

United States Department of the Interior
National Park Service



169

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 (NPS Form 10-900a).

1. Name of Property

Historic name O. S. Warden Bridge
Other names/site number 24CA401/MDT Identification No. P00060094+08282

2. Location

street & number Tenth Avenue South crossing of Missouri River N/A not for publication
city of town Great Falls N/A vicinity
State Montana code MT county Cascade code 013 zip code 59404

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 at the following level(s) of significance:

national statewide local

Mark F. [Signature]
Signature of certifying official

FEBRUARY 10, 2012
Date

STATE HISTORIC PRESERVATION OFFICER
Title

MONTANA STATE HISTORIC PRESERVATION OFFICER
State or Federal agency and bureau

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

Signature of commenting official

Date

Title

State or Federal agency and bureau

4. National Park Service Certification

I, hereby, certify that this property is:

Signature of the Keeper

Date of Action

- 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:)

[Signature] 3/20/2012

O. S. Warden Bridge
 Name of Property

Cascade County, Montana
 County and State

5. Classification

Ownership of Property
 (Check as many boxes as apply)

Category of Property
 (Check only one box)

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

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

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

Contributing	Noncontributing	
		buildings
		sites
1		structures
		Objects
		buildings
1	0	Total

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

Number of contributing resources previously listed in the National Register

Montana's Historic Steel Stringer and Steel Girder
 Bridges, 1901-1961

N/A

6. Function or Use

Historic Functions
 (Enter categories from instructions)

TRANSPORTATION/Road-related (vehicular) =
 Bridge

Current Functions
 (Enter categories from instructions)

TRANSPORTATION/Road-related (vehicular) =
 Bridge

7. Description

Architectural Classification
 (Enter categories from instructions)

OTHER: Steel Girder Bridge

Materials
 (Enter categories from instructions)

foundation: CONCRETE, METAL: Steel

walls:

roof:

other: METAL: Steel, CONCRETE

O. S. Warden Bridge

Name of Property

Cascade County, Montana

County and State

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

The O. S. Warden Bridge consists of one contributing structure, a multi-span steel girder structure constructed in 1951. The bridge crosses the Missouri River on Tenth Avenue South in Great Falls, Montana. The bridge is 2,093 feet long and 38.5 feet wide. A second structure of nearly equal length built in 1983 is located adjacent to it. For many years, the Warden Bridge was the longest bridge in Montana. It is an excellent example of a steel girder bridge and the first to use hammerhead type concrete piers in its construction. The bridge opened up Tenth Avenue South for commercial development and the setting of the bridge is still largely commercial.

Narrative Description

The O. S. Warden Bridge is located on Tenth Avenue South about one mile east of the Interstate 15 interchange in Great Falls, Montana. The bridge crosses the Missouri River and the BNSF Railway Company's branch line to Helena. It is also located just a few hundred feet from the confluence of the Missouri and Sun rivers. Great Falls derived its name from the Great Falls of the Missouri River. The area, comprised of late Cretaceous sediments called the Fort Union Formation, was previously located underwater both during the Cretaceous and again, under Glacial Lake Great Falls, during the Pinedale ice age about 15,000 years ago. The Adel Mountains to the south are the remnants of a volcanic pile that erupted about 55 million years ago. The Highwood Mountains to the east are also a volcanic intrusion. The area presently encompassing the bridge displays a mixture of commercial and light industrial, and recreational use.¹

The O. S. Warden Bridge crosses the Missouri River, River Road, and the BNSF Railway Company tracks on Tenth Avenue South in Great Falls. The bridge is 2093 feet in length and 38.5 feet wide with a roadway width of 28 feet. The bridge consists of six steel girder main spans with an overall length of 935 feet. The main spans consist of five 150-foot spans and one 185-foot span. There are 20 steel stringer approach spans on the east end of the bridge and one reinforced concrete T-beam tower approach span on the west end of the bridge. The approach spans alternate between 51-foot and 64-foot spans. The substructure is comprised of two full-height reinforced concrete abutments. All but four of the spans are supported by reinforced concrete hammerhead-type abutments; there are also four skewed open columnar-type abutments on the east end of the bridge to accommodate River Drive and the railroad tracks.

