

**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

For HCRS use only
received JUN 11 1984
date entered JUL 12 1984

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Dewey Bridge
and/or common Dewey Bridge (or Dewey Suspension Bridge)

2. Location

street & number Utah State Route 128 not for publication
city, town 30 miles northeast of Moab vic. vicinity of 03 congressional district
state Utah code 049 county Grand code 019

3. Classification

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<u>N/A</u> occupied	<input type="checkbox"/> agriculture <input type="checkbox"/> museum
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial <input type="checkbox"/> park
<input checked="" type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational <input type="checkbox"/> private residence
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment <input type="checkbox"/> religious
<input type="checkbox"/> object	<u>N/A</u> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government <input type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial <input checked="" type="checkbox"/> transportation
		<input type="checkbox"/> no	<input type="checkbox"/> military <input type="checkbox"/> other:

4. Owner of Property

name Utah Department of Transportation
street & number 4501 South 2700 West
city, town Salt Lake City vicinity of Utah state 84119

5. Location of Legal Description

courthouse, registry of deeds, etc. Utah Department of Transportation
street & number 4501 South 2700 West
city, town Salt Lake City state Utah 84119

6. Representation in Existing Surveys

title none has this property been determined eligible? yes no
date federal state county local
depository for survey records
city, town state

7. Description

Condition		Check one	Check one
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input type="checkbox"/> moved date _____
<input checked="" type="checkbox"/> fair	<input type="checkbox"/> unexposed		

Describe the present and original (if known) physical appearance

Setting:

A rural locale provides the unique (almost desolate) background for this 500 foot suspension bridge. Carrying Utah State Route 128 over the Colorado River in Grand County, the Dewey Bridge was named for its location, the now vanished community of Dewey.

Design:

Some confusion is encountered as to the original design and the finally-adopted design. Original plans found in the bridge file of the Utah Department of Transportation show that the present Dewey Bridge was constructed somewhat differently from the bridge as designed. In addition, plans show 1913 as a date of completion, but through historical research, a dedicatory year of 1916 was found.¹ Original plans submitted by the Midland Bridge Company, Freygong & Trocan, Props, of Kansas City, Missouri are entitled "Design for 530' x 12' suspension bridge over Grand River at Dewey." (Also shown on these plans is the former location of the old Dewey School House on the south side of the river.)²

Initially the bridge design was to accommodate one 12-foot roadway with a 19-foot approach span on the north end, a 530-foot suspended span over the river, and eleven 19-foot spans on the south end. Other initial design features of the bridge included:

- *Main towers and "joists" to utilize timber from Oregon Fir;
- *Stiffening trusses, flooring, and piles to be out of Oregon Fir or Native Pine;
- *Main cables made from seven 1-1/8" galvanized cables;
- *1" suspender cables with upset ends;
- *Single 1-1/8" galvanized cables to serve as wind bracing;
- *1/10 sag to span ratio;
- *Anchors to contain "abt. 40 cubic yards of concrete each."³

Such design features were not necessarily unique for their time but they do suggest that economy was a prime concern. Even though actual design loading is not known, it is obvious from the plans that the designers were knowledgeable in the sciences of structural analysis and material selection of their day. This is suggested by the following known bridge documentation;

- *One loading of "6 horses @ 1400#, freight 9000#, and 3 wagons @ 1400#; total 21600#";
- *Another loading of "live load 300# per lin. feet over the entire bridge" and "floor load 960# per lin. ft.";
- *Loads on cables of "live load 300# per lin. feet" and "dead load 900# per lin. feet," with a safety factor of 3;
- *Cable tension of 214000#;
- *Wind cable tension of 36000#;
- *Transverse wind on each half of the structure is indicated at 8950#.⁴

8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/ humanitarian
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input checked="" type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> theater
<input type="checkbox"/> 1800-1899	<input checked="" type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> transportation
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input checked="" type="checkbox"/> other (specify)
		<input type="checkbox"/> invention		

Specific dates 1916 **Builder/Architect** Midland Bridge Co./Midland Bridge Company

Statement of Significance (in one paragraph)

Constructed in 1916, Dewey Bridge is significant as an outstanding engineering accomplishment and for its historical role as a vital transportation and commercial link connecting southeastern Utah with Colorado and other points east. In the early decades of the twentieth century, Moab and other southeastern Utah towns were dependent on communities in western Colorado both for everyday supplies and for markets for their agricultural products. This bridge, which spans the formidable natural barrier of the Colorado River, was the first to provide a direct connection. Dewey Bridge is Utah's longest suspension bridge and, at the time of its construction, was the second longest suspension bridge west of the Mississippi. It is also the state's second longest clear span bridge.

