

Historic Bridge Adoption Information Packet

Grayson County Craft Road Choctaw Creek Tributary October 2024

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Announcement

The Texas Department of Transportation (TxDOT) seeks adopters for the historic bridge detailed below for reuse according to federal transportation and historic preservation laws. The bridge is located in Grayson County, on Craft Road crossing Choctaw Creek.

Letters of interest and/or reuse proposals will be accepted until 5 p.m. on **January 31, 2024**. TxDOT is currently undergoing alternatives analysis for this project. The outcome of the analysis may impact the availability of this bridge. Priority for assistance will be given to public entities seeking to reuse the bridge in a public or publicly visible space. Bridges available through this program are not suitable for vehicular service. All rehabilitation work must conform to the Secretary of the Interior's *Standards for Rehabilitation* in consultation with the Texas Historical Commission (THC).

Interested parties may request additional information, indicate an interest, or submit a reuse proposal by contacting:

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Bridge Location

County:	Grayson
Highway or Facility:	Craft Road
Feature Crossed:	Choctaw Creek
 GIS Locational Information 	https://arcg.is/1XvaTP0

Bridge Information

 Bridge Owner 	Grayson County
 Main-span Type: 	Camelback Pony Truss
 Main-span Length 	120 feet
 Roadway Width 	18 feet
• Year Built	1920 (Relocated and widened 1950)
 Builder 	Unknown

Bridge Condition

The bridge is currently open to vehicular traffic and is poor in condition but with needed repairs and overall painting, the truss could be repurposed for use as a pedestrian only bridge. The steel truss members and floor beams have localized areas of section loss due to corrosion or impact deformations. At a minimum, cleaning, painting, and sealing of deformed members would be required. For truss lower chord members found with cracks, an engineering analysis for the allowable load rating and desired pedestrian bridge width would be required to determine if more extensive repairs or replacement of the members is needed.

Historic Significance of the Bridge

In 2014, the Texas State Historic Preservation Office (SHPO) determined that all extant metal truss bridges in Texas are historically significant at the local level as rare surviving examples of their type. This c. 1920 Camelback pony truss retains the essential physical features that enable it to convey the historic character of metal truss bridges from the early-to-mid-20th century.

Condition Photos and Descriptions

The following photos highlight some areas of the truss needing repair. Some repairs will be required prior to converting the bridge to pedestrian use, while others can be deferred to a later date. Each photo is accompanied by a description of the repair and recommendations for timing of the repair. Please note that additional repairs may be uncovered while moving the truss, or while completing rehabilitation activities. Other costs required for converting the bridge to pedestrian use include foundations at the new location, a pedestrian rail, and a pedestrian walkway of a width to be determined by engineering analysis. Finally, the truss will need to be moved from the current site to the new location. Costs to the recipient will be dependent on distance to be moved and may be partially or fully covered the State.

Diagram 1: Truss Member Labeling (from South to North)



Photo 1: West Truss Bottom Chord (L1-L2)



Bottom flange angle at midspan with 5-3/4 inch long crack.

Photo 2: West Truss Bottom Chord (L2-L3)

Bottom batten plate at midspan with 1-3/4 inch long crack.

Photo 3: West Truss Bottom Chord (L5-L6)

Underside of cover plate at L5 with 6- 1/8 inch long crack.

Photo 4: East Truss Bottom Chord (L1-L2)

Underside of exterior angle with 8-1/4 inch long crack.

Photo 5: East Truss Bottom Chord (L2-L3)

Underside of bottom flange splice plate near L2 with 2-3/4 inch long crack.

Photo 6: East Truss Bottom Chord (L5-L6)

Underside of exterior angle with 1-3/16 inch long crack.

The damage created from cracking in photos 1-6 must be analyzed by an engineer to determine proper repair. The crack analysis and repairs can be completed after moving the truss but prior to converting the truss to pedestrian use.

Photo 7: Deformation at Truss Connection

Three poorly seated rivets show corrosion with section loss at the vertical angle and gusset plate on the East truss. This repair can be completed after moving the truss and can be deferred further if needed. However, corrosion will continue until addressed by cleaning, painting, and sealing areas of deformation where water will collect. TxDOT highly recommends cleaning and painting the entire structure.

Photo 8: Deformation at Bottom Chord Flanges

The West truss has flange deformations at eight locations and the East truss has flange deformations at four locations which are all subjected to laminar corrosion. It is suspected that the flange deformations were created when the original bridge was moved from its original location and would not affect structural integrity for pedestrian loads. Repairs can be completed after moving the truss or can be deferred further if needed. However, corrosion will continue until addressed by cleaning, painting, and sealing areas of deformation where water will collect. TxDOT highly recommends cleaning and painting the entire structure.

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Photos 9 and 10: Truss Dimensions in Elevation and Cross Section

The configuration and dimensions of the structure are shown to assist in estimating costs associated with moving the truss, and for purchasing and installing the pedestrian walkway and railing. The width of the walkway will need to be determined from pedestrian load rating calculations provided by a professional engineer.

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Bridge Photographs

