



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**CORPS OF ENGINEERS, NEW ORLEANS DISTRICT**  
**7400 LEAKE AVENUE**  
**NEW ORLEANS, LOUISIANA 70160-0267**

**NOVEMBER 15, 2017**

Regional Planning and  
Environment Division, South  
Environmental Planning Branch

Kristin Sanders, Deputy State Historic Preservation Officer  
Louisiana Office of Cultural Development  
P.O. Box 44247  
Baton Rouge, LA 70804-4241

**RE: Section 106 Review Consultation**

**Undertaking:** Illinois Central Railroad Bonnet Carré Spillway Bridge  
Replacement, St. Charles Parish, Louisiana  
(center point of bridge: -Lat.30.064152°, Long. -90.387355°)

**Determination: Adverse Effect**

Dear Ms. Sanders:

Illinois Central Railroad Co. (ICRR) has submitted a request to replace its Bonnet Carré Spillway Bridge, in St. Charles Parish, Louisiana (“undertaking”). This request for permission to modify a U.S. Army Corps of Engineers Project is being reviewed under Section 14 of the Rivers and Harbors Act of 1899, codified in 33 U.S.C. 408 (“Section 408”). Section 408 authorizes the Secretary of the Army to grant permission for the alteration or occupation or use of a USACE project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. Evaluation factors employed by the U.S. Army Corps of Engineers, New Orleans District (CEMVN) for Section 408 reviews, are detailed in Public Notice/File Number 17-0244. This consultation is specific to evaluation factor 3(e).

In partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, the CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Documentation in this letter is consistent with the requirements in 36 CFR §800.11(e).

**Project Background**

In addition to the Section 408 permission, replacement of the bridge requires a Bridge Permit from the United States Coast Guard (USCG) under Section 9 of the Rivers and Harbors Act. The two federal agencies have agreed that USCG will act in the lead role for National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.) compliance, with USACE as a coordinating agency, and that CEMVN will act in the lead role for National Historic Preservation Act (NHPA) (54 U.S.C. § 300101 et seq.) compliance, with USCG being a signatory to any Memorandum of Agreement that is developed (USCG letter dated October 11, 2017, CEMVN letter dated October 16, 2017 -Attachment A). This is consistent with 36 CFR § 800.2(a)(2). As the owner and operator of the bridge, ICRR is funding the entire bridge removal and replacement project.

ICRR is proposing to replace the existing bridge in order to extend the service life of the crossing and ensure continued service along its rail system. Excessive maintenance costs associated with a combination of age, damage from Formosan termites, scour during spillway operation, and fire have become cost prohibitive and preclude the continuation of this repair program.

### **Description of the Undertaking**

ICRR proposes the construction of a new bridge crossing the Bonnet Carré Spillway along the McComb Subdivision and demolition of the existing bridge. The ICRR Bonnet Carré Spillway Bridge (Bridge) is located in St. Charles Parish, southwest of Interstate Highway 10 (I-10) over Lake Pontchartrain and the Bonnet Carré Spillway (Figure 1). It is an approximately 2 mile-long bridge that includes pile trestle, through plate girder, I-beam, and concrete fire wall components. See Attachment B, which provides current photographs of the existing bridge.

The new concrete bridge structure will be constructed parallel to and 50 feet north (lake side) of the existing Bridge and tie back 19 feet from the existing alignment at both the north and south abutments. This offset will allow traffic to be maintained on the existing bridge during construction with only minor operational impacts. The new bridge will be constructed primarily from custom manufactured equipment (overhead gantry crane) from an elevated movable crane platform (bridge builder). The bridge builder will use two (2) 36 inch diameter spud pilings to move along the length of the new bridge within a 42-foot wide temporary work zone to drive piling for the new rail alignment. Light-weight permanent fill and rip-rap is proposed to be placed in uplands, to support new rail embankment at the abutments. See Attachment C, which provides plan examples for the new bridge alignment and typical sections for construction details.

The undertaking takes place almost entirely within an existing Right of Way (ROW) maintained by the ICRR. The undertaking requires the construction of a temporary access road on the north end of the project and a wood-mat road parallel to portions of the existing railroad bridge, the establishment of two staging areas (one on the north end of the project area, and one on the south end of the project area), and the removal of trees and other vegetative materials in advance of the construction of the new Bridge. Of the original Bridge, only four (4) Through Plate Girder (TGP) Spans are to remain following the demolition, all the remaining timber and concrete elements of the bridge will be removed.

### **Area of Potential Effects (APE)**

The APE for direct and indirect effects is represented in Figure 1 and Figure 2. The direct effects APE for the construction and demolition of the Bridge across the Bonnet Carré Spillway, including all the staging areas and temporary access roadways, with a small buffer for construction activities, measures approximately 57.5 acres in size. The construction activities and demolition activities would have direct effects; whereas the elevated railway bridge would have indirect visual effects as represented in Figure 2.

### **Identification and Evaluation**

Background research and literature review was conducted by CEMVN staff in August, and October of 2017. Additionally, ICRR contracted HDR, Inc., an engineering and environmental

services firm, to conduct an assessment of the National Register of Historic Places (NRHP) eligibility of the existing railroad bridge (Keen 2016; Attachment C) and to assess the potential for archaeological deposits in the area of the proposed new construction (Johnson Memo 8/11/2017). Historic properties within the APE were identified based on a review of the NRHP database, the Louisiana Cultural Resources Map, historic map research, and a review of cultural resources survey reports and field visits to document the existing Bridge. The information regarding historic properties identified within the APE was evaluated by CEMVN staff using the National Register (NR) Criteria for evaluation as defined at 36 CFR § 60.4.

The literature review revealed that there has been several cultural resource surveys in the vicinity, with Poplin et al. 1988 being the most relevant for archaeological resources. This cultural resources inventory of the Bonnet Carré Spillway assessed the APE, conducting limited survey in portions of it, and finding no archaeological deposits. The Keen 2016 report was coordinated with the Louisiana State Historic Preservation Officer's (LA SHPO) office who concurred, via letter on August 29, 2017, that the bridge was eligible for listing to the NRHP under Criterion C.

The ICRR Bonnet Carré Spillway was originally built by the ICRR in 1934–1935 as a replacement for an earlier bridge, necessitated by the construction of the Bonnet Carré Spillway from 1929–1931. The 11,748-foot-long bridge was built at MP 891.5 on ICRR's McComb Subdivision, approximately 70 feet west of the center line of the alignment that had been in place since the Civil War era. The USACE built the spillway as a major component of its Mississippi River flood protection plan developed in the wake of the Great Mississippi River Flood of 1927. The new rail bridge was built to withstand an estimated water flow of 250,000 cfs rising to a depth of 11 feet when the spillway structure was open. The bridge is composed of 862 panels of pile trestle, five 70-foot Through Plate Girder spans, five 35-foot I-beam spans, and 13 concrete fire walls (see Attachment B and D).

As noted in reports published at the time of construction, the bridge, while executed as a standard timber trestle with additional concrete and steel components, required extensive and laborious engineering in the planning and design phase. Bridge plans were developed under the leadership team of A. F. Blaess, ICRR's chief engineer, and C. C. Westfall, ICRR's engineer of bridges. Because the Bonnet Carré Spillway was newly completed, designs for the new Bridge had to be based on hydraulic studies and assumptions rather than experience on how the spillway would perform. The topography of the Bridge location added further complications to the construction process. Prior to construction of the spillway, the Bridge location was primarily swampland. Westfall had to develop two pile drivers specifically for use at this site, drivers that were supported on the piles themselves. Driven piles ranged in length from 67 to 105 feet to reflect the soil profile of black muck, multiple strata of watery clay, and thick strata of sand at depths of up to 80 feet.

CEMVN cultural resources staff have determined, based on Keen 2016 and the LA SHPO's concurrence with the findings of Keen, that the Bridge is eligible for listing to the NRHP under Criterion C for engineering, as a timber trestle bridge of extraordinary length and one that solved a complex topographical engineering problem. It is eligible on a local level and its period of significance is 1934–1935. Based on the available evidence, it is unlikely that the APE contains as yet unidentified, intact historic or pre-contact archaeological deposits or other cultural resources.

### **Consulting Parties and the Public**

CEMVN is forwarding this letter and the attached documentation to various consulting parties for their review and comments as required by 36 CFR §800.4(d)(1), and we request that these potential consulting parties provide comments within the 30 days provided for by 36 CFR 800.

In addition to your agency, CEMVN has identified the Advisory Council for Historic Preservation, the U.S. Coast Guard, the Illinois Central Railroad, Tribal governments, the Louisiana Landmarks Society, the St. Charles Parish Economic Development and Tourism Office, which oversees the St. Charles Museum and Historical Association, the Louisiana Trust for Historic Preservation, and the Southeast Louisiana Chapter of the National Railway Historical Society as having an interest in the project. Tribal governments identified to date are: The Alabama-Coushatta Tribe of Texas, the Caddo Nation of Oklahoma, The Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Muscogee (Creek) Nation, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, and the Tunica-Biloxi Tribe of Louisiana. At this time, CEMVN has not identified any other preservation interests. Should you know of additional Tribal governments or preservation groups, please do not hesitate to communicate these to the CEMVN.

### **Assessment of Effects**

Based on the information presented in this letter, CEMVN has determined that there is one historic property, the 1934-1935 ICRR Bonnet Carré Spillway Bridge, as defined in 36 CFR 800.16(l) within the APE. As the proposed undertaking calls for the near complete demolition of this historic property, CEMVN has determined that implementing the undertaking would directly alter the characteristics of this historic property that qualify it for inclusion in the NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, and association. Therefore, CEMVN has determined a finding of **Historic Properties Adversely Affected** for this undertaking and is submitting this determination for your review and comment.

CEMVN requests your comments within 30 days, regarding:

- Efforts to identify and evaluate historic properties within the APE;
- The determination that the construction of a new railroad bridge across the Bonnet Carré Spillway and the demolition of the 1934-1935 ICRR Bonnet Carré Spillway Bridge will result in an Adverse Effect to Historic Properties; and
- CEMVN's proposal to address the effects on the 1934-1935 ICRR Bonnet Carré Spillway Bridge through the development of an MOA.

A date and time for the initial Section 106 consultation meeting has not been set. However, **CEMVN proposes to conduct the initial meeting at the Bonnet Carré Spillway Project Offices, 16302 River Road, Norco, LA 70079 during the week of December 11-15, 2017.** The purpose of the initial meeting will be to discuss the proposed undertaking, the historic property, and to determine the appropriate steps to avoid, minimize, and mitigate the adverse effects. CEMVN will notify the SHPO and other likely consulting parties regarding the meeting as soon as possible and forward information regarding a conference call-in number and the agenda.

CEMVN proposes to send future notices, draft agreements, and other background information to the consulting parties by e-mail to minimize communication delays and expedite the

development of the MOA. Please let CEMVN know if this is impractical, so we can make alternative arrangements.

We look forward to your concurrence with this determination. Should you have any questions or need additional information regarding this undertaking, please contact Jason Emery, Archaeologist, U.S. Army Corps of Engineers, New Orleans District at (504) 862-2364; jason.a.emery@usace.army.mil.

Sincerely,

  
MARSHALL K. HARPER  
Chief, Environmental Planning Branch

CC: File

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Enclosures

Attachment A: USCG letter dated October 11, 2017 and CEMVN letter dated October 16, 2017  
Attachment B: Photographs of the Existing Bonnet Carré Spillway Bridge  
Attachment C: Plan Examples and Typical Sections of the New Bonnet Carré Spillway Bridge  
Attachment D: LDOA # 22-5690 Bonnet Carré Spillway Bridge NRHP Evaluation, Illinois Central Railroad – McComb Subdivision, St. Charles Parish, Louisiana

References:

Poplin, Eric C., Paul C. Armstrong, Carol J. Poplin, and R. Christopher Goodwin  
1988 *Phase 2 of the Cultural Resources Inventory of the Bonnet Carré Spillway, St. Charles Parish, Louisiana*. Produced by R. Christopher Goodwin and Associates, Inc. Report on File with the Louisiana Division of Archaeology (LDOA Rpt. # 22-1259).

Keen, Ann

2016 *Bonnet Carré Spillway Bridge NRHP Evaluation, Illinois Central Railroad – McComb Subdivision, St. Charles Parish, Louisiana*. Produced by HDR, Inc. Report on File with the Louisiana Division of Archaeology (LDOA Rpt. # 22-5690).

Johnson, Melanie

2017 ICRR Bonnet Carré Spillway Bridge Replacement Memo to LA SHPO, USACE Regulatory and Planning on file with USACE, PDN-NCR.

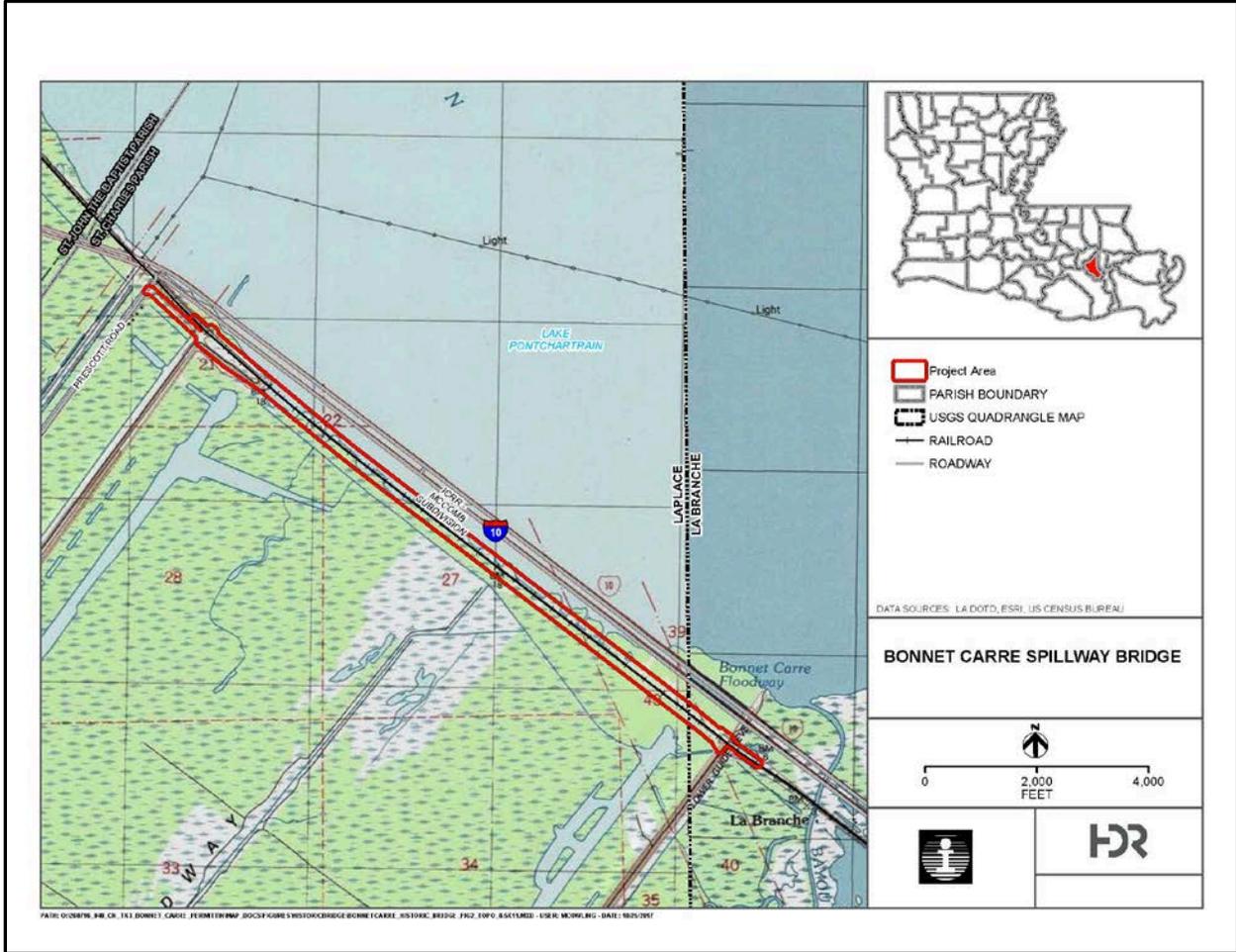


Figure 1. The area outline in red is the location of the 17-0244 Permission. Also, it represents the Area of Potential Effects for the direct effects. The project area is on the LaPlace and the LaBranche 7.5 USGS maps.



Figure 2. Area of Potential Effects: Direct Effects APE bounded by the red line, with indirect APE bounded by the yellow line.