The main spans are comprised of two steel girders with angle section flanges and stiffeners riveted to the steel beams of the spans. The girders are connected by steel girder floor beams at the piers; they, too, have angle section flanges and stiffeners riveted to them. There are also angle section sway and bottom lateral braces under the deck. The concrete slab deck is supported by steel I-beam stringers, flanked by raised concrete sidewalks and the steel post-and-baluster guardrails standard to MDT-built bridges during the 1950s. The sidewalks overhang the girders and are supported by steel I-beam brackets.

Twenty of the 21 approach spans are steel I-beam stringer structures. The concrete slab decks are supported by five lines of steel I-beam stringers. The decks overhang the stringers and are supported by concrete brackets. The decks on the approach spans are also flanked by raised concrete sidewalks with the ubiquitous steel post-and-baluster guardrails. The approach span on the west is an 85-foot reinforced concrete T-beam tower-type span. The span consists of four lines of concrete girders enclosed in a box consisting of concrete web walls with decorative grooves on the exterior. The boxes are filled with rubble.

Integrity

The O. S. Warden Bridge retains excellent integrity and is a good example of the type of steel girder bridges designed and built by the Montana Highway Department in the post-World War II years. All of the structural components standard to the type are intact and unchanged, including the distinctive web-stiffened girders and the concrete hammerhead piers. The original guardrails are still intact. In 1983, the highway department built a two-lane steel stringer bridge next to the Warden Bridge to facilitate traffic on Tenth Avenue South. That bridge is structurally compatible to the older bridge and does not significantly diminish its integrity.

¹ David Alt and Donald W. Hyndman, *Roadside Geology of Montana*, (Missoula: Mountain Press Publishing, 1991), 270-271.

O. S. Warden Bridge
Name of Property

Cascade County, Montana
County and State

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

Transportation

Period of Significance

1951-1961

Significant Dates

1951

Significant Person

(Complete only if Criterion B is marked above)

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.

Cultural Affiliation

Architect/Builder

Montana Highway Department

Anderson Construction Company

Period of Significance (justification)

The Period of Significance encompasses the construction date of the bridge, continuing through the historic period until 1961 and its subsequent function as a river crossing on Tenth Avenue South in Great Falls, Montana. The bridge remains in use.

Criteria Considerations (explanation, if necessary)

O. S. Warden Bridge

Cascade County, Montana

Name of Property

County and State

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

The O. S. Warden Bridge can be listed on the National Register of Historic Places under Criteria A and C. The bridge is representative of the Montana Highway Department's attempts to improve and expand the state's highway system in the wake of World War II. The bridge, moreover, was once the longest bridge in the state and is responsible for the development of Tenth Avenue South as a significant commercial area in the 1950s and 1960s. The bridge is an excellent example of a steel girder bridge that incorporates some new design elements that weren't previously utilized in long-span bridges of this type in Montana.

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

The O. S. Warden Bridge is eligible for listing in the National Register of Historic Places under Criterion A for its association with the Montana Highway Department's post-World War II construction programs to modernize the state's transportation system and provide roads and bridges in the state's urban areas. The bridge was the longest and most expensive project undertaken by the department up to 1951. Its importance to the department's programs manifested itself in the high elevation of the project and the unprecedented reports made about the progress of the structure at the Montana State Highway Commission's monthly meetings. The bridge is also significant for the impact it had on the post-war development of Great Falls. Prior to the completion of the bridge, Tenth Avenue South dead-ended at the river and was the site of railroad warehouses, light industrial businesses, a few motels and restaurants, and numerous residences. The bridge made Tenth Avenue South a through route on US Highways 87 and 89 and, in 1967, connected to Interstate 15. Consequently, commercial development of the street boomed, diverting businesses from the downtown area to Tenth Avenue South. The street became a heavily developed commercial strip and included one of the first indoor shopping malls built in Montana. It also allowed the residential development of the south and east ends of Great Falls. The O. S. Warden Bridge facilitated that development and is probably the best example of the type of impact a bridge could have on the post-war growth of an urban center in Montana.

