

United States Department of the Interior
National Park Service

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 Rulo Bridge
other name/site number Missouri River Bridge; NEHBS Number RH00-66

2. Location

street & number U.S. Highway 159 over the Missouri River N/A not for publication
city, town east edge of Rulo N/A vicinity
state NE; MO county Richardson, NE; Holt, MO code 147/087 zip code 68431

3. Classification

| | | | |
|-----------------------|--|-------------------------------------|---------------------|
| Ownership of Property | <u>States of Nebraska and Missouri</u> | Number of Resources within Property | |
| Category of Property | <u>structure</u> | Contributing | Noncontributing |
| | | <u>0</u> | <u>0</u> buildings |
| | | <u>0</u> | <u>0</u> sites |
| | | <u>1</u> | <u>0</u> structures |
| | | <u>0</u> | <u>0</u> objects |
| | | <u>1</u> | <u>0</u> Total |

Number of contributing resources previously listed in the National Register: 0
Name of related multiple property listing: Highway Bridges in Nebraska, 1870-1942

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.

Signature of certifying official _____ Date _____

State or Federal agency and bureau _____

In my opinion, the property X meets _____ does not meet the National Register Criteria.

Claire F. Blackwell
Signature of commenting or other official Claire F. Blackwell, Deputy SHPO

18 November 1992
Date

Missouri Department of Natural Resources

State or Federal agency and bureau _____

5. National Park Service Certification

I, hereby, certify that this property is:

| | | |
|--|-------------------------------------|-------|
| <u>_____</u> entered in the National Register | _____ | _____ |
| <u>_____</u> see continuation sheet | _____ | _____ |
| <u>_____</u> determined eligible for the National Register | <u>_____</u> see continuation sheet | _____ |
| <u>_____</u> determined not eligible for the National Register | _____ | _____ |
| <u>_____</u> removed from the National Register | _____ | _____ |
| <u>_____</u> other (explain:) | _____ | _____ |

Signature of the Keeper _____

Date of Action _____

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[Signature] DSHPS 5/6/92
Signature of certifying official Date
Nebraska State Historical Society
State or Federal agency and bureau

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

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 Function (enter categories from instructions)

TRANSPORTATION/road-related

Current Function (enter categories from instructions)

TRANSPORTATION/road-related

7. Description

Architectural Classification (enter categories from instructions)

OTHER /riveted Pennsylvania through truss

Materials (enter categories from instructions)

foundation N/A
walls N/A
roof N/A
other N/A

Describe present and historic physical appearance.

The Rulo Bridge spans the Missouri River on the east edge of Rulo. Other than maintenance-related repairs, the bridge remains essentially unaltered as it continues to carry vehicular traffic. The Rulo Bridge today retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. A description of the structure follows:

| | |
|----------------------|---------------------------------|
| span number: 3 | construction date: 1938-39 |
| span length: 375.0' | construction cost: \$651,296.01 |
| total length: 859.0' | current condition: good |
| roadway wdt.: 20.0' | alterations: none |

superstructure: steel, 16-panel riveted Pennsylvania through truss with riveted Warren deck trusses
substructure: concrete abutments and wingwalls; concrete two-legged piers and solid channel piers
floor/decking: concrete deck over I-beam transverse joists which rest on I-beam stringers
other features: upper chord: back-to-back channels with cover plate and double lacing; lower chord: face-to-face channels with top and bottom battens; verticals: built-up I-beams to level of longitudinal, horizontal bracing, above are composed over 4 angles tied by lacing; hip verticals: built-up I-beams; diagonals: face-to-face channels with lacing, diagonals tying second lower panel point from end to top of hip is built-up I-beam; portals: intermediate transverse strut and diagonal bracing below are composed of 4 angles tied with lacing, all other members consist of 2 angles tied with lacing; sway bracing: overhead struts composed of 4 angles tied with lacing, all other members are single angle sections; top lateral: cross-braced members composed of 2 angles tied by lacing; floor beams: I-beams riveted by means of gussets to lower chord; bottom lateral: cross-braced members composed of back-to-back angles; railing: channel and angle-section rails riveted to double angle-section posts.

