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		E	Br. #	Latitu	ude	Longit	ude			Last Revised
old Pa	RR: White	Lick Ck Bridge	Morgan		55		0	Ν		W	03	E	4/2/2015
			Townsh	ip		Sec	t'n	Tnshp	Rai	nge	by Des	sign	Current
Carries	Indiana Sou	uthern Railroad				9		12N	1E		trains	t	rains
Over	White Lick (Creek	USGS T	оро Мар	<u> </u>	JTMs						Structure	
			Moores	ville Eas	t '	16 E :	55396	64 N	: 43833	91	Namo	Structure	
SUPER:	STRUCTUR	E FORMS	Matorial	metal			3				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Met	hod of nect'n	Panel	ls Spa	ns S	Clear Span ft/in)			SURVE Built	YED Structu	ire
through	truss	Pratt									Span(s	s) Added	
											Remo	delled	
											Movod	On	
(B) <u>Arch</u>	es	Design	5	Spans	Clea	r Spar	n F	Rise (ft/	in)		To	- 011	
					(1	ft/in)					Poplac	od	
											Replac	eu -	
									_		Ву		
(C) <u>Bear</u> <u>& Oth</u>	<u>ns</u> ier Forms	Design	Sp	ans	Clea (ft/	r Span ⁄in)		DIMENS	SIONS				
								Struc	ture	Struct	ure j	Road	Skew
								Leng	tn (tt/in)	vviatn	(tt/in) \	Nidth (ft./in)	
												one track	
<u>SUBSTF</u>	RUCTURE	1	Material										
Masonr	у Туре	Masonry Finish	Mas	sonry C	lass	Ма	sonry	Setting	3				
	Desigr	ners/Engineers	Buil	ders									
		Constructio	on His	tory	and	Str	uctı	ural I	Desc	riptio	n		

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

Namo			County		Dr #	Lotitud		Longit	udo			Last Revised
Hondrid	ske County	v Bridge #204	Hendricks	32	DI. #	o	N	o	w	09	SE	5/1/2015
[Morga	n County F	Pridao #2011	Terrahin	52	[204] Soc	t'n T	hehn	Ban		by De	sian	Current
	County Line		Township				пэпр		ige	vohio		demolished
Carries	County Line	e Ra.	LICCE Tone May							venic	les	demolished
Over	White Lick (Creek	Disciplication Discrete Field	5		552220		12967	20	PRIOF	<u>R</u> Structure	
			Fiairifield		10 E.	552220		430072	20	Name	•	
SUPER	STRUCTUR	<u>E FORMS</u>	Material metal			3						
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Pan	els Spa	Cl ns Sp (ft	ear ban /in)			<u>SURV</u> Built	<u>EYED</u> Struct	ure 1893
through t	russ	Pratt	pinned	8	1	149	/3			Snan(s) Added	
pony trus	SS	Pratt	pinned	2	2	24				Romo	dollod	
(B) <u>Arch</u>	<u>es</u>	Dosign	Spans	Cle	ar Spar	n Pi	so (ft/i	n)		Moved	I - On	
		Design	opuno	UIC	(ft/in)		36 (101	,		То		
										Repla	ced -	1990
										Ву		
									I			
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Cle (ar Span ft/in)	DI	MENS	<u>IONS</u>				
							Struc Leng	ture th (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in)	Skew
							197/3	3			15/7	
SUBSTR	UCTURE	Λ	latorial concret	e]				
Masonr	y Type	Masonry Finish	Masonry C	lass	Ма	sonrv S	ettina					
						, -						
	Desigr	ners/Engineers	Builders									
			Wrought Iron E	Bridge	e Co.		fabi	ricator				
				<u> </u>								

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 floorbeams 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			Count	ty		Br. #	La	titude	Long	jitude		26	Last Revised
old Pa	RR: White	River Bridge	Morga	an	55		0	N	I	W		SC	4/2/2015
			Towns	ship		See	ct'n	Tnshp	R	ange	by De	sign	Current
Carries	Indiana Sou	uthern Railroad	Clay-V	Nashingto	n	9		12N	1	E	trains	; tı	ains
Over	White River		USGS	Торо Мар		UTMs						2 Structure	
			Martin	nsville		16 E	549	9520	N: 4371	130	Name		
SUPER:	STRUCTUR	E FORMS	Materia	al metal			3						
(A) <u>Trus</u>	<u>ses</u>	Design	Me Co	ethod of onnect'n	Pane	els Spa	ans	Clear Span (ft/in)			<u>SURV</u> Built	EYED Structu	re
through	truss	Pratt						132			Span	(s) Added	
											Remo	delled	
											Μονο	d - On	
(B) <u>Arch</u>	<u>es</u>	Design		Spans	Clea	ar Spa	n	Rise (ft	/in)		То		
)[(ft/in)]			Popla	cod -	
											By		
											Бу		
(C) <u>Bear</u> <u>& Oth</u>	<u>ns</u> ier Forms	Design	ę	Spans	Clea (f	ar Spai t/in)	n	DIMEN	SIONS				
								Stru Leng	cture gth (ft/i	Struct n) Width	ure (ft/in)	Road Width (ft./in)	Skew
								415				one track	
SUBSTR	RUCTURE	N	latorial										
Masonr	у Туре	Masonry Finish	M	asonry C	lass	Ма	ason	ry Settin	q				
									•	1			
	Desigr	ners/Engineers	Bu	ilders									
		Constructio	n Hi	story	and	d Sti	uc	tural	Des	criptio	on		

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

Nomo			Ocumente	D., #	Latitud	. Lau	a life al a		_	Last Rovisod
	Lamba Cr	ook Bridgo	County	Br. #			igitude	USE	I I	4/2/2015
Fa RR.		eek bliuge	Morgan	55			VV			Current
[33-30]			Township	Se		ISND I	Range	by Design		
Carries	Pennsylvan	ia Railroad	Jenerson	[]		IN	100	trains	de	emolished
Over	Lambs Cree	ek	USGS Topo Ma	o UTMs				PRIOR St	tructure	
			Martinsville	16	: 545220	N: 436	53470	Name		
SUPERS	STRUCTUR	<u>E FORMS</u>	Material metal		3					
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels Sp	Cle ans Spa (ft/i	ar an n)		SURVEYI Built	ED Structur	e c.1895
through t	russ	Pratt	pinned	7 1				Span(s)	Added	
								Remodel	lled	
(B) <u>Arch</u>	<u>es</u>	Docian	Spans	Clear Sp	an Rie	o (ft/in)		Moved -	On	
		Design	opuno	(ft/in)	1/13	e (iuiii)		То		
								Replaced	i -	<2008
								Ву		
										·
(C) <u>Bean</u> <u>& Oth</u>	n <u>s</u> er Forms	Design	Spans	Clear Spa (ft/in)		IENSIONS	<u>5</u>			
						Structure Length (ft	/in) Struct	ure Ro (ft/in) Wie	ad dth (ft./in)	Skew
								on	e track	
SUBSTR	UCTURE	Ν	laterial stone		· · · · · · · · · · · · · · · · · · ·					
Masonr	у Туре	Masonry Finish	Masonry C	lass N	asonry Se	etting				
	Desigr	ners/Engineers	Builders							

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 dieforged 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

Namo			County	Dr	# 1.0	titudo I	ongitudo			Last Revised
Thomas	s Whoolor	Bridge	Morgan	55 Br	• # Ld		Jungitude	w US	SE	4/13/2015
moma	S WITEETET	blidge	worgan	55		T			sign	Current
			Township		Sectin	Insnp	Range	by De	sign	
Carries	Awbrey Rd.	/C.R. 500W	Ashland		2-11	12N	200	vehic	les v	ehicles
Over	Rhodes Cre	eek	USGS Topo Ma	p UT	Ms			PRIOF	Structure	
			-	16	6 E:	N:		Name		
SUPER:	STRUCTUR	<u>E FORMS</u>	Material conc	rete	9					
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panels	Spans	Clear Span (ft/in)		SURV	EYED Structu	re 1013
			Connect n		[]	(1011)		Built	l	1913
								Span(s) Added	
								Remo	delled	
								Mover	I - On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear \$ (ft/i	Span n)	Rise (ft/in)		То		
								Repla	ced -	
								Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear S (ft/in	Span)	DIMENSIO	<u>DNS</u>			
slab			1	8		Structu Length	ıre Str (ft/in) Wi	ructure dth (ft/in)	Road Width (ft./in)	Skew
						10	20/	/4	18	
SUBSTR		N	laterial						L	
Masonr	у Туре	Masonry Finish	Masonry	Class	Mason	ry Setting				
	Desigr	ners/Engineers	Builders							
	H. A. Blur	nk	L. P. Guthrie			builde	er			

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.

<u>References</u>

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. #	La	titude	Lor	ngitu	de		26	Last Revised
Parago	n Bridge		Morgan	55	[6]	39°	22.4'	N 86°	33.2	' W		JL	4/3/2015
			Township		See	ct'n	Tnshp	ວິ	Rang	je	by De	sign	Current
Carries	Paragon Ro	d.	Ray-Baker		19	-20	11N		1W		vehic	les	demolished
Over	White River	r W Fork	USGS Topo Map)	UTMs								
0101]		16 E	:		N:			PRIO	<u>R</u> Structure	
SUPERS	STRUCTUR	F FORMS									Nam	9	
			Material metal			3							
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Pane	els Sna	ans	Span				<u>SURV</u>	EYED Struc	ture
		Design	Connect'n	i un	no ope		(ft/in)				Built		1889
through-t	russ				2		161				Span	(s) Added	
											Remo	delled	
(B) <u>Arch</u>	<u>es</u>	Decian	Snans	Cle	ar Sna	n	Dico (f	*/in)			Move	d - On	
		Design	Opuns		(ft/in)	••	KISE (I	UIII)			То		
]		Repla	ced -	1974
]		Ву	CPC I-bea	ms
(C) <u>Bean</u>	<u>ns</u>												
<u>& Oth</u>	er Forms	Design	Spans	Cle	ar Spai	n			~				
		Design		(f	t/in)		DIMEN	SION	<u>s</u>				
							Stru	ucture)	Struct	ure	Road	Skew
							Len	gth (f	t/in)	Width	(ft/in)	Width (ft./in)
							330)				16	
SUBSTR		N	latorial										
Masonr	v Type	Masonry Finish	Masonry C	lass	Ma	ason	rv Settir	ומ					
) ·) [· ·	,		1400			i y oottii	'9					
	Desigr	ners/Engineers	Builders										

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.

<u>References</u>

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.

Namo			Country	D., #	1 - 414	tudo l					Last Revised
		idao	Margan	Br. #					US	SE	4/13/2015
Bryants	Greek Br	luge	worgan	55 9	39-2	21.0 N 8	50 32.	T. VV			Current
			Township	S	ect'n	Tnshp	Ran	ge	by Des	sign	Current
Carries	Bryant Ck F	Rd/C.R. 600W/#54	Baker	2	8-29	11N	1W		vehicl	es N	vehicles
Over	Bryants Cre	ek	USGS Topo Map	UTMs	6					Structure	
			Modesto	16	E: 5396	654 N:	435654	40	Namo		
SUPERS	STRUCTUR	E FORMS		oto	9				Name		
			waterial concre		3	Clear					
(A) <u>Irus</u>	<u>ses</u>	Design	Method of	Panels Sp	ans	Span			SURVE	<u>Struct</u>	ire
		-	Connect'n			(ft/in)			Built		1909
									Span(s	s) Added	
									Remo	delled	
										0	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear Sp	an	Rise (ft/in	4			- On	
		Design	opano	(ft/in)			')		То		
filled-spa	indrel arch		1	40					Replac	ed -	
									Ву	539654	
(C) <u>Bean</u>	<u>15</u> _										
<u>& Oth</u>	<u>er Forms</u>	Desian	Spans	Clear Spa	an	DIMENCI	ONE				
				(ft/in)		DIMENSI	<u>UN5</u>				
						Struct	ure	Struct	ure	Road	Skew
						Length	n (ft/in)	Width	(ft/in)	Width (ft./in)	
						41		18/8		15/6	
SUBSTR	UCTURE	R/		2		9					
Masonr		Masonry Finish	Masonry C	, lass M	lasonn	v Setting					
						yoctung					
	Desigr	ners/Engineers	Builders								
	E. O. Gilbert		N. W. Gilbert			build	er				

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.

<u>References</u>

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			Coun	nty		Br.	# L	atitu	de	L	ongi	itude				Last Rev	vised
Morgan Co	ounty Bi	ridge #24	Morg	an	55	24	3	39° 22	.2'	Ν	36° 16	5.0' V	N	0	SE	4/14/2015	;
			Town	ship			Sect'	n [.]	Tnsh	р	Ra	inge		by De	sign	Current	
Carries Hic	key Rd.		Jacks	son			24		11N		2E	Ξ		vehic	les	vehicles	
Over Ind	ian Creel	k, branch	USGS	6 Торо Мар		UTI	V Is								Structure		
			Morg	antown		16	E: 5	56347	6	N:	4358	527	ľ	Nam			
SUPERSTR	UCTURE	FORMS	Materi	ial concre	ete		9							- ann			
(A) <u>Trusses</u>	· 1	Design	M C	lethod of connect'n	Pan	els \$	Span	C s S (f	lear pan t/in)				5	<mark>URV</mark> Built	EYED Struc	ture 1911	
								Ì						Snanl	hahha (a		
														Zomo	dollod	1986	
													Ľ				
(B) <u>Arches</u>		Design		Spans	Cle	ar S	pan	R	ise (ft/in)			/loveo	a - On		
.	<u> </u>			•	1	(ft/ir	i)				, 			10			
filled-spandr	el arch	_		1	22						_		ľ	kepia	ced -		
		_		_							_		L	Ву			
(C) Beams																	
<u>& Other F</u>	Forms	Design		Spans	Cle (ear S ft/in)	pan	D	IME	NSIC	<u>DNS</u>						
								_	Str Lei	ucti ngth	ure 1 (ft/in	Stro) Wic	uctu ith (re ft/in)	Road Width (ft./ii	Skew	
									43	6		26/	6		25/5		
SUBSTRUC	TURE	N	latoria	al 🗌													
Masonry Ty	/pe	Masonry Finish	N	lasonry Cl	ass		Mase	onry s	Setti	ng							
				-				-		-							
	Design	ers/Engineers	В	uilders								-					
		Constructio	n H	istory	an	d S	Stru	ictu	ral	D	esc	cript	tio	n			

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. # La	titude Lonait	ude		Last Revised
Morgan	County B	ridge #26	Morgan	55 26 39	° 23.7' N 86° 24	.4' W	USE	4/14/2015
Ŭ		-	Township	Sect'n	Tnshp Rai	nge	by Design	Current
Carries	Mahalsville	Rd.	Washington	15	11N 1E	-	vehicles	vehicles
Over	Sand Creek	{	USGS Topo Map	o UTMs				
••••		.	Martinsville	16 E: 55	0990 N: 43607	00	PRIOR Structure	
SUPERS	STRUCTUR	E FORMS		into 0			Name	
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels Spans	Clear Span (ft/in)	5	SURVEYED Structu Built	ire c1916
							Span(s) Added	
							Remodelled	<1978
							Moved On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear Span (ft/in)	Rise (ft/in)	ľ	To	
							Replaced -	
							Ву	
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear Span (ft/in)	DIMENSIONS			
concrete	slab		2	18/4	Structure Length (ft/in)	Structu Width	ure Road (ft/in) Width (ft./in)	Skew
					39/6	21/9	20/8	
SUBSTR		Γ	laterial concret	e	9			
Masonr	у Туре	Masonry Finish	Masonry C	lass Masor	nry Setting			
	Desigr	ners/Engineers	Builders					
			E. O. Gilbert		contractor			

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	# Lati	itude	Longit	ude			Last Revised
Morgar	County B	ridge #27	Morgan	55 [27	'] 39°	21.7' N	86° 21	.8' W	08	E	4/14/2015
			Township		Sect'n	Tnshp	Rai	nge	by Des	sign	Current
Carries	Mahalsville	Rd.	Washington		25	11N	1E		vehicl	es ve	ehicles
Over	Camp Cree	k	USGS Topo Ma	p UT	Ms					Structure	
			Morgantown	16	6 E: 554	590 N	: 43565	20	Name	Siluciale	
SUPER:	STRUCTUR	E FORMS	Material steel	; concrete	4; 9				Nume		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			SURVE Built	YED Structu	re c1930
]		Span(s	s) Added	
									Remo	delled	
									Moved	- On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear S	Span	Rise (ft/i	in)		To		
				(ft/i	n)				Ponlac	- ho	
										eu -	
									Бу		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> Ier Forms	Design	Spans	Clear S (ft/in	Span)	DIMENS	IONS				
encased	I-beam	continuous	3	13		Struc	ture	Struct	ure	Road	Skew
						Leng	th (ft/in)	Width	(ft/in)	Width (ft./in)	
						42		20		18/4	
SUBSTR	RUCTURE	Ν	laterial concre	te		9					
Masonr	у Туре	Masonry Finish	Masonry	Class	Masonr	y Setting	J				
-	Desigr	ners/Engineers	Builders								
		Constructio	on History	and	Struct	tural [Desc	riptic	on		

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. #	Lati	itude	Longi	tude		SE	Last Revised
Mahala	sville Brid	ge	Morgan	55	[28]	39° :	21.5' N	86° 21	1.3' W			4/2/2015
			Township		Sec	t'n	Tnshp	Ra	nge	by De	sign	Current
Carries	Mahalasville	e Rd./C.R. #39	Jackson		30		11N	2E	=	vehic	les	half relocated
Over	Indian Cree	k	USGS Topo Map)	UTMs						2 Structure	
			Morgantown		16 E :	555 ⁻	162 N	: 43567	707	Nom]
SUPERS	TRUCTUR	E FORMS	Matorial steel			4				Nam	·	
	200					-	Clear			eupv		
(A) <u>1105</u>	565	Design	Method of	Pane	ls Spa	ns	Span			SURV	<u>ETED</u> Struct	
			Connect n	0			(tvin)	7		Built		1920-1927
pony trus	S	Pratt		6	1	2	90			Span	s) Added	
pony trus	S	Pratt		5	1	/	/0	_		Remo	delled	
										Move	d - On	2004
(B) <u>Arcn</u>	<u>es</u>	Design	Spans	Clea	ar Spar	۱	Rise (ft/	in)		То	Yorktown (c	one span)
					(10111)					Repla	ced -	2004/2005
										By		
				_						<u> </u>		
(C) Bean	າຣ][]									
<u>& Oth</u>	er Forms	Desian	Snans	Clea	ar Snan							
		Design	opuno	(ft	t/in)		DIMENS	<u>SIONS</u>				
							Struc	ture	Struct	ure	Poad	Skew
							Leng	th (ft/in) Width	(ft/in)	Width (ft./in)
							163		15/8		15/5	
SUBSTR	UCTURE	٨		2			9					
Masonry	/ Type	Masonry Finish	Masonry C	lass	Ма	sonr	v Setting	 1				
	J	,					y ootting	2				
	_											
	Desigr	ners/Engineers	Builders									
			Vincennes Brid	lge Co).		cor	ntractor				

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

<u>Prior Structure</u> (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.

N				_							Loof Deviced
Name			County	Br	∵.#_La	titude	Longit	ude		F	Last Revised
Miller B	ridge		Morgan	55 30) 39	21.3' N	86° 17.	9' W			4/14/2015
			Township		Sect'n	Tnshp	Ran	ge	by Des	sign	Current
Carries	Mahalsville	Rd./C.R. #62	Jackson		27-34	11N	2E		vehicle	es v	ehicles
Over	Piko Crook		USGS Topo Map	UT	[Ms] L	
Over			Morgantown	16	E: 56)440 N	43563	00	PRIOR	Structure	
SUDED									Name		
<u>SUPERC</u>	DIRUCTUR		Material concre	ete	9						
(A) <u>Trus</u> :	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			SURVE	YED Structu	re 1916
]	(1011)			Built		
				_					Span(s	s) Added	
									Remo	delled	
									Moved	- On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear /ft/	Span ïn)	Rise (ft/	/in)		То	•	
					-				Replac	ed -	
									Bv		
									,		
(C) <u>Bean</u>	<u>15</u>	/]							
<u>& Oth</u>	er Forms	Design	Spans	Clear S (ft/in	Span ı)	DIMENS	<u>SIONS</u>				
through g	girder	with floor-beams	1	36		Stru	cture	Struct	ure	Road	Skew
						Leng	Jui (iviii)				
						41		20/7		17/2	30°
SUBSTR	UCTURE	N	laterial concrete	3		9					
Masonr	у Туре	Masonry Finish	Masonry C	lass	Masor	rv Setting	a				
						. ,	5				
	Desigr	ners/Engineers	Builders								
			H.A. Blunk & P	.M. Vana	arsdall	cor	ntractor				
			n.								

