

CLEAR BOGGY CREEK BRIDGE
Structure #12E2017N4035004
Boswell
Choctaw County
Oklahoma

PHOTOGRAPHS

WRITTEN AND DESCRIPTIVE DATA

**CLEAR BOGGY CREEK BRIDGE
BOSWELL, CHOCTAW COUNTY, OKLAHOMA**

Structure #: 12E2017N4035004

Location: The bridge is located off of N4030 Road on E2020 Road over Clear Boggy Creek near Boswell in Choctaw County, Oklahoma.

USGS Quadrangle map: Boswell, OK.

UTM Coordinates: Zone 15 E238345 N3775487

Date of Construction: The bridge was constructed in 1919.

**Designer/
Builder:** Kansas City Bridge Company, Kansas City, Missouri

Present Owner: Choctaw County

Previous Use: Roadway Bridge (public)

Present Use: Roadway Bridge (public)

Significance: This bridge is a good example of a Pratt through truss with curved portal brackets intact. Pratt trusses are rare in Choctaw and surrounding counties.

Author: Erica L. Howard, Sherry N. DeFreece Emery, and Kate Singleton; URS Corporation, Dallas, Texas; April 2012

Project Information: This project consists of Historic American Engineering Record (HAER) Level II equivalent documentation of the Clear Boggy Creek Bridge in Choctaw County, Oklahoma. This HAER recordation serves as mitigation for the removal of this structure from the transportation system. Field work was accomplished by Kate Singleton on December 21, 2011. At the site, 35mm format, black and white photographs were taken and the character and conditions of the structure were recorded. No original drawings were available at the time of the field work. Newspaper articles from the time period were consulted, but no information was obtained. The County Commission's Meeting Minutes were available, dating back to approximately 1907. These minutes were researched and provided information about the bridges.

PART I: HISTORICAL INFORMATION

Oklahoma has two main drainage systems: the Arkansas River and the Red River. These rivers along with their tributaries flow into Oklahoma by the six surrounding states. The waters flow out of the state by way of the Red, Arkansas, and Little Rivers, and Lee Creek. These rivers and creeks proved a challenge as Oklahoma travel evolved from horseback and foot travel to motorized transportation, necessitating the construction of ferries, and later bridges over many of these creeks and rivers.^{1,2,3}

When people and goods first came across Oklahoma, trails were developed based on the easiest route to travel or from animal tracks. Osage Indian trails were later used for resettlement of additional tribes and by Anglos, and by their arrival an established network of roads and fords had formed. From these routes, later highways developed, including the Texas Road (later U.S. Highway 69). Individuals established better crossings at rivers and streams beginning in the 1820s using wooden rafts, flatboats, and later ferries powered by steam engines.

Military roads were begun in the early 1800s when the U.S. Army arrived to the territory. The first surveyed road in the state was conducted by the army under Lieutenant James L. Dawson in 1826; this route extended 55 miles from Fort Gibson to Fort Smith. Military roads became the chief routes for travel, supplies, livestock, and communication not only for the military but for other settlers and tradespeople, and continued to be developed into the 1870s. The army also built and operated ferries, most of which were timber plank bridges intended only for temporary use.

After Indians were relocated to Oklahoma Territory in the 1830s and 1840s the tribes gained control of travel routes and ferries and the governments of the Cherokee, Choctaw, Chickasaw, and Creek tribes began a series of legislative actions that further established public roads, primarily along section lines. In 1849 the Cherokee Nation approved annual taxes for the ferries they regulated on the Arkansas, Canadian, Neosho, Illinois, and Verdigris rivers. Each tribal government established ferry regulations that applied to its landholdings, and individual landholders operated ferries and toll bridges on the creeks and rivers on their land. Traders often operated ferries associated with their stores. By the 1850s, the army built more permanent wooden and wrought iron bridges.

