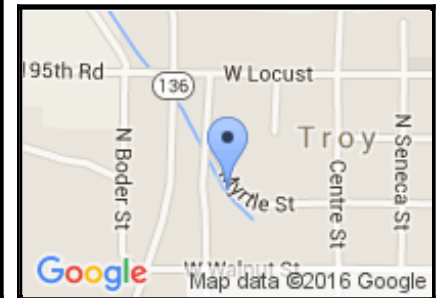


# Kansas Historic Resources Inventory

Printed: 06/28/2016



**043-0000-00463**  
**Doniphan County Waddell**  
**Bridge (Relocated)**  
**00 W MYRTLE ST**  
**Troy**



## LOCATION:

**County:** Doniphan

**Address:** 00 W MYRTLE ST

**Address Remarks:** Historic location: Monument Rd, SW4, NE4, SW4 S3-T5S-R21E (39.64383,-95.05384).  
Currently located in Troy City Park.

**City:** Troy

**Zip:** 66087

**Parcel ID:** 104-17-0-30-20-002.00-0

**Legal Description:** SW 1/4 of NE 1/4 of SW 1/4 of Section 3 Township 5S Range 21E

**Legal Description Remarks:** Current: City of Troy, Original Town, Block 6, Lot 7

**Latitude, Longitude 1:** 39.787999 -95.094707

**Latitude, Longitude 2:**

**Latitude, Longitude 3:**

**Latitude, Longitude 4:**

**Datum:** WGS84

## DESCRIPTION:

**Historic Name:** Doniphan County Waddell Bridge (Relocated)

**Alternate Name:**

**Historic Function:** Transportation

**Subcategory:** Road-Related (Vehicular)

**Historic Function Remarks:** This is the only known, extant Waddell "A" Truss bridge in Kansas.

**Present Function:** Transportation

**Subcategory:** Pedestrian-Related

**Present Function Remarks:**

**Residential/Commercial/Religious Style:**

**Secondary Style:**

**Barn Type:** Not Applicable

**Bridge Type:** Other

**Landscape Type:**

**Physical Description/Remarks:** Waddell "A" Truss; riveted pony truss. Single span, 36' long, 20' wide (historically). Width was narrowed when reinstalled.

**Plan Form:** Rectangle

**Commercial Building Type:** Not Applicable

**Roof Form:** Not Applicable

**Stories:** 1

**Condition:** Good

**Principal Material:** Metal

**Condition Remarks:** Bridge was relocated and reinstalled in October 2015.

**Architect/Designer/Builder:** Unknown

**Year of Construction:** 1900

**Certainty:** Estimated

**Date Notes:**

**General Remarks:**

**Ancillary Structures:** None

**Ancillary Structure Remarks:**

#### REGISTER STATUS:

**Listed in State Register:** Yes

**Date of State Listing:** 08/26/1989

**Listed in National Register:** Yes

**Date of National Listing:** 01/04/1990

**Historic District:**

**Demolished:**

**Date Demolished (if applicable):**

**Potentially Eligible for National Register:**

**Register Status Remarks:** Relocation request approved by HSBK 05/04/2013. Approval of relocation by the NR is pending.

**Thematic Nomination (MPDF):** Metal Truss Bridges in Kansas

**National Historic Landmark:**

#### SURVEY INFORMATION:

There is no survey information for this record.

#### IMAGES & DOCUMENTS



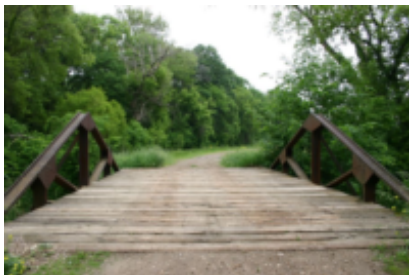
Doniphan County Waddell Truss  
Bridge 5-27-2009



Doniphan County Waddell Truss  
Bridge 5-27-2009



Doniphan County Waddell Truss  
Bridge 5-27-2009



Doniphan County Waddell Truss  
Bridge 5-27-2009



Doniphan County Waddell Truss  
Bridge 5-27-2009



Doniphan County Waddell Truss  
Bridge. After relocation. 2016.



Doniphan County Waddell Truss Bridge. After relocation. 2016.



