractor's equipment or materials. The contributing area used to design the temporary support system, is defined by the limits between the east and west trusses between panel points L20' and L22'. If the Contractor elects to use a different system or places any construction equipment or materials within the limits contributing to the design of the floorbeam temporary support system, plans shall be submitted to the Bureau of Bridges and Structures for approval prior to commencement of the removal and replacement of the damaged M21'-U21' vertical member.



**SECTION B-B**  
(L21')

**FLOORBEAM TEMPORARY SUPPORT ELEVATION**  
(Looking West)



**JACKING PEDESTAL**  
(2 Assemblies Req'd)

DESIGNED - I.J.L.	EXAMINED - <i>Ralph E. Anderson</i>
CHECKED - G.G.E.	PASSED - <i>Ralph E. Anderson</i>
DRAWN - Drew Christopher	
CHECKED - I.J.L. G.G.E.	

ENGINEER OF STRUCTURAL SERVICES	DATE - August 11, 2010
ENGINEER OF BRIDGES AND STRUCTURES	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**TEMP SUPPORT DETAILS**  
**SN 002-0022**  
SHEET NO. 2 OF 6 SHEETS

F.A. RTE. 57	SECTION D9 Bridge Repair 2010-1	COUNTY Alexander	TOTAL SHEETS 10	SHEET NO. 6
CONTRACT NO. 78220				

SLT-99-001-10

Revised Sheet 09/07/10 V.H.V. M.A.C.

**GENERAL NOTES**

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

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

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 Furnishing and Erecting Structural Steel.

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".

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8 See Special Provision "Cleaning and Painting New Metal Structures".

Cost of drilled drain holes in vertical and diagonal truss members is included with Structural Steel Repair.

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

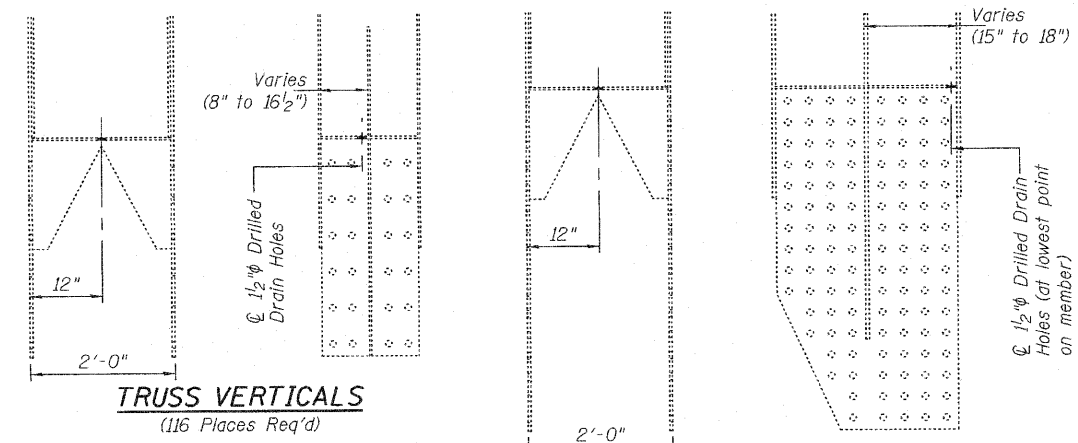
The Contractor shall submit Structural Assessment Report(s) as required for the Contractor's means and methods of construction, and shall include the effect of the temporary removal of member M21' - U21' on the structural adequacy of the bridge. See Special Provisions.

The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Highway Bridges (Complex), for preparation of the Structural Assessment Report. Contractor's pre-approval shall not be applicable for this project. See Special Provision.

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractors equipment.

