

**Champ Clark Bridge at Louisiana ■ Hydraulic Report
Pike Counties of Illinois and Missouri**

Civil Engineering – Hydraulics Subcontractor

Millennia Professional Services was retained by Burns & McDonnell, in concert with the Missouri Department of Transportation, to provide hydraulic modeling, design-build competition guidance, permitting, and hydraulic reports for the Champ Clark Bridge at Louisiana, Missouri.

The project connects the States of Illinois and Missouri at Louisiana, Missouri, and is located in Pike County for both states. The project will replace the existing US 54 Bridge over the Mississippi River with a new bridge on offset alignment to the south of the existing bridge. The existing bridge structure is comprised of simply supported truss river spans and deck truss approach spans. The bridge is founded on concrete caisson piers in the river and steel frame piers in the overbanks. The project is coordinating improvements in concert with improvements to the Sny Island Levee.

Engineering Services Provided:

- Project Narrative
- Waterway Information Tables
- Hydraulic Report Data Sheets
- Hydraulics Analyses using HEC-RAS
- Modeling for Natural, Existing, and Proposed Conditions
- Freeboard Analysis and Design Recommendations
- Hydraulic Survey Data Exhibits
- Hydraulic Report
- Corps of Engineers Section 401 and 408 Permit Coordination (Rock Island and St. Louis)
- Levee District Permit Coordination
- IDNR-OWR Permit Coordination
- Scour Analysis Parameters

Client:

Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 63114
Phone: 816.276.1593



**Champ
Clark
BRIDGE**
U.S. 54 OVER THE MISSISSIPPI RIVER