NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

059-0000-0055

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Tauy Creek Bridge

other names/site number Same

2. Location

street & number NW/NE ¼, SE ¼, NE ¼, NW ¼, S17, T16S, R20E ☐ not for publication

city, town Ottawa ☒ vicinity

state Kansas code KS county Franklin code 059 zip code 66067

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☐ private	☐ building(s)		buildings
☒ public-local	☐ district		sites
☐ public-State	☐ site	1	structures
☐ public-Federal	☒ structure		objects
	☐ object	1	Total

Name of related multiple property listing:
Metal Truss Bridges in Kansas, 1861-1939

Number of contributing resources previously listed in the National Register 20

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ☒ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Ramon Powers State Historic Preservation Officer September 17, 1990

Signature of certifying official Date

Kansas State Historical Society

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

☐ entered in the National Register.
☐ See continuation sheet.

☐ determined eligible for the National Register. ☐ See continuation sheet.

☐ determined not eligible for the National Register.

☐ removed from the National Register.

☐ other, (explain:)

Signature of the Keeper Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)
Transportation: Road related (vehicular); Bridge

Current Functions (enter categories from instructions)
Transportation: Road related (vehicular); Bridge

7. Description

Architectural Classification
(enter categories from instructions)

Other: Warren Truss

Materials (enter categories from instructions)

foundation Stone: limestone
walls
roof
other Metal: steel

Describe present and historic physical appearance.

The Tauy Creek Bridge spans the West Fork of Tauy Creek on the SE 1/4, NE 1/4, NW 1/4, S. 17, T. 16S, R. 20E, in Ottawa Township, Franklin County, Kansas. It stands just southwest of the Tauy Jones House (NR 1972) on a gravel road. The property is one mile north of Ottawa on US Highway 59, two miles and eight-tenths of a mile northeast on secondary roads.

The Tauy Creek Bridge is a double intersection Warren truss. It measures one hundred feet from northeast to southwest and fifteen feet eight and a half inches from northwest to southeast. The vertical clearance measurement from the wooden deck to the portal strut is fourteen feet. The vertical drop measurement from the center of the bridge's deck to the river bed is seventeen feet. The superstructure's main diagonal members measure eight inches by three and a half inches wide. The northern limestone block abutment measures nine feet from grade to the base, the southern limestone block abutment measures ten feet and four inches from grade to the base.

A poured concrete caps surmounts the limestone abutments. Poured concrete walls form abutments that stretch south of the southern abutment on either side of the gravel road. Inscriptions on the west plane read October, 1909 and on the east plane read G.E. Hoagland November 22, 1909, along with various other names on both sides. The concrete work is indicative of a grading project which increased the height of the road and the bridge in 1909.

The Tauy Creek Bridge is rated at three tons. It received a sufficiency rating of 22.9 in 1985 and 1987 from KDOT. A new plank deck with runners was installed on the bridge in 1987. If the bridge were reinforced with new stringers its weight rating could very likely be increased to seven tons. The bridge maintains a high degree of architectural and structural integrity. Its low sufficiency rating is derived primarily from its fifteen feet eight and a half inch width, which only permits one lane of traffic to cross at any time. However, the county road which passes the Tauy Jones House is not heavily travelled.

☐ See continuation sheet

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

☐ nationally ☐ statewide ☒ locally

Applicable National Register Criteria ☐ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Engineering	1895	1895

Cultural Affiliation
N/A

Significant Person
N/A

Architect/Builder
Kansas City Bridge Company

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The Tauy Creek Bridge (c. 1895) is being nominated to the National Register under criterion C for its architectural significance as a double intersection Warren truss bridge and is to be included in the "Metal Truss Bridges of Kansas" thematic resources nomination.

The Warren truss was patented in 1848 by two British engineers, James Warren and Willoughby Monzoni. The original form of a Warren truss was a series of equilateral triangles and as such represents one of the earliest, simplest truss types. Later modifications included subdivision by verticals or addition of alternate diagonals. The Warren truss was widely built throughout most of the United States from about 1860 to the twentieth century. Most Warren trusses were modified in the 1920s and 1930s. A double intersection Warren truss is quite rare.

