TR 1/Farder Bridge
Over Voel Creek
(S.N. 036-5110/Sequence No. 19417)
Terre Haute Township
(Vicinity of LaHarpe)
Henderson County
Illinois

IL HAER No. HE-2016-1

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Illinois Historic American Engineering Record
Illinois Historic Preservation Agency
Springfield, Illinois

Prepared for the Illinois State Archaeological Survey on behalf of the Illinois Department of Transportation
by:

Heritage Research, Ltd.
Historical/Environmental Consultants
Menomonee Falls, Wisconsin
February 2017

ILLINOIS HISTORIC AMERICAN ENGINEERING RECORD
IL HAER No. HE-2016-1

TR 1/Farder Bridge
(REINFORCED CONCRETE, POST-AND-BEAM)

Location: TR 1 over Voel Creek
Terre Haute Township (Vicinity of LaHarpe), Henderson County, Illinois

USGS Quadrangle: USGS Stronghurst, 7.5 minute, Illinois
Latitude 040° 38' 15.74" N Longitude 090° 54' 57.95" W

Universal Transverse Mercator Coordinates:
Zone 15 Easting 676226 Northing 4500421

Present Owner: Terre Haute Road District

Present Use: Vehicular Bridge (IDOT Structure No. 036-5110, formerly 034-4510)

Significance: The TR 1/Farder Bridge spanning Voel Creek is a single-span, post-and-beam structural form, the load on which is carried by reinforced concrete girders (the railings) and a reinforced concrete deck. It was built in 1914 and is included on IDOT's Historic Bridge List as a primary example of this bridge-type that dates to a period in which reinforced concrete was evolving as a dominant bridge-building material.

PART 1. HISTORICAL INFORMATION

A. Physical History:

1. Date of Erection: 1914

2. Designer: Illinois State Highway Department

3. Original and subsequent owners: Terre Haute Road District

4. Builder or contractor:

•William J. Fowler & James Wilson – LaHarpe, IL (bridge)
•Ed Belknap (approaches)

5. Alterations and additions: No alterations or changes were observed.

B. Historical Context:[1]

Bridge Development in Illinois

The earliest permanent bridges in Illinois include a few masonry arches built in 1832 when the National Road was extended west from Maryland. At least one other arch was built on the Chicago-Galena Road in the same period (see Figure 1). Accounts of early travelers suggest that rudimentary ferries sometimes facilitated passage over larger streams in the region. Planks laid on the ice were also used to cross bodies of water in winter months. In warmer periods, timber structures accommodated such travel. Little is known of the pile trestles or half-submerged floating platforms used. All were subject to risks and washouts.[2]



Figure 1: This image pictures in January 2016 the remains of the ca. 1830s stone arch bridge situated on the nineteenth-century Chicago-Galena Road.

As settlers established permanent communities, "experienced mechanics" – either self-taught or from New England shipyards – were attracted to the frontier to erect covered bridges. Between 1820 and 1900, an estimated two to three hundred such bridges were

[1] The "Bridge Development in Illinois and Concrete Bridges" and the "Illinois State Highway Department" sections are adapted from material (including footnotes) previously prepared by Illinois Department of Transportation (IDOT).

[2] John R. Nolen and IDOT, *Ms. on file at IDOT* (1995), 310ff; Milo M. Quaife, *Chicago's Highways Old and New* (Chicago: D.F. Keller & Co., 1923), 186-189.

built in Illinois, of which five remained in 2001.[3]

Railroads improved upon the early timber structures. But by the late 1850s their need for stronger bridges encouraged the development of iron fabrications, which were followed after the 1870s by those made of steel. The development of steel trusses in the post-Civil War era contributed to the rapid expansion of railroads, settlement and industrialization in a growing America.[4]

Concrete Bridges and the Illinois State Highway Department:

Reinforced concrete emerged at the beginning of the twentieth century as a new building material in bridge construction. Concrete structures were substantially cheaper than bridges constructed of stone. And, without joints, they were generally stronger since the mortar used on stone bridges did not typically fill completely the joints between stones. Additionally were concrete bridges used in many locations with short crossings that would otherwise have claimed structures of steel (i.e., truss bridges). The versatility of concrete was further enhanced as it was reinforced with steel rods or used to encase rolled steel beams, thus protecting them from the weather and giving the bridge a more pleasing appearance.[5]

Illinois established in 1905 a state road authority and subsequently became involved in the design and building of highway structures. The Highway Commission warned local authorities in 1906 of the dangerous condition of existing iron and timber bridges and offered plans for a 40-foot through-girder concrete bridge. A test bridge of this type was built in 1908 at the Southern Illinois Penitentiary, Menard, Illinois, and carried 420 tons before it collapsed.[6]

The earliest concrete girder highway bridge known to have been built in Illinois was

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[3] Russell M. Garrard, "Early Bridges in Central Illinois," in *Heritage of Mid-Illinois Engineering* (Capital City Chapter of the Illinois Society of Professional Engineers, circa 1976), 15ff; Illinois Department of Transportation (IDOT), *Historic Bridge Survey List* (Springfield, IL: Bureau of Location and Environment, 1992, 2004).

[4] Walter V. Voss, "How New Materials Increased Man's Building Ability," in *Centennial Transactions* (New York: American Society of Civil Engineers, 1953), 829ff.

[5] Walter M. Smith, Sr., and Walter M. Smith, Jr., "Concrete Bridges: Some Important Features in Their Design," *Transactions of the American Society of Civil Engineers* 77 (December 1914): 695-696; Leslie R. Schureman, "Beauty in Short-Span Highway Bridges," *Civil Engineering* 8 (May 1938): 319.