Oklahoma Territory roads became popular routes during this time, and travelers to the frontiers of Texas and California passed through the area. Along the Texas Road turnpikes, toll bridges, and ferries were built by the 1870s. As railroads extended their lines through the territory, they also brought iron and steel truss bridges that were often the first permanent bridges erected in some areas. Railroad bridges were often adapted to allow crossing by horse and wagon; other times railroad bridge designs, or actual retired railroad bridges were used for road use. By the 1880s, cattle trails became important, and the Chisholm (later U.S. Highway 81) and Great Western trails were extended through Oklahoma Territory. Ferries began being regulated by Oklahoma Territory in 1890, which allowed counties to fix tolls, license ferries, and regulate their locations; after statehood, these regulations became state law.^{4,5,6}

Prior to statehood, a system of county-led road construction and maintenance had been established, but roads and bridges on tribal lands were controlled by the Bureau of Indian Affairs. The mostly dirt roads were only sporadically maintained. Since the Indian nations and Oklahoma Territory did not have the financial resources nor the technology to properly maintain the roads, the public found they often had to deal with washed out crossings, quicksand filled stream and river beds, and other problems. Although railroad bridges were in use, most were simple wooden structures or “straw bridges” that consisted of straw mats which were laid on the river bottom.

The national campaign known as the “Good Roads” movement was founded in St. Louis in 1893 and found a foothold in Oklahoma in 1902 after a series of disastrous floods. The movement was sponsored by the U.S. Department of Agriculture’s Office of Road Inquiry (later Office of Public Roads) and railroad companies. The railroad had just as much of an interest in good roads as the public, since better access meant that farmers could reach rail lines and markets more easily. In fact, railroads such as the St. Louis and San Francisco even used excursion trains to showcase the demonstration roads it had helped build in the Oklahoma Territory. The movement was able to secure provisions (including the establishment of a state highway department) during the 1906 Oklahoma State Constitutional Convention.

During the early years of statehood, individual townships had the responsibility of maintaining roads and local individuals were required to maintain the section-line roads, which were often the only roads that existed in the area. By 1911, the highway department existed, but received no funding for construction or maintenance of roads, nor did they have any authority. In fact, Oklahoma claimed only 23 miles of hard surfaced roads, the fewest in the United States. Only with the passage of the 1916 Federal Aid Highway Act were matching funds provided and state legislators made funding for state roads available. Previously, funding was channeled through county road improvement districts that had been established in 1909. Between 1917 and 1919, \$690,834.00 in federal money was appropriated for Oklahoma roads, and counties matched this 50-50. Primarily due to the efforts of the Good Roads Association, rural roads continued to improve; farmers had better access to towns, railroads, and markets, which in turn improved the values of farm property and businesses.^{7,8,9,10}

The turn of the twentieth century also brought advancements in bridge construction to Oklahoma. Counties increasingly purchased prefabricated, often mass-produced, metal trusses and suspension bridges (often tolled to save public money) from Midwestern bridge companies such as the Central States Bridge Company, Rochester Bridge Company, Vincennes Bridge Company of Indiana; the Canton Bridge Company of Ohio; John Gilligan Company and Monarch Engineering of Nebraska; Midland Bridge Company, Kansas City Bridge Company, and Canton Bridge Company of Kansas City, and the Missouri Valley Bridge and Iron Company of Kansas. These bridges could be transported to the site by railroad gondolas and erected by local workers supervised by a bridge company representative. This mode of bridge construction became a regular practice in the state, and several bridge companies benefited from opening an office in Oklahoma; the J. B. Klein Iron and Foundry Company (later Robberson Steel Company) and the Boardman Company both opened offices in Oklahoma City. Generally these metal truss and suspension bridges were good durable designs, and the convenience of “turnkey” service by bridge companies proved to be a successful solution for many small creeks and streams. Toll bridges lost

favor in the late 1920s, and public money was spent to buy out owners and transfer ownership to the state.¹¹

Around 1915 the type of trusses used for shorter spans shifted from pin-connected Pratt pony trusses to half-hip, truss leg bedstead, and most commonly, the Warren pony truss with vertical members. Construction of bridges stalled with the United States' entry into World War I as labor and construction materials were reallocated to the war effort. After the war bridge construction resumed and transportation demands of the oil industry further spawned their construction. Steel truss bridges became the most popular choice for shorter spans, and were also used in combination with each other or with other span types for larger spans. Later, longer spans and heavier loads necessitated a further shift to the use of Parker through-trusses, and concrete pile trestles also saw wider use. In the 1920s, the camelback pony truss became the preferred type of state highway department engineers and was most commonly used from the 1930s through the 1950s on federally funded roads. This truss was also used in combination with other trusses such as K-trusses on larger spans. Automobile travel had arrived in Oklahoma in the 1920s and by 1926 there were 500,000 cars registered in the state. In 1924 Governor Martin Trapp established a state highway system to comply with a demand from the federal government for accountability for the funding it provided for roads; the newly created department was responsible for road construction and maintenance. The legislation also allowed for a gasoline tax and created the state highway commission. Roads in Oklahoma continued to expand, with asphalt, brick, and concrete roads replacing dirt roads. Even in the early 1930s, ferries and fords were still used, but had increasingly been replaced by bridges, and their types became more standardized as a result of more centralized control.¹²

