**Advisory Council on Historic Preservation**

**Electronic Section 106 Documentation Submittal System (*e*106) Form**

***MS Word* format**

**Send to: *e106@achp.gov***

**I. Basic information**

1. **Name of federal agency** (If multiple agencies, state them all and indicate whether one is the lead agency): Federal Highway Administration.
2. **Name of undertaking/project** (Include project/permit/application number if applicable): Replacement of the historic bridge on Route 17 with a new structure (A7854) over Saline Creek north of Tuscumbia, Miller County; MoDOT Project J5P0928 (see attached project plan sheets and location map).

**3. Location of undertaking** (Indicate city(s), county(s), state(s), land ownership, and whether it would occur on or affect historic properties located on tribal lands): North of Tuscumbia in Miller County, Missouri. The project will occur on public land (within existing Missouri Department of Transportation right of way).

**4. Name and title of federal agency official and contact person for this undertaking**, including email address and phone number:

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**5.** **Purpose of notification.** Indicate whether this documentation is to:

* **notify the ACHP of a finding that an undertaking may adversely affect historic properties, and/or**
* **invite the ACHP to participate in a Section 106 consultation, and/or**
* ~~propose to develop a project Programmatic Agreement (project PA) for complex or multiple undertakings in accordance with 36 C.F.R. 800.14(b)(3).~~

**II. Information on the Undertaking\***

**6. Describe the undertaking and nature of federal involvement** (if multiple federal agencies are involved, specify involvement of each):

Missouri Department of Transportation (MoDOT) Project No. J5P0928 is designed to improve the safety and efficiency of Route 17 over the Saline Creek 3.2 miles north of Route 52 near Tuscumbia by replacing the existing substandard bridge on existing alignment with a new bridge (A7854). The road will be closed during construction. Bridge H0119 is eligible for the National Register of Historic Places (National Register), and the proposed work will have an “adverse effect” on the historic property. No environmental NEPA classification has been approved.

**7. Describe the Area of Potential Effects**:

The project’s area of potential effects (APE) is considered to be the project footprint (i.e. existing and new right-of-way, and temporary and permanent easements). The proposed project will use matching Federal funds. The APE is identified on the location maps attached.

**8. Describe steps taken to identify historic properties**:

In March of 1992 Fraser's Missouri Historic Bridge Inventory survey first evaluated the Saline Creek Bridge (H0119) to be National Register non-eligible as a typical example of 1920s MSHD truss design. The scoping project was advertised for the first time in the Statewide Transportation Improvement Plan (STIP) when Stimulus 2 funding became available in early 2010. The conceptual study report was approved on August 4, 2010; no value engineering study was conducted for the project, and no environmental NEPA classification has been approved.

In January of 2010, MoDOT Historic Preservation (HP) staff re-evaluated the bridge as National Register eligible. On March 25, 2010 HP staff requested that MoDOT District 5 staff do an alternatives analysis and initiate public involvement for the project. A Section 106 Memo was submitted to the SHPO on June 16, 2011, and on June 29, 2011 the SHPO concurred with MoDOT’s recommendation that Bridge H0119 is National Register eligible and that the project will have an “adverse effect” on the historic property. A two-party MOA with stipulations for mitigation would be drafted for review by all signatories, and the project would be covered under a nationwide Programmatic Section 4(f) Evaluation. The first MoDOT core team meeting was held for the project on June 21, 2011. A public meeting was held at Tuscumbia on July 12, 2011. From July 21 through September 15, 2011, the historic bridge was advertised for adaptive reuse at a new location.

**9. Describe the historic property** (or properties) and any National Historic Landmarks within the APE (or attach documentation or provide specific link to this information):

Built in 1925, the Saline Creek Bridge (H0119) (see attached photos) consists of a steel, six-panel, rigid-connected, Pratt through truss with two Warren pony truss approach spans. The main span is 120 feet long, and the total bridge length is 288 feet. It is supported on steel-reinforced concrete abutments, wingwalls, and dumbbell piers. The roadway width is 20 feet curb-to-curb. The 1996 Missouri Historic Bridge Inventory originally listed 90 of this type built in the state prior to 1951. In 2008 their numbers had dwindled to 55, and several more have been replaced since then. H0119 is one of the older surviving members of this truss type in the state with only 12 older currently in existence. It is considered a good example of Missouri State Highway Department truss design in the 1920s, and is considered to be eligible for inclusion to the National Register under Criterion C in the area of Engineering.

**10. Describe the undertaking’s effects on historic properties**:

Replacement of this bridge on the existing alignment will require the removal of the bridge, which is considered an "adverse effect" and will require a Memorandum of Agreement (MOA) stipulating mitigation.

**11. Explain how this undertaking would adversely affect historic properties** (include information on any conditions or future actions known to date to avoid, minimize, or mitigate adverse effects):

This project proposes to replace the historic Saline Creek Bridge with a new structure on existing alignment. The bridge is eligible for the National Register, and this action constitutes an "adverse effect" to the structure as described in 36CFR800.5(a)(2)(i) of the regulations implementing the National Historic Preservation Act.

The alternative courses of action considered for this project include a no-build option, and four build options: 2) rehabilitation of the existing structure, 3) complete bridge replacement on the existing alignment and profile, and 4 & 5) new bridge on new alignment and profile to the east or west of the existing alignment. The Alternative Analysis is attached.

The **no-build** alternate would result in continued deterioration of the bridge. Keeping it in service would require periodic repairs, and occasional unplanned load postings in addition to existing postings, and/or bridge closures for extended periods. The frequency of this work would increase as the bridge ages. The concrete bridge deck is another area of concern; it will require complete replacement in the next 3 to 5 years. Based on historical data, the average maintenance repair cost would be about $3,500 per year. This cost would increase each year as the structure continues to deteriorate. Also, the load posting would be lowered as the structure continued to deteriorate. This option does not satisfy the project objectives and would eventually result in permanent bridge closure.

**Rehabilitation** of the existing structure (estimated cost $750,000) would extend the service life by 5 to 7 years but would not eliminate the current regular maintenance closings. The concrete deck would require complete replacement. Rehabilitation would include superstructure and substructure repair and repainting of all structural steel. Extensive rehabilitation of this scale would be impractical in light of the cost for future additional rehabilitations, and the frequency of this work would increase as the structure ages. Current estimates indicate that an extensive rehabilitation would require bridge closure for about 5 months. The estimated cost would likely increase as additional needed repairs are identified during construction. Rehabilitation would partially satisfy the project objectives by temporarily improving the deck and superstructure National Bridge Inventory Condition Rating. However, rehabilitation would not address safety or functional deficiencies since the deck is confined by the bridge truss and cannot be widened to meet current standards, nor can the truss be strengthened to carry current design loads.

**Complete replacement with a new bridge on existing alignment** (estimated cost $ 982,000 + roadway) would provide long-term benefits. The new structure would have a 28-foot-wide roadway and meet current load standards. Rebuilding the bridge in place would require closing Route 17 for approximately 3 months. This option would result in the least environmental impact of any of the replacement options. It also would require the least right-of-way purchases, mitigation expenses, and approach roadway construction.

**Complete replacement with a new bridge on new alignment on** **the east side** (estimated cost $1,857,000) would provide long-term benefits. The new structure would have a 28 foot wide roadway and meet current load standards. Building on the east would minimize the closure of Route 17. However, this option would result in significant environmental impact to adjacent wetlands. This option would require significant right-of-way purchases, mitigation expenses, and approach roadway construction.

**Complete replacement with a new bridge on new alignment on** **the west side** (estimated cost $1,897,000) would provide long-term benefits. The new structure would have a 28 foot wide roadway and meet current load standards. Building on the east would minimize the closure of Route 17. However, this option would result in significant environmental impact to adjacent wetlands. This option would require significant right-of-way purchases, mitigation expenses, and approach roadway construction.

**Conclusions:** The environmental impacts associated with rehabilitation and new construction along the existing alignment would have the least environmental impact. Conversely, the environmental impacts would be quite significant if traffic was maintained on the existing structure while one of the options was built along new alignment.

Rehabilitation would satisfy the project objective of eliminating the structural condition rating deficiencies and associated high maintenances needs. However, it would only gain 5 to 7 years of service life, and over time, this option could be far more expensive than the estimated $750,000. Additionally, rehabilitation would address the structural deficiencies, but not address the safety or functional deficiencies.

Completely replacing the existing bridge with a similar structure on the existing alignment would satisfy the project objectives of eliminating all condition, safety, and functional deficiencies. With an estimated cost of $1,458,000, complete replacement on existing alignment would be the most reasonable and Preferred Option.

Replacing the existing structure with a new bridge on new alignment to the east or west would satisfy the project objectives of eliminating all condition, safety, and functional deficiencies. With an estimated construction cost of $1,857,000 and $1,897,000 respectfully, these are not the most reasonable options. Additional cost from environmental impacts and right of way purchases would make them not financially feasible.

**12. Provide copies or summaries of the views provided to date by any consulting parties, Indian tribes or Native Hawai’ian organizations, or the public**, including any correspondence from the SHPO and/or THPO.

The proposed replacement of the historic Route 17 Bridge over the Saline Creek near Tuscumbia has generated a considerable amount of public response. An open-house public hearing was held from 4 p.m. to 6:30 p.m. in the cafeteria of the Miller County R-III High School, located at 526 School Road in Tuscumbia, Missouri. Excluding MoDOT personnel, 30 people attended the meeting to review displays, visit with knowledgeable staff, ask questions and submit comments. Those in attendance were invited to share comments that evening, submit comments within two weeks after the meeting, or submit them online. In addition, there was an online virtual meeting from July 12 to July 19. The online meeting had 14 visits during the comment period. Copies of public meeting displays related to Section 106 and the Bridge and summaries of public comments are attached.

Letters and news releases were sent to local public officials and area newspapers advertising the date and time of the public meeting (representative copies are attached). All displays and handouts from the meeting were posted online, including the opportunity to submit comments online. Participants who provided their email addresses were added to the project E-Update subscription.

Letters were also sent to the following agencies:

Federal Highway Administration

Missouri Department of Conservation

Missouri Department of Economic Development – Division of Tourism

U.S. Fish and Wildlife Service

Missouri Historic Preservation Office

U.S. Environmental Protection Agency

Missouri Department of Natural Resources

Missouri Farm Bureau

Missouri Emergency Management Agency

U.S. Post Office

Fort Leonard Wood – Administrative Services Division

Overall nine comments were received from individuals:

* + 1. Four comments were in support of the proposed plan.
    2. Three comments suggested the bridge should be relocated and Route 17 should not be closed during construction, that closing Route 17 during construction placed an unfair burden on local residents, and that the county road detours were inadequate.
    3. One comment suggested scheduling other construction projects in the area so they do not conflict and minimize traffic disruption.
    4. One comment recommended closing Route 17 between June 15 and September 31.

In addition to the continuation of public involvement, and with the review and approval of the Missouri State Historic Preservation Office (SHPO), marketing letters were sent out to regional planning organizations, county commissioners, city mayors, state and federal agencies, and other groups; with information packets containing location maps, photographs, and historic and structural information for the existing Saline Creek Bridge H0119. The letters informed the groups that the bridge has been determined eligible for the National Register of Historic Places and that MoDOT is considering replacing it. (The Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA) Section 123(f) states: “prior to the demolition of a historic bridge, the State shall market (sell or donate) the bridge to a State or local government, agency or responsible private entity”). As part of this mitigation process, MoDOT will make Bridge H0119 available for adaptive reuse, to any government or group willing to move, re-erect, maintain, and assume financial responsibility for the structure.

\* see *Instructions for Completing the ACHP* e*106 Form*

**III. Optional Information**

**13. Please indicate the status of any consultation that has occurred to date.** Are there any consulting

parties involved other than the SHPO/THPO? Are there any outstanding or unresolved concerns or issues

that the ACHP should know about in deciding whether to participate in consultation?

No additional parties have requested consulting party status.

**14. Does your agency have a website or website link where the interested public can find out about this project and/or provide comments?** Please provide relevant links:

www.modot.mo.gov/tuscumbiabridge

**15. Is this undertaking considered a “major” or “covered” project listed on the Federal Infrastructure Projects Permitting Dashboard or other federal interagency project tracking system?** If so, please provide the link or reference number:

NO

**The following are attached to this form** (check all that apply):

\_X\_\_ Section 106 consultation correspondence

\_X\_\_ Maps, photographs, drawings, and/or plans

\_X\_\_ Additional historic property information

\_X\_\_ Other:

Public Involvement

Alternatives Analysis

[Appendices not included here]