

United States Department of the Interior  
National Park Service

070



# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).**

### 1. Name of Property

historic name Old Santa Fe Railroad Bridge

other names/site number Structure #63D3342E1446000; Flynn Bridge

### 2. Location

street & number Drummond Road  not for publication

city or town Wanette  vicinity

state Oklahoma code OK county Pottawatomie code 125 zip code 74878

### 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,  
I hereby certify that this X 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 X meets     does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

    national     statewide   X   local

*Bob Beall*  
Signature of certifying official

1/25/2010  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
State or Federal agency/bureau or Tribal Government

In my opinion, the property     meets     does not meet the National Register criteria.

\_\_\_\_\_  
Signature of commenting official

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
State or Federal agency/bureau or Tribal Government

### 4. National Park Service Certification

I, hereby, certify that this property is:

entered in the National Register

    determined eligible for the National Register

    determined not eligible for the National Register

    removed from the National Register

    other (explain): \_\_\_\_\_

*for Edson H. Beall*  
Signature of the Keeper

3-10-10  
Date of Action

**5. Classification**

**Ownership of Property**  
(Check as many boxes as apply)

- private
- public - Local
- public - State
- public - Federal

**Category of Property**  
(Check only **one** box)

- building(s)
- district
- site
- structure
- object

**Number of Resources within Property**  
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
0	0	buildings
0	0	district
0	0	site
1	0	structure
0	0	object
1	0	<b>Total</b>

**Name of related multiple property listing**  
(Enter "N/A" if property is not part of a multiple property listing)

N/A

**Number of contributing resources previously listed in the National Register**

N/A

**6. Function or Use**

**Historic Functions**  
(Enter categories from instructions)

Transportation: Rail-Related

**Current Functions**  
(Enter categories from instructions)

Transportation: Road-Related

**7. Description**

**Architectural Classification**  
(Enter categories from instructions)

Other: Camel Back-Through Truss

**Materials**  
(Enter categories from instructions)

foundation: Concrete, Stone

walls:

roof:

other: Steel

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### **Narrative Description**

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

#### **Summary Paragraph**

Drummond Road is carried over the Canadian River between Pottawatomie and McClain County by a pin-connected Camelback through truss bridge with a total length of 785 feet. The bridge, constructed ca. 1903 to carry the Santa Fe Railroad over the Canadian River, is the oldest and longest bridge in both Pottawatomie and McClain County. While originally constructed as a railroad bridge, it was closed as such in 1963 and converted to a vehicular bridge. It retains excellent integrity with only minor changes for the conversion to vehicular traffic.

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### **Narrative Description**

The Canadian River serves as a boundary between Pottawatomie and McClain counties. For the majority of its run from Texas to the Arkansas River in Eastern Oklahoma, the Canadian flows in a west to east direction. The towns of Wanette and Byars are located on the north and south sides of the bridge. The river valley is wide with steep bluffs on each bank.

The bridge is supported by two concrete piers and concrete and stone abutments. Each pier and abutment anchors the end of the steel through trusses. The through truss system is a Camelback with verticals made of lace channel beams. Both the top and bottom chords are lace channel beams. The diagonals are eye-bars with stays. There are three total spans with the longest span equaling 265 feet.

The trusses support the roadbed on I-beams that run parallel to the roadbed. The roadbed width is 14 feet for a total of one lane. The abutments for the bridge are earth and stone. I-beams for the approach sections rest on poured in place concrete.

Of the four Camelback through truss bridges identified in the 2007 bridge survey conducted by Oklahoma Department of Transportation, the Santa Fe Railroad Bridge over the Canadian River in Pottawatomie County is the longest example of this bridge type in Oklahoma. While the railroad tracks were removed and a roadbed poured of concrete installed, the bridge retains a high degree of integrity of design, location, association, workmanship, feeling, setting and material.

**8. Statement of Significance**

**Applicable National Register Criteria**

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

**Areas of Significance**

(Enter categories from instructions)

Engineering  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Period of Significance**

Ca. 1903  
\_\_\_\_\_  
\_\_\_\_\_

**Significant Dates**

Ca. 1903  
\_\_\_\_\_  
\_\_\_\_\_

**Significant Person**

(Complete only if Criterion B is marked above)

N/A  
\_\_\_\_\_

**Cultural Affiliation**

N/A  
\_\_\_\_\_  
\_\_\_\_\_

**Architect/Builder**

American Bridge Company  
\_\_\_\_\_  
\_\_\_\_\_

**Criteria Considerations**

(Mark "x" in all the boxes that apply)

Property is:

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years old or achieving significance within the past 50 years.

