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 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.

1. Name of Property

Historic name: Cedar Grove Bridge
Other names/site number: Indiana State Bridge #6625B
Name of related multiple property listing:
(Enter "N/A" if property is not part of a multiple property listing
N/A

2. Location

Street & number: Carries Old State Road 1 over Whitewater River
City or town: Cedar Grove State: IN County: Franklin
Not For Publication: [ ] Vicinity: [X]

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this X 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 X meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___national **_X__statewide** **_X__local**

Applicable National Register Criteria:

_X__A **___B** **_X__C** **___D**

Mitchell K. Zoll Deputy SHPO August 1, 2014

Signature of certifying official/Title: **Date**

Indiana DNR-Division of Historic Preservation and Archaeology

State or Federal agency/bureau or Tribal Government

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

Signature of commenting official: **Date**

Title : **State or Federal agency/bureau or Tribal Government**

Cedar Grove Bridge
Name of Property

Franklin, Indiana
County and State

4. National Park Service Certification

I hereby certify that this property is:

___ 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 of the Keeper Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private:	☐
Public – Local	X
Public – State	☐
Public – Federal	☐

Category of Property

(Check only **one** box.)

Building(s)	☐
District	☐
Site	☐
Structure	X
Object	☐

Cedar Grove Bridge — Name of Property
Franklin, Indiana — County and State

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

Contributing	Noncontributing	
		buildings
		sites
1		structures
		objects
1		Total

Number of contributing resources previously listed in the National Register 0

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6. Function or Use
Historic Functions
(Enter categories from instructions.)
TRANSPORTAION: road-related

Current Functions
(Enter categories from instructions.)
TRANSPORTATION: road-related

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7. Description

Architectural Classification
(Enter categories from instructions.)
Camelback Pratt Through Truss

Materials: (enter categories from instructions.)
foundation: STONE: limestone
walls: _____
_____
roof: _____
other: METAL: steel
CONCRETE

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Cedar Grove Bridge, otherwise designated as Indiana State Bridge #6625 B, carries Old State Road 1 over the Whitewater River, at Cedar Grove, Highland Township in Franklin County, Indiana. Not currently in use for vehicular traffic, this two-span, camelback, Pratt through truss bridge rests on stone abutments at the north and south ends and is supported by two round metal caissons at midpoint. Each span of the bridge is 180 feet long, 10 panels of 18 feet each. The overall length of the bridge is 386 feet and has a roadway 18 feet wide. Built of steel with riveted connections, the bridge is the product of the Indiana Bridge Company of Muncie, Indiana. The current deck has two layers of wooden boards that are in disrepair but serviceable for foot traffic.

With the exception of some wear and tear on the superstructure, a viewer from the mid-1910s would see little difference between the original built in 1914 and the structure today.

Narrative Description

The Cedar Grove Bridge, otherwise designated as Indiana State Bridge #6625B, carries Old State Road 1 over the Whitewater River, at Cedar Grove, Highland Township in Franklin County, Indiana. The bridge is no longer in use for vehicular traffic. The long axis of this two-span, camelback, Pratt through truss bridge is north and south. Each span of the bridge is 180 feet long, 10 panels of 18 feet each (Photograph 1) for a total structural length of 386 feet and has a roadway of 18 feet in width. Built of steel with riveted connections, the bridge is the product of the Indiana Bridge Company of Muncie, Indiana. The current deck has two layers of wooden boards but original plans called for a deck of three-inch

wooden blocks. Creosoted wooden blocks were used in various applications, including early street paving, at the time of the bridge's construction (Photograph 2).

The substructure of the bridge consists of abutments and a pair of metal caissons piers that support the spans at mid-point in the river. The abutments are original to a three-span superstructure built in 1870 and lost in the great 1913 flood and date from 1870. A projecting course of stone on the south abutment, approximately two-thirds up the face, shows the additional height applied to the old abutments to deal with future flood conditions in the river (Photograph 3). The north abutment appears to have had a parge coat of cementitious material applied to its surface. The round caissons are fabricated from riveted steel components. Sheet piling, encircling the caissons just above and below water level, protects them from scour (Photographs 4 and 5). [1]

The identical spans of the superstructure have ten panels per truss. The right and left limits of each panel are defined by interior verticals fabricated from laced channels that extend from the bottom chord to the top chord. Diagonals are fabricated from paired angles connected by riveted battens. The diagonals stretch between the top chord and the bottom chord, at panel points, to deal with stresses from wind and live loads moving across the bridge. The top chord is fabricated from a pair of channels laced below and with a cover plate above as demonstrated at the connection of the top chord and end post (Photograph 6). The bottom chord is fabricated from two pairs of angles riveted together with battens. The end panels of each truss carry vertical hangers fabricated from two pairs of angles riveted together with battens to support the outer floor beam (Photographs 7 and 8).