[6] *Second Annual Report of the Illinois State Highway Commission for the Year 1907* (Springfield, IL: State of Illinois, 1908), 77; *Illinois Good Road Commission* (Springfield, IL: 1912[?]); Illinois State Highway Commission, *Modern Bridges for Illinois Highways* (Springfield, IL: Illinois State Journal Company, State Printer, 1912), 49-53.

constructed in 1908. It had four girders – two lower (located beneath the bridge's deck) and two edge (located above and along the sides of the bridge's deck). Two through-girder bridges, which used only edge-girders, were constructed in 1910. On the flat prairies of Illinois the increased use of through-girder bridges meant that high-water clearance could be maintained, while the deck of a structure could be dropped – thus reducing the rise needed for a bridge's approaches. This was possible since the bridge's load-bearing girders reached above the deck, instead of being placed below.[7]

The State Highway Commission published in 1912 a 53-page bulletin "to encourage the construction of better highway bridges" by local road commissions. The bulletin outlined the financial and safety advantages of modern, properly designed bridges built either of concrete or steel and described the commission's bridge design services. The narratives were reinforced with pictures of poorly designed and collapsed bridges. In several cases noted by the commission, the cause of the bridge failure was the fact that the structure collapsed under the weight of motorized steam tractors then found on township roads. The bulletin also provided several examples of modern bridges of both concrete and steel that had been built throughout the state using commission plans.[8]

The Illinois State Legislature in 1913 subsequently passed the Tice State Aid Road Bill. It established the Illinois State Highway Department which was to be led by the Chief State Highway Engineer and overseen by the State Highway Commission. The department was divided into five bureaus: roads, bridges, maintenance, tests and audits. The state was then divided into seven geographic districts, each headed by a division engineer. The road, bridge and maintenance bureaus generally planned, designed and implemented the state aid road system, as well as provided consulting services and plans for county highway departments and other local entities that had bridge projects. The 1913 legislation also gave the State Highway Department total control of the construction and maintenance of all bridges considered to be state aid improvements, as well as great influence over bridges owned by county and township governments.[9]

Henderson & Hancock Counties and the Communities of Terre Haute & LaHarpe:

Pioneers settled in Henderson County in the first quarter of the nineteenth century but

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[7] David Plowden, *Bridges: The Spans of North America* (New York: Viking Press, 1974), 297-300; IDOT *Historic Bridge Survey List*; IDOT, *Statement of Significance* (Springfield, IL: Bureau of Location and Environment, 1997), 21.

[8] Illinois State Highway Commission, *Modern Bridges for Illinois Highways*, 1-12.

[9] *Fifth Report of the Illinois State Highway Department for the Years 1913, 1914, 1915, 1916* (Springfield, IL: Illinois State Journal Co., State Printer, 1917), xi-xii, 61-63; "Good Roads Bill Passed by House," *Chicago Daily Tribune*, 6 June 1913, 2.

did not arrive in earnest until the mid-1830s. Early settlers were attracted to the excellent farming opportunities found in the bottomland along the Mississippi River. The state legislature in 1841 separated Henderson County from Warren County, naming Oquawka as the county seat. Agriculture dominated the county's economy which claimed virtually no manufacturing or mining. The county's population peaked in 1870 with a count of 12,582. That declined to 9,724 by 1910.[10]

Located in south central Henderson County, Terre Haute Township was settled as early as 1835, although it was not organized until 1907. The township included the unincorporated community of Terre Haute which emerged to provide the vicinity with several general stores, a hotel, restaurant, blacksmith shop and three doctors. But the community dwindled when bypassed by railroads and by 1910 had a population of 110 with only a post office and general store as amenities. The greater township's population then numbered 635, most of which were engaged primarily in agriculture.[11]

Settlement in Hancock County started as early as 1817. The county was organized in 1825, although significant settlement did not occur until the 1830s when thousands of pioneers ventured to the area from Kentucky and states to the east. The county was home to 10,000 people by 1840, many of which raised wheat, corn and livestock.[12]

LaHarpe Township claims the northeastern corner of Hancock County, immediately south of Henderson County. It was initially settled in 1830. The area was largely prairie and drained by five small waterways – the second northernmost of which was Voel Creek, a tributary to the La Moine River. The settlement and economic development of LaHarpe Township mirrored that of the rest of the county and benefitted from the construction of two railroads, one of which ventured through the small Village of LaHarpe that had been platted in 1836 as the township's only settlement. The village, which claimed by 1920 a population of 1,323, served the local area as an agricultural support center as well as a manufacturer of farm equipment. Area farmers came to the village along a network of town roads that largely extended along section lines.[13]

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[10] Newton Bateman, Paul Selby and James W. Gordon, eds., *Historical Encyclopedia of Illinois and History of Henderson County*, 2 vols. (Chicago: Munsell Publishing Company, 1911), 1: 617, 620, 704; Robert P. Sutton, *Rivers, Railways, and Roads: A History of Henderson County* (Raritan, IL: Henderson County Historical Society, 1988), Chapter 4: unpaginated.

[11] Bateman, et. al., *History of Henderson County*, 636-37, 704; "Henderson County's Population," *LaHarper* (LaHarpe, IL), 6 March 1914.

[12] Charles J. Scofield, ed., *History of Hancock County, Illinois* (Chicago: Munsell Publishing Company, 1921), 648-59, 662-63, 880-81, 1918.

[13] *Map of Hancock County, Illinois* (Chicago: Charles Shober, 1859); *Plat Book of Hancock County, Illinois* (Chicago: Alden Ogle & Co., 1891).

It was in this immediate Terre Haute and LaHarpe vicinity that the Farder Bridge was constructed in 1914. It replaced an earlier structure that had helped to accommodate the travel of farmers to the two local trade centers and area schools.

