

FINAL

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 Wabash and Erie Canal Culvert #100
other names/site number Burnett's Creek Arch; County Bridge #181

2. Location

street & number Towpath Road over Burnett's Creek N/A not for publication
city or town Lockport vicinity
state Indiana code IN county Carroll code 015 zip code 47926

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 36CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

J. C. St
Signature of certifying official/Title
Indiana Department of Natural Resources
State or Federal agency and bureau

1-29-02
Date

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

- I hereby certify that the property is:
- 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:)

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property

(Check only one box)

- building
- district
- site
- structure
- object

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	0	Total

Name of related multiple property listing

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

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

TRANSPORTATION: Water-Related

Current Functions

(Enter categories from instructions)

TRANSPORTATION: Road-Related (vehicular)

7. Description

Architectural Classification

(Enter categories from instructions)

MID-19th c.:

OTHER: true masonry arch

Materials

(Enter categories from instructions)

foundation

walls

STONE: Limestone

roof

other

WOOD

Narrative Description

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

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.

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 of age or achieved significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

ENGINEERING

TRANSPORTATION

Period of Significance

1840-1874

1876-1951

Significant Dates

1840

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Case, Reed

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographic References

Bibliography

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

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:

Carroll County Museum

Wabash and Erie Canal Culvert #100
Name of Property

Carroll IN
County and State

10. Geographical Data

Acreage of Property .08 acre

UTM References

(Place additional UTM references on a continuation sheet.)

1 16 536572 4505663
Zone Easting Northing

3 []
Zone Easting Northing

2 []

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 Robert Conner
organization Carroll County Historical Society date 06-15-2001
street & number P.O. Box 277 telephone 765/ 564-3151
city or town Delphi state IN zip code 46923

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

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.

Photographs

Representative black and white photographs of the property.

Additional items

(Check with the SHPO or FPO for any additional items)

Property Owner

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

name Carroll County Board of Commissioners
street & number 101 W. Main Street telephone 765/ 564-3172
city or town Delphi state IN zip code 46923

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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**National Register of Historic Places
Continuation Sheet**

Section number 7 Page 1

Wabash and Erie Canal Culvert #100, Carroll Co., IN

Section 7, Description:

The Wabash and Erie Canal Culvert # 100, also known as Burnett's Creek Arch, is located .33 miles northeast of Lockport, Indiana in Carroll County and about 4 miles north of Rockfield. The culvert is located in an agricultural setting near the north bank of the Wabash River (Photo 20A).

The Wabash and Erie Canal carried passengers, materials and produce to markets between Evansville, Indiana and Toledo, Ohio. It was the principal route of transportation in northern Indiana from 1840 to 1858 until surpassed by the railroads in the late 1850's. The canal system brought commerce and prosperity to Indiana for a brief time, before ceasing operation in 1874.

During the construction of the Wabash and Erie Canal in Carroll County, one of the difficulties that faced the contractors was carrying the canal over Burnett's Creek. When they reached this point they found the canal would be 15 feet higher than the bed of the creek. They addressed this problem by building a stone arch over the creek, wide enough to carry the canal channel and towing path (Photo 11A). Thus, Culvert # 100 became known as Burnett's Creek Arch and it remains standing today because of the engineering methods applied and the quality of materials used.

The Wabash & Erie Canal Culvert #100 is a semicircular span completed in 1840. It is 20 feet in length and 10 feet high. Its 85.5 foot width was wide enough to carry both the canal and the towpath. The culvert was the second largest arch built on the canal by 1847 and is the only original arch left. Earlier culverts were built of salamonie (largo) stone, which deteriorated rapidly. However, the site of the Burnett's Creek arch was close to the Georgetown quarry, near Logansport, which produced quality limestone slabs and stones for the project.

Limestone was delivered and cut at the site, some slabs more than 12 feet long, 2 feet thick and several feet wide. Each was given a hammered finish and was laid dry upon a three-layer grillage. The grillage is made of two-foot wide walnut timbers, some of which are over 40 feet long. No mortar was used to construct the arch; stone slabs and ring (cap) stones were all cut to fit (Photo 17A). The limestone blocks of the spandrels and the stepped wing walls (Photo 12A) were also laid dry, providing a structural length of about 42 feet. As originally constructed, the arch would have carried a puddle of fill for the canal approximately 2 ft. deep over the crown of the arch.

Today, the old canal bed is being used as a road and the arch as a bridge to support the road. The arch is in good condition. The only repair given it occurred long after its conversion to a county roadway. The original southern face of the arch and the course of stone at the springing on the north have been encased in concrete (Photos 1A and 4A). Culvert #100 retains its historical and engineering significance over 160 years after its completion.

