Reading Jim Cooper's Database Files

Structures are generally arranged by county and structure number. Structure numbers are those assigned in county and state bridge inventories. Structure numbers in parentheses are either demolished or owned by a non-government unit (mostly railroads).

Generally all structures raised at a given site are included in a single database entry or file. Where considerable information has been uncovered on structures on a given site, more than one entry may be used and the entries be cross-referenced.

Structures on county lines are listed under the lead county. While both counties are financially responsible for a bridge on a border, one is designated as the lead. Counties are lead on their eastern and southern sides. (Structures along Mill Creek which have been assigned to Putnam County are listed at the end of the pdf for Morgan County.)

Where bridges have been named in contracting, planning, or via newspaper reports, they are so noted on the database even if the "historic" name is no longer used for the crossing.

Name	County	Br. #	Latitude	Longitude
old Pa RR: White Lick Ck Bridge	Morgan	55	° N	W

Township	Sect'n	Tnshp	Range
	9	12N	1E

Carries: Indiana Southern Railroad
Over: White Lick Creek

USGS Topo Map: Mooresville East
UTMs: 1 6 E: 553964 N: 4383391

USE by Design: trains | Current: trains
Last Revised: 4/2/2015

PRIOR Structure
Name:

SURVEYED Structure
Built:
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss Pratt				

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
		one track	

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

References

"ISRR White Lick Creek Bridge," Morgan County, <Bridgehunter.com>.

Name	County	Br. #	Latitude	Longitude
Hendricks County Bridge #204 [Morgan County Bridge #201]	Hendricks	32 [204]	° N	° W

Township	Sect'n	Tnshp	Range

Carries: County Line Rd.
Over: White Lick Creek

USGS Topo Map: Plainfield
UTMs: 16 E: 552220 N: 4386720

USE by Design: vehicles
Current: demolished
Last Revised: 5/1/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1893
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1990
By:

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss Pratt	pinned	8	1	149/3
pony truss Pratt	pinned	2	2	24

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
197/3		15/7	

SUBSTRUCTURE

Material: concrete

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Wrought Iron Bridge Co.	fabricator

Construction History and Structural Description

The joint boards of commissioners of Hendricks and Morgan counties agreed in August 1906 to repairs to the bridge over White Lick Creek on Mooresville & Plainfield Free Gravel Road. Morgan county was to take the lead in what was anticipated as a $2,600 repair. At the February 1907 letting in Martinsville, N. W. Gilbert won a $829 contract for flooring, painting, and repairing the county line bridge 1 mile north of Mooresville. The joint boards met in Danville in April 1924 and decided that the bridge on the county line should have a block floor and the substructure painted according to plans that George R. Harvey, Hendricks County Enginner had already prepared. The joint boards let the repair contract to McIntire & Son for $1,468.

The Wrought Iron Bridge Company of Canton, Ohio, fabricated the three spans seated upon concrete abutments and wingwalls and metal caisson piers. Intermediate verticals of laced channels divided the through-truss span into most of its eight panels of 18-foot and 8-inch width. Eyebars provided the diagonals: pairs of die-forged and rectangular ones stretched toward center span from the top panel point to the bottom of all except the end-post panels; cylindrical eyebars with turnbuckles countered the others in the two most central panels. The Pratt ponies each spanned 24-ft. in two panels with a vertical of laced double angles and cylindrical eyebar diagonals with turnbuckles. U-bolted to the lower pins, I floor-beams carried the timber deck and roadway between latticed guardrails for all spans. The through-truss span had 20- ft. of vertical roadway clearance.

Built by a prolific Ohio firm, this bridge retains its original members, including decoratively latticed guardrails.

References

Beam, Longest & Neff, Inc., *Bridge Inventory Rating & Safety Inspection: Hendricks County* (Indianapolis, 1974).
Associated Engineering Consultants, Inc., *Bridge Reinspection Study & Report: Hendricks County* (Nashville, 1979).

bridge nameplate.

Morgan County,"Commissioners Record," 21: 535; 22: 42; 28: 269-271.

Name	County		Br. #	Latitude	Longitude
old Pa RR: White River Bridge	Morgan	55		° N	W

Carries	Township	Sect'n	Tnshp	Range
Indiana Southern Railroad	Clay-Washington	9	12N	1E

Over	USGS Topo Map	UTMs		
White River	Martinsville	1 6	E: 549520	N: 4371130

USE	Last Revised
by Design	4/2/2015
trains	Current: trains

PRIOR Structure

Name:

SURVEYED Structure

Built:
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss: Pratt				132

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
415		one track	

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

References

"ISRR - White River Bridge," Morgan County, <Bridgehunter.com>.

Name	County	Br. #	Latitude	Longitude
Pa RR: Lambs Creek Bridge [33-30]	Morgan	55	° N	W

Township	Sect'n	Tnshp	Range
Jefferson	1	11N	1W

Carries: Pennsylvania Railroad
Over: Lambs Creek

USGS Topo Map: Martinsville
UTMs: 1 6 E: 545220 N: 4363470

USE by Design: trains
Last Revised: 4/2/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: c.1895
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - <2008
By:

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss	Pratt	pinned	7	1

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
		one track	

SUBSTRUCTURE

Material: stone

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

This single-span, pin-connected Pratt through truss was seated upon cut stone abutments and wing-walls. Intermediate verticals of laced channels subdivided the truss into most of its seven panels. Eye-bars provided the diagonals: pairs of die-forged and rectangular ones stretched toward center span from the top panel point to the bottom along with an adjustable eyebar in the 2nd, 3rd, 5th, and 6th panels; cylindrical eye-bars with turnbuckles countered the others in the 3rd and 5th panels and pairs crossed the 4th or center panel. Attached above the lower chord, girder floor-beams carried the timber railroad ties and single track deck. The die-forged, rectangular eye-bars of the central panels of the lower chord were enclosed with a special adjustable member.

The heaviness of members, extra members, and special adjustable members with the diagonals and lower chord were unusual features.

References

Name	County	Br. #	Latitude	Longitude
Thomas Wheeler Bridge	Morgan	55	° N	° W

Township	Sect'n	Tnshp	Range
Ashland	2-11	12N	2W

Carries: Awbrey Rd./C.R. 500W
Over: Rhodes Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Last Revised: 4/13/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1913
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
slab	1	8

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
10	20/4	18	

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
H. A. Blunk	L. P. Guthrie	builder

Construction History and Structural Description

The county advertized a March 1913 letting for construction of the Thomas Wheeler Bridge near Plano in Ashland township on plans developed by H. A. Blunk, the county engineer. Lewis P. Guthrie of Brooklyn, Indiana, brought in the only and consequently the successful bid at $270. Guthrie was paid $270 in September.

The "flat top" span includes 13 patented Luten trusses; deck about 15-inches deep; original gas pipe railings replaced with galvanized W-rails.

References

H. A. Blunk, "Thomas Wheeler Bridge Plan for an 8-foot Concrete Flat-top Bridge," January 1913.

Morgan County, "Commissioners Docket," 18: 304-305, 307;
"Commissioners Record," 24: 353, 367, 388-389, 392, 500;
"County Council Record," 1: 120.

Name	County	Br. #	Latitude	Longitude
Paragon Bridge	Morgan	55 [6]	39° 22.4' N	86° 33.2' W

Township	Sect'n	Tnshp	Range
Ray-Baker	19-20	11N	1W

Carries: Paragon Rd.
Over: White River, W Fork
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Last Revised: 4/3/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1889
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1974
By: CPC I-beams

SUPERSTRUCTURE FORMS
Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through-truss			2	161

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
330		16	

SUBSTRUCTURE
Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

The county commissioners visited the site of a bridge proposed to cross the White River near Paragon (2 miles south) a few days before receiving a construction proposal from the Wrought Iron Bridge Company in December 1887 at $25 per lineal foot. The board contracted with Wrought Iron Bridge for a 330-foot long structure (extreme) in two 165-foot spans (161-ft, clear) with a 16-foot roadway. The county was to have the substructure ready by September 1889 and Wrought Iron was to erect the superstructure by October. The commissioners received proposals for substructure in April 1889 and promptly adjourned to view stone at the Romona and Stinesville quarries. Within days, the Romona Oolitic Stone Company secured the stone-work contract for $7.62 per cubic foot of masonry. Romona Oolitic received payments of $2,000 in September and $3,469.38 in October.

The Paragon Bridge underwent repair periodically. In May 1908 the board ordered county Surveyor, E. O. Gilbert to prepare plans and specifications for some repairs. In June, the county let a $471.60 contract to Thomas E. Lawrence for the repairs.

In September 1927, the Council appropriated $6,000 for new 8-inch I-beam stringers and flooring for the "Paragon Bridge". At a March 1928 letting, the commissioners awarded a $12,873 contract to Robert E. Rhea of Clayton to paint and install new stringers and flooring in three steel structures, including the Paragon Bridge. Flooding early in the year also cut in behind the Paragon Bridge, causing the Council to tentatively appropriate via borrowing $4,000 repairs to the structure and $2,000 the strengthen the bank and cut a channel.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 17: 339-342, 393-394, 447-448, 496; 22: 444, 487; 29: 47-49;
"County Council Record," 1: 242, 245.

Name	County	Br. #	Latitude	Longitude
Bryants Creek Bridge	Morgan	55 9	39° 21.6' N	86° 32.1' W

Carries	Bryant Ck Rd/C.R. 600W/#54
Over	Bryants Creek

Township	Sect'n	Tnshp	Range
Baker	28-29	11N	1W

USGS Topo Map	UTMs		
Modesto	16	E: 539654	N: 4356540

USE by Design	Current	Last Revised
vehicles	vehicles	4/13/2015

PRIOR Structure

Name

SURVEYED Structure

Built	1909
Span(s) Added	
Remodelled	
Moved - On	
To	
Replaced -	
By	539654

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	40	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
41	18/8	15/6	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
E. O. Gilbert	N. W. Gilbert	builder

Construction History and Structural Description

The commissioners ordered the construction of a number of bridges in February 1909, including a reinforced concrete arch across Bryant's Creek in Baker township (S29/T11N/R1W), to plans drawn by E. O. Gilbert. While the National Bridge Company brought in the lowest bid on Luten plans at the March letting, the commissioners gave the contract to N. W. Gilbert who would build to county plans for a 40-foot span. Construction was complete by September.

The three-centered arch ring is about 12-inches deep at the crown and 2-feet at springing. 2-foot high concrete parapets.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 23: 35, 43, 47, 91, 104, 113;
"County Council Record," 1: 79.

E. O. Gilbert, "Bryant's Creek" plans.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #24	Morgan	55	24	39° 22.2' N	86° 16.0' W

Township	Sect'n	Tnshp	Range
Jackson	24	11N	2E

Carries: Hickey Rd.
Over: Indian Creek, branch

USGS Topo Map: Morgantown
UTMs: 16 E: 563476 N: 4358527

USE

Last Revised: 4/14/2015

by Design	Current
vehicles	vehicles

PRIOR Structure

Name:

SURVEYED Structure

Built	1911
Span(s) Added	
Remodelled	1986
Moved - On	
To	
Replaced -	
By	

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	22	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
43	26/6	25/5	

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

Widened in 1986 with a pair of 4-feet wide prestressed concrete box beams to the south, replacing the concrete parapet on the widened side with W-rail.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #26	Morgan	55 26	39° 23.7' N	86° 24.4' W

Township	Sect'n	Tnshp	Range
Washington	15	11N	1E

Carries	Mahalsville Rd.
Over	Sand Creek

USGS Topo Map	UTMs		
Martinsville	1 6 E: 550990	N: 4360700	

USE by Design: vehicles — Current: vehicles — Last Revised: 4/14/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: c1916
Span(s) Added:
Remodelled: <1978
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
concrete slab	2	18/4

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
39/6	21/9	20/8	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	E. O. Gilbert	contractor

Construction History and Structural Description

The commissioners decided in September 1910 to build "one arch two miles southeast of Martinsville, on Mahalasville Gravel Road" over Sand Creek. E. O. Gilbert secured a combination contract that included approximately $961 for the Sand Creek bridge. Pat Magee was appointed superintendent of construction "of arch over Sand Creek".

Widened in 1986 with a 3-foot and 9-inch wide prestressed concrete box beams to the east, replacing the concrete parapet on the widened side with W-rail.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Morgan County, "Commissioners Record," 23: 249, 264.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #27	Morgan	55 [27]	39° 21.7' N	86° 21.8' W

Township	Sect'n	Tnshp	Range
Washington	25	11N	1E

Carries: Mahalsville Rd.
Over: Camp Creek

USGS Topo Map: Morgantown
UTMs: 16 E: 554590 N: 4356520

USE by Design: vehicles | Current: vehicles
Last Revised: 4/14/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: c1930
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: steel; concrete | 4; 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
encased I-beam	continuous	3	13

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
42	20	18/4	

SUBSTRUCTURE

Material: concrete | 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

The 12-inch deck consisted of I-beams encased in concrete.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Name	County		Br. #	Latitude		Longitude	
Mahalasville Bridge	Morgan	55	[28]	39° 21.5'	N	86° 21.3'	W

Township	Sect'n	Tnshp	Range
Jackson	30	11N	2E

Carries Mahalasville Rd./C.R. #39
Over Indian Creek

USGS Topo Map Morgantown
UTMs 1 6 **E:** 555162 **N:** 4356707

USE by Design: vehicles
Last Revised 4/2/2015
Current: half relocated

PRIOR Structure
Name

SURVEYED Structure
Built 1926-1927
Span(s) Added
Remodelled
Moved - On 2004
To Yorktown (one span)
Replaced - 2004/2005
By

SUPERSTRUCTURE FORMS
Material steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss Pratt		6	1	90
pony truss Pratt		5	1	70

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
163	15/8	15/5	

SUBSTRUCTURE
Material concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	contractor

Construction History and Structural Description

Prior Structure (1879 - 1926)

In June 1879, the commissioners contracted with George Lash & Sons to constructing stone abutments "for the superstructure of a Bridge across Indian Creek at Mahalasville". Lash & Sons were paid $100 "on bridge piers at Mahalasville" in July and $205.56 balance for stonework in September. In October 1879, William R. Sheppard received $50 for painting "the iron bridge at Taggart's crossing and the iron bridge at Mahalasville".

Mandeville, Olds & Company of Mahalasville secured a county contract to construct "a trestle bridge over Indian Creek" in July 1882. The contract included the moving of an existing superstructure, stonework, and trestle construction. In September, S. J. Mandeville was advanced $200 "on the work of Mahalasville Bridge". In December, the company received $1,130.90 for its construction.

Surveyed Pratt Truss Spans (1926/27 - 2004)
The "wagon bridge at Mahalasville was broken in two during the high waters" of a September 1926 storm, making "every day" in town as though "Sunday there now." Mahalasville residents demanded a new bridge for over Indian Creek from the county authorities, and they quickly got it. The county council soon appropriated $10,500 for a replacement within a week. Although the commissioners set a November letting, the board actually contracted with the Vincennes Bridge Company for a replacement in late October for the 70- and 90-foot steel-trussed superstructures on concrete abutments and pier for $9,848 plus piling, if needed. Piling was apparently required, for *Martinsville Democrat* reported on the 23rd of December that the pile driver was expected that week. The Vincennes bridge men worked on the pier pits on Sunday in order to get Christmas day off. Construction was completed by early May 1927.

The riveted, full-hip Pratt pony trusses were seated upon concrete abutments and pier. The two spans of the 162-foot structure were of different length and depth: the one to the North spanned 90 feet in six panels at 10-feet deep, and the southern one extended 70 feet in five panels at an 8-foot and 4-inch depth. All the verticals were made from two pairs of angles and a few battens which also helped to stiffen the external sway braces. A pair of angles and battens provided the diagonals and the counters. None of the outer panels had diagonals, and only the center panel(s) were countered (two panels in the long span, and one in the shorter one). A pair of heavy angles and battens also supplied the lower-chord members in all except the two most central panels of the long span where the angles were doubled. Riveted to the verticals below the lower chord, I-floor-beams carried runs of rolled-I steel stringers and a 16-foot concrete deck. At 20 inches, the floor-beams of the long span were 2 inches deeper than on the shorter one. Narrow-channel guardrails protected the trusses.

Morgan county began a prolongued effort at federal-aid replacement of the Mahalasville Bridge in the 1990s and finally decided to proceed with county funding alone. It closed the old structure sometime in 2004 and had a new single span welded truss built alongside. The shorter span, which crossed the channel, was reportedly demolished by a tree falling on it.

Having removed the floor and floor-beams of the old span and cut its trusses in two, the contractor for the new span gifted the truss remains in June 2004 to James E. Barker Engineering who made the structure available for rehabilitation and reuse in Delaware County in 2005. [For relocation site, see Delaware county, 18-Yorktown Park Bridge.]

References

Prior Structure (1879 - 1926)

Morgan County, "Commissioners Record," 14: 207, 214, 279, 314; 15: 451, 456, 534.

"Notice to Contractors," *Martinsville Republican*, 12 June 1879: p4 c3.

Surveyed Pratt Truss Spans (1926/27 - 2004)

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).

Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).

R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

"Bridge Should Be Fixed at Once," " Bridge Money Appropriated," "Mahalasville Bridge," *Martinsville Democrat*,
17 September 1926: p1 c2; 24 September 1926: p5 c4; 23 December 1926: p4.

"Two Other Bids Submitted," Martinsville *Daily Reporter*, 6 October 1926: p1 c4.

"Bridge and Road Contracts were Awarded," *Martinsville Republican*, 7 October 1926: p1 c3.

Morgan County, "Commissioners Record," 28: 444, 523;
"County Council Record," 1: 234.

Name	County	Br. #	Latitude	Longitude
Miller Bridge	Morgan 55	30	39° 21.3' N	86° 17.9' W

Township	Sect'n	Tnshp	Range
Jackson	27-34	11N	2E

Carries: Mahalsville Rd./C.R. #62
Over: Pike Creek

USGS Topo Map: Morgantown
UTMs: 16 E: 560440 N: 4356300

USE by Design: vehicles
Last Revised: 4/14/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1916
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	1	36
with floor-beams		

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
41	20/7	17/2	30°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	H.A. Blunk & P.M. Vanarsdall	contractor

Construction History and Structural Description

The county had plans for the 36-foot, skewed clear span Miller Bridge in Jackson township calling for Luten trusses in the girder of 12 and 4 one-inch round rods. The floor-beams were each to carry trusses of 11 three-quarter-inch round rods. The commissioners ordered a letting of the "Pike Creek Bridge" in Jackson township in February 1916. H. A. Blunk and P. M. Vanarsdoll of Martinsville secured the construction contract. O. R. Wells served as Superintendent of Construction.

The paneled girders are 1-foot and 5-inches wide and 4-feet and 4-inches high. The eight 10x12-inch floor-beams were centered 5-feet apart.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County plans for "Miller Bridge, Jackson Township."

Morgan County, "Commissioners Record," 25: 522, 553, 559-560; 26: 27.

"Martinsville , Morgan County - Bridges," *Engineering News*, Construction News, 75 (9 March 1916): 141.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #31	Morgan	55 [31]	39° 21.6' N	86° 18.3' W

Township	Sect'n	Tnshp	Range
Jackson	27-28	11N	2E

Carries: Pete Whetstine Rd.
Over: Indian Creek

USGS Topo Map: Morgantown
UTMs: 16 E: 559635 N: 4356990

USE by Design: vehicles | Current: demolished
Last Revised: 4/2/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: c1928
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 2010
By:

SUPERSTRUCTURE FORMS
Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren	riveted	6	1	72

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
75	20/4	18/10	

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders
[state highway commission]	

Construction History and Structural Description

The Indiana Department of Highways continued to design riveted Warren pony trusses throughout the 1930s for some spans requiring spans of less than 100 feet.

The bridge trusses are half-hip, each with six 12-foot panels and bolted together in three sections. Its diagonals are heavier at the end-posts than towards center span. They are made from two pairs of angles and battens for each outer panel and a single, increasingly lighter pair towards mid-span. The lower-chord members are also varied in size, each being fabricated from a pair of angles and battens in the outermost panel and with two pairs of angles for the inner panels. The verticals consist of two pairs of angles riveted together with several batten plates shared with the external braces. The battens integrate the sway bracing with the verticals. The I floor-beams are bolted to gussets and the verticals above the lower chord and carry a concrete deck with an asphalt roadway. Guardrails of light channels protect the trusses.

The design of this structure follows ISHC patterns used in the transition between the mid-1920s and the mid-1930s. Although the deck is not as wide as typical of the 1930s, the method and amount of reinforcing used with some diagonal and lower chord members suggests the early years of the later decade. The combination of bolting and riveting in the superstructure suggests relocation.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County*; *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1974, 1978).

Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).

R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #32	Morgan	55 [32]	39° 22.6' N	86° 18.8' W

Township	Sect'n	Tnshp	Range
Jackson	21	11N	2E

Carries: Sedwick/Voiles Rd.
Over: Oliver Creek

USGS Topo Map: Cope
UTMs: 16 E: 559180 N: 4358870

USE by Design: vehicles
Last Revised: 4/2/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1931
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 2008
By:

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	1	47
riveted plate		

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
50	19/8	16/6	33°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders
E. D. Canatsey	

Construction History and Structural Description

In December 1930, H. A. Blunk, engineer, and W. H. Farr and Walter Anderson, viewers, recommended the construction of the Whetstone Road, including a 50-foot plate girder over Oliver Creek for an estimated $2,652 and eight culverts. E. D. Canatsey, county engineer, designed the girder for this location.

The single-span, 50-foot plate girder rests upon concrete abutments and wing-walls. Offset from one another by 33 degrees, each girder is about 3.5-feet deep, made from two plates, and square-ended. The flanges are reinforced with a cover plate all around - top, bottom, and sides. Bolted through the plate inside the lower flanges, I-floor-beams carry a concrete deck with a 17-foot and 6-inch asphalt roadway.

Except for its considerable skew, the bridge's design was quite conventional for its period.

