

**MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL RAILROAD ADMINISTRATION,
THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER, AND
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER,
REGARDING THE
MACARTHUR BRIDGE MAIN SPAN AND EAST APPROACH PROJECT
EAST ST. LOUIS, ST. CLAIR COUNTY, ILLINOIS AND ST. LOUIS, ST. LOUIS COUNTY,
MISSOURI**

WHEREAS, the Terminal Railroad Association of St. Louis (Project Sponsor) is proposing the MacArthur Bridge Main Span and East Approach Project located in East St. Louis, Illinois and St. Louis, Missouri (Project); and

WHEREAS, the Project consists of encasing the westernmost portions of the north and east approaches by constructing cellular concrete fill within Mechanically Stabilized Earth (MSE)-type walls from Pier 1 to E11; and

WHEREAS, the Federal Railroad Administration (FRA) anticipates providing future financial assistance to the Project Sponsor for construction for the Project; and

WHEREAS, FRA's action requires review under the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 *et seq.*) and is considered an Undertaking under Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108) (NHPA), as amended, and its implementing regulations at 36 Code of Federal Regulations [C.F.R.] § 800 (hereinafter collectively referred to as Section 106); and

WHEREAS, FRA has coordinated Section 106 compliance with the NEPA process and is preparing a categorical exclusion (CE); and

WHEREAS, pursuant to 36 C.F.R. § 800.3(c)(3), FRA initiated consultation and identified Consulting Parties pursuant to 36 C.F.R. § 800.2(c) with the Illinois and Missouri State Historic Preservation Offices (collectively referred to as SHPOs), in a letter dated April 14, 2025, (Attachment 1); and

WHEREAS, the Project Sponsor, will have roles and responsibilities in the implementation of this MOA and FRA invited the Project Sponsor to sign this MOA as an Invited Signatory; and

WHEREAS, pursuant to 36 C.F.R. § 800.3(f), in a letter dated April 14, 2025, FRA invited the following organizations with a demonstrated interest in the Undertaking to participate in the Section 106 process and be Consulting Parties: Great Rivers Greenway, HistoricBridges.org, John Marvig Railroad Bridge Photography, Landmarks Association of St. Louis, Inc., Landmarks Illinois, Missouri Preservation, St. Clair County Historical Society, St. Louis Chapter of the National Railway Historical Society, St. Louis Cultural Resources Office, State Historical Society of Missouri, and TRRA Historical & Technical Society, Inc. All of these entities declined or provided no response to FRA's invitation; and

WHEREAS, pursuant to 36 C.F.R. § 800.3(f)(2), in a letter dated April 14, 2025, FRA invited the following Federally-recognized Indian tribes (herein collectively referred to as Tribes) to participate in the Section 106 process and be Consulting Parties: Apache Tribe of Oklahoma, Menominee Indian Tribe of Wisconsin, Miami Tribe of Oklahoma, The Osage Nation, Peoria Tribe of Indians of Oklahoma, Quapaw Nation, and Seneca-Cayuga Nation. The Osage Nation declined FRA's invitation on October 28,

2025; the remaining Tribes provided no response to FRA's invitation. Tribes who accepted Consulting Party status are referred to as consulting Tribes; and

WHEREAS, pursuant to 36 C.F.R. §§ 800.4(a)(1) and 800.16(d) and in consultation with SHPOs and Consulting Parties, FRA defined the Undertaking's Area of Potential Effects (APE) (Attachment 2) and the SHPOs concurred with the APE in a letter dated April 29, 2025, (IL SHPO) and May 7, 2025, (MO SHPO; and

WHEREAS, pursuant to 36 C.F.R. § 800.4 and in consultation with SHPOs and Consulting Parties, FRA identified one historic property that is eligible for listing in the National Register of Historic Places (NRHP) in the APE: MacArthur Bridge. The SHPOs concurred with this determination in letters dated April 29, 2025, (IL SHPO) and May 7, 2025, (MO SHPO) (Attachment 1); and

WHEREAS, pursuant to 36 C.F.R. § 800.5 and in consultation with SHPOs and Consulting Parties, FRA determined that the Undertaking will have an adverse effect on MacArthur Bridge. The SHPOs concurred with this determination in letters dated April 29, 2025, (IL SHPO) and May 7, 2025, (MO SHPO) (Attachment 1); and

WHEREAS, pursuant to 36 C.F.R. § 800.6(a) and in consultation with SHPOs and Consulting Parties, FRA considered avoidance and minimization options and determined that encasing the eastern approach of MacArthur Bridge is necessary for safety and long-term reliability of the structure; and;

WHEREAS, FRA and the Project Sponsor, along with the SHPOs, have determined that it is appropriate to enter into this Memorandum of Agreement (MOA) to resolve adverse effects pursuant to 36 C.F.R. § 800.6(c), which will govern the implementation of the Undertaking and satisfy FRA's obligation to comply with Section 106; and

WHEREAS, pursuant to 36 C.F.R. § 800.6(a)(1), FRA notified the Advisory Council on Historic Preservation (AHP) of its adverse effect determination and intention to enter into a MOA on April 24, 2025, and the AHP, in a letter dated May 28, 2025, declined to participate in the consultation pursuant to 36 C.F.R. § 800.6(a)(1)(iii) (Attachment 1); and

WHEREAS, FRA made the Draft MOA available to the public for review and comment by posting via regulations.gov; and

NOW, THEREFORE, FRA, and SHPOs (collectively referred to as the Signatories) agree that the project will be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties.

STIPULATIONS

FRA, in coordination with the Project Sponsor, will ensure the following measures are carried out:

I. APPLICABILITY

This MOA applies to FRA's Undertaking and only binds FRA if FRA provides funding for the Project.

II. TIMEFRAMES AND COMMUNICATIONS

The timeframes and communication protocols described in this Stipulation apply to all Stipulations in this MOA unless otherwise specified.