**Period of Significance (justification)**

The period of significance is associated with the approximate date of construction of ca. 1903.

**Criteria Considerations (explanation, if necessary)**

N/A

**Statement of Significance Summary Paragraph** (provide a summary paragraph that includes level of significance and applicable criteria)

The Old Santa Fe Railroad Bridge is eligible for the National Register of Historic Places at the local level under Criterion C for its engineering design. The Old Santa Fe Railroad Bridge embodies the distinctive characteristics of bridge engineering; specifically the camelback through truss design. It is the longest and oldest of its type in Pottawatomie and McClain County.

**Narrative Statement of Significance** (provide at least **one** paragraph for each area of significance)

The superstructure of the Old Santa Fe Railroad Bridge is in its original configuration including the connections and the composition and configuration of the individual composite members. Because the superstructure is the most important feature of the bridge, the replacement of the deck does not impact the integrity or eligibility of the bridge. The Old Santa Fe Railroad Bridge embodies the distinctive characteristics of bridge engineering; specifically the camelback through truss design. It is the longest and oldest of its type in Pottawatomie and McClain County.

**Developmental history/additional historic context information** (if appropriate)

The Atchison and Topeka, which began modestly in Kansas in 1859, was reorganized under the grander title in 1870. Originally building westward through Kansas and into New Mexico, it had reached San Diego and Los Angeles by 1887. On the eastern end, it reached Chicago in 1887, making the Atchison, Topeka and Santa Fe (AT&SF) into a true transcontinental railroad. At this time it also had its eye on Texas. Two nominally independent companies, the Southern Kansas (of Kansas, 1885) and the Gulf, Colorado and Santa Fe (1873), both controlled by the Santa Fe, completed a north-south main line through Oklahoma to Purcell in 1887. The same Southern Kansas in 1886-87 also constructed a line from Kiowa, Kansas, through Woodward to Goodwin and on to Amarillo, Texas, giving the Santa Fe a shortcut to its western lines. All this expansion led to a receivership in 1893. The company was reorganized by 1896 and came out stronger.

During the boom years in Oklahoma an alternative main line was obtained from Newkirk through Cushing and Shawnee to Pauls Valley, where it rejoined the original line. Another subsidiary, the Eastern Oklahoma, constructed this railroad between 1900 and 1904, but the Santa Fe worked it from the outset. The Old Santa Fe Railroad bridge, designed by the American Bridge Company, is located along this line.

The American Bridge Company was founded in 1900 through the JP Morgan led consolidation of twenty-eight of the nations largest steel fabricators and constructors. In 1901, the company became a subsidiary of the newly consolidated steel trust, United States Steel Corporation. The company pioneered the use of steel as a construction material allowing it to be used in buildings, bridges, and vessels. The American Bridge Company continues to build bridges into the current day.

Steel frame bridges consist of a framework superstructure which supports the roadway over the span of the bridge. The framework consists of individual members which forms a prominent geometric pattern of solids and voids. Each individual member consists of steel shapes of various sizes, such as angle sections, channel sections, I-beams, and round and square rods.

Bridges are typically categorized by the configuration of the trusses. In most cases, the name for each truss type comes from the person or company who developed it. The most common truss configurations in the United States are Howe, Pratt and Warren. The camelback through truss is a variant of the Pratt design.

Pratt trusses are characterized by vertical compression members that are relatively thick and prominent visually. They also have diagonal tension members which as they function in tension are relatively thin. Pratt trusses have horizontal upper chords. The camelback through truss has an angular top chord with exactly five beams.

Another important distinction between truss bridges is the connections used at the point where members intersect. During the 19<sup>th</sup> century, most steel truss bridges were pin-connected, meaning that at each intersection of vertical, diagonal, and chord members, they were held together by a pin set through holes in the members. Around the turn of the century, bridge designers and builders began to make great use of riveted connections, especially for short spans. This meant that at their intersections, the vertical, diagonal, and chord members were riveted to a steel gusset plate rather than being pin-connected. By the 1920s, the riveted connections replaced pins for many longer spans as well. The Old Santa Fe Railroad bridge is pin-connected.

**9. Major Bibliographical References**

**Bibliography** (Cite the books, articles, and other sources used in preparing this form)

"American Bridge Company" n.d.