During the Depression, construction of bridges and roads slowed, with the exception of those funded by federal programs like the Works Progress Administration (WPA) and the Civilian Conservation Corps. WPA grants amounted to over \$4 million in 1937 alone. Funds were typically allocated to smaller projects and repairs, and it also provided for dismantling and moving trusses to new locations; however, some of the largest bridges in the state were built during the Depression. In all, 24 bridges that each spanned over 700 feet were built during that period.¹³

Bridge and road construction again slowed as the United States entered World War II; 24 road projects were stalled, and maintenance was deferred even as roads saw increased heavy use. The budget for the highway department was cut to below 1922 levels, and older metal bridges were demolished for scrap for the war effort. Road and bridge work was restricted to military and oil field purposes, which did lead to the construction of 65 bridges during the war years. Interstate highways and state sponsored turnpikes were constructed in the state after the war to meet increased demand and repair infrastructure damaged by wartime use and even in 1955 twenty percent of Oklahoma roads were unpaved. Standardized highway and bridge designs became the norm in the 1950s; concrete was increasingly used for both, and the use of metal truss bridges declined. Oklahoma's economy was jolted by the booming oil industry, and so was its transportation infrastructure by the time that the 1956 Interstate Highway program was created. By 2000, Oklahoma had 10 turnpikes and two Interstate highways carrying goods and travelers across the state.^{14,15}

Choctaw County

Named for the area tribe, Choctaw County encompasses approximately 800 square miles. The county is located in southeastern Oklahoma, and bounded by McCurtain County on the east, Bryan County on the west, Pushmataha and Atoka Counties on the north and the Red River and Texas on the south. The Kiamichi River runs through the county and drains into the Red River. Muddy Boggy and Clear Boggy Creeks also drain into the Red River.

Early Native people resided in the region. The county was part of the lands given to the Choctaws after they signed treaties that ceded their home lands to the government. It was part of Jackson, Kiamichi, Cedar and Towson counties of the Choctaw Nation. The U.S. Army established Fort Towson in 1824. The Chickasaw Indians moved to the area after signing the 1837 treaty. The town of Doaksville was located adjacent to Fort Towson. The towns of Towson and Doaksville served as capitols of the Choctaw Nation at various times.¹⁶

In 1844, Captain Robert Jones (Confederate Army), part Choctaw, established a large cotton plantation known as Rose Hill in the county. He owned 500 slaves to farm this prosperous plantation and he acquired two steamboats to transport the crops. In the aftermath of the Civil War, Jones lost his fortune and he died in 1873.¹⁷

Large scale farming did not occur in the county until the early 1900s. The main crops were cotton, corn, hay and peanuts. Ranching and the lumber industry were also important to the county's economy. In 1910, cotton was the main agriculture crop. Much of the land was farmed by tenant farmers. By the 1930s, cotton was no longer the main crop; agriculture had diversified to include corn, oats, hay and peanuts. Agricultural crops at the end of the twentieth century were soybeans, corn and vegetables. Also in the county was an active vegetable processing industry as well as petroleum and crushed stone industries.^{18,19}

In 1886-87, St. Louis and San Francisco Railway (Frisco) built a line from Fort Smith, Arkansas through what is now Choctaw County. The Arkansas and Choctaw Railroad Company, a company later purchased by the Frisco, constructed an east-west line, crossing the existing tracks at Hugo In 1901-1903. The Kiamichi Railroad took over the lines of these railroads and provided service to the county for both the north-south and east-west lines. Hugo, the county seat developed as the commercial center due in part to the railroad stop. Hugo was surveyed and platted in 1902 and was made the county seat at the time of statehood. In 1910, the population of the county was 21,862. By 1920, the population had grown to 32,144. But during the Great Depression, the number of residents fell significantly to 21,142. The population has continued to decline; in 1960 it was 15,633 and in 2010 it was 15,205.²⁰

Hugo is known as "Circus City USA". The mild winters have brought several circuses to the town to winter. From 1942 to the present day fifteen different circuses have headquartered in the town. Currently, three circuses winter in the town.