The bridge is an excellent and intact example of the type of steel girder bridge designed and built by the Montana Highway Department in the years following World War II. It retains all the standard components common to the type which remain intact and unchanged. The bridge also includes 21 steel stringer approach spans resting on concrete hammerhead piers – a design that was new to the Montana Highway Department when the bridge was built. At 2093 feet, it was the longest bridge in the state until surpassed by the Lake Kookanusa Bridge in 1971. Increasing traffic demands on Tenth Avenue South and Interstate 15 caused the highway department to construct a two-lane steel stringer bridge next to the Warden Bridge in 1983. At 2,122 feet, it is 29 feet longer than the Warden Bridge. However, the design of the new structure is structurally compatible to the Warden Bridge and does not detract significantly from the older structure. The bridge is an excellent example of a steel girder bridge and is eligible for the National Register under Criterion C.

Engineering Significance

At 2093 feet in length, the O. S. Warden Bridge was the longest bridge in Montana until surpassed by the Lake Kookanusa Bridge in northwest Montana in 1971 (2,437 feet). It is the longest and most massive steel girder bridge in the state and incorporates several design elements, such as the hammerhead piers, that were new to bridge structures in the state. The bridge was also part of an extensive program by the Montana Highway Department to build bridges in urban areas in the years after World War II. In the case of the Warden Bridge, the structure significantly changed transportation patterns on US Highway 89 and within the City of Great Falls, resulting in an explosion of commercial development along Tenth Avenue South. Even today (2011), Great Falls' commercial core is centered on the Tenth Avenue South and the new business developments west of the bridge just off of Interstate 15. The Warden Bridge remains a significant arterial in Montana's third largest city.

O. S. Warden Bridge
Name of Property

Cascade County, Montana
County and State

Developmental history/additional historic context information (if appropriate)

Many of the big bridges designed and built by the Montana Highway Department after World War II were located in proximity to the state's major urban centers to improve access to them from the surrounding rural areas and to improve trade networks between Montana's cities and towns. In 1948 and 1949, the commission let contracts to build new bridges near Butte, Missoula, and Billings. One of the most important of these projects was a new bridge across the Missouri River at Great Falls, which had a profound effect, permanently altering its pattern of development by creating a new entrance to the city. Before 1951, the Second Avenue North Bridge provided the only access to Great Falls from west of the river. Tenth Avenue South consisted of a scattering of warehouses, tourist cabin camps, auto repair shops, and working-class dwellings. Within a decade after the completion of the bridge, this street in the "Electric City" transformed into one the state's busiest thoroughfares, lined with stores, service stations, restaurants, and, by 1959, one of Montana's first shopping malls. Where Tenth Avenue South once dead-ended at the Missouri River, it now provided access to two major highways and the expanding Malmstrom Air Force base.²

On 29 June 1949, the highway commission let a contract for the construction of a "1,007.4-foot steel and concrete bridge over the Missouri River, and a 1,085.4-foot steel and concrete viaduct and overpass over the Great Northern Railway" in Great Falls. The highway commissioners called it the "largest bridge and structural contract that this department has ever handled." The Anderson Construction Company of Great Falls underbid its competitors by \$221,000 to build the \$1.7 million structure, the most expensive bridge built by the highway department up to that time. Anderson was able to bid low on the project because steel prices were low. The company paid 22¢ per pound for the 1,192.5 tons of structural steel needed for the bridge. The 2,093-foot bridge consists of six steel girder main spans, twenty steel stringer approach spans and one reinforced concrete T-beam tower approach span. The approaches rest on reinforced concrete hammerhead piers, the first of that design built in Montana. Instead of the standard ten-foot driving lanes, the bridge carries two fourteen-foot driving lanes over the river. Truly a Great Falls product, the Anderson Construction Company built the bridge and HGR Construction Company of the Electric City built the approach roads.³