National Register  
nomination

United States Department of the Interior  
National Park Service

043-0000-0463

National Register of Historic Places  
Registration Form

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 Doniphan County Waddell

other names/site number Doniphan County Waddell

## 2. Location

street &amp; number 1.7 miles northeast of Doniphan on F.A.S. 28

☐ not for publication

city, town Doniphan

☒ vicinity

state Kansas

code KS

county Doniphan

code 43

zip code none

## 3. Classification

## Ownership of Property

☐ private☒ public-local☐ public-State☐ public-Federal

## Category of Property

☐ building(s)☐ district☐ site☒ structure☐ object

## Number of Resources within Property

## Contributing

\_\_\_\_\_

1

1

## Noncontributing

\_\_\_\_\_ buildings

\_\_\_\_\_ sites

\_\_\_\_\_ structures

\_\_\_\_\_ objects

\_\_\_\_\_ Total

Name of related multiple property listing:  
Metal Truss Bridges in KansasNumber of contributing resources previously  
listed in the National Register 0

## 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.

Signature of certifying official

Nov. 16, 1989  
Date

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: Waddell "A" Truss

Materials (enter categories from instructions)

foundation

walls

roof

other Metal: Wrought Iron or Steel

Describe present and historic physical appearance.

The Doniphan County Waddell "A" truss, erected in ca. 1900, is a rivited pony truss. The single span is 36 feet long and 20 feet wide. The deck rises 14 feet above the stream bed.

The members of a truss bridge are designated either as chord members or web members. Chord members are those mainly defining the outlines of the structure and they are termed lower or upper chord members depending on whether they are found at the bottom or the top of the structure. Members between the chords are web members. They are called posts or ties if they sustain compression or tension respectively.

In the King Post truss, the end posts and top chord merge to form two sides, and the lower chord completes the triangle. The end post and top chord sides are in compression while the lower chord side is in tension. If diagonals and secondary verticals are added to the king post, it becomes a Waddell "A" truss. The secondary verticals are placed in tension and the diagonals act in compression. The Doniphan county bridge is fabricated out of channel stock. Connections are facilitated by the use of metal plates at connection points. All connections are rivited. The top chords, king post, diagonals and secondary verticals are made up of these channel beams. The bottom chord is single. One floor beam is attached to the king post and the sway brace. This in turn supports an I beam running the length of the panel. The wood decking is laid diagonally on top of these I beams. Few alterations have taken place and the bridge retains a high degree of its structural integrity.

## 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)

Engineering

Transportation

Period of Significance

Ca. 1900

Ca. 1900

Significant Dates

Ca. 1900

Ca. 1900

Cultural Affiliation

n/a

Significant Person

n/a

Architect/Builder

Unknown

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

The King Post is one of the oldest truss designs, serving well in many medieval buildings. As is evident they served as well as bridges into the 20th century. Its simplicity also establishes its limit. As the length increases so must the height, at the same ratio. It is therefore only practical in short spans. This was compensated somewhat by the development of a Waddell "A" Truss in the late 19th and early 20th century. The length of a Waddell could reach up to 75 feet.

No actual construction history of the Doniphan County Waddell "A" Truss has presently been located. Such structures were generally quite inexpensive and received little public notice. It was selected to be nominated because it is the only remaining example of the design in Kansas and it retains an outstanding degree of its integrity.

☐ See continuation sheet

## 9. Major Bibliographical References

Victor C. Darnell, American Bridge Building Companies, Washington, DC:  
Society for Industrial Archeology Occasional Publication 4, 1984.

David Weitzman, Traces of the Past: A Field Guide to Industrial Archeology,  
New York: Charles Schribner's Sons, 1980.

James L. Cooper, Iron Monuments to Distant Posterity, DePauw University,  
F.H.W.A., Indiana Dept. of Highways, Indiana Dept. Natural Resources,  
N.P.S., 1987.

Dan G. Deibler, A Survey and Photographic Inventory of Metal Truss Bridges  
in Virginia, Charlottesville: Virginia Highway & Transportation  
Research Council, 1975.

☐ 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:

- ☒ State historic preservation office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Specify repository:  
KS State Historical Society

## 10. Geographical Data

Acreeage of property less than one acre

### UTM References

A 

1	5
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3	2	3	7	4	0
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4	3	9	0	0	4	0
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Zone Easting Northing

C 

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B 

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Zone Easting Northing

D 

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☐ See continuation sheet

### Verbal Boundary Description

The nominated property is located on the NW 1/4, SW 1/4, NE 1/4, SW 1/4, section 3, township 5 south, range 21 east, on a tract measuring 36' x 20' whose northeast corner is represented by the northeast corner of the bridge. Beginning at the northeast corner the boundary proceeds 26' southwest, 20' northwest, 36' northeast and 16' southeast to the point of beginning.