The two center panels of each truss have diagonals and counters to lessen the effects of tension/compression, at this critical point in the truss, as live loads move across the span. Along the bottom chord at each panel point are two gussets, one outboard of the bottom chord and one inboard, that connect the lower ends of the verticals, diagonals, counters (where present) and the ends of the floor beams into a strong and efficient riveted connection of these critical truss components. The I-beam stringers supported by the floor beams carry the deck (Photograph 8).

One end of each span is fixed while the other is capable of expansion. The fixed end of each span is located on top of the caissons; the end post shoes are bolted to a concrete cap on the metal caissons (Photograph 9). The expansion end of each span rests on the abutments. The expansion end post shoes rest on four steel, four-inch roller bars contained in a roller nest. The nest retains the rollers in a fixed position and the shoes are free to move forward and back in a horizontal plane to counter the effects of seasonal weather change and normal movements of the deck during loading by traffic. The wooden blocks for the original deck are visible in the detail (Photograph 10). [2]

[1] "Inspection of the Cedar Grove INDOT Truss Bridge (NBI #516) and a Discussion of Preservation Strategies," J.A. Barker Engineering, Inc., Bloomington, Indiana, 26 August 2011; Cedar Grove Bridge Plans, Indiana Bridge Company, Sheet 6, April 1914. Plans are available at the Bracken Library Archives at Ball State University in Muncie, Indiana

[2] Cedar Grove Bridge Plans, Indiana Bridge Company, Sheet 6, April 1914.

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.)

- [X] 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.
- [X] 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.)

- [ ] 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

Areas of Significance
(Enter categories from instructions.)
TRANSPORTATION
ENGINEERING

Period of Significance
1870
1914-1963

Significant Dates
1870
1914

Significant Person (last name, first name)
(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder (last name, first name)
Indiana Bridge Company

Period of Significance (justification)

The period of significance was chosen to include the date of the construction of the bridge and a period of high usage of the bridge as an important transportation element of State Highway 1. The date 1870 acknowledges the date of the stone abutments, major intact components of the bridge that was destroyed in the flood of 1913. They were reused in the construction of the 1914 bridge.

Criteria Considerations (explanation, if necessary)

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

Located in Franklin County, Indiana, the Cedar Grove Bridge, that carries Old State Road 1 over the Whitewater River, is eligible for the National Register of Historic Places under Criteria A and C.

Under Criterion A, at state level, the bridge is eligible for its association with the commercial development of the southeastern portion of the state and the development of a state highway system. Unlike many early bridges in the state, the current bridge did not cross the Whitewater River at a fording location, rather, this site is a traditional crossing point dating from 1870 when Franklin County had the first substantial bridge built here. The original abutments were reused in the construction of the 1914 steel bridge. Commercial traffic using the original bridge and its successor for over eight decades carried people and products north and south/to and from Brookville and points north; from Greendale, Lawrenceburg, Indiana, and often on to Cincinnati, Ohio. Confirming the importance of this crossing, the county's bridge and roadway were absorbed into the state highway system in the late 1920s to early 1930s. From that time to its closure in 1999 the bridge remained an active and integral part of the larger state transportation system.

Under Criterion C, at state level, the bridge is eligible for its embodiment of the characteristics of a type of bridge construction indicative of advances in bridge-building technology and as an example of the work of a well-known and well-respected Hoosier enterprise, the Indiana Bridge Company of Muncie, Indiana. The use of all-riveted, fabricated components that lightened the dead weight of bridges at no sacrifice to their carrying capabilities and the design of camelback trusses that allowed for longer spans than achievable with a standard Pratt truss configuration.[3]

The Cedar Grove Bridge received a rating of "Outstanding" in the most recent edition (2011) of the Franklin County *Interim Report* published by the Indiana Department of Natural Resources.

