DRY CREEK PRATT HALF HIP PONY TRUSS BRIDGE
Spanning Dry Creek
Oilton vicinity
Creek County
Oklahoma
JP Number 26553(04)
Structure Number 19N3630E640009
NBI Number 00192

PHOTOGRAPHS

AND

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Final

HISTORIC AMERICAN ENGINEERING RECORD
Submitted to:
Oklahoma State Historic Preservation Office
Oklahoma Historical Society
Oklahoma History Center, 800 Nazih Zuhdi Dr.
Oklahoma City, Oklahoma 73105
April 2015
SHPO File No. 0392-12/MOA #350

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Tori Raines, Photographer, May 2012

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HISTORIC AMERICAN ENGINEERING RECORD

DRY CREEK PRATT HALF HIP PONY TRUSS BRIDGE

Location: Spanning Dry Creek approximately 1 mile north and 2.5 miles east of Oilton in northwest Creek County.
UTM: Zone 14S, 720767E, 3995306N

Legal Location: SE ¼ SE ¼ Section 34 T19N R7E.

Map Reference: U.S.G.S. 7.5' series, OILTON, OKLA (1978)

Present Owner: Creek County, Oklahoma
Oklahoma Department of Transportation (ODOT)

Present Use: Currently on ODOT Adopt-A-Bridge Program.

Significance: The Dry Creek Bridge is an unusual example of a small bridge constructed by the Missouri Valley Bridge and Iron Company, known for its work on large railroad and highway bridges across the southwest. It is a notable example of a Pratt with Half Hip Pony Truss Bridge, a modified form of a Pratt Pony popular for its economy of materials and its reliability.

Project Information: Historic American Engineering Record (HAER) Level II equivalent documentation was performed in May 2012 and April through July 2014. Kelli Gaston, Architectural Historian, conducted an onsite visit and compiled the historical information; Tori Raines with ODOT took the photographs in May 2012. These photographs have been digitally reproduced following National Park Service (NPS) standards for digital images. This HAER recordation serves as mitigation for the removal of the structure from vehicular traffic.

List of Preparers:

Historian/ Architectural Historian:	Kelli E. Gaston Consultant to Geo-Marine, Inc. Plano, Texas
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Report Production:	Anna Banda Geo-Marine, Inc. Plano, Texas
Photographer:	Tori Raines ODOT Cultural Resources Program Norman, Oklahoma

PART I: HISTORICAL INFORMATION

A. Physical History:

1. **Date of Construction:** 1910
2. **Architect/Engineer:** Not Known
3. **Builder/Contractor/Supplier:** Missouri Valley Bridge and Iron Company
4. **Original Plans:** Not Available
5. **Alterations and Additions:** The structure remains unaltered.

B. Historical Context:

1. Introduction

In outlying rural communities across Oklahoma, bridges frequently stand as the most notable examples of expert engineering. These functional structures are artifacts representative of a community's development as well as changes in engineering practices over time. The bridge along NS-363 over Dry Creek northeast of the community of Oilton in northwest Creek County was a vital farm to market link. Dry Creek Bridge served multiple practical purposes, including allowing local farmers and ranchers access to supplies and markets in larger county towns like Sapulpa and Drumright. It also provided a link to and from oil and natural gas production fields in the area. For over 100 years, the bridge over Dry Creek provided stable and flood-proof transportation across this rural tributary, a monument to the early efforts of county commissioners to improve infrastructure across the county.

The area that would become Creek County is located in the Sandstone Hills and has long been home to numerous Native American tribes. Explorers to the area in the 1800s included Washington Irving, Thomas James, and Thomas Nuttall. As part of the Louisiana Purchase of 1803, the territory was later included in the land set aside for the resettlement of the Osage Nation, but the Osage ceded part of their territory in 1825 for the resettlement of the Creek and other southeastern tribes. Members of the Creek tribe were forcibly removed to the area from Georgia and Alabama after 1826. Other tribes arrived in the area at a later date. Resettled Native Americans were primarily farmers, raising a variety of crops including cotton, and cattle ranchers. Many Native Americans in the area also relied on African slave labor. During the Civil War, most Creeks sided with the Confederacy—an association that greatly affected the fortunes of the tribe, as the war was disruptive to their economy and destructive to their lands and farms. Furthermore, as a consequence of this alliance, the tribe lost all of its land west of present day Seminole County in 1866 (Oklahoma Encyclopedia 2014a; Sapulpa Daily Herald 1997; Sapulpa Historical Society 1979).

During the Reconstruction period, the tribe leased land to Texas cattlemen for grazing purposes and ranches of varying sizes developed across Creek County. This arrangement came to an end with the allotment of tribal land to individual tribesmen, a process which

began in 1890 with the Dawes Commission. Land in present day Creek County was surveyed beginning in 1895 and the allotment process was completed in 1897. As a result, each Creek tribal member was allotted 160 acres. According to federal legislation, tribesmen could not sell their allotted land without governmental permission (Sapulpa Historical Society 1979).