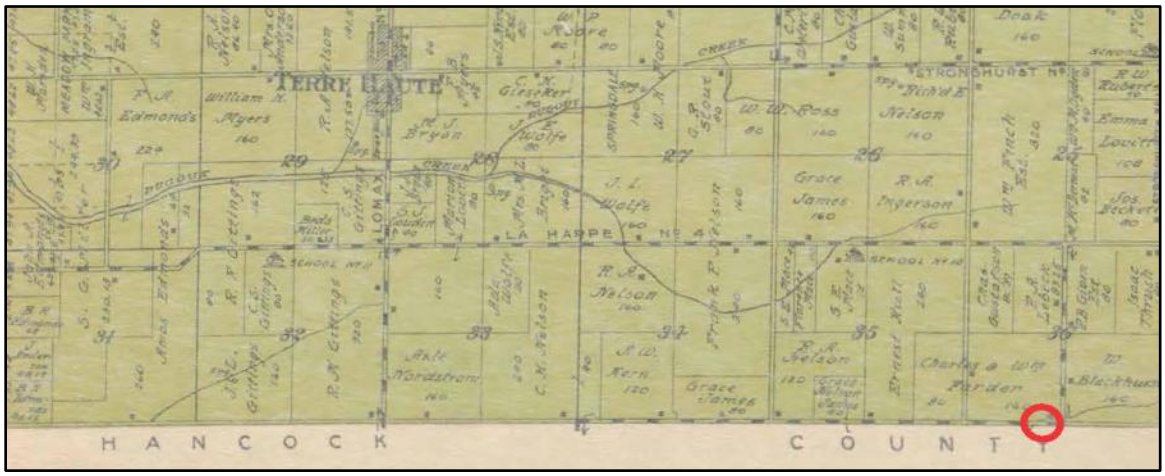


Figure 2: This 1914 map of Henderson County illustrates the location of the Charles and William Farder farm, and the location of the subject bridge adjacent to it. *Atlas and Farm Directory of Mercer & Henderson Counties, Illinois* (N.P.: Standard Map Company, 1914).

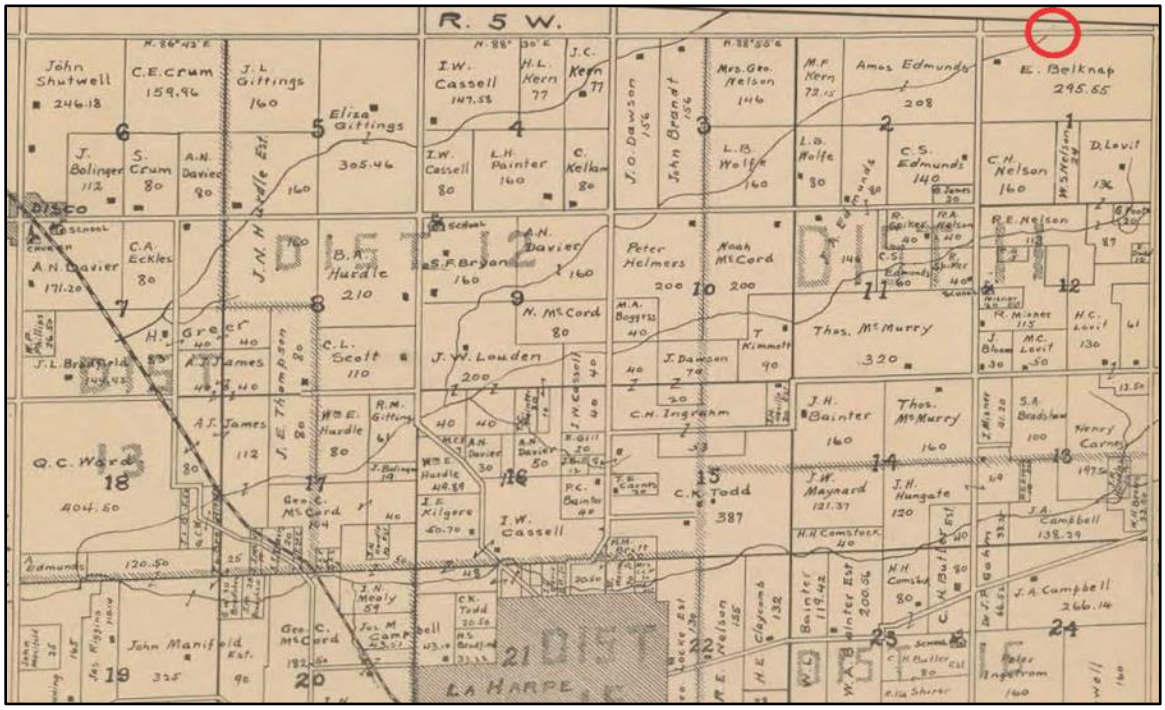


Figure 3: A plat map from 1908, this illustration shows the local roads and property owners immediately south of the TR 1/Farder Bridge identified by the red circle. *Plat Book of Hancock County* (Carthage, IL: J.C. Helms, 1908).

Local Road Development and the Farder Bridge:

The local road network of northeast Hancock, northwestern McDonough and southern Henderson counties developed as early as the 1850s. The east-west road shared by the three counties, which became TR 1, emerged along section lines and ran uninterrupted for an extended distance. As a result, this county line road emerged as an important local artery and was designated as a Rural Free Delivery route on a 1914 plat map. Within a two-mile radius around the Voel Creek crossing was a school house to the northwest, a cemetery and church to the east, a second school to the southeast and a third school to the south.[14]

Nothing is known about the initial crossing over Voel Creek. It was quite likely, however, an inadequate structure. Upon the 1914 completion of the subject bridge, William Burgner, Hancock County Highway Superintendent, critically observed that the remaining "bridges and culverts [along the Henderson-Hancock county line] are in bad condition and that the road in general has been neglected."[15]

Hancock County initiated activity that led to the construction of the subject bridge. Its county board directed Burgner in September 1914 to prepare plans for the Farder Bridge over Voel Creek. The name most likely was derived from Henderson County residents Charles & William Farder, who owned 240 acres in sections 35 and 36 of Terre Haute Township immediately north of and adjacent to the subject bridge.[16]