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Section number 8

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Wabash and Erie Canal Culvert #100, Carroll Co., IN

Section 8, Statement of Significance:

Wabash and Erie Canal Culvert #100 is eligible for the National Register of Historic Places under Criteria A for its significance in transportation. The culvert, known locally as Burnett's Creek arch, was part of a vast 468-mile canal system begun in Indiana in 1832. It also qualifies under Criteria C for engineering significance. Built during the period of 1839-1840, it was one of only a small number of limestone culverts built along the Wabash and Erie Canal. It is believed to be the canal system's earliest surviving culvert, built for permanence with limestone block laid dry into a semi-circular arch. It carried both canal boats and towpath over Burnett's Creek until 1874, and was then used to carry vehicular traffic from c. 1887 to the present. It stands witness to Indiana's headlong rush into internal improvements and, with the canal itself, shaped economic development throughout the state.

The example of the Erie Canal, built in the decade following the War of 1812, proved irresistible across the Midwest. The economic development that the Erie generated across upstate New York and through the ports around the Great Lakes enticed other governments into state-sponsored canal building. Starting with the nest-egg provided by a federal land grant in 1827, the Indiana legislature decided to build the longest canal ever to be constructed in the United States. Construction began in 1832 and was completed to Lafayette by 1843. The Panic of 1837, however, bankrupted the over-committed state government, leading a group of private bondholders in 1841 to assume financial responsibility for the completion of the canal to Evansville. Upon its completion in 1853, the Wabash and Erie Canal connected the Great Lakes system from Toledo, Ohio to the Ohio River watershed at Evansville.

Burnett's Creek was named for Abraham Burnett, who led an unsuccessful ambush against the forces of William Henry Harrison during the War of 1812. The son of Kankeama (sister of Chief Topenibe of the Potawatomi tribe) and a Frenchman, tribal leaders arranged to have Burnett well provided for in their treaty made with the whites. He was given land in a number of counties in northwestern Indiana. Among these were two reserves in Carroll County, one across the Wabash River from Delphi and the other a portion of land near what has come to be known as Burnett's Creek. He died sometime around 1830.

Carroll County's white settlement began in the northern and eastern parts of the county, with Henry Robinson arriving in October of 1821. Robinson officially purchased land near Deer Creek when it was parceled in late 1824. It is impossible to say who first settled Lockport and the surrounding Adams Township, but William Flicks was one of the first, settling there in 1828 or 1829. He is thought to have raised the first crops in Adams Township, which was officially organized in May 1831.

Farming was the principal pursuit of the residents of Adams Township, because of the rich and fertile soil. The presence of the Wabash River, Rattlesnake Creek, and Burnett's Creek attracted settlers, providing them with a means of travel, abundant fish and wildlife for food, and a useful source of waterpower, which soon led to the development of mills throughout the area. John and William Barnes had built the first mill on Burnett's Creek by 1833. William Barnes platted the town of Barnesville in 1836. Three years later, with the arrival of the canal, it was renamed Lockport. Several new mills, inns and a tavern cropped up as the town began to grow as a result of canal traffic.

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Wabash and Erie Canal Culvert #100, Carroll Co., IN

The construction of the canal itself called for canal men who lived in the vicinity to clear the right-of-way for the canal. The right-of-way was to be cleared of trees, stumps, brush and stones to a width of 90 feet. Ox teams, owned by the men who did the clearing, performed the heavy draft work and the best timber was saved for use in construction work. The length of the canal, in places, traveled through wilderness and swamps. The canal right-of-way in Carroll County alone led through heavy timber in the northeastern section. Above Delphi it entered a swamp on the south side of the Wabash and after passing through the northern edge of Delphi, it crossed the Deer Creek Prairie.

After the right-of-way was cleared, the men dug a channel 30 feet wide and 6 feet deep 'in most places. The top dirt was loaded into horse-drawn carts, hauled off to the side and dumped to build the levee, which when completed was leveled off for the towing paths. The sides and bottoms of the channel were tamped solid, and were lined with a thick layer of stiff clay. To keep the channel in good condition, towpath walkers were employed to walk up and down looking for trouble spots. They watched for erosion of the banks and for tiny swirls in the canal water. Spotting a hole, the walker would wade in, place a wisp of straw in the hole and trod it down firmly. Sediment would cling to the straw, eventually sealing the hole. Even after the channel was finished, there was a constant fight to prevent damage by rodents, eels, crawfish, weeds and tree sprouts.

