

COPY

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 for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an 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 entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Southwest Fifth Street Bridge

other names/site number _____

2. Location

street & number SW Fifth Street (Jackson Street) over Raccoon River not for publication

city or town Des Moines vicinity

state Iowa code IA county Polk code 153 zip code 50318

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, 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. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Patricia Chubb King DSHPO 4-7-98
Signature of certifying official/Title Date

STATE HISTORICAL SOCIETY OF IOWA

State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the 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): _____

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	sites
1	0	structures
0	0	objects
1	0	Total

Name of related multiple property listing

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

Highway Bridges of Iowa

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

TRANSPORTATION/road-related

Current Functions

(Enter categories from instructions)

TRANSPORTATION/road-related

7. Description

Architectural Classification

(Enter categories from instructions)

other: pinned Pratt through truss

Materials

(Enter categories from instructions)

foundation Stone

walls

roof

other Steel

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets)

Located in Des Moines, the Southwest Fifth Street Bridge spans Raccoon River in an urban setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: 3	construction date: 1898
span length: 135.0'	construction cost: \$19,000.00 (contract amount)
total length: 401.0'	current condition: fair
roadway wdt.: 30.0'	alterations: extensive deck, lower chord and abutment repairs

superstructure: steel, 6-panel, pin-connected Pratt through truss
 substructure: stone abutments; concrete-filled steel cylinder piers
 floor/decking: asphalt-covered timber deck on steel stringers
 other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with lacing; diagonal: 2 punched rectangular eyebars; strut: angle with angle bracing between; floor beam: riveted plate girder; guardrail: steel pipe, wire rope outside of sidewalk; portal strut: angles with bracing and angle knee braces; timber-floored sidewalk cantilevered on down-stream side

Other than maintenance-related repairs and alterations, the bridge remains essentially unaltered as it continues to carry vehicular traffic. The Southwest Fifth Street Bridge today retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association.

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.

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 of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on continuation sheets.)

Areas of Significance

(Enter categories from instructions)

ENGINEERING

Period of Significance

1898

(The period of significance is derived from the original construction date.)

Significant Dates

1898 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

designer:

Des Moines City Engineer

fabricator:

Jones and Laughlin Steel Company

builder:

J.H. Killmar, Des Moines IA

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

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:

10. Geographical DataAcreage of Property less than one acre**UTM References**

(Place additional UTM references on a continuation sheet)

1 15 448360 4602790
zone easting northing2 15 448490 4602790
zone easting northing**Verbal Boundary Description**

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 32 feet by 401 feet, which is centered on the UTM point(s) listed above. Included within this rectangular parcel are the bridge's superstructure, substructure, approach spans and floor system.

Boundary Justification

(Explain why the boundaries were selected)

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 the bridge.

11. Form Prepared Byname/title Michelle Crow-Dolby and Clayton Fraserorganization Fraserdesign date 31 August 1994street & number 1269 Cleveland Avenue telephone 303-669-7969city or town Loveland state Colorado zip code 80537**Additional Documentation**

Submit the following items with the completed form:

Continuation Sheets**Maps**A **USGS map** (7½ or 15 minute series) indicating the property's locationA **Sketch map** for historic districts and properties having large acreage or numerous resources**Photographs**Representative **black and white photographs** of the property**Additional items**

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO)

name/title City of Des Moinesstreet & number 400 East First Street telephone 515-284-4747city or town Des Moines state Iowa zip code 50309

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. 470 *et seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 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 Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section Number 8 Page 1 Southwest Fifth Street Bridge Polk County; Iowa

Spanning the Raccoon River in the city of Des Moines, the 1898 Southwest Fifth Street Bridge has enjoyed a long and polemic history. Featuring a timber deck and timber sidewalk cantilevered on the downstream side, the pinned Pratt through truss is supported by stone abutments and concrete-filled steel cylinder piers. From its inception in 1896, the Raccoon River Bridge has generated both fervent debates and landmark decisions. At that point in Des Moines' history, the various rivers and streams acted as formidable obstacles to city dwellers and farmers alike. Bridges and the funds to build them were scarce commodities. Land owners understood the commercial benefits of bridging two areas of land, which, when left isolated by an uncrossable waterway, maintained a lower market value. Therefore, when the city council discovered \$30,000.00 unappropriated in the bridge fund, a spirited contest to see which area of town would secure the bridge was launched.

The two main parties involved in this debate were the East Side interests and the West Side interests. The "East-Siders" wanted an East Sixth Street bridge across the Des Moines River in order to establish connections with the growing southern part of the city and its agricultural region. Conversely, "West-Siders" wanted to connect the west and south side business centers with a Southwest Fifth Street bridge across the Raccoon River. People supportive of a new bridge across the Des Moines River were split into several factions, each group desirous of a span close to where they lived, and consequently, they did not pose a concentrated threat to the West-Siders. Led by the Clifton Land Company, owner of considerable portions of south Des Moines, the Raccoon River bridge defenders, on the other hand, presented a stronger, more unified appeal to the city council during bridge location deliberations.