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	В	r. # La	titude	Longitu	lde	LICE		Last Revised
Morgan	County B	sridge #31	Morgan	55 [3	1] 39	° 21.6' N	86° 18.3	3' W	USL		4/2/2015
			Township		Sect'n	Tnshp	Ran	ge	by Design	(Current
Carries	Pete Whets	stine Rd.	Jackson		27-28	11N	2E		vehicles	de	emolished
Over	Indian Cree	k	USGS Topo N	lap U	TMs					oturo	
			Morgantown	1	6 E: 55	9635 N:	435699	90	<u>PRIOR</u> Sill	icture	
SUPERS	TRUCTUR	E FORMS	Matorial stee	<u></u>	4				Name		
(A) <u>Trus</u> :	ses	Design	Method c Connect	of Panels	Spans	Clear Span (ft/in)			SURVEYEI) Structu	re c1928
pony trus	s	Warren	riveted	6	1	72					
	.0		involtou			· <u>-</u>			Span(s) Ad		
									Remodelle	a [
(B) Arch	es			Clear	<u>On on</u>				Moved - O	n	
(_)		Design	Spans	s Clear (ft	Span /in)	Rise (ft/i	n)		То		
				Ì					Replaced -		2010
									Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ıs</u> er Forms	Design	Spans	Clear (ft/ii	Span ı)	DIMENS	<u>IONS</u>				
						Struc Lengt	ture th (ft/in)	Struct Width	ure Road (ft/in) Widt	d h (ft./in)	Skew
						75		20/4	18/1	0	
SUBSTR		Ν	laterial concr	ete		9]				
Masonry	у Туре	Masonry Finish	Masonry	Class	Masor	nry Setting					
	Desiar	ners/Engineers	Builders								
	[state high	hway commission1									
		· ,,							_		
	L		J[

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. #	t Lati	itude	Lonait	ude			Last Revised
Morgan	County B	ridge #32	Morgan	55 [32]	39°	22.6' N	86° 18.	8' W	US	E	4/2/2015
Ū	-	-	Township	<u> </u>	Sect'n	Tnshp	Ran	ge	by Des	ign	Current
Carries	Sedwick/Vc	iles Rd.	Jackson	2	21	11N	2E		vehicle	es	demolished
Over	Oliver Cree	k	USGS Topo Map	UTM	S			1		O tana a ta ana	
			Соре	16	E: 559	180 N:	435887	70	Nome	Structure	
SUPERS	STRUCTUR	E FORMS	Matorial steel		4				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels S	pans	Clear Span (ft/in)			SURVE Built	YED Struct	u re 1931
									Span(s) Added	
									Remod	, lelled	
									Movod	- On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear Sp (ft/in)	an	Rise (ft/i	n)		То		
									Replac	ed -	2008
									Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear Sp (ft/in)	an	DIMENS	<u>IONS</u>				
through	girder	riveted plate	1	47		Struc Leng	ture th (ft/in)	Struct Width	ure F (ft/in) V	Road Vidth (ft./in)	Skew
						50		19/8	·	16/6	33°
SUBSTR	UCTURE	N	laterial concrete	9		9]				
Masonr	у Туре	Masonry Finish	Masonry C	lass	Masonr	y Setting					
	Desigr	ners/Engineers	Builders								
	E. D. Ca	natsey									
		·									

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			Coun	ty		Br. #	Lat	itude		Long	gitude					Last Revised
Morgar	County B	ridge #34	Morga	an	55	34	39°	20.5'	Ν	86° 2	21.0' V	V		SE	4	/14/2015
			Towns	ship	,	Se	ect'n	Tnsl	hp	R	ange		by De	sign	С	urrent
Carries	Bearwallow	Rd.	Jacks	on		3 [.]	1	11N		2	E		vehic	les	ve	hicles
Over	Indian Cree	k, branch	USGS	Торо Мар		UTMs			_			Ŀ		Structure		
			Morga	antown		16	: 555	510	N:	4354	1859	ľ	Name			
SUPERS	STRUCTUR	E FORMS	Materi	al concre	ete		9						Nam	•		
(A) Trus	ses				_			Clear	r			s	URV	EYED Stru	cture	9
()		Design	M C	ethod of onnect'n	Pan	els Sp	ans	Span (ft/in))			ľ	Built		С	.1920
								. ,				ç	Snan(babh Δ (a)		
													Pomo	dollod	1	986
												Ľ				
(B) <u>Arch</u>	<u>es</u>	Design		Spans	Cle	ar Spa	an	Rise	(ft/ir	n)		ľ	love	d - On		
		Design		-		(ft/in)		1.00	(1011	·,			10			
filled-spa	andrel arch			1	20/6	6		4/2				F	Repla	ced -		
												L	Ву			
(C) Boan	ne															
<u>& Oth</u>	<u>ier Forms</u>	_ .		Snane	Clo	ar Sna	n I									
		Design	•	Spans	(1	ai Spa ft/in)		DIME	NSI	ONS						
								St	ruct	ture	Stri	uctu	re	Poad		Skew
								Le	ngt	h (ft/i	n) Wid	lth (ft/in)	Width (ft./i	n)	Cherry
								2	1/6		26/2	2		26		
SUBSTR	RUCTURE	Ν	lateria		2			9								
Masonr	у Туре	Masonry Finish	M	lasonry Cl	ass	N	ason	ry Sett	ing							
									•		1					
	Design	ers/Engineers	Bu	uilders							_					
	Doorgi	iono, Engineero														
		Constructio	n Hi	istory	an	d St	ruc	tura	ID)es	cript	io	n			

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. #	Lat	itude		Longi	tude		°E	Last Revised
Cramer	Bridge		Morgan		55	[37]	39°	23.9'	Ν	86° 23	3.2' W		SE	4/2/2015
			Township)		Sec	ct'n	Tnsl	hp	Ra	nge	by De	esign	Current
Carries	Townshend	I/Voiles Rd./C.R.#41	Washingto	on		13		11N	l	1E		vehic	cles	demolished
Over	Sand Creek	<pre> /Indian Ck, branch</pre>	USGS Top	о Мар		UTMs								
			Martinsvil	le		16 E	552	370	N:	43608	380	PRIO	<u>R</u> Structure	
SUPERS	STRUCTUR	E FORMS	Matarial	stool			4						e	
			Material	SIEEI			4	Clear	r			CLIDV		4
(A) <u>Trus</u>	<u>ses</u>	Design	Metho	od of	Pane	els Spa	ins	Span				SURV	<u>ETED</u> Struc	ture
			Conne	ect'n	1			(tt/in))			Built		1927
												Span	(s) Added	
												Remo	odelled	
												Move	d - On	
(B) <u>Arch</u>	<u>es</u>	Design	Sp	ans	Cle	ar Spa	n	Rise	(ft/in	I)		То		
						(ft/in)				_		Ronla		1088
										_				1900
										_		Ву	PC box b	eams
(C) Bean	ns]									
<u>& Oth</u>	er Forms		Cree											
		Design	Spar	ns	Ciea (f	ar Spai t/in)		DIME	NSI	<u>ONS</u>				
through	airder	riveted plate	1	3	32			St	ruct	uro	Strue	sturo	Deed	Skow
	5							Le	ength	h (ft/in) Widt	h (ft/in)	Width (ft./ir)
								35	5		17/9		16	27°
SUBSTR				noroto										
Masonr		Masonry Finish			200	M	son	9 ny Sott	ina					
Mason	y iype		IVIASU		a55		15011	ry Sell	ing					
	Desigr	ners/Engineers	Builde	ers										
			Vincenne	es Brido	ge Co	Э.		l	build	ler				

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			Coun	tv		Br	#	Lati	tudo	1	ongi	tudo			Last Revised
Morgar	n County B	tridae #38	Morga	vy an	55	38	m	20° (21 1'	N 8	6° 2'	1 7' W	U	SE	4/14/2015
morga			Town	ahin	55	00	Soci	t'n	Tneh		Pa		by De	sian	Current
			Wash	ington			36	. 11	11N	ih		lige	li ve le i e	lee [vohiolog
Carries	Downey Ro	1.	Vasi				-					·	venic	les	venicies
Over	Indian Cree	ek, branch	USGS	Торо Мар			ls F	EEAC	NOF.		12550	20	PRIO	<u>R</u> Structure	
			worga	antown		10	E:	5540	000	N: 4	+3558	32	Nam	e	
SUPERS	STRUCTUR	<u>E FORMS</u>	Materi	al concre	ete			9							
(A) <u>Trus</u>	<u>ses</u>	Design	M	ethod of	Pan	els S	Spai	ns	Clear Span				SURV	EYED Struct	ure
			C	onnect'n					(fṫ/in)				Built		c.1920
													Span	(s) Added	
										_			Remo	delled	1986
													Move	d - On	
(B) <u>Arch</u>	<u>es</u>	Design		Spans	Cle	ar S	pan	Ì	Rise ((ft/in)			То		
filled-spa	andrel arch			1	20/2	2	'		4				Repla	ced -	
													Bv		
													,		
(C) <u>Bear</u>	<u>ns</u>														
<u>& Otr</u>	<u>ier Forms</u>	Design	:	Spans	Cle (ear Sp ft/in)	pan		DIME	NSIC	<u>DNS</u>				
									Str Lei	uctu nath	ire (ft/in)	Struct Width	ure (ft/in)	Road Width (ft /in)	Skew
									22)	(26	()	25/10	
			I									20		20/10	
SUBSTR	RUCTURE	Ν	lateria	concrete	;				9						
Masonr	у Туре	Masonry Finish	М	lasonry C	lass		Ma	sonr	y Setti	ng					
	Desigr	ners/Engineers	Βι	uilders											
		Constructio	n H	istorv	an	d S	tr	uct	ural		esc	riptic	n		

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. #	Lat	itude		Long	gitude			-	Last Revised
Taggar	t's Crossir	ng Bridge	Morgan	55	[39]	39°	22.7'	Ν	86°	23.8' V	/	036	-	4/14/2015
			Township		Sec	ct'n	Tns	hp	R	Range		by Desig	In	Current
Carries	Low Gap R	d.	Washington		22-	-23	11N	I	1	IE		vehicles	i	demolished
Over	Indian Cree	k	USGS Topo Map)	UTMs						ŀ		4	
					16 E:	:		N:			ľ	<u>PRIOR</u> 5	tructure	
SUPERS	STRUCTUR	E FORMS	Matarial concre			٩					-1	Name		
(A) <u>Trus</u>	ses_	Docian	Method of	Pane	ale Sna	une i	Clear	r				URVEY	ED Struc	ture
		Design	Connect'n	i and	513 Opa		(ft/in))				Built		c.1920
[pony tru	ss]											Span(s)	Added	
												Remode	lled	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Cle	ar Spai	n	Rise	(ft/ir	n)		ľ	Noved -	On	
		Design			(ft/in)			(1011				10		
											F	Replaced	d -	1973
												By P	C box bea	ams
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> Jer Forms	Design	Spans	Clea (f	ar Spar ˈt/in)	ו ו	DIME	NSI	IONS	<u>-</u>				
							St Le	ruct engt	ture :h (ft/i	Stru in) Wid	ictu th (ire Ro ft/in) Wi	ad dth (ft./in	Skew)
SUBSTR		Ν	laterial			•								
Masonr	у Туре	Masonry Finish	Masonry C	lass	Ма	ison	ry Sett	ting						
	Desigr	ners/Engineers	Builders											
		• • •			1.01									

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

<u>Prior Structure</u> (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. # La	titude	Longitu	ude		20	Last Revised
Sheere	r/Burton L	ane Bridge	Morgan	55	[42] 39	24.1' N	86° 26.0	0' W			4/3/2015
[old Ma	rion Co. B	ruce Ford]	Township		Sect'n	Tnshp	Ran	ge	by De	sign	Current
Carries	Burton La.,	Martinsvl/C.R.#189	Washington		8-9	11N	1E		vehic	les	dismantled
Over	Indian Cree	k	USGS Topo Map		UTMs					Structuro	
	L		Martinsville		16 E: 548	3450 N	: 436110	00	Name		
SUPERS	STRUCTUR	E FORMS	Material wroug	ht & c	ast 2				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Pane	ls Spans	Clear Span (ft/in)			SURVI Built	EYED Struct	ure 1872
pony trus	s	bowstring	bolted	12	1	93]		Snan(s) Added	
									Romo	dollod	
											1900-1020-1
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clea	ar Span	Rise (ft/i	in)		Moved	I - On	1099, 1930, 1
		Design		((ft/in)				10	Co. nwy gar	age
									Replac	ced -	1998
									Ву	CPC I-bean	n
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clea (ft	ır Span //in)	DIMENS	IONS				
I-beam			1 9	9-10		Struc Leng	ture th (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in)	Skew
						108		16		15/5	
SUBSTR	UCTURE	N		7		9]				
Masonr	y Type	Masonry Finish	Masonry C	lass	Mason	rv Setting					
						, ,					
	Desigr	ners/Engineers	Builders								
	Joseph D	avenport	Massillon Bridg	e Co.		fabı	ricator				
		-					_				

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

<u>Sheerer Bridge</u> (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. #	La	titude		Longi	itude			26	Last Revised
Dean Arch			Morgan	55	44	39°	25.6'	Ν	86° 16	5.0' \	W		DE	4/14/2015
			Township		Se	ct'n	Tns	shp	Ra	ange		by De	sign	Current
Carries Peavi	ine Rd /(CR #321	Green-Jackson		36	6-1	11-	12N	2E	Ξ		vehic	les	vehicles
Ourse Ctatta	Ore els		USGS Topo Man		LITMe				[- 1	Vorne		
Over Stotts	сгеек,	S. Prong	Cone		16 F	562	990	N٠	4364	500	ļ	PRIOF	<u>R</u> Structure	
									-00-0	000	-	Name	•	
SUPERSTRUC	TURE	FORMS I	Material concre	ete		9								
(A) <u>Trusses</u>	_		Mathedaf	Dan		_	Clea	r				SURV	EYED Struc	ture
. ,	D	esign	Connect'n	Pan	eis Sp	ans	Spai (ft/in	n N				Duilt		1911
							(-,				Duint		
												Span(s) Added	
												Remo	delled	
												Move	d - On	
(B) <u>Arches</u>		Design	Spans	Cle	ear Spa	in	Rise	(ft/in	ו)			То		
					(ft/in)									
filled-spandrel a	arch		1	60								Repla	ced -	
												Ву		
(C) <u>Beams</u>														
& Other For	r <u>ms</u>	Desian	Spans	Cle	ar Spa	n			010					
				(ft/in)			<u>=N51</u>	<u>UN5</u>					
							S	truct	ure	Str	ucti	ıre	Road	Skew
							L	engtl	h (ft/in	n) Wie	dth	(ft/in)	Width (ft./ir)
							6	62		18			16	
SUBSTRUCTU	IRE						0							
Maganny Tune		Meeonry Einich	aterial concrete	;			9							
wasonry Type	e	Masonry Finish	Masonry C	lass	M	ason	ry Set	ting		,				
D	esigne	rs/Engineers	Builders											
НА	A Blunk	J	Earl O. Gilbert					cont	ractor					
11.7	. Diarin							50110						
			10 C											

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	В	Rr# la	titude	Longit	ude		_1	Last Revised
Hess A	rch		Morgan	55 [4	461 39	° 26.5' N	86° 17	.8' W	USI	Ξ	4/14/2015
			Townshin		Sect'n	Tnshp	Rar	nae	by Desig	 gn	Current
Carrios	Nast Chang		Green		27	12N	2E	.90	vehicles	b d	emolished
Carries		i ru.	USGS Topo Man						vernetes		ornononou
Over	Stotts Cree	k, S. Prong	Cope	1	6 F : 56	0380 N	43663	80	<u>PRIOR</u> S	Structure	
SUDEDO									Name		
<u>JUPER</u>			Material concre	ete	9						
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panel	s Snans	Clear Span			SURVEY	<u>'ED</u> Structu	re
		Design	Connect'n	i anon	opuno	(ft/in)			Built		1910
									Span(s)	Added	
									Romode		
]				
(B) <u>Arch</u>	<u>es</u>	Decign	Snans	Clear	Snan	Dico (ff)	in)		Moved -	On	
		Design	opuno	(f	t/in)		,		То		
filled-spa	andrel arch		1	74					Replace	d -	1991
									By C	R concrete	slab
								l			
(C) <u>Bean</u> & Oth	<u>ns</u> er Forms										
		Design	Spans	Clear	' Span	DIMENS	IONS				
				(ועו	in)						
						Struc	ture	Struct	ure Ro	oad	Skew
								10			
						00		19	10	0/4	
SUBSTR	RUCTURE	Μ	aterial concrete	9		9					
Masonr	у Туре	Masonry Finish	Masonry C	lass	Masor	nry Setting	I				
	Desigr	ers/Engineers	Builders								
	H A Blu	nk	N W Gilbert			con	tractor				

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.

Namo			County	D,	. # La	titudo	Longi	tudo		Last Revised
	rch		Morgan	55 40	· π La	29 1' N	26° 17		USE	4/15/2015
I IAKE A				55 48	0	20.1 N	00 17	./ ••	by Design	Current
			Township		Sectin	Inshp	Ra	nge	by Design	
Carries	Abraham Ro	d.	Green		22	12N	2E	:	vehicles	vehicles
Over	Stotts Creel	<, N. Prong	USGS Topo Ma	י UT	Ms					icture
			Соре	16	6 E: 560)355 N	: 43691	08	Nomo	
SUPERS	STRUCTUR	FORMS		roto	0				Name	
· • · •		I	viaterial conci	ele	9	Clear				
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panels	Spans	Span			SURVEYED	<u>)</u> Structure
		-	Connect'n		-	(ft/in)	_		Built	1911
									Span(s) Ad	dded
									Remodelle	d
									Remouche	
(B) Arch	es	_ .	Snono	Clear			- 、		Moved - O	n
. ,		Design	Spans	(ft/	Span in)	Rise (ft/	in)		То	
filled-spa	andrel arch		1	53	,	6			Replaced -	
· ·						-			By	
				_						
(C) <u>Bean</u>	<u>15</u>]][]				
`´ <u>& Oth</u>	er Forms	Decian	Spans	Clear	Span I					
		Design		(ft/in)	DIMENS	<u>SIONS</u>			
						Struc	ture	Struct		d Skow
						Leng	th (ft/in) Width	(ft/in) Widt	h (ft./in)
						54		18/6	16	17°
CUDETE					/					[]
Magazin		Maaawwa Finiak	aterial concret	e		9				
Masonr	утуре	Masonry Finish	Masonry C	lass	Mason	ry Setting	3			
	Desian	ers/Engineers	Builders							
	H. A. Blun	k	Earl O. Gilbert			cor	ntractor			

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.

<u>References</u>

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. ‡	# La	titude		Longi	itude			Last Revised
Morgan	County B	ridae #50	Morga	י ר	55	[50]	39	° 28.3'	Ν	86° 16	3.5' ₩	U	SE	4/14/2015
			Towne	hin			Sect'n	Tns	hp	Ra	inge	by De	sign	Current
Carrios	Brian Como	atory Dd /C D #139	Green	in p			14	12N	1	28		vehic		demolished
		elery Ru./C.R. #130		Cono Man		LITN			•			Verno	163	demonstred
Over L	_azy Run		Cope			16	F: 56	2400	N:	43694	470	PRIO	<u>R</u> Structure	
SUDEDET	TOUCTUD		Cope			10		2100		1000		Nam	e	
SUPERS	IKUCIUKI		Materia	concre	ete		9							
(A) <u>Truss</u>	<u>es</u>	Desian	Me	thod of	Pan	els S	pans	Clea Spar	r า			SURV	EYED Struc	cture
			Co	nnect'n	-			(ft/in)			Built		c.1917
												Span	(s) Added	
												Remo	delled	
												Mayo		
(B) <u>Arche</u>	<u>s</u>	Design		Spans	Cle	ear Si	ban	Rise	(ft/ir	n)		wove		
				•	-)	(ft/in)		(.,		10		
												Repla	ced -	1986
												Ву	PC box be	eams
(C) <u>Beams</u> & Othe	<u>s</u> er Forms		-			-								
		Design	S	pans	Cle (ear Sp ft/in)	ban	DIME	NSI	<u>IONS</u>				
through gi	irder	with floor-beams	1		49	· · · ·		St	ruct	turo	Struct	luro	Deed	Skow
								Le	engt	th (ft/in) Width	(ft/in)	Width (ft./i	n)
								5	1		21		18	0
SUBSTRI	JCTURE	Ν	Interial	concrete	<u>,</u>]				
Masonry	Type	Masonry Finish	Materiai Ma	sonry C	ِ اعدد		Masor	vrv Sett	tina]				
,		,		loomy o	1400		maoor	ny oon	ing					
	Design	ners/Engineers	Bui	Iders										
		Constructio	on Hi	storv	an	d S	truc	tura)esc	riptio	on		

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).

