UNNAMED CREEK SIX-SPAN REINFORCED CONCRETE SLAB WITH MASONRY PIERS WPA BRIDGE
Spanning Unnamed Creek
Altus vicinity
Jackson County
Oklahoma

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Submitted to:
Oklahoma State Historic Preservation Office
800 Nazih Zuhdi Drive
Oklahoma City, Oklahoma 73105

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Tanya McDougall, Photographer, October 2011

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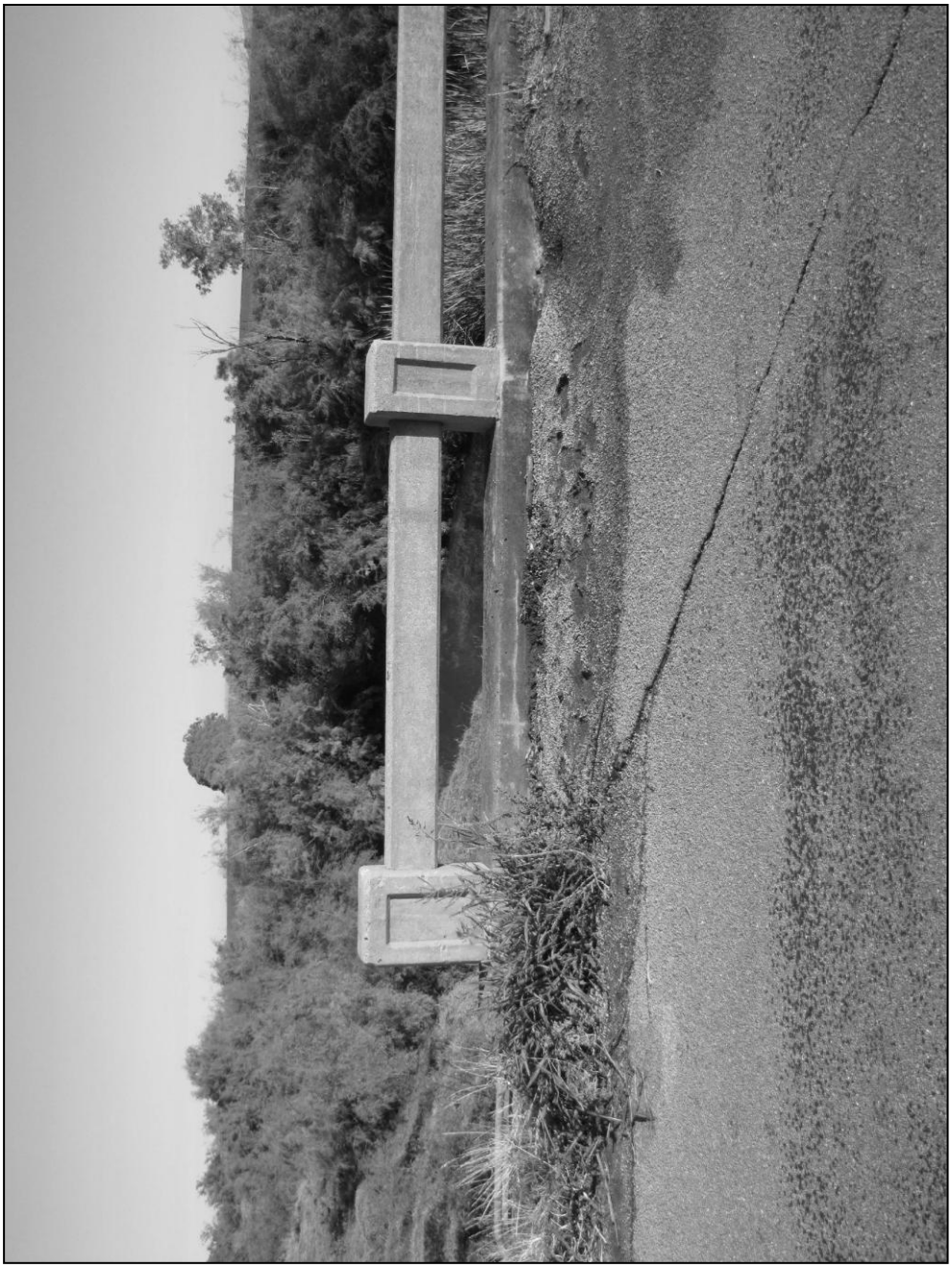