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On August 6, 1895 the Franklin County Commission made a motion to build "the superstructure of an Iron bridge across Tauy Creek at Woodlief's crossing." The Ottawa Township authorities were to be responsible for the stone work and approaches. On August 15, 1895 the Franklin County Commissioners inspected the site of the proposed new county bridge and reported that a satisfactory location was chosen.

The county advertised in the September 5, 1895 edition of the Ottawa Weekly Republican that:

Proposals will be received until September 9, 1895 for the building of iron bridges as follows: One over Ottawa Creek (Tauy) about five miles northeast of Ottawa at what is known as Woodlief's crossing. One over Appanoose Creek near the farm of J.H. Houser about twelve miles northwest of Ottawa. One over the Marais des Cygnes River on the west side of the Island of Pomona, about three miles west of Ottawa. Plans and specifications may be seen at the office of the county clerk.

On September 9, 1895 the Franklin County Commission "considered bids of various bridge companies for construction of superstructure of Woodlief bridge in Ottawa Township, the slough bridge between Ottawa and Lincoln Townships, and the Appanoose bridge in Appanoose Township." The three contracts were awarded to the Kansas City Bridge Company for a total of $2895.

The Kansas City Bridge Company was a relatively prolific bridge builder of the late nineteenth and early twentieth centuries, although little information has been compiled on the firm. The 1900 Kansas Gazetteer lists the company as having an office at the 411-412 Massachusetts Building in Kansas City, Missouri. In 1900 the company's officers were J.S. Everhard- President, H.K. Webb-Vice President, P.H. Everhard- Secretary, and D.L. Hammond- Treasurer. H.K. Webb appears to have done a fair amount of business with the Franklin County Commission in 1895, furnishing all of the material to construct and

In a 1905 promotional brochure intended to advertise the farm for sale Woodlief describes the property in this manner:

"Woodlief is a station and farm on the Santa Fe Railway, 54 miles south-west of Kansas City, 10 miles south of Baldwin, the seat of Baker University, and 4 miles north-east of Ottawa, the county-seat of Franklin County, Kansas, and where is located Ottawa University, the Baptist College . . . . The farm contains 1,040 acres of fine, rich land---700 acres of rich bottom land, 300 acres of gently rolling prairie, and 40 acres of good timber . . . . Ottawa creek flows from north to south through nearly the center of the farm, over a smooth stone bottom and between shaded banks . . . . The railroad runs across the farm from east to west, and Woodlief Station is near the center of the farm. Three daily passenger trains each way stop at the station, and all our stock and produce are shipped from here.

The house is of fine cut stone, two stories and a large cellar. It contains twelve large rooms, pantries, wardrobes, and two halls and stairways . . . . The house stands on a 5-acre lawn which slopes gently from it in all directions, and is shaded by fine old forest trees. The barn holds 10 horses, and is surrounded on three side by good sheds. Two corn cribs and plenty of hay room are inside. Other buildings and improvements are a corn crib, two granaries, ice house, smoke house, chicken house, blacksmith shop, cattle shed, three cisterns, two wells, some bearing fruit trees and a young orchard. Woodlief has rural free delivery of mail and telephone connection.

The station is near the middle of the farm, double track of the Santa Fe railway. It has good stock-yards, connected by drive-ways with my pasture and feed-lot, and is equipped with telegraph and telephone. Passenger time from here to Kansas City is two hours and twenty minutes, and stock train time is four hours, reaching there in time for the early morning market."

Woodlief's son Harold maintained ownership of the farm until the 1930s, breeding registered pure bred Hereford cattle and Duroc Jersey swine.

Woodlief very likely viewed the construction of a bridge at Woodlief's Crossing as essential to the transportation system for that part of Franklin County. The county road provided a short-cut to Ottawa and continued to be heavily travelled. As a township trustee and state legislator Woodlief was aware of the positive economic development that such a new bridge would have for him personally as well as others who used the road frequently.