			_					_					Lest Deviced
Name			County	7	Br. #	Lat	titude	Lo	ongit	ude		SE	Last Revised
Pierce	Bridge		Morgan	55	[51]	39°	28.1'	N 86	6° 16.	1' W			4/3/2015
			Township		Sec	:ťn	Tnsh	р	Ran	ge	by De	sign	Current
Carries	Dillman Rd.	./C.R. 850E	Green		22-	-23	12N		2E		vehic	les	demolished
Over	Statts Cree	k N Prong	USGS Topo Map	1	UTMs								
0101		k, N. Frong	· · · ·		16 E			N:			PRIO	<u>R</u> Structure	
SUPERS	STRUCTUR	E FORMS									Nam	9	
			Material steel			4							
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Pan	els Sna	ins	Snan				<u>SURV</u>	EYED Struc	ture
		Design	Connect'n	i un			(ft/in)				Built		1922
pony trus	s	Warren		3	1		49/3				Snan	e) Addad	
. ,											Span		
											Remo	aellea	
(B) Arch	6 5										Move	d - On	
(B) <u>Aron</u>	<u></u>	Design	Spans	Cle	ar Spai	n	Rise (ft/in)			То		
					(ioni)						Repla	ced -	1984
									-		- By	CP concre	
									-		Ъу		e sian
(C) Bean	ns												
<u>& Oth</u>	er Forms	_ .	Spane	Clo	ar Snar	• •							
		Design	Spans	(al Spai ft/in)	•	DIMEN	NSIOI	<u>NS</u>				
				•	,		C 1	4		Charles			<u>.</u>
							Str	uctur nath (e (ft/in)	Width	(ft/in)	Road Width (ft /in	SKew
							50	/3	()	20/6	()	10/9	,
							50	/ J		20/0		19/0	
SUBSTR	RUCTURE	N	laterial concrete	e; tim	ber		9; 1						
Masonr	у Туре	Masonry Finish	Masonry C	lass	Ма	ison	ry Setti	ng					
	Dociar	ors/Enginoors	Buildore										
	Desigi	iers/Engineers		a 0	•		-	ontro	oto-				
			vincennes Brid	ge C	υ.		С	ontra	CLOF				

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.

Manag			-													t Poviced
Name	<u> </u>		Cour	nty		Br. #	La	titude		Lon	ngitud	de	U	SE	Las 1/3/2	015
Morgan	County B	ridge #53	Morg	jan	55	[53]	39	28.0	N	86°	18.5	W			4/3/2	.013
			Towr	nship		Se	ct'n	Tn	shp		Rang	е	by De	sign	Curi	rent
Carries	Fire Station	Rd./C.R. 625E	Gree	n		21		12	N		2E		vehic	les	demo	lished
Over	Stotts Cree	k. N. Prona	USG	S Торо Мар		UTMs								0.04		
		.,	Cope)		16 E	: 559	9140	N	: 436	8570)		<u>x</u> Structure		
SUPERS	STRUCTUR	E FORMS					2						Namo	9		
			Mater	metal			3		.							
(A) <u>Trus</u>	<u>ses</u>	Design	N	lethod of	Pan	els Spa	ans	Spa	n				SURV	EYED Strue	cture	
		g	C	connect'n	-	•		(ft/i	n)				Built		c190)5
pony trus	SS	Pratt	p	oinned	5	1		83					Span	(s) Added		
										-			Pomo	dollod		
										-			Kenit	ueneu		
(B) Arch	es			Snono			-	D .					Move	d - On		
. ,	Design			Spans	(ft/in)			Rise (min)					То			
													Repla	ced -	199	0
													Bv	PC box be	ams	
													-,		Jamo	
(C) Bean	ns][
`´ <u>& Oth</u>	er Forms	Desian		Snans	Cle	ar Sna	n I									
		Design		opuno	(ft/in)		DIM	ENS	ION	<u>s</u>					
								c	truc	sturo		Struct	uro	Beed	CI.	
								Ľ	.eng	th (ft	/in)	Width	(ft/in)	Width (ft./i	n)	ew
									85	•	[16/5	· ,	15/9		
												, .		10/0		
SUBSTR	RUCTURE	Ν	lateria	al concrete	;			9								
Masonr	у Туре	Masonry Finish	Γ	Masonry Cl	ass	Ма	ason	iry Se	tting	J						
	Desigr	ners/Engineers	В	uilders												
		U U														
													_			

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. #	Lat	itude	Lo	ongitu	ıde		26	Last Revised
Hender	son Ford I	Bridge	Morgan	55	[54]	39°	28.8'	N 86	5° 21.2	2' W			4/3/2015
			Township		Sec	ct'n	Tnsh	р	Rang	ge	by De	sign	Current
Carries	Henderson	Ford Rd.	Clay-Green		7		12N		2E		vehic	les	demolished
Over	White River	, W Fork	USGS Topo Ma	D	UTMs							2 Structure	
		<u>.</u>	1		16 E	:		N:					
SUPERS	STRUCTUR	E FORMS	Matorial metal			3					Name	,	
(Δ) Trus	202			J			Clear			SURV	turo		
(A) <u>1103</u>	303	Design	Method of	Pane	Panels Spans						Duilt		1803
4 la 11 a 1 1 a 1 la 14			Connect II				(1011)				Built		1095
through t	russ										Span(s) Added	
				_							Remo	delled	
											Move	d - On	
(B) <u>Arcn</u>	<u>es</u>	Design	Spans	Clear Span (ft/in)			Rise (ft/in)			То		
											Repla	ced -	1968
											Ву	CPC I-bea	n
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> er Forms	Design	Spans	Cle: (f	ar Spai t/in)	n	DIMEN	ISIO	<u>NS</u>				
				(-	,		0.1			04		_	
							Str Ler	ngth	re (ft/in)	Width	(ft/in)	Road Width (ft./in	Skew
SUBSTR		N	laterial concret	e			9						
Masonry	у Туре	Masonry Finish	Masonry C	lass	Ма	asoni	ry Setti	ng					
								•					
	Desiar	ners/Engineers	Builders										
			Wrought Iron Bridge Cc			Co. contractor			ctor				
							0	2					
							[

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 #	Lat	itude		Long	aitude			Last Revised	
Morgan	County B	ridae #55	Morgan	י ר	55	[55]	39°	28.5'	Ν	86°	22.5' W	U	SE	4/14/2015	
inor gai			Towns	hin	00	[00] S	ect'n	Tns	hn	R	22.0 II	by De	esian	Current	
Corrigo	Manla Turn		Washir	naton		1	3	121	J	1	F	vohio		demolished	
Carries		R0./C.R. #142		Tono Mon					•			venic		demonshed	
Over	Clear Creek	k, Grassy Fork	0303	горо мар		1.6	5 		NI			PRIO	<u>R</u> Structure		
						10			_ IN.			Nam	e		
SUPER:	STRUCTUR	<u>EFORMS</u>	Materia		ete 9										
(A) <u>Trus</u>	<u>ses</u>	Docian	Mo	thod of	Panels Spans			Clear Span				SURV	EYED Struct	<u>)</u> Structure	
		Design	Co	nnect'n				(ft/in)				Built		c.1920	
												Snan	(s) Added		
												Bomo			
												Kenic	Jueneu		
(B) <u>Arch</u>	es	Desimu		Snane	CI	oar Sn	an	Dies	(54 /:	-		Move	d - On		
. ,		Design		Spans	Cit	(ft/in)	an	Rise	ושו	n)		То			
filled-spa	andrel arch			1	34/	6						Repla	ced -	1990	
												Ву	CR concrete	e slab	
(C) <u>Bean</u>	<u>ns</u> Formo														
<u>a Otr</u>	<u>ier Forms</u>	Design	S	pans	Cle	ar Sp	an								
		-			(ft/in)					_				
								S	truc	ture	Struc	ture	Road	Skew	
								L	engi		in) wiath	(ft/in)	Width (ft./in)		
								3	5		18/9		16		
SUBSTR	RUCTURE	N	aterial	concrete	•			9							
Masonr	у Туре	Masonry Finish	Ма	sonry C	lass	Ν	lason	ry Set	ting	1					
	Desigr	ners/Engineers	Bui	Iders											
		•													
		Constructio	n His	storv	an	d St	ruc	tura	I C)es	criptio	on			

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

<u>References</u>

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 #	Lati	tudo		naitu	do			Last Revised
Stockw			Morgon	55	DI. #	200	26 0'		nyiiu ° oo 7	' W	US	SE	4/15/2015
SIUCKW	en briuge		Morgan	55	00	39	20.9) 22.1	vv			Current
			Township		Sec	ct'n	Tnsh	р	Rang	je	by De	sign	ourrent
Carries	Teeters Rd		Washington		26		12N		1E		vehic	es	vehicles
Over	Clear Creek	k, W. Fork	USGS Topo Ma	р	UTMs							Structure	
			Martinsville		16 E:	553 ⁻	139	N: 43	36683	7	Name		
SUPERS	STRUCTUR	E FORMS	Material conc	rete		q					Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Pan	els Spa	ins	Clear Span				SURVI	EYED Struct	ture
			Connect'n				(ft/in)				Built		1916
											Span(s) Added	
											Remo	delled	
(B) <u>Arch</u>	<u>es</u>	Dosign	Spans	Cle	Clear Span			Rise (ft/in)				I - On	
		opano		(ft/in)						То			
											Replac	ced -	
											Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Cle (ar Spai ft/in)	ו ו	DIME	NSIOI	<u>NS</u>				
through	girder	with floor-beams	1	32			Str Lei	uctur ngth (re (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in	Skew)
							38			20/7		17/7	
SUBSTR		N	laterial										
Masonr	у Туре	Masonry Finish	Masonry (Class	Ма	Isonr	y Setti	ng					
	Desigr	ners/Engineers	Builders										
			H.A. Blunk & P.M. Vanarsdell				С	ontra	ctors				
								_					

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	. # La	titude	Longit	ude			Last Revised
Record	s Ferry/Blu	ue Bluff Bridge	Morgan	55 [57	7] 39°	29.8' N	86° 24.	W 0			4/3/2015
	-	-	Township		Sect'n	Tnshp	Ran	ge	by Des	sign	Current
Carries	Blue Bluff F	Rd./C.R. 150E	Washington		10	12N	2E		vehicl	es	demolished
Over	White River	r, W Fork	USGS Topo Map	UT	Ms					Structuro	
				1 (6 E:	Ν	:		Namo	Siluciule]
SUPERS	STRUCTUR	E FORMS	Material metal		3				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			SURVE Built	YED Struc	ture 1893
through t	russ					()]		Span(
anough									Span(s		
							-		Remo	delled	
(B) Arch	es			Clear]		Moved	- On	
. ,		Design	Spans	(ft/i	Span in)	RISE (ft/i	n)		То		
				Ì					Replac	ed -	1974
									Ву	CPC I-bear	ns
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear \$ (ft/in	Span)	DIMENS	IONS				
						Struc Leng	ture th (ft/in)	Struct Width	ure (ft/in)	Road Nidth (ft./in	Skew
SUBSTR	UCTURE		Material concrete	3		9					
Masonr	у Туре	Masonry Finish	Masonry C	lass	Mason	ry Setting	_ 				
	Desigr	ners/Engineers	Builders								
			1								

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.

Nomo			0 and 1	Du			1	ter al a			Last Rovisod
		(D.1)	County	Br.			Longi	tude	US	E	4/15/2015
Barb Si	mith/Cente	rton Bridge	Morgan	55 [58	5] 39°	30.7' N	86° 22	2.5' W		·	4/10/2010
			Township		Sect'n	Tnshp	Ra	nge	by Des	sign	Current
Carries	Centerton R	Rd./C.R. 590N/#28	Clay		1	12N	1E		vehicl	es	demolished
Over	White Lick (Creek	USGS Topo Map	UT UT	Ms					Structuro	
			Mooresville We	st 16	6 E: 553	3280 N	: 43737	760	Namo	Siluciule	
SUPERS	STRUCTUR	E FORMS	Meterial concr	oto	0				Name		
(A) -				ele	9	Clear					
(A) <u>Irus</u>	<u>ses</u>	Design	Method of	Panels	Spans	Span			SURVE	<u>YED</u> Struct	ure
		_	Connect'n			(ft/in)	-		Built		1908
									Span(s	s) Added	
									Remo	delled	
									Maxad	0.7	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear S	Span	Rise (ft/	in)		woved	- 00	
		Design		(ft/i	n)	1100 (12	,		10		
filled-spa	andrel arch		4	60					Replac	ed -	1985
									Ву	KC steel be	am
											I
(C) <u>Bean</u>	<u>ns</u> or Formo										
	<u>IEI FUIIIS</u>	Design	Spans	Clear S	Span		PIONS				
		-		(ft/in))						
						Struc	cture	Struct	ure p	Road	Skew
						Leng	th (ft/in) Width	(ft/in)	Nidth (ft./in)
						313		18/9		15/9	
SUBSTR	UCTURE	Ν	laterial concrete	9		9					
Masonr	у Туре	Masonry Finish	Masonrv C	lass	Mason	rv Setting	 1				
							-				
	Design	ers/Engineers	Builders								
	E. O. Gilb	ert	A. Ferguson &	N. H . Gi	lbert	contractors					

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.

Namo			Count			Dr #		litudo		Lon	aitu	do			Last Revised	
Morgan	County B	ridao #63	Morga	y n	55	DI. #	20°	26.8	N	26° (28 8'		U :	SE	4/3/2015	
worgan			Towns	hin	55	[00]	ot'n	20.0	shn	00 2	20.0 2200	•••	by De	sian	Current	
0		D #400		son		25		121	NI NI		Tany	e			domolished	
Carries	Bain Rd./C.	R. #122		Tone Mer			,	121	•		1 V V		venic	les	demonstred	
Over	Goose Cree	ek	Martin		,		- 54	1600	N	436	6340)	PRIO	<u>R</u> Structure		
			iviai un	Sville			54-	1000	N.	-50	00-0		Nam	e		
<u>SUPERS</u>			Materia	al steel	4											
(A) <u>Trus</u> :	ses_	Design	Me	thod of	Panels Spans			Span					SURV	EYED Struc	ture	
			Co	onnect'n	-			(ft/in)					Built		1920	
pony trus	S	Warren			3 1			39					Span	(s) Added		
													Remo	delled		
													Move	d - On		
(B) <u>Arch</u>	<u>Arches</u> Design			Spans	Cle	Clear Span (ft/in)			Rise (ft/in)				То			
													Repla	ced -	1984	
													Ву	PC box be	ams	
(C) <u>Bean</u> <u>& Oth</u>	<u>ıs</u> er Forms	Design	5	spans	Cle (ear Spa ft/in)	n	DIM	ENS	IONS	<u>5</u>					
								S	truc	ture	:	Struct	ure	Road	Skew	
								L	engt	th (ft/	/in)	Width	(ft/in)	Width (ft./ir	I)	
								4	10			16/5		16		
SUBSTR	UCTURE	Ν	laterial	steel; co	oncre	te		4; 9)							
Masonry	у Туре	Masonry Finish	M	asonry C	lass	М	ason	ry Set	ting	_						
	Desigr	ners/Engineers	Builders													
	Vincennes	Vincennes Bridae Co.					contractor									
				č												

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

<u>Prior Concrete Arch</u> (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	P	r #	Lat	itudo		Long	aitud	0		_	Last	Revised
Crone F	Rridae		Morgan	55 6	4	Lal	27 1'	N	86° 2	20 6'	W	U	SE	4/15/	2015
CIONE L	nuge		Termehin	55 0	T Soc	55	Z1.1	hn	00 2	29.0	••	by De	sian	Curr	ent
			lofforson		300	an	10	np	1	kange	•				
Carries	Bain Rd./C.	R. #122	Jenerson		20			N		1 V V		vehic	les	venici	es
Over	Lambs Ck,	Sally Bradley brnch	USGS Topo Map	U.	TMs			.				PRIOF	R Structure		
				1	6 E:			N:				Name	e		
SUPERS	TRUCTUR	<u>E FORMS</u>	Material concre	ete		9									
(A) <u>Trus</u> s	ses_	Design	Method of Connect'n	Panels Spans			Clea Spar (ft/in	r า)				SURV Built	<u>EYED</u> Stru	cture 1916	6
												Span	(s) Added		
												Romo	dollod		
(B) <u>Arche</u>	<u>es</u>	Decian	Snans	Cloar Span			Dico (ff/in)					Move	d - On		
		Design	Opano	(ft	(ft/in)							То			
												Repla	ced -		
												Ву			
											I				
(C) <u>Beam</u> <u>& Oth</u>	<u>is</u> er Forms	Design	Spans	Clear (ft/ii	Spar n)	ו ו	DIME	ENSI	IONS	<u>i</u>					
through g	girder	with floor-beams	1	24/4			St	truct	ture	S	struct	ure	Road	Sk	ew
							Le	engt	: h (ft /i	in) V	Vidth	(ft/in)	Width (ft./	in)	
							2	9/4		2	21		17/9		
SUBSTR	UCTURE	M	laterial			••••									
Masonry	/ Туре	Masonry Finish	Masonry C	lass	Ма	son	'y Set	ting	1						
							-	-							
	Desigr	ners/Engineers	Builders												
			H. A. Blunk & P. M. Vanar			sdell contractors									
				70				50110							

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	Ві	r.# Lat	itude	Longit	ude		_	Last Revised
Morgan County B	ridge #67	Morgan	55 67	' 39°	27.6' N	86° 30.	7' W	036		4/16/2015
		Township		Sect'n	Tnshp	Ran	ige	by Desig	jn (Current
Carries Big Hurricar	ne Rd.	Jefferson		22	12N	1W	'	vehicles	; Ve	ehicles
Over Lambs Cree	ek, branch	USGS Topo Ma	IP UT	ſMs					tructure	
			16	6 E:	1	N:		Name		
SUPERSTRUCTURI	E FORMS	Material cond	rete	9						
(A) <u>Trusses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			SURVEY Built	<u>ED</u> Structu	re c1928
								Snan(s)	Added	
								Remode	lled	
								Moved	On	
(B) <u>Arches</u>	Design	Spans	Clear	Span	Rise (ft	/in)				
			(ft/	'in)		·		Banlaga	d	
								Replaced	u -	
								Ву		
(C) <u>Beams</u>										
& Other Forms	Design	Spans	Clear (ft/ir	Span ı)	DIMEN	<u>SIONS</u>				
through girder	with floor-beams	1	30		Stru Leng	cture gth (ft/in)	Struct Width	ure Ro (ft/in) Wi	oad idth (ft./in)	Skew
					33		21/6	18	3/6	20°
SUBSTRUCTURE	N	laterial concre	te		9					
Masonry Type	Masonry Finish	Masonry	Class	Mason	ry Settin	g				
					-	_				
Design	ners/Engineers	Builders								
	Constructio	n History	, and	Struc	tural	Desc	rintic	n		

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

<u>References</u>

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).
Marsa			0			D									La	st Rovisod
Name	0		County	у		ы г . #	Lat			LON	gitud	e	US	SE	La: 	4/2015
Morgan	County B	sridge #75	Morga	n	55	/5	39°	29.7	Ν	86°	40.0'	w		·		4/2013
			Towns	hip		Se	ct'n	Tns	shp		Range	•	by De	sign	Cui	rrent
Carries	Bowman R	d.	Ashlan	nd		8		12	N		2W		vehic	les	vehio	cles
Over	Rhodes Cre	eek	USGS '	Торо Мар		UTMs								Ctru of uro		
	L		Quincy	/		16 E	: 528	8779	N:	437	2132			<u>structure</u>		
SUPERS	STRUCTUR	E FORMS											Name			
			Materia	concre	ete		9									
(A) <u>Trus</u>	<u>ses</u>	Design	Me	thod of	Pane	ls Spa	ans	Spa	n				SURVI	<u>EYED</u> Stru	cture	
		Doorgin	Co	nnect'n				(ft/ir	i)				Built		190)7
													Snan(s) Added		
													Domo	dallad		
													Remo	ueneu		
(B) Arch	es][0	01		I						Moved	l - On		
(=) <u></u>		Design		Spans	Ciea	ar Spa (ft/in)	n	Rise	e (ft/i	n)			То			
filled-spa	andrel arch			1	50	,		8/6					Repla	ced -		
· ·				•				0.0					Bv			
													y			
(C) Bean	ns															
<u>& Oth</u>	er Forms	_ .	S	nane	Cloa	r Sna	n I									
		Design	0	pans	(ft	/in)	.	DIM	ENS	IONS	<u>s</u>					
								6	truc	turo	6	truct	uro			leave
		-						L	eng	th (ft	/in) V	Vidth	(ft/in)	Road Width (ft./	ວ in)	Kew
		-						-	7 <u>4</u>		1	9		16		
									-	-				10		
SUBSTR	RUCTURE	Γ	<i>l</i> laterial	concrete	;			9								
Masonr	у Туре	Masonry Finish	Ма	asonry C	ass	Ма	ason	ry Set	ting							
	Dealer			ildoro												
	Design	ners/Engineers	DU	nuers												
			Kelleh	ner and Sl	ipher				con	tracto	ors					

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			Coun	tv		Br. #	Lat	itude		Lon	naitude				Last Revised
Morgar	County B	ridge #79	Morg	an	55	[79]	39°	28.6'	Ν	86°	37.9'	W	US	SE	4/30/2015
Ŭ		0	Town	ship		Sec	:ťn	Tns	hp		Range		by De	sign	Current
Carries	Wilson Rd.		Ashla	ind		15-	-16	12N	1		2W		vehic	les	demolished
Over	Rhodes Cre	ook	USGS	5 Торо Мар		UTMs		[
0,001						16 E:			N:				PRIOF	<u>R</u> Structure	
SUPERS	STRUCTUR	E FORMS											Name)	
<u></u>			Materi	al metal			3	Close							
(A) <u>Trus</u>	<u>ses</u>	Design	М	ethod of	Pane	els Spa	ns	Span					SURV	EYED Struc	ture
			C	onnect'n		-		(fṫ/in))				Built		1893
pony trus	SS					1		40					Span(s) Added	
													Remo	delled	
													Μονο	4 On	
(B) <u>Arch</u>	<u>es</u>	Desian		Spans	Clea	ar Spai	n	Rise	(ft/i	n)					
				- -	1	(ft/in)			•	<i>′</i>					4000
													Repla	ced -	1968
													Ву	CR concre	te slab
(C) <u>Bean</u> & Oth	<u>ier Forms</u>			•	0	•									
		Design		Spans	Clea (fi	ar Spar t/in)	וי	DIME	NS	ION	<u>s</u>				
l-beam				2	14	,		C 4		4	0.				
i boain				-				Le	ruc enat	ture th (ft	50 t/in) W	ruct idth	ure (ft/in)	Road Width (ft./ir	SKew
							_			- (-					
			I	/L						1					
SUBSTR		N	lateria	metal				3							
Masonr	у Туре	Masonry Finish	N	lasonry C	lass	Ма	ison	ry Sett	ting		_				
	Desigr	ners/Engineers	Βι	uilders											
			Hunt	& Adams					con	tract	ors				

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.