Local newspapers provided a popular forum for the opposing sides with each given turns to justify their reasons for needing a bridge either over the Raccoon or the Des Moines. Quoted in **Plain Talk**, an east-side supporter explained, "There is some need of a bridge across the Des Moines river at East Sixth Street, and also one across that river above the dam. But for another bridge over the 'Coon there is not the least particle of necessity. There is certainly no public demand for it." Additionally, East-Siders expressed that "This is a very desirable improvement (bridge over the Des Moines River). It will enable people from the country to come into the city without making a long detour to either of the west side bridges or even the East Ninth Street bridge. It is doubtful if any other bridge that can now be put over either river can be so beneficial to both city and country as the one proposed." Ultimately, though, the consolidated effort of the Clifton Land Company won its venture and they were granted a bridge over the Raccoon River, on the condition that the property owners furnish the structure's approaches and provide financial bonds to protect the city from damage.

By July 1896 city council members were ready to advertise for competitive bridge construction proposals and eventually numerous sealed bids were received. Low-bidder at \$19,000.00, J.H. Killmar was awarded the contract to erect the new Southwest Fifth Street Bridge. The second conflict surrounding the bridge thus developed. It was common practice for certain bridge builders to participate in "combines" or informal cliques of builders who

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Section Number 8 Page 2 Southwest Fifth Street Bridge Polk County; Iowa

would take part in the unethical and illegal practice of bid-rigging. Builders, prior to their submittal of "competitive" bids, would appoint several high bidders and one low bidder for each project. In this fashion, they could predict who would win the project, the low-bidder, and each contractor would take turns submitting the lowest bid for various projects. The only snag in this plan is that all contractors bidding on a project must be members of the combine for the scheme to work successfully. The combine's strategy did not work with the Southwest Fifth Street bid, because J.H. Killmar was an independent contractor and cleverly underbid the entire combine and consequently received the prestigious contract.

Serious about sending Killmar a message and mad about being outwitted, the bridge combine, under the guise of C. Jenney, "a private citizen and taxpayer", sued both Killmar and the city council. The companies alleged, among other things, that the city's plans and specifications were not detailed enough to produce similar yet competitive bids. A confident Killmar confided to a **Leader** reporter his feelings about the case, "I think Jenney is a figurehead plaintiff for the bridge combine, and that the George King Bridge Company, which bid next to me, is the real plaintiff. I am sure my plans and strain sheets are correct and that the specifications on which we (all the bidders) figured (our bids) were all that could be desired, and (I) do not anticipate that the suit will amount to much." After a lengthy and complicated court case the lower court ruled in favor of the bridge consortium and enacted an injunction prohibiting the council from validating Killmar's contract. The city and Killmar immediately appealed the case to the Supreme Court, which, after reviewing the arguments, dramatically overruled the lower court's decision and allowed Killmar to build the bridge for \$19,000.00. "Everything was found square and above the board, and the specifications prepared by the city engineers were sufficiently comprehensive to serve the purpose of the call for bids," the **Capital** announced after the verdict was made public, under the banner headline "Killmar Builds It!". Three days after the Supreme Court's October 20, 1897, ruling, Killmar commenced with construction on the now-notorious span. Using steel components rolled in Pittsburgh by Jones and Laughlin Steel Company, in addition to coping with bad weather and late shipments of bridge materials, he finally completed the three-span through truss on June 17, 1898.

The Southwest Fifth Street Bridge ranks among Iowa's most significant vehicular spans. A well-preserved, 19th century example of pinned truss construction, the bridge is further distinguished as one of Iowa's few remaining pinned Pratt through trusses with three or more spans. The bridge's greatest significance, though, derives from the rarity of such structures in urban settings. As one of only three pinned through trusses located in an urban setting, the Southwest Fifth Street Bridge is exceptionally important in its representation of early urban wagon bridge construction. The truss is equally important to the broad patterns of history in Des Moines and Polk County, for two reasons. One, because of its association with events surrounding the history of bridge construction practices and organized bridge "combines", and two, for its involvement in the intense competition between various geographical areas of Des Moines for transportation improvements during the prosperous years in the late 1800s.

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Section Number 9 Page 3 Southwest Fifth Street Bridge Polk County; Iowa

Iowa Department of Transportation, Structure Inventory and Appraisal: Structure No. 004041.

Johnson Brigham, *History of Des Moines and Polk County, Iowa* (Chicago: S.J. Clarke Publishing Company, 1911).

City of Des Moines Structure Inventory and Appraisal, located at the Des Moines City Hall, Des Moines IA.

Supreme Court of Iowa, January Term, 1897, Appeal from Polk District Court, Appellants Abstract of Record, pages 62-91.

Leader, (27 March 1896); "Bridge Case Tangled," (10 April 1896); (11 April 1896); (22 April 1896); (2 June 1896); "To Enjoin the City," (11 August 1896); "Fifth Street Bridge," (11 August 1896); "Bridge Case Postponed," (16 August 1896); (16 August 1896); "Sixth Street Bridge Fight," (18 August 1896); "Fifth Street Bridge Enjoined," (28 August 1896); (27 August 1896); (28 August 1896); "Killmar Will Build It," (21 October 1896); "Had a Narrow Escape," (21 October 1897); (22 October 1897); (8 January 1898); (17 February 1898); "Fifth Street Bridge," (3 February 1898); "South-Siders Kicking," (12 February 1898); (24 March 1898); (6, 8, 17 June 1898).