Burgner obtained from the Illinois State Highway Department standardized plans for a reinforced concrete bridge. The County Board then selected William J. Fowler and James Wilson of nearby LaHarpe as the contractors for the $1,600 project. Their low bid of $1,480 beat out C.D. Stratton of Little York and Marsh Engineering of Decatur.[17]

Fowler and Wilson partnered to build several bridges in Hancock County area in the 1910s. The pair constructed in 1914 alone at least seventeen concrete bridges, bridge abutments and culverts in Hancock County's LaHarpe Township. Little is known of

[14] *Map of Hancock County, Illinois* (1859); *Plat Book of Hancock County, Illinois* (Carthage, IL: Carthage Commercial Club, 1908); *Atlas and Farm Directory of Mercer & Henderson Counties* (1914); *Standard Atlas of McDonough County, Illinois* (Chicago: Geo. A. Ogle & Co., 1913).

[15] "Proceedings of the Board of Supervisors, December 1914," *La Harper*, 18 December 1914.

[16] Ibid.; *Atlas and Farm Directory of Mercer & Henderson Counties* (1914).

[17] "Proceedings of the Board of Supervisors, December 1914."

Wilson, who was born in 1864 and listed his occupation in the 1910 census as mason/plasterer/odd jobs. He died in 1921. Fowler was born on 15 May 1868 in LaHarpe Township to Abraham and Lavina (Dunlap) Fowler. After stints working on a farm and in a butcher shop he started in circa 1900 a concrete construction business and was among the first in the area to build concrete bridges. His work was well regarded by the Illinois State Highway Department, which sent its new engineers to observe his techniques for concrete bridge construction. He died in 1956.[18]

The cost of the bridge contract was divided between the two counties based upon each county's assessed value – Hancock paid $991 and Henderson $489. Ed Belknap – a farmer in Section 1 of LaHarpe Township – won a $75 bid to fill the approaches. The bridge was inspected by Burgner and considered complete on 2 December 1914.[19]

PART II: ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural Character:

The TR 1/Farder Bridge was constructed in 1914. It is a 33'-4" long, 18'-0" wide, reinforced-concrete structure that carries the road over Voel Creek.

2. Condition of Fabric:

The historical integrity of the structure is generally good. Deteriorating concrete and exposed and rusting rebar are apparent. The deck of the bridge has also been built up with gravel, thus reducing the effective height of the railings.

B. Description:[20]

The Farder Bridge is a single-span fabrication oriented on an east/west axis that employs a post-and-beam structural form. The abutments (posts) are of reinforced

[18] U.S. Federal Census—Population (1910-1940), Available at www.ancestry.com, Accessed February 2016; "Highway Treasurer's Report," *LaHarper* (La Harpe, IL), 10 April 1914; Headstone of James Wilson," Material available at www.findagrave.com, Accessed February 1916; "William J. Fowler Died in Illinois," *DeKalb County Record* (Maysville, MO), 15 July 1956.

[19] "Proceedings of the Board of Supervisors, December 1914;" *Plat Book of Hancock County* (1908).

[20] The measurements used to describe this bridge were taken from the structure itself during field investigations. Activities were limited to components that could be reached from the deck, slopes around and ground beneath the deck without aid of ladders, boats or other equipment.

concrete, as are the bridge deck and its railings (beams). The bridge is 34'-4" long and 18'-0" wide, outer-edge-of-railing-to-outer-edge-of-railing. The traffic deck is 16'-0" wide and 15½" thick. Wingwalls extend at a 137° angle to the northeast, southeast, southwest and northwest. All are 13'-9" long and 12" wide. The distance from generally early/mid-winter low water to the bottom of the deck is 9'-9", while that from the bottom of the deck to the top of the railing's top chord is 4'-9".

The railings reach a height, from the current traffic deck (with its tightly packed, gravel build-up) to the top of the top chord, of 26½". Additionally, the railings are of concrete and feature three inset panels on the interior and exterior sides of the bridge, the outer panels of which are inset from the end of the railing by 20". Each panel is 9'-0" long, 18" high and framed by 2" recessed, canted corners. The panels are 18" apart. The railing has no endposts or top chord.

A bridge plate acknowledging the construction date of 1914 is centered in the center interior panel on the structure's north side.

PART III: SOURCES OF INFORMATION

A. Primary and Unpublished Sources:

Atlas and Farm Directory of Mercer & Henderson Counties, Illinois. N.p.: Standard Map Company, 1914.

Fifth Report of the Illinois State Highway Department for the Years 1913, 1914, 1915, 1916. Springfield, IL: Illinois State Journal Co., State Printer, 1917.

"Good Roads Bill Passed by House," *Chicago Daily Tribune*, 6 June 1913.

Illinois Department of Transportation Contract Files. Record Group 242.28. Illinois State Archives, Springfield, IL.

Illinois Good Roads Commission. Springfield, IL: 1912[?].

Illinois State Highway Commission. *Modern Bridges for Illinois Highways.* Springfield, IL: Illinois State Journal Company, State Printer, 1912.

Illinois Historical Aerial Photography, 1937-1947. Image #RX/RV-41-3650. Viewed at http://clearinghouse.isgs.illinois.edu/data/imagery/1937-1947-illinois-historical-aerial-photography in March 2016.

Map of Hancock County, Illinois. Chicago: Charles Shober, 1859.

Plat Book of Hancock County, Illinois. Chicago: Alden Ogle & Co., 1891.

Plat Book of Hancock County, Illinois. Carthage, IL: Carthage Commercial Club, 1908.

Second Annual Report of the Illinois State Highway Commission for the Year 1907. Springfield, IL: 1908.

Standard Atlas of McDonough County, Illinois. Chicago: Geo. A. Ogle & Co., 1913.

U.S. Federal Census–Population (1910-1940). Viewed at www.ancestry.com. in February 2016.

