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CHAPTER I

Purpose of the Manual

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1-1.0-Purpose of the Manual

The Indiana Department of Transportation’s Cultural Resources Office (INDOT-CRO), in consultation with the Federal Highway Administration (FHWA) and the Indiana State Historic Preservation Office (SHPO), designed this manual as guidance on legal requirements and agency procedures, including scoping, identifying, evaluating, and documenting cultural resources on INDOT and Local Public Agency (LPA) projects. This manual is written for both cultural resource specialists and for the many individuals (project managers, engineers, environmental specialists, contractors, and consulting parties) who contribute to the planning and implementation of transportation projects in Indiana. For cultural resource specialists, this manual may be viewed as an outline for the documentation, investigation, and evaluation of cultural resources, with the end result being cultural resource documents of consistent format and quality. For project managers, engineers, and environmental specialists, this manual will serve as a guidance and reference resource to assist in planning transportation projects. In addition, some information herein may be useful to members of the public who wish to be involved in the cultural resource compliance process.
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A Guide to the Cultural Resources Manual

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2-1.0 Outline of the Cultural Resources Manual (CRM)

The Cultural Resources Manual (CRM) is arranged in five primary parts. Each part contains individual chapters. Each chapter, in PDF form, contains a table of contents with links to the chapter’s topic areas. The five primary parts are summarized below:

**PART I Introduction:** PART I provides an overview of the CRM and INDOT-CRO, and defines what is meant by cultural resources in regards to FHWA/INDOT projects.

**PART II Section 106 Compliance:** PART II pertains to Section 106 of the National Historic Preservation Act (NHPA). Section 106 comprises the majority of FHWA and INDOT’s cultural resource compliance activities, and therefore PART II represents the largest component of the CRM. The chapters of PART II follow the sequential process for complying with Section 106.

**PART III State Laws and Specifications:** PART III discusses the various state laws and requirements involving cultural resources that are independent of Section 106.

**PART IV Historic Bridges:** PART IV focuses on compliance with historic bridges, including the Historic Bridge Inventory and Project Development Process.

**PART V Forms:** PART V contains the most commonly used forms and templates.

In addition to the primary parts, an appendix is included with a list of acronyms, a glossary of cultural resource management terms, and a list of helpful websites.

2-2.0 How to Use the Cultural Resources Manual

The CRM is intended as a guidance tool for following FHWA and INDOT cultural resource compliance activities. It is tailored to our agencies’ procedures for meeting the cultural resource laws and regulations. However, the procedures contained within the CRM are not intended to substitute for Section 106 regulations, or other state and federal laws pertaining to cultural resources. In cases of unintended inconsistencies, the state and federal procedures will take precedence.

These procedures are intended to be flexible and adaptable. They may be revised from time to time to include further improvements in the Section 106 process. In addition, FHWA may choose to adopt different procedures, in the context of a particular project, without modifying this document. These procedures are intended only as a general guide. They are not intended to create any new binding legal requirements, nor are they intended to create enforceable legal rights or obligations on the part of FHWA, INDOT, MPOs, or any other party.
In any case, any professional with responsibility for ensuring cultural resources compliance for a FHWA/INDOT project should be thoroughly familiar with the CRM in all its parts and the laws and regulations to which the guidance contained within refers.

2-3.0 Updates

This manual will be periodically revised to reflect changes in policies, methodologies, and laws. Please refer frequently to the CRM website for updates and subscribe to the INDOT Environmental Services Listserv for news and announcements. Please go to https://public.govdelivery.com/accounts/INSTATE/subscriber/topics and sign up for Environmental Services under Transportation, Department of.
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CHAPTER III
INDOT’s Cultural Resources Office

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3-1.0 INDOT's Cultural Resources Office

Under Title 23, United States Code, for federal-aid highway projects the state DOTs are the responsible agencies for all aspects of project development, including environmental and cultural resource compliance before and during construction. The CRO is the cultural resources management arm of INDOT. As such, CRO has many duties, including:

- Ensuring that INDOT and FHWA projects maintain compliance with a wide variety of historic preservation laws and regulations - most notably Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act - so that transportation projects may proceed efficiently and on-time;

- Assuring that state and federally-funded cultural resource investigations and reports are consistently of the highest quality in order to comply with all applicable laws; regulations, guidelines, and standards;

- Establishing partnerships with state and federal resource agencies and the State Historic Preservation Officer (SHPO), as well as historic preservation societies and organizations;

- Managing the cultural resources encountered by INDOT on federally and state funded projects;

- Providing excellent customer service to our coworkers, partners, clients, and communities.

The CRO consists of an Archaeology Unit and a History Unit. Both units coordinate closely to review cultural resource documents and identify and evaluate cultural resources through research, fieldwork, and laboratory analysis. Please refer to Chapter 3-2.0 for CRO staff contact information.
### 3-2.0 CRO Staff Contact Information

#### Cultural Resources Manager
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PART I
CHAPTER IV
What Are Cultural Resources?

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4-1.0-What Are Cultural Resources?

Cultural resources are any prehistoric or historic remains or indicators of past human activities, including artifacts, sites, structures, landscapes, and objects of importance to a culture or community for scientific, traditional, religious, or other reasons. Cultural resource management is the development and maintenance of programs designed to investigate, manage, preserve, and protect cultural resources in compliance with state and federal laws. Development and maintenance of our infrastructure, particularly our transportation system, is necessary for growth and progress, and such activities can have impacts on cultural resources. In these circumstances, decisions must be made to strike a balance between practical growth and the protection of cultural resources.¹ As a result of this need for balance regarding cultural resource management, federal and state agencies have created laws and regulations for the protection of cultural resources.

It is important to note that the term historic property, as it pertains to the Section 106 process, is defined as any cultural resource listed on or eligible for listing on the National Register of Historic Places. These can include various resource types such as historic and prehistoric archaeological sites, houses, historic districts, engineering features such as roadbeds, railways, or bridges, battlefields, historic and cultural landscapes, and traditional cultural properties. However, not all cultural resources are by definition historic properties. They must be determined eligible for listing or must already be listed in the NRHP.

Please refer to Part II of the Cultural Resources Manual for detailed information regarding Section 106 and how historic properties are identified and evaluated.

¹ K. Kris Hirst, Cultural Resources Management, a Process. [http://archaeology.about.com/od/culturalresource/qt/crm_definition.htm](http://archaeology.about.com/od/culturalresource/qt/crm_definition.htm)
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Hirst, K. Kris
PART II

CHAPTER 1

A Summary of Section 106
of the National Historic Preservation Act

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1-1.0 National Historic Preservation Act

When the National Historic Preservation Act (NHPA) (16 USC 470) was passed in 1966, Congress sought to ensure that impacts of growth and development are considered when federal projects are planned and carried out. This law reflected the nation’s growing perception that although modern development is important and necessary, it too often leads to the loss of something that everyone cherishes - the character of our communities and our cultural roots, as expressed in historic properties.

The opening section of NHPA states that “…the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people.”¹ In the NHPA, Congress stated that it would be the policy of the Federal Government to “…foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony...”²

The NHPA established the National Register of Historic Places (NRHP), which is administered by the Secretary of the Interior, through the National Park Service (NPS). Items considered for the NRHP include districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture, which possess national, state, or local significance. The Act also provides funding for the State Historic Preservation Officer (SHPO), and staff, to conduct surveys and develop comprehensive preservation planning standards for state programs.

1-2.0 National Register of Historic Places

The NRHP was created by the NHPA, which gives the Secretary of the Interior the responsibility for its maintenance and expansion (through the nomination and listing of historic resources). The NRHP is the official federal record of resources that have been identified as worthy of recognition and preservation. Listing is “honorary,” in that it does not require a private property owner to preserve the resource, nor does it prevent the owner from modifying or demolishing the resource if private funds are used. The main types of resources that can be listed in the NRHP include districts, sites, buildings, structures, and objects. In order to be listed, the resource must be significant in American history, architecture, archaeology, engineering, and/or culture and retain sufficient integrity to convey that significance. In terms of recognition, resources can be significant on a national, state, or local level.

In order to be considered an historic property during Section 106 review, a property can either be already listed in the National Register or can be eligible for listing. A property is considered eligible when it meets specific criteria established by the NPS. As a general guideline, a property should be at least 50 years old to be considered a historic property, though cases of exceptional significance can be exempted from the “50 years” rule. More information about the NRHP can be found on the National Park Service website: http://www.cr.nps.gov/nr/.

² Ibid.
1-3.0 Section 106 of the NHPA

The purpose of Section 106 of the NHPA is to “…achieve a balance between preservation of our nation’s heritage and the development activities that are necessary to maintain and improve our standard of living…”3 As such, Section 106 requires all federal agencies to take into consideration the effect of federally assisted, licensed, or permitted projects on cultural resources that are listed, or eligible for listing in the National Register of Historic Places (NRHP). Section 106 also requires that the Advisory Council on Historic Preservation (ACHP) be afforded an opportunity to comment on such effects. The process for complying with Section 106 is set forth in the implementing regulations of 36 CFR Part 800 as amended in 2004.

Section 106 is a procedural law. While a specific outcome is not mandated, the Section 106 process must be followed before the federal agency will approve an undertaking. The key aspect in successfully completing Section 106 is consultation. The NHPA defines consultation as the “…process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them…”4 The basic steps in the Section 106 consultation process are listed below and are each discussed more in-depth in subsequent chapters.

- Identify consulting parties and invite them to participate in consultation.
- Establish an area of potential effects (APE).
- Identify historic properties within the APE.
- Evaluate effects on historic properties within the APE.
- Resolve “adverse effects,” if any, on historic properties [this can entail the preparation of a Memorandum of Agreement (MOA)].

The procedures presented in subsequent chapters are not intended to be used as a substitute for the Section 106 regulations or the Section 106 guidance issued by the ACHP. Applicants, consultants, and others responsible for preparing Section 106 documentation for FHWA review should carefully review not only these procedures but also the Section 106 regulations themselves and the related guidance materials on the ACHP's web site. In particular, when questions arise concerning the meaning of particular provisions in the Section 106 regulations, it is important to review the “Section-by-Section Questions and Answers” in the ACHP's Section 106 User's Guide. In the event of any unintended inconsistencies between these procedures and the Section 106 regulations or the ACHP's guidance, the Section 106 regulations and ACHP guidance will take precedence.

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References

Advisory Council on Historic Preservation
2008  Nation Historic Preservation Act of 1966, as Amended through 2006 [With annotations].

SRI Foundation
n.d.  Section 106 Principles and Practice. SRI Foundation, Rio Rancho, New Mexico. Electronic
PART II

CHAPTER 2

FHWA/INDOT Section 106 Consultation Process Overview

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APPENDIX: Section 106 Flowchart
2-1.0 Background

This chapter provides an overview of the Federal Highway Administration (FHWA) and INDOT’s Section 106 consultation process. Specifically, this chapter explains the roles of FHWA, INDOT, the Indiana State Historic Preservation Officer (IN SHPO), project applicants/sponsors and consultants. Moreover, this chapter summarizes the key aspects of the FHWA/INDOT Section 106 process. Subsequent chapters provide detailed procedures on how to complete the Section 106 process.

2-2.0 Roles and Responsibilities

2-2.1 FHWA-IN-Lead Federal Agency

Per the Programmatic Agreement (PA) 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 (also known as the “Minor Projects PA”), INDOT independently performs much of the work and consultation described in 36 CFR Part 800. While INDOT has been delegated much of the oversight of the Section 106 process, per 36 CFR 800.2(c)(4), FHWA will remain legally responsible for all findings and determinations required by federal law. The level of involvement by FHWA will reflect the complexity of the historic preservation issues involved in a project, and will be determined on a case-by-case basis, taking into account any views expressed by the applicant, the SHPO, the ACHP, and/or consulting parties.

INDOT’s Cultural Resources Office (CRO) reviews all Section 106 documents on behalf of FHWA. Findings for undertakings with determinations of “no adverse effect” or “no historic properties affected” are approved by INDOT, acting on FHWA’s behalf. After INDOT’s review, FHWA approves findings for all undertakings with “adverse effect” determinations.

In recognition of the unique government-to-government relationship between the Federal government and Indian tribes, FHWA shall take the lead in identifying and establishing consultation with the Indian tribes and Tribal Historic Preservation Officers (THPO) consistent with 36 CFR 800.2(c)(2). If the tribe is agreeable, further consultation may be conducted between the tribe and INDOT. Likewise, FHWA is responsible for conducting consultation with the ACHP.

2-2.2 INDOT-CRO

INDOT--specifically CRO--has been delegated by FHWA to oversee much of its Section 106 program. On behalf of FHWA, INDOT may independently perform, approve, and oversee Section 106 consultation as described in the following sections of 36 CFR Part 800:

- In accordance with 36 CFR § 800.3:
(1) Establish the undertaking;
(2) Coordinate with other reviews;
(3) Identify the appropriate SHPO and/or THPO;
(4) Plan to involve the public;
(5) Identify other consulting parties; and
(6) Expedite consultation.

• In accordance with 36 CFR § 800.4:
  (1) Determine the scope of identification;
  (2) Identify historic properties;
  (3) Evaluate historic significance; and
  (4) Provide results of identification and evaluation to SHPO and consulting parties.

• In accordance with 36 CFR § 800.5:
  (1) Apply criteria of “adverse effect”;
  (2) Issue finding of “no adverse effect”;
  (3) Notify SHPO and consulting parties of the finding; and
  (4) Provide SHPO and consulting parties with the documentation specified in 36 CFR § 800.11(e).

2-2.3 Indiana SHPO

In Indiana, the Director of the Department of Natural Resources (DNR) is designated as the State Historic Preservation Officer (SHPO). In 1981, the General Assembly established the Division of Historic Preservation and Archaeology (DHPA) within the DNR, whose mission is to carry out the federal-state partnership of the NHPA. The Director of the DHPA was named Deputy SHPO and is charged with the daily oversight of the state’s preservation programs and policies.

The SHPO is the primary consulting party throughout the Section 106 process. The SHPO will review all Section 106 documentation, excepting those projects covered under the Minor Projects PA. Consultation with the SHPO is critical to successfully completing Section 106.

2-2.4 Applicants and Consultants

For purposes of these procedures, the “applicant” is defined as the owner of the roadway/bridge (INDOT or Local Public Agency [LPA]). In other words, the applicant is the project sponsor. FHWA authorizes applicants (or their consultants) for all FHWA-IN projects to initiate Section
106 consultation on behalf of FHWA in accordance with these procedures to the fullest extent allowed under 36 CFR 800.2(c)(4), unless otherwise directed by the FHWA.

Applicants, their designees, and their consultants, may prepare information, analyses, and recommendations as part of the Section 106 process, in accordance with 36 CFR 800.2(a)(3). In order to complete Section 106 documentation on behalf of FHWA and INDOT, consultants first must be listed as an **INDOT prequalified consultant** under Category 5.9 Archaeological Investigations and Category 5.10 Historical/Architectural Investigations. Please keep in mind that per 7-2.01 of INDOT’s [LPA Guidance Document](#), all professional services leading to federally funded construction must be performed by INDOT prequalified consultants or by LPA in-house staff that have been approved by INDOT as having the same technical qualifications specified for consultants. This is regardless of whether federal funds for the services are being reimbursed or credits are being accrued.

In order to be listed as an INDOT prequalified consultant in Category 5.9 and Category 5.10, individuals at a minimum must meet the [Secretary of Interior's Professional Qualification Standards](#) and be listed on the [DHPA’s Qualified Professionals Roster](#). Additionally, as explained in further detail in Chapter 2-3.0, Section 106 documentation must be prepared by individuals meeting the [Secretary of Interior's Professional Qualification Standards](#) and listed on the [DHPA’s Qualified Professionals Roster](#).

Applicants, their designees, and their consultants, who meet the qualification standards above are permitted to assist FHWA and INDOT in completing the activities required under 36 CFR 800.4, "Identification of Historic Properties"; 36 CFR 800.5, "Assessment of Adverse Effects"; 36 CFR 800.6, "Resolution of Adverse Effects," and recommendations for the area of potential effects, eligibility determinations, and effect findings for FHWA/INDOT approval.

Moreover, applicants, their designees, and consultants may carry out on behalf of FHWA non-decision making functions assigned to the "agency official" in the Section 106 regulations, including day-to-day coordination with consulting parties, the SHPO, and other participants in the Section 106 process. Such coordination could include invitation of consulting parties, distribution of FHWA/INDOT approved eligibility determinations and effect findings, invitations to consulting party meetings, distribution of minutes, and responses to SHPO requests for additional information. If a controversial issue arises, coordination should occur with INDOT-CRO. INDOT will consult with FHWA as appropriate to resolve the issue.

The applicant or their consultant should “cc” INDOT on all Section 106 correspondence sent to the SHPO or any consulting party. The Section 106 correspondence may indicate that responses and comments be directed to the consultant, who is working on behalf of the applicant. However, in any correspondence to the SHPO or consulting parties, the applicant or their consultant should specifically request that recipients “cc” INDOT on their responses to that correspondence. The

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**Consultant Performance**

Please note that INDOT staff evaluates consultant performance with the submittal of each deliverable and at other times as appropriate. Refer to the [INDOT Consultant Performance Evaluation Guidelines](#) for more information.
applicant or their consultant should “cc” FHWA only when it is anticipated that the project will involve an “adverse effect,” or as directed by INDOT-CRO.

As FHWA and INDOT rely on consultants to assist in Section 106 activities, we expect consistent quality. To that end, consultants are expected to have a thorough understanding of FHWA and INDOT Section 106 procedures. When deficient work is identified, the consultant will be expected to show improvement. If a pattern of deficient work persists, INDOT may seek more formal action, including suspension or removal of the consultant from INDOT’s prequalified consultant list.

2-3.0 Qualified Professionals Requirement

The National Historic Preservation Act (Section 112) and Section 106 regulations [800.2(a)(1)] require agencies responsible for protecting historic properties to ensure that all actions taken by their employees or contractors meet the Secretary of Interior's Professional Qualification Standards. Therefore, FHWA and INDOT only accept Section 106 documentation that has been prepared by Qualified Professionals (QP) meeting the Secretary of Interior's Professional Qualification Standards. Further, individuals meeting the Qualified Professional Standards must also be listed on the DHPA’s Qualified Professionals Roster. Individuals who meet the Professional Qualification Standards and wish to be included in the Qualified Professionals Roster are invited to submit the appropriate forms together with supporting materials to the DHPA. The DHPA will review documentation to determine if the qualifications meet the Federal and State Standards. Please note that inclusion on the list does not constitute DHPA’s endorsement of any individual consultant, any contracting firm, or any consultant’s work or work products.

Examples of Section 106 documentation that Qualified Professionals must prepare include:

- Formulating areas of potential effects;
- Identification and evaluation of cultural properties including historic property reports and archaeological survey/investigation reports;
- Assessment of effects;
- 800.11 documentation*
- National Register of Historic Places (National Register) application preparation;
- Completion of certain MOA stipulations such as county historic inventories, HABS/HAER-level documentation, state-level photographic and written documentation, and archaeological data recovery (Phase III).

*FHWA and INDOT recognize that non-QPs sometimes participate in the preparation of 800.11 documentation. However, a QP is responsible for the final prepared documentation that is provided to INDOT for review and subsequently to consulting parties. When 800.11 documentation is submitted to INDOT-CRO for review by a non-QP (usually a prime consulting
Remember:
In addition to being listed on DHPA’s Qualified Professionals Roster, consultants must be prequalified to work for INDOT under categories 5.9 Archaeological Investigations and 5.10 Historical/Architectural Investigations.

firms’ environmental/planning staff), the QP responsible for the 800.11 documentation shall provide written endorsement verifying their role in its preparation. When the 800.11 documentation is distributed to consulting parties by a non-QP, the cover/transmittal letter shall specify the QP responsible for the document’s preparation.

Other Section 106 coordination and preparation efforts may be conducted by other professional staff working in consultation with a Qualified Professional. Examples of these efforts/documents include:

- Identifying and inviting consulting parties to participate;
- Preparing and sending out early coordination documents;*
- Preparing MOA documents.

When a non-QP submits documents on behalf of a QP or has prepared documents in consultation with a QP, such as an early coordination letter, the cover/transmittal letter should indicate the consulting QP and cc them on the correspondence.

2-4.0 Section 106 Timelines

The Section 106 process can be lengthy, and there are many different aspects of the process that affect the timeline. Examples include:

- The scope of the project: Larger projects require more time for identifying and documenting cultural resources;
- Weather: Archaeological survey cannot proceed while the ground is frozen, snow is on the ground, or in heavy rain;
- The number of historic properties identified: This will necessarily affect the timeline;
- The nature of the historic properties: A small lithic scatter might be documented in a day, while a buried prehistoric village site could take many months; While it may take a few days to evaluate a single historic home, it may take many weeks to evaluate a historic district composed of many structures;
- The finding of effect: A finding of “adverse effect” will take more time to resolve than a finding of “no adverse effect”;
- Consultation with the ACHP or the Keeper of the Register: A project that involves a property being forwarded to the Keeper can involve significant delays. Likewise, if the ACHP is brought into a project due to controversy, this may delay the project;
- Review time: During various stages of the Section 106 process the SHPO and consulting parties are given 30 days to comment. If submissions are inadequate or confusing the agency may stop the 30-day “clock” and request more information.
The following table illustrates Section 106 timelines, separated by findings of effect. These time frames are estimates based on average agency review times, and they assume accurate and complete information/documentation was submitted to the agencies. The consultation for findings of “no adverse effect” and “adverse effect” are difficult to predict, so these timeframes account for variables such as follow-up correspondence, consulting party meeting coordination, and extensive MOA coordination (for findings of “adverse effect”). Please refer to the appendix for the Section 106 process flow chart.

Table 2-1: Section 106 Timelines

<table>
<thead>
<tr>
<th>Project Effect Finding</th>
<th>Average Completion Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor Projects PA Category B (no fieldwork)</td>
<td>2 Weeks</td>
</tr>
<tr>
<td>Minor Projects PA Category B (fieldwork)</td>
<td>2 Months</td>
</tr>
<tr>
<td>Finding of “no historic properties affected”- Regular Section 106 process</td>
<td>4-6 Months</td>
</tr>
<tr>
<td>Finding of “no adverse effect”- Regular Section 106 process</td>
<td>4-8 Months</td>
</tr>
<tr>
<td>Finding of “adverse effect”- Regular Section 106 process</td>
<td>8-12 Months</td>
</tr>
<tr>
<td>Finding of “no adverse effect” or “adverse effect” for historic bridges – Historic Bridge PA process</td>
<td>6-12 Months</td>
</tr>
</tbody>
</table>

2-5.0 Consultation Best Practices

As Table 2.1 shows, the Section 106 process can potentially take over a year to complete. Section 106 is a consultative law, thus much of its completion is dictated on how well the process is followed and consulting parties are engaged. Consequently, FHWA and INDOT have formulated a number of “best practices” designed to streamline the Section 106 process. These are presented below. Subsequent chapters provide more specific procedures for Section 106 compliance.

For minor, non-controversial projects, consultation may address multiple steps (from initiation of the Section 106 process to defining the APE, identification of historic properties, assessment of effects, and resolution of an “adverse effect”) in one packet of correspondence/consulting party meeting when FHWA, INDOT and SHPO agree it is appropriate, as long as the consulting parties and the public have an adequate opportunity to express their views. If a project does not
result in an adverse effect to a historic property, the entire consultation process may be done through correspondence.

2-5.1 Section 106 Consulting Party Meetings

Where deemed appropriate by FHWA or INDOT during the Section 106 process, the applicant or their consultant will organize a consulting party meeting and invite consulting parties. When there is a possibility of a finding of “adverse effect,” a consulting party is recommended to address consulting party concerns and seek measures to minimize, avoid and mitigate potential adverse effects. The applicant or consultant shall consult with FHWA and INDOT regarding the need for a consulting party meeting.

When it has been determined that there will be a consulting party meeting, potential meeting dates should be coordinated with INDOT-CRO, FHWA, and SHPO before sending out invitations. It is often appropriate to meet near the project location to better accommodate local consulting parties and to visit the project area.

If a project does not result in an “adverse effect” to a historic property, the entire consultation process may be done in writing. Depending upon the complexity of the project, several consulting party meetings or other informal meetings with various participants in the Section 106 process may be required.

For major or very complex projects, separate consulting party meetings may be held for each step of the consultation process – defining the area of potential effects, the identification and evaluation of potentially eligible properties, the assessment of effects and the development of mitigation. Consult with INDOT/FHWA for further guidance.

If a consulting party meeting is held, the following procedures apply:

a. An agenda and appropriate documentation will be forwarded to consulting parties approximately two weeks in advance of the meeting, unless otherwise approved by FHWA and INDOT;

b. The applicant or their consultant will distribute a summary of the meeting to all consulting parties approximately one week after the meeting to document the consultation and the decisions made.

Section 106 consulting party meetings will allow FHWA and INDOT to consult with the applicant, the SHPO, and consulting parties regarding issues that may arise in the Section 106 process. This consultation will facilitate consideration of all reasonable alternatives, encourage minimization where appropriate, and result in timely decisions.

Remember:
Before commencing with Section 106 consultation, two critical steps should be followed. First, determine that the project is an undertaking. Second, reference the Minor Projects PA to determine whether a) the project fits within a Minor Projects Category or b) it may be a candidate for expedited consultation.
2-5.2 Consulting Party Review and Public Comments

Consulting parties are generally afforded 30 days to comment on Section 106 documentation and findings. Sufficient information (except for archaeological site locations) must be shared to allow for meaningful comments during the various stages and decision-making points of the process. The Section 106 regulations state that the federal agency must ensure that adequate time is given so the public will have the opportunity to both obtain information and to provide viewpoints.

Although public notice should be conducted using existing FHWA procedures, the public can express their views at any time, without waiting for a formal request. At any juncture in the Section 106 process a potential consulting party can request to become--and will be accepted as--a consulting party.

The intent of consultation with consulting parties is to allow for early and timely input. Failure to raise issues that could have been addressed during such opportunities may result in these comments not receiving the same consideration that they would have received if raised at the appropriate time. Comments on old issues will be considered if those comments are based on new information. However, back-tracking to previously resolved issues will occur only if the new information is at substantial variance with what was expected, and if the new information pertains to an issue of sufficient magnitude and severity to warrant reconsideration.
Tips for Successful Section 106 Consultation

- Coordinate early with INDOT-CRO with any questions;
- Identify and invite consulting parties early in the Section 106 process;
- Keep consulting parties abreast of any changes in the project. Consult as decisions are being made, not after they are made;
- If particular groups or individuals ask to be consulting parties, let them;
- If possible, travel to meet with consulting parties at their places of business or their location, rather than asking consulting parties to travel to you;
- Invite consulting parties to physically tour the project area. Actually seeing a project area and historic properties in person will be valuable when consulting parties are forming opinions about your project;
- Allow consulting parties the time and venue to voice their concerns, listen respectfully, and consider their opinions;
- Send the FHWA Section 106 documentation only after a finding of “adverse effect” is anticipated.
APPENDIX: SECTION 106 Flow Chart

**STEP 1 (800.16[y])**
Establish that the project is an undertaking.

**STEP 2**
Is the undertaking included within Category A or B of the Minor Projects PA?

- **NO**
  - **STEP 3 (800.2 & 800.3)**
    Identify and invite Consulting Parties.

- **YES**
  - If so, the full Section 106 process is not required. Consult with INDOT Cultural Resources Office (CRO).

**STEP 4 (800.4)**
Establish Area of Potential Effect (APE).

**STEP 5 (800.4[a][b])**
Are potential historic properties (cultural resources) identified within the APE?

- **NO**
  - **Finding of No Historic Properties Affected (800.4[d]).** Once INDOT approves the finding, it is distributed to consulting parties for 30-day comment period.

- **YES**
  - **STEP 6 (800.4[c])**
    Are the cultural resources determined to be historic properties (NRHP listed or eligible)?

  - **NO**
    - **STEP 7 (800.4[d])**
      Are the historic properties affected by the undertaking?

      - **NO**
        - **Finding of No Adverse Effect (800.5[b]).** Once INDOT approves the finding, it is distributed to consulting parties for 30-day comment period.

      - **YES**
        - **Apply Criteria of Effect (800.5[a]).**

        - **NO**
          - **Finding of No Adverse Effect (800.5[b]).** Once INDOT approves the finding, it is distributed to consulting parties for 30-day comment period.

        - **YES**
          - **Adverse Effect**

  - **YES**
    - **Finding of Adverse Effect (800.5[a]).** Once FHWA approves finding, it is distributed to consulting parties for 30-day comment period.

**STEP 8 (800.6)**
Resolve Adverse Effects. Meet with consulting parties to discuss adverse effects and mitigation efforts.

**STEP 9 (800.6[c])**
Develop Memorandum of Agreement to mitigate adverse effects.
PART II

CHAPTER 3

Minor Projects Programmatic Agreement

(Minor Projects PA)

March 2015

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Appendix: Minor Projects Programmatic Agreement
3-1.0 Overview

The procedures through which Section 106 is administered by FHWA in Indiana are stipulated in 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 (also known as the Minor Projects PA), executed in 2006. Please see the Appendix for the Minor Projects PA.

Understanding the provisions of the Minor Projects PA prior to the initiation of Section 106 consultation is vital. In addition to specifying how Section 106 is administered in Indiana, the PA provides a list of minor projects that are exempt from full Section 106 review. Therefore, the list of minor projects exempt from full Section 106 review should be referenced prior to the initiation of the Section 106 process. (Minor projects categories are discussed in more detail in Chapter 3-2.0.)

Please note that the Minor Projects PA was last updated in March 2015.

3-2.0 Minor Projects

A key provision of the Minor Projects PA is the list of minor projects that are exempted from the normal (and sometimes lengthy) full Section 106 review process. Minor projects, as defined in the Minor Projects PA, are those that have little or no potential to cause effect to historic properties. If a project type, activity, or undertaking is listed in the Minor Projects PA, little or no further cultural resource investigation is needed, and the project is exempt from the normal Section 106 process.

None of the minor projects listed in the PA require consultation with or review by the SHPO, provided the project:

- is limited to the activities specified;
- is not part of a larger project;
- is on an existing transportation facility;
- occurs in soils previously disturbed by vertical and horizontal highway construction activities (please note that agricultural activity, such as plowing/disking, does not normally constitute a severe level of disturbance to an archaeological site); and
- has no known public controversy based on historic preservation issues.

Without the Minor Projects PA, all FHWA-funded projects would have to go through the entire Section 106 process. This process, including review time by multiple agencies, may take months to complete. Under the Minor Projects PA, common projects are exempt from the normal Section 106 process.
Projects covered by the Minor Projects PA fall into two categories: minor projects that do not require review by INDOT-CRO (Category A); and minor projects that do require documentation and review by INDOT-CRO in order to assess the likelihood that historic properties exist in the area of potential effects, or to determine the degree of existing soil disturbance within the project area (Category B).

Minor projects implemented under the PA are listed in Appendices to the document so that the list may be easily modified or added to by the mutual written agreement of FHWA, INDOT, and the SHPO. If you become aware of minor highway projects that should be on the list, please contact the CRO.

A full list of the projects under each category can be found in Appendices A and B of the Minor Projects PA.

3-2.1 Category A

In general, Category A projects are small in scope, do not include major expansion or alteration of the current roadway footprint, and do not include the addition of new elements (such as light poles, sidewalks, curb ramps, etc.). If the project manager, project sponsor, the INDOT District office in charge of the environmental document, and/or INDOT-CRO determines that a project is consistent with Category A of the PA, then no further work needs to be produced for review by SHPO or FHWA under Section 106. INDOT-CRO should be consulted if there is a concern about the application of the PA to a specific project.

3-2.2 Category B

In general, Category B projects could have a larger scope, may include some expansion or alteration of the current roadway footprint, and may include the addition of new elements, such as curb ramps and sidewalks. When a project may fall within Category B, project information should be submitted to INDOT-CRO to make the final determination. If INDOT-CRO agrees that the project falls within the Minor Projects PA, INDOT-CRO will provide a determination form that will conclude Section 106. Please refer to Chapter 3-3.0 for information required for INDOT-CRO’s determination.

3-2.3 NEPA Documentation

This PA does not exempt a minor project from the normal NEPA process and documentation. Any minor project listed in the PA shall be documented in the NEPA documentation. The documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt from further Section 106 review.
3-2.4 Monitoring

FHWA and INDOT may visit construction sites at any time--and the SHPO will be invited to participate--in order to monitor any project approved under the Minor Projects PA. Should monitoring or other activities result in evidence that the requirements of the PA need modification or are not being met, FHWA, the SHPO, and INDOT-CRO will meet to implement corrective measures. Should monitoring or other activities result in evidence that a project is not meeting the requirements of the Minor Projects PA, then that project will no longer fall under the PA, and must fulfill the normal Section 106 requirements.

3-3.0 Submitting Information for a Minor Projects Determination

The project applicant or consultant shall submit the documentation to the Manager of the Cultural Resources Office in the INDOT Environmental Services in INDOT’s Central Office. When submitting documentation for review, be sure to state in the cover letter that the submittal is a “request for INDOT-CRO review as a Minor Project under the Minor Projects PA”.

Please also include the following information:

- Name of contact person at the applicant’s organization or at the consulting firm that should receive correspondence regarding the documents. Please include an email address and phone number to facilitate more immediate communication. Additionally, INDOT-CRO prefers to return the completed determination form via email.

- General project identification information:
  - Project designation (Des.) number;
  - Route number;
  - Project description/scope of work;
  - Feature crossed (for bridge or small structure projects);
  - Township;
  - City;
  - County;
- Category of Minor Projects exemption under which you feel the project may fall.

Please include the following information in your documentation:

- Maps showing the general and specific location of the project within the state and county:
  - The project area must be clearly presented;
  - It is also helpful, if possible, to show the location of any known potential historic property locations within or near the project area;

- Aerial photo of the project area:
  - Must include the date of aerial photos in the caption,
• Topographic map of the project area:
  o Should be at a 1:24000 scale;
• The caption of the topographic map should be properly titled, for example; “Portion of the USGS 7.5’ series Miami, Indiana topographic quadrangle showing the location of the project area.” USGS topographic maps and high-quality 2005 aerial photographs are available free of charge (and without copyright restrictions) at the Indiana GIS Atlas website (http://www.indianamap.org/All maps and aerial photographs should include a scale, a north arrow, and a key or legend;
• Project-area descriptions;
• Soil survey data;
• Summaries of previous archaeological or historic property documents previously completed in the project area (if available);
• Bridge inspection information (if applicable).

The following information should also be included when available or when the above information is not adequate to assess the nature of the project area:

• General project area photos keyed to a map. Photographs are not necessary for every submission, but are most helpful when:
  o Potential historic properties exist in the project area;
  o When previously identified historic properties have been demolished and are no longer present in the area;
  o When the above-listed items do not adequately demonstrate previous ground disturbance, but a photograph does.

After reviewing the documentation, the INDOT-CRO staff will return the determination form to the project applicant or consultant, indicating whether the project is exempt from further Section 106 consultation. A copy of the determination form must be included in the environmental document. If the project should change, the INDOT-CRO staff would need to reexamine the information to see if the Minor Projects determination still applies.

3-4.0 Minor Projects PA for Archaeologists

Several Category B project types call for archaeological fieldwork and INDOT-CRO approval of subsequent reports before a determination form can be completed. QP archaeologists are expected to be aware of these categories in order to assist their clients in applying the PA whenever applicable, and to reference the appropriate category in reports.

It is expected that archaeological work conducted to meet criteria set forth in the Minor Projects PA will follow all standard practices outlined in the INDOT Cultural Resources Manual and DHPA Guidelines. Reports of investigations are to be submitted to INDOT-CRO for review and approval. Once accepted, the archaeologist and consultant will receive a completed PA Determination Form for inclusion into the NEPA document and will be directed to transmit one hard copy of the report to DHPA for their records. The cover letter to DHPA must clearly
Programmatic Agreement (PA)
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

WHEREAS, the Federal Highway Administration (FHWA) administers the Federal Aid Highway Program in Indiana authorized by 23 U.S.C. §§ 101 et seq., through the Indiana Department of Transportation (INDOT) (23 U.S.C. § 315); and

WHEREAS, INDOT undertakes Federal minor highway projects that would qualify as Categorical Exclusions (CEs), including Local Public Agency Federal aid projects, as defined in 23 CFR 771, that do not individually or cumulatively have a significant impact on the environment, and therefore may not require the preparation of an environmental document; and

WHEREAS, FHWA has determined that certain types of minor highway projects typically have no effect upon historic properties included in or eligible for inclusion in the National Register and has consulted with the Advisory Council on Historic Preservation (Council), and the Indiana State Historic Preservation Officer (SHPO) pursuant to Section 800.14(b) of the regulations (36 CFR Part 800 Subpart C) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, INDOT participated in the consultation and has been invited to be a signatory to this PA; and

WHEREAS, INDOT maintains cultural resource staff and consultants meeting the Secretary of Interior’s Professional Qualification standards (48 Federal Register (FR) 44716) and State of Indiana standards (Indiana Code 14-21-1 and 312 IAC 21) in the fields of archaeology, history and architectural history;

NOW, THEREFORE, FHWA, INDOT, the Council, and SHPO agree that the Federal Aid Highway Program shall be administered in accordance with the following stipulations to satisfy the FHWA Section 106 responsibility for all individual undertakings of the program.

STIPULATIONS

FHWA shall ensure that the following measures are carried out:

1. Purpose and Scope
A. This PA sets forth the process by which FHWA, with the assistance of INDOT, will meet its responsibilities for undertakings pursuant to Sections 106 and 110 of the National Historic Preservation Act (NHPA) (16 U.S.C. § 470f).

B. FHWA Responsibilities - In compliance with its responsibilities under the NHPA, and as a condition of its award to INDOT of any assistance under the Federal Aid Highway Program, FHWA will ensure that INDOT carries out the requirements of this agreement and Council policies and guidelines for undertakings subject to this agreement.

C. INDOT Responsibilities

1. Pursuant to this agreement, INDOT will ensure that all cultural resource staff and/or consultants, employed under its contract to conduct work in the field of cultural resources, meet the qualifications set forth in the Secretary of Interior's Professional Qualification standards (48 FR 44716) and State of Indiana standards (IC 14-21-1 and 312 IAC 21) for such work. These qualified INDOT cultural resources personnel shall have the primary responsibility for implementing this PA.

2. Prior to December 31, 2007, and in consultation with SHPO and FHWA, INDOT will prepare a Cultural Resources Manual detailing the procedures for implementing this agreement. Upon approval of the Cultural Resources Manual by INDOT, SHPO, and FHWA, this programmatic agreement will be appended to the INDOT Cultural Resources Manual and be fully explained therein.

2. Minor Projects

The following types of undertakings, listed in Appendices A and B, are activities in which INDOT routinely utilizes Federal Aid highway funds and consist of minor projects that generally do not affect historic properties. None of the minor projects listed below will require consultation with or review by the SHPO, provided the undertaking:

- is limited to the activities specified
- is not part of a larger project
- is on an existing transportation facility
- if ground disturbance in previously disturbed soils is specified, occurs in soils previously disturbed by vertical and horizontal highway construction activities
- has no known public controversy based on historic preservation issues

Such minor projects fall into two categories: minor projects that do not require review by INDOT Cultural Resources staff (Category A; Appendix A), and minor projects that do require documentation and review by INDOT Cultural Resources staff to assess the likelihood that historic properties exist in the area of potential effects or determine the degree of existing soil disturbance within the project area (Category B; Appendix B).

For undertakings in Category B, or where questions arise about the need for review of an undertaking in Category A, INDOT Cultural Resources staff shall determine whether a
particular project should be exempt from SHPO review. If the SHPO specifically requests a copy of the documentation for a particular undertaking covered by this stipulation, INDOT will provide SHPO with the requested documentation and, if the project has not already been approved, will review the project in accordance with Stipulation 4 of this Agreement. All of the minor projects listed in Appendices A and B will be subject to regular internal audit by INDOT.

3. Documentation of Minor Projects

A. Any minor project listed in Appendices A or B shall be documented in the National Environmental Policy Act documentation. The documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt from further Section 106 review.

B. INDOT Cultural Resources staff will utilize the County Interim Reports, most current Bridge Inventory, as well as additional documentation to assure projects are not adjacent to a National Register eligible property or district. Documentation may include construction plans, project area descriptions, soil survey data, photographs, and archaeological documentation.

4. Section 106 Consultation for FHWA Undertakings Not Exempt from Review

For those projects not exempt from review under terms of Stipulation 2, INDOT and FHWA shall review the undertakings in accordance with the procedures found in 36 CFR Part 800. Upon completion of the Cultural Resources Manual required in Stipulation 1, INDOT, using staff and/or consultants meeting the Secretary of the Interior’s Professional Qualifications Standards (48 FR 44738-9), may independently perform the work and consultation described in the following sections of 36 CFR Part 800 (including any succeeding revisions to the regulations) on behalf of FHWA as follows:

36 CFR § 800.3

(1) Establish undertaking
(2) Coordinate with other reviews
(3) Identify the appropriate SHPO and/or THPO
(4) Plan to involve the public
(5) Identify other consulting parties
(6) Expediting consultation

36 CFR § 800.4

(1) Determine scope of identification
(2) Identify historic properties
(3) Evaluate historic significance
In recognition of the unique government-to-government relationship between the Federal government and Indian tribes, FHWA shall take the lead in identifying and establishing consultation with the Indian tribes and Tribal Historic Preservation Officers (THPO) consistent with 36 CFR § 800.3(c) - (f). If the tribe is agreeable, further consultation may be conducted among the tribe and INDOT.

A. Finding of “No Historic Properties Affected”

If INDOT determines, in consultation with the SHPO and consulting parties, that no historic properties will be affected by the undertaking, INDOT will make a finding of “no historic properties affected,” and documentation (800.11[d]) will be forwarded to the SHPO for concurrence. Copies of this documentation will be provided to all consulting parties and will be made available for public inspection. INDOT may proceed with the project if the SHPO has agreed, in writing, with the finding or if within 30 days of receipt neither SHPO nor another consulting party has objected to the finding. If the SHPO or any consulting party objects, in writing, to INDOT's finding within 30 days of receipt of an adequately documented finding, the documentation will be submitted to FHWA for resolution. If, through consultation, consensus can be reached, the process will move forward in accordance with this agreement. If consensus is not achieved, the undertaking will not be developed under this agreement, but instead will proceed in accordance with 36 CFR Part 800.3 through 800.6. If INDOT determines, in consultation with the SHPO and consulting parties, that historic properties may be affected by the undertaking, INDOT shall apply the Criteria of Adverse Effect, 36 CFR Part 800.5(a)(1).

B. Finding of “No Adverse Effect”

If INDOT determines, in consultation with the SHPO and consulting parties, that the undertaking will have no adverse effect on historic properties, it will make a finding of “no adverse effect,” and documentation (800.11[e]) will be forwarded to the SHPO for concurrence. Copies of this documentation will be provided to all consulting parties and will be made available for public comment. INDOT may proceed with the project if the SHPO has agreed, in writing, with the finding or if within 30 days of receipt neither the SHPO nor another consulting party objects to the finding. If SHPO or any consulting party objects within 30 days of receipt of
adequate documentation, in writing, to INDOT's finding, the documentation will be submitted to FHWA for resolution. If, through consultation, consensus can be reached, the process will move forward in accordance with this agreement. If consensus is not achieved, the undertaking will not be developed under this agreement, but instead will proceed in accordance with 36 CFR Part 800.3 through 800.6.

C. Finding of “Adverse Effect”

If INDOT determines, in consultation with the SHPO and consulting parties, that the undertaking will have an adverse effect on historic properties, it will notify FHWA and FHWA will ensure the Section 106 process is completed in accordance with 36 CFR 800.6. FHWA will be responsible for making a finding of “adverse effect” and the resolution of those effects.

5. Unanticipated Discovery

If any unanticipated discoveries of historic properties, sites, artifacts, or objects are encountered during the implementation of any project exempted under this PA, INDOT and FHWA shall comply with 36 CFR 800.13 and IC 14-21-1-27 and 14-21-1-29 by stopping work in the immediate area and informing the SHPO, housed in the Indiana Department of Natural Resources (“DNR”) of such unanticipated discoveries or effects within two (2) business days. Any necessary archaeological investigations will be conducted according to the provisions of IC 14-21-1 and 312 IAC 21.

If any unanticipated effects on historic properties are found to be occurring during the implementation of any project exempted under this PA, INDOT and FHWA shall comply with 36 CFR 800.13 and inform the SHPO immediately.

If any human remains are encountered during the implementation of any project exempted under this PA, work shall cease in the immediate area and the human remains left undisturbed. INDOT and FHWA will contact the county coroner and law enforcement officials immediately, and the discovery must be reported to the SHPO within two (2) business days. The discovery must be treated in accordance with IC 14-21-1 and 312 IAC 22. If the remains are determined to be Native American, FHWA will notify the appropriate federally recognized Indian Tribes.

Work at the site shall not resume until a plan for the treatment of the human remains is developed and approved in consultation with the SHPO and any appropriate consulting parties. The plan will comply with IC 14-21-1, 312 IAC 22, the current Guidebook for Indiana Historic Sites and Structures Inventory--Archaeological Sites, and all other appropriate federal and state guidelines, statutes, rules, and regulations.
6. Monitoring

A. INDOT, FHWA and the SHPO will consult as needed to review implementation of the terms of the PA.

B. FHWA and INDOT may monitor activities carried out pursuant with this agreement, and the SHPO will be invited to participate. INDOT shall cooperate in carrying out the monitoring effort. Should monitoring or other activities result in evidence that the requirements of this PA need modification or are not being met, FHWA, the SHPO, and INDOT will meet to develop and implement corrective measures.

7. Dispute Resolution

A. If the Indiana SHPO, INDOT, the Council, or a consulting party for an individual undertaking carried out under the terms of this agreement objects in writing to the FHWA regarding any action carried out or proposed with respect to the implementation of this PA, then FHWA shall consult with the objecting party to resolve this objection. If after such consultation FHWA determines that the objection cannot be resolved through consultation, then FHWA shall forward all documentation relevant to the objection to the Council, including FHWA's proposed response to the objection. Within fifteen (15) days after receipt of all pertinent documentation, the Council shall exercise one of the following options:

1) Advise FHWA that the Council concurs in FHWA’s proposed response to the objection, whereupon FHWA will respond to the objection accordingly; or

2) Provide FHWA with recommendations, which FHWA shall take into account in reaching a final decision regarding its response to the objection.

B. Should the Council not exercise one of the above options within fifteen (15) days after receipt of all pertinent documentation, FHWA may assume the Council’s concurrence with the proposed response to the objection.

8. Terminate, Modify, and Amend

A. Any party to this PA may terminate it by providing thirty (30) days written notice to the other parties, provided that the parties shall consult during the period prior to termination to seek agreement on amendments or other action that would avoid termination. In the event of termination, FHWA shall conduct individual project review pursuant to 36 CFR Part 800.

B. FHWA, INDOT, and the SHPO will review this PA every ten (10) years from the date of execution for modifications or termination. If no changes are proposed and no party objects, the term of the PA will be extended automatically for another ten years without re-execution.
C. Any party to this agreement may request that it be amended, whereupon the parties shall consult to consider such amendment. The amendment will be effective on the date a copy is signed by all of the original signatories. The lists of minor projects in Appendices A and B may be modified by the mutual written agreement of FHWA, INDOT, and the SHPO, and shall not require a formal amendment to this agreement.

Execution and implementation of this PA evidences that the Federal Highway Administration has satisfied its Section 106 responsibilities for all individual undertakings of highway projects covered under this agreement.
SIGNATORIES:

FEDERAL HIGHWAY ADMINISTRATION

By: Robert F. Tally, Jr., P.E.  Date: 10/3/06
Division Administrator

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: John M. Fowler  Date: 10/12/06
Executive Director

INDIANA STATE HISTORIC PRESERVATION OFFICER

By: Kyle Hufer  Date: 9/6/06
Director, Indiana Department of Natural Resources

INDIANA DEPARTMENT OF TRANSPORTATION

By: Thomas D. Sharp  Date: 9/20/06
Commissioner

Programmatic Agreement Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana

September 6, 2006 Page 8 of 8
APPENDIX A

Category A (Minor Projects Requiring No Review by INDOT Cultural Resources Staff)
Category A consists of projects that, by their nature, have little to no potential to cause effect to historic properties and do not require review by INDOT Cultural Resources Staff.

1. Any work to be done on bridges under the conditions listed below. If all conditions cannot be met, please see Category B-12. This category does not include bridge replacement projects (when both superstructure and substructure are removed).
   - The project takes place in previously disturbed soils; AND
   - The bridge is not classified as Select or Non-Select in the latest historic bridge inventory, and the work is limited to bridge substructure or superstructure elements without replacing, widening, or elevating the superstructure; AND EITHER
     - The bridge was determined not National Register eligible in the latest historic bridge inventory; OR
     - The bridge was built after 1945, and is a common type as defined in Section V. of the Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges issued by the Advisory Council on Historic Preservation on November 2, 2012 for so long as that Program Comment remains in effect AND the considerations listed in Section IV. of the Program Comment do not apply; OR
     - The bridge is part of the Interstate system, and was determined not National Register eligible under the Section 106 Exemption Regarding Effects to the Interstate Highway System adopted by the Advisory Council on Historic Preservation on March 10, 2005, for so long as that Exemption remains in effect.

2. All work within interchanges and within medians of divided highways in previously disturbed soils.

3. Replacement, repair, lining, or extension of culverts and other drainage structures which do not extend beyond or deeper than previous construction limits, and do not exhibit stone or brick structures or parts therein.

4. Roadway surface replacement, rehabilitation, resurfacing, or reconstruction, overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within areas previously disturbed by construction where replacement, repair, or installation of curbs or sidewalks will not be required.

5. Repair, replacement, or upgrade of existing lighting, signals, signage, and other traffic control devices in previously disturbed soils.
6. Repair, replacement, or upgrade of existing safety appurtenances such as guardrails, barriers, glare screens, and crash attenuators in previously disturbed soils.

7. Fencing and landscaping in previously disturbed soils.

8. Railway crossing signs and signal installation or modification and surface improvement in previously disturbed areas.

9. Erosion control within previously disturbed soils to prevent erosion of roadways, waterways and bridge piers.

10. Routine roadside maintenance activities necessary to preserve existing infrastructure and maintain roadway safety in previously disturbed areas.

11. Rehabilitation of existing rest areas and truck weigh stations within previously disturbed soils.

12. Hazardous waste removal and disposal constituting a public hazard and which require immediate removal.

13. Bridge deck resurfacing, overlay, pavement repair, seal coating, pavement grinding, and pavement marking on National Register of Historic Places eligible or listed bridges within areas previously disturbed by construction where replacement, repair, or installation of curbs, curb ramps, or sidewalks will not be required and provided the work is limited to the roadway cross section only and does not impact structural members of the bridge. Work under this category can only take place where the existing surface is already concrete or asphalt pavement.
APPENDIX B

Category B (Minor Projects Requiring Submittal of Documentation and Review by INDOT Cultural Resources Staff)
Category B consists of projects that do require documentation and review by INDOT Cultural Resources staff to assess the likelihood that historic properties exist in the area of potential effects or determine the degree of existing soil disturbance within the project area.

1. Roadway surface replacement, rehabilitation, resurfacing, or reconstruction, overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within areas previously disturbed by construction where replacement, repair, or installation of curbs or sidewalks will be required when such activities do not take place adjacent to or within a National Register listed or eligible bridge, property or historic district.

2. Installation of new lighting, signals and other traffic control devices in previously disturbed soils when such activities do not take place adjacent to or within a National Register listed or eligible bridge, property or historic district.

3. Construction of turning and auxiliary lanes (e.g., truck climbing, acceleration and deceleration lanes) and shoulder widening in areas previously disturbed by vertical and horizontal construction activities except when adjacent to or within a National Register listed or eligible bridge, property or historic district.

4. Installation of new safety appurtenances such as guardrails, barriers, glare screens, and crash attenuators, when such activities do not take place adjacent to or within a National Register listed or eligible bridge, property or historic district.

5. Emergency repairs to maintain the integrity of bridges (except National Register listed or eligible bridges) and roadways.

6. Other minor actions if deemed appropriate for coverage under this PA, by consultation and mutual agreement between INDOT, FHWA, and the SHPO.

