United States Department of the Interior National Park Service

National Register of Historic Places Registration Form

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NAT	REEISTER OF HISTOR NATIONAL PANK SER	IC PLACES VICE

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This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property	New 2017	
historic name La Salle Street Bridge		
5		141-597-36312
2. Location		
street & number Over the St. Joseph Rive	r on La Salle St.	N/A not for publication
-		N/A □ vicinity
-		code zip code
state <u>Indiana</u> code <u>IN</u>	county <u>St. Joseph</u>	$_$ code <u>141</u> zip code <u>40017</u>
3. State/Federal Agency Certification		
As the designated authority under the National His request for determination of eligibility meets th	storic Preservation Act, as amended, I here e documentation standards for registering (by certify that this ⊠ nomination properties in the National Register of
Historic Places and meets the procedural and prof meets does not meet the National Register	essional requirements set forth in 36CFR P	Part 60. In my opinion, the property
□ nationally □ statewide ⊠ locally. (□ See	continuation sheet for additional comments	s.)
for Smarke	10/22/90	
Signature of certifying official/Title	10/27/98 Date	
Indiana Department of Natural R	esources	
State or Federal agency and bureau		
		See continuation sheet for additional
In my opinion, the property \Box meets \Box does no comments.)	t meet the National Register Chiena. (
Signature of certifying official/Title	Date	
State or Federal agency and bureau	Λ	
4. National Park Service Certification	1 million	
I hereby certify that the property is:	Signature of the Keepe	Date of Action
Intered in the National Register. Interest See continuation sheet.	O	$ \land \land$
\Box determined eligible for the		
National Register	Tal nam 't	1200/X Z.18.99
□ See continuation sheet.	Control / 1.	- Lal - 10 11
 determined not eligible for the National Register 		
removed from the National Register		
□ other, (explain:)		
· · · · · · · · · · · · · · · · · · ·		

La Salle Street Bridge

Name of Property

5. Classification

Ownership of Property C (Check as many boxes as apply)	Check only one box		Resources within Prop previously listed resources in	
private		Contributing	Noncontributing	
⊠ public-local public-State		0	0	buildings
	. Structure	0	0	sites
an interest of the second s	object	1	0	structures
		0	0	objects
		1	0	Total
Name of related multiple pro (Enter "N/A" if property is not part of a	multiple property listing.)	in the National Reg	uting resources previo lister	ously listed
East Bank Multiple P	roperty Listing	0		
6. Function or Use				
Historic Functions (Enter categories from instructions)		Current Functions (Enter categories from ins	tructions)	
TRANSPORTATION:	Road-Related (vehicular)	TRANSPORTA	TION: Road-Re	lated (vehicular)
7. Description				
Architectural Classification (Enter categories from instructions)		Materials (Enter categories from in	structions)	
OTHER:	Filled Spandrel Arch	foundation	CONCR	ETE
OTHER:	Melan Arch			
		walls	Meta	
			CONCR	ETE
		roof		
		other		
				······································

Narrative Description

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

Name of Property

8. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- Property is associated with events that have made A a significant contribution to the broad patterns of our history.
- Property is associated with the lives of persons В significant in our past.
- Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- Property has yielded, or is likely to yield, D information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- owned by a religious institution or used for religious purposes.
- В removed from its original location.
- a birthplace or grave. С
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- less than 50 years of age or achieved significance G within the past 50 years.

St. Joseph IN County and State

Are (Ent	as of Significance er categories from instructions)
	GINEERING
	
Per	iod of Significance
190	-
Sia	nificant Dates
190 [°]	
Sig	nificant Person
(Con	nplete if Criterion B is marked above)
Cul	tural Affiliation
Arc	hitect/Builder
Han	nmond, A. J., Builder

Narrative Statement of Significance

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

9. Major Bibliographic References

Bibliography (Cite the books, articles, and other sources used in preparing this form on Previous documentation on file (NPS):	one or more continuation sheets.) Primary location of additional data:
preliminary determination of individual listing (36 CFR 67) has been requested	State Historic Preservation Office
previously listed in the National Register	Other State agency
previously determined eligible by the National Register	Federal agency
designated a National Historic Landmark	Local government
recorded by Historic American Buildings Survey	
#	Other
recorded by Historic American Engineering Record #	Name of repository:

La Salle Street Bridge Name of Property	St. JosephIN County and State		
10. Geographical Data			
Acreage of Property 			

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

United States Department of the Interior

National Park Service

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7. Description

The LaSalle Street Bridge is a reinforced concrete structure, 279 feet in length, with three spans. It is 51 feet wide and the height of the bridge deck to the river bottom is approximately 54 feet.

The bridge is an excellent example of early twentieth century structures built with the Melan arch system, a method of reinforcement which utilized ribs of steel embedded in the concrete arches. The LaSalle Street Bridge arches are elliptical, springing from concrete piers. Marking the entrados is a simple banding, scored to recall voussoirs and of an even width between the entrados and extrados. The crown of this element nearly touches the bottom of a dentilled cornice at the roadbed level. A solid concrete spandrel completes the arch.

The pier starlings are semi-circular at the ends, with scored concrete on the bases below the high water line to imitate masonry construction. Above this, in the body of the pier is a series of stepped, conic forms, the two lowest being truncated by the form above. Above the piers, the vertical supports are in the form of pilasters, with eight banded courses (in concrete) supporting a panelled upper shaft. At the roadbed level a projecting square cornice, with a dentilled frieze below serves as a support for the railing and curb. Short, square posts, as wide as the pier column express the piers above the roadbed.

The wide road bed has concrete sidewalks on either side and once contained ornate balustrades now replaced by modern metal rails. The bridge once had eight lamp standards, each of which contained five ornamental incandescent lamps for illumination. Today, these have been removed, although the raised piers upon which they once stood remains. The bridge is graceful, and harmonizes with the natural setting of the river and its banks. The simplicity of its decor is set off by lush vegetation on either side of the naturalized banks and yet forms a tie to the residential, commercial and industrial activity which bustles along at the street level. **United States Department of the Interior** National Park Service

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8. Statement of Significance

The LaSalle Street Bridge gains significance from its association with the development of the East Bank area during the early twentieth century. (See Section E. East Bank Multiple Property Listing.) It qualifies for the National Register under Criterion C, as an excellent example of an engineering masterwork.

The crossing at LaSalle Street (formerly called Water Street) was one of the first to be made over the St. Joseph River in South Bend. The first ferrie license was granted here in 1831 to Nehemiah B. Griffith. Toward the mid-to latter part of the 1850s, St. Joseph County took charge of all bridges across the St. Joseph (and the rest of the county). A wooden covered bridge was installed soon afterward.

But the crossing was destined to endure difficulties. In 1865 this span fell in the path of a tornado, which destroyed the eastern half. It was rebuilt without the roof, perhaps in the hope of averting further disaster. Later, this wooden construction was replaced by a suspension or chain bridge. When a hapless workman accidentally drove a pin out of the east end, the entire structure dove into the river. Prudently, its successor was a sturdy iron truss bridge, which remained in place until replaced by the present reinforced concrete edifice. ¹

Henry Grattan Tyrell, the erudite early twentieth century bridge engineer and author, called for: "the engineers of the twentieth century to insist upon and to establish a higher standard of bridge design, based upon the combined standard of economic proportion and aesthetic appearance. He would have approved of the LaSalle Street Bridge. Its proportions, especially of the arches as well as the design of its piers have much in common with a concrete bridge constructed in 1904 in Grand Rapids, Michigan which the old master called, " ..a good example of the best American practice in concrete construction." 2

Along with South Bend's two other early nineteenth century concrete bridges, the La Salle Street Bridge shows some of the influences of the

¹ Howard pp. 232,233.

² Henry Grattan Tyrell. Artistic Bridge Design. Chicago: The Myron C. Clark Publishing Co., 1912. Preface and p. 219.

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	St. Joseph County, Indiana

"City Beautiful" movement. An adherent of this movement, the landscape architect/planner, George Kessler, had decorated many of the crossings in the state capital, Indianapolis, with concrete and stone bridges which featured classically inspired ornament. The La Salle Street Bridge was designed by South Bend City Engineer, Alonzo J. Hammond. His design was far more restrained than those devised by Kessler, and used concrete to imitate stone. Mr. Hammond had designed, in 1906, the Jefferson Street Bridge "to harmonize with the improvements in Howard Park", and had prophesized that it would be "one of the ornamental structures of the city" A year later when he supervised the design of the La Salle Street Bridge, he surely had the same aspirations in mind. The Concrete-Steel Engineering Company of New York was paid for the use of their patented, Melan-system reinforcing designs. In addition, Professor Malverd A. Howe of Rose Polytechnic Institute in Terre Haute was hired to inspect the plans and specifications. ³

The Melan arch and its predessors in Europe helped make it possible to create graceful, flowing bridges in concrete, such as the La Salle Street Bridge. In the early 1870s, a Frenchman, Jean Monier had patented a reinforcing system for concrete bridges, which the French called the "Breton Arme" or "armed concrete". By the 1880s the patent rights had been purchased for use in Germany and Austria. In the United States, the system was tested by Professor Joseph Melan, who found it too light, and developed a hybrid system, which in essence, created a steel structural skeleton, enveloped in concrete. The Melan arch was revealed to be capable of supporting four times the load of the Monier arch. By 1893, Melan had secured a U.S. patent for his system and the Melan Arch construction Company was formed in New York City. The development of the Melan arch and its later adaptations, meant that bridge building could venture beyond the circular, cut-stone arch of ancient times to create strong structures with more variety. Bridges designed with the Melan arch reinforcing system, like the La Salle Bridge, utilized the elliptical or segmental arch. ⁴ Other, more adventurous designs would come later, as reinforcing systems were further refined.

³James Cooper, Artistry and Ingenuity in Artificial Stone, Indiana's Concrete Bridges, 1900-1942, Greencastle, IN: James L. Cooper, 1997, pp. 26-7, 255.

⁴Ibid., pp. 14-15.

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9. Bibliography

Baker, Ira O., C.E. A Treatise on Masonry Construction. New York: John Wiley & Sons, 1903.

Cooper, James. Artistry and Ingenuity in Artificial Stone, Indiana's Concrete Bridges, 1900 - 1942. Greencastle, IN: James Cooper, 1997.

Howard, Timothy Edward. A History of St. Joseph County, Indiana, Vols. I & II. Chicago/New York: Lewis Publishing Co., 1907.

Tyrrell, Henry Grattan, C.E. Artistic Bridge Design, a Systematic Treatise on the Design of Modern Birdges According to Aesthetic Principles. Chicago: The Myron C. Clark Publishing Co., 1912.

Other Sources

Sanborn Insurance Maps for the City of South Bend: On microfilm in the collection of the South Bend Public Library.

Survey Form, South Bend Historic Sites and Structures Survey, 1979 & April 1988.

10. Verbal Boundary Description

The property consists of the bridge, as it crosses the St. Joseph River, including the roadway, the east and west abutments and the superstructure.

Boundary Justification

The boundaries of the property are intact since the bridge's construction.

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Contemporary and historic photographs:

The following information is the same for all photographs, unless otherwise noted.

- LaSalle Street Bridge Over the St. Joseph River on LaSalle Street
- 2. St. Joseph County, Indiana
- 3. Camille Fife, The Westerly Group, Inc.
- 4. May-June, 1997
- 5. 556 W. 1175 N. Rd., Farmersburg, IN 47850
- 6. View looking northeast from the west bank of the St. Joseph River, just south of the bridge abutment. The two central piers and the east abutment are clearly visible.

- 6. View looking north twoard the south elevation of the bridge, taken from a point along the west bank, almost due south of the bridge.
- 7. Photo No. 8

^{7.} Photo No. 7