Des Moines News, (28 March 1896).

Des Moines Capital, (9 April 1896); "Des Moines Bridges," (28 August 1896); "Killmar Ordered to Go Ahead," (23 October 1897).

Des Moines Daily News, (9 April 1896).

Iowa State Register, (9 April 1896).

Plain Talk, "A Bridge That's Not Wanted," (25 April 1896); "Local and General," (11 July 1896); (29 August 1896); (23 October 1897); (16 July 1898).

Daily Iowa Capital, "Proposals for Iron Bridge and Abutments," (6 July 1896); "Killmar Builds It," (20 October 1897).

The Des Moines Register, "D.M. Bridges Show Wear, Tear of Time," (14 April 1951).

Letter from Lowell J. Soike, Ph.D., Historian, Bureau of Historic Preservation, to Randall B. Faber, Historic Preservation Specialist, Iowa Department of Transportation, dated 21 October 1991.

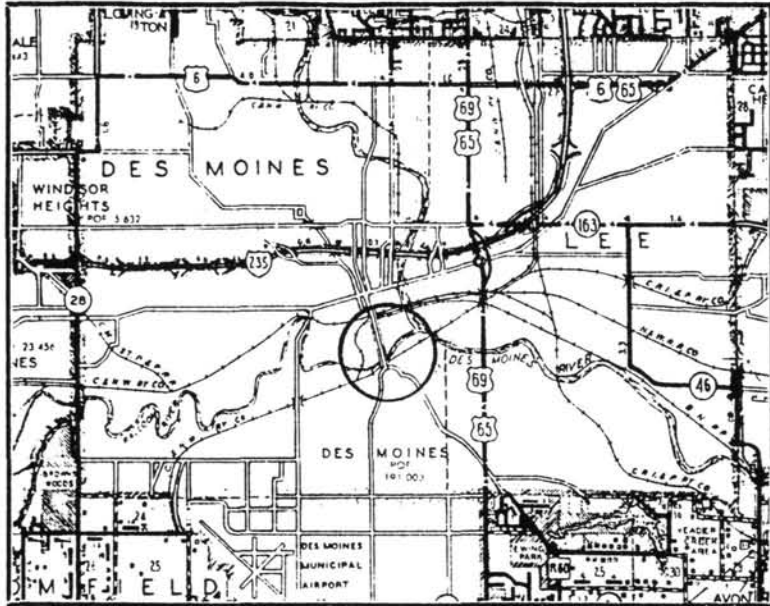
Preliminary Determination of NRHP Eligibility for the Iowa Historic Bridge Inventory, produced by Fraserdesign, 30 August 1991.

Engineering Report for the SW 5th Street Bridge over the Raccoon River, prepared by Terry Shuck, Structural Engineers, Inc., Des Moines IA, for Harold Smith, P.E..

Field inspection by Clayton B. Fraser, 23 August 1991;

NAME(S) OF STRUCTURE

Southwest Fifth Street Bridge (Raccoon River Bridge)

PHOTOS AND SKETCH MAP OF LOCATION**LOCATION MAP**

TAKEN FROM IOWA DEPARTMENT OF TRANSPORTATION
HIGHWAY AND TRANSPORTATION MAP

SOURCES

Iowa Department of Transportation, Structure Inventory and Appraisal: Structure Number 004041; **History of Des Moines and Polk County, Iowa**, Johnson Brigham, Chicago: S.J. Clarke Publishing Company, 1911; City of Des Moines Structure Inventory and Appraisal, located at the Des Moines City Hall, Des Moines IA; field inspection by Clayton B. Fraser, 23 August 1991; **Supreme Court of Iowa, January Term, 1897, Appeal from Polk District Court**, Appellants Abstract of Record, pages 62-91; **Leader**, no title, n.p. (27 March 1896), "Bridge Case Tangled," n.p. (10 April 1896), no title, n.p. (11 April 1896), no title, n.p. (22 April 1896), no title, n.p. (2 June 1896), "To Enjoin the City," n.p. (11 August 1896), "Fifth Street Bridge," n.p. (11 August 1896), "Bridge Case Postponed," n.p. (16 August 1896), no title, n.p. (16 August 1896), "Sixth Street Bridge Fight," n.p. (18 August 1896), "Fifth Street Bridge Enjoined," n.p. (28 August 1896), no title, n.p. (27 August 1896), no title, n.p. (28 August 1896), "Killmar Will Build It," n.p. (21 October 1896), "Had a Narrow Escape," n.p. (21 October 1897), no title, n.p. (22 October 1897), no title, n.p. (8 January 1898), no title, n.p. (17 February 1898), "Fifth Street

INVENTORIED BY

Michelle Crow-Dolby and Clayton Fraser

AFFILIATION

Fraserdesign, Loveland CO

DATE

10 May 1993