7. Roadway surface replacement, rehabilitation, resurfacing, or reconstruction, overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within areas previously disturbed by construction where replacement, repair, or installation of curbs or sidewalks will be required when such activities take place adjacent to or within a National Register listed or eligible bridge, property or historic district, but where the National Register listed or eligible bridge, property or historic district does not possess any unusual features such as brick or stone sidewalks, curbs or sidewalks/curb ramps; stepped or elevated sidewalks, curbs or sidewalks/curb ramps; or any other feature whose replacement or modification might constitute an adverse effect to nearby properties. All projects proposed
to fall under this stipulation must be reviewed by INDOT Cultural Resources Staff (both archaeologists and historians) as outlined in Stipulations 2 and 3 of this agreement. They also must be field checked by an INDOT Cultural Resources’ staff historian or other qualified professional historian (meeting the Secretary of Interior’s Professional Qualification standards [48 Federal Register (FR) 44716]). The Cultural Resources staff historian, or other qualified professional historian, shall survey the project area for any unusual features. If no unusual features are observed adjacent to or within a National Register listed or eligible bridge, property or historic district, documentation will be gathered to this effect for the project files. If a non-INDOT qualified professional historian field checks the project area, the documentation must be sent to the INDOT Cultural Resources Section for review and approval. If unusual features are observed, full Section 106 review will be required.

8. For the purposes of this programmatic agreement, certain recreational trail projects are considered _minor projects_,

**IF ONE OF THE FOLLOWING TWO CONDITIONS IS MET:**

**Condition 1**
Construction of a trail would occur within an existing roadway, sidewalk, or rail bed where replacement, repair, or installation of a trail feature occurs within areas previously disturbed by vertical and horizontal construction activities, and not on, within, or adjacent to a National Register listed or eligible site, bridge, property or historic district. In such a case, the project may be reviewed as a _minor project_, according to Stipulation 2 of this agreement, as long as the project is not otherwise disqualified from treatment of a _minor project_. If the trail construction occurs on, within, or adjacent to a National Register listed or eligible archaeological site, bridge, property or historic district, then the project must complete full Section 106 review consultation pursuant to Stipulation 4 of this agreement. Any archeological resources uncovered accidentally during construction must be treated according to Stipulation 5 of this agreement.

**OR**

**Condition 2**
Construction of a trail would occur within previously undisturbed soils and such trail construction would not occur on, within or adjacent to National Register eligible or listed archaeological resources, as determined by an archaeological investigation (archaeological records check up to a Phase Ia reconnaissance, as determined by the INDOT Cultural Resources Section) of the project area, submitted to the INDOT Cultural Resources Section by the applicant. If the archaeological investigation determines that no National Register eligible or listed archaeological resources are present within the

APPENDIX B

Category B (Minor Projects Requiring Submittal of Documentation and Review by INDOT Cultural Resources Staff)
project area, then the project may be reviewed as a minor project, according to Stipulation 2 of this agreement, as long as the project is not otherwise disqualified from treatment as a minor project. If the archaeological investigation locates National Register eligible or listed archaeological resources, then the project must complete full Section 106 review consultation pursuant to Stipulation 4 of this agreement. Any archaeological resources uncovered accidentally during construction must be treated according to Stipulation 5 of this agreement. Copies of any reports will be provided to the DHPA from the INDOT Cultural Resources Section and the archaeological site form information will be entered directly into SHAARD.

In addition, trail construction must not occur on, within, or adjacent to an above-ground National Register listed or eligible site, bridge, property or historic district. If the trail construction occurs on, within, or adjacent to an above-ground National Register listed or eligible site, bridge, property or historic district, then the project must complete full Section 106 review consultation pursuant to Stipulation 4 of this agreement.

Activities related to trail projects that are considered minor in nature may include the following:

- roadway surface replacement; rehabilitation, resurfacing, or reconstruction; overlays; laying down of crushed stone or gravel
- shoulder treatments; pavement repair; seal coating; pavement grinding
- pavement marking
- installation of new signals and other traffic control devices
- installation of new safety appurtenances such as guardrails and barriers
- installation of trees, bike racks, benches, trash cans, and other amenities, excluding lighting
- the installation of directional signage
- trail heads that do not involve rehabilitation or alteration of National Register eligible, potentially eligible, or listed structures and occur within areas previously disturbed by vertical and horizontal construction activities but do not involve rehabilitation or alteration of National Register eligible, potentially eligible, or listed structures
- parking lots that occur within areas previously disturbed by vertical and horizontal construction activities

Any activities NOT included in the above list are NOT considered minor in nature, are not covered under this agreement, and require a full Section 106 review consultation pursuant to Stipulation 4 of this agreement.

9. Replacement, repair, lining, or extension of culverts and other drainage structures in undisturbed soils, under the conditions listed below. If both
conditions of this stipulation cannot be met, full Section 106 review will be required pursuant to Stipulation 4 of this agreement.

- The structure does not exhibit non-modern wood, stone, or brick structures or parts therein, or a context that suggests it might have engineering or historical significance.
- The project does not take place on, adjacent to, or within a National Register listed or eligible bridge, property or historic district.

Additionally, an archaeological investigation (archaeological records check up to a Phase Ia reconnaissance, as determined by the INDOT Cultural Resources Section) must be conducted by the applicant to assure that no National Register-eligible sites are within the undisturbed project area. If the archaeological investigation determines that no National Register eligible or listed archaeological resources are present within the project area, then the project may be reviewed as a minor project, according to Stipulation 2 of this agreement. If the archaeological investigation locates National Register eligible or listed archaeological resources, then the project must complete full Section 106 review consultation pursuant to Stipulation 4 of this agreement. Any archaeological resources uncovered accidentally during construction must be treated according to Stipulation 5 of this agreement. Copies of any reports will be provided to the DHPA from the INDOT Cultural Resources Section and the archaeological site form information will be entered directly into SHAARD.

10. Slide corrections, slope corrections, and similar erosion control measures, in soils not previously disturbed under the conditions listed below. If all conditions of this stipulation cannot be met, full Section 106 review will be required pursuant to Stipulation 4 of this agreement.

- The project does not take place adjacent to or within a National Register listed or eligible bridge, property or historic district.
- An archaeological investigation (archaeological records check up to a Phase Ia reconnaissance, as determined by the INDOT Cultural Resources Section) has been conducted by the applicant to assure that no National Register-eligible sites are within the undisturbed project area. If the archaeological investigation determines that no National Register eligible or listed archaeological resources are present within the project area, then the project may be reviewed as a minor project, according to Stipulation 2 of this agreement. If the archaeological investigation locates National Register eligible or listed archaeological resources, and those resources cannot be avoided, then the project must complete full Section 106 review consultation pursuant to Stipulation 4 of this agreement. Any archeological resources uncovered accidentally during construction must be treated according
to Stipulation 5 of this agreement. Copies of any reports will be provided to the DHPA from the INDOT Cultural Resources Section and the archaeological site information will be entered directly into SHAARD.

11. Scour protection projects for bridges that are eligible for listing in or listed in the National Register of Historic Places under the conditions listed below. If all conditions cannot be met, full Section 106 review will be required pursuant to Stipulation 4 of this agreement.

- Scour protection allowable under this category is defined as placement of riprap around and adjacent to abutments, piers, wingwalls, etc. Scour protection that involves more complex measures, such as installation of gabion walls or other retaining devices, is not allowable under this category.
- Ground excavation may be necessary so that riprap can be laid and the top of the riprap is at the ground elevation. If ground excavation is involved, the project must take place in previously disturbed soils.

12. Replacement, widening, or raising the elevation of the superstructure on existing bridges, and bridge replacement projects (when both the superstructure and substructure are removed), under the conditions listed below. If all conditions cannot be met, full Section 106 review will be required pursuant to Stipulation 4 of this agreement.

- The project takes place in previously disturbed soils; AND
- The bridge is not classified as Select or Non-Select in the latest historic bridge inventory, and the project does not take place within 0.25 mile of any other National Register listed or eligible property or historic district; AND EITHER
  - The bridge was determined not National Register eligible in the latest historic bridge inventory; OR
  - The bridge was built after 1945, and is a common type as defined in Section V. of the Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges issued by the Advisory Council on Historic Preservation on November 2, 2012 for so long as that Program Comment remains in effect AND the considerations listed in Section IV. of the Program Comment do not apply; OR
  - The bridge is part of the Interstate system, and was determined not National Register eligible under the Section 106 Exemption Regarding Effects to the Interstate Highway System adopted by the Advisory Council on Historic Preservation on March 10, 2005, for so long as that Exemption remains in effect.
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Appendix: Indiana-Indian Tribe Contacts
4-1.0 Overview

The following two steps are necessary before initiating Section 106 consultation:

1st - Determine if the project is a federal undertaking

An undertaking refers to a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including:

- Those carried out by or on behalf of the agency;
- those carried out with federal financial assistance;
- those requiring a federal permit, license, or approval;
- those subject to state or local regulation administered pursuant to a delegation or approval by a federal agency.

Even if no federal funding is used for a project, Section 106 may apply if the project requires a federal permit, license or approval. For example, a locally funded project requiring a permit from the Army Corps of Engineers is a federal undertaking. The procedures laid out in this manual are specifically for Section 106 projects where FHWA is the lead federal agency. Section 106 compliance where another federal agency is lead will require coordination to determine their procedures.

2nd - Reference the Minor Projects PA to determine if the project is consistent with a Minor Projects category

If a project is consistent with a Minor Projects category then full Section 106 is not required. (Please see Chapter 3 for coordinating projects that fall under the Minor Projects categories.)

If it has been determined that a project is an undertaking and that the Minor Projects categories of the PA do not apply, then initiation of the regular Section 106 process and identification of consulting parties should commence.

4-2.0 Identification of Consulting Parties

Section 106 requires that federal agencies, or their federally delegated authorities, actively consult with individuals and organizations throughout the Section 106 process. 36 CFR Section 800.2(c)(5) defines a consulting party as “Certain individuals and organizations with a demonstrated interest in the undertaking may participate as consulting parties due to the nature of their legal and economic relation to the undertaking or affected properties, or their concern with the undertaking’s effects on historic properties.”

The first step in consultation is identifying and inviting the appropriate participants. Early consultation with groups or individuals who have a demonstrated interest in historic properties that may be affected by a proposed project is ideal. Inviting groups or individuals at the beginning of the process may defuse controversy and encourage communication and negotiation.
These groups or individuals, known as Section 106 consulting parties, are given the opportunity to comment on the identification and evaluation of historic properties, as well as to provide their views on effects to these properties and proposed strategies to avoid, minimize, or mitigate “adverse effects.”

For transportation projects in Indiana involving FHWA funding, the following entities must be invited to become consulting parties:

- State Historic Preservation Officer (SHPO),¹
- Indian Tribes: For Environmental Impact Statement (EIS) projects and projects on new alignment, invite Indian tribes with ancestral interest (religious/cultural) in Indiana. Refer to this chapter’s appendix for a listing of Indian tribe contact information.² Consultation with Indian tribes, unless directed otherwise from the tribes, is on a government-to-government basis. Consult with INDOT and FHWA on appropriate consultation procedures.
- Representatives of local governments with jurisdiction over the area in which the effects of an undertaking shall occur (mayors, town councils, county commissioners, etc);³
- Other federal agencies issuing approval (such as permitting), when applicable;
- For projects with a National Historic Landmark (NHL) located within the APE, invite the Midwest Regional Office of the National Park Service:
  Dr. Michele Curran
  National Park Service
  Midwest Region
  601 Riverfront Drive
  Omaha, NE 68102-4226
- Metropolitan planning organizations (MPOs) with jurisdiction over the area in which the effects of an undertaking shall occur;⁴
- Indiana Landmarks;⁵
- County historian;⁶

¹ In Indiana, the Director of the DNR is designated as the SHPO. Most of the day-to-day work of the Indiana SHPO is performed by the staff of the DHPA.
² Federally recognized tribes should be invited to be consulting parties on projects on Environmental Impact Statement (EIS) projects and projects on new terrain, or projects containing sensitive cultural properties within the Area of Potential Effects (based on consultation between FHWA and federally recognized Native American Tribes). The listing of recognized tribes by location can be found at the National Park Service web site, “National NAGPRA Native American Consultation Database.” FHWA will take the lead in identifying and establishing consultation with the Indian tribes and Tribal Historic Preservation Officers (THPO) consistent with 36 CFR 800.3(c) - (f). If the tribe is agreeable, further consultation may be conducted directly among the tribe and INDOT.
³ Contact information for local governments can be found in the most recent Indiana LTAP Directory of Indiana State, County, City, and Town Officials Responsible for Road and Street Work: http://rebar.ecn.purdue.edu/LTAP1/Resources/Publications.aspx.
⁴ A list of the agencies that house the MPOs in Indiana can be found at http://www.indianampo.com/MPO/mpos.htm.
⁵ The appropriate regional office of Indiana Landmarks can be identified at the following website: http://www.indianalandmarks.org/regionallandmarks/regionaloffices/pages/default.aspx.
• County/city/regional/local historical societies;⁷
• Other regional or local preservation organizations and related organizations;⁸
• Specialized historical organizations when resources in which they have interest are located within the APE (such as the Canal Society of Indiana, the Indiana Covered Bridge Society, etc.);⁹
• Neighborhood organizations/associations that represent historic districts within the project area;
• Members of the public with a demonstrated legal, economic, or preservation interest
• Historic property owners when direct property impacts or planned acquisition of right-of-way occurs (regardless of effect finding) or if a finding of “adverse effect” is anticipated;
• For historic bridge projects:
  o Historic Spans Task Force (Paul Brandenburg, Chair);
  o Dr. James Cooper.¹⁰

Individuals or organizations that have a demonstrated interest in the undertaking, or a concern regarding the undertaking’s impact on historic properties may request consulting party status. The request, usually made in writing, should clearly state the applicant’s interest in the project. INDOT/FHWA practice is to grant consulting party status to any group or individual expressing legitimate interest in the Section 106 process. Granting consulting party status to a person or organization obligates the federal agency to involve the party in the Section 106 process. This includes but is not limited to, historic property identification and effects analysis. Most importantly, if “adverse effects” to historic resources are found, then the consulting party may be consulted in the development of a Memorandum of Agreement (MOA) to minimize or mitigate these impacts.

It should be noted that consulting parties are not decision makers—they provide information that should be considered where feasible and prudent. In fact, members of the public may know more about the cultural resources within an APE than anyone else, and they can be of great assistance in identifying historic properties. Consulting parties should be invited early in the Section 106 process, and they should be kept informed and up-to-date about changes to a project throughout the development process.

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⁶ The appropriate historian can be identified at the following website: http://www.indianahistory.org/our-services/local-history-services/local-history-contacts/local-history-contacts.
⁷ The appropriate County/City/Regional/Local Historical Societies can be identified at the following website: http://www.indianahistory.org/our-services/local-history-services/local-history-contacts/local-history-contacts.
⁸ The appropriate organizations can be identified at the following websites. BOTH websites MUST be checked as they sometimes contain different information: http://www.indianalandmarks.org/resources/pages/indianapreservationdirectory.aspx and http://www.in.gov/dnr/historic/3656.htm.
⁹ The appropriate organizations can be identified at the following website: http://www.indianahistory.org/our-services/local-history-services/local-history-contacts/other-resources-in-indiana.
¹⁰ The Historic Spans Task Force website can be found at http://www.indianalandmarks.org/aboutus/initiatives/pages/historicspans.aspx. The mailing addresses for Mr. Brandenburg and Dr. Cooper can be obtained from CRO staff.
4-3.0 Invitation to Consulting Parties / Early Coordination Letters

The next step in consultation is making contact with the consulting parties and inviting them to participate in the process. The first piece of correspondence in the consultation process could be as simple as a letter with very basic project identification information and the question to potential consulting parties as to whether they would like to participate in the process. Or the first correspondence could be an invitation to participate in the process, a full project description, and transmittal of a historic property report—all in one packet. The amount of information conveyed at various points in the process will depend upon the complexity of the project.

At some point early in the process, the following information should be provided to consulting parties:

- General project identification information:
  - Project designation (Des.) number
  - Route number
  - Project description/scope of work
  - Feature crossed (for bridge or small structure projects)
  - Township
  - City
  - County;

- Maps showing the general and specific location of the project within the state and county:
  - The project area must be clearly presented;

When invitation of consulting parties is treated as a separate step, the easiest way for an applicant to extend a consulting party invitation is to include a self-addressed postcard in the early coordination letter to potential consulting parties. INDOT and the SHPO should not be sent a postcard since SHPO is always a consulting party and INDOT is always involved in process oversight.

The postcard should include a checkbox wherein the potential consulting party can check either “we do” or “we do not” agree to be a consulting party. The early coordination letter should make it clear that if the postcard is not returned indicating a desire to be a consulting party, the potential consulting party will not be included on the list of consulting parties for that project, and will not receive further project information unless the scope changes.

Include the following paragraph in all early coordination letters addressed to all potential consulting parties:

Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their undertakings on historic properties. In accordance with 36 CFR § 800.2(c), you are hereby requested to be a consulting party to participate in the Section 106 process. This process involves efforts to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any “adverse effects” on
historic properties. Please return the enclosed postcard and check if you “do” or
“do not” agree to be a consulting party. If you indicate on the postcard that you
do not desire to be a consulting party, or if you do not return the postcard at all,
you will not be included on the list of consulting parties for this project. You will
not receive further information about the project unless the scope changes.

The following paragraph should be included in the early coordination letter to the SHPO. Including this paragraph allows the SHPO to identify additional parties that may have been missed.

The following agencies have been invited to be consulting parties: (list those
invited to be consulting parties). Per 36 CFR § 800.3(f), we hereby request that
the SHPO notify this office if the SHPO is aware of any other parties that may be
titled to be consulting parties or should be contacted as potential consulting
parties for the subject project.

When reaching out to potential consulting parties, please include a link to the ACHP’s brochure, Protecting Historic Properties: A Citizen’s Guide to Section 106 Review.

Additional parties may come forward during the Section 106 process and request to be consulting parties. Per 36 CFR § 800.3(f)(3), if the applicant agrees with the request, they shall be added to the list of consulting parties and notified accordingly. As mentioned earlier, INDOT/FHWA practice is to grant consulting party status to any group or individual with a legitimate interest who makes a formal request to become a consulting party.

Please note that when preparing the appropriate documentation per 36 CFR § 800.4(d)(1), or 36 CFR § 800.5(c) or 36 CFR § 800.6(a)(3), you must provide a list of all consulting parties, including SHPO, and indicate which parties accepted consulting party status. Copies of all correspondence to/from SHPO, other consulting parties, and the public must be included. It is important to include not just the responses received from the consulting parties, but also copies of the correspondence sent by the consultants/agencies in order to show the most complete record of the consultation process.

For major projects especially, a good method of ensuring that interested members of the public have full opportunity to become consulting parties is to provide an area devoted to Section 106 at any public information meetings/hearings. Forms could be available allowing potentially interested parties the ability to request to be included as consulting parties. A good document to have as a handout at this area is the ACHP’s brochure, Protecting Historic Properties: A Citizen’s Guide to Section 106 Review.
## APPENDIX: Indiana-Tribal Contacts (Updated November 2013)

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<tr>
<th>Agency Name</th>
<th>Title</th>
<th>FOC</th>
<th>Telephone</th>
<th>Address 1</th>
<th>Address 2</th>
<th>City</th>
<th>State</th>
<th>Zip Code</th>
<th>Counties</th>
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<tbody>
<tr>
<td>Citizen Potawatomi Nation</td>
<td>Chairman</td>
<td>Mr. John A. Barrett Jr</td>
<td>605-27-3121</td>
<td>1021 South Gordon Cooper Drive</td>
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<tr>
<td>Forest County Potawatomi Community</td>
<td>Chairman</td>
<td>Mr. Harold G. Frank</td>
<td>715-478-7200</td>
<td>P.O. Box 144</td>
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<td>Delaware Nation of Oklahoma</td>
<td>THPO</td>
<td>Mrs. Tamara Frances Fourkiler</td>
<td>405-247-2448</td>
<td>P.O. Box 425</td>
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<td>Kickapoo Tribe of Kansas</td>
<td>Chairman</td>
<td>Mrs. Steve Cadue</td>
<td>785-886-2131</td>
<td>1107 Goldenbrick Road</td>
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<td>Kickapoo Tribe of Oklahoma</td>
<td>Chairman</td>
<td>Mr. Gilbert Slausser</td>
<td>405-586-7100</td>
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<td>Miami Tribe of Oklahoma</td>
<td>THPO</td>
<td>Mr. George Strack</td>
<td>918-542-1440 (tribal office)</td>
<td>117-625-1288 (cell)</td>
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<td>Miami Tribe of Oklahoma</td>
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<td>Ms. Ethel C. Cook</td>
<td>405-540-1515</td>
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<td>Peoria Tribe of Indians of Oklahoma</td>
<td>Chief</td>
<td>Mr. Frank Hecksher</td>
<td>918-540-2536, ext. 112</td>
<td>P.O. Box 1527</td>
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<td>Pokagon Band of Potawatomi Indians</td>
<td>THPO</td>
<td>Mr. Marcus A. Winchester</td>
<td>269-462-4224</td>
<td>P.O. Box 189</td>
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<td>Prairie Band of Potawatomi Nation</td>
<td>Chairman</td>
<td>Mr. Steve Coté</td>
<td>260-588-4300</td>
<td>30277 O Road</td>
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<td>Prairie Band of Potawatomi Nation</td>
<td>Chief</td>
<td>Mr. Ron Sparksman</td>
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<td>Wyandotte Nation</td>
<td>Chief</td>
<td>Mr. Billy Friend</td>
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<td>64700 E. Highway 60</td>
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<td>United Keetoowah Band of Cherokee Indians</td>
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<td>Mrs. Lisa Baker</td>
<td>918-822-1952 (cell)</td>
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<td>Western Shawnee Tribe of Oklahoma</td>
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**UPDATED 11/5/13: 5AM**
PART II

CHAPTER 5

Establishing the Area of Potential Effects (APE)

March 2014
Contents

5-1.0 Overview ............................................................................................................................... 3
5-2.0 Procedures for Establishing the APE ................................................................................ 3
5-1.0 Overview

As per 36 CFR 800.16(d), the area of potential effects (APE) is defined as “. . . 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. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking…”1 The APE defines that area within which the identification of historic properties will occur. (Refer to Chapters 6 and 7 for procedures for identifying historic properties.)

The APE for above-ground properties might encompass the entire “view-shed”; i.e., the area in which the project may visually impact above-ground structures. For example, the project area of a newly installed cell tower is relatively small (the area of actual physical boundaries of the undertaking); however, the APE for that cell tower will be much larger in order to reflect the cell tower’s potential to visually impact cultural resources hundreds of feet away.

The APE for archaeological resources would generally encompass portions of the project area where actual ground disturbance will occur (the project footprint). If the APE is used with respect to archaeological resources, it must be differentiated from the above-ground (historic structures) APE, since these areas are not one and the same. INDOT-CRO prefers the use of the terms “project area” or “survey area” when describing the archaeological APE.

The APE should be delineated as precisely as possible using high-quality aerial mapping. A written description and map shall be provided in both the historic property and archaeology report.

5-2.0 Procedures for Establishing the APE

When establishing the APE, multiple factors must be considered, including but not limited to physical impacts, and potential visual, auditory and vibration impacts. The APE should also include all areas used for project staging and temporary construction. Defining the APE does not require prior knowledge of the historic properties in the area; the APE is simply the area in which historic properties-- if present--could potentially be affected. It should not be established in relation to the resources that are or may be present.

When assessing the APE it is important to consider both the view from the project looking outward and the view from outside looking into the project. Therefore, it is essential to set the APE in the field, as each case can be highly individual. The APE should include:

- All areas of potential direct or indirect effects;
- All alternative locations;
- All locations where ground disturbance may result;
- All locations where the undertaking may be visible or audible;

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• All locations where the activity may result in changes in traffic patterns, land use, public access, and all areas where there may be indirect as well as direct impacts.

While there is no formula for delineating the APE--and every APE should be defined on a case-by-case basis, taking into account the project details and the surrounding environment--below are some baseline recommendations (by project type) based on previous projects and consultation with SHPO.

Table 5-1-Recommended APE by Project Type

<table>
<thead>
<tr>
<th>Project type/elements</th>
<th>Suggested APE</th>
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<tbody>
<tr>
<td>Road resurfacing, sidewalk and curb ramp replacements</td>
<td>Immediately adjacent properties</td>
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<tr>
<td>Streetscape improvements, roundabouts, trail projects</td>
<td>Adjacent properties and properties within viewshed</td>
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<tr>
<td>New bridge overpass, bridge replacement on raised elevation</td>
<td>0.25-mile buffer (this may be increased or decreased based on surrounding topography and built environment)</td>
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<tr>
<td>Added travel lanes</td>
<td>Adjacent properties and properties within viewshed; consider broadening APE as appropriate for potential auditory or noise impacts</td>
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<tr>
<td>New terrain highway/interstate</td>
<td>1-mile buffer beyond corridor (this may be increased or decreased based on surrounding topography and built environment)</td>
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</table>
Tips for establishing an APE

- Consider how various environmental factors influence the APE. Is the setting a rural or an urban area? Is the surrounding landscape wooded or open fields? What is the topography—hilly or flat? What is current land use—developed or agricultural? If developed, how (i.e., industrial, residential, commercial)?
- Consider the scale of construction in relation to the surrounding setting;
- The APE(s) should include all of the construction alternatives;
- Consider both the view from the project looking outward and the view from outside looking into the project;
- Consider the project’s potential to have more than just visual effects. Will the project have audible effects? Will construction impact undisturbed land? Will the project impact existing traffic patterns, land use, public-access, etc?
- Remember, the APE is not determined on the basis of land ownership;
- The APE should include all locations where the activity may result in changes in traffic patterns, land-use, public-access;
- The APE should include all areas where there may be indirect as well as direct impacts.
- An APE need not be a single area;
- Revising project plans may also lead to revising APE boundaries;
- Determining an APE does not mean that any historic properties within its boundaries must be preserved. It does, however, mean that they have to be taken into account during the Section 106 process.
PART II
CHAPTER 6
Historic Property Identification and Evaluation: Above-Ground

March 2014
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- 6-2.4 National Register Eligibility Evaluations
  - 6-2.4.1 Criteria of Eligibility
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  - 6-2.4.4 Making National Register Eligibility Recommendations
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### APPENDIX- Guidance for Specific Property Types

- Bridges-Historic Bridge Inventory
- Program Comment for Common Post-1945 Concrete and Steel Bridges
- Historic Districts
- Mid-20th Century Resources
6-1.0 Overview

Section 106 requires a “reasonable and good faith effort” to identify historic properties within a project’s area of potential effects (APE). For the purposes of Section 106, historic properties are defined as those properties listed in or eligible for listing in the National Register of Historic Places (NRHP). As a general guideline, in order to be considered for listing in the NRHP, a resource should be at least 50 years old. Historic properties include both above-ground and archaeological resources. The identification phase of Section 106 consists of locating properties previously listed or determined eligible for the NRHP and evaluating properties to determine if they are eligible for NRHP listing.

FHWA and INDOT rely on qualified professional consultants to provide clear, detailed and honest information when identifying historic properties in order to ensure a reasonable and good faith effort. Without a proper identification effort, FHWA/INDOT is unable to make an assessment of “adverse effect.” Therefore, this chapter provides guidance for completing the identification of historic above-ground resources, including survey, evaluation and reporting for projects funded by FHWA. Chapter 7 details the steps for completing archaeological identification and evaluation.

Identification of above-ground resources is conveyed through the production of a historic property report (HPR). The HPR provides the results of the above-ground identification efforts, including field survey and NRHP eligibility evaluations. An HPR must be produced by a qualified professional who has been approved to conduct historic/architectural investigations. INDOT-CRO will only accept an HPR that has been prepared by qualified professionals who meet the Secretary of Interior's Professional Qualification Standards and who are listed on the Indiana Division of Historic Preservation and Archaeology's Qualified Professionals Roster. Once a completed HPR has been submitted to/approved by INDOT-CRO, that HPR will be provided to SHPO and consulting parties for review and comment.

6-2.0 How to Complete a Historic Property Report

The following subchapters describe the procedures for identifying and evaluating historic properties. These procedures will be described through the preparation of the HPR. A full or short HPR will be prepared for every Section 106 project that does not fall under the Minor Projects PA. Specific HPR content guidelines are provided in Chapter 6-3.0.

6-2.1 Literature Review/Previous Investigations

A Literature Review includes the collection of sufficient data to characterize or predict the type and location of previously identified cultural resources that might be present in the APE. A background literature search is the review of all pertinent cultural resources data, a summary of known resources, and a determination if cultural resources may exist in the study area. The thorough literature review should be completed early in the investigation. The literature search area must be broad enough to develop the historic context for the area, but most importantly, it
should provide a base that can support the cultural resource evaluations that follow. Without a quality literature review, it is virtually impossible to formulate an accurate and useful historic context.

**Some expected resources to include in a literature review include:**

*Indiana Historic Sites and Structures Inventory (a.k.a. county interim reports)*

Likely the most-used resource when completing a literature review is the Indiana Historic Sites and Structures Inventory (IHSSI). All of Indiana’s 92 counties (and, separately, some municipalities or townships in large urban areas) have been surveyed. The majority of the counties that have been surveyed have published reports called “interim reports.” The term “interim report” recognizes that a “final” inventory of a county can never be accomplished due to the ever-changing nature of the built-environment. Properties are demolished, altered, and/or restored on a daily basis. Further, as each year passes, properties previously omitted because they were less than 40 years old attain sufficient age to be considered for survey.

All survey records are filed at the DHPA for public access. Additionally, survey data is continually being made available through the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and SHAARD GIS.\(^1\) By the end of 2013, roughly half of the counties in the state have county survey data entered into SHAARD. With the development of SHAARD, new survey data will be made available online, but not in published interim reports. For counties where survey data appears in SHAARD and in a published interim report, SHAARD should be checked first. SHAARD will take precedence over published interim report data.

For a map of the surveyed counties and to ascertain whether an interim report has been published, visit the DHPA website at [http://www.in.gov/dnr/historic/](http://www.in.gov/dnr/historic/). The DHPA has a complete set of interim reports that is available to the public. Other repositories that maintain copies of interim reports include the Indiana State Library, federal and state agencies, regional planning agencies, city governments, as well as libraries throughout the state.\(^2\)

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\(^1\) SHAARD and SHAARD GIS is available online at: [http://www.shaard.dnr.in.gov](http://www.shaard.dnr.in.gov) and [https://gis.in.gov/apps/dnr/SHAARDGIS](https://gis.in.gov/apps/dnr/SHAARDGIS)

\(^2\) Contact the Indiana Landmarks at 317-639-4534 or [http://www.indianalandmarks.org/Resources/ArchitecturalSurveys/Pages/SurveyReports.aspx](http://www.indianalandmarks.org/Resources/ArchitecturalSurveys/Pages/SurveyReports.aspx) to check the availability of a specific Interim Report. Some Interim Reports have been digitized as part of the digital library collections of the IUPUI University Library and can be found online ([http://www.ulib.iupui.edu/digitalcollections/home.html](http://www.ulib.iupui.edu/digitalcollections/home.html)).
Indiana Landmarks has partnered with the Indiana University/Purdue University at Indianapolis (IUPUI) University Library to digitize and make certain interim reports available online at http://www.ulib.iupui.edu/digitalscholarship/collections/IHSSI. To be included in the IHSSI, a property must be at least 40 years old and retain its historic integrity. Severe alterations to the fabric of a building, such as the addition of synthetic siding material, removal of decorative features, replacement/resizing of windows, and construction of large or incongruent additions affect integrity and often disqualify a property from inclusion in the survey.

The IHSSI uses the following rating system:

**Outstanding (O)**—These properties possess a high level of historic or architectural significance. They are either already listed in the National Register or may be eligible for listing in the National Register. These properties can be of local, state, or national significance;

**Notable (N)**—These properties do not quite merit an Outstanding rating, but possess enough historic or architectural significance to be considered above-average. Further research may reveal these properties to be eligible for listing in the National Register;

**Contributing (C)**—These properties meet the basic inventory criteria, but do not possess any noteworthy historic or architectural significance. These properties are an important contribution to an area’s historic fabric. They can be eligible for or listed in the National Register as part of a historic district, but do not have enough merit to stand alone;

**Non-Contributing (NC)**—These properties are included in the survey only as part of a historic district. These properties are fewer than fifty-years old or possess little historic integrity due to alterations. They are not eligible for the National Register.

While these surveys and companion interim reports are valuable tools in understanding the local built environment and identifying potential historic properties, they are not the final authority on NRHP eligibility. Survey ratings do not always translate to NRHP eligibility. Moreover, since the surveys were completed, significant changes may have occurred to the properties and environment. Information found in the interim reports should always be field-checked.

*Indiana Register of Historic Sites and Structures (the State Register) and National Register of Historic Places*

Properties previously listed on the State and National Registers should be checked during the literature review. For a listing of National Register listed properties in Indiana please refer to the National Register Database. Additionally a listing of National and State Register properties can be found on SHAARD.

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3 IHSSI Survey Manual for Architectural and Historical Resources. Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology.2011.
Historic Bridge Inventory

Bridges built through 1965 have been surveyed and evaluated through the Indiana Historic Bridge Inventory. More information about the bridge inventory can be found in Part IV of the CRM. A listing of surveyed bridges can be found on the Historic Bridges Inventory Summary & Results webpage. Historic bridge locations also appear on SHAARD. Keep in mind that there may be location discrepancies between the Historic Bridge Inventory and SHAARD. Keep in mind that the Historic Bridge Inventory data takes precedence over SHAARD if there is a discrepancy.

Historic maps

Reference to historic maps will also provide valuable insight in predicting the likely presence of historic properties in the APE. Historic maps can be accessed in a variety of locations including online, Indiana State Library, Indiana Historical Society, and libraries across the state.

6-2.2 Historic Context

The results of the Literature Survey will aid in the development of the historic context, a critical element in evaluating properties for National Register eligibility. The National Park Service’s National Register Bulletin 15 states that historic contexts are “…found at a variety of geographical levels or scales. The geographic scale selected may relate to a pattern of historical development, a political division, or a cultural area. Regardless of the scale, the historic context establishes the framework from which decisions about the significance of related properties can be made…”

A historic context is information about historic properties grouped by an important theme in the prehistory or a history of a community, state, or the nation during a particular period of time. The development of historic contexts is a foundation for decisions about the planning, identification, evaluation registration, and treatment of historic properties, based upon comparative significance.

Because historic contexts are organized by theme, place, and time, they link historic properties to important historic trends. In this way they provide a framework for determining the significance of a property and its eligibility for National Register listing. Knowledge of historic contexts allows applicants to understand a historic property as a product of its time and as an illustration of aspects of heritage that may be unique, representative, or pivotal.

Themes often relate to the historic development of a community, such as commercial or industrial activities. They may relate to the occupation of a prehistoric group, the rise of an architectural movement, the work of a master architect, specific events or activities, or a pattern of physical development that influenced the character of a place at a particular time in history. It is within the larger picture of a community’s history that local significance becomes clear and

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the property is seen in relationship to trends and patterns of prehistory or history statewide or nationally.

The historic context for a project should be integrated into all summaries and discussions of significance. Previously recorded properties and previous decisions regarding National Register eligibility should be evaluated against the context. Recommendations should be justified in narrative text by referring to all available data. Thematic groupings should be identified within and relative to the historic context developed for the project.

Specific content that should be provided in the historic context is listed in Chapter 3.0. Additional guidance for the definition and the preparation of a historic context can be found in National Register Bulletin’s 16A How to Complete the National Register Form; National Register Bulletin 15 How to Apply the National Register Criteria for Evaluation; and National Register Bulletin 16B How to Complete the National Register Multiple Property Documentation Form.

6-2.3 Methodology

The methods used to address cultural resources investigations vary depending on the scope and type of projects. The goal for the above-ground survey is to identify properties 50-years or older, or that will be 50 years old at the proposed project letting, that have been listed or may be eligible for listing in the National Register. Buildings, structures, and objects 50 years or more in age, including resources previously identified, are documented according to location, historic context, use, type, age, condition, integrity, and relevant National Register Criteria.

Fieldwork is a key step at this stage in identifying and documenting the actual properties in the APE, gauging the potential for historic districts, and assessing retention of integrity. Based on fieldwork and historic context development, the qualified professional preparing the HPR must summarize the qualities and characteristics of the identified properties and make appropriate NRHP eligibility recommendations. It is expected that the investigator will follow all applicable INDOT-CRO, DHPA, and NRHP guidelines and requirements when evaluating properties. The investigator must always focus on collecting the necessary data to address integrity and eligibility, as INDOT-CRO is only interested in information that is needed to determine the eligibility of a property. Extraneous information in such evaluations is distracting.

Repetitiously occurring property-types and their context should be summarized collectively in the survey report. INDOT-CRO (in consultation with SHPO, if necessary) will make the final determination about which architectural properties require further investigation, such as property deed research and interior access and documentation.

For most typical projects, the methodology will include full identification and evaluation of properties 50 years or older in the APE, which is therein conveyed through a single HPR. As a means to ensure that identification remains current up to construction, the 50 year age threshold should be determined based on the date of the proposed project letting. The methodology should clearly state the beginning date used for identification. For projects where actual construction may not begin for many years after the completion of Section 106, it is recommended to increase
the scope of survey to include properties 45 years and older to ensure proper coverage between Section 106 and project implementation.

6-2.4 National Register Eligibility Evaluations

The National Register Criteria for Evaluation (Section 800.4[1]) (National Register Criteria), is used to determine the significance of historic properties. Cultural resource evaluation is effectively made by following the five-step approach outlined in the National Register Bulletin—How to Apply the National Register Criteria for Evaluation (Please note that the information contained in Chapter 6-2.4 concerning eligibility evaluations is from this aforementioned National Register Bulletin.) These steps are:

1) Categorizing the cultural resource as site, building, structure, object, or district;
2) Determining the historic context or contexts within which the cultural resource is associated;
3) Determining whether the cultural resource is significant under one or more of the four National Register Criteria.
4) Determining whether the cultural resource meets any of the criteria of considerations; and
5) Determining whether the cultural resource retains the integrity to convey its historic significance.

Cultural resources that meet one or more of the four National Register criteria, or any of the criteria considerations, and retain sufficient integrity to convey their historic significance are considered eligible for listing in the NRHP. The National Register Criteria, criteria considerations, and integrity are discussed below.

6-2.4.1 Criteria of Eligibility

Historic significance is defined as the importance of a property to the history, architecture, archaeology, engineering, or culture of a community. Significance is determined by applying the criteria of eligibility within the framework of a historic context. The four NRHP criteria used to assess whether or not cultural resources are, in fact, significant and therefore eligible for the NRHP are:

A. Cultural resources that are associated with events that have made a significant contribution to the broad patterns of our history; or
B. Cultural resources that are associated with the lives of persons significant in our past; or
C. Cultural resources that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess

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5 Consult the various National Register Bulletins that are available online at the following website: [http://www.cr.nps.gov/nr/publications/#bulletins](http://www.cr.nps.gov/nr/publications/#bulletins).
6 Ibid
high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Cultural resources that have yielded or may be likely to yield, information important in prehistory or history.

6-2.4.2 Criteria Considerations

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

(a) A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

(b) A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

(c) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life.

(d) A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

(e) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

(f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

(g) A property achieving significance within the past 50 years if it is of exceptional importance

6-2.4.3 Historic Integrity

The concept of historic integrity is central to resource eligibility. Integrity is defined as the authenticity of a property’s historic identity, evidenced by the survival of physical characteristics.

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that existed during the resource’s historic or prehistoric period. In other words, integrity is the ability of a resource to convey its significance.

There are seven aspects of integrity:\(^8\):

1. **Location**: Quality of integrity retained by a historic property existing in the same place as it did during the period of significance;

2. **Design**: Quality of integrity applying to the elements that create the physical form, plan, space, structure, style of a resource;

3. **Setting**: Quality of integrity applying to the physical environment criteria in one or more areas of significance;

4. **Materials**: Quality of integrity applying to the physical elements that were combined or deposited in a particular pattern or configuration to form a historic property;

5. **Workmanship**: Quality of integrity applying to the physical evidence of the crafts of a particular culture, people, or artisan;

6. **Feeling**: Quality of integrity through which a historic resource evokes the aesthetic or historic sense of past time and place;

7. **Association**: Quality of integrity through which a historic property is linked to a particular past time and place.

How much integrity is required for eligibility is a somewhat subjective question, but generally several, if not most, of the seven aspects must be met. A resource can be significant, but unless it has a certain amount of integrity, it cannot be eligible. In simple terms, Significance + Integrity = Eligibility. Because integrity is based on the identity for which a property is significant, the NPS emphasizes the need to assess integrity only after significance has been determined.

6-2.4.4 Making National Register Eligibility Recommendations

National Register evaluations should clearly show that the NRHP criteria were applied and that integrity was appropriate considered. Once again, it is critical to frame evaluations in these terms: *Significance + Integrity = Eligibility*. When assessing integrity, it is vital to understand how a property is significant and what aspects of integrity are critical for that property to convey its significance. Fully supporting these aspects will help ensure that upon its review, the SHPO concurs to the HPR’s findings and recommendations.

Keep in mind that the HPR only conveys recommendations of eligibility. Through the evaluations in the HPR, properties are recommended either eligible or not eligible for the NRHP. Only after SHPO has reviewed the HPR and concurred to its findings, is a property formally determined eligible or not eligible for listing in the NRHP.

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\(^8\) Ibid, 44-45.
6-2.4.5 Disagreements of National Register of Historic Places Eligibility

During the Section 106 process, if FHWA and the SHPO do not agree on the eligibility of a property, or if the ACHP or the Secretary of the Interior so request, FHWA shall obtain a determination of eligibility pursuant from the Keeper of the National Register of Historic Places (Keeper), who is housed in the Department of the Interior.\(^9\)

If a Native American tribe that attaches religious and cultural significance to a property off tribal lands does not agree, it may ask the ACHP to request FHWA to obtain a determination of eligibility. FHWA can also choose to submit a request to the Keeper for a determination of eligibility for a property on which FHWA and SHPO agree upon eligibility status, but a consulting party disagrees.

The procedures outlined in 36 CFR Part 63 will be followed with regard to the determination. INDOT-CRO should be contacted for further guidance in such a situation.

6-2.5 Report Review and Distribution

Before distribution to consulting parties and the SHPO, one electronic copy of the HPR should be forwarded to the INDOT-CRO for review. If the HPR is too large to send via email, a CD or access to a FTP site is acceptable. A copy of the Early Coordination Letter (ECL), if not already distributed, or transmittal letter that will accompany the HPR should be sent to INDOT-CRO at the same time. INDOT-CRO will be able to complete a more thorough review with all relevant information provided.

After any comments from INDOT are satisfactorily addressed, the HPR may be distributed to the consulting parties and SHPO for review and comment as part of the Section 106 process. The transmittal letter should indicate that the INDOT Cultural Resources Office has reviewed the document. CRO should be electronically copied on the transmittal letter and should receive an electronic copy of the final report for INDOT’s files.

When the project area warrants preparation of a large HPR (generally over ¼” thick when double-sided) or the number of consulting parties is greater than 10, it is not necessary to provide each consulting party with a complete hard copy of the report. The SHPO must always receive a hard copy of the report, but the other consulting parties could receive a CD of the report instead.

\(^9\) 36 CFR Part 63.
6-3.0 Full Historic Property Report Guidelines

The guidelines are meant to drive the content of the reports. Format and structure of the reports can vary based on what the authoring historian feels is appropriate, as long as the pertinent information is present.

Cover Sheet/Title Page

A cover sheet must be attached to all project reports and should include the following information:

- Report Title/Brief description of the project (i.e., Historic Property Report for the SR 45 Bridge Replacement Project over the White River, Johnson Township, Clark County)
- Principal Investigator, author, and organization including address, telephone number, and e-mail address
- Date
- INDOT Des. No.
- DHPA No. (if already known)

Table of Contents

Arranged in accordance with the sequence of topical headings. Page numbers for each section or appendix must be provided.

Lists of Figures, Photos, and Tables

Management Summary or Abstract

This section should include a brief description of the undertaking and project area, the scope of the work of the report, and a summary of the recommendations concerning National Register eligibility for properties located within the Area of Potential Effects (APE).

Many of the readers of the HPRs submitted to INDOT are not historians: they are project managers, project engineers, and environmental specialists. The Management Summary is included in all INDOT HPRs so that these readers can quickly ascertain if historic properties are within the project area.

Introduction/Project Description

- Summary of the undertaking---identification of the project location, identification of the approximate project termini, and enough project scope information to support the APE delineation. Please focus the HPR on the identification and evaluation of properties, and

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These guidelines were largely influenced by those created by the Kentucky State Historic Preservation Office/Kentucky Heritage Council, Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports: http://heritage.ky.gov/NR/rdonlyres/5757C6A1-E8E0-4B5E-BE0F-7AF5B78C6BF1/0/2006FieldworkCRspecs.pdf
not project details and effects related discussions. Details concerning plan sheets should all be contained within the transmittal letter instead of the HPR itself. Later changes in the project or effect findings may cause procedural confusion if a HPR contains different or contradictory information than that of the eventual finding/800.11 documentation.

- Description of the project area——include a brief summary of the setting (urban, suburban, rural), a discussion of present land use (commercial, agricultural, etc.), a brief discussion of the physical environment (topography, physiography, soils, vegetation, drainage), and a summary of the transportation facilities that bisect/have bisected the project.

- Define the APE and explain how it was determined.

- Acknowledge survey/research personnel. Indicate project personnel meeting Secretary of the Interior’s Professional Qualifications Standards, and what tasks these persons performed during the project.11

**Literature Review/Previous Investigations**

- Describe and assess research materials consulted including both primary and secondary sources.

- Names of investigators or institutions that have previously conducted historic architectural surveys in the project area, dates of research; purpose of the surveys; survey methodologies; and the results of the surveys, including sites or districts, or multiple resource areas identified.

- Include previously recorded sites/structures (from the National Register or State Register lists, county Interim Reports, etc.) in a list or table (whichever is appropriate given the number of resources listed) within the text. The author should employ information for analysis and development of a context. State the date of record and the responsible agency/organization. If a property has been recorded in the Indiana Historic Sites and Structures Inventory, please include full 11-digit site number when referencing said property. Also, please provide the IHSSI-issued rating for the property for reference. If IHSSI properties are part of a historic district, this fact should be noted as well.

- Discuss and include copies of pertinent cartographic resources when available (county atlases, plat maps, Sanborn maps, topographic maps, etc.). These complement the discussion of the original land subdivision and its impact on the cultural landscape and should include a reasonable interpretation.

- If interurban lines, railroad lines, brick pavers or other transportation elements are identified through the literature review these should be identified in the HPR.

**Historic Context**

11 [http://www.cr.nps.gov/local-law/Prof_Qual_83.htm](http://www.cr.nps.gov/local-law/Prof_Qual_83.htm)
• Describe the natural setting. Include natural resources that impacted the historical development of the community. Examples include rivers, harbors, fords, passes, minerals, timber, etc.

• Include a brief overview of Native American habitation during the historic period and how it informed historic settlement patterns and the built environment.

• Relate important events and persons that have shaped the course of community development. When appropriate, mention or list architects, engineers, builders, craftsmen, or other designers who had an impact on the area.

• Address past economic trends and the resulting fluctuations in population and impacts upon cultural resources.

• Mention important sites or structures that played pivotal roles in community life such as public buildings, parks, industrial sites, etc.

• Discuss how transportation routes affected past and present settlement and land use patterns.

• Be sure to remember key 20th century events. Discussion would likely include building booms, the Depression, impact of wars, post-war growth, etc.

• Provide an analysis of the important themes from the historic context that would inform above-ground property significance under the National Register criteria.

• Themes included in the historic context should vary somewhat by project area depending on the setting and the resources. For example, a historic context for a rural setting with farm properties and a school house should include information about the agricultural and educational history of that area. As another example, if the only properties surveyed are mid-twentieth century houses, the historic context should focus on post-World War II suburban development and architectural styles of that period.

Methods/Methodology

Field techniques shall be described in such a way that reviewers and future researchers may reconstruct what was done and why. The methods used to address cultural resources investigations vary depending on the scope and type of projects. It is expected that the investigator will follow all applicable INDOT, DNR-DHPA, and NRHP guidelines and requirements.

NRHP Eligibility and Evaluations

First, this section shall provide a general summary of all above-ground resources fifty years old or older in the APE. Unless it is part of an identified National Register eligible or listed historic
district, each previously or newly recorded property fifty years old or older that warrants a rating of Contributing or higher (in the Indiana Historic Sites and Structures Inventory system) shall be described and evaluated either in the narrative or a table as outlined below. Properties currently listed in the NRHP or previously determined eligible for listing in the NRHP shall also be described.  

Properties that are over fifty years old, but do not warrant a rating of Contributing or higher (in other words, the property would warrant a Non-Contributing rating in the Indiana Historic Sites and Structures Inventory system) should be mentioned, but do not require an evaluation. A summary of the general type and number of these properties is adequate. The report author should maintain a level of documentation on these properties that is sufficient to address questions if they should arise during the Section 106 process.

Properties less than fifty years of age should be mentioned, but do not require full documentation unless there is a question about their age. A brief summary of the general type and number of these properties is adequate.

For properties that have not been previously recorded as part of the Indiana Historic Sites and Structures Inventory and do not have an IHSSI number, it is suggested that a numbering system specific to the project be employed for these properties for easier reference (ie, “INDOT-1, INDOT-2,” etc. or “House 1, House 2, Church 1,” etc.).

**Please note that some properties less than fifty years old may be eligible or listed in the NRHP under National Register Criteria Consideration G (properties that have achieved significance within the last fifty years). Due consideration and analysis must be given to these properties.**

Precede the NRHP evaluations by listing the NRHP criteria and explain the aspects of integrity to set forth the framework for the NRHP evaluations. Explanation of the NRHP criteria and aspects of integrity can be included in the Methodology section of the report instead of this section, if preferred.

Unless it is part of an identified NRHP eligible or listed historic district, each previously or newly recorded property fifty years old or older that warrants a rating of Contributing or higher shall be evaluated for NRHP eligibility within the framework of the historic established context. Properties currently listed in the NRHP or previously determined eligible for listing in the NRHP shall be reevaluated.

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12 When properties previously listed in the NRHP or determined NRHP eligible are present within the APE, please consult with INDOT CRO staff to determine the appropriate level of documentation for the current undertaking.
If the APE contains ten (10) or fewer properties over fifty years old that warrant a rating of Contributing or higher, the NRHP analysis for all of them must be provided fully in paragraph form in the text of the report as outlined below.

If the APE contains eleven (11) or more properties over fifty years old that warrant a rating of Contributing or higher, a table can be used to summarize the NRHP evaluations. Only those properties warranting a Notable or Outstanding rating (that are not located within a historic district) must have their NRHP analysis fully described in the text of the report (as outlined below). If the APE contains eleven (11) or more properties over fifty years old that warrant a rating of Contributing or higher, but none of them warrant a Notable or Outstanding rating, a representative sampling of Contributing properties shall have their NRHP analysis included in the text with a full description (as outlined below).

When the NRHP evaluation for an individual property is described fully in the text of the report, the following information should be included:

- A detailed description of each property shall be provided highlighting the character-defining features of the properties. Properties previously listed in the NRHP or properties previously determined eligible shall be included and their historic boundaries delineated on project maps contained within the report.

- Each resource shall be mapped and illustrated with at least two photographs. In some cases, additional views may be needed to support recommendations, such as illustrating the resource’s defining characteristics or showing its alterations. The photographs must clearly show the property. A final evaluation may be delayed if the property is obscured in the photographs by weeds, brush, or trees or if photographs are taken from too far away. Photographs shall be in the text immediately adjacent to the property description so the reader may easily compare the text to the photograph. All photographs shall be clearly labeled. If several photographs of each property have been taken, one or two only need to be included in the body of the report, and the rest may be included in appendix, if preferred.

- The information provided on individual properties must be sufficient to support a NRHP eligibility evaluation. Alterations in material integrity should be shown as clearly as possible in photographs, especially if integrity issues are the main reason for not recommending a property NRHP eligible. Additionally, alternations should be clearly described in the text as they are not always easy to ascertain through photographs.

- The property must be evaluated individually against the NRHP Criteria A, B, C, and D. Writing off properties only with statements such as “the property is not eligible because there are better examples of this style elsewhere” or “the property is a vernacular example of … (x) style and is therefore not eligible for the NRHP” are not acceptable since they fail to specifically address all of the NRHP criteria and aspects of integrity.
• The National Park Service’s NRHP Categories for Areas of Significance are inherently applicable when evaluating properties for eligibility: http://www.cr.nps.gov/nr/publications/bulletins/nrb16a/nrb16a_III.htm#statement.

• Previously listed or previously determined eligible NRHP properties should be reevaluated. Further, the report shall address whether the original boundary descriptions of these properties are still appropriate. In some cases, a project survey may determine that these properties no longer qualify for the NRHP or that changes to part of the property justify a recommendation for boundary reduction. In such cases, written and photographic documentation shall be provided to support the recommendation.