After the county seat of Hugo, the second largest town is Boswell which hit its peak immediately before and after World War I. The town is named for Amity Boswell who was the civil engineer for Bethlehem

Steel Corporation that surveyed the area for a railroad route. The town boomed around 1902 when settlers moved to the area after the arrival of the railroad. In 1903 the town was incorporated through the Central District Court of Indian Territory at Durant. By statehood the community's population registered 836 residents.²¹

In 1918, Choctaw County Commissioners passed a resolution to participate in the State Highway Departments' road and bridge program. The state of Oklahoma legislature had appropriated \$1 million to construct roads in each county in 1917 through Chapter 238 Session Laws. Choctaw County passed their resolution on September 2, 1918 that stated, "Whereas, in order to participate in the benefits...it is required that each county, through its Board of County Commissioners shall make formal application to the State Department of Highways to agreeing to the terms and provisions of the law referred to. The county appropriated \$12,286.50 for 1918-1919."²² The County Commissioners met August 18, 1919 to receive bids for the construction of both the Muggy Boggy Creek and Clear Boggy Creek bridges. Bids were submitted by C.G. London of Oklahoma City; Boardman Company, Oklahoma City; Austin Brothers, Dallas, Texas, and Kansas City Bridge Company, Kansas City. The Kansas City Bridge Company was approved for the construction of the bridges.²³ The road leading to the bridges was surveyed September 25, 1919 by the County Surveyor R. P. Draper at the request of S.F. Nelson, one of the County Commissioners.²⁴

PART II – ARCHITECTURAL AND ENGINEERING INFORMATION

General Description

The Clear Boggy Creek Bridge carries vehicular traffic over the creek. The bridge was constructed by the Kansas City Bridge Company around 1919. The total length of the pin connected Pratt through truss is approximately 160 feet. The longest span of the bridge is 100 feet. The total width of the bridge is approximately 16 feet.

The substructure of the bridge has two concrete abutments on either side of the creek. The top chord and end posts are steel beams with lace pattern. The bottom chord and diagonals are steel eye-bars. The decking of the bridge is covered with timber. There are identical bridge plates on the portal bracing.

Pratt through Truss

Caleb Pratt of Boston, Massachusetts and Thomas Pratt of Norwich, Connecticut received a patent for the design on April 4, 1844.^{25, 26} The Pratt through Truss is a simple structure with top and vertical compression members and diagonal tension members. The diagonal members slant down toward the center of the span except for the end sections. The bridge design was originally constructed with wood compression members and iron tension members. Later designs were primarily constructed of metal. Pratt trusses can also be found in pony, deck, and bedstead span types; variations of the Pratt truss include Whipple, Baltimore, Parker, and Pennsylvania trusses.²⁷

Many railroad and highway bridges used the Pratt truss for spans under 250 feet. The Baltimore and Ohio Railroad used the design almost exclusively from 1880 to 1905.²⁸

The Pratt truss was patented by Thomas Pratt and his father Caleb. Thomas Pratt had studied at Rensselaer Polytechnic Institute and then worked for the U. S. Army and several railroads in New England. Caleb Pratt was an architect in Boston. Together the father and son team developed a truss design that consisted of wood vertical compression members with wrought iron diagonal tension members, which was the reverse of the Howe truss. The Pratt design had an advantage in that it made the calculation of stress distribution throughout the truss simpler; however, it required more metal than the Howe truss, making it more expensive. The railroad bridge building boom in the late 1800s drove the need for increasing numbers of all-metal bridges, and the Pratt truss was soon recognized as superior to the Howe truss. An increased demand for iron brought metal prices down, and this, along with the relatively simple design of the Pratt and its ease of construction led it to become the most popular bridge type in the U. S. for spans less than 250 feet. Steel eventually replaced iron as the metal used for the Pratt, and other, trusses. Its dominance lasted until the first decades of the twentieth century, when the Warren truss became more widely used.²⁹