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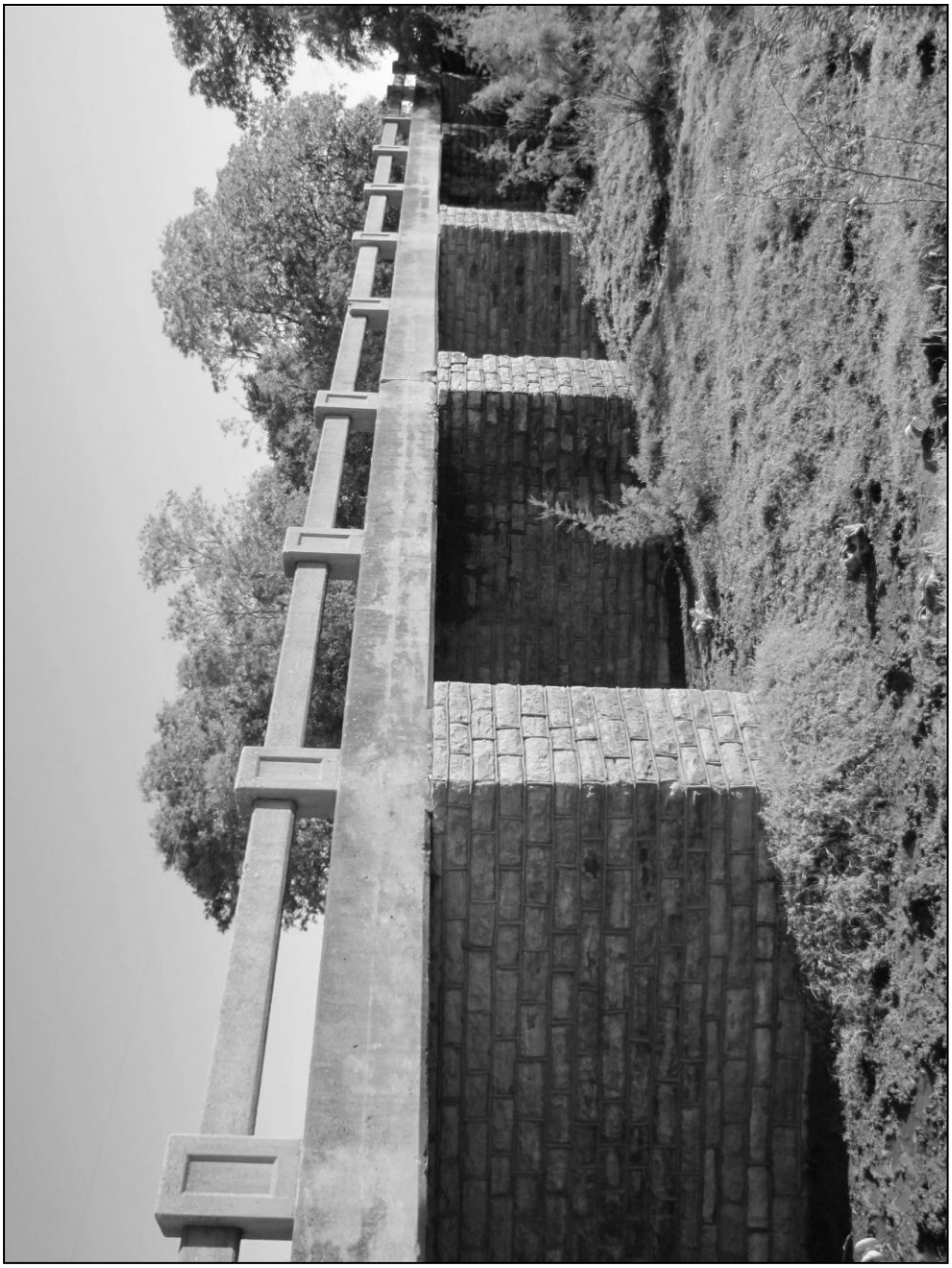

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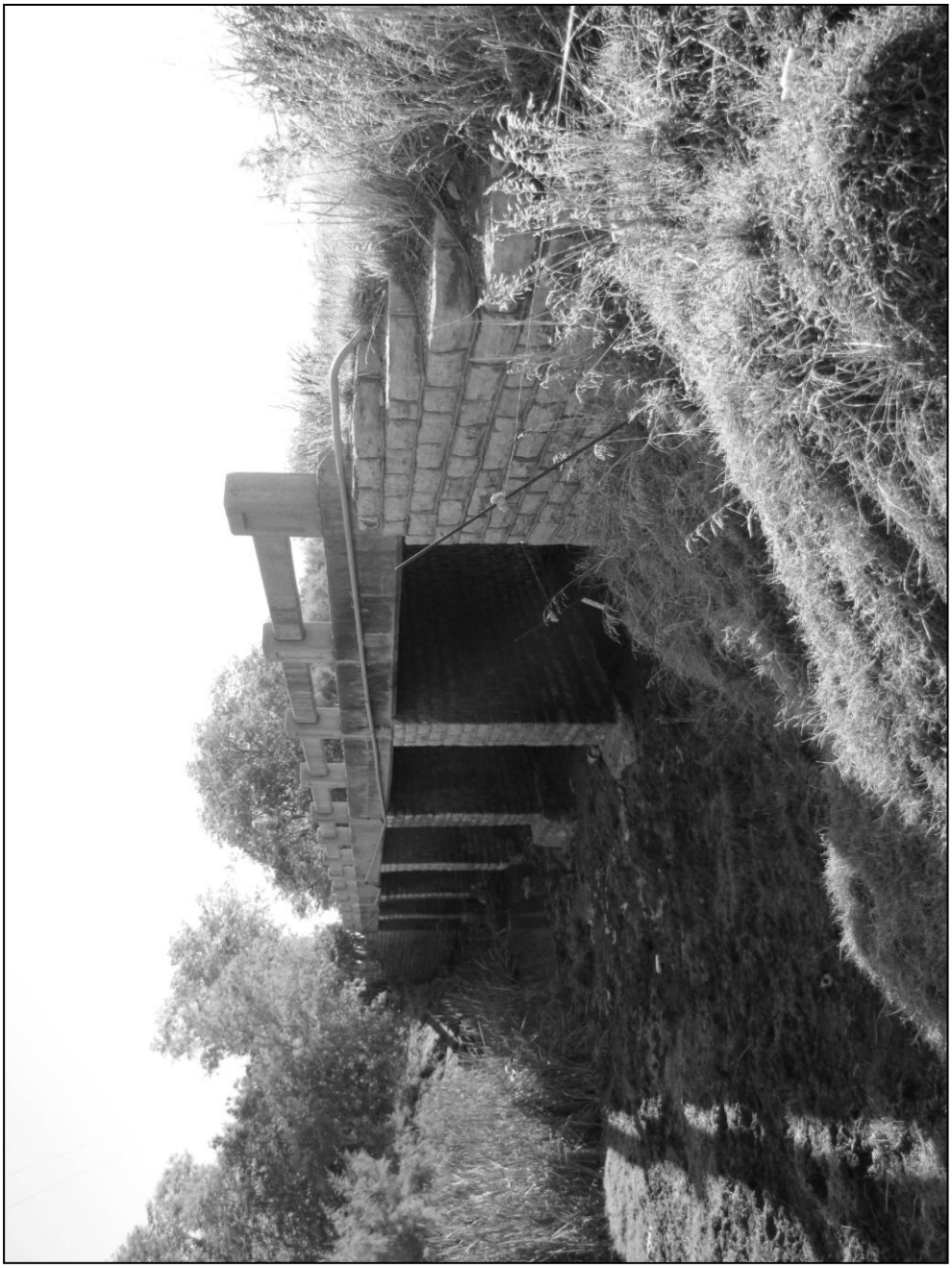