[3] James L. Cooper, *Iron Monuments to Distant Posterity: Indiana's Metal Bridges, 1870-1930* (Greencastle, IN: DePauw University, et al, 1987), pages 74 and 75.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

The Cedar Grove Bridge carries a portion of the once-busy State Highway 1 over a major natural barrier to commercial and public travel in the southern section of Indiana. Built in 1914, after a major flooding incident that claimed lives in Franklin County and around the state, the extant bridge superstructure and piers were designed and fabricated by the Indiana Bridge Company of Muncie, Indiana, guaranteeing free travel across this watercourse in any season and under the most adverse weather situations. Absorbed into the state inventory of county transportation assets in the late 1920s and early 1930s, this structure remains as a reminder of important aspects of Hoosier history, the growth of the intrastate transportation system and the development of commercial road links between productive nodes of agriculture and industry in this section of the state.

An 1870 advertisement in the local *Indiana American*, a newspaper in Brookville, notified contractors that bridge lettings for Cedar Grove, Laurel, and Metamora were in the offing; bids had to be submitted to the county auditor by 2 May of that year. Plans and specifications for the projects at Laurel and Cedar Grove were available at the same auditor's office starting on 18 April 1870. In a special session on 3 May 1870, the commissioners approved a contract with Herman H. Schrichte, Patrick Ryan, and James Wilson. The contract called for them "… to erect and build two piers and two abutments for a bridge on the Whitewater River at or near Cedar Grove…," all three contractors were local men from Brookville. None of the three contractors was an engineer but Patrick Ryan, an immigrant stone mason from Ireland, and Herman H. Schrichte, an immigrant marble cutter from the German principality of Hanover, obviously had previous experience in working and/or building with stone. Pennsylvanian James Wilson identified himself as a farmer in the 1870 census and no doubt was used to hard labor. He may have provided hauling for the masons. On 12 December 1870, the county commissioners approved payment of $24,881.05 to the three contractors for the completed stone work on the two piers and abutments. [4]

The 1870 abutments are the same structures that support the north and south ends of the current two-span bridge superstructure except for modifications made 1913-14 to raise their bridge seat height further above the stream bed to preclude future damage from flooding. The north abutment appears to have been parged with a cement coating but individual stones are visible at the top near the bridge seat. The two stone piers constructed in 1870 were likely destroyed by the 1913 flood.[5]

Common to any big decision attempted by a committee, the discussion of what to actually do about the three iron bridges (Zenas King's bridges from 1870) ensued for months. On 14 November 1913, the commissioners reviewed the status of bridge repair plans and costs. During this review, they determined that the Cedar Grove Bridge would require a much greater amount of money to repair than first believed. Now they were considering $23,000.00 for necessary repairs not the original amount; hence arose a "wait-a-minute" moment. After

[4] "To Contractors, Bridge Lettings," *Indiana American*, 15 April 1870, no page; 1870 Decennial Census, Franklin County, Indiana, pages 31, 39, and 42; "Bridge Contracts," *Indiana American*, 6 May 1870, no page; Commissioner's Record, Franklin County, Indiana, Volume P, 1869 – 1873, page 322.
[5] Commissioner's Record, Franklin County, Indiana, Volume P, 1869 – 1873, page 204.

deliberation, the commissioners decided to ask for bids to completely replace the bridge at Cedar Grove; they shelved further consideration of repairs. The board directed the auditor to advertise for bids to be considered in early 1914. On 17 March 1914, the board opened more than 80 bids submitted for the Cedar Grove Bridge and other works the county required. The Indiana Bridge Company of Muncie, Indiana won the bid for a "bridge complete" in the amount of $18,975.00; a complete bridge included the sub-and superstructures. The county required that construction be finished by 1 August 1914. The contracts the sub- and superstructure of the Metamora Bridge went to local firms in Greensburg and Rushville, Indiana. The company completed the 1914 Cedar Grove Bridge on schedule and the commissioners moved on to other bridge business.[6]

The bridge is also a reminder of the heyday of bridge-building activity by many Hoosier fabricators but especially the Indiana Bridge Company whose all-riveted example of a camelback Pratt through truss structure signified advances in bridge technology that are apparent in the few remaining examples of this type.