The historic significance of the Pratt truss lies in its place in the evolution of bridge design. As described in the Historic Context for Common Historic Bridge Types, early examples of the Pratt truss are particularly significant when they retain character-defining features. Features include the “truss form, method of connection, top and bottom chords, vertical and diagonal members, floor beams and stringers. For through trusses, the lateral top bracing and features of the portal (e.g., struts, bracing) are also character-defining features.” These significant features vary by the truss subtype, but generally consist of vertical members and end posts, consisting of angles, channels, or rolled sections; diagonal tension members of square or round bars; interior diagonals slanting down and in, and inclined end posts slanting outward, each at a 45 degree angle as designed by the Pratts; a straight top chord (a change from the original patent that showed a curved top chord).³⁰

PART III – SOURCES OF INFORMATION

Original Drawings and Other Sources

No original drawings were found. The County Clerk’s Office did have the County Commissioners’ Meeting Minutes for this time period. (Personal Communications, May 9, 2012, Visit to County June 13, 2012).

PART IV END NOTES

¹ Johnson, Kenneth S. “Rivers and Creeks,” Encyclopedia of Oklahoma History and Culture. Oklahoma State University. Electronic document, available at <http://digital.library.okstate.edu/encyclopedia>, accessed March 14, 2012.

² Corbett, Bill. “Transportation,” Encyclopedia of Oklahoma History and Culture. Oklahoma State University. Electronic document, available at <http://digital.library.okstate.edu/encyclopedia>, accessed 15 March 2012.

- ³ Birdwell, Jimmie. "Le Flore County," Works Progress Administration, 7 October 1936. Oklahoma Historical Society, Vertical Files; Oklahoma City: 1.
- ⁴ Corbett.
- ⁵ O'Dell, Larry. "Ferries and Fords," Encyclopedia of Oklahoma History and Culture. Oklahoma State University. Electronic document, available at <http://digital.library.okstate.edu/encyclopedia>, accessed 14 March 2012.
- ⁶ King, Joseph. *Spans of Time: Oklahoma Historic Highway Bridges*. Texas Tech University Center for Historic Preservation & Technology and the Oklahoma Department of Transportation Planning Division, 1993: 3-9.
- ⁷ Corbett.
- ⁸ O'Dell, "Ferries and Fords."
- ⁹ Everett, Dianna. "Good Roads Association," Encyclopedia of Oklahoma History and Culture. Oklahoma State University. Electronic document, available at <http://digital.library.okstate.edu/encyclopedia>; accessed 15 March 2012.
- ¹⁰ King, 5.
- ¹¹ King, 6-10.
- ¹² King, 10-17, 21.
- ¹³ King, 27-30.
- ¹⁴ Corbett.
- ¹⁵ King, 32.
- ¹⁶ Milligan, James C. "Choctaw County History", *Encyclopedia of Oklahoma History and Culture*, <http://digital.library.okstate.edu/encyclopedia>, accessed 28 March 2012.
- ¹⁷ "Choctaw County Proud of Past, Looking Ahead", The Daily Oklahoman, 26 August 1962: 12A
- ¹⁸ Killian, Bertha. "Choctaw County," Works Progress Administration, 27 April 1936: 3. Vertical Files, Oklahoma Historical Society, Oklahoma City.
- ¹⁹ Milligan.
- ²⁰ Ibid.
- ²¹ Ibid.
- ²² Choctaw County, Court Journal 2, September 2, 1918, pp. 447-448.
- ²³ Choctaw County, Court Journal, August 18, 1919, pp. 545-546.
- ²⁴ Choctaw County, *Roads*, p. 11, 1915-1921.
- ²⁵ United States Patent Office, Specification of Letters Patent No. 3,523. 4 April 1844.
- ²⁶ Hayes, Brian, *Infrastructure: A Field Guide to the Industrial Landscape*. W.W. Norton and Company, New York, 2005, 398.
- ²⁷ Parsons Brinkerhoff, "A Context for Common Historic Bridge Types" for NCHRP Project 25-25, October 2005, 3-25.
- ²⁸ McVarish, Douglas C., *American Industrial Archaeology*. Left Coast Press, Inc., Walnut Creek, California, 2008, 34.
- ²⁹ Parsons Brinkerhoff, 3-25.
- ³⁰ Ibid.