- A. All time designations are in calendar days unless otherwise stipulated. If a review period ends on a Saturday, Sunday, or Federal holiday, the review period will be extended until the next business day.
- B. All review periods are thirty (30) days, starting on the day the documents are provided by the Project Sponsor for review.

The Project Sponsor, in coordination with FRA, will ensure that all comments received within the 30-day review period are considered, and will consult with responding parties as appropriate. If the Project Sponsor does not receive comments within the 30-day review period, the Project Sponsor may proceed to the next step of the process. In exigent circumstances (e.g., in Post-review discovery situations and emergency situations), all Signatories, consulting Tribes, and Consulting Parties agree to expedite their respective document review within seven (7) days.

- C. All official notices, comments, requests for further information, documentation, and other communications will be sent in writing by e-mail or other electronic means.
- D. FRA is responsible for all government-to-government consultation with Tribes.

III. ROLES AND RESPONSIBILITIES

- A. **FRA**
 - 1. Pursuant to 36 CFR § 800.2(a)(2), FRA has the primary responsibility to ensure the provisions of this MOA are carried out.
 - 2. FRA remains legally responsible for all findings and determinations, including determinations of National Register of Historic Places (NRHP) eligibility, assessment of effects of the Project on historic properties, and resolution of adverse effects, as well as resolution of objections or dispute resolution.
 - 3. FRA is responsible for all government-to-government consultation with Federally recognized Native American tribes.
- B. SHPOs will respond within the timeframes of this agreement after notifications are received.
- C. **PROJECT SPONSOR**
 - 1. Pursuant to the FRA authorization granted under 36 CFR § 800.2(c)(4), the Project Sponsor, in coordination with FRA, will conduct investigations and produce analyses, documentation and recommendations in a timely manner to address historic properties pursuant to the terms of the MOA.
 - 2. The Project Sponsor is responsible for continued compliance with all commitments outlined in this MOA and will comply with applicable conditions of the MOA until such time as the terms of this MOA are complete or this MOA is terminated or expires. The Project Sponsor may engage consultants to assist in carrying out the MOA commitments, but the Project Sponsor ultimately remains responsible for compliance.
 - 3. The Project Sponsor is responsible for the funding and completion of measures to resolve adverse effects pursuant to this MOA. The Project Sponsor will consider these measures to be successfully completed upon review, concurrence and/or acceptance in writing by the SHPOs.
- D. **CONSULTING PARTIES**
 - 1. Consulting Parties and consulting Tribes have been provided the opportunity to actively participate in the development of this MOA and to assist in the resolution of adverse effects pursuant to 36 C.F.R. § 800.6.
 - 2. If a Consulting Party or consulting Tribe does not provide written comments within the timeframes specified in this MOA, FRA and the Project Sponsor will proceed to the next step in the review process without taking additional steps to seek comments from such parties.

3. Pursuant to 36 CFR § 800.6(c)(3), Consulting Parties and consulting Tribes are invited to sign this MOA as Concurring Parties within 30 days of the execution of this MOA. The refusal of any Consulting Party or consulting Tribe to concur does not invalidate or affect the effective date of this MOA. Consulting Parties or consulting Tribes who choose not to sign this MOA as a Concurring Party will continue to receive and have an opportunity to review and comment upon documents pursuant to the MOA once executed.

IV. PROFESSIONAL QUALIFICATIONS STANDARDS

The Project Sponsor will ensure that all actions prescribed by this MOA are carried out by, or under the direct supervision of, qualified professional(s) who meet the appropriate standards in the applicable disciplines as outlined in the *Secretary of the Interior's Professional Qualifications Standards* (48 Fed. Reg. 44716, 44738 (Sept. 29, 1983)).

V. DOCUMENTATION STANDARDS

All studies, reports, plans, and other documentation prepared pursuant to this MOA will be consistent with pertinent standards and guidelines outlined in *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 Fed. Reg. 44716, Sept. 29, 1983). In addition, documentation will also follow applicable guidance issued by the ACHP and any applicable SHPO or State standards/required formats or subsequent revisions or replacements to these documents.

VI. TREATMENT MEASURES

A. Architectural Historic Properties

1. The Project Sponsor will ensure the bridge is documented in accordance with Missouri Levels of Bridge Documentation (State Level) for Section 106 Mitigation of Adverse Effect Level I, including: (Attachment 3)
 - a. Archival photographs, consistent with NRHP and SHPO standards, will be taken, with sufficient coverage to provide overall views of the bridge and significant details of the bridge, and affected portions of the bridge.
 - i. Missouri SHPO will be consulted regarding the adequacy of photographic coverage of the bridge and the selection of images prior to Project construction.
 - ii. Digital photographs (black and white .tiff images and color .jpeg images) will be taken and labeled in accordance with the NRHP and National Historical Landmarks Program Consolidates and Updated Photograph Policy 2024.
 - iii. Digital images on archival discs will be provided to the Missouri SHPO and Illinois SHPO.
 - b. A copy of the as-built construction plans (if available) will be provided to the SHPOs in printed and high-quality digital format. Rehabilitation plans will be included in digital format.
 - c. A historical narrative describing the planning for and construction of the MacArthur Bridge, and any significant historic themes associated with the planning and construction of the bridge, will be prepared.
 - d. A brief, reader-friendly bridge description will be prepared, referencing the archival photographs and bridge plans.
2. The Project Sponsor will provide copies of the documentation in subparagraphs VI.A.1.(a)-(d) above:
 - a. To SHPOs and Consulting Parties for review and approval in accordance with Stipulation II before Project construction.

- b. At least one final draft copy will be provided to the John W. Barriger III National Railroad Library of the University of Missouri St. Louis, Missouri Historical Society and the St. Clair County Historical Society.
- c. Final draft copies will be posted for online access through the TRRA Website.
- 3. The Project Sponsor will produce, install, and maintain an interpretive panel on the history and engineering of the MacArthur Bridge. TRRA will coordinate the panel's interpretive content and placement with the Signatories and Consulting Parties before Project construction (see Stipulation II).