• For previously listed properties, the date of listing and the NRHP criteria under which the property is listed should be included.

• Previously recorded properties documented in the Indiana Historic Sites and Structures Inventory (Interim Report) but not listed in the NRHP should be evaluated properly against the NRHP Criteria. Writing off properties only with statements such as “the property is not eligible because it was listed as ‘contributing’ in the Interim Report” or recommending a property as NRHP eligible only with statements such as “the property is NRHP eligible because it was rated ‘Outstanding’ in the Interim Report” are not acceptable since they fail to specifically address the NRHP criteria and aspects of integrity.

• Provide a property boundary map and a verbal boundary description with justification for each building or structure recommended eligible for the NRHP. The description and maps should include outbuildings and other features of interest, and distinguish between contributing and non-contributing elements of the property.

Conclusions

Provide a summary of the survey efforts and the National Register eligibility recommendations. Describe how many properties were evaluated and a summary of why the surveyed properties were found eligible or ineligible. For example:

Eighteen (18) properties were inventoried as part of this study (Table 1; Figures 10-24; 36). Most of the buildings inventoried dated from the period 1870-1950. None of the buildings in the APE were recommended as eligible for the National Register for historic or architectural significance. The following residential properties are ineligible due to severe alterations resulting in a lack of integrity: 131-20114-25004, 131-20114-25005, 131-20114-25007, 131-20114-250010, 131-20114-25014, 131-20114-25015, and 131-20114-25017. While other residential properties in the corridor have retained a good level of material integrity, they are ineligible due to a lack of architectural distinction. These properties are: 131-20114-25006, 131-20114-25008, 131-20114-25009, 131-20114-25011, 131-20114-25012, 131-20114-25013, 131-20114-25016, 131-20114-25018, 131-20114-25019, 131-20114-25020, 131-20114-25021.
References Cited

All works cited, either directly or indirectly, must be included in this section. Proper footnotes, endnotes, or parenthetical notes should be used throughout the report to accurately give credit to cited and referenced sources. INDOT does not require a specific citation style for historic property reports. Any established convention may be used. However, uniformity must be maintained throughout the report.

Appendices

Photos, tables, and maps can be integrated into the text of the report for ease of reference. If these items are not integrated into the text of the report they should be included as appendices. The appropriate place for these items is left to the author’s discretion provided they are presented in a clear and understandable format.

Photos

- The photos must be clearly labeled and keyed to maps and tables.
- Photographs of excellent quality are a requirement.
- Include panoramic or streetscape shots when appropriate to characterize a project area or historic district, whether it is an urban or rural setting.
- Photos should be of sufficient size to ascertain property details. When thumbnail photos are provided in tables and no other image of the properties is provided in the report, it is advisable to also submit a CD with the jpeg files of the images to INDOT and the SHPO to aid in their review.

Maps

- A map showing the location of the project within the state and county must be included.
- A 7.5’ USGS map (with map title) of the project area must be included.
- An aerial photograph of the project area must be included. A map of the APE must be included (the APE can be indicated on the USGS map or aerial photograph).
- A master map indicating all inventoried sites recorded as a result of the survey must accompany the report.
- Include any other maps that are of value in understanding results of the survey project or illustrate points raised in the report.
- Copies of historical maps illustrating the location of the project area should be included in the report when pertinent/available.
- In the event that a NRHP-listed or recommended eligible property is located in the APE, the boundary of the property must be indicated on at least one of the maps or as a separate graphic.
- Please note that maps from Google or other commercial web sites cannot be used in reports fully or partially funded by INDOT unless a commercial license has been purchased by the consultant.
Tables

- A survey results table is optional for projects with ten properties or less to investigate. The table has its greatest utility as an organizational tool for projects with large numbers of properties within the APE.
- The tables are tools to identify patterns and organize data. They are NOT meant to substitute for a detailed analysis of individual properties. As outlined above, the author must discuss properties, results, and conclusions in the report text, based on the context, photos, and data on the tables.
- An example table is shown below:

Table 6.1: Example Survey Results Table

<table>
<thead>
<tr>
<th>Photo</th>
<th>INDOT No. &amp; Rating / IHSSI No. &amp; Rating</th>
<th>Property Name</th>
<th>Address</th>
<th>Date/Style</th>
<th>National Register recommendation/integrity issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="INDOT 1" /></td>
<td>INDOT 1 (C)/NA</td>
<td>Hobart Apartment Building</td>
<td>418 W. JACKSON ST.</td>
<td>c. 1895/ Vernacular</td>
<td>Not National Register eligible; lacks significance &amp; integrity; vinyl siding &amp; additions</td>
</tr>
<tr>
<td><img src="image2" alt="INDOT 2" /></td>
<td>INDOT 2 (N)/035-442-45153 (C)</td>
<td>House</td>
<td>400 W. JACKSON ST.</td>
<td>c.1880/Italianate</td>
<td>Not National Register eligible; lacks significance &amp; integrity; see discussion in text</td>
</tr>
<tr>
<td><img src="image3" alt="INDOT 3" /></td>
<td>INDOT 3/035-442-36001 through 035-442-36127 (Varies from NC to O)</td>
<td>Walnut Street Historic District Roughly Walnut St. from Washington St. to Victor St.</td>
<td></td>
<td>Mid-19th to mid-20th century; varies: Italianate &amp; Revival styles are prevalent</td>
<td>Listed in the National Register in 1989 under Criteria A &amp; C; see discussion in text</td>
</tr>
<tr>
<td><img src="image4" alt="INDOT 4" /></td>
<td>INDOT 4 (C)/NA</td>
<td>House</td>
<td>401 W. JACKSON ST.</td>
<td>c.1890/Vernacular</td>
<td>Not National Register eligible; lacks significance &amp; integrity; vinyl siding, some replacement windows &amp; doors on front facade</td>
</tr>
<tr>
<td><img src="image5" alt="INDOT 5" /></td>
<td>INDOT 5 (C)/NA</td>
<td>Commercial Building-Muncie Music Center</td>
<td>225 W. JACKSON ST.</td>
<td>c.1960/Modern</td>
<td>Not National Register eligible; lacks significance; not a noteworthy example, does not possess high artistic value</td>
</tr>
<tr>
<td><img src="image6" alt="INDOT 6" /></td>
<td>INDOT 6 (O)/035-442-45197 (O)</td>
<td>Muncie Public Library</td>
<td>301 E. JACKSON ST.</td>
<td>c.1903/Neoclassical</td>
<td>Listed in the National Register in 1976 under Criterion C; see discussion in text</td>
</tr>
</tbody>
</table>
6-4.0 Short Historic Property Report Guidelines

An abbreviated historic property report may be prepared under the following circumstances:

- No above-ground resources are present in the APE.
- Above-ground resources are present within the APE, but none are fifty years old or older.
- Above-ground resources fifty years old or older are present within the APE, but none exhibit enough integrity to warrant at least a Contributing rating in the Indiana Historic Sites and Structures Inventory system (in other words, the properties warrant a Non-Contributing rating).
- The only above-ground resource fifty years old or older present within the APE that warrants at least a Contributing rating in the Indiana Historic Sites and Structures Inventory system is a bridge that has been evaluated in the latest historic bridge inventory or is exempt from individual review pursuant to the Program Comment for Post-1945 Bridges.¹³ (If resources other than the bridge warrant at least a Contributing rating, or if a property is less than 50 years old but meets National Register Criteria Consideration G [properties that have achieved significance within the last fifty years], a full report must be prepared in order to properly evaluate those resources).
- The only above-ground resource fifty years old or older present within the APE that warrants at least a Contributing rating in the Indiana Historic Sites and Structures Inventory system is a property that is listed in the NRHP or was recently previously determined eligible for listing in the NRHP¹⁴ (If resources other than the National Register listed property warrant at least a Contributing rating, or if a property is less than 50 years old but meets National Register Criteria Consideration G [properties that have achieved significance within the last fifty years], a full report must be prepared in order to properly evaluate those resources).

Please note that some properties less than fifty years old may be eligible or listed in the NRHP under National Register Criteria Consideration G (properties that have achieved significance within the last fifty years).

Include the specified information for the following components from the Full Historic Property Report format guidance, unless otherwise specified below:

- Cover Sheet/Title Page
- Table of Contents
- Lists of Figures, Photos, and/or Tables
- Management Summary or Abstract
- Introduction/Project Description

Remember:

Identification should include those properties 50 years or older, or that will be 50 years old, at the time of the proposed project letting.

¹³ [Link](http://environment.fhwa.dot.gov/histpres/program_comment.asp)

¹⁴ When properties previously determined NRHP eligible are present within the APE, please consult with INDOT CRO staff to determine the appropriate level of documentation for the current undertaking.
The following guidance should be taken into consideration when preparing the Recommendations section:

Alterations in material integrity should be shown as clearly as possible in photographs, especially if integrity issues are the main reason for not recommending a Contributing rating for a property. Additionally, alternations should be clearly described in the text as they are not always easy to ascertain through photographs.

For bridges evaluated in the latest historic bridge inventory, provide appropriate references to the inventory and the recommendations made in the inventory.

For properties listed in the NRHP or recently previously determined eligible for listing in the NRHP, provide appropriate references to when the property was listed or determined eligible for listing and under what criterion. Provide a brief analysis of whether the National Register listing or eligibility determination is still valid and appropriate.
References

2011  *Survey Manual for Architectural and Historical Resources.* Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology. Document on file at IDNR, DHPA.
APPENDIX- Guidance for Specific Property Types

Based on consultation with SHPO and consulting parties, this Appendix includes special guidance for completing identification and evaluation for resources that require special consideration or where consultation has resulted in specific procedures. This Appendix will be enhanced and added to as new procedures or guidance is developed.

Bridges-Historic Bridge Inventory

Bridges built through 1965 have been surveyed and evaluated through the Indiana Historic Bridge Inventory. More information about the bridge inventory can be found in Part IV of the CRM. A listing of surveyed bridges can be found on the INDOT website here: http://www.in.gov/indot/2531.htm.

Understanding the eligibility determination for any bridges within the APE will greatly determine the Section 106 course. For projects involving historic bridges, please refer to Part IV for specific information on processing a project through the Historic Bridge Programmatic Agreement.

Program Comment for Common Post-1945 Concrete and Steel Bridges

For bridges built after 1965 there is another resource for assessing bridges for NRHP eligibility. On November 2, 2012, the Advisory Council on Historic Preservation (ACHP) issued the Program Comment for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges. As a summary, the Program Comment relieves federal agencies from the Section 106 requirement to consider the effects of undertakings on most concrete and steel bridges built after 1945. On March 19th 2013, federal agencies were approved to use the Program Comment for Indiana projects.

When considering the Program Comment for your project the following considerations should be evaluated before the Program Comment can apply:

The Program Comment does NOT apply to bridges that are already listed in or eligible for the National Register of Historic Places or to those located in or adjacent to a historic district (Section IV.A). Please note that per the Indiana Historic Bridge Inventory, bridges built between 1945 and 1965 have already been evaluated for National Register eligibility. Therefore, it is important to reference the Historic Bridge Inventory.

The Program Comment does NOT apply to these bridges:

- The Program Comment does NOT apply to arch bridges, truss bridges, bridges with movable spans, suspension bridges, cable-stayed bridges, or covered bridges (Section IV.B).
- The Program Comment does NOT apply to bridges identified as having exceptional significance for association with a person or event, being a very early or particularly
important example of its type in a State or the nation, having distinctive engineering or architectural features that depart from standard designs, or displaying other elements that were engineered to respond to a unique environmental context and included in a list to be developed by each state Division of FHWA (Section IV.C). Based on consultation between FHWA, INDOT, SHPO and interested parties, no bridges with exceptional significance were identified.

Please keep in mind that the Program Comment is not a waiver of the Section 106 review. It does relieve federal agencies from the need to individually evaluate and consider the effects of undertakings on bridges where the Program Comment applies. When submitting Section 106 materials where the Program Comment applies to a bridge, provide clear documentation that the criteria considerations were evaluated. In addition to providing some basic information and photographs of the subject bridge, below is an example of how application of the Program Comment might be explained in a historic property report:

On November 2, 2012, the Advisory Council on Historic Preservation (ACHP) issued the Program Comment for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges (Program Comment). The Program Comment relieves federal agencies from the Section 106 requirement to consider the effects of undertakings on most concrete and steel bridges built after 1945. On March 19, 2013, federal agencies were approved to use the Program Comment for Indiana projects. The Program Comment applies for Bridge No. 041-42-02351 ANBL because it has not been previously listed in or determined eligible for listing in the National Register of Historic Places and it is not located in or adjacent to a historic district (Section IV.A of the Program Comment). As an example of a steel beam structure built in 1967, this bridge is also not one of the types to which the Program Comment does not apply (arch bridges, truss bridges, bridges with movable spans, suspension bridges, cable-stayed bridges, or covered bridges [Section IV.B]). Additionally, this bridge has not been identified as having exceptional significance for association with a person or event, being a very early or particularly important example of its type in the state or the nation, having distinctive engineering or architectural features that depart from standard designs, or displaying other elements that were engineered to respond to a unique environmental context (Section IV.C). This bridge also has not been identified as having some exceptional quality. Based on consultation between FHWA, INDOT, SHPO and interested parties, no bridges with exceptional significance were identified in Indiana (Section IV.C). Because the above criteria from the Program Comment have been met, no individual consideration under Section 106 is required for Bridge No. 041-42-02351 ANBL.

For additional reference, please visit the FHWA website for a further description of the Program Comment and a Q&A: http://www.environment.fhwa.dot.gov/histpres/bridges.asp.
Historic Districts
It is incumbent upon the project historian to be observant for unidentified historic districts within the APE, including rural historic districts. In some instances, a potentially NRHP eligible historic district may lay both within and outside of a project’s APE. When assessing such districts it is most important to define the boundary within the APE and to define the number and type of resources located therein. Because some effect from the project is possible within the APE, it is important to fully assess this portion of the district.

In order to fully determine the district’s eligibility, a rough estimate of the boundary outside the APE is needed. Also, a rough estimate of the number and type of resources located outside the APE is needed. In difficult situations, such as a large district where large portions extend beyond the APE, it is possible to provide general boundaries, such as a road or physical feature where the district may end, and general descriptions of resources for those portions beyond the APE.

Previously identified historic districts (as identified through the Interim Reports, previous projects, or National Register listing) and newly identified historic districts should be described fully in the text of the report. Each district must be evaluated against the National Register Criteria A, B, C, and D. Provide a district boundary map and a verbal boundary description with justification for each district. The report shall address whether the original boundary descriptions of NRHP listed districts are appropriate.

Previously or newly recorded properties fifty years old or older that warrant a rating of Contributing or higher that are located within an identified historic district do not need to be individually described or evaluated. Because it is known they are part of a historic district, it is not necessary to come to consensus on their individual eligibility.

Mid-20th Century Resources:
When documenting mid-20th century resources, it is especially important to provide enough information to support your recommendation. In many cases, these resources are not old enough to have been included in the Indiana Historic Sites and Structures Inventory. Thus, no previous information is available for them (i.e., survey cards and photographs). For individual properties, it is important to provide two to three clear photographs and a good description of the material integrity and any alterations observed.

When there is a collection or strip of mid-20th century resources, as is common, consideration of a potential historic district should be provided. For potential historic districts, it is important to provide streetscape photographs of representative building types. For potential historic districts, more information than is normally required about properties outside the APE will aid in INDOT and/or SHPO’s review. For example, when a potential historic district is located both within and outside the APE, photographs of the properties outside the APE are usually not included in the HPR. However, more detailed photographs of individual properties or streetscapes that include several properties may need to be included for mid-20th century areas in order to better ascertain the character and feeling of the potential historic district.

With regard to assessing mid-20th century houses for National Register eligibility, consultation with the SHPO has indicated that given the ubiquity of such residences constructed throughout
Indiana at the time, a property must have other associations with broad trends in American history in order to be significant enough to be recommended as individually eligible for listing in the National Register under Criterion A. With regard to Criterion C, such houses need to retain nearly all of their original features in order to be considered National Register eligible and they should have experienced few alterations. In other words, a high level of overall material integrity is needed. Additionally, a significant house of this era might be architect-designed, a “high-style” example, and/or exhibit a high level of workmanship.

An analysis of historic mapping, aerial photographs, and neighborhood plats is helpful in determining what areas of mid-20th century resources might constitute a historic district. When looking for potential historic districts of mid-20th century resources, there would likely be a uniformity of design and a feeling of continuity within the area. The buildings should retain a high level of integrity and represent a particular era of development and/or a particular popular housing stock of the era. To be eligible under Criterion A, historic districts of the mid-20th century would need to exhibit an important association with the planned suburban development of the area. Under Criterion C, historic districts of the mid-20th century would need to exhibit a noteworthy collection of intact architecture.

A useful resource is A Model for Identifying and Evaluating the Historic Significance of Post-World War II Housing. However, when evaluating a mid-century resource, it is recommended to contact INDOT-CRO for specific guidance. In some situations, INDOT-CRO will confer with SHPO during the evaluation for guidance.
PART II

CHAPTER 7

Historic Property Identification and Evaluation—Archaeology

March 2014
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7-1.0 Background

The Section 106 process, 36 CFR 800.4, requires a “reasonable and good faith effort” to identify historic properties within a project’s area of potential effects (APE). For the purposes of Section 106, historic properties are defined as those properties listed in or eligible for listing in the National Register of Historic Places (NRHP). As a general guideline, to be considered for listing in the NRHP, a resource should be at least 50-years old. Historic properties include both above-ground and archaeological resources. The identification phase of Section 106 consists of locating properties to determine if they are eligible for NRHP listing.

FHWA and INDOT rely on qualified professional consultants to provide clear, detailed and honest information when identifying historic properties to ensure a reasonable and good faith effort. Without a proper identification effort, FHWA/INDOT is unable to make an assessment of “adverse effect.” Therefore, this chapter provides guidance for completing the identification of archaeological resources, including survey, evaluation and reporting. Please also refer to Chapter 9 Resolving Adverse Effects for procedures for conducting data recovery as mitigation for adverse effects to archeological sites. Chapter 6 details the steps for completing above-ground identification and evaluation.

The purpose of archaeology in the context of transportation is to satisfy federal and state legislation, specifically the National Historic Preservation Act (NHPA), and the Indiana Historic Preservation and Archaeology Act (IC 14-21). FHWA must adhere to the regulations set forth in the NHPA and National Environmental Policy Act (NEPA), while IC 14-21 governs the actions of INDOT. Because INDOT projects are funded by a combination of local, state, and federal monies, the agency is required to follow all regulations authorized by these statutes. Discussions of the relevant laws can be found in PART III of this manual. Archaeological investigations are also conducted for borrow and waste areas under INDOT’s Standard Specifications Manual and for INDOT excess parcels under IC-14-21-1-14.

For any FHWA/INDOT project involving federal or state funding that has the potential to directly or indirectly impact archaeological resources, some level of investigation and documentation is required.

Prior to initiating an archaeological investigation, the archaeological consultant must be provided sufficient information to define the undertaking. The entire undertaking must be considered in the archaeological investigation and summarized in the report of investigation. This information can be obtained through scoping and engineer’s reports, project plans, maps, etc. and must be provided to the project archaeologist to aid in developing scopes of work and cost estimates.
**7-2.0 Phase I Investigations**

All investigations conducted for INDOT will apply the methodologies outlined in the Draft Guidebook for Indiana Historic Sites and Structures Inventory—Archaeological Sites (Guidelines) as minimum standards for the field reconnaissance. If archaeological sites are located during any type of Phase I investigation, the archaeological report must include a recommendation of the sites’ significance and potential eligibility for listing on state and national registers. To this end, INDOT-CRO requires a written description of the site including stratigraphic information. To obtain this information shovel testing or other subsurface tests sufficient to evaluate the site must be completed. If a site is assessed as potentially eligible then a Phase II investigation will be required or else the site must be completely avoided.

The process for the identification, documentation and evaluation of an archaeological property during a Phase I investigation is based within the framework of the criteria set forth in the National Register of Historic Places (NRHP), Indiana State Law (IC-14-21 and 312-IAC-21) and the Indiana State Archaeological Guidelines (2008).

This process includes:

1. Identification of the archaeological resource (reasonable and good faith effort);
2. Defining the extent, type and function of the archaeological resource (categorize);
3. Determine which historic context(s) the resource represents, which includes associated temporal period (period[s] of potential significance) and theme (refine type and/or function of property if necessary);
4. Determine whether the resource is significant under the National Register Criteria within the framework of the appropriate historic context;
5. Determine if the archaeological resource retains integrity;
6. Provide a clear eligibility recommendation that is grounded in this process that addresses both significance and integrity (significance + integrity = eligibility).

The proper identification of an archaeological resource serves as the foundation for evaluation and may entail a combination of informational resources as part of this process, such as written documents, maps, oral testimony, geophysics, the presence of surviving buildings, structures, landscapes, objects and the archaeological record.\(^1\) Data should include “horizontal and vertical extent of the site, chronology or periods of occupation/use, site type, site function, and internal

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configuration.” Please refer to the following subchapters to follow the appropriate steps in completing identification through the Phase I investigations.

7-2.1 Phase Ia Records Check/Literature Review

All INDOT/FHWA funded archaeological projects should begin with a Records Check/Literature Review. This is the foundation of all archaeological identification. The Records Check/Literature Review utilizes site records, maps, reports, and other materials on file at DHPA and other private institutions as well as information from the State Historic Architectural and Archaeological Research Database (SHAARD). The purpose of the records check is to locate, identify, and evaluate known and expected cultural resources that might be affected by an undertaking. A thorough knowledge of previously recorded cultural resources as well as the environmental characteristics of a region or project area allows the researcher to formulate predictions for the types of archaeological sites that might be encountered during fieldwork.

If during the records check, it is determined that the current project area was the subject of an archaeological reconnaissance in the past and the methods used were sufficient to meet both the reasonable and good faith effort standard and the methodology specified in the current Guidelines, it may be determined, in consultation with INDOT-CRO, that no additional archaeological investigations are necessary.

On occasion, it may be determined by the Qualified Professional archaeologist through aerial photography, photographs, project plans, soil descriptions or other documentation, and/or by an onsite inspection that land within a project area has been altered to the extent that any potential archaeological site has been destroyed. When the project area has been disturbed to this extent, thorough documentation of the disturbance takes the place of systematic field investigations. The archaeological report will be complete after the required background information and sufficient documentation to show that the reasonable and good faith effort standard has been met. The Archaeological Short Report may be used to convey the results of the records check. Please note that:

- Agricultural activity (i.e. plowing/disking) does not constitute a severe level of disturbance.
- Residential properties (i.e. lawns) cannot be assumed to be disturbed. Suspected disturbance by grading/filling or landscaping must be verified by subsurface testing.
- Right-of-way cannot be assumed to be disturbed.
- Fill is not a disturbance; an attempt must be made to penetrate and test beneath fill.
- Soil map units should be used with care when used to determine disturbance (i.e. Urban land complex soils are typically comprised of 40-60% Urban land or disturbed soil, but the remaining soil may not be disturbed).

2 Ibid, 17
7-2.2 Phase Ia Field Reconnaissance

For most FHWA/INDOT undertakings, a systematic and detailed field inspection that seeks to locate, identify, and evaluate archaeological resources within a project area is conducted. The Archaeological APE includes proposed permanent and temporary right-of-way, as well as any undisturbed existing right-of-way, of the preferred alternative and is considered the “project area” or “survey area”. If archaeological resources are present, the Phase Ia survey also seeks to define the horizontal and vertical extent of those resources, as well as the cultural affiliation and integrity of the deposits in order to determine if the site(s) are eligible for listing in the NRHP.

Remember before conducting fieldwork the following two requirements:

7-2.2.1 Notices of Entry

Per IC 8-23-7-26, Notices of Entry (NOEs) are letters informing landowners whose property might be impacted by an INDOT project of the need to conduct environmental surveys on their property. Landowners are to receive NOEs at least five days in advance of archaeological fieldwork. A NOE template is available in Appendix H of the INDOT CE Manual and is to be sent to all property owners potentially impacted by the project.

Archaeologist's Responsibility:

1.) Ensure that NOEs have been sent to all landowners in the project area;
2.) Request copies of NOEs from clients if not received prior to fieldwork; and
3.) Carry NOEs in the field.

INDOT Expectations:
1.) Archaeologists are expected to make an effort to identify themselves to landowners if they are available before entering private property.
2.) Bright colored safety vests or shirts are to be worn at all times when conducting work on behalf of INDOT.

7-2.2.2 Archaeological Permits

IC 14-21-1-16 requires a permit for archaeological fieldwork conducted on state-owned property. Permit requests are to be submitted to DHPA with INDOT-CRO receiving a copy for its project files. Requests are to include written permission from the property owner and an outline of general field methodologies. DHPA will provide authorization to conduct archaeological field investigations on state property and issue a permit number upon their review. A copy of this authorization is to be carried by archaeologists in the field. The permit number is to be referenced in subsequent archaeological reports.

A permit is not required when conducting work on state property owned by INDOT, such as right-of-way. INDOT has obtained an approved permit for Phase Ia field investigations on INDOT properties (Permit #2009032) (See Part V Forms). A copy of this permit should be carried by archaeologists working on INDOT projects.
In addition, the **Archaeological Resources Protection Act** (ARPA) requires a permit for Archaeological Investigation (Permit) for investigations conducted on Federal lands. Since INDOT maintains state and US highways that cross Federal lands, archaeologists must be aware of their presence in relation to their project areas and if needed, apply for a permit through the proper Federal land manager or agency. Instructions on how to apply for an ARPA permit and the permit application can be found at the National Park Service website: [http://www.nps.gov/archeology/sites/permits.htm](http://www.nps.gov/archeology/sites/permits.htm)

A map showing the Federal lands in Indiana and the managing agencies can be found at:


INDOT-CRO does not need to review the application but does ask that a copy of the application and agency approval letter be provided for our project file.

### 7-2.2.3 Standard Methodologies

Different field conditions call for different methodologies. If ground surface visibility is greater than 30% and survey conditions are adequate for detecting archaeological sites (i.e., there is a reasonable expectation that artifacts would be readily exposed on the surface such as a rainwashed plowed fields), a pedestrian surface survey not to exceed 10 m intervals may be conducted. No-till agriculture fields and wooded areas do not constitute survey conditions adequate for detecting archaeological sites regardless of the amount of surface visibility. In addition, archaeological survey should not be conducted if the ground is frozen or covered in snow.

Once artifacts are identified on the ground surface, or if surveying on a known or reported site, spacing is to be reduced to 5 meters. On sites investigated by pedestrian surface survey, one or more shovel tests should be excavated in order to characterize the vertical extent and integrity of subsurface deposits. The number of shovel tests needed is dependent on the site’s size and setting.

Areas with slopes greater than 20% or 11º may be investigated by a walkover visual survey at 30 meter intervals. However, if areas with potential for archaeological resources are identified (such as caves, sinkholes, rock shelters, rock ledges, chert outcrops, etc.) they should be investigated using standard survey methodologies (shovel testing in rockshelters should be minimized to avoid damaging fragile deposits).

If ground surface visibility is less than 30% and the slope is less than 20% or 11º, shovel probing is required. In addition, shovel probes are required in any settings where artifacts would not be expected to be readily exposed on the surface (e.g. no-till agricultural fields, freshly plowed or un-rainwashed, fields, some alluvial settings, forest with thick humus layers, etc.). Shovel probing shall occur at intervals not to exceed 15 m. If the project area is located in an area with a high potential for archaeological sites, a smaller interval should be considered. Shovel probes must be at least 30 cm in diameter and excavated into subsoil or to a depth of 50 cm, whichever comes first. Soil excavated from shovel tests must be screened through a ¼” wire mesh. All probes must be backfilled and returned to their original condition as much as possible.
Once artifacts are recovered or if shovel probing on a known or reported site, the shovel test interval is to be reduced to 5 meters near the periphery of the site and continued until two sequential negative probes are excavated in order to determine the site boundaries. Additional radial probes must be excavated around positive radial probes in order to properly delineate the site boundaries.

Artifacts are to be collected and bagged by shovel probe location and placed in appropriately identified bags. Artifacts recovered must be recorded as to the general depth of occurrence or minimally "above" or "below plowzone" if observable. Soil profile information from positive shovel tests must be noted and representative examples generally described in the report.

The location of all sites should be recorded by GPS. For each archaeological site located, an Indiana State Site Form must be submitted to the DHPA through SHAARD. A state site number may be acquired from the DHPA. In addition, if a recorded site is resurveyed and not relocated, a new site form must be completed indicating that no evidence of the site was found.

Augering or probing during the Phase Ia may be used to confirm the presence of alluvial, colluvial, or aeolian soils, which may contain buried archaeological deposits, requiring a Phase Ic.

**7-2.3 Phase Ib Intensive Survey**

The Phase Ib intensive survey is designed to build upon the Phase Ia investigations when additional information is required to better evaluate a site when its integrity and potential eligibility cannot be determined through standard Phase Ia methods. INDOT considers intensive shovel probing, piece plotting, and controlled surface collection strategies part of Phase Ia investigations that may be conducted without submitting a plan to DHPA for approval. For historical sites, in depth historical research may be useful to determine significance and may be conducted without an approved work plan. On occasion, INDOT-CRO may not agree with a consultant’s eligibility determination of a site and ask that a Phase Ib intensive survey be conducted to gather additional information about the site’s integrity. In all cases where a Phase Ib is recommended, please consult INDOT-CRO in developing a sampling strategy for the investigation. If limited subsurface testing is recommended, a plan for Phase Ib investigations will need the approval of INDOT and DHPA.

**7-2.4 Phase Ic Subsurface Reconnaissance**

A Phase Ic subsurface reconnaissance is required in areas where archaeological deposits are likely to be buried in alluvial, colluvial, or aeolian soils. Phase Ic investigations may also be appropriate in urban settings where cultural deposits may be buried under layers of fill. The Phase Ic may require the use of augers, soil coring, trenches, or test units to locate and assess the nature of buried deposits. DHPA guidelines require that 1-3% of land areas favorable for the presence of buried deposits within a project area be sampled by the Phase Ic investigation. Please see the Guidelines for specific guidance in conducting Phase Ic investigations. Plans for Phase Ic investigations are to be approved by INDOT-CRO prior to submittal to DHPA.
7-2.5 Key aspects of Phase I Identification

7-2.5.1 Site Boundaries

The level of effort to define site boundaries should be an explicit part of research designs for archaeological surveys designed to identify potentially National Register-eligible sites. In addition, the principles for demarcating the limits of archeological sites should also be explicitly stated in the survey methodology. “Once defined, this methodology should be consistently applied to each potential archeological site identified in a survey.”3 Sites identified in the project limits should be discussed as a whole (including areas extending outside of the project limits), although only the portion within the project limits is subject to an eligibility evaluation. Note any pertinent information regarding the portion of the site which lies outside the project limits in order to better define the site boundaries, such as topography, historical land use patterns, and details extracted from both historical and current maps as well as relevant historical documents.

7-2.5.2 Site Type/Function

An archaeological site is defined on the basis of all relevant information that addresses the nature and function of the resource, which in turn allows for the evaluation of the resource within the scope of a historic context. The process of defining a site type is based upon relevant criteria, which includes data from field investigations (both in and outside the project area), historical documents, and comparative site information for the area.

7-2.5.3 Resurvey of a Previously Identified Site

All known and reported sites within a project area are to be examined, information on them updated, and their data included in the analysis and interpretation. If a previously recorded site is resurveyed and not relocated, a new site form must be completed indicating that no evidence of the site was re-identified. An Indiana Archaeological Short Report (State Form 54566 [1-11]) may be prepared “where the archaeological investigation does not produce evidence for archaeological resources or where alteration or disturbance precludes the survival of any archaeological sites” (312 IAC 21-3-8).

7-2.6 Phase I-National Register Eligibility Evaluation

The two considerations for assessing whether an archaeological site is eligible for the NRHP are significance and integrity. In order for an archaeological site to be NRHP-eligible it must be significant within an established context(s) and it must retain sufficient integrity to convey its significance.

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In most cases, the archaeologist should be able to make an informed recommendation for a site at the Phase I level. If not, additional work may be necessary beyond what is required in the Guidelines in order to make an adequate evaluation. If there is still insufficient data to evaluate the site, explicitly state the reasoning as to why adequate information is lacking and what is required to make a defensible significance determination. Foremost, the evaluation of the archaeological resource should not be assessed in vacuity, but in relation to all available yet relevant data.

7-2.6.1 Context

The purpose of a historic context is to provide an interpretive framework to assess the potential significance of an archaeological resource at local, state and national levels. The context ties the resource to thematically, geographically and temporally linked information that provides avenues to address particular research questions – “Historic contexts are those patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its historic meaning (and ultimately its significance) is made clear”4. The lack of an applicable context greatly diminishes the ability to adequately evaluate the significance of a particular archaeological resource. This information may also include broadened comparative site data (based upon similar site types), a relevant literature review and an examination of primary historical documents; however, the depth and complexity of the context should reflect the nature of the site and will vary in scope based upon an assessment of available information.

The procedures for developing a historic context once a site has been identified and defined by type and function are:

1. Define the period(s) of significance for the site;
2. Define the geographic limits (local, state, national);
3. Define the theme(s) with respect to defined period(s) of significance and geographic limits;
4. Assemble existing information about the historic context based upon preceding steps;
5. Synthesize the information from the context and relate to the historic property - refine the site type/function if necessary.

The cultural history and records check sections within a report do not necessarily replace the need for a context once a site has been identified. The objectives of the cultural history/records check and context differ and one cannot usually serve both aims. Due to these separate and distinct goals, the author should be clear as to the intended purpose and use as appropriate. Specifically, the cultural history/records check provides an outline of the overall setting and the types of cultural resources one would expect to encounter during the reconnaissance as outlined

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in the Guidelines. This background is typically too broad to be useful as a context in which to evaluate a site for the NRHP. It is written prior to the survey and is meant as a planning tool to provide the reader (and investigator) a general introduction to the project area; not as an evaluation tool for a specific historic property. The defined site type will dictate the theme, temporal period and geographic limits of the context; therefore, writing the context prior to the identification of an archaeological property is most likely ineffective. However, once a context has been developed in response to the initial defining attributes of a property, these defining parameters can be adjusted as additional contextual information is gathered and synthesized.

7-2.6.2 Significance

The basis for evaluating the significance of an archaeological site is its assessment within the framework of an applicable historic context, which is then applied to the National Register criteria, most likely Criterion D, although any of the four may pertain to an archaeological property:

**Criterion A:** Associated with events that have made a significant contribution to the broad patterns of our history *(typically contains ruins or extant buildings/structures with associated archaeological deposits which are “needed to convey, illustrate or help interpret the historical event or pattern”)*; or

**Criterion B:** Associated with the lives of persons significant in our past *(archaeological deposits are “needed to convey, illustrate or interpret a historic property that is strongly associated with the career or life of an important person”)*; or

**Criterion C:** Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction *(archaeological deposits are “needed to convey, illustrate, or interpret an historic property containing strongly associated architectural or related attributes that reflect a particular pattern, style or type”)*; or

**Criterion D:** Have yielded, or may be likely to yield, information important in prehistory or history.

Under Criteria A, B, and C the archaeological property must have demonstrated its ability to convey its significance, as opposed to sites eligible under D, where only the potential to yield important information is required. Therefore, archaeological sites are most often significant under Criterion D for their information potential. “Criterion D most commonly applies to properties that contain or are likely to contain information bearing on an important archeological research question. The property must have characteristics suggesting the likelihood that it possesses configurations of artifacts, soil strata, structural remains, or other natural or cultural features that make it possible to do the following:

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5 Donald L. Hardesty and Barbara J. Little  
2000 Assessing Site Significance. AltaMira Press. Pg. 33.  
6 Ibid, 34  
7 Ibid, 36
• Test a hypothesis or hypotheses about events, groups, or processes in the past that bear on important research questions in the social or natural sciences or the humanities; or
• Corroborate or amplify currently available information suggesting that a hypothesis is either true or false; or
• Reconstruct the sequence of archeological cultures for the purpose of identifying and explaining continuities and discontinuities in the archeological record for a particular area.”

Significance under Criterion D means that a site must be likely to produce information that contributes to our understanding of history or prehistory, and this information must be considered important (e.g., it fills a gap in our knowledge or understanding or it can be used to develop new theory). An archaeological site must satisfy both of these requirements to be considered significant under Criterion D.

“Under the first of these requirements, a property is eligible if it has been used as a source of data and contains more as-yet unretrieved data. Under the second requirement, the information must be carefully evaluated within an appropriate context to determine its importance. Information is considered ‘important’ when it is shown to have a significant bearing on a research design that addresses such areas as: 1) current data gaps or alternative theories that challenge existing ones or 2) priority areas identified under a State or Federal agency management plan.”

Information potential (and therefore Criterion D significance) must be evaluated in the context of our current state of knowledge and theoretical development. Sites that can provide information from poorly understood or poorly documented cultures or time periods (such as Paleoindian, Middle Archaic, contact period, pioneer era, early African American sites, or immigrant community sites) may have a lower threshold for significance. Types of sites that have typically been understudied (such as small, limited activity prehistoric sites) may not be clearly significant in isolation; however, such sites may contribute significant information in the context of reconstructing settlement patterns, landscape usage, diachronic changes in resource exploitation, or other research questions. Similarly, a tendency to equate significance with large, diverse historical scatters yielding great numbers of artifacts and containing durable architectural materials may lead to a bias toward recovering information about affluent landowners at the expense of lower socioeconomic status people, whose habitation sites may yield only meager amounts of materials. “Overlooking the significance of small sites may skew our understanding of past lifeways as those sites not only receive less research attention, but also are destroyed without being recorded thoroughly because they are ‘written off’ as ineligible for listing in the National Register. Such losses point to the need to continuously reexamine historic contexts and allow new discoveries to challenge our ideas about the past.”

9 Ibid, 21
In order to justify a site as significant under Criterion D, a greater level of analysis is required at the Phase I level. A statement of significance should be included in the Phase I report that constitutes a reasoned, well developed argument, within the framework of the appropriate context(s) that will result in providing the basis for the significance evaluation of the historic property.

7-2.6.3 Integrity

Integrity is the ability of a property to convey its significance. Properties eligible under Criterion D convey their significance through the information that they contain. A site that lacks integrity will not be considered eligible. Conversely, a site that lacks important information will not be significant even if it retains excellent integrity. The assessment of integrity is the final step in the evaluation process and should not be used as an initial screening mechanism.

Historic properties either retain integrity (that is, convey their significance) or they do not. Within the concept of integrity, the National Register criteria recognize seven aspects or qualities that, in various combinations, define integrity. To assess integrity, first define the essential physical qualities that must be present for the property to represent its significance.

**Location:** Location is the place where the historic property was constructed or the place where the historic event occurred. “The location of a property often helps explain its importance. Archeological sites and districts almost always have integrity of location. Integrity of location is closely linked to integrity of association, which is discussed below. Integrity of location would not necessarily preclude the eligibility of secondary or re-deposited deposits in an archeological property. Integrity depends upon the significance argued for the property.”

**Design:** Design is the combination of elements that create the form, plan, space, structure, and style of a property. It results from conscious decisions made during the original conception and planning of a property (or its significant alteration through use) and includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials. “Under Criterion D, integrity of design for archeological sites most closely approximates intra-site artifact and feature patterning. For districts, inter-site patterning can be used to illustrate integrity of design.”

**Setting:** “Setting is the physical environment of a historic property. Whereas location refers to the specific place where a property was built or an event occurred, setting refers to the character of the place in which the property played its historical role.” Archeological sites that lack integrity of setting may still be nominated under Criterion D if they have important information potential.”

**Materials:** “Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic

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11 Ibid, 38
12 Ibid, 39
property. The choice and combination of materials reveal the preferences of those who created the property and indicate the availability of particular types of materials and technology.”

“Under Criterion D, integrity of materials is usually described in terms of the presence of intrusive artifacts/ features, the completeness of the artifact/feature assemblage, or the quality of artifact or feature preservation.”

**Workmanship:** “Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. It is the evidence of artisans' labor and skill in constructing or altering a building, structure, object, or site. Workmanship can apply to the property as a whole or to its individual components.”

“Under Criterion D, workmanship usually is addressed indirectly in terms of the quality of the artifacts or architectural features. The skill needed to produce the artifact or construct the architectural feature is also an indication of workmanship. The importance of workmanship is dependent on the nature of the site and its research importance.”

**Feeling:** “Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character.”

Archeological sites that lack integrity of feeling may still be nominated under Criterion D if they have important information potential.

**Association:** “Association is the direct link between an important historic event or person and a historic property.”

Under Criterion D, integrity of association may refer to the physical association of features and materials (or the site itself) with diagnostic artifacts or datable artifacts such as carbon that provide context for interpretation. Integrity of association may also be measured in terms of the strength of the relationship between the site's data or information and the important research questions. In this sense, a site that contains extremely important information may retain its integrity of association and therefore significance even if the site has been extensively disturbed.

“Generally, integrity cannot be thought of as a finite quality of a property. Integrity is relative to the specific significance which the property conveys. Although it is possible to correlate the seven aspects of integrity with standard archeological site characteristics, those aspects are often unclear for evaluating the ability of an archeological property to convey significance under Criterion D. The integrity of archeological properties under Criterion D is judged according to important information potential. Archeological sites may contain a great deal of important information and yet have had some disturbance or extensive excavation (and, thereby, destruction). For example, sites that have been plowed may be eligible if it is demonstrated that...”

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14 Ibid, 45
17 Ibid: 45
18 Ibid, 45
19 Ibid, 45
the disturbance caused by plowing does not destroy the important information that the site holds.” Evaluation of integrity for archaeological sites significant under Criterion D will most often focus upon Location, Materials, Association, and Design. Other aspects of integrity, such as Workmanship, may also be relevant in certain cases.

7-2.6.4 Recommendations

The recommendation should provide a clear yet concise rationale of how the eligibility determination was attained within the framework of the evaluation process and whether the property was found eligible or ineligible. The recommendation should synthesize the eligibility or potential eligibility of the archaeological site on the basis of a well grounded argument for or against significance and the ability to convey or not convey integrity. A recommendation should not consist of open-ended, inadequate or unsupported statements.

While all archaeological sites have the potential to convey information, that information is not always important with respect to furthering our understanding of past lifeways, cultural processes and change. It is therefore necessary to state what is important and why. If additional work is recommended, a basic level of guidance also needs to be provided for subsequent investigations. If this guidance is lacking, additional work at the Phase I level may be necessary rather than shifting this responsibility to future fieldwork. Limit recommendations to the areas of the site that were investigated within proposed right-of-way and address all potential impacts to the site as a result of the project. If the archaeological site will not be impacted by the project, explicitly state this. Every recommendation should contain the following information, as applicable:

- **Statement of Significance**
  - Not significant
  - Supporting information summary
  - Potentially Significant
  - Specify which National Register criteria
  - Supporting information summary
  - Significant
  - Specify which National Register criteria
  - Supporting information summary

- **Statement of Integrity** (only if site is determined significant or potentially significant)
  - Supporting information summary

- **Eligibility for the NRHP Statement**
  - Ineligible (if property is determined not significant)
  - Potentially Eligible (unclear significance and/or integrity - specify)

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o Eligible (clear significance and sound integrity)

- **Recommendation Statement**
  - Further work or avoidance
    - Summarize type and guidance for further work
  - No further work

7-2.7 Report Review and Distribution

Before distribution to the SHPO, one electronic copy of the archaeology report should be forwarded to INDOT-CRO for review. If the report is too large to send via email, a CD or access to a FTP site is acceptable. After all comments from INDOT are satisfactorily addressed, the archaeology report may be distributed to SHPO for review and comment as part of the Section 106 process. The transmittal letter should indicate that the INDOT Cultural Resources Office has reviewed and accepted the document. CRO should be electronically copied on the transmittal letter and should receive an electronic copy of the final report for INDOT’s files. A bound hard copy should also be provided to CRO for reports over 60 pages (single sided) in length or for reports containing fold-out illustrations.
7-3.0 Phase I Report Guidelines

These guidelines were created in order to increase the consistency and quality of archaeological reports, as well as streamline the review process. These guidelines are largely based on the DHPA’s Guidebook for Indiana Historic Sites and Structures Inventory - Archaeological Sites and Indiana state law IAC 21-3-8.

In Indiana, accepted archaeological reports include both short and full report formats. The Indiana Archaeological Short Report can be used for Phase Ia reconnaissance surveys when:

1. there is no potential to impact archaeological resources;
2. field survey found previously recorded archaeological sites to be completely destroyed or;
3. field survey identified no archaeological sites within the project area.

In all other instances a full archaeological report must be completed. The short report is available in both Microsoft Word and PDF formats and can be accessed through DHPA’s website.

7-3.1 Indiana Archaeological Short Report

The purpose of the short report is to establish an abbreviated, standard report format for surveys meeting the conditions listed above, while ensuring that information is adequate to make a determination that no sites are present. INDOT requires the use of the short report when applicable. INDOT-CRO will review reports to determine if the minimum content is present. The final report should be as complete and concise as possible while still providing the necessary information to demonstrate the reasonable and good faith effort standard. An attempt should be made to fill in all appropriate boxes. Additional expectations for INDOT projects are included below:

- The date should reflect the latest version of the report, i.e. if there are revisions the date should be changed as well.
- The project description should fully describe the nature and scope of the project, the limits of the project area, and the type and extent of land disturbing activities, including all associated impacts, anticipated by the undertaking.
- The project area (archaeological APE) should be clearly described and depicted on quality maps.
- For a project’s legal location or dimensions, the available boxes may not be appropriate. In such cases, use the comment box below to give the location; e.g. if the project is best described as being on the common line between the NW ¼ and the NE ¼ of Section 6 or segment 1 is 100 m x 30 m and segment 2 is 300 m x 30 m, etc.
- The property owner box should, at a minimum, distinguish between public and private ownership, including existing INDOT right-of-way. Public ownership may require obtaining additional permission or permits prior to fieldwork.
- Project length and width should be given as maximum length and maximum width.
- Expectations for figures and tables are the same for both short and full report formats.
- Use the comment box under Results to describe the survey, including specific methodologies, visibility, etc. (should be consistent with survey map). Explain the
reconnaissance in detail including observed soil profiles, number and orientation of transects, and any areas found to be disturbed.

7-3.2 Indiana Archaeological Phase I Full Report

These guidelines are meant to drive the content of the reports. Format and structure of the reports can vary based on what the authoring archaeologist feels is appropriate, as long as the pertinent information is present. (Note that the metric system is required for all measurements in documentation submitted to FHWA/INDOT.)

The purpose of a Phase Ia archaeological reconnaissance and report is to comply with state and federal law. To this end FHWA/INDOT and consultants working on their behalf must make a “reasonable and good faith effort” to identify cultural resources within the area of potential effect, typically the project footprint (INDOT right-of-way and proposed right-of-way) for archaeological resources. The Phase Ia survey also seeks to define the horizontal and vertical extent of archaeological resources, as well as the cultural affiliation and integrity of the deposit in order to decide if the site(s) are eligible for listing in the NRHP.

Archaeological reports are simply one element of Section 106 documentation and the NEPA documentation, all of which are legal documents that are often scrutinized by professionals and the public. INDOT-CRO has received requests by consulting parties and the interested public (including other professional archaeologists) to review archaeological reports. Transportation projects, both large and small in scope, often become controversial, and it is INDOT’s responsibility to ensure that all aspects of our NEPA/Section 106 documentation, including archaeological reports, are of the highest quality and accuracy. Please refer to the Society for American Archaeology’s Editorial Policy, Information for Authors, & Style Guide when writing or editing an archaeological report. The following are the required elements of a Phase I Reconnaissance Report:

Title Page

- INDOT Designation Number
- Title (including description, location, and county of the project)
- Author(s), name of the Principal Investigator, company/organization/institution, address, and telephone number
- Signature of the Principal Investigator
- Client for whom the report is prepared, contact person, address, and telephone number
- Lead Agency or Funding Agency
- Date

Management Summary

The Management Summary summarizes the nature of the project and its conclusions. It should include:
- The INDOT designation number, the nature of the undertaking, and the size (length, width, and area) of the project area.
• A brief statement of project goals and objectives should also be expressed (e.g. to identify archaeological resources within the project area and assess their significance in terms of meeting the criteria for listing in the IRHSS and NRHP).

• Project results and recommendations for further investigations, no further investigations, site avoidance, etc. with specific references to sites fitting each category.

• A statement confirming that all archaeological work was carried out in accordance with state and federal guidelines and that personnel conducting field and lab work meet professional qualifications.

Many of the readers of the archaeological reports submitted to INDOT are not archaeologists; they are project managers, project engineers, and environmental specialists. The Management Summary is included in all INDOT archaeological reports so that these readers can quickly ascertain eligibility determinations and recommendations that are summarized in the larger NEPA environmental documentation.

Introduction

• The Introduction must include the name of the agency for which the archaeological work was completed, the name and designation number of the project, the location and size (length, width, and area) of the project, and what kind of impact activity is planned. The specifications of the undertaking and scope of work need to be included. The location of the project is to be given in quarter sections, township and range numbers, civil township, and topographic map title.

• Two figures should be referenced in the Introduction; the first showing the exact location(s) of the project on USGS 7.5’ series topographic quadrangles preferably at a 1:24,000 scale and the second an aerial image of the project areas showing current land use. USGS topographic maps and high-quality 2005 aerial photographs are available free of charge (and without copyright restrictions) at IndianaMap. The limits of the project area (archaeological APE) should be clearly depicted on the maps. Maps from Google or other web sites cannot be used in reports fully or partially funded by INDOT unless a commercial license has been purchased by the consultant. The names of the archaeologists who performed the survey and the dates of fieldwork.

Environmental Setting

A basic understanding of the environmental and cultural history of the project area and immediate region is a necessary component to fieldwork. This section briefly summarizes the natural environment of the project area. The most important aspect of this section is the probability of the project area to contain intact cultural resources.

If a project area appears disturbed, it is required that the disturbance be documented. It may be helpful to furnish evidence of that disturbance in the form of field photographs, construction plans, soil descriptions, and aerial photographs.

The environmental setting will not be complete unless all of the following information is included:
Soil Association and specific soil delineations (county soil survey reports are available online at [http://soils.usda.gov/survey/](http://soils.usda.gov/survey/)).

- Physiographic region
- Watershed
- Geology
- Proximity of nearest chert sources
- Modern environmental setting
- Current land use pattern in project area
- Natural Region
- Topography
- Regional/local Pleistocene and Holocene environmental overview (if appropriate);

This information is largely available as layers in IndianaMap.

**Cultural Background and Previous Investigations**

The Cultural Background summarizes the prehistory and history of the county or region, emphasizing the results of particularly large-scale archaeological surveys or excavations and describing significant sites. This section should define the archaeological context of the project area within a regional perspective. The goal of this phase of the background investigations is not the production of culture histories per se, but to provide a summary of previously established archaeological resource distributions which can, in turn, be used to predict the likely distribution of archaeological resources within the project area. The length and detail of the Cultural Background will reflect the nature and location of the project. For example, the Cultural Background section for a 0.5 acre small structure replacement will be much briefer than the Background section for a 15 mile long highway corridor.

This section should include a brief historical background as well, particularly if the project is located in an urban area or historic district, or if historical archaeological sites have been found in the region.

The Previous Investigations section gives special reference to the project area and summarizes previous investigations conducted in and within one-mile of the project area. This section also provides information regarding Historic Sites and Structures (particularly in urban areas) and historical cemeteries in or near the project area. In addition, this section should discuss all archaeological sites within one mile of the project area, including site number, cultural affiliation, site type, and eligibility. If numerous sites exist in or near the project area, a table may be used to list and describe them.

For many projects, the Cultural Background and Previous Investigations sections can be combined into several brief paragraphs. The point of these sections is to synthesize relevant information specific to the project area and vicinity, and make predictive statements about the potential for archaeological sites within a given project area, not to present lengthy boilerplate culture histories.
Your archaeological records check will not be complete unless all of the following materials and sources available in the DHPA office (or other institution) are reviewed:

- [The Indiana State Historic Architectural and Archaeological Research Database for archaeological site, archaeological reports, and cemeteries (SHAARD)](#)
- [The Indiana State Historic Architectural and Archaeological Research Database Geographical Information System (SHAARD GIS)](#).
- Cultural resource management and other research and grant reports on file at DHPA.
- County Interim Reports. Indiana Landmarks, through DHPA grants, conducted surveys of historic structures in most of the Indiana counties. These reports are especially helpful in urban settings. County Interim reports also include helpful historic summaries on counties, townships, and towns.
- McGregor Industrial Site Records. These are special files for only a few counties. They represent the McGregor survey of historical/industrial structures and archaeological sites.
- [Sanborn Fire Insurance Maps](#) when in urban settings.

