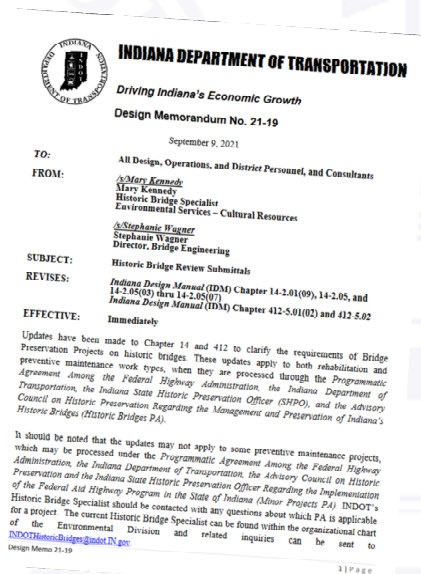


Design Memorandum No. 21-19

- Historic Bridge Review Submittals
- Issued September 9, 2021
- Effective Immediately



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Design Memorandum No. 21-19

- Why? Consistency!
- Historic Bridges Programmatic Agreement (PA)
- Cultural Resources Manual

ATTACHMENT B

Standard Treatment Approach for Historic Bridges

REHABILITATION

The following standard treatment approach applies to all Select Bridges and when the selected alternative includes preservation of a Non-Select Bridge:

1. The bridge owner will develop plans to rehabilitate the bridge in accordance with the Secretary of the Interior's Standards for Rehabilitation, or as close to the Standards as is practicable.
2. The bridge owner will provide rehabilitation plans to the Indiana SHPO when the design is approximately 30% complete, 60% complete, and when final design plans are complete. If the project involves a bypass of the historic bridge, then the plan submittals will include a site plan and design of the new bridge and the historic bridge. The purpose of these reviews is to evaluate the design and proximity of the new bridge in relationship to the historic bridge (if historic bridge is bypassed), ensure compliance with the Secretary of Interior's Standards for Rehabilitation, and to incorporate context sensitive design features, where practicable.
3. The Indiana SHPO will have thirty (30) days to review and provide comments to the bridge owner and notify them of any photo documentation requirements. If comments are not received within thirty (30) days, the bridge owner may assume agreement from the Indiana SHPO on the plans submitted.

2-6.1 Rehabilitation

• **Plan Submittals:**

- o Plans shall be developed in accordance with the Secretary of the Interior's Standards for Rehabilitation (Standards), or as close to the Standards as is practicable. If the project involves a bypass of the historic bridge, then the plan submittals shall include a site plan and design of the new bridge and the historic bridge. The purpose of these reviews is to evaluate the design and proximity of the new bridge in relationship to the historic bridge, ensure compliance with the Standards, and to incorporate context sensitive design features, where practicable.
- o The bridge owner shall provide plans to the SHPO at the stages listed below:
 - Approximately 30% complete;
 - Approximately 60% complete;
 - Final design plans.
- o INDOT has seen issues on many projects with the process not being followed for the plan submittals specified at each of the stages. ALL THREE of these plan review submittals ARE REQUIRED for all projects for which the preferred alternative is rehabilitation of the historic bridge.
- o For many projects, the design does not progress beyond Stage 1 (approximately 30% complete) plans before environmental document completion. Therefore, the 60% complete & final plan submittals often will occur after the environmental document has been approved. As a result, these plan submittals must be listed as commitments in the environmental document and the Project Commitments Database. These submittals should be completed prior to the submittal of the Environmental Consultation Form (ECF). The ECF cannot be approved until all three plan submittals have been completed.
- o The SHPO staff and consulting parties are not engineers, and they have varying levels of proficiency in reading plans. Therefore, each plan submittal should include a transmittal letter that "tells the story" of what is happening in the plans. This narrative that accompanies the plans should quantify information as much as possible. For example, approximately how many stringers, gusset plates, floor beams, rivets, brackets, etc. are expected to be retrofitted, repaired, or replaced? What percentage of these elements is going to be impacted versus how many original elements will remain? If the bridge will be painted, how will the paint color compare with the existing paint color? What type of railing is on the bridge? Will it be replaced? If so, how will the new design differ from the original or can the original be replicated? Providing information in as much detail as possible helps the SHPO staff understand the level of impact of the work. A few example letters for transmittal plans can be found in Appendix D. More examples can be found in IN SCOPs by searching for the document type "Bridge Plan Review".
- o Highlighting and marking up plan sheets to better explain the information to non-engineers is encouraged where appropriate.
- o The transmittal letter should include a brief explanation of the items that have changed since the last plan submittal.

