#### 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 Snow Hill Covered Bridge	
other names/site number Johnson Fork Covered Bridge	<u>}</u>
2. Location	
street & number <u>Snow Hill Road over Johnson Fork</u>	NAnot for publication
city or townRockdale	□ Vicinity
stateIndiana code IN county Frankl	in code <u>047</u> zip code <u>47060</u>
3. State/Federal Agency Certification	
Matural Resources   State of Federal agency and bureau   In my opinion, the property   meets   does not meet the National Register criteria. I recommend   Signature of certifying official/Title   Date   Indiana Department of Natural Resources   State of Federal agency and bureau   In my opinion, the property   meets   does not meet the National Recomments.)	ditional comments.) - 27- 95
Bate	
State or Federal agency and bureau	
National Park Service Certification	
	of the Keeper Date of Action
☐ 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:)	

Snow	Hill	Covered	Bridge
Name of			

Franklin County, Indiana 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	☐ building(s)	Contributing	Noncontributing	
□ public-local   □ public-State	☐ district ☐ site	0	0	buildings
□ public-Federal	☐ site ☐ structure ☐ object	0	0	sites
		1	0	structures
		0	00	objects
		1	0	Total
Name of related multiple property is not part	roperty listing of a multiple property listing.)	Number of cor in the National	tributing resources p Register	reviously listed
N/A		0		
6. Function or Use				
Historic Functions (Enter categories from instructions)		Current Functions (Enter categories from instructions)		
TRANSPORTATION: road-related			ON: road-related	
				-
		-		
7. Description				
Architectural Classification (Enter categories from instructions)		Materials (Enter categories from	instructions)	
OTHER: Howe Truss		foundation STONI	E: limestone	
		wallsWOOD: weatherboard		
		roof ASPH	ALT	
		other <u>Concr</u>	RETE	

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

8. St	atement of Significance	
(Mark	cable National Register Criteria "x" in one or more boxes for the criteria qualifying the property itional Register listing.)	Areas of Significance (Enter categories from instructions) ENGINEERING
X A	Property is associated with events that have made a significant contribution to the broad patterns of our history.	TRANSPORTATION
□В	Property is associated with the lives of persons significant in our past.	
	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.	Period of Significance
	Property has yielded, or is likely to yield, information important in prehistory or history.	
(Mark "	a Considerations x' in all the boxes that apply.)	Significant Dates 1895
Proper	ty is.	
□ <b>A</b> c	owned by a religious institution or used for religious purposes.	
□ <b>B</b> r	emoved from its original location.	Significant Person (Complete if Criterion B is marked above) N/A
□ C a	a birthplace or grave.	11/11
□ <b>D</b> a	cemetery.	Cultural Affiliation N/A
□ <b>E</b> a	reconstructed building, object, or structure.	
	commemorative property.	
□ <b>G</b> le	ess than 50 years of age or achieved significance within the past 50 years.	Architect/Builder Butts, William Horn, John
<b>Narrativ</b> Explain t	ve Statement of Significance significance of the property on one or more continuation sheets.)	
). Majo	or Bibliographical References	
	books, articles, and other sources used in preparing this form on one	or more continuation sheets.)
	s documentation on file (NPS):	Primary location of additional data:
C pre	eliminary determination of individual listing (36 EFR 67) has been requested eviously listed in the National Register eviously determined eligible by the National egister signated a National Historic Landmark eorded by Historic American Buildings Survey	☐ State Historic Preservation Office ☐ Other State agency ☐ Federal agency ☐ Local government ☐ University ☐ Other  Name of repository: Indiana Historic
☐ rec	orded by Historic American Engineering ecord #	Sites and Structures Inventory