In 1886, the Atlantic and Pacific Railroad (later the St. Louis and San Francisco) arrived in Sapulpa. Railroad access brought ranchers, loggers, veterans, farmers, and merchants to the area. By the close of the nineteenth century, Sapulpa was connected to Oklahoma City by railroad, and in 1907, the town became the county seat for the newly created Creek County in the newly designated State of Oklahoma. After statehood, farming and ranching expanded, with cotton, wheat, corn, and oats being the principal crops (Oklahoma Encyclopedia 2014a; Sapulpa Historical Society 1979).

In the first two decades of the twentieth century, the oil and gas industry began to dominate the local economy. On November 22, 1905, the Ida Glen well struck oil. Known as the biggest oil find in history at the time, Creek County soon became known as the "richest oil county in the United States" (Sapulpa Daily Herald 1997). With the ensuing oil boom and the opening of additional fields, such as the Cushing-Drumright Field, new communities, including Oilton and Drumright, sprang up across the county. Rail lines were quickly built to connect these communities to Sapulpa and elsewhere (Oklahoma Encyclopedia 2014a; Sapulpa Historical Society 1979).

Before the oil boom, Oilton was an unimproved agricultural field, but that all changed in January 1915 when a city was platted, and less than a month later, twenty businesses stood on Main Street. Located in northwestern Creek County, south of the Cimarron River and on the northern edge of the Cushing-Drumright Field, Oilton continued to grow as numerous banks, hotels, restaurants, churches, and schools opened to serve residents. At times, danger was a part of life in this boomtown, which was frequented by bootleggers, gamblers, and outlaws. Despite its proximity to the oil field, agriculture remained an important activity. Farmers grew a variety of crops, including watermelon and corn, selling their produce to residents and oil field workers. Orchards were also prevalent and ranching remained an important economic activity. The population of Oilton peaked in 1920 and declined thereafter (Newsom n.d.; Oklahoma Encyclopedia 2014b; Oklahoma Historical Society n.d.).

2. Development of the Creek County, Dry Creek Pratt with Half Hip Pony Truss Bridge

The Dry Creek Pratt with half hip pony truss bridge, constructed in 1910 by the Missouri Valley Bridge and Iron Company, is located on NS-363 Road (also known as S497th West Avenue), approximately 1 mile south and 2.5 miles east of Oilton, Oklahoma. The bridge is located just north of EW-650 (also known as W61st Street). NS-363 is a two-lane dirt road, surrounded by grazing land and a significant number of trees. There are a few scattered homes in the vicinity.

Creek County, like much of Oklahoma, is traversed by numerous streams as well as larger rivers and bodies of water. Prior to the arrival of the railroad, these waterways served as important transportation routes. In particular, Creek County is drained by the Cimarron

River, a tributary of the Arkansas River, as well as the Deep Fork and the Little Deep Fork of the North Canadian River. The abundance of these bodies of water has helped bring prosperity to the state, but bridging them has long posed a challenge to citizens, municipalities, and the state at large. The earliest attempts at bridge building were largely private, utilizing locally available materials. Such bridges, though, were unreliable, often dangerous, and required constant maintenance. After statehood, road and bridge building maintenance became a county issue and managing miles of roads and countless bridges posed a significant problem for county commissioners. The good roads movement, beginning prior to statehood, was a driving force in the establishment of a state highway department, which was provided for by the state constitution in 1907 (Burke 2011:7). Due to the lack of funding and personnel, however, the state highway department was unable to provide for the construction of roads and bridges, leaving the responsibility at the county level (Oklahoma Department of Highways 1970). It was during this transitional period that the Dry Creek Pratt Half Hip Pony Truss Bridge was constructed in Creek County.

Always mindful of limited budgets, bridges constructed during this period were frequently of inferior quality. In many counties across the state, commissioners often chose prefabricated bridges, and even some suspension bridges, manufactured by companies such as the Oklahoma Bridge and Structural Steel. These bridges were relatively unstable and did not provide long-term solutions to transportation problems. Standardized bridges were ordered from catalogs or from bridge salesmen representing national or regional companies. The mass produced trusses were transported by rail and then assembled by locals on site with a company representative overseeing the work (King 1993).