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Design Memorandum No. 21-19

- Overview of revisions

IDM Section	Revision
14-2.01(09)	Updated to reflect current information for INDOT public involvement procedures. New content regarding historic bridge projects and public involvement.
14-2.05	New content regarding historic bridge plan reviews.
14-2.05(03)	New content regarding historic bridge plan review.
14-2.05(04)	New section regarding historic bridge plan review.
14-2.05(05)	Section number revised. New content regarding historic bridge plan review.
14-2.05(06)	Only section number revised.
14-2.05(07)	Only section number revised.
412-5.01(02)	Minor edits for clarification.
412-5.02	New content regarding historic bridge plan reviews.

3

14-2.01(09) Public Hearing Plans Preparation

- Updated to reflect current information for INDOT public involvement procedures. New content regarding historic bridge projects and public involvement.

See [Chapter 8, Public Involvement Procedures](#), for the minimum thresholds that trigger public involvement for a project. If a public information meeting or hearing is required, coordinate with the INDOT project manager regarding the public information process. Public involvement activities are contained in the *INDOT Project Development Public Involvement Procedures Manual*. The manual and additional public involvement information is available from the [INDOT Public Involvement website](#).

A public hearing is required for all historic bridge projects processed through the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*. Procedures for public hearings under the *Historic Bridges PA* can be found in the *INDOT Cultural Resources Manual*, Part IV, Chapter 3.

It should be noted that some historic bridge projects may be processed under the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana (Minor Projects PA)*. Projects processed under the *Minor Projects PA* typically do not require public involvement. INDOT's Historic Bridge Specialist should be contacted with any questions about which *PA* is applicable for a project. The current Historic Bridge Specialist can be found within the organizational chart of the Environmental Division and related inquiries can be sent to INDOTHistoricBridges@indot.IN.gov.

Where public involvement is required, and the environmental document has been released for public involvement, the designer should submit the following to the INDOT District Capital Program Management staff. Coordinate with the INDOT Project manager regarding the public information process.

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14-2.05 Bridge Plans, Preservation Project

- New content regarding historic bridge plan reviews.

Historic Bridges

Historic bridges require additional coordination and plan reviews in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*. The *Historic Bridges PA* and a listing of Select and Non-Select bridges (inventory summary & results) are available on the [Indiana Historic Bridges Inventory website](#).

In accordance with the *Historic Bridges PA*, when any preservation option is selected as the preferred alternative for a historic bridge, the bridge owner is required to provide plans to the Indiana State Historic Preservation Officer (SHPO) when the design is approximately 30% complete (Stage 2 previously Preliminary Plans), approximately 60% complete (Hearing Plans), and when plans are 100% complete (Stage 3). If the project involves a bypass of the historic bridge, then the plan reviews will include a site plan and design of the new bridge and the historic bridge. The designer shall copy the Historic Bridge Specialist on all STAGE and PHRG submittals for Historic Bridges. The current Historic Bridge Specialist can be found within the organizational chart of the Environmental Division and related inquiries can be sent to INDOTHistoricBridges@indot.IN.gov.

The SHPO staff is allotted a 30-day comment period on each plan review. Additionally, each of these submittals are reviewed by Cultural Resources Office staff in the Division of Environmental Service before the plans are submitted to the SHPO staff and consulting parties. See 412-5.02 and the [INDOT Cultural Resources Manual](#), Part IV, Chapter 2 for more information.

5

14-2.05(03) Stage 2 Review Submission (Preliminary Plans)

- New content regarding historic bridge plan review.

Additional Stage 2 (Preliminary Plans) Information

For historic bridges, the designer should coordinate with the project manager to have Stage 2 plans reviewed by the Cultural Resources Office staff in the Division of Environmental Service before they are submitted to the Indiana State Historic Preservation Officer (SHPO) staff to fulfill the 30% complete plan review requirement under the *Historic Bridges PA*. See 412-5.02 and the [INDOT Cultural Resources Manual](#), Part IV, Chapter 2 for more information.

6

14-2.05(04) Hearing Plans Preparation

14-2.05(05) Stage 3 Review Submission (Final Plans)

- New content regarding historic bridge plan reviews. Section number revised.

14-2.05(04) **Hearing Plans Preparation** [Rev. Mar. 2016, Apr. 2017, Nov. 2017, May 2020, Feb. 2021, Mar. 2021, Jun. 2021, **Sep. 2021**]

A public hearing is required for all historic bridge projects processed through the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*. See the requirements listed in Section 14-2.01(09).