References

Associated Engineering Consultants, *Bridge Inventory Rating & Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 29: 300.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #34	Morgan	55 34	39° 20.5' N	86° 21.0' W

Township	Sect'n	Tnshp	Range
Jackson	31	11N	2E

Carries: Bearwallow Rd.
Over: Indian Creek, branch

USGS Topo Map: Morgantown
UTMs: 16 E: 555510 N: 4354859

USE by Design: vehicles
Last Revised: 4/14/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: c.1920
Span(s) Added:
Remodelled: 1986
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	20/6	4/2

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
21/6	26/2	26	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

Widened in 1986 with a 4-feet wide prestressed concrete box beams on each side, replacing the paneled concrete parapets with W-rail.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Name	County	Br. #	Latitude	Longitude
Cramer Bridge	Morgan	55 [37]	39° 23.9' N	86° 23.2' W

Township	Sect'n	Tnshp	Range
Washington	13	11N	1E

Carries: Townshend/Voiles Rd./C.R.#41
Over: Sand Creek/Indian Ck, branch

USGS Topo Map: Martinsville
UTMs: 16 E: 552370 N: 4360880

USE by Design: vehicles
Last Revised: 4/2/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1927
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1988
By: PC box beams

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	1	32
riveted plate		

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
35	17/9	16	27°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	builder

Construction History and Structural Description

In March 1925, the county commissioners ordered "engineer Canatsey" to prepare plans for the Cramer Bridge across Sand Creek. But the board did not act on construction until February 1927 when it finally ordered a March letting for the 35-foot Cramer Bridge over Sand Creek in Washington township. The Vincennes Bridge Company won the letting for $3,350 plus piling at $1 per foot. E. D. Canatsey reported the bridge as complete and the board accepted it in May.

The single-span, plate girder sat on concrete abutments and wing-walls. Offset from one another by 27 degrees, each girder was about 3-feet deep, built from two plates, and slightly rounded at its ends. The flanges are un-reinforced. Bolted through stiffeners and girder plate, I-floor-beams carried the runs of steel stringers and asphalt-over-concrete roadway.

Aside from its skew, the bridge's design was quite conventional.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 28: 342, 465, 485-489, 523.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #38	Morgan	55	38	39° 21.1' N	86° 21.7' W

Township	Sect'n	Tnshp	Range
Washington	36	11N	1E

Carries: Downey Rd.
Over: Indian Creek, branch

USGS Topo Map: Morgantown
UTMs: 16 E: 554665 N: 4355932

USE by Design: vehicles
Current: vehicles
Last Revised: 4/14/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: c.1920
Span(s) Added:
Remodelled: 1986
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	20/2	4

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
22	26	25/10	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	

Construction History and Structural Description

Widened in 1986 with a 4-feet wide prestressed concrete box beam on each side and replacing the paneled concrete parapets with W-rail.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Name	County	Br. #	Latitude	Longitude
Taggart's Crossing Bridge	Morgan	55 [39]	39° 22.7' N	86° 23.8' W

Township	Sect'n	Tnshp	Range
Washington	22-23	11N	1E

Carries: Low Gap Rd.
Over: Indian Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Current: demolished
Last Revised: 4/14/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: c.1920
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1973
By: PC box beams

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
[pony truss]				

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

Prior Structure (1867/1868 - 19xx) [?]
The commissioners ordered a November 1867 letting of two bridges, including one "over Indian Creek, at the crossing of the county road, near the residence of Joseph Taggart" in Washington township. Bids were sought in either wood "of the Howe pattern" or iron. At the letting W. A. Winslow & Company successfully proposed to construct "Z. King's celebrated wrought iron bridges in accordance with the patent and all improvements upon the patent thereof". The Indian Creek span would be 70-feet long by 12-feet wide for $24 per lineal foot and placed on abutments prepared by the county. In December 1867 and January 1868, James C. Craig received $73.04 for timber provided for the Indian Creek Bridge and P. L. Davis received payments for the erection "of trussels or abutments" to support the superstructure. The commissioners accepted the bridge as satisfactorily completed in December and paid Winslow $2,874 as contracted. James Martin received $44.25 in June "for services on bridge over Indian Creek."

The "iron bridge" underwent periodic repair. The commissioners inspected the Indian Creek bridge "near Joseph Taggart's" in June 1878 and appointed N. J. Cunningham "to make the necessary repairs". Cunningham received $60 for the repairs in September and $151.68 in December. In October 1879, William R. Sheppard received $50 for painting "the iron bridge at Taggart's crossing and the iron bridge at Mahalasville". Sheppard secured $18 in December "for tightening Morgantown Bridge [#1522], Taggard's Crossing Bridge [#39], and Mooresville Bridge [#137, #3790]." Milt Moran received $11.35 in March 1889 "for olts, nuts, etc., for bridge on Taggart's Station Gravel Road."

References

Prior Structure (1867/1868 - 19xx) [?]
Morgan County, "Commissioners Record," 9: 192-193, 196-198, 226, 230, 320; 10: 1; 13: 444, 535; 14: 21, 339; 15: 157-159; 17: 375.

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Name	County	Br. #	Latitude	Longitude
Sheerer/Burton Lane Bridge [old Marion Co. Bruce Ford]	Morgan	55 [42]	39° 24.1' N	86° 26.0' W

Township	Sect'n	Tnshp	Range
Washington	8-9	11N	1E

Carries: Burton La., Martinsvl/C.R.#189
Over: Indian Creek

USGS Topo Map: Martinsville
UTMs: 16 E: 548450 N: 4361100

USE by Design: vehicles
Last Revised: 4/3/2015
Current: dismantled

PRIOR Structure
Name:

SURVEYED Structure
Built: 1872
Span(s) Added:
Remodelled:
Moved - On: 1899;1930;1
To: Co. hwy garage
Replaced - : 1998
By: CPC I-beam

SUPERSTRUCTURE FORMS

Material: wrought & cast 2

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	bowstring	bolted	12	1	93

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
I-beam	1	9-10

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
108	16	15/5	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
Joseph Davenport	Massillon Bridge Co.	fabricator

Construction History and Structural Description

[For Original Location, see Marion County, Bruce Ford Bridge (49-#1804).]

Sheerer Bridge (18xx - 1930)
When, in June 1867, the commissioners were considering the improvement of the Martinsville & Bloomington Road, they ordered William B. Taylor of Martinsville to prepare plans and specifications for a bridge "to be erected over Indian Creek".

The commissioners visited the "iron bridge" over Indian Creek "near Martinsville on the Martinsville & Bloomington Road" in June 1878 and named C. A. McCracken as agent to make repairs on the bridge. McCracken received $74.41 in July for superintending the repairs.

The Sheerer Bridge, a Zenas King patented bowstring-arch bridge over Indian Creek on the Martinsville-Bloomington Road at Sherm's ford, was reported on December 4, 1899 to be "in a dangerous condition." To erect a replacement bridge by January 1, 1900, Morgan county issued a $1,842 contract to the Indianapolis Bridge Company and Iron Works for one-half of the original two-span, wrought iron Davenport Howe truss bridge once located on Central Avenue over Fall Creek in Marion County. The south span of the Bruce Ford Bridge was relocated in December 1899 to Indian Creek on the Martinsville-Bloomington Road.

The Sheerer Bridge, as it became known, was incorporated as a part of Indiana State Highway #22 (now old State Road #37) in 1919. The Martinsville-Bloomington Road over Indian Creek, which was already a major regional artery, having become part of the Dixie Highway by 1915. The Dixie Highway had been promoted before the establishment of the Indiana State Highway Commission in 1919 by automotive interests concerned with cross-country paved roads. Due to increased automobile traffic, the Sheerer Bridge was bypassed in 1925 in favor of a three-span Warren pony truss bridge erected immediately to the southwest [55-224]. The three-span Warren structure still stands, although it to was bypassed by an even newer stretch of State Route #37.

Sheerer's old stone abutments still exist north of the John Daily property. In its turn, the county decided in 1930 to relocate the largely-abandoned Sheerer Bridge to Burton Lane.

Burton Lane Bridge, (surveyed location)
The county contracted with William H. Kollman of Mooresville for $1,138.44 to re-erect the relocated Sheerer superstructure on a new substructure of cement-filled columns to the south, and with a short I-beam approach betwixt the columns and a concrete abutment still further south at Burton Lane.

The bowstring arch pony main span consisted of twelve panels separated by cruciform-shaped verticals bolted through both plates of the arch, to the floor beam, and between the lower chord plates. Cylindrical eyebars crossed all except the end-post panels and are bolted through the lower arch plate and between the lower chord plates as diagonals. The arch

consisted of bolted sections of parallel curved plates with latticed iron columns (two angled downward, one upward) fitted into cast iron seats and the whole being secured with a pair of adjustable cylindrical rods running through the arch plates and cast iron seats. The top chords consisted of four 23-inch wrought iron cover plates 7" wide and 3/4" thick latticed to wrought iron stay plates with cast iron pipe diagonals and fittings (for compression) and pairs of threaded wrought iron rods as verticals (for tension). In Howe fashion, the diagonals angling upward and inward toward mid-span are doubled. The plates and the chord webbing are bolted together.

A pair of die-forged rectangular bars served as the lower chord that wrap around the ends of the top chord. The bottom chord plates are spaced by and bolted to the ends of the truss webbing. Placed above and U-bolted to the lower chord, fifty-six I floor-beams (many added to the original ones) carried the timber deck and roadway. Every other original floor beam extended beyond the lower chord to accommodate a cruciform-shaped stabilizer which is attached to a vertical above. I-beams had been welded as verticals outside the arch at three places and then connected above and between the arches for the additional stability of a through truss.

Except at span-end, a cruciform rod borders each truss panel. The verticals extend through the top chord plates and are bolted above. Every other vertical carries a second cruciform rod extended beyond the truss as a sway brace. The brace is bolted below through a pipe connector at the end of an extended floor beam. Except for the end panel, each carries one threaded rod as a diagonal and another as a counter. The rods run through the bottom plate of the upper chord and are bolted above it.

The county highway department added three external braces to the bridge in the 1960s. In 1990, the highway department replaced the timber deck with steel grid and the old I floor-beams with new ones. The lower lateral bracing has been retained.

Contrary to the widespread belief in the community that this bridge was taken from the Ferris Wheel used at the 1893 World Columbian Exposition in Chicago, the truss is more likely one of two bowstring ponies extant in Indiana which the Massillon Bridge Company of Massillon, Ohio, designed. This unadorned bridge retained its original members, although some have been reinforced, the guardrail replaced, and the whole moved to its current location in 1930.

Burton Lane and the Original 1893 Ferris Wheel

The actual history of the Burton Lane Bridge is as intriguing as local lore. As with Dunn's Bridge in Porter County, another outstanding Indiana example of a metal arch bridge, the Burton Lane Bridge is believed to have been fashioned from the world's first Ferris Wheel at the 1893 World Columbian Exposition. The tale has been repeated again and again by authoritative sources: by the local newspaper; by former county engineer Delbert Hobson; and by Ross Drapalik, a young, local civil engineer who wrote a convincing paper about the bridge's connections to the Ferris Wheel while at Purdue University. ("I had it all mathematically figured out," he says. "My professor was impressed and gave me an 'A.'")

The charm of the tale has made the bridge locally significant, and it has no doubt contributed to the bridge's preservation. Recent county highway engineer Steve Wegman reported that the bridge was scheduled for replacement in the early 1980s. He credited his predecessor, Delbert Hobson, who valued the bridge both as an engineering gem as well as a part of the original Ferris Wheel, with saving the bridge from destruction.

Name	County	Br. #	Latitude	Longitude
Dean Arch	Morgan	55 44	39° 25.6' N	86° 16.0' W

Carries	Over	Township	Sect'n	Tnshp	Range
Peavine Rd./C.R. #321	Stotts Creek, S. Prong	Green-Jackson	36-1	11-12N	2E

USGS Topo Map: Cope

UTMs: 16 E: 562990 N: 4364500

USE by Design: vehicles

Current: vehicles

Last Revised: 4/14/2015

PRIOR Structure Name:

SURVEYED Structure

Built: 1911

Span(s) Added:

Remodelled:

Moved - On:

To:

Replaced -

By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	60	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
62	18	16	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
H. A. Blunk	Earl O. Gilbert	contractor

Construction History and Structural Description

The commissioners approved H. A. Blunt's plans for the Dean Arch early in 1911. The plans called for a 60-foot span, 16-foot roadway, heavy wings, and undecorated parapet rails. The board contracted with Earl O. Gilbert for construction and named W. L. Pearce to superintend construction, paid Gilbert $1,720.41 in May and June, and then visited the Dean Arch among other bridges before approving same in June.

The three-centered ring is about 12-inches thick at the crown and 2-feet at springing. The undecorated rail is about 12-inches thick and 2.5-feet high.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).

Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Morgan County, "Commissioners Record," 23: 320, 356, 386, 420, 430-431.

H. A. Blunk, "Dean Arch" plans.

Name	County	Br. #	Latitude	Longitude
Hess Arch	Morgan	55 [46]	39° 26.5' N	86° 17.8' W

Township	Sect'n	Tnshp	Range
Green	27	12N	2E

Carries: Nast Chapel Rd.
Over: Stotts Creek, S. Prong

USGS Topo Map: Cope
UTMs: 16 E: 560380 N: 4366380

USE by Design: vehicles
Last Revised: 4/14/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1910
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1991
By: CR concrete slab

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	74	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
80	19	16/4	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
H. A.. Blunk	N. W. Gilbert	contractor

Construction History and Structural Description

The commissioners authorized a concrete bridge for Hess Ford of Stotts Creek in February 1910. In March H. A. Blunk was allowed $23 for plans for the Hess Bridge, and N. W. Gilbert secured a $2,431 construction contract for the Hess Arch. Gilbert received a $1,401.60 in June and the balance of $491.89 in August.

Very flat ring with replacement concrete parapet rails.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Morgan County, "Commissioners Record," 23: 171, 178, 180-181, 194, 230.

Name	County	Br. #	Latitude	Longitude
Flake Arch	Morgan	55 49	39° 28.1' N	86° 17.7' W

Township	Sect'n	Tnshp	Range
Green	22	12N	2E

Carries: Abraham Rd.
Over: Stotts Creek, N. Prong

USGS Topo Map: Cope
UTMs: 16 E: 560355 N: 4369108

USE by Design: vehicles
Last Revised: 4/15/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1911
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	53	6

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
54	18/6	16	17°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
H. A. Blunk	Earl O. Gilbert	contractor

Construction History and Structural Description

In March 1911, the commissioners ordered H. A. Blunk to prepare plans for a number of new bridges, including the Flake Arch, for an April letting. Isaac Williams was named superintendent of construction. In May, Earl O. Gilbert received $1,218.11 for the Flake Arch. In June the board visited a number of new bridge sites, including the Flake Arch, all of which were accepted. Earl O. Gilbert received the balance for his construction and gave the county a 2-year guarantee that the bridge "will be and remain substantial".

Fairly flat arch ring. Concrete parapet rails.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Morgan County, "Commissioners Record," 23: 356, 386, 430-431.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #50	Morgan	55 [50]	39° 28.3' N	86° 16.5' W

Township	Sect'n	Tnshp	Range
Green	14	12N	2E

Carries: Brian Cemetery Rd./C.R. #138
Over: Lazy Run

USGS Topo Map: Cope
UTMs: 1 6 E: 562400 N: 4369470

USE by Design: vehicles
Current: demolished
Last Revised: 4/14/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: c.1917
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1986
By: PC box beams

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	1	49
with floor-beams		

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
51	21	18	°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

The coped girders are 79-inches high and 18-inches wide. The 10x12-inch floor-beams were centered 5-feet apart.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Name	County	Br. #	Latitude	Longitude
Pierce Bridge	Morgan	55 [51]	39° 28.1' N	86° 16.1' W

Township	Sect'n	Tnshp	Range
Green	22-23	12N	2E

Carries: Dillman Rd./C.R. 850E
Over: Stotts Creek, N. Prong

USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles — Current: demolished — Last Revised: 4/3/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1922
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1984
By: CR concrete slab

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren		3	1	49/3

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
50/3	20/6	19/8	

SUBSTRUCTURE

Material: concrete; timber 9; 1

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	contractor

Construction History and Structural Description

The county Council had appropriated $2,200 for a new Pierce Bridge over Stotts Creek in Green township as an emergency in July 1919. But the commissioners did not contract for its construction until May 1922. The Vincennes Bridge Company brought the lowest and therefore the successful bid for a 50-foot span supported on steel piles for $2,685.

Seated on a wood pile abutment to the north and concrete to the south, the bolted or riveted Warren pony trusses relied heavily on pairs of angles riveted together with battens for its verticals, diagonals, and lower-chord members all of which were fastened at their ends to gussets. The 20-inch I floor-beams carried the runs of 9-inch I-beam stringers and concrete roadway lined by angle railings.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 28: 85;
"County Council Record," 1: 179-180.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #53	Morgan	55 [53]	39° 28.0' N	86° 18.5' W

Township	Sect'n	Tnshp	Range
Green	21	12N	2E

Carries	Fire Station Rd./C.R. 625E
Over	Stotts Creek, N. Prong

USGS Topo Map	UTMs		
Cope	16	E: 559140	N: 4368570

USE by Design: vehicles

Last Revised: 4/3/2015

Current: demolished

PRIOR Structure

Name:

SURVEYED Structure

Built	c1905
Span(s) Added	
Remodelled	
Moved - On	
To	
Replaced -	1990
By	PC box beams

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt	pinned	5	1	83

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
85	16/5	15/9	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

The full-hip, 9-foot deep Pratt pony trusses rested upon concrete abutments and wing-walls. The truss verticals were fabricated from two pairs of laced angles and its diagonals of a pair of die-forged eye-bars in the second and fourth panels. The center panel's diagonals and counters each consisted of a pair of adjustable and cylindrical rods. 20-inch I floor-beams, which are bolted to pin plates, carried the runs of 10-inch I-beam stringers and bituminous-on-concrete roadway lined by angle railings.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Name	County	Br. #	Latitude	Longitude
Henderson Ford Bridge	Morgan	55 [54]	39° 28.8' N	86° 21.2' W

Township	Sect'n	Tnshp	Range
Clay-Green	7	12N	2E

Carries: Henderson Ford Rd.
Over: White River, W Fork
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles | Current: demolished | Last Revised: 4/3/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1893
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1968
By: CPC I-beam

SUPERSTRUCTURE FORMS
Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss				

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Wrought Iron Bridge Co.	contractor

Construction History and Structural Description

The county commissioners contracted with the Wrought Iron Bridge Company for a bridge over the White River at Henderson Ford in May 1893. The board ordered $5,000 borrowed in August 1893 since "county has purchased two White River bridges for Records and Henderson fords, and county line." Two weeks later, the board "now agreed to borrow $30,000 for the pair of White River Bridges. The county paid Wrought Iron Bridge $1,500 in September considering "said bridge is now in process of construction." Other payments occurred in October, November, and December.

The commissioners visited the "White River Bridge at Henderson Ford" in December 1898 and found it "out of repair." The board received -- and continued -- a petition from James Stafford *et al* in March 1899 for the bridge's repair. In July, the board agreed to undertake repairs on the provision that Green and Clay townships each pay $75 towards them. The county Council appropriated $2,240 for repairs to the Henderson Bridge in September 1908, and in December the commissioners awarded a repair contract to A. Ferguson for $2,172. Ferguson received payment of $2,188.75 in May 1909.

The great spring flood of 1913 damaged the Henderson Ford bridge and required the erection of an "extra span". At the June letting, Earl O. Gilbert secured a combination contract for repair and construction of flood-damaged/destroyed structures, including $9,000 for Henderson Ford. Gilbert received payments through November. At an August 1915 letting, Clifton F. Schnaiter won a repair contract for $1,211.30.

In September 1927, the Council appropriated $6,000 for new 8-inch I-beam stringers and flooring for the Henderson Bridge. At a March 1928 letting, the commissioners awarded a $12,873 contract to Robert E. Rhea of Clayton to paint and install new stringers and flooring in three steel structures, including the Henderson Bridge.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 18: 571-572; 19: 2, 25, 45; 20: 44, 101, 145; 23: 2, 13, 57;
24: 418, 429, 446-448, 490, 500, 534, 565; 25: 2, 35, 439-442; 29: 47-49;
"Commissioners Docket," 18: 312;
"County Council Record," 1: 79, 126, 242.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #55	Morgan	55	[55]	39° 28.5' N	86° 22.5' W

Township	Sect'n	Tnshp	Range
Washington	13	12N	1E

Carries: Maple Turn Rd./C.R. #142
Over: Clear Creek, Grassy Fork

USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Current: demolished
Last Revised: 4/14/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: c.1920
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1990
By: CR concrete slab

SUPERSTRUCTURE FORMS
Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	34/6	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
35	18/9	16	

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	

Construction History and Structural Description

fairly flat ring about 16-inches deep. Coped and paneled parapet rails.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Name	County		Br. #	Latitude	Longitude
Stockwell Bridge	Morgan	55	56	39° 26.9' N	86° 22.7' W

Township	Sect'n	Tnshp	Range
Washington	26	12N	1E

Carries: Teeters Rd.
Over: Clear Creek, W. Fork

USGS Topo Map: Martinsville
UTMs: 16 E: 553139 N: 4366837

USE by Design: vehicles
Current: vehicles
Last Revised: 4/15/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1916
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	with floor-beams	1	32

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
38	20/7	17/7	

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	H .A. Blunk & P.M. Vanarsdell	contractors

Construction History and Structural Description

The county had plans for the 32-foot clear span Stockwell Bridge in Washington township calling for Luten trusses in the girder of 13 one-inch round rods. The floor-beams were each to carry Luten trusses of 11 three-quarter-inch round rods. The county Council appropriated $950 in September 1915 for the construction of the Stockwell Bridge in Washington township. The commissioners ordered a letting of the "Stockwell Bridge" in February 1916. H. A. Blunk and P. M. Vanarsdell of Martinsville secured the construction contract. B. F. Badgley served as Superintendent of Construction.