VII. PROJECT MODIFICATION AND DESIGN CHANGES

The Project Sponsor will notify the Signatories, consulting Tribes, and Consulting Parties of any proposed modifications to the Undertaking or changes to Project design that may result in additional or new effects on historic properties within 15 days of first identifying any project modification or design change. Before the Project Sponsor takes any action that may result in additional or new effects on historic properties, the Project Sponsor, in coordination with FRA, will consult with SHPO, consulting Tribes, and Consulting Parties to determine the appropriate course of action. This may include revision to the APE, identification of historic properties, assessment of effects to historic properties, and treatment measures to resolve adverse effects. If FRA determines that an amendment to the MOA is required, it will proceed in accordance with Stipulation XI.

VIII. POST-REVIEW DISCOVERIES

A. Unanticipated Discovery or Effect to Cultural Resources

In accordance with 36 C.F.R. § 800.13(a)(2), if a previously undiscovered archeological or cultural resource that is or could reasonably be a historic property is encountered or a previously known historic property will be affected in an unanticipated manner during construction, as determined by staff who meet the qualifications set forth in Stipulation IV, the Project Sponsor will implement the following procedures. Each step within these procedures will be completed within seven (7) days unless otherwise specified:

- 1. The Project Sponsor will require the contractor to immediately cease all ground disturbing and/or construction activities within a 50-foot radius buffer zone of the discovery, after it is safe to do so. For any discovered archeological resources, the Project Sponsor will also halt work in surrounding areas where additional subsurface remains are reasonably expected to be present. The Project Sponsor, in coordination with FRA, may seek written SHPO concurrence during notification that a smaller buffer is allowable based on facts in the field specific to the unanticipated discovery.
- 2. The Project Sponsor will ensure that no excavation, operation of heavy machinery, or stockpiling occurs within the buffer zone. The Project Sponsor will secure the buffer zone through the installation of protective fencing. The Project Sponsor will not resume ground disturbing and/or construction activities within the buffer zone until the specified Section 106 process required by this MOA is complete. Work in all other Project areas may continue.
- 3. The Project Sponsor will notify the Signatories within 24 hours of any unanticipated discovery or unanticipated effect. The Project Sponsor, in coordination with FRA, will also consider if new Federally-recognized Indian tribes and/or Consulting Parties should be identified and invited to consult regarding unanticipated discoveries or unanticipated effects.
- 4. Following notification of an unanticipated discovery or effect, the Project Sponsor will investigate the discovery site and evaluate the resource(s) according to the documentation

standards contained in Stipulation V. The Project Sponsor, in coordination with FRA, will prepare and submit a written document containing a proposed determination of National Register eligibility for the resource and/or, if relevant, an assessment of the Undertaking's effects on historic properties. The Project Sponsor will provide that document for review to the Signatories, consulting Tribes, and Consulting Parties in accordance with the timeframes and communications protocols identified in Stipulation II. If SHPO does not concur with the eligibility and/or effects determination, FRA may elect to assume eligibility and/or adverse effects for expediency.

5. If the unanticipated discovery or effect is determined to be eligible for listing in the National Register and/or adverse effects cannot be avoided, the Project Sponsor, in coordination with FRA, will propose in writing to Signatories, consulting Tribes, and Consulting Parties, treatment measures to resolve adverse effects following the timeframes and communications protocols identified in Stipulation II.
6. If it is necessary to develop treatment measures, the Project Sponsor, in coordination with FRA, will implement the approved treatment measures. The Project Sponsor will ensure construction-related activities within the buffer zone do not proceed until consultation with the Signatories, consulting Tribes, and Consulting Parties, concludes with SHPO concurrence that: 1) the resource is not National Register-eligible; 2) the agreed upon treatment measures have been implemented; or 3) it has been agreed that the treatment measures can be completed within a specified time period after construction-related activities have resumed.

B. Unanticipated Discovery of Human Remains

1. If human remains are encountered during ground disturbing or construction activities, the Project Sponsor will immediately halt subsurface disturbance in that portion of the Project area when safe to do so, and immediately secure and protect the human remains and any associated funerary objects in place in such a way that minimizes further exposure or damage to the remains from the elements, looting, and/or vandalism. The Project Sponsor will ensure a perimeter with a 50-foot radius buffer zone around the human remains is established where there will be no excavation, operation of heavy machinery, or stockpiling. The Project Sponsor will secure the buffer zone through the installation of protective fencing. The Project Sponsor, in coordination with FRA, may seek written SHPO concurrence during notification that a smaller buffer is allowable based on facts in the field specific to the unanticipated discovery. The Project Sponsor will not resume ground disturbing and/or construction activities within the buffer zone until the specified Section 106 process required by this MOA is complete. Work in all other Project areas may continue.
2. The Project Sponsor will immediately notify the local police department to determine if the discovery is subject to a criminal investigation by law enforcement and notify the Signatories within twenty-four (24) hours of the initial discovery.
3. If a criminal investigation is not appropriate, the Project Sponsor will ensure compliance with any applicable State and local laws pertaining to human remains, funerary objects, and cemeteries.
4. In the event the human remains encountered are of Native American origin, FRA in coordination with the Project Sponsor, will consult with the appropriate Tribal representatives and SHPO to determine treatment measures for the avoidance, recovery or reburial of the remains. FRA and the Project Sponsor will follow the guidelines outlined in the ACHP's *Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects* (2023).
5. If the remains are not of Native American origin, the Project Sponsor, in coordination with FRA, will consult with the Signatories, consulting Tribes, and Consulting Parties pursuant to Stipulation VIII.A(4)-(6) to determine if the discovery is a historic property,

take into account the effects on the historic property, and resolve adverse effects, as appropriate.