Today, the Cedar Grove Bridge (INDOT # 6625B) remains basically unchanged from the bridge that the Indiana Bridge Company built under contract to the Franklin County commissioners in 1914. A few members are bent and rusted, some of the minor members require refurbishment, and the deck needs work but its trusses remain intact and demonstrate the bridge's historical and evolutionary integrity/significance. The bridge stands as a viable monument to once-thriving industries that brought prosperity to many Indiana communities in the late 19th and early 20th centuries. An all-riveted camelback bridge, rare in 1914 and even rarer in 2013, is a visible symbol of the evolution of bridge construction from the first stone arch examples through the wooden-truss covered bridges to the metal bridge examples that continue to serve communities today.

Developmental History/Additional historic context information

Two treaties with the resident Native American tribes defined the final boundaries of what became Franklin County, Indiana. The Treaty of Grouseland signed in 1805 and the Treaty of Fort Wayne signed in 1805 rounded out the portion of the county previously relinquished by the Native Americans in the Treaty of Greenville. Proximity to the Ohio River and the booming settlement of Cincinnati, Ohio, on that same river, made Franklin County a destination of choice to early settlers. Brookville, a few miles north of Cedar Grove's eventual site, became home of the local Federal Land Office in 1819.[7]

By the 1820s, the county began to grow rapidly with an influx of settlers. Although the Whitewater River was difficult to navigate on return trips from Cincinnati, it provided ready access to that growing metropolis for farmers shipping pork, flour, and whiskey downstream on flat boats. When the 1830s canal craze took hold of state government after the success of the Erie Canal, plans to build a canal down the Whitewater Valley overcame solid recommendations that it was not feasible, cost wise, due to the significant and rapid changes in elevation along the route; no matter, the canal became a reality in the late 1830s and 1840s though it would serve the

[6] Commissioner's Records, Franklin County, Indiana, Volume C, pages, 324-328, 331, 421-423, and 478-479; "Contracts," *Brookville Democrat*, 18 March 1914, page 4.

[7] Indiana Historic Sites & Structures Inventory, *Franklin County Interim Report* (Indianapolis: Indiana Department of Natural Resources, 2011), pages 12-14.

valley inconsistently. However, towns along the route became centers of commerce in spite of or in the face of destructive flooding and high repair costs.

While the Whitewater Canal never really met the hopes and aspirations of its originators of the idea, it did focus commercial development in various locations in the county and Cedar Grove, Laurel, and Metamora benefited from their positions along the main transportation route to Cincinnati. When the railroad, using the old canal towpath, came through the county these same towns continued to prosper. The Franklin County commissioners recognized the need for permanent, all-weather, and all-season river crossings for the wagon traffic passing through the county between Cincinnati and towns north of the Ohio River. There was no such crossing point (no bridge) over the Whitewater River near Cedar Grove in 1870.

No mention of the superstructure contract was discovered in the records reviewed but on 13 January 1871, the Board of Commissioners approved payment of $9,250.00 to Zenas King for the superstructure of the bridge at Cedar Grove. The record includes the notation, "370 ft. at $25.00 per foot." It appears that the King Iron Bridge and Manufacturing Company got the contract for all three metal bridges in Franklin County during that period because payments for the Laurel and Metamora bridges are also noted in the record. [8]

Although no pictures of the 1870 bridge at Cedar Grove were found during research for this nomination, Zenas King's reputation for bridge design and manufacture started back in 1858. His singular design of a wrought-iron bowstring bridge, with top chords fabricated from flat plates and channel iron in lieu of the more expensive tubular top chords, made him and his company leaders in the field. By the time the Franklin County commissioners had his company build their three bridges King was doing business all over the Midwest and as far west as Fort Laramie, Wyoming. From his headquarters in Cleveland, Ohio, King's representatives spread out and made themselves known to local government officials. His advertisements appeared in business directories in many states. Based on the need for two piers for the 1870/71 Cedar Grove Bridge, the most likely description for that structure would be a three-span bowstring bridge similar to those he advertised in his catalogues in the 1870s.[9]

Flooding along the Whitewater River remained a problem until the construction of a dam near Brookville in 1965. The Whitewater Canal never truly achieved its intended goal but the river would offer other benefits in counter to its destructive force. In the early 1900s, the river and its recreational facilities drew folks from around the Midwest to take advantage of its fishing, swimming, and youth camps.[10]