History

Commerce:

From the commercial view, there are no records of significant historical events or historically relevant people associated with the Dewey Bridge, thus significance of this bridge is limited to its effect on the development in the area in question, an area which extends roughly from Moab easterly to the Colorado state line. As for the town of Dewey, it is not known who first settled on the ranches along the banks of the Grand (Colorado) River. Miners built small log cabins under the trees near the river and panned for gold. Later, people settled more permanently on ranches at Dewey. The land was good for grazing and soon there were many settlers.¹

On a state road map dating from 1916 one can find a road running northeast parallel to the river for 13 miles, turn southeast and go on 11 miles further to the town of Castleton. Beyond the 13 miles, the road was considered a county road and therefore shown as a dashed line. The main highway at that time (now I-70) paralleled the railroad to the north and was the principal route to the east. It took a lightly loaded, 2 horse wagon, 4 hours to make the 32 mile trip north from Moab to what now is Crescent Junction on I-70 and another 2-1/2 hours to traverse an additional 22 miles to reach the point where that county road (Utah State Route 128) joined the main highway. Although the existing ferry at Dewey provided some means for crossing the river at that time, its capacity was limited and its safety questionable, thus the settlers in the vicinity of Dewey were often required to traverse a time-consuming roundabout route on their travels eastward -- that is, until the Dewey Bridge was opened.

9. Major Bibliographical References

The Grand Valley Times, Moab, Utah. February 23, 1912; March 14, 1912; April 16 and November 26, 1915; June 2 and April 21, 1916.

10. Geographical Data

Acreeage of nominated property 1.55

Quadrangle name Cisco, Utah

Quadrangle scale 1:62,500

UMT References

A

1	2	6	4	7	3	9	3	4	2	9	7	0	6	0
Zone			Easting				Northing							

B

Zone			Easting				Northing							

C

Zone			Easting				Northing							

D

Zone			Easting				Northing							

E

Zone			Easting				Northing							

F

Zone			Easting				Northing							

G

Zone			Easting				Northing							

H

Zone			Easting				Northing							

Verbal boundary description and justification

See continuation sheet

List all states and counties for properties overlapping state or county boundaries

state N/A code county N/A code

state N/A code county N/A code

11. Form Prepared By

name/title Phil Fredrickson and Eduardo M. Norat, Environmental Analysts

organization Utah Department of Transportation date April 1, 1984

street & number 4501 South 2700 West telephone 965-4228

city or town Salt Lake City state Utah

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state local

As the designated State Historic Preservation 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 Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature

A. Kent Powell

A. Kent Powell

title Deputy State Historic Preservation Officer date May 25, 1984

For HCERS use only

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

Entered in the National Register

date 7/12/84

Melrose Bryan
Keeper of the National Register

Attest:

date

Chief of Registration

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Construction:

Building of the structure began in November 1915. Though there is nothing in the files to explain why, the bridge was (as stated) not built according to plans: the Oregon Fir towers were replaced by riveted structural steel; there are no approach spans; the main span is 500 feet;⁵ and only one lane 8 feet wide has been provided for vehicular travel. Although the name of the company that built this bridge is known (see Design on previous page), there is no mention in the records of the name of the engineer or group of engineers instrumental in the revised design (as constructed). A November 1915 issue of Grand Valley Times mentions the name of A. J. Welday as foreman for the builders.⁶

On site conditions may have contributed to design changes during construction. Elimination of approach spans may have been an additional economic consideration as adequate embankment material may have been available at the site at virtually no cost. Substitution of timber for steel in the towers may also have been an economic consideration, since the source of Oregon Fir was probably as far removed from the project site as was the source of structural steel. Regardless of the reasoning, both decisions were sound. Effects of both natural and man-made elements over 68 years of exposure were less damaging on the embankment and steel towers than they would have been on exposed, untreated timber.⁷

After less than five months construction time, the bridge was opened to traffic.

Appearance:

The structure remains essentially as it was built in 1916. Now, in 1984, the bridge still presents its original appearance. There have been no major alterations or additions that would significantly change its historical value. At some time in the more recent past, a new guard rail, not provided during construction, was installed. This guard rail consists of two parallel, convex, galvanized steel plates, 1/8 inch thick, attached to the stiffening trusses and running the full 500 feet length of the main span.