6. If it is necessary to develop treatment measures, the Project Sponsor, in coordination with FRA, will implement the approved treatment measures. The Project Sponsor will ensure ground disturbing and construction-related activities within the buffer zone do not proceed until consultation with the Signatories, consulting Tribes, and Consulting Parties, as appropriate, concludes with SHPO concurrence that: 1) the resource is not National Register-eligible; 2) the agreed upon treatment measures have been implemented; or 3) it has been agreed that the treatment measures can be completed within a specified time period after construction-related activities have resumed.
7. The Project Sponsor, in coordination with FRA, will also ensure ground disturbing and construction-related activities within the buffer zone do not proceed until the Project Sponsor has complied with all applicable State or local cemetery or burials laws.

IX. ADOPTABILITY

In the event that a Federal agency, not initially a party to or subject to this MOA, receives an application for financial assistance, permits, licenses, or approvals for the Project as described in this MOA, such Federal agency may become a signatory to this MOA as a means of complying with its Section 106 responsibilities for its undertaking. To become a signatory to this MOA, the agency official must provide written notice to the Signatories that the agency agrees to the terms of the MOA, specifying the extent of the agency's intent to participate in the MOA, and identifying the lead Federal agency for the undertaking. The participation of the agency is subject to approval by the Signatories. Upon approval, the agency must execute a signature page to this MOA, file the signature with the ACHP, and implement the terms of this MOA, as applicable. Any necessary amendments to the MOA will be considered in accordance with Stipulation XI.

X. MONITORING AND REPORTING

Once yearly, beginning one (1) year from the date of execution of this MOA until it expires or is terminated, the Project Sponsor will provide all Signatories, consulting Tribes, and Consulting Parties to this MOA a summary report detailing work undertaken pursuant to its terms. Such report will include any progress on implementation, proposed scheduling changes, any problems encountered, and any disputes or objections received as a result of FRA and the Project Sponsor's efforts to carry out the terms of this MOA.

XI. AMENDMENTS

If any amendment is required or any Signatory to this MOA requests that it be amended, FRA will notify the Signatories, consulting Tribes, and Consulting Parties, and consult for no more than thirty (30) calendar days (or another time period agreed upon by all Signatories) to consider such amendment. The amendment will become effective immediately upon execution by all Signatories. FRA will file the executed amendment with the ACHP.

XII. DISPUTE RESOLUTION

- A. Any Signatory to this MOA, consulting Tribe or Consulting Party may object to any proposed action(s) or the manner in which the terms of this MOA are implemented by submitting its objection to FRA in writing, after which FRA will consult with all Signatories to resolve the objection. If FRA determines such objection cannot be resolved, FRA will, within thirty (30) days of such objection:
 1. Forward all documentation relevant to the dispute, including FRA's proposed resolution, to the ACHP (with a copy to the Signatories). ACHP may provide FRA with its

comments on the resolution of the objection within thirty (30) days of receiving documentation.

2. If the ACHP does not provide comment regarding the dispute within thirty (30) days, FRA will make a final decision on the dispute and proceed accordingly.
3. FRA will document this decision in a written response that takes into account any timely comments received regarding the dispute from ACHP and the Signatories and provide the Signatories, consulting Tribes and Consulting Parties with a copy of the response.
4. FRA will then proceed according to its final decision.
5. The Signatories remain responsible for carrying out all other actions subject to the terms of this MOA that are not the subject of the dispute.

B. A member of the public may object to the manner in which the terms of this MOA are being implemented by submitting its objection to FRA in writing. FRA will notify the other Signatories of the objection in writing and take the objection into consideration. FRA will consult with the objecting party, and if FRA determines it appropriate, the other Signatories for not more than thirty (30) days. Within fifteen (15) days after closure of this consultation period, FRA will provide the Signatories, consulting Tribes, Consulting Parties, and the objecting party with its final decision in writing.

XIII. TERMINATION

- A. If any Signatory to this MOA determines that its terms will not or cannot be carried out, that Signatory will immediately consult with the other Signatories to attempt to develop an amendment per Stipulation XI. If within thirty (30) days an amendment cannot be reached, any Signatory may terminate the MOA upon written notification to the other Signatories.
- B. Once the MOA is terminated, and prior to work initiating or continuing on the Undertaking, FRA must either: 1) execute a new MOA pursuant to 36 C.F.R. § 800.6, or 2) request, take into account, and respond to the comments of the ACHP under 36 C.F.R. § 800.7. FRA will notify the Signatories as to the course of action it will pursue.

XIV. EFFECTIVE DATE

- A. This MOA will become effective immediately upon execution by all Signatories. In the event another federal agency elects to use this MOA, the MOA will be effective on the date that other federal agency completes the process identified in Stipulation IX of this MOA.
- B. Counterparts. This MOA may be executed in counterparts, each of which constitutes an original and all of which constitute one and the same Agreement.
- C. Electronic Copies. Within one (1) week of the last signature on this MOA, the Project Sponsor shall provide each Signatory with one high quality, legible, full color, electronic copy of the fully-executed MOA and all of its attachments fully integrated into one, single document. If the electronic copy is too large to send by e-mail, the Project Sponsor shall provide each Signatory with an electronic copy of the fully executed MOA as described above via other suitable, electronic means.

XV. DURATION

This MOA will expire when all treatments measures identified in Stipulation VI. have been completed and the Project Sponsor has completed a final yearly summary report, or in ten (10) years from the effective date, whichever comes first, unless the Signatories extend the duration through an amendment in accordance with Stipulation XI. The Signatories to this MOA will consult six (6) months prior to expiration to determine if there is a need to extend or amend this MOA. Upon completion of the Stipulations set forth above, the Project Sponsor, in coordination with FRA, will provide a letter (with attached documentation) of completion to the SHPOs, with a copy to the

Signatories. If SHPO concurs the Stipulations are complete within thirty (30) days, the Project Sponsor will notify the Signatories, consulting Tribes, and Consulting Parties in writing and this MOA will expire, at which time the Signatories will have no further obligations hereunder. If SHPO objects, FRA and the Project Sponsor will consult further with the SHPOs to resolve the objection. If the objections cannot be resolved through further consultation, FRA will resolve the dispute pursuant to Stipulation XII. The Project Sponsor will provide written notification to the Signatories, consulting Tribes, and Consulting Parties on the final resolution.