There were a number of standard ways for American engineers in the 1830s to get a canal across lateral water-courses without changing the canal's elevation or impairing its functions. Small streams crossing the canal's course at its chosen elevation could be allowed to feed into the canal as long as unwanted water could be evacuated through weirs. Small streams below the desired canal elevation were typically made to pass through box culverts built under the canal bed. Larger streams, like Burnett's Creek, required grade-separating spans longer than box culverts could carry. The engineer usually settled on an arch culvert or, where multiple spans were required, a beam or arch aqueduct.

Canals were expensive and time-consuming to build and made no returns on investment until they carried toll-paying cargoes. Thus, engineers were forced to construct canals as quickly and as cheaply as possible. They relied on plentiful, and therefore relatively inexpensive timber. Permanent cut-stone spans could be built over time to replace more temporary timber ones. Jesse L. Williams, the canal's chief engineer, faced another situation that reinforced the prevailing penchant for timber culverts. No good quarries were found within an economically-feasible distance of the canal as it stretched from the Ohio border across Indiana until it reached Georgetown at the western edge of Cass County. Of the 200 miles of canal across the northern part of Indiana that Williams surveyed in 1847, he recorded ten aqueducts and 144 culverts, of which all but 14 culverts were out of timber.

However, when the canal builders reached Burnett's Creek in Carroll County in 1839 they found the site to be only five miles west of the Georgetown quarry. For this reason, Williams chose to separate the stream from the canal with a stone structure, and he turned to the semi-circular arch pattern which the Romans had perfected centuries before for aqueducts and highway spans. In his 1847 survey, Williams found Culvert #100 - the only major arch then on the canal built of adequate stone on the first attempt - in "good repair excepting the ring stone at each end, a part of which are of soft stone and are falling to pieces."

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Wabash and Erie Canal Culvert #100, Carroll Co., IN

Williams hired Reed Case to build sections of the Wabash and Erie Canal, including Culvert #100. Born in 1808, Case established his own construction business by the age of sixteen. By age twenty-eight, he had helped build a number of Indiana landmarks, including the former Hendricks County Courthouse, portions of the National Road, and sections of the Wabash and Erie Canal in Miami County. In 1838, he was hired to build the Wabash and Erie Canal through Carroll County, Indiana. When Mr. Armitage, the contractor for the section immediately west of Carroll County, died, Case continued to supervise the canal's construction to the Tippecanoe River, just outside of Lafayette. By the time of his death in 1871, Reed Case was one of the most respected and wealthy citizens of Carroll County. He operated a pork packing plant and warehouses in Delphi, in addition to his construction business.

With its proximity to Tippecanoe and Cass County canal traffic, Lockport and all of Carroll County prospered from this water channel. Freight boats that passed through Carroll County brought merchandise from the east to local stores. Packet boats carried emigrants west to the frontier and merchants and businessmen east to markets. Carroll County residents were in awe of boats from distant places that passed through their towns. As packets and freight boats approached town wharves, townspeople were eager to welcome their passengers and inspect their cargo. They were interested in hearing about any state, national, or international events from those on board and the "canalers" were anxious to partake of any attractions the town might provide.

While the canal brought commerce and settlement to its ports, it continued to be a source of controversy and debate. Canal traffic was at the mercy of the weather, and was thus unreliable. Hard winter freezes and seasonal floods closed the canal for indefinite periods of time, delaying the arrival of needed supplies to the towns along the canal and leaving travelers to rely on land transportation. Escalating maintenance costs and the rapid spread of railroads across Indiana, especially following the Civil War, underlined the competitive disadvantages of canal transportation.

When the Wabash River canal darn failed in the early 1870s thereby draining the Wabash and Erie Canal, not enough support could be mounted to make the necessary repairs and Culvert #100 sat abandoned for some time. No railroad passed through Lockport, nor was the Wabash River bridged near the town. Indeed, the town's growth stagnated following the abandonment of the canal in 1874. Lockport's sole lifeline became the "old state road", referred to locally as the Delphi to Logansport Road. The state road ran north from Delphi and crossed the Wabash River at Carrollton. It then turned northeast and roughly paralleled the canal through Lockport to the Cass County line.

In 1886, the Wabash and Erie Canal authorities admitted defeat and began to dispose of canal lands. The Indianapolis and Evansville Railroad had already appropriated the 100 miles of towpath between Worthington and Evansville for their use, though its claim was challenged in court, eventually reaching the State Supreme Court. The State of Indiana sold off many sections of canal right-of-way. In 1886, Joseph Shirk of Peru purchased all the canal lands from Lafayette to Lagro with the intention of selling off parcels, many to adjacent landowners, at a profit. Not all the reuses of the old towpath occurred as formal property transfers or through court cases.

