

IL HSR Early Steel Package No. 5 Steel Fabrication Package

The Union Pacific Railroad (UPRR) will issue a Request for Proposal (RFP) for the acquisition of material, and fabrication and delivery of bridge materials for:

Bridge 52.47 Joliet Subdivision over Forked Creek —Wilmington, IL
Bridge 52.66 Joliet Subdivision over Water Street —Wilmington, IL
Bridge 52.70 Joliet Subdivision over Kankakee River —Wilmington, IL
Bridge 183.78 Springfield Subdivision over 9th Street—Springfield, IL
Bridge 255.93 Springfield Subdivision over Seminary Ave. —Alton, IL

Following is a summary of structural steel required at each location and the delivery dates for completed spans:

Through Plate Girder Spans

Bridge 52.66 Joliet Subdivision over Water Street —Wilmington, IL

Delivery Date: August 1, 2015

- 2- 52'-0" Non-Standard Through Plate Girder, Prefabricated Ballast Deck

Two (2) – 52'-0" long through plate girder ballast deck spans including fixed and expansion bearings, handrail and walkway attached to the through plate girder spans are required:

- Girders are welded built-up sections.
- Girder webs are PL ½ x 48 x 52'-0" (FCM).
- Girder top flanges are PL 2 x 16 x 52'-0".
- Bottom flanges are PL 1 3/8 x 24 x 52'-0" (FCM).
- Centerline to centerline of girders is 14'-0".
- All floorbeams are W18 x 97 (FCM).
- All member connections are bolted.
- Ballast pans are 7/8" thick.
- Floor system is panelized.
- Estimated weight of Phase 1 Span (not including bolts) is 90,040 LB. (45.0 Ton).
- Estimated weight of Phase 2 Span (not including bolts) is 90,150 LB (45.1 Ton).

Materials and fabrication must be in accordance with Chapter 15: Steel Structures of the AREMA Manual for Railway Engineering. Material shall conform to the following requirements:

- Girder Web, Bottom Flange, Knee Braces, and Floor Beams – ASTM A709 Gr. 50W F2
- Girder Top Flange and Bearing Stiffeners – ASTM A709 Gr. 50W T2
- Deck Plates – ASTM A709 Gr. 36 T2

- Anchor Rods – ASTM F1554 Gr. 36
- Checker Plate – ASTM A786, galvanized
- All Other Structural Steel ASTM A588
- Bolts – ASTM A325 Type 3
- M. Bolts – ASTM A307
- America Recovery and Reinvestment Act of 2009 Buy America Provisions

Bridge 183.78 Springfield Subdivision over 9th Street—Springfield, IL

Delivery Date: June 1, 2015

- 1- 188'0" Non-Standard Through Plate Girder, Prefabricated Ballast Deck

One (1) – 188'-0" long through plate girder ballast deck span including fixed and expansion bearings and handrail attached to the through plate girder span are required:

- Girders are welded built-up sections.
- Girder webs are PL 1 1/8 x 141 x 188'-0" (FCM).
- Girder top flanges are PL 3 1/2 x 36 x 188'-0".
- Bottom flanges are PL 3 1/2 x 36 x 188'-0" (FCM).
- Centerline to centerline of girders is 21'-0".
- All floorbeams are W14 (FCM).
- All member connections are bolted.
- Ballast pans are 5/8" thick.
- Estimated weight of Span (not including bolts) is 943,036 LB. (471.0 Ton).