PART IV – BIBLIOGRAPHY

Primary Sources

American Road Builders Association

1921 Good Roads: Highway Construction and Transport, Vol. LXI, No. 1, 6 July 1921, New York: 12.

Birdwell, Jimmie

1936 "Le Flore County," Works Progress Administration, 7 October 1936: 1. Vertical Files, Oklahoma Historical Society, Oklahoma City.

Bridges and Culverts

1917 *The Contractor*. 1 January: 17.

Bridges

1916 *Engineering and Contracting*. 1 March 1916: 32.

Choctaw County

1918 Choctaw County Court Journal 2, 1918-1919.

Choctaw County

1915-1921 Roads, 1915-1921.

Choctaw Herald

Various Microfilm roll no. 6968-30. 06 January 1916- 11 December 1919. Hugo, Oklahoma.

Daily Oklahoman

1962 "Choctaw County Proud of Past, Looking Ahead," 26 August 1962: 12A.

Hugo Husonian

Various Microfilm roll no. 6973-33. 06 January 1916- 26 June 1919. Hugo, Oklahoma.

Various Microfilm roll no. 6976-34. 03 July 1919- 25 December 1919. Hugo, Oklahoma.

Killian, Bertha

1936 "Choctaw County," Works Progress Administration. Vertical Files, Oklahoma Historical Society, Oklahoma City; 27 April 1936: 3.

Oklahoma State Highway Commission

1925 Annual Report of the State Highway Commission for the Years 1919 to 1924 Inclusive. Oklahoma City, OK: 24.

Snider, L.C.

1911 Preliminary Report on the Road Materials and Road Conditions of Oklahoma, Geological Survey No. 8, University of Oklahoma, Norman August 1911: 35-40.

Soper Democrat

Various Microfilm roll no. 7048-83. 03 January 1918- 30 December 1920. Soper, Oklahoma.

State of Oklahoma

- 1917 Acts of the Sixth Legislature of Oklahoma 1917, Harlow Publishing, Oklahoma City, Ok. 1917: 46-47.

United States Patent Office

- 1884 Specification of Letters Patent No. 3,523.

Secondary Sources

Corbett, Bill

- 2012 "Transportation," Encyclopedia of Oklahoma History and Culture. Oklahoma State University. Electronic document, available at <http://digital.library.okstate.edu/encyclopedia>, accessed March 15, 2012.

Eddings, Anna Marie

- 2007 *Oklahoma Historic Bridge Survey: Phase 1- A Re-evaluation of Spans of Time: Oklahoma Historic Highway Bridges*. Electronic document, <http://www.okladot.state.ok.us/hqdiv/p-r-div/spansoftime/pdfs/survey-phase1.pdf>, accessed 11 January 2012.

Everett, Dianna

- 2012 "Good Roads Association," Encyclopedia of Oklahoma History and Culture. Oklahoma State University. Electronic document, available at <http://digital.library.okstate.edu/encyclopedia>, accessed March 15, 2012.

Hayes, Brian

- 2005 *Infrastructure: A Field Guide to the Industrial Landscape*. W.W. Norton and Company, New York.

Johnson, Kenneth S

- 2012 "Rivers and Creeks," Encyclopedia of Oklahoma History and Culture. Oklahoma State University. Electronic document, available at <http://digital.library.okstate.edu/encyclopedia>, accessed March 14, 2012.

King, Joseph E.

- 1993 *Spans of Time: Oklahoma Historic Highway Bridges*. Submitted to Oklahoma Department of Transportation. Electronic document, <http://www.okladot.state.ok.us/hqdiv/p-r-div/spansoftime/index.htm>, accessed 11 January 2012.

McVarish, Douglas C.

- 2008 *American Industrial Archaeology*. Left Coast Press, Inc., Walnut Creek, California.

Milligan, James C.

- 2012 "Choctaw County History", *Encyclopedia of Oklahoma History and Culture*, <http://digital.library.okstate.edu/encyclopedia>, accessed 28 March 2012.

O'Dell, Larry

- 2012 "Ferries and Fords," Encyclopedia of Oklahoma History and Culture. Oklahoma State University. Electronic document, available at <http://digital.library.okstate.edu/encyclopedia>, accessed March 14, 2012.