10. Geographical Data	
Acreage of Property Less than one acre	
UTM References (Place additional UTM references on a continuation sheet.)	
1 1 6 6 8 5 1 8 0 4 3 5 4 8 9 0 Northing	3 Zone Easting Northing 4 See continuation sheet
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)	
Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)	
11. Form Prepared By	
name/title Beverly Metze	
organization N/A	date September 7, 1994
street & number 3051 Snowhill Road	telephone 812-637-1864
city or town West Harrison	state IN zip code 47060
Additional Documentation Submit the following items with the completed form:	
Continuation Sheets	
Maps	
A USGS map (7.5 or 15 minute series) indicating the prop	perty's location.
A Sketch map for historic districts and properties having	arge acreage or numerous resources.
Photographs	
Representative black and white photographs of the property	erty.
Additional items (Check with the SHPO or FPO for any additional items)	
Property Owner (Complete this item at the request of SHPO or FPO.)	
nameFranklin County Commissioners	
	telephone 317-647-4631
	state zip code

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.

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Snow Hill Covered Bridge, 1895, is located in Whitewater Township, Franklin County, in the extreme southeast corner of the county, only 1 3/4 miles from the Ohio-Indiana border. The bridge is also known as Johnson Fork Covered Bridge; this is how county commissioners records refer to the structure. Area residents have long since used the name Snow Hill. Surrounding terrain is gently rolling and the bridge spans Johnson Fork, which merges with Whitewater River about 2 miles south of the site. The bridge carries Snow Hill Road across the stream and joins it to Johnson Fork Road on the east bank.

The Howe Truss type bridge rests on stone abutments with wingwalls. Additionally, the west abutment was partly reinforced with concrete in 1929 and in 1987, concrete piers which reduce the effective span were placed about 10 feet from the abutments.

Snow Hill Bridge is an 8 panel, 75 feet long Howe Truss structure. True to the Howe Truss formula, paired diagonal wood members slant in one direction while the sandwiched single member slants diagonally in the other direction. All double diagonals slant westward. Overhead X-braces are single members linking each top chord to the opposite top chord. A similar web of X-braces on the under side of the bridge links the bottom chords. Both top and bottom chords are composite members formed of sandwiched planks held together by iron nuts and bolts with washers.

The use of iron joining bolts and tie rods is common in the Howe Truss, and Snow Hill Covered Bridge is no exception. Paired vertical iron bars mark the upper and lower meeting points of the doubled and single diagonals (the division point between panels). Iron nuts and washers joining the verticals to the upper and lower chords allow the bridge to be adjusted if necessary. The vertical bars provide support in tension. Iron bars also link the top chords overhead, and the bottom chords underneath. Iron shoes are used to anchor the diagonal braces.

The gable roof has a slight overhang and the exterior walls are covered with vertical board and batten siding. The siding does not extend to the eaves, leaving an open clerestory across each flank of the bridge. Portals are plainly detailed, with a portion of the wood board and batten siding wrapping around to the first three or

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so feet of the interior "walls". The upper corners of the portal opening are rounded. Portals have been painted white, while the flanks are barn red. Dates 1885 (incorrect) and 1987 (rehab date) are crudely painted in black on each portal gable end.

Since construction in March 1895, Snow Hill Covered Bridge has been altered several times. In 1928, openings were cut into each side for automobile traffic visibility. An elderly local farmer tells an anecdote that in 1929, he helped build a concrete abutment on the Snow Hill side of the bridge to strengthen the stone abutment. Mostly due to the openings cut through in 1928 exposing the trusses to the elements, but aggravated by missing siding and a deteriorated roof, the bridge had deteriorated by the 1980s. A truck carrying a bulldozer disregarded load limit signs and damaged the bridge in crossing in 1986. In the same year, the bridge was deemed unsafe and closed to traffic. With much community support, a restoration project was initiated. Several sections of lower chords had to be replaced. Six diagonal braces were replaced, and the contractor had to recast two of the iron diagonal member shoes. The flooring was replaced. Originally, it was a wide plank floor, now the floor is of 2" X 4"s laid on edge. The siding was repaired with wood which matched the original poplar siding. A new asphalt shingle roof was installed. The abutments were sandblasted and repointed. New concrete piers were installed about 10 feet in from the abutments, increasing the load limit of the bridge to 12 tons. Lloyd Brown was the contractor for the repairs and Jim Barker of AECON Engineering was the engineer.