For historic bridges, the designer should coordinate with the project manager to have hearing plans reviewed by the Cultural Resources Office staff in the Division of Environmental Service before they are submitted to the Indiana State Historic Preservation Officer (SHPO) staff to fulfill the 60% complete plan review requirement under the *Historic Bridges PA*. See 412-5.02 and the [INDOT Cultural Resources Manual](#), Part IC, Chapter 2 for more information.

Additional Stage 3 (Final Plans) Information

For historic bridges, the designer should coordinate with the project manager to have final plans reviewed by the Cultural Resources Office staff in the Division of Environmental Service staff before they are submitted to the Indiana State Historic Preservation Officer (SHPO) staff to fulfill the final plan review requirement under the *Historic Bridges PA*. See 412-5.02 and the [INDOT Cultural Resources Manual](#), Part IV, Chapter 2 for more information.

14-2.05(05) **Stage 3 Review Submission (Final Plans)** [Rev. Mar. 2016, **Sep. 2021**]

The following should be reviewed in accordance with quality assurance procedures and included in this submission. Information required for the Stage 2 (Preliminary Plans) Submission should be included in this submission, if not previously submitted. If the project includes traffic signal(s),

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14-2.05(06) & 14-2.05(07)

- Only section numbers revised

14-2.05(06) **Final Field Check** [Rev. **Sep. 2021**]

A final field check is at the discretion of the project manager in consultation with the Bridge Engineering Division upon completion of the final plan review. The purpose of the field check should be as follows:

1. to confirm the condition of the structure and appropriateness of the plans; and
2. to allow the district representative to review the MOT scheme and construction procedures.

The attendees from the initial field investigation should be invited to the final field check.

All corrections noted at the final field check should be included in the Final Tracings Submission.

The Constructability Review at this stage is at the discretion of the the project manager. See the *Constructability Guide Book* at <http://www.in.gov/indot/2697.htm>. At the discretion of the project manager, constructability and utility items may be discussed at the final field check and documented the Final Field Check Minutes.

14-2.05(07) **Final Tracings Submission** [New **Sep. 2021**]

All revisions resulting from the Final Field Check and Stage 3 review will be completed for this submission. See the requirements listed in Section 14-1.02(04). Any significant changes to the project between Stage 3 and Final Tracings should be reviewed by the Bridge Engineering Division. The designer should coordinate with the INDOT Reviewer of the Stage 1 submittal and the Project Manager to coordinate the additional review.

8

412-5.01(02) Non-Select Bridges

- Minor Edits for Clarification

412-5.01(02) Non-Select Bridge [Rev. Sep. 2021]

A Non-Select bridge has been identified as a historic bridge that is not an excellent example of its structure type or is not a suitable candidate for preservation. If the rehabilitation alternatives are not in accordance with Section 412-5.02, and the owner is not granted a design exception or does not request one, the Non-Select bridge must be marketed for re-use. In accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*, if no party steps forward to assume ownership of the bridge before the end of the public hearing comment period, the bridge may be demolished. See the *Historic Bridges PA* for further guidance on marketing or demolishing the bridge.

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412-5.02 Historic Bridge Alternatives Analysis

- New content regarding historic bridge plan reviews

412-5.02 Historic Bridge Alternatives Analysis [Rev. Feb. 2018, Sep. 2021]

Where a project involves a historic bridge, the bridge owner must complete a Historic Bridge Alternatives Analysis. The Historic Bridge Alternative Analysis will serve as the Bridge Rehabilitation Report or Bridge Preventive Maintenance Meeting Minutes in the Stage 1 submittal. The required contents of the analysis, including explanations and tips for discussion of alternatives, is available from the Department's Historic Bridge Inventory Summary & Results webpage, under Historic Bridge Project Development Process Documents. The HBAA requires concurrence from Cultural Resources Office staff in the Division of Environmental Service and the Bridges Division Office of Bridge Design prior to proceeding to the Stage 2 (Preliminary Plans) submittal.

The evaluation of alternatives must address the following alternatives for both Select and Non-Select Bridges. The list is a hierarchy, meaning that the analysis must prove an alternative is either not feasible or prudent prior to proceeding to the next alternative. Note that Select bridges must be preserved as part of the project.

In accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*, when any of the rehabilitation options are selected as the preferred alternative, the bridge owner is required to provide rehabilitation plans to the Indiana State Historic Preservation Officer (SHPO) when the design is approximately 30% complete (Stage 2 formerly Preliminary Plans), approximately 60% complete (Hearing Plans), and when plans are 100% complete (Stage 3 formerly Final Plans). If the project involves a bypass of the historic bridge, then the plan reviews will include a site plan and design of the new bridge and the historic bridge.