B. Secondary and Published Sources:

Bateman, Newton, Paul Selby and James W. Gordon, eds. *Historical Encyclopedia of Illinois and History of Henderson County*. 2 vols. Chicago: Munsell Publishing Company, 1911.

Garrard, Russell M. "Early Bridges in Central Illinois." *Heritage of Mid-Illinois Engineering*. Capital City Chapter of the Illinois Society of Professional Engineers, circa 1976.

Headstone of James Wilson. Material available at www.findagrave.com. Accessed February 1916.

"Henderson County's Population." *LaHarper* (LaHarpe, IL), 6 March 1914.

"Highway Treasurer's Report." *LaHarper*, 10 April 1914.

Illinois Department of Transportation. *Historic Bridge Survey List*. Springfield, IL: Bureau of Location and Environment, 1992, 2004.

_____. *Statement of Significance*. Springfield, IL: Bureau of Location and Environment, 1997.

Nolen, John R. and the Illinois Department of Transportation (IDOT). *Ms. on file at IDOT* (1995).

Plat Book of Hancock County. Carthage, IL: J.C. Helms, 1908.

Plowden, David. *Bridges: The Spans of North America*. New York: Viking Press, 1974.

"Proceedings of the Board of Supervisors, December 1914." *La Harper*, 18 December 1914.

Quaife, Milo M. *Chicago's Highways Old and New*. Chicago: D.F. Keller & Co., 1923.

Scofield, Charles J., ed. *History of Hancock County, Illinois.* Chicago: Munsell Publishing Company, 1921.

Schureman, Leslie R. "Beauty in Short-Span Highway Bridges." *Civil Engineering* 8 (May 1938): 318-319.

Smith, Sr., Walter M. and Walter M. Smith, Jr. "Concrete Bridges: Some Important Features in Their Design." *Transactions of the American Society of Civil Engineers* 77 (December 1914): 695-744.

Sutton, Robert P. *Rivers, Railways, and Roads: A History of Henderson County.* Raritan, IL: Henderson County Historical Society, 1988.

U.S. Department of the Interior, Census Office. *Report of the Productions of Agriculture at the Tenth Census, 1880*. Washington, D.C.: Government Printing Office, 1883.

U.S. Geological Survey. *Stronghurst Quadrangle* [map]. 1:24000, 7.5 Minute Series. Reston, VA: United States Department of the Interior, USGS, 1974.

U.S. Geological Survey. *Illinois: La Harpe Quadrangle* [map]. 1:64000, 15 Minute Series. Reston, VA: United States Department of the Interior, USGS, 1918..

Voss, Walter V. "How New Materials Increased Man's Building Ability." *Centennial Transactions*. New York: American Society of Civil Engineers, 1953.

"William J. Fowler Died in Illinois." *DeKalb County Record* (Maysville, MO), 15 July 1956.

PART IV: METHODOLOGY OF RESEARCH

A. Research Strategy

Research objectives were to place the bridge in its geographic, historic and engineering contexts. A strategy was developed to accomplish those goals that investigated local, regional and statewide documentary sources. On-site observation and investigation of the bridge was also part of the research plan.

B. Research Process

1. Visited bridge site to review conditions, as well as to photograph and measure the structure.

2. Searched repositories in Springfield (IL), Milwaukee (WI), and Madison (WI) for data relating to road, bridge and local development in Henderson and Hancock counties.

3. Prepared report draft.

4. Document draft internally reviewed at Heritage Research, Ltd.

5. Document draft reviewed by IDOT and IHPA.

6. Completed all revisions and submitted to IDOT.

C. Archives and Repositories Used/Consulted:

Illinois State Archives
Norton Building
State Capitol Complex
Springfield, Illinois 62756
(IDOT Record Group 242.28, Local Government Records Index and Maps)

Illinois State Historical Society Library
Abraham Lincoln Presidential Library
112 N. 6th Street
Springfield, Illinois 62701-1507
(Histories, Various Newspapers)

Illinois State Library
300 S. 2nd Street
Springfield, Illinois 62701-1796
(Map Collection and County Histories)

Wisconsin Historical Society
816 State Street
Madison, Wisconsin 53706
(Illinois State Gazetteers)

Milwaukee Public Library
814 W. Wisconsin Avenue
Milwaukee, Wisconsin 53233
(Illinois State Gazetteers)