Materials and fabrication must be in accordance with Chapter 15: Steel Structures of the AREMA Manual for Railway Engineering. Material shall conform to the following requirements:

- Girder Web, Bottom Flange, Knee Braces, and Floor Beams – ASTM A709 Gr. 50W F2
- Girder Top Flange and Bearing Stiffeners – ASTM A709 Gr. 50W T2
- Deck Plates – ASTM A709 Gr. 36 T2
- Handrail – ASTM A847
- Anchor Rods – ASTM F1554 Gr. 36
- Checker Plate – ASTM A786, galvanized
- Bearing Pins – ASTM A576 Gr. 1018
- All Other Structural Steel ASTM A588
- Bolts – ASTM A325 Type 3
- M. Bolts – ASTM A307
- America Recovery and Reinvestment Act of 2009 Buy America Provisions

Steel Beam Spans

Bridge 52.47 Joliet Subdivision over Forked Creek —Wilmington, IL

Delivery Date: August 1, 2015

- 2 - Steel Beam Span W40x277 x 59'-0", Prefabricated Ballast Deck
- 4 - Steel Beam Span W40x431 x 69'-0", Prefabricated Ballast Deck

Bridge 52.70 Joliet Subdivision over Kankakee River —Wilmington, IL

Delivery Date: August 1, 2015

- 8- Steel Beam Span W40x431 x 74'-0", Prefabricated Ballast Deck
- 8- Steel Beam Span W40x431 x 69'-0", Prefabricated Ballast Deck
- 1- Steel Beam Span W36x150 x 31'-0", Prefabricated Ballast Deck

Materials and fabrication must be in accordance with Chapter 15: Steel Structures of the AREMA Manual for Railway Engineering. Material shall conform to the following requirements:

- Beams – ASTM A709 Gr. 50W T2
- Deck Plate – ASTM A709 Gr. 36 T2
- Drain Pipe – ASTM A53 Gr. B
- Handrail – ASTM A847
- All Remaining Steel – ASTM A588
- Bolts – ASTM A325 Type 3
- M. Bolts – ASTM A307
- Anchor Rods – ASTM F1554. Gr. 36
- Bearing Pads – Cast Polyurethane (70 Durometer)
- America Recovery and Reinvestment Act of 2009 Buy America Provisions

Deck Plate Girder Spans

Bridge 255.93 Springfield Subdivision over Seminary Ave. —Alton, IL

Delivery Date: June 1, 2015

- 1- 84'0" Deck Plate Girder, Prefabricated Ballast Deck

One (1) – 84'-0" long deck plate girder (4 girders) ballast deck span including fixed and expansion bearings, ballast retainers and handrail attached to the ballast retainers are required:

- Girders are welded built-up sections.
- Girder webs are PL 1/2 x 54 x 84'-0" (FCM).
- Girder top flanges are PL 2 x 24 x 84'-0".
- Bottom flanges are PL 2 x 24 x 84'-0" (FCM).
- Centerline to centerline of girders is 4'-0".
- Diaphragms are PL 1/2.
- All member connections are bolted.

- Ballast pans are 5/8” thick.
- Estimated weight of Span (not including bolts) is 217,340 LB. (109.0 Ton).

Materials and fabrication must be in accordance with Chapter 15: Steel Structures of the AREMA Manual for Railway Engineering. Material shall conform to the following requirements:

- Girder Web and Bottom Flange – ASTM A709 Gr. 50W F2
- Girder Top Flange and Bearing Stiffeners – ASTM A709 Gr. 50W T2
- Deck Plates – ASTM A709 Gr. 36 T2
- Handrail – ASTM A847, galvanized
- Anchor Rods – ASTM F1554 Gr. 36
- Checker Plate – ASTM A786, galvanized
- All Other Structural Steel ASTM A588
- Bolts – ASTM A325 Type 3
- M. Bolts – ASTM A307
- Bearing Pads – Reinforced neoprene, 60 Durometer
- America Recovery and Reinvestment Act of 2009 Buy America Provisions

All potential vendors wishing to bid on the project, as described above, must meet the following criteria:

- AISC Major Steel Bridge (CBR) Certification
- AISC Fracture Critical Endorsement
- Mandatory compliance with the IL HSR UPRR Quality Management Plan dated March 23, 2014.
- Prefer vendors with prior construction of spans that are in accordance with AREMA Specifications.

To register and receive all specifications, prints and documents for this package, please submit electronic copies of your AISC Major Steel Bridge (CBR) Certification and AISC Fracture Critical Endorsement via email to:

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