The coped and paneled girders are 18-inches wide and 4-feet and 6-inches high. The six 10x12-inch floor-beams were centered 5-feet apart.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Morgan County plans for "Stockwell Reinforced Concrete Bridge, Washington Township," (16 January 1916).

Morgan County, "Commissioners Record," 25: 522, 553, 556-557; 26: 27;
"County Council Record," 1: 144.

"Martinsville , Morgan County - Bridges," *Engineering News*, Construction News, 75 (9 March 1916): 141.

Name	County	Br. #	Latitude	Longitude
Records Ferry/Blue Bluff Bridge	Morgan	55 [57]	39° 29.8' N	86° 24.0 W

Township	Sect'n	Tnshp	Range
Washington	10	12N	2E

Carries: Blue Bluff Rd./C.R. 150E
Over: White River, W Fork
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Last Revised: 4/3/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1893
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1974
By: CPC I-beams

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss				

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

The county commissioners contracted with the Wrought Iron Bridge Company for a bridge over the White River at Records Ferry in May 1893. The board ordered $5,000 borrowed in August 1893 since "county has purchased two White River bridges for Records and Henderson fords, and county line." Two weeks later, the board "now agreed to borrow $30,000 for the pair of White River Bridges. The county paid Wrought Iron Bridge $7,500 in September considering "said bridge is now in process of construction." Other payments occurred in October, November, and December.

The county engaged in periodic repairs. In June 1905, the commissioners contracted with Nathan W. Gilbert at $239 for concrete abutment work. The county Council appropriated $2,400 for repairs to the Records Ferry Bridge in September 1909. A. Ferguson secured a $2,096 contract in February 1910 to repair the "Record's Bridge across White River 1.5 miles south of Centerton." In September 1927, the Council appropriated $6,000 for new 8-inch I-beam stringers and flooring for the "Blue Bluff Bridge". At a March 1928 letting, the commissioners awarded a $12,873 contract to Robert E. Rhea of Clayton to paint and install new stringers and flooring in three steel structures, including the Blue Bluff Bridge.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 18: 571-572; 19: 1, 22, 25, 45; 21: 306; 23: 163, 172, 174; 29: 47-49
"County Council Record," 1: 89, 242.

Name	County	Br. #	Latitude	Longitude
Barb Smith/Centerton Bridge	Morgan	55 [58]	39° 30.7' N	86° 22.5' W

Township	Sect'n	Tnshp	Range
Clay	1	12N	1E

Carries: Centerton Rd./C.R. 590N/#28
Over: White Lick Creek

USGS Topo Map: Mooresville West
UTMs: 16 E: 553280 N: 4373760

USE by Design: vehicles
Current: demolished
Last Revised: 4/15/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1908
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1985
By: KC steel beam

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	4	60	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
313	18/9	15/9	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
E. O. Gilbert	A. Ferguson & N. H . Gilbert	contractors

Construction History and Structural Description

In March 1899, B. M. Cox and others petitioned the commissioners for a bridge across White Lick Creek about three-fourths of a mile east of Centerton. The board "continued" the petition. Not until January 1908 did the commissioners order the construction of a 4-span concrete arch bridge 240-feet long over White Lick Creek in Clay township at the ford east of Centerton near the residence of Barb Smith. W. W. Pointer was named as superintendent of construction. At the February letting, N. H. Gilbert & Ferguson brought in the lowest and successful bid of $9,774. The commissioners authorized additional work on the Barb Smith Bridge in September on the plans of Earle O. Smith. The work was to be let in October. Pointer received $12 in January 1909 for his superintendence of the Smith bridge construction.

Coped and paneled concrete parapets.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

rail inscription.

Morgan County, "Commissioners Record," 20: 101; 22: 340, 364-365, 390, 573; 23: 31, 180;
"County Council Record," 1: 73.

"Centerton - Bridge - Morgan County," *Engineering News*, Supplement, 59 (27 February 1908): 63.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #63	Morgan	55 [63]	39° 26.8' N	86° 28.8' W

Township	Sect'n	Tnshp	Range
Jefferson	25	12N	1W

Carries Bain Rd./C.R. #122
Over Goose Creek

USGS Topo Map Martinsville
UTMs 1 6 **E:** 544600 **N:** 4366340

USE by Design: vehicles
Last Revised 4/3/2015
Current: demolished

PRIOR Structure
Name

SURVEYED Structure
Built 1920
Span(s) Added
Remodelled
Moved - On
To
Replaced - 1984
By PC box beams

SUPERSTRUCTURE FORMS

Material steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren		3	1	39

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
40	16/5	16	

SUBSTRUCTURE

Material steel; concrete 4; 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
Vincennes Bridge Co.	Vincennes Bridge Co.	contractor

Construction History and Structural Description

Prior Concrete Arch (1907 - 1920)
The commissioners let a $523 contract to Kelleher and Slipher in February 1907 for construction of a 20-foot concrete arch over Goose creek near Bain school house S26/T12N/R1W.

Surveyed Pony-Truss Structure (1920 - 1984)
An "unusual flood" on July 3, 1920 destroyed the concrete bridge on the Martinsville & Lewisville Road over Goose Creek near Donald Bain's. The commissioners declared an emergency because of the "large daily traffic" and threshing machines must cross at harvest time and contracted with the Vincennes Bridge Company for a 40-foot span with a 16-foot concrete roadway for $1,762. Vincennes Bridge also built abutments and wing-walls of 38 8-inch steel I-beams capped and webbed with channels and bars, the whole encased in concrete, for $2,330.

Seated on concrete abutments and wing-walls, the bolted or riveted Warren pony trusses relied heavily on pairs of angles riveted together with battens for its verticals, diagonals, and lower-chord members all of which were fastened at their ends to gussets. The 18-inch I floor-beams carried the runs of 8-inch I-beam stringers and concrete roadway lined by angle railings.

References

Prior Concrete Arch (1907 - 1920)
Morgan County, "Commissioners Record," 22: 42.

Surveyed Pony-Truss Structure (1920 - 1984)
Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 27: 170-172.

Name	County	Br. #	Latitude	Longitude
Crone Bridge	Morgan	55 64	39° 27.1' N	86° 29.6' W

Township	Sect'n	Tnshp	Range
Jefferson	26	12N	1W

Carries: Bain Rd./C.R. #122
Over: Lambs Ck, Sally Bradley brnch

USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Last Revised: 4/15/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1916
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS
Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	with floor-beams	1	24/4

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
29/4	21	17/9	

SUBSTRUCTURE
Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	H. A. Blunk & P. M. Vanarsdell	contractors

Construction History and Structural Description

County plans for the 24-foot clear span Crone Bridge in Jefferson township called for Luten trusses in the girder made from 6 one-inch round rods. The floor-beams were each to carry Luten trusses of 11 three-quarter-inch round rods. The commissioners ordered a letting of the "Crone Bridge" in Jefferson township in February 1916. H. A. Blunk and P. M. Vanarsdoll of Martinsville secured the construction contract. Dan M. Bain served as Superintendent of Construction.

The coped and paneled girders are 18-inches wide and 49-inches high. The five 10x12-inch floor-beams were centered 4-feet apart.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County plans for "Crone Bridge, Jefferson Township."

Morgan County, "Commissioners Record," 22: 42; 25: 522, 553, 558-559; 26: 102;
"County Council Record," 1: 144.

"Martinsville , Morgan County - Bridges," *Engineering News*, Construction News, 75 (9 March 1916): 141.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #67	Morgan	55 67	39° 27.6' N	86° 30.7' W

Township	Sect'n	Tnshp	Range
Jefferson	22	12N	1W

Carries: Big Hurricane Rd.
Over: Lambs Creek, branch

USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Last Revised: 4/16/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: c1928
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS
Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	1	30
with floor-beams		

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
33	21/6	18/6	20°

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

18-inch wide and 61-inch tall paneled girders. Five 10x12-inch floor-beams.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #75	Morgan	55 75	39° 29.7' N	86° 40.0' W

Township	Sect'n	Tnshp	Range
Ashland	8	12N	2W

Carries: Bowman Rd.
Over: Rhodes Creek

USGS Topo Map: Quincy
UTMs: 16 E: 528779 N: 4372132

USE by Design: vehicles
Current: vehicles
Last Revised: 4/14/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1907
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	50	8/6

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
74	19	16	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Kelleher and Slipher	contractors

Construction History and Structural Description

At the February 1907 letting, the commissioners awarded a construction contract to Kelleher and Slipher for a "50-foot concrete arch over Rhodes creek one mile south of Eminence, Indiana, in S8/T12N/R2W for the sum of $1,485." Construction was to be complete by September.

Flairly flat, 20-inch deep, ring. Coped and paneled parapets.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Morgan County, "Commissioners Record," 22: 42-43.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #79	Morgan	55 [79]	39° 28.6' N	86° 37.9' W

Township	Sect'n	Tnshp	Range
Ashland	15-16	12N	2W

Carries: Wilson Rd.
Over: Rhodes Creek

USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles | Current: demolished | Last Revised: 4/30/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1893
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1968
By: CR concrete slab

SUPERSTRUCTURE FORMS

Material: metal | 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss			1	40

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
I-beam	2	14

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew

SUBSTRUCTURE

Material: metal | 3

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Hunt & Adams	contractors

Construction History and Structural Description

In November 1893, J. M. Trosh, agent for Hunt & Adams at Indianapolis, presented the commissioners with the lowest bid of $750 for construction of a 40-foot span plus 14-foot aprons supported on caissons for a bridge over Rhodes Creek, one-fourth of a mile north of Lewisville.

The commissioners agreed in July 1919 to repair the bridge over Rhodes Creek, one-half mile north of Lewisville. E. O. Gilbert secured a $325 repair contract.

References

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Morgan County, "Commissioners Record," 19: 24; 23: 207, 243.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #90	Morgan	55	[90]	39° 31.8' N	86° 31.4' W

Township	Sect'n	Tnshp	Range
Gregg	28	13N	1W

Carries McClure Rd./C.R. #26
Over Lambs Creek

USGS Topo Map

UTMs 16 E: N:

USE by Design: vehicles | Current: demolished | Last Revised: 4/3/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: c1890
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1979
By: timber beam

SUPERSTRUCTURE FORMS

Material: metal | 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt bedstead	pinned	3	1	49/6

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
50/6	14/3	13/6	

SUBSTRUCTURE

Material: concrete; metal | 9;3

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	

Construction History and Structural Description

Seated on a concrete abutment to the east and metal legs to the west, the Pratt bedstead used pairs of latticed angles for verticals, rectangular eye-bars for diagonals, and an adjustable round-rod eyebar for a counter in the central panel. The 12-inch I floor-beams carried the runs of 6-inch I-beam stringers and timber roadway lined by latticed hub-quards.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Name	County		Br. #	Latitude	Longitude
Ollie Hadley Bridge	Morgan	55	[94]	39° 33.8' N	86° 32.1' W

Township	Sect'n	Tnshp	Range
Monroe-Gregg	16-17	13N	1W

Carries: Hall Rd.
Over: Lake Ditch, branch

USGS Topo Map: Hall
UTMs: 1 6 E: 539944 N: 4379396

USE by Design: vehicles
Current: demolished
Last Revised: 4/14/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1907
Span(s) Added:
Remodelled: 1968
Moved - On:
To:
Replaced - 1999
By: PC box beams

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	35	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
74	19	25/5	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Kelleher and Slipher	contractors

Construction History and Structural Description

At the February 1907 letting, the commissioners awarded a construction contract to Kelleher and Slipher for a "35-foot concrete arch at Ollie Hadley's over Lake ditch one mile north of Hall, Indiana, on line dividing Gregg and Monroe townships for the sum of $794." Construction on the Hall Road structure was to be complete by September.

Widened in 1968 with a 3-foot and 9-inch prestressed box beam on each side. The widening replaced the original concrete parapets with galvanized W-rails.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 1998, 2004).

Morgan County, "Commissioners Record," 22: 42-43;
"County Council Record," 1: 62.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #96	Morgan	55 96	39° 34.5' N	86° 31.5' W

Township	Sect'n	Tnshp	Range
Monroe	9	13N	1W

Carries: Lake Ditch Road
Over: Robards Ditch

USGS Topo Map: Hall
UTMs: 1 6 E: 540680 N: 4380650

USE by Design: vehicles
Last Revised: 4/3/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1895
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS
Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	1	58/6
riveted plate		

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
61/4	24/10	23	57°

SUBSTRUCTURE
Material: concrete

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Chicago Bridge & Iron Co.	fabricator

Construction History and Structural Description

History

While the paternity of the bridge seated on Lake Ditch Road over Robards Ditch in 2000 is well established, only parts of its life-cycle are documented. The story of the span is like an assembled jig-saw puzzle with significant numbers of the pieces missing.

A Chicago Bridge & Iron Company Span

Inscribed "Chicago Bridge & Iron Co. - 1895," the nameplates that once graced each girder leave little doubt about the span's paternity. Horace E. Horton, CB&I founder, had designed and built his first bridge, a timber arch, in Minnesota in 1867. Twenty years later Horton gained national attention with the construction of the Dubuque High Bridge, a long and high metal structure. This was the first of eleven bridges which Horton built over the Mississippi River.

In 1889, George and William Wheelock merged their Kansas City Bridge & Iron Company with Horton's business to create the Chicago Bridge & Iron Company [CB&I]. Horton purchased property bordered by two railroad lines in Washington Heights, then south of Chicago, opened the company's first fabricating plant, and began the process of building a sales network. George King, nephew to Zenas King of the King Iron Bridge and Manufacturing Company of Cleveland, integrated the George E. King Bridge Company of Des Moines, Iowa, with CB&I in 1890, giving the new and enlarged company a significant presence in the states between the Mississippi and the Rockies. By the early 1890s, CB&I had established an office in the Builder's Exchange in Indianapolis with Albert Michie as Agent.

Michie probably sold this plate-girder span. He did so in the midst of the great depression which began with a panic in 1893 and turned into a four-year industrial depression. Horton encouraged his company's agents to find work, even when it led to contracts without much prospect of profit, if only to keep CB&I's increasingly skeletal operation essentially in tact. CB&I's reported fabricating 15,000 long tons in 1894--tied for second largest in Illinois in that year. This dropped to 10,000 long tons by 1896 and reduced the firm to third place in the state. The CB&I office in Indianapolis was closed by 1898, and Michie joined the Chicago sales office.

CB&I, like a number of metal-bridge builders in the 1890s depression, diversified business in an effort to survive the hard times. Horace Horton's son George, for example, served as construction foreman of the company's first standpipe for water storage in Lake City, Iowa, in 1893. A year later CB&I designed an elevated steel storage tank with a full hemispherical bottom and erected the initial one at Fort Dodge, Iowa. Water storage tanks began slowly to challenge bridges as the company's main product over the next decade.

Highway and railroad bridges nonetheless remained CB&I's main product throughout the 1890s. In all likelihood, Agent Michie had clinched his deal for this plate girder with a rail company for a central Indiana crossing. The bridge company's historians have reported that CB&I took "contracts for a large number of railroad girder bridges" in this and the next decade

in part because railroad bridges were generally larger and heavier than highway spans. Railroad clients also had another advantage: "the capability of the contractor to perform, rather than the lowest price, was considered in making the awards (a luxury that few public bodies such as county boards cared to exercise."

The Morgan county structure's design (discussed in more detail under "Structural Description") speaks to a carrying-capacity suitable for train weights and speeds rather than for wagon traffic on a county roadway. The width and the floor system suited a single-track railway far better than a Morgan county roadway at the time. None of the extant plans of plate girders which Morgan county engineers drew up (mostly later) for other roadway crossings proposed girders as heavy for similar span lengths, all specified a wider deck and roadway, and all had floor-beams spaced much closer together (typically about 4 ft. apart). Unfortunately, the county records are generally silent about the placement of this CB&I-built plate girder span at its current location. There is no mention of a county letting or contract in 1895 at this site or at any other time to CB&I.

Lake Valley and the L. C. Cook Ditch (1875-1910)

Stretching from Mill Creek across the center of Adams township, cutting the northwest corner of Gregg, and angling northward through western Monroe, Lake Valley originally carried a lazy, meandering stream spreading like a slough over the surrounding lowlands during wet seasons of the year. Mill Creek and its feeder streams and sloughs increasingly became the focus of local efforts for tax-supported dredging similar to those taking hold in other Indiana counties in the last decades of the nineteenth century. The first and probably most modest man-made drainage of the Lake Valley occurred in 1875. The second, in 1906, was substantial enough to warrant a name change of the system to the Lester C. Cook ditch.

Now known as Lake Ditch Road (520W), the graveled way T's into the Monrovia Road to the north and jogs southward to Hall as it did at least as early 1876. The road continued as such a tertiary route that Monroe township rather than the county remained its custodian until sometime after 1909. None of the considerable energy expended on tax-supported road improvement projects in Morgan county from the 1890s through the Great World War ever seems to have included this no-name dirt way off the Monrovia Road.

When the first timber structure was built over the Lake Valley creek on what was then a dirt lane remains uncertain. In 1906 the Cook ditch viewers reported a 25-ft., single-span wooden structure there.

The Wallace Bridge (1912-1913)

The first recorded evidence of county involvement in the dirt road and its bridge came in September 1912, when county surveyor and engineer, Henry Alton Blunk, planned the repair of the "Wallace Bridge," named as was customary for an adjacent landowner. Orville Wallace had purchased from J. H. Hadley sometime after 1909 land which the Cook ditch crossed, the Monrovia Road bounded on the north, and the township dirt road bordered on the east. The new farmer-landowner may have been less tolerant of the condition of the old structure than had Hadley. In any case, the county contracted with William F. Lewis, a successful farmer and handyman from Jefferson township, to work on the bridge once the harvest season had passed its peak. The county paid Lewis $99 for the unspecified "repair(s)."

Even as Lewis was fixing the old Wallace Bridge, the county councilors were considering the commissioners formal request for funding a "new bridge" to be built here in 1913. The council appropriated $800 in September 1912. Surveyor-engineer Blunk prepared plans for the replacement early in the new year, and Walter E. Johnson of Monrovia won the bidding for

Name	County	Br. #	Latitude	Longitude
Felkins Bridge	Morgan	55 97	39° 33.3' N	86° 33.3' W

Township	Sect'n	Tnshp	Range
Gregg	18-19	13N	1W

Carries: Yale Ferguson Rd./C.R. 900N
Over: Lake Ditch

USGS Topo Map: Hall
UTMs: 1 6 E: 537200 N: 4378520

USE by Design: vehicles
Current: vehicles
Last Revised: 4/3/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1910
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren	riveted	5	1	68/4

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
71/7	17/7	16/8	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
E. O. Gilbert	Lafayette Engineering Co.	contractor

Construction History and Structural Description

E. O. Gilbert, the county Surveyor, prepared plans for the "Felkins Bridge" in Gregg township in February 1910, the commissioners agreed in June to have the bridge built on Gilbert's plans, and Lafayette Engineering Company secured a $1,548 for construction of the Felkins Bridge over Lake Ditch in Gregg township in July. Lafayette Engineering was paid the contracted amount in November. Gilbert's plans were for a skewed 56-foot and 6-inch span with a 16-foot roadway. But Lafayette Engineering erected a metal-truss superstructure.

Concrete abutments and wing-walls support the single-span Warren pony trusses. External sway braces are integrated with the all-interior verticals manufactured from two pairs of angles riveted together with battens. A pair of heavy angles and battens supply the diagonals. 18-inch wide flange I floor-beams are riveted to gussets and the verticals above the lower chord. The floor-beams carry the runs of 10-inch wide flange stringers and steel grid roadway (replacing the original timber deck).

The placement of the floor-beams and the integration of knee or external sway braces suggest a late stage in the design of all-riveted Warren pony trusses. This altogether undecorated bridge retains its original members.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 23: 43-44, 203, 225, 270;
"County Council Record," 1: 79, 92.

E. O. Gilbert, "Felkins Arch" plans.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #103	Morgan	55	103	39° 31.9' N	86° 30.4' W

Township	Sect'n	Tnshp	Range
Gregg	27	13N	1W

Carries: Briarhopper Rd.
Over: Lambs Creek

USGS Topo Map: Hall

UTMs: 16 E: 542348 N: 4376049

USE by Design: vehicles
Current: vehicles
Last Revised: 4/17/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1916
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
through girder	1	30
with floor-beams		

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
35	20/7	17/10	

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

The county engineer's March 1916 plans for the W. C. Meredith Free Gravel Road in Gregg township included a "30-foot flat-top - station 20". The bridge plans called for Luten trusses in the coped and paneled girders made from 13 one-inch round rods. The six floor-beams were each to carry Luten trusses.

The girders - repairing has removed their coping and paneling - are 14-inches wide and 4-feet and 6.5-inches high. The six 12x14-inch floor-beams were centered 5-feet apart.

References

Associated Engineering, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Sebree, Craig, & McKneight, Inc., *Bridge Reinspection Study and Report: Morgan County* (Indianapolis, 1986).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Carr Haase, "Plans for Concrete Work on the W. C. Meredith Free Gravel Road, Gregg Township," March 1916.

Name	County		Br. #	Latitude	Longitude
Allen Bridge	Morgan	55	107	39° 32.9' N	86° 36.8' W

Township	Sect'n	Tnshp	Range
Adams	22-23	13N	2W

Carries: Measel Rd./C.R.1000W
Over: Lake Ditch
USGS Topo Map: Hall
UTMs: 16 E: 533230 N: 4377600

USE by Design: vehicles
Current: vehicles
Last Revised: 4/3/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1930
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt	riveted	5	1	69/3

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
70	16/7	15/8	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	builder

Construction History and Structural Description

The Vincennes Bridge Company won a $4,442 county contract (plus piling) in May 1930 to construct the 70-foot Allen Bridge over Lake Ditch in Adams County. Engineer Canatsey and construction superintendent R. G. Crone reported successful construction in early August, and the county commissioners approved their reports.