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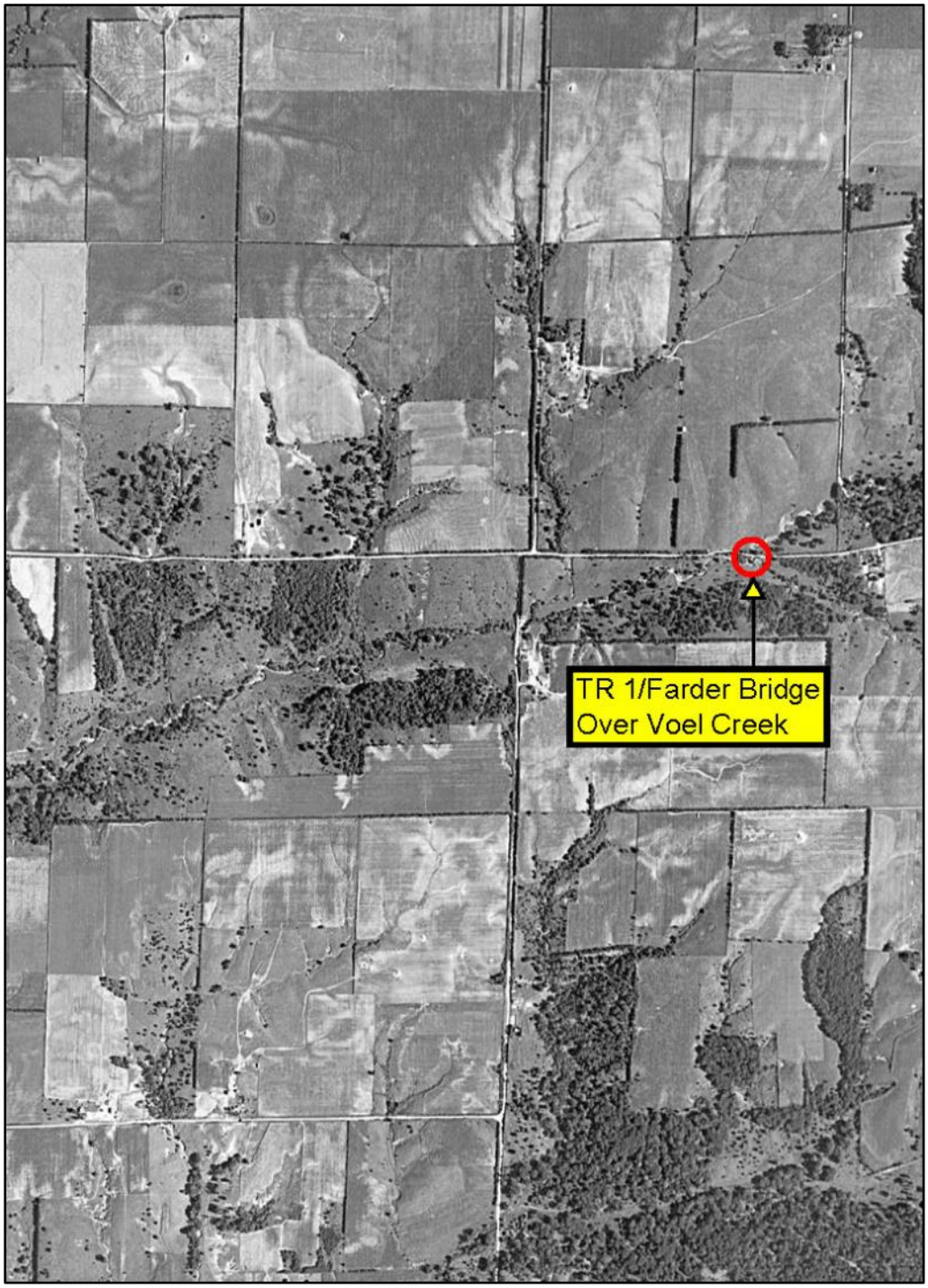
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PART V: PROJECT INFORMATION

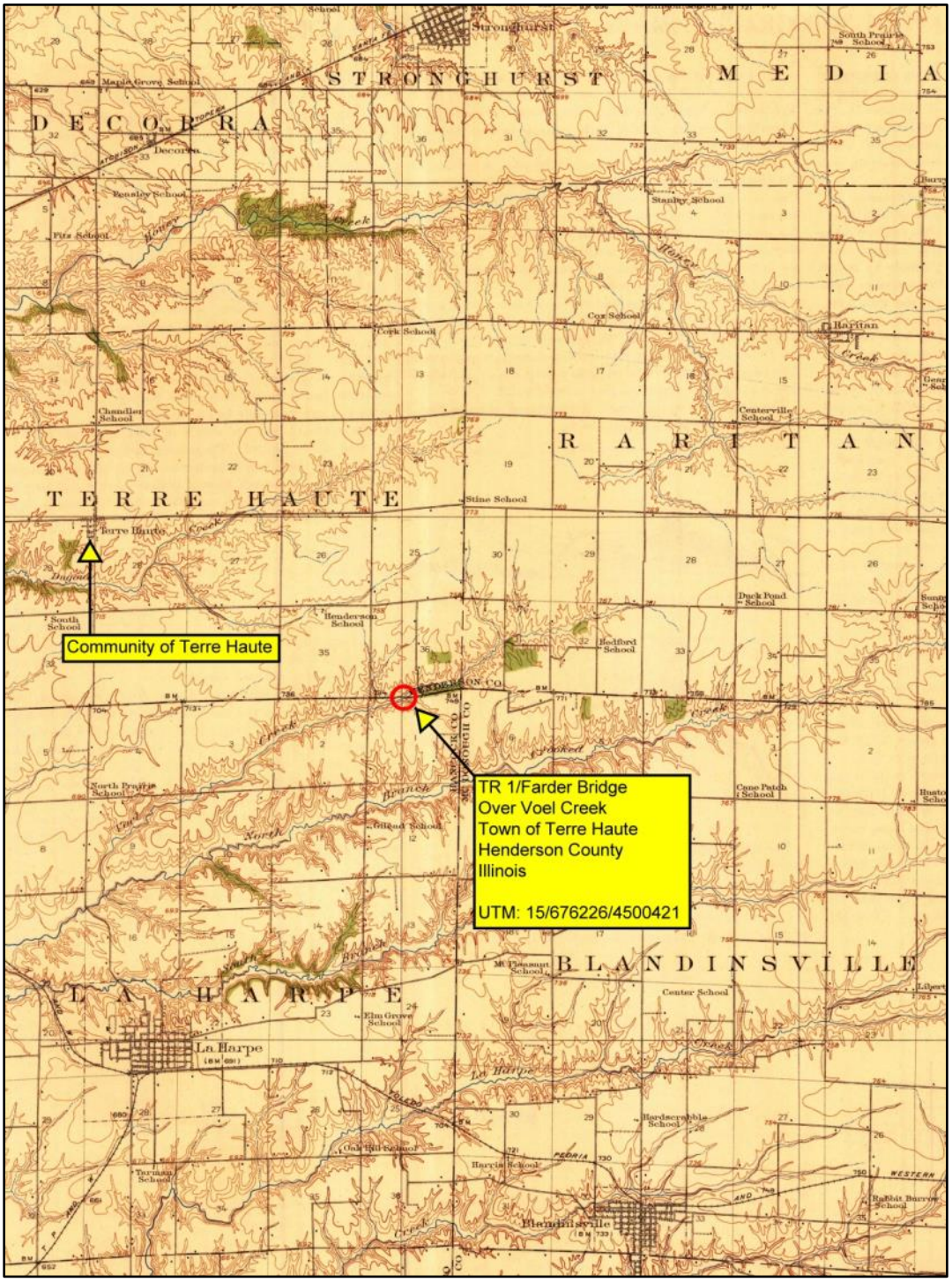
This IL-HAER archival documentation is submitted in compliance with a stipulation of a Memorandum of Agreement (MOA) between the Federal Highway Administration, Illinois Division, and the Illinois State Preservation Officer, dated with final signature on 09 September 2016. The MOA was executed in compliance with CFR 36 800.6(b)(1)(iv) of the National Historic Preservation Act of 1966, as amended.

