National Register of Historic Places Continuation Sheet

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SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 89002187

Asylum Bridge Property Name Miami County

Date Listed: 1/4/90

KS **State**

Metal Truss Bridges in Kansas 1861--1939 MPS Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Beth Boland

 $\frac{1/4}{90}$

Signature of the Keeper

Amended Items in Nomination:

Item #2, Location: The correct county code is 121.

Item #6, Function: The correct current function is "Transportation: pedestrian-related."

Item #7, Description: Materials include 1) Metal: wrought iron or steel; 2) Wood; and 3) Stone.

Item #8, Significance: The applicable National Register criteria are A and C.

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National Register of Historic Places Registration Form

NOV 2 8 1989

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 Asylum Bri	dge				
other names/site number	Same				
				_	
2. Location					
street & 'number 1st Stree	et, 2 blocks nor	th			not for publication
city, town Osawatomie				⊻_ vicinity	
state Kansas	code KS	county	Miami	code 41	zip code 66064
3. Classification					
Ownership of Property Category of Property				Number of Reso	urces within Property
private	🛄 build	ling(s)		Contributing	Noncontributing
X public-local	distr	ict			buildings
public-State	site				sites
public-Federal	X struc	ture			structures
	obje	ct			objects
	•			1	Total
Name of related multiple prope	rty listina:			Number of contri	buting resources previously
Metal truss bridges in Kar				listed in the National Register0	
4. State/Federal Agency C	ertification			*****	
National Register of Historic In my ₁ opinion, the property Signature of certifying official	I meets does		National Reg	gister criteria. 🛄 See c	
State pr Federal agency and bu	reau				
In my opinion, the property	meets does	not meet the	National Reg	gister criteria. 🗌 See c	ontinuation sheet.
Signature of commenting or other official			-		Date
State or Federal agency and bureau					
5. National Park Service C	ertification				
, hereby, certify that this prope					
entgred in the National Regi			$\overline{}$		
See continuation sheet.	2101.	Beth y	Solar 1		Ilula
determined eligible for the N		NEIN Y	- and	**************************************	
Register. See continuation					
determined not eligible for the	10				
National Register.	·				
removed from the National F	Pagistor				
other, (explain:)					
Unidi, (explain.)					

6. Function or Use		
Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)	
Transportation: Road Related (Vehicular) Bridge	Transportation: Road Related (Vehicular) Bridge	
7. Description		
Architectural Classification (enter categories from instructions)	Materials (enter categories from Instructions)	
Other: Reverse Parker Through Truss	foundation walls	
	roof	
	other Metal: Wrought Iron or Steel	
	and the state of the same installed and the state of the state of the same installed and the same installed and	

Describe present and historic physical appearance.

The Asylum bridge, erected in 1905, is a pin connected reverse Parker truss. The single span is 219 feet long and 16.5 feet wide. The wooden deck rises 21 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 case of the Asylum bridge the web members are alternately vertical and inclined. The inclined members are in tension and the verticals in compression.

The inclined end posts and top chord of the Asylum bridge are fabricated from sections of channel iron, tied together by single bar lacing. The hip verticals and posts are fabricated from angle stock and single bar lacing. Main diagonals are fabricated from channel stock, and flat bar "ladder" type lacing with a cover plate. The portal bracing is fabricated from angle stock and single bar lacing. A large plaque listing the names of the county commissioners adorns each entry portal. Individual components are fabricated of stock angles and straps by being rivited together. The main members of the bridge, however, are connected at panel points by the use of a pin.

For the purpose of this nomination the bridge is being considered a reverse Parker. The bridge is restricted to pedestrian traffic and the railings have been damaged by impacts. Its lighting fixtures have also been removed. In spite of this it retains a high degree of its structural integrity.

8. Statement or Significance		
Certifying official has considered the significance of this pro	perty in relation to other properties:	
Applicable National Register Criteria	D	
Criteria Considerations (Exceptions)	D D E F G	
Areas of Significance (enter categories from instructions) Engineering	Period of Significance 1905	Significant Dates 1905
Transportation	1905	1905
	Cultural Affiliation	
Significant Person	Architect/Builder Kansas City Bridge Commpany	

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

The great evolution of truss bridge construction began in the United States soon after the publication of Squire Whipple's historic work on stresses in 1840. Prior to this the design work was essentially that of trial and error, experience and judgement. The Warren and Pratt trusses were rational designs and lent themselves readily to the system of analysis postulated by Whipple. They were, therefore, readily and rapidly accepted and formed the foundation for a greater part of American truss design. The Parker truss with its polygonal top chord is a variant of the Pratt truss. This arched top chord made for a stronger bridge while using the same amount of material.

Although the Asylum bridge is being classified as a Parker it obviously shows some differences. The top chord curves downward rather than upward and the towers at each abutment give it a cantilevered appearance. This design is unique to Kansas and a study of bridge inventories from other states has not revealed any similar example. It is being proposed as unique not only to Kansas but to the United States. As the only such example it is worthy of listing.

The bridge is also important to the history of the state in that it is a physical remnant of a period in the state's history when the erection of such a structure had significant economic importance to a community. The existing tensions simmering in the locality could be brought to a boil by actual and perceived political maneuvering attendant to all such major construction.

The Kansas Department of Transportation (KDOT) carried out a statewide inventory of historic bridges between 1980 and 1983. The bridges to be included were identified through computer printouts developed by KDOT, from information supplied by the counties (since almost all of the historic bridges were located on secondary rather than the primary road system), and by direct observation by field personnel. All bridges were inspected by

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KDOT personnel to verify the data on file. That information was jointly evaluated by representatives of KDOT, Kansas State Historical Society, and the State Historic Preservation Officer.

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Each structure was evaluated using a points rating system adapted from the points evaluation rating developed by the Ohio Department of Transportation and Ohio Historic Preservation Office. Consideration was given to areas such as age, builder, number of spans, length, special features, history, integrity, surviving numbers, and preservation potential.

In many instances there is little information about individual structures. Often bridge plaques which may have contained information have been removed, or the county's records are not complete or have been destroyed. Due to the large numbers of similar structures there is often little to choose from in differentiating among individual bridges other than condition and the likelihood of preservation.

The purpose of the KDOT study and subsequent evaluation was to identify a representative selection of bridges of each class. Through this approach KDOT and KSHS hope to preserve for posterity some examples of each type.

The floods of 1903 and 1904 were expensive for Miami county and large sums of money were required to repair the damage. Among the numerous bridge replacements was one at the Asylum Crossing in Osawatomie. No less than ten companies submitted bids. Kansas City Bridge of Kansas City, Missouri was selected as the winner with a bid of \$4,800.

Commissioners had planned to remove the old spans and move one (120') to Pott's Ford in Paola township and one (50') to Courtney Ford on Sugar Creek in Sugar Creek township. This provoked a great deal of controversy as many other areas of the county felt they had a greater need for the structure. Valley township was a particularly adamant petitioner. The Valley township location, they claimed, would open a new section of the county to Osawatomie trade. The early growth of Osawatomie was hampered due to its location between two rivers and the need for necessary crossings. On their part, the commissioners were unsure what to do. Costs for moving the old structure were found to be more than initially thought. Moving it any great distance would be uneconomical. The controversy continued throughout the year. Local commissioner Archie Lee was unable to convince his two fellow commissioners to make a commitment for placing the bridge near Osawatomie and the Valley township location. A great deal of

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animosity existed between district three and the other two. Delays were chalked up to discrimination and politics.

Work on the new bridge was begun in October 1905. Once removed, there would only be the creamery crossing in the northeast part of town. Progress seemed painfully slow but by December 22, 1905 it was finished.

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Controversy continued about the commissioners' names that were placed on the bridge plaque. The Osawatomie <u>Graphic</u> felt that of Captain Reuben Smith should be on it rather than Archie Lee because Smith was actually the commissioner in office when the appropriation was secured. It would have been a fitting monument. Officials in Paola countered that "when Osawatomie hasn't material troubles to make her sore, she takes on airy ones."

Little was reported about the controversy over locating the old bridge other than the north span was located a mile west and one-half mile south of Block.

Victor C. Darnell, American Bridge Buildi					
Society for Industrial Archeology Occasional Publication 4, 1984.					
David Weitzman, Traces of the Past: A Field Guide to Industrial					
Archeology, New York: Charles Scribner'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, <u>A Survey and Photographic Inventory of Metal Truss Bridges</u>					
in Virginia, Charlottesville: Virginia Highway & Transportation					
Research Council, 1975.					
"Locals," <u>Osawatomie Graphic</u> , November 18, 1904, p. 5.					
"County Commissioners," Miami Republican,	November 18, 1904, p. 5.				
	See continuation sheet				
Previous documentation on file (NPS):					
preliminary determination of individual listing (36 CFR 67)	Primary location of additional data:				
has been requested	x State historic preservation office				
previously listed in the National Register	Other State agency				
previously determined eligible by the National Register	Federal agency				
designated a National Historic Landmark	Local government				
recorded by Historic American Buildings					
Survey #	Other				
recorded by Historic American Engineering	Specify repository: Kansas State Historical Society				
Record #					
10 Geographical Data					
10. Geographical Data					
10. Geographical Data Acreage of propertyless than one acre					
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See continuation sheet

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

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"County Business," Miami Republican, December 23, 1904, p. 1. "Fine Piece of Road," Miami Republican, December 23, 1904, p. 1. "Locals," Osawatomie Graphic, December 30, 1904, p. 8. "Locals," Osawatomie Graphic, March 23, 1905, p. 8. "Locals," Osawatomie Graphic, April 20, 1905, p. 8. "Locals," Osawatomie Graphic, April 13, 1905, p. 5. "Bridge Proposition Popular," Osawatomie Graphic, April 6, 1905, p. 1. "Council Meeting," Ibid, May 4, 1905, p. 4. "Local," Ibid, May 18, 1905, p. 8. "Osawatomie Gets It--In Neck," Osawatomie Graphic, June 29, 1905, p. 5. "Local," Ibid, September 21, 1905, p. 5. "In Neck Again," Ibid, August 10, 1905, p. 1. "New Bridge At Last," Ibid, October 12, 1905, p. 1. "Local," Miami Republican, October 13, 1905, p. 8. "Local," Osawatomie Graphic, October 26, 1905, p. 5. "Local," Osawatomie Graphic, November 2, 1905, p. 1. "Not Just," Miami Republican, December 1, 1905, p. 1. "Glad That's Done," Osawatomie Graphic, December 7, 1905, p. 1. "Locals," Western Spirit, December 8, 1905, p. 4. "It's a Good Bridge," Osawatomie Graphic, December 14, 1905, p. 1. "Asylum Bridge Completed," Miami Republican, December 22, 1905, p. 4. "Locals," Miami Republican, December 22, 1905, p. 5. "About That Name on Bridge," Western Spirit, January 5, 1906, p. 1.

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