XVI. EXECUTION AND IMPLEMENTATION

Execution of this MOA by the Signatories and its subsequent filing with the ACHP by FRA, demonstrates that FRA has taken into account the effect of the Undertaking on historic properties, has afforded the ACHP an opportunity to comment, and FRA has satisfied its responsibilities under Section 106 of the NHPA and its implementing regulations.

**MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL RAILROAD ADMINISTRATION,
THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER, AND
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER
REGARDING THE
MACARTHUR BRIDGE MAIN SPAN AND EAST APPROACH PROJECT
EAST ST. LOUIS, ST. CLAIR COUNTY, ILLINOIS AND ST. LOUIS, ST. LOUIS COUNTY,
MISSOURI**

SIGNATORY

FEDERAL RAILROAD ADMINISTRATION

By: Amanda Murphy Date: 12/11/2025
Amanda Murphy
Deputy Federal Preservation Officer

**MEMORANDUM OF AGREEMENT
AMONG
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THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER, AND
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER**

**REGARDING THE
MACARTHUR BRIDGE MAIN SPAN AND EAST APPROACH PROJECT
EAST ST. LOUIS, ST. CLAIR COUNTY, ILLINOIS AND ST. LOUIS, ST. LOUIS COUNTY,
MISSOURI**

SIGNATORY

ILLINOIS STATE HISTORIC PRESERVATION OFFICER

By: Carey L. Mayer _____ Date: 12/8/2025
Carey Mayer
Deputy State Historic Preservation Officer

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EAST ST. LOUIS, ST. CLAIR COUNTY, ILLINOIS AND ST. LOUIS, ST. LOUIS COUNTY,
MISSOURI**

SIGNATORY

MISSOURI STATE HISTORIC PRESERVATION OFFICER

By: 
Laura Hendrickson
Director, Division of State Parks
Missouri Department of Natural Resources

Date: 12/8/25

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MISSOURI

INVITED SIGNATORY

TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS

By: 
Brent Wood
President

Date: 12/11/25

**ATTACHMENT 1 – SECTION 106
CONSULTATION DOCUMENTATION**



U.S. Department
of Transportation

1200 New Jersey Avenue, SE
Washington, DC 20590

**Federal Railroad
Administration**

April 14, 2025

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RE: *MacArthur Bridge Main Span and East Approach Project. East St. Louis, Illinois and St. Louis, Missouri. Initiation of Section 106 Consultation and Finding of Adverse Effect*

Dear SHPOs Finnie and Schaeffer:

The Federal Railroad Administration (FRA) is providing financial assistance to Terminal Railroad Association of St. Louis (TRRA) for the proposed MacArthur Bridge Main Span and East Approach Project (Project). The Project is on the MacArthur Bridge which spans the Mississippi River and is located in East St. Louis, Illinois and St. Louis, Missouri (see maps in Attachment 1). The Project is an undertaking subject to Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations 36 CFR Part 800 (Section 106). The purpose of this letter is to initiate Section 106 consultation for the Project and seek concurrence on findings for components of the Project that do not qualify as an exempted activity under the Advisory Council on Historic Preservation's Program Comment to Exempt Consideration of Effects to Rail Properties Within Rail Rights-of-Way (83 FR 42920, August 24, 2018; amended 84 FR 31075, June 28, 2019) (Program Comment).

Project Description

The Project subject to consultation includes a series of proposed components focused along the eastern approach of MacArthur Bridge with some proposed work along the main spans. The proposed Project components include:

The westernmost portions of the north and east approaches ballasted track will be supported on cellular concrete fill retained within Mechanically Stabilized Earth (MSE)-type walls or on new girders from Pier 1 to E11. This is anticipated as being like the fill section on the East Approach of the Merchants Bridge and includes several box culverts through the fill, which will be supported on concrete piles. This work will place a critical switching area on the ballasted track while extending the life of this structure over 80+ years. This work will allow traditional switch ties to be used that are readily available in a way that custom-built bridge ties are not. This will also be safer for train crews and

maintenance of way personnel needed to get on track for manual switch operations or testing of switches as the ballasted deck will allow for handrails to protect the potential falls. It should be noted that all original towers and bents will remain in place and will just be encased within the cellular concrete fill.

Area of Potential Effects

The area of potential effects (APE), as defined in 36 CFR § 800.16(d), is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” FRA delineated the APE to reflect the nature, scale, and location of the Project and considered direct effects (those that occur at the same time and place with no intervening cause resulting from construction and/or operation of the undertaking, whether physical, auditory, visual, or atmospheric) and indirect effects (those reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative). Physical effects are limited to the Limits of Disturbance (LOD), which includes all areas where construction activities are proposed to occur as well as areas used to support construction such as temporary access routes and equipment staging areas.

FRA defined a single APE for the Project (Attachment 1, see Figure 1). The portion of the APE with direct effects is defined as the LOD for project components that are subject to consultation. The APE encompasses the MacArthur Bridge and a 100-foot buffer around the full extent of said bridge, extending from St. Louis, Missouri, to East St. Louis, Illinois. The vertical depth APE is consistent with the concrete piles proposed for the culverts along the base of the MSE wall. This APE may require revision in the future as the Project’s design process identifies staging areas adequate for the scope of this work.

Identification of Historic Properties

To identify historic properties in the APE, TRAA reviewed a one-kilometer study area around the APE using available information, including NRHP listings; State Historic Preservation Office (SHPO) files, historic maps, historic topographic quadrangles, historic trails, and cemeteries.

Archaeological Resources

The archival review revealed there were no previously recorded archaeological sites within the APE. Per Illinois SHPO preference, the locations of previously recorded cultural resources and surveys were not documented in TRAA’s cultural resource report. However, there is one previous-conducted survey that overlapped with the APE on the Illinois side and the conditions were described as highly disturbed. Furthermore, no cultural remains were identified. Additionally, TRAA performed an archeological survey on a portion of the APE. The results of this survey are documented in Attachment 1 (pages 46-54).

Architectural Resources

One architectural historic property was identified within the APE: the MacArthur Bridge. The bridge was determined eligible under Criteria A (for industry, engineering, commerce, and travel) and B (for the individuals and companies involved in the design – Boller and Hodge) in 2012 by the Federal Emergency Management Agency (FEMA). As part of this effort, FEMA identified 5 character defining features for the bridge:

1. The stone-clad piers,
2. The three through Pennsylvania truss spans,
3. The railroad deck,
4. The railroad approaches, including the western, southern, eastern, norther, and south valley approaches, and
5. The structural elements of the vehicle deck.

For more information, please see the cultural resources report in Attachment 1.

Assessment of Effects

TRA provided recommendations on the Project's anticipated effects to historic properties in attached cultural resource report. FRA disagrees with TRA's recommendation that the project would have no adverse effect to historic properties. FRA assessed the Project's effects to MacArthur Bridge and found the encasing of the eastern approach does not meet the Secretary of the Interior's Standards for Rehabilitation (36 CFR 68), including changes to historic fabric/character-defining features that will not be in-kind. This encasement of the metal trestle approach with cellular concrete fill within the MSE-type walls is a non-reversible alteration that would constitute an adverse effect under 36 CFR Part 800.5(a)(2) and diminish four aspects of integrity: design, materials, workmanship, and feeling. The concrete fill and walls are permanent construction. If it were to be chipped away in the future, the chemical processes during the curing process would likely damage the existing metal trestlework, requiring replacement due to deterioration.

TRRA considered avoidance and/or minimization options and determined that encasing the eastern approach of MacArthur Bridge is necessary for safety and long-term reliability. In accordance with 36 CFR Part 800.5, FRA considered the scope of work and determined that the proposed Project will alter the qualifying characteristics of a historic property in a manner that will diminish its integrity and adversely affect the MacArthur Bridge.

Consulting Party Outreach

FRA identified parties that may be interested in the Project and determination of effects. FRA invites the individuals/organizations copied on this letter to participate as Section 106 consulting parties. Invited parties should indicate their willingness to participate as a consulting party and provide comments, as indicated below, within 30 calendar days from the date on this letter. If any invited party expresses concern about the Project's potential effects to historic properties, FRA will consult with you and other consulting parties to resolve those concerns prior to project implementation. For more information on the role of a consulting party see: <https://www.achp.gov/citizens-guide-section-106-review>. FRA also invited Federally-recognized Indian tribes (see Attachment 2) to participate in consultation by separate correspondence.

Finding of Effect

FRA finds that the undertaking will have an **Adverse Effect** to historic properties. Pursuant to 36 CFR Part 800.6, FRA will consult with you and other consulting parties to develop and evaluate strategies to avoid, minimize, or mitigate the adverse effect on historic properties. Please e-mail your comments to Jimmy Barrera at jimmy.barrera@dot.gov within 30 calendar days of receipt of this letter. If you have questions or wish to discuss the Project, Jimmy Barrera can be reached at 817.471.0085. Thank you for your cooperation on the Project.

Sincerely,



Amanda Murphy
Deputy Federal Preservation Officer
Federal Railroad Administration

Enclosures: Attachment 1 - Cultural Resource Report (with Appendices A – H)
Attachment 2 - List of Federally Recognized Tribes

cc: Matt Amara, FRA - Environmental Protection Specialist
Eric Fields, TRRA - Project Manager
Bob Bettis, St. Louis Cultural Resources - Office Director
Nathan Holth, HistoricBridges.org - Founder
John Marvig, John Marvig Railroad Bridge Photography
Andrew Bell, Landmarks Association of St. Louis, Inc. - Executive Director
Larry Thomas, TRRA Historical & Technical Society, Inc. –
Secretary/Treasurer/Editor
Riley Price, Missouri Preservation – Executive Director
William P. Shannon, IV, St. Clair County Historical Society – Curator
Bonnie McDonald, Landmarks Illinois – President & CEO
David Huelsing, St. Louis Chapter, National Railway Historical Society – President
Susan Trautman, Great Rivers Greenway – CEO
Saint Louis Research Center, State Historical Society of Missouri



St. Clair County
East St. Louis
MacArthur Bridge Main Span and East Approach Project
SHPO Log #002041425

April 29, 2025

Jimmy Barrera
U.S. Department of Transportation
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

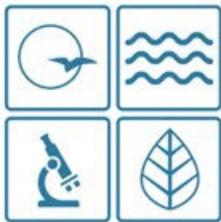
Thank you for your submission of the proposed MacArthur Bridge Main Span and East Approach Project in East St. Louis, Illinois and St. Louis, Missouri, which we received on 4/14/25 (SHPO Log# 002041425). Our comments are required by Section 106 of the [National Historic Preservation Act of 1966](#), as amended, 54 U.S.C. § 306108, and its [implementing regulations](#) (36 CFR Part 800) (Act).

We concur with the established Area of Potential Effects (APE) and the identification of historic properties in the APE. MacArthur Bridge was determined eligible for listing on the National Register of Historic Places on October 7, 2011, by the IL SHPO, and in 2012, by the Federal Emergency Management Agency (FEMA). Additionally, our staff have determined that no historic archaeological properties are known to exist within the APE. However, if any archaeological materials are encountered during construction, this office must be notified. This letter is not a clearance for purposes of the [Illinois Human Remains Protection Act \(20 ILCS 3440\)](#).

We concur that the project as proposed does not meet the Secretary of the Interior's Standards for Rehabilitation (Standards) and constitutes an adverse effect to the historic bridge. Please work with CJ Wallace (Carol.Wallace@Illinois.gov) and Rita Baker (Rita.E.Baker@Illinois.gov) in our office to avoid, minimize, or mitigate the adverse effects pursuant to the Act.

Sincerely,

Carey L. Mayer
Carey L. Mayer, AIA
Deputy State Historic Preservation Officer



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Mike Kehoe
Governor

Kurt U. Schaefer
Director

May 7, 2025

Jimmy Barrera
Federal Railroad Administration
1200 New Jersey Avenue SE
Washington, DC 20590

Re: SHPO Project Number: 020-SLC-25 — MacArthur Bridge Main Span and East Approach
Project – MacArthur Bridge, St. Louis, St. Louis City County, Missouri (FRA)

Dear Jimmy Barrera:

Thank you for submitting information to the State Historic Preservation Office (SHPO) regarding the above-referenced project for review pursuant to Section 106 of the National Historic Preservation Act, P.L. 89-665, as amended (NHPA), and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which require identification and evaluation of historic properties.

We have reviewed the information regarding the above-referenced project and have included our comments on the following page(s). Please retain this documentation as evidence of consultation with the Missouri SHPO under Section 106 of the NHPA. SHPO concurrence does not complete the Section 106 process as federal agencies will need to conduct consultation with all interested parties. **Please be advised that, if the current project area or scope of work changes, such as a borrow area being added, or cultural materials are encountered during construction, appropriate information must be provided to this office for further review and comment.**

If you have questions, please contact the SHPO at (573)751-7858 or call/email Aaron Schmidt, (573) 522-4641, aaron.schmidt2@dnr.mo.gov. If additional information is required, please submit the information via email to MOSection106@dnr.mo.gov.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Laura Hendrickson, Director
Missouri State Parks



SHPO Project Number: 020-SLC-25 — MacArthur Bridge Main Span and East Approach Project – MacArthur Bridge, St. Louis, St. Louis City County, Missouri (FRA)

COMMENTS:

We have reviewed the information your office provided concerning the proposed modifications to the MacArthur Bridge, which spans the Mississippi River between St. Louis, Missouri and East St. Louis, Illinois. The Missouri SHPO concurs that the MacArthur Bridge is eligible for listing on the National Register of Historic Places (NRHP). Therefore, in accordance with the Advisory Council on Historic Preservation's regulation Protection of Historic Properties (36 CFR Part 800), Section 800.5, the Missouri SHPO also concurs that the proposed modifications to the MacArthur Bridge, including the installation of cellular concrete fill on the north and east approaches, would have an **adverse effect** on this NRHP property.

A Memorandum of Agreement (MOA) that outlines the steps needed to mitigate the adverse effect for this project should be prepared. Final stipulations in the MOA should be determined in consultation with the Federal Railroad Administration (FRA), our office, the Illinois SHPO, the Advisory Council (if participating) and any other interested parties.

The FRA should forward the necessary adequate documentation as described to the ACHP at e106@achp.gov. Pending receipt of the Council's decision on whether it will participate in consultation, no action shall be taken which would foreclose Council consideration of alternatives to avoid or satisfactorily mitigate any adverse effect on the property in question. Please be sure to copy us on any correspondence to the ACHP.



May 28, 2025

James E."Jimmy" Barrera
Archaeologist
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Ref: *MacArthur Bridge Main Span and East Approach Project*
East St. Louis, St. Clair and St. Louis County, Illinois and Missouri
ACHP Project Number: 022733

Dear Mr. Barrera:

On May 15, 2025, the Advisory Council on Historic Preservation (ACHP) received the additional documentation as requested regarding the potential adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe our participation in the consultation to resolve adverse effects is needed.

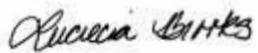
However, if we receive a request for participation from the Illinois and Missouri State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian Tribe, a consulting party, or other party, we may reconsider this decision. Should the undertaking's circumstances change, consulting parties cannot come to consensus, or you need further advisory assistance to conclude the consultation process, please contact us.

Pursuant to 36 CFR § 800.6(b)(1)(iv), you will need to file the final Section 106 agreement document (Agreement), developed in consultation with the Illinois and Missouri SHPO and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the Agreement and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the NHPA.

Thank you for providing us with the additional information we requested regarding this notification of adverse effect. IF APPROPRIATE: In the future you may consider using our electronic notification process. More information can be found [here](#). If you have any questions or require our further assistance, please contact Max Sickler at (202) 517-0220 or by e-mail at msickler@achp.gov and reference the

ACHP Project Number above.