8. Statement of Significance

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

| | |
|---------------------------------------|---|
| | statewide |
| Applicable National Register Criteria | C |
| Criteria Considerations (Exceptions) | N/A |
| Areas of Significance | Engineering |
| Period of Significance | 1938-39 (The period of significance is derived from the original construction date.) |
| Significant Dates | 1938-39 |
| Cultural Affiliation | N/A |
| Significant Person | N/A |
| Architect/Builder (Designer) | Harrington and Cortelyou, Kansas City MO |
| (Fabricator) | Missouri Valley Bridge and Iron Works, Leavenworth KS |
| (Builder) | Kansas City Bridge Company, Kansas City MO; Missouri Valley Bridge and Iron Works, Leavenworth KS |

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

A group led by John C. Mullen of Falls City laid the ground work for the Rulo Bridge in 1933, when it secured permission from the United States Congress to construct and operate a toll bridge over the Missouri River at Rulo. Either in that year or earlier, the group also engaged the services of the Kansas City engineering firm of Harrington and Cortelyou to prepare plans for the bridge. The initial plans were approved by the War Department on May 29, 1933. Despite these efforts, it is not known whether Mullen and his associates ever intended to construct the bridge. On February 14, 1934 Mullen approached the Richardson County Board, offering to assign the county "all his rights, interests, contracts, and franchises which he possesses for the construction of a vehicular traffic bridge at Rulo."

The county accepted Mullen's offer, but only on the condition that it not have to pay for construction. Considering that the bridge was estimated to cost between \$700,000 and \$800,000, this was no small caveat. Fortunately, Mullen had a solution, proposing that the county apply for a federal grant and loan. The board was careful to stipulate that the loan would only be repaid through bridge tolls, at no expense to the county. The county clerk noted in his minutes:

It was explained that [Richardson County could]... obtain a grant from the Reconstruction Finance Corporation of the Federal Government to build such bridge, in the amount of about \$800,000, of which thirty percent of the portion thereof that is expended for labor and material would... be an outright gift, the balance to be repaid with interest at the rate of four percent per annum... It being the understanding that the Reconstruction Finance Corporation would approve the issuing of such bonds as debenture bonds only, the same to be retired from revenue from the use of such bridge so that the County of Richardson would not be subject to any deficiency judgement in the case that such bridge does not pay out.

Negotiations appear to have dragged on for several years, but in September 1938, the Public Works Administration agreed to fund 45 percent of the bridge's construction, the total grant not to exceed \$326,250. To cover the balance, the county released a bond issue which was to be repaid through bridge revenue. With funding secured, the board officially entered a contract with Harrington and Cortelyou, who had been operating under a verbal agreement. The firm was to prepare all plans and supervise the project for six percent of the cost of construction. On 7 October, the board called for construction bids. The announcement stipulated that no bid was to exceed \$625,000, and stated that "the structure comprises, from west to east, 815 ft. of graded approach, five steel deck truss spans, each 100 ft. long, three steel through truss spans, each 376.5 ft. long, 5 steel deck truss spans, each 100 ft. long and 352 ft. of graded approach. A concrete floor slab is provided on all the truss spans and concrete paving on the graded approaches."

United States Department of the Interior
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National Register of Historic Places Continuation Sheet

Section number 8 Page 2

Highway Bridges in Nebraska, 1870-1942

The county opened bids on 7 November 1938. Of eleven bids received, the board selected the joint proposal of the Kansas City Bridge Company and the Missouri Valley Bridge and Iron Company, low bidders at \$599,425.35. In an effort to provide local employment during the Depression, the county required the contractors to hire Richardson County residents whenever possible. Construction apparently began immediately and continued through 1939. The Empire Construction Company of Omaha was subcontracted to grade the approaches, and the Interstate Construction Company of Lincoln installed the bridge lighting. The Rulo Bridge apparently opened to traffic in November 1939, and the Richardson County Board officially accepted the toll bridge on 2 April 1940. The total cost of construction amounted to \$651,296.01.

In 1945, an engineer from the Nebraska highway department observed that "the steel portions of the structure appear in excellent condition, although due to war conditions, the painting of the steel has been deferred and the paint coat is not in as good a condition as desired. This, no doubt, will be remedied when materials and labor again become available." More seriously, the writer also reported that the west approach fill had settled, and "this has occasioned some movement in the abutment and in the truss span at the west end of the bridge. This movement is sufficient to entirely close the expansion joint between the trusses at the first pier." The engineer presumably was referring to the first approach span, and not the western most through truss. The state estimated the cost of the repairs at \$10,000, and the work was probably done in the late 1940s. Aside from these minor repairs, no major work appears to have been performed on the bridge after its opening.