<u>References</u>

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

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

Name			County	Br	# la	titudo	Longit	ohu		7	Last Revised
Morgan	County B	ridae #90	Morgan	55 [90	1 39°	' 31 8' N	86° 31	4' W	USE		4/3/2015
			Townshin	00 [00	Sect'n	Tnshp	Ran	de	by Desig	n (Current
Carrios	McClure Pr	1/C P #26	Grega		28	13N	1W	90	vehicles	de	emolished
Our		al	USGS Topo Mar	л. ПТ	Me				Verneies		
Over	Lamps Cree	ek		16) E:	N	:		PRIOR St	ructure	
SUPERS	TRUCTUR	E FORMS							Name		
			Material metal		3	Clear					
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Span (ft/in)			<u>SURVEYI</u> Built	<u>ED</u> Structui	e c1890
pony trus	s	Pratt bedstead	pinned	3	1	49/6]		Snan(s)	∆dded	
									Pomodol		
(B) <u>Arch</u>	<u>es</u>	Dooign	Snans	Clear S	Snan	Dico (#/i	in)		Moved -	On	
		Design	opulio	(ft/i	n)		,		То	r	
									Replaced	I-	1979
									By tim	nber beam	
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> er Forms	Design	Spans	Clear S (ft/in)	Span	DIMENS	IONS				
						Struc Leng	ture th (ft/in)	Struct Width	ure Ro (ft/in) Wi	ad dth (ft./in)	Skew
						50/6		14/3	13	/6	
SUBSTR		N	laterial concrete	e; metal		9;3]				
Masonr	у Туре	Masonry Finish	Masonry C	lass	Mason	ry Setting	J				
	Desigr	ners/Engineers	Builders								
		0 (()									

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).

Mana			- · ·								Leat Daviand
Name			County	Br. #	Latitu	de	Longitu	Ide		F	
Ollie Ha	adley Bridg	ge	Morgan	55 [94]	39° 33	3.8' N	86° 32.1	1' W			4/14/2015
			Township	Se	ect'n	Tnshp	Ran	ge	by Des	sign	Current
Carries	Hall Rd.		Monroe-Gregg	16	6-17	13N	1W		vehicl	es	demolished
Over	Lake Ditch	branch	USGS Topo Map	UTMs	5						
010.	Lano Brion,	Signori	Hall	16	: 53994	4 N:	437939	6	PRIOR	Structure	
SUPERS	STRUCTUR	F FORMS							Name		
			Material concre	ete	9	leer					
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panels Sp	ans S	alear Span			SURVE	YED Structu	ıre
		Design	Connect'n		(f	it/in)			Built		1907
									Snan(s	hahhA (s	
									Demo		1069
									Remo	aenea	1900
(B) Arch	es								Moved	- On	
(=) <u>/</u>	<u></u>	Design	Spans	Clear Spa	an R	lise (ft/ir	n)		То		
filled-spa	andrel arch		1	35					Replac	ed -	1999
									Bv	PC box boa	ms
									By		115
(C) Bean	าร										
<u>& Oth</u>	er Forms	_ .	Snane	Cloar Sna	an I						
		Design	Spans	(ft/in)	"' <u>D</u>	IMENSI	<u>ONS</u>				
				. ,		Church		Chrust			.
						Lenat	ture h (ft/in)	Width	ure (ft/in) \	Road Nidth (ft /in)	Skew
						74		19	()	25/5	
						17		10		2010	
SUBSTR	UCTURE	Ν	laterial concrete	9	ç	9					
Masonry	у Туре	Masonry Finish	Masonry C	lass N	lasonry S	Setting					
	Deciar	ors/Engineero	Buildore								
	Desigi	iers/Engineers	Builder 5	Par la la la							
			Kellener and S	lipner		cont	ractors		_		
								_			

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.

Namo			County			Br #	Lat	itudo		Longi	tudo	_		Last Revised
Morgan	County B	ridae #96	Morgan		55	DI. #	20°	34 5'	N	26° 31	5' W	U	SE	4/3/2015
worga		iluge #30	Taura		55	90	59	J 4 .J	hn	00 JI	.5 ••		sian	Current
			Monroo	ip		0	ect n	121	np	11/	nge		, sign	vehielee
Carries	Lake Ditch	Road	Monroe			9		131	N	IV	V	vehic	les	venicies
Over	Robards Di	tch	USGS T	оро Мар)	UTMs		000	. .	40000		PRIO	<u>R</u> Structure	
			Hall			16	: 540	080	N:	43806	50	Nam	e	
SUPERS	STRUCTUR	<u>E FORMS</u>	Material	steel			4							
(A) Trus	ses				_			Clea	r			SURV	EYED Struct	ure
、 /		Design	Met Con	hod of nect'n	Pan	els Sp	ans	Spar (ft/in	ן ו			Duilt		1895
				neotn				(10111	,			Duiit		
												Span	(s) Added	
												Remo	delled	
												Move	d - On	
(в) <u>Arcn</u>	<u>es</u>	Design	5	Spans	Cle	ear Spa	an	Rise	(ft/in	ו)		То		
						(tt/in)]				Renla	ced -	
										_		Bu		
										_		Бу		
(C) Bean	ns													
<u>& Oth</u>	er Forms	. .	Sn	ane	Clo	ar Sna	n I							
		Design	Op	ans	(ft/in)		DIME	NSI	<u>ONS</u>				
through	girder	riveted plate	1		58/6			St	truct	uro	Struct	uro	Deed	Skow
	•							Le	engt	h (ft/in) Width	(ft/in)	Width (ft./in)
								6	1/4		24/10		23	57°
CUDET)(
Magan		Meesnay Finish	Naterial	concrete	e •		•							
Masonr	утуре	Masonry Finish	Mas	sonry C	lass		ason	ry Set	ting					
	Desigr	ners/Engineers	Buil	ders										
			Chicag	o Bridge	e & Ir	on Co.			fabri	cator				
				4.0		4 04		4						
		Constructio	on His	torv	an	d St	ruc	tura		esc	rintic	n		

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.

<u> A Chicago Bridge & Iron Company Span</u>

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.

<u>The Wallace Bridge (1912-1913)</u>

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

Mana				_							Loot Deviced
Name			County	Br.	# La	titude	Longi	tude		F	Last Revised
Felkins	Bridge		Morgan	55 97	39	° 33.3' N	86° 33	3.3' W			4/3/2015
			Township		Sect'n	Tnshp	Ra	nge	by Desi	gn	Current
Carries	Yale Fergus	son Rd./C.R. 900N	Gregg		18-19	13N	1V	V	vehicle	s ۷	rehicles
Over	Lake Ditch		USGS Topo Map	UT (Ms					24	
			Hall	1 6	6 E: 53	7200 N	1: 43785	520	PRIOR	Structure	
SUPERS	TRUCTUR	E FORMS							Name		
			Material steel		4	Cloar					
(A) <u>Trus</u>	<u>ses</u>	Desian	Method of	Panels	Spans	Span			SURVE	<u>(ED</u> Structu	re
			Connect'n			(ft/in)			Built		1910
pony trus	S	Warren	riveted	5	1	68/4			Span(s)	Added	
									Remode	elled	
(B) <u>Arch</u>	<u>es</u>	Docian	Snans	Clear S	Snan	Riso (ff)	in)		Moved -	On	
		Design	opuno	(ft/i	n)	1136 (10	,		То		
									Replace	ed -	
									Ву		
(C) <u>Bean</u>	<u> 15</u>										
<u>& Oth</u>	<u>er Forms</u>	Design	Spans	Clear S	Span						
			-	(ft/in)		DIMENS	SIONS				
						Struc	cture	Struct	ure R	oad	Skew
						Leng	<mark>th (ft</mark> /in) Width	(ft/in) W	idth (ft./in)	
						71/7		17/7	1	6/8	
SUBSTR	UCTURE			<u></u>		0					
Masonn		Masonry Finish			Masor	9 Nrv Sotting	 ~				
	1960			1035	Widson	ny Settini	1				
	Design	ers/Engineers	Builders								
	E. O. Gilb	ert	Lafayette Engi	neering C	o.	cor	ntractor				
			n								

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	ə l	Longitu	ıde		-	Last Revised
Morgan	County B	ridge #103	Morgan	55 103	39° 31.9	' N 8	86° 30.4	1' W	05	E	4/17/2015
_	-	-	Township	Se	ct'n Tr	nshp	Ran	ge	by Des	ign	Current
Carries	Briarhopper	r Rd.	Gregg	27	13	BN	1W		vehicle	es v	ehicles
Over	Lambs Cree	ek	USGS Topo Map	UTMs						Chrus at size	
		-	Hall	16 E	: 542348	N:	437604	9	Nome	Structure	
SUPERS	TRUCTUR	E FORMS	Material concr	ete	Q				name		
(A) <u>Trus</u> :	<u>ses</u>	Design	Method of Connect'n	Panels Spa	Cle ans Spa (ft/i	ar an in)			SURVE Built	YED Structu	re 1916
									Snan/s		
									Pomod		
									Remou	lelleu	
(B) <u>Arch</u>	<u>es</u>	Docian	Spans	Clear Spa	n Rie	o (ft/in	۰		Moved	- On	
		Design	opano	(ft/in)			, 		То		
									Replac	ed -	
							_		Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>is</u> er Forms	Design	Spans	Clear Spa (ft/in)	n <u>DIN</u>	IENSI	<u>ONS</u>				
through g	girder	with floor-beams	1	30		Struct	ure	Struct	ure F	Poad	Skew
						Length	ו (ft/in)	Width	(ft/in) V	Vidth (ft./in)	
						35		20/7	·	17/10	
SUBSTR		N	laterial								
Masonry	у Туре	Masonry Finish	Masonry C	lass M	asonry Se	etting					
	Desigr	ners/Engineers	Builders								
		-									

The county engineer's March 1916 plans for the W. C. Meredith Free Gravel Road in Gregg township included a "30-foot flattop - 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.

Namo			County		Dr #	Latituda		Longi	tudo			Last Revised
	ridao		Morgan	55	DI. #	20° 32 0'	N	Reo 36		109	SE	4/3/2015
	nuge		Township	55	107 500	59 52.9	- N	00 JU			sian	Current
		10 D 400014	Adams		22-	23 13	snp N	21/	lige V	lug his		vohiolog
Carries	Measel Rd.	/C.R.1000W			22-	23 13	IN	20	V	venic	les	venicies
Over	Lake Ditch			ар		533330	NI-	12776	200	PRIOF	<u>R</u> Structure	
			l iaii		10 E.	555250	IN.	43770	000	Name	•	
SUPERS	STRUCTUR	<u>EFORMS</u>	Material stee	l		4						
(A) <u>Trus</u> :	<u>ses</u>	Design	Method o	f Pan	els Spa	Clea ns Spa (ff/ii	ar n n			SURV	EYED Struct	ure
nony truc		Drott	riveted		1	60/2	'			Built		1900
pony trus	5	Pian	nveled	5		09/3				Span(s) Added	
										Remo	delled	
(D) Arob										Move	d - On	
(D) <u>Arcii</u>	<u>85</u>	Design	Spans	Cle	ar Spar (ft/in)	Rise	ə (ft/in	1)		То		
										Repla	ced -	
										Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ıs</u> er Forms	Design	Spans	Cle (1	ar Span ft/in)	DIM	ENSI	<u>ONS</u>				
						S	Struct .engtl	ure h (ft/in	Struc) Width	ture 1 (ft/in)	Road Width (ft./in)	Skew
						-	70		16/7		15/8	
SUBSTR		Ν	laterial concre	ete		9						
Masonry	у Туре	Masonry Finish	Masonry	Class	Ма	sonry Se	tting					
	Desigr	ners/Engineers	Builders									
			Vincennes Bi	idge C	0.		build	ler				
				<u> </u>								
			η									

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		Longit	ude			Last Revised
Dorsett	Bridge		Morgan	55	110	39° 32.1'	Ν	86° 39.	7' W			4/3/2015
			Township		Sec	t'n Tn	shp	Rar	nge	by De	sign	Current
Carries	McClure Ro	1./C.R. 750N	Adams		29	13	N	2W	'	vehic	les	vehicles
Over	Lake Ditch		USGS Topo Map)	UTMs						Structure	
			Eminence		16 E :	529220	N:	43760	60	Name		
SUPERS	TRUCTUR	E FORMS	Material steel			4				Hann		
(A) <u>Trus</u> :	<u>ses</u>	Design	Method of Connect'n	Pane	els Spa	Clea ns Spa (ft/ii	ar In n)			SURV Built	EYED Struct	ure 1926-1928
pony trus	s	Pratt	bolted	5	1	75				Span(s) Added	
										Remo	delled	
										Move		
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clea	ar Spar (ft/in)	Rise	ə (ft/i	n)		To	1 - On	
										Repla	ced -	
										Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>is</u> er Forms	Design	Spans	Clea (f	ar Span t/in)	DIM	ENS	IONS				
						S	Struc .engt	ture th (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in)	Skew
							76		16/5		15/8	40°
SUBSTR	UCTURE	N	laterial concrete	ż		9]				
Masonry	у Туре	Masonry Finish	Masonry C	lass	Ма	sonry Se	tting]				
						-						
	Desig	ners/Engineers	Builders									
			Vincennes Brid	lae Ca	Э.		con	tractor				
				<u> </u>								
			n									

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.

<u>References</u>

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

<u>Pratt Pony-Truss Bridge</u> (1926/27 -) Associated Engineering Consultants, Inc., Bridge

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.

Maria					_								Loot Dovised
Name			Coun	ty	E	3r. # L	atitu	de	Longi	tude		SE	
Mud Cr	eek Bridge	9	Morga	an	55 [113] 3	9° 35	.0' N	86° 36	5.2' W			4/4/2015
			Towns	ship		Sect'n		Tnshp	Ra	nge	by De	sign	Current
Carries	Anglin Rd./	C.R. #220	Adam	S		11		13N	2V	V	vehic	les	demolished
Over	Mud Creek		USGS	Торо Мар	ι	JTMs							L
••••			Hall		•	16 E: 5	34020) N:	43816	60		<u>K</u> Structure	
SUPERS	STRUCTUR	F FORMS									Name	9	
			Materia	al steel		4		laan					
(A) <u>Trus</u>	<u>ses</u>	Design	м	ethod of	Panel	s Spans		iear nan			SURV	EYED Struct	ture
		Design	Co	onnect'n		e epane	(f	t/in)			Built		1916
pony trus	s	Warren	bc	olted	4	1	59/	4			Span	(s) Added	
											Pomo	dollod	
											Kenit	ueneu	
(B) Arch	es			Snono	Clas	r Enon					Move	d - On	
. ,		Design		Spans	Ciea (1	i Span it/in)	R	ise (π/i	n)		То		
						,					Repla	ced -	1987
					_						Bv	PC box bea	ams
											,		
(C) <u>Bean</u>	ns	1			1								
`´ <u>& Oth</u>	er Forms	Decian	ę	Spans	Clear	r Span	1						
		Design			(ft/	in)		IMENS	IONS				
								Struc	ture	Struct		Dood	Skow
								Leng	th (ft/in) Width	(ft/in)	Width (ft./in)
								60		16/7		15/9	30°
SUBSTR		N	lateria		,		,)]				
Masonr	v Tvpe	Masonry Finish	M	asonry C	lass	Masc	nrv S	Settina					
	, ,,						,						
	Desigr	ners/Engineers	Bu	ilders									
			Vince	ennes Brid	ge Co.			con	tractor				

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.

<u>Surveyed Structure</u> (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.

<u>References</u>

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

<u>Surveyed Structure</u> (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:

Nerver				_							Leat Davised
Name			County	Br. :	# La	titude	Longit	ude	119	SE	
Smart E	Bridge		Morgan	55 [114	.] 39°	° 34.5' N	86° 37	.9' W			4/4/2015
			Township		Sect'n	Tnshp	Rai	nge	by De	sign	Current
Carries	Little Point I	Rd.	Adams		9-10	13N	21	/	vehic	les	demolished
Over	Mud Creek		USGS Topo Map	UTN	ls						
Over			· · ·	16	E:	Ν	:		PRIOF	<u>R</u> Structure	
SUDEDO									Name	•	
<u>SUPERC</u>			Material steel		4						
(A) <u>Trus</u>	<u>ses</u>	Desian	Mathad of	Donala S		Clear			SURV	EYED Struc	ture
		Design	Connect'n	Panels 3	pans	(ft/in)			Built		1891
nony truc	`C			1		97	1		Duiit		
pony true	>>			1		07	-		Span(s) Added	
							-		Remo	delled	
									Moved	I- On	
(B) <u>Arch</u>	<u>es</u>	Desian	Spans	Clear S	pan	Rise (ft/i	in)		То		
				(ft/in)	`			10		
									Repla	ced -	1968
									Ву	CR concret	te slab
(C) <u>Bean</u>	<u>ns</u>										
<u>& Oth</u>	er Forms	Design	Spans	Clear Sp	ban						
		Design	•	(ft/in)		DIMENS	IONS				
						Struc	ture	Struct	ure	Poad	Skow
						Leng	th (ft/in)	Width	(ft/in)	Width (ft./in)
						90				12	0
CUDETE											
<u>30031R</u>		N.	laterial concrete)		9					
Masonry	утуре	Masonry Finish	Masonry C	lass	Mason	ry Setting					
	Desigr	ners/Engineers	Builders								
			Wrought Iron B	ridge Co.		fab	ricator				
			Clem D. Dorset	tt		stor	nework				

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	Long	itude	LICE	Last Revised
Mills Br	ridge		Morgan	55	118	39° 35.7'	N 86° 3	8.6' W	USE	4/4/2015
			Township		Sec	t'n Tnsh	np Ra	ange	by Design	Current
Carries	Horsebarn	Rd./C.R. 1150N	Adams		4	13N	2	W	vehicles	[demolished]
Over	Mill Creek [Ditch	USGS Topo I	Мар	UTMs		,		PRIOR Structu	re
			Eminence		16 E:	530180	N: 4382	560	Name	
SUPERS	STRUCTUR	<u>E FORMS</u>	Material ste	el		4				
(A) Trus	ses			< >		Clear	,		SURVEYED St	ructure
. ,		Design	Connect	of Pan t'n	els Spa	ns Span (ft/in)			Built	1927-1928
pony trus	s	Pratt	riveted	6	1	89			Span(s) Adda	d
									Span(s) Adde	u
									Remodelled	
(B) <u>Arch</u>	<u>es</u>	Decian	Snan	is Cla	ar Snar	D Dico	(ft/in)		Moved - On	
		Design	Opan		(ft/in)	NISE	(1011)		То	
									Replaced -	
									Ву	
(C) <u>Bean</u> & Oth	<u>ns</u> er Forms									
<u></u>		Design	Spans	Cle	ar Spar ft/in)		NSIONS			
					,	C+	turo	Struct		01
						Le	ngth (ft/ii	n) Width	(ft/in) Width (f	ъкеw ít./in)
						91		16/7	15/7	22°
SUBSTR		Ν	laterial cond	rete		9				
Masonry	у Туре	Masonry Finish	Masonr	y Class	Ма	sonry Sett	ing			
							0]		
	Desig	ners/Engineers	Builders	6				-		
	200191		Vincennes I	Bridae C	0.	C	contractor			
					**					
][

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 wingwalls. 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	.# La	titude	Lonait	ude			Last Revised
Morgan	County B	ridge #119	Morgan	55 [1 ⁻	19] 39	34.6' N	86° 39.	.1' W	US	E	4/4/2015
	-	-	Township		Sect'n	Tnshp	Rar	nge	by Des	ign	Current
Carries	Cooney Mil	hon Rd./C.R.1050N	Adams		8	13N	2W	/	vehicl	es [demolished]
Over	Mill Creek		USGS Topo Map	UT	Ms					Structure	
	L		Eminence	1	6 E: 529	9740 N:	43809	00	Namo	Structure	
SUPERS	STRUCTUR	E FORMS	Material steel		4				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			SURVE Built	YED Structu	i re 1926
pony trus	ss	Pratt	riveted	5	1	78			Span(s) Added	
									Remo	lelled	
									Moved	- On	
(B) <u>Arch</u>	<u>ches</u> Design		Spans	Clear (ft/	Span in)	Rise (ft/i	n)		То		
									Replac	ed -	
						_			Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ier Forms</u>	Design	Spans	Clear : (ft/in	Span ı)	DIMENS	<u>IONS</u>				
						Struc Lengt	ture th (ft/in)	Struct Width	ure p (ft/in) \	Road Vidth (ft./in)	Skew
						80		20/6		19/8	
SUBSTR	UCTURE	N	laterial concrete	3		9]				
Masonr	у Туре	Masonry Finish	Masonry C	lass	Mason	ry Setting]				
	Desigr	ners/Engineers	Builders								
			Vincennes Brid	ge Co.		buil	der				

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 centerpanel 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	P,	r# 1-	atitudo		Longit	udo			Last Revised
Morgan	County B	ridge #120	Morgan	55 [1	201 30	9° 31 4'	N	86° 16	6' W	09	SE	4/17/2015
morgan			Townshin	00 [1	Sect'n	Tne	shn	Rar		by De	sian	Current
Corrigo	Dia Dood D		Harrison		35	131	N N	2F	ige	vohio		demolished
Carries		u./U.R. #1/4	LISCS Tono Man				•			verno	les	demolished
Over	Crooked Cr	reek	Mooresville Fas	+ 1	6 E 56	2007	N۰	43754	00	PRIO	<u>R</u> Structure	
						2007		+0104		Nam	e	
<u>SUPERC</u>	SIRUCIUR		Material concre	ete	9							
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clea Spai (ft/in	n n n			SURV	EYED Struct	ure 1905
						(1011)	-,			Built		
										Span	s) Added	
						_				Remo	delled	
(B) Arch	6 5									Move	d - On	
(B) <u>Aion</u>	<u></u>	Design	Spans	Clear (ff/	Span /in)	Rise	e (ft/i	n)		То		
filled-spa	ndrel arch		1	50	,					Repla	ced -	1985
	ed-spandrel arch									By	timber bear	n
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> er Forms	Design	Spans	Clear (ft/ir	Span ı)	DIME	ENS	IONS				
						S L	truc [.] engt	ture th (ft/in)	Struct Width	ture (ft/in)	Road Width (ft./in)	Skew
						5	52		18/6		15/6	
SUBSTR		N	laterial concrete	;		9]				
Masonr	у Туре	Masonry Finish	Masonry Cl	ass	Maso	nry Set	ting	-				
	Desigr	ners/Engineers	Builders									
			A. Ferguson				con	tractor				

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.