The highway commission's new long-range plan to improve intra-and-interstate travel and commerce manifested itself in the O. S. Warden Bridge, named for Oliver S. Warden, former publisher of the *Great Falls Tribune* and member of the highway commission from 1924 to 1936 who was a tireless advocate of improved roads and bridges. Dedication of the structure took place during the city's annual Fall Festival on September 15, 1951. Warden's widow, Eleanor, and son, Jock, cut the ribbon to the structure, opening up what would be one of the most important bridges built in Montana during the twentieth century. Great Falls Chamber of Commerce president Ray Welter called the bridge a "lasting monument to the loyalty and vision of community leaders with a burning desire to serve their fellow men." The bridge provided a new entrance to Great Falls off U.S. Highway 87 and 89 (and later Interstate 15) and facilitated the shipment of goods between eastern and western Montana via Montana Highway 200.⁴

9. Major Bibliographical References

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

"\$1,257,319 Project to Create New Entrance to Falls." *Great Falls Tribune*, 30 June 1949.

Alt, David and Donald W. Hyndman. *Roadside Geology of Montana*. (Missoula: Mountain Press Publishing, 1991).

Axline, Jon. *Conveniences Sorely Needed: Montana's Historic Highway Bridges, 1860-1956*. (Helena: Montana Historical Society, 2005).

² Sanborn Fire Insurance Company Maps: Great Falls, Montana, 1929, 1950, 1957. Montana Historical Society, Helena.

³ Montana Highway Commission Book 9, 398, 407, 409 (29 June 1948); "\$1,257,319 Project to Create New Entrance to Falls." *Great Falls Tribune*, 30 June 1949.

⁴ *Ibid*, 10, 274 (10 May 1951); "Bonner Cites Warden's Road Vision," *Great Falls Tribune*, 15 September 1951; Montana Highway Commission, Book 10, 309-310 (11 January 1949); "O.S. Warden Bridge Dedication Features Second Day of Fall Festival," *Great Falls Tribune*, 14 September 1951; "Bonner Cites Warden's Road Vision," *Great Falls Tribune*, 15 September 1951.

O. S. Warden Bridge
Name of Property

Cascade County, Montana
County and State

"Bonner Cites Warden's Road Vision." *Great Falls Tribune*, 15 September 1951.

Bridge Condition Survey No. 107-0917-0009. Montana Department of Transportation. Helena, Montana.

Bridge Inspection Record No. P00060094+08282. Montana Department of Transportation. Helena, Montana.

Montana State Highway Commission Meeting Minute Books. Montana Department of Transportation. Helena, Montana.

"O.S. Warden Bridge Dedication Features Second Day of Fall Festival." *Great Falls Tribune*, 14 September 1951.

Sanborn Fire Insurance Company Maps: Great Falls, Montana, 1929, 1950, 1957. Montana Historical Society. Helena, Montana.

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: Montana Department of Transportation

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property 5.0
(do not include previously listed resource acreage)

UTM References

(Place additional UTM references on a continuation sheet)

1 12 476410 5260017
Zone Easting Northing

3 _____
Zone Easting Northing

2 _____
Zone Easting Northing

4 _____
Zone Easting Northing

Verbal Boundary Description (describe the boundaries of the property)

The boundary for the O. S. Warden Bridge measures 2,200 x 40 feet. The rectangle encompasses the bridge and its approaches and provides a slight buffer on both sides of the Missouri River. The boundary is centered on the bridge.

O. S. Warden Bridge
Name of Property

Cascade County, Montana
County and State

Boundary Justification (explain why the boundaries were selected)

Boundaries for the O. S. Warden Bridge are drawn to encompass the bridge spans, its immediate approaches and that portion of the Missouri River spanned by the bridge. The width is increased beyond the measurements of the structure to include the piers and abutments.

11. Form Prepared By

name/title Jon Axline/Historian
organization Montana Department of Transportation date November 18, 20010
street & number 2701 Prospect Avenue telephone (406) 444-6258
city or town Helena state MT zip code 59620-1001
e-mail jaxline@mt.gov

Additional Documentation

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)

Photographs:

Submit clear and descriptive black and white 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.