1938 Aerial Photographic Image Identifying Bridge Location:



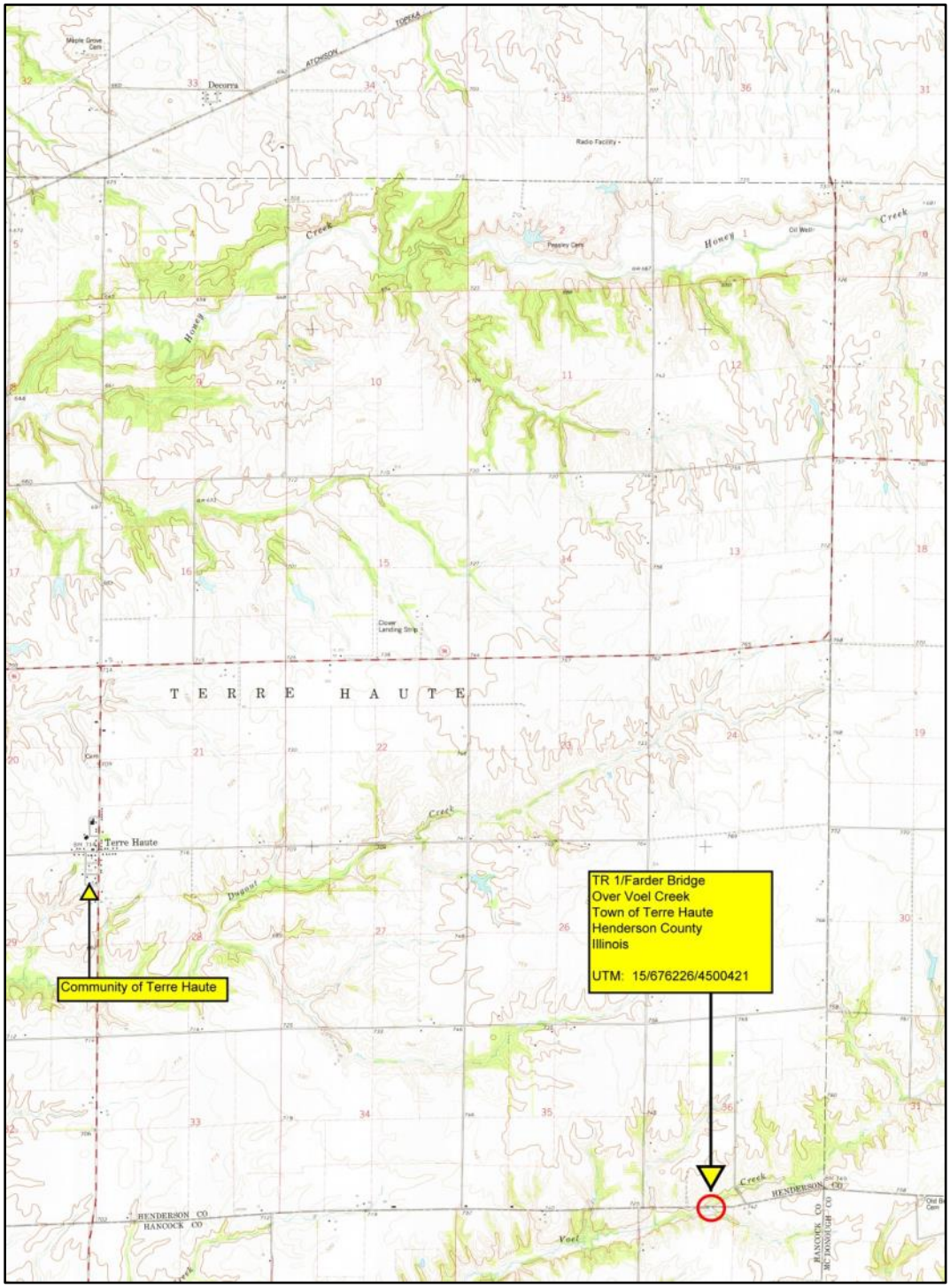
The agricultural nature of the Terre Haute/LaHarpe area is unmistakable. Illinois Historical Aerial Photography: 1937-1947, Image RX/RV-41-3650, 11 August 1938, Viewed at http://maps.isgs.illinois.edu/ ilhap/ on 04 March 2016.

USGS Map (1918) Identifying Bridge Location:



U.S. Geological Survey, *La Harpe Quadrangle* [map], 1918, 1:62500, 15 Minute Series (Reston, VA: United States Department of the Interior, USGS, 1918).

USGS Map (1974) Identifying Bridge Location:



U.S. Geological Survey, *Stronghurst Quadrangle* [map], 1974, 1:24000, 7.5 Minute Series (Reston, VA: United States Department of the Interior, USGS, 1974).