The Historic Bridge Alternatives Analysis document should clearly indicate that three plan reviews will be forthcoming.

Additionally, each of these submittals are reviewed by Cultural Resources Office staff in the Division of Environmental Service before the plans are submitted to the SHPO staff and consulting parties.

The SHPO staff is allotted a 30-day comment period on each plan review. Additionally, each of these submittals are reviewed by Cultural Resources Office staff in the Division of Environmental Service before the plans are submitted to the SHPO staff and consulting parties. See the [INDOT Cultural Resources Manual](#), Part IV, Chapter 2 for more information.

All three plan review submittals are required for all projects for which the preferred alternative is rehabilitation of the historic bridge. Any outstanding plan submittals must be listed as commitments in the environmental document and the Project Commitments Database. These submittals should be completed prior to the submittal of the Environmental Consultation Form (ECF). The ECF cannot be approved until all three plan submittals have been completed.

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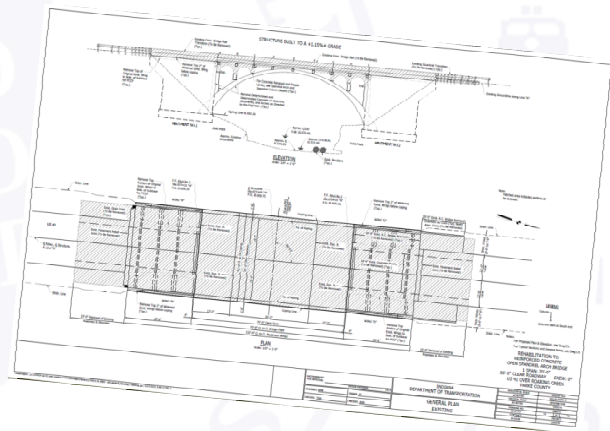
Design Memo 21-19 Questions

- Question: LPA Projects are only required to submit a Stage 3 (90%/100%) submission for INDOT Review. For the 30% and 60% Plan Submittals for Historic Bridge Rehab projects required for SHPO Review, it states in the memo they should be submitted as Stage 2 and Public Hearing Plans while copying the Historic Bridge Specialist. This indicates that they would get an INDOT Central Office Bridge Group Review, when it isn't technically required. Should we plan to make those submittals going forward on projects? Or will the previous approach of sending the plans directly to the Historic Bridge Specialist suffice for the LPA Projects?
- Response: For projects involving historic bridges, all submittals described in Design Memo 21-19 are required, even for projects that qualify for the reduced required submittals in the LPA Project Development Process Guidance Document. The additional submittals required for historic bridge coordination can be noted by the designer as "for Historic Bridge Coordination Only" when submitted to the INDOT Coordinator. Not all the Stage 2 Review Submission documents are required.

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Design Memo 21-19 Questions

- Question: Do the 60%/Hearing Plans have to be reviewed and approved by SHPO or the Historic Bridge Specialist prior to holding the public hearing?
- Response: It is not required to have the Historic Bridge Specialist or SHPO review these plans before the public hearing. The timing of submitting these plans for SHPO review is at the designer's discretion.



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Design Memo 21-19 Questions

- Question: When 30% Plans (Stage 2) are submitted to the Historic Bridge Specialist for review, prior to providing to SHPO for review, is it required to submit all other Stage 2 Review Submission documents (IDM 14-2.05(03)) at the same time? In addition to the Plans and Transmittal Letter, Stage 2 Review Submission documents include:
 - a. All Project Commitments Report
 - b. Level One Controlling Criteria Checklist and Design Computations
 - c. Draft Traffic Management Plan (TMP) Report
 - d. Traffic Control Plan Checklist
 - e. Scour Analysis Memo (*Scour analysis must be submitted for review 30 days prior to Stage 2 Review Submission*)
 - f. Cost Estimate
- Response: For LPA projects, refer to first question. For state projects, yes, everything is required. Central Office Bridge Group and the Historic Bridge Specialist will concurrently review.

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Design Memo 21-19 Key Take Aways

- All historic bridge projects processed under the Historic Bridges PA must hold a public hearing
- Coordinate with INDOT PM for public hearing details
- All historic bridge rehabilitation projects processed under the Historic Bridges PA require three plan reviews with SHPO (30-day review period for each)
- All three plan reviews should be complete before Environmental Consultation Form (ECF) submittal
- Plan ahead accordingly!



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