The bridge was reopened to traffic in August 1987. Still in service after a century of use, Snow Hill Bridge retains its significant Howe Truss design and a good percentage of original members.

Section 8-Statement of Significance

Constructed in March of 1895, Snow Hill Covered Bridge is eligible under Criterion C as a fine example of a small scale Howe Truss timber bridge. The Howe Truss was rarely used on Indiana wooden

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Snow Hill Covered Bridge Franklin County, Indiana

truss bridges; the more conservative Burr Arch type was the favorite of the most important builders. Only about 22 Howe Truss bridges are thought to stand in Indiana, giving this and other examples statewide importance. Under Criterion A, Snow Hill Bridge was an important passageway to Johnson Fork Road, which leads eventually to the Cincinnati area, the biggest market for local farmers.

Snow Hill Covered Bridge uses a Howe Truss to bear loads up to 12 tons (current rating). The concept of the Howe Truss was invented by William Howe in 1840. As was often the case with the empirical design process used by engineers in the early 19th century, Howe built upon the ideas of others. He borrowed the use of diagonal members from the Long and Town Trusses, but strengthened the resulting lattice work with vertical iron bars which which also allowed members to be lighter. The Howe Truss has often been cited as a significant step towards all metal bridge construction. Indeed, it is interesting that the Snow Hill Bridge would have been erected using the Howe Truss as late as 1895. The 1890s were the heyday of the all metal truss bridge in Indiana, although a good number of traditional timber bridges continued to be built in rural counties of Indiana, where successful builders were able to convince county commissioners of the practicality of their designs.

One might also note that the Howe Truss was very popular in Franklin County. Nearly all known vehicular spans in the county were Howe Trusses; several were built in the 1890s. The only other remaining wood bridge in the county today, the Stockheughter or Enochsburg Bridge, is also a Howe Truss span. It would appear that the county commissioners favored the Howe Truss. Whitewater Canal Aquaduct is also in Franklin County (Whitewater Canal Historic District, NR, 6-13-73). Although not truly a bridge, but rather an aquaduct, it utilizes the Burr Arch Truss.

It would appear that Snow Hill Bridge was erected by local builders who had knowledge of the Howe Truss bridge type. According to County Commissioner's records, the substructure was

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started in October 1894 by John H. Horn, a local mason whose family owned property about one-half mile from the bridge on Snow Hill Road. William Butts, a local carpenter, erected the timber bridge with the help of area laborers. Work was complete in March 1895, the total cost being \$1,422.50. Neither man is thought to have built any other timber bridges. The name of the bridge comes from Lemuel Snow, a Revolutionary War officer and owner of the high ground west of the bridge (Snow Hill).

Section 9-Bibliography

- Condit, Carl. American Building. Chicago: University of Chicago, 1968.
- Franklin County Commissioners Notes. Franklin County Courthouse, Brookville, Indiana, Volumes for 1894-1895, pp. 338, 366, 387-88, 398-99, 487-89.
- Gould, George. <u>Indiana Covered Bridges Thru the Years</u>. Indianapolis: Indiana Covered Bridge Society, 1977.
- Indiana Historic Sites and Structures Inventory. Franklin County Interim Report, 1978.
- Sechrist, John. "Snow Hill Bridge Restored," <u>Indiana Covered Bridge Society Newsletter</u>, Volume 24, Number 4, October 1987, pp. 1-2.
- Weber, Wayne. <u>Covered Bridges in Indiana</u>. Midland, MI: Northwood Institute, 1977.

Section 10-Geographical Data-Verbal Boundary Description

The Snow Hill Covered Bridge is located in Whitewater Township of Franklin County, Indiana, at UTM point 16 685180 4354890. The boundary includes the entire bridge, its right-of-way, superstructure, trusses, and any supporting piers, abutments, wingwalls, or anchored supports of the Snow Hill Bridge. Include

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10' of the approaches at the east and west ends of the bridge.

Boundary Justification

The boundary includes the bridge, its significant truss work, and enough of the immediate site to convey its significance in transportation and engineering.

