Historic Bridge Management Plan for Bridges in City Park, New Orleans

Parish: Orleans
Route: Local Roads
Crossing Description: City Park Lagoons

Prepared for

Louisiana Department of Transportation and Development

Prepared by

Mead & Hunt

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August 2016

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Historic Bridge Management Plan for Bridges in City Park, New Orleans

Parish: Orleans
Features Carried (Route): Local Roads
Crossing: New Orleans City Park Lagoons

The following bridges are covered under this Historic Bridge Management Plan:

- **Recall Number:** 102113
  Structure Number: U3630002900581
- **Recall Number:** 102114
  Structure Number: U3630002900571
- **Recall Number:** 102115
  Structure Number: U3630000900541
- **Recall Number:** 102226
  Structure Number: P3629591900591
- **Recall Number:** 102227
  Structure Number: P3629591900571
- **Recall Number:** 102233
  Structure Number: P3629593900551
- **Recall Number:** 102234
  Structure Number: P3629592900561
- **Recall Number:** 102235
  Structure Number: P3629594900561
- **Recall Number:** 102236
  Structure Number: P3629595900071
- **Recall Number:** 102237
  Structure Number: P3629599900571

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Executive Summary

The 10 bridges in City Park are located in New Orleans, Orleans Parish, Louisiana, and are owned by the State of Louisiana. The bridges carry local roads over lagoons within City Park. These bridges were determined eligible for the National Register of Historic Places (National Register) in 2013. The 10 bridges are addressed collectively in this Plan because they are of similar design, materials, and dates of construction and have similar preservation needs. Relevant differences are noted.

The bridges consist of nine concrete arches and one concrete rigid frame:

- Recall No. 102113 – Harrison Avenue over City Park lagoon
- Recall No. 102114 – Harrison Avenue over City Park lagoon
- Recall No. 102115 – Harrison Avenue over City Park lagoon
- Recall No. 102226 – Anseman Avenue over City Park lagoon
- Recall No. 102227 – Turner Way over City Park lagoon
- Recall No. 102233 – Enrique Alferez Drive over City Park lagoon
- Recall No. 102234 – Franklin D. Roosevelt Mall Drive over City Park lagoon (rigid frame)
- Recall No. 102235 – Golf Drive over City Park lagoon
- Recall No. 102236 – Palm Drive over City Park lagoon
- Recall No. 102237 – Diagonal Drive over City Park lagoon

All 10 bridges are single-spans and range in length from 31 feet to 55 feet, with overall structure length ranging from 31 feet to 72 feet. All 10 bridges carry park roads and include pedestrian sidewalks. One bridge was built in 1924 while the construction of nine of the bridges associated with the Works Progress Administration (WPA) range from 1936 through 1939.

These bridges are in good condition overall and appear to adequately serve their purpose of carrying vehicular and pedestrian traffic. There are no major structural deficiencies on any of these bridges. Minor deficiencies are described later in this document. With proper maintenance and rehabilitation, the City Park bridges can continue to serve in their present capacity for 20 years or longer.

Any work on the bridges should proceed according to recommendations in this Historic Bridge Management Plan (Plan), which adhere to the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (Secretary's Standards), the *Management Plan for Historic Bridges Statewide* (Statewide Historic Bridge Plan), and the *Programmatic Agreement among the Federal Highway Administration, the Louisiana Department of Transportation And Development, the Advisory Council on Historic Preservation, and the Louisiana State Historic Preservation Officer Regarding Management of Historic Bridges in Louisiana* (PA).

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1. Introduction

This Plan, used in conjunction with the Statewide Historic Bridge Plan, provides guidance on the approach to preservation activities for 10 bridges in City Park identified as Preservation Priority Bridges.

Completion of individual management plans for Preservation Priority Bridges and the Statewide Historic Bridge Plan fulfills terms of the PA, which was executed on September 21, 2015.

The PA provides the basis and procedures for the management of historic bridges in Louisiana and outlines the procedures for the treatment of historic bridges, including Preservation Priority Bridges. In accordance with the PA, an owner seeking state or federal funding for Preservation Priority Bridges will be required by the Louisiana Department of Transportation and Development (LADOTD), in cooperation with the Louisiana State Historic Preservation Office (LASHPO) and the Federal Highway Administration (FHWA), to follow the procedures outlined in this Plan and the Statewide Historic Bridge Plan.

The Statewide Historic Bridge Plan outlines the overall approach to bridge preservation through a discussion of the collaboration of the bridge historian and the bridge engineer, guidance on assessing preservation needs, and resources and technical guidance on maintenance and rehabilitation activities that are broadly applicable to historic bridges. A glossary of common engineering and historical terms is included in the Statewide Historic Bridge Plan.

This Plan for the 10 bridges in City Park compiles and summarizes the specific historic and engineering information for these Preservation Priority Bridges. It documents the existing use and condition of the bridges, along with assessments of the preservation needs, including cost estimates. Preservation can be accomplished in two manners: preventative maintenance and rehabilitation. Maintenance includes cyclical or condition-based activities that, along with regular structural inspections, are directed toward continued structure serviceability. Rehabilitation activities are near- or long-term steps that need to be taken to preserve and in some cases restore a bridge's structural condition and serviceability. In assessing preservation activities for each Preservation Priority Bridge, a design life of 20 years was considered, which is consistent with the duration of the PA. This Plan provides the bridge owner, and other interested parties, with detailed information related to the historic nature of the bridges and the necessary background to make an informed planning decision. The recommendations within this Plan should be reviewed in 10 years following completion of the Plan to identify any needed updates or revisions.

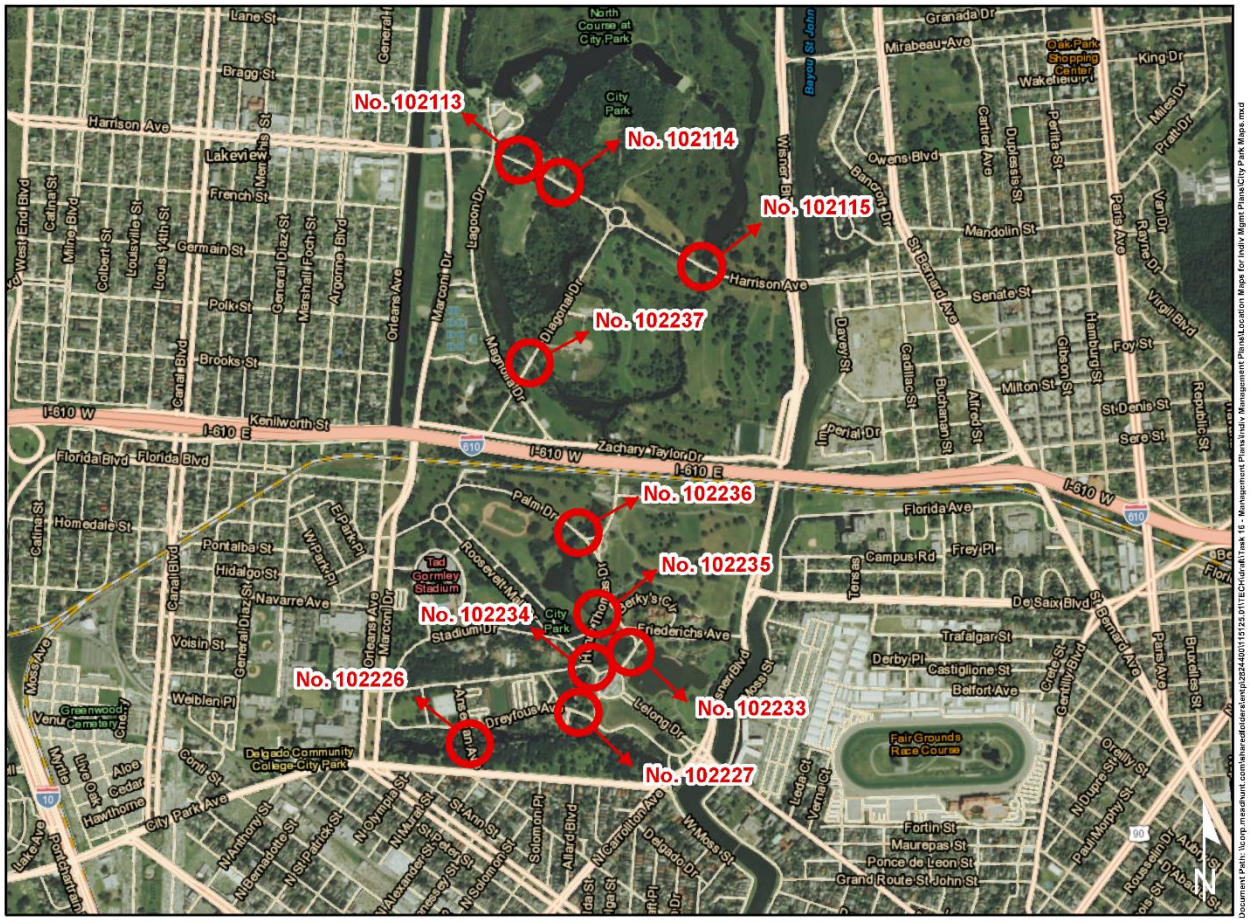
Existing bridge data sources typically available for Louisiana bridges were gathered for this Plan and field investigation confirmed general structural condition and character-defining features of the subject bridge. These sources include:

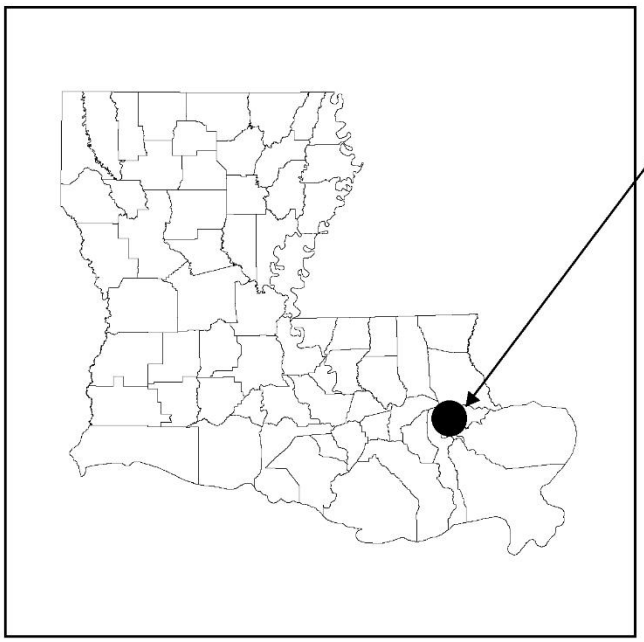
- The current LADOTD Bridge Inspection Report, and any other similar inspection reports
- Existing historical and documentary material related to the historic bridges

Recommendations within this Plan are consistent with the Secretary's Standards. The Secretary's Standards are basic principles created to help preserve the distinct character of a historic property and its site, while allowing for reasonable change to meet new engineering standards and codes. The Secretary's Standards recommend repairing, rather than replacing, deteriorated features whenever possible. A version of the Secretary's Standards that is specific to historic bridges is included in the Statewide Historic Bridge Plan. Following these standards is a requirement of the PA.

A bridge historian and bridge engineer from Mead & Hunt, Inc. (Mead & Hunt) jointly prepared this Plan under contract to the LADOTD. The LADOTD, FHWA, and LASHPO reviewed and provided input into the final Plan.

2. Location Map





PROJECT LOCATION
City Park, New Orleans
Route: Local Roads
Orleans Parish

Recall Number	Structure Number
102113	U3630002900581
102114	U3630002900571
102115	U3630000900541
102226	P3629591900591
102227	P3629591900571
102233	P3629593900551
102234	P3629592900561
102235	P3629594900561
102236	P3629595900071
102237	P3629599900571

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3. Historic Data

A. Identifying information

Identifying information for the 10 bridges covered in this Plan is included in Table 1 below.

Table 1. Identifying information for historic bridges in City Park

Structure number	Recall number	LASHPO number	Year built	Main span type	Designer / Engineer	Builder
U3630002900581	102113	36-01805	1937	Concrete arch	Richard Koch with George Rice; Enrique Alferez-artist	WPA
U3630002900571	102114	36-01806	1937	Concrete arch	Richard Koch with George Rice; Enrique Alferez-artist	WPA
U3630000900541	102115	36-01807	1939	Concrete arch	Richard Koch with George Rice	WPA
P3629591900591	102226	36-01808	1938	Concrete arch	Richard Koch with George Rice	WPA
P3629591900571	102227	36-01809	1924	Concrete arch	Unknown	Unknown
P3629593900551	102233	36-01810	1938	Concrete arch	Richard Koch with George Rice	WPA
P3629592900561	102234	36-01811	1938	Concrete rigid frame	WPA	WPA
P3629594900561	102235	36-01812	1936	Concrete arch	Richard Koch with George Rice; Enrique Alferez-artist	WPA
P3629595900071	102236	36-01813	1936	Concrete arch	Richard Koch with George Rice; Enrique Alferez-artist	WPA
P3629599900571	102237	36-01814	1936	Concrete arch	Richard Koch with George Rice; Enrique Alferez-artist	WPA

B. Description of the bridges

City Park is situated in New Orleans and includes 1,300 acres extending nearly 2 miles. The park is bounded by Robert E. Lee Boulevard, Wisner Boulevard/Bayou St. John, City Park Avenue, and Marconi Drive/Orleans Avenue Canal.

Between 1936 and 1939 the WPA constructed eight single-span, reinforced-concrete arch bridges and one single-span, rigid-frame bridge featuring Art Deco stylized influences typical of the period. Bridge construction was part of New Deal federal work-relief efforts in City Park by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression that included reconfiguration of the park layout and landscaping and

sidewalk, road, and building construction. This Plan also includes a 1924, single-span, concrete arch featuring Classical Revival architectural features. All 10 bridges carry park roads with pedestrian sidewalks.

The 10 bridges in City Park exhibit similar design, construction, and features. Basic descriptive information is included in Table 2.

Table 2. Summary description of historic bridges in City Park[1]

Recall number	Main span type	Max. span length (feet)	Overall structure length (feet)
102113	Closed spandrel concrete arch	36	60
102114	Closed spandrel concrete arch	31	31
102115	Closed spandrel concrete arch	42	60
102226	Closed spandrel concrete arch	41	60
102227	Closed spandrel concrete arch	35	72
102233	Closed spandrel concrete arch	36	53
102234	Concrete rigid frame	55	55
102235	Closed spandrel concrete arch	36	60
102236	Closed spandrel concrete arch	36	59
102237	Closed spandrel concrete arch	43	60

C. History and significance

City Park is situated in New Orleans and extends nearly 2 miles, bounded by Robert E. Lee Boulevard, Wisner Boulevard/Bayou St. John, City Park Avenue, and Marconi Drive/Orleans Avenue Canal. Since its beginnings in the late nineteenth century, City Park has grown to include 1,300 acres and includes a multitude of attractions and recreational facilities, making it a popular destination in New Orleans.

(1) City Park and the New Deal

Efforts to establish the park began when the City Park Improvement Association was formed in 1891. However, park development occurred slowly during the late nineteenth century and the first decades of the twentieth century. The park was developed with a curvilinear system of lagoons, roads, and walkways enhanced by landscaping and numerous buildings and structures placed throughout the park. Initial development included several buildings and improvements for recreational activities. Notable park features from this period include the Peristyle constructed in

[1] Average Daily Traffic (ADT) and weight limit (load posting) typically indicated in individual bridge management plans are not included in this Plan. ADT does not apply to these 10 bridges because they are on roads in City Park. Load (weight) limits do not apply to these bridges because there are no heavy vehicles operating on the roads within City Park.

1907, the New Orleans Museum of Art constructed in 1911, the Casino constructed in 1913, the Beauregard Statue constructed in 1915, and the Popp bandstand constructed in 1917.[2]

Early park development coincided with national trends associated with the City Beautiful Movement, an ideal presented at the 1893 World's Columbian Exposition in which architecture reflected a revival of classicism. Proponents of the movement argued for monumental structures that exhibited durability, strength, fitness, grace, and beauty. The use of the Classical Revival style became popular following the Exposition and included its application in bridge design (discussed further below).[3] One concrete arch bridge constructed in 1924 (Recall No. 102227) in City Park expresses the design ideals associated with the City Beautiful Movement's aesthetic and expresses the Classical Revival style.

In 1926 the park was expanded by 900 acres as additional land was reclaimed, thus making way for its expansion to the north toward Lake Pontchartrain.[4] Further improvements, however, were limited during the 1920s and early 1930s due to lack of funding. To provide a vision for the park, architect Richard Koch, along with F. Julius Dreyfous and Marcel Garsaud, formed a committee to plan future improvements and enhance the aesthetics of the park.[5] In 1931 the committee selected the famed Chicago architecture and city planning firm of Bennett, Parsons, and Frost to complete a master plan. Completed in 1933, the master plan defined a system of lagoons, roadways, and other park improvements that were implemented through a series of New Deal programs, most notably the WPA.[6] Work included the construction of bridges and roads; the Tad Gormley Stadium; the New Orleans Botanical Garden, designed by William Wiedorn, architect Richard Koch, and Art Deco artist Enrique Alferez; and an expansion of the golf course, also designed by Wiedorn.[7] Koch, along with architect Samuel Wilson, Jr. and engineer George Rice, collaborated to design bridges for the new park roads under the WPA from 1936 to 1939, including eight concrete arches in the Art Deco style, five of which display sculptures by Alferez. One bridge, a concrete rigid frame (Recall No. 102234), was also constructed during this period by the WPA in 1938; however, research did not reveal an association with Koch, Wilson, Rice, or Alferez.

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[2] City Park New Orleans, "City Park History," http://neworleanscitypark.com/new-orleans-city-park-history; The Cultural Landscape Foundation, "New Orleans City Park" https://tclf.org/landscapes/new-orleans-city-park.

[3] Mead & Hunt, Inc., *Historic Context for Louisiana Bridges, Louisiana Statewide Historic Bridge Inventory,* prepared for the Louisiana Department of Transportation and Development by Mead & Hunt, Inc., December 2013, 107-109.

[4] City Park History, "City Park New Orleans."

[5] Sally K. Reeves, William D. Reeves, Ellis P. Laborde, and James S. Janssen, *Historic City Park, New Orleans* (New Orleans, La.: City Park Improvement Association and the Friends of City Park, 2000), 76.

[6] Reeves, *Historic City Park, New Orleans*, 77-78; The Cultural Landscape Foundation, "New Orleans City Park."

[7] The Cultural Landscape Foundation, "New Orleans City Park."

The City Park improvements reflect the culmination of work under a number of New Deal programs and projects, including the WPA, PWA, CWA, and FERA. In addition to the architect-designed projects above, this work included substantial reconfiguration of the park layout, which included landscaping and sidewalk, road, and building construction based on the concepts of the 1933 master plan. These large improvements created jobs for an estimated 20,000 workers due to the intense use of hand labor for construction activities.[8] The scale of the work is reflected by a visit by President Franklin D. Roosevelt in 1937 to New Orleans to dedicate Roosevelt Mall in City Park and recognize the many federal work-relief projects in the park.[9] The construction of the nine bridges associated with the WPA spans from 1936 through 1939 and coincides with federal work-relief projects during the New Deal. After the late 1930s the New Deal programs wound down prior to U.S. entry into World War II.[10]

Bridges constructed under the New Deal and federal work-relief programs is identified as an important historical theme in the *Historic Context for Louisiana Bridges*. Nine of the City Park bridges are eligible for the National Register under *Criterion A: Politics/Government* for a direct association with of New Deal federal work-relief efforts in City Park, an important theme in Louisiana history. These bridges retains good integrity and clearly convey the physical features that demonstrate their significance as a work of the WPA, which is especially evident through the use of bold font with "WPA" on the concrete endposts.

(2) Design and aesthetics of bridges in City Park

Concrete arch bridges came into widespread use in the U.S. in the late 1890s following the introduction of reinforcing systems, which became the popular concrete technique used extensively in highway and pedestrian bridge construction.[11] Concrete arch bridges can either have an open or closed spandrel. The spandrel is the area between the arch ring and deck. The concrete arches in City Park are closed spandrels in which the spandrel wall retains fill material such as earth or rubble and bears the live loads. Closed-spandrel arches are primarily used for short span lengths such as the examples in City Park. Nationally, reinforced-concrete closed-spandrel arches generally date from the 1890s through the 1940s; Louisiana examples were constructed through the 1930s. There are no other examples of concrete arches in Louisiana and the examples in City Park represent a distinctive bridge type in Louisiana.[12]

The rigid frame bridge is considered the last major type of reinforced-concrete bridges to be developed. The rigid frame originated in Europe and was introduced to the U.S. in the 1920s, in

[8] City Park New Orleans, "City Park History"; Reeves, *Historic City Park, New Orleans*, XI, 75-79.

[9] City Park New Orleans, "City Park History"; Reeves, *Historic City Park, New Orleans*, 87.

[10] Mead & Hunt, Inc., *Historic Context for Louisiana Bridges, Louisiana Statewide Historic Bridge Inventory,* 24-27.

[11] National Research Council, *A Context for Common Historic Bridge Types,* prepared for the National Cooperative Highway Research Program, Transportation Research Council, National Research Council, by Parsons Brinckerhoff and Engineering and Industrial Heritage, 2005, 2-17.

[12] Mead & Hunt, Inc., *Historic Context for Louisiana Bridges, Louisiana Statewide Historic Bridge Inventory,* 65.

which it was used primarily for grade separations and parkways and was readily adaptable for architectural and ornamental treatment. In rigid frame design and construction, the bridge's superstructure and substructure are joined in a cast-in-place unit. Compared to their greater use nationally, concrete rigid frame bridges in Louisiana are rare and represent a distinctive bridge type.[13]

Like buildings, bridges from a particular period may either intentionally or unintentionally reflect the aesthetic of the time. Aesthetics was not a major focus in bridge design and construction largely due to the limitations of construction materials, cost, availability of artisans, and/or community expectations. As such, most bridges do not have an overt aesthetic; rather, aesthetics are subtle or not applied at all. Following the national trend, Louisiana has few examples of intentionally applied aesthetic treatments applied to bridges reflecting important architectural styles.[14] The 10 bridges in City Park represent a departure from this trend in Louisiana as they display aesthetic treatments reflecting features of two important architectural styles: Classical Revival and Art Deco.

Nationally, the desire for the application of aesthetic treatments reflecting important architectural styles to bridges first occurred in the late nineteenth century as part of the City Beautiful Movement in which the use of Classical Revival design elements became popular and applied to bridges. This style is reflected in the 1924 concrete arch bridge (Recall No. 102227) in City Park. Classical Revival design features are reflected through curved railing with arched posts, decorative carved flowers and inscribed cartouche on the parapet/railing, integrated lamp posts with decorative lanterns, endposts with integrated concrete urns, and recessed panels in spandrel walls. The presence of these features represents high artistic value by its overall design as an example of Classical Revival style architecture.

The Art Deco style, which enjoyed its peak of popularity between 1920 and 1930, was characterized by the use of geometric and ornamental motifs to express contemporary trends of industrialization and modernization.[15] Nine of the City Park bridges reflect aesthetic treatment reflective of the Art Deco style. These features are expressed by geometric patterns and inscribed lines, crowned and beveled parapets/railings, recessed arch rings, integrated benches and lighting, and bold font in Art Deco style letters in the concrete endposts. The presence of these features represents high artistic value through overall design as examples of Art Deco style architecture that is enhanced by bas-relief sculptures by artist Enrique Alferez on several of the bridges.

Richard Koch is a notable architect in Louisiana and his work figures prominently in City Park and in the design of eight of the 10 bridges. Koch earned an architectural degree from Tulane in 1910. He studied abroad and worked in the northeastern U.S. before returning to New Orleans in

[13] Mead & Hunt, Inc., *Historic Context for Louisiana Bridges, Louisiana Statewide Historic Bridge Inventory,* 89-90.

[14] Mead & Hunt, Inc., *Historic Context for Louisiana Bridges, Louisiana Statewide Historic Bridge Inventory,* 107-109.

[15] Mead & Hunt, Inc., *Historic Context for Louisiana Bridges, Louisiana Statewide Historic Bridge Inventory,* 107-109.

1916 and forming a partnership with Charles Armstrong. The Armstrong Koch firm is noted for its pioneering work in the restoration of historic buildings in Louisiana beginning in the 1920s. Beginning in 1934 Koch also led the efforts of the Historic American Building Survey (HABS) in the state. By the mid-1930s the partnership with Armstrong ended and Samuel Wilson, Jr. had joined Koch to assist in the design of numerous WPA projects in City Park.[16]

George Rice was also involved with Koch in the design of eight of the bridges. Rice was a consulting structural engineer that is known to have worked with the architectural firm Weiss, Dreyfous and Seiferth on such projects as the State Capitol in Baton Rouge and Charity Hospital in New Orleans.[17] Beginning in 1935 Weiss, Dreyfous and Seiferth directed many of the WPA projects in City Park, which involved the work of Rice and Alferez by the firm. Alferez was a Mexican-born sculptor who came to the U.S. in 1924. He studied at the Art Institute of Chicago before moving to New Orleans in 1929, gaining employment at Weiss, Dreyfous and Seiferth.[18]

The roles of Koch, Wilson, and Rice is notable on eight of the bridges that reflect the Art Deco style, which is further enhanced on five of these bridges by bas-relief sculptures by Alferez. The bas-relief carvings feature figures, often of WPA workers, and tools, which further enhance the design aesthetic of the bridges.

All 10 of the bridges in this Plan are eligible under *Criterion C: Design/Engineering* as distinctive bridge types in Louisiana and as important examples displaying high artistic value. Nine are concrete arches that reflect the characteristics of closed-spandrel arch design and one (Recall No. 102234) reflects rigid-frame construction consisting of substructure and superstructure joined in a monolithic, cast-in-place unit. All 10 display high artistic value as demonstrated with architectural treatments and decorative elements that convey the overall design aesthetic of the Art Deco style or Classical Revival style, which make the structures visually distinctive in their urban parkway setting. These bridges retains good integrity and clearly convey the design features that demonstrate their significance as distinctive bridge types with high artistic value.

D. Character-defining features

Character-defining features are prominent or distinctive aspects, qualities, or characteristics of a historic property that contribute significantly to its physical character. Features may include materials, engineering design, and structural and decorative details. Elements of the bridge that are not identified as character-defining features may be historic fabric. Historic fabric is material in a bridge that was part of

[16] McCollam, Julie H., "Richard Koch," KnowLA Encyclopedia of Louisiana, Louisiana Endowment for the Humanities, http://www.knowla.org/entry/503/; Reeves, *Historic City Park, New Orleans*, 160.

[17] Southeastern Architectural Archive Collection 53, “Weiss, Dreyfous, and Seiferth Office Records,” Southeastern Architectural Archive, http://seaa.tulane.edu/sites/default/files/seaa/docs/finding_aids/53%20WDS%20Office%20Records_Revised_December_2015%20PDF.pdf.

[18] Reeves, *Historic City Park, New Orleans*, 160.

original construction. It is important to consider both character-defining features and the bridge's historic fabric when planning any work.

Each of the 10 bridges in City Park has two character-defining features (described below). The decks and sidewalks on the bridges have been replaced and as modern features they are not part of the historic fabric.

Character-defining Feature 1: Design and construction of reinforced-concrete structures with integrated wing walls.

- Nine are closed-spandrel, reinforced-concrete arches with integrated curved wing walls.
- One is a rigid frame consisting of substructure and superstructure joined in a monolithic, cast-in-place unit with integrated curved wing walls.

Character-defining Feature 2: Aesthetic treatment reflective of the Art Deco or the Classical Revival style. Specific aesthetic treatments for each bridge vary, but display elements below.

Art Deco features are expressed on the bridges by the following elements:

- Geometric patterns and inscribed vertical lines.
- Crowned and beveled parapets/railings and pier caps.
- Recessed arch ring.
- Integrated lighting and benches.
- Bold font in Art Deco style letters in the concrete endposts.
- Bas-relief sculptures.

Classical Revival features are expressed by the elements found on Recall No. 102227, which include:

- Curved railing with arched posts.
- Decorative carved flowers and inscribed cartouche on the parapet/railing.
- Integrated lamp posts with decorative lantern.
- Decorative endposts with integrated concrete urns.
- Recessed panels in spandrel walls.

Character-defining Feature Photo 1: Design and construction of a closed-spandrel, reinforced-concrete arch with integrated curved wing walls and recessed arch ring (Recall No. 102237 shown).

Character-defining Feature Photo 2: Design and construction of rigid frame construction consisting of substructure and superstructure joined in a monolithic, cast-in-place unit with integrated curved wing walls and crowned parapets/railings and beveled pier caps (Recall No. 102234 shown).

Character-defining Feature Photo 3: Design of reinforced-concrete superstructure with integrated curved wing walls and aesthetic treatment seen in bold font in Art Deco style letters in the concrete endposts and crowned parapets/railings (Recall No. 102234 shown).

Character-defining Feature Photo 4: Aesthetic treatment seen in integrated benches walls (Recall No. 102113 shown).

Character-defining Feature Photo 5: Aesthetic treatment seen in geometric patterns/inscribed vertical lines, recessed arch ring, and beveled parapets/railings (Recall No. 102233 shown).

Character-defining Feature Photo 6: Aesthetic treatment seen in curved railing with arched posts, integrated lamp posts with decorative Classical Revival style lantern, and decorative endposts with integrated concrete urns (Recall No. 102227 shown).

Character-defining Feature Photo 7: Aesthetic treatment seen in decorative carved flowers and inscribed cartouche on the parapet/railing and crowned parapets/railings (Recall No. 102227 shown).

Character-defining Feature Photo 8: Aesthetic treatment seen in recessed panels in spandrel walls. (Recall No. 102227 shown).

Character-defining Feature Photo 9: Aesthetic treatment seen in integrated lighting and beveled parapets/railings (Recall No. 102233 shown).

Character-defining Feature Photo 10: Aesthetic treatment seen in bas-relief sculptures (Recall No. 102236 shown).

Character-defining Feature Photo 11: Aesthetic treatment seen in bas-relief sculptures (Recall No. 102235 shown).

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4. Engineering Data

A. Existing conditions

(1) Structural observations

All 10 bridges in City Park are in good condition overall and appear to adequately serve their purpose of carrying vehicular traffic and pedestrians/bicyclists on local roads, over lagoons, in the park. There are no load (weight) limit posting signs on the bridges. There are no major structural deficiencies for these bridges, but there are several minor deficiencies as described below.

The following are general observations that apply to the 10 bridges covered by this Plan:

1. The roadway and sidewalks have dirt, vegetation, and debris accumulated in gutters and under integrated benches.

2. Vegetation at the ends of the bridges over sidewalks partially obstructs pedestrians and bicyclists.

3. Mold and mildew exists on the concrete surfaces, including under and around the integrated benches at the ends of the bridges.

4. Graffiti has been spray-painted on several bridges.

5. Joints in the concrete parapets/railings are not sealed, and need to be sealed.

6. Joints between the sidewalks and parapets/railings generally lack sealant, and in those joints that have been sealed the sealant has failed and the color does not match the adjacent concrete.

7. The road surface is in poor condition across the bridges and at approaches.

The following are specific observations for individual bridges:

Recall No. 102113

1. An abandoned steel conduit and wiring exists on the north side of the bridge.

Recall No. 102114

1. The sidewalk in the southwest and northeast corners of the bridge has uneven joints where the sidewalks have settled.

Recall No. 102115

1. There is vehicle impact damage at the southwest corner of the concrete parapet/railing on integrated wingwall.

Recall No. 102226

1. Unsealed joints and cracks exist in the road pavement over the bridge.
2. Asphalt road approaches to the bridge are pot-holed and deteriorated.

Recall No.102227

1. There is broken glass in the northwest lamp post lantern. It is not known if the lights in the four towers work.
2. Spalled and delaminated concrete exists on the underside of the arch.

Recall No. 102233

1. Joints in the north approach roadway to the bridge are not sealed.
2. Deteriorated and failed roadway pavement are present at south approach to the bridge
3. Spalled and delaminated concrete exists on the underside of the arch.

Recall No. 102234

1. A crack is present in the west asphalt approach roadway to the bridge.
2. Spalled and delaminated concrete exists on the underside of the arch.

Recall No.102235

1. Joints in sidewalks on both sides of the road are uneven where the sidewalks have settled.
2. Joints in the road over the bridge are uneven where differential settlement has occurred.

Recall No. 102236

1. Joints in sidewalks on both sides of the road are uneven where the sidewalks have settled.
2. There is erosion at the corners of the bridge and sidewalk.

Recall No. 102237

There are no specific observations for this bridge not covered under the general observations.

(2) Non-structural observations

There are no non-structural observations for the 10 bridges.

(3) Serviceability observations

ADT typically indicated in individual bridge management plans is not included in this Plan as it is not available for these 10 bridges because they are on local roads in a city park. The bridges have sidewalks to accommodate pedestrian use. Bicycles share the traffic lanes with vehicles.

The bridge parapets/railings on all bridges are in fair condition but do not meet current standards for height and geometry. However, there is no crash history on these bridges, except for one crash at Recall No. 102115. It is recommended that no changes or alterations be made to any of the bridge parapets/railings. The existing bridge parapets/railings are acceptable without modification because of the low or non-existent crash history.

B. Sources of information

Plans available:	No
Inspection report date:	March 22, 2015, April 22, 2015 and April 23, 2015
Fracture critical report date:	Not applicable
Underwater inspection report:	(not known)
Date of site visit:	December 14-16, 2015

The following photographs show representative examples of vegetation and debris accumulation, vegetation at ends of bridges, and mold and mildew on concrete surfaces, including under the integrated benches.

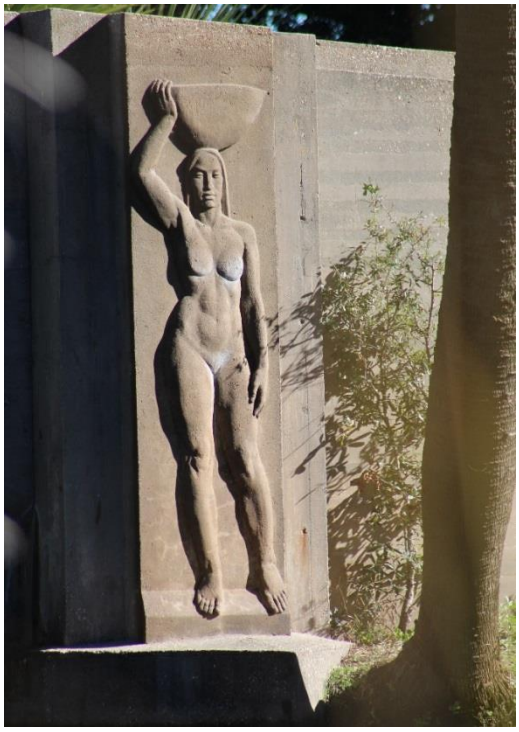
Condition Photo 1: Debris, vegetation, and mold/mildew on underside of integrated bench (northeast corner of Recall No.102235 shown).

Condition Photo 2: Debris and vegetation accumulation and mold/mildew on concrete surface of bas-relief sculpture (southwest corner of Recall No. 102237 shown).

Condition Photo 3: Debris accumulation on sidewalk (northeast corner of Recall No. 102226 shown).

The following photos show representative examples of graffiti on bridges.

Condition Photo 4: Integrated bench with graffiti sprayed with paint (northwest corner of Recall No. 102235 shown).



Condition Photo 5: Graffiti sprayed with paint on bas-relief sculpture (southeast corner of Recall No. 102236 shown).

Condition Photo 6: Sidewalk and parapet/railing with graffiti sprayed with paint (northeast corner of Bridge Recall No. 102114 shown).

The following photos show specific observed conditions at individual bridges.

Condition Photo 7: Abandoned steel conduit and wiring on north side of Recall No. 102113.

Condition Photo 8: Sidewalk settlement at curb line of Recall No. 102114, and asphalt sidewalk approach settled at curb line resulting in uneven joints.

Condition Photo 9: Vehicle impact damage to concrete parapet/railing on integrated wingwall in southwest corner of Recall No. 102115.

Condition Photo 10: Unsealed joints and cracks in concrete pavement over Recall No. 102226; deteriorated asphalt pavement on easterly approach roadway.

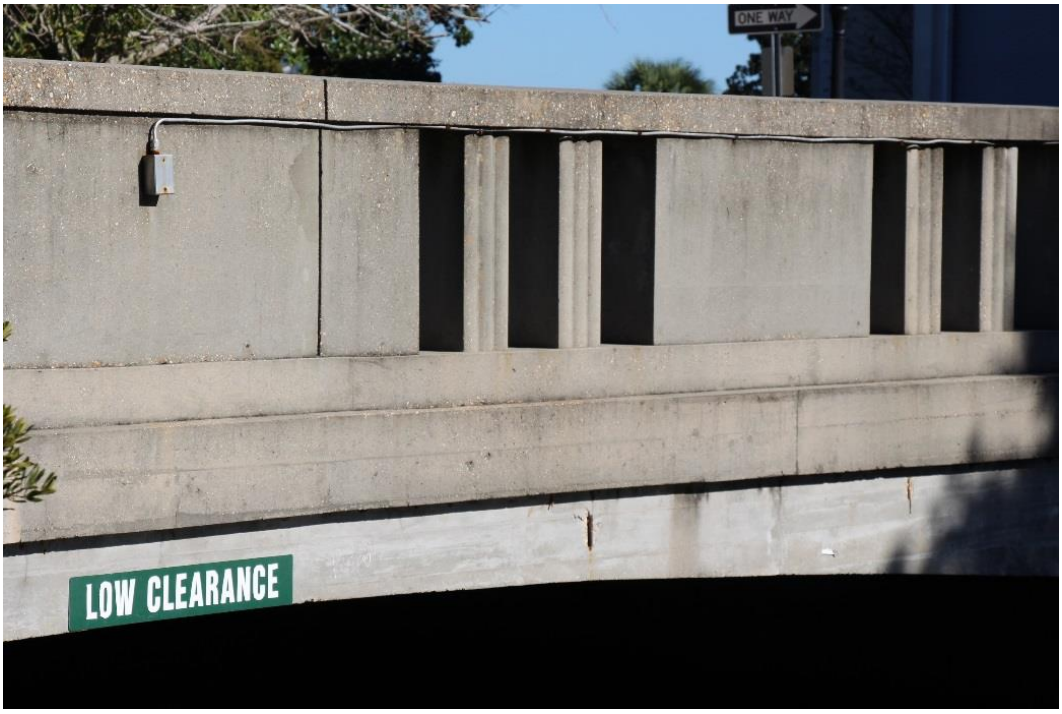
Condition Photo 11: Broken glass in northwest lamp post lantern on Recall No. 102227; condition of lights in four corners of the bridge is unknown.

Condition Photo 12: Spalled and delaminated concrete on underside of arch of Recall No. 102227.

Condition Photo 13: Spalled and delaminated concrete on underside of arch of Recall No. 102233.

Condition Photo 14: Deteriorated and failed roadway pavement at south approach to Recall No. 102233.

Condition Photo 15: North approach roadway of Recall No. 102233 with unsealed jointed pavement.



Condition Photo 16: Spalled and delaminated concrete on underside of Recall No. 102234 and sides of rigid frame.

Condition Photo 17: Crack in west asphalt approach roadway to Recall No. 102234.

Condition Photo 18: Unsealed joints and settlement of sidewalks at curb line of Recall No. 102235, typical each side of the bridge.

Condition Photo 19: Unsealed joints and settlement of roadway slabs at ends of Recall No. 102235, typical each end.

Condition Photo 20: Unsealed joints in concrete sidewalk on Recall No. 102236; settlement at curb line.

Condition Photo 21: Erosion in southwest corner of Recall No. 102236 at sidewalk, typical on all four corners of bridge.

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5. Recommendations

These Preservation Priority Bridges should remain in use and can meet current and projected transportation needs for the next 20 years or more. Maintenance and rehabilitation activities should be completed in a manner consistent with the long-term preservation of these historic bridges. The Statewide Historic Bridge Plan provides additional guidance and approaches to completing maintenance and rehabilitation activities that adhere to the Secretary's Standards. Work should be conducted under the supervision of a qualified professional historian, as defined in the PA. The bridge engineer, or the bridge engineer's supervising engineer, should have demonstrated expertise in historic bridge projects and must have completed the LADOTD's historic bridge training. When developing plans and specifications for a project, the bridge engineer should follow the recommendations below.

Under the terms agreed upon in the PA, the bridge owner may undertake certain activities that are considered to be best practices without additional consultation or public notification. These activities are documented in Attachment 5 of the PA and are limited to the activities specifically noted. All recommended preventative maintenance and rehabilitation activities for these bridges are included in Attachment 5 and are not expected to alter the character-defining features or historic fabric of the bridge. Some cyclical or condition-based maintenance items are noted below under Rehabilitation because they are expected to be completed as part of an overall rehabilitation project for this bridge. These activities may need to be completed as conditions dictate to promote long-term preservation of this historic bridge. Recommendations within this Plan should be reviewed in 10 years following completion of the Plan to identify any needed updates or revisions.

The opinions of probable costs provided below are in 2016 dollars. The costs were developed without benefit of preliminary rehabilitation plans and are based on the above identified tasks using engineering judgment and/or gross estimates of quantities and historic unit prices and are intended to provide a programming level of estimated costs. Refinement of the probable costs is recommended once preliminary plans have been developed. The estimated preservation costs include a 10 percent contingency and 7 percent mobilization allowance of the preservation activities, excluding soft costs. Actual costs may vary significantly from those opinions of cost provided herein. Engineering design, historical consultation, and construction administration costs are not included as these may be provided by the owner or consultants.

A. Preventative maintenance

The following are recommendations for cyclical or condition-based maintenance for the 10 bridges covered by this Plan in City Park, many of which are being routinely performed. As such, these items are not included in the cost estimates.

1. Clean the roadway and sidewalks from dirt, vegetation, and debris quarterly, or as conditions warrant.

2. Clear vegetation at the ends of the bridges as necessary to remove obstructions for pedestrians as conditions warrant.

3. Remove mold and mildew from the concrete surfaces under and around the benches at the ends of the bridges, by using gentle methods for removal such as low-pressure water spray (1,000 psi or less) so as to not remove any of the concrete material. Careful testing of the this method should first take place on a small area to ensure it does not abrade, discolor, or damage the concrete surface prior to employing the method to complete the cleaning. This work should be done regularly to maintain in good condition.

4. Remove graffiti from bridges, by using gentle methods for removal. National Park Service (NPS) *Preservation Brief 38: Removing Graffiti from Historic Masonry* provides guidelines for removing graffiti from concrete surfaces and determining the gentlest possible treatment for graffiti removal that will be effective, such as low-pressure water spray (1,000 psi or less). Solvent cleaning should not be used, nor should any coating be applied over the graffiti. Careful testing of the selected method by an operator whose skill and experience can be documented should be conducted on a small area to ensure it does not abrade, discolor, or damage surfaces that are to remain prior to completing the graffiti removal. This should be done as needed.

5. Seal the joints in the parapets/railings with a sealant of a color that closely matches the color of the adjacent concrete in the parapets/railings. This work should be done as conditions warrant.

6. Seal joints between the sidewalks and parapets/railings with a sealant that closely matches the color and texture of the adjacent concrete. This work should be done as conditions warrant.

7. Continue to monitor the condition of the road surface across the bridges and at approaches to the bridges. Considerations should be given to sealing the cracks in the pavement as conditions warrant. Review the condition of the road surface as conditions warrant.

The following are recommendations for condition-based maintenance for individual bridges. It is recommended that these activities be performed to maintain the structures in good condition:

Recall No. 102113

1. Remove the abandoned steel conduit and attachments to the bridge on the north side of the bridge. Care should be taken not to damage the concrete surface of the bridge during removal. Patch concrete where attachments are removed with mortar material that matches the color, texture, and consistency of the existing concrete.

Recall No. 102114

1. Grind the sidewalk in the southwest and northeast corners of the bridge to smooth out the joint where the sidewalks have settled.

Recall No. 102115

1. Repair the vehicle impact damage at the southwest corner of the concrete parapet/railing on the integrated wingwall. Any exposed reinforcing should be sandblasted, cleaned, and coated with a rust-inhibiting product. The replacement concrete material should be selected to be compatible in composition with the adjacent concrete and should be formed and finished to match the surrounding historic concrete in color and texture (including any necessary exposed aggregate). Consult NPS *Preservation Brief 15: Preservation of Historic Concrete* to identify the appropriate methods for concrete patch repairs. Visual appearance should be carefully reviewed by a bridge historian to confirm the results conform to the Secretary's Standards.

Bridge Recall No. 102226

1. Seal joints and cracks in road pavement over the bridge.

2. Patch asphalt road approaches to the bridge with asphalt road patching material, either hot mix or cold mix. Perform this work within the next year.

Recall No.102227

1. Remove and replace broken glass in the northwest lamp post lantern. Check all lights and replace bulbs and glass as necessary. Replacement glass should be in-kind. In-kind means replacement material should match the same material type and color as the existing material.

Recall No. 102233

1. Seal joints in the north approach roadway to the bridge.

Recall No. 102234

1. Seal cracks and joints in the west approach roadway to the bridge at the end of the bridge.

Recall No.102235

1. Grind joints in sidewalks on both sides of the road to smooth out the joints where the sidewalks have settled.

2. Grind joints in the road over the bridge where differential settlement has occurred.

Recall No. 102236

1. Grind joint in the sidewalk in the northwest corner where the sidewalk has settled.

2. Place and compact crushed aggregate or crushed stone in all corners of sidewalks at the ends of the bridge to correct and control erosion.

Recall No. 102237

There are no recommendations for condition-based maintenance for Recall No. 102237.

B. Rehabilitation

The following are recommendations for rehabilitation for Recall No. 102227. The activity listed should be performed when necessary (estimated to be within the next five years).

1. Patch delaminated concrete on underside of the arch. Any exposed reinforcing should be sandblasted, cleaned, and coated with a rust-inhibiting product. The replacement concrete material should be selected to be compatible in composition with the adjacent concrete and should be formed and finished to match the surrounding historic concrete in color and texture (including any necessary exposed aggregate). Consult NPS *Preservation Brief 15: Preservation of Historic Concrete* to identify the appropriate methods for concrete patch repairs. Visual appearance should be carefully reviewed by a bridge historian to confirm the results conform to the Secretary's Standards.

Bridge Recall No. 102227			Date:	3/22/2016	
City Park Bridge over Park Lagoon					
Opinion of Probable Costs					
Rehabilitation					
Item	**Quantity**	**Unit**	**Unit Cost**	**Total**	
Patch delaminated concrete on underside of arch	40	SF	$125	$5,000	
Item Subtotal				$5,000	
Contingency			10.00%	$500	
Mobilization			7.00%	$385	
TOTAL				**$5,885**	
			Round to:	**$6,000**	

The following are recommendations for rehabilitation for Recall No. 102233:

1. Patch delaminated concrete on the underside of the arch. Any exposed reinforcing should be sandblasted, cleaned, and coated with a rust-inhibiting product. The replacement concrete material should be selected to be compatible in composition with the adjacent concrete and should be formed and finished to match the surrounding historic concrete in color and texture (including any necessary exposed aggregate). Consult NPS *Preservation Brief 15: Preservation of Historic Concrete* to identify the appropriate methods for concrete patch repairs. Visual appearance should be carefully reviewed by a bridge historian to confirm the results conform to the Secretary's Standards. This activity should be performed when necessary (estimated to be within the next five years).

2. Repair south approach roadway pavement by removing existing deteriorated asphalt pavement patch, paving with hot-mixed asphalt pavement to fill the depressed pavement, and leveling out with adjacent pavement. This activity should be performed when necessary (estimated to be within the next year).

Bridge Recall No. 102233			Date:	3/22/2016	
City Park Bridge over Park Lagoon					
Opinion of Probable Costs					
Rehabilitation					
Item	**Quantity**	**Unit**	**Unit Cost**	**Total**	
Patch delaminated concrete on underside of arch	25	SF	$125	$3,125	
Repair south approach roadway pavement by removing existing pavement, pave with hot-mix asphalt to fill depressed area, and level with hot-mix asphalt to match existing pavement	30	SY	$200	$6,000	
Item Subtotal				$9,125	
Contingency			10.00%	$913	
Mobilization			7.00%	$703	
TOTAL				**$10,740**	
			Round to:	**$11,000**	

The following are recommendations for rehabilitation for Recall No. 102234. The activity listed should be performed when necessary (estimated to be within the next five years).

1. Patch delaminated concrete on the underside of the rigid frame. Any exposed reinforcing should be sandblasted, cleaned, and coated with a rust-inhibiting product. The replacement concrete material should be selected to be compatible in composition with the adjacent concrete and should be formed and finished to match the surrounding historic concrete in color and texture (including any necessary exposed aggregate). Consult NPS *Preservation Brief 15: Preservation of Historic Concrete* to identify the appropriate methods for concrete patch repairs. Visual appearance should be carefully reviewed by a bridge historian to confirm the results conform to the Secretary's Standards.

Bridge Recall No. 102234			Date:	3/22/2016	
City Park Bridge over Park Lagoon					
Opinion of Probable Costs					
Rehabilitation					
Item	**Quantity**	**Unit**	**Unit Cost**	**Total**	
Patch delaminated concrete on underside of rigid frame	36	SF	$125	$4,500	
Item Subtotal				$4,500	
Contingency			10.00%	$450	
Mobilization			7.00%	$347	
TOTAL				**$5,297**	
			Round to:	**$5,000**	

There are no recommendations for rehabilitation for any of the other bridges as of the date of the Management Plan.

C. Identification of any anticipated design exceptions

No design exceptions are recommended for any of the 10 bridges.

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Appendix A. Historic Inventory Forms

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Louisiana Historic Bridge Inventory

Recall Number: 102113 **Structure Number:** U3630002900581 **SHPO Number:** 36-01805

Bridge Name: HARRISON AV.OVER LAGOON

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.6MI.W.OF WISNER BL

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: City or Municipal Highway Agency

Latitude: 30.003333

Longitude: -90.096667

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1937

Main Span Configuration (if applicable): Closed spandrel arch

Maximum Span Length (feet): 36

Number of Spans: 1

Overall Structure Length (feet): 60

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA
Richard Koch with George Rice; Enrique Alferez-artist

Bridge Plaque:

WPA

National Register of Historic Places Evaluation:

This reinforced concrete arch bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

This bridge also possesses significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Its significance is further demonstrated by the overall aesthetic treatment reflective of the Art Deco style, which is expressed by geometric patterns, crowned and beveled parapets, a recessed arch ring, integrated benches, and bold font used for the WPA stamp. A bas-relief sculpture of a reclined figure, designed by sculptor Enrique Alferez, enhances this bridge's aesthetics. This bridge retains good integrity and clearly conveys the design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102113 **Structure Number:** U3630002900581 **Bridge Name:** HARRISON AV.OVER LAGOON

Parish: Orleans Bridge Owner: City or Municipal Highway Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102114 **Structure Number:** U3630002900571 **SHPO Number:** 36-01806

Bridge Name: HARRISON AV.OVER LAGOON

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.4MI.W.OF WISNER BL

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: City or Municipal Highway Agency

Latitude: 30.003333

Longitude: -90.095

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1937

Main Span Configuration (if applicable): Closed spandrel arch

Maximum Span Length (feet): 31

Number of Spans: 1

Overall Structure Length (feet): 31

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA
Richard Koch with George Rice; Enrique Alferez-artist

Bridge Plaque:

WPA

National Register of Historic Places Evaluation:

This reinforced concrete arch bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

The bridge also possesses significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Its significance is further demonstrated by the overall aesthetic treatment reflective of the Art Deco style, which is expressed by geometric patterns, inscribed vertical lines, crowned and beveled parapets, a recessed arch ring, integrated benches, bold font used for the WPA stamp. Bas-relief sculptures of WPA workers with construction tools, designed by sculptor Enrique Alferez, enhance this bridge's aesthetics. This bridge retains good integrity and clearly conveys design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for listing in the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102114 **Structure Number:** U3630002900571 **Bridge Name:** HARRISON AV.OVER LAGOON

Parish: Orleans Bridge Owner: City or Municipal Highway Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102115 **Structure Number:** U3630000900541 **SHPO Number:** 36-01807

Bridge Name: HARRISON OVER LAGOON

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.1MI.W.OF WISNER BL

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: City or Municipal Highway Agency

Latitude: 30

Longitude: -90.09

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1939

Main Span Configuration (if applicable): Closed spandrel arch

Maximum Span Length (feet): 42

Number of Spans: 1

Overall Structure Length (feet): 60

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA
Richard Koch with George Rice

Bridge Plaque:

WPA

National Register of Historic Places Evaluation:

This reinforced concrete arch bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

This bridge also possesses significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Its significance is further demonstrated by the overall aesthetic treatment reflective of the Art Deco style, which is expressed by geometric patterns, inscribed vertical lines, crowned and beveled parapets, a recessed arch ring, bold font used for the WPA stamp. This bridge retains good integrity and clearly conveys the design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102115 **Structure Number:** U3630000900541 **Bridge Name:** HARRISON OVER LAGOON

Parish: Orleans Bridge Owner: City or Municipal Highway Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102226 **Structure Number:** P3629591900591 **SHPO Number:** 36-01808

Bridge Name: BRIDGE OVER CITY PARK LG

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.1MI.N.OF CITY PARK

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: Other Local Agency

Latitude: 29.985

Longitude: -90.098333

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1938

Main Span Configuration (if applicable): Closed spandrel arch

Maximum Span Length (feet): 41

Number of Spans: 1

Overall Structure Length (feet): 60

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA
Richard Koch with George Rice

Bridge Plaque:

WPA; Dedicated to Victor Anseman for his great devotion to the park, 1842-1904

National Register of Historic Places Evaluation:

This reinforced concrete arch bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

The bridge also possesses significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Though more modest than other arches in City Park, the combination of features conveys the overall design aesthetic of the Art Deco style, which include the overall structure design, beveled piers and parapets, recessed arch ring, and bold font used for the WPA stamp. As a later example of a reinforced concrete arch in City Park, the bridge reflects the evolution of the Art Deco style as the design aesthetic became simplified and influenced by the Streamlined Moderne style. This bridge retains good integrity and clearly conveys the design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102226 **Structure Number:** P3629591900591 **Bridge Name:** BRIDGE OVER CITY PARK LG

Parish: Orleans Bridge Owner: Other Local Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102227 **Structure Number:** P3629591900571 **SHPO Number:** 36-01809

Bridge Name: BRIDGE OVER CITY PARK LG

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.5MI.W OF WISNER BL

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: Local Park, Forest or Reservation Agency

Latitude: 29.985

Longitude: -90.095

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1924

Main Span Configuration (if applicable):

Maximum Span Length (feet): 35

Number of Spans: 2

Overall Structure Length (feet): 72

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

Unknown

Bridge Plaque:

Presented by Mr. and Mrs. Felix J. Dreyfous

National Register of Historic Places Evaluation:

This reinforced concrete arch has significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Its significance is further demonstrated by the overall aesthetic treatment reflective of the Classical Revival style, which is expressed by a curved railing with arched posts, decorative carved flowers and inscribed cartouche on the parapet, integrated lamp posts with decorative Revival style lantern, and decorative endposts with integrated concrete urns and recessed panels. This bridge retains good integrity and clearly conveys the significant design features within its type and high artistic value. This bridge is eligible for listing in the National Register under Criterion C: Design/Engineering.

No evidence was found during research or data collection activities to indicate that this bridge possesses a direct and important association with historical events or trends. This bridge does not possess significance under Criterion A.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102227 **Structure Number:** P3629591900571 **Bridge Name:** BRIDGE OVER CITY PARK LG

Parish: Orleans Bridge Owner: Local Park, Forest or Reservation Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102233 **Structure Number:** P3629593900551 **SHPO Number:** 36-01810

Bridge Name: ENRIQUE ALFEREZ

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.3MI.N OF MUSEUM AR

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: Local Park, Forest or Reservation Agency

Latitude: 29.988333

Longitude: -90.091667

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1938

Main Span Configuration (if applicable): Closed spandrel arch

Maximum Span Length (feet): 36

Number of Spans: 1

Overall Structure Length (feet): 53

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA
Richard Koch with George Rice

Bridge Plaque:

WPA

National Register of Historic Places Evaluation:

This reinforced concrete arch bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

This bridge also possesses significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Its significance is further demonstrated by the overall aesthetic treatment reflective of the Art Deco style, which is expressed by geometric patterns, inscribed vertical lines, crowned and beveled parapets, a recessed arch ring, integrated lighting, and bold font used for the WPA stamp. This bridge exhibits one alteration that results in a minor loss of integrity, the replacement of an original light fixture in the parapet with a comparable style. This continues to clearly convey design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102233 **Structure Number:** P3629593900551 **Bridge Name:** ENRIQUE ALFEREZ

Parish: Orleans Bridge Owner: Local Park, Forest or Reservation Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102234 **Structure Number:** P3629592900561 **SHPO Number:** 36-01811

Bridge Name: ROOSEVELT DR.-LAGOON

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.0MIW.OF MUSEUM OF

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: Local Park, Forest or Reservation Agency

Latitude: 29.986667

Longitude: -90.093333

Structural Data:

Bridge Type: Concrete rigid frame

Year Built: 1938

Main Span Configuration (if applicable):

Maximum Span Length (feet): 55

Number of Spans: 1

Overall Structure Length (feet): 55

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA

Bridge Plaque:

WPA

National Register of Historic Places Evaluation:

This concrete rigid frame bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

This bridge also possesses significance as an important example of concrete rigid frame construction, a distinctive and rare bridge type in Louisiana, and for possessing high artistic value. The distinguishing feature of rigid frame construction is the integration of substructure and superstructure into a single monolithic, cast-in-place unit, which this bridge clearly exhibits. In addition, this bridge displays architectural treatments and decorative elements that convey the overall design aesthetic of the Art Deco style and make the structure visually distinctive in its urban parkway setting. This includes the haunched span, vertical ribbing and flutes on the posts, curved end walls, and bold font used for the WPA stamp. This bridge retains good integrity and clearly conveys the design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102234 **Structure Number:** P3629592900561 **Bridge Name:** ROOSEVELT DR.-LAGOON

Parish: Orleans Bridge Owner: Local Park, Forest or Reservation Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102235 **Structure Number:** P3629594900561 **SHPO Number:** 36-01812

Bridge Name: GOLF DR./PARK LAGOON

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.1 MI.N.OF STADIUM

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: Local Park, Forest or Reservation Agency

Latitude: 29.99

Longitude: -90.093333

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1936

Main Span Configuration (if applicable): Closed spandrel arch

Maximum Span Length (feet): 36

Number of Spans: 1

Overall Structure Length (feet): 60

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA
Richard Koch with George Rice; Enrique Alferez-artist

Bridge Plaque:

WPA

National Register of Historic Places Evaluation:

This reinforced concrete arch bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

This bridge also possesses significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Its significance is further demonstrated by the overall aesthetic treatment reflective of the Art Deco style, which is expressed by geometric patterns, crowned and beveled parapets, a recessed arch ring, integrated benches, and bold font used for the WPA stamp. Bas-relief sculptures of reclined figures and tools for construction and farming, designed by sculptor Enrique Alferez, enhance this bridge's aesthetics. This bridge retains good integrity and clearly conveys the design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102235 **Structure Number:** P3629594900561 **Bridge Name:** GOLF DR./PARK LAGOON

Parish: Orleans Bridge Owner: Local Park, Forest or Reservation Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102236 **Structure Number:** P3629595900071 **SHPO Number:** 36-01813

Bridge Name: PALM DRIVE / LAGOON

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: 0.1 MI.W.OF GOLF DR.

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: Local Park, Forest or Reservation Agency

Latitude: 29.988709

Longitude: -90.093746

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1936

Main Span Configuration (if applicable): Closed spandrel arch

Maximum Span Length (feet): 36

Number of Spans: 1

Overall Structure Length (feet): 59

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA
Richard Koch with George Rice; Enrique Alferez-artist

Bridge Plaque:

WPA

National Register of Historic Places Evaluation:

This reinforced concrete arch bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

This bridge also possesses significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Its significance is further demonstrated by the overall aesthetic treatment reflective of the Art Deco style, which is expressed by geometric patterns, crowned and beveled parapets, a recessed arch ring, and bold font used for the WPA stamp. Bas-relief sculptures titled "Work" and "Earth" depicting WPA tools, designed by sculptor Enrique Alferez, enhance this bridge's aesthetics. This bridge retains good integrity and clearly conveys the design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102236 **Structure Number:** P3629595900071 **Bridge Name:** PALM DRIVE / LAGOON

Parish: Orleans Bridge Owner: Local Park, Forest or Reservation Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs:

Louisiana Historic Bridge Inventory

Recall Number: 102237 **Structure Number:** P3629599900571 **SHPO Number:** 36-01814

Bridge Name: ROOSEVELT DR./LAGOON

Location Data:

District: 02

Parish: Orleans

Feature Crossed: CITY PARK LAGOON

Facility Carried: LOCAL ROAD

Location: O.1MI.N.OF MAGNOLIA

City, Village or Town (if applicable): New Orleans

Status: Open

Bridge Owner: Local Park, Forest or Reservation Agency

Latitude: 29.998333

Longitude: -90.095

Structural Data:

Bridge Type: Concrete Arch

Year Built: 1936

Main Span Configuration (if applicable): Closed spandrel arch

Maximum Span Length (feet): 43

Number of Spans: 1

Overall Structure Length (feet): 60

Approach Span Type (if applicable): N/A

Posted Load:

Current ADT:

Design and Construction Data:

Engineer or Builder:

WPA
Richard Koch with George Rice; Enrique Alferez-artist

Bridge Plaque:

WPA

National Register of Historic Places Evaluation:

This reinforced concrete arch bridge has significance for its association with important trends or events that have made a significant contribution to the broad patterns of Louisiana history. Its significance is demonstrated through its association with the Works Progress Administration (WPA) program to provide work relief and improved infrastructure during the Depression era. Between 1936 and 1939 the WPA constructed eight reinforced concrete arch bridges and one rigid frame bridge in New Orleans's City Park featuring Classical Revival and Art Deco stylized influences typical of the period. Each bridge features "WPA" in Art Deco style letters in the concrete endposts. Bridge construction was part of New Deal federal-relief efforts by the WPA, Public Works Administration (PWA), Civil Works Administration (CWA), and Federal Emergency Relieve Administration (FERA) during the Depression in City Park that included reconfiguration of the park layout and landscaping, sidewalk, road, and building construction.

This bridge also possesses significance as a distinctive bridge type in Louisiana and as an important example of high artistic value. The bridge is one of nine reinforced concrete arches in City Park reflecting the characteristics of closed spandrel arch design. Its significance is further demonstrated by the overall aesthetic treatment reflective of the Art Deco style, which is expressed by geometric patterns, crowned and beveled parapets, a recessed arch ring, and bold font used for the WPA stamp. Bas-relief sculptures of WPA workers employed in construction activities, designed by sculptor Enrique Alferez, enhance this bridge's aesthetics. This bridge retains good integrity and clearly conveys the design features that demonstrate its significance as a work of the WPA and as a distinctive bridge type with high artistic value. This bridge is eligible for the National Register under Criterion A: Politics/Government and Criterion C: Design/Engineering.

Within/Adjacent to Known Historic District: N/A

National Register Historic District Name: N/A

National Register Determination: Eligible

National Register Determination Date: 2013

Surveyor: Mead & Hunt, Inc.

Date Surveyed: 2013

Louisiana Historic Bridge Inventory

Recall Number: 102237 **Structure Number:** P3629599900571 **Bridge Name:** ROOSEVELT DR./LAGOON

Parish: Orleans Bridge Owner: Local Park, Forest or Reservation Agency

Feature Crossed: CITY PARK LAGOON Facility Carried: LOCAL ROAD

Photographs: