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**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM**

(Type all entries - complete applicable sections)

STATE:	IOWA
COUNTY:	LYON
FOR NPS USE ONLY	
ENTRY DATE	OCT 18 1974

1. NAME

COMMON: Melan Bridge

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER: E of Rock Rapids in Emma Sater Park, Iowa Highway Nine East

CITY OR TOWN: Rock Rapids vicinity

CONGRESSIONAL DISTRICT: Sixth

STATE: Iowa

CODE: 14

COUNTY: Lyon

CODE: 119

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Site <input type="checkbox"/> Object <input type="checkbox"/> Building <input checked="" type="checkbox"/> Structure	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Both	Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered	<input type="checkbox"/> Occupied <input type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input checked="" type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify)

4. OWNER OF PROPERTY

OWNER'S NAME: City of Rock Rapids

STREET AND NUMBER: 310 South Third Avenue

CITY OR TOWN: Rock Rapids

STATE: Iowa

CODE: 14

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.: City Offices

STREET AND NUMBER: 310 South Third Avenue

CITY OR TOWN: Rock Rapids

STATE: Iowa

CODE: 14

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:

DATE OF SURVEY: Federal State County Local

DEPOSITORY FOR SURVEY RECORDS:

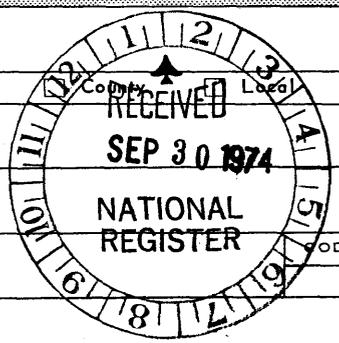
STREET AND NUMBER:

CITY OR TOWN:

STATE:

CODE:

SEE INSTRUCTIONS



STATE:

COUNTY:

ENTRY NUMBER: OCT 18 1974

DATE:

FOR NPS USE ONLY

7. DESCRIPTION

CONDITION

(Check One)

Excellent Good Fair Deteriorated Ruins Unexposed

(Check One)

Altered Unaltered

(Check One)

Moved Original Site

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

Still in excellent condition, the arch-shaped Melan Bridge in Emma Sater Park is made of reinforced concrete. Its span is thirty feet and roadway sixteen feet. The arch of the spandrel rises three feet and at its crown is six inches thick.

Two stone posts at each end support a double bar gas pipe hand rail, part of which has been replaced.

The side walls of the structure are faced in Sioux Falls Jasper stone. Beneath the facing is the reinforced concrete composed of one part cement, two parts sand, four parts broken Jasper and five four-inch I-beams.

The Melan Bridge rests only a few miles from its original location over Dry Creek near Rock Rapids. Due to its narrow roadway, the bridge was considered unfit for automobile traffic and was therefore removed.



SEE INSTRUCTIONS

SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

- | | | | |
|--|---------------------------------------|--|---------------------------------------|
| <input type="checkbox"/> Pre-Columbian | <input type="checkbox"/> 16th Century | <input type="checkbox"/> 18th Century | <input type="checkbox"/> 20th Century |
| <input type="checkbox"/> 15th Century | <input type="checkbox"/> 17th Century | <input checked="" type="checkbox"/> 19th Century | |

SPECIFIC DATE(S) (If Applicable and Known) 1893-1894

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Aboriginal | <input type="checkbox"/> Education | <input type="checkbox"/> Political | <input type="checkbox"/> Urban Planning |
| <input type="checkbox"/> Prehistoric | <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Philosophy | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Historic | <input type="checkbox"/> Industry | <input type="checkbox"/> Science | _____ |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Invention | <input type="checkbox"/> Sculpture | _____ |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Social/Humanitarian | _____ |
| <input type="checkbox"/> Art | <input type="checkbox"/> Literature | <input type="checkbox"/> Theater | _____ |
| <input type="checkbox"/> Commerce | <input type="checkbox"/> Military | <input type="checkbox"/> Transportation | _____ |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Music | | |
| <input type="checkbox"/> Conservation | | | |

STATEMENT OF SIGNIFICANCE

Built in 1893-1894 the Melan Bridge in Rock Rapids is considered to be probably the third reinforced concrete bridge of arched design to have been built in the United States. Austrian Joseph Melan, after whom the bridge is named, was a contemporary pioneer in the use of reinforced concrete. His official representative and holder of the Melan patent, Frederick von Emberger, provided Lyon County supervisors with the design of the structure. The significance and authenticity of the Melan Bridge are recognized by the Smithsonian Institution in Washington, D. C., where a model of it is displayed. Also, the bridge has been featured in such publications as the Cornell Civil Engineer, Modern Concrete Magazine, Concrete Industry News and The Central Contractor.

The construction of the Melan Bridge was supervised by W. S. Hewett of Minnesota, who chose the Melan design, and local contractor John Olsen. Cement was imported from Germany and purchased at Rock Rapids for \$3.25 per barrel. Total cost of the project was approximately \$1,000.00. This figure was thought very reasonable considering the advantages that such "modern" materials as concrete and steel have over alternative, more accessible materials.



SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Letter, Eugene F. Olsen, July, 1959; Letter, Robert M. Vogel, August 19, 1959
 Lyon County Reporter Records, Rock Rapids, Iowa
 Board of Supervisors Records, Lyon County, Iowa
 Menser, Wm., "The Development of Reinforced Concrete Bridge Construction"
Cornell Civil Engineer, Volume 33, Issue 8, page 161, May, 1925
Engineering News, October 3, 1895, page 214
2nd Annual Report, Iowa State Highway Commission, 1915, page 55
Modern Concrete Magazine, issues of June and November, 1964
Concrete Industry News, June, 1964
The Central Contractor, April, 1957 and June, 1964

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds	
NW	0 . .	0 . .		96 9 19	43 25 49	
NE	0 . .	0 . .				
SE	0 . .	0 . .				
SW	0 . .	0 . .				

14/73026L
4812310
CO

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: Less than one acre

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE



SEE INSTRUCTIONS

11. FORM PREPARED BY

NAME AND TITLE: Robert L. Sullivan

ORGANIZATION: _____ DATE: September 1974

STREET AND NUMBER: _____

CITY OR TOWN: Alvord STATE: Iowa CODE: 14

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National State Local

Name Adrian D. Anderson

Title Historic Preservation Officer

Date 9/23/74

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Adrian D. Anderson
 Director, Office of Archeology and Historic Preservation

Date 10/18/74

ATTEST:

Ronald M. Greenberg
 Keeper of The National Register

Date 10/17/74