The full-hip, 8-foot and 6-inch deep Pratt pony trusses rests upon concrete abutments and wing-walls. The truss verticals are fabricated from a pair of angles riveted together with battens and integrated with external sway braces. The diagonals and center-panel counters are also made from a pair of angles and battens. 20-inch I floor-beams, which are attached to the verticals below the lower chord, carry the runs of 9-inch steel stringers and concrete roadway.

Riveted Pratt ponies are not plentiful in Indiana, especially full-hip ones with external sway braces integrated with the verticals. There are, however, a number of them in Morgan County. The extensive reliance on angles for the web members is also noteworthy. The unadorned bridge retains its original members.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 29: 243-244, 263.

Name	County	Br. #	Latitude	Longitude
Dorsett Bridge	Morgan	55 110	39° 32.1' N	86° 39.7' W

Township	Sect'n	Tnshp	Range
Adams	29	13N	2W

Carries: McClure Rd./C.R. 750N
Over: Lake Ditch

USGS Topo Map: Eminence
UTMs: 1 6 E: 529220 N: 4376060

USE by Design: vehicles
Current: vehicles
Last Revised: 4/3/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1926-1928
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt	bolted	5	1	75

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
76	16/5	15/8	40°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	contractor

Construction History and Structural Description

Previous Structure (1909 - 1926/27)
In March 1909, the county paid the Surveyor, E. O. Gilbert, $8 for plans for "Dorsett Bridge" in Adams township. At the letting for the construction of a reinforced concrete arch across Lake Ditch (S29/T13N/R2W), N. W. Gilbert won a $1,742 contract for the "Dorsett Bridge". D. G. Goss was named superintendent of construction. Gilbert received payment in September.

Pratt Pony-Truss Bridge (1926/27 -)
An Adams township delegation petitioned the county commissioners in January 1926 for a new bridge over Eel River drain on the Gilbert Dorsett Road. The board ordered the surveyor to make plans and the auditor to solicit bids. The Vincennes Bridge Company successfully bid $6,291 for a 75-foot trussed span over Cooks Ditch in Section 29 Township 13 North and Range 2 West. Not until September 1927 did the County Council appropriate $6,300 for a 75-foot steel span for Dorsett Bridge over Cook's Ditch. The Dorsett Bridge was not reported as complete until July 1928.

Offset about 20% from one another, the 8-foot deep trusses of this full-hip, largely-bolted Pratt pony rest upon concrete abutments and wing-walls. Its verticals are fabricated from a pair of angles riveted together with battens and integrated with external sway braces. The diagonals and center panel counters are each also made of a pair of angles and battens. 18-inch I floor-beams, which are attached to the verticals below the lower chord, carry the runs of 9-inch steel stringers and concrete roadway.

Bolted Pratt ponies are not plentiful in Indiana, although Morgan County retains a number of them. The skew, full-hip design, integration of external braces with the verticals, and reliance on angles for the web members are all unusual features. The original members of the unadorned bridge remain intact.

References

Previous Structure (1909 - 1926/27)
Morgan County, "Commissioners Record," 23: 43, 47, 113, 134.

Pratt Pony-Truss Bridge (1926/27 -)
Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 28: 381, 394, 402-404; 29: 85;
"County Council Record," 1: 242.

"Notice to Contractors," "Commissioners Court," *Martinsville Democrat*, 23 April 1926, 7 May 1926: p7 c4; p4 c3.

Name	County	Br. #	Latitude	Longitude
Mud Creek Bridge	Morgan	55 [113]	39° 35.0' N	86° 36.2' W

Township	Sect'n	Tnshp	Range
Adams	11	13N	2W

Carries: Anglin Rd./C.R. #220
Over: Mud Creek

USGS Topo Map: Hall
UTMs: 16 E: 534020 N: 4381660

USE by Design: vehicles
Current: demolished
Last Revised: 4/4/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1916
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1987
By: PC box beams

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren	bolted	4	1	59/4

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
60	16/7	15/9	30°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	contractor

Construction History and Structural Description

Prior Structure (1867/1868 - 1916)
The commissioners ordered a November 1867 letting of two bridges, including one over Mud Creek on the Monrovia and Stilesville Rd. in Adams township. Bids were sought in either wood "of the Howe pattern" or iron. At the letting W. A. Winslow & Company successfully proposed to construct "Z. King's celebrated wrought iron bridges in accordance with the patent and all improvements upon the patent thereof". The Mud Creek span would be 80-feet long by 12-feet wide for $25 per lineal foot and placed on abutments prepared by the county. The commissioners then contracted with Charles S. Twiss to make "a truss foundation for the said bridge over Mud Creek" for $240. In March 1868, Twiss received $79.66 for lumber for the abutments and $162 for construction. P. L. Davis had served as superintendent of construction.

In August 1913, the Hazlett Bridge over Mud Creek on the N-S center line of Section 11, Adams township, needed floor repairs. The commissioners agreed to pay Ormer McCloud and James Hamilton $95 for the repairs.

Surveyed Structure (1916 - 1987)
The commissioners set a letting for several bridges in October 1915, including the Mud Creek Bridge over Reitzel Ditch in Adams township. No bids were received on a number of the proposed structures, so contracting for the Mud Creek Bridge was postponed until February 1916. At the belated letting, the Vincennes Bridge Company came in with the winning construction bid of $3,460.

Concrete abutments and wing-walls support the somewhat skewed, largely-bolted, 7-foot deep, Warren pony trusses. The all-interior verticals and diagonals were manufactured from a pair of angles riveted together with battens. The trusses were reinforced with external sway braces. Attached to gussets below the lower chord, the 18-inch I floor-beams carried the runs of 10-inch steel stringers and timber roadway.

References

Prior Structure (1867/1868 - 1916)
Morgan County, "Commissioners Record," 9: 192-193, 196-198, 234; 24: 497-498.

Surveyed Structure (1916 - 1987)
Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 25: 460-461, 487-489, 522, 553-554, 556-557;
"County Council Record," 1: 144.

"Notice to Bridge Contractors," "Bids on Bridges Opened Monday," *Martinsville Democrat*, 24 September 1915, 15 October 1915:

Name	County	Br. #	Latitude	Longitude
Smart Bridge	Morgan	55 [114]	39° 34.5' N	86° 37.9' W

Township	Sect'n	Tnshp	Range
Adams	9-10	13N	2W

Carries: Little Point Rd.
Over: Mud Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles | Current: demolished | Last Revised: 4/4/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1891
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1968
By: CR concrete slab

SUPERSTRUCTURE FORMS
Material: steel | 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss			1	87

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
90		12	°

SUBSTRUCTURE
Material: concrete | 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Wrought Iron Bridge Co.	fabricator
	Clem D. Dorsett	stonework

Construction History and Structural Description

The commissioners let a $1,565 contract to the Wrought Iron Bridge Company in September 1891 for a bridge over Mud Creek one mile North of Little Point on the Gosport & Stilesville Road. The bridge was to be 90-feet long (extreme length) with an 87-foot clear span with a 12-foot roadway. Clem D. Dorsett won the "edged limestone" abutment contract for $10.50 per cubic yard of masonry.

In May 1914, the board sought plans for repair of the Smart Bridge over Mud Creek, three-quarters of a mile north of Little Point in Adams township. H. A. Blunk's specifications were approved in August and a letting set for September. A. Ferguson secured a $366 county contract. Ferguson received the contracted amount in November for the repairs.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 18: 318-319, 321-322; 25: 131, 195, 255.

"Notice to Contractors," "Commissioners Let Road Contract," *Martinsville Democrat*, 14 August 1914, 11 September 1914: p7 c6; p3 c5.

Name	County	Br. #	Latitude	Longitude
Mills Bridge	Morgan	55 118	39° 35.7' N	86° 38.6' W

Township	Sect'n	Tnshp	Range
Adams	4	13N	2W

Carries: Horsebarn Rd./C.R. 1150N
Over: Mill Creek Ditch
USGS Topo Map: Eminence
UTMs: 16 E: 530180 N: 4382560

USE by Design: vehicles
Last Revised: 4/4/2015
Current: [demolished]

PRIOR Structure
Name:

SURVEYED Structure
Built: 1927-1928
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt	riveted	6	1	89

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
91	16/7	15/7	22°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	contractor

Construction History and Structural Description

The commissioners held a letting in November 1927 for construction of the "Mills Bridge" over Eel River in Adams township. The Vincennes Bridge Company brought in the winning bid of $7,144, plus piling at $1 per foot, for a 90-foot steel structure. In Febuary 1928, the County Council declared an emergency caused by flooding, and appropriated $744 and authorized the Commissioners to borrow same for construction of the "Mills Bridge" in Adams township. The bridge was declared complete as of May 1928.

Offset about 8% from one another, the trusses of this full-hip, riveted Pratt pony rest upon concrete abutments and wing-walls. The verticals are fabricated from a pair of angles riveted together with battens and integrated with external sway braces. The diagonals and counters are also made from a pair of angles and battens. Counters are used in the two most central panels. 20-inch I floor-beams, which are attached to the verticals below the lower chord, carry the runs of 10-inch steel stringers and concrete roadway.

Riveted Pratt ponies are not common in Indiana, especially skewed, full-hip ones with external sway braces integrated with the verticals. There are, however, a number without offset in Morgan County. The extensive reliance on angles for the web members is also noteworthy. The undecorated bridge retains its original members.

Reported on Bridgehunter as replaced by 2011.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 29: 33-35, 61; "County Council Record," 1: 244.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #119	Morgan	55 [119]	39° 34.6' N	86° 39.1' W

Township	Sect'n	Tnshp	Range
Adams	8	13N	2W

Carries	Cooney Milhon Rd./C.R.1050N
Over	Mill Creek

USGS Topo Map	UTMs		
Eminence	16	E: 529740	N: 4380900

USE by Design: vehicles

Last Revised: 4/4/2015

Current: [demolished]

PRIOR Structure

Name:

SURVEYED Structure

Built	1926
Span(s) Added	
Remodelled	
Moved - On	
To	
Replaced -	
By	

SUPERSTRUCTURE FORMS

Material: steel (4)

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt	riveted	5	1	78

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
80	20/6	19/8	

SUBSTRUCTURE

Material: concrete (9)

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	builder

Construction History and Structural Description

The commissioners received bids in March 1926 "for the construction of a bridge over the Robards Drain in section 8, Township 13 North, Range 2 West." The Vincennes Bridge Company, with the lowest bid, received a $5,154 contract for an 80-foot span over Eel River Dredge in Adams township near Vern C. Parker's residence.

The full-hip, riveted Pratt pony trusses rest upon concrete abutments and wing-walls. Truss verticals, diagonals, and center-panel counters are all made from a pair of angles riveted together with battens. 24-inch I floor-beams, which are attached to the verticals below the lower chord, carry the runs of 9-inch steel stringers and concrete roadway.

Riveted Pratt ponies are not plentiful in Indiana, although Morgan County retains a few. The full-hip design and reliance upon angles for the web members are unusual features. The original members of the unadorned bridge remain intact.

Reported on Bridgehunter as replaced by 2010

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 28: 389-390.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #120	Morgan	55 [120]	39° 31.4' N	86° 16.6' W

Township	Sect'n	Tnshp	Range
Harrison	35	13N	2E

Carries: Big Bend Rd./C.R. #174
Over: Crooked Creek

USGS Topo Map: Mooresville East
UTMs: 16 E: 562007 N: 4375400

USE by Design: vehicles
Last Revised: 4/17/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1905
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1985
By: timber beam

SUPERSTRUCTURE FORMS
Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	50	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
52	18/6	15/6	

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	A. Ferguson	contractor

Construction History and Structural Description

In June 1898, the commissioners dismissed the petition of Robert Musser *et al* "for the construction of two wagon bridges over Crooked Creek in Harrison township. One at a point in S35/T13N/R2E. The second bridge to be erected in S25 -26/T13N/R2E."

The commissioners advertized a July 1905 letting for construction of a "steel, concrete arch over Crooked Creek, at a ford near J. W. Paul's in Harrison township; span 50 feet." A. Ferguson of Indianapolis secured a $1,568 contract for the construction. Daniel Paul was named superintendent of construction in July for the bridge over Crooked creek near John Paul's in Harrison township. Ferguson received payments for #120 and #123 in November and December.

The arch ring was about 18-inches thick.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 19: 581; 21: 320, 340, 397, 416;
"County Council Record," 1: 45-46.

"Martinsville - Bridges - Morgan County," *Engineering News*, Supplement, 54 (13 July 1905): 11.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #122	Morgan	55 [122]	39° 32.1' N	86° 15.0' W

Township	Sect'n	Tnshp	Range
Harrison	25	13N	2E

Carries: Banta Rd.
Over: Crooked Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Last Revised: 4/17/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1901-1902
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1975
By: PC box beams

SUPERSTRUCTURE FORMS
Material:

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
John E. Jolliffe	American Bridge Co.	superstructure
	M. W. Dawson	abutments

Construction History and Structural Description

In June 1898, the commissioners dismissed the petition of Robert Musser *et al* "for the construction of two wagon bridges over Crooked Creek in Harrison township. One at a point in S35/T13N/R2E. The second bridge to be erected in S25 -26/T13N/R2E."

The boards of commissioners of Morgan and Johnson county commissioners agreed in September 1901 to construct a bridge over Crooked Creek on the Banta-Indianapolis highway. John E. Jolliffe was to draft plans and specifications and to act of superintendent of construction. The contract was to be let through Johnson county. At the October letting, M. W. Dawson secured a $275 contract to build concrete abutments. The American Bridge Company of New York won the superstructure contract for $412.

The arch ring was about 18-inches thick.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 19: 581; 20: 335-336, 349;
"County Council Record," 1: 45-46.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #123	Morgan	55	[123]	39° 31.6' N	86° 16.1' W

Township	Sect'n	Tnshp	Range
Harrison	35-36	13N	2E

Carries: Waverly Rd.
Over: Crooked Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles | Current: demolished | Last Revised: 4/17/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1905
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1968
By: PC box beams

SUPERSTRUCTURE FORMS

Material: concrete | 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	50	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
52	18/6	15/6	

SUBSTRUCTURE

Material: concrete | 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	A. Ferguson	contractor

Construction History and Structural Description

In June 1898, the commissioners dismissed the petition of Robert Musser *et al* "for the construction of two wagon bridges over Crooked Creek in Harrison township. One at a point in S35/T13N/R2E. The second bridge to be erected in S25 -26/T13N/R2E."

The commissioners advertized a July 1905 letting for construction of a "steel, concrete arch in Harrison township; over Crooked Creek, known as cemetary arch; span 50 feet." A. Ferguson of Indianapolis secured a $1,568 contract for the construction. Daniel Paul was named superintendent of construction in July for the bridge over Crooked creek "at the ford near the Odd Fellows cemetary". Ferguson received payments for #120 and #123 in November and December.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 19: 581; 21: 320, 340, 397, 416;
"County Council Record," 1: 45-46.

"Martinsville - Bridges - Morgan County," *Engineering News*, Supplement, 54 (13 July 1905): 11.

Name	County	Br. #	Latitude	Longitude
Waverly Bridge	Morgan	55 [124]	° N	° W

Township	Sect'n	Tnshp	Range
Harrison-Madison	23	13N	2E

Carries: old State Route #144
Over: White River, W. Fork

USGS Topo Map: Mooresville East
UTMs: 1 6 E: 5622320 N: 4378930

USE by Design: vehicles
Current: demolished
Last Revised: 3/11/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1911-1912
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - [1969]
By: KC & C I-beam

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	5		

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
450		20	30°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
Daniel B. Luten	National Concrete Co.	contractor

Construction History and Structural Description

Covered Bridge (1873/1874 - 1911)
In June 1873 the board determined to borrow $60,000 to build two bridges across the White River - one at Martinsville and the other at Waverly. The Smith Bridge Company secured the construction contract for the Waverly Bridge. The commissioners met in March 1874 "for the purpose of making settlement with the Smith Bridge Company for building bridge at Waverly. In June the commissioners determined to protect its recent investment by purchasing $8,000 in insurance on the Waverly Bridge - $2,000 in each of four companies for $180. A number of persons were paid in September for tools and work on the bridge and John Rooker was named to paint "sign boards for bridges at Martinsville and Waverly".

The bridge required occasional maintenance and repair. In September 1875, for example, the county paid George W. Dehaney $6.50 "for removing drift" from around the structure and Alex Swearengin secured a contract for rip-rapping there. Albert K. Taylor received $60.75 for repairs to the Waverly Bridge in September 1877. The commissioners asked county Surveyor Blunk in January 1911 to prepare repair plans and, in February, asked that those plans be redrawn because bids were so high. Fire intervened.

The county council acknowledged the "burning of the Wooden Bridge" at Waverly on 21 March 1911 and looked forward to a concrete replacement that would require the issuance of approximately $40,000 in bonds. The commissioners agreed to establish a temporary ferry.

Concrete Arch Bridge (1911 - 198x)
The county commissioners approved H. A. Blunk's plans for a 4-span (2@125' & 2@100'), 450-foot long, concrete bridge with a 20-foot roadway in May 1911. Blunk was allowed $89.10 for his plans, and Sam Watson $842.41 for operating a ferry at Waverly. At the June letting, steel and concrete proposals were submitted. Although the Hackedorn Contracting Company of Indianapolis brought in a construction bid of $37,369 on Blunk's plans, the commissioners awarded the construction contract to the National Bridge Company at $38,750 for a 5-span Luten-design structure. Sam Watson was named superintendent of construction. The commissioners visited the new Waverly Bridge in October and reported "that the work is getting along nicely." The *Democrat* reporter intoned that "it will be a mighty fine bridge when completed and the people in the neighborhood won't have to wait long." National Bridge received approximately $24,000 in October, November, and December. Its final payment came in September 1912.

County Republicans apparently condemned the commissioners decisions on the Waverly Bridge contracting. Many favored the lower-cost Hackedorn Contracting Co. bid and complained about the height of the Luten-design arches. The bridge both survived the great 1913 flood, but also had not slowed the flow of the river and pushed flood waters into town: "The whole town would have been wiped out."

The commissioners ordered the Mooresville Telephone Company to remove its poles and lines from the "new bridge" In Janaury 1914.

The state built a bypass to the north of Waverly and the bridge, crossing the White River in 1969 with a KCSB and CSG structure. The old concrete arches were essentially abandoned until removed sometime after 1980.

References

Covered Bridge (1873/1874 - 1911)
George E. Gould, *Indiana Covered Bridges Thru the Years* (Indiana Covered Bridge Society, Indianapolis, 1977), 39, 56.

Morgan County, "Commissioners Record," 11: 90, 182; 12: 5-6, 26-27, 61, 78, 215, 272, 274, 498-4990; 13: 263;
23: 310, 316, 320, 356-358; 25: 45;
"County Council Record," 1: 103, 120, 131.

Concrete Arch Bridge (1911 - 198x)
"Bridges - Martinsville, Morgan County", *Engineering New Record, Supplement,* 65 (11, 25 May, 15 June 1911): 225, 248.
"Bridges - Waverly, Indiana", *Engineering New Record,* Construction News, 65 (15 June 1911): 282.

"Much Work Done by Commissioners," *Martinsville Democrat*, 6 October 1911: p5 c7.
"People of Waverly Should Have Help," *Martinsville Democrat*, 18 April 1913: p7 c5.

Morgan County, "Commissioners Record," 23: 358-359, 372, 375, 385-386, 396-397, 403-408, 432-433, 509, 535, 574;
24: 6-7, 20, 23-24, 292; 25: 45;
"Commissioners Docket," 18: 273, 290.

Waverly Bridge proposals and contract (1911), Morgan County Auditor's Office.

Name	County		Br. #	Latitude	Longitude
Copeland Arch	Morgan	55	129	39° 31.6' N	86° 20.1' W

Township	Sect'n	Tnshp	Range
Clay	29	13N	2E

Carries: Rinker Rd.
Over: White River, branch

USGS Topo Map: Mooresville East
UTMs: 16 E: 556960 N: 4375772

USE by Design: vehicles
Current: vehicles
Last Revised: 4/22/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1911
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	35	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
38	18/10	16/6	33°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Earl O. Gilbert	builder

Construction History and Structural Description

The plans which H. A. Blunk prepared for the county called for a skewed 36-foot and 8-inch span with a 16-foot roadway. Wings were heavy and parapet rails undecorated. The commissioners named Jesse Copeland superintendent construction of the Copeland Arch in March 1911. Earl O. Gilbert was paid $300 in June and $662.78 in July for the Copeland Arch. The board visited and accepted the structure in June.

The fairly-flat, 16-inch deep, ring springs from about 2-feet up on the abutments. Undecorated concrete parapet rails.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 23: 356, 420, 430-431, 466.

H. A. Blunk, "Copeland Arch" plans.

Name	County	Br. #	Latitude	Longitude
Buck Stone Bridge	Morgan	55 [135]	39° 37.3' N	86° 15.3' W

Township	Sect'n	Tnshp	Range
Madison	25	14N	2E

Carries: Mann Rd./C.R. #53
Over: Goose Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Last Revised: 4/3/2015
Current: demolished

PRIOR Structure Name:

SURVEYED Structure
Built: 1927-1928
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - By: 1984 CR concrete slab

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren		4	1	56

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
57	19/3	17/8	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	builder

Construction History and Structural Description

In September 1927, the commissioners awarded a $3,475 contract to the Vincennes Bridge Company for the 56-foot Buck Stone Bridge in Madison township. [Stone property in northeast quarter of S 25.] In Febuary 1928, the County Council declared an emergency caused by flooding and appropriated $3,400 and authorized the Commissioners to borrow same for construction of the "Buck Stone Bridge" in Madison township. In May 1928, the county turned over the old, removed Buckstone Bridge superstructure to the township "to do with as they saw fit."

Seated on concrete abutments and wing-walls, the bolted or riveted Warren pony trusses relied heavily on pairs of angles riveted together with battens for its verticals, diagonals, lower-chord members and external sway braces all of which were fastened at their ends to gussets. The 20-inch I floor-beams carried the runs of 9-inch I-beam stringers and asphalt-over-concrete roadway lined by angle railings.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 29: 9-11, 36, 60;
"County Council Record," 1: 244.