In March 1913, the Whitewater River and other watercourses in the surrounding region (including the Ohio River) inundated towns and farms along their banks and left a level of devastation unknown before this time. Bridges all over Indiana crashed into streambeds in record numbers. The *Brookville Democrat* headline on 28 March 1913 told the sad news, "Twelve Lives Lost, Immense Loss of Property," and a subtext declared the flood as the "… Greatest Flood in the History of the Whitewater Valley." The lead article further noted that five bridges around Brookville were destroyed along with others at places such as Cedar Grove, Laurel, and Metamora, the same locations Zenas King built his bridges in 1870.[11]

[8] Ibid.
[9] "Bridge Building on a National Scale: The King Iron Bridge and Manufacturing Company," Industrial Archeology, Volume 15-2 (1989), pages 23-39; Cooper, *Iron Monuments*, page 54.
[10] Ibid.
[11] "Twelve Lives Lost, Immense Loss of Property," *The Brookville Democrat*, 28 March 1913, page 1.

A few months after the flood (Summer 1913), the Franklin County commissioners began their struggle to deal with the aftermath of the now infamous flood. The magnitude of the problem is best considered in light of the fact all the main bridges in the county were damaged or destroyed. Brookville, the county seat, was nearly isolated from the rest of the county. Apparently the flood undermined one or both of the piers of the Cedar Grove Bridge which compromised the iron superstructure. Eventually, the commissioners approved a number of requests from enterprising locals to operate ferries and, in one case, a pontoon bridge to ease transportation needs of the county's citizenry. At the board meeting on 23 June 1913, the commissioners requested a bond issue to repair the Cedar Grove Bridge to the tune of $15,600.00. The county council appropriated that amount at a special session. Initially, the commissioners' greatest struggle dealt with what alternative to choose to get the county's iron bridges back in operation. One option considered for Cedar Grove included a new center pier, raising the abutments 15 feet, and constituting a new superstructure using a combination of a wooden Howe truss bridge for one- half and a new steel bridge for the other half, each 180 feet long.[12]

The Indiana Bridge Company of Muncie, Indiana manufactured approximately twenty percent of all the camelback metal bridges extant in Indiana in 1987, a number greatly reduced in the last two-plus decades. The Indiana Bridge Company started in 1886 and continued for decades to fabricate not only bridges but structural steel for many applications. Noted for simplicity in the design of its products, the firm standardized the crafting of members. It replaced the use of eye bars commonly used on many bridges with paired or laced angles. These changes are apparent in the construction of the all-riveted members in the Cedar Grove Bridge, its oldest riveted camelback.[13]

With the payment for the Cedar Grove Bridge made to the Indiana Bridge Company, the county commissioners closed that chapter of the bridge's history. The bridge served the needs of commercial and public traffic for the next six decades with little requirement for serious modification or repairs. In 1975, the Indiana Department of Transportation (INDOT), the owner of the bridge since the1930s, replaced the deck and made some other minor repairs and painted the structure. It is unknown when or how many times the bridge was painted between 1914 and 1975, however, original plans directed that "All surfaces that are inaccessible after being riveted or after erection shall have … two coats of pure red lead and boiled linseed oil." [14]

[12] "New Bridge," *Brookville Democrat*, 14 May 1913, page 3; Commissioner's Records, Franklin County, Indiana, Volume C, pages 324-328; "Council Appropriated Money for Bridges and Other Purposes at Special Session," *Brookville Democrat*, 28 May 1913, page 4.
[13] Cooper, *Iron Monuments*, pages 74and 75.
[14] Cedar Grove Bridge Plans, Indiana Bridge Company, Sheet 5, April 1914.

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Brookville Democrat, 28 March 1913, 14 May 1913, 28 May 1913, and 18 March 1914.

Commissioner's Records, Franklin County, Indiana, Volumes C and P.

Cooper, James L. *Iron Monuments to Distant Posterity: Indiana's Metal Bridges, 1870-1930*. Greencastle, IN: DePauw University, et al, 1987.

Cedar Grove Bridge Plans, Indiana Bridge Company, Sheets 5 and 6, April 1914.

Decennial Census 1870, Franklin County, Indiana

Indiana American, 15 April 1870 6 May 1870

Indiana Historic Sites & Structures Inventory. *Franklin County Interim Report*. Indianapolis: Indiana Department of Natural Resources, 2011.

Industrial Archeology, Volume 15-2 (1989).

"Inspection of the Cedar Grove INDOT Truss Bridge (NBI #516) and a Discussion of Preservation Strategies." J.A. Barker Engineering, Inc., Bloomington, Indiana, 26 August 2011.

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 # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

____ State Historic Preservation Office
____ Other State agency
____ Federal agency
____ Local government

____ University
____ Other
Name of repository: _____

Historic Resources Survey Number (if assigned): 50001-040-003

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10. Geographical Data

Acreage of Property Less than 1 acre

Use the UTM system

UTM References USGS Cedar Grove Quadrangle 1:24,000

Datum (indicated on USGS map):

[ ] NAD 1927 or [X] NAD 1983

1. Zone: 16	Easting: 677425	Northing: 4358012
2. Zone:	Easting:	Northing:
3. Zone:	Easting:	Northing:
4. Zone:	Easting :	Northing:

Verbal Boundary Description (Describe the boundaries of the property.)

From a start point 30 feet west and 50 feet north of the northwest end post of the bridge; turn east and cross Old State Highway 1 to a point 50 feet north and 30 feet east of the northeast end post of the bridge; turn south and proceed in a straight line across the Whitewater River to a point 30 feet east of the southeast end post of the bridge and continue to the north limit of Old State Highway 1, a distance of about 30 feet; turn west and follow the north limit of Old State Highway 1 to a point 30 feet west of the southwest end post of the bridge; turn north and cross the Whitewater River in a straight line to the start point 30 feet west and 50 feet north of the northwest end post of the bridge.

Boundary Justification (Explain why the boundaries were selected.)

The boundary as described includes the abutments, piers, and spans of the bridge and its immediate environs.

11. Form Prepared By

name/title: John Warner
organization: _____
street & number: 5018 Broadway St.
city or town: Indianapolis state: IN zip code: 46205
e-mail_jp_warner@sbcglobal.net
telephone: 317 283 5450
date:_____

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 3000x2000 at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Cedar Grove Bridge
City or Vicinity: Cedar Grove
County: Franklin State: Indiana
Photographer: John Warner
Date Photographed: 12 February 2013

Description of Photograph(s) and number, include description of view indicating direction of camera:

1 of 10 Looking east (downstream) at the full length view of the Cedar Grove Bridge.
2. Looking north from the south abutment and south portal of the bridge. Note the condition of the deck but also the good condition of the main truss members. The bridge railing is in need of some repair, mainly straightening. This view also provides a view of the company's use angle iron and battens to fabricate lightweight bridge members without sacrificing strength in verticals and diagonals.
3. Looking south at the south abutment. The projecting course of stones defining the added height to the bridge seat is visible about 15 feet below the top of the face. The upstream caisson is visible in the left portion of the view. The remains of rusted through lower lateral bracing are also visible. Their absence, according to a report by a professional engineer, is not significant to the bridge's use for foot traffic.
4. Looking north through the caissons at the north abutment. Visible below the end of the span are the stones from the original abutment; i.e., the 15-foot addition in height applied in 1914 to counter/minimize the effect of future floods on the bridge.
5. Looking southeast at the sheet piling around one of the caisson piers.
6. Looking up at the east truss of the south span. Visible in the photograph are examples of the connections at the gusset plates for the diagonals, counters, floor beams, bottom chord, and verticals. Also visible are examples of the use of angle iron and riveted battens to fabricate various truss members and the lacing on the verticals. The top lateral bracing and the sway bracing members are shown at the top of the view.
7. Looking at the same area of the east truss for a better view of the various connections and the fabrication of the bottom chord.
8. Looking up at the top chord and end post connection to demonstrate the fabrication of the top chord and joining of the portal bracing to the same.
9. Looking down at the top of a caisson and the connection of the fixed end post shoe bolted to the concrete cap.
10. A photograph of a detail from the original plans showing the relationship of an end post shoe and the rollers in the roller nest used at the expansion end of each span. The wooden blocks of the deck are shown above side view of a floor stringer.