The Dewey Bridge is unique in that it is not only the longest suspension bridge in Utah, but also the state's second longest clear span bridge. The simplicity of its basic design, the strength of each of its components, and the serviceability of this bridge (which at the time of construction was the second longest suspension bridge west of the Mississippi River) have made this

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68 year old bridge an excellent example of the application of basic engineering principles in the early twentieth century. Nonetheless, the most striking feature of the Dewey Bridge is its quasi-wilderness setting just downstream from the confluence of the Colorado and Dolores Rivers, a portion of the latter being on the federal Wild and Scenic Rivers inventory.

In order to maintain the original appearance and integrity, defective bridge components have continually been replaced with like materials. Since some of the structural components are now damaged beyond repair, the bridge in its present condition has become a hazard to vehicular use. In a park setting, and with a few basic repair alterations that would not detract from the original concept of the structure, the Dewey Bridge could be used as a pedestrian crossing.

Notes

¹Grand Valley Times, Moab, Utah (November 26, 1915 issue).

²UDOT Structure Department Files

³Alex Mansour, UDOT Chief of Structural Engineer.

⁴Ibid.

⁵Ibid.

⁶Grand Valley Times, Moab, Utah (November 26, 1915 issue).

⁷Alex Mansour, UDOT Chief of Structural Engineer.

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Delivering cattle to market was probably the most important, yet most tedious, chore for residents in local communities. Most farmers at Dewey had from fifty to a hundred head of breeding cattle grazing on the free range near their homes. Produce was not generally hauled to market but rather was fed to cattle. The cattle, in turn, were driven to markets, sometimes utilizing the Dewey Bridge for passage. However, when large herds of transient sheep passed through Grand County, the range was left barren. Stockmen in the western states banded together to seek protection from further over-grazing of the land. By an act of Congress the Bureau of Land Management was created. The old timers say it was not what most of them wanted because it put the small stockmen out of business. The free range was gone. Cattle were taken off the range, farms were abandoned, and Dewey became a ghost town. Today there are a few log cabins, acres of cleared land where once crops of corn and alfalfa were grown, a very prominent suspension bridge, and a farm house. This is all that remains of the early settlement of Dewey. Consequently, commercial use of the Dewey Bridge gradually changed in its nature.²

Engineering:

As stated under Description, the Dewey Bridge at the time of its construction was the second longest suspension bridge west of the Mississippi. Added to this is the straightforward design which complements its setting. For these two reasons, the bridge is significant from an engineering perspective.

There is also the matter of durability. In the vicinity of the Dewey, there is presently one other highway bridge crossing the Colorado River (about a mile north of Moab). A bridge at this location was built a short time before the Dewey Bridge, but was replaced by a newer structure within the last 20 years.

Contact with the Colorado Division of Highways, in February of 1984, disclosed that there are two pre-1916 bridges which cross the Upper Colorado River. The Una and Rifle Bridges, both in Garfield County, Colorado, are considered eligible for nomination to the National Register. Another, the North Fork Bridge in Grand County, has the possibility of being historically significant. None of these bridges are, however, of the same design as the Dewey.³

Transportation:

One of the principal problems which continually plagued the community of Dewey in its early days was the barrier formed by the Grand River. For most of the

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year the river was difficult to cross, so in the 1890s Samuel King built a ferry; Dick Westwood operated it. In 1909 a one-year contract was awarded to George A. Combs for operating the Dewey Ferry for twenty dollars a month plus the ferry tolls; Gay Brown was the next ferryman.⁴

Ferry service was neither dependable nor safe. In 1897 the ferry slipped its moorings and ran downstream several miles before snagging, thus occasioning an interruption in service for several days. Escaping again, it got away permanently, requiring the construction of another boat. There is record of at least one drowning and there were probably others.

Although individual travelers occasionally reported fees as being somewhat higher, the authorized fees ran from a low of four cents for sheep in lots of twenty-five to a round trip maximum of \$1.50 for a six-horse team and wagon.⁵

The need for a more convenient method of crossing the (then) Grand River, was recognized by citizens of Grand County as early as 1912. In February of that year, two Grand County (Utah) Commissioners traveled to Palisade, Colorado to inspect a cable bridge over the Grand River at Cameo. This bridge over the (now known) Colorado River allowed increased travel between Grand Junction, Colorado and major population centers to the east. A similar, though on a smaller scale, enhancement of transportation in southeastern Utah came about when the commissioners returned and spearheaded efforts to build the Dewey Bridge.⁶

Although the significance of the bridge as a transportation link may not be outstanding when considering the numbers who have used it for the past 68 years, its principal eminence in transportation is that it is the only crossing of the Colorado in the desolate 60 mile long stretch of that river between Moab and Grand Junction.