[http://www.americanbridge.net/index.php?Itemid=72&id=44&option=com\\_content&task=view](http://www.americanbridge.net/index.php?Itemid=72&id=44&option=com_content&task=view) (August 13, 2009).

Condit, Carl W. *American Building: Materials and Techniques from the Beginnings of the Colonial Settlements to the Present*. Chicago: University of Chicago Press, 1968.

Ketchum, Milo S. *The Design of Highway Bridges of Steel, Timber and Concrete*. New York: McGraw-Hill Book Company, 1920.

King, Joseph E. *Spans of Time: Oklahoma's Historic Highway Bridges*. Oklahoma City, OK: Oklahoma Department of Transportation, 1993.

*Oklahoman*, April 15 & 17, 1966.

Waddell, J.A.L. *Bridge Engineering*. New York: John Wiley & Sons, Inc., 1916.

**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
- Name of repository: \_\_\_\_\_

Historic Resources Survey Number (if assigned): \_\_\_\_\_

**10. Geographical Data**

**Acreage of Property** Less than 1 acre  
(Do not include previously listed resource acreage)

**UTM References**

(Place additional UTM references on a continuation sheet)

1	<u>14</u>	<u>678170</u>	<u>3865926</u>	3	<u>                    </u>	<u>                    </u>	<u>                    </u>
	Zone	Easting	Northing		Zone	Easting	Northing
2	<u>14</u>	<u>678022</u>	<u>3865727</u>	4	<u>                    </u>	<u>                    </u>	<u>                    </u>
	Zone	Easting	Northing		Zone	Easting	Northing

**Verbal Boundary Description** (describe the boundaries of the property)

The bridge is located over the Canadian River between Pottawatomie and McClain County, T5N, R2W, within the west half of Section 12. The boundary between Pottawatomie and McClain counties is indefinite, it varies with the flow of the river in its channel.

**Boundary Justification** (explain why the boundaries were selected)

Includes the area historically associated with the bridge.

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**11. Form Prepared By**

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name/title Lynda B. Schwan, National Register Program Coordinator & Janice Oak (local contact)  
organization OK SHPO date August 7, 2009  
street & number 2401 North Laird Ave telephone 405-522-4478  
city or town Oklahoma City state OK zip code 73105  
e-mail lschwan@okhistory.org

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**Additional Documentation**

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Submit the following items with the completed form:

- **Maps:** A **USGS map** (7.5 or 15 minute series) indicating the property's location.  
A **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Continuation Sheets**
- **Additional items:** (Check with the SHPO or FPO for any additional items)

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**Photographs:**

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Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

**Name of Property:** Old Santa Fe Railroad Bridge  
**City or Vicinity:** Wanette  
**County:** Pottawatomie **State:** Oklahoma  
**Photographer:** Lynda Schwan  
**Date Photographed:** November 6, 2009

**Description of Photograph(s) and number:**

1 of 4.

No.	Subject	Dir.
0001	Old Santa Fe Railroad Bridge	N
0002	Name Plate	N
0003	Old Santa Fe Railroad Bridge	S
0004	Old Santa Fe Railroad Bridge	E

Old Santa Fe Railroad Bridge  
Name of Property

Pottawatomie, Oklahoma  
County and State

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**Property Owner:**

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name Oklahoma Department of Transportation  
street & number 200 Northeast 21<sup>st</sup> St. telephone (405) 521-2606 (Bridge Division)  
city or town Oklahoma City state OK zip code 73105

**Paperwork Reduction Act Statement:** This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. fo the Interior, 1849 C. Street, NW, Washington, DC.



UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Old Santa Fe Railroad Bridge  
NAME:

MULTIPLE  
NAME:

STATE & COUNTY: OKLAHOMA, Pottawatomie

DATE RECEIVED: 1/29/10                      DATE OF PENDING LIST: 2/19/10  
DATE OF 16TH DAY: 3/06/10                  DATE OF 45TH DAY: 3/15/10  
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 10000070

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N  
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N  
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

ACCEPT     RETURN     REJECT    3.10.10 DATE

ABSTRACT/SUMMARY COMMENTS:

**Entered in  
The National Register  
of  
Historic Places**

RECOM./CRITERIA \_\_\_\_\_

REVIEWER \_\_\_\_\_ DISCIPLINE \_\_\_\_\_

TELEPHONE \_\_\_\_\_ DATE \_\_\_\_\_

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.



Old Santa Fe Railroad Bridge

carries Drummond Road over Canadian River  
Wauwette vicinity, Pottawatomie County, Oklahoma

Lynda B Schwan

OK SHPO

6 November 2009

facing north

0001



Old Santa Fe Railroad Bridge

carries Drummond Road over Canadian River  
Wanette Vicinity, Pottawatomie County, Oklahoma

Lynda B Schwan

OK SHPO

6 November 2009

Facing north

0002



Old Santa Fe Railroad Bridge

Carries Drummond Road over Canadian River  
Wewette Vicinity, Pottawatomie County, Oklahoma

Lynda B Schwan

OKSHPO

6 November 2009

Facing south

0003





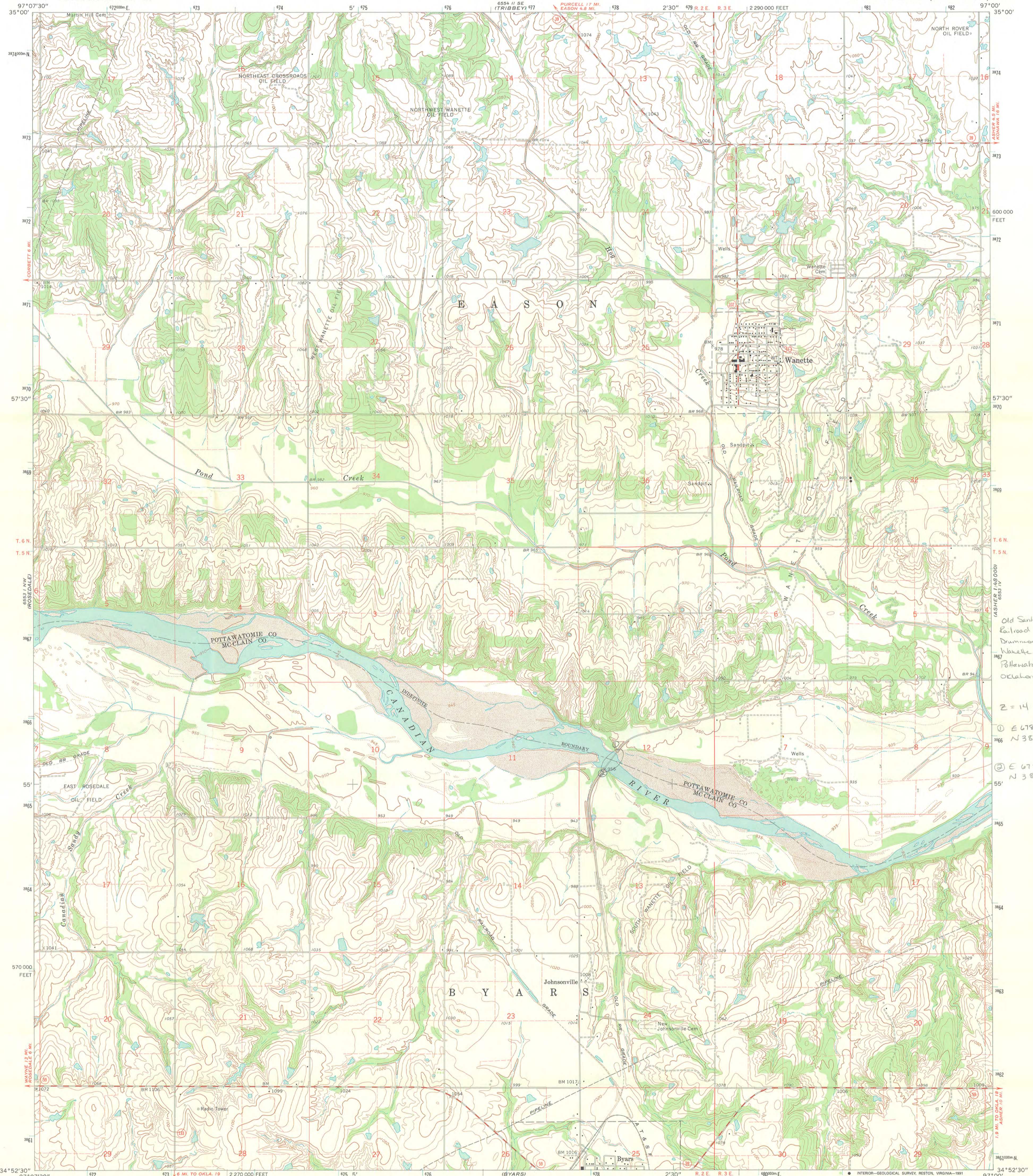
Old Santa Fe Railroad Bridge  
Carries Drummond Road over Canadian River  
Wauette Vicinity, Pottawatomie County, Oklahoma