Prominent in a truss bridge are the top and bottom chords, which are the structural members that resist the forces induced by bending. These chords carry the major loads exerted on the bridge. The web members are categorized as verticals or diagonals, and are connected to the top and bottom chords at

complete the superstructure of many iron bridges with a span of one hundred feet or less.

On November 29, 1895 the Franklin County Commissioners "viewed the recently completed abutments at Woodlief Crossing." The Commission issued payment of $1695 on March 7, 1896 to the Kansas City Bridge Company to apply to the aforementioned contract. On May 23,1896 the Commission paid the Kansas City Bridge Company the remaining balance of $1425 for the construction of the Woodlief, Island, and Appanoose bridges and also the approach to the latter bridge. A specific construction cost for the Tauy Creek Bridge was never called out in the commission journals. The Kansas City Bridge Company contracted with Franklin County in 1895 to build an iron bridge with a thirty-three foot span for $200, one can extrapolate that the Tauy Creek Bridge cost somewhere between $700 and $1000 to construct.

Woodlief's Crossing marks the conjunction of the Ohio City Road and Fort Scott Road with the road to Ottawa Jones'. Between 1840 and 1870 the roads were heavily traveled by people associated with the Sac and Fox Indian Agency and the military. Before 1895 the creek was crossed at a smooth rock bottom ford one hundred yards southeast of the metal truss bridge. The existing curving road pattern closely aligns itself with the original road.

John Tecumseh (Ottawa/ Tauy) Jones (1800-1872) worked as a missionary to the Ottawa Indians and was actively involved in the establishment of Ottawa University. A trading post was established on the site in the 1840s by Jones and his wife Jane. Their home became a landmark and overnight stop for travellers journeying from Fort Scott to Lawrence. Although the Joneses attempted to remain neutral in the slavery controversy, they were threatened by Proslavery advocates and their home was burned by Border Ruffians in 1856. Construction of the existing two-story, limestone Tauy Jones House began in 1858 and was completed in 1870 at a cost of between $20,000 and $30,000.

William H. Woodlief (1839-1912) purchased the Tauy Jones estate in 1877. Woodlief was a farmer and breeder of blooded cattle. By the 1880s he had acquired 1,040 acres of land in Franklin County and was largely engaged in breeding blooded Durham cattle and draught horses. By 1899 he was raising one to three hundred head of Shorthorn cattle and two thousand head of Angora goats for sale and breeding purposes. As a prominent Republican Woodlief served as an Ottawa Township Trustee "and served one term in the state legislature, where he was interested in securing the passage of the bill to build the Locust street bridge in Ottawa." Andreas describes Woodlief as one of the largest farmer in Franklin County and as someone who had an interest in contracts for carrying the United States mail at Omaha, Nashville, Savannah, New Orleans, Cleveland, and Buffalo.

the joints. It is the arrangement of the chords and web members that determine the specific truss type, as a wide variety of configurations are possible.

Other basic components of a truss bridge are the portal, stringers, floor beams, and deck. The portal is the space of a truss which forms the entrance to the bridge. Stringers are the longitudinal members, set parallel to the direction of traffic, which are used to transmit loads to the floorbeams. The floor beams are set transverse to the direction of traffic to transmit the deck loads to the trusses. The deck is the structural element providing direct support for vehicular loads. On a Warren truss the roadway is suspended below the truss at each panel point. The truss rests on the top of the pier or abutment at a point called the bearing seat.

Analysis of the functioning of a simple truss assumes that joint connections will allow joint rotation, and that the application of loads occurs only at the joints so that members are subjected only to direct stresses. The loads and reactions which act on a truss cause internal forces, or stresses, in the members. If an individual member is stressed by a pulling action, the stress is called a tensile stress and the member is said to be in tension. If a member is stressed by a pushing action, it acts in compression under compressive stresses.