Additional useful records check may include, but are not limited to the following:

- historical maps and atlases (often available on-line),
- historical plat maps,
- early editions of the U.S. Geological Survey topographic maps;
- county histories (often available on-line);
- historical aerial photographs;
- GLO records.

**Methodology**

This section should be presented so that reviewers and future researchers may reconstruct what was done and why. This section is split in two categories: Field Methods and Laboratory Methods.

The Field Methods section summarizes the survey techniques utilized and specifies any variations in techniques due to varying field conditions. It also explains the intensity of the survey with specific attention to pedestrian and shovel probe transect intervals and size and depth of shovel probes. Survey methods should be carefully explained so that others using the gathered information can understand how it was obtained and what its possible limitations or biases are. Any conditions including that of the ground surface or subsurface, weather, etc. that may have affected survey results should be described. Note anything that may have obscured visibility. Specific percentages of ground surface visibility must be provided. Accompanying photographs and maps must also be referenced.

If any areas were not examined, or were examined on a scale different than a normal interval (for example, if a disturbed area was shovel tested on a 40 m interval), those areas must be described and justifications for any deviations from standard methodologies provided. Generally, all project areas undergoing 106 review are expected to be surveyed unless access is denied. Any access problems should be discussed and resolved directly with INDOT-CRO.

Please note that:
• Agricultural activity (i.e. plowing/disking) does not normally constitute a severe level of disturbance to an archaeological site and does not provide sufficient justification for a recommendation of no additional investigation.
• Residential properties (i.e. lawns) cannot be assumed to be disturbed.
• Right-of-way cannot be assumed to be disturbed.
• Fill is not a disturbance and every effort should be made to penetrate past fill deposits into natural soils.
• Any deviations from standard methodologies must be approved by INDOT-CRO and DHPA prior to fieldwork.

The Laboratory Methods section includes a prehistoric and/or historical artifact typology, presents a summary of how cultural materials were processed, and states where materials and project documentation will be curated.

Results

This section presents the details of the field reconnaissance. This section must include a clear statement of how many new sites and/or previously recorded sites were documented during the reconnaissance. The description of sites should be as follows:

12-Xy-0001

UTM coordinates:
Cultural period:
Site dimensions:
Topographic setting:
Elevation:
Soil type:
Watershed:
Nearest water source:
Distance and direction to nearest water source:

Site 12-Xy-0001 is located in the NE ¼ of the SW ¼ of the NW ¼ of the SE ¼ of Section 2, Township 3 South, Range 4 West, as shown on the USGS 7.5’ series Miami, Indiana topographic quadrangle (Figure #). The site consists of a (prehistoric lithic scatter, camp, historical scatter, etc.) discovered during (visual pedestrian reconnaissance or shovel probe testing) of an (topographic setting) consisting of (land-use) with (percent of visibility). The size of the site is 10m x 10m. The soil on which the site is located is (specific soil type and description). The following artifacts were recovered from site 12-Xy-0001:

<table>
<thead>
<tr>
<th>Count</th>
<th>Artifact Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Core (Holland Chert)</td>
<td>58.8 g</td>
</tr>
<tr>
<td>2</td>
<td>Broken flakes (Wyandotte Chert)</td>
<td>7.4 g</td>
</tr>
</tbody>
</table>
This format should be repeated for each site recorded. Sites located through systematic shovel probe survey should include a site map showing positive and negative shovel probes.

State whether alluvial floodplain areas or colluvial areas were encountered during the reconnaissance. Also, state whether any areas were subjected to Oakfield probing or auger coring. Use a map to show these locations.

The end of this section may include any statistical analyses used to make archaeological inferences (i.e. preference of raw material; site locations with regards to soil characteristics, topography, or distance to water; site densities; etc.)

**Conclusion and Recommendations**

This section summarizes the information in the Results section and establishes a framework for evaluating the significance of the sites located during the reconnaissance.

A statement of how many sites were found, including the state site number, the cultural period and site type, and significance/recommendation for each site, must be included (use a table if necessary). Each site identified during the survey must be evaluated according to the criteria for inclusion in the National Register. It is insufficient to merely state that a site is or is not significant - significance evaluations must be presented with specific reference to criteria for eligibility for inclusion in the NRHP.

The significance of a site is usually determined by the amount and quality of the information that is present on a site – Criterion D. This data must have the potential to address the criteria for eligibility and the site must have the potential to contribute to specific research questions that will add to our present knowledge about the past. The ability to characterize a site based on its size, age, artifact variability, function, integrity (lack of disturbance of soils containing artifacts), and context (regional, chronological, functional) forms the core of assessing significance. Evidence for relatively intact subsurface archaeological deposits, density of fire-cracked rock, and the level of disturbance on a site, are commonly considered factors when making eligibility determinations.

Recommendations should also be phrased in terms of “further work,” “no further work,” or “avoidance.” If data generated during a Phase I investigation clearly documents the absence of archaeological resources, or if identified sites do not meet the criteria for eligibility to the NRHP, then a recommendation of no additional work is appropriate. If the research potential for a particular site has not been exhausted at the Phase I level, further archaeological investigations may be necessary. A number of factors and questions may be considered at this point, including site integrity, presence/absence of intact stratigraphic deposits, subsurface features and/or ecofactual materials, site location, and topographic setting.

If further work is recommended, specify what the work is (i.e. Phase Ib Intensive Survey, Phase Ic Subsurface Reconnaissance, Phase II Archaeological Testing, etc.).

**References**
Check to make sure that sources cited in the body of the report are listed in this section. Generally, archaeological reports are expected to conform to the Society for American Archaeology’s Editorial Policy, Information for Authors, & Style Guide.

Appendices

Appendices can be used for artifact photographs, site forms, the artifact catalog or, if available, project plans and/or scope of work.

Figures

- All topographic maps should be at a 1:24,000 scale (include scale on map) and have a north arrow and legend. The caption of the topographic map should be properly titled, for example; “Portion of the USGS 7.5’ series Miami, Indiana topographic quadrangle showing the location of the project area.”
- If an archaeological site has been located, a site map should be included illustrating site boundaries, positive and negative shovel tests (if applicable), and topographic, natural, and man-made features. All Phase Ib shovel probes and/or units and Phase Ic deep trenching locations should be illustrated on a map.
- If a project area includes different ground cover conditions, or contains large disturbed areas, a map should be included that clearly illustrates those areas.
- All maps should include a scale, a north arrow, and legend.
- Project areas and site locations must be clearly presented.
- Aerial photographs must include the date of aerial photos in the caption, a scale, a north arrow, and legend. For example, “A 1998 aerial photograph showing the project location and land use.”
- Artifact photographs should include a scale and a brief description. Diagnostic and unique artifacts should be photographed and included in report.
- Make sure the figure numbers discussed in the report match the actual figures.

Tables

- Make sure the numbers in tables match the numbers discussed in the report.
- Tables must have Table Numbers and Titles.
7-4.0 Phase II Investigations

Phase II investigations are intended to assess the eligibility of an archaeological site whose eligibility could not be determined at the Phase I level of investigation, and to assess the effects of an undertaking upon a site that is found to be NRHP eligible. Therefore, the underlying research questions should focus on identifying issues of significance (what information might the site contain, and why is it important or not?) and evaluating integrity with respect to the identified contexts of significance. The Phase II investigation should result in evaluations of a site’s integrity, potential for additional archaeological deposits, significance, and eligibility for listing on state and national historic registers.

A variety of field methods and techniques may be implemented during Phase II investigations. These include controlled surface collection, systematic shovel probing, mechanical augering, hand-excavated test units, mechanical removal of the plowzone, and use of remote sensing and geophysical techniques.

In some cases, specialized artifact analysis methods may be necessary, such as radiocarbon dating, botanical analysis, residue analysis, or lithic use-wear studies.

The Phase II investigation must proceed according to a plan approved by the DHPA and INDOT-CRO, and should be guided by specific research questions. Generally, the DHPA requires 10% of the site’s area to be excavated, and in practice this is usually broken into 1% test unit excavation and 9% mechanical excavation. However, the amount of testing and hand excavation can be adjusted in consultation with INDOT-CRO and the DHPA. INDOT-CRO encourages that plans for Phase II investigations incorporate the following standard research questions into Phase II work plans as appropriate.

The following are examples of research questions that are often stated to guide Phase II investigations at historical and prehistoric sites. This list is not exhaustive, and other relevant research questions may be identified. The research questions should be tailored to the site being evaluated, and must be designed to help determine the eligibility of the site (typically under Criterion D, as described above). More specific research goals related to a specific site should also be included as appropriate.

7-4.1 Prehistoric Phase II Research Questions

Does the site contain components relating to poorly documented or poorly understood aspects of prehistory? (Significance)

Are the archaeological deposits suitable to addressing questions regarding the use of space and the manner in which that changed through time? (Significance)

What is the range and kind of activities carried out at the site as indicated by the assemblage composition, the lithic reduction system, and raw material usage patterns? (Significance)
Do the data reveal settlement and/or subsistence information that helps us to understand the role(s) of the site within its natural and physiographic setting? (Significance)

How is the site related to similar sites in the region? What information can the site provide regarding settlement, subsistence, or chronology and cultural change with respect to results from other sites in the region? (Significance)

Are sub-plowzone archaeological deposits preserved at the site? What are their vertical and horizontal distributions? (Integrity of Location)

Archeological sites “do not exist today exactly as they were formed. There are always cultural and natural processes that alter the deposited materials and their spatial relationships.” Can the site formation processes and post-depositional processes affecting the deposits be determined and, if so, how have they transformed the archaeological deposits? (Integrity of Location, Design, and Association)

What identifiable components are present at the site? (Integrity of Association)

Is the site a single component? If the site is multicomponent, is there horizontal or vertical separation of the components? (Integrity of Location and Association)

Are discrete activity/occupation areas preserved at the site? (Integrity of Location, Association, and Design)

Are patterns of artifact and feature distribution discernable within the site? (Integrity of Design)

Are cultural materials such as identifiable floral or faunal remains preserved in context with culturally diagnostic artifacts (such as ceramics or projectile points) or datable materials (such as charcoal)? (Integrity of Materials and Association)

7-4.2 Historical Phase II Research Questions

Does the documentary record (deeds, census data, tax rolls) provide a record of the occupants and occupational history of the site? Information from a site for which the occupants can be identified is often more likely to be considered significant. (Significance)

Does the documentary record provide an interpretive framework to aid in evaluating the significance of the archaeological component within a local, regional, or national context? (Significance)

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21 National Register Bulletin 15, Section 8, “How to Evaluate the Integrity of a Property” (http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_8.htm)

22 National Register Bulletin 15, Section 8, “How to Evaluate the Integrity of a Property” (http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_8.htm)

What can the artifact assemblage, any intact deposits, or use of space within the site reveal about market access and the socioeconomic status and cultural background of the inhabitants? (Significance)

Domestic sites with the best research potential will typically be single-family occupations (particularly if the occupation was of short duration). This is best determined in advance of fieldwork through archival research. (Significance)

For longer duration or multi-occupant sites, spatially and temporally distinct archaeological deposits or features should be present to allow deposits to be associated with particular occupants, or to reflect socioeconomic changes over time. (Significance and Integrity of Location, Materials, and Association)

For homesteads and farmsteads, is there evidence for a planned arrangement of the landscape? (Significance and Integrity of Design)

What were the function(s) of the structures and features at the site, and did these functions change over time? Can the chronology of construction episodes and changes in land use be reconstructed? (Significance and Integrity of Association and Design)

For domestic structures, can the initial date of construction and the chronology and functions of additions be reconstructed? Are changes in architectural style over time apparent? (Significance and Integrity of Design)

Was the site abandoned and left to deteriorate, calamitously destroyed, or intentionally demolished? (Intentionally demolished sites often have very little context or information preserved.) (Integrity of Materials and Association)

Are subsurface/sub-plowzone archaeological deposits preserved at the site? What are their vertical and horizontal distributions? (Integrity of Location)

Do intact subsurface features such as kitchen middens, privy shafts, building foundations, builders trenches, cellars, cisterns, or wells persist? To what degree has modern disturbance affected site integrity? (Integrity of Location)

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24 Documentary research of this type has often been reserved until after a significance recommendation has been made based upon the results of Phase II excavations. However, this research is often critical in interpreting the significance of the archaeological deposits documented during Phase II investigations and therefore the logical time to conduct it is in advance of fieldwork. The expedited transition from Phase II to Phase III allowed by the Archaeology Streamlining PA dictates that the Phase II level, prior to fieldwork, is the appropriate time for archival research.


26 Ibid

27 Ibid
Are there any cultural deposits associated with the structure foundations (if present)? (Integrity of Location and Association)

For late 19th and 20th century domestic sites, a phased approach should be taken that starts with archival research prior to fieldwork. If archival research indicates that the site was inhabited by ten different occupants over a period of sixty years, the site may be considered to have limited research potential, or field investigations may be targeted toward identifying deposits related to a particular occupation. If the background research can identify the site’s occupants and demonstrate a well-defined single period of occupation, or an occupation that brackets an important period of local, state, or national history, then it is likely that the site will be considered significant if it can be demonstrated to retain any reasonable degree of integrity.

7-4.3 Standard Work Plan for Phase II Investigations

- All investigations must be directly supervised in the field and laboratory at all times by a qualified professional archaeologist meeting the supervisory qualifications in the "Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation" (48 F.R. 44716) or 312 IAC 21-3-4 (as applicable).

- All work will be carried out in accordance with the INDOT Cultural Resources Manual, the most recent DHPA Draft Guidebook, and relevant state laws including IC 14-21-1 and 312 IAC 21 (as applicable).

- Phase II field investigations should test at least 10% of the portion of the site located within the project area and containing significant deposits. Portions of the site may be excluded from this total due to lack of integrity, location outside of the project area, or other relevant factors in coordination with INDOT-CRO. This exclusion must be described and justified in the prospectus.

- Of this area, a minimum of 0.5%-1.0% of that total should be hand excavated, depending upon the nature and integrity of the site; in a plowzone context, hand excavation may be limited to 0.25-0.5% of the site area. At least 25% of plowzone from hand excavated units should be screened through quarter-inch mesh. All intact subplowzone soils must be screened through quarter-inch mesh.

- A portion of the hand excavation total may consist of intensive shovel probing at 5m intervals across the site to systematically sample the plowzone, determine whether intact buried deposits or artifact concentrations are present, and to guide the placement of excavation units. All soils excavated from shovel probes must be screened through quarter-inch mesh.

- INDOT-CRO advises that an appropriate time to conduct an intensive shovel probe survey is at the point during the Phase Ia investigations when the potential significance of the site is recognized. Otherwise, it should be undertaken as the initial phase of the Phase II investigations.
• If a geophysical survey is planned, it should be conducted prior to the initiation of hand-excavated units.

• Mechanical excavation will be conducted using a smooth-edged bucket, and will be monitored at all times by a qualified professional. Mechanically exposed surfaces will be visually inspected for the presence of features or other archaeological deposits, and will be shovel- or trowel-scraped as necessary to facilitate identification. The locations of features within trenches will be recorded, and the locations of features and trenches will be recorded on a plan map of the site. Representative profiles of trenches will be drawn and photographed.

• Features should be completely excavated following the requirements of the DHPA Draft Guidebook and INDOT CR Manual. Additional excavation units may be placed adjacent to trenches or hand excavated units to fully expose partially exposed features or to expose features observed in the wall profile. If a large number of features are exposed during Phase II investigations on an eligible site, a sample of features may be excavated at the Phase II level (in consultation with INDOT and DHPA), with the remainder excavated during Phase III data recovery.

• At least two walls (one E-W and one N-S) of each excavation unit should be photographed and mapped in profile. Photographs must include a scale.

• Features should be photographed and mapped in plan view. Feature bisect profiles should be photographed and mapped. Photographs must include a scale.

• Any amendments to or deviations from the standard work plan must be coordinated with INDOT-CRO and must be submitted in writing to DHPA for approval in advance of implementation.

• Requests for extension of the standard work plan for a project must be approved in advance by INDOT-CRO and must be submitted in writing to DHPA for approval.

• If complex deposits or human remains are present, additional consultation with DHPA and INDOT-CRO will be necessary, and preparation of a written work plan may be required.

• If any human remains dating before January 1, 1940 are encountered, the discovery must be reported to the Indiana Department of Natural Resources and INDOT-CRO within two (2) business days. If human remains or burials that are not subject to NAGPRA are discovered, then relevant state statutes, including IC 23-14 and IC 14-21-1, will be adhered to.

7-4.4 Report Review and Distribution

Before distribution to the SHPO, one electronic copy of the archaeology report should be forwarded to INDOT-CRO for review. If the report is too large to send via email, a CD or access
to a FTP site is acceptable. After any comments from INDOT are satisfactorily addressed, the archaeology report may be distributed to SHPO for review and comment as part of the Section 106 process. The transmittal letter should indicate that the INDOT Cultural Resources Office has reviewed the document. CRO should be electronically copied on the transmittal letter and should receive an electronic copy of the final report for INDOT’s files. A bound hard copy should also be provided to CRO for reports over 60 pages (single sided) in length or for reports containing fold-out illustrations.
7-5.0 Phase II Report Guidelines

These guidelines are meant to guide the content of the reports. The format and structure of the reports can vary based on what the authoring archaeologist feels is appropriate, as long as all of the necessary and pertinent information is present. All measurements should be taken and reported in metric units (English equivalents may also be given when appropriate). Scales for all maps, photographs, and plan and profile drawings should be in metric units.

Title Page

- INDOT Designation Number
- Title (including description, location, and county of the project)
- Author(s), name of the Principal Investigator, company/organization/institution, address, and telephone number
- Signature of the Principal Investigator
- Client for whom the report is prepared, contact person, address, and telephone number
- Lead Agency or Funding Agency
- Date

Management Summary

The Management Summary summarizes the nature of the project and its conclusions and is required for all reports. It must include:

- The project title and designation number, and the nature of the undertaking.
- A brief statement of project goals and objectives should also be expressed (e.g. to evaluate the significance of an archaeological resource in terms of meeting the criteria for listing in the IRHSS and NRHP).
- A statement confirming that the archaeological work was carried out in accordance with state and federal guidelines.
- A brief description of the Phase II methodology.
- Determinations of significance and eligibility and site recommendations for avoidance, further work, or no further work.

Figures

- Figures must have figure numbers, titles and proper citations.
- All topographic maps should be reproduced at a 1:24,000 scale and should be properly titled in the caption (for example: “Portion of the USGS 7.5’ series Rexville, Indiana topographic quadrangle showing the location of the project area”).
- All maps and aerial photographs should include a metric scale and north arrow. A legend should be included if appropriate.
- Aerial photographs must include the date of aerial photos in the caption, a scale, a north arrow, and a legend (if appropriate). For example, “A 2005 aerial photograph showing the project location.”
• Artifact photographs should include a Figure Number (referenced in the text), a scale, and a brief description.
• Make sure the Figure Numbers discussed in the report match the actual figures.

Tables
• Tables must have Table Numbers and Titles.
• For quantities such as artifact counts, make sure the numbers in tables match the numbers discussed in the report.
• Tables must include totals when appropriate (e.g., artifacts by material or by unit and level).

Introduction

• The Introduction must include the name of the agency for which the archaeological work was completed, the name and designation number of the project, the location and size (length, width, and area) of the project, and what kind of impact activity is planned. It is requested that the specifications of the undertaking and scope of work be included. The location of the project is to be given in quarter sections, township and range numbers, civil township, and topographic map title.
• Two figures should be referenced in the Introduction; the first showing the exact location(s) of the sites investigated within the project area on USGS 7.5’ series topographic quadrangles preferably at a 1:24,000 scale and the second an aerial image of the project areas showing current land use. USGS topographic maps and high-quality 2005 aerial photographs are available free of charge (and without copyright restrictions) at IndianaMap.
• The names of the archaeologists who performed the survey and the dates of fieldwork.

Environmental Setting

This section briefly summarizes the physical environment of the site and includes a description of its geology, topography, physiography, vegetation, hydrology, soils, and chert resources. At a minimum the following information should be included:
• Physiographic setting and local features of the landscape, including discussions of drainage, soils, hydrology, geomorphology, and geology (these layers are available at IndianaMap);
• Regional/local Pleistocene and Holocene environmental overview (if appropriate);
• Modern environmental setting (historical and current environment and land use patterns, etc)

Cultural Background

The Phase II Cultural Background should not be a generic prehistoric and historical overview, but should be customized to focus upon the site(s) investigated. For example, it would not be necessary to discuss prehistoric cultural history in a report of investigations at a mid-nineteenth-century farmstead. Instead, the background section should provide a context for evaluating the information potential and significance of the site(s) being tested. Therefore, the section should
focus upon what is known about other sites that are similar in cultural affiliation, age, function, setting, etc. and should provide an overview of relevant theoretical questions (or gaps in archaeological knowledge) that information from the site may be able to address. Results of investigations at similar or relevant sites from the area, county, state, or surrounding regions should be discussed as appropriate. If similar or related sites are under investigation for the same project, these should be discussed as well.

**Previous Investigations**

This section should provide a summary of previous investigations at the site, including the projects for which the site was investigated, the results of the investigations, and the recommendations made. The results of previous investigations should be considered in developing a Phase II research plan and in making an eligibility recommendation for the site following the Phase II investigations.

**Methodology**

This section should be presented so that reviewers and future researchers may reconstruct what was done and why. Investigation methods should be carefully explained so that others using the gathered information can understand how it was obtained and what its possible limitations or biases are. This section should include (if applicable):

- Description of surface collection techniques.
- Description of test unit excavation, locations of test units, and percentage of site area sampled through test unit excavation.
- Description of mechanical excavation, locations of trenches or blocks, and percentage of site area sampled through trenches.
- Specialized techniques (such as geophysical survey) must be described and discussed. Refer to Appendix B for geophysical survey guidelines.
- Feature excavation techniques.
- Description of site mapping.
- Discussion of datum points and establishment of site grid.

A summary of the laboratory analysis; at a minimum, this section should include:

- Detailed description of all laboratory metric and nonmetric techniques employed.
- Typological or classificatory schemes chosen for analysis must be explained and justified, and analytical units (e.g., uniface, edge scraper, tertiary flake) must be defined.
- Relative or chronometric techniques used to associate dates or ages with artifacts or assemblages must be discussed.
- Any statistical tests or procedures used in analysis should be explained and justified.
- Specialized analyses (such as lithic use-wear, radiocarbon dating, botanical analysis, faunal analysis, etc.) must be described and discussed. If a report is provided by a specialist it should be included as an appendix.
- The plan for curation of artifacts and documentary materials such as field notes and photographs must be discussed.
Results of Field Investigations

This section presents in detail the results of the Phase II field investigations. This section must include a scaled and keyed site map depicting site boundaries, datum(s), site grid, test units and mechanically excavated blocks or trenches, as well as relevant natural and cultural characteristics. At least two walls of each test unit should be depicted in profile (N-S profile and E-W profile). Every feature should be graphically depicted and photographed in both plan view and profile. The functions of subsurface features should be identified, if possible. Subsections should include:

- Surface collection or intensive shovel probing (if applicable).
- Specialized techniques such as geophysical survey. If a report is provided by a specialist it should be included as an appendix. Refer to Appendix B for geophysical survey guidelines.
- Test Unit Excavation and Stratigraphy
- Mechanical Excavation and Stratigraphy
- Subsurface Feature Descriptions
- Distribution and density of artifacts encountered
- Site Summary
  - Horizontal and Vertical Extent of Cultural Deposits
  - Site Integrity
  - Presence of Subsurface Features
  - Site Function and Cultural Affiliation

Artifact Analysis

- Photographs or drawings of diagnostic, unusual, and other selected or representative artifacts, including metric scale.
- A complete inventory of artifacts by provenience and class (may be included as an appendix if appropriate).
- Graphs, tables, or other summary information as appropriate.
- Specialized analyses (such as lithic use-wear, radiocarbon dating, botanical analysis, faunal analysis, etc.) should be summarized and discussed. If a report is provided by a specialist it should be included as an appendix.
- Radiocarbon Results. When reporting published radiocarbon dates cite the reference with the page number. New or unpublished radiocarbon dates should be reported using the following guidelines:
  - Report uncalibrated dates and error.
  - Present the dates as years followed by one sigma or standard error.
  - State the material dated and if the sample is corrected for isotopic fractionation.
  - If calibrated dates are also presented use cal A.D. or cal B.C.
  - Identify the calibration and 1 or 2 sigma.

Consult the Society for American Archaeology’s Editorial Policy, Information for Authors, & Style Guide for further information regarding the reporting of radiocarbon results.
Conclusion and Recommendations

This section summarizes the information in the Results and Analysis sections and establishes a framework for evaluating the significance of the site(s) tested. This section should include a discussion and interpretation of the results in terms of the background cultural context, research design and goals, and stated research problems.

Were the research goals met? If not, why not?
- Did the selected methodology prove to be appropriate, and how did the constraints affect the reliability of the data collected?
- How do the results of the investigation bear upon the hypotheses being tested, the research questions being asked, or the predicted results?
- What new knowledge or understanding has been gained as a result of the investigation, and what are its theoretical implications?
- How does the site fit into a regional prehistoric or historic context?
- What future research problems may be identified based on the results and conclusions of the Phase II study?
- Each site investigated during the Phase II should be evaluated according to the criteria for inclusion in the National Register and justified. It is insufficient to merely state that a site is or is not significant - significance evaluations must be presented with specific reference to criteria for eligibility for inclusion in the NRHP (see Section 2.6.1).
- An assessment of the project impacts on each eligible site should be provided, along with recommendations phrased in terms of “further work,” “no further work,” or “avoidance.”
- If further work is recommended at a site, then recommendations for specific Phase III (data recovery) research questions and methods should be included.

References Cited

This section must conform to the Society for American Archaeology’s Editorial Policy, Information for Authors, & Style Guide. Check to make sure that sources cited in the body of the report are listed in this section, and that all bibliographic entries are cited in the report.

Appendices

Appendices can be used for artifact photographs not discussed in the text, analytical reports of specialized analyses, artifact catalogs, etc.
REFERENCES

Barile, Kerri S.

Binzen, Timothy L.

Curtin Edward V., Kerry L. Nelson and Jessica E. Schreyer

Hardesty, Donald L., and Barbara J, Little

Perazio, Philip A.

Rieth, Christina B.

Wilson, John S.
APPENDIX A- Guidance for Historical Archaeological Sites

Based on consultation with SHPO and consulting parties, this Appendix includes special guidance for completing identification and evaluation for resources that require special consideration or where consultation has resulted in specific procedures. This Appendix will be enhanced and added to as new procedures or guidance is developed.

Historical Sites

Historical sites can be divided into types based on recovered field reconnaissance data and historical research. Probably the most prevalent type of historical site encountered in Indiana consists of farmsteads and rural households. There are, however, many other types of historical sites recorded in Indiana, such as one-room schoolhouses; industrial or mining sites (e.g., brick kiln, mill, blacksmith shop, slope mine); rural communities; inns/taverns; transportation corridors or sites (e.g., trail, stagecoach stop, railroad station); forts and blockhouses; and discard/disposal sites.

The composition of the artifact assemblage plays a key role in determining site type. A farmstead or rural household is likely to be characterized by a density and diversity of a variety of artifacts, including domestic household ceramic and glasswares, personal items, structural materials, tools, fencing, and furnishings. In many cases, “archaeological properties include standing or intact buildings or structures that have direct historical association with below-ground archaeological remains”\(^{28}\) and should be included as part of the site documentation and evaluation process.

Farmsteads/Rural Domestic Sites

Rural, agricultural and domestic archaeological sites in Indiana have remained a problematic resource to define, document and assess in a consistent manner, particularly with relation to the criteria of the NRHP. These inconsistencies have resulted in limiting the effectiveness of Section 106 compliance. The basis for this dilemma stems from a lack of uniformity with respect to operational definitions, limited or absent contextual assessment, as well as inconsistent and inadequate evaluation methods. The inability to examine similar site types within a cohesive and contextualized framework that clearly outlines chronological, developmental, and geographic considerations has resulted in the evaluation of sites on an individual basis. These idiosyncratic assessments have promoted the false perception that these types of historical resources are ubiquitous (and therefore infinite), too recent, and/or too mundane for considerations of significance with respect to the criteria of the NRHP. In reality, few historical sites in Indiana are identified as farmsteads, accounting for approximately 15 percent of all of the historic sites recorded in the state as of 2010 (IDNR, DHPA 2010). Of these, less than 1 percent were found eligible for the NRHP and recommended for additional investigation and at least 13 Indiana counties have no farmstead sites listed as part of the site inventory (IDNR, 2010). These low numbers most likely reflect poorly defined site types, but nevertheless illustrate the paucity of

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data that has been collected throughout the state over the last few decades, countering assertions of over-representation in the archaeological record.

**Define Site Type/Function**

It is important to categorize the property as accurately as possible at the Phase I level. It may require utilizing a variety of sources in order to refine the chronology, type and function of the property. The aim is to avoid inaccurately categorizing the resource, such as labeling a farmstead or domestic house as a historic scatter or dump. The results of the property classification provide the subsequent framework for evaluation, which if done incorrectly, greatly hampers the evaluation process. Under-defined deposits (scatters, isolates and dumps) limit the ability to make meaningful correlations to questions of significance. This process should include:

- The consultation of historical documents, such as township plat maps that may show a farmhouse in the location of a field scatter, which should be considered when defining the site.

- Proper analysis of the archaeological data:
  - Is there a preponderance of structural materials that would suggest the presence of buildings or other structures in the vicinity (bricks, window glass, mortar, framing/roofing nails, or slate shingles)?
  - Acknowledge the potential relationship between the archaeological deposits and extant buildings and structures outside the project limits. For instance, if a historic artifact scatter is identified within the project limits and a farmhouse is visible 20m to the south, yet outside the project limits, include the farmhouse as part of site classification, documentation and evaluation.

- Use SHAARD Site Types in defining site:
  - Rural Domestic
    - Cabin
    - House
    - Dump
    - Isolate
    - Scatter
    - Other (sheet midden, domestic structure, domestic outbuilding, etc.)
  - Agriculture
    - Agricultural Field
    - Agricultural Outbuilding
    - Agricultural Settlement
    - Agricultural Structure
    - Farmstead (includes farmhouse, outbuildings and landscape features [fences, well, cisterns, etc.])
    - Other
Define Context

- Based upon geographic parameters (Local, State and National)
  - Theme and Period of Significance
    - Frontier/Subsistence (1700-1790)
    - Initial Large Scale Settlement (1790-1820)
    - Improved Transportation Routes (1820-1850)
    - Railways & Improving Agricultural Technology (1850-1900)
    - Golden Age (1900-1920)
    - Depression and War Era (1920-1945)
    - Post War Era (1945-1960)

(Examples adapted from McMahan [199129] for local and state general historic contexts)

Significance and Integrity Evaluations

- Include comparative site data (via SHAARD) based upon similar site type, geography and context.
  - Is this a type of site lacking investigation within the context and geographic parameters? What work has been done?
  - Consult historical documents in order to establish where the property fits within the historic context.
- Archaeological Data
  - Are the deposits discrete or have no discernible pattern? If discrete, discuss possible associations and interpretations.
  - Are deposits in plowed or unplowed settings?
  - Discuss the depth and nature of plowzone across site (mold-board vs. no till). Is there plowzone directly over subsoil or is a remnant A horizon present?
  - Is there evidence of razing or demolition disturbance?
    - What is the nature of the disturbance (discuss depth and horizontal extent)?
  - Is there evidence of fire or another event that caused the abrupt end to the occupation (which increases the likelihood for intact/sealed deposits)?
  - Provide an artifact assessment that includes:
    - Type (domestic, commercial, structural or within a described functional classification scheme);
    - Temporal period(s)
      - Are the deposits well defined chronologically? If so what are the time frames (well defined early, well defined late, extend over long time period encompassing multiple occupations)?

• Amount (limited quantities associated with discrete temporal periods may reflect a single short-term occupation creating a lower threshold for significance) – use minimum number of objects, which is better for illustrating variety.
  
  o Additional fieldwork may be required to establish the level of integrity through shovel testing, particularly for sites identified through surface deposits. Without some level of shovel testing, a general understanding of the nature of the subsurface across the site will be lacking; a single shovel test may not accomplish this task, particularly if considered potentially eligible and will be necessary to guide subsequent investigations.

• Historical Documentation
  
  o Need to have at least cursory knowledge of occupants and occupational time frames in order to assess potential significance of the site. These resources may include:
     Historical plats
     Post Office Rural Delivery Route Maps
     GLO land grants
     Census Records
     County histories
     Property deeds
     Probate records

Linear Resources

Linear resources are commonly associated with transportation facilities, such as roads, railroad lines, interurban lines, canals, and brick pavers. Typically, the entirety of a linear resource is not individually eligible for the NRHP. However, distinct elements of the resource may be individually eligible such as a train depot or canal lock. In coordination with SHPO, FHWA/INDOT has developed general procedures for treatment of linear resources as described below. However, specific procedures will be coordinated between INDOT-CRO and SHPO as it pertains to individual project situations.

When linear resources are partially or fully exposed within a listed or eligible National Register historic district they are likely to be evaluated as contributing resources, potentially under Criterion A, B and C. When linear resources are known to be buried, they will be assessed under Criterion D. If research reveals plans, photographs, or other materials depicting or describing the resource, they will likely be considered not eligible as the information potential is minimal.

When documenting linear resources:

• Define site boundaries by the extent of the resource that was investigated;
• Document the nature of construction through profiles and photographs and compare to standard specifications for the period (to show if adherence to standardization was applied).
In cases where information is not available concerning a buried linear resource, it may be recommended that the resource be treated as an accidental discovery during construction. A plan for documentation of the resource shall be included in the project commitments and contract documents.

When a linear resource is discovered during construction, whether expected or not, it will be treated as an accidental discovery. The treatment plan will likely include a qualified professional archaeologist documenting the discovery with photography, profile drawing, and written description of materials and design. Once the information is gathered, construction can commence. A formal report will be submitted to SHPO. This will likely preclude the need for additional monitoring.

Urban Sites

Urban sites represent the historic settlement, development, industrialization and economic choices of municipalities and residents. Resources related to these important topics may not be readily evident in areas presently covered by roads, curbs, sidewalks, parking lots, driveways, city lots, or residential neighborhoods. Features associated with early industry and manufacturing as well as residential lots (i.e. privies and wells) are often overlooked archaeologically because evidence for their presence is not sought or the context in which they may exist is dismissed as previously disturbed. Acknowledging the fact that historical resources exist in urban settings, INDOT-CRO requires the use of Sanborn Fire Insurance maps to identify past features that might be present within existing or proposed r/w in urban environments. Sanborn maps are freely available on-line for many Indiana cities and towns for the period between 1883 and 1966. Where possible, identified features should be targeted during the Phase Ia reconnaissance to establish their presence and assess their integrity and eligibility. When identified features are inaccessible, their description, location, and significance should be documented within the report of investigations.

- Additional fieldwork may be required to establish the level of integrity through shovel testing or augers, particularly for sites containing fill, which does not always equate into disturbance. Without data from shovel testing, a general understanding of the nature of the subsurface (including the depth and nature of the fill as well as the sub-fill surface) across the site will be lacking. The potential for buried and intact deposits within these settings are great since fill was typically added atop previous ground surfaces.
- Questions of integrity to address:
  - Depth of disturbance (fill does not automatically equate into disturbance)
  - Depth of fill
  - Nature of the fill (e.g. stratified with multiple episodes of filling or homogenous - a single episode)
    - Be wary of secondary deposits that may have been added as part of the fill from another location. In other instances, materials may have associations with the site, but have been mixed if there were previous episodes of demolition –note which, if possible
  - Nature of the sub-fill surface
- If unable to penetrate fill, may need to consider alternate methods, if eligibility remains unclear
- Sanborn maps should have been consulted *prior* to the field reconnaissance, to help guide the investigation and site evaluation

Consult City Directories, if applicable
APPENDIX B- Guidance for Prehistoric Archaeological Sites

Based on consultation with SHPO and consulting parties, this Appendix includes special guidance for completing identification and evaluation for resources that require special consideration or where consultation has resulted in specific procedures. This Appendix will be enhanced and added to as new procedures or guidance is developed.

Lithic Scatters

With respect to Criterion D, an archaeological site is significant if it has contributed to or has the potential to contribute to archaeological research; the size of the site is not a deciding factor.30 Small lithic scatters are often assumed to be ineligible simply based upon their small size or low artifact density, while large scatters with high artifact densities are considered potentially eligible. While large, dense scatters may contain important information, they are frequently palimpsests of information from multiple components and frequently contain mixed deposits that intrude into one another.

Small lithic scatters, in contrast, may represent single component activity areas and thus provide important information about specific activities taking place in a specific context. These sites may “represent single occupations or tasks that are less easily discerned within large, multi-component archaeological sites.”31 Small scatters are often functionally different than large sites and are likely to reflect different activities and behaviors than took place at larger sites.32 Since small scatters are typically poorly studied, little information about these activities and behaviors may have been systematically recovered in the past. In addition, such sites may “have the ability to provide information about the range of resources exploited within a particular area as well as the use of prehistoric landscapes across both space and time.”33

One criterion frequently used for assessing the significance of prehistoric sites is the recovery of diagnostic artifacts and types of identifiable chert present. Such artifacts provide context for interpreting the site at the Phase Ia level and may indicate that the site retains integrity of association. However, due to the lower artifact mass of small scatters, diagnostic artifacts (even


if present) may not be recovered during Phase I investigations. The failure to recover diagnostic artifacts during a Phase I reconnaissance survey does not mean that no diagnostic artifacts (or datable materials contained within features) are present below the surface, either within the plowzone or within sealed deposits. Therefore, nonrecovery of diagnostic artifacts during a single Phase Ia survey is not a reliable indicator that a site lacks information potential, particularly if testing consisted of only a single methodology (e.g., surface collection with no shovel probing).

So that sites are consistently evaluated from project to project, CRO recommends that Phase Ia studies should consider whether a lithic scatter meets more than one of the following criteria in order to help assess whether a site may be potentially eligible:34

1) the presence of a diagnostic artifact, such as a projectile point, to place the site in a chronological or cultural context;
2) the excavation of multiple positive shovel probes;
3) the recovery of two or more artifacts from a single shovel probe;
4) the recovery of artifacts from undisturbed soil or from beneath the plowzone;
5) the recovery of more than one artifact type (such asdebitage, chipped stone tools, ground stone tools, ceramics, etc.);
6) the type(s) of chert present;
7) the potential for subsurface features or deposits, which may contain diagnostic or datable materials (a clear description of the subsurface and a statement addressing the potential for such deposits must be provided);
8) the presence of FCR, which strongly suggests a potential for thermal features that may contain datable organic materials;
9) the recovery of exotic materials (such as obsidian or copper) or of craft items (such as stone pipe fragments or shell beads);
10) the existence of significant prehistoric archaeological sites (mounds, habitations, etc.) in the vicinity (such sites are often surrounded by small special purpose satellite sites whose significance may be easily overlooked out of the context of the cultural landscape).

If a site is believed likely to contain significant information, additional fieldwork may be required to establish the level of integrity through shovel testing, particularly for sites identified through surface deposits. Without some level of shovel testing, a general understanding of the nature of the subsurface across the site will be lacking. A single shovel test may not be adequate to accomplish this.

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Isolated Finds

A single recovered artifact is classified as an isolated find. While some artifact types, such as projectile points, may have commonly been lost or discarded in isolation, it is likely that many “isolated” artifacts actually represent lithic scatters that are too small or low density to be identified by standard Phase Ia methodologies. Since such sites are likely the result of a single brief event (such as pausing to rejuvenate a tool), they will typically lack the potential to contain important information. However, some apparently isolated artifacts may warrant additional investigation if they reflect a culture or time period that is very poorly documented or understood (e.g., a Paleoindian projectile point) or if they suggest that more substantial deposits may be present that cannot be identified through Phase Ia testing (e.g., a sherd of prehistoric pottery).
APPENDIX C- Geophysical Survey Guidelines

Geophysical survey techniques can provide a relatively quick, nondestructive means of obtaining information about the subsurface structure of archaeological sites. Under good conditions, geophysical techniques may be useful for the interpretation of sites such as lithic and historic scatters, where documenting the presence of intact subsurface cultural deposits is crucial for evaluating the site’s information potential. Geophysical survey results may also be useful for guiding the design and implementation of Phase II investigations.

The quality of geophysical data depends upon the selection of the appropriate techniques (as determined by experienced practitioners), upon the selection of an appropriate sampling density for data collection, and upon the spatial accuracy of the resulting data. In order to ensure sufficient spatial accuracy, geophysical survey grids should be laid out to survey quality specifications (≤0.1 m accuracy). Since there is a tradeoff between sampling density (and therefore data resolution) and time (and therefore expense), wider sampling intervals are sometimes used for initial site evaluations. Typically, 0.5 m traverse and 0.5 m measurement intervals for resistivity and 0.5 m traverse and 0.125 m measurement intervals for magnetometry are considered the minimum acceptable sampling intervals. In some instances, the cost of initially sampling at a higher density may be offset by the necessity of surveying the site area only once.

The usefulness of geophysical data depends not only upon their quality and their proper interpretation by experienced practitioners, but also upon the ability to precisely locate geophysical anomalies for additional investigations (such as high density resurveys to delineate small features, additional surveys using complementary geophysical techniques, or archaeological test excavations). A detailed data image with cultural anomalies clearly marked is not useful if archaeologists cannot determine where on the ground to place excavation units to investigate those anomalies.

Therefore, it must be possible to accurately relocate or reconstruct the geophysics grid. If the geophysical survey is conducted during Phase I investigations, the grid must be reproducible to allow anomalies to be accurately located in the field during subsequent investigations and to allow the geophysical grid to be tied into the archaeological grid system. This may be accomplished by marking grid corners with laths and stakes (if additional archaeological investigations will follow shortly after the geophysical survey) or with permanent datum points (these should be non-ferrous if additional magnetic or EM survey is likely to be undertaken at the site). In addition, the grid corners must be tied into existing permanent control points using a total station, or else the coordinates of the grid corners must be recorded using a survey quality (sub-decimeter accuracy) GPS receiver. If geophysical survey is performed in conjunction with Phase II or III investigations, it should be directly tied to the excavation grid system.

To ensure proper interpretability of geophysical data presented in archaeological reports, INDOT-CRO requires that the following information be provided:

- pedological and geological setting of survey area
- types, manufacturers, and models of instruments used
- dates of data collection and names of operators
- description of survey conditions
- traverse and sampling intervals
- probe configuration and mobile probe spacing (for resistance surveys)
- center frequency of antenna (for GPR)
- sensor type and configuration (for magnetic surveys)
- coil separation and frequency (for EM/conductivity surveys)
- traverse direction (parallel or zigzag)
- total area surveyed

In addition, the survey grid layout must be accurately described and illustrated. Images of processed data must be accompanied by full details of the processing history (a list of all procedures, filters, and algorithms applied and the processing software package used); this may be given in the figure caption or in the accompanying text. An image should also be provided of the raw, unprocessed or minimally processed (e.g., despiked only) data. If markups showing anomalies of interest or other explanatory or interpretive information are included, these should be provided after (or side by side with) an unmarked image of the same data at the same spatial scale and extent.

Survey maps and images of data must include a north arrow and a metric scale bar, as well as a scale in the appropriate units (e.g., ohms, mS/m, nT) indicating the range of the data presented. Resistivity pseudosections and ground penetrating radar profiles should include both a horizontal metric scale and a vertical time scale. A scale of estimated depth may also be included if appropriate. Topographic correction should be considered for areas of significant relief.

If a technical report is provided to the archaeologist by a geophysical consultant, this should be included with the archaeological report as an appendix. Please refer to the English Heritage Geophysical Survey in Archaeological Field Evaluation guidelines for more detailed information regarding geophysical survey methods, practice, and reporting.
APPENDIX D- Curation and Sampling Guidelines

Archaeological curation refers to the storage, management, care, conservation, and preservation of materials and associated records. Under Title 23, United States Code, for federal-aid highway projects the state DOTs are the responsible agencies for all aspects of project development, including environmental review and archeological survey work before and during construction. State DOTs are also responsible for the long-term curation of archeological materials recovered from federal-aid transportation projects. Federal and state regulations require that materials recovered by archaeological work for FHWA/INDOT projects, and the records, photographs, maps, and other documents resulting from and pertaining to the work be curated, unless a landowner chooses to keep the artifacts. If the landowner decides to keep artifacts, further analysis may be necessary in consultation with INDOT-CRO and DHPA. For federal aid projects, the curation facility must be a qualified curatorial facility (QCF).

A QCF is a facility that meets the standards identified in 36 CFR 79.9. The facility must be in Indiana and have the physical capacity, capabilities, resources, and professional staff to curate on a long-term basis in a professional and acceptable way. Qualified curatorial facilities exist at some universities and at the Indiana State Museum. CRO should be contacted for further information about curatorial facilities.

Archaeological reports are to state where materials are or will be curated. Materials collected by archaeological consultants having a QCF are to be curated at that facility unless otherwise directed by INDOT. Materials collected by archaeological consultants that do not have a QCF are to be curated at a QCF under an agreement between the consultant and the facility. Curation will be at that facility unless otherwise directed by INDOT. For INDOT administered projects, copies of relevant curation documents are to be sent to CRO.

Curation of materials recovered for INDOT projects that are 100% state funded are subject to state regulations. The regulations are very similar to the federal requirements except that a QCF is not specified (312 IAC 21-3-7).

INDOT has the right to determine and/or approve where materials from INDOT administered projects are curated.

INDOT-CRO recognizes that curation space is increasingly limited at most facilities, and that not all artifact types have sufficient research potential to warrant permanent curation. The following guidelines should be used in determining what materials from a collection should be retained for curation. Before applying these guidelines, consultation should occur with INDOT-CRO and DHPA to determine any exceptions based on specific site characteristics. Please note that a record of all discarded materials (including description, count, weight, and any other required measurements) must be included with the curated collection.
**Discard**

- unidentified corroded metal pieces
- sheet metal fragments
- melted metal
- melted glass
- completely exfoliated ceramics
- burnt or heavily fire damaged undecorated/unmarked ceramics
- fragmentary cut and wire nails
- unidentifiable corroded nails (complete nails must be measured for length/pennyweight)
- screws/bolts/nuts/washers/staples/etc.
- wire
- 20th century brick (unmarked), mortar, plaster
- architectural stone
- concrete, cement, and asphalt
- coal and coal slag/cinders
- 20th century flat glass
- asphalt shingles
- linoleum
- electrical wiring, fuses, and fixtures
- unidentifiable plastic fragments
- late 19th-20th century mass-produced or machine-made tools (hammers, screwdrivers, crowbars, files, chisels, wrenches, shovels, etc.) from nonindustrial contexts

FCR (must be sorted by material, counted, and weighed prior to discard)

**Representative Sample**

- undecorated plain whiteware and ironstone body sherds
- undecorated yellowware body sherds
- stoneware body sherds
unidentifiable/unmarked glass container fragments
unmarked bottles, bases, and finishes (machine made)
lamp chimney glass
19\textsuperscript{th} century flat glass from most contexts \textsuperscript{2}
complete machine cut and wire nails (discarded complete nails must be measured for length/pennyweight)
19\textsuperscript{th} century brick, mortar, plaster
marked 20\textsuperscript{th} century brick

\textbf{Keep}
diagnostic artifacts
decorated/marked ceramics (all types)
ceramic footers and rims (all types)
marked bottles and bases (machine made) \textsuperscript{3}
bottles, bases, and finishes (non-machine made)
marked/embossed glass container fragments
all flat glass from short-duration 19\textsuperscript{th} century sites or from pre-20\textsuperscript{th} century feature contexts
early 19\textsuperscript{th} century cut nails
wrought nails
all artifacts from early to mid-19\textsuperscript{th} century historical sites other than coal, coal slag/cinders, and unidentifiable corroded metal artifacts (in consultation with INDOT-CRO)

\textsuperscript{1} Generally a 10\% sample. The sample should be representative of the spectrum of features and other contexts present at the site. The retained sample should include at least one example of each variety within a type (e.g., each glaze/slip combination on stoneware, each pennyweight of nail, each type or manufacturing method of bottle). For some collections this may require retaining a greater than 10\% sample. For large assemblages (N>100), a reduced percentage sample may be determined in consultation with INDOT-CRO if necessary.

\textsuperscript{2} Color, count, and thickness of all pieces should be recorded prior to sample retention and discard. Color, count, and thickness MUST be recorded for all pieces discarded. For very large assemblages (N>500), thickness may be measured on a percentage of discarded pieces in consultation with INDOT-CRO.

\textsuperscript{3} If multiple identical artifacts are present, one example of each may be retained and the remainder discarded.
APPENDIX E- Blanket Permit for INDOT Property
June 8, 2009

Staffan Peterson
Cultural Resources Section
Office of Environmental Services
Indiana Department of Transportation
100 North Senate Avenue, Room N642
Indianapolis, Indiana 46204

Re: Request for approved permit for Phase Ia field investigations on Indiana Department of Transportation ("INDOT") properties.

Dear Mr. Peterson:

The Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology (IDNR-DHPA) has reviewed the plan submitted by Shaun Miller of your staff for personnel to conduct Phase Ia field investigations on INDOT properties under Indiana Code (IC) 14-21-1-16. The plan is acceptable for all personnel currently on the Qualified Professionals Roster for Archaeology who are INDOT personnel, personnel with archaeological firms under contract to INDOT, and personnel with sub-consultants contracted by engineering/environmental firms, with the following conditions:

1. The methods and techniques for Phase 1 archaeology in the most current Guidebook for Indiana Historic Sites and Structures Inventory—Archaeological Sites will be adhered to for all projects under this approved plan.
2. This plan is for INDOT properties only.
3. All projects must be directly supervised in the field and laboratory by a qualified archaeologist meeting the supervisory criteria of 312 IAC 21. This plan is non-transferable.
4. This authorization does not apply to areas where known, large multicomponent, and/or significant archaeological sites are present; earthworks and/or mound sites are present, anticipated, or encountered; burial grounds, cemeteries, and/or sites with human remains present, anticipated, or encountered; and unique sites or cultural landscape areas (e.g., Wabash and Erie Canal sites) are present, anticipated, and/or encountered. In such cases, if there is to be any disturbance of the ground, a plan for archaeological investigations must be submitted to the Indiana Department of Natural Resources for approval in advance of fieldwork activities.
5. The IDNR-DHPA must receive notification of the survey and maps with locations and a description of the nature of the project and the project area(s) prior to the fieldwork activities. Depending upon the nature of the project, project area, and other considerations, the IDNR-DHPA may require a more detailed plan or different methodology in certain cases.
6. Archaeological records checks for all projects must be completed in advance of field investigation.
7. If human remains dating on or before December 31, 1939 are encountered, the discovery must be treated in accordance with IC 14-21-1 and 312 IAC 22. In that event, please call (317) 232-1646.
8. Any proposed revision of standard reconnaissance methodology must be submitted to our office, in writing, for review and comment prior to implementation.
With these conditions, the plan for scientific investigations is approved (#2009032). A copy of this letter, along with proper identification, should be carried by archaeologists in the field. This will ensure minimal confusion should they be requested to produce proper identification in the field by law enforcement personnel.

If you have any questions regarding this authorization, please contact Dr. Rick Jones at 317/232-1646.

Very truly yours,

James A. Glass, Ph.D.
Director, Division of Historic Preservation and Archaeology

JAG:RJ:jj
PART II
CHAPTER 8
Assessments of Effect

March 2014
8-1.0 Overview

After the identification of historic properties within the APE is complete for both above-ground and archaeological resources, assessment of effects will commence. There are three possible effect findings:

1. **“No historic properties affected”** - This finding is appropriate when it is determined that no historic properties are present in the APE or there are historic properties present, but the undertaking will not have any effect on them;

2. **“No adverse effect”** – This finding is appropriate when the undertaking may impact a historic property, but that impact will not alter the characteristics (directly or indirectly) that qualify a property for listing on the NRHP;

3. **“Adverse effect”** – A finding of “adverse effect” is appropriate when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling or association.

Making an effect finding and preparing supporting documentation as specified in 36 CFR Section 800.11(d) and (e) as applicable is required to successfully conclude the Section 106 process. The following chapters describe in detail the three effect finding types, documentation and consultation requirements.