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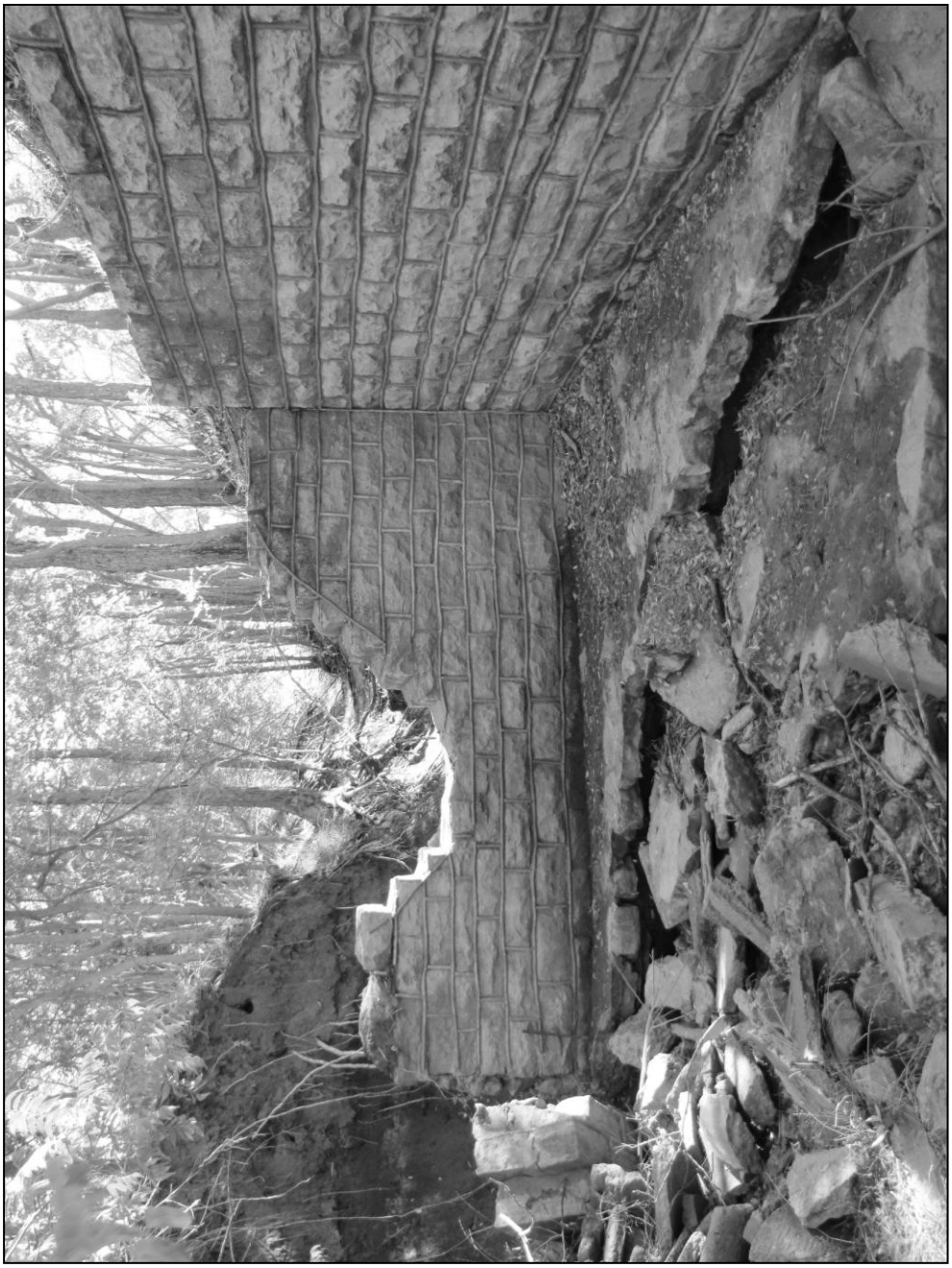

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UNNAMED CREEK SIX-SPAN REINFORCED CONCRETE SLAB WITH MASONRY PIERS WPA BRIDGE

Location: Spanning an unnamed creek, carrying E-1690 Road, in the Altus vicinity, Jackson County, Oklahoma.
UTM: 14/E0476635/N3824854
Quad: Altus Southeast

Present Owner: Jackson County, Oklahoma
ODOT Structure Number 33E1690N2080005

Present Use: Vehicular Bridge

Significance: The Unnamed Creek Six-Span Reinforced Concrete Slab with Masonry Piers WPA Bridge was constructed in 1938 by the Works Progress Administration (WPA). Located approximately 500 feet east of the bridge is an associated culvert. The culvert was also constructed by the WPA, but the date stamp reads 1939. Both structures serve as good examples of drainage structures constructed in a rural area by the WPA during the 1930s.

Project Information: Historic American Engineering Record (HAER) Level II equivalent documentation was performed in October 2011. Tanya McDougall, Architectural Historian, conducted the on-site recordation and compiled the historical information. During the on-site recordation, photographs following National Park Service (NPS) standards for digital photography were taken of the structure, and observations on existing conditions were noted. The HAER recordation serves as mitigation for the demolition of this structure.