The lack of counters, and sometimes verticals, on Warren truss bridges subjected the pins at the center of the span to extensive wear. When bolts and rivets replaced the pins in later years, this problem was no longer encountered. The design was more popular for railroad bridges than for highway bridges.

The ease of constructing a metal truss bridge made it the most common bridge type built from the mid-nineteenth century to the early twentieth century. It was preferred because the field construction of a metal truss bridge could be accomplished with unskilled labor and minimal equipment.

Several methods of construction were possible, depending on the size of the bridge and the site conditions. Very small trusses could be shipped completely assembled from the shop and lifted onto piers and abutments which had been constructed according to the needs of the site. For larger trusses, the individual members were fabricated and riveted at the bridge shop and shipped to the site, where the truss was assembled by matching the marked members and inserting pins at the joints.

9. Major Bibliographical References

Andreas, A.T. History of the State of Kansas, (Chicago: A.T. Andreas, 1883).

Baughman, Robert W. Kansas Post Offices. (Topeka: Kansas State Historical Society, 1961).

Chapman Publishers, Leavenworth, Douglas, and Franklin Counties: Biographical Record. (New York: Chapman Publishers, 1899).

Franklin County Atlases; 1903, 1920, 1931.

[X] See continuation sheet

Previous documentation on file (NPS):
- [ ] preliminary determination of individual listing (36 CFR 67) has been requested
- [ ] previously listed in the National Register
- [ ] previously determined eligible by the National Register
- [ ] designated a National Historic Landmark
- [ ] recorded by Historic American Buildings Survey # _____
- [ ] recorded by Historic American Engineering Record # _____

Primary location of additional data:
- [X] State historic preservation office
- [ ] Other State agency
- [ ] Federal agency
- [ ] Local government
- [ ] University
- [ ] Other

Specify repository: Kansas State Historical Society

10. Geographical Data

Acreage of property Less than 1 acre

UTM References

	Zone	Easting	Northing		Zone	Easting	Northing
A	15	306580	4281710	B			
C				D			

[ ] See continuation sheet

Verbal Boundary Description The nominated property is located on the NW/NE ¼, SE ¼, NE ¼, NW ¼, S17, T16S, R20E in Ottawa Township, Franklin County, Kansas on a tract measuring 100' x 15'8½" whose northeast corner is represented by the northeast corner of the bridge. Beginning at the northeast corner, the boundary proceeds 100' southwest, 15'8½" northwest, 100' northeast, and 15'8½" southeast to the point of beginning.

[ ] See continuation sheet

Boundary Justification

The boundary includes only that area that is historically associated with the nominated property.

[ ] See continuation sheet

11. Form Prepared By

name/title Martha Hagedorn-Krass, Architectural Historian

organization Kansas State Historical Society date September 17, 1990

street & number 120 W. 10th telephone 913-296-5264

city or town Topeka state Kansas zip code 66612

Franklin County, Kansas Commissioners' Journal "G", 1 July 1895; 23 July 1895; 26 July 1895; 6 August 1895; 15 August 1895; 24 August 1895; 9 September 1895; 29 November 1895; 7 March 1896; 23 May 1896. (Franklin County Courthouse, Ottawa, Kansas).

Jochims, Larry. "Metal Truss Bridges in Kansas, 1861-1939." National Register Nomination, 1989.

Kansas Farmers and Mail and Breeze Directory of Franklin and Douglas Counties. (Topeka, 1920). (Kansas State Historical Society, Topeka, Kansas).

Kansas Gazetteer, (Kansas City, Missouri, 1900). (Kansas State Historical Society, Topeka, Kansas).

Ottawa Weekly Republican 5 September 1895.

Rathburn, George D. 1895 Directory of Franklin County, Kansas. (Kansas State Historical Society, Topeka, Kansas).

Woodlief,William, Promotional brochure about Woodlief's Station. 1905. (Kansas State Historical Society, Topeka, Kansas).

TAUY CREEK BRIDGE
Ottawa vic.
LE LOUP QUAD
UTM Coordinates
15 306580
4281710