

Withington Ford Bridge

FRAN14

GENERAL DATA

structure no.:	F-72	city/town:	3.2 miles southeast of Gray Summit
county:	Franklin	feature inters.:	Meramec River
		cadastral grid:	S15/22, T43N, R2E
		highway route:	county road
		highway distr.:	6
		current owner:	Franklin County

STRUCTURAL DATA

superstructure:	steel, 10-panel, pin-connected Pennsylvania through truss, with steel stringer approach span		
substructure:	concrete abutments and pier		
span number:	2	condition:	good
span length:	200.0'	alterations:	none
total length:	422.0'	floor/decking :	asphalt on timber, over steel stringers
roadway width:	15.0'	other features:	upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with lacing; diagonal: 2 punched rectangular eyebars; lateral bracing: round rod with threaded ends; strut: 2 angles, braced; floor beam: I-beam, field bolted to vertical; guard-rail: 2 angles; builder's plate: Built by / Miller & Borcharding / St. Louis Mo.

HISTORICAL DATA

erection date:	1916-17
erection cost:	\$13,832.00 (contract amount)
designer:	J.M. Moore, Franklin County Engineer
fabricator :	Illinois Steel Company, Chicago IL
contractor :	Miller and Borcharding, St. Louis MO

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number F-72; Franklin County Court Record, Book Q: page 48 (6 September 1892), page 109 (8 December 1892); Book T: page 346 (4 May 1903); Book Z: page 575 (10 December 1915), page 618 (16 February 1916), page 626 (22 February 1916); Book AA: page 70 (5 October 1916), page 82 (21 November 1916), page 95 (4 January 1917); citizens' petitions and subscriptions (4 May 1903, 1 August 1914, 10 February 1915; 12 February 1916); construction drawings by J.M. Moore (November 1915); bid summary (16 February 1916); superstructure contract with Miller and Borcharding (18 February 1916); contract for approach work with F.X. Manning (25 February 1916) - all located at Franklin County Courthouse, Union MO; field inspection by Clayton Fraser, 23 October 1989.

Withington Ford Bridge

sign. rating: 70

evaluation: NRHP eligible (excellent long-span example of uncommon truss type)

inventoried by: Clayton B. Fraser 18 January 1994

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Withington Ford Bridge
MHTD: F-72

FRAN14

DATE(S) OF CONSTRUCTION

1916-17

LOCATION

county road over Meramec River; S15/22, T43N, R2E
3.2 miles southeast of Gray Summit; Franklin County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP possibly eligible (score: 63)

CONDITION

good

OWNER

Franklin County

span number: 2

span length: 200.0'

total length: 422.0'

roadway wdt.: 15.0'

superstructure: steel, 10-panel, pin-connected Pennsylvania through truss, with steel stringer approach span

substructure: concrete abutments and pier

floor/decking: asphalt on timber, over steel stringers

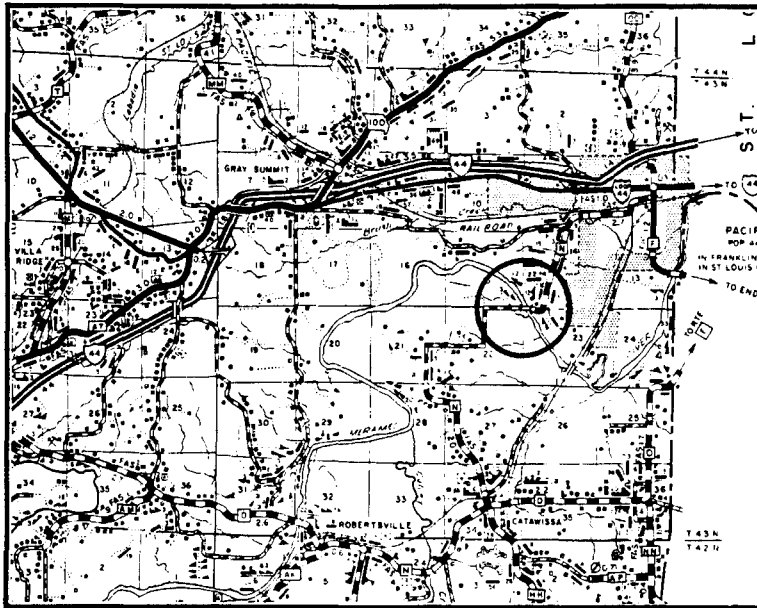
other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with lacing; diagonal: 2 punched rectangular eyebars; lateral bracing: round rod with threaded ends; strut: 2 angles, braced; floor beam: I-beam, field bolted to vertical; guardrail: 2 angles; builder's plate:
Built by / Miller & Borcharding / St. Louis Mo.

With its wide channel and high bordering cliffs, the Meramec River proved to be a formidable obstacle to overland travelers in central Franklin County. Local citizens began subscribing for a bridge over the river on the Catawissa-Pacific Road as early as 1892. The Withington Ford crossing, as it was known locally, became the object of repeated petitions to - and rejections by - the county court over the next 23 years. The judges finally directed county engineer J.M. Moore to design a bridge for the crossing in December 1915. Moore delineated a pair of 200-foot Pennsylvania through trusses, with typical pin-connected detailing, supported by concrete abutments and center pier. After receiving competitive proposals from nine bridge companies later in the month for the Withington Ford and Hartmann's Ford (FRAN23) bridges, the county selected the East St. Louis Bridge Company to erect the two trusses. For an unknown reason, the bridge company asked to be released from its bid, however, and in February 1916 the St. Louis firm of Miller and Borcharding agreed to construct both bridges for the same price. Construction proceeded slowly throughout the next two years. Using steel components milled by the Illinois Steel Company of Chicago, Miller and Borcharding completed the Withington Ford Bridge in December 1917 for the contract cost of \$13,832.00. It has carried traffic since, with only minor maintenance-related repairs.

Serving as a major crossing of the Meramec River for more than seventy years, the Withington Ford Bridge is historically significant for its longstanding role in the development of regional transportation. The structure's channel spans are technologically significant as well-preserved examples of a Pratt truss subtype—the Pennsylvania through truss. With their polygonal top chord and subdivided panels, the trusses exemplify this relatively uncommon truss type which was used primarily at long-span crossings after the turn of the century. As a rare multiple-span example of this configuration, the Withington Ford Bridge is one of the state's more noteworthy roadway trusses dating from the 1910s.

NAME(S) OF STRUCTURE

Withington Ford Bridge

PHOTOS AND SKETCH MAP OF LOCATION**LOCATION MAP**TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP

SOURCES

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INVENTORIED BY

Clayton B. Fraser

AFFILIATION

Fraserdesign

DATE18 January 1994