Notes

¹Daughters of Utah Pioneers, Grand Memories, Utah Printing Company (1972).

²Ibid.

³Fraser Design, Loveland, Colorado (1984).

⁴Gregory Crampton, Boating on the Upper Colorado, University of Utah (1975).

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⁵Charles F. Peterson, Look to the Mountains, Brigham Young University Press Press (1975).

⁶Grand Valley Times, Moab, Utah (November 26, 1915 issue).

Interview with Mrs. Lydia Skewes - Eduardo Norat, UDOT (November 14, 1983).
We visited Mrs. Skewes at her home in Moab (57 North 3rd East). Although she is partially deaf, she was able to tell us that she remembered the ferry at Dewey, and the opening of the Dewey Bridge to traffic. Also she remembered when the new bridge crossing the Colorado River carrying US-191 was opened and the old one taken down. Many other things were mentioned about the towns' people but none related to this project. Her daughter was present in the interview and mentioned to us that some of the information may not be reliable.

Interview with Mr. Ballard Harris - John McEwan, UDOT (November 10, 1983); Eduardo Norat, UDOT (November 14, 1983).
Ballard Harris was, for many years, the UDOT maintenance shed foreman in Cisco. He is now retired and living in a house on the north bank of the Colorado, just upstream from the Dewey Bridge. This house was not one of the original homes in the area, but was built by Mr. Harris over a period of years before his retirement.

When asked about the history of the Dewey Bridge, he replied that he remembered it from his early days, but could offer no details or specific incidences connected with the bridge. He did however, know the site of the original old Dewey Ferry. This was on the property he now uses as a corn field. He displayed several interesting old bottles which he had turned up while plowing at this site.

When asked about the placer mining operation at the mouth of the Dolores River, he said this area was once a huge eddy caused by a natural dam on the Dolores. When this dam blew out in prehistoric times, it carried tons of sediment down river and deposited it near the site of Dewey. According to Mr. Harris, this entire area has locatable placer deposits and he has five or six mining claims on the hills behind his house. The placer mines upstream from the Dewey Bridge have been worked off-and-on since the 1920s, when some miner took 400 ounces of gold out of a pocket nearby.

Although we talked to Mr. Harris and his wife for over an hour, the above seemed to be the extent of his historical knowledge.

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Interview with Mr. Wayne McConkie - Phil Fredrickson, UDOT (February 9, 1984).
Mr. McConkie remembers construction of the Dewey Bridge, as his father taught at the old Dewey School during this time. To his recollection, things were pretty much as shown in his sister's book, "The Far Country," by Fawn McConkie Tanner.

"The Far Country," was published in 1976 by the Olympus Publishing Company, Salt Lake City, Utah, and is available at the Utah Division of State History. The warmth and candor with which Mrs. Tanner relates some of the everyday occurrences makes "The Far Contry" a valuable source of background information regarding the people of Grand County (including Dewey) in the early 1900s. There are, however, no direct references to the Dewey Bridge.

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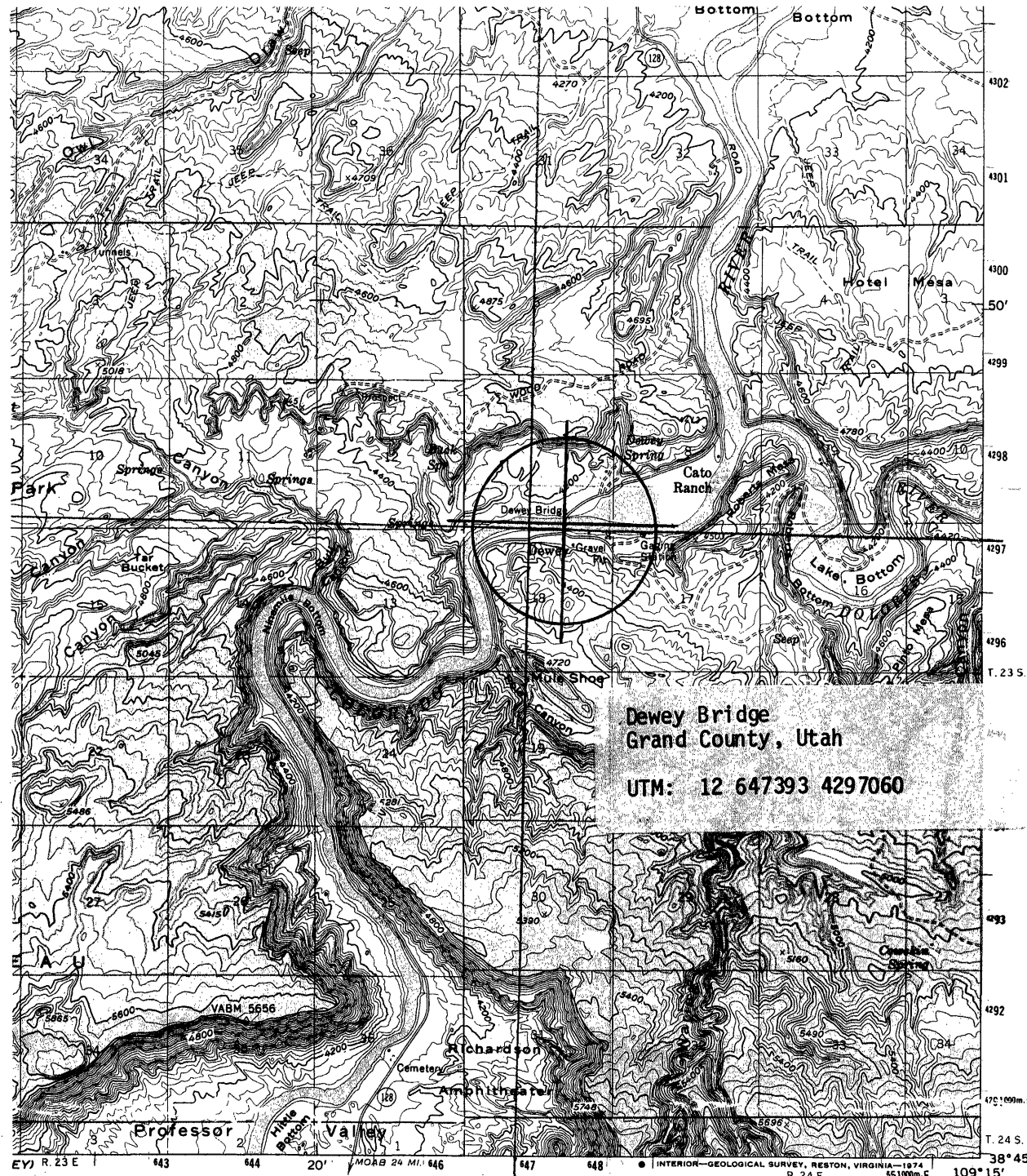
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Legal Description

A parcel of land for nomination to the National Register of Historic Places situate in the SE 1/4 of Section 7 and in the NE 1/4 of Section 18, T. 23 S., R. 24 E., SLB&M in Grand County, Utah.

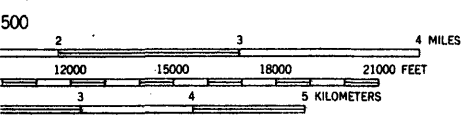
The boundaries of said parcel are described as follows:

Beginning in the centerline produced of the Dewey Suspension Bridge at a point opposite the south face of the north concrete cable anchors which point is 197.59 feet north and 3691.80 feet east, from the N.W. corner of said Section 18; thence, N. 10°55'55" E. 20 feet; thence S. 79°04'05" E. 40 feet; thence S 10°55'55" W 843 feet across the Colorado River; thence N. 79°04'05" W 80 feet to a point 40 feet perpendicularly distant westerly from the centerline produced of said bridge; thence N. 10°55'55" E. 843 feet; thence S 79°04'05" E 40 feet; thence S. 10°55'55" W. 20 feet to the point of beginning. The above described parcel of land contains 1.55 acres.

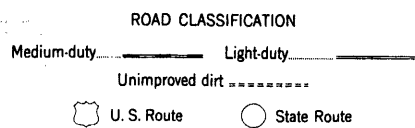


647393
4297060

Dewey Bridge
Grand County, Utah
UTM: 12 647393 4297060



L 40 FEET
L DATUM OF 1929



(POLAR MESA)
1:62,500

MAP ACCURACY STANDARDS
ORADO 80225, OR RESTON, VIRGINIA 22092
SYMBOLS IS AVAILABLE ON REQUEST

CISCO, UTAH
N3845—W10915/15
1958
MINOR REVISIONS 1973
AMS 4161 IV - SERIES V797