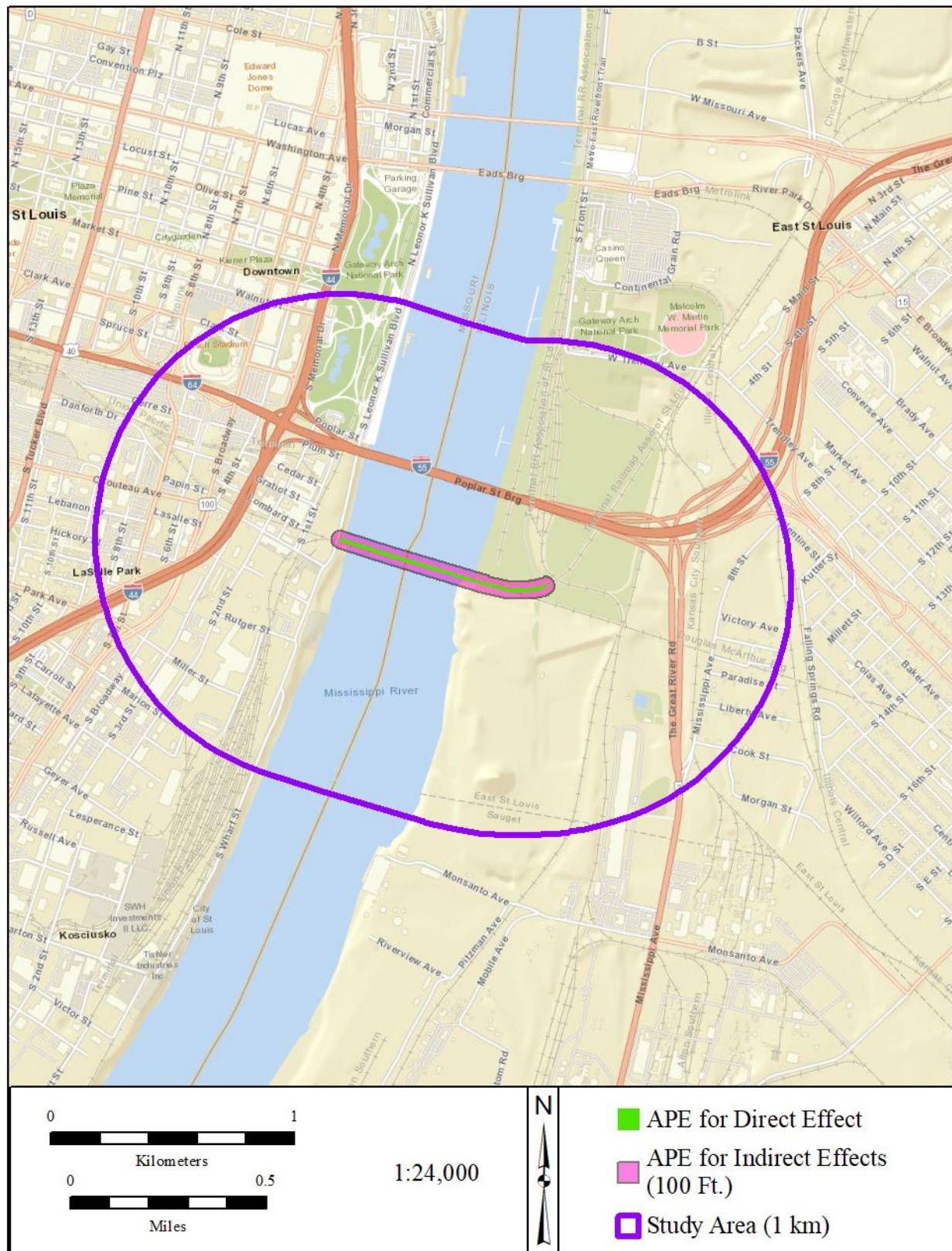
Sincerely,

A handwritten signature in black ink, appearing to read "Lucrecia Brooks".

Lucrecia Brooks
Historic Preservation Technician
Office of Federal Agency Programs

**ATTACHMENT 2 –
AREA OF POTENTIAL EFFECTS**

Figure 1: Location of MacArthur Bridge Showing APE for Direct Effects, APE for Indirect Effects, and the Study Area



ATTACHMENT 3 – HISTORIC BRIDGE DOCUMENTATION GUIDANCE

The guidance below is extracted from the Missouri Department of Transportation's *Levels of Bridge Documentation (State Level) For Section 106 Mitigation of Adverse Effect* directive, 2016. The FRA has elected to use this guidance as a framework to document the MacArthur Bridge.

Level I: the highest level of documentation—for bridges over major rivers, for example, the Mississippi or Missouri River or the main tributaries to these rivers, and bridges with Criteria A or B associations as well as Criterion C.

- Drawings—as built or final construction plans for bridge (including rehabs), if extant (if drawings are not available a detailed technical description will be required).
- Photographs* (8" X 10" format) showing elevations of the bridge, substructure, important connections, all span types, and other significant details; images should be taken, printed and labeled according to NRHP/Mo SHPO standards.
- Bridge description--A reader friendly bridge description narrative shall include; if bridge plans are not available, this should be a technical description of the bridge. The description should reference the mitigation photographs and plans to identify features of the bridge.
- Written history—should be the product of primary and contemporary sources as much as possible; it should address significant themes associated with the bridge, *for example*:
 - o Engineering significance (Criterion C)—explain how and why the bridge is significant from an engineering perspective; discuss its relationship to surviving bridges of the same type in region and state. Also explain:
 - Who designed the bridge? Is it a standard bridge type or did it require modification from standard plans?
 - Who constructed the bridge? Include fabricator and contractor for truss bridges. Were they well-established companies? Did they have history of contracts with the state/county/city? Did they build a large number of bridges? How many of their bridges survive?
 - o Transportation significance--explain how the bridge fit into the larger transportation system. Consider:
 - Construction of the bridge, including planning and actual construction
 - Address any issues encountered during bridge planning that had to be overcome (opposition, etc.)
 - Address any issues encountered during construction and how they were resolved (weather, etc.)
 - How was the bridge perceived by the community—eagerly anticipated, apathetically, etc.? Was it received differently in various parts of the larger community?
 - Was the bridge built as part of a new road or replacing an earlier crossing? If replacement, of what type—ford, ferry or earlier bridge?
 - o Social History—did important events associated with American culture occur on the bridge or is it associated with a route significant in American culture? (Examples would be civil rights marches that crossed bridge, bridges associated with Route 66, bridges associated with early farm-to-market roads, bridges associated with seedling miles of highway, etc.)
 - o Commerce—was the bridge important in the economic development of a community or did local business leaders promote the bridge? If so, explain how they were involved. If the bridge was a toll bridge, explain how the toll structure was set up, who collected the tolls, how long the tolls were collected, if possible, what the toll rates were, local attempts to free the bridge, and when it became a free bridge.

- o Planning – Was the bridge built or incorporated into a Parkway? Was the bridge built as part of a larger development? Was the planning for the bridge tied up in litigation related to its construction or the construction of an associated highway?
- o There may be other broad patterns in American History that the bridge is associated with. Consultation between the SHPO, FHWA, MoDOT, the local government and other consulting parties will help to determine the appropriate areas of significance for the bridge.
- o Examples of sources to utilize include: MoDOT Bridge and Commission Records (if State Highway Department Constructed the bridge); County Commission Minutes (if County constructed the bridge); contemporary newspapers; trade journals; diaries; builder or engineering company records; County Histories; etc.