NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

NAME
HISTORIC
SARVIS FORK COVERED BRIDGE (alias Sandyville Covered Bridge)
AND/OR COMMON

LOCATION
STREET & NUMBER Secondary Route 21/5 at junction of U.S. 21, between Odaville & Sandyville, across left fork of Sandy Creek
CITY, TOWN Sandyville
STATE West Virginia

CLASSIFICATION
CATEGORY DISTRICT
X STRUCTURE
X SITE
X OBJECT

OWNERSHIP
PUBLIC
PRIVATE
BOTH
PUBLIC ACQUISITION
IN PROCESS
BEING CONSIDERED

STATUS
X OCCUPIED in service
UNOCCUPIED
WORK IN PROGRESS
ACCESSIBLE
YES: RESTRICTED
YES: UNRESTRICTED
NO

PRESENT USE
AGRICULTURE
COMMERCIAL
PARK
EDUCATIONAL
PRIVATE RESIDENCE
ENTERTAINMENT
GOVERNMENT
INDUSTRIAL
X TRANSPORTATION
MUSEUM
SCIENTIFIC
RELIGIOUS
OTHER

OWNER OF PROPERTY
NAME West Virginia Department of Highways
STREET & NUMBER 1900 Washington Street, West
CITY, TOWN Charleston
STATE West Virginia

LOCATION OF LEGAL DESCRIPTION
COURTHOUSE, REGISTRY OF DEEDS, ETC. Jackson County Court House
STREET & NUMBER
CITY, TOWN Ripley
STATE West Virginia

REPRESENTATION IN EXISTING SURVEYS
TITLE None
DATE
FEDERAL STATE COUNTY LOCAL
DEPOSITORY FOR SURVEY RECORDS
CITY, TOWN
STATE
The Sarvis Fork Covered Bridge is 11 feet-8 inches wide and has a length of 101 feet-3½ inches, which is the center-to-center distance between the opposite endposts. It has red wooden siding and a sheet metal roof. The trusses, which are of the patented Long type and are constructed almost identically to those of the Staats Mill bridge, have 13 panels; each approximately 9 feet-4 inches long and 12 feet-5 inches high. Each panel has double diagonals comprised of two 6 x 7 inch members, which slope toward the centerpost and a 6 x 7 inch single center diagonal, fitted between and bolted to the double diagonals. As in the Staats Mill bridge, the tops of the single diagonals fit into the notched tops of the 6 x 7 inch verticals, while the bottom ends rest on bearing blocks. The top chord is made up of an 8 x 8 3/4 inch member sandwiched between two 5 x 8 3/4 inch members while the bottom chord contains a 7½ x 10½ inch member sandwiched between two 5 3/4 x 10½ inch members. A curious broken-back arch composed of 3½ x 11½ inch members, spans the length of both trusses. It is non-functional, since there are spaces between many of the arch sections. The ends of the arches rest at the bottom end panel joints and are not securely fastened. Whether the arch is an original part of the bridge or was added at a later date is not known. It is questionable whether the arch ever added to the bridge's load carrying capacity or served as a stiffening device.

The bridge is heavily reinforced with steel stringers and supported on a dual bent system. This modern reinforcement completely supports the wooden deck so that the trusses are no longer subject to live loads (1).
SIGNIFICANCE

AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW.

- PREHISTORIC
- ARCHEOLOGY-PREHISTORIC
- COMMUNITY PLANNING
- LANDSCAPE ARCHITECTURE
- RELIGION
- SCIENCE
- SCULPTURE
- SOCIAL/HUMANITARIAN
- THEATER
- TRANSPORTATION

- 1400-1499
- ARCHEOLOGY-HISTORIC
- CONSERVATION
- LAW
- LITERATURE
- MILITARY
- SCULPTURE
- SOCIAL/HUMANITARIAN
- THEATER
- TRANSPORTATION