☐ See continuation sheet

### Boundary Justification

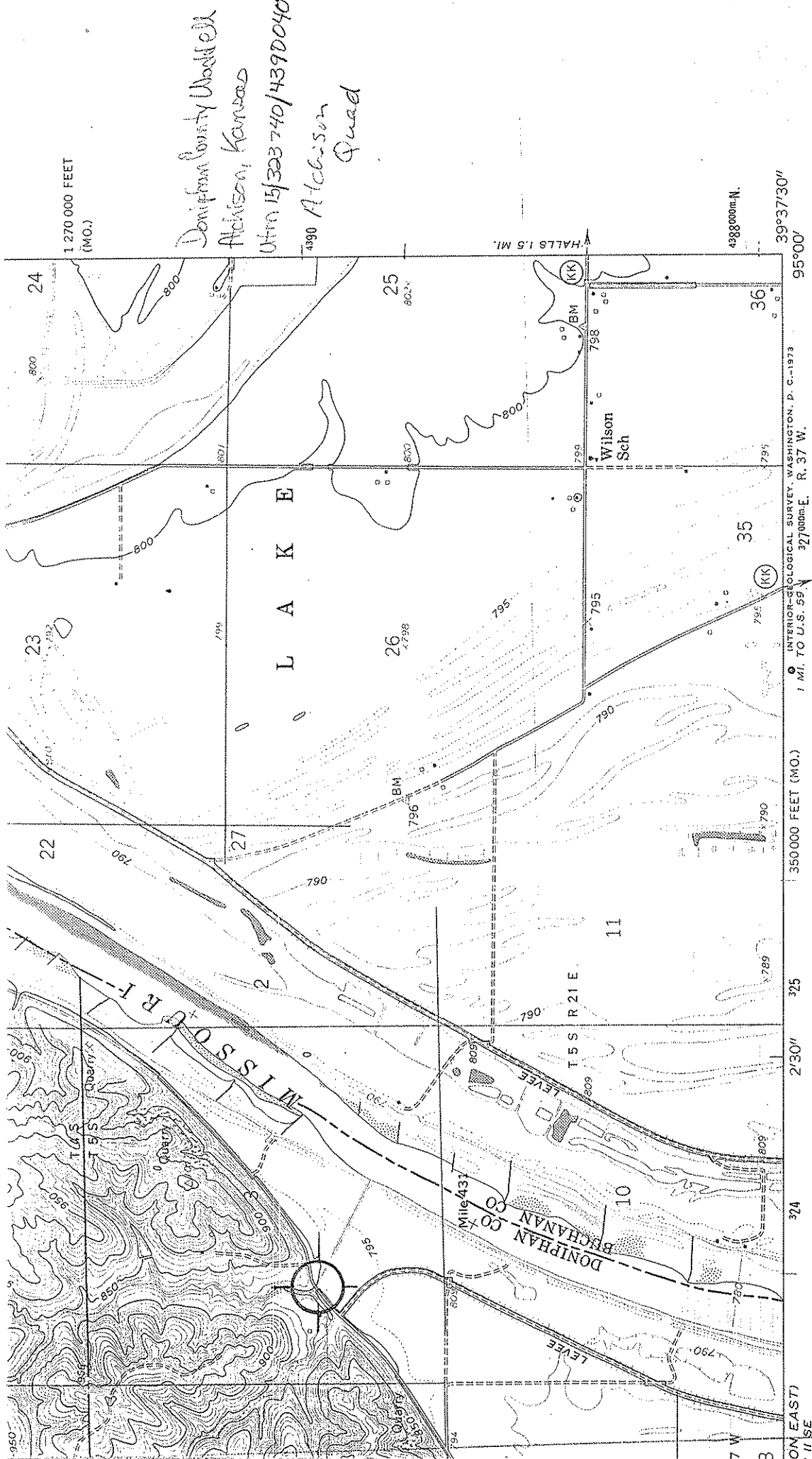
The boundary includes only that area that is historically associated with the nominated property.

☐ See continuation sheet

## 11. Form Prepared By

name/title	Larry Jochims	date	September 20, 1989
organization	Kansas State Historical Society	telephone	(913) 296-3251
street & number	120 W. 10th	state	KS
city or town	Topeka	zip code	66612

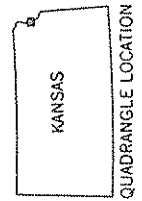




IDE KALB)  
7063 III SW

ROAD CLASSIFICATION

Light-duty ----- Unimproved dirt -----  
○ State Route



ATCHISON NE, KANS. — MO.  
NE 1/4 ATCHISON 15' QUADRANGLE  
N 3937.5 — W 9500 / 7.5

NATIONAL MAP ACCURACY STANDARDS  
R, COLORADO 80225, OR WASHINGTON, D. C. 20242,  
Y. LAWRENCE, KANSAS 66044  
SURVEY, ROLLA, MISSOURI 65401  
S AND SYMBOLS IS AVAILABLE ON REQUEST

1959  
PHOTOREVISED 1972

Doniphan County Washell  
Atchison, Kansas  
UTM 15/323 740/4390040  
4390 Atchison  
Quad