The year 1910 was significant for bridge building in Creek County. Although the earliest County Commissioner proceedings for Creek County date to July 30, 1910, one of the local papers, the *Creek County Courier*, provides details regarding the circumstances surrounding the construction of the Dry Creek Bridge and others across the county.[1] In early 1910, a bond issue was passed to finance the construction of 69 bridges. Thirty-nine were to be built in 1910 and the remainder in 1911. According to the paper, the construction of the bridges would "revolutionize conditions in the agricultural districts, for the absence of bridges heretofore has delayed the work of developing some of the finest farming lands in the state." On April 21, 1910, the *Creek County Courier* announced the awardees for the first round of bridge contracts, but it was not until May 5, 1910, that the paper announced that the Missouri Valley Bridge Company had been awarded two bridge construction projects. On June 30, 1910, the *Creek County Courier* printed a notice that all winning bidders were to "proceed with work according to contract and to make shipment at the earliest possible date."

The Dry Creek Bridge is a notable example of a Pratt with Half Hip Pony Truss Bridge built by the Missouri Valley Bridge and Iron Company. The Pratt Pony Truss Bridge was extremely popular across the state of Oklahoma during the first two decades of the twentieth century. It is characterized by its inclined end posts and pinned connections. The Pratt Pony Truss was a relatively inexpensive, reliable bridge for lengths of 50 to 100 feet and was built by local, regional, and national bridge companies alike. This bridge type was frequently modified and one such modification is the Pratt with Half Hip Pony Truss. In this form, there is no vertical member at the junction of the top chord and the inclined end

[1] Creek County Commissioner records for this period are handwritten and contain very little information. County records before July 30, 1910, relate only to county schools.

post. This modification simplified the structure and therefore required "less metal," but the design change also limited the length of the span to no more than 60 feet. The Pratt with Half Hip Pony Truss was used extensively across the state for bridging small streams (Eddings 2007; King 1993; ODOT Adopt-A-Bridge). The Missouri Valley Bridge and Iron Company, established in 1874, was a major national bridge builder based in Leavenworth, Kansas. The company started in railroad bridge construction, gradually expanding into highway bridge construction in Kansas, Oklahoma, New Mexico, Louisiana, and other parts of the southwest, as well as ironwork for a variety of building types (Kansas State Historical Society 2014).

The Dry Creek Bridge was inventoried as part of the ODOT Planning and Research Division Cultural Resources Program's 1993 assessment of Oklahoma highway bridges (King). This study examined metal truss bridges and concrete and stone arch bridges longer than 20 feet in length built prior to 1955. The study determined the Dry Creek Bridge to be eligible for the National Register of Historic Places as a notable example of a Pratt with half hip pony truss bridge. The bridge was also included in the 2007 re-evaluation and determined to remain eligible for listing in the National Register of Historic Places as a surviving example of a Pratt with half hip pony truss bridge (Eddings).

PART II. STRUCTURAL/DESIGN INFORMATION

A. General Description: The Dry Creek Pratt with Half Hip Pony Truss Bridge carried two lanes of traffic along NS-363 (also known as S497th West Avenue), a dirt road, that is approximately 1 mile north and 2.5 miles east of Oilton. The 65-foot bridge features a single, Pratt with Half Hip Pony Truss measuring 40 feet with one stringer approach span. The bridge is just over 13.5 feet wide curb to curb, with a total width of 16.1 feet. The bridge has pinned connections and inclined end posts. A bridge plate identifies the contractor and the date of construction. The top chord of the main span features channel with stays. The bottom chord has an eye bar. The vertical members are angle with lace. The diagonals have an eye bar as well as rods with turnbuckles. It also had ornate lattice railing. The bridge deck is wood. The substructure of the bridge features concrete abutments with steel lally columns.

1. **Character:** The Pratt with Half Hip Pony Truss design of the Dry Creek Bridge is indicative of its rural setting and period of construction. The structure demonstrates the efforts made during early statehood to improve rural roads and encourage development.

2. **Condition of Fabric:** The Dry Creek Pratt with Half Hip Pony Truss Bridge shows evidence of normal deterioration due to age and exposure to the elements.

B. Site Information: The Dry Creek Pratt with Half Hip Pony Truss Bridge is located on a secondary road in a rural area. In each direction, there is pastureland, dotted with trees and other heavy vegetation particularly along fence rows and creek beds.

PART III. CURRENT STATUS

ODOT has found the Dry Creek Pratt with Half Hip Pony Truss Bridge to be structurally deficient for current and future vehicular travel; thus, it is slated for replacement with a more modern two-lane concrete bridge. Under a Memorandum of Agreement with the Oklahoma State Historic

Preservation Office (OK/SHPO), the bridge was photographed and documented per NPS HAER Level II equivalency. The bridge is currently available under ODOT's Adopt-A-Bridge Program.

PART IV. SOURCES OF INFORMATION

A. Primary Sources

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LOCATION MAP

DRY CREEK PRATT HALF HIP PONY TRUSS BRIDGE
CREEK COUNTY, OKLAHOMA
LOCATION MAP