Lynda B Schwan  
OKSHPO

6 November 2009

Facing east

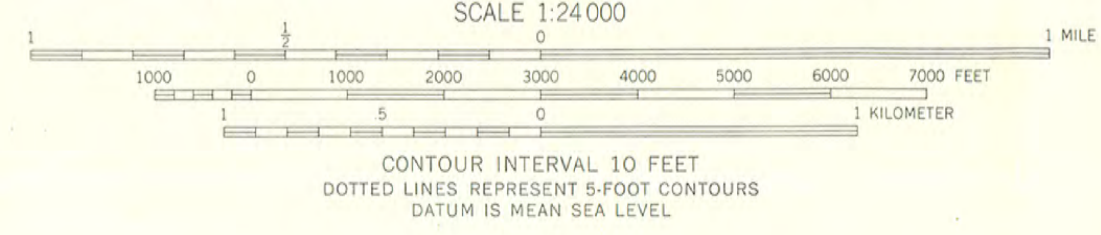
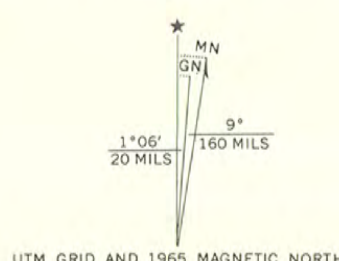
0004



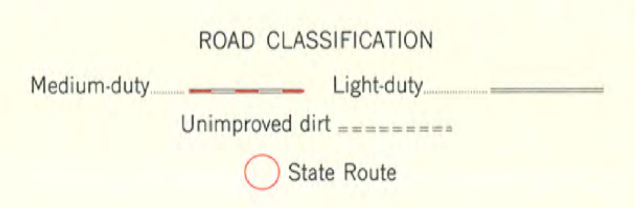
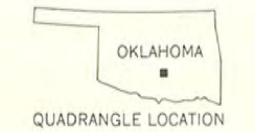
Old Santa Fe  
Railroad Bridge  
Drummond Rd  
Wanette OK  
Pottawatomie Co  
Oklahoma

Z = 14  
① E 67870  
N 3865724  
② E 678022  
N 3865727

Mapped, edited, and published by the Geological Survey  
Control by USGS, USC&GS, and Oklahoma Geological Survey  
Topography by photogrammetric methods from aerial  
photographs taken 1962. Field checked 1965  
Polyconic projection. 1927 North American datum  
10,000-foot grid based on Oklahoma coordinate system, south zone  
1000-meter Universal Transverse Mercator grid ticks,  
zone 14, shown in blue  
Fine red dashed lines indicate selected fence and field lines where  
generally visible on aerial photographs. This information is unchecked  
Map photinspected 1976  
No major culture or drainage changes observed



CONTOUR INTERVAL 10 FEET  
DOTTED LINES REPRESENT 5-FOOT CONTOURS  
DATUM IS MEAN SEA LEVEL



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

WANETTE, OKLA.  
N3452.5—W9700/7.5  
1965  
PHOTOINSPECTED 1976  
AMS 6553 I NE—SERIES V883



## Oklahoma Historical Society

Founded May 27, 1893

### State Historic Preservation Office

Oklahoma History Center • 2401 North Laird Ave. • Oklahoma City, OK 73105-7914  
(405) 521-6249 • Fax (405) 522-0816 • [www.okhistory.org/shpo/shpom.htm](http://www.okhistory.org/shpo/shpom.htm)

January 25, 2010

Ms. Carol Shull  
Acting Keeper of the Register  
National Park Service 2280, 8th floor  
National Register of Historic Places  
1201 "I" (Eye) Street, NW  
Washington D.C. 20005



Dear Ms. Matthews:

We are pleased to transmit three National Register of Historic Places nominations for Oklahoma properties. The nominations are for the following properties:

Rose Hill Plantation, Hugo Vicinity, Choctaw County  
Old Santa Fe Railroad Bridge, Wanette Vicinity, Pottawatomie County  
Overholser House (additional documentation), Oklahoma City, Oklahoma County

We look forward to the results of your review. If there may be any questions, please do not hesitate to contact either Lynda B. Schwan of my staff or myself.

Sincerely,

  
Melvena Heisch  
Deputy State Historic  
Preservation Officer

MKH:lbs

Enclosures