Namo			County	B	r# 1a	titudo	Lon	aitudo			Last Revised
Morgan	County B	ridgo #122	Morgan	55 [1	221 20	° 32 1'	LOII		USE	4	4/17/2015
worgar	County D		Tourschin	55 [1	Soot'n	JZ. I			by Design	Ċ	Current
			Harrison		25	12N	рг	tange o⊏	by Design		maliahad
Carries	Banta Rd.				20	IJN		20	vehicles	de	emolisnea
Over	Crooked Cr	eek	USGS Topo Map		ſMs				PRIOR Strue	cture	
					6 E:		N:		Name		
SUPERS	STRUCTURI	<u>E FORMS</u>	Material								
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panels	Spans	Clear Span			SURVEYED	Structur	e
			Connectin		1	(tt/in)			Built	[1901-1902
									Span(s) Ad	ded	
									Remodelle	k k	
									Moved - Or	, [
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear (ft/	Span ⁄in)	Rise (ft/in)		То	•	
									Replaced -	•	1975
									By PC b	ox beam	S
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> er Forms	Design	Spans	Clear (ft/ir	Span ı)	DIMEN	ISIONS	<u>3</u>			
						Str Ler	ucture ngth (ft/	Strue /in) Widt	cture Road h (ft/in) Width	ו (ft./in)	Skew
SUBSTR	UCTURE			2		9					
Masonr	v Type	Masonry Finish	Masonry C	, lass	Masor	urv Setti	na				
	, , , , , , , , , , , , , , , , , ,	,		1400	1	li y oottii	"g	-			
	Design	ners/Engineers	Builders								
	John E. Jolliffe		American Bridg	ge Co.		S	uperstru	ucture			
			M. W. Dawson			а	butmen	nts			

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. # La	titude Longit	tude		Last Revised
Morgan	County B	Bridge #123	Morgan	55 [123] 39	° 31.6' N 86° 16	.1' W	USE	4/17/2015
_	-	-	Township	Sect'n	Tnshp Ra	nge	by Design	Current
Carries	Waverly Ro	1.	Harrison	35-36	13N 2E		vehicles	demolished
Over	Crooked Cr	reek	USGS Topo Map	UTMs				
				16 E:	N:		Namo]
SUPERS	STRUCTUR	E FORMS	Material concre	ete 9			Name	
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels Spans	Clear Span (ft/in)		<u>SURVEYED</u> Struct Built	ure 1905
							Span(s) Added	
							Remodelled	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear Span (ft/in)	Rise (ft/in)		To	
filled-spa	andrel arch		1	50			Replaced -	1968
							By PC box bea	ims
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear Span (ft/in)	DIMENSIONS			
					Structure Length (ft/in)	Structu Width	ure Road (ft/in) Width (ft./in)	Skew
					52	18/6	15/6	
SUBSTR	<u>UCTURE</u>	N	laterial concrete	9	9			
Masonr	у Туре	Masonry Finish	Masonry C	lass Masor	nry Setting			
	Desig	ners/Engineers	Builders					
			A. Ferguson		contractor			

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. #	Latit	tude	Longitu	ude		26	Last Revised
Waverl	y Bridge		Morgan	55	[124]	0	Ν	0	W			3/11/2015
			Township		Se	ct'n	Tnshp	Ran	ge	by De	sign	Current
Carries	old State Re	oute #144	Harrison-M	adison	23		13N	2E		vehic	les	demolished
Over	White River	, W. Fork	USGS Topo	Мар	UTMs						Structure	
			Mooresville	e East	16 E	: 5622	2320 N:	437893	80	Name		
SUPERS	STRUCTUR	E FORMS	Material C	oncrete		9				Turre		
(A) Trus	ses		•			-	Clear			SURV	EYED Struc	ture
		Design	Methoo	tof Par ct'n	nels Spa	ans	Span (ft/in)			Ruil4	<u></u> 0	1911-1912
							()			Built	a) Addad	
										Span(s) Added	
										Remo	delled	
(B) Arch	es		 			I	D . (6)			Moved	d - On	
(<u>-)</u>		Design	Spa	ins C	(ft/in)	n	Rise (ft/i	n)		То		
filled-spa	andrel arch		5		. ,					Repla	ced -	[1969]
										Ву	KC & C I-b	eam
(C) <u>Bean</u>	<u>is</u> or Formo											
	er rorms	Design	Spans	s Cl	ear Spa	n	DIMENS	IONS				
					(1011)				•			
							Struc Lengt	ture th (ft/in)	Struct	ure (ft/in)	Road Width (ft./in	Skew
							450				20	30°
SUBSTR	UCTURE	Λ	latorial con	ocrete			9]				
Masonr	v Tvpe	Masonry Finish	Mason	rv Class	s Ma	asonry	v Setting					
	,	,				y	, coung					
	Desigr	ners/Engineers	Builder	rs								
	Daniel B. Luten		National C	oncrete	Co.		con	tractor				

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

<u>Covered Bridge</u> (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.

Nome			Ocumentes		D., #	Lat	- ام د ما		Laws					Last Rovised
Consta	nd Arek		County	66	Br. #	Lat		NI	LON			US	SE	4/22/2015
Copeia	nd Arch		Morgan	55	129	39	31.6	N	86.7	20.1	VV			Current
			Township		Sec	ct'n	Tns	shp	R	lange		by De	sign	Current
Carries	Rinker Rd.		Clay		29		131	N	2	2E		vehic	les	vehicles
Over	White River	r, branch	USGS Topo Map		UTMs			_			_	PRIOF	Structure	
			Mooresville Eas	t	16 E:	556	960	N:	4375	5772		Name		
SUPERS	STRUCTUR	<u>E FORMS</u>	Material concre	ete		9						ittaint		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Pan	els Spa	ins	Clea Spai (ft/in	n n 1)				SURV Built	EYED Struct	ture 1911
												Span(s) Added	
												Romo	dollod	
(B) <u>Arch</u>	<u>es</u>	Docian	Snans	Cle	ar Snai	n	Dico	/f+/ii	n)			Moved	l - On	
		Design	Opuno	010	(ft/in)	•	1/196		,			То		
filled-spa	andrel arch		1	35								Repla	ced -	
												Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Cle (1	ar Spar ft/in)	ו ו	DIME	ENSI	IONS	-				
							S L	truc engt	ture th (ft/i	Si in) W	truct /idth	ure (ft/in)	Road Width (ft./in	Skew)
							3	88		18	8/10		16/6	33°
SUBSTR	UCTURE	Ν	laterial concrete	•			9]				<u></u>	
Masonr	у Туре	Masonry Finish	Masonry C	lass	Ма	Isoni	ry Set	ting	-					
	Desigr	Builders												
		_	Earl O. Gilbert					build	der					

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.

Nerre			a		D "	1						Last Povisad
			County		Br. #	Latitu		Longit	tude	U	SE	1/3/2015
Buck S	tone Bridg	le	Morgan	55	[135]	39° 37	(.3' N	86° 15	.3' W		- <u>-</u>	4/3/2013
			Township		Sec	:ťn	Tnshp	Rai	nge	by De	sign	Current
Carries	Mann Rd./C	C.R. #53	Madison		25		14N	2E		vehic	les	demolished
Over	Goose Cree	ek	USGS Topo Ma	р	UTMs						0.01	
					16 E:		N:	:			<u>K</u> Structure	
SUPERS	TRUCTUR	E FORMS								Name)	
			Material steel			4	loor					
(A) <u>Trus</u>	<u>ses</u>	Desian	Method of	Pane	els Spa	ns S	Span			SURV	EYED Struct	ure
			Connect'n			(1	ft/in)			Built		1927-1928
pony trus	S	Warren		4	1	56				Span	s) Added	
										Remo	delled	
(B) <u>Arch</u>	es_	Decian	Snane	Clo	ar Snai	n E		m)		Move	d - On	
		Design	Opans	Ole	(ft/in)			n)		То		
										Repla	ced -	1984
										By	CR concret	e slab
(C) <u>Bean</u>	<u>15</u>)[][
<u>& Oth</u>	<u>er Forms</u>	Dosign	Spans	Clea	ar Spar	n ⊥ _						
		Design		(f	t/in)		DIMENS	<u>IONS</u>				
							Struc	ture	Struct	ure	Pood	Skow
							Lengt	th (ft/in)) Width	(ft/in)	Width (ft./in)
							57		19/3		17/8	
SUBSTR				to			0]				
Masonr		Masonry Finish			Ma	0000	9 Sotting					
Mason	утуре		Masonry	51055		ISOTITY	Setting					
	Desigr	Builders										
			Vincennes Bri	dge Co	0.		buil	der				
				-								
							I					

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. #	Latitu	ıde	Loi	ngitude				Last Revised
Mitchel	l's Ford/M	ooresville Brdge	Morgan		55	[137]	0	N	°	W	/ L	035		3/11/2015
			Townshi	р		Sec	ťn	Tnshp		Range	by	Design	า	Current
Carries	Bridge St.,	Mooresville	Brown			36		14N		1E	ve	hicles		demolished
Over	White Lick	Creek. E. Fork	USGS To	ро Мар)	UTMs								
						16 E :		1	N:			<u>IUR</u> 50	ructure	
SUPER	STRUCTUR	E FORMS	Motorial									ame		
(A) <u>Trus</u>	<u>ses</u>	Design	Material Meth Coni	od of nect'n	Pan	els Spa	ns S (1	Clear Span ft/in)			SU Bi	RVEYE uilt	ED Struc	ture
through-	truss	Pratt	pinne	ed	6	1					Sp	an(s) A	Added	
											Re	model	led	
											Mo	wood	O n	
(B) <u>Arch</u>	Arches Design		S	pans	Cle	ear Spar (ft/in)	I F	Rise (ft	/in)			To		
]	Re	placed	l -	1974
												By CF	PC I-bear	ns
											_			
(C) <u>Bear</u> <u>& Oth</u>	n <u>s</u> ier Forms	Design	Spa	ans	Cle (ear Spar ft/in)		DIMEN	SION	<u>S</u>				
								Stru Leng	cture gth (f	e Stru t/in) Wid	cture th (ft/i	n) Wid	ad dth (ft./in	Skew)
SUBSTR		N	laterial											
Masonr	у Туре	Masonry Finish	Mas	onry C	lass	Ма	sonry	Settin	g					
	Designers/Engineers			lers										
		-												
											•			

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	В	8r. # L	atitude	Long	itude		SE	Last Revised
Moores	ville Bridg	e	Morgan	55 [1	139] 3	9° 36.5' N	l 86° 23	3.5' W			4/2/2015
			Township		Sect'r	n Tnshp	Ra	inge	by De	sign	Current
Carries	Greencastle	e Rd/CR 1300N	Brown		35	14N	16	Ξ	vehic	es	demolished
Over	White Lick (Creek	USGS Topo Map	U	TMs						
			Mooresville We	st 1	6 E: 5	52767	N: 43849	998	Nom	<u>structure</u>	
SUPERS	STRUCTUR	E FORMS	Meterial Wroug	uht iron	2				Name		
			waterial wroug		2	Clear					
(A) <u>Irus</u>	<u>ses</u>	Design	Method of	Panels	s Spans	s Span			SURVI	<u>= Y ED</u> Struc	ture
		(Connect'n			(ft/in)			Built		1884
through-t	russ	Pratt	pinned		2	50			Span(s) Added	
					_	_			Remo	delled	
									Mover	I- On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear	r Span	Rise (ft	/in)		То		
				(fi	t/in)				Denle		1059
						_			Repla	cea -	1958
									Ву	cont I-bean	n
(C) Boon	20										
& Oth	er Forms		•	~	•	_					
		Design	Spans	Clear (ft/i	r Span in)	DIMEN	<u>SIONS</u>				
				(,	O.t		C true of			
						Len	gth (ft/ir) Width	ure (ft/in)	Road Width (ft./in	SKew
						100			. ,		
0110077		L									
SUBSTR		N	laterial								
Masonr	уТуре	Masonry Finish	Masonry C	lass	Maso	onry Settin	g				
	Designers/Engineers		Builders								
			Indianapolis Br	idge Co	Э.	su	perstruc	cture			
			Schweitzer & S	pence		su	bstructu	ire			

[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.

<u>References</u>

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	E	Br. # L	atitude	Longit	tude	211	F	Last Revised
Joppa I	Bridge		Morgan	55 [[142] 3	9° 37.5' N	86° 25	.8' W	03		4/2/2015
			Township		Sect'n	Tnshp	Rai	nge	by Des	ign	Current
Carries	Hammer Ro	d./C.R. 25W	Monroe		28	14N	1E		vehicle	es	demolished
Over	McCracken	Creek	USGS Topo Map	<u> </u>	JTMs _					Structure	
			Plainfield	·	16 E: 54	48790 N	I: 43865	70	Name	Structure	
SUPERS	STRUCTUR	E FORMS	Matorial steel		4				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panel	ls Spans	Clear Span			SURVE	YED Struct	ure
			Connect'n			(fṫ/in)	_		Built		1927
pony trus	s	Pratt	riveted	6	1	90			Span(s) Added	
									Remod	, lelled	
									Mayad	0	
(B) <u>Arch</u>	ches Design		Spans	Clea	r Span	Rise (ft/	'n)		To	- 011	
				, 	10111)				Replac	ed -	1994
									By		slab
				-					By		5 5100
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> er Forms	Design	Spans	Clea (ft/	r Span ⁄in)	DIMENS	BIONS				
						Struc Leng	cture jth (ft/in)	Struct Width	ure F (ft/in) V	Road Vidth (ft./in)	Skew
						92		17	•	15/9	
SUBSTR		N	laterial concrete	9		9]				
Masonr	у Туре	Masonry Finish	Masonry C	lass	Maso	onry Setting	 a				
						<u> </u>					
	Desigr	Builders									
		U U	Vincennes Brid	ge Co		bui	lder				
				-							
					_						

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

<u>Previous Structure</u> (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.

<u>Pratt Pony-Truss Span</u> (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	# la	titude	Long	itude			Last Revised
Morgan	County B	Bridae #143	Morgan	55 [14	31 39	° 37.2'	N 86° 20	6.5' W	105	SE	4/21/2015
			Township][][•]	Sect'n	Tnsh	p Ra	ange	by De	sign	Current
Carries	Hamer Rd./	/C.R.1350N/#252	Monroe		29	14N	11	E	vehic	les	/ehicles
Over	McCracken	Creek	USGS Topo Map	UT	Ms						
0101	moordoken		Mooresville Wes	st 16	E: 54	7634	N: 4386	068	PRIOR	<u>R</u> Structure	
SUPERS	STRUCTUR	E FORMS			0				Name		
(A) <u>Trus</u> :	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			<u>SURVI</u> Built	EYED Structu	ire 1907
									Span(s) Added	
									Remo	delled	
									Moyod	L. On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear S ft/i	Span n)	Rise (f	ft/in)		To		
filled-spa	andrel arch		1	60					Replac	ced -	2000
									Ву	PC box bea	ms
								I			
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> er Forms	Design	Spans	Clear S (ft/in)	Span)	DIMEN	<u>ISIONS</u>				
						Stri Len	ucture 1gth (ft/ir	Struct	ure (ft/in)	Road Width (ft./in)	Skew
						92		18/8		16	
SUBSTR		N	laterial concrete	;		9					
Masonry	у Туре	Masonry Finish	Masonry C	ass	Masor	nry Settir	ng				
						-	-]			
	Desig	ners/Engineers	Builders								
			Kelleher & Slip	ner		C	ontractor	-			
			· · · · ·								

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.

Maria			•								Loot Dovigod
Name			County	E	Br. # L	atitude	Longit	ude	USF		
Burnet	's/Lambs	Creek Bridge	Morgan	55 1	146 39	9° 25.5' N	86° 28.	5' W	UUL	Ľ	4/2015
			Township		Sect'n	Tnshp	Ran	ge	by Design	C	urrent
Carries	Old S.R. #6	7/C.R. #98	Jefferson		1	11N	1W		vehicles	ve	hicles
Over	Burnett/Lan	nbs Creek	USGS Topo M	ap L	JTMs						
			Martinsville	·	16 E: 54	45180	1: 436372	20	PRIOR Struc	ture	
SUPERS	STRUCTUR	E FORMS		ught iror					Name		
				bugnt iror	ıj Z	Clear					
(A) <u>Trus</u>	<u>ses</u>	Design	Method o	f Panel	ls Spans	Span			SURVEYED :	Structure	9
			Connect'	n		(ft/in)	_		Built	1	893
through t	truss	Pratt	pinned	5	1	78/10			Span(s) Add	led	
									Remodelled	Ē	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clea	r Span	Rise (ff	/in)				
		Design		(1	ft/in)		,		10		
									Replaced -		
									Ву		
									L		
(C) <u>Bean</u>	<u>ns</u>										
<u>& Oth</u>	ier Forms	Desian	Spans	Clea	r Span						
				(ft/	/in)		510115				
						Stru	cture	Struct	ure Road		Skew
						Leng	gth (ft/in)	Width	(ft/in) Width	(ft./in)	
						86		16/6	15/8		
SUBSTR	RUCTURE	N	latorial stone	concret	ρ	•					
Masonr	v Type	Masonry Finish	Masonry	Class	Maso	nrv Settin	a				
	J · J P •	,		01000			9				
	Desigr	ners/Engineers	Builders								
			Wrought Iron	Bridge (Co.	fab	oricator				

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	# la	titudo	Longit	udo			Last Revised
Morgan	County B	ridae #147	Morgan	55 14	7 39°	24 1' N	86° 31	2' W	US	SE	4/4/2015
	-	J	Townshin		Sect'n	Tnshp	Rar	nde	by Des	sign	Current
Carries		7/C R 1805	Jefferson		9	11N	1W	/	vehicl		ehicles
Over	Durkhart Cr	nc.it. 1003	USGS Topo Map	ШТ	'Me				Verner		
Over	Burkhart Cr	eek	Paragon	1 6	6 E: 541	089 N	43612	30	PRIOR	Structure	
SUDEDS	TDUCTUD								Name		
<u>JUPLIN</u>			Material steel		4						
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panels	Spans	Clear Span			SURVE	YED Structu	re
		Deergin	Connect'n			(ft/in)			Built		1921-1922
pony trus	S	Warren	riveted	4	1	48			Span(s	s) Added	
									Remo	delled	
									Maxad	0	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear	Span	Rise (ft/i	n)		woved	- On	
		Doolgii	•	(ft/i	in)				10		
									Replac	ed -	
									Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>is</u> er Forms		0		.						
		Design	Spans	(ft/in))	DIMENS	<u>IONS</u>				
				•	-	Struc	turo	Struct		Deed	Skow
						Leng	th (ft/in)	Width	(ft/in)	Nidth (ft./in)	Skew
						51		21		19/2	30°
SUBSTR		N	latorial concrete	2	I]				
Masonr	y Type	Masonry Finish	Masonry C	ass	Mason	rv Settina					
	, ,,		,			. ,					
			Duildana								
	Design	iers/Engineers	Builders								
	state highway commission					con	tractor				

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. # La	titude	Lonait	ude			Last Revised
Morgan	County B	ridge #148	Morgan	55	[148] 39	° 23.6' N	°86 34.	7' W	US	5E	4/4/2015
	•	•	Township][]	Sect'n	Tnshp	Ran	ige	by Des	sign	Current
Carries	old S.R. #6 [.]	7/C.R. #280	Ray		13	11N	2W		vehicl	es	demolished
Over	Fall Creek		USGS Topo	Мар	UTMs					Chrusoftune	
			Paragon		16 E: 53	6180 N	436030	00	Namo	Structure	
SUPERS	TRUCTUR	E FORMS	Material Ste	el	4				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method Connect	of Pane	els Spans	Clear Span (ft/in)			SURVE Built	YED Struct	ure 1927-1928
pony trus	S	Warren	riveted	4	1	48			Span(s	s) Added	
									Remo	delled	
									Moved	- On	
(B) <u>Arch</u>	<u>es</u>	Design	Span	is Clea	ar Span (ft/in)	Rise (ft/i	n)		То		
									Replac	ed -	2002
							_		Ву	I-beam	
(C) <u>Bean</u> <u>& Oth</u>	<u>ıs</u> er Forms	Design	Spans	Clea (f	ar Span t/in)	DIMENS	IONS				
						Struc Lengt	ture th (ft/in)	Struct Width	ure (ft/in) \	Road Nidth (ft./in)	Skew
						49		20/7		19/2	35°
SUBSTR		Ν	laterial cond	rete		9]				
Masonr	у Туре	Masonry Finish	Masonr	y Class	Maso	nry Setting]				
	Desigr	ners/Engineers	Builders	\$							
	state highway commission			Vincennes Bridge Co.							