(See Continuation Sheets)

Property Owner:

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

name Montana Department of Transportation
street & number 2701 Prospect Avenue telephone 406-444-6200
city or town Helena state MT zip code 59602-1001

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.).

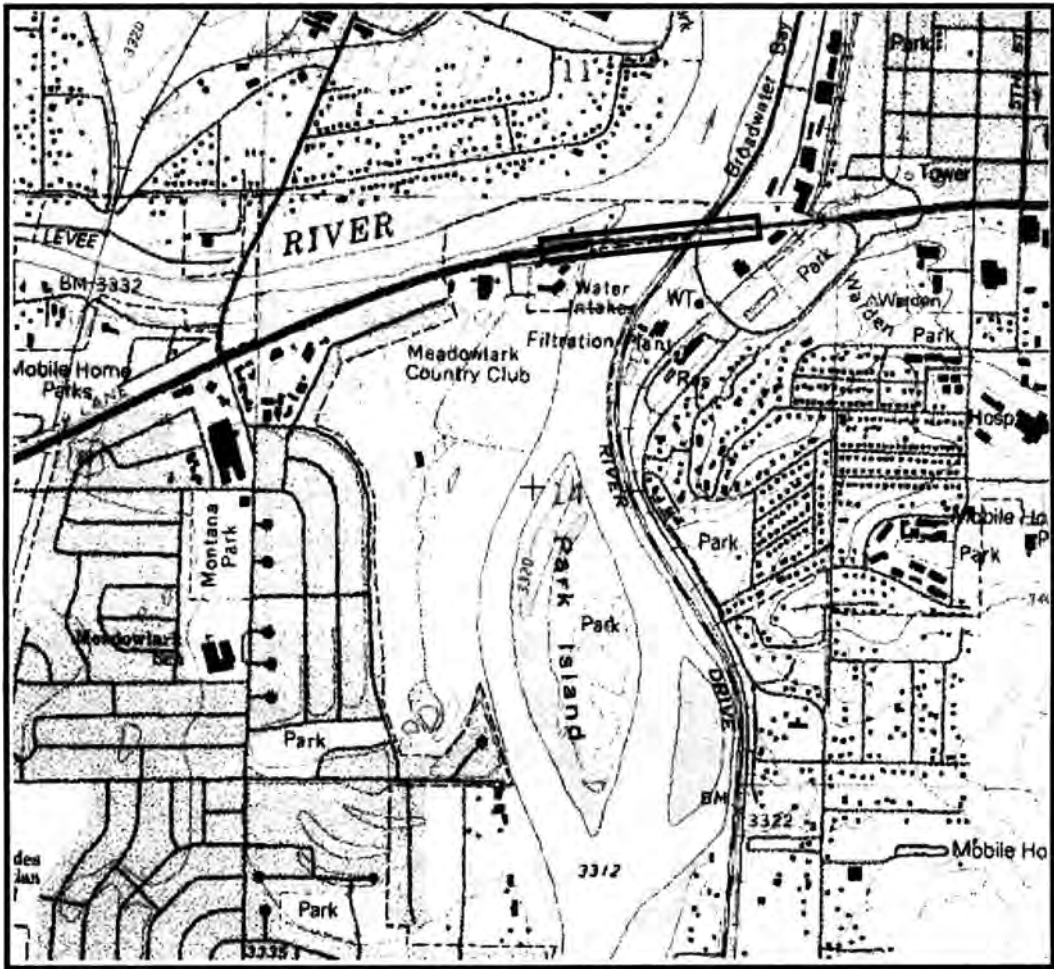
Estimated Burden Statement: Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, PO Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

O. S. Warden Bridge
Name of Property
Cascade, MT
County and State
Montana's Historic Steel Stringer and Steel Girder Bridges, 1901-1961
Name of multiple listing (if applicable)

Section number Map Page 9



Southwest Great Falls, Montana USGS Quadrangle Map, 1975

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

**National Register of Historic Places
Continuation Sheet**

O.S. Warden Bridge

Name of Property

Cascade, MT

County and State

Montana's Historic Steel Stringer and Steel
Girder Bridges, 1901-1961

Name of multiple listing (if applicable)

Section number Photographs Page 10

National Register Photographs

Name: O. S. Warden Bridge
 County and State: Cascade County, Montana
 Photographer: Kristi Hager
 Date of Photograph: 2005
 Location of original negative: Montana Department of Transportation. Helena, Montana.
 Description and view of camera: South elevation. View to the northwest
 Photograph: 0001

Name: O. S. Warden Bridge
 County and State: Cascade County, Montana
 Photographer: Kristi Hager
 Date of Photograph: 2005
 Location of original negative: Montana Department of Transportation. Helena, Montana.
 Description and view of camera: South elevation. View to the northwest.
 Photograph: 0002

Name: O. S. Warden Bridge
 County and State: Cascade County, Montana
 Photographer: Kristi Hager
 Date of Photograph: 2005
 Location of original negative: Montana Department of Transportation. Helena, Montana.
 Description and view of camera: South elevation. View to the northeast.
 Photograph: 0003

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

O. S. Warden Bridge
Name of Property
Cascade, MT
County and State
Montana's Historic Steel Stringer and Steel Girder Bridges, 1901-1961
Name of multiple listing (if applicable)

Section number Photographs Page 11



Photo 0001. O. S. Warden Bridge. South elevation. View to the northwest.



Photo 0002. O. S. Warden Bridge. South elevation. View to the northwest.

United States Department of the Interior
National Park Service

**National Register of Historic Places
Continuation Sheet**

O.S. Warden Bridge

Name of Property

Cascade, MT

County and State

Montana's Historic Steel Stringer and Steel
Girder Bridges, 1901-1961

Name of multiple listing (if applicable)

Section number Photographs

Page 12

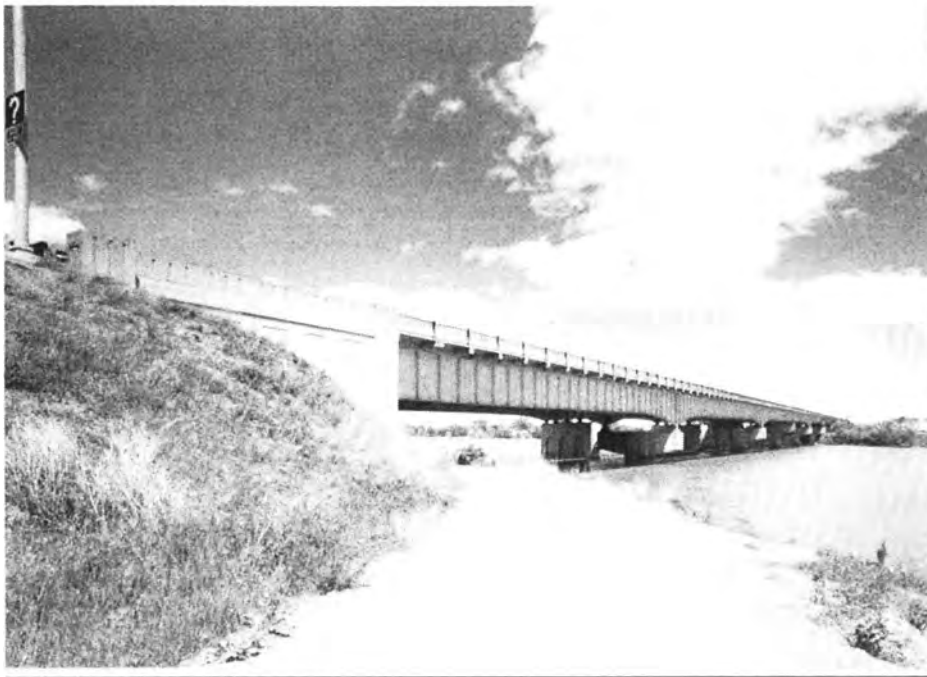


Photo 0003. O. S. Warden Bridge. South elevation. View to the northeast.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Warden, O.S., Bridge
NAME:

MULTIPLE Montana's Steel Stringer and Steel Girder Bridges MPS
NAME:

STATE & COUNTY: MONTANA, Cascade

DATE RECEIVED: 2/17/12 DATE OF PENDING LIST: 3/09/12
DATE OF 16TH DAY: 3/26/12 DATE OF 45TH DAY: 4/04/12
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 12000168

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: Y SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

 ACCEPT RETURN REJECT DATE

ABSTRACT/SUMMARY COMMENTS:

The O.S. Warden Bridge meets National Register Criteria A and C at the local and state levels in the areas of Transportation and Engineering. The bridge is an excellent and intact example of the type of steel girder bridge designed and built by the Montana Highway Department in the years following World War II. Among the longest such bridges in the state, it served an important role in local community development. The resource meets the Registration Requirements set forth in the MPS cover.

RECOM./CRITERIA Accept Criteria A+C

REVIEWER Paul Lusignan DISCIPLINE HISTORIAN

TELEPHONE DATE 3/26/12

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.



O.S. Warden Bridge

Cascade Co., MT

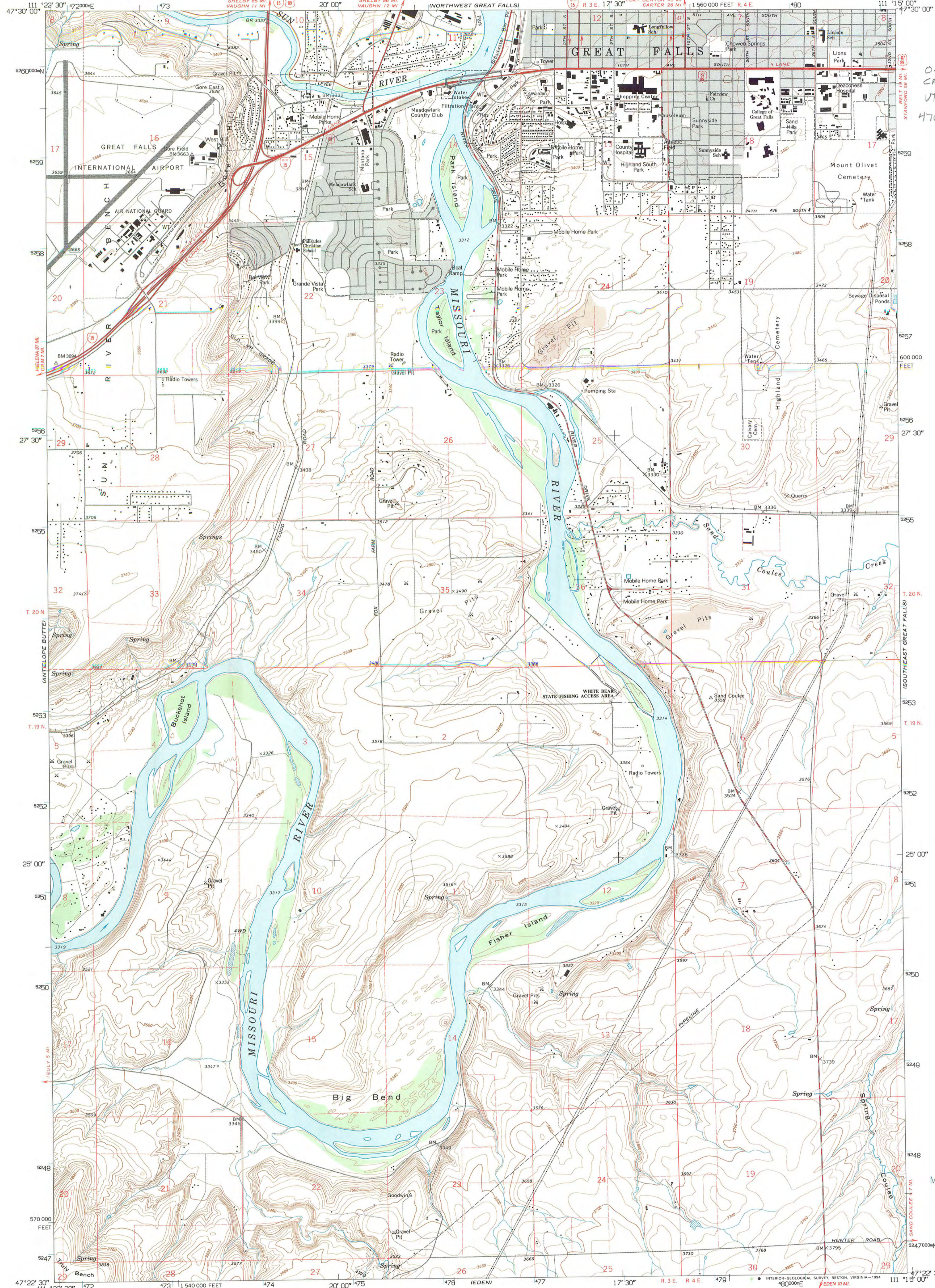
Photo # 0001



OS Warden Bridge
Cascade Co., MT
PHOTO # 0002



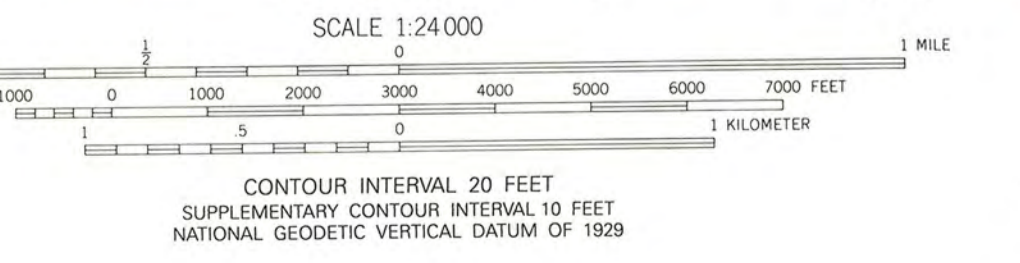