8-2.0 Finding of "No Historic Properties Affected"

Once efforts to identify historic properties are complete and assessment of effects is concluded, if the applicant or their consultant believes that no historic properties are present or that historic properties are present but the project will have no effect on those historic properties [as defined at 36 CFR § 800.16(i)], they should proceed as follows:

1. Forward the recommendations and support documentation to INDOT-CRO for approval. Two templates have been prepared that may be used, by applicants or their consultants, to submit finding recommendations and the required support documentation. The finding template (“Sample Format for a Section 106 Recommendation for Area of Potential Effect, Eligibility Determinations, and Effect Findings and Section 4(f) Compliance Requirements”) is included in Part V Forms. The template for documentation supporting a “No Historic Properties Affected” finding, as specified in 36 CFR § 800.11(d), is included in Part V Forms (“Sample Format and Guidance for Documenting FHWA’s NO HISTORIC PROPERTIES AFFECTED finding”);
2. If INDOT agrees that no historic properties will be affected by the undertaking, INDOT will sign the finding. If INDOT disagrees with the recommendation, requires further information before reaching a decision, or requires revisions to the documents, it will send an e-mail to the applicant or their consultant setting forth its position. Once approved and signed, INDOT will send the signature page to the applicant or consultant, who will in turn distribute the “finding” and 800.11(d) documentation to the SHPO for concurrence. Copies of this finding and 800.11(d) documentation should also be provided to all consulting parties and should be made available for public comment. The transmittal letter should note that “if no one takes exception to the ‘no historic properties affected’ recommendation within 30 days, the Section 106 process for this project will be concluded.”;

3. Section 106 is concluded once the SHPO has agreed--in writing--with the finding or if, within 30 days of receipt, neither SHPO nor another consulting party has objected to the finding. If the SHPO or any consulting party objects--in writing--to INDOT's finding within 30 days of receipt of an adequately documented finding, the documentation will be submitted to FHWA for resolution;

4. A public notice should be issued providing the public 30 days to submit comments on INDOT’s finding. The public notice can be issued simultaneously with the distribution of the 800.11 documentation, once INDOT has signed the finding. A template providing guidance on the language to be placed in the public notice is provided in Part V Forms. If there is no disagreement with the “no historic properties affected” finding after the 30-day consultation and public comment period, the Section 106 process is concluded.

**8-3.0 Assessment of Adverse Effects**

When historic properties are identified within the APE and they will be affected, it is necessary to apply the criteria of “adverse effect” to determine the appropriate finding of effect, taking into account consulting party input. “Adverse effects” may include “reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.”¹ “Adverse effects” on historic properties include but are not limited to:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous materials remediation, and provision of handicapped access, that is not consistent with the Secretary’s standards for the treatment of historic properties and applicable guidelines;²
- Removal of the property from its historic location;

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¹ 36 CFR Section 800.5(a)(1).
² 36 CFR Part 68.
• Change of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance;

• Introduction of visual, atmospheric or audible elements that diminish the integrity of the property’s significant historic features;

• Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

• Transfer, lease or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.³

Questions to take into account during the effects assessment include: Will right-of-way be acquired from the historic property? Will any part of the property be demolished? Will any landscape features be removed, etc? Will there be introduction of visual elements that will diminish the property’s setting and feeling?

When assessing “adverse effects,” it is important to understand why the property is significant and what aspects of integrity are most critical to convey that significance. For instance, removal of mature trees adjacent a historic residence may be seen as an “adverse effect” due to diminishment of the property’s setting and feeling. Conversely, removal of mature trees adjacent a historic industrial property is less likely to have an “adverse effect.”

When preparing the effect determination, specifically reference the examples of “adverse effect” per 36 CFR Section 800.5(a)(1). Keep in mind that the examples of “adverse effect” are not inclusive of all types of “adverse effects.” Nevertheless, referencing the examples indicates that the regulations and its description of “adverse effects” were considered.

Only one “adverse effect” determination for one historic property is enough for the whole project to have an “adverse effect” finding. However, a finding of “adverse effect” does not mean that the project is a “bad project” or that a project cannot proceed; it simply means that alternatives to affecting the historic resource and ways to minimize affecting the historic resource must be considered. Ultimately, the decision to proceed rests with the federal agency.

FHWA and INDOT encourage phased application of the criteria of “adverse effect” for projects involving alternatives that consist of corridors or larger land areas, pursuant to 36 CFR § 800.5(a)(3). When an applicant believes such an approach is appropriate, the applicant should consult with FHWA and INDOT.

³ 36 CFR Section 800.5(a)(2).
8-3.1 Finding of “No Adverse Effect”

Upon completion of assessment of “adverse effects,” if the applicant or their consultant believes that the undertaking will have “no adverse effect” on historic properties, they should proceed as follows:

1. Forward the recommendations and support documentation to INDOT-CRO for approval. Two templates have been prepared that may be used, by applicants or their consultants, to submit finding recommendations and the required support documentation. The finding template (“Sample Format for a Section 106 Recommendation for Area of Potential Effect, Eligibility Determinations, and Effect Findings and Section 4(f) Compliance Requirements”) is included in Part V Forms. The template for documentation supporting a “no adverse effect” finding, as per 36 CFR Section 800.11(e), is included in Part V Forms (“Sample Format and Guidance for Documenting FHWA’s NO ADVERSE or ADVERSE EFFECT finding”);

2. If INDOT agrees that no historic properties will be adversely affected by the undertaking, INDOT will sign the finding. If INDOT disagrees with the recommendation, requires further information before reaching a decision, or requires revisions to the documents, it will send an e-mail to the applicant or their consultant setting forth its position. Once approved and signed, INDOT will send the signature page to the applicant or consultant, who will in turn distribute the “finding” and 800.11(e) documentation to the SHPO for concurrence. Copies of this 800.11(e) documentation should also be provided to all consulting parties and should be made available for public comment. The transmittal letter should note that “if no one takes exception to the ‘no adverse effect’ recommendation within 30 days, the Section 106 process for this project will be concluded.”;

3. Section 106 is complete when SHPO has agreed--in writing--with the finding or if, within 30 days of receipt, neither SHPO nor another consulting party has objected to the finding. If the SHPO or a consulting party objects in writing to INDOT’s finding of “no adverse effect,” then INDOT shall consult with FHWA and the objecting party to resolve this objection. If after such consultation FHWA determines that the objection cannot be resolved through consultation, then FHWA shall forward all documentation relevant to the objection to the ACHP, including FHWA’s proposed response to the objection. Within 15 days after receipt of all pertinent documentation, the ACHP shall exercise one of the following options:

   a) Advise FHWA that the ACHP concurs in FHWA’s proposed response to the objection, whereupon FHWA will respond to the objection accordingly; or

   b) Provide FHWA with recommendations, which FHWA shall take into account in reaching a final decision regarding its response to the objection;
c) Should the ACHP not exercise one of the above options within 15 days after receipt of all pertinent documentation, FHWA may assume ACHP’s concurrence with the proposed response to the objection.

After the 15-day time period expires, or after FHWA receives and considers the ACHP’s advisory opinion on the effect finding, the FHWA will issue a letter to all consulting parties documenting the final finding.

4. A public notice should be issued providing the public 30 days to submit comments on INDOT’s finding. The public notice can be issued simultaneously with the distribution of the 800.11 documentation, once INDOT has signed the finding. A template providing guidance on the language to be placed in the public notice is provided in Part V Forms. If there is no disagreement with the “no adverse effect” finding after the 30-day consultation and public comment period, the Section 106 process is concluded.

8-3.2 Finding of “Adverse Effect”

Upon completion of assessment of “adverse effects,” if the applicant or their consultant believes that the undertaking will have an “adverse effect” on historic properties, they should proceed as follows:

1. Forward the recommendations and support documentation to INDOT-CRO for approval. Two templates have been prepared that may be used, by applicants or their consultants, to submit finding recommendations and the required support documentation. The finding template (“Sample Format for a Section 106 Recommendation for Area of Potential Effect, Eligibility Determinations, and Effect Findings and Section 4(f) Compliance Requirements”) is included in Part V Forms. The template for documentation supporting an “adverse effect” finding, as per 36 CFR Section 800.11(e), is included in Part V Forms (“Sample Format and Guidance for Documenting FHWA’s NO ADVERSE or ADVERSE EFFECT finding.”);

2. If INDOT agrees with recommendations of “adverse effect,” it will forward the recommendations to FHWA for signature. After FHWA signature, the document will be returned to the applicant or their consultant for distribution to the SHPO and consulting parties for review. If INDOT disagrees with the recommendation, requires further information before reaching a decision, or requires revisions to the documents, it will send an e-mail to the applicant or their consultant setting forth its position;

3. FHWA will notify the ACHP of the likely "adverse effect,” provide them with a copy of the Section 800.11(e) documentation (supplied by the consultant), and invite the ACHP to be a consulting party. If there is no known controversy, FHWA will notify the ACHP concurrently with the finding review period. When there is controversy, FHWA will notify the ACHP at the conclusion of the finding review period to provide the ACHP with the latest consultation summary. In any case, the ACHP will notify FHWA within 15 days of receipt of the notice whether it will participate.
4. The applicant or their consultant should send the “finding” and the documentation (800.11[e]) to the SHPO for concurrence. Copies of this 800.11(e) documentation should also be provided to all consulting parties and should be made available for public inspection.

5. Where deemed appropriate by INDOT or FHWA, the transmittal letter forwarding the Section 800.11(e) documentation should schedule a Section 106 consulting parties meeting to discuss that documentation. This will enable INDOT and FHWA to ensure that all reasonable minimization options have been evaluated and will allow INDOT and FHWA to work with the consulting parties to resolve outstanding issues.

6. The project may proceed if the SHPO has agreed--in writing--with the finding or if, within 30 days of receipt, neither SHPO nor another consulting party has objected to the finding. If the SHPO or any consulting party objects--in writing--to INDOT's finding within 30 days of receipt of an adequately documented finding, the documentation will be submitted to FHWA for resolution.

7. A public notice should be issued providing the public 30 days to submit comments on INDOT’s finding. The public notice can be issued simultaneously with the distribution of the 800.11 documentation, once FHWA has signed the finding. A template providing guidance on the language to be placed in the public notice is provided in Part V Forms. If no one disagrees with the finding after the 30-day consultation and public comment period, the resolution of “adverse effect” stage of the Section 106 process may begin.

8. If a disagreement arises between the applicant, INDOT, FHWA, and/or the SHPO regarding resolution of “adverse effect,” an additional Section 106 consulting party meeting involving the ACHP may be necessary.

Please see Part II Chapter 9 for specific guidance on resolution of “adverse effects.”
PART II
CHAPTER 9
Resolving “Adverse Effects”

March 2014
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9-1.0 Overview

This chapter explains the process by which “adverse effects” are resolved. When there is an “adverse effect,” in consultation with SHPO and other consulting parties, measures are undertaken to minimize and mitigate those effects. As explained in more detail in Chapter 9-2.0, these measures are usually formalized through the execution of a Memorandum of Agreement (MOA). When archaeological sites are adversely affected, typical mitigation consists of Phase III investigations (data recovery). This chapter explains the procedures for completing Phase III investigations as part of mitigation.

9-2.0 Procedures for Resolving “Adverse Effects”¹

Once a finding of “adverse effect” is made, the input of consulting parties should be elicited to identify ways to achieve the project purpose and need while avoiding, minimizing, or mitigating “adverse effects.”

The consultation about mitigation should take into consideration the value of the historic property or district, the parts of the undertaking that are essential to achieving the purpose and need of the project, and the adequacy of planning and of funding to achieve both the project objectives and a satisfactory resolution of “adverse effects.”

Consultation to resolve “adverse effects” usually results in a Memorandum of Agreement (MOA), which outlines agreed-upon measures that the agency will take to avoid, minimize, or mitigate “adverse effects” upon historic properties. The MOA serves as a binding legal document that holds parties responsible to commitments stipulated in the document. First consideration is given to alternative ways of accomplishing the agency’s goals without impacting NRHP-listed or eligible properties. This may include consideration of alternate sites or designs, to evaluate the importance of the undertaking against the severity of its effects. If the consideration of alternatives does not result in a viable alternative solution that would avoid adverse impacts, then a discussion and evaluation of mitigation measures can begin.

Mitigation refers to actions that reduce or compensate for the “adverse effect” an undertaking may have on a NRHP-listed or eligible property, often written as “stipulations” of the MOA.² Mitigation may include avoidance, alternative treatments, redesign, relocation, archaeological data recovery, documentation of the historic property, shielding a historic property with noise walls or visual barriers, public education initiatives or interpretive measures. Specific mitigation measures are not prescribed under Section 106, and alternative or creative mitigation measures are encouraged by the ACHP.

¹ It should be noted that for projects involving “adverse effects” to historic bridges, the procedures outlined in the Programmatic Agreement Regarding the Management and Preservation of Indiana’s Historic Bridges shall be implemented.
² 36 CFR Section 800.11(e).
It is recommended that a consulting parties meeting be held to reach consensus on appropriate mitigation measures. In some cases correspondence can satisfactorily be used to reach agreement, but if mitigation stipulations cannot be agreed upon, the project sponsor or their consultant should notify INDOT and FHWA and coordinate a Section 106 consulting parties meeting to resolve the disagreement. On rare occasions, if consultation proves unproductive and the “adverse effect(s)” cannot be resolved, the FHWA, or the SHPO or the ACHP itself, may terminate consultation. If the SHPO terminates consultation, FHWA and the ACHP may conclude an MOA without SHPO involvement; however FHWA will make every effort to resolve “adverse effects”.

Once the mitigation stipulations have been negotiated and agreed upon by the signatories, a draft MOA should be prepared and circulated to the signatories for review and comment. [It should be noted that if a project is not controversial and does not have outstanding issues, a draft MOA may be circulated concurrently with the distribution of the materials specified in 36 CFR § 800.11(e)].

The MOA should follow the template found in PART V FORMS. The version date of the MOA should reflect the date that the MOA is sent to the signatories for review and comment. Depending upon the number of revisions that are required to finalize the terms of the MOA, the version date may change several times. Once the signatories agree to the terms, the version date on the MOA should not change unless additional modifications to the terms are required and agreed to by the signatories.

Mitigation stipulations should be entered into INDOT’s Project Commitments Database by the consultant or INDOT project manager as directed. The commitments in the Project Commitments Database are carried forward from inception through design to construction. Any questions entering commitments related to cultural resources should be directed towards INDOT-CRO. In addition, mitigation stipulations may also result in development of special provisions in the contract.

9-3.0 MOA Signature Process

For most projects, the applicant or their consultant may coordinate the mitigation stipulations amongst the signatories. Once all signatories are satisfied with the MOA, the applicant or their consultant must obtain signatures from all signatories. Typically, the MOA may be signed by three categories of participants: required signatories; invited signatories; and concurring parties.

Per the Section 106 regulations, the required signatories are the federal agency (FHWA) and the SHPO. INDOT must be invited to be a signatory on all MOAs. For Local Public Agency (LPA) projects, the appropriate representative(s) of the LPA must also be invited to be a signatory. If any other agency or entity has specific responsibilities under the MOA, they too should be an invited signatory. Finally, if the ACHP is involved in consultation, they will also be a required signatory. Concurring parties are agencies or entities that have participated in the consulting

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3 36 CFR Section 800.6(c).
process. They are invited to sign to express agreement with the MOA. However, concurring parties do not have the rights of signatories; their approval is not needed to execute, amend or terminate the MOA.

Once the terms of the MOA are finalized, INDOT and FHWA use a concurrent process for obtaining signatures. The applicant or their consultant should provide, in writing, each signatory with a copy of the MOA and each signature page. The MOAs provided to the signatories must be identical, they must contain the terms that the signatories agreed to previously, and they must show the same version date. The written request should ask the signatory to review and sign the signature sheet within 30-days of receiving the documents. Each signatory should only return their signed signature sheet page.

After the applicant or their consultant receives all signature pages back from the signatories (except FHWA), they should forward the completed signature pages to INDOT. INDOT will request FHWA’s signature. FHWA is typically the last entity to sign the MOA. After FHWA has signed the MOA and returned the signature page to the project sponsor, the project sponsor will distribute copies of the MOA with all completed signature pages to each signatory and to all consulting parties.

The FHWA will submit the MOA to the ACHP, and “cc” INDOT and the project sponsor. The submittal of the MOA to consulting parties and to the ACHP concludes FHWA’s procedural requirements under Section 106. The environmental document for the project may not be approved until after the FHWA has filed the MOA with the ACHP.

9-4.0 Failure to Agree on the Terms of a MOA

The applicant or their consultant should forward the documentation set forth in Section 800.11(g) as soon as it is determined that the SHPO is unwilling to sign an MOA. Per 36 CFR § 800.6(b)(1)(v), FHWA should request the ACHP to join the consultation and provide the ACHP with the documentation set forth in Section 800.11(g).

Per Section 800.6(b)(2), if the ACHP decides to participate in the consultation, FHWA and INDOT will consult with the consulting parties and ACHP to seek ways to avoid, minimize or mitigate the “adverse effects.” If FHWA, INDOT, SHPO, and the ACHP agree on how the “adverse effects” will be resolved, they should execute an MOA.

After consulting to resolve “adverse effects” pursuant to Section 800.6(b)(2), FHWA, INDOT, SHPO, and ACHP may determine that further consultation will not be productive and will terminate consultation. Any party that terminates consultation should notify the other consulting parties and provide them the reasons for terminating in writing. Per 36 CFR § 800.7(a)(2), if the SHPO terminates consultation, INDOT, FHWA and the ACHP may execute a MOA. If FHWA

Remember:
If ANY changes are made to the MOA after the signatories have already agreed upon the terms, then the revised MOA must be circulated for review and comment before signatures are obtained.
terminates consultation, the FHWA Administrator shall request that the ACHP comment pursuant to 36 CFR § 800.7(c).

9-5.0 Amending a MOA

In certain circumstances the stipulations agreed upon in an MOA are not feasible to implement. When it has been determined that the MOA mitigation measures will not be implemented as stipulated, coordination with the MOA signatories must commence. Usually, the signatories agree to new alternative mitigation measures in an amended MOA. Once the signatories agree to amend the MOA, then a draft amended MOA will be circulated for comment. After the amended MOA’s terms are agreed upon, the signature process will follow that of any MOA. Please see Part V Forms for amended MOA example.

Tips for drafting a MOA

- Carefully consider the language in the MOA. The MOA is a legally binding document, so make sure all the terms and definitions are specific and accurate;
- The signatories should carefully consider the mitigation measures to ensure that they will be able and willing to fulfill them;
- Clearly describe which agency or entity will be responsible for which task;
- Always include a “sunset clause” that states a specific deadline by which the stipulations must be fulfilled. When setting a deadline, consider potential project delays so that it may easily be met. For example, set the deadline as “X years after completion of the construction of the project” rather than “by May 5, 2015.”;
- Stipulations should clearly outline future obligations, such as archaeological data recovery or noise walls;
- Follow the FHWA MOA template that is provided in this manual (see Chapter 3 and Appendix Q).
- Follow-up from time-to-time to make sure the terms of the MOA have been correctly carried out;
- Include the stipulations of the MOA in the Environmental Commitments Database.
9-6.0 Phase III Data Recovery Investigations

When archaeological sites are adversely affected, mitigation is usually in the form of Phase III data recovery investigations. While Phase III investigations are commonly used as mitigation of archaeological sites, the ACHP has stated that data recovery is not always the only--or necessarily the most appropriate--means for mitigating “adverse effects.” Nevertheless, when Phase III mitigation is determined as the preferred mitigation option, the steps for completing the investigations will be outlined in the MOA. Once the Phase III investigations are complete and the Phase III report has been accepted by INDOT-CRO and the SHPO, no additional coordination is necessary regarding the archaeological site unless human remains and/or burial objects are encountered.

The Phase III investigations must proceed according to a plan approved by INDOT-CRO and the DHPA, and be guided by specific research questions. Since every archaeological site is different, every Phase III plan will be tailored to the specific site and the qualities or characteristics that make it eligible. Generally, the DHPA requires a minimum of 25% of the site’s area within proposed right-of-way be excavated during a Phase III, beyond the 10% excavated during Phase II testing (for a total 35% minimum). INDOT-CRO encourages that plans for Phase III investigations adhere to the following guidelines.

9-6.1 Phase III Research Questions

By the time a site is recommended as NRHP-eligible, its significant qualities and characteristics will typically have been identified. Since these characteristics will vary from site to site, it is not practical to develop a set of standard research questions for data recovery. Research questions should build off those developed prior to Phase II testing but be dependent upon site particulars and the type of data that has been recovered. An additional goal of every Phase III research design should be the synthesis of the newly recorded information with other relevant information regarding the same culture, time period, region, etc.

9-6.2 Standard Work Plan for Phase III Investigations

The research design (work plan) should address research questions related to the national, regional, or local significance of the site and its context, the internal spatial organization of the site, and its social and economic relationships to other sites, with respect to relevant contemporary theoretical developments. The plan must be designed to document the qualities or characteristics that make the site significant. If the site was determined to be significant because of its potential to yield important information, the investigation should attempt to extract the maximum amount of data relevant to specific research questions that are designed to make important contributions to our knowledge of the past. Test implications or expectations should be considered for each research question or hypothesis on which the investigation will focus. Data recovery and analysis should be accomplished in a thorough, efficient manner, using the most cost-effective techniques practicable. Adequate time and funds should be budgeted for fulfillment of the overall plan.
The data recovery strategies, and the questions they are designed to address, will depend in part upon the age, cultural affiliation, type, size, geographic location, and condition of the site, and must be tailored to those and other relevant factors. The plan should build directly upon the results of previous archaeological investigations at the site, especially as they pertain to the nature and distribution of features and cultural deposits. The plan should also be informed by the results of previous investigations of similar scale, in similar environments, or at similar sites.

The plan should detail what types of analysis are planned, such as lithic analysis, faunal analysis, ethnobotanical analysis, radiocarbon dating, geomorphology, or other appropriate techniques. The plan should include arrangements for recovered materials to be maintained in an approved curation facility, as well as for the curation of photographs, slides, negatives, maps, field notes, and other documentary materials generated during the investigations.

The Phase III data recovery plan should provide for reporting and dissemination of results, as well as interpretation of what has been learned, so that it is understandable and accessible to the public. This interpretation may include museum exhibits, signage, posters, pamphlets, websites, and other forms of public education as appropriate.

All Phase III investigations will be carried out in accordance with the *DRAFT Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites As partially revised by the Division of Historic Preservation and Archaeology in consultation with the Guidebook Committee of the Indiana Archaeology Council in 2008* and the INDOT Cultural Resources Manual, and will adhere to the Standard Work Plan for Phase II Investigations (see Chapter 7) with the following additional stipulations:

- A minimum of 35% of the site must be sampled in total (including the portion sampled during Phase II investigations). In some cases, larger areas may be sampled in consultation with INDOT-CRO.

- Additional sampling of the plowzone is not necessary at the Phase III level, since the goal is to recover information from significant intact deposits.

- If a midden or other buried horizon is encountered within a site, the extent of the deposit should be manually delineated and at least 1% of the deposit should be sampled through hand excavation (overlying plowzone may be mechanically removed to facilitate this). An additional 15%-25% of the deposit should be mechanically stripped to allow the identification of underlying features. Identified features should be fully excavated and should be documented as outlined in the Phase III work plan.
PART II
CHAPTER 10
Post-Review Discoveries

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10-1.0 Overview

This chapter addresses post-review discoveries, including accidental discoveries and unanticipated impacts. The term *post-review* refers to any point after the Section 106 consultation has been completed. Post-review may be considered such soon after the completion of Section 106 consultation or during project implementation. In any case, please refer to the procedures below for complying with both the state and federal requirements to address post-review discoveries.

10-2.0 Post-Review Discoveries (Accidental or Unanticipated Impacts)

Treatment of accidental discoveries and unanticipated impacts is covered by federal and state laws. When a post-review discovery is made, compliance with federal and state law can be approached in a combined procedure. Therefore, it is important to understand both the Section 106 and state law requirements for addressing post-review discoveries. This chapter steps through compliance with both the federal and state laws to more easily explain compliance requirements.

10-2.1 Section 106

In the Section 106 regulations, post-review discovery is covered under 36 CFR Part 800.13, which states that if historic properties are discovered or unanticipated effects on historic properties are found after the Section 106 process is completed, the federal agency shall make reasonable efforts to avoid, minimize or mitigate “adverse effects” to such properties.

When a discovery is made on a FHWA/INDOT project, typically the project manager or on-site project engineer will contact INDOT-CRO. Construction should stop within 100 ft. of the discovery until the issue has been resolved. If CRO determines that the discovery requires further assessment, CRO will contact FHWA. At that point, FHWA will determine actions to resolve “adverse effects,” and notify--or direct INDOT to notify--the SHPO and the ACHP within 48 hours of the discovery. The notification shall describe FHWA’s assessment of National Register eligibility of the property and proposed actions to resolve the “adverse effects.” The SHPO will respond within 48 hours of the notification. FWHA will take into account SHPO recommendations regarding National Register eligibility and proposed actions, and then carry out appropriate actions.

If a project includes an MOA to mitigate adverse impacts to historic properties, check the language of the MOA to determine if it provides instruction on the treatment of accidental discoveries, especially concerning notification of tribes.
10-2.2 Applicable State Laws

Under [IC 14-21-1-29](https://igis.dnr.in.gov/igi/igisweb/CODE000.PDF?%20Page%20141), if a person accidentally discovers a burial object or artifact while disturbing the ground for another purpose, the person shall immediately stop and must notify the DNR within two business days. Following notification, a number of results may occur:

1. The ground disturbing activity may continue (with or without conditions), or in accordance with an approved, systematic plan for scientific recovery, analysis, and disposition of the material;
2. The situation may be resolved under other law;
3. Or the area may be protected and avoided.

If the artifact or burial object is accidentally discovered during a transportation project, INDOT-CRO requires that all work stop within 100 ft. of the object and INDOT-CRO be notified immediately. INDOT-CRO will then communicate with the DNR-DHPA regarding the accidental discovery.

Under Indiana Code, an artifact (dating before December 31, 1870) can consist of a fragment of historic or prehistoric pottery, chipped stone tools or flakes, ground stone tools, or prehistoric or historic housing material, among other things. A feature can consist of a subsurface prehistoric garbage pit or cooking pit, the remains of a prehistoric house, a surface historic privy or well, or any burial objects. Burial objects are of particular concern, because they suggest the presence of human remains, which are covered under laws discussed below.

10-2.3 Human Remains (IC 14-21-1-27 and 312 IAC 22)

If any human remains are accidentally encountered during construction, work shall cease and the human remains left undisturbed. INDOT-CRO and DHPA should be notified immediately. INDOT or the DHPA will then contact a county coroner and law enforcement officials ([IC 14-21-1-27](https://igis.dnr.in.gov/igi/igisweb/CODE000.PDF?%20Page%20141) and [312 IAC 22](https://igis.dnr.in.gov/igi/igisweb/CODE000.PDF?%20Page%20141)). Exposed human remains should be protected from the elements, and at no time should human remains be allowed to be viewed by the public.

Please keep in mind that, although human remains may appear archaeological or historic, they may actually represent a modern or historically recent crime scene, which is why the county coroner always documents the remains first. It is very important to leave the area of the discovery as undisturbed as possible.

Work at the site shall not resume until a plan for the treatment of the human remains is developed and approved in consultation with the DHPA, FHWA and INDOT-CRO. The plan
will comply with IC 14-21-1, 312 IAC 22-3-3, the DRAFT-Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites As partially revised by the Division of Historic Preservation and Archaeology in consultation with the Guidebook Committee of the Indiana Archaeology Council in 2008, and all other appropriate federal and state guidelines, statutes, rules, and regulations. Further, any investigation and excavation of human remains will be conducted by archaeologists qualified under IC 14-21-1 and 312 IAC 22-3-4. For additional guidance, please consult with the ACHP’s human remains policy.¹

10-3.0 Examples of Post-Review Discoveries

Some examples of post-review discoveries include (but are not limited to):

- Dark stains containing prehistoric artifacts (such as “arrowheads”, stones, bone, charcoal) or historic artifacts (such as bricks, nails, bottles, broken glass, whole or broken dishes and crocks, metal, bone, charcoal, etc.)

- Concentrations of these types of artifacts with no dark stain visible

- Buried foundations or footers (coursed bricks, mortared stones, limestone piers, etc.)

• Wells and cisterns (may be lined with bricks)

• Buried wooden posts, planks, and boxes

• Human remains- or *potentially* human remains (human remains and graves are legally protected, and purposely disturbing them is a felony)
PART II

CHAPTER 11

Section 106 and Section 4(f)

March 2014
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11-1.0 Section 4(f) Overview

Under the provisions of Section 4(f) of the Department of Transportation Act of 1966, the Department of Transportation (DOT) is prohibited from using any publicly owned public parks, recreation areas, and wildlife or waterfowl refuges, or any publicly or privately owned historic site listed or eligible for listing on the National Register of Historic Places for public transportation purposes without first determining either that associated impacts are de minimis or that there is no prudent and feasible alternative to the use of such resources. If no prudent and feasible alternative exists, then the DOT is required to develop measures to minimize harm to the resource resulting from the transportation project. FHWA regulations 23 CFR 771.135 specifically address the evaluation of Section 4(f) resources and impacts.

A Section 4(f) resource is “used” when:

1. Land from a 4(f) site is permanently incorporated into a transportation facility;
2. There is a temporary occupancy of land that is adverse in terms of the Section 4(f) statute's preservationist purposes [23 C.F.R. 771.135(p)(7)]; or
3. There is a constructive use of land [23 C.F.R. 771.135(p)(2)].

For the regulation and related guidance on complying with Section 4(f) please refer to the FHWA Environmental Review Toolkit website at: http://www.environment.fhwa.dot.gov/4f/index.asp.

11-2.0 Section 106 and Section 4(f) Coordination

Although Section 4(f) and Section 106 overlap because they both address historic properties, they are completely separate laws. Section 106 involves considering the effects of federal undertakings on cultural resources and providing the ACHP an opportunity to comment on the undertaking. Section 4(f) requires that a project may not use land from Section 4(f) properties unless there is no prudent and feasible alternative to using that land; and the project includes all possible planning to minimize harm to the Section 4(f) property resulting from the use. Section 4(f) applies to a historic site when that site is listed or eligible for listing in the NRHP regardless of ownership. Completion of Section 106 requirements does not complete Section 4(f). Section 106 must come to closure first so that the determination can be made regarding use under Section 4(f).

11-2.1 Key differences of Section 106 and Section 4(f)

1. Section 106 is a procedural law, whereas Section 4(f) is a substantive law. Section 4(f) requires the avoidance of use of a historic property unless it has been demonstrated, after sufficient analysis, that that there are no prudent or feasible alternatives. Section 4(f) applies to the actual use or occupancy of a historic site, while Section 106 involves assessment of effects of an action on historic properties arrived through consultation. There is no direct correlation between “use” in the Section 4(f) context and “effect” in the
Section 106 context. Due to its substantive requirements, Section 4(f) is supported by stronger case law and is therefore viewed as a more powerful statute than Section 106.

2. Section 4(f) only applies to US DOT funded projects. A project with an Army Corps of Engineers (ACOE) permitted action, with no FHWA involvement, would not be subject to Section 4(f) analysis, although Section 106 would still apply.

3. The Section 106 process is integral to the Section 4(f) process, but the Section 4(f) process is not integral to the Section 106 process. The identification, boundary determination and evaluation of historic properties under Section 106 are keys to understanding the potential “use” of a property. For instance, fully justifying historic boundaries for a NRHP eligible or listed property is critical to understanding if a “use” is occurring to the property.

11-3.0 Determining Section 4(f) “Use”

A Section 4(f) use occurs if land from within a historic site (NRHP-eligible or listed) is being permanently incorporated into a transportation facility or it will be temporarily occupied. If land from within the site is not being physically used, there still may be a constructive use. A constructive use may occur when proximity impacts may substantially impair the property’s activities, features, or attributes that qualify the property for protection under Section 4(f).\(^1\) Constructive use is rarely applied, but may be considered for certain situations. Close consultation with FHWA will determine constructive use applicability. Accordingly, the following sections refer to physical use of a property.

Listed below are some considerations when determining Section 4(f) use:

11-3.1 Historic Boundaries

When determining whether a property is “used” in Section 4(f) parlance, it is critical to have a clearly delineated historic property boundary. In some cases, the boundary of the historic property, for Section 106 and Section 4(f) purposes, is not the same as the legal boundary of the property. For example, a historic building may have a legal boundary of several acres; however, the historic boundary may be more narrowly defined because not all of the acreage conveys the historic significance of the building. The historic property boundary should be developed in consultation with the SHPO. Clearly marked and labeled maps showing a property’s historic boundaries in relation

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to the project footprint and right-of-way limits shall be provided in the Section 106
documentation.

11-3.2 Section 4(f) and Archeological Sites

Section 4(f) applies to archaeological sites that are listed in or eligible for the NRHP and that
warrant preservation in place. Section 4(f) does not apply to archaeological sites that are
important primarily for what can be learned from data recovery and have minimal value for
preservation in place. Coordination with INDOT, FHWA and SHPO should occur when a
NRHP-eligible archaeological site is impacted to determine if Section 4(f) is applicable.

11-3.3 Section 4(f) and Historic Districts

When taking land from within a historic or archaeological district, Section 4(f) applies to the use
of those properties that are considered contributing to the eligibility of the historic district, as
well as any individually eligible property within the district. It must be noted generally that
properties within the bounds of an historic district are assumed to contribute, unless it is
otherwise stated, or if they are determined not to be contributing. For those properties that are not
contributing elements of the district or are not individually significant, the property and the
district as a whole must be carefully evaluated in order to determine whether or not it could be
used without substantial impairment of the features or attributes that contribute to the National
Register eligibility of the district.

11-4.0 Section 4(f) Approval Procedures

As explained in the Section 4f Policy Paper, there are three methods available for FHWA to
approve a 4(f) use:

1) Preparing a de minimis impact determination
2) Applying a programmatic Section 4(f) evaluation; or
3) Preparing an individual Section 4(f) evaluation.

The following subchapters summarize the three Section 4(f) approval methods in regards to
historic sites. With any Section 4(f) determination it is important to consult closely with INDOT
and FHWA to apply the appropriate Section 4(f) approval.

11-4.1 de minimis Impact

A finding of de minimis, which can include temporary or permanent occupancy, on a historic
property may be made when:

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2 Ibid; see http://environment.fhwa.dot.gov/4f/4fpolicy.asp#ar
1. The process required by Section 106 of the NHPA results in the determination of “no adverse effect” or “no historic properties affected” with the concurrence of the SHPO and ACHP, if participating in the Section 106 consultation;

2. The SHPO and ACHP, if participating in the Section 106 consultation, are informed of FHWA’s intent to make a de minimis impact finding based on their written concurrence in the Section 106 determination; and

3. FHWA has considered the views of any consulting parties participating in the Section 106 consultation.

Approval of the de minimis determination is conveyed through the “Section 106 Recommendation for Area of Potential Effect, Eligibility Determinations, and Effect Findings and Section 4(f) Compliance Requirements” form (see PART V Forms). A 4(f) statement is included in the form indicating that FHWA/INDOT has determined a de minimis finding, and asks for SHPO concurrence to the Section 106 finding. The de minimis determination is not approved until SHPO and ACHP, if participating, has concurred to the Section 106 finding of “no adverse effect” or “no historic properties affected” for the historic site being used.

11-4.2 Programmatic Section 4(f) Evaluations

There are three Programmatic Section 4(f) evaluations that apply to historic properties. Each is discussed below.

11-4.2.1 Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges

While already in a transportation use, historic bridges are considered Section 4(f) properties subject to evaluation. A proposed action will “use” a historic bridge when the action impairs the historic integrity of the bridge either by rehabilitation or demolition.

To apply the Historic Bridge Programmatic Section 4(f) Evaluation, three alternatives that avoid any use of the historic bridge must be examined:

   a) do nothing,

   b) build a new structure at a different location without affecting the historic integrity of the historic bridge, and

   c) rehabilitate the historic bridge without affecting the historic integrity of the structure.

Additionally, the “Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation (INDOT), the Indiana State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) Regarding Management and Preservation of Indiana’s Historic Bridges” (Historic Bridge PA) governs the project development process for historic bridges in Indiana. This agreement states that FHWA will work with INDOT, and the bridge owner--if the bridge does not belong to INDOT--to
develop a Purpose and Need statement and an alternatives analysis for any project involving a historic bridge. Rehabilitation for vehicular use must be thoroughly evaluated before other alternatives are considered.

For approval of the Historic Bridge Programmatic Section 4(f), the Historic Bridge Alternatives Analysis fulfills the requirements of the Historic Bridge PA and the Historic Bridge Programmatic Section 4(f) Evaluation when applicable.

Refer to Part IV Historic Bridges for more information on the Historic Bridge PA and completing the Section 4(f) alternatives analysis for historic bridges.

FHWA final approval of the CE will affirm that all Historic Bridge PA requirements have been fully addressed, serve to confirm that FHWA has concluded its responsibilities under Section 106, and serve as FHWA approval of the Historic Bridge Programmatic 4(f) and the preferred alternative.

Rehabilitation that does not impair the historic integrity of the bridge as determined by procedures implementing Section 106 is not subject to Section 4(f). That is to say, in general, if a rehabilitation project results in a “no adverse effect” finding for the bridge, the bridge is not subject to Section 4(f).

11-4.2.2 Final Nationwide Section 4(f) Evaluation and Approval for Federally Aided Highway Projects with Minor Involvements with Historic Sites

This programmatic evaluation is applicable under the following conditions:

a. Improvements only to existing facilities;
b. Does not impair the use of the Section 4(f) property;
c. Does not require the removal or alteration of historic objects;
d. Does not require the disturbance of archaeological resources that should be preserved in place;
e. SHPO agrees in writing with the assessment of effects and mitigation.

Please note that the de minimis impact determination has essentially replaced the need to apply this programmatic evaluation. For FHWA/INDOT projects, the de minimis determination is applied for minor uses of historic properties.

11-4.2.3 Nationwide Programmatic Section 4(f) Evaluation and Approval for Transportation Projects That Have a Net Benefit to a Section 4(f) property

A Net Benefit is applied under the following conditions:

4 Ibid
a. The proposed transportation project uses a Section 4(f) historic site.
b. The project includes all appropriate measures to minimize harm and mitigation to preserve, rehabilitate and enhance the Section 4(f) property.
c. For historic properties, there is no demolition or major alteration of the characteristics that qualify it for inclusion in the National Register. For archaeological properties that are important for preservation in place, it does not require the disturbance or removal of these properties.
d. The SHPO must agree to the mitigation for historic properties in an MOA.

A Net Benefit determination is rarely applied, but is possible through coordination with FHWA and SHPO. When a Net Benefit is applied, specific language in the 800.11 documentation should be included that references the Section 4(f) regulations in regards to the Net Benefit and explains why the project meets the conditions of the Net Benefit. Further, the MOA will include a statement that the project was determined a Net Benefit.

11-4.3 Individual Section 4(f) Evaluation

When it has been determined that the use is not de minimis and does not comply with the Programmatic Evaluations, then an individual Section 4(f) evaluation must be completed.

The Section 4(f) evaluation must show that:

a. There is no “feasible and prudent” alternative to the use of the 4(f) property; and
b. The project includes all possible planning to minimize harm to the 4(f) property.

An individual Section 4(f) evaluation requires coordination with the U.S. Department of Interior (USDOI) and requires FHWA legal counsel to review the evaluation for legal sufficiency prior to approval. Please keep in mind that Section 106 must be completed prior to approval of the Section 4(f) evaluation. Please refer to INDOT’s Procedural Manual for Preparing Environmental Studies for details in preparing the Section 4(f) documentation.

Obtaining approval of the individual Section 4(f) evaluation may take 3-6 months. Therefore, it is important early in the planning process to identify potential Section 4(f) properties and potential use and approval options.

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PART II

CHAPTER 12

Section 106 and NEPA

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12-1.0 National Environmental Policy Act of 1969 (NEPA)

Under NEPA, agencies have broad responsibilities concerning the impacts of their activities on the environment. FHWA adopted the policy of managing the NEPA project development and decision making process as an "umbrella" under which all applicable environmental laws (including NHPA) and regulations are considered and addressed prior to the final project decision and document approval. The conclusion of the NEPA process results in a decision that addresses multiple environmental concerns and requirements, including Section 106 of the NHPA.

NEPA mandates that the type of documentation for federal actions be determined by the potential impacts projects may have on the surrounding natural, cultural, and social environment. The Council on Environmental Quality (CEQ) regulations implementing NEPA may be found at 40 CFR 1500-1508, and FHWA regulations describing the policies and procedures for implementing NEPA and the CEQ regulations may be found at 23 CFR 771. The three types of NEPA documentation include:

- **Environmental Impact Statement (EIS):** Prepared for projects where it is known that the action will have a significant effect on the environment;
- **Environmental Assessment (EA):** Prepared for actions in which the significance of the environmental impact is not clearly established. Should environmental analysis and interagency review during the EA process find a project to have no significant impacts on the quality of the environment, a **Finding of No Significant Impact (FONSI)** is issued;
- **Categorical Exclusions (CEs):** Prepared for actions that do not individually or cumulatively have a significant effect on the environment.

Refer to the **INDOT CE Manual** and the **Procedural Manual for Environmental Studies** for detailed information on NEPA compliance.

12-2.0 Coordinating Section 106 and NEPA

Both NEPA and the Section 106 are decision-making processes that are intended as analytical tools so that issues concerning both the natural and human environments receive reasonable and fair consideration. The review processes for both should be conducted early in the development of the project, when adverse impacts to the natural and human environment can still be avoided or mitigated. Section 106 and NEPA require consideration of project impacts, during:

- identification of resources
- analysis of alternatives;
- public disclosure of information and consideration of public views;
- direct consultation with key stakeholders;

Since NEPA acts as the umbrella under which project development and decision making occurs, responsibilities under Section 106 should be initiated as early as possible. NEPA documentation cannot be finalized until the Section 106 process is completed, which means that Section 106 is often the critical path to completing CE projects A project that is “categorically excluded” under...
NEPA is not exempt from Section 106 review. Instructions for documenting Section 106 compliance within the environmental document is discussed in detail in the **INDOT CE Manual** and the **Procedural Manual for Environmental Studies**.

As stipulated in 36 CFR 800.8, the steps of Section 106 can be combined with that of NEPA. In this regard, in 2013 the ACHP released a handbook for integrating these laws—**NEPA and NHPA: A Handbook for Integrating NEPA and Section 106**. Integrating the steps of NEPA and Section 106 are especially helpful for EA and EIS level projects. When integrating these processes, it is crucial to consider how public involvement will be achieved for both, since this is a primary facet of compliance.

For EA and EIS level projects, it is especially important to work closely with INDOT’s Environmental Policy Office, CRO, and FHWA to integrate these procedures. Generally speaking, the FHWA will have a higher level of day-to-day involvement in the Section 106 process for EIS projects. Due to the complexity of EIS projects, the FHWA (in consultation with the Project Coordination Team and the SHPO) may elect to adopt a phased approach to compliance with Section 106 in accordance with 36 CFR § 800.4(b)(2) and § 800.5(a)(3). In addition, particularly in the context of EIS projects, FHWA may choose to incorporate the required Section 106 documentation into the EIS, as provided in 36 CFR § 800.8.

### 12-3.0 Documenting Section 106 for Categorical Exclusions (CEs)

CEs constitute the majority of environmental documents prepared for transportation projects in Indiana. In Indiana, INDOT and FHWA have agreed to four levels in which a project may qualify as a CE. The appropriate level of CE is based on the type of action and the anticipated impacts of the project. The Section 106 finding is a factor in determining the CE level, so close coordination with these procedures is necessary to complete the CE. The CE will not be approved until the Section 106 process has been successfully concluded and documented.

The following Section 106 information must be documented in the CE:

- Description of the APE;
- Coordination with consulting parties;
- Archaeology (include the results and recommendations of the archaeology report);
- Historic properties (include a description of each above-ground historic property and whether or not it is listed in or eligible for inclusion in the National Register);
- Documentation and findings (summarize and provide submittal dates for the following: the finding and associated documentation, all correspondence with the SHPO and INDOT, and options considered to minimize harm and potential mitigation or enhancements). If applicable, include the executed MOA to resolve “adverse effects”;

Remember:

If a project complies with the Minor Projects PA, the applicable category should be listed. If a Category B project, the determination form should be attached to the CE.
• Public involvement (include the date the legal notice was published and whether any comments were received from the public or consulting parties, especially objections).

The following should appear in an appendix to the CE Document Form:

1. The FHWA-approved APE, eligibility determinations, and effect finding. Include the date of each determination on the CE form;
2. Documentation that supports the effect finding;
3. If the FHWA has made an “adverse effect” finding, then attach a copy of the fully signed MOA. Include the date the MOA was fully signed on the CE form;
4. Summary of Archaeology report (retain the entire report in the project file but do not include in the CE);
5. Summary of historic properties report (retain the entire report in the project file but do not include in the CE).
6. All correspondence with consulting parties, SHPO, FHWA, and INDOT, including the outgoing invitation to consulting parties;
7. The affidavit of publication of the legal notice advertising the finding of effect and a copy of the notice;
8. The Minor Projects PA determination form (for Category B projects) if applicable.

Remember:

Be certain that specific locations of archaeological sites are not circulated to the public.
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Overview-State Laws and Specifications

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1-1.0 Overview

In addition to completing Section 106 for projects with federal participation, INDOT and LPA projects must also comply with state cultural resource laws. Where possible, FHWA’s and INDOT’s Section 106 procedures integrate state law compliance. However, it is important to understand state law requirements, when they apply and how they should be adhered to, especially when they follow a distinct compliance path from that of Section 106. The following subchapters summarize the relevant cultural resource state laws. Part III Chapters 2-5 provide further detailed guidance on the more substantive laws and requirements as they relate to transportation projects.

1-2.0 Indiana Historic Preservation and Archaeology Act (IHPAA) (IC 14-21-1)

State cultural resource laws fall under the umbrella of the Indiana Historic Preservation and Archaeology Act (IHPAA). One of the primary provisions of the IHPAA is protection of archaeological sites that date before December 31, 1870. It also establishes protection for human burial sites that date before January 1, 1940. Refer to the following subchapters for a summary of relevant cultural resource state laws and Chapters 2-4 for detailed guidance on specific provisions including IC 14-21-1-18, IC 14-21-1-26.5 and IC 14-21-1-29

1-3.0 Indiana Register of Historic Places (IC 14-21-1-9)

The Indiana Register of Historic Sites and Structures (IRHSS) was created by an act of the Indiana General Assembly in 1981 (IC 14-21-1-9), and is administered by the DHPA. All properties on the NRHP are automatically listed in the State Register. However, a number of properties are listed on the IRHSS Register only. The criteria for listing properties on the IRHSS are virtually the same as the NRHP criteria.1

1-4.0 Transfers of property by the state (IC 14-21-1-14)

IC 14-21-1-14 states that before real property owned by the state may be sold or transferred, the Indiana Department of Administration (DIOA) must notify DHPA at least 90 days before the proposed transfer. The DHPA must advise DIOA of the location of any historic sites or

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1 Indiana properties listed on both the State and National Registers are listed on the DHPA website (http://www.in.gov/dnr/historic/files/hp-nrlist.pdf). Indiana properties listed only on the State Register are also listed on the DHPA website (http://www.in.gov/dnr/historic/files/hp-nrlist.pdf). Indiana properties listed on the National Register are also listed in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD): https://secure.in.gov/apps/dnr/shaard/welcome.html.
structures on the property. If historic sites or structures are present, IDOA will reserve control of the historic property through a covenant or easement.

1-5.0 Field investigations or alteration of historic property without permit ([IC 14-21-1-16](#)

IC 14-21-1-16 requires a permit for archaeological fieldwork conducted on state-owned property. Permit requests are to be submitted to DHPA with INDOT-CRO receiving a copy for its project files. Requests are to include written permission from the property owner and an outline of general field methodologies. DHPA will provide authorization to conduct archaeological field investigations on state property and issue a permit number upon their review. A copy of this authorization is to be carried by archaeologists in the field. The permit number is to be referenced in subsequent archaeological reports.

A permit is not required when conducting work on state property owned by INDOT such as right-of-way. INDOT has obtained an approved permit for Phase Ia field investigations on INDOT properties (Permit #2009032) (See Part V Forms for the permit). This permit should be carried by archaeologists working on INDOT projects.

1-6.0 Alteration of historic sites or structures requiring certificate of approval ([IC 14-21-1-18](#)

IC 14-21-1-18 (a) and (b) require that a Certificate of Approval (COA) be obtained before using state funds to alter, demolish, or remove an historic site or historic structure, if it is owned by the state or if it is listed in either the Indiana Register of Historic Sites and Structures or the NRHP. The term “property,” as defined in IC 14-21-1-18, refers to both above-ground structures and archaeological sites.

Please see Chapter 2 for detailed guidance on compliance with IC 14-21-1-18.

1-7.0 Cemetery Development Plans ([IC 14-21-1-26.5](#)

State law (IC 14-21-1-26.5) requires that a person may not disturb the ground within one hundred (100) feet of a burial ground for the purpose of excavating or covering over the ground or erecting, altering, or repairing any structure that would impact a burial ground or cemetery without having a development plan approved by the DHPA.

Please see Chapter 3 for detailed guidance on compliance with IC 14-21-1-26.5.
1-8.0 Disturbance of Human Remains or Burial Grounds (IC 14-21-1-27)

Prior to disturbance of human remains or burial grounds, IC 14-21-1-27 requires that a person notify the DHPA within two (2) business days of the time of the disturbance and treats or reburies the human remains in a manner and place according to rules adopted by the Natural Resources Commission or a court order and permit issued by the State Department of Health under IC 23-14-57.

1-9.0 Accidental Discovery (IC 14-21-1-29)

Under IC 14-21-1-29, if a person accidentally discovers a burial object or artifact while disturbing the ground for another purpose (such as construction or utility excavation), the person shall immediately stop work within 100 feet of the discovery and notify DHPA within two business days. Following notification, the DHPA will decide if:

1. The ground-disturbing activity may continue with or without conditions, or in accordance with an approved, systematic plan for scientific recovery, analysis, and disposition of the material;
2. The situation may be resolved under another law; or
3. The area requires protection and avoidance.

Please see Chapter 4 for detailed guidance on compliance with IC 14-21-1-29.
PART III
CHAPTER 2
The Indiana Historic Preservation Review Board and Certificates of Approval

March 2014
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2-1.0 Overview- Alteration of historic sites or structures requiring certificate of approval (IC 14-21-1-18)

IC 14-21-1-18 (a) and (b) require that a Certificate of Approval (COA) be obtained from the Indiana Historic Preservation Review Board (Review Board) before using state funds to alter, demolish, or remove an historic site or historic structure, if it is owned by the state or if it is listed in either the Indiana Register of Historic Sites and Structures or the NRHP. The term “property,” as defined in IC 14-21-1-18, refers to both above-ground structures and archaeological sites.

2-2.0 Dual Review-Synching Section 106 and IC 14-21-1-18

Gaining a COA under state law IC 14-21-1-18 does not satisfy federal Section 106 requirements (16 USC 470f) – nor does completion of Section 106 satisfy IC 14-21-1-18. Consequently, if a project utilizes both state and federal money, it must comply with both laws. In August 2013, a permanent rule (312 IAC 20-4-11.5) was passed for projects that are subject to both Section 106 and IC 14-21-1-18. Previously, projects had to complete Section 106 and obtain a COA as separate processes. The Dual Review rule synchs these two processes.

The primary obligation of INDOT and/or its consultants to follow the Dual Review process is to provide a letter to the DHPA with “Dual Review Project” in the subject line. This signifies to the DHPA to review the project under both Section 106 and state law concurrently. The request for a Dual Review must be made at the beginning of the consultation process. Sending early coordination letters, consulting party invitations, and/or distribution of Historic Property/Archaeology Reports could be the appropriate mechanism for initiating the Dual Review process. It is also recommended to indicate in the body of the letter that the Dual Review Process is being invoked. Sample language is provided below:

Please note that per the permanent rule issued by the Indiana Department of Natural Resources effective August 14th, 2013 (IAC 20-4-11.5), INDOT is requesting that this project be subjected to “dual review”; that is, reviewed by the Division of Historic Preservation and Archaeology simultaneously under 16 USC 470f (Section 106) and IC 14-21-1-18 (Indiana Preservation and Archaeology Law dealing with alterations of historic sites and structures requiring a Certificate of Approval). Pursuant to Section 1(f) of this rule, at the conclusion of the review process, we anticipate that the Division Director would issue a letter of clearance exempting this project from obtaining a certificate of approval under IC 14-21-1-18.
Under the Dual Review procedures, DHPA will acknowledge receipt of the transmittal letter. In addition to any notification required under 16 U.S.C. 470f and 36 CFR 800, DHPA shall provide notification of the commencement of a Dual Review to the following:

(1) Interested persons.

(2) Members of the Review Board.

(3) By posting on the DHPA’s website.