"Notice to Bridge Contractors," *Martinsville Democrat*, 26 August 1927: p2 c5.

Name	County	Br. #	Latitude	Longitude
Mitchell's Ford/Mooresville Brdge	Morgan	55 [137]	° N	° W

Township	Sect'n	Tnshp	Range
Brown	36	14N	1E

Carries: Bridge St., Mooresville
Over: White Lick Creek, E. Fork

USGS Topo Map:
UTMs: 16 E: N:

USE by Design	Current	Last Revised
vehicles	demolished	3/11/2015

PRIOR Structure
Name:

SURVEYED Structure
Built:
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1974
By: CPC I-beams

SUPERSTRUCTURE FORMS

Material:

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through-truss	Pratt	pinned	6	1

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

William R. Sheppard was paid $18 in December 1879 "for tightening Morgantown Bridge [#1522], Taggard's Crossing Bridge [#39], and Mooresville Bridge [#137, #3790]" and $65 for painting bridges at Morgantown [#1522], Mooresville [#137, #3790], and part of McClure's Bridge.

[#137 or #3509]: The county set a May 1926 letting for the construction of three bridges, including a "90-foot low truss bridge known as the Mooresville Bridge over White Lick Creek one-half mile east of Mooresville". The Vincennes Bridge Company brought in the winning proposal at $7,588, plus piling if needed.

References

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 14: 339, 355; 28: 402-404.

"Notice to Contractors," "Commissioners Court," *Martinsville Democrat*, 23 April 1926, 7 May 1926: p7 c4; p4 c3.

Name	County	Br. #	Latitude	Longitude
Mooresville Bridge	Morgan	55 [139]	39° 36.5' N	86° 23.5' W

Township	Sect'n	Tnshp	Range
Brown	35	14N	1E

Carries: Greencastle Rd/CR 1300N
Over: White Lick Creek

USGS Topo Map: Mooresville West
UTMs: 1 6 E: 552767 N: 4384998

USE by Design: vehicles
Current: demolished
Last Revised: 4/2/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1884
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1958
By: cont I-beam

SUPERSTRUCTURE FORMS

Material: wrought iron 2

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through-truss Pratt	pinned		2	50

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
100			

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Indianapolis Bridge Co.	superstructure
	Schweitzer & Spence	substructure

Construction History and Structural Description

[Probably #3970 but possibly #139]: The county commissioners decided in June 1868 that a bridge was "needed over White Lick Creek at or near West boundary of Mooresville". P. L. Davis received payment in December "for work done on trussing and abutments" for the bridge near Mooresville.

The commissioners acted favorably on the J. H. Woodward *et al,* supported by the township trustee, petition for construction of a bridge across White Lick Creek at Greencastle Ford in December 1883. W. H. Miller presented specifications for a 270-foot superstructure with pair of 135- by 16-foot clear spans of iron or wood on a stone foundation. Against the advice of an attorney for some citizen opponents of the bridge, the board appointed Robert Scott "to superintend the letting and building of the same." In March 1884, the Brown township renewed the petition for a bridge at the Greencastle Ford and viewers supported construction. W. H. Miller presented revised specifications for a 260-foot superstructure with pair of 126- by 16-foot clear spans - each of 9 panels - of iron on a stone foundation. Miller estimated the cost at $8,923.25. At the April 1884 letting, the Indianapolis Bridge Company secured a $5,590 contract for the superstructure. Bernard Schweitzer and James H. Spence of Owen County won the stonework contract at $3,750. The Indianapolis Bridge Company and Schweitzer & Spence received their final payments in October.

The commissioners agreed to repairs in July 1905 to the iron bridge over White Lick Creek west of Mooresville on Greencastle road, two spans, 100 feet." A. Ferguson of Indianapolis won a $1,174 contract for the repairs. In July 1911, the commissioners awarded Jasper Wilhite a $390 contract to furnish new stringers and to re-floor "the Mooresville Bridge on the Mooresville and Greencastle Road" over White Lick Creek.

The 1958 I-beam structure was itself replaced in 2008.

References

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 9: 331; 10:1; 16: 17, 105-106, 124, 136-137, 146-150, 155-159, 162, 185; 21: 320; 23: 432, 467-468, 470-471, 476.

"Martinsville - Bridges - Morgan County," *Engineering News*, Supplement, 54 (13 July 1905): 11.

Name	County	Br. #	Latitude	Longitude
Joppa Bridge	Morgan	55 [142]	39° 37.5' N	86° 25.8' W

Township	Sect'n	Tnshp	Range
Monroe	28	14N	1E

Carries: Hammer Rd./C.R. 25W
Over: McCracken Creek
USGS Topo Map: Plainfield
UTMs: 1 6 E: 548790 N: 4386570

USE by Design: vehicles
Last Revised: 4/2/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1927
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1994
By: CR concrete slab

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt	riveted	6	1	90

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
92	17	15/9	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	builder

Construction History and Structural Description

Previous Structure (1905 - 1927)
At the July 1905 letting, the commissioners awarded a construction contract for a "double concrete arch or steel bridge, both substructure and superstructure; over McCracken creek, Monroe township, near Joppa; 80 feet." A. Ferguson of Indianapolis received the $1,988 contract. Ferguson was paid the contracted amount in December. The county Council noted in September 1926 that the bridge was "out," and appropriated $200 for a temporary structure.

Pratt Pony-Truss Span (1927 - 1994)
The county sought bids in March 1927 for the construction of the 90-foot span Joppa Bridge in Monroe township. The Vincennes Bridge Company brought in the successful bid at $7,480 plus piling. Construction was complete by July 1927.

The full-hipped, riveted Pratt pony trusses rested upon concrete abutments and wing-walls. Truss verticals were fabricated from a pair of angles riveted together with battens and integrated with the external sway braces. The diagonals and counters were also made from a pair of angles and battens. The diagonals were countered in the two most central panels. 18-inch I floor-beams -- attached to the verticals below the lower chord -- carried the runs of 9-inch steel stringers and the concrete roadway.

Riveted Pratt ponies are not plentiful in Indiana, although Morgan County retains a number. The full-hip design, integration of external braces with verticals, and complete reliance on angles for the web members are all unusual features. The original members of the unadorned bridge all still function.

References

Previous Structure (1905 - 1927)
Morgan County, "Commissioners Record," 21: 320, 416;
"County Council Record," 1: 45-46, 234.

"Martinsville - Bridges - Morgan County," *Engineering News*, Supplement, 54 (13 July 1905): 11.

Pratt Pony-Truss Span (1927 - 1994)
Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 28: 465, 486-489, 549.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #143	Morgan	55	[143]	39° 37.2' N	86° 26.5' W

Township	Sect'n	Tnshp	Range
Monroe	29	14N	1E

Carries: Hamer Rd./C.R.1350N/#252
Over: McCracken Creek

USGS Topo Map: Mooresville West
UTMs: 16 E: 547634 N: 4386068

USE by Design: vehicles
Current: vehicles
Last Revised: 4/21/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1907
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 2000
By: PC box beams

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	60	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
92	18/8	16	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Kelleher & Slipher	contractor

Construction History and Structural Description

The commissioners advertized the letting of a 60-foot concrete arch over McCracken Creek, two miles north of Gasburg in S29/T14N/R1E in February 1907. At the letting, Kelleher and Slipher secured a $1,744 for the construction of the arch to be completed by September.

Fairly-flat 18-inch deep ring. Coped and paneled parapet rails with rail columns.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 22: 42-43.

Name	County	Br. #	Latitude	Longitude
Burnett's/Lambs Creek Bridge	Morgan	55 146	39° 25.5' N	86° 28.5' W

Township	Sect'n	Tnshp	Range
Jefferson	1	11N	1W

Carries: Old S.R. #67/C.R. #98
Over: Burnett/Lambs Creek

USGS Topo Map: Martinsville
UTMs: 1 6 E: 545180 N: 4363720

USE by Design: vehicles
Current: vehicles
Last Revised: 4/4/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1893
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS
Material: [wrought iron] 2

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss Pratt	pinned	5	1	78/10

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
86	16/6	15/8	

SUBSTRUCTURE
Material: stone; concrete

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Wrought Iron Bridge Co.	fabricator

Construction History and Structural Description

The commissioners awarded a contract in March 1893 to the Wrought Iron Bridge Company, through its agent, David Braden for an 86-foot span at $17.50 per lineal foot ($1,422.44 total) for a crossing of Burnett's Creek (earlier name for Lambs Creek). The bridge was to be completed within 60 days. The county paid the company the contracted amount in June.

The county undertook regular repairs. The commissioners decided on repair of the "Burnett's Creek Bridge" about 3 miles southwest of Martinsville on the Martinsville & Gosport Road in January 1910. At the February letting, A. Ferguson secured a $428 repair contract.

The pin-connected Pratt through trusses sit upon cut stone (reinforced with concrete) abutments and wing-walls. Intermediate verticals of laced channels divide the 86' span into most of its five panels. Eyebars provide the diagonals: pairs stretch toward center span from the top panel point to the bottom of the 2nd and 4th panels; cylindrical eyebars with turnbuckles cross the center panel. U-bolted to the lower pins, the 15-inch I floor-beams carry the runs of 6-inch steel stringers and steel grid (replacement) roadway with 15-feet of vertical clearance.

This quite unadorned bridge, built by a prolific Ohio firm, appears to retain its original members.

References

Associated Engineering Consultants, *Bridge Inventory Rating andSafety Inspection Report: Morgan County* (Nashville, 1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R, W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

nameplate.

Morgan County, "Commissioners Record," 18: 523, 535; 23: 163, 172, 174.

HAER, IN-102.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #147	Morgan	55 147	39° 24.1' N	86° 31.2' W

Township	Sect'n	Tnshp	Range
Jefferson	9	11N	1W

Carries	Old S.R. #67/C.R. 180S
Over	Burkhart Creek

USGS Topo Map	UTMs		
Paragon	1 6 E: 541089	N: 4361230	

USE by Design: vehicles — Current: vehicles — Last Revised: 4/4/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1921-1922
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren	riveted	4	1	48

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
51	21	19/2	30°

SUBSTRUCTURE

Material: concrete

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	E. C. Wright	contractor
	HIPCo	fabricator

Construction History and Structural Description

The Indiana State Highway Commission designed this structure and let a contract of $5,410 in August 1921 for its construction to E. C. Wright of Bloomfield. Wright, who entered the field of bridge construction along with the ISHC, handled construction and apparently sublet the fabrication and erection of the metal-truss superstructure to relatively small firm, HIPCo of Ligonier, also fairly new to the field. Construction was completed by early February 1922.

The riveted Warren pony trusses were erected upon concrete abutments and wing-walls. The all-interior truss verticals were manufactured from pairs of angles riveted together with stay plates and reinforced with external sway bracing. Its diagonals were also made from a pair of angles (doubled in the outer panel) riveted together with stay plates. Riveted to the verticals above the lower chord, the 24-inch I floor-beams carry the runs of 10-inch steel stringers and asphalt-over-concrete roadway.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

bridge nameplate.

Indiana State Highway Commission, "Bridge Letting Notices," and "Bridge Contract Awards," for 30 August 1921.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #148	Morgan	55 [148]	39° 23.6' N	°86 34.7' W

Township	Sect'n	Tnshp	Range
Ray	13	11N	2W

Carries	old S.R. #67/C.R. #280
Over	Fall Creek

USGS Topo Map	UTMs			
Paragon	1 6	E: 536180	N: 4360300	

USE by Design	Last Revised	Current
vehicles	4/4/2015	demolished

PRIOR Structure

Name

SURVEYED Structure

Built	1927-1928
Span(s) Added	
Remodelled	
Moved - On	
To	
Replaced -	2002
By	I-beam

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren	riveted	4	1	48

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
49	20/7	19/2	35°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Vincennes Bridge Co.	builder

Construction History and Structural Description

The state highway commission awarded the Vincennes Bridge Company a combination contract in late July 1927, including $7,218.63 for a 48-foot steel truss of state design for over Fall Creek in Morgan County. Construction was complete by April 1928.

Concrete abutments and wing-walls supported the somewhat skewed, riveted, 6-feet and 4-inch deep, Warren pony trusses. The all-interior truss verticals were manufactured from two pairs of angles riveted together with battens and reinforced with external sway braces. A single pair of angles (doubled in the outer panel) and battens provided the diagonals. The 24-inch I floor-beams were attached to gussets and the verticals above the lower chord and, with 10-inch steel stringers riveted to the sides of the floor-beams, carried the asphalt-over-concrete roadway.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Indiana State Highway Commission, structure, #67-55-503; contract, #161; "Bridge Contract Awards," for 27 July 1927.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #150	Morgan	55	150	39° 22.3' N	86° 36.6' W

Township	Sect'n	Tnshp	Range
Ray	22-23	11N	2W

Carries: Lingle Rd.
Over: White River, branch
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Last Revised: 4/22/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: c.1940
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
T-beam	1	40

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
43	27/2	24/2	30°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

The commissioners let a $445 contract to the Indianapolis Bridge and Iron Works in November 1900 to erect a steel superstructure "at Hoose Ford one-half mile southwest of Whitaker".

Six 32-x16-inch T-beams spaced about 4-feet apart. Outer beam angled to support coped and paneled parapet rails. 6-inch concrete deck.

References

Associated Engineering Consultants, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 20: 278.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #161	Morgan	55	161	39° 22.3' N	86° 28.7' W

Township	Sect'n	Tnshp	Range
Washington	24	11N	1W

Carries: Old S.R. #37/C.R. #270
Over: Little Indian Creek

USGS Topo Map: Hindustan
UTMs: 16 E: 544780 N: 4357760

USE by Design: vehicles
Current: closed
Last Revised: 4/21/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1921-1922
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	65	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
104	22/6	19/4	34°

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	E. C. Wright	contractor

Construction History and Structural Description

The state highway commission awarded a $10,482.40 construction to E. C. Wright of Bloomfield to build a 65-foot reinforced concrete arch over Little Indian Creek in Morgan County in August 1921. Construction was complete by November 1922.

Quite flat 16-inch deep ring - likely three-centered - with coped and paneled parapet rails.

Reported in Bridgehunter as closed (since 2013) and by INDOT in 2014 as slated for bypass and pedestrian use.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Indiana State Highway Commission, structure, #22-E [55]-18; "Tabulation of Awards - Bridges," August 1921;
Inventory of Bridges on State Highway System of Indiana (Indianapolis, 1979).
Indiana Department of Transportation, "Legal Notice of Availability of I-69 Section 5 Reevaluation Statement #3,
Morgan County Bridge No. 1l1 and Public Hearing."

Name	County	Br. #	Latitude	Longitude
Stine's Mill Bridge	Morgan	55 [162]	39° 28.6' N	86° 22.1' W

Township	Sect'n	Tnshp	Range
Washington	13	12N	1E

Carries: Old State Route #37
Over: Clear Creek
USGS Topo Map: Cope
UTMs: 16 E: 553940 N: 4369520

USE by Design: vehicles
Last Revised: 4/23/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1924-1925
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1992
By: CPC box beams

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
T-beam	3	34

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
111	22/8	19/2	°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Robert H. King	contractor

Construction History and Structural Description

Prior County Structure

At the September 1901 county letting for the Stine's Mill Bridge over Clear Creek, Lossie Fisher secured the stonework contract at $663, and the Indianapolis Bridge Company won the steel superstructure contract for $1,165.

Surveyed T-beam Structure (1924/25 - 1992)
Robert H. King of Danville secured a $24,772.41 combination construction contract from the state highway commission in August 1924 which included these 3 T-beam spans over Clear Creek. Construction was complete by July 1925.

Six beams 13-inches wide by 27-inches high on 43-inch centers. The outer beams were flared to carry the coped and paneled concrete rails.

References

Prior County Structure
Morgan County, "Commissioners Record," 20: 337.

Surveyed T-beam Structure (1924/25 - 1992)
Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Indiana State Highway Commission, structure, #37-L [55]-4514; contracts, #38; "Tabulation of Awards - Bridges," August 1924; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940).

Name	County	Br. #	Latitude	Longitude
Stotts Creek/Exchange Bridge	Morgan	55 [163]	39° 29.8' N	86° 19.7' W

Township	Sect'n	Tnshp	Range
Green	8	12N	2E

Carries: New Harmony Rd./C.R. 475N
Over: Stotts Creek

USGS Topo Map: Cope
UTMs: 16 E: 557430 N: 4372220

USE by Design: vehicles
Last Revised: 4/22/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1910-1911
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS
Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	2	78	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
159	21/8	19	

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	E. O. Gilbert	contractor

Construction History and Structural Description

[*Covered Bridge* (18xx - 1910)]
George Gould reported a timber-truss structure over Stotts Creek (S8/T12N/R2E) but thought it was located on what is now State Route #37 [#1371]. He provided no other information on the structure. The 1876 atlas map suggests the roadway followed what is today's New Harmony Rd.

The Stotts Creek Bridge underwent periodic repair. In October 1877, Aaron St. John received $30 "for repairs done Stotts Creek bridge 'buttment.'" In March 1879, St. John was allowed $10.20 for lumber and labor. The structure received considerable attention in late 1880. Many were paid in December for labor and materials (including a barrel of Rosedale cement) for substantial work -- including jacks for lifting the superstructure -- on a possible replacement of the substructure from timber to stone. W. W. Gregory received $39.40 for 11,000 shingles and D. Turk & Rodgers $30.06 for 9,250 pine shingles. The county bought $3,000 insurance on the bridge in 1882.

The commissioners awarded a $144.45 contract in May 1905 to John H. Elliott for the repair the Stotts Creek bridge in section 8 of Green township. Elliott secured payment in June. The commissioners also approved concrete abutments for the bridge and contracted with Nathan W. Gilbert for $393.

Concrete Arch (1910 - >1993)
The county determined in September 1910 to have a concrete arch constructed one-half mile west of Exchange over Stotts Creek. E. O. Gilbert of Martinsville brought in the lowest and successful bid at $5,100 in October. Alfred Gray was named superintendent of construction. Gilbert received payments in November and December of 1910 and in April of 1911. Also in April 1911, the commissioners awarded Gilbert a $50 contract for placing a foot deep of gravel over the arch ring with at least 6-inches of gravel over the crown. James Singleton received a $80 contract to provide dirt fill over and beyond the gravel. The board visited and then accepted the Exchange Bridge in June.

Fairly-flat 18-inch deep rings. Undecorated concrete parapet rails.

Closed by 1988 and removed after 1993.

References

[*Covered Bridge* (18xx - 1910)]
George E. Gould, *Indiana Covered Bridges Thru the Years* (Indiana Covered Bridge Society, Indianapolis, 1977), 39, 56.

Morgan County, "Commissioners Record," 13: 287; 14: 60; 15: 7-8, 12-13, 37, 50, 64, 69, 80; 15: 369; 21: 265, 274, 306.

Concrete Arch (1910 - >1993)
Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);

Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 23: 249, 264, 273, 281, 364, 379, 420, 430-431, 508;
" County Council Record," 1: 101.

"Martinsville - Bridges - Morgan County," *Engineering News*, Supplement, 64 (27 October 1910): 193.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #166	Morgan	55	166	39° 33.0' N	86° 16.0' W

Township	Sect'n	Tnshp	Range
Harrison	24	13N	2E

Carries: Old State Route #37
Over: Bluff Creek

USGS Topo Map: Mooresville East
UTMs: 16 E: 563120 N: 4378820

USE by Design: vehicles
Current: vehicles
Last Revised: 4/21/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1924-1925
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
slab	2	18/6

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
37	36	26	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	W. H. Grammer & Son	contractor

Construction History and Structural Description

W. H. Grammer & Son of Evansville received a $6,668.04 state contract for the 2-span concrete slab over Bluff Creek in August 1924. Construction was complete by June 1925.

1-foot and 7.5-inch deep slab. No railings.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Indiana State Highway Commission, structure, F.A. 63-B-1; contract, #37; *Separate Contract Structures Awarded by Bridge Department - Arranged According to State Roads* (1941), 37-L.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #173	Morgan	55 [173]	39° 33.1' N	86° 22.2' W

Township	Sect'n	Tnshp	Range
Clay	24	13N	2E

Carries: Country Club Rd.
Over: Monical Branch

USGS Topo Map: Mooresville East
UTMs: 16 E: 554130 N: 4378200

USE by Design: vehicles
Current: demolished
Last Revised: 4/24/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1907-1908
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1995
By: PC box beams

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	35	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
40	18/4	15/5	45°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	N. W. Gilbert	contractor

Construction History and Structural Description

The commissioners ordered an October letting in 1907 for three bridges, including the construction of a 35-foot concrete arch across Monical branch one mile north of Brooklyn. At the letting, N. W. Gilbert secured a $899 construction contract for the Monical branch arch.

18-inch deep ring springs from about 4-feet up on abutments. Low paneled rails.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 22: 268, 300;
"County Council Record," 1: 73.

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #174	Morgan	55 174	39° 33.4' N	86° 22.6' W

Township	Sect'n	Tnshp	Range
Clay	24	13N	1E

Carries: Old State Route #67
Over: Monical Branch

USGS Topo Map: Mooresville East
UTMs: 1 6 E: 554005 N: 4378433

USE by Design: vehicles | Current: vehicles

Last Revised: 4/21/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1937
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	35	
under fill			

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
38	58	42	30°

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	James A. Crosbie	contractor

Construction History and Structural Description

The state highway commission let the construction of this arch on 16 March 1937 to James A. Crosbie of Bluffton for $12,886.63 as a part of contract #1490. The state acknowledged successful completion of construction in early September.

Semi-circular ring - 12-inch deep at crown - under fill. No rails.

The county took ownership of this bridge when the state abandoned this section of State Route #67.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Indiana State Highway Commission, structure, #67-H [55]-1600, contract, #1490; "Tabulation of Awards - Bridges," March 1937.
G. I. Seyert, *Indiana State Highway Commission Bridge Contracts Logged by State Road* (through 1942).

Name	County	Br. #	Latitude	Longitude
Morgan County Bridge #188	Morgan 55	188	39° 22.9' N	86° 35.9' W

Township	Sect'n	Tnshp	Range
Ray	23	11N	2W

Carries	Old State Route #67
Over	Hodges Ditch

USGS Topo Map:

UTMs: 16 E: N:

USE by Design: vehicles — Current: vehicles

Last Revised: 4/23/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1939-1940
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
T-beam	1	30

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
32	22/8	38	45°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	A. L. Deniston	contractor

Construction History and Structural Description

Prior County Structure (1904 - 1939)
At an October 1904 county letting, A. Ferguson secured a $725 contract to construct a 30-foot concrete arch with a 16-foot roadway half a mile north of Whitaker Station in Ray township.

Surveyed T-beam Structure (1939/40 -)
A. L. Deniston of Rochester, Indiana, secured a $20,480.01 combination construction contract from the state highway commission in September 1939 which included the T-beam span over Hodges Ditch (@$10,057.32).

Five beams 14-inches wide by 25-inches high on 4-foot and 6-inch centers. The outer beams were flared to carry the coped and paneled concrete rails.

References

Prior County Structure (1904 - 1939)
Morgan County, "Commissioners Record," 21: 154.

Surveyed T-beam Structure (1939/40 -)
Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Indiana State Highway Commission, structure, #67-G [55]-1559; contract, #1845; "Tabulation of Awards - Bridges," September 1939; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940).

Name	County	Br. #	Latitude	Longitude
Patrick Arch	Morgan	55 [189]	39° 23.1' N	86° 33.4' W

Township	Sect'n	Tnshp	Range
Ray	18-19	11N	1W

Carries: Paragon Rd./C.R. 300S/#15
Over: White River, W. Fork, creek

USGS Topo Map: Paragon
UTMs: 16 E: 537630 N: 4359230

USE by Design: vehicles
Current: demolished
Last Revised: 4/24/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1910
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1994
By: CR concrete slab

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	23/6	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
24	18	16	30°

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	N. W. Gilbert & Son	contractor

Construction History and Structural Description

The commissioners asked the county surveyor to prepare plans and specification for a number of bridges in February 1910, including the Patrick Bridge, one mile south of Paragon. N. W. Gilbert & Son secured a $703 contract for the construction of the Patick Arch in March 1910.

Close to semi-circular, about 12-inch deep, ring springs from about 3-feet up on abutments. Undecorated concrete parapets.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Morgan County, "Commissioners Record," 23: 171, 178, 180-181, 194.

Name	County		Br. #	Latitude	Longitude
Morgan County Bridge #224	Morgan	55	224	39° 23.7' N	86° 27.2' W

Township	Sect'n	Tnshp	Range
Washington	18	11N	1E

Carries: Old S.R. #37S/C.R. #363
Over: Indian Creek

USGS Topo Map: Martinsville
UTMs: 16 E: 546810 N: 4360330

USE by Design: vehicles | Current: vehicles
Last Revised: 4/4/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1925-1926
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: steel | 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren	riveted	7	3	77

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
237/7	20	19/2	30°L

SUBSTRUCTURE

Material: concrete | 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Vincennes Bridge Co.	builder

Construction History and Structural Description

The state highway commission decided to straighten out a section of county roadway south of Martinsville incorporated into State Route #37. The new section bypassed the bowstring later relocated to Burton Lane. The Vincennes Bridge Company of Vincennes, Indiana, bid $27,558.47 to build the new three-span skewed structure (30deg.L) on concrete abutments and piers to state design in July 1925. The bid came in about seven thousand below the state engineers' estimate, although in the end Vincennes was paid two thousand dollars over its bid. Work started in September under the direction of Vincennes employee Curtis A. Teague of Martinsville. The bridge was complete by July 1926. Assistant state engineer Britton "said it was the best bridge between Indianapolis and the Ohio River."

The state highway commission relied on an early standard plan for 77-ft., riveted, half-hip, Warren pony-truss spans with 20-foot roadways. The 8-foot 9-inch deep trusses carry seven 11-foot wide panels. The external sway braces share battens with the all-interior verticals -- each of two pairs of angles (3.5"x2.5"Ls) riveted together. The diagonals are heavier towards the ends (4Ls@3.5x3) than toward mid-span (2Ls@3.5"x2.5"), each member riveted together with battens. The upper and lower chord members, on the other hand, become increasingly heavier toward mid-span. For the top, a pair of 10-inch channels grow from 15.3 lbs to 20 lbs. For the bottom, a single pair of angles (6"x3.5"Ls) serve in the outer panel; thereafter the pairs are doubled. The state specified fairly heavy I floor-beams (24"@79.9#). These were riveted to the verticals above the lower chord and to their sides were attached seven rows of rolled 10-inch I's (@25.4#) as stringers, together carrying the concrete deck. Angles supply the lower sway bracing. Post and channel guardrails line the trusses.

This is probably the oldest extant state-design Warren pony-truss structures. It is multi-span, skewed, and retains its original members. A notable Indiana bridge builder fabricated and erected the trusses along with the substructure.

Closed to traffic by 2015 and reportedly slated for demolition.

References

Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Indiana State Highway Commission, structure #22-E-473; contract, #44-25; superstructure standard (15 August 1924); "Tabulation of Awards - Bridges," 28 July 1925.

"New Bridge over Indian Creek," "Change in Road," *Martinsville Democrat*, 26 June 1926: p7 c3; 8 Oct. 1926: p1 c4.

Name	County	Br. #	Latitude	Longitude
Brooklyn Bridge	Morgan	55 243	39° 32.1' N	86° 22.0' W

Township	Sect'n	Tnshp	Range
Clay	25	13N	1E

Carries: Mill St., Brooklyn
Over: White Lick Creek

USGS Topo Map: Mooresville East
UTMs: 1 6 E: 554423 N: 4376741

USE by Design: vehicles
Current: vehicles
Last Revised: 3/7/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1948
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS
Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	3	84	
continuous			

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
249/10	27	23/10	

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

Prior Timber Bridge (18xx - 1875)
In April 1867, the commissioners learned that the "bridge at Brooklyn, White Lick Creek [was] about to fail." Stephen Gregory was empowered to repair the bridge "according to the original specifications and plans of William Frezer of Indianapolis." In May, Gregory was allowed $556.76 for repairs to the Brooklyn Bridge. William Frazer received $132.22 for superintending the repairs. In March 1869, the county board named John A. Gregory to superintend repair of the bridge at Brooklyn. In June Gregory was paid $67.80.

The commissioners in early August 1875 "made visit to view the destruction of the Bridges at Brooklyn and Mooresville caused by the late High Waters." John W. Ferguson was named agent "to sell remains of old Bridge at Brooklyn in September.

Howe-Truss Covered Bridge (1875 - 1948)
The demise of the Brooklyn Bridge led to commissioners to contract with the Smith Bridge Company of Toledo in August 1875 for a "Wooden Howe Truss Clear Span of Bridge between 130 & 150 feet" with a 14-foot roadway for $18.25 per lineal foot of superstructure. The board contracted with Stephen Gregory and Clark Robbins to build abutments of White Lick stone for $1,000 and named Robert Smith to inspect the stone-work construction. Gregory received in October the $700 balance of what was due him for repair and construction of the abutments. In December, Stephen Gregory and John W. Ferguson were allowed $444 "for wings to abutments of Brooklyn Bridge not included in contract of abutments and built by order of commissioners". The commissioners inspected the bridges at Brooklyn and at White Lick Creek near Mooresville in November 1875, received the Mooresville structure but postponed acceptance of the one at Brooklyn. The bridge was received in December and Smith Bridge was paid $3,470 and gave the county a ten-year construction guarantee. The county purchased insurance on the "White Lick Bridge at Brooklyn" in October 1880 and renewed it in 1882.

The structure underwent periodic repair. W. C. Greeson received $5.50 in July 1878 "for painting on Brooklyn Bridge across White Lick". In June 1880, William Brown was paid $241.60 for excavation and stonework here. The commissioners granted a petition in September 1897 for a new abutment on the East end of the bridge. The board asked county Surveyor Blunk in January 1911 to prepare repair plans. At the February letting, Lewis Guthrie won a $210 contract for these repairs.

According to George Gould, "the 180-foot [160-ft. clear span] covered bridge at Brooklyn was replaced in 1948 by an $80,000 concrete structure. A Howe span built in 1878 [1875] was near a large water-powered mill. In its later years the bridge was strengthened by placing suspension rods beneath the chords and by knee braces."

Concrete Arch (1948 - 20xx)

Likely three-centered , 14-inch deep, rings. Coped and paneled parapet rails.

References

Prior Timber Bridge (18xx - 1875)
Morgan County, "Commissioners Record," 9: 87, 91; 10: 99, 159; 12: 264, 298.

Howe-Truss Covered Bridge (1875 - 1948)
George E. Gould, Indiana Covered Bridges Thru the Years (Indiana Covered Bridge Society, Indianapolis, 1977), 39, 56.

Morgan County, "Commissioners Record," 12: 265-267, 303, 315, 318-320, 352; 13: 477; 14: 554; 15: 51, 369; 19: 362, 507; 23: 310, 316, 323.

Concrete Arch (1948 - 20xx)
Associated Engineering Consultants, Inc., *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville,1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).
R. W. Armstrong & Associates, *Bridge Reinspection Report: Morgan County* (Indianapolis, 2004).

Name	County		Br. #	Latitude	Longitude
old State Highway Bridge #1389	Morgan	55	[1389]	° N	° W

Township	Sect'n	Tnshp	Range
Harrison	34	13N	2E

Carries: former State Route #37
Over: Crooked Creek
USGS Topo Map:
UTMs: 1 6 E: 559910 N: 4374353

USE by Design: vehicles | Current: bypassed | Last Revised: 4/21/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1924
Span(s) Added:
Remodelled: 1932-33
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete | 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
T-beam	2	34	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
		26	

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Robert H. King	contractor
	Mead-Balch Construction Co.	widening

Construction History and Structural Description

Robert H . King of Danville secured a $24,772.41 state contract in August 1924 to build a pair of reinforced concrete girder structures on then state road #22-F, including the one here. Widening the original structure was included in a combination contract in February 1933. The Mead-Balch Construction Company of Indianapolis secured the $7,141.50 widening contract.

References

Indiana State Highway Commission, structure, #37-L [55]-1389; contracts, #38 & #535; "Tabulation of Awards - Bridges," August 1924 & February 1932; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1520	Morgan	55	1520	° N	° W

Township	Sect'n	Tnshp	Range
Jackson	36	11N	2E

Carries: State Route #135
Over: Bear Creek

USGS Topo Map: Morgantown
UTMs: 1 6 E: 563670 N: 4356070

USE by Design: vehicles
Last Revised: 4/5/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1933-1934
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	three-centered	1	59/8	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
115/9		31/9	30°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Mustard-Curry Building Corp.	contractor

Construction History and Structural Description

Prior County Structure

In May 1908, the commissioners contracted with N. W. Gilbert for $1,924 to construct a concrete arch over Bear Creek on the Morgantown and Nashville Free Gravel Road one mile south of Morgantown. County plans called for a 56-foot span with a 16-foot roadway. Parapets were to be coped and paneled.

Surveyed Structure (1934 -)

The state highway commission awarded a combination contract in September 1933 for a pair of reinforced concrete arches south of Morgantown - a 24-foot one over a Drainage Ditch [#1521] and a 60-foot one over Bear Creek [#1520]. The Mustard-Curry Building Corporation of Bloomington won the $19,113.25 contract. Work was completed on the Bear Creek arch by April 1934.

Three-centered ring. Coped and paneled rails.

References

Prior County Structure

Morgan County, "Commissioners Record," 22: 444.

E. O. Gilbert, "Bear Creek Arch" plans.

Surveyed Structure (1934 -)

Indiana State Highway Commission, structure, #35-H-1520; contract, #620; "Tabulation of Awards - Bridges," September 1933; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979).

Name	County	Br. #	Latitude	Longitude
State Highway Bridge #1522	Morgan	55 1522	° N	° W

Township	Sect'n	Tnshp	Range
Jackson	25	11N	2E

Carries: State Route #135
Over: Indian Creek

USGS Topo Map: Morgantown
UTMs: 16 E: 563630 N: 4357550

USE by Design: vehicles
Current: vehicles
Last Revised: 4/5/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1934
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss Parker	riveted	8	1	150

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
150		24	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Bergen & Bergen	contractor

Construction History and Structural Description

Prior County Structure (18xx - 1934)
The county commissioners decided in June 1868 that a bridge was "needed ... over Indian Creek South of Morgantown at or near the point where road leading from Morgantown to Green Brier in Brown County". The board named P. L. Davis as superintendent to select the location of the Indian Creek Bridge". The board contracted with Winslow & Co. for the bridge, accepted the structure in December, and paid Winslow. P. L. Davis also received pay for "work done on trussing and abutments" to support the superstructure.

The bridge underwent periodic repair. The commissioners visited the iron bridge over Indian Creek "near Morgantown" in June 1878 and named George W. Prosser as agent "to make the necessary repairs on the bridge near Morgantown on the Morgantown and Bloomington Road." In September, Joshua Whitaker received $74.41 for work and Prosser was allowed $17.50 for blacksmithing and hauling for the bridge repairs. In March 1879, William A. Fesler was allowed $16 and W. E. Barkley for labor "for re-flooring Bridge and apron across Indian Creek in Jackson township near Morgantown." William R. Sheppard secured $18 in December "for tightening Morgantown Bridge [#1522], Taggard's Crossing Bridge [#39], and Mooresville Bridge [#137, #3790]"and $65 for painting bridges at Morgantown [#1522], Mooresville [#137, #3790], and part of McClure's Bridge. In October 1907, A. Ferguson secured a $989.50 contract to repair the bridge over Indian Creek one-h alf mile south of Morgantown on the Morgantown & Brown County road.

Surveyed Structure (1934 -)
Bergen and Bergen of Franklin, Indiana, won the contract to build this structure for the state highway commission in September 1933. Bergen and Bergen bid $16,971.37 for the job, about five thousand dollars below the state engineers' estimates, and completed the structure by mid-summer 1934.

The state used a revised version of the third-generation standard plan (#472A) for a 150-ft., riveted, Parker through-truss span with a 24-foot roadway to be erected upon concrete abutments. Truss depth varied from 21-feet and 6-inches at the portal to 29-feet and 6-inches at mid-span. Each truss carried eight 18-foot and 9inch panels bounded by verticals made of a pair of laced 9-inch channels (@13.4#, except for the hip vertical @15#). Substantial latticed struts and heavy upper sway framing placed above 15-feet of roadway clearance buttress the quite-tall trusses against wind and vehicle-induced stress. Like the upper bracing, the portals rely on latticed sections. The diagonals and the counters (used in the two most-central panels) are made from a pair of different sizes of angles -- heavier towards the ends (6"x4"Ls) than toward mid-span (3.5"x3"Ls) -- riveted together with battens. No top chord member is parallel with the lower chord; all are differently sloped; and all are fabricated from a pair of 12-inch channels increasing in weight from the outer panel (@ 55#) to the more central ones (@30#). The lower chord's members are all alike: two pairs of angles (6"x4"Ls) riveted together with battens. The state required 33-inch I floor-beams (@141#) riveted to the verticals above the lower chord. Eight rows of heavier rolled I stringers (16"@40#) are attached to the floor-beams' sides. Together, the floor-beams and the stringers carry the concrete deck. A pair of angles supplies each lower sway bracing member.

Of the six structures built for standard plan #472A, this was the only survivor as of 2009. The trusses retain their original members. A number of new stringers were added when the deck was replaced.

References

Prior County Structure (18xx - 1934)
Morgan County, "Commissioners Record," 9: 331; 10: 1, 29; 13: 444, 529, 532; 14: 70-71, 339, 355; 22: 268, 300.

Surveyed Structure (1934 -)
Indiana State Highway Commission, structure, #35-H-1522; contract, #621; superstructure standard, #472A;
"Tabulation of Awards - Bridges," September 1933;
Inventory of Bridges on State Highway System of Indiana (Indianapolis, 1989).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1560	Morgan	55	[1560]	° N	° W

Township	Sect'n	Tnshp	Range
Ray	13	11N	2W

Carries: State Route #67
Over: Fall Creek

USGS Topo Map: Paragon
UTMs: 16 E: 535830 N: 4359560

USE by Design: vehicles
Last Revised: 4/25/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1939
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1998
By: CR concrete slab

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
T-beam	1	40	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
40		38	10°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	A. L. Deniston	contractor

Construction History and Structural Description

At a September 1939 letting, the state highway commission awarded a $20,480.01 contract to A. L. Deniston of Rochester to construct a pair of "reinforced concrete girders" on S.R. #67, including the 40-foot one over Fall Creek.

The Indiana State Highway Commission continued to design a large number of reinforced concrete beam or "slab and girder" spans during the 1930s for moderate-length approaches or crossings. From 1937 on, the ISHC integrated the beams and deck more tightly with each other. The standard beam became wider, a little less deep, and spaced further apart from one another than had been typical.

Six beams about 2-feet wide by 2.5-feet high about 4-feet apart. The outer beam was flared to carry the coped and paneled concrete parapet rails. Several rows of steel rods reinforce the lower part of each beam for tension and are bundled by stirrups which interlock with the rods of the concrete deck.

References

Indiana State Highway Commission, structure, #67-G [55]-1560; contract, #1845; "Tabulation of Awards - Bridges," Sept. 1939;
Inventory of Bridges on State Highway System of Indiana (Indianapolis, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1564	Morgan	55	[1564]	° N	° W

Township	Sect'n	Tnshp	Range
Jefferson	1	11N	1W

Carries: State Route #67
Over: Lambs Creek

USGS Topo Map: Martinsville
UTMs: 1 6 E: 545160 N: 436730

USE by Design: vehicles
Current: demolished
Last Revised: 4/5/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1939-1940
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -: >2008
By:

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Parker	riveted	9	1	125

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
129	29	28/2	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	R. L. Schutt	contractor

Construction History and Structural Description

R. L. Schutt of Indianapolis, Indiana, secured the $29,197.48 contract in July 1939 to build a riveted, full-hip, Parker pony-truss span of state design upon concrete abutments. The project took nearly a year to complete.

The state highway commission developed a standard plan (#1532) for this 125-ft. span with a 28-ft. roadway in 1939, a design it reused several times in the years just before the Second World War. Truss depth varied from 13-feet at the hip to 17-feet at mid-span with external sway or knee braces prescribed to supplement the truss' stability. Each truss was divided into nine panels, the two on each end at 13-feet and 4-inches, the central five at 14-feet and 4-inches. The top chord's members consisted of a pair of 10-inch channels increasing in strength toward mid-span, sometimes by weight (30#>35#) and sometimes by an added plate (central panel). The lower chord illustrated the state's move toward rolled rather than crafted members. 10-inch I-beams, with weights increasing from 49 lbs. (outer) to 100 lbs. (inner), supplied each member.

The truss web really underlined the move to rolled and standardized sections. The verticals all consisted of 10-inch I-beams at 33 lbs. The diagonals and counter (central panel only) also consisted of 10-inch I's. The weights of the diagonals varied considerably: second panel at 37 lbs., third at 29 lbs., fourth at 49 lbs, and fifth at 23 lbs.

The floor system depended on rolled sections, too. Riveted to the verticals above the lower chord, the I floor-beams varied in depth and weight by position: the end ones were 33-inch deep and weighed 141 lbs. per foot; the others were 36-inch deep at 150 lbs. The nine rows of 14-inch I-beam stringers attached to the floor beam sides varied in weight by panel length and position (outer to inner): for the 13-feet and 4-inch panels, weights grew from 30 lbs. (outer) to 38 lbs. (inner); weights in the 14-feet and 4-inch panels shifted from 30 lbs. to 42 lbs. Together, the floor-beams and stringers carried the concrete deck. Angles supplied the lower lateral sway bracing, and a pair of channels lined the trusses as rails to provide some protection for the trusses.

This structure appears to be the first of a new generation of longer, wider, and more standardized state highway pony-truss spans.

References

Indiana State Highway Commission, structure, #67-G [55]-1564; contract, #823; superstructure standard, #1532 (May 1939);
"Tabulation of Awards - Bridges," July 1939;
Inventory of Bridges on State Highway System of Indiana (Indianapolis, 1999-2000).

Name	County	Br. #	Latitude	Longitude
Bradford Woods trail bridge; [old State Highway Bridge #1597]	Morgan	55 [1597]	° N	° W

Township	Sect'n	Tnshp	Range
Clay	9	12N	1E

Carries: old S.R. #67 trail, Bradford
Over: Sycamore Creek

USGS Topo Map:
UTMs: 16 E: N:

USE Last Revised: 4/5/2015
by Design: vehicles
Current: pedestrians

PRIOR Structure
Name:

SURVEYED Structure
Built: 1939
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS
Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Warren	riveted		1	

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
96		28	°R

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	R. L. Schutt	builder

Construction History and Structural Description

The state awarded a contract to R. L. Schutt of Indianapolis in July 1939 for $23,362.78 to construct a 96-foot "steel truss" with a right skew over Sycamore Creek [FA 293-F (2)] on State Route #67.

The state rerouted State Route #67 in this area in 1967 and abandoned the roadway segment to Indiana University's Bradford Woods where the bridge now serves as a pedestrian trail and for service vehicles.

References

Indiana State Highway Commission, structure, #67-H-1597; contract, #1824; "Tabulation of Awards - Bridges," July 1939;
"Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940);
Inventory of Bridges on State Highway System of Indiana (Indianapolis, 1999-2000).

Name	County	Br. #	Latitude	Longitude
State Highway Bridge #1605 [Moon Bridge]	Morgan	55 [1605]	° N	° W

Township	Sect'n	Tnshp	Range
Brown	1	13N	1E

Carries: State Route #67 [NBL]
Over: White Lick Creek

USGS Topo Map: Mooresville West
UTMs: 16 E: 553620 N: 4383210

USE by Design: vehicles
Last Revised: 4/5/2015
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1936
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1995
By: KC I-beam

SUPERSTRUCTURE FORMS
Material: steel

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss	Parker	riveted	10	2	175

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
355		24	

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Bergen & Bergen	contractor

Construction History and Structural Description

Previous Structure (1889 - 1935)
The Wrought Iron Bridge Company submitted a proposal at $21 per lineal foot in December 1888 for a bridge "over White Lick one mile south of Mooresville at Moon's" ford. The bridge was to be 250-feet long consisting of two 125-foot spans (121-feet clear span) with a 16-foot roadway. The county then agreed to have the Wrought Iron Bridge Company provide a metal substructure for the superstructure for $2,000. In October 1889, the county allowed Sumner & Bray $42.56 for lumber for the Mooresville Bridge and S. P. Flowers $5 for 2.5 days of carpentry work on the timber roadway. The Steel Pulley & Machine Works received $8.90 for iron rods, bolts, and washers.

The county undertook repairs over the years. The commissioners ordered Earl O. Gilbert, county Surveyor, to prepare specifications and plans for repair of "the Moon Bridge south of Mooresville". At the November 1908 letting, A. Ferguson secured a $588 repair contract.

State highway surveyors reported that the county had earlier erected a three-span bridge over White Lick Creek built by the Wrought Iron Bridge Company of Canton, Ohio. The older structure consisted of two 124-foot, pin-connected, Pratt through-truss spans, each of eight panels (@15'6"), and a 27-foot half-hipped Pratt pony of two panels (@13'6"). The whole was seated upon metal caissons.

Surveyed Structure (1935 - 1995)
In April 1935, Bergen and Bergen of Franklin, Indiana, won the contract to build a new two-span steel truss bridge of state design for $61,813.96 about 190-ft upstream of the inherited county structure. Bergen and Bergen completed the new structure by the summer of 1936.

The state highway commission used revised versions of the third-generation standard plan #475A for a 175-ft., riveted, Parker through-truss span with a 24-foot roadway for this and a dozen other structures. Truss depth varied from 21-feet and 6-inches at the portal to 31-feet and 6-inch at mid-span. Each truss carried ten 17-feet and 6-inch panels. Every top chord member was differently sloped; none was parallel with the lower chord; and all were fabricated from a pair of 15-inch channels (@40# for the end-posts, fourth, and fifth panels, and @33.3# for the second and third). Two pairs of angles -- all of the same size (6"x4"Ls)--riveted together with battens and buttressed in all but the two most outer panels with plates provided the lower chord's members.

The truss webbing was also substantial. The verticals or posts, except for the hip one, consisted of a pair of laced 10-in. channels (@15.3#). A 10-in. I (@39#) supplied the hip vertical. To protect the quite-tall trusses against wind and vehicle-induced stress, the verticals were buttressed with substantial latticed struts and heavy upper sway framing above the 15 feet of roadway clearance. The portals used latticed sections, too. The diagonals combined a pair of angles with battens into heavier members in the outer panels (6"x4"Ls) than in the central ones (3.5"x3"Ls). A pair of angles (3"x3"Ls) and battens provided counters in the two most central panels.

The state used 33-inch I floor-beams (@141#) riveted to the verticals above the lower chord. Eight rows of heavier rolled I stringers (16"@36#) were attached to the floor-beams' sides. Together, the floor-beams and the stringers carried the concrete deck. A pair of angles supplied each lower sway-bracing member. Post-and-channel rails lined the inner sides of the trusses and coped concrete rails with bush-hammered panels marked the approaches. The superstructure sat upon concrete abutments and pier.

This was an early, multi-span example of a much-used, revised third-generation state highway standard plan.

References

Previous Structure (1889 - 1935)
Morgan County, "Commissioners Record," 17: 340, 342-344, 488, 496; 23: 2, 13, 57.

Surveyed Structure (1935 - 1995)
Indiana State Highway Commission, structure, #67-H-1605; contract, #1025; superstructure standard, #475A;
"Tabulation of Awards - Bridges," April 1935;
Inventory of Bridges on State Highway System of Indiana (Indianapolis, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1669	Morgan	55	1669	° N	° W

Township	Sect'n	Tnshp	Range
Gregg	32-33	13N	1W

Carries: State Route #142
Over: Kivett Branch

USGS Topo Map: Hall
UTMs: 1 6 E: 540803 N: 4374483

USE by Design: vehicles
Last Revised: 4/5/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1934
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	24	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
28/10	29/3	23/10	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Foulkes Contracting Co.	contractor

Construction History and Structural Description

In April 1934, Foulkes Contracting Company of Terre Haute secured a $16,948.78 state contract for the construction of three arches on S. R. #142, including this 24-foot one.

References

Indiana State Highway Commission, structure, #142-55-1669; contract, #817; "Tabulation of Awards - Bridges," April 1934; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1670	Morgan	55	1670	° N	° W

Township	Sect'n	Tnshp	Range
Gregg	33	13N	1W

Carries: State Route #142
Over: Lambs Creek

USGS Topo Map: Hall
UTMs: 1 6 E: 540370 N: 4374220

USE by Design: vehicles
Last Revised: 4/5/2015
Current: vehicles

PRIOR Structure Name:

SURVEYED Structure
Built: 1934
Span(s) Added:
Remodelled: 1998
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	three-centered	1	60	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
65/10		30	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Foulkes Contracting Co.	contractor

Construction History and Structural Description

In April 1934, Foulkes Contracting Company of Terre Haute secured a $16,948.78 contract for the construction of three arches on S. R. #142, including this 60-foot one.

Three-centered ring springing about 2-feet up on the abutments. Coped and paneled rails.

Widened in 1998 from 24 feet to 30 feet.

References

Indiana State Highway Commission, structure, #142-55-1671; contract, #817; "Tabulation of Awards - Bridges," April 1934; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1671	Morgan	55	1671	° N	° W

Township	Sect'n	Tnshp	Range
Gregg	33-34	13N	1W

Carries: State Route #142
Over: Little Rock Creek

USGS Topo Map: Hall
UTMs: 1 6 E: 540805 N: 4374468

USE by Design: vehicles
Current: vehicles
Last Revised: 4/5/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1934
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	32/6	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
40/7		24	30°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Foulkes Contracting Co.	contractor

Construction History and Structural Description

Prior Structure (1917 - 1934)
The commissioners adopted plans and specifications for the Hicks Bridge in Gregg township in February 1917. The Hicks family owned land in section 33 of the township where Little Rock Creek crossed the established east-to-west there. R. E. Bray & Company secured a $1,795 construction contract in March. Everitt Hicks was named superintendent of construction.

Reinforced Concrete Arch (1934 -)
In April 1934, Foulkes Contracting Company of Terre Haute secured a $16,948.78 contract for the construction of three arches on S. R. #142, including the 32-foot and 6-inch one over Little Rock Creek.

References

Prior Structure (1917 - 1934)
Morgan County, "Commissioners Record," 26: 180, 202-205, 213.

"Notice to Bridge Contractors," "County Commissioners Let Road Work," *Martinsville Democrat*, 16 February 1917, 9 March 1917: p5 c5; p4 c2.

Reinforced Concrete Arch (1934 -)
Indiana State Highway Commission, structure, #142-55-1671; contract, #817; "Tabulation of Awards - Bridges," April 1934; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1965	Morgan	55	1965	° N	° W

Township	Sect'n	Tnshp	Range
Jackson	21	11N	2E

Carries: State Route #252
Over: Oliver Creek

USGS Topo Map: Hall
UTMs: 1 6 E: 540805 N: 4374468

USE by Design: vehicles
Last Revised: 4/5/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1937-1938
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	40	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
43		32	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Robert H. King	contractor

Construction History and Structural Description

County Arch (1904 - 1937)
The county Council appropriated $800 in September 1903 for a "bridge over Oliver Creek 3 miles west of Morgantown on Morgantown & Martinsville road." The commissioners advertized a June 1904 letting for a "concrete steel arch" of 80-feet for this location. The award went to The Block, Bridge, and Culvert Company for $690, and the company was paid in September.

State Arch (1937/38 -)
The state highway commission awarded a combination contract of $48,531.15 to Robert H. King for this plus three other structures on S.R. #252 in June 1937.

References

County Arch (1904 - 1937)
Morgan County, "Commissioners Record," 21: 111-112, 132;
"County Council Record," 1: 35.

State Arch (1937/38 -)
Indiana State Highway Commission, structure, #252-E [55]-1965; contract, #1538; "Tabulation of Awards - Bridges," June 1937;
"Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1966	Morgan	55	1966	° N	° W

Township	Sect'n	Tnshp	Range
Jackson	23	11N	2E

Carries: State Route #252
Over: Crooked Creek, W. Fork

USGS Topo Map: Morgantown
UTMs: 16 E: 561640 N: 4358000

USE by Design: vehicles
Current: vehicles
Last Revised: 4/22/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1937
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
T-beam	1	36

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
		29/2	

SUBSTRUCTURE

Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Robert H. King	contractor

Construction History and Structural Description

The state highway commission awarded a combination contract of $48,531.15 to Robert H. King for this plus three other structures on S.R. #252 in June 1937.

The Indiana State Highway Commission continued to design a large number of reinforced concrete beam or "slab and girder" spans during the 1930s for moderate-length approaches or crossings. From 1937 on, the ISHC integrated the beams and deck more tightly with each other. The standard beam became wider, a little less deep, and spaced further apart from one another than had been typical.

The five beams are about 2-feet wide by 2.5-feet high placed about 4-feet apart. Several rows of steel rods reinforce the lower part of each beam for tension and are bundled by stirrups which interlock with the rods of the concrete deck. The outer beams are flared in order to carry the coped and paneled parapet rails.

References

Indiana State Highway Commission, structure, #252-E [55]-1966; contract, #1538; "Tabulation of Awards - Bridges," June 1937; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1967	Morgan	55	1967	° N	° W

Township	Sect'n	Tnshp	Range
Jackson	23-26	11N	2E

Carries: State Route #252
Over: Crooked Creek

USGS Topo Map: Morgantown
UTMs: 1 6 E: 561899 N: 4358206

USE by Design: vehicles
Current: vehicles
Last Revised: 4/21/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1937
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)
filled-spandrel arch	1	40	

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
43	28/10	28	15°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Robert H. King	contractor

Construction History and Structural Description

The state highway commission awarded a combination contract of $48,531.15 to Robert H. King for this plus three other structures on S.R. #252 in June 1937.

References

Indiana State Highway Commission, structure, #252-E [55]-1967; contract, #1538; "Tabulation of Awards - Bridges," June 1937; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #1968	Morgan	55	1968	° N	° W

Township	Sect'n	Tnshp	Range
Jackson	24-25	11N	2E

Carries: State Route #252
Over: Long Run Creek

USGS Topo Map: Morgantown
UTMs: 1 6 E: 563148 N: 4358248

USE by Design: vehicles
Last Revised: 4/21/2015
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: 1937
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
T-beam	2	28

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
		28	56°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Robert H. King	contractor

Construction History and Structural Description

The state highway commission awarded a combination contract of $48,531.15 to Robert H. King for this plus three other structures on S.R. #252 in June 1937.

Replacement process started in 2012.

References

Indiana State Highway Commission, structure, #252-55-1968; contract, #1538; "Tabulation of Awards - Bridges," June 1937; "Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Name	County		Br. #	Latitude	Longitude
State Highway Bridge #3107	Morgan	55	3107	° N	° W

Township	Sect'n	Tnshp	Range
Washiongton	8	11N	1E

Carries	State Route #37
Over	Indian Creek, overflow

USGS Topo Map	UTMs			
Martinsville	1 6	E: 547360	N: 4361240	

USE by Design	Current	Last Revised
vehicles	vehicles	4/21/2015

PRIOR Structure

Name

SURVEYED Structure

Built	1938
Span(s) Added	
Remodelled	1966
Moved - On	
To	
Replaced -	
By	

SUPERSTRUCTURE FORMS

Material: concrete 9

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)
T-beam	4	10
under fill		

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
		40	56°

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
state highway commission	Robert H. King	contractor

Construction History and Structural Description

The state highway commission awarded a combination contract of $48,531.15 to Robert H. King for this plus three other structures on S.R. #252 in June 1937.

Beams under about 3-feet of fill.

Widened in 1966 from 40 to 49 feet with concrete slab.

References

Indiana State Highway Commission, structure, #37- K [55]-3107; contract, #1600;
"Tabulation of Awards - Bridges," February 1938;
"Separate Contract Structures Awarded by Bridge Department: Arranged According to State Roads" (Indianapolis, 1940); *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Name	County	Br. #	Latitude	Longitude
Martinsville Bridge	Morgan	55 [3108]	° N	° W

Township	Sect'n	Tnshp	Range
Jefferson-Washington	32	12N	1E

Carries: River Rd./S.R. #39
Over: White River, W. Fork

USGS Topo Map: Martinsville
UTMs: 1 6 E: 547376 N: 4365042

USE by Design: vehicles
Current: demolished
Last Revised: 3/7/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1893
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1950; 2012
By:

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss	Parker	[pinned]	10	3	170>172

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
512		16	

SUBSTRUCTURE

Material: cut stone

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Wrought Iron Bridge Co.	superstructure
	Theodore Eck	substructure

Construction History and Structural Description

Burr Arch-Truss Covered Bridge (1873 - 1893)
R. B. Major petitioned the commissioners in March 1869 for a bridge across the White River on the Martinsville to Monrovia road.

"Perhaps the most famous" covered bridge in Morgan County, according to George Gould, "was the 3-span, 550-foot [Burr arch-truss] structure built a mile west of Martinsville by A. M. Kennedy and sons. Started in the spring of 1873 it was thrown open for use on Christmas Eve of that year. The substructure was built by Theodore Eck of St, Paul, Indiana, at a cost of $8,936. The superstructure was made entirely of oak and pine, containing 48,000 board feet of the former and 185,000 feet of the latter. The cost was $18,768." The county commissioners agreed in June 1873 to issue $60,000 of bonds and to levy added taxes to build bridges near Martinsville and at Waverly. The county agreed that the stonework was complete by October.

The county undertook periodic maintenance and repair activities with the bridge. John Rooker was named to paint "sign boards for bridges at Martinsville and Waverly" and S. J. Mandeville received $153 for furnishing rip-rap in September 1874. The county purchased rip rap regularly to protect the substructure of the bridge. In April 1875, the Auditor was authorized to insure the Martinsville Bridge for $6,000 apportioned between three companies at $180. The county continued the insurance into the 1880s. Removing drift from the bridge was a regular matter, starting from a year after construction. Robert Nutter secured a contract from the county in November 1875 for gravelling the bridge approach. The commissioners examined the "White River Bridge" near Martinsville in March 1877. The board "conclude said bridge is not in a dangerous condition and only needs tightening up." Work postponed until low water so pier and abutments may be examined before contracting for repairs. In June A. M. Kennedy was allowed $4.10 "expense on Railroad and from Indianapolis to Martinsville to examine Bridge over White River." James M. Mitchell paid $203 in October for repairs.

The Martinsville Bridge withstood the big 1875 flood, but not the wind storm swept up the river valley in the spring of 1893. John E. Hurt reported that his grandfather, returning home from Martinsville, had just crossed the bridge when the tornado struck. The *Republican* announced that "the long white structure that for twenty years has been a landmark, and could be seen for miles, had been lifted completely off the piers and had fallen with a ruinous crash into the river below." "Without a bridge, crossing options were limited to miles of travel to another bridge, or an old-fashioned rope-powered ferry. The ferry was kept busy.... Wagons were blocked there for several hundred yards, and they waited for one to two hours to get across."

Parker Through-Trusses (1893 - 1952)
Gould reported that, "for the iron replacement bridge, the same piers and abutments were used." A proposal for the new bridge was accepted without public notice of a letting and without formal bidding. The Wrought Iron Bridge Company of Canton, Ohio, secured the construction contract in March 1893 through David Braden, Agent. The new superstructure - consisting of three Parker spans of 170-, 172-, and 170-feet in length - was reportedly completed within two months.

Wrought Iron Bridge received $2,577.56 in June and $10,000 in July, likely for the Martinsville Bridge.

The structure underwent a fair amount of periodic repair. The commissioners contracted with Whitcomb Fesler in June 1899 to re-floor the bridge for $597.45. In May 1905, the county contracted with Alonzo Ferguson for $2,125 of repairs. The board asked county Surveyor Blunk in January 1911 to prepare repair plans. At the February letting, A. Ferguson won a $2,247 contract.

The 1913 flood caused some damage to the bridge substructure, but not to the iron work above. In October 1913, the county let a $1,500 contract to C. F. Schnaiter and D. H. Major for repair of a pier of the White River Bridge near Martinsville. John Hedges ($62.45), Steel & West Lumber Company ($96.37), Martinsville Construction Company ($1,500), and William H. Wooden, Bridge Repair Superintendent, ($37) received payments for repairs in June, August, and September.

The Council appropriated $1,500 in June 1916 "for the protection" of the Martinsville Bridge.

State Highway Designed Bridges (1952 -)
The adjacent roadway and bridge were incorporated into the state highway system and a part of State Route #39. In October 1921 the state highway commission let a $19,466.22 contract for repairs to the bridge. The county commissioners petitioned the state highway commission in December 1941 to replace the Parker spans because they were too narrow "for two cars to meet and pass with safety", the structure too short to allow high waters to pass without flooding out an approach, and the traffic had dramatically increased after connecting two state highways. The state decided in 1950 to replace the Parkers with a somewhat relocated and much longer(1,075 feet) mostly steel beam structure of 12 spans. This bridge, in turn, was replaced in 2012-13.

References

Burr Arch-Truss Covered Bridge (1873 - 1893)
Morgan County, "Commissioners Record," 10: 123; 11: 90, 133; 12: 60-61, 78, 186, 215, 319; 13: 103, 140, 209, 286; 15: 86, 353.

Martinsville Republican, 1893, as quoted in "Nature's influence on the White River crossing," Gray & Pape and Joanne Stuttgen, Historical Marker.

George E. Gould, Indiana Covered Bridges Thru the Years (Indiana Covered Bridge Society, Indianapolis, 1977), 39, 56.

John E. Hurt letter to James L. Cooper, 27 March 1992.

Parker Through-Trusses (1893 - 1952)
Morgan County, "Commissioners Record," 18: 523, 557, 559; 20: 135-136; 21: 265; 23: 310, 316, 326, 386, 433, 509; 24: 532, 544-545, 559; 25: 152, 187, 207; 30: 334;
"County Council Record," 1: 154.

"Bridge Pier About Done," *Martinsville Democrat*, 21 August 1914: p1 c2.

Name	County	Br. #	Latitude	Longitude
State Highway Bridge #3509 [Little Red Bridge]	Morgan	55 [3509]	° N	° W

Township	Sect'n	Tnshp	Range
Brown	36	14N	1E

Carries: E.High St/Waverly Rd/S.R#144
Over: White Lick Creek, E. Fork

USGS Topo Map: Mooresville East
UTMs: 1 6 E: 554476 N: 4384475

USE by Design: vehicles
Current: demolished
Last Revised: 4/13/2015

PRIOR Structure
Name:

SURVEYED Structure
Built:
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1958
By: reinf concrete girder

SUPERSTRUCTURE FORMS
Material:

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew

SUBSTRUCTURE
Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

Little Red Covered Bridge (18xx - 19xx)
George Gould reported the structure as a 50-foot Howe built in 1870 by Mr. Winters and replaced in 1912.
Bridgehunter reporters state that the structure consisted of 8-panel Howe or Smith trusses and was replaced in 1936.

The county commissioners underwrote periodic repairs to the "Mooresville Bridge". In September 1877, the county paid William S. Beeson $3 for repairs. In March 1879, it paid Richard Fausler $1.25 "for painting sign boards for Mooresville Bridge". The board also paid six other claims in March and April for labor, blacksmithing, and lumber for the "Mooresville Bridge". In February 1903, the commissioners ordered an advertized letting for April of "one abutment under the wooden bridge, E Fork of White Lick Creek, one-fourth mile east of Mooresville." At the April letting, Lawson Fisher and John A. Baker secured a $290 contract for same. Fisher and Baker received payment of $330.30 in July. In September 1911, the commissioners acknowledged the need for repairs for the "wooden bridge near Mooresville." In October, the county contracted with H. H. Hicks to make specified repairs for $223. Hicks received the contracted amount in early December.

In September 1915, the county Council appropriated $1,025 for a new bridge "on the Mooresville & Waverly road in Brown Township, known as the Red Bridge." The commissioners promptly set an October letting for repair/replacement of the "Red Bridge". The county received only one bid - from R. E. Bray at $1,300 - and that above the engineering estimate of $1,128.40. Consequently no contract was let, nor did the commissioners take steps for a new letting.

[#137 or #3509]: The county set a May 1926 letting for the construction of three bridges, including a "90-foot low truss bridge known as the Mooresville Bridge over White Lick Creek one-half mile east of Mooresville". The Vincennes Bridge Company brought in the winning proposal at $7,588, plus piling if needed.

State Highway Structure (1958 -)
The state highway commission erected four 40-foot reinforced concrete girders with a 30-foot roadway here in 1958.

References

Little Red Covered Bridge (18xx - 19xx)
George E. Gould, *Indiana Covered Bridges Thru the Years* (Indiana Covered Bridge Society, Indianapolis, 1977), 39, 56.

Morgan County, "Commissioners Record," 13: 273;14: 63, 82, 116-118; 20: 468, 529; 23: 531, 556-558; 24: 7; 25: 460-461, 487-489; 28: 402-404;
"County Council Record," 1: 144.

"Notice to Bridge Contractors," "Bids on Bridges Opened Monday," *Martinsville Democrat*, 24 September 1914, 15 October 1915: p4 c6; p2 c7.

"Notice to Contractors," "Commissioners Court," *Martinsville Democrat*, 23 April 1926, 7 May 1926: p7 c4; p4 c3.

State Highway Structure (1958 -)
Indiana State Highway Commission, structure, #144-55-3509; contract, #4346;
Inventory of Bridges on State Highway System of Indiana (Indianapolis, 1979).

Name	County	Br. #	Latitude	Longitude
State Highway Bridge #3790 [Mooresville Bridge]	Morgan	55 [3790]	° N	° W

Township	Sect'n	Tnshp	Range
Brown	35	14N	1E

Carries: Monrovia Pike/S.R. #42
Over: White Lick Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles | Current: demolished | Last Revised: 4/28/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1891
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1963
By: PC I-beam

SUPERSTRUCTURE FORMS
Material:

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through-truss			2	125

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
250		16	

SUBSTRUCTURE
Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

Timber Truss & Beam Bridge (1868 - 1891)
The county commissioners decided in June 1868 that a bridge was "needed over White Lick Creek at or near West boundary of Mooresville". P. L. Davis received payment in December "for work done on trussing and abutments" for the bridge near Mooresville.

A J. P. Calvert photo shows a structure consisting largely of a combination of uncovered timber multiple king-post ponies and timber beam spans raised on timber bents. (The Calvert photo also shows the iron bowstring.)

The commissioners in early August 1875 "made visit to view the destruction of the Bridges at Brooklyn and Mooresville caused by the late High Waters." The flooding washed out the northeastern span(s) of the timber superstructure.

Wrought Iron Tubular Arch Replacement Span (1875 - 1891)
The officers of the Mooresville and Monrovia Gravel Road Company agreed in late August 1875 to allow vehicles and stock to cross the "grade leading to and from the Iron Bridge recently washed away from White Lick Creek at the crossing of said gravel road near Mooresville" provided that Morgan County "replace said iron Bridge on the abutments at the former crossing and forever maintain said Bridge". The commissioners contracted a month later through Agent W. W. Winslow for the King Iron Bridge Company of Cleveland, Ohio, "for the repair" of the White Lick Creek structure by the erection of "a Wrought Iron Tubular Arch Bridge" of 120-feet long (116-feet clear span) with stringers and flooring of white oak for the 14-foot roadway there for $1,000. King Iron Bridge was to "have free use of the old bridge at or near aforesaid place for putting up of Trestle Work and other purposes as may be for convenience in erecting said Bridge." In October 1875, the county allowed John L. Knox $530.25 for superintending work on the stone abutments for the the new span over White Lick Creek near Mooresville. The commissioners inspected the bridges at Brooklyn and at White Lick Creek near Mooresville in November, received the White Lick span, and promptly paid King Iron Bridge Manufacturing Company its contracted $1,000.

William R. Sheppard secured $18 in December 1879 "for tightening Morgantown Bridge [#1522], Taggard's Crossing Bridge [#39], and Mooresville Bridge [#137, #3790]" and $65 for painting bridges at Morgantown [#1522], Mooresville [#137, #3790], and part of McClure's Bridge.

Metal Thru-Truss Bridge (1891 - 19xx)
The county board ordered a May 1891 letting for the construction of a bridge across White Lick Creek on "Monrovia Pike" west of Mooresville. The board approved specifications for two abutments of "oolitic or stratified lime or Mooresville stone" and a wrought iron superstructure of two 125-foot (center-to-center) spans with a 16-foot oak roadway. "The span of bridge that now stands must be raised off and above the pier during the construction of the pier in such a way as to not damage said span and be securely braced and be let down in position with new span when completed." The commissioners contracted with the Wrought Iron Bridge Company thru David Braden and W. W. Winslow at $20 per lineal foot for the superstructure (2 spans at 125-ft. clear span; 254-ft. extreme length) . Samuel Robbins & Cyrus Rariden of Marion County

won the stonework contract (one abutment and two piers) for $8,000. C. G. H. Goss was named superintendent of construction. Wrought Iron Bridge received $4,220 "for bridge" in October. Robbins & Rariden received a final payment for the stonework in November 1891.

In September 1895 the county allowed David A. Ward $615 for damages his wife and carriage suffered "by reason of defective bridge over Whitelick on the Mooresville and Monrovia Road."

Repairs proceeded over the years. The commissioners employed N. W. Gilbert to remove the old bridge and construct "cement wings" in April 1903 for $395 and Oscar Robbins to build "a fill and grade and grading the same on the Mooresville and Monrovia Gravel Road at White Lick Creek [one-quarter mile south]west of Mooresville" for $940. The commissioners ordered the county Surveyor, E. O. Gilbert, to provide plans and specifications for repairing "the Iron Bridge over White Lick creek on the Mooresville and Monrovia Free Gravel Road near Mooresville" in February 1908. At the June letting, A. Ferguson secured a $1,372 contract for the repairs. At an October 1913 county letting, A. Ferguson brought in the lowest bid at $517 to repair with oak the flooring of the Mooresville Bridge on the Mooresville and Monrovia Gravel Road. Ferguson was paid the contracted amount in December. The commissioners authorized E. D. Catantsey in August 1930 to purchase and lay flooring on the bridge on the Mooresville-Monrovia Road. William Thomas received a $450 contract in September for 12,081 feet of oak for the flooring.

References

Timber Truss & Beam Bridge (1868 - 1891)
Morgan County, "Commissioners Record," 9: 331; 10:1; 12: 264, 279-280.

"Bridge on Monrovia Pike from Scott's Block," J. P. Calvert photo (c.1876-1881), Mooresville Public Library.

Wrought Iron Tubular Arch Replacement Span (1875 - 1891)
Morgan County, "Commissioners Record," 12: 278-279, 314, 318-320; 14: 339, 355.

Metal Thru-Truss Bridge (1891 - 19xx)
Morgan County, "Commissioners Record," 18: 224-235, 272, 278-279, 300, 326-328, 340; 19: 260; 20: 468, 527; 22: 444, 487; 24: 532, 544-547; 25: 2; 29: 263, 272.

Indiana State Highway Commission, structure, #42-55-3790; contract, #6160;
Inventory of Bridges on State Highway System of Indiana (Indianapolis, 1979).

Name	County	Br. #	Latitude	Longitude
State Highway Bridge #3820 [Eminence Bridge #14]	Morgan	55 [3820]	° N	° W

Township	Sect'n	Tnshp	Range
Adams	21	13N	2W

Carries	State Route #42
Over	Lake/L.C. Cook Ditch

USGS Topo Map	UTMs			
Eminence	1 6	E: 530450	N: 4377040	

USE by Design	Last Revised	Current
vehicles	4/8/2015	demolished

PRIOR Structure

Name:

SURVEYED Structure

Built	1926
Span(s) Added	
Remodelled	
Moved - On	
To	
Replaced -	1991
By	CR concrete slab

SUPERSTRUCTURE FORMS

Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt	riveted	5	1	69

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
70		17/9	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Vincennes Bridge Co.	builder

Construction History and Structural Description

The Vincennes Bridge Company brought in the "best and lowest" bid for 3 bridges in May 1926, including the 70-foot Eminence #14 structure over Cooks Ditch in S21/T13N/R2W at $5,482 plus piling if needed.

The full-hip, single-span Pratt pony truss rested upon concrete abutments and wing-walls. Truss verticals were fabricated from two pairs of angles riveted together with battens and integrated with external sway braces. A pair of angles and battens also supplied the diagonals and center-panel counters. I floor-beams, which were riveted to the verticals below the lower chord, carried the runs of steel stringers and asphalt-over-concrete roadway.

Riveted Pratt ponies were not plentiful in Indiana, although Morgan County possessed a few. The full-hip design, the integration of external braces with the verticals, and the reliance on angles for the web members were all noteworthy features.

References

Indiana State Highway Commission, *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979, 1999-2000).

Morgan County, "Commissioners Record," 28: 402-404.

"Notice to Contractors," "Commissioners Court," *Martinsville Democrat*, 23 April 1926, 7 May 1926: p7 c4; p4 c3.

Name	County	Br. #	Latitude	Longitude
Carter Bridge	Morgan	55 [6335]	° N	° W

Township	Sect'n	Tnshp	Range
Brown	6	13N	2E

Carries: State Route #144
Over: Goose Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles
Current: demolished
Last Revised: 4/8/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1915-1916
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - [1962]
By: PC box beams

SUPERSTRUCTURE FORMS
Material:

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew

SUBSTRUCTURE
Material:

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

The commissioners called a letting in October 1915 for the repair or construction of the Carter Bridge on the Mooresville and Waverly Road in Brown township. At the letting, Blunk & Van Arsdall won a $1,275.89 contract. Charles G. Jones was named superintendent of construction.

References

Indiana State Highway Commission, *Inventory of Bridges on State Highway System of Indiana* (Indianapolis, 1979).

Morgan County, "Commissioners Record," 25: 460-461, 487-490.

"Notice to Bridge Contractors," "Bids on Bridges Opened Monday," *Martinsville Democrat*, 24 September 1915, 15 October 1915: p4 c6; p2 c7.

Name	County		Br. #	Latitude	Longitude
Putnam County Bridge #211 [Morgan County Bridge #199]	Putnam	67	211	39° 35.6' N	86° 39.5' W

Township	Sect'n	Tnshp	Range
Jefferson	5	13N	2W

Carries: C.R. 450S/Horse Barn Rd.
Over: Mill Creek

USGS Topo Map: Eminence
UTMs: 16 E: 529600 N: 4382550

USE by Design: vehicles
Last Revised: 9/10/2014
Current: vehicles

PRIOR Structure
Name:

SURVEYED Structure
Built: c1905
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced -
By:

SUPERSTRUCTURE FORMS
Material: steel 4

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
pony truss	Pratt	pinned	5	1	74

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
81	16	15/6	

SUBSTRUCTURE
Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders

Construction History and Structural Description

This full-hip, single-span Pratt pony truss rests upon concrete abutments and wing-walls. The pinned structure extends 90' in five panels. Its verticals are fabricated from a pair of laced channels and its diagonals of a pair of die-forged eye-bars in the second and fourth panels. The center panel's diagonals and counters each consist of a pair of adjustable, cylindrical rods. I floor-beams carry nine runs of steel stringers and a steel-grate roadway lined by latticed railings. Bolted to the verticals above the lower chord, the floor-beams require the outer panel of the lower chord to be sloped.

This structure has several noteworthy features: the full-hip design, heavy verticals, floor-beams placed inside the trusses and a polygonal lower chord.

References

Associated Engineering Consultants, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

Butler, Fairman and Seufert, Inc., *Bridge Inspection/Reinspection Report: Putnam County* (Indianapolis, 1974, 1978).

Beam, Longest & Neff, *Bridge Reinspection Report: Putnam County* (Indianapolis, 1990, 1992, 1994).

USI Consultants, *Bridge Inspection Report: Putnam County* (Indianapolis, 2007).

Name	County	Br. #	Latitude	Longitude
Shackelford Ford Bridge [Morgan County Bridge #197]	Putnam	67 [230]	39° 32.3' N	86° 39.9' W

Township	Sect'n	Tnshp	Range
Jefferson	29	13N	2W

Carries: McClure Rd./C.R.1025E
Over: Mill Creek

USGS Topo Map: Eminence
UTMs: 1 6 E: 528773 N: 4376535

USE by Design: vehicles
Last Revised: 9/14/2014
Current: demolished

PRIOR Structure
Name:

SURVEYED Structure
Built: 1911-1912
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1997
By: CPC I-beams

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss Pratt	pinned	5	1	90

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
93	16/3	15/8	

SUBSTRUCTURE

Material: concrete 9

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	O. J. Larkin	contractor

Construction History and Structural Description

In December 1883, the Morgan county commissioners determined that a bridge was necessary on the Eminence & Bell Union highway over Mill Creek (S29/T12N/R2W) and called for a meeting with the Putnam county commissioners.

In May 1909, the Putnam county commissioners received the G. W. Wright *et al* petition for a bridge over Mill Creek or L. C. Cook Dredge Ditch at Shackelford Ford on the county line with Morgan county. The Putnam board agreed to meet with the Morgan county board. The petition was renewed in September 1910 for a bridge on the Belle Union and Eminence Rd, and the Putnam board reaffirmed its willingness to build. Without a response by Morgan county authorities by July 1911, the Putnam board accepted responsibility for construction with the intention of forcing Morgan county to pay its share. A. A. Lane was to prepare plans and specifications for a 90-foot span. The Putnam commissioners accepted Lane's plans in August and set a September letting. The county accepted the "lowest and best" bid of O. J. Larkin for $2,700. Larkin was paid the contracted amount from November to early March 1912. The Morgan county board recorded communications from Putnam county, belatedly authorized construction, and in March 1913 paid Putnam county $1,381.20 for its share in the Shackelford Bridge construction.

Seated upon concrete abutments and wing-walls, the pinned Pratt through trusses relied on verticals fabricated from a pair of laced channels. A pair of die-forged eye-bars served as the diagonal sets in the second and fourth panels. A pair of cylindrical rods with turnbuckles supplied the diagonal and counter sets in the center panel; single ones countered the diagonals in the second and fourth panels. Attached to the lower pins through the verticals, the I floor-beams carried runs of steel stringers and a timber roadway lined by latticed guardrails and with 16-feet of vertical clearance.

Born near Belle Union in 1872, Larkin was an active road and bridge builder in the early decades of the 20th century. He was also a wool and seed merchant.

Aside from the heavy verticals, these pinned Pratt through trusses were conventionally designed.

References

Associated Engineering Consultants, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974);
Bridge Reinspection Study and Report: Morgan County (Nashville, 1978).
Butler, Fairman and Seufert, Inc., *Bridge Inspection/Reinspection Report: Putnam County* (Indianapolis, 1974, 1978).
Farrar, Garvey & Associates, *Putnam County: Bridge Inspection* (Indianapolis, 2003).
USI Consultants, *Bridge Inspection Report: Putnam County* (Indianapolis, 2007).

Indiana Historic Sites & Structures Inventory, *Putnam County: Interim Report* (Indianapolis, 1982), 50-52.

Morgan County, "Commissioners Record," 16: 107; 23: 261-262, 408-409, 449; 23: 408-409, 449; 24: 415-416;
"Commissioners Docket," 18: 308, 316;
"County Council Record," 1: 109, 125.

Putnam County, "Commissioners Record," 20: 351-352, 503, 531; 21: 111, 161, 204-205, 214, 258, 309, 365, 414, 450.

"County Council Completes Work," "Notice to Bridge Contractors," Greencastle *Star-Democrat*, 9 September 1910: p7, c3; 11 August 1911: p7 c5.

Jason Urban, "A History and Description of the Shackelford Ford Bridge" (DePauw University, April 1995).

Name	County	Br. #	Latitude	Longitude
Parker Bridge [Morgan County Bridge #111]	Putnam	67 [190]	39° 33.5' N	86° 39.2' W

Township	Sect'n	Tnshp	Range
Jefferson	17-20	13N	2W

Carries: County Route 700S
Over: Mill Creek
USGS Topo Map:
UTMs: 16 E: N:

USE by Design: vehicles | Current: demolished | Last Revised: 5/31/2014

PRIOR Structure
Name:

SURVEYED Structure
Built: 1886
Span(s) Added: 1926
Remodelled:
Moved - On:
To:
Replaced - 1982
By: PC box beams

SUPERSTRUCTURE FORMS

Material: timber; iron | 1; 2

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss Howe		11	1	122
pony truss Pratt	riveted	6	1	90

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
206/6	16	15/6	°

SUBSTRUCTURE

Material: stone; concrete

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Smith Bridge Co.	Howe superstr
	Vincennes Bridge Co.	Pratt superstr

Construction History and Structural Description

In June 1886, the Putnam county commissioners accepted the petition of Ben A. Parker and others for a bridge over Mill Creek on the line with Morgan county. The Putnam commissioners called for a joint board meeting with the Morgan commissioners. At the July joint board meeting, the commissioners agreed to build (S17-20) and named Putnam County Surveyor, Rainnow H. Walls, to prepare specifications for an August letting in Greencastle. At the letting, the Smith Bridge Company won the contract to build a 122-foot (clear span) Howe-truss superstructure with a 16-foot roadway at $19.10 per lineal foot. J. D. Torr & Company secured the stonework contract at $5.65 per cubic yard of masonry.

In May 1912, the boards of Putnam and Morgan counties met in Martinsville and determined that the Parker Bridge over Eel River required immediate repair. Morgan County took the lead in planning and executing the repairs. H. H. Hicks and Wilhite Jasper received payment for approximately $900 and $250 respectively for repair work and materials.

When Mill Creek was dredged, the dredge created a second channel and bypassed the Howe-truss superstructure to the east, necessitating the addition of an approach to the timber superstructure. In July 1926, the Morgan county commissioners awarded a contract to the Vincennes Bridge Company for a 70-foot span "over Eel River drain known as the H. H. Parker Bridge" for $4,764. In October, the commissioners revised their contract with Vincennes Bridge for the eastern approach to the Parker Bridge. "Recent floods" underlined the inadequacy of the 70-foot length. The revised approach span was to be skewed with one 91-foot and one 82-foot truss for an additional cost of $1,550.

To accommodate the added approach span, the old eastern abutment became a pier and a new concrete abutment was constructed. The full-hipped, all-riveted Pratt steel trusses were 10-feet high. The 24-inch I floor-beams carried runs of 9-inch steel stringers and a concrete roadway.

The bridge underwent periodic repair. In 1933, for example, Putnam county undertook over $100 of work on the roof and siding, including some repair painting, plus some re-pointing of the substructure.

The bridge was closed after 1974. While the counties and the Morgan county preservationists fought over demolition/replacement of the Parker Covered Bridge, either high winds or thieves of bridge's timbers took down the Howe truss superstructure in November 1979.

References

Associated Engineering Consultants, *Bridge Inventory Rating and Safety Inspection Report: Morgan County* (Nashville, 1974); *Bridge Reinspection Study and Report: Morgan County* (Nashville, 1978).

Butler, Fairman and Seufert, Inc., *Bridge Inspection/Reinspection Report: Putnam County* (Indianapolis, 1974, 1978).

USI Consultants, *Bridge Inspection Report: Putnam County* (Indianapolis, 2007).

Putnam County, "Commissioners Record," 11: 399, 415-416, 429-432, 448, 469, 486, 492; 18: 135; 21: 500.

"Parker Bridge Repair - 1933," Putnam County Surveyor's Office, drawer 5.

Morgan County, "Commissioners Docket," 18: 266, 270, 277, 279, 290, 294;
"Commissioners Record," 16: 469; 17: 31, 55; 24: 185, 204, 214, 233-235, 244, 307; 28: 413-415, 437-438;
"County Council Record," 1: 234.

"Court Allowances," *Martinsville Democrat*, 13 September 1912: p3 c3.

"Bridge and Road Contracts Were Awarded," *Martinsville Republican*, 7 October 1926: p1 c3.

Becky Igo, "Mother Nature Ends Local Bridge Dilemma," "Bridge Demise Unnatural?", Greencastle *Banner-Graphic*,
28 November 1979; 31 December 1979.

George A. Gould, *Indiana Covered Bridges Thru the Years* (Indianapolis, 1977), 42, 59-60.

Name	County	Br. #	Latitude	Longitude
Hendricks County Bridge #204 [Morgan County Bridge #201]	Hendricks	32 [204]	° N	° W

Township	Sect'n	Tnshp	Range

Carries: County Line Rd.
Over: White Lick Creek

USGS Topo Map: Plainfield
UTMs: 16 E: 552220 N: 4386720

USE by Design: vehicles
Current: demolished
Last Revised: 5/1/2015

PRIOR Structure
Name:

SURVEYED Structure
Built: 1893
Span(s) Added:
Remodelled:
Moved - On:
To:
Replaced - 1990
By:

SUPERSTRUCTURE FORMS

Material: metal 3

(A) Trusses

Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)
through truss Pratt	pinned	8	1	149/3
pony truss Pratt	pinned	2	2	24

(B) Arches

Design	Spans	Clear Span (ft/in)	Rise (ft/in)

(C) Beams & Other Forms

Design	Spans	Clear Span (ft/in)

DIMENSIONS

Structure Length (ft/in)	Structure Width (ft/in)	Road Width (ft./in)	Skew
197/3		15/7	

SUBSTRUCTURE

Material: concrete

Masonry Type	Masonry Finish	Masonry Class	Masonry Setting

Designers/Engineers	Builders	
	Wrought Iron Bridge Co.	fabricator

Construction History and Structural Description

The joint boards of commissioners of Hendricks and Morgan counties agreed in August 1906 to repairs to the bridge over White Lick Creek on Mooresville & Plainfield Free Gravel Road. Morgan county was to take the lead in what was anticipated as a $2,600 repair. At the February 1907 letting in Martinsville, N. W. Gilbert won a $829 contract for flooring, painting, and repairing the county line bridge 1 mile north of Mooresville. The joint boards met in Danville in April 1924 and decided that the bridge on the county line should have a block floor and the substructure painted according to plans that George R. Harvey, Hendricks County Enginner had already prepared. The joint boards let the repair contract to McIntire & Son for $1,468.

The Wrought Iron Bridge Company of Canton, Ohio, fabricated the three spans seated upon concrete abutments and wingwalls and metal caisson piers. Intermediate verticals of laced channels divided the through-truss span into most of its eight panels of 18-foot and 8-inch width. Eyebars provided the diagonals: pairs of die-forged and rectangular ones stretched toward center span from the top panel point to the bottom of all except the end-post panels; cylindrical eyebars with turnbuckles countered the others in the two most central panels. The Pratt ponies each spanned 24-ft. in two panels with a vertical of laced double angles and cylindrical eyebar diagonals with turnbuckles. U-bolted to the lower pins, I floor-beams carried the timber deck and roadway between latticed guardrails for all spans. The through-truss span had 20- ft. of vertical roadway clearance.

Built by a prolific Ohio firm, this bridge retains its original members, including decoratively latticed guardrails.

References

Beam, Longest & Neff, Inc., *Bridge Inventory Rating & Safety Inspection: Hendricks County* (Indianapolis, 1974).
Associated Engineering Consultants, Inc., *Bridge Reinspection Study & Report: Hendricks County* (Nashville, 1979).

bridge nameplate.

Morgan County,"Commissioners Record," 21: 535; 22: 42; 28: 269-271.