In October 1966, Richardson County informed the States of Nebraska and Missouri that "there appears at this time [to be]... sufficient funds available for a premature retirement of the [bridge construction] bonds on or before October 1, 1967." Although tolls would no longer be required to repay the bridge bonds, they would still be collected to cover the cost of maintenance. Noting that Interstate 29 was currently being built in Missouri and that an access road was planned from the bridge, the board urged the states to assume ownership and make the Rulo Bridge a toll-free crossing to facilitate travel. The board stated: "It would be beneficial to the residents of Richardson County, Nebraska, and to the residents of Northwest Missouri that the bridge be made a free bridge... This is particularly true in light of the construction of Highway I-29 through Holt County, Missouri, and the proposed plans to build an access road from I-29 to the Rulo Bridge."

The States of Nebraska and Missouri agreed to assume joint ownership of the Rulo Bridge in 1969. Prior to the transfer, Richardson County contracted with the Capital Bridge Company to repair and waterproof the bridge's concrete surfaces, according to plans and specifications prepared by the State of Nebraska. The total cost of the project amounted to \$14,775.00. To celebrate the new ownership, the county board declared May 15th and June 19th as "free bridge" days, temporarily allowing traffic to cross the bridge free of toll. On 24 June 1969, the Richardson County Board signed the papers transferring ownership of the Rulo Bridge to the States of Nebraska and Missouri. With its 375-foot spans, the Rulo Bridge is one of the longest trusses in Nebraska. It is technologically significant as an excellent example of large-scale bridge construction in the state.

For further contextual information regarding bridge building in Nebraska, registration requirements, and property types, see related multiple property listing "Highway Bridges in Nebraska, 1870 - 1942."

9. Major Bibliographical References

Nebraska Department of Roads, Structure Inventory and Appraisal: Structure Number S159 01373; Nebraska Department of Roads and Irrigation, *Twenty-Third Biennial Report, 1939-40*, p. 23; Henry G. Schlitt, "Missouri River Bridges, Report #2," 7 November 1945, located in Bridge Division, Nebraska Department of Roads, Lincoln, Nebraska; Proceeding of the Richardson County Commissioners, located in Richardson County Courthouse, Falls City, Nebraska, see the following entries indexed in the "Rulo Bridge Book", Book 13 : 14 February 1934 (pp. 673-674); Book 14: 10 September 1935 (p. 276), 24 September 1935 (pp. 284-5), 23 June 1936 (p. 419), 29 June 1938 (pp. 52-53); Book 15: 28 July 1938 (pp. 67-70), 13 September 1938 (pp. 111-113), 29 November 1938 (p. 161), 17 January 1939 (p. 183), 25 July 1939 (p. 239), 7 November 1939 (p. 276), 2 April 1940 (p. 324); Book 16: 11 October 1966 (p. 73); Book 20: 17 January 1967 (p. 106), 10 December 1968 (p. 363) 7 January 1969 (p. 371), 25 February 1969 (p. 389), 24 June 1969 (p. 426); field inspection by Demian Hess, 13 March 1990.

___ 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:)

10. Geographical Data

Acreeage of Property less than one acre
Cadastral Reference S17, T1N, R18E
USGS Quadrangle Rulo, NE - MO (7.5 Minute Series, 1965)
UTM References zone 15 easting 293530 northing 4436350

___ See continuation sheet

Verbal Boundary Description

The nominated property is a rectangular shaped parcel measuring 859 feet by 22 feet, which is centered on the UTM point listed above. Included within this rectangular parcel are the bridge's superstructure, substructure, floor system, and approach spans.