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. #	Latitu	de	Longi	tude			Last Revised
Morgar	County B	ridge #150	Morgan	55	5 150	39° 22	2.3' N	86° 36	6.6' W	03)E	4/22/2015
			Township	,	See	ct'n	Tnshp	Ra	nge	by Des	sign	Current
Carries	Lingle Rd.		Ray		22	-23	11N	2V	V	vehicl	es V	rehicles
Over	White River	r, branch	USGS Topo	Мар	UTMs						Structure	
					16 E	:	Ν	:		Namo	Siluciule	
SUPER:	STRUCTUR	E FORMS		oncrete		9				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method	l of Pa	nels Spa	ans S (1	lear pan ft/in)			SURVE Built	EYED Structu	re c.1940
]		Span(s	s) Added	
										Remo	delled	
										Moved	0n	
(B) <u>Arch</u>	<u>es</u>	Design	Spa	ns C	lear Spa (ft/in)	n R	lise (ft/	in)		To		
										Replac	ed -	
										Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	s C	lear Spai (ft/in)	ⁿ <u>D</u>	IMENS	IONS				
T-beam			1	40			Struc Leng	ture: th (ft/in	Struct) Width	ure (ft/in)	Road Width (ft./in)	Skew
							43		27/2		24/2	30°
SUBSTR	NUCTURE	Ν	laterial con	crete		 	9]				
Masonr	у Туре	Masonry Finish	Mason	ry Clas	s Ma	asonry	Setting	J				
	Desigr	ners/Engineers	Builder	S								

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	В	r.#La	titude	Long	litude			Last Revised
Morgan	County B	ridge #161	Morgan	55 16	61 39	° 22.3'	N 86° 2	8.7' W		E	4/21/2015
Ŭ		Ū	Township		Sect'n	Tnshp	ר R	ange	by Des	ign	Current
Carries	Old S.R. #3	7/C.R. #270	Washington		24	11N	1	W	vehicle	es	closed
Over	Little Indian	Creek	USGS Topo Map	U U	TMs					(
010.			Hindustan	16	6 E: 54	4780	N: 4357	760	PRIOR	Structure	
SUPERS	TRUCTUR	E FORMS							Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			SURVE Built	YED Struct	ure 1921-1922
									Span(s) Added	
									Remod	lelled	
									Moved	- On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear (ft	Span /in)	Rise (f	ť/in)		То		
filled-spa	ndrel arch		1	65					Replac	ed -	
									Ву		
									· · · ·		
(C) <u>Bean</u> <u>& Oth</u>	<u>ıs</u> er Forms	Design	Spans	Clear (ft/ir	Span ı)	DIMEN	ISIONS				
						Strเ Len	ucture gth (ft/i	Struct n) Width	ure F (ft/in) V	Road Vidth (ft./in)	Skew
						104	1	22/6	·	19/4	34°
SUBSTR		N	latorial			•					
Masonr	у Туре	Masonry Finish	Masonry C	lass	Maso	nry Settir	ng				
] []	2	•	1			
	Desiar	ners/Engineers	Builders								
	state high	way commission	E. C. Wright				ontracto	r			
	J										
			л								

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.

<u>References</u>

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. 1I1 and Public Hearing."

Name			County	E	Br. #	Latitude	•	Longi	tude		SE .	Last Revised
Stine's	Mill Bridge	9	Morgan	55 [162]	39° 28.6'	N	86° 22	2.1' W			4/23/2015
			Township		Sect	'n Tn	shp	Ra	nge	by De	sign	Current
Carries	Old State R	oute #37	Washington		13	12	N	1E		vehic	les	demolished
Over	Clear Creek	{	USGS Topo Map	ι ι	JTMs							L
		-	Соре	•	16 E:	553940	N:	43695	520	PRIOR	<u>K</u> Structure	
SUPERS	TRUCTUR	E FORMS								Name)	
· • · •			waterial concre	ele			ar					
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panel	s Span	is Spa	in			SURV	EYED Struct	ture
		-	Connect'n	1		(ft/i	n)			Built		1924-1925
										Span(s) Added	
										Remo	delled	
										Μονο	l - On	
(B) <u>Arch</u>	<u>es</u>	Desian	Spans	Clea	r Span	Ris	e (ft/ir	n)				
		g	-	(1	ft/in)		`	<u> </u>				4000
										Repla	ced -	1992
										Ву	CPC box b	eams
(C) <u>Bean</u> & Oth	<u>IS</u> er Forms											
		Design	Spans	Clear	r Span	DIM	ENSI	ONS				
Theem			0	(IU)	111)							
I-beam			3 、	34		_	Struct	ture	Struct	ure (ft/in)	Road	Skew
								יוויטוו)		(ועווו))
							111		22/8		19/2	
<u>SUBSTR</u>		N	laterial concrete	;		9						
Masonry	у Туре	Masonry Finish	Masonry C	lass	Mas	sonry Se	tting	1				
	Design	ers/Engineers	Builders									
	state high	way commission	Robert H King				contractor					
	State High		Tobort H. King				0011					

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.

<u>References</u>

<u>Prior County Structure</u> 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. i	# Lat	itude	Longitu	ude	LISE		Last Revised
Stotts (Creek/Excl	nange Bridge	Morgan	55 [163	8] 39°	29.8' N	86° 19.	7' W	USE		4/22/2015
			Township		Sect'n	Tnshp	Ran	ge	by Design	(Current
Carries	New Harmo	ony Rd./C.R. 475N	Green		8	12N	2E		vehicles	de	emolished
Over	Stotts Cree	k	USGS Topo Map	UTN	ls					cturo	
			Cope	16	E: 557	'430 N:	437222	20	<u>PRIOR</u> Siru Namo	clure	
SUPER:	STRUCTUR	E FORMS	Material concre	ete	9				INAILIE		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panels S	pans	Clear Span			SURVEYED	<u>Structur</u>	e
		.	Connect'n		-	(fṫ/in)			Built	ŀ	1910-1911
									Span(s) Ad	lded	
									Remodelle	d	
									Moved - O	n	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear S (ft/in	pan)	Rise (ft/i	n)		То	·•	
filled-spa	andrel arch		2	78					Replaced -		
									Ву		
								l			
(C) <u>Bean</u> <u>& Oth</u>	n <u>s</u> er Forms	Design	Spans	Clear Sı (ft/in)	oan	<u>DIMENSI</u>	IONS				
						Struct Lengt	ture :h (ft/in)	Struct Width	ure Roac (ft/in) Widt	l h (ft./in)	Skew
						159		21/8	19		
SUBSTR	UCTURE		Material concrete	9	I	9					
Masonr	у Туре	Masonry Finish	Masonry C	lass	Mason	ry Setting	1				
	Desigr	ners/Engineers	Builders								
			E. O. Gilbert			cont	tractor				

[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.

<u>Concrete Arch</u> (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.

<u>References</u>

[<u>Covered Bridge</u> (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.

<u>Concrete Arch</u> (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. #	Lat	itude		Longi	tude			Last Revised
Morgan	County B	ridge #166	Morgan	55	166	39°	33.0'	N	86° 16	.0' W			4/21/2015
			Township		See	ct'n	Tns	hp	Ra	nge	by De	sign	Current
Carries	Old State R	oute #37	Harrison		24		13N	1	2E		vehic	les	vehicles
Over	Bluff Creek		USGS Topo	Мар	UTMs							Structuro	
			Mooresville	e East	16 E	: 563	120	N:	43788	20	Nam		
SUPERS	STRUCTURI	E FORMS	Material C	oncrete		9					Nam		
(A) <u>Trus</u>	<u>ses</u>	Design	Methoo	l of Pan ct'n	els Spa	ans	Clea Spar (ft/in	r า)			<u>SURV</u> Built	EYED Struct	ure 1924-1925
											Span	s) Added	
											Remo	delled	
											Maria		
(B) <u>Arch</u>	<u>es</u>	Design	Spa	ns Cle	ear Spa (ft/in)	n	Rise	(ft/in	I)		To	u - On	
											Repla	ced -	
											Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Span	s Cle	ear Spai (ft/in)	n	DIME	ENSI	<u>ons</u>				
slab			2	18/6			St	truct	ure h (ft/in)	Struc	ture	Road	Skew
							3	7		36		26)
										00		20	
SUBSIR		N	laterial COP	crete			9						
Masonr	утуре		Mason	ry Class	Ma	ason	ry Set	ting					
	Design	ers/Engineers	Builder	rs									
	state highway commission			W. H. Grammer & Son				contractor					

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)

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. #	Latitu	de L	ongitu	de			Last Revised
Morgan	County B	Bridge #173	Morgan	55 [173]	39° 33	.1' N 8	6° 22.2	2' W	05	5E	4/24/2015
	-	-	Township	S	ect'n T	Tnshp	Rang	je	by Des	sign	Current
Carries	Country Clu	ub Rd.	Clay	2	4 [·]	13N	2E		vehicl	es	demolished
Over	Monical Bra	anch	USGS Topo Map	UTM	6					Ctructure	
			Mooresville Eas	t 16	E: 554130	0 N: 4	37820	0	Namo	Structure	
SUPERS	STRUCTUR	E FORMS	Material concre	ete	9				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels Sp	C bans S (f	lear pan t/in)			SURVE Built	EYED Struct	ure 1907-1908
									Span(s) Added	
									Remo	delled	
									Moved	l - On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear Sp (ft/in)	an R	ise (ft/in)			То		
filled-spa	andrel arch		1	35					Replac	ced -	1995
									Ву	PC box bea	ms
(C) <u>Bean</u> <u>& Oth</u>	<u>ler Forms</u>	Design	Spans	Clear Spa (ft/in)	an DI	IMENSIO	<u>NS</u>				
						Structu Length	ı re (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in)	Skew
						40		18/4		15/5	45°
SUBSTR	UCTURE	N	laterial concrete	;	g)					
Masonr	у Туре	Masonry Finish	Masonry Cl	lass N	lasonry S	Setting					
	Desiar	ners/Engineers	Builders								
	9.		N. W. Gilbert			contra	actor				

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				Coun	ty		Br. #	Lat	itude		Lon	gitud	e			Last Revised
Morgan	County B	Brid	ge #174	Morga	an	55	174	39°	33.4'	Ν	86° 2	22.6'	W	0	SE	4/21/2015
_	-		-	Town	ship		Se	ct'n	Tns	shp	F	Range	•	by De	sign	Current
Carries	Old State R	Rout	e #67	Clay			24	ŀ	131	N	1	1E		vehic	les	vehicles
Over	Monical Bra	anch	<u>ו</u>	USGS	Торо Мар		UTMs									
				Moore	esville East	t	16 E	: 554	005	N:	437	8433		Nam	<u>x</u> Structure	
SUPERS	STRUCTUR	E F	ORMS	Natori	al concre	ete		9						Nam		
(A) <u>Trus</u>	<u>ses</u>	De	sign	M	ethod of onnect'n	Pane	els Sp	ans	Clea Spai (ft/in	ır n ı)				<u>SURV</u> Built	EYED Struc	cture 1937
														Span	(s) Added	
														Remo	delled	
														Marrie		
(B) <u>Arch</u>	<u>es</u>	I	Design		Spans	Cle	ar Spa (ft/in)	In	Rise	e (ft/iı	n)			To		
filled-spa	andrel arch	ι	under fill		1	35	. ,							Repla	ced -	
														Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	De	esign	:	Spans	Cle (f	ar Spa t/in)	n	DIME	ENSI	IONS	<u>)</u>				
									S L	truct engt	ture th (ft/	S (in) V	Struct Vidth	ure (ft/in)	Road Width (ft./ii	Skew n)
									3	38		5	58		42	30°
SUBSTR			м	ateria	1]					
Masonr	у Туре	N	lasonry Finish	M	lasonry Cl	ass	М	ason	ry Set	ting]					
	Desiar	ners	s/Engineers	Βι	uilders											
	state high	commission	James A. Crosbie					contractor								
	, ,															

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 #	Lat	itudo		lonc	nitud				Last Revised
Morgan	County B	ridae #188	Morgan	1	55	188	39°	22.9'	N 8	86° 3	35.9'	w	09	SE	4/23/2015
	-		Townsh	nin		Sec	ct'n	Tns	hp	R	Rande	•	by De	sign	Current
Carries	Old State R	oute #67	Ray	iip		23		11N		2	2W		vehic	les	vehicles
Over	Hodgos Dite	buic #01	USGS T	оро Мар		UTMs		[[Vorno		
Over	nouges Ditt					16 E	:		N:				PRIOF	<u>R</u> Structure	•
SUPERS	TRUCTUR	F FORMS							L	L			Name	•	
			Material	concre	ete		9	Close	-						
(A) <u>Trus</u>	<u>ses</u>	Design	Met	hod of	Pane	els Spa	ins	Span					SURV	EYED Stru	icture
		-	Cor	nnect'n				(ft/in))				Built		1939-1940
													Span(s) Added	
													Remo	delled	
													Moved	l- On	
(B) <u>Arch</u>	Arches Design			Spans	Cle	ar Spa (ft/in)	n	Rise	(ft/in	ı)			То		
						(1011)							Repla	ced -	
													Bv		
													,		
(C) <u>Bean</u> <u>& Oth</u>	<u>ıs</u> er Forms	Design	Sr	oans	Cle (1	ar Spai ft/in)	n	DIME	NSI	ONS	<u>i</u>				
T-beam			1	3	30			St	ruct	ure	S	Struct	ure	Road	Skew
								Le	ngth	h (ft/i	in) V	Vidth	(ft/in)	Width (ft./	in)
								32	2		2	22/8		38	45°
SUBSTR		Ν	laterial	concrete	ć		•	9							
Masonry	у Туре	Masonry Finish	Ma	sonry C	lass	Ма	asoni	ry Sett	ing						
								-	•		٦				
	Docian	ore/Engineers	Ruil	ders											
	etato high								contr	racto	vr				
	state nigh		A. L. D						conti	acio	Л		_		

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.

<u>Surveyed T-beam Structure</u> (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

<u>Prior County Structure</u> (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. #	Latitu	ide L	_ongitu	ıde			Last Revised
Patrick	Arch		Morgan	55 [189]	39° 23	3.1' <mark>N</mark> 8	36° 33.4	4' W		· L	4/24/2015
			Township	S	ect'n	Tnshp	Rang	ge	by Des	sign	Current
Carries	Paragon Ro	d./C.R. 300S/#15	Ray	1	8-19	11N	1W		vehicl	es	demolished
Over	White River	W Fork creek	USGS Topo Map	UTM	· .						
0101		, W. FOIR, CICCR	Paragon	16	E: 53763	0 N: 4	435923	0	PRIOR	Structure	
SUPERS	STRUCTUR	F FORMS							Name		
			Material concre	ete	9	Neer					
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Panels Sr	ans S	bear Span			SURVE	YED Struct	ıre
		200.g.i	Connect'n	1	(1	ft/in)			Built		1910
									Span(s	s) Added	
									Remo	felled	
(B) <u>Arch</u>	<u>es</u>	Decian	Snans	Clear Sn	an 🗖	Dico (ft/in)	`		Moved	- On	
		Design	opuno	(ft/in)			,		То		
filled-spa	andrel arch		1	23/6					Replac	ed -	1994
									Ву	CR concrete	e slab
(C) <u>Bean</u>	<u>ns</u>										
<u>& Oth</u>	<u>er Forms</u>	Design	Spans	Clear Spa	an I_						
		Design		(ft/in)		DIMENSIC	<u>DNS</u>				
						Structu	ure	Struct	ure i	heo?	Skew
						Length	ו (ft/in)	Width	(ft/in)	Nidth (ft./in)	
						24		18		16	30°
SUBSTR			latarial								
Masonr	v Type	Masonry Finish	Masonry C	1266 N	lasonry	Sotting					
	, , , , , , , , , , , , , , , , , , , ,				lasoniy	octing					
	Desigr	ners/Engineers	Builders								
			N. W. Gilbert &	Son		contra	actor				

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.

Namo			County	D) w # 1	otitudo		Longi	tudo			Last Revised
Morgan	County B	ridge #224	Morgan	55 2	24 3	ailiuue	N	26° 27		US	SE	4/4/2015
worgan			Tagan	55 Z		9 23.1 Te		00 Z1	.2 VV		sian	Current
			I ownsnip			11	snp N		nge			vehielee
Carries	Old S.R. #3	7S/C.R. #363	washington		10		IN			vehic	es	/enicies
Over	Indian Cree	k	USGS Topo Map	U	TMs	40040	_	40000		PRIOF	Structure	
			Martinsville	1	6 E: 54	46810	N:	43603	330	Name	•	
SUPERS	STRUCTUR	<u>E FORMS</u>	Material steel		4							
(A) <u>Trus</u> :	<u>ses</u>	Design	Method of Connect'n	Panels	s Spans	Clea Spa (ft/ii	ar In n)			<u>SURV</u> Built	EYED Structi	u re 1925-1926
pony trus	s	Warren	riveted	7	3	77				Span(s) Added	
										Remo	delled	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear	r Span	Rise	e (ft/ii	n)		woved	I- On	
		Design		(f	t/in)			,		10		
										Repla	ced -	
										Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>is</u> er Forms	Design	Spans	Clear (ft/i	^r Span in)	DIM	ENSI	IONS				
						S L	Struc .engt	ture th (ft/in)	Struc) Width	ture (ft/in)	Road Width (ft./in)	Skew
							237/7	,	20		19/2	30°L
SUBSTR		N	laterial concrete	;		9						
Masonry	у Туре	Masonry Finish	Masonry C	lass	Maso	onry Se	tting]				
						-						
	Desigr	ners/Engineers	Builders									
	state high	way commission	Vincennes Brid	ge Co.			build	der				

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 20foot 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.

<u>References</u>

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 #	Lati	itudo		Long	itudo	Т		_	Last Revised
Brookh	n Bridge		Morgan	55	243	20°	32 1'	Ν	86° 2'	2 0' V	V	US	E	3/7/2015
BIOOKI	In Druge		Tourochin	55	270	55 ·	JZ. I	hn	00 2	2.0	╹ ,	L DV Des	ian	Current
					25	un	13N	np I	1	ange ⊑		u a la i a la		vehielee
Carries	Mill St., Bro	oklyn					IJN			<u> </u>		venicie	es	venicies
Over	White Lick	Creek	USGS Topo Map	+		EE A	400	NI.	4276	711	P	<u>RIOR</u>	Structure	
			MODIESVIIIE Eas	L	10 E.	5544	423	IN:	4370	741	_	Name		
SUPERS	STRUCTUR	<u>E FORMS</u>	Material concre	ete		9								
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Pan	els Spa	ns	Clear Span (ft/in)	r 1)			<u>s</u>	<u>URVE</u> Built	YED Struct	u re 1948
							\ - 1					bunt man/a	\ A dda d	
											3	pan(s) Added	
											R	lemod	lelled	
(B) Arch	6 5					IL_					N	loved	- On	
(B) <u>Aion</u>	<u></u>	Design	Spans	Cle	ear Spar (ft/in)	า	Rise	(ft/ir	ו)			То		
filled-spa	andrel arch	continuous	3	84	(1011)						R	eplac	ed -	
											Bv			
											L			
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Cle (ar Spar ft/in)	1	DIME	NSI	ONS					
							St Le	ruct engt	ture h (ft/ir	Stru n) Wid	ictu th (f	re F t/in) V	Road Vidth (ft./in)	Skew
							24	49/1	0	27		2	23/10	
SUBSTR	RUCTURE	Ν	laterial concrete	;			9							
Masonr	у Туре	Masonry Finish	Masonry C	lass	Ма	sonr	y Sett	ing						
	Desigr	ners/Engineers	Builders											

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

<u>Prior Timber Bridge</u> (18xx - 1875) Morgan County, "Commissioners Record," 9: 87, 91; 10: 99, 159; 12: 264, 298.

<u>Howe-Truss Covered Bridge</u> (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.

<u>Concrete Arch</u> (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	,# La	titude	Lonaitu	de			Last Revised
old Sta	te Highway	y Bridge #1389	Morgan	55 [13	89] °	N	0	W	US	5E	4/21/2015
	.		Township		Sect'n	Tnshp	Rang	je	by De	sign	Current
Carries	former Stat	e Route #37	Harrison		34	13N	2E		vehic	es k	oypassed
Over	Crooked Cr	reek	USGS Topo Map	UT	Ms	[
010.				16	6 E: 559	9910 N	: 437435	3	PRIOR	<u>K</u> Structure	
SUPERS	STRUCTUR	E FORMS							Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			SURVI Built	EYED Structu	I re 1924
						()	1		Dunt Omen (a) A alala al	
				_			-		Span(s) Added	4000.00
							-		Remo	delled	1932-33
(B) Arch	es		Snoro	Clear	2	D . (6)	J 		Movec	I - On	
(_ /		Design	Spans	Clear 3 (ft/i	span n)	Rise (ft/i	in)		То		
T-beam			2	34					Replac	ced -	
									Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear S (ft/in)	Span)	DIMENS	SIONS				
						Struc Leng	ture th (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in)	Skew
										26	
SUBSTR	UCTURE	Ν	laterial]				
Masonr	у Туре	Masonry Finish	Masonry C	lass	Masor	nry Setting]				
	Desigr	ners/Engineers	Builders								
	state high	way commission	Robert H. King			con	tractor				
			Mead-Balch Co	onstructio	on Co.	wid	ening				

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.

<u>References</u>

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	.# Lat	titude	Lonaitude			Last Revised
State H	ighway Br	idge #1520	Morgan	55 15	620 °	Ν	° V		5E	4/5/2015
		-	Township		Sect'n	Tnshp	Range	by De	sign	Current
Carries	State Route	e #135	Jackson		36	11N	2E	vehic	les	vehicles
Over	Bear Creek	· · ·	USGS Topo Map	> U1	Ms		(
••••		·	Morgantown	1	6 E: 563	8670 N:	4356070	PRIOF	<u>K</u> Structure	
SUPERS	STRUCTUR	E FORMS		oto	0					
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)		<u>SURV</u> Built	EYED Struct	ure 1933-1934
								Span(s) Added	
								Remo	delled	
								Mover	I- On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear (ft/	Span ïn)	Rise (ft/in	1)	То		
filled-spa	andrel arch	three-centered	1	59/8				Repla	ced -	
								Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> Jer Forms	Design	Spans	Clear : (ft/in	Span ı)	DIMENSI	<u>ONS</u>			
						Struct Lengt	ure Stru h (ft/in) Wic	ucture dth (ft/in)	Road Width (ft./in)	Skew
						115/9			31/9	30°
SUBSTR		Λ	laterial concret	e	•	9				
Masonr	у Туре	Masonry Finish	Masonry C	lass	Mason	ry Setting				
	Desiar	ners/Engineers	Builders							
	state high	way commission	Mustard-Curry	Building	Corp.	cont	ractor			
	J	-	,		•					

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.

<u>Surveyed Structure</u> (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.

<u>References</u>

<u>Prior County Structure</u> Morgan County, "Commissioners Record," 22: 444.

E. O. Gilbert, "Bear Creek Arch" plans.

<u>Surveyed Structure</u> (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. #	Lat	itude	Long	itude			Last Revised
State H	ighway Br	idge #1522	Morgan		55	1522	0	N	l °	W		5E	4/5/2015
			Townshi	р		Sec	ct'n	Tnshp	R	ange	by De	sign	Current
Carries	State Route	e #135	Jackson			25		11N	2	E	vehicl	es	vehicles
Over	Indian Cree	k	USGS To	ро Мар		UTMs						Structure	
	L		Morgante	own		16 E:	563	630	N: 4357	550	Name		
SUPERS	STRUCTUR	E FORMS	Material	steel			4						
(A) <u>Trus</u>	<u>ses</u>	Design	Meth Conr	od of nect'n	Pane	els Spa	ins	Clear Span (ft/in)			<u>SURVE</u> Built	EYED Struct	ture 1934
through t	russ	Parker	rivete	ed	8	1		150			Span(s) Added	
											Remo	delled	
											Moved	l - On	
(B) <u>Arch</u>	<u>es</u>	Design	S	pans	Cle	ar Spai (ft/in)	n	Rise (ft	/in)		То		
											Replac	ced -	
											Ву		
(C) <u>Bean</u> <u>& Oth</u>	ns er Forms	Design	Spa	ans	Clea (f	ar Spar t/in)	ו ו	DIMEN	<u>SIONS</u>				
								Stru Leng	icture gth (ft/ii	Struc n) Width	ture ı (ft/in)	Road Width (ft./in	Skew)
								150				24	
SUBSTR	UCTURE	N		oncrete	3			9					
Masonr	у Туре	Masonry Finish	Mas	onry C	lass	Ма	son	ry Settin	g				
]			
	Desigr	ners/Engineers	Build	lers									
	state high	way commission	Bergen	& Berge	en			со	ntracto	-			
		-											

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

<u>Prior County Structure</u> (18xx - 1934) Morgan County, "Commissioners Record," 9: 331; 10: 1, 29; 13: 444, 529, 532; 14: 70-71, 339, 355; 22: 268, 300.

<u>Surveyed Structure</u> (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. #	Latitu	ude	Longit	ude			Last Revised
State H	ighway Br	idge #1560	Morgan	55	[1560]	o	Ν	0	W			4/25/2015
		-	Township		Sec	:t'n	Tnshp	Ran	ige	by De	sign	Current
Carries	State Route	: #67	Ray		13		11N	2W	'	vehic	es	demolished
Over	Fall Creek		USGS Topo Map)	UTMs							
0101			Paragon		16 E:	53583	30 N:	43595	60	PRIOR	<u>Structure</u>	
SUPERS	STRUCTUR	E FORMS		- 1 -						Name		
			Material concre	ete		9	Cloar					
(A) <u>Trus</u>	<u>ses</u>	Design	Method of	Pane	els Spa	ins S	Span			SURVE	EYED Struc	ture
			Connect'n		•	((fṫ/in)			Built		1939
										Span(s) Added	
										Remo	delled	
										Moved	0	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Cle	ar Spai	n F	Rise (ft/iı	n)		woved	- 01	
			· .		(ft/in)					10		
T-beam			1	40						Replac	ced -	1998
										Ву	CR concre	te slab
(C) <u>Bean</u>	<u>15</u> or Forms											
		Design	Spans	Cle	ar Spar	י ר		IONS				
				(1	rvin)							
							Struct	ture	Struct	ure	Road	Skew
						_	Lengt	.11 (10111)	width	(ivin)	wiath (ft./in	
							40				38	10°
SUBSTR	<u>UCTURE</u>	N	laterial concrete	Э			9					
Masonr	у Туре	Masonry Finish	Masonry C	lass	Ма	isonry	Setting	1				
	Desigr	ners/Engineers	Builders									
	state high	way commission	A L Deniston				cont	tractor				
	State right		A. E. Dematori				com					

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).

Namo			Count			D., #		فاغب وا و		on ett.	de			Last Revised
	laihuuau Da	idee #4504	Count	y	e e	Br. #	La	tituae		ongitu	ae	U	SE	4/5/2015
State H	ignway Br	lage #1564	Morga	n	55	[1564 _.	IJĽ		N		W			Current
			Towns	hip		Se	ct'n	Tns	hp	Rang	je	by De	sign	Current
Carries	State Route	e #67	Jeffers	on		1		11N	l	1W		vehic	les	demolished
Over	Lambs Cree	ek	USGS	Торо Мар)	UTMs) Chruchurs	
			Martin	sville		16 E	: 545	5160	N : 4	36730			Structure	
SUPERS	STRUCTUR	E FORMS		• atas!								Name)	
			Materia	steel			4	Close	-					
(A) <u>Trus</u>	<u>ses</u>	Desian	Me	thod of	Pan	els Sp	ans	Span				SURV	EYED Struct	ture
			Co	nnect'n		P		(ft/in))			Built		1939-1940
pony trus	S	Parker	rive	eted	9	1		125				Span(s) Added	
												Remo	delled	
(B) <u>Arch</u>	es	Dosign		Snans	Cle	ar Sna	'n	Riso	(ft/in)			Nove	a - On	
		Design		opuns	UIC	(ft/in)		rise	(1011)			То		
												Repla	ced -	>2008
												Ву		
											I		L	
(C) <u>Bean</u>	<u>15</u>													
<u>& Oth</u>	er Forms	Desian	S	pans	Cle	ar Spa	n		Neio	NC				
				1	(1	ft/in)		DINE	<u>UIGNI:</u>	<u>enn</u>				
								St	ructu	ire	Struct	ure	Road	Skew
								Le	ength	(ft/in)	Width	(ft/in)	Width (ft./in)
								1:	29		29		28/2	
SUBSTR	UCTURE	N	latorial	concrete	2			Q						
Masonr		Masonry Finish	Material	sonry C	Jase	м	ason	rv Sett	ina					
				Jooniy O	1433		4301	i y oett						
<u> </u>														
	Desigr	ners/Engineers	Bu	ilders										
	state highway commission			Schutt					contra	actor				

R. L. Schutt of Indianapolis, Indiana, secured the \$29,197.48 contract in July 1939 to build a riveted, full-hip, Parker ponytruss 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 l-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.	# La	titude l	Longitu	de			Last Revised
Bradfo	rd Woods t	trail bridge;	Morgan	55 [15	97] °	N	0	W	USE	[4/5/2015
[old Sta	ate Highwa	y Bridge #1597]	Township	J (_	Sect'n	Tnshp	Rang	е	by Design	(Current
Carries	old S.R. #6 ⁻	7 trail, Bradford	Clay		9	12N	1E		vehicles	pe	edestrians
Over	Svcamore (Creek	USGS Topo Map	UTI	Ms						
••••	-)			16	E:	N:			PRIOR Stru	icture	
SUPERS	STRUCTUR	E FORMS	Matarial steel		1				Name		
(Δ) True	202		Material Steel			Clear) Structur	0
(A) <u>1105</u>	<u></u>	Design	Method of Connect'n	Panels \$	Spans	Span (ft/in)			Built	<u>-</u> otractar	c 1939
pony trus	s	Warren	riveted	·	1				Span(s) A	hed	
									Remodelle		
										u [
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear S	pan	Rise (ft/in	0		Moved - O	n [
		Design		(ft/ir	1)		·,		10	Г	
									Replaced -		
							_		Ву		
(С) <u>Беан</u> <u>& Oth</u>	<u>ier Forms</u>		Snana	Clear S	non						
		Design	Spans	(ft/in)	ματι	DIMENSI	<u>ONS</u>				
						Struct	ure	Structi	ire Roa	ł	Skew
						Length	h (ft/in)	Width	(ft/in) Widt	h (ft./in)	
						96			28		°R
SUBSTR	UCTURE	N	laterial concrete	9		9					
Masonr	у Туре	Masonry Finish	Masonry C	lass	Mason	ry Setting					
	Desigr	ners/Engineers	Builders								
	state high	way commission	R. L. Schutt			build	ler				

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.

<u>References</u>

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).

Manag			• •	_							Loot Poviced
			County	Br	'. # La		Longit	ude	USE		4/5/2015
State H	ighway Br	idge #1605	Morgan	55 [16	305] °	N	0	W			4/3/2013
[Moon	Bridge]		Township		Sect'n	Tnshp	Ran	ige	by Design		Surrent
Carries	State Route	e #67 [NBL]	Brown		1	13N	1E		vehicles	de	emolished
Over	White Lick (Creek	USGS Topo Map	UT UT	Ms				PRIOR Stru	cture	
			Mooresville We	st 1	6 E: 553	3620 N:	43832	10	Name	otaro	
SUPERS	STRUCTUR	E FORMS	Material steel								
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)			SURVEYED Built) Structu	г е 1936
through t	russ	Parker	riveted	10	2	175			Span(s) Ac	lded	
									Remodelle	d	
									Moved O	- I	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear (ft/	Span in)	Rise (ft/i	n)		To		
									Replaced -		1995
									By KC I	-beam	
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear : (ft/in	Span	DIMENS	<u>IONS</u>				
						Struc Lengt	ture th (ft/in)	Struct Width	ure Road (ft/in) Widt	l h (ft./in)	Skew
						355			24		
SUBSTR	UCTURE	N	laterial concrete	3		9]				
Masonr	у Туре	Masonry Finish	Masonry C	lass	Mason	ry Setting	_				
	Desigr	ers/Engineers	Builders								
	state high	way commission	Bergen & Berg	en		con	tractor				
		,	<u> </u>								
			. IL			L					

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.

<u>Surveyed Structure</u> (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

<u>Previous Structure</u> (1889 - 1935) Morgan County, "Commissioners Record," 17: 340, 342-344, 488, 496; 23: 2, 13, 57.

<u>Surveyed Structure</u> (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. #	Lat	titude	Longitu	de			Last Revised
State H	ighway Br	idge #1669	Morgan	55 1669	•	Ν	0	W	03		4/5/2015
			Township	S	ect'n	Tnshp	Rang	je	by Des	sign	Current
Carries	State Route	e #142	Gregg	3	32-33	13N	1W		vehicl	es v	ehicles
Over	Kivett Brand	ch	USGS Topo Map	UTM	s					Ctrue ture	
		-	Hall	16	E: 540	0803 N:	4374483	3	Nome	Structure	
SUPERS	STRUCTUR	E FORMS	Material concre	ete	9				warne		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels S	pans	Clear Span (ft/in)			SURVE Built	EYED Structu	re 1934
									Span(s) Added	
									Remo	delled	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear Sp	an	Rise (ft/in	1)		Noved	- On	
		Design		(ft/in)	-		.,		10		
filled-spa	andrel arch		1	24					Replac	ed -	
									Ву		
(C) Boon	00							-			
<u>& Oth</u>	<u>ier Forms</u>	Design	Spans	Clear Sp (ft/in)	an	DIMENSI	<u>ONS</u>				
						Struct Lengt	ture h (ft/in)	Structo Width	ure (ft/in)	Road Width (ft./in)	Skew
						28/10		29/3		23/10	
SUBSTR	UCTURE	Ν	laterial concrete	3		9					
Masonr	у Туре	Masonry Finish	Masonry C	lass I	Mason	ry Setting					
						, ,					
	Desigr	ners/Engineers	Builders								
	state high	way commission	Foulkes Contra	cting Co.		cont	ractor				
				-							

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	/	E	Br. #	Latituc	le	Longi	tude			Last Revised
State Hig	hway Bri	idge #1670	Morgar	า	55 1	670	0	Ν	0	W		DE	4/5/2015
			Towns	hip		Sect	'n T	'nshp	Ra	nge	by De	sign	Current
Carries St	tate Route	#142	Gregg			33	1	3N	1V	V	vehic	les	vehicles
Over La	ambs Cree	ek	USGS 1	Горо Мар	<u> </u>	TMs						Structure	
			Hall		1	6 E:	540370	N:	43742	20	Name		
SUPERST	RUCTURE	E FORMS	Matoria	concre	ote		a				Name		
(A) Trusse	S						CI	ear			SURVI	EYED Struct	ure
	-	Design	Me Co	nnect'n	Panel	s Spar	is Sp (ft	ban /in)			Built		1934
								_			Span(s) Added	
											Remo	delled	1998
											Movor	L On	
(B) <u>Arches</u>	<u>.</u>	Design		Spans	Clea	r Span	Ri	se (ft/i	n)		To		
filled an an a	dral arab				(f	t/in)					Popla	aad	
filled-spand	arei arch	three-centered		1	60				_		Replac	.eu -	
											Ву		
(C) Beams][
& Other	Forms	Docian	S	oans	Clear	[.] Span							
		Design	-		(ft/	in)	DI	MENS	<u>IONS</u>				
								Struc	ture	Struct	ure	Road	Skew
								Lengt	th (ft/in)) Width	(ft/in)	Width (ft./in)	
								65/10)			30	
SUBSTRU	CTURE	N	laterial	concrete	9		9						
Masonry T	Гуре	Masonry Finish	Ма	sonry C	lass	Mas	sonry S	etting	L				
	Design	ers/Engineers	Bui	Iders									
:	state high	way commission	Foulke	es Contra	cting C	co.		con	tractor				
	-												
					-								
		Constructio	n His	story	and	Stru	JCtu	ral D	Jesc	riptic	n		

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	Longitud	e 🗖		Last Revised			
State H	ighway Br	idge #1671	Morgan	55 1671	° N	0	w	JSE	4/5/2015			
		•	Township	Sec	t'n Tnshp	Range	by	Design	Current			
Carries	State Route	#142	Gregg	33-	34 13N	1W	veł	icles	vehicles			
Over	Little Rock (Creek	USGS Topo Map	UTMs								
010.			Hall	16 E:	540805	1: 4374468		<u>JR</u> Structure				
SUPERS	TRUCTUR	E FORMS						ne				
(A) <u>Trus</u> :	<u>ses</u>	Design	Method of Connect'n	Panels Spa	Clear ns Span (ft/in)	_	<u>SUR</u> Bu	<u>VEYED</u> Struct	ture 1934			
							Spa	n(s) Added				
							Ren	nodelled				
							Mov	ed - On				
(B) <u>Arch</u>	Arches Design		Spans	Clear Spar (ft/in)	n Rise (ft/	/in)	Т					
filled-spa	d-spandrel arch		1	32/6			Rep	laced -				
							E	у				
								L				
(C) <u>Bean</u> <u>& Oth</u>	<u>ıs</u> er Forms	Design	Spans	Clear Spar (ft/in)		<u>SIONS</u>						
					Strue Leng	cture S gth (ft/in) W	tructure /idth (ft/in	Road) Width (ft./in	Skew)			
					40/7	·		24	30°			
SUBSTR		N	laterial concrete	ć	9							
Masonry	у Туре	Masonry Finish	Masonry C	lass Ma	sonry Setting	g						
						-						
	Designers/Engineers Builders											
	state high	way commission	Foulkes Contra	cting Co.	СОІ	ntractor						

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

<u> Prior Structure</u> (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.

<u>Reinforced Concrete Arch</u> (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	.# La	titude	Longitud	e		Last Revised
State H	ighway Br	idge #1965	Morgan	55 19	65 °	N	0	W	USE	4/5/2015
			Township		Sect'n	Tnshp	Range	, k	oy Design	Current
Carries	State Route	e #252	Jackson		21	11N	2E		/ehicles	vehicles
Over	Oliver Cree	k	USGS Topo Ma	p UT	Ms					
			Hall	1 (6 E: 540)805 N:	4374468		<u>RIOR</u> Structure	
SUPERS	STRUCTUR	E FORMS	Matorial conc	rete	Q			r	Name	
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels	Spans	Clear Span (ft/in)		SI	<u>URVEYED</u> Struc Built	cture 1937-1938
								s	pan(s) Added	
								R	emodelled	
								M	oved - On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear : (ft/i	Span in)	Rise (ft/in	1)		То	
filled-spa	andrel arch		1	40				R	eplaced -	
									Ву	
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear S (ft/in	Span)	DIMENSI	<u>ONS</u>			
						Struct Lengtl	ure S h (ft/in) V	Structur Vidth (f	e Road t/in) Width (ft./ii	Skew n)
						43			32	
SUBSTR	UCTURE	Ν	laterial concret	e		9				
Masonr	у Туре	Masonry Finish	Masonry C	Class	Mason	ry Setting				
	Desigr	ners/Engineers	Builders							
	state high	Robert H. Kind	1		conti	ractor				
	june ngi		,							
	L									

<u>County Arch</u> (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.

<u>State Arch</u> (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.

<u>References</u>

<u>County Arch</u> (1904 - 1937) Morgan County, "Commissioners Record," 21: 111-112, 132; "County Council Record," 1: 35.

<u>State Arch</u> (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).

Nome			Ocumentes		D., #	Latitud		Longitu				Last Rovisod
	alaure P	alara #4000	County		Br. #				iae	US	E	4/22/2015
State H	ignway Br	lage #1966	worgan	55	1966		N	-	W			Current
			Township		Sec	t'n Tr	nshp	Rang	ge	by Des	sign	Current
Carries	State Route	#252	Jackson		23	11	1N	2E		vehicl	es	vehicles
Over	Crooked Cr	eek, W. Fork	USGS Topo	Мар	UTMs						Structure	
		,	Morgantowi	n	16 E:	561640	N:	435800	0	Name	Structure	
SUPERS	TRUCTUR	E FORMS		noroto						Name		
				Increte		9 Cla	ar					
(A) <u>Trus</u>	<u>ses</u>	Design	Method	of Pan	els Spa	ins Spa	an			SURVE	YED Struct	ure
			Connec	:t'n		(fṫ/i	in)			Built		1937
										Span(s	s) Added	
										Pomor		
										Kennot		
(B) Arch	es	_ .	Sno		or Sno	D'-				Moved	- On	
. ,		Design	Spar		ear Spai (ft/in)	I RIS	e (ft/in	1)		То		
					()					Replac	ed -	
								_		Bv		
										_,		
(C) Bean	IS]		I		[
`´ <u>& Oth</u>	<u>er Forms</u>	Desim	Snans		ar Snar	. .						
		Design	opune	((ft/in)	. <u>DIN</u>	IENSI	<u>ONS</u>				
T-beam			1	36			Struct	uro	Struct		Deed	Skow
							Length	h (ft/in)	Width	(ft/in)	Road Nidth (ft./in)	Skew
											29/2	
][
<u>SUBSTR</u>		N	laterial									
Masonry	у Туре	Masonry Finish	Mason	ry Class	Ма	sonry Se	etting					
	Design	ers/Engineers	Builder	s								
	state high	way commission	Robert H. I	Kina			contr	ractor				
	state ingr									_		

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.

<u>References</u>

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	e Longi	tude		-	Last Revised
State H	ighway Br	idge #1967	Morgan	55 1967	0	N °	W	051		4/21/2015
	-		Township	Se	ct'n Tn	shp Ra	nge	by Desig	gn (Current
Carries	State Route	e #252	Jackson	23	-26 11	N 2E		vehicles	s ve	ehicles
Over	Crooked Cr	eek	USGS Topo Map	UTMs						
			Morgantown	16 E	: 561899	N: 43582	206	Nome	structure	
SUPERS	STRUCTUR	E FORMS	Motorial concre	ato	Q			Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels Spa	Cleans Spa (ft/i	ar an n)		<u>SURVEY</u> Built	<u>ED</u> Structur	r e 1937
								Span(s)	Added	
								Remode	elled	
								Moved	On	
(B) <u>Arch</u>) <u>Arches</u> Design		Spans	Clear Spa (ft/in)	n Ris	e (ft/in)		To		
filled-spa	andrel arch		1	40				Replace	d -	
								Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear Spa (ft/in)	n <u>DIM</u>	ENSIONS				
					\$	Structure _ength (ft/in)	Structo Width	ure Ro (ft/in) W	oad ⁄idth (ft./in)	Skew
						43	28/10	28	8	15°
SUBSTR	UCTURE	1	Material concrete	9	9					
Masonr	у Туре	Masonry Finish	Masonry C	lass M	asonry Se	tting				
	Desigr	ners/Engineers	Builders							
	state highway commission		Robert H. King			contractor				

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. #	Lat	titude	Longitu	ude	110		Last Revised
State H	ighway Br	idge #1968	Morgan	55 1968	•	Ν	0	W	0	DE	4/21/2015
			Township	S	ect'n	Tnshp	Ran	ge	by De	sign	Current
Carries	State Route	e #252	Jackson	2	24-25	11N	2E		vehic	es	vehicles
Over	Long Run C	Creek	USGS Topo Map	UTM	s					Structure	
			Morgantown	16	E: 563	8148 N:	435824	18	Name		
SUPERS	STRUCTUR	E FORMS	Material concre	ete	9				Name		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels S	pans	Clear Span (ft/in)			SURVI Built	EYED Struct	ure 1937
									Span(s) Added	
									Remo	delled	
									Movoo	. On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clear Sp (ft/in)	an	Rise (ft/i	n)		To		
									Replac	ced -	
									Ву		
										<u></u>	
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	Spans	Clear Sp (ft/in)	an	<u>DIMENSI</u>	IONS				
T-beam			2	28		Struct Lengt	ture :h (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in)	Skew
										28	56°
SUBSTR	UCTURE	Ν		<u></u>	•	9					
Masonr	у Туре	Masonry Finish	Masonry C	lass I	Mason	rv Settina					
						,					
	Desigr	ners/Engineers	Builders								
	state highway commission		Robert H. King			cont	tractor				

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			Count	y	I	Br. #	Lat	itude	Lo	ngitu	ıde			Last Revised
State H	ighway Br	idge #3107	Morga	- In	55 3	3107	0		N °	Ŭ	W		SE	4/21/2015
		-	Towns	ship		Sec	:t'n	Tnsh	ıp	Rang	ge	by De	sign	Current
Carries	State Route	e #37	Washi	iongton		8		11N		1E		vehic	les	vehicles
Over	Indian Cree	k, overflow	USGS	Торо Мар		JTMs							2 Structure	
			Martin	sville		16 E:	547	360	N: 43	6124	0	Nam		
SUPERS	STRUCTUR	E FORMS	Materia		ete		9					Marin		
(A) <u>Trus</u>	<u>ses</u>	Design	Me	ethod of	Panel	ls Spa	ins	Clear Span				SURV	EYED Struct	Jre
				meetin				(1011)				Built		1930
					_				_			Span	s) Added	
					_				_			Remo	delled	1966
(B) Arch	es		I	0			[Move	d - On	
(=) <u></u>		Design		Spans	Clea	r Spai ft/in)	n	Rise	(ft/in)			То		
					Ì	,]		Repla	ced -	
												Ву		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ler Forms	Design	5	Spans	Clea (ft/	r Spar ⁄in)	ו י	DIME	NSION	<u>IS</u>				
T-beam		under fill	4	1	10			Stı Le	ructure) it/in)	Struct Width	ure (ft/in)	Road Width (ft /in)	Skew
										,		()	40	56°
OUDOTE			I										10	
Macan		N Maaanny Einich	laterial		e	84-		9						
Masonn	утуре			asonry C	lass		ison	ry Setti	ing	_				
	Desigr	ners/Engineers	Bu	ilders										
	state highway commission		Robe	rt H. King				c	contrac	tor				

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.

<u>References</u>

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).

											Leaf Deviced
Name			County		Br. #	Latitude	Longit	ude	US	F	2/7/2015
Martins	ville Bridg	е	Morgan	55	[3108]	° N	°	W			3/7/2015
			Township		Sect	n Tnshp	Rar	nge	by Des	sign	Current
Carries	River Rd./S	.R. #39	Jefferson-Wash	ingtor	า 32	12N	1E		vehicl	es	demolished
Over	White River	, W. Fork	USGS Topo Map		UTMs					Structure	
		<u>.</u>	Martinsville		16 E: 4	547376	N: 43650	42	Nama	Structure	
SUPERS	STRUCTUR	E FORMS	Matorial metal						Name		
	50C					, Clear		- 1			
(A) <u>1105</u>	565	Design	Method of	Pane	ls Span	s Span				<u>TED</u> Struct	
		_ .	Connect n			(tvin)			Built		1893
through t	russ	Parker	[pinned]	10	3	170>172	_		Span(s	s) Added	
							_		Remo	delled	
									Moved	- On	
(B) <u>Arch</u>	<u>es</u>	Design	Spans	Clea	ar Span (ft/in)	Rise (ft	/in)		То		
					. ,				Replac	ed -	1950; 2012
									By		
									-		
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> er Forms	Design	Spans	Clea (ft	ar Span t/in)	DIMEN	SIONS				
						Stru Leng	cture gth (ft/in)	Structo Width	u re (ft/in)	Road Nidth (ft./in)	Skew
						512				16	
SUBSTR		Ν	latorial cut ston	۵							
Masonr	v Tvpe	Masonry Finish	Masonry C	lass	Mas	onry Settin	a				
							9				
	Design	ers/Engineers	Builders								
	Looigi	Wrought Iron B	Iridae	Co	e11	nerstruct	ure				
				nuge	00.	Su	hetructur				
			THEOUDIE ECK			Su	balluciul	C			

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

<u>Burr Arch-Truss Covered Bridge</u> (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	Lon	gitude		2	Last Revised
State H	ighway Br	idge #3509	Morgan	55	[3509]	0	N °	W			4/13/2015
[Little F	Red Bridge]	Township		Sec	t'n Tnsh	p F	Range	by Des	sign	Current
Carries	E.High St/V	Vaverly Rd/S.R#144	Brown		36	14N		1E	vehicl	es	demolished
Over	White Lick	Creek, E. Fork	USGS Topo Ma	C	UTMs					Structure	
			Mooresville Ea	st	16 E :	554476	N: 438	4475	Name		
SUPER:	STRUCTUR	E FORMS	Material						Hame		
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Pan	els Spa	Clear ns Span (ft/in)			<u>SURVE</u> Built	EYED Struct	ture
									Span(s) Added	
									Remo	delled	
									Moved	- On	
(B) <u>Arch</u>	es Design		Spans	Cle	ar Span (ft/in)	Rise (ft/in)		To		
									Replac	ed -	1958
									Ву	reinf concre	ete girder
(C) <u>Bear</u> <u>& Oth</u>	<u>ns</u> ier Forms	Design	Spans	Cle (1	ar Span ft/in)	DIMEN	SIONS	<u>5</u>			
						Str Ler	ucture ngth (ft/	/in) Width	ture (ft/in)	Road Width (ft./in	Skew)
SUBSTR	<u>RUCTURE</u>	Ν	/aterial								
Masonr	у Туре	Masonry Finish	Masonry C	lass	Ма	sonry Setti	ng				
						-	•				
	Desigr	ners/Engineers	Builders								
		_									

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.

<u>References</u>

<u>Little Red Covered Bridge</u> (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. #	La	titude	L	ongit	ude		SE	Last Revised
State H	ighway Br	idge #3790	Morgan		55	[3790] °		N °		w		SE	4/28/2015
[Moore	sville Brid	ge]	Townshi	р		S	ect'n	Tnsł	hp	Rai	nge	by De	esign	Current
Carries	Monrovia P	ike/S.R. #42	Brown			3	5	14N		1E		vehic	les	demolished
Over	White Lick (Creek	USGS To	ро Мар)	UTMs	5						7 Otras trans	
						16	E:		N:			PRIU	<u> A</u> Structure	
SUPER	STRUCTUR	E FORMS										Nam	e	
			waterial					Cloar						
(A) <u>Trus</u>	<u>ses</u>	Design	Meth	od of	Pan	els Sp	ans	Span	l			SURV	EYED Struc	ture
			Coni	nect'n				(ft/in))			Built		1891
through-	truss					2		125				Span	(s) Added	
												Remo	delled	
												Move	d - On	
(B) <u>Arch</u>	<u>es</u>	Design	S	pans	Cle	ar Sp	an	Rise	(ft/in))		То		
		_				(ft/in)				_		Banla	aad	1062
								_		_		керіа	ceu -	1903
								_		_		Ву	PC I-beam	
(C) Boar	ne													
(C) <u>Bear</u> & Oth	<u>ier Forms</u>		0			•								
		Design	Spa	ans	Cie (ear Spa ft/in)	an	DIME	NSIC	<u>DNS</u>				
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								Le	nath	ure (ft/in)	Width	(ft/in)	Road Width (ft./ir	Skew
								24	50	· · ·		(- /	16	-,
								2					10	
SUBSTR	RUCTURE	N	laterial											
Masonr	у Туре	Masonry Finish	Mas	onry C	lass	N	lasor	ry Sett	ing					
	Desigr	ners/Engineers	Build	lers										
		Constructio	n His	torv	an	d St	ruc	tura		esc	riptio	on		

<u>Timber Truss & Beam Bridge</u> (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 beats. (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 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

<u>Timber Truss & Beam Bridge</u> (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.

<u>Wrought Iron Tubular Arch Replacement Span</u> (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. #	La	titude	Lor	ngitud	le		SE .	Last Revised
State H	ighway Br	idge #3820	Morgan	ı	55	[3820]	0	1	N °		W	0		4/8/2015
[Emine	n <mark>ce Bridg</mark> e	e #14]	Townsh	nip		Se	ct'n	Tnsh	р	Range	e	by De	sign	Current
Carries	State Route	e #42	Adams			21		13N		2W		vehic	les	demolished
Over	Lake/L.C. C	Cook Ditch	USGS T	оро Мар)	UTMs					_		2 Structure	
			Eminen	ice		16 E	: 530	0450	N: 437	77040		Nam]
SUPERS	TRUCTUR	E FORMS	Matorial	steel			4					Inallie		
(A) <u>Trus</u> :	<u>ses</u>	Design	Met Cor	hod of	Pan	els Spa	ans	Clear Span (ft/in)				SURV Built	EYED Struc	ture 1926
pony trus	s	Pratt	rive	ted	5	1		69				Snan(s) Added	
												Romo	dollod	
													ueneu	
(B) <u>Arch</u>	es Design		:	Spans	Cle	ear Spa	n	Rise (f	ft/in)			Moved To	1 - On	
						(1011)				1		Repla	ced -	1991
								-				Bv	CR concre	te slah
												-,		
(C) <u>Bean</u> <u>& Oth</u>	<u>ıs</u> er Forms	Design	Sp	oans	Cle (ear Spa ft/in)	n	DIMEN	ISION	<u>IS</u>				
								Stru Len	ucture ngth (f	e S t/in)V	Struct Nidth	u re (ft/in)	Road Width (ft./ir	Skew
								70					17/9	
SUBSTR		Ν	latorial	concrete	,			9						
Masonry	y Type	Masonry Finish	Ma	sonrv C	lass	M	ason	rv Settir	na					
									5					
	Desigr	ners/Engineers	Buil	ders										
				ines Brid	ge C	0.		bı	uilder					
					-									

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.

<u>References</u>

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	Longi	tude		Last Revised
Carter I	Bridge		Morgan	55 [6335]	0	N °	W	USE	4/8/2015
	Ŭ		Township	Sec	t'n Tnsł	np Ra	nge	by Design	Current
Carries	State Route	#144	Brown	6	13N	2E		vehicles	demolished
Ovor	Goose Cree		USGS Topo Map) UTMs					
Over	Guuse cied	5N		16 E	:	N:		PRIOR Structure	
SUPERS	STRUCTUR	E FORMS						Name	
			Material		Cloar				
(A) <u>Trus</u>	<u>ses</u>	Design	Method of Connect'n	Panels Spa	ins Span (ft/in)			<u>SURVEYED</u> Stru Built	cture 1915-1916
					(1211)				
						_		Span(s) Added	
						_		Remodelled	
(B) Arch	es		•					Moved - On	
(=) <u></u>	<u></u>	Design	Spans	(ft/in)	n Rise	(ft/in)		То	
				(1011)				Replaced -	[1962]
								By PC box be	eams
(C) <u>Bean</u> <u>& Oth</u>	<u>ns</u> ier Forms		Enono	Clear Spa					
		Design	Spans	(ft/in)		<u>NSIONS</u>			
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SUBSTR	NUCTURE	Ν	Naterial					,	
Masonr	у Туре	Masonry Finish	Masonry C	lass Ma	sonry Sett	ing			
	Desigr	ners/Engineers	Builders						

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.

Nome			O second se	Du		414 I	1				Last Rovisod
Name Dutnom County Bridge #214			Dute and	Br.					US	SE	9/10/2014
Putham County Bridge #211			Putnam	o <i>r</i> 21	1 39	35.6 N	86 39.	5' VV			Current
[Morgan County Bridge #199]			Township		Sect'n	Tnshp	Ran	ge	by Des	sign	Guirent
Carries	C.R. 450S/I	Horse Barn Rd.	Jefferson		5	13N	2W		vehicl	es v	ehicles
Over Mill Creek			USGS Topo Map	UT	Ms				PRIOR Structure		
			Eminence	6 E: 529600 N: 43825			50	Name			
SUPERS	STRUCTUR	<u>E FORMS</u>	Material steel		4				Nume		
(A) <u>Trusses</u> Design		Method of Pane Connect'n		Spans	Clear Span (ft/in)		S		EYED Structu	re c1905	
pony trus	s	Pratt	pinned	5	1	74			Span(s) Added		
										delled	
										0	
(B) <u>Arches</u> Decign		Spans	Clear Span		Rise (ft/in)			woved	- On		
		Design		(ft/i	n)				10		
									Replac	ed -	
									Ву		
(C) <u>Beams</u> <u>& Other Forms</u> Design		Spans	Clear S (ft/in)	Span)	DIMENSIONS						
						Struc Leng	cture th (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in)	Skew
						81		16		15/6	
SUBSTR	UCTURE	Ν		2		9					
Masonry Type Masonry Finish		Masonry Class		Masonry Setting		 1					
	, ,,						,				
	Desigr	ners/Engineers	Builders								
		<u>v</u>									
		_						_			

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	JJ	Br.# I	Latitude		Long	itude		SE	Last Revised
Shackelford Ford Bridge			Putnam	67	[230] 3	39° 32.3'	Ν	86° 39	9.9' V	v I L	SL	9/14/2014
[Morgan County Bridge #197]			Township		Sect'n		Tnshp		ange	by D	esign	Current
Carries McClure Rd./C.R.1025E			Jefferson		29	131	N	2۱	N	vehi	cles	demolished
Over Mill Creek			USGS Topo Map		_			PRIC	PRIOR Structure			
			Eminence	16 E: 5	528773	N: 4376535			Nan			
SUPER:	STRUCTUR	E FORMS	Material metal		3							
(A) <u>Trusses</u> Design			Method of Connect'n	Clea s Spa (ft/ir	ar n 1)			<u>SUR</u> Buil	<u>/EYED</u> Struc t	ture 1911-1912		
through	truss	Pratt	pinned	5 1		90				Spar	n(s) Added	
											odelled	
										Mov	d On	
(B) <u>Arch</u>	Arches Design		Spans	Clear Span		Rise	Rise (ft/in)			To		
					()					Repl	aced -	1997
										В	CPC I-bea	ms
											L	
(C) <u>Beams</u> <u>& Other Forms</u> Design			Spans	Clea (f	ar Span t/in)	DIMI	ENSI	<u>IONS</u>				
						SL	truc engt	ture th (ft/ir	Stru n) Wid	ucture Ith (ft/in)	Road Width (ft./in	Skew
						9	93		16/3	3	15/8	
SUBSTR	RUCTURE	N	laterial concrete	;		. 9]				
Masonry Type Masonry Finish			Masonry C	Mas	Masonry Setting							
						-]			
	Desiar	ners/Engineers	Builders									
			O. J. Larkin					contractor				
			n.									

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.

<u>References</u>

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	.# La	titude	Longitu	ude	IISE	Last Revised	
Parker Bridge	Putnam	67 [19	90] 39	° 33.5' N	86° 39.	2' W	USL	5/31/2014	
[Morgan County	Township		Sect'n	Tnshp	Ran	ge	by Design	Current	
Carries County Ro	Jefferson 17-20 13N 2W						vehicles	demolished	
Over Mill Creek	USGS Topo Map	D UT	PRIOR Structure						
	16 E: N:						Name		
SUPERSTRUCTU	<u>RE FORMS</u>	Material timber	r; iron						
(A) <u>Trusses</u>	Method of Connect'n	Spans	Clear Span (ft/in)			SURVEYED \$ Built	Structure 1886		
through truss	Howe		11	1	122			Span(s) Add	ed 1926
pony truss	Pratt	riveted	6	1	90			Remodelled	
]			
(B) <u>Arches</u>	<u>rches</u> Design		Clear : (ft/	Span in)	Rise (ft/i	n)		To	
			Ì					Replaced -	1982
								By PC bo	x beams
(C) <u>Beams</u> <u>& Other Forms</u>	Spans	Clear \$ (ft/in	Span)	DIMENS	IONS				
					Struc Leng	ture th (ft/in)	Struct Width	ure Road (ft/in) Width	Skew (ft./in)
					206/6	6	16	15/6	0
SUBSTRUCTURE	Ν	laterial stone: c	oncrete						
Masonry Type	Masonry Finish	Masonry C	lass	Masor	nry Setting				
Desig	ners/Engineers	Builders	Builders						
		Smith Bridge C		How	we super	rstr			
		Vincennes Brid	lge Co.		Pra	tt supers	str		
					· · · ·				

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.

Namo			County		Dr #	Latitud	~	Longit	udo			Last Revised
Hendricks County Bridge #204			Hendricks	32	DI. #		e N	∘	w	09	SE	5/1/2015
Morgan County Bridge #2011			Township	52	[204] Soc	t'n Ti	hehn	Ban		by De	sian	Current
Comico	County Line	rownsnip				isiip		ige	vohio		demolished	
Carries	County Line	e Ra.	LICCE Tana Ma					venic	les	demolished		
Over White Lick Creek			Disciplication Discription	552220	1220 N. 4296720				PRIOR Structure			
			Fiairilleiu	552220	220 N. 4300720			Name	•			
SUPER	STRUCTUR	<u>E FORMS</u>	Material metal	3								
(A) <u>Trusses</u> Design		Method of Par Connect'n		anels Spans		Clear Span (ft/in)		SURV Buil		<u>EYED</u> Struct	ure 1893	
through t	russ	Pratt	pinned	8 1		149/	149/3		Snan		s) Added	
pony trus	SS	Pratt	pinned	2	2	24	24				dollod	
(B) <u>Arches</u>		Spans	Cle	ar Spar	n Rie	o (ft/i	n)		Moved	I - On		
		Design	opuno	UIC	(ft/in)			,		То		
										Repla	ced -	1990
										Ву		
									I			
(C) <u>Beams</u> <u>& Other Forms</u> Design		Spans	Cle (ar Span ft/in)		<u>IENS</u>	<u>IONS</u>					
							Struc Leng	ture th (ft/in)	Struct Width	ure (ft/in)	Road Width (ft./in)	Skew
							197/3	3			15/7	
SUBSTR	UCTURE	Λ	latorial concret	e]				
Masonr	y Type	Masonry Class Masonr				ettina]					
						, -	J					
Designers/Engineers Builders												
			Wrought Iron Bridge Co.				fabricator					
			<u> </u>	<u> </u>								

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 floorbeams 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.