

HUNTSVILLE ROAD BRIDGE
(Goff Farm Road Bridge)
Spanning stream at Goff Farm Road
Fayetteville vicinity
Washington County
Arkansas

HAER AR-96
AR-1

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

HISTORIC AMERICAN ENGINEERING RECORD

HUNTSVILLE ROAD BRIDGE (Goff Farm Road Bridge)¹

HAER No. AR-96

Location: Spanning a small stream flowing from West Fork White River at Goff Farm Road (originally part of Huntsville Road), Fayetteville vicinity, Washington County, Arkansas

UTM: 15.400006.3989190, Elkins, Arkansas, Quad.

AHTD #: 18668

Structural Type: Stone arch

Construction Date: Probably late-nineteenth century

Builder: Unknown

Owner: Washington County, Arkansas

Use: Vehicular bridge

Significance: Huntsville Road Bridge is an excellent example of stone masonry construction and a rare surviving stone arch bridge in Arkansas.

Project Information: The Arkansas Historic Bridges Recording Project is part of the Historic American Engineering Record (HAER), a long-range program that documents historically significant engineering sites and structures in the United States. HAER is administered by the Heritage Documentation Programs Division of the National Park Service, United States Department of the Interior, Richard O'Connor, Manager. The Arkansas State Highway and Transportation Department sponsored this project.

Lola Bennett, HAER Historian, 2007

¹ Maps indicate that this crossing was part of Stone Bridge Road until at least 1967; this section of road was renamed in the 1970s.

Chronology

- 1803 Louisiana Purchase doubles size of the United States
- 1819 Arkansas Territory created from part of Louisiana Purchase
- 1828 Washington County formed
- 1830 Fayetteville population 75
- 1835 William Dugan establishes a water-powered mill near this site
- 1836 Arkansas becomes 25th state to join the Union
- 1840 Fayetteville population 425
- 1844 Huntsville Road laid out as a county road
- 1850 Fayetteville population 600
- 1873 Arkansas Legislature authorizes counties to build and maintain bridges
- 1885 Fayetteville population 2,300
- 1970s Section of Stone Bridge Road renamed "Goff Farm Road"

Description

Huntsville Road Bridge is a single-span dry-laid split stone arch, measuring 150'-0" long and 24'-0" wide with a 20'-0" wide roadway. The semi-circular arch springs from near grade level, rises 10' to the crown and spans 20'. The arch soffit is covered with a thin layer of paving. According to Arkansas Highway & Transportation Department inspection records, the spandrels are filled with earth and the deck is bituminous concrete. Modern steel guardrails flank the roadway.

History

Present-day Goff Farm Road was originally laid out in 1844 as part of the Fayetteville-Huntsville Road. No information has been found concerning early bridges on that road, but even some of the larger crossings may have been fords until the late nineteenth century.² This crossing appears inconsistently—if at all—on nineteenth century maps. It does not consistently appear until the 1960s, when present-day Goff Farm Road, known as "Stone Bridge Road" at that date, is shown crossing a stream below a small pond just south of West Fork White River.³ County records indicate that William Dugan owned a water-powered mill near this site in 1835, but neither the mill nor the pond appears on nineteenth century maps. Most of the surrounding land was used for agricultural purposes until recently, when the former Goff Farm property was developed as a golf course.

Based solely on physical evidence, Huntsville Road Bridge appears to date to the late nineteenth century. Its rustic, yet intricate, split-stone masonry construction is strikingly similar to that of a stone bridge that once spanned Spring Creek near Bluff Cemetery at Springdale, just north of Fayetteville. That bridge's date and builder are unknown, but an early twentieth century image of the bridge in a pastoral setting—reminiscent of early twentieth century artists who hoped to record the passing of rural America—suggests that the photographer considered it an old structure.⁴ That both the Huntsville Road Bridge and the Spring Creek Bridge were built by traditional methods using local materials and were located along early transportation corridors suggests the *possibility* of mid- to late-nineteenth century construction, but no information has been found to confirm this.

Design

The arch is an ancient structural form, probably a refinement of the even earlier practice of corbelling stones or timbers to span a void. The defining characteristic of an arch is its reliance on compression to transfer gravity loads to the supporting foundations. While arch bridges can

² A nearby crossing of White River is referred to as "Walker Ford" on Gordon Skelton's 1894 *Atlas Map of Washington County*.

³ City of Fayetteville, Office of the City Engineer, "Map of Fayetteville," 1962 and 1967.

⁴ "Scene Near Cemetery, Springdale," *History of Washington County, Arkansas* (Springdale: Shiloh Museum, 1989), 37.

be built of any material, an arch is the only efficient way to span long distances with stone. Since the stones in a masonry arch rely on each other for support, wooden falsework is used to support the arch until all the stones are fitted together. The structure becomes self-supporting when the final stone is wedged into place at the crown of the arch. Well-built stone arch bridges are extremely strong and durable. America's oldest stone arch bridge, Pennypack Creek Bridge (1697) at Philadelphia, still carries traffic more than three centuries after its construction.⁵

Despite their strength and longevity, stone arch bridges were not commonly built in Arkansas. By the time the population had increased enough for counties to begin building bridges in earnest, it was generally easier and less expensive to erect pre-fabricated metal truss bridges. Nevertheless, some impressive stone arch bridges were built in Arkansas in the nineteenth and early twentieth centuries. Huntsville Road Bridge is one of six surviving examples of this type identified to date.⁶

BRIDGE	LOCATION	COUNTY	DATE	SPAN	BUILDER	STATUS
SALADO ⁷	US 167 / SALADO CREEK	INDEPENDENCE	1870	43'	JOHN SCHNABEL	LOST
SPRING CREEK ⁸	SPRING CREEK ROAD / SPRING CREEK	WASHINGTON		<25'		LOST
HUNTSVILLE ROAD	GOFF FARM ROAD / UNNAMED CREEK	WASHINGTON		21'		EXTANT
SPRINGFIELD STREET	SPRINGFIELD STREET/	CARROLL		<25'		LOST
MARBLE 1 ⁹	CR 707 / RAVINE	CARROLL	1891	44'	SANITARIUM CO.	EXTANT
MARBLE 2	CR 707 / DITCH	CARROLL	1891	22'	SANITARIUM CO.	EXTANT
MARBLE 3	CR 707 / DITCH	CARROLL	1891	<10'	SANITARIUM CO.	EXTANT
MAIN STREET	SELLARS ST / SILVER SMITH BRANCH	LOGAN	1923	<10'	AARON MOORE	EXTANT
CEDAR CREEK ¹⁰	CR 5 / CEDAR CREEK	CONWAY	1935	32'	CCC	EXTANT

⁵ See HAER No. PA-465, Pennypack Creek Bridge.

⁶ Since, by definition, a stone arch bridge relies on stone to carry loads, this list does not include stone-faced concrete bridges. Presumably, there are other stone arch bridges that have not yet been identified.

⁷ Anthony Leone, "Salado Bridge," *Arkansas Gazette (Sunday Magazine)*, 16 June 1957, 1F.

⁸ Carroll County Historical Society Photograph Collection, Berryville, Arkansas.

⁹ See HAER No. AR-103, Marble Bridge.

¹⁰ See HAER No. AR-31, Cedar Creek Bridge.

Sources

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