**CURRENT RATINGS ON FILE FOR EXISTING STRUCTURE**

Inventory: HS22.0  
Operating: HS35.1  
Live Load Restrictions: No

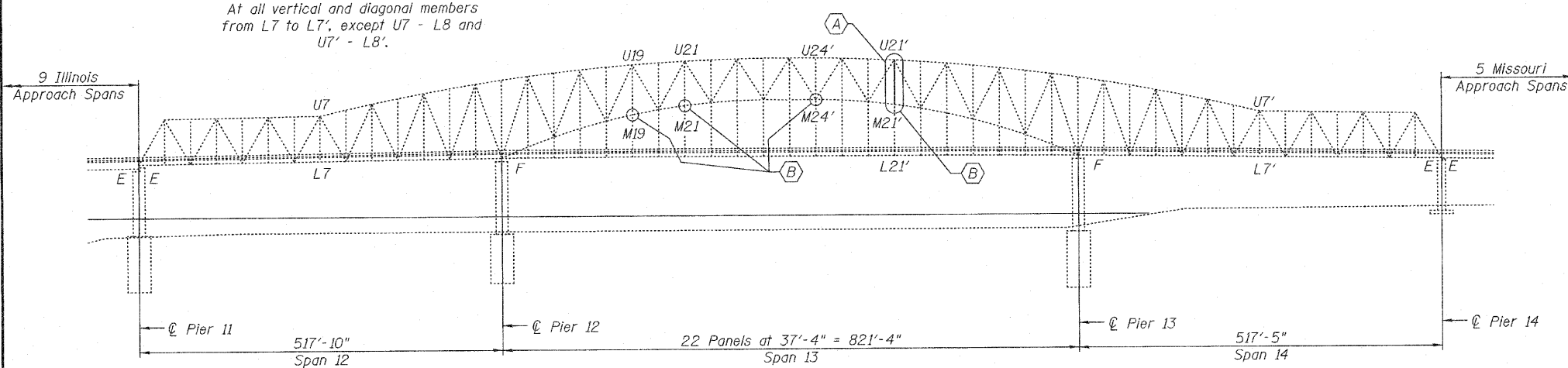


**TRUSS VERTICALS**  
(116 Places Req'd)

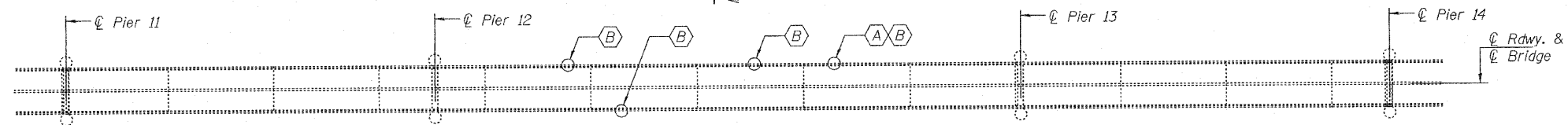
**TRUSS DIAGONALS**  
(68 Places Req'd)

**TYPICAL DRILLED DRAIN HOLE DETAILS**

(184 Locations Req'd)  
At all vertical and diagonal members from L7 to L7', except U7 - L8 and U7' - L8'.



**PARTIAL ELEVATION**  
(Looking East)



**PARTIAL DECK PLAN**

- (A) Replace U21' - M21'
- (B) Sway Brace Repair

**SEQUENCE OF CONSTRUCTION FOR REMOVAL AND REPLACEMENT OF U21' - M21' MEMBER**

1. Install Floor Beam Temporary Support System.
2. Load Cells simultaneously to 55 kips each.
3. Remove existing U21' - M21' member.
4. Install new U21' - M21' member.
5. Unload Cells.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	880
Temporary Support System	L. Sum	1
Furnishing and Erecting Structural Steel	Pound	11,650
Structural Steel Removal	Pound	7,890



Expires: November 30, 2010

DESIGNED - <i>[Signature]</i>	EXAMINED - <i>[Signature]</i> ENGINEER OF STRUCTURAL SERVICES	DATE - August 11, 2010
CHECKED - <i>[Signature]</i>	PASSED - <i>[Signature]</i> ENGINEER OF BRIDGES AND STRUCTURES	
DRAWN - <i>[Signature]</i>		
CHECKED - IJL		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN AND ELEVATION**  
**SN 002-0022**

SHEET NO. 1 OF 6 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 Bridge Repair 2010-1	Alexander	10	5
ILLINOIS FED. AID PROJECT				

Revised Sheet 09/07/10 V.H.V. M.A.C.