Oklahoma Historical Society (OHS)

- 2012 *Encyclopedia of Oklahoma History and Culture*. Electronic Document,
 <http://digital.library.okstate.edu/encyclopedia>, accessed 09 January 2012.
- Various Vertical Files, Oklahoma City.

Parsons Brinkerhoff

- 2005 A Context for Common Historic Bridge Types. For NCHRP Project 25-25.

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Photographer: Kate Singleton, Architectural Historian

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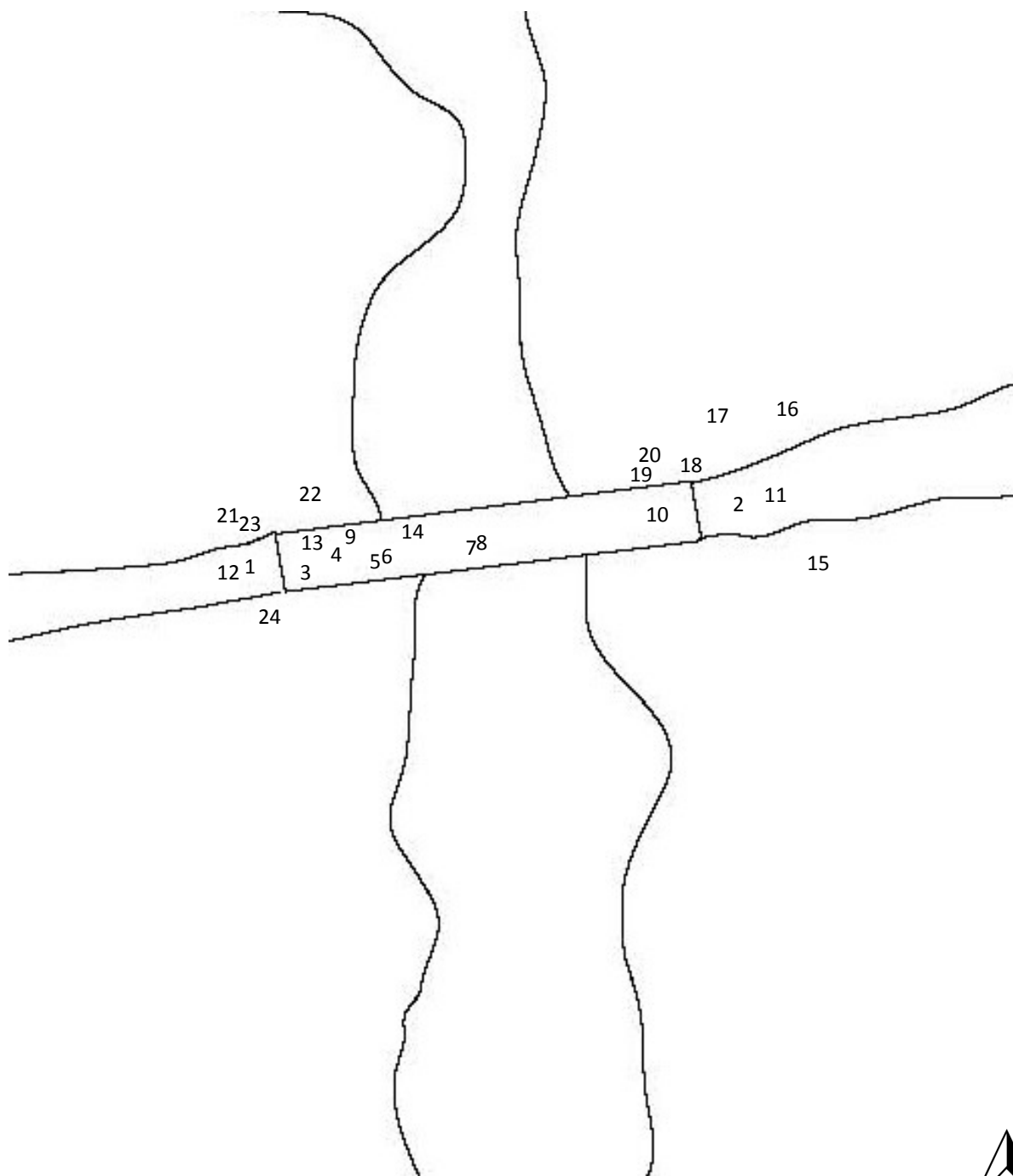
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PHOTO KEY

















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