___ See continuation sheet

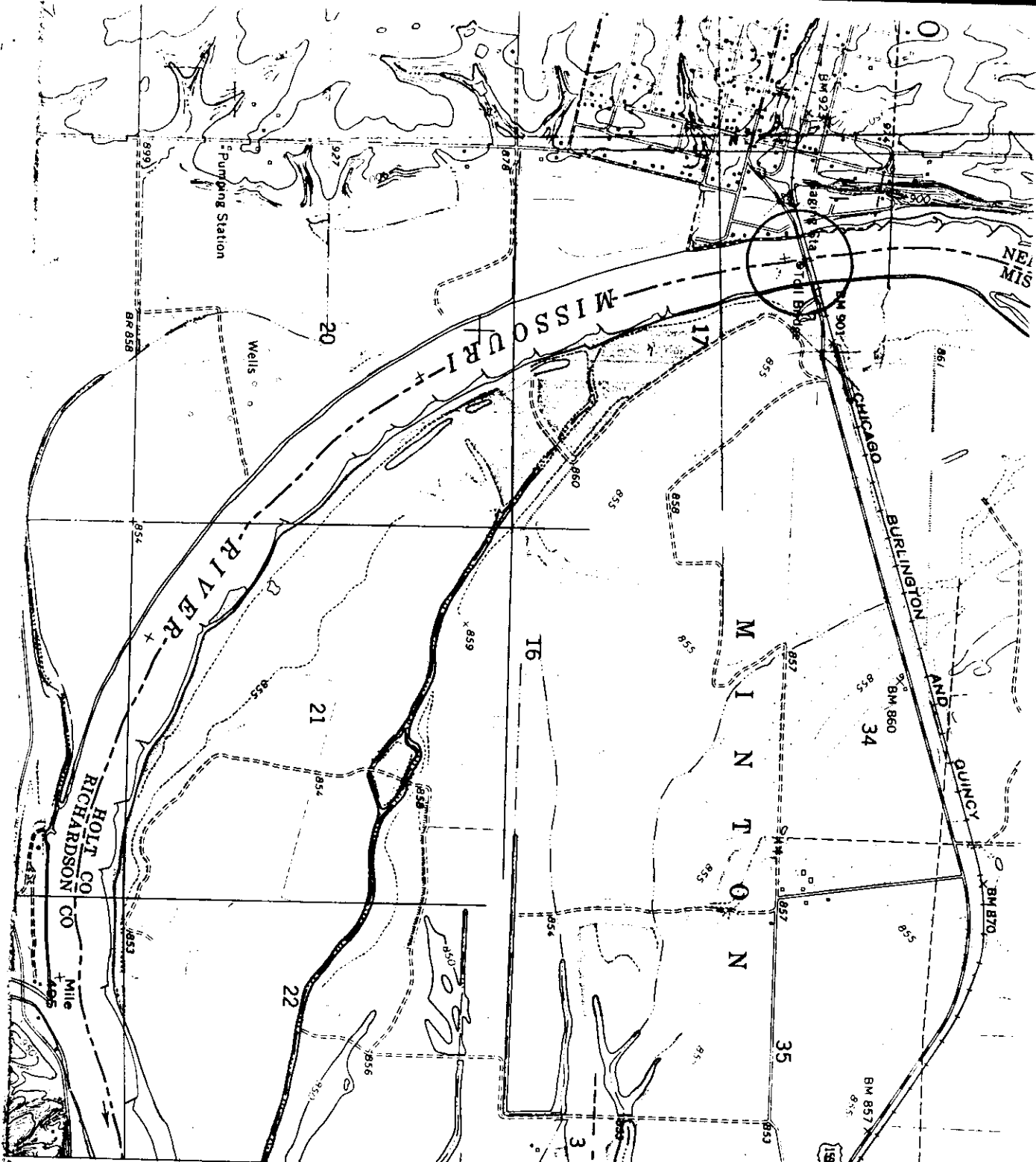
Boundary Justification

The nominated structure includes the bridge's superstructure, substructure, floor system, any approach spans and the property on which they rest. These boundaries encompass, but do not exceed, all of the property that has been historically associated with this bridge.