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PART I. HISTORICAL INFORMATION

A. Physical History:

1. **Date of Construction:** Bridge 1938; culvert 1939

2. **Architect/Engineer:** Not Known

3. **Builder/Contractor/Supplier:** Works Progress Administration

4. **Original Plans:** Original plans were not found for this structure.

5. **Alterations and Additions:** The structure remains unaltered.

B. Historical Context:

1. Introduction

The Unnamed Creek Six-Span Reinforced Concrete Slab with Masonry Piers WPA Bridge and associated culvert are located southwest of Altus in Jackson County, Oklahoma. The area now encompassed by Jackson County was part of Greer County, Texas, until 1896, when it was deemed part of Oklahoma Territory.[1] The area was divided into Beckham, Jackson, and Greer counties at the Oklahoma Constitutional Convention of 1906 (Heisch 2012). In 1907, Oklahoma was admitted to the Union as the forty-sixth state, and Jackson County was officially organized with Altus designated as the county seat (Wilson 2011).

Early settlers in the area established cattle ranches, and cattle drives from Texas to Kansas followed the Chisholm Western trails passing halfway between Altus and Headrick. However, by the early 1900s the area economy was primarily based in agriculture. The principal crops grown were cotton, wheat, corn, alfalfa, and hay. The arrival of the St. Louis and San Francisco Railway in 1903, and later the Altus, Wichita Falls, and Hollis Railway in 1910, made Altus a major regional agricultural trade and distribution center. Between 1907 and 1910, the county population grew from 23,737 to 28,910, and agriculturally based businesses were established. By 1930, Altus had eight cotton gins, two cotton compresses, and 18 wholesale businesses (Herron 2012; Wilson 2011).

[1] In 1819, the Adams-Onis Treaty of 1819 established the boundary line between Spanish Territory and United States Territory; however, errors on the treaty map contributed to disputes concerning where the boundary line was actually located. In 1886, Greer County, Texas, was organized, but disputes over the boundary line persisted. In 1896, the U.S. Supreme Court decided the boundary line between Texas and U.S. Territory was the South Fork of the Red River and made Greer County part of Oklahoma Territory (Moore 2012).

Through most of the 1920s, Jackson County experienced a significant amount of growth and prosperity due to the flourishing agricultural industry; however, in 1929, the county, along with the nation, was struck by the Great Depression. In western Oklahoma, the economic hardship was further exacerbated by drought, which caused farms to fail and the number of acres in cultivation to drop. In 1920, Jackson County had approximately 80,000 acres of wheat in cultivation, but in 1930, that number fell to 23,100 acres (Wilson 2011). To ease the financial crisis, Congress passed federal work programs, including the Works Progress Administration (WPA), which provided work for the unemployed and helped local and state governments fund projects they otherwise could not afford (Burke 2011:60). It was during this period that the Unnamed Creek Six-Span Reinforced Concrete Slab with Masonry Piers WPA Bridge and associated culvert were constructed in Jackson County.

2. Development of WPA Bridge over Unnamed Creek in Jackson County

Due to the economic depression that started with the stock market crash of 1929, Congress passed the Emergency Relief Appropriation Act of 1935, which funded the WPA. The main purpose of the WPA was to provide the unemployed with jobs through federally funded grants (State Highway Commission 1937–1938:53). Initially, funding for road construction was designated for use on state highway systems, but in 1936, Congress extended the availability of WPA funds to include secondary roads. The program was called the Federal Aid Secondary Road System and included farm-to-market roads, rural free delivery mail routes, and public bus routes (Burke 2011:62). Communities took advantage of this opportunity by building bridges and culverts on county roads that were previously made impassable by heavy rains.

In Jackson County, $50,350 in additional WPA funding for farm-to-market roads was made available in May 1938. The funding was supplemented by an additional $22,000 approved by the Jackson County Board of County Commissioners and was marked for constructing bridges and culverts on secondary roads (*Altus Times-Democrat* 24 May 1938). It is most likely that the Unnamed Creek Six-Span Reinforced Concrete Slab with Masonry Piers WPA Bridge and associated culvert were approved for construction due to this funding.

Plans used to construct the WPA Bridge and culvert were standardized as WPA structures were to be constructed ". . . under State Standard Specifications and the work done . . . to the standards of contract construction" (State Highway Commission 1937–1938:53). Both the WPA Bridge and associated culvert are constructed of concrete with stone substructures. The use of concrete for road structures became prevalent during the 1920s, and its use gained momentum in the 1930s. However, the use of stone is a reflection of a move toward the "betterment of the roadsides" in the 1930s (State Highway Commission 1937–1938:99). This trend included adding aesthetically pleasing features such as stone to utilitarian type structures. Thus, stone is a common building material found on WPA structures constructed during the 1930s and 1940s.

Although the 1930s were plagued with the economic hardships of the Great Depression, it was also a period of impressive road development and improvement. By 1941, the program had distributed approximately $11 billion nationally, nearly half of which was used for transportation projects (Burke 2011:60). In Oklahoma, more than

2,000 bridges were built throughout the state with WPA funds, including the Jackson County WPA Bridge and associated culvert (Burke 2011:63). However, once the United States entered World War II, funding for road projects was severely reduced. Between 1942 and 1944, only 65 bridges were constructed in Oklahoma (King 1993). Today the Unnamed Creek Six-Span Reinforced Concrete Slab with Masonry Piers WPA Bridge and associated culvert stand as testaments to the impact the WPA had on the U.S. road system.

PART II. STRUCTURAL/DESIGN INFORMATION

A. General Description:

The Unnamed Creek Six-Span Reinforced Concrete Slab with Masonry Piers WPA Bridge and associated culvert are located along the two-lane road E-1690, approximately 6.75 miles southeast of Altus, in Jackson County, Oklahoma. The structures run east–west to accommodate the north to south drainage of the unnamed creek.

The bridge is skewed and consists of six spans supported by coursed stone piers. The total length of the structure is 104 feet with the longest span measuring 17 feet. The width of the structure is 25 feet curb-to-curb and 27 feet total. WPA date stamps with the date 1938 are located on each curb.

Along each side of the structure is a 12-panel concrete railing consisting of 13 formed concrete posts with a single row of horizontal concrete rail. The rail posts are rectangular in shape and measure 10 inches in length, 19 inches in width, and 24.5 inches in height. Decorative recessed sections are located in the center of each post. The concrete rail between each post measures 4.3 inches in thickness, 7 feet in width, and 10.5 inches in height.

The structure's deck is a concrete slab supported by five coursed stone piers and coursed stone abutments. The stones used for the substructure are irregular in size and measure from approximately 5 inches in height by 10 inches in length, to 6 inches in height by 18 inches in length. The coursed stone abutments have stepped flared wing walls. Attached to the north side of the east abutment is a coursed stone retaining wall that extends east and turns north. The retaining wall is severely deteriorated and is missing several stones from the top and center.

Located approximately 500 feet east of the WPA Bridge is the associated concrete and stone culvert. On each end of the culvert is a concrete headwall supported by stone wing walls and a centrally located stone pier. The culvert headwall measures approximately 11.8 inches in thickness, 10 feet in width, and 19.6 inches in height. The stone pier measures approximately 13.3 inches in width and 18.9 inches in height. Two WPA date stamps with the date 1939 are located on each headwall.

1. **Character:** The WPA Bridge and associated culvert are constructed of concrete with coursed stone substructures. The combination of the two materials demonstrates the state's effort to use standardized plans for bridge construction, while also introducing aesthetically pleasing features to utilitarian structures. The use of stone is a common material found on WPA structures from the 1930s and 1940s.

2. **Condition of Fabric:** The Unnamed Creek Six-Span Reinforced Concrete Slab with Masonry Piers WPA Bridge retains its character and integrity. The structure shows evidence of normal deterioration due to exposure to the elements. Noted deterioration includes broken and missing stones along the coursed stone piers and abutments, and missing and broken stones on the top and center of the retaining wall on the northeast side of the bridge. Concrete has also broken off the corners of several rail posts. The associated culvert remains intact.

B. Site Information: The immediate area surrounding the WPA Bridge and associated culvert is undeveloped. Native vegetation lines the banks of the unnamed creek. The northern and southern landscape is used for agricultural purposes. There are no buildings or structures in proximity to the bridge.

PART III. SOURCES OF INFORMATION

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LOCATION MAP

UNNAMED CREEK SIX-SPAN REINFORCED CONCRETE SLAB WITH
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JACKSON COUNTY, OKLAHOMA
LOCATION MAP