- 1500-1599
- AGRICULTURE
- ECONOMICS
- EDUCATION
- ENGINEERING
- MUSIC
- TECHNIQUE
- TRANSPORTATION

- 1600-1699
- ARCHITECTURE
- LITERATURE
- SCULPTURE
- SOCIAL/HUMANITARIAN
- THEATER
- TRANSPORTATION

- 1700-1799
- ART
- MUSIC
- THEATER
- TRANSPORTATION

- 1800-1899
- COMMERCIAL
- EXPLORATION/SETTLEMENT
- PHILOSOPHY
- TRANSPORTATION

- 1900-
- COMMUNICATIONS
- INVENTION
- INVENTION
- INVENTION

SPECIFIC DATES Dec. 1889 - Jan. 1890

On May 24, 1886 the Jackson County Court appointed D. K. Hood and Elias Stone to visit the ford on Mill Creek on the property of John Carnahan to determine the most suitable location for a bridge and to estimate the required span length and abutment height. It was decided that the location would be on the site of an old bridge above Carnahan's Ford. The clerk was authorized to advertise for bids for the abutments on May 21 and William Quincy and J. Grim were awarded the contract for the piers on August 4. On October 13, the clerk was authorized to advertise for bids for the building of the superstructure, and on December 13, the contract was awarded to R. B. Cunningham. The material and style of the abutments and superstructure were to be like those of the then current Angerona Bridge. Payment for the abutments and superstructure were established at $3.40 per perch (16¾ cubic feet) and $9.00 per linear foot respectively.

For reasons not mentioned in the court records, the court, during its session on April 13, 1887, ordered that all work and matters relating to the building of the bridge be discontinued. Approximately one year later, on April 11, 1888, William T. Green, and others asked the court to order that the building of the bridge be resumed. The court honored the request and on May 7 appointed D. K. Hood and John Hamilton as commissioners to locate and obtain land for right-of-way from John Carnahan and James McKown for a new public road (to join public roads located on both sides of Mill Creek). A 20 foot wide right-of-way was obtained without expense to the county and during this time, Quincy, Grim and Cunningham resumed work on the bridge. The abutments and superstructure were completed for costs of $1573.65 and $1044.00, respectively. On November 11, 1889, a contract for the bridge fills (i.e. earthwork) was awarded to Wesley Sayre for a cost of $59.75 and a contract for the woodwork at the bridge approaches was awarded to T.T. Hartley for $180.00. The bridge, which was completed some time during the months of December 1889 and January 1890, was 116 feet long and had a total cost of approximately $2,860.00.

On April 9, 1924, the county clerk asked the State Road Commission to provide the court with an engineer who could make plans and specifications for abutments to be built along Sandy Creek at or near the property of William Weekly. Bids were advertised for dismantling the bridge at Carnahan's Ford and rebuilding and replanning it on abutments to be constructed at the site near Weekly's. On July 2, 1924, C.R. Kent, R.R. Hardesty and E.R. Duke were awarded the contract to relocate the bridge for $1050.00. The site chosen is the present location of the bridge.

It is interesting to note that another bridge was constructed, during the time that work on the bridge at Carnahan's Ford was halted, at or near John Carnahan's property, but at a distinctly different location than the previous Sarvis Fork bridge. The history of this bridge is also included, because in the past, it has been mistakenly applied to the present Sarvis Fork Bridge.

On June 14, 1887 the Jackson County Court ordered that a notice be published in the Jackson Herald for bids to be accepted for building a bridge across the run at

(continued on attached sheet)
John Carnahan's stable where the Ripley and West Columbia Turnpike cross the run. The bridge was to be built of wood and the deck was to be supported on timber bents. The contract was later awarded to George W. Staats to construct the bridge, fills and approaches for $64.00. Work was completed sometime during the months of December 1887 and January 1888. William Hickel and John Hamilton, commissioners appointed by the court to examine the construction of the bridge, reported on January 11, 1888 that the work had not been done in accordance with the contract. Staats was held accountable by the court in the future for any damage to the structure or losses or damages suffered by persons using the bridge resulting from defective workmanship or material.

It can be noted by looking at the court records that there were two bridges at or near John Carnahan's property. The bridges were built at different locations, constructed by different people using different materials and for sizably different costs. Because the entries in the records pertaining to the construction of the bridge over the run near John Carnahan's stable come between the entries involving the bridge over Mill Creek, it is easy to overlook pages involving the latter bridge.

The primary evidence for believing that the bridge constructed over Mill Creek in 1889 is the present Sarvis Fork Bridge is that the records referring to the bridge's dismantling and relocation in 1924 refer to the original site as "Carnahan's Ford". Carnahan's Ford is the same location recorded for the bridge built by Quincy, Grim, and Cunningham over Mill Creek. The location of the other bridge was recorded as "the run near John Carnahan's Stable". Other evidence involves the material used for the abutments. The bridge built by George Staats was supported by "timber bents", while the superstructure built by Cunningham rested on stone abutments. It is unlikely that a bridge the size of the Sarvis Fork Bridge would be supported on timber bents. Finally, the cost of a covered bridge the size of the Sarvis Fork Bridge would commonly be between 1000 and 3000 dollars. It would be extremely difficult at that time to build a bridge similar to the Sarvis Fork Bridge for only $64.00 (2, 3, 4).
Colonel Stephen Long (1784-1864) patented his famous wooden truss system in 1830 marking a new era in bridge building in the United States and in a larger sense he was a pioneer in transforming the art of building, which was practiced by craftsmen, into a professional activity firmly guided by trained civil engineers. He was a man of wide interests who succeeded in making substantial contributions to nearly all of the recognized fields of civil engineering in his day.

While working with the Baltimore and Ohio Railroad, Long built his first bridge, the Jackson Bridge near Baltimore, which carried the Washington Pike over the B & O. Before this bridge, the B & O was committed to monumental masonry structures following traditional British and European practice. This bridge ushered in the use of timber trusses for railway use.

The Long truss was not common in the Virginias but in Jackson County at least four were built and two survive. There are no other Long trusses in West Virginia. The Staats Mill Bridge was specified by the County Court to be based upon the Bridge at Hardesty's Mill over Tug Fork, whereas the design of the Sarvis Fork Bridge was to be based upon the Angerona Bridge. The inspiration for building covered bridges using the Long patent is not known. The two extant bridges are excellent examples of this type, whose notable features are the repeating "X" braced panels, the details of the counter braces, the use of a horizontal lattice bracing system in the roof and joggles used in the chord splices. Both bridges are of nearly identical span and possess all of the structural details of the Long system. The distinguishing feature of the Sarvis Fork Bridge is the polygonal arch installed on the inside of the trusses. The arches were not "let into" the truss members with notched joints so typical of other arch-truss systems. Thus, it appears most likely these arches were added when the bridge was moved in 1924.

The Sarvis Fork Bridge is a good example and rare survivor of an important patented covered bridge system. It is an important landmark in Jackson County and it is one of seventeen surviving covered bridges in West Virginia.
See Attached Sheet

GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY: Not Applicable

UTM REFERENCES: Quad. name Sandyville

Quad. scale 1:24000

VERBAL BOUNDARY DESCRIPTION

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

STATE CODE COUNTY CODE

STATE CODE COUNTY CODE

FORM PREPARED BY

E. L. Kemp, Professor of the History of Science & Technology and of Civil Engineering

ORGANIZATION West Virginia University

DATE

STREET & NUMBER 14 Woodburn Hall Town Campus

TELEPHONE (304) 293-2867

CITY OR TOWN Morgantown

STATE West Virginia

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 National Park Service.

FEDERAL REPRESENTATIVE SIGNATURE

TITLE ___________________________ DATE __________

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER DATE ___________________________

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

DATE ___________________________

ATTEST: ___________________________

DATE ___________________________

KEEPER OF THE NATIONAL REGISTER ___________________________
9. MAJOR BIBLIOGRAPHICAL REFERENCES


2. Jackson County Record Book #2 (1884-1886), pp. 467-471.


4. Road Record #3, Jackson County Court, p. 233.
10. SARVIS FORK COVERED BRIDGE
10. SARVIS FORK COVERED BRIDGE