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TR 1B Over Voel Creek
(S.N. 036-5110/Sequence No. 19417)
Terre Haute Township
(Vicinity of LaHarpe)
Henderson County
Illinois

IL HAER No. HE-2016-1

Documentation: 18 Exterior Photographs (2015)
16 Data Pages
01 15 Minute USGS Map (1918)
01 7.5 Minute USGS Map (1974)

John N. Vogel, Ph.D., Photographer

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IL HAER No. HE-2016-1.3	VIEW TO EAST NORTHEAST.
IL HAER No. HE-2016-1.4	VIEW TO NORTHEAST.
IL HAER No. HE-2016-1.5	VIEW TO NORTHWEST.
IL HAER No. HE-2016-1.6	VIEW TO WEST SOUTHWEST.
IL HAER No. HE-2016-1.7	VIEW TO WEST.
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IL HAER No. HE-2016-1.16	VIEW TO SOUTHEAST. BRIDGE RAILING.
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IL HAER No. HE-2016-1.18	VIEW TO NORTH. CLOSEUP OF BRIDGE PLATE.

PHOTOGRAPHS



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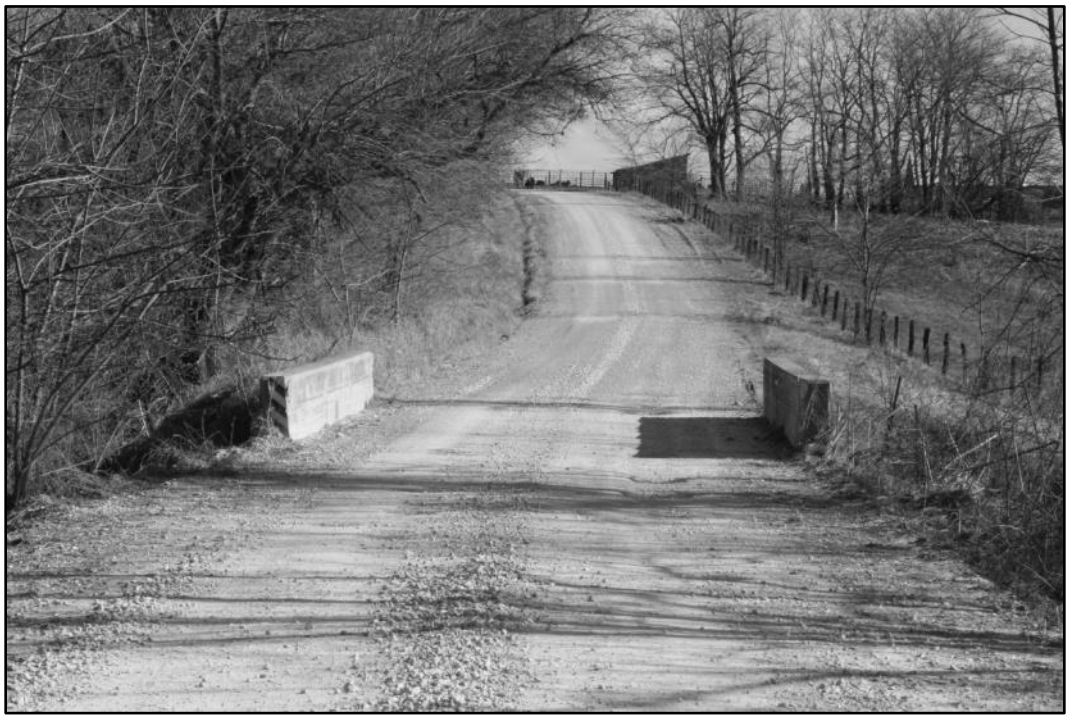


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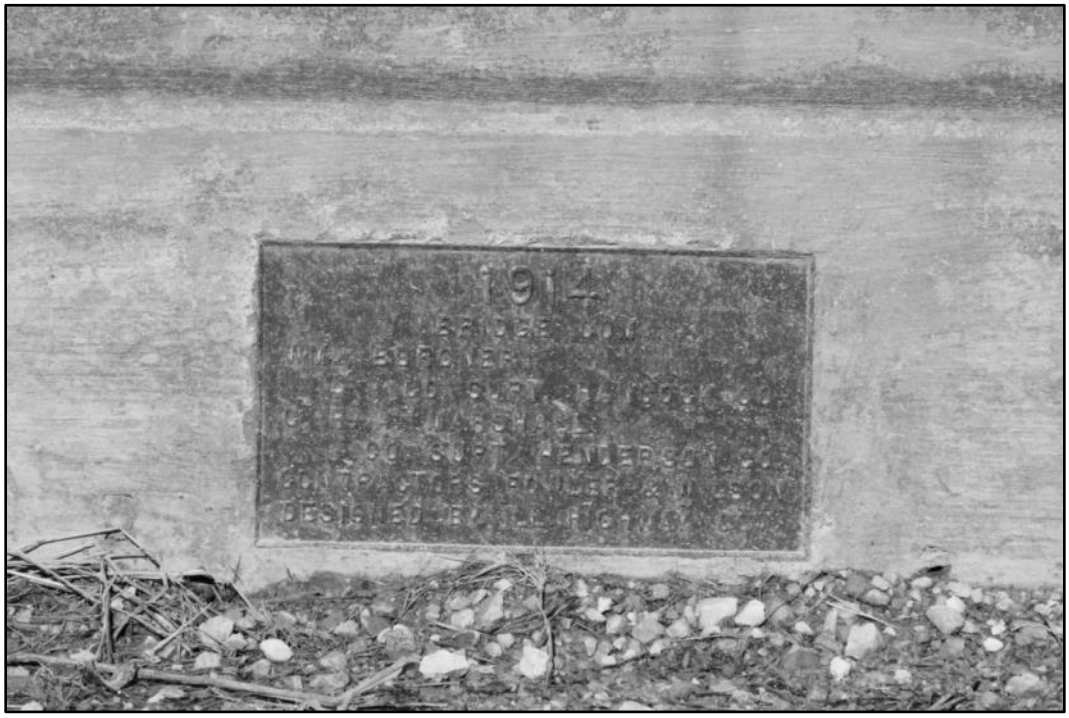


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