___ See continuation sheet

11. Form Prepared By

| | | | |
|-----------------|--|-----------|--------------|
| name/title | Demian Hess, Research Historian | date | 30 June 1991 |
| organization | Fraserdesign and Hess, Roise and Company | telephone | 303-669-7969 |
| street & number | 1269 Cleveland Avenue | zip code | 80537 |
| city or town | Loveland state Colorado | | |



NEHBS # RH00-66)
 RICHARDSON COUNTY
 LTM:

15.293530.4436350

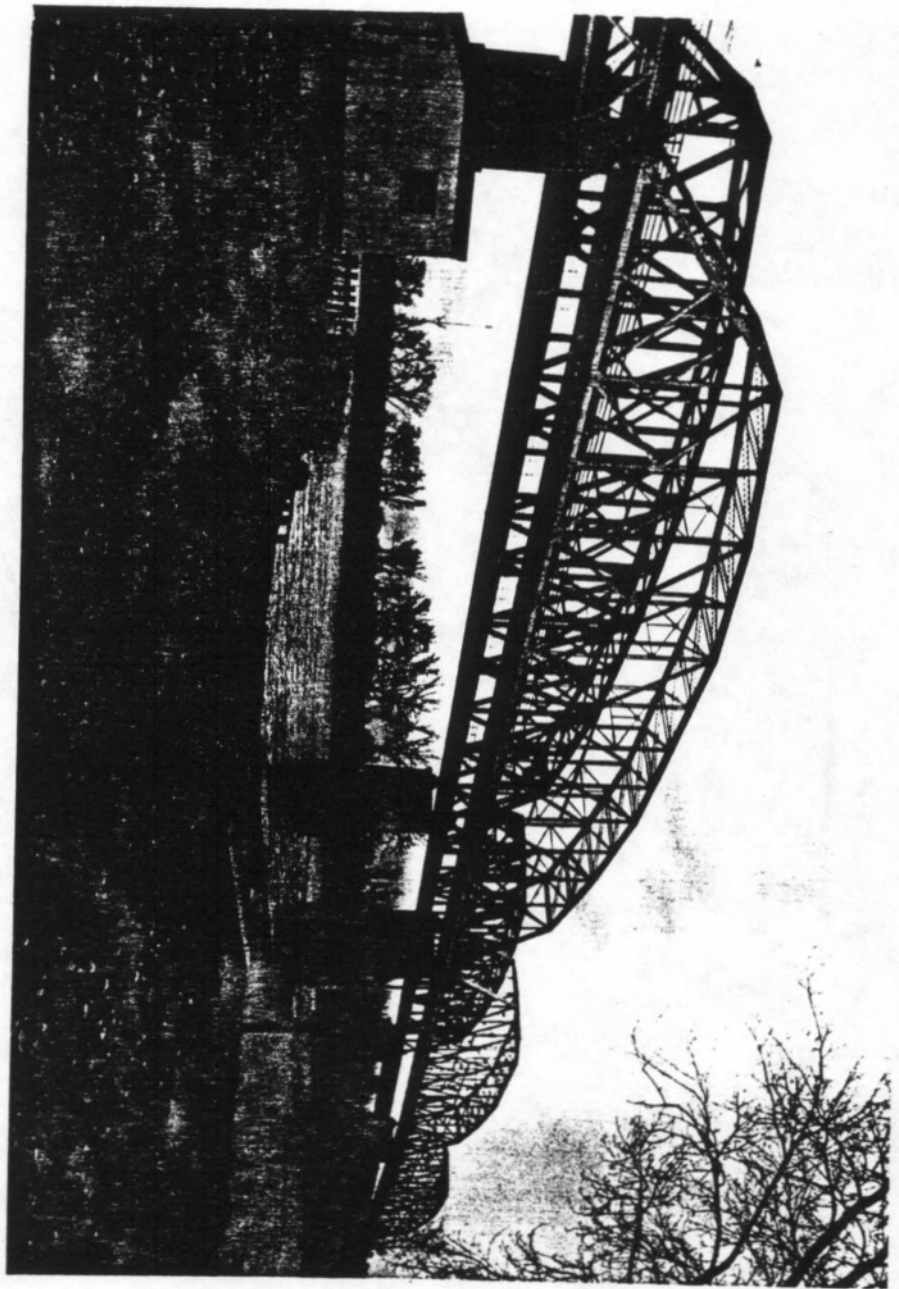
CRAIG (U.S. 59) 12 M (CRAIG 1964)

T. 61 N.
 T. 60 N.

2'30"

4434

4433



RULO BRIDGE - NEHBS # RH00-66
RULO VICINITY, RICHARDSON CO., NEBR
DEMIAN HESS
13 MARCH 1990
ORIGINAL NEG. LOCATED AT NESHPD
VIEW; LOOKING NE