The DHPA Division Director shall issue a letter of clearance for a project and exempt the entity from obtaining a COA under IC 14-21-1-18 if a submission results:

(1) in a finding under 36 CFR 800 of “no historic properties affected” or “no adverse effect” on historic properties; and

(2) the Indiana State Historic Preservation Officer (SHPO) concurs in the finding.

If a submission results in a finding of “adverse effect” on historic properties under 36 CFR 800, and a memorandum of agreement (MOA) is executed under 36 CFR 800, the Division Director shall consider the terms of the MOA. If the Division Director concludes the objectives and purposes of IC 14-21-1-18 have been achieved, the Division Director shall issue a letter of clearance and exempt the entity from obtaining a COA.

With regard to projects involving a bridge covered by the July 17, 2006, “Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Office, and the Advisory Council for Historic Preservation Regarding the Management and Preservation of Indiana’s Historic Bridges” (“Historic Bridges PA”), in the case of a finding of “adverse effect” on historic properties under 36 CFR 800, the Division Director shall consider the mitigations prescribed for the adverse effects under the Historic Bridges PA. If the Division Director concludes the objectives and purposes of IC 14-21-1-18 are achieved, the Division Director shall issue a letter of clearance and exempt the entity from obtaining a COA.

The Division Director shall provide notice to interested persons and members of the Review Board of the intention to issue any letters of clearance. Any member of the Review Board may request review by the Review Board for the purpose of acting upon a COA for the project. If a request for review is made, the DHPA shall place the completed application on the agenda of the next meeting of the Review Board for a determination.

If a Dual Review results in a finding of “adverse effect” on historic properties under 36 CFR 800, and a MOA is not executed, the entity making the submission shall obtain a COA regarding the project from the Review Board before taking action that would alter the historic significance or character of the historic property involved.

A copy of the Dual Review rule can be found at the following link: http://www.in.gov/legislative/iac/title312.html
2-3.0 Projects Utilizing 100% State Funds

Projects utilizing 100% state funds may be “cleared” one of the following ways:

(1) If consultation with INDOT-CRO staff determines that no historic sites or structures are located in/near the project area and that no archaeological work is required because the project takes place in previously disturbed soils, no further coordination is required. An appropriate summary explanation should be prepared for inclusion in the State Categorical Exemption (CE) document.

(2) If consultation with INDOT-CRO staff determines that historic sites or structures are located in/near the project area, but they will not be adversely impacted, and that no archaeological work is required because the project takes place in previously disturbed soils, no further coordination is required. An appropriate summary explanation should be prepared for inclusion in the State CE document.

(3) If consultation with INDOT-CRO staff determines that no historic sites or structures are located in/near the project area or that historic sites or structures are located in/near the project area, but they will not be adversely impacted, but the project takes place in previously undisturbed soils and an archaeological report has been prepared, the report should be conveyed to DHPA for review and approval (after INDOT-CRO review and approval). An appropriate summary explanation should be prepared for inclusion in the State CE document and the document should not be approved without the approval letter from DHPA for the archaeological report.

(5) If consultation with INDOT-CRO staff determines that historic sites or structures are located in or near the project area, and they will be adversely impacted (altered, demolished, or removed), a letter of explanation and 13 copies of the COA application should be conveyed to DHPA. Additionally, if an archaeological report has been prepared, the report should be conveyed to DHPA for review and approval (after INDOT-CRO review and approval). An appropriate summary explanation should be prepared for inclusion in the State CE document and the document should not be approved without the DHPA letter indicating the Review Board has approved the COA.
2-4.0 How to Apply for a Certificate of Approval

When a COA is required, a COA application must be submitted to the Indiana Department of Natural Resources (“DNR”), Division of Historic Preservation and Archaeology (“DHPA”), and heard by the Indiana Historic Preservation Review Board (“Review Board”). A completed COA application must be filed with DHPA on the appropriate DHPA form at least 40 days prior to the Review Board meeting at which the application is to be considered. A COA application may be downloaded at: http://www.in.gov/dnr/historic/files/certapproval.doc.

To be deemed filed, thirteen (13) duplicate copies of the application must be received at the DHPA office no later than 4:45 PM on the day that is 40 days prior to the date of the meeting. The Review Board typically meets on a Wednesday in the last half of January, April, July, and October. Applicants should check with DHPA to ascertain the date of the next meeting and the date on which the 40-day deadline falls (http://www.in.gov/dnr/historic/2785.htm).

The principal contact person and/or another representative of the COA applicant who is knowledgeable about the details of the project should plan to attend the Review Board meeting. Typically, an applicant is given a few minutes to explain the project or to highlight key points, and the Review Board members often ask questions about the application.

Based on the COA application, the DHPA’s recommendations, and any discussion during the meeting, the Review Board will take a vote on granting the COA. Typically, the COA is granted at its initial vote. However, in certain cases, the Review Board may request additional information prior to granting the COA.

2-5.0 Guidelines for Emergency Work Using State Funds

Where an emergency exists and the reduction or elimination of the risk would require that a historic property be altered, demolished, or removed using, in whole or in part, state funds, then action may be taken to reduce or eliminate the risk without the actor’s previously having

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1 Legislative Services Agency website: http://www.in.gov/legislative/iac/20090930-IR-312090774ERA.xml.pdf
2 DHPA website, http://www.in.gov/dnr/historic/
obtained a COA pursuant to IC § 14-21-1-18. For the purposes of these guidelines, an “emergency” is a situation involving a state-owned historic property, where there exists either:

(1) a demonstrable risk of harm to the health or safety of persons, or

(2) a demonstrable risk of damage to property; and

The following conditions apply to these emergency work guidelines:

(1) as soon as feasible after the emergency is discovered and the need to reduce or eliminate the risk is identified, the actor shall notify the DHPA in writing or by email of the emergency and the need to take action;

(2) the actor limits the alteration, demolition, or removal of a historic property to the minimum level of action necessary to reduce or eliminate the risk posed by the emergency;

(3) to the extent feasible, and as determined through consultation between INDOT and DHPA, character-defining historic materials and features shall be preserved by stabilization; if necessary, they shall be repaired; if they cannot be repaired, they shall be replaced with the materials of the same kind and design; if they cannot be replaced with materials of the same kind and design, then either easily-removed materials shall be substituted temporarily or materials as similar as possible to the original materials in kind and design shall be used to replace the character-defining historic materials;

(4) after the action has been taken and prior to the next regularly scheduled Review Board meeting, the actor shall submit to the DHPA written and photographic documentation of the emergency that existed and of the nature and extent of the emergency action that was taken to alter, demolish, or remove the historic property, which the DHPA shall forward to the Review Board members; and

(5) the actor or his, her, or its representative shall attend the next regularly scheduled Review Board meeting and shall be prepared to explain the emergency and the action taken.
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3-1.0 Overview-Cemetery Development Plans (IC 14-21-1-26.5)

State law (IC 14-21-1-26.5) requires that a person may not disturb the ground within one hundred (100) feet of a burial ground for the purpose of excavating or covering over the ground or erecting, altering, or repairing any structure without having an approved development plan. This law does not prohibit construction near a cemetery, nor does it prohibit moving cemeteries if the proper permits are acquired. This law only requires that developers' plans take into account cemetery locations. Consequently, maintenance of existing facilities, such as road repair, repaving, or in-kind replacement, does not require a Cemetery Development Plan (CDP).

3-1.1 What is a Cemetery or Burial Ground

The Indiana general cemetery law defines a cemetery as any land or structure in Indiana that is dedicated to and used for, or intended to be used in the future for, the interment, entombment, or inurnment of human remains (IC 23-14-33-7). Under IC 14-21-1-3, a burial ground is defined as ground in which human remains are buried, including the surrounding area that is marked by a permanent boundary such as a fence or wall, or else that is recorded or reported as containing human remains, mounds, or burial objects.

“Human remains” include any part of the body of a human being in any stage of decomposition or state of preservation, including cremated remains (IC 14-21-1-7; IC 23-14-33-21). As a result, even a single fragment of human bone may be considered part of a burial ground.

Many historic and prehistoric cemeteries do not have clear boundaries, and many historic cemeteries contain gravestones that have been moved from their original locations, or lack standing gravestones altogether. Other historic cemetery locations are unknown except for reported but unverified descriptions. In such cases, a qualified professional archaeologist would need to investigate the area to determine whether a cemetery is present and to delineate the actual cemetery boundaries if it is not otherwise clear whether the cemetery is located within 100 feet of the project.

3-1.2 When is a Cemetery Development Plan Required?

Under IC 14-21-1-26.5, a CDP must be approved if a person, municipality, or the state intends to

(A) excavate or cover over the ground or

(B) construct a new structure or alter or repair an existing structure, and this action would impact the burial ground or cemetery;

A CDP is not required if a person, municipality, or the state intends to

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1 IC 14-21-1-26.5 does not apply to the following: (1) a public utility (as defined in IC 8-1-2-1(a)); (2) a corporation organized under IC 8-1-13; (3) a municipally owned utility (as defined in IC 8-1-2-1(h)); and (4) a surface coal mining and reclamation operation permitted under IC 14-34.
(A) excavate or cover over the ground or

(B) erect, alter, or repair an existing structure for an incidental or existing use that would not impact the burial ground or cemetery.

Many INDOT projects involve the repair or replacement of existing structures within existing right-of-way, and do not impact nearby cemeteries. The potential impacts of a proposed project upon nearby cemeteries and the need for an approved CDP must be determined in consultation with INDOT-CRO staff.

3-1.3 How to Complete a Cemetery Development Plan

Under 312 IAC 22.5-2-3, a CDP submission must include the following:

- A signed cover letter from the applicant on letterhead with the following information:
  - The identity of the person or persons who would conduct the project.
  - The overall nature and timeframe for the project.
  - The location of the project by section, township, range, county, and address.
  - Any prior disturbance of the area.
  - A statement of whether federal or state funds or licenses are involved in the project.

- Mapping to show the location of the cemetery in relation to the project that includes the following:
  - Construction details for activities within one hundred (100) feet of the cemetery.
  - References to nearby landmarks.
  - Location of the cemetery and the project area on the appropriate U.S. Geological Survey 7.5’ quadrangle map.

- A description of the cemetery sufficient to evaluate the likely impact of the project, including the following:
  - Any name of the cemetery.
  - The dates of use.
  - Historical information and documentation.
  - Precise boundaries that reference nearby landmarks. If documentation is not currently available to identify the cemetery boundaries, the applicant may be required to determine those boundaries through the following:
    - Remote sensing or archaeological geophysics.
    - Investigations by archaeologists.
    - Another scientific method approved by the division.
  - The current physical condition of the cemetery.
- A description of the grounds adjacent to and within one hundred (100) feet of the cemetery, including the following:

  The nature, depth, and degree of previous disturbances, including those caused by construction, excavation, grading, or filling.
  A description of soils, by types, that are present at the site, including an explanation of how they would be disturbed, graded, modified, removed, or otherwise treated.
  A description of every structure.
  A description of the activities anticipated to erect, alter, or repair a structure.
  Areas that would contain new construction of the footprints of the proposed construction areas.

- Clear recent photographs of the cemetery and the grounds adjacent to and within one hundred (100) feet of the cemetery.

- If the application is not from the landowner, written permission from the owner of the cemetery and the owner of any area to be entered or disturbed during the project.

- In addition, if the burial ground or cemetery is located within an archaeological site, contains an archaeological site, or is itself an archaeological, then the CDP must also include an archaeological plan under IC 14-21-1-26.5.

The DHPA Cemetery Registry may be a good source of information when completing a CDP. The Cemetery Registry database contains location information, survey data, and historical documentation on many cemeteries and burial grounds in the state. The State Library and local county libraries and historical societies are also good sources for historical information. Some cemetery websites include a brief history of the cemetery. Other internet resources such as http://www.ingenweb.org/ and http://www.findagrave.com/ may also provide useful information.

3-1.4 Submitting a Cemetery Development Plan for Approval

Under IC 14-21-1-26.5, the approving entity depends upon the project sponsor:

A development plan of the state requires the approval of DHPA.

A development plan of a municipality requires approval of the executive of the municipality and does not require the approval of DHPA.

If the burial ground or cemetery is located outside the municipality, approval is also required by the executive of the county where the burial ground (in addition to approval by the executive of the municipality);

A development plan of a governmental entity other than a municipality or the state requires the approval of the executive of the county where the governmental entity is located, and does not require the approval of the IDNR, DHPA. If the governmental entity is located in more than one
county, only the approval of the executive of the county where the burial ground or cemetery is located is required. A county cemetery commission established under IC 23-14-67-2 may advise the county executive on whether to approve a development plan.

Whenever a CDP is prepared for an INDOT project, a copy of the plan must be provided to INDOT-CRO for inclusion with the project documentation.

3-2.0 Prohibition on Road and Utility Construction in Cemeteries (IC 23-14-44-1)

This state law restricts road or utility construction through, over, or across any part of the cemetery, within 100 feet of:

A space in which burial rights have been transferred;
A mausoleum in the cemetery;
A garden crypt in the cemetery;
A columbarium in a cemetery;

without the consent of the owner of the cemetery. Further, IC 23-14-44-2 gives any person the right to seek a permanent injunction to prevent road or utility construction within a cemetery. INDOT makes every effort to avoid cemeteries completely, and will only move burials if avoidance is not a feasible alternative.
PART III

CHAPTER 4

Accidental Discovery

March 2014
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4-1.0 Overview

As discussed in Part II, Chapter 10, INDOT and FHWA meets its obligations concerning accidental discoveries by simultaneously following both federal and state guidelines. When a project is 100% state funded then the procedures specified in Chapter 2.0 will be followed exclusively.

4-2.0 State Law Regarding Accidental Discovery (IC 14-21-1-29)

Under IC 14-21-1-29, if a person accidentally discovers a burial object or artifact while disturbing the ground for another purpose (such as construction or utility excavation), the person shall immediately stop work within 100 feet of the discovery and notify DHPA within two business days. Following notification, the DHPA will decide if:

1. The ground disturbing activity may continue with or without conditions, or in accordance with an approved, systematic plan for scientific recovery, analysis, and disposition of the material;
2. The situation may be resolved under another law; or
3. The area requires protection and avoidance.

An artifact (dating before December 31, 1870, as per IC 14-21-1-2) can consist of a fragment of historic or prehistoric pottery, chipped stone tools or flakes, ground stone tools, glass, or historic housing material, among other things.

An archaeological feature can consist of a subsurface prehistoric garbage pit or cooking pit, the remains of a prehistoric house, a historic privy or well, or any burial objects including human remains. Notification should occur if such features are encountered. Burial objects are of particular concern, because they suggest the presence of human remains.

If any archaeological artifacts (including human remains) are accidentally encountered during construction, work shall cease within 100 feet of the discovery with the artifacts left undisturbed. As per INDOT Standard Specification 107.10 the project engineer shall be notified. The project engineer should then immediately notify INDOT CRO staff, and the DHPA. INDOT or the DHPA will then contact a county coroner and law enforcement official. Although human remains may appear prehistoric or historic in nature, they may actually represent a modern or historically-recent crime scene. This is why the county coroner always investigates the remains first. It is very important to leave the area of the discovery as undisturbed as possible.

Work within 100 feet of the discovery shall not resume until a plan for the treatment of the human remains is developed and approved in consultation with the DHPA, FHWA and CRO. The plan will comply with IC 14-21-1, 312 IAC 22, the current Guidebook for Indiana Historic

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1 IC 14-21-1-27 and 312 IAC 22.
Sites and Structures Inventory--Archaeological Sites (Appendix V), and all other appropriate federal and state guidelines, statutes, rules, and regulations.

If a project includes a Memorandum of Agreement (MOA) to mitigate adverse impacts to historic properties, check the language of the MOA to determine if it provides instruction on the treatment of accidental discoveries, especially concerning notification of tribes. If it provides instruction, this must be followed as well.
December 11, 2013

CONSTRUCTION MEMORANDUM

13-14

TO: District Deputy Commissioners
    District Construction Directors
    District Technical Services Directors
    District Testing Engineers
    District Area Engineers
    District LPA Coordinators
    Field Engineers
    Project Engineers/Supervisors
    Office of Materials Management

FROM: Mark A. Miller, Director
      Division of Construction Management

SUBJECT: Guidance for Post-Review (Accidental) Discoveries

Per state laws (IC 14-21-1-27 and IC 14-21-1-29) and federal regulation (36 CFR 800.13), INDOT and FHWA must examine and evaluate all post-review discoveries. These are unanticipated finds of prehistoric or historic artifacts or features that are encountered during construction after Section 106 review of the project has been completed, which is why they are termed “post-review” or accidental discoveries. Some examples of post-review discoveries include (but are not limited to):

- dark stains containing prehistoric artifacts (such as arrowheads, stones, bone, charcoal) or historic artifacts (such as bricks, nails, bottles, broken glass, whole or broken dishes and corks, metal, bone, charcoal, etc.)
- concentrations of these types of artifacts with no dark stain visible
- buried foundations or footers (coursed bricks, mortared stones, limestone piers, etc.)
- wells and cisterns (may be lined with bricks)
- buried wooden posts, planks, and boxes
- human remains - or potentially human remains (human remains and graves are legally protected, and purposely disturbing them is a felony)
If it appears that an accidental discovery is found during construction, it is important that the following steps are taken:

- **INDOT Standard Specification 107.10** states that work within 100 feet must stop – work may continue in other areas.

- **INDOT- Cultural Resource Office (CRO)** should be contacted immediately. The contractor should notify the Project Engineer/Supervisors, who will inform CRO of the discovery. **The sooner CRO is contacted, the sooner work may be cleared to resume around the discovery.**

- A description of the discovery should be provided, along with digital photographs if possible, to CRO at the time of the discovery (or photographs may be forwarded to CRO by email after notification by phone). In many cases, a set of scaled photographs will allow CRO staff to evaluate the discovery and determine whether work may resume or whether additional documentation will be necessary without the time required for a site visit.

- Through photographs and description of the discovery, CRO may determine that there are no cultural resource concerns and CRO will provide written authorization to the Project Engineer/Supervisor notifying that construction may commence.

- If the discovery is a concern, then the following steps will be followed. INDOT-CRO will inform DNR’s Division of Historic Preservation and Archeology (DHPA), FHWA and the Advisory Council on Historic Preservation (ACHP) of the discovery within two (2) business days. CRO will consult with DHPA, FHWA, and the ACHP to determine the level of documentation required and develop a treatment plan as appropriate. In many cases, however, the issue may be resolved by CRO staff visiting the site to document the discovery and providing that documentation to DHPA.

- If human remains, or potential human remains, are encountered, INDOT-CRO will contact the necessary authorities. The area must be considered a potential crime scene until clearance is received from the county coroner and law enforcement.

Please note that INDOT Standard Specification 107.10 prohibits the removal or sale of archaeological materials from construction sites.

The objectives of the INDOT Cultural Resources Office (CRO) are to be sure that INDOT complies with the applicable laws and that projects stay on schedule and are not delayed. When accidental discoveries occur, they are INDOT-CRO’s top priority. In the event of an accidental discovery, please contact:

- **CRO Manager**
  - 317-233-2061

- **Archaeology Team Lead**
  - 317-233-6795

MAM/GGP
PART III

CHAPTER 5

Borrow-Disposal Sites Procedures

March 2014
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5-1.0 Overview

The selection of borrow and disposal sites for project construction activities typically occurs after the Section 106 process is completed. While not codified as state law, per Standard Specification 203.08, INDOT requires archaeological clearance prior to approval of borrow and disposal sites—unless a commercial source is utilized. Archaeological clearance, along with other environmental considerations, is addressed prior to approval of the site by the Project Engineer/Supervisor through completion of the Request for Approval of Borrow or Disposal Site Form (INDOT form IC-203). To assist the Project Engineer/Supervisor in approving proposed borrow and disposal sites, the procedures detailed in Chapter 5-2.0 have been implemented.

5-2.0 Borrow and Disposal Sites Archaeological Clearance Procedures

- The Contractor, or their qualified archaeologist, shall submit the completed archeological survey report for the proposed borrow and/or disposal site(s) to the Project Engineer/Supervisor who will submit the completed archaeological survey report to CRO. Please send the report to the archaeological team lead or CRO manager. CRO will review the report within 2-5 days and ensure that the survey report meets the Division of Natural Resources (DNR)-Division of Historic Preservation and Archaeology (DHPA) standards.

- Before approval, the report may need to be revised based on CRO review comments. Once a report is approved, CRO will send an email notification to the Project Engineer/Supervisor who will forward it to the Contractor and/or their qualified archaeologist. This email should be attached to the Request for Approval of Borrow or Disposal Site form (INDOT form IC-203) per Item B. 8. This will constitute archaeological clearance and written authorization per the Approval of Borrow or Disposal Site form.

- In cases where there are potential archaeological issues with a survey or site location, at their discretion CRO may choose to consult with DHPA regarding clearance. Consultation with DHPA will be completed expeditiously.

- As DHPA is the repository of all archaeological work in the state, INDOT-CRO will request through the Project Engineer/Supervisor that the archaeologist submit the approved report to DHPA for their records only. No review by DHPA will be necessary.

Refer to Construction Memo 13-15 and included in the Appendix detailing these procedures.
Appendix -- Construction Memo 13-15: Guidance for Archaeological Clearance of Borrow and Disposal Sites per Standard Specification 203.08
December 12, 2013

CONSTRUCTION MEMORANDUM
13-15

TO:
District Deputy Commissioners
District Construction Directors
District Technical Services Directors
District Testing Engineers
District Area Engineers
District LPA Coordinators
Field Engineers
Project Engineers/Supervisors
Office of Materials Management

FROM: Mark A. Miller, Director
Division of Construction Management

SUBJECT: Guidance for Archaeological Clearance of Borrow and Disposal Sites per Standard Specification 203.08

Per Standard Specification 203.08, archaeological clearance is required prior to approval of proposed borrow and disposal sites unless a commercial source is utilized. To assist Project Engineer/Supervisors in approving sites in a streamlined and consistent manner, the Cultural Resources Office (CRO) is providing the following guidance for complying with 203.08:

- The Contractor, or their qualified archaeologist, shall submit the completed archeological survey report for the proposed borrow and/or disposal site(s) to the Project Engineer/Supervisor who will submit the completed archaeological survey report to CRO. Please send the report to the archaeological team lead or CRO manager. CRO will review the report within 2-5 days and ensure that the survey report meets the Division of Natural Resources (DNR)-Division of Historic Preservation and Archaeology (DHPA) standards.

- Before approval, the report may need to be revised based on CRO review comments. Once a report is approved, CRO will send an email notification to the Project Engineer/Supervisor who will forward it to the Contractor and/or their qualified archaeologist. This email should be attached to the Request for Approval of Borrow or Disposal Site form (INDOT form IC-203) per Item B. 8. This will constitute archaeological clearance and written authorization per the Approval of Borrow or Disposal Site form.

- In cases where there are potential archaeological issues with a survey or site location, at their discretion CRO may choose to consult with DHPA regarding clearance. Consultation with DHPA will be completed expeditiously.
• As DHPA is the repository of all archaeological work in the state, INDOT-CRO will request through the Project Engineer/Supervisor that the archaeologist submit the approved report to DHPA for their records only. No review by DHPA will be necessary.

Please contact the Cultural Resources Office with any questions:

CRO Manager
317-233-2061

Archaeology Team Lead
317-233-6795

MAM/GGP
PART IV
CHAPTER 1
Overview-Indiana Historic Bridges Program

March 2014
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1-1.0 Overview-Indiana Historic Bridges Program

In coordination with the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation (ACHP), and the Indiana State Historic Preservation Office (IN SHPO), INDOT developed a historic bridge program. This program is outlined through the Historic Bridges Programmatic Agreement. The Historic Bridge PA, as it is commonly referred, is the process by which historic bridge projects are managed in Indiana.

One of the primary aspects of the Historic Bridge PA was the statewide inventory of bridges. The inventory evaluated all the publicly owned bridges in the state built through 1965 for National Register eligibility. The inventory is the final determination of the historic bridges in the state. Subsequently, the list of historic bridges (National Register-eligible or listed), have been classified as either Select or Non-Select. A distinct project development process must be followed for each type.

In summary, projects utilizing federal funds and involving a historic bridge are analyzed to see if the existing bridge will meet the purpose and need of the future traffic conditions expected on that roadway segment. If it does, then rehabilitation of that historic bridge is considered as a viable option for reuse of the existing structure. If the historic structure does not meet the purpose and need for the motoring public, other alternatives are considered.

FHWA will not participate in the demolition of a Select Bridge. All FHWA projects involving Select bridges must preserve the bridge in some manner. Non-Select Bridges may be replaced if no avoidance alternative is determined to be feasible and prudent or no alternative that poses the least harm to the bridge is determined to be feasible and prudent.

When a historic bridge is planned for bypassing or replacement, the bridge is offered to any group or individual that may want to take ownership of the bridge and manage it or relocate it to another site. Bridges currently available for reuse can be found on the Historic Bridges Marketing Program page.

The completed documents related to the historic bridge inventory can be found on the following webpage: http://www.in.gov/indot/2531.htm. They include:

- Historic Context Study;
- National Register Eligibility Results;
- List of Select and Non-Select Bridges;
- Historic Bridge Alternatives Analysis Template;
- Historic Bridge Hearing Notice Template;
- Historic Bridge Legal Notice Template;
- Blank Bridge Marketing Website Data Form;
- FAQ;
- Annual Reports
APPENDIX: Historic Bridges Programmatic Agreement
WHEREAS, the Federal Highway Administration (FHWA) has determined that the construction and improvement of highways and bridges with Federal Aid Highway funds (Federal-aid) may have an effect on bridges that are listed in the National Register of Historic Places (NRHP), or may be determined to be eligible for listing, hereafter referred to as “historic bridges”; and

WHEREAS, historic bridges may be rehabilitated through several Federal-aid programs, such as the Transportation Enhancement Program, the Surface Transportation Program, and the Highway Bridge Replacement and Rehabilitation Program provided the appropriate eligibility criteria are satisfied; and

WHEREAS, this Programmatic Agreement (Agreement) is applicable to Federal-aid projects that result in the rehabilitation or replacement of historic bridges in Indiana; and

WHEREAS, FHWA has consulted with the Advisory Council on Historic Preservation (Council) and the Indiana State Historic Preservation Officer (Indiana SHPO) pursuant to 36 CFR 800.14(b) of the regulations implementing Section 106 of the National Historic Preservation Act of 1966 (Section 106) (16 U.S.C. 470f); and

WHEREAS, FHWA formed a Historic Bridge Task Group (Task Group), including representatives from the Council, Indiana SHPO, Indiana Department of Transportation (INDOT), Indiana Local Technical Assistance Program (LTAP), Historic Landmarks Foundation of Indiana (HLFI), Historic Spans Task Force, Indiana Association of County Highway Engineers and Supervisors (IACHES), Indiana Association of County Commissioners (IACC), and Senator Richard Lugar’s Office, to assist in the development of this Agreement and monitor its success upon implementation of the Agreement; and

WHEREAS, this Agreement defines a process to identify historic bridges that are most suitable for preservation and are excellent examples of a given type of historic bridge, hereafter referred to as “Select Bridges” and also identify those historic bridges that are not considered excellent examples of a given type of historic bridge or are not suitable candidates for preservation, hereafter referred to as “Non-Select Bridges”; and

WHEREAS, FHWA will not consider demolition to be a “prudent” alternative for any Federal-aid project involving a Select Bridge and FHWA will not participate in a project that would result in the demolition of a Select Bridge; and
WHEREAS, FHWA may participate in the demolition of a Non-Select Bridge provided there are no feasible and prudent alternatives to demolition of the Non-Select Bridge; and

WHEREAS, the Task Group recognizes that historic bridges are an important part of the history, culture and surface transportation system of the State of Indiana and its local units of government; and

WHEREAS, economic development and tourism benefits have been recognized from preserving historic bridges; and

WHEREAS, the rehabilitation, reuse and preservation of historic bridges constructed of a wide variety of materials can be facilitated with good information and procedures that encourage consideration of context sensitive design solutions and address this public interest; and

WHEREAS, it is understood that new bridge construction and routes may ultimately be required to address local and state transportation needs; and

WHEREAS, FHWA, in consultation with the Council and the Indiana SHPO, have invited INDOT to be a signatory to this Agreement; and

WHEREAS, FHWA in consultation with the Council and the Indiana SHPO have invited the LTAP, HLFI, Historic Spans Task Force, IACHES, and IACC to be concurring parties to this Agreement;

NOW, THEREFORE, FHWA, INDOT, the Indiana SHPO, and the Council agree that the following stipulations will be implemented for FHWA undertakings in the State of Indiana that involve historic bridges.

STIPULATIONS

FHWA shall ensure that the following stipulations are carried out:

I. INDOT will implement the following actions or program updates within one (1) year of executing this Agreement:

A. INDOT will develop and include “Standards for Rehabilitation of Bridges on Low-Volume Roads” in the INDOT design manual, which will be utilized to evaluate if rehabilitation of a given historic bridge for vehicular use is feasible and prudent. Standards that define “feasibility” relate to the ability of an alternative to meet certain engineering requirements, such as structural capacity. Standards that define “prudent” relate to cost effectiveness of an alternative. The Task Group will be provided an opportunity to review and comment on the Standards before they are finalized and prior to any updates.
B. INDOT will inform the applicants for Federal-aid funds for any bridge project in the award letter that the scope of the bridge project (rehabilitation or replacement) will be determined by FHWA through the National Environmental Policy Act (NEPA) process and Section 4(f) of the Department of Transportation Act. The award letter will state that laws, regulations and design standards may ultimately dictate that the bridge be rehabilitated if the bridge is determined to be historic and FHWA concludes that rehabilitation is feasible and prudent.

C. INDOT will classify and label all historic bridge projects as “Bridge Project – Scope Undetermined” until after FHWA has identified a preferred alternative for the project. The classification and labeling will apply to award letters to federal-aid applicants, the Indiana Statewide Transportation Improvement Program and in electronic tracking systems maintained by INDOT. This generic classification for bridge projects will ensure that federal-aid applicants and the public do not have false expectations that the bridge will be replaced before the NEPA process is completed. The classification or label for the bridge project may be updated to reflect the scope identified in the approved NEPA document.

D. INDOT will work with the Transportation Enhancement Committee to develop and implement a scoring system that gives funding priority to Select Bridges within the historic projects category.

II. BRIDGE SURVEY

INDOT will complete a statewide survey of bridges on public roads and on public right-of-way (Bridge Survey) that were built in or before 1965. INDOT will gather the appropriate data to develop a historic context for bridges in Indiana, make NRHP eligibility recommendations, and recommend preservation priorities for historic bridges in accordance with “Attachment A - Scope of Services for the Development of a Historic Bridge Inventory (Appendix A of Consultant Contract)” of this Agreement. INDOT will collect data on all types of bridges (metal truss, concrete, masonry and timber), and will provide adequate opportunities for input to the Task Group and the public in completing the requirements of Attachment A and Stipulations II.A and II.B. Key points where INDOT will seek public comment include: NRHP eligibility, draft Select and Non-Select prioritization criteria, and the draft list of Select and Non-Select Bridges. Each notice requesting public comment will be mailed directly to the County Commissioners so bridge owners will be able to comment at each stage of the process.

A. NRHP Eligibility Determinations:

1. INDOT will provide NRHP eligibility recommendations to the Task Group, County Commissioners, and the public for a 60 day comment period. INDOT’s recommendations will include the NRHP criterion, or criteria, that qualify the bridge for listing in the NRHP. INDOT will also list the bridges that are determined not to be eligible for the NRHP. INDOT will forward their final recommendations, along with any Task Group and public comments to FHWA and the Indiana SHPO for an eligibility determination.
2. FHWA, in consultation with the Indiana SHPO, will issue NRHP eligibility determinations for each bridge surveyed by INDOT. Bridges determined not to be NRHP eligible require no further consideration by INDOT and FHWA, unless later determined eligible for the NRHP in response to a nomination, or based on additional information or changed circumstances.

3. INDOT will make available to the public the NRHP eligibility determinations made by FHWA. The list will also include those bridges that FHWA determines not to be eligible for the NRHP.

B. Prioritization:

1. INDOT will develop criteria to identify each historic bridge as either Select or Non-Select in accordance with the process outlined in “Attachment A - Scope of Services for the Development of a Historic Bridge Inventory (Appendix A of Consultant Contract).”

2. INDOT will seek input from the Task Group and the public on the evaluation criteria for classifying historic bridges as Select and Non-Select. The Task Group, County Commissioners, and the public will have thirty (30) days to provide comments to INDOT on the criteria.

3. FHWA, in consultation with the Indiana SHPO, will review the comments from the Task Group and the public, modify the criteria as appropriate, and approve the criteria in cooperation with INDOT.

4. INDOT will apply the Select and Non-Select Bridge criteria to each historic bridge identified in the Bridge Survey. INDOT will seek comments from the Task Group and the public on the draft list of Select and Non-Select Bridges. For each bridge, the rationale for including the bridge on the Select list or Non-Select list will be described. The Task Group, County Commissioners, and the public will have sixty (60) days to provide comments to INDOT on the Select and Non-Select Bridges list.

5. INDOT will provide FHWA and the Indiana SHPO with the list of Select and Non-Select Bridges and the comments received from the Task Group and the public. FHWA, in consultation with the Indiana SHPO, will review the comments received and make appropriate changes to the list, if any. FHWA, in consultation with the Indiana SHPO, will ultimately approve the list of Select and Non-Select Bridges when both parties are satisfied with the classification of each bridge.

6. INDOT will make available to the Task Group and the public the final list of Select and Non-Select Bridges, the final criteria used to evaluate bridges as Select or Non-Select, and the rationale for the classification of each bridge.
C. Re-Evaluation of Historic Bridges

1. In unusual circumstances, a Select Bridge may no longer meet the Select Bridge criteria. Examples of unusual circumstances may include, but are not limited to, the bridge collapsing due to a flood or an overweight vehicle. A bridge owner may request that FHWA and the Indiana SHPO re-evaluate the Select Bridge determination if an unusual circumstance occurs. The following process will be followed to determine if re-classification of the Select Bridge is appropriate:

   a. The bridge owner must submit the request in writing to INDOT. The bridge owner should describe the unusual circumstance that has occurred and explain why the Select Bridge criteria no longer apply to the bridge.

   b. If INDOT determines the request has merit, then INDOT will notify FHWA, the Indiana SHPO, the Task Group, and the public of the request to re-classify the Select Bridge. INDOT will accept comments from the Task Group and the public for thirty (30) days.

   c. INDOT will provide a copy of all comments received to FHWA and the Indiana SHPO. FHWA and the Indiana SHPO will consult to evaluate the request and consider the comments received from the Task Group and the public.

   d. If FHWA and the Indiana SHPO agree on the classification of the bridge, then FHWA will notify INDOT of the decision within 30 days after receiving the documentation from INDOT. INDOT will notify the bridge owner, the Task Group and all individuals that provided comments on the bridge of the decision. If FHWA and the Indiana SHPO do not agree on the classification of the bridge, then the parties will invoke the Dispute Resolution provision, Stipulation IV.B. If necessary, INDOT will update the Select/Non-Select list by removing the Select Bridge from the list.

2. At least every ten (10) years, FHWA, INDOT, and the Indiana SHPO will consult to determine if conditions have changed that would require updating the list of bridges eligible for the NRHP, the criteria for identifying Select and Non-Select Bridges, and the list of Select and Non-Select Bridges. Any signatory may request that an update be completed more frequently if there have been substantial changes to the population of bridges identified in the Bridge Survey. If FHWA, INDOT and the Indiana SHPO agree that conditions have changed and an update is required, then the survey will be completed as described in Stipulation II of this Agreement. The FHWA, INDOT and the Indiana SHPO will consult to determine if the survey should be expanded to include bridges built after 1965. If FHWA, INDOT and the Indiana SHPO determine the existing survey is still valid, then INDOT will notify the Task Group, County Commissioners, and the public of the decision.
III. PROJECT DEVELOPMENT PROCESS FOR HISTORIC BRIDGES

FHWA will satisfy its Section 106 responsibilities for undertakings involving Select and Non-Select Bridges by completing the following processes. FHWA recognizes that additional historic properties, other than the historic bridge, may exist within the project’s Area of Potential Effect (APE). To satisfy FHWA’s Section 106 responsibilities for other historic resources that may be in the APE, FHWA will comply with the requirements of 36 CFR Parts 800.3-800.6.

Consulting parties shall be invited to consult pursuant to 36 CFR Part 800.3 and be notified that consultation with respect to the historic bridge will be completed in accordance with the Programmatic Agreement for the Management and Preservation of Indiana’s Historic Bridges.

A. Project Development Process for Select Bridges

1. FHWA will work with INDOT, and the bridge owner if the historic bridge does not belong to INDOT, to develop a draft purpose and need statement (P&N) and alternatives analysis. Rehabilitation for vehicular use must be thoroughly evaluated before other alternatives are considered. Rehabilitation alternatives must include a one-way pair alternative that involves rehabilitating the existing bridge and constructing a new parallel bridge. If rehabilitation is not feasible and prudent, then the Select Bridge must be bypassed or relocated for another use. FHWA will not participate in a project that involves demolition of a Select Bridge.

2. If the bypass alternative is not feasible and prudent, relocation of the bridge will be required. INDOT will work with the bridge owner, if the bridge does not belong to INDOT, to identify a new location for the Select Bridge. Preference will be given to locations closest to the original location of the bridge. The NEPA document must include the proposed new location, description of how the new bridge will be utilized, and evaluate the associated impacts, in addition to those resulting from the bridge replacement.

3. Upon completion of the draft P&N and alternatives analysis, INDOT will forward to the consulting parties a copy of the draft P&N and alternatives analysis (including relocation proposal, if applicable) and give the consulting parties at least thirty (30) days to provide comments before the P&N and alternatives analysis are finalized.

4. FHWA will work with INDOT, and the bridge owner if the historic bridge does not belong to INDOT, to revise the P&N and alternatives analysis based on comments received. FHWA will identify a preferred alternative based on the P&N and alternatives analysis. INDOT will provide the revised P&N, alternatives analysis (including updated relocation proposal, if applicable), and preferred alternative to all consulting parties. The submittal to the Indiana SHPO will request concurrence with the FHWA preferred alternative.

5. If the Indiana SHPO objects to the preferred alternative within thirty (30) days of receiving the request for concurrence, FHWA will continue to consult with the
Indiana SHPO, INDOT, the bridge owner if the historic bridge does not belong to INDOT, and the consulting parties. If the Indiana SHPO and FHWA cannot reach agreement with respect to the preferred alternative, then FHWA will comply with the dispute resolution stipulation of this Agreement.

6. If the Indiana SHPO concurs with FHWA’s preferred alternative, then the standard treatment approach, described in Attachment B (Standard Treatment Approach for Historic Bridges) will be initiated. The Indiana SHPO, the Council, and FHWA agree that implementation of the standard treatment approach for rehabilitation (rehabilitation is required for the Select Bridge) includes all possible planning to minimize harm to the historic bridge and fulfills all consultation requirements under Section 106.

7. The bridge owner will hold a public hearing prior to completion of NEPA. The bridge owner will notify consulting parties by letter or e-mail (if available) of the public hearing and the availability of the environmental documentation. The environmental document, Section 106 documentation for other resources in the APE, and preliminary Section 4(f) evaluation, if one is required, will be made available prior to and at the public hearing for public review and comment.

8. If the preferred alternative includes transferring ownership of the historic bridge, then INDOT will initiate an agreement between INDOT, the bridge owner if the bridge does not belong to INDOT, the Indiana SHPO, and the proposed new bridge owner. The agreement shall include all applicable commitments required in Attachment B. INDOT will execute the agreement prior to NEPA approval.

9. FHWA and INDOT will work jointly so that all measures to minimize harm to the historic bridge are incorporated into the project as part of the environmental commitments made in documentation required pursuant to NEPA.

10. If there is no agreement ultimately regarding the preferred alternative, FHWA will comply with the dispute resolution stipulation of the Agreement.

B. Project Development Process for Non-Select Bridges

1. FHWA will work with INDOT, and the bridge owner if the bridge does not belong to INDOT, to develop a draft P&N and alternatives analysis. Rehabilitation for vehicular use must be thoroughly evaluated before other alternatives are considered. Rehabilitation alternatives must include a one-way pair alternative that involves rehabilitating the existing bridge and constructing a new parallel bridge.

2. If rehabilitation alternatives are not feasible and prudent, the bridge owner shall market the historic bridge for re-use. Proposals will be accepted for the immediate rehabilitation and reuse or for its storage for future reuse. Proposals will also be accepted for the salvage of elements that may be stored for future repair of similar historic bridges. At a minimum, the following activities will be completed:
a. The bridge owner shall place a legal notice in a local newspaper and a statewide newspaper at a minimum six (6) months in advance of the public hearing to notify interested parties of the historic bridge availability for re-use. The advertisement should describe, at a minimum, the historic bridge length, width, height, condition, and availability.

b. The bridge owner shall place signs at both approaches to the historic bridge at a minimum six (6) months in advance of the public hearing to notify users that the historic bridge will be replaced. The signs will remain in place until completion of NEPA.

c. The bridge owner shall provide INDOT and HLFI with the information needed to post the historic bridge on INDOT’s historic bridge marketing website and HLFI website, respectively, at a minimum six (6) months prior to the public hearing.

3. If no responsible party steps forward either prior to or during the public hearing to assume ownership of the Non-Select Bridge, then the bypass and relocation alternatives will be deemed not prudent and, therefore, Indiana SHPO, the Council, and FHWA agree that the bridge may be demolished.

4. FHWA will identify a preferred alternative based on the P&N and alternatives analysis. The standard treatment approach, described in Attachment B (Standard Treatment Approach for Historic Bridges) will be initiated. The Indiana SHPO, the Council, and FHWA agree that implementation of the standard treatment approach includes all possible planning to minimize harm to the historic bridge and implementation of the standard treatment approach fulfills all consultation requirements under Section 106.

5. The bridge owner will hold a public hearing for the project, prior to completion of NEPA. The bridge owner will notify consulting parties by letter or e-mail (if available) of the public hearing and the availability of the environmental documentation. The environmental document, Section 106 documentation for other resources in the APE, and preliminary Section 4(f) evaluation, if one is required, will be made available prior to and at the public hearing for public review and comment.

6. If the preferred alternative includes transferring ownership of the historic bridge, then INDOT will execute an agreement between INDOT, the bridge owner if the bridge does not belong to INDOT, the Indiana SHPO, and the proposed new bridge owner. The agreement shall include all applicable commitments required in Attachment B. INDOT will execute the agreement prior to NEPA approval.

7. FHWA will ensure all measures to minimize harm to the historic bridge are incorporated into the project as part of the environmental commitments made in documentation required pursuant to NEPA.
IV. ADMINISTRATIVE STIPULATIONS

A. **Review** – The Council and Indiana SHPO may monitor activities carried out pursuant to this Agreement and will review such activities, if so requested. FHWA and INDOT will cooperate with the Council and the Indiana SHPO in carrying out their review responsibilities.

B. **Dispute Resolution** – Should any signatory or invited signatory to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, FHWA shall consult with the objecting party(ies) to resolve the objection. If FHWA determines that such objection(s) cannot be resolved, FHWA will:

1. Forward all documentation relevant to the dispute to the Council in accordance with 36 CFR Section 800.2(b)(2). Upon receipt of adequate documentation, the Council shall review and advise FHWA on the resolution of the objection within thirty (30) days. Any comment provided by the Council, and all comments from the parties to the Agreement, will be taken into account by FHWA in reaching a final decision regarding the dispute.

2. If the Council does not provide comments regarding the dispute within thirty (30) days after receipt of adequate documentation, FHWA may render a decision regarding the dispute. In reaching the decision, FHWA will take into account all comments regarding the dispute from the parties to the Agreement.

3. FHWA’s responsibilities to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute remain unchanged. FHWA will notify all parties of its decision in writing before implementing that portion of the undertaking subject to dispute under this stipulation. FHWA’s decision will be final.

C. **Annual Reporting** – INDOT will maintain the list of bridges evaluated under Stipulation II and include at least the current status of eligibility, priority (Select or Non-Select), current owner, and scope of Federal-aid projects processed under this Agreement. INDOT will prepare an annual report that will include a list of Select and Non-Select Bridges that have been processed during the previous calendar year pursuant to this Agreement and the scope of each project. INDOT will submit this report on or before January 31 of each year to the Task Group.

D. **Amendments and Noncompliance** – If any signatory to this Agreement, including any invited signatory, determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties, as well as the Task Group, to develop an amendment. The amendment will be effective on the date a copy is signed by all of the original signatories. If the signatories cannot agree to appropriate terms to amend the Agreement, any signatory may terminate the Agreement in accordance with the Termination stipulation. In the event FHWA does not carry out the terms of this Agreement, FHWA will comply with 36 CFR Part 800 with regard to individual undertakings covered by this Agreement.
E. **Termination** – The Council, Indiana SHPO, INDOT, or FHWA may propose to terminate this Agreement by providing thirty (30) calendar days notice to the other parties and explaining the reason(s) for the proposed termination. The Council, Indiana SHPO, FHWA, and INDOT will consult during this period to seek agreement on amendments or other actions that would avoid termination. In the event of termination, FHWA will comply with 36 CFR Part 800 with regard to individual undertakings covered by this Agreement.

F. **National Historic Landmarks** – National Historic Landmarks shall be treated in accordance with 36 CFR 800.3–800.6, and 800.10 rather than the terms of this agreement.

G. **Anticipatory Demolition** – If FHWA or Indiana SHPO determine a bridge owner intentionally demolishes or otherwise diminishes the historic integrity of a Select Bridge under the bridge owner’s jurisdiction with non-Federal-aid funds, then FHWA will comply with 36 CFR Part 800 for any future federal-aid bridge project proposed by that bridge owner. After the next Bridge Survey update is completed in accordance with Stipulation II.C.2, FHWA may process federal-aid projects in accordance with this Agreement for that bridge owner.

Section 110(k) of the National Historic Preservation Act prohibits FHWA from providing Federal-aid funds for a given project, where the bridge owner, with the intent to avoid the requirements of Section 106, has intentionally adversely affected the historic bridge prior to completion of NEPA (see 36 CFR 800.9(c)).

H. **Transition of existing projects** – Until such time as the initial survey and prioritization of historic bridges called for in Stipulation II.B has been carried out, or for those projects that fall outside the scope of this agreement, projects must comply with the requirements of 36 CFR Part 800. Projects that have completed compliance with 36 CFR Part 800 shall not be reevaluated, provided the scope of work of the project and the mitigation measures, if any, are fully implemented as they were identified during the NEPA evaluation.

I. **Duration** – This Agreement shall become effective upon execution by FHWA, Indiana SHPO, INDOT, and the Council and shall remain in effect until December 31, 2030.

J. **Option to Renew** – No later than December 31, 2029, FHWA will consult with the Indiana SHPO, INDOT and the Council to determine interest in renewing this Agreement. The Agreement may be extended for an additional term upon the written agreement of the signatories.

Execution of this Agreement and implementation of its terms evidences that FHWA has considered the effects of its Federal-aid program on Indiana’s historic bridges and afforded the Council a reasonable opportunity to comment.
SIGNATORIES

FEDERAL HIGHWAY ADMINISTRATION

Robert F. Tally, Jr., P.E.
Division Administrator

Date 8/2/06

INDIANA HISTORIC PRESERVATION OFFICER

Kyle Hupfer
Director, Indiana Department of Natural Resources
Indiana State Historic Preservation Officer

Date 7/20/06

ADVISORY COUNCIL ON HISTORIC PRESERVATION

John M. Fowler
Executive Director

Date 8/4/06

INVITED SIGNATORY

INDIANA DEPARTMENT OF TRANSPORTATION

Thomas O. Sharp
Commissioner

Date 9/21/06

Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges

July 17, 2006

Page 11 of 11
CONCURRING PARTY

HISTORIC LANDMARKS FOUNDATION OF INDIANA

[Signature]

Marsh Davis
President

October 23, 2006

Programmatic Agreement Regarding Management and Preservation of Indiana’s Historic Bridges

July 17, 2006
ATTACHMENT A

Scope of Services
for the Development of a
Historic Bridge Inventory
(Appendix A of Consultant Contract)
Appendix “A”

Information and Services to be furnished by the CONSULTANT:

The CONSULTANT will be responsible for the study of publicly owned bridges that exist in the National Bridge Inventory (NBI) and were built through 1965 in the State. The work will be accomplished following all of the relevant Federal Highway Administration regulations and guidance documents, as well as other federal and state requirements and Indiana Department of Transportation (INDOT) Procedural Manual for Preparing Environmental Studies. The work will be assigned and reviewed by the Office of Environmental Services (OES) Administrator. The completed study along with the appropriate number of copies will be transmitted for distribution to the OES.

HISTORIC BRIDGES INVENTORY:

The study will be divided into two phases. Phase I of the study will focus on bridges (approximately 3,443 bridges) constructed through 1942. Phase II of the study will focus on bridges (approximately 3,856 bridges) constructed from 1943 through 1965. The Phase I and Phase II evaluations will be completed concurrently. The Phase I evaluations are more critical given that many of these bridges are eligible for the National Register of Historic Places (National Register) and many of these structures have been lost in recent years.

Part 1 of the Agreement will extend through Task 4.2 and will include bridges built through 1965. Tasks 8, 9, and 10 will be completed concurrently with Tasks 1 through 4.2, as appropriate. The scope of work for succeeding tasks, beginning with Task 4.3, will be finalized as Part 2 of the Agreement after the number of bridges requiring inventory has been determined.

The CONSULTANT will provide the following scope of services for the development of a historic bridge inventory:

Task 1. Develop Contextual Study of Historic Bridges in Indiana – This task involves developing a historic context report for bridges in Indiana. The report will include a history of settlement and transportation in Indiana with an emphasis on nineteenth-century wagon routes, automobile transportation, and bridge engineering and design. Early road development, significant named highways, the interstate system, and important public works campaigns related to transportation will be addressed. The report will include a context for the historical development of transportation networks and systems at the local, regional, and state levels, as described in secondary literature, historic maps, county historical surveys, and INDOT annual progress reports. The report will also include a history of the evolution of the Indiana State Highway Commission into INDOT.
Task 1.1 Conduct historical research
The CONSULTANT will conduct research into periods of bridge construction and general events and trends in transportation history in the United States and Indiana to prepare a historic context to assist in the evaluation of bridges through 1965.

Sources to be consulted are expected to include:

a. Secondary literature related to Indiana transportation history
b. INDOT’s annual progress reports, major planning studies for bridges, and bridge design manuals for the period
c. Histories of construction and design firms actively working on Indiana bridges during this period
d. Engineering journals of the period covering the subject bridges, such as Engineering News-Record and Public Roads
e. Standard plans and construction drawings for the subject bridges, as needed
f. INDOT’s Bridge Inventory Database
g. Indiana State Historic Preservation Office’s (INSHPO) bridge database
h. Indiana county atlases and highway maps from the period, including the 1876 atlas of Indiana
i. Historic contexts for bridges of the period completed by other state departments of transportation and the National Cooperative Highway Research Program
j. Thematic surveys in the collection of INSHPO, including: Iron Monuments to Distant Prosperity, Indiana’s Metal Bridges; Artistry and Ingenuity in Artificial Stone, Indiana’s Concrete Bridges; Indiana’s Covered Bridges; and WPA Recreational Projects in the Hoosier State
k. Transportation contexts provided in county and municipal surveys in the collection of INSHPO
l. Nominations and determinations of eligibility for bridges in the collection of INSHPO
m. Materials previously gathered by Professor James Cooper for statewide bridge studies and publications
n. Bridge information collected by the Local Technical Assistance Program (LTAP) in 2003

Research for this task will be conducted in Indianapolis; West Lafayette; and Madison, Wisconsin. Repositories to be visited are expected to include:

a. INDOT
b. INSHPO
c. Indiana State Archives, Indianapolis
d. Indiana State Library, Indianapolis
e. Indiana Historical Society, Indianapolis
f. Stewart Center Libraries, Purdue University, West Lafayette
g. Online sources
h. University of Wisconsin Engineering Library (for national journals)
i. Wisconsin Historical Society Library (collection on U.S. history)
No research for this task is expected to be conducted at the local level of Indiana counties or cities.

Task 1.2 Conduct oral history interviews
The CONSULTANT will conduct interviews with up to 10 bridge engineers and transportation historians. The CONSULTANT will select interview subjects based on discussions with INDOT. Selected subjects are expected to include agency and consulting engineers, Purdue University and extension civil engineers, and transportation historians knowledgeable on the period of study. The results of the interviews will be incorporated into the historic context report.

Task 1.3 Prepare historic context outline
The CONSULTANT will prepare an outline for the historic context report for concurrent INDOT and INSHPO review. Within 10 days of receipt, INDOT will approve or provide written comments on the outline. If the draft outline requires extensive revision, INDOT and the CONSULTANT will have a teleconference to discuss comments and a revised draft will be submitted for review. The approved outline will be the basis for the draft historic context report.