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Wabash and Erie Canal Culvert #100, Carroll Co., IN

Just as some abandoned, graded railroad rights-of-way have in later times been integrated into county road systems, so Carroll County residents increasingly and at first fitfully eyed sections of the abandoned Wabash and Erie canal towpath as roadways in waiting. Stone arches were more permanent than timber spans and could carry greater loads, however, they required greater capital outlays to build. Thus, in the construction of Indiana's roadways, stone arches were largely reserved for urban settings or the National Road. The Burnett's Creek Arch, however, was in excellent condition and adjacent to the "old state road." As it would require no serious structural modification, it seemed natural to incorporate it into the Carroll County road system when the older, timber road bridges nearby had begun to suffer dangerous decay. In March 1887, Adams township residents from Lockport and to the east petitioned the county commissioners for the "vacation and relocation" of that portion of the old state road from Lockport to Cass County. They also asked that it be improved as the "Lockport and County Line Gravel Road." Petitions concerning parts of the state road and bridges from Carrollton to Lockport were so generally successful that the commissioners began to speak of it as the "Towpath Road."

The commissioners appointed three viewers along with Craven Smith, the county's surveyor/engineer, to survey and assess the proposed route. Although the viewers recommended the construction of the somewhat relocated and improved road to cross Culvert #100, a number of the Adams township residents who would be assessed to pay the cost of the improvement hired legal counsel to resist. In the end, the commissioners caved in to the protestors and dismissed the petition for road improvement. That is to say, the county surveyor/engineer did not propose to route the road over Culvert #100; instead, he planned for the construction of a separate 40-50 ft. pony-truss crossing Burnett's Creek.

The fight that erupted in Carroll County from efforts to convert the old state road into the Lockport and County Line Gravel Road appears to have demoralized advocates for improvement of this particular stretch of the road for some time. Indeed, it may have been the absence of improvement and the decay of the old, wooden bridge over Burnett's Creek that quietly and informally led to the use of canal Culvert #100 for vehicular traffic. The formal incorporation of the arch into the county roadway system may well have occurred as result of the successful petition of Lewis Greenwalt in late 1908 or early 1909. His request for "recording all towpaths as public highway" in Adams Township led to the arch's reuse as Carroll County Bridge #181.

Section 9, Bibliography:

"Burriss House Is Third in Series"
Carroll County Comet (February 1, 1995) Delphi, Indiana
Front Section

Castaldi, Thomas E.
Wabash and Erie Canal Notebook II: Cass, Carroll and Tippecanoe Counties.
Pages 46-5 1. Columbia City, Indiana: Hinen Printing, 1998

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Section number 9&10 Page 6

Wabash and Erie Canal Culvert #100, Carroll Co., IN

Cooper, James L., PhD.
"An Arch for All Seasons: Culvert No. 100 and Burnett's Creek Arch"
Unpublished paper

Cullen, Kevin
"Historic Burnett's Creek Arch -'beautiful piece of work'."
Lafayette Journal/Courier (February 14, 1999):
Local/Life Section C 1, Vol. 8 1, No. 45

Cullen, Kevin
"Group Trying to Open Public Access to Historic Burnett's Creek Arch."
Lafayette Journal/Courier (May 14, 2000):
Local/Life Section B 1, Vol. 82, No. 132

Fatout, Paul
Indiana Canals Pages 130-139. Purdue University Studies. 1972.

History of Carroll County, Indiana.
Pages 263-267. Kingman Brothers. Chicago, IL 1882 (Reprinted 1955).

Mayhill, Dora Thomas
Old Wabash and Erie Canal in Carroll County and Pre-Canal History of the Wabash
Pages 45-46. Banner Publishing Co. Knightstown, Indiana. 1953 (Reprinted 1973).

McDaniel, Dennis K.
"Water Over Water: Hoosier Canal Culverts, 1832-1847"
Indiana Magazine of History (December 1982)
Volume LLXXVIII, Number 4, Pages 311-322

McOmber, C. "Canal Systems of Indiana and Ohio (Map)"
Cartographic Services, Department of Geography, Ball State University, 1998

Warner, John.
"(Indiana) Canals and Related Resources 1800-1875"
Resource Protection Planning Process document, I.U.P.U.I., 1993

Verbal Boundary Description:

The nomination includes the Wabash and Erie Canal Culvert #100, its arched span, spandrels, wing walls, grillage, deck, right-of-way, and all parts of its structure and superstructure. On either side of the span, the boundary includes 20' of the approaching right-of-way of the Lockport and County Line Gravel Road. The Wabash and Erie Canal Culvert #100 carries the Lockport and County Line Gravel Road across Burnett's Creek.

Boundary Justification:

The boundary as described includes the significant resource and its immediate environment.

WARRIOR OF THE
CAMP CURET #100
CARROLL CO, IN
UTM
16 536512 4505 663

3665 11 NW
(YEOMAN)