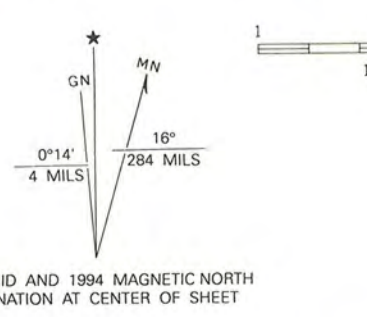
05 Warden Bridge
Cascade Co, MT
Photo # 0003



O. S. WARDEN BRIDGE
CASCADE COUNTY, MONTANA
UTM ZONE 12
476410E 5260017 N

MONTANA OUTDOOR SPORTS
708 N. MAIN
HELENA, MONTANA 59601
(406) 443-4119

Produced by the United States Geological Survey
Control by USGS and NOS/NOAA
Compiled from aerial photographs taken 1964. Field checked 1965
Revised from aerial photographs taken 1990 and other sources
Map edited 1994
North American Datum of 1927 (NAD 27). Projection and
blue 1000-meter Universal Transverse Mercator ticks, zone 12
10000-foot ticks: Montana Coordinate System, central zone
North American Datum of 1983 (NAD 83) is shown by dashed
corner ticks. The values of the shift between NAD 27 and NAD 83
for 7.5-minute intersections are obtainable from National Geodetic
Survey NADCON software
There may be private inholdings within the boundaries of the
National or State reservations shown on this map
Gray tint indicates areas in which only landmark buildings are shown
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked



ROAD CLASSIFICATION	
Heavy-duty	Light-duty
Medium-duty	Unimproved dirt
Interstate Route	U.S. Route



SOUTHWEST GREAT FALLS, MONT.
47111-D3-TF-024

1965
REVISED 1994
DMA 3778 IV NE-SERIES V894

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