Task 1.4 Prepare draft historic context report
Based on the results of research and interview efforts, the CONSULTANT will prepare the historic context report. The purpose of the report is to define relevant historic contexts that will be used in assessing historical significance and establishing periods of significance for bridges built in Indiana through 1965. These historic contexts will inform the stratification methodology (Task 2) and the Evaluation Criteria (Task 3). The primary historic contexts to be developed are expected to include:

a. Transportation history (specific to bridges) – Provides a narrative history of transportation in Indiana, including federal, inter-state, county, and municipal public works construction campaigns from the late nineteenth century to 1965. Transportation networks include early roads (as indicated on 1876 atlas), named highways, state-aid highways, and interstate highways. The history of the evolution of the Indiana State Highway Commission into INDOT will be included. In addition, attention will be given to the development of various inter-state highway associations with routes in Indiana, including the National Road, Lincoln Highway, and Dixie Highway. Information on county and municipal public works will be limited to that identified through secondary sources identified as Source k in Task 1.1.

b. Bridge engineering, innovations, and developments – Includes a history of bridge technology, understanding of bridge typology, including structural configurations and building materials, and identifies bridge types utilized in Indiana, as well as innovations in design, materials, and construction methods found in the state.

c. Significant engineers, designers, and builders – Identifies important private- and public-sector bridge designers and builders of Indiana bridges constructed in or before 1965. The context for notable people and firms will focus on Indiana. For nationally known figures whose careers are well documented, research will be limited to that necessary to understand the potential significance of their work in Indiana.
Other historic contexts are expected to play a lesser role in the evaluation of the eligibility of subject bridges. Relevant information for these contexts in relationship to bridges of the subject period may be limited. These secondary contexts are expected to include:

a. Economic development (specific to bridges as components of road networks) – Includes bridges whose construction stimulated economic development of a region or city, if any.

b. Community planning and development – Includes bridges designed and constructed as part of a comprehensive plan for a community, if any.

c. Social history – Includes bridges directly associated with significant social programs, if any.

d. Politics/government – Includes bridges associated with the enactment and administration of state laws, if applicable.

e. Aesthetics – Considers how bridges reflect design principles of the period.

The CONSULTANT will submit a draft version of the report to INDOT for review. INDOT will complete a quality review of the draft report within 5 days of receipt. If the draft appears satisfactory, it will be submitted for concurrent review by INDOT, INSHPO, and the Federal Highway Administration, Indiana Division (FHWA Indiana). If INDOT provides written comments, the CONSULTANT will revise the report to address and incorporate INDOT’s comments and submit a revised draft. INDOT, INSHPO, and the FHWA Indiana will review the CONSULTANT’s revised draft within 30 days of receipt. Based on that review, INDOT will compile INDOT, INSHPO, and FHWA Indiana comments and provide the CONSULTANT with one set of comments.

Task 1.5 Complete preliminary analysis of NBI
The CONSULTANT will obtain NBI databases for state and county bridges from INDOT. The CONSULTANT will consolidate the databases and conduct a preliminary analysis of relevant data. As addenda to the draft historic context report, the CONSULTANT will prepare a list of bridge types represented in Indiana during the subject period and a list of historic contexts that may be associated with the subject bridges. For each type, the CONSULTANT will present years in use, heyday of use, typical span length, and longest span, based on preliminary analysis of the NBI.

Task 1.6 Prepare final historic context report
Based on written comments and the review meeting (see Task 10.2), the CONSULTANT will prepare the report in final form to address and incorporate all comments provided by INDOT. The CONSULTANT will submit the final report to INDOT for review and approval. The final historic context report will be available to the public for review on the INDOT project website (see Task 9.2). INDOT will advise the CONSULTANT regarding which public comments will be addressed in the final historic context. A maximum of 40 hours are budgeted for addressing public comments. The CONSULTANT will work with INDOT to address the comments and not delay subsequent tasks. If this is not feasible, the CONSULTANT will work with INDOT to revise the schedule.
Project Deliverable:  Historic context report for historic bridges in Indiana. Final report will be provided in hard copy (5 copies) and on CD in PDF format (10 copies).

Task 2. Develop Methodology for Bridge Inventory – Because it is not feasible or practical to field survey all of the bridges built through 1965, the CONSULTANT will develop a method for separating the bridge population into subgroups based upon type/level of data needed for their evaluation.

Task 2.1 Develop methodology for stratifying bridge population
After consulting with INDOT and other entities (see Task 10.3), the CONSULTANT will develop a methodology to separate INDOT’s pre-1966 bridge population into bridge subgroups. Bridges that have previously been determined eligible or listed in the State and/or National Register will not require further data and will be eliminated from further study. Extant eligible and listed bridges will be reintroduced in Task 7 (to be scoped in the future). Bridges with superstructures replaced after 1965 and any non-bridge structures in the NBI will also be eliminated from further study. Remaining bridges will be separated into subgroups based on type/level of data needed for their evaluation.

Task 2.2 Test assumptions of methodology
The CONSULTANT will test assumptions regarding the proposed methodology for stratifying the bridge population by reviewing photographs, maintenance, and inspection files, and construction drawings for up to 100 bridges. These materials will be reviewed to confirm assumptions concerning data needed for evaluation of bridge subgroups.

Task 2.3 Prepare draft bridge stratification report with list of subgroups and data needs
The CONSULTANT will identify and present rationale for what type of data will be needed for the evaluation of each subgroup. The CONSULTANT will develop procedures for how the data will be collected and documented for each subgroup.

The CONSULTANT will prepare and submit a bridge stratification report that includes a list of bridge subgroups, data needs for evaluating subgroups, and written procedures for collecting and synthesizing data for each subgroup to INDOT for review. As an appendix, the CONSULTANT will prepare a preliminary list of bridges in each subgroup. INDOT will complete a quality review of the draft bridge stratification report within 5 days of receipt. If the draft appears satisfactory, it will be submitted for concurrent review by INDOT, INSHPO, and FHWA Indiana. If INDOT provides written comments, the CONSULTANT will revise the bridge stratification report to address and incorporate INDOT’s comments. INDOT, INSHPO, and FHWA Indiana will review the CONSULTANT’s revised draft within 30 days of receipt.

Based on that review, INDOT will compile INDOT, INSHPO, and FHWA Indiana comments and provide the CONSULTANT with one set of comments.

Task 2.4 Develop final bridge stratification report
The CONSULTANT will prepare the bridge stratification report in final form to address and incorporate all comments provided by INDOT. The CONSULTANT will revise the list of
bridges in each subgroup to address and incorporate comments. The CONSULTANT will submit the final report to INDOT for review and approval.

**Project Deliverables:** Final lists and procedures will be provided in hard copy (5 copies) and on CD in PDF format (10 copies).

**Task 3. Develop Evaluation Criteria for National Register Eligibility** – The evaluation criteria will be based on the Historic Context and National Register Criteria for Evaluation. The criteria and considerations will follow the guidelines of *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* and *National Register Bulletin 16A: How to Complete the National Register Registration Form*. INSHPO’s *Guidelines for Assessing the Cultural Significance of Indiana’s Extant Metal Truss Bridges (1872-1942)* will also be consulted.

**Task 3.1 Prepare evaluation criteria**
Based on the results of the historic context report and the meeting (see Task 10.4), the CONSULTANT will develop bridge evaluation criteria and implementation procedures for determining which bridges are National Register eligible. These criteria will focus on significance at the state level but will also identify significant local trends and developments found during research. If Indiana played a national role in any innovations affecting the subject structures, possible national levels of significance will also be identified.

Criterion A will be developed to recognize structures that have an important association with significant events, trends or patterns in transportation history. Some structures that are primarily significant for their transportation function may also be associated with secondary themes. Significant secondary themes will be identified as appropriate to clarify the possible significance of structures. Secondary themes may include:
- Community planning and development
- Industry and commerce
- Social history
- Politics/government

Criterion C will be developed to identify structures that are significant representations of:
- Features common to its type, period, or method of construction
- Technological advances
- A variation, evolution, or transition that reflects an important phase in bridge construction
- High artistic value
- The work of a master

It is not anticipated that structures will be evaluated for eligibility under Criteria B or D. The Criteria for Evaluation will explain in detail why Criteria B and D are not expected to apply.
Task 3.2 Develop integrity considerations
Based on the results of the historic context report and the meeting (see Task 10.4), the CONSULTANT will develop integrity considerations that may apply to the subject structures. Integrity considerations, especially when inconsistent with the original design, may include:
- Widening the superstructure
- Replacing the superstructure after 1965
- Changing or removing a railing or parapet that is integral to the superstructure
- Replacing or adding main structural member

The CONSULTANT will review the work history field in the NBI database to determine types of alterations that will inform development of integrity considerations. These considerations will be incorporated into the draft and final evaluation criteria report.

Task 3.3 Prepare Draft evaluation criteria and implementation procedures
The CONSULTANT will submit a Draft Evaluation Criteria and Implementation Procedures report to INDOT for review. INDOT will complete a quality review of the draft report within 5 days of receipt. If the draft appears satisfactory, it will be submitted for concurrent review by INDOT, INSHPO, and FHWA Indiana. If INDOT provides written comments, the CONSULTANT will revise the evaluation criteria and implementation procedures to address and incorporate INDOT’s comments. INDOT, INSHPO, and FHWA Indiana will review the CONSULTANT’s revised draft within 30 days of receipt. Based on that review, INDOT will compile INDOT, INSHPO, and FHWA Indiana comments and provide the CONSULTANT with one set of comments.

Task 3.4 Final evaluation criteria and implementation procedures
Based upon that review, INDOT will compile INDOT, INSHPO, and FHWA Indiana comments and provide the CONSULTANT with any additional written comments, and the CONSULTANT will incorporate the comments. The CONSULTANT will submit the final report to INDOT for review and approval.

Project Deliverables: Bridge evaluation criteria and implementation procedures. Final criteria and procedures will be provided in hard copy (5 copies) and on CD in PDF format (10 copies).

Task 4. Conduct Bridge Inventory

Task 4.1 Develop a historic bridge inventory database template
The CONSULTANT will work with INDOT System’s Technology staff to develop a historic bridge inventory database template for all bridges built prior to and in the year 1965. The Database will be developed in Access and will include relevant NBI data elements (approximately 60 item numbers are expected to be included) and additional relevant fields not included in the NBI. The database will be separate from NBI, but compatible with NBI. Additional relevant fields not in NBI are expected to include:
- Historic bridge name (if known)
- Bridge number (County Bridge # or State Bridge #)
• Bridge located in park or on private property
• Bridge type details (especially for trusses not distinguished in NBI)
• Unique bridge number
• Unique design features
• Structural features
• Integrity problems
• Bridge designer and builder (if known)
• Aesthetic treatments
• Historical association
• Indiana Historic Sites and Structures (IHSS) inventory numbers
• National Register eligibility determinations
• “Select/Non-Select” status (this field will be filled after Task 7 is completed)
• Data to back up the “Select/Non-Select” decision (to be determined during Task 6)
• NBI Item 37 for historic significance (with corrected data)

Identification of selected NBI data elements and new data elements not presently in the NBI will be coordinated with INDOT, FHWA Indiana, and INSHPO. The CONSULTANT will submit the draft database template to INDOT. INDOT, INSHPO, and FHWA Indiana will review the draft database template with proposed fields based on NBI elements and other relevant information before any data is collected. Based upon that review, INDOT will provide the CONSULTANT with written comments. The CONSULTANT will incorporate the comments and INDOT will review and approve the final database template.

Project Deliverable: Historic bridge inventory database template recorded electronically in Access with Excel spreadsheet export capability, provided on CD (10 copies)

Task 4.2 Populate database
The CONSULTANT will populate the database with NBI data and LTAP data for approximately 7,300 bridges. This task includes quality review of data to identify and address errors, omissions, and inconsistencies.

Task 4.3 Incorporate non-NBI bridges into the database
The CONSULTANT, in consultation with INDOT, will incorporate up to 50 non-NBI bridges identified by the public and interest groups during Tasks 8.4 and 9.1 into the database. Not all NBI database fields will be available.

Task 4.4 Determine project approach for Part 2
The CONSULTANT, in consultation with INDOT (see Task 10.5), will determine the proposed approach for succeeding tasks. INDOT will receive a memo of understanding outlining the proposed approach for review and comment.

Subsequent items under this task will be completed under a separate work scope.

Task 4.5 Collect bridge inventory data for all subgroups – Reserved (a detailed scope and cost proposal will be developed at a later date).
Task 5. Analyze Inventory Data to Make Eligibility Determinations – Reserved (a detailed scope and cost proposal will be developed at a later date).

Task 6. Develop Criteria for Identification of “Select” and “Non-Select” Bridges – Reserved (a detailed scope and cost proposal will be developed at a later date).

Task 7. Analyze Inventory Data to Make “Select” and “Non-Select” Determinations – Reserved (a detailed scope and cost proposal will be developed at a later date).

Task 8. Public Involvement – This task will be undertaken concurrently with Tasks 1 through 4.1, as appropriate. Three public presentations will be made to share information regarding the bridge inventory project, including the proposed methodology and evaluation criteria.

Task 8.1 Prepare presentation materials
The CONSULTANT will prepare a PowerPoint presentation and handouts. The CONSULTANT will submit presentation materials and handouts to INDOT for review prior to the meeting. The CONSULTANT will incorporate INDOT comments into the final version of the presentation materials and handouts prior to distribution. The final version will be used for the three presentations.

Task 8.2 County Bridge Conference presentation
If invited, the CONSULTANT will make a presentation at the County Bridge Conference, sponsored by the LTAP and Purdue University, to be held in January 2007 in West Lafayette. The CONSULTANT will work with INDOT to obtain an invitation.

Task 8.3 Road School presentation
If invited, the CONSULTANT will make a presentation at Purdue Road School, to be held in spring 2007 in West Lafayette. The CONSULTANT will work with INDOT to obtain an invitation.

Task 8.4 Public presentation
The CONSULTANT will make three presentations at locations selected in consultation with INDOT. The locations will include Indianapolis, the northern part of the state, and the southern part of the state. The CONSULTANT, in consultation with INDOT and INSHPO, will identify and invite groups, including County Historians, Historic Landmarks Foundation of Indiana and its affiliates, and the Historic Spans Task Force, and individuals with an interest in historic bridges to the meeting. The presentation will be open to the public and advertised through a public notice in the newspaper. The CONSULTANT will solicit information from attendees on bridges not included in the NBI. Such bridges may include bypassed bridges and bridges in parks.

Task 9. Supply Information for Creation of a Project Website – This task will be undertaken concurrently with Tasks 1 through 4.1, as appropriate. As part of the public involvement campaign, the CONSULTANT will assist INDOT’s Systems Technology staff, as directed, with
content and format recommendations and provide copy content drafts for INDOT approval. Development, maintenance, and technical management of the project website will be the responsibility of INDOT.

Task 9.1 Project information available on project website
On a quarterly basis, the CONSULTANT will provide information on project methodology, milestones, and public meetings to INDOT’s Systems Technology staff for posting on the project website. The website will also include a form for the public to identify non-NBI bridges. This form can be printed, completed, and returned. INDOT will review all web information prepared by the CONSULTANT prior to posting and provide written comments. The CONSULTANT will incorporate INDOT comments prior to submittal to INDOT’s Systems Technology staff for posting.

Task 9.2 Final historic context report available on project website
The CONSULTANT will provide the final historic context report to INDOT’s Systems Technology staff in PDF format for posting on the project website.

**Project Deliverables:** Electronic files containing project information and report in PDF format for public outreach.

**Task 10. Meetings and Project Milestones** – This task will be undertaken concurrently with Tasks 1 through 4.1, as appropriate. The CONSULTANT will meet with INDOT, and any other entities (such as FHWA Indiana) as decided by INDOT, to review the scope of services, schedule, and deliverables for the project. The CONSULTANT will develop a refined schedule with meetings and project milestones outlined. Meetings may be waived by INDOT or reallocated to occur in conjunction with a different task. Additional meetings would be considered extra services. The CONSULTANT will provide INDOT with weekly progress reports via e-mail.

Task 10.1 Kick-off meeting
The CONSULTANT will meet with INDOT and other invited entities to gather historical research materials, review the project schedule, discuss the public involvement campaign, and establish the communication protocol between project participants. INDOT’s Systems Technology staff will be present to discuss content and format recommendations for the project website. Minutes will be prepared and distributed to participants.

Task 10.2 Draft historic context report meeting
The CONSULTANT will meet with INDOT and other invited entities to review and discuss written comments, as provided by INDOT, on the CONSULTANT’s revised draft historic context report. Minutes will be prepared and distributed to participants.

Task 10.3 Methodology meeting
The CONSULTANT will consult with INDOT and other invited entities at a meeting to discuss a methodology to separate INDOT’s pre-1966 bridge population into bridge subgroups. Minutes
that document the decisions on the stratification methodology will be prepared and distributed to participants.

Task 10.4 Evaluation criteria meeting
The CONSULTANT will meet with INDOT, and other entities as decided by INDOT, to discuss how the historic context report will influence the development of criteria for evaluation and integrity considerations. Minutes will be prepared and distributed to participants.

Task 10.5 Project approach meeting
The CONSULTANT will meet with INDOT, and other entities as decided by INDOT, to discuss the proposed approach for succeeding tasks. Minutes will be prepared and distributed to participants.

Task 11. Development of the Programmatic Agreement – Reserved (a detailed scope and cost proposal will be developed at a later date).
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 Bridge1:

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.

4. The bridge owner will provide a written response to Indiana SHPO comments before the design is advanced to the next phase. The Indiana SHPO comments must be addressed.

5. The bridge owner will ensure that the historic bridge will be maintained for a minimum period of 25 years.

6. If the bridge is currently listed on the NRHP, then INDOT will seek approval of the Department of Interior to keep it on the Register.

7. The bridge owner will complete any photo documentation in accordance with the specifications provided by the Indiana SHPO.

1 Applicable whether rehabilitated at existing location or relocated, whether rehabilitated for vehicular or non-vehicular use.
8. The bridge owner will ensure that the above requirements are implemented before INDOT requests construction authorization from FHWA.

9. If there is any disagreement between the Indiana SHPO and the bridge owner in carrying out this standard approach, then FHWA will consult with the Indiana SHPO and the bridge owner to resolve the disagreement. If the disagreement cannot be resolved by FHWA, then FHWA will comply with the dispute resolution stipulation of the Agreement.

DEMOLITION

The following standard treatment approach applies to Non-Select Bridges when the selected alternative includes demolition of the Non-Select Bridge:

1. The bridge owner will consult with the Indiana SHPO to determine if photo-documentation of the bridge is needed. If needed, the Indiana SHPO will specify the photo documentation standards and distribution requirements. If the Indiana SHPO does not respond within thirty (30) days, the bridge owner may assume the Indiana SHPO does not require any photo documentation.

2. The bridge owner will complete any required photo documentation in accordance with the specifications provided by the Indiana SHPO.

3. The bridge owner will ensure that the above requirements are implemented before INDOT requests construction authorization from FHWA.

4. If there is any disagreement between the Indiana SHPO and the bridge owner in carrying out this standard approach, then FHWA will consult with the Indiana SHPO and the bridge owner to resolve the disagreement. If the disagreement cannot be resolved by FHWA, then the dispute resolution process identified in the Agreement will be followed.

5. Salvage of elements that may be stored and used for future repair of similar historic bridges, if a party was identified during the bridge marketing phase of project development (see Stipulation III.B.2).
PART IV
CHAPTER 2

Historic Bridge Project Development Process

March 2014
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2-1.0 Historic Bridge Project Development Process

When developing a project that involves a historic bridge, the following process should be followed. The Historic Bridge PDP is based on the procedures set forth in the Historic Bridge PA.

Initiate Early Coordination and Seek Consulting Party Comment

The following items can occur concurrently, or they can be a step-by-step process. The number of submittals is at the discretion of the project management team. Consulting parties should be afforded a 30-day comment period for each submittal. If requested by a consulting party, a reasonable extension of the review time can be granted.

- Issue early coordination letter. Letter should contain, at a minimum, the following information:
  - Project Designation Number;
  - Route Number;
  - Project Description;
  - Feature crossed;
  - Township;
  - City;
  - County

- When referencing the project, the proposed classification (i.e., replacement or rehabilitation) should not yet be stated. Per the Historic Bridge PA, INDOT will classify and label all historic bridge projects as “Bridge Project – Scope Undetermined” until after FHWA has identified a preferred alternative for the project. This generic classification for bridge projects will ensure that federal-aid applicants and the public do not have false expectations that the bridge will be replaced before the NEPA process is completed.

- Invite consulting parties and seek feedback on the following items when they are ready for review:
  - Area of Potential Effect (APE). See Part II, Chapter 5 for guidance on developing an APE.
  - Historic properties report (HPR). See Part II, Chapter 6 for guidance on which type of HPR to prepare.
  - Purpose & need (P&N). See Procedural Manual for Environmental Studies and the Historic Bridge Alternatives Analysis Template on the Historic Bridge Inventory website and in Part V Forms for guidance on developing a purpose and need statement.
  - Section 4(f) alternatives analysis. See Historic Bridge Alternatives Analysis Template on the Historic Bridge Inventory website and in PART V Forms for guidance on developing an alternatives analysis document (the draft document must be submitted to INDOT-CRO for review and concurrence prior to distribution).

Market Bridge for Re-Use, if Applicable
Marketing can occur concurrent with above, but should not precede the early coordination initiation. In other words, consulting parties should be aware that a bridge project is proposed at least at the same time that marketing measures are started.

- Marketing is required when:
  
  o Select Bridges: optional if vehicular use does not appear to be feasible & prudent and owner wants to explore relocation options;

  o Non-Select Bridges: all of them that are being replaced. Even bridges that cannot be relocated must be marketed (i.e., a concrete arch). While it is unlikely, someone may step forward and be willing to preserve such a bridge at its existing location. The entity would have to assume the legal liability (i.e., a local group using the bridge for a fishing pier, and being legally responsible for bridge preservation and associated liability), but if they were willing to do so, then they should have the opportunity to step forward and propose such an alternative

  o Marketing provisions from the Historic Bridge PA must be followed. See the [Historic Bridge Inventory website](#) and Part V Forms for templates and guidance related to these items:

  o The bridge owner shall place one legal notice in a local newspaper and place one legal notice in a statewide newspaper at a minimum six (6) months in advance of the public hearing to notify interested parties of the historic bridge availability for re-use. Each notice only needs to run once. The advertisement should describe, at a minimum, the historic bridge length, width, height, condition, and availability.

  o The bridge owner shall place signs at both approaches to the historic bridge at a minimum six (6) months in advance of the public hearing to notify users that the historic bridge may be replaced. The sign should also include the contact information for the bridge owner or consultant who can answer questions from any potential responsible party who wants to assume ownership of the bridge. The signs will remain in place until completion of NEPA.

  o The bridge owner shall provide INDOT-CRO with the information needed to post the historic bridge on INDOT’s historic bridge marketing website and Indiana Landmarks’ website, respectively. This information should be provided, at a minimum, six (6) months prior to the public hearing. INDOT-CRO will post information on the INDOT website and will forward the information to Indiana Landmarks to post on their website.

**Identify Preferred Alternative**

- INDOT, in consultation with SHPO, may request that a consulting parties meeting be scheduled to address questions and concerns with the draft 4(f) alternatives analysis.

- During consultation, sufficient details must be provided to determine effect for rehabilitation projects (i.e., listing specific structural members that will be replaced and/or providing percentage of replacement of the bridge’s original material).
• Once INDOT is satisfied that substantive SHPO concerns have been addressed, the consultant should prepare the 800.11(e) documentation and include the updated P&N and 4(f) alternatives analysis.

• INDOT will review the 800.11(e) documentation and sign it if it involves a “no adverse effect” finding, or forward it to FHWA for signature if it involves an “adverse effect” finding. FHWA signature of the 800.11(e) “adverse effect” finding also constitutes FHWA concurrence in the draft P&N, 4(f) alternatives analysis, and preferred alternative. FHWA signature does not constitute final FHWA approval of the preferred alternative, but rather release of the 800.11(e) document and associated alternatives analysis for consulting party review and comment.

• If the project involves a Select Bridge, INDOT will seek SHPO concurrence with FHWA's preferred alternative. Additional information may need to be provided to SHPO during this review, to address specific questions regarding scope of the rehabilitation and/or analysis of alternatives, before they are able to comment regarding the preferred alternative. The 800.11(e) documentation will need to be updated, approved, and redistributed to consulting party review and comment if the draft preferred alternative changes.

• If there is an adverse effect for historic resources other than the historic bridge, a draft MOA should be prepared to address non-bridge related “adverse effects.”

Hold Public Hearing
• When the project is being processed under the Historic Bridge PA, a public hearing shall be held for every Select and Non-Select bridge regardless of the preferred alternative. Guidance on conducting a public hearing for a historic bridge project can be found in Chapter 3.

CE/4(f) Approval
• Once the public hearing comment period has expired, the CE should be updated as appropriate (finalize 4(f) alternatives analysis/preferred alternative/Commitments Summary Form) and forwarded to INDOT for final review. INDOT must assure that:
  - Final CE provides NEPA clearance for the new location of a Select bridge, if the project involves relocation of a Select bridge.
  - Associated contracts/sureties should be in place and be specifically referenced in the CE Commitments Summary Form so FHWA can assure that all provisions of the Indiana Historic Bridge PA Standard Treatment Approaches for Historic Bridges have been fully incorporated into the final CE.

• Once FHWA has assured that all of the Historic Bridge Programmatic Agreement requirements have been fully addressed (and MOA provided to ACHP if there is an adverse effect to non-bridge related historic resources), FHWA will be in a position to grant final NEPA approval.
• FHWA final approval of the CE will affirm that all Historic Bridge PA requirements have been fully addressed, serve to confirm that FHWA has concluded its responsibilities under Section 106, and serve as FHWA approval of the Historic Bridge Programmatic 4(f).

• FHWA has granted INDOT authority to sign “no adverse effect” findings. FHWA conducts Quality Assurance Reviews (QARs) of projects annually to assure the provisions of the respective Historic Bridge PA, Minor Projects PA and Categorical Exclusion PA are being properly implemented. INDOT will assure that all Historic Bridge PA stipulations not implemented at the time of NEPA approval are included in the Project Commitments Database (i.e., SHPO reviews at 30%, 60%, and Final Design if not already completed prior to NEPA approval; photo-documentation of bridges when requested by SHPO). INDOT will also assure that all of the commitments have been fully implemented prior to construction using the mitigation commitments tracking system.

Please see the appendix for a flow chart of the project development process for projects involving historic bridges.
APPENDIX A: Historic Bridge PA FAQ

Frequently Asked Questions about the Historic Bridge Programmatic Agreement (PA) and Project Development Process
Updated September 2013

Q: What does Select Bridge mean?
A: These are historic bridges that are most suitable for preservation and are excellent examples of a given type of historic bridge.

Q: What does Non-Select Bridge mean?
A: These are historic bridges that are not considered excellent examples of a given type of historic bridge or are not suitable candidates for preservation.

Q: Are Non-Select Bridges historic?
A: Yes. Both Select and Non-Select bridges are “historic”—that is, both types of bridges are ones that are either listed in the National Register of Historic Places or have been determined to be eligible for listing in the National Register. Documents listing historic and non-historic bridges as determined by the Historic Bridge Inventory project can be found here: http://www.in.gov/indot/2531.htm. Additionally, a database of the information can be found here: http://www.in.gov/indot/div/public/HistoricBridgeDatabase.mdb.

Q: How can I find out if a bridge is Select or Non-Select?
A: Documents listing Select and Non-Select bridges as determined by the Historic Bridge Inventory project can be found here: http://www.in.gov/indot/2531.htm.

Q: Did bridge owners have any say in the Select/Non-Select determinations?
A: Yes. Before the list of historic bridges was finalized, a 60-day public comment period occurred. Before the Select/Non-Select determination process was started, a 30-day public comment period was given for the evaluation criteria for classifying historic bridges as Select and Non-Select. The draft list of Select and Non-Select Bridges, with the rationale for including a bridge on either list, was also subject to a 60-day public comment period. Before and during each of the comment periods, the public, bridge owners, agency officials, historic groups, and other interested parties and stakeholders were notified and asked to provide comment.

Q: What if a bridge owner disagrees with the Select determination for a bridge?
A: The Historic Bridge PA states that examples of unusual circumstances that may warrant an owner requesting a change in designation may include, but are not limited to, the bridge collapsing due to a flood or an overweight vehicle. In Section 5 of Volume 3: Methodology to
Identify Select and Non-Select Bridges, a process is outlined for reconsidering the Select status of a bridge: [http://www.in.gov/indot/files/Volume_3_-_Select_Methodology.pdf](http://www.in.gov/indot/files/Volume_3_-_Select_Methodology.pdf).

The first step is to provide FHWA with the information outlining why the owner thinks the bridge should be Non-Select. In some cases, the best way to provide this information may be for the bridge owner to prepare an alternatives analysis document considering a range of options, and making a clear case of why preservation of the bridge in some manner is not feasible and prudent: [http://www.in.gov/indot/files/ES_BridgeAnalysisTemplate.pdf](http://www.in.gov/indot/files/ES_BridgeAnalysisTemplate.pdf).

If the request does move forward after initial FHWA review, the SHPO, the Historic Bridge Task Group, and the public are notified of the request and allowed to make comments for 30 days. After the comment period, FHWA and SHPO review the comments and let INDOT know if the classification should be changed or not. The INDOT Cultural Resources Office should be contacted for further guidance about this process.

**Q: What are the options for a Select Bridge?**

**A:** FHWA will not consider demolition to be a “prudent” alternative for any Federal-aid project involving a Select Bridge and FHWA will not participate in a project that would result in the demolition of a Select Bridge. Therefore, any FHWA-funded project involving a Select Bridge must preserve that bridge in some manner. The project development process for Select Bridges can be found in Section III and Attachment B of the Historic Bridge PA: [http://www.in.gov/indot/files/HistoricBridgePA.pdf](http://www.in.gov/indot/files/HistoricBridgePA.pdf).

**Q: If a Select bridge is rehabilitated, but the rehabilitation work cannot follow the Secretary of the Interior’s Standards and the result is determined an adverse effect, is that allowable in the Historic Bridge PA?**

**A:** Yes, it is allowable. Section 106 for all Federal-aid projects involving bridges on the Select/Non-Select list will follow the provisions of the Historic Bridge PA, regardless of whether the project ultimately does or does not result in an adverse effect. The alternatives analysis will discuss why certain improvements are needed to meet the purpose and need of the project, and ultimately SHPO will need to concur with the preferred alternative.

The 800.11(e) documentation should include the alternatives analysis and explain why the adverse effect is needed to meet the purpose and need of the project. In order to help mitigate “adverse effects” that do occur, per the Historic Bridge PA, the bridge owner will complete any photo documentation in accordance with the specifications provided by the Indiana SHPO.

**Q: What are the options for a Non-Select Bridge?**

**A:** FHWA may participate in the demolition of a Non-Select Bridge provided there are no feasible and prudent alternatives to demolition of the Non-Select Bridge. The project development process for Non-Select Bridges can be found in Section III and Attachment B of the Historic Bridge PA: [http://www.in.gov/indot/files/HistoricBridgePA.pdf](http://www.in.gov/indot/files/HistoricBridgePA.pdf).
Q: Can a Non-Select bridge be preserved?
A: Yes. The results of the Purpose and Need development and Alternatives Analysis might conclude that rehabilitation of a Non-Select bridge is prudent and feasible, and therefore, is the preferred alternative for a Non-Select bridge.

Q: Why is an Alternatives Analysis needed for Non-Select bridges? Why can’t they simply be demolished given their Non-Select status?
A: The Historic Bridge PA was formulated to streamline the Section 106 process for historic bridges, but does not specifically address Section 4(f) requirements. A Section 4(f) Alternatives Analysis is required to fulfill the Section 4(f) Programmatic Evaluation for Historic Bridges. As such, before demolition and replacement of a historic bridge can occur, the FHWA must confirm that, on the basis of extensive studies and analysis, there are no “feasible and prudent” alternatives to this use of the resource. The “Historic Bridge Alternatives Analysis Layout” should be used to develop the alternatives analysis: [http://www.in.gov/indot/files/ES_BridgeAnalysisTemplate.pdf](http://www.in.gov/indot/files/ES_BridgeAnalysisTemplate.pdf).

Q: How is the process streamlined for Non-Select Bridges for which the alternatives analysis determines will be replaced? It seems like a lot of work is still involved to replace these bridges.
A: If the only adverse effect is to the historic bridge, a Memorandum of Agreement (MOA) will not be required for the “adverse effect” involved with demolishing the bridge. The Historic Bridge PA sets out the process for mitigating any adverse effects to the historic bridge. Time and money are saved by not undergoing the MOA process.

Time and money will also be saved in the amount of mitigation that is specified in the Historic Bridge PA. Dismantling bridges for storage and potential reuse is currently a common mitigation practice. It will no longer be required per the Historic Bridge PA. Per Attachment B of the Historic Bridge PA (Standard Treatment Approach for Historic Bridges), only two points of mitigation are required:

- The bridge owner will consult with the Indiana SHPO to determine if photodocumentation of the bridge is needed. If needed, the Indiana SHPO will specify the photo documentation standards and distribution requirements. If the Indiana SHPO does not respond within thirty (30) days, the bridge owner may assume the Indiana SHPO does not require any photo documentation.
- The bridge owner will salvage elements that may be stored and used for future repair of similar historic bridges, if a party was identified during the bridge marketing phase of project development (see Stipulation III.B.2).

Q: Can a Select or Non-Select Bridge be altered or removed with non-FHWA funds?
A: Yes. A bridge owner can alter or remove Non-Select or Select bridges with non-FHWA funds. However, the Historic Bridge PA (Stipulation IV.G) states that if FHWA or Indiana SHPO determine a bridge owner intentionally demolishes or otherwise diminishes the historic integrity of a Select Bridge under the bridge owner’s jurisdiction with non-Federal-aid funds, then FHWA will comply with 36 CFR Part 800 for any future federal-aid bridge project.
proposed by that bridge owner for any of its bridges. That is to say, the normal Section 106 review process must be carried out for those projects and the streamlining procedures of the Historic Bridge PA cannot be utilized. After the next Bridge Survey update is completed (likely to occur in approximately 10 years), FHWA may again process Federal-aid projects in accordance with the Historic Bridge PA for that bridge owner.

It should also be noted that Section 110(k) of the National Historic Preservation Act prohibits FHWA from providing Federal-aid funds for a given project, where the bridge owner, with the intent to avoid the requirements of Section 106, has intentionally adversely affected the historic bridge prior to completion of NEPA. In other words, a bridge owner could not remove a bridge with non-FHWA funds and then apply for Federal-aid funds to build the replacement structure at that location.

One clarification is that if a Select bridge is destroyed due to some natural disaster (fire, tornado, etc), then the bridge owner would not be held responsible, and there would be no need to invoke Stipulation IV.G of the Historic Bridge PA.

**Q: Does FHWA, INDOT or SHPO need to review or approve alterations with non-FHWA funds to a Select or Non-Select Bridge?**

**A:** No. Because FHWA does not have the authority to apply Section 106 to non-Federal undertakings, FHWA and INDOT will not be involved in projects that are not using FHWA funds. Likewise the SHPO would typically not be involved unless there was another federal action that would require their review (ie, a US Army Corps of Engineers permit) or there was state funding involved. It is recognized that routine maintenance work may need to be done to Select bridges, and many times these maintenance activities will not diminish the historic integrity to the extent that a bridge would need to be removed from the Select list. It is a good idea to follow the Secretary of Interior’s Standards for projects using non-FHWA money: [http://www.nps.gov/hps/TPS/standguide/](http://www.nps.gov/hps/TPS/standguide/).

It should be noted that the Historic Bridge PA (Stipulation IV.G) states that if FHWA or Indiana SHPO determine a bridge owner intentionally demolishes or otherwise diminishes the historic integrity of a Select Bridge under the bridge owner’s jurisdiction with non-Federal-aid funds, then FHWA will comply with 36 CFR Part 800 for any future federal-aid bridge project proposed by that bridge owner for any of its bridges. That is to say, the normal Section 106 review process must be carried out for those projects and the streamlining procedures of the Historic Bridge PA cannot be utilized. After the next Bridge Survey update is completed (likely to occur in approximately 10 years), FHWA may again process Federal-aid projects in accordance with the Historic Bridge PA for that bridge owner.

One clarification is that if a Select bridge is destroyed due to some natural disaster (fire, tornado, etc), then the bridge owner would not be held responsible, and there would be no need to invoke Stipulation IV.G of the Historic Bridge PA.
Q: Why is a historic property report (HPR) required for historic bridge projects when the bridge’s National Register eligibility has already been established through the inventory results?
A: To ensure all FHWA-funded projects are consistent, an HPR is required for all projects that do not fall under the Minor Projects PA. Even though we know the eligibility of the bridge, other resources in the APE must be evaluated for National Register eligibility. If the bridge is the only resource in the APE or the only resources over 50 years of age that warrants at least a “contributing” rating, then a short HPR would be appropriate. Please see the Cultural Resources Manual for detailed guidance on what type of HPR is appropriate and the guidelines for preparing HPRs.

Additionally, the appropriate archaeology investigations must also be conducted. Please see the Cultural Resources manual for detailed guidance on what type of archaeology report is appropriate and the guidelines for preparing archaeology reports.

Q: Is Section 106 required for projects involving the non-historic bridges that were determined not to be National Register eligible in the inventory?
A: Yes. Section 106 is required for these projects, although depending on the scope of work, the project may fall under the Minor Projects Programmatic Agreement (MPPA) (http://www.in.gov/indot/files/Minor_Projects_PA__signed__with_updated_Appendix_A_and_B.pdf). Even though we know the bridge is not National Register eligible, other resources in the APE must be evaluated for National Register eligibility if the project does not fall under the MPPA. If the bridge is the only resource in the APE or the only resources over 50 years of age that warrants at least a “contributing” rating, then a short HPR would be appropriate. Please see the Cultural Resources Manual for detailed guidance on what type of HPR is appropriate and the guidelines for preparing HPRs.

Additionally, the appropriate archaeology investigations must also be conducted. Please see the Cultural Resources manual for detailed guidance on what type of archaeology report is appropriate and the guidelines for preparing archaeology reports.

Q: Why do concrete and stone bridges have to be marketed for reuse when they can’t be relocated?
A: While it is unlikely, someone may step forward and be willing to preserve such a bridge at its existing location. The entity would have to assume the legal liability (i.e. a local group using the bridge for fishing pier, and being legally responsible for bridge preservation and associated liability), but if they were willing to do so, then they should have the opportunity to step forward and propose such an alternative.

Q: Are Memorandums of Agreement (MOAs) needed for historic bridge projects now?
A: Not if the only adverse effect is to the historic bridge. The Historic Bridge PA sets out the process for mitigating any adverse effects to the historic bridge. However, if an adverse effect will occur to another above-ground resource or an archaeological resource as a result of the bridge project, an MOA will be needed to mitigate the effects of the project on those resources.
Q: Is notification to the Advisory Council on Historic Preservation (ACHP) of an adverse effect on a historic bridge required under the Historic Bridge PA?
A: No. Through signature of the Historic Bridge PA, the ACHP agreed that implementation of the standard treatment approach includes all possible planning to minimize harm to the historic bridge and implementation of the standard treatment approach fulfills all consultation requirements under Section 106. However, if an adverse effect will occur to another above-ground resource or an archaeological resource as a result of the bridge project, the ACHP must be notified and the MOA to resolve that adverse effect must be filed with the ACHP.

Q: Is a Section 106 Public Notice published in a local newspaper required for historic bridge projects now?
A: No. A separate newspaper notice is not needed as long as the public hearing notice indicates that the hearing serves as the opportunity for the public to comment on both the CE and the 800.11(e) documentation, and serves as the last opportunity for a responsible party to step forward and take ownership of a Non-Select bridge. Additionally, if other historic properties are located within the project APE, as long as the hearing notice indicates that the hearing serves as the opportunity for comment on the effects of the project on those properties, no need exists for a separate Section 106 Public Notice published in a local newspaper. A template for public hearing notices for projects involving historic bridges can be found here: http://www.in.gov/indot/2531.htm.

Q: Is a public hearing required for all historic bridge projects now?
A: All projects involving either a Select or a Non-Select Bridge processed under the Historic Bridge PA now require a public hearing.

Q: What type of sign should be placed for marketing a Non-Select bridge?
A: Any type of sign that is visible by vehicular traffic and easily accessible to be safely read by pedestrian traffic is fine. The sign should contain information to the effect that the bridge may be replaced and is being offered to other parties. The sign should include contact information for obtaining further information. The sign can be a standard highway sign or a sign similar to those used for permits on a construction site, as long as it will hold up to the weather for 6 months. The sign should not be perpendicular to the roadway, but should be placed parallel to the roadway on the side of the roadway. It is suggested that photographs with a time/date stamp be taken of the installed sign in order to prove that this requirement was met. These photographs can be included in the Section 106 800.11 documentation for the project.
APPENDIX B: Historic Bridge PDP Flow Chart
PART IV

CHAPTER 3

Procedures for Public Hearings under the Historic Bridge PA

March 2014
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3-1.0 Procedures for Public Hearings

Per Stipulations III.A.7 and III.B.5 of the Historic Bridge PA, at the end of the Section 106 process for a bridge processed under the PA, a public hearing must be held for every Select and Non-Select bridge regardless of the preferred alternative.1 For example, even a project that proposes to rehabilitate a Select Bridge for continued vehicular use requires a hearing.

The procedures presented in this chapter are not intended to be used as a substitute for public hearing guidance issued by the INDOT Office of Public Involvement. Public hearings held for historic bridges shall follow the guidance and procedures outlined in the 2012 INDOT Public Involvement Procedures Manual. Specific guidance with regard to certain requirements that are needed to fulfill the stipulations of the Historic Bridge PA is found below.

When marketing of the bridge is required, the public hearing should not be scheduled until after a minimum of six (6) months of marketing has occurred. Whether marketing is required or not, FHWA, or INDOT on FHWA’s behalf, (and SHPO for Select bridges) must have concurred with the 800.11(e) documentation and associated preferred alternative and INDOT must have initialed the CE document for release for public review and comment before the hearing can be held.

The public hearing will serve as an opportunity for the public to comment on both the CE document and the 800.11(e) documentation. The public hearing will also be the last opportunity for a responsible party to step forward and provide the necessary sureties to obtain ownership of a Non-Select bridge, if continued vehicular use is not feasible and prudent, and the Section 4(f) alternatives analysis proposes demolition of a Non-Select Bridge.

Therefore, the public hearing notice should indicate that the hearing is serving as the opportunity for the public to comment on both the CE document and the 800.11(e) documentation. It also should indicate that the hearing is serving as the last opportunity for a responsible party to take ownership of a Non-Select bridge. The project documentation will be made available prior to and at the public hearing for public review and comment. A public hearing notice template is located in Part V Forms and at the Historic Bridge Inventory website and should be followed closely.

If other historic properties are located within the project APE, the hearing notice should indicate that the hearing serves as the opportunity for comment on the effects of the project on those properties, thereby eliminating the need for publication of a separate Section 106 Public Notice.

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1 Projects 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 (also known as the Minor Projects PA) do not require a public hearing. Whether a public hearing is required for projects processed under the standard Section 106 process is at INDOT’s discretion based on the project specifics. (those projects involving border bridges or bridges not included in the historic bridge inventory, for example). Further consultation with INDOT is required on such projects.
Per the Historic Bridge PA, the bridge owner (or their consultant) must notify consulting parties of the public hearing by letter or e-mail (if available) and will indicate the availability of the environmental documentation for review.

The environmental document, Section 106 documentation, and Section 4(f) alternatives analysis, should be made available at the public hearing for public review and comment. In addition to having staff present that can answer general questions about the project design, a staff person knowledgeable about the Historic Bridge PA procedures must be present at the public hearing to answer any questions related to the PA that may arise. The hearing presentation must clearly indicate that the project involves either a Select or Non-Select Bridge and what that designation means. Basic information about why the bridge is considered historic should also be presented. The alternatives that were analyzed and how the preferred alternative was chosen must be explained, especially for Non-Select Bridges when replacement is the preferred alternative. Example PowerPoint slides that address these topics are shown below. Please contact the Public Hearings or Cultural Resources Office staff for more examples or with any questions.

The public hearing to address the Historic Bridge PA requirements can be combined with any other needed public hearing for the project, as part of the environmental or design process, as long as the above conditions are met.
3-2.0 Slide Examples for Hearing Presentations

Example PowerPoint slides that address how Select and Non-Select bridges are processed under the Historic Bridge PA are shown below. Please note that these slides do not constitute an entire presentation for a historic bridge project public hearing. These slides just address the elements of the Historic Bridge PA. Slides pertaining to the overall project design, overall environmental process, and the public hearing comment process must be included as well.

Sample Public Hearing Presentation Slides for a Non-Select Bridge

SR 9 Bridge over Flatrock River is Historic

- Eligible for listing in the National Register of Historic Places
- Possesses engineering and historical significance
Results of Historic Bridge Inventory

- SR 9 Bridge is Non-Select
- Non-Select means:
  - Not suitable candidate for preservation
  - Not considered excellent example

Detailed Alternatives Analysis Required

Alternatives Studied:
- Rehabilitation for Continued Vehicular Use
  - One-way or two-way roadway on historic bridge
  - One-way pair: historic bridge & new bridge each carry one direction of traffic
- Bypass (non-vehicular use)
- Relocate (non-vehicular use)
- Replacement
Historic Bridge Project Development Process

• Seek Consulting Party Comment
  o Indiana Landmarks, Indiana Historic Spans Task Force & local groups favor rehabilitation
  o State Historic Preservation Officer: “no viable option” besides replacement

• Market Bridge for Re-Use
  o Has been marketed for over 6 mos.

• Identify Preferred Alternative
  o Replacement

• Hold Public Hearing
  o May XX, 20XX

• Environmental Document Approval
  o After hearing comment period ends

Bridge Marketing

• Legal notice in a local newspaper

• Signs at both approaches to the bridge

• INDOT’s historic bridge marketing website
  http://www.in.gov/indot/2532.htm

• To date, no interested party has stepped forward for re-use
Mitigation

- SHPO requested photo-documentation of bridge
- Photographs of bridge to be submitted to SHPO and the Indiana State Digital Archives
  http://www.indianadigitalarchives.org/default.aspx

This slide is included when other resources eligible for or listed in the National Register are located in the project area. The resources could be buildings, historic districts, archaeology sites or other bridges. A description of what impacts (if any) the project will have on those resources should be included.

Other Historic Resources in Project Area

- National Register eligible Cave Mill Archaeological Site will be impacted by project
- “Adverse effect” finding for the site
- Memorandum of Agreement (MOA) specifies that additional archaeological investigations will occur
Sample Public Hearing Presentation Slides for a Select Bridge

SR 49 Bridge over Kankakee River is Historic

• Eligible for listing in the National Register of Historic Places

• Good example of Indiana State Highway Commission-designed Parker through truss
Results of Historic Bridge Inventory

• SR 49 Bridge is Select
• Select means:
  o Suitable candidate for preservation
  o Considered excellent example
  o MUST be preserved when using FHWA funds

Rehabilitation Project Highlights

Repair, protect, and preserve the integrity and qualities of the “Select” bridge while providing a safe structure:

• In-kind replacements
• Some rivets replaced with round-headed bolts
• New railing
• Design load increase from HS-15 to HS-20
Historic Bridge Project Development Process

- Seek Consulting Party Comment
  - No objection to date

- Identify Preferred Alternative
  - Repair/Rehabilitation

- Hold Public Hearing
  - September XX, 20XX

- Environmental Document Approval
  - After hearing comment period ends
Historic Bridge Data Sheet

Please provide the requested information for listing historic bridges on INDOT’s web site and Indiana Landmarks’ website. INDOT will forward the information to Indiana Landmarks. Please contact the INDOT staff person listed below with any questions regarding either organization’s website.

(Press “Tab” key to move between fields)

**Bridge Location**
- County:
- Road:
- Feature Crossed:
- Other location information (distance to landmarks, intersections, name of nearest town or city, etc.):
- Structure Number or County Bridge number:

**Bridge Information**
- Owner:
- Type:
- Length (total; provide span lengths if applicable):
- Width:
- Year Built:
- Builder:
- Current Load Rating:
- History of Modifications, Rehabilitations, etc.:
- Other Comments:

**For further information, who should interested parties contact?**

Name:
Organization:
Address:
E-Mail:
Phone:

**Narrative Description:**

*Narrative Description Example:* This 3-span, pony truss bridge was built in 1922. The bridge is eligible for listing in the National Register of Historic Places, but is not select for preservation (Non-Select), per the Programmatic Agreement Regarding Management and Preservation Indiana’s Historic Bridges (Historic Bridges PA). The status of this bridge is currently “pending,” which means that its future is currently unknown as the Section 106 historic review process is ongoing.

Depending on the outcome of Section 106 consultation, interested parties may be able to utilize the bridge. The County is now accepting proposals for the rehabilitation and reuse, or the storage and future reuse of the bridge. Proposals will also be accepted for the salvage of elements that may be stored for future repair of similar historic bridges.

**The above information was provided by:**

You are requested to send a photo (high quality jpeg) of the bridge. We would prefer that the view be from the side so that the bridge’s structure, length, etc. will be visible. The photo will be posted on our web site.
Please send completed form and photo electronically to: mkennedy@indot.in.gov. Please call Mary Kennedy of the Cultural Resources Section with any questions about this form: 317-232-5215.
APPLICATION FOR A CERTIFICATE OF APPROVAL

BACKGROUND

Indiana Code § 14-21-1-18(a) and (b) require that a certificate of approval be obtained before using state funds to alter, demolish, or remove an historic site or historic structure, if it is owned by the state or if it is listed in either the Indiana Register of Historic Sites and Structures or the National Register of Historic Places. The application must be submitted to the Department of Natural Resources, Division of Historic Preservation and Archaeology (“DHPA”), and heard by the Historic Preservation Review Board (“Review Board”).

A new, state administrative rule regarding the certificate of approval process, 312 IAC 20-3-3, took effect on December 1, 2003. The rule requires that a completed application for a certificate of approval be filed with DHPA at least 40 days prior to the Review Board meeting at which the application is to be considered. The rule also requires that the application be submitted on a form to be provided by DHPA. This is the form to be used for the application. The form may be revised from time to time, so check with DHPA to make sure you have the current version.

DETERMINING WHETHER A CERTIFICATE OF APPROVAL IS REQUIRED

If the state agency or its applicant for funding is not certain whether or not the project will alter, demolish, or remove a site or structure that is historic, then the state agency or applicant may ask for DHPA’s technical advice on the historical, architectural, or archaeological significance of sites or structures, or on the project’s impact on them, before applying formally for a certificate of approval. Depending on the nature of the project and the properties it could impact, the Director of DHPA or his staff may recommend that additional information be provided for the benefit of the Review Board, such as the report of an archaeological investigation of an undisturbed parcel of land, a structural report on a structure proposed for demolition, or photographs of work areas and detailed plans and specifications of proposed rehabilitation work.

Consequently, it would be advisable for the applicant to consult informally with the DHPA staff well before the 40-day deadline for filing the application for a certificate of approval, so that the staff could advise the applicant whether any of those additional items will be needed prior to the Review Board meeting. Similarly, the DHPA staff informally can advise the applicant of any other, obvious information deficiencies or of questions that the Review Board likely would want to have answered before the Review Board meeting.

COMPLETING AND FILING THE APPLICATION FORM

Once it is determined that an historic site or historic structure will be altered, demolished, or removed and that a certificate of approval will have to be obtained, please complete the form below. Attempt to respond to the numbered items below on the application form. If you have an electronic copy of this form, you may enlarge the space provided between questions in order to accommodate your written response. If any of the requested information will not fit into the spaces below the appropriate numbered item, then you may provide that information on additional sheets that you may attach. Also, indicate where that information may be found (e.g., “Continued on attached sheet” or “See response on page 1 of the attachment” or “Photographs attached”). If any requested item of information is inapplicable, then please explain.

Please file 13 duplicate, written or printed copies of the application form and of any attachments at least 40 days prior to the meeting at which you wish to have the application considered by the Review Board. To be deemed filed, the application must be received at the DHPA office no later than 4:45 PM on the day that is 40 days prior to the date of the meeting. The Review Board typically meets on a Wednesday in the last half of January, April, July, and October. You may check with DHPA to ascertain the date of the next meeting and the date on which the 40-day deadline falls.
BEFORE THE REVIEW BOARD MEETING

The agenda, staff comments, and applications for certificates of approval are mailed to Review Board members about two weeks prior to the next Review Board meeting. The applicant’s principal contact person will receive a copy of the staff comments after they have been prepared for the Review Board members and prior to the meeting. To save on postage and copying costs, the DHPA staff prefers to send the agenda and staff comments by e-mail, so please provide an e-mail address for the principal contact person on the project.

The principal contact person and/or another representative of the certificate of approval applicant who is knowledgeable about the details of the project should plan to attend the Review Board meeting. Typically, an applicant is given a few minutes to explain the project or to highlight key points, and the Review Board members often ask questions about the application.

MAILING OR DELIVERY ADDRESS FOR THE APPLICATION

Indiana Department of Natural Resources
Division of Historic Preservation and Archaeology
402 West Washington Street, Room W274
Indianapolis, Indiana  46204-2739

FOR MORE INFORMATION

Questions about issues pertaining to structures should be directed to the Historic Structures Review Section of DHPA. Questions about archaeological matters should be directed to the Archaeology Section. Either section may be contacted at 317-232-1646 or at dhpa@dnr.state.in.us.
THE APPLICATION

Please provide the information requested in the numbered items below, or explain why it is inapplicable:

1) Identify the state agency that will be spending or providing the funds and the entity (local government, not-for-profit organization, etc.), if any, that is applying for or that has received the state funds.

_______________________________________________________________________________________

2) Provide the name, mailing address, telephone number, and other pertinent information (e.g., facsimile number and e-mail address) of the principal contact person for this application. The principal contact person may be an official or an employee of the state agency, of the applicant for funding, or of the state agency’s or the applicant’s consultant or other agent.

_______________________________________________________________________________________

3) Provide the address, if any, and the nearest city or town, township, and county of the proposed project area.

_______________________________________________________________________________________

4) Provide a detailed description of all construction, demolition, landscaping, earthmoving, rehabilitation, and installation activities (i.e., scope of work).

_______________________________________________________________________________________

5) Provide a detailed explanation of how, and to what extent, land, buildings, structures, or objects, in or adjacent to the project area, could be physically altered or visually modified or obscured.

_______________________________________________________________________________________

6) Describe the current and past land uses within the project area. In particular, state whether or not the ground is known to have been disturbed by construction, excavation, grading, or filling, and, if so, indicate the part or parts of the project area that have been disturbed and the nature of the disturbance. Be aware that agricultural tilling generally does not have a serious enough impact on archaeological sites to constitute a disturbance of the ground for this purpose.
7) State the known or approximate dates of construction of structures (including buildings, bridges, monuments, picnic shelters, historic districts, etc.) and any other historical information known about the land and structures within the project area. It may be necessary to consult a local history text, the interim report of a local historic sites and structures inventory, the county historian, or a local historical or historic preservation organization for this information.

8) State whether or not any other structures could be sold, leased, altered, demolished, or removed as a result of the acquisition or construction of a new facility, and, if so, provide the information in 5) and 6), above, for those structures.

9) Attach a map, or a good quality photocopy of a map, identifying the location of the project, and showing the relevant portion of the city or town, county, or U.S. Geological Survey quadrangle. Be sure that streets, roads, highways, railroads, rivers, lakes, etc., are clearly identified and that the boundaries of the project area and of any property to be sold leased, altered, demolished, or removed are clearly outlined in a dark ink (highlighter and pencil marks do not photocopy well). If there are other properties within or adjacent to the project area that are or may be at least 50 years of age, then they should be identified on the map and keyed to written descriptions in the letter and to any photographs included with the letter and map.

10) Attach recent photographs (exterior and, if possible, interior) of any structures that may be 50 years old or older and that could be impacted in any way (such as by demolition, rehabilitation, expansion, sale, taking of right-of-way, or visual modification or obscuration) by the project.

11) Provide a site plan for projects that will involve new construction, additions to existing buildings, changes in right-of-way or earthmoving activities, showing the footprint of existing and/or proposed buildings or structures with the location of all construction, changes in right-of-way or earthmoving activities on a particular lot or lots depicted as precisely as possible.

12) For projects involving the addition to, or the rehabilitation or restoration of, an historic structure, provide copies of architectural or engineering plans or specifications. Provide only those sheets that help to depict character defining features of the historic structure and how they will be altered. Reduce any plan or elevation sheets to no larger than 11” x 17”. If pertinent notes on the sheets are too small to read in reduced form, then they should be reproduced elsewhere in the application in larger print. Similarly, if the applicant believes it would be useful to provide copies of specifications for the treatment of historically or architecturally significant features, then please reproduce only the most relevant pages from the specifications.

13) If an historic site or historic structure will be altered, demolished, or removed as part of the project, then identify any alternatives that were, or reasonably could be, considered that would not have as great an impact on the historic site or structure. Discuss the advantages and disadvantages of those alternatives and their feasibility. If there are no feasible alternatives, please explain.
The purpose of the public hearing is to offer all interested persons an opportunity to comment on the environmental document, Section 106 document, and preliminary design plans for the proposed bridge project located at [**fill in place**]. The project proposes to [**fill in project description**].

The [**fill in bridge name/number**] is [**eligible for/listed in** (choose correct option)] the National Register of Historic Places (National Register). As part of the Indiana Historic Bridge Inventory project, the bridge was determined to be [**Select/Non-Select** (choose correct option)]. For Non-Select bridges, include the following: The bridge has been marketed for re-use for the past six months and information about the bridge can be found on the following INDOT Historic Bridge Marketing website: http://www.in.gov/indot/2532.htm.

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of their undertakings on historic properties. The proposed project [**choose appropriate option below**]:

(1) does not involve any properties eligible for the National Register aside from the subject bridge. This project will result in [**“no adverse effect”/ “an adverse effect”** (choose correct option)] under Section 106. The [**INDOT/Federal Highway Administration** (choose correct option)] will be issuing [**“a no adverse effect”/ “an adverse effect”** (choose correct option)] finding for the project. In accordance with the NHPA, the views of the public are being sought regarding the effect of the proposed project on the historic elements as per 36 CFR 800.2(d), 800.3(e) and 800.6(a)(4). Pursuant to 36 CFR 800.6(a)(4), the documentation of [**“no adverse effect”/ “adverse effect”** (choose correct option)] specified in 36 CFR 800.11 (e) is available for inspection in the [**fill in office location(s)**].

(2) in addition to involving the subject bridge, the project also involves the following property that is eligible for the National Register: [**fill in other historic property name**]. This project will result in [**“no adverse effect”/ “an adverse effect”** (choose correct option)] under Section 106. The [**INDOT/Federal Highway Administration** (choose correct option)] will be issuing [**“a no adverse effect”/ “an adverse effect”** (choose correct option)] finding for the project. In accordance with the NHPA, the views of the public are being sought regarding the effect of the proposed project on the historic elements as per 36 CFR 800.2(d), 800.3(e) and 800.6(a)(4). Pursuant to 36 CFR 800.6(a)(4), the documentation of [**“no adverse effect”/ “adverse effect”** (choose correct option)] specified in 36 CFR 800.11 (e) is available for inspection in the [**fill in office location(s)**].

The public hearing serves as the opportunity for the public to comment on both the Categorical Exclusion (CE) environmental document and the 800.11(e) documentation for Section 106. All comments collected before, during and after the hearing through [**fill in date**, which should be 30 days after the date the first hearing notice will be published] will be taken into consideration. For Non-Select bridges that will be demolished, include the following: The public hearing will be the last opportunity for a responsible party to step forward and provide the necessary sureties to obtain ownership of the bridge.
Historic Bridge Marketing Legal Notice Template
Last Updated April 2012

Project specific information should be inserted where each instance of [** . . . **] in blue text appears.

Public Notice

Designation No. [**fill in Des. No.**]

[**The bridge owner**] is offering [**bridge name/number**] carrying [**road carried**] over [**feature crossed**] in [**location**] to interested responsible parties. The bridge is eligible for the National Register of Historic Places and has been determined “Non-Select” for preservation per the Programmatic Agreement Regarding Management and Preservation of Indiana's Historic Bridges. The status of this bridge is currently “pending,” which means that its future is currently unknown as the Section 106 historic review process is on-going. Depending on the outcome of Section 106 consultation, interested parties may be able to utilize the bridge.

The bridge is [**length, width, height, condition**]. A photo and general information about the bridge can be viewed at the following website: [http://www.in.gov/indot/2532.htm](http://www.in.gov/indot/2532.htm). Additional information about the bridge is available for review by contacting the person listed below.

[**Bridge owner**] is now accepting proposals for the rehabilitation and reuse, or the storage and future reuse of the bridge. Proposals will also be accepted for the salvage of elements of the bridge. Any proposals should be received within the next six months. Funding of any rehabilitation, reuse, storage, dismantling, reconstruction, salvage, etc. of this bridge would be the responsibility of the new owner. Interested parties should submit a written proposal for reuse to the address below as soon as possible:

[**Owner/Consultant Contact Name**
Address
Phone
Fax
Email**]

**This notice is intended to market Non-Select Bridges. If an owner is marketing a Select Bridge, please contact INDOT-CRO for guidance on modifying the template appropriately.**
June 8, 2009

Staffan Peterson
Cultural Resources Section
Office of Environmental Services
Indiana Department of Transportation
100 North Senate Avenue, Room N642
Indianapolis, Indiana 46204

Re: Request for approved permit for Phase 1a field investigations on Indiana Department of Transportation ("INDOT") properties.

Dear Mr. Peterson:

The Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology (IDNR-DHPA) has reviewed the plan submitted by Shaun Miller of your staff for personnel to conduct Phase 1a field investigations on INDOT properties under Indiana Code (IC) 14-21-1-16. The plan is acceptable for all personnel currently on the Qualified Professionals Roster for Archaeology who are INDOT personnel, personnel with archaeological firms under contract to INDOT, and personnel with sub-consultants contracted by engineering/environmental firms, with the following conditions:

1. The methods and techniques for Phase 1 archaeology in the most current Guidebook for Indiana Historic Sites and Structures Inventory—Archaeological Sites will be adhered to for all projects under this approved plan.

2. This plan is for INDOT properties only.

3. All projects must be directly supervised in the field and laboratory by a qualified archaeologist meeting the supervisory criteria of 312 IAC 21. This plan is non-transferable.

4. This authorization does not apply to areas where known, large multicomponent, and/or significant archaeological sites are present; earthworks and/or mound sites are present, anticipated, or encountered; burial grounds, cemeteries, and/or sites with human remains present, anticipated, or encountered; and unique sites or cultural landscape areas (e.g., Wabash and Erie Canal sites) are present, anticipated, and/or encountered. In such cases, if there is to be any disturbance of the ground, a plan for archaeological investigations must be submitted to the Indiana Department of Natural Resources for approval in advance of fieldwork activities.

5. The IDNR-DHPA must receive notification of the survey and maps with locations and a description of the nature of the project and the project area(s) prior to the fieldwork activities. Depending upon the nature of the project, project area, and other considerations, the IDNR-DHPA may require a more detailed plan or different methodology in certain cases.

6. Archaeological records checks for all projects must be completed in advance of field investigation.

7. If human remains dating on or before December 31, 1939 are encountered, the discovery must be treated in accordance with IC 14-21-1 and 312 IAC 22. In that event, please call (317) 232-1646.

8. Any proposed revision of standard reconnaissance methodology must be submitted to our office, in writing, for review and comment prior to implementation.
With these conditions, the plan for scientific investigations is approved (#2009032). A copy of this letter, along with proper identification, should be carried by archaeologists in the field. This will ensure minimal confusion should they be requested to produce proper identification in the field by law enforcement personnel.

If you have any questions regarding this authorization, please contact Dr. Rick Jones at 317/232-1646.

Very truly yours,

James A. Glass, Ph.D.
Director, Division of Historic Preservation and Archaeology

JAG:RJ:jj
FHWA Indiana Division

Sample Format and Guidance for Documenting

FHWA's NO ADVERSE EFFECT or ADVERSE EFFECT finding

As per Section 106 regulations at 36 CFR Section 800.11(e)

Revised March 2014

Instructions

Per FHWA-IN Section 106 procedures and per the Programmatic Agreement (PA) 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 (also known as the “Minor Projects PA”), applicants or their consultants may submit recommendations for “no adverse effect” findings to INDOT, which is acting on FHWA’s behalf, for review, approval, and signature. While FHWA will still review, approve, and sign “adverse effect” findings, the findings and their documentation must first be sent to INDOT for review. When INDOT finds them satisfactory, they will forward these to FHWA.

These recommendations should be sent to the Manager of the Cultural Resources Office in Environmental Services in INDOT’s Central Office. Each recommendation must be accompanied by support documentation meeting the requirements in the Section 106 regulations at 36 CFR Section 800.11(e). Use the template below for guidance when preparing the support documentation for either a recommended “no adverse effect” or “adverse effect” finding. Project specific information should be inserted where each instance of (** . . . **) in blue text appears.

INDOT will review the recommendation and the support documentation upon receipt. If INDOT disagrees with the recommendation, requires further information before reaching a decision, or requires revisions to the documents, INDOT will advise the applicant or their consultant to update the documentation or the finding as appropriate. After INDOT is satisfied the documentation is adequate to support the finding, INDOT, who is acting on FHWA’s behalf, will sign “no adverse effect” findings and will forward “adverse effect” findings to FHWA for review and approval. The signed finding will then be returned to the applicant or their consultant, along with the support documentation.

The applicant or their consultant, upon receipt of the approved finding and support documentation, should distribute copies of the finding and the support documentation to the SHPO and consulting parties, consistent with Section 106 procedures.
1. DESCRIPTION OF THE UNDERTAKING

(**Describe the undertaking and discuss the federal involvement in the project. Typically, the federal involvement is funding received from FHWA. Describe the area of potential effects (APE), including both the above-ground APE and archaeological APE, and attach a map that clearly delineates the boundaries of the APE. Include any photographs, maps, plan sheets, as necessary to provide a complete description of the project.**)

2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

(**Describe all of the steps taken to identify historic properties and include, as appropriate, efforts to seek information pursuant to 36 CFR Section 800.4(b). Discuss resources checked, such as county interim reports, the Indiana Register of Historic Places, and the National Register of Historic Places. Discuss site visits that were conducted. Discuss what type of historic property report (HPR) was prepared and the results of the report. Discuss any archaeological work that was done, including archaeological reports and recommendations, or explain why archaeological work was not required. Discuss any input received from the State Historic Preservation Officer (SHPO) on the HPR and archaeology report and indicate when the SHPO concurred with the reports. If the HPR and archaeology report are submitted simultaneously with the finding/800.11 documentation, indicate that they are included with the enclosed materials. Discuss any input received from other consulting parties about the HPR and/or that resulted in the identification of historic properties. Copies of all letters received from consulting parties should be included in the appendix.**)

3. DESCRIBE AFFECTED HISTORIC PROPERTIES

(**Describe each of the historic properties affected and include information on the characteristics that qualify it for the National Register of Historic Places. The National Register Criterion or Criteria that qualify each property for the Register should be identified. The Eligibility Determination signed by INDOT or FHWA should be included as the first page of the documentation. For properties already listed in the Register, include a brief property description, list the Criterion or Criteria under which the property is listed, and note the date it was listed in the Register.**)

4. DESCRIBE THE UNDERTAKING'S EFFECTS ON HISTORIC PROPERTIES

(**Describe the extent to which each property will be affected by the project. Will right-of-way be acquired from the property (either permanent or temporary)? Will any part of the property be demolished or disturbed? Will any landscape features be removed, etc.? If the project does not affect an historic property, that should also be noted in this section. Please note that the fact that historic property will not be converted to a transportation use does not preclude an effect on a historic property.**)

FEDERAL HIGHWAY ADMINISTRATION
DOCUMENTATION OF SECTION 106 FINDING OF
NO ADVERSE EFFECT or ADVERSE EFFECT
SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR Section 800.5(c)
for no adverse effect findings include this citation
PURSUANT TO 36 CFR Section 800.6(a)(3)
for adverse effect findings, include this citation
(**insert project description here**)
DES. NO.: (**insert Des. No. here**)
5. EXPLAIN APPLICATION OF CRITERIA OF ADVERSE EFFECT -- INCLUDE CONDITIONS OR FUTURE ACTIONS TO AVOID, MINIMIZE OR MITIGATE ADVERSE EFFECTS

(**For each historic property identified, explain why the criteria of adverse effect do or do not apply pursuant to 36 CFR Section 800.5(a). Apply and reference the criteria when evaluating effects. In addition, reference the examples of adverse effect listed in 36 CFR Section 800.5(a)(2). Types of adverse effects are not limited to these examples, but they should be referenced and referred to when assessing effects. If an adverse effect is considered unavoidable, discuss the avoidance alternatives considered and why they were dismissed. If an adverse effect occurs, discuss minimization or mitigation efforts to be undertaken.**)

For historic bridge projects, especially for Non-Select bridges that will be replaced, please include alternatives analysis information that shows why the preferred alternative is the only feasible and prudent alternative. Additionally, please include the entire Alternatives Analysis document as an appendix. This will lead to some redundancy with the narrative text for the alternatives being present both in the text of the 800.11 and in an appendix, but it provides a complete record of the process.

For Non-Select bridges, please also include a summary of the marketing measures that have taken place.**)

6. SUMMARY OF CONSULTING PARTIES AND PUBLIC VIEWS

(**Summarize SHPO’s position on the project and reference related correspondence in the appendix. Summarize other consulting parties’ positions and reference any correspondence received in the appendix. Indicate how comments brought forth by SHPO and other consulting parties were addressed or will be addressed. Discuss any consulting party meetings that were held and include meeting summaries in the appendix.**)

If a public notice has been issued, note the date it was issued and summarize any comments received from the public. If no comments were received from the public, make a note of it in this section. If a public notice has not yet been issued, make note of it and indicate when the public notice will be issued and indicate the document will be revised after the public notice, if necessary.**)

APPENDIX

(**The information in item #1 above should be included in the appendix (photographs, maps, plan sheets, etc.). The location of historic properties in the APE should be clearly indicated (except for archaeological sites—see below). The boundaries of historic properties should be clearly indicated on at least one graphic. Plan sheets should clearly show historic property boundaries and the proposed impacts to historic properties. Color coding and notations should be used as appropriate to illustrate existing and proposed conditions for historic properties.**)

Include the abstract and summary/conclusions from any historic property and archaeology reports. Per Section 304 of the National Historic Preservation Act and Section 9(a) of the Archaeological Resources Protection Act, specific archaeological site locations should not be included in documentation made available to consulting parties (except INDOT, FHWA and SHPO) and the general public. Detailed archaeological reports may be provided to qualified professional archaeologists, but only after consultation with the SHPO. Only summary documentation of any archaeological work should be included in the documentation supporting the findings. No maps or text indicating the locations of archaeological sites should be included. This will minimize the potential for endangerment of sites from vandalism.

Provide a list of all consulting parties, including SHPO. Indicate which parties accepted consulting party status. Copies of all correspondence to/from SHPO, other consulting parties, and the public should be
included. It is important to include not just the responses received from the consulting parties, but also copies of the correspondence sent by the consultants/agencies in order to show the most complete record of the consultation process.

For Non-Select bridges, please include the Alternatives Analysis document as an appendix, and include proof of the marketing measures that have taken place such as the publisher’s affidavit for the newspaper notice marketing the bridge, a screenshot from the INDOT Historic Bridges Marketing website showing the bridge, and photographs of the marketing signs in place at the bridge site.

A copy of the publisher’s affidavit from the newspaper legal notice or the public hearing notice containing the Section 106 comment period notification should be included in the appendix, once received. **
FHWA Indiana Division

Sample Format and Guidance for Documenting FHWA's

NO HISTORIC PROPERTIES AFFECTED finding

As per Section 106 regulations at 36 CFR Section 800.11(d)

Revised March 2014

Instructions

Per FHWA-IN Section 106 procedures and the Programmatic Agreement (PA) 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 (also known as the "Minor Projects PA"), applicants or their consultants may submit recommendations of "no historic properties affected" for review, approval and signature to INDOT.

These recommendations should be sent to the Manager of the Cultural Resources Office in Environmental Services in INDOT's Central Office. Each recommendation must be accompanied by support documentation meeting the requirements in the Section 106 regulations at 36 CFR Section 800.11(d). Use the template below for guidance when preparing the support documentation for a recommended "no historic properties affected" finding. Project specific information should be inserted where each instance of (** . . . **) blue text appears.

INDOT will review the recommendation and the support documentation upon receipt. If INDOT disagrees with the recommendation, which requires further information before reaching a decision, or requires revisions to the documents, INDOT will advise the applicant or their consultant to update the documentation or the finding as appropriate. After INDOT is satisfied the documentation is adequate to support INDOT's finding, INDOT (which is acting on FHWA's behalf) will sign the effect finding. It will then be returned to the applicant or their consultant, along with the support documentation.

The applicant or their consultant, upon receipt of the signed finding and support documentation, should distribute copies of the finding and the support documentation to the SHPO and consulting parties, consistent with the Section 106 procedures.
FEDERAL HIGHWAY ADMINISTRATION
DOCUMENTATION OF SECTION 106 FINDING OF
NO HISTORIC PROPERTIES AFFECTED
SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR Section 800.4(d)(1)

(**insert project description here**)  
DES. NO.: (**insert Des. No. here**)  

1. DESCRIPTION OF THE UNDERTAKING

(**Describe the undertaking and discuss the federal involvement in the project. Typically, the federal involvement is funding received from FHWA. Describe the area of potential effects (APE) and attach a map that clearly delineates the boundaries of the APE. Include any photographs, maps, plan sheets, as necessary to provide a complete description of the project.**)  

2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

(**Describe all of the steps taken to identify historic properties and include, as appropriate, efforts to seek information pursuant to 36 CFR Section 800.4(b). Discuss resources checked, such as county interim reports, the Indiana Register of Historic Places, and the National Register of Historic Places. Discuss site visits that were conducted. Discuss what type of historic property report (HPR) was prepared and the results of the report. Discuss any input received from the State Historic Preservation Officer (SHPO) on the HPR and archaeology report and indicate when the SHPO concurred with the reports. If the HPR and archaeology report are submitted simultaneously with the finding/800.11 documentation, indicate that they are included with the materials. Discuss any archaeological work that was done, including archaeological reports and recommendations, or explain why archaeological work was not required. Discuss any input received from other consulting parties about the HPR and/or that resulted in the identification of historic properties. Copies of all letters received from consulting parties should be included in the appendix. Indicate how comments brought forth by SHPO and other consulting parties were addressed or will be addressed. If a public notice has been issued, note the date it was issued and summarize any comments received from the public. If no comments were received from the public, make a note of it in this section. If a public notice has not yet been issued, make note of it and indicate when the public notice will be issued and indicate the document will be revised after the public notice, if necessary.**)  

3. BASIS FOR FINDING

(**Discuss the basis for determining that no historic properties are present or affected. Legitimate bases for the "no historic properties affected" finding include "no historic properties are present within the area of potential effects" or "historic properties are present but the project does not have any effect on the property's characteristics qualifying the property for inclusion in the National Register of Historic Places."**)  

APPENDIX

(**The information in item #1 above should be included in the appendix (photographs, maps, plan sheets, etc.). The location of historic properties in the APE should be clearly indicated (except for archaeological sites—see below). The boundaries of historic properties should be clearly indicated on at least one graphic.**)
Include the abstract and summary/conclusions from any historic property and archaeology reports. Per Section 304 of the National Historic Preservation Act and Section 9(a) of the Archaeological Resources Protection Act, specific archaeological site locations should not be included in documentation made available to consulting parties (except INDOT, FHWA and SHPO) and the general public. Detailed archaeological reports may be provided to qualified professional archaeologists, but only after consultation with SHPO. Only summary documentation of any archaeological work should be included in the documentation supporting the findings. No maps or text indicating the locations of archaeological sites should be included. This will minimize the potential for endangerment of sites from vandalism.

Provide a list of all consulting parties, including SHPO. Indicate which parties accepted consulting party status. Copies of all correspondence to/from SHPO, other consulting parties, and the public should be included. It is important to include not just the responses received from the consulting parties, but also copies of the correspondence sent by the consultants/agencies in order to show the most complete record of the consultation process.

A copy of the publisher’s affidavit from the newspaper legal notice or the public hearing notice containing the Section 106 comment period notification should be included in the appendix, once received.**
Instructions

Per the Section 106 procedures, and the Programmatic Agreement (PA) 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 (also known as the “Minor Projects PA”), the Area of Potential Effects (APE), eligibility determinations, and effect findings must be approved by the INDOT, when acting on FHWA’s behalf, for undertakings with determinations of “no adverse effect” or “no historic properties affected”. FHWA approves undertakings with “adverse effect” determinations after INDOT has reviewed them. All recommendations should be sent to the Manager of the Cultural Resources Office in Environmental Services in INDOT’s Central Office.

INDOT and/or FHWA approval and signature(s) must occur before submitting the finding and documentation to Section 106 consulting parties. The applicant or their consultant should submit their recommendations to INDOT for the APE, properties within the APE they believe are eligible for the National Register of Historic Places (the Register), and an effect finding for the project. The eligibility recommendations should also list any property that is included in the Register that is within the APE.

The template below must be used to submit the eligibility recommendations. FHWA also will utilize this template to determine the Section 4(f) compliance requirements for historic properties and, if applicable, satisfy the coordination requirements for a "de minimis" finding for historic properties, pursuant to SAFETEA-LU provisions. Project specific information should be inserted where each instance of (** . . . **) in blue text appears.

The recommendations for the APE definition, eligibility determinations, and effect finding may be submitted as separate findings, or combined, as shown on the template, if information is available. Typically for CE level projects, the information is combined and the forms are submitted near the conclusion of the Section 106 consultation process. If the recommendations are made separately, simply delete the appropriate sections of the template. Subsequent recommendations to INDOT and FHWA need only address the areas not covered by previously approved determinations or findings.

Any time an approved effect finding is distributed to consulting parties, the appropriate support documentation must be attached so the consulting parties may understand the basis for the finding. For "no historic properties affected" finding, the documentation specified at 36 CFR 800.11(d) should be attached. For "no adverse effect" and "adverse effect" findings, the documentation specified at 36 CFR 800.11(e) should be attached.
This template also incorporates a Section 4(f) compliance requirement that includes language for potential Section 4(f) scenarios. While Section 4(f) compliance is not required to conclude the Section 106 process, the Section 106 findings are necessary for determining Section 4(f) requirements. Further, SHPO concurrence to the Section 106 findings is required for some Section 4(f) approvals. Therefore, this form is used to convey the appropriate Section 4(f) approval required based on the results of the Section 106 process.

FHWA-funded projects vary in complexity and the template below may not be appropriate for all projects. Please consult with INDOT regarding any questions. The following types of Section 4(f) compliance requirements for historic properties are listed in the template. As indicated in the template, a statement must be made to describe the Section 4(f) compliance requirement for each historic property.

1. **No historic properties present** – no Section 4(f) evaluation required.

2. **Historic properties are present, but no conversion to a transportation use will occur** – no Section 4(f) evaluation required.

4. **Historic properties are present and FHWA intends to issue a Section 4(f) “de minimis” finding.** Applicable when land within a historic property is converted to a transportation use, but the Section 106 finding is "no historic properties affected" or “no adverse effect”.

5. **Historic property affected is a bridge and the Section 106 finding is “no adverse effect”** – no Section 4(f) evaluation required.

6. **Historic property affected is a bridge and the Section 106 finding is “adverse effect”**- a Section 4(f) evaluation must be completed. A “Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the use of Historic Bridges” (see http://environment.fhwa.dot.gov/projdev/4fbridge.asp) may be used in lieu of an individual Section 4(f) evaluation. For bridge projects processed through the Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation (INDOT), the Indiana State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) Regarding Management and Preservation of Indiana’s Historic Bridges (Historic Bridge PA), completion of the Historic Bridge Alternatives Analysis Layout (http://www.in.gov/indot/files/ES_BridgeAnalysisTemplate.pdf) will satisfy the Programmatic Section 4(f) evaluation requirements.

If the project consists of transportation enhancement work or mitigation activities where the use of the bridge is solely for the purpose of preserving or enhancing an activity, feature, or attribute that qualifies the bridge for Section 4(f) protection and the State Historic Preservation Officer agrees that is the case, the FHWA may determine that the bridge work qualifies for the Section 4(f) exception in 23§774.13(g) (http://environment.fhwa.dot.gov/4f/4fpolicy.asp#addex17). The appropriate template as indicated below should be used.
7. **Historic properties (other than historic bridge) are present and conversion to a transportation use will occur.** This is applicable when the Section 106 finding is “adverse effect”. An individual Section 4(f) evaluation is required if the project does not result in a “net benefit.” The application of “net benefit” in lieu of an individual Section 4(f) evaluation is spelled out through the “whereas” clauses of the Memorandum of Agreement (MOA) outlining the mitigation for the “adverse effect” to the historic property. See the sample MOA template for more information.

8. Section 4(f) applies to **archaeological sites** eligible for or included in the National Register of Historic Places that warrant preservation in place and therefore a Section 4(f) evaluation must be completed. If the archaeological site that is eligible for or included in the National Register of Historic Places is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place (National Register Criterion D), no Section 4(f) evaluation required.

Upon receipt of the recommendations, if FHWA agrees with the recommendations, INDOT and FHWA will review, approve, and return the findings and determinations to the applicant or the applicant's consultant for distribution to consulting parties.

The applicant or the applicant's consultant shall provide consulting parties with a copy of INDOT’s (acting on FHWA’s behalf), or FHWA's findings and determinations, in accordance with INDOT’s and FHWA's Section 106 procedures. The finding signature page should be the first page of the packet so that consulting parties can clearly see that INDOT or FHWA has approved the document. Comments will be accepted for 30-days upon receipt of the findings.
FEDERAL HIGHWAY ADMINISTRATION’S
SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties) AND
SECTION 106 FINDINGS AND DETERMINATIONS
AREA OF POTENTIAL EFFECTS
ELIGIBILITY DETERMINATIONS
EFFECT FINDING
(**insert project description here**)
DES. NO.: (**insert des. no. here**)

AREA OF POTENTIAL EFFECTS
(Pursuant to 36 CFR Section 800.4(a)(1))

(**Insert description of APE here and/or include a map clearly marking the area of potential effects. For complex APE descriptions, a textual description is not required. Simply reference the APE map attached to the recommendation.**)  

ELIGIBILITY DETERMINATIONS
(Pursuant to 36 CFR 800.4(c)(2))

(**Insert a brief description of each property within the APE that is recommended to be eligible for or currently listed in the National Register of Historic Places. Each property listed should include the National Park Service criterion, or criteria, that renders the property eligible for/listed in the Register. For properties already listed in the Register, also note the date it was listed in the Register.**)  

EFFECT FINDING

(**In this section, list each historic property that is within the APE and indicate the effect the undertaking has on the property ("No Effect" or "No Adverse Effect" or "Adverse Effect"). After all historic properties and their individual effect findings are listed, insert a concluding statement that declares the effect finding for the entire undertaking. Include the following statement:

(**"INDOT, acting on FHWA’s behalf", or “FHWA” (whichever is applicable) has determined a (“No Historic Properties Affected" or "No Adverse Effect" or "Adverse Effect") finding is appropriate for this undertaking."**)  

The strongest effect finding determines the effect finding for the entire undertaking. For example, several historic properties may not be affected at all by the undertaking, however, if one property is adversely affected, then the undertaking's effect finding for the project is "Adverse Effect".)

After this concluding effect statement, include one of the following statements asking for SHPO concurrence:
If the effect finding for each property and the overall effect finding are the same, use this statement:

(**“INDOT” or “FHWA” whichever is applicable) respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect.”**)

Or use this statement if individual property effect findings differ from overall effect finding:

(**“INDOT” or “FHWA” whichever is applicable) respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect for each property and the project’s overall effect finding.”**)

SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties)

For each historic property, a statement must be made to describe the Section 4(f) compliance requirements. Listed below are the six (6) potential Section 4(f) conclusions that can be made for historic properties and one (1) conclusion for archaeological sites that are eligible for/listed in the National Register of Historic Places but do not warrant preservation in place. Edit and insert the appropriate statement for each historic property.

1. (**NO NATIONAL REGISTER ELIGIBLE OR LISTED PROPERTIES ARE PRESENT IN THE APE**) - This undertaking will not convert property from any Section 4(f) historic property to a transportation use; INDOT, acting on FHWA’s behalf, has determined the appropriate Section 106 finding is “No Historic Properties Affected”; therefore no Section 4(f) evaluation is required.

2. (**INSERT NAME OF HISTORIC PROPERTY**) - This undertaking will not convert property from (**INSERT NAME OF HISTORIC PROPERTY**), a section 4(f) historic property, to a transportation use; (**“INDOT, acting on FHWA’s behalf” or “FHWA” whichever is applicable**) has determined the appropriate Section 106 finding is (**"No Adverse Effect" or "Adverse Effect"**) ; therefore no Section 4(f) evaluation is required for (**INSERT NAME OF HISTORIC PROPERTY**).

3. (**INSERT NAME OF HISTORIC PROPERTY**) - This undertaking will convert property from (**INSERT NAME OF HISTORIC PROPERTY**), a Section 4(f) historic property, to a transportation use; (**“INDOT, acting on FHWA’s behalf” or “FHWA” whichever is applicable**) has determined the appropriate Section 106 finding is (**"No Historic Properties Affected" or "No Adverse Effect"**) ; therefore FHWA hereby intends to issue a "de minimis" finding for the (**INSERT NAME OF HISTORIC PROPERTY**), pursuant to SAFETEA-LU, thereby satisfying FHWA’s responsibilities under Section 4(f) for this historic property.
4. (**INSERT NAME OF HISTORIC BRIDGE**) -- This resource is used for transportation purposes. This undertaking will have a “No adverse effect” on (**INSERT NAME OF HISTORIC BRIDGE**), a Section 4(f) historic property; (**“INDOT, acting on FHWA’s behalf” or “FHWA” whichever is applicable**) has determined the appropriate Section 106 finding is "No Adverse Effect"; and therefore no Section 4(f) evaluation must be completed for (**INSERT NAME OF HISTORIC BRIDGE**).

5. (**INSERT NAME OF HISTORIC BRIDGE**) - This resource is used for transportation purposes. This undertaking will have an “Adverse effect” on (**INSERT NAME OF HISTORIC BRIDGE**), a Section 4(f) historic property; the FHWA has determined the appropriate Section 106 finding is "Adverse Effect"; and therefore a Section 4(f) evaluation must be completed for (**INSERT NAME OF HISTORIC BRIDGE**).

—OR—

(**INSERT NAME OF HISTORIC BRIDGE**) – This resource is used for transportation purposes. This undertaking will have an “adverse effect” on the (**INSERT NAME OF HISTORIC BRIDGE**), a Section 4(f) historic property. FHWA believes that the bridge work qualifies for the Section 4(f) exception in 23§774.13(g), which applies to:

(g) Transportation enhancement projects and mitigation activities, where:

(1) The use of the Section 4(f) property is solely for the purpose of preserving or enhancing an activity, feature, or attribute that qualifies the property for Section 4(f) protection; and

(2) The official(s) with jurisdiction over the Section 4(f) resource agrees in writing to paragraph (g)(1) of this section.

FHWA respectfully requests that the Indiana State Historic Preservation Officer provide written concurrence that they are in agreement with paragraph (g) (1) above and that the project qualifies for the Section 4(f) exception.

6. (**INSERT NAME OF HISTORIC PROPERTY**) - This undertaking will convert property from (**INSERT NAME OF HISTORIC PROPERTY**), a Section 4(f) historic property, to a transportation use; the FHWA has determined the appropriate Section 106 finding is "Adverse Effect"; and therefore a Section 4(f) evaluation must be completed for (**INSERT NAME OF HISTORIC PROPERTY**).

7. (**INSERT NAME OF ARCHAEOLOGICAL PROPERTY**) – This undertaking will have an adverse effect on (**INSERT NAME OF ARCHAEOLOGICAL PROPERTY**). FHWA has determined the appropriate Section 106 finding is "Adverse Effect". In consultation with the Indiana State Historic Preservation Officer, it has been determined that preservation-in-place is not warranted for (**INSERT NAME OF ARCHAEOLOGICAL PROPERTY**); therefore Section 4(f) does not apply. FHWA respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the determination that the archaeological site does not warrant preservation-in-place.
For undertakings with “No Historic Properties Affected” and “No Adverse Effect” findings:

Patrick Carpenter, for FHWA
Manager
INDOT Cultural Resources

Approved Date

For undertakings with “Adverse Effect”:

Richard J. Marquis
Division Administrator
FHWA-IN Division

Approved Date
Section 4(f) of the USDOT Act of 1966 (Title 49, USC, Section 303) requires special considerations be made regarding the “use” of any publicly owned park, recreation area, wildlife/waterfowl refuge or historic property that is listed in or eligible for the National Register of Historic Places (National Register). These properties are called “4(f) Properties.” “Use” is defined as a permanent easement, fee taking, or “constructive use” of a Section 4(f) property. Bridges listed in or eligible for listing in the National Register are 4(f) properties. As such, before demolition and replacement of a historic bridge can occur, the Federal Highway Administration (FHWA) must confirm that, on the basis of extensive studies and analysis, there are no “feasible and prudent” alternatives to this use of the resource.

The use of most historic bridges is covered under a programmatic Section 4(f) evaluation known as the “Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges” (Historic Bridge Programmatic Section 4(f) Evaluation).¹ For the purpose of the Historic Bridge Programmatic Section 4(f) Evaluation, a proposed action will "use" a bridge that is on or eligible for inclusion on the National Register when the action will impair the historic integrity of the bridge either by rehabilitation or demolition. Rehabilitation that does not impair the historic integrity of the bridge as determined by procedures implementing the National Historic Preservation Act of 1966, as amended, is not subject to Section 4(f). That is to say, in general, if a rehabilitation project results in a “No Adverse Effect” finding for the bridge, the bridge is not subject to Section 4(f).

To apply the Historic Bridge Programmatic Section 4(f) Evaluation, three alternatives that avoid any use of the historic bridge must be examined: do nothing, build a new structure at a different location without affecting the historic integrity of the historic bridge, and rehabilitate the historic bridge without affecting the historic integrity of the structure.

Additionally, the “Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation (INDOT), the Indiana State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) Regarding Management and Preservation of Indiana’s Historic Bridges” (Historic Bridge PA) governs the project development process for historic bridges in Indiana. This agreement states that FHWA will work with INDOT, and the bridge owner if the bridge does not belong to INDOT, to develop a Purpose and Need statement and an alternatives analysis for any project involving a historic bridge. Rehabilitation for vehicular use must be thoroughly evaluated before other alternatives are considered.

This document provides guidance in preparing a Historic Bridge Alternatives Analysis for review by INDOT, which after approval, will be submitted to consulting parties for review as part of the Section 106 consultation process. The goal is that the resultant Alternatives Analysis is in accordance with the Historic Bridge PA and fulfills the requirements of the Historic Bridge Programmatic Section 4(f) Evaluation when applicable.

Please note that final approval of the preferred alternative does not occur until FHWA approves the NEPA document. INDOT approval of the Historic Bridge Alternatives Analysis

allows its distribution for consulting party review. Later, INDOT signature of the 800.11(e) “no adverse effect” finding or FHWA signature of the 800.11(e) “adverse effect” finding constitutes draft agency concurrence in the purpose and need statement, alternatives analysis, and preferred alternative. INDOT or FHWA signature does not constitute final approval of the preferred alternative, but rather release of the 800.11(e) document for consulting party review and comment.

The environmental document for the subject bridge project will need to summarize the alternatives analyzed in the Historic Bridge Alternatives Analysis Document and why each was or was not feasible and prudent. The Historic Bridge Alternatives Analysis Document should be included in an appendix to the environmental document. After the public hearing comment period has expired, the CE should be updated as appropriate (finalize alternatives analysis, preferred alternative, and Commitments Summary Form) and forwarded to INDOT for final review. Once FHWA has assured that all of the Historic Bridge Programmatic Agreement requirements have been fully addressed, FHWA will be in a position to grant final NEPA approval. FHWA final approval of the CE will affirm that all Historic Bridge PA requirements have been fully addressed, serve to confirm that FHWA has concluded its responsibilities under Section 106, and serve as FHWA approval of the Historic Bridge Programmatic 4(f) and the preferred alternative.

These guidelines were created in order to increase the consistency and quality of alternative analysis documents, as well as streamline the review process. This document provides the recommended process for writing these documents, and indicates the components required for inclusion in the documents. Below is an outline of the components that should be included in these documents. An annotated outline with specific guidance follows.

Some components of this document were influenced by guidelines in use by the Texas Department of Transportation (TxDOT) titled Historic Bridge Programmatic Section 4(f) Guidelines and Standards of Uniformity (prepared by Mead & Hunt, Inc., April 2009).

Suggested Components of the Historic Bridge Alternatives Analysis Document

I. COVER SHEET/TITLE PAGE
II. TABLE OF CONTENTS
III. EXISTING STRUCTURE DATA
IV. EXISTING CONDITIONS
V. PURPOSE AND NEED
VI. ALTERNATIVES
VII. MINIMIZATION AND MITIGATION
VIII. PRELIMINARY PREFERRED ALTERNATIVE

APPENDICES
A. MAPS
B. PHOTOGRAPHS
C. DRAWINGS
D. COST ESTIMATES

Any of the items listed as appendices here can also be incorporated into the text of the document as appropriate.
Historic Bridge Alternatives Analysis Layout

I. COVER SHEET/TITLE PAGE

Provide a cover sheet or title page as illustrated below.

Historic Bridge Alternatives Analysis

BRIDGE NUMBER: __________________

DESIGNATION NUMBER: _______

ROUTE IDENTIFICATION AND FEATURE CROSSED:

________ over _______________

COUNTY: _______________________

NBI NUMBER: _______

PROJECT LOCATION: ________________________________

PREPARED BY: _______________________

(Name of INDOT staff or name of consultant staff. It is expected that authorship of this
document should be a collaboration of both engineering and cultural resources staff. Both
Professional Engineers and Qualified Professional Historians/Architectural Historians should
contribute to the report preparation [Engineers—provide existing structure data, inspection
information, design criteria, cost criteria, etc.; CR QPs—provide National Register of Historic
Places criteria, list of contributing features, analysis of the impacts of each alternative to the
historic integrity of the structure, etc.]).

DATE: _______________

II. TABLE OF CONTENTS

If the magnitude of the document warrants, provide a Table of Contents segregated by
major document sections.

III. EXISTING STRUCTURE DATA

A. Identification/History

Bridge No.:
Project Location: (Route Number, Feature Crossed, City / County, District)
Designation No.: (As determined)
Year Built:
Years Repaired:
Most Recent Field Inspection Date:
Average Daily Traffic (ADT)/Year of ADT:
Percentage of Commercial Vehicles:
Low volume road?: (Yes/No) A low-volume road is defined as having a design year ADT of less than or equal to 400.

Functional Classification:
Detour Length: (Detour length is defined as the total additional travel a through-bound vehicle would experience from closing the bridge. This is determined by the shortest route on which a vehicle with a loading of HS-20 [36 tons] is legally capable of traveling.)
Load Rating:
Sufficiency Rating3:
National Register of Historic Places Status: (Eligible or Listed?)
Historic Bridge Prioritization Status: (Select or Non-Select?)
Historic Character-Defining Features: (Pinned or Riveted Connections, Decorative Railing, Exceptional Length or Skew, etc.)

B. Structure/Dimensions

Surface Type: (Original concrete deck, asphalt overlay, etc.)
Out to Out of Copings: (Width, feet-inches)
Out to Out of Bridge Floor: (Length, feet-inches)
Clear Roadway Width: (Length, feet-inches)
Number of Lanes on Structure:
Skew: (Angle and Direction; i.e., Left or Right)
Type of Superstructure: (Reinforced Concrete Slab, Prestressed Concrete, Structural Steel, etc.)
Spans: (No. and length of each span, feet-inches)
Type of Substructure/Foundation: (Pier Type & Shape, Abutment/End Bent Type, Piles or Spread Footings, etc.)
Seismic Zone: (only if in Zone 2)

C. Appurtenances

Bridge Railing: (Type, height in inches, measured from roadway surface)
Curbs: (Presence, one or both sides, height in inches, width in inches)
Sidewalks: (Presence, one or both sides, height in inches, width in inches)
Utilities: (Power, telephone, etc.)
Railroad: (Presence, if affected by project construction or maintenance of traffic)

D. Approaches

Roadway Width: (feet-inches)
Surface Type: (Asphalt or Concrete)

3The sufficiency rating measures a bridge's capability to remain in vehicular service, based on a formula incorporating condition rankings, load capacity, roadway and structure geometrics, traffic counts, presence of suitable detour routes, and other bridge inspection factors. This rating is used as one of the factors for determining if federal funding can be used for rehabilitation and/or replacement of an existing bridge structure. To be eligible for rehabilitation, a bridge must have a sufficiency rating of 80 or less. To be eligible for replacement, the bridge must have a sufficiency rating of less than 50.
Guardrail: (Type)
Guardrail End Treatment: (Type)

IV. EXISTING CONDITIONS

Provide brief statements on the condition of the structural elements. The following provides guidance on the content of this section. Photographs should be provided to support the statements made in each section about deficiencies or inadequacies.

A. Bridge Deck

Indicate the overall condition of the bridge deck (excellent, fair, poor). Describe the extent and location of spalling, presence of existing patches, extent and location of cracking, signs of leakage, etc. If curbs or sidewalks are present, the satisfying INDOT criteria must be evaluated within this context. Indicate any structural, functional, or geometric deficiencies or inadequacies.

B. Superstructure

Indicate the overall condition of the superstructure (excellent, fair, poor). If known or if visible, identify prior repair or maintenance work performed. Where applicable, identify the extent and location of specific structural deficiencies, e.g., cracking, spalling of concrete, rust on metal components, deformation, loss in concrete or metal components. Identify fracture-critical or fatigue-prone members. Identify damage due to collision by vessels, vehicles, etc. Indicate any structural, functional, or geometric deficiencies or inadequacies.

C. Substructures and Foundations

Indicate the overall condition of the substructures and foundations and slope protection (excellent, fair, poor). If known or if visible, identify prior repair or maintenance work performed, e.g., patching of concrete. Where applicable, identify the extent and location of specific structural deficiencies, e.g., cracking, leaching, deterioration, settlement, rotation, exposed reinforcement. Indicate overall adequacy of drainage with respect to the substructure and foundation and identify problems, e.g., erosion. If known for a bridge in a waterway, indicate evidence (or lack of evidence) for scour, either from visual inspection or from an underwater inspection report. Indicate any structural, functional, or geometric deficiencies or inadequacies.

D. Approaches

Indicate the overall condition of the approaches (excellent, fair, poor). All features within the project limits should be checked for compliance to the current safety standards. Describe other pertinent features that affect driveability and safety. Indicate any structural, functional, or geometric deficiencies or inadequacies.
E. **Slopewalls.**

Indicate the overall condition and material of existing slopewalls (excellent, fair, poor). Indicate any structural, functional, or geometric deficiencies or inadequacies.

V. **PURPOSE AND NEED**

The purpose and need statement outlines the problem(s) of the transportation facility and the goal(s) for that facility. The purpose and need section should not be written so narrowly as to describe only the recommended alternative. The purpose and need should be concise and can include the identification of current needs, current capacity, future demand, safety issues, roadway deficiencies, system linkage and legislative directive. The types of needs often associated with bridge projects fall into three main groups: structural deficiencies, functional inadequacies, and geometric deficiencies.

Common concerns of the purpose and need are narrowly defining the project purpose and need; project goals that are too vague or broad; omitting local agencies’ policies and goals established in transportation, land use, and other relevant planning studies.

The following is a sample structure for a purpose and need statement:

**Background** – a short discussion of the location and existing facility.

**Purpose** – a very clear, concise description of the primary goals the project is expected to attain.

**Need** – a description of the problems or unsatisfactory conditions that currently exist or are expected with the existing facility or project area.

**Other goals/objectives** – a description of desired outcomes that are not central to the P&N but are nonetheless important considerations. For example, a travel corridor selected as best addressing identified transportation problems resulting from planning analyses may be part of the project’s purpose and need statement.

The above information was primarily taken from the INDOT Procedural Manual for Preparing Environmental Documents (2008 Version) and further information and guidance about Purpose and Need can be found in that document: [http://www.in.gov/indot/files/Procedural_Manual_for_Preparing_Environmental_Studies_2008.pdf](http://www.in.gov/indot/files/Procedural_Manual_for_Preparing_Environmental_Studies_2008.pdf)

An example Purpose and Need statement can be found as an attachment to this document (Figure 1).

VI. **ALTERNATIVES**

The alternatives analysis must address the following alternatives (A-F) for both Select and Non-Select Bridges (Select Bridges must be preserved as part of the project). The alternatives analysis must prove why each alternative either is or is not feasible and prudent, and it should document the justification for the decision to proceed with the preferred alternative.
Please step down through the alternatives until a feasible and prudent alternative is formulated. Alternatives A-F are to be considered hierarchically. They should be studied in order and the first one that is found to be prudent and feasible while meeting the Purpose and Need of the project should be designated as the preferred alternative. For example, if rehabilitation for continued vehicular use is prudent and feasible, and thus, becomes the preferred alternative, no further analysis is needed.

If replacement is the proposed alternative for a Non-Select bridge, each of the alternatives must be analyzed to determine if there is a feasible and prudent alternative that avoids the use of the historic bridge or minimizes the harm to the historic bridge. If no avoidance alternative is determined to be feasible and prudent or no alternative that poses the least harm to the bridge is determined to be feasible and prudent, then an alternative that uses the historic bridge may be chosen.

The term "feasible" refers to an alternative that is possible to engineer, design and build. The term "prudent" means there are unique problems or unusual factors involved with the use of such alternatives. This means that the cost, social, economic and environmental impacts, and/or community disruption resulting from such alternatives reach extraordinary magnitudes. One can use a totality of these circumstances to establish that these unique problems, unusual factors or other impacts reach extraordinary magnitudes. A transportation agency must select an avoidance alternative if it is feasible and prudent. By contrast, an alternative may be rejected if it is not feasible and prudent.

It is important to document all aspects of engineering assessments and decisions, and to provide these in non-technical terms as much as possible for the lay reader since many consulting parties may not be familiar with engineering terminology. A preliminary cost estimate should be included for each alternative with the detailed cost information included in the appendix. After the discussion of each alternative, provide a summary statement for that alternative. The summary statement should act as a closing argument for the alternative. Be factual and to the point. As explained later in Section VIII, an alternatives analysis table should be included.
**Tips for Alternatives Analysis Discussions**

- Avoid vague statements: *The bridge has unacceptable safety hazards. The bridge does not meet load capacity requirements.* Be specific about the deficiencies. Provide factual data.
- Avoid alarmist statements: *The bridge poses an immediate danger to the motoring public.* Provide factual data, including accident data.
- Only address the standards that are applicable to the specific project/bridge. Explain which chapter of the design manual is applicable and why. Remember to reference Chapter 72-7.0 “Historic Bridge on Low-Volume Local Road” when appropriate.
- If a design exception is needed, explain the factors involved and explain whether it would be appropriate to pursue the design exception.
- Be prepared to answer the question, “Why is the bridge structurally deficient?” Do not state that a bridge is structurally deficient because of its low sufficiency rating: *The bridge’s sufficiency rating is 25.5, and therefore, it is structurally deficient.* Sufficiency rating is not tied to thresholds for structural deficiency.
- Provide documentation to back up statements made: *The bridge should be replaced because modern farm equipment can’t use it.* Provide information about location and number of farms or results of interviews with nearby property owners. What is the detour length? *The bridge has a history of many vehicular accidents.* Provide the accident data and photographs illustrating the damage.
- When discussing rehabilitation, provide detailed information: *Many of the structural members are in poor condition and require replacement.* Explain which members need replacement and why. Consider a diagram showing this information. Include photographs illustrating the deterioration. What approximate percentage of the members overall will need to be replaced?
- Avoid making recommendation statements without providing the reason: *Ten south truss members, 4 north truss members, and approximately 50% of the lower chord will need to be replaced.* *The spandrel walls are beyond repair.* *The bridge needs to be widened.* Why? Provide condition ratings and recent inspection information. Reference the applicable standards.

**A. No Build/Do Nothing**

The discussion should begin by stating that this alternative means that no federal funds will be expended and that no action would occur. It should be noted that the no build alternative is an avoidance alternative since it would not use the historic bridge. The evaluation should consider all consequences of proceeding with the no build alternative to determine if it is feasible and prudent. The discussion should describe how this alternative would affect the structural, functional, and geometric deficiencies outlined in the purpose and need. A discussion of anticipated impacts to other infrastructure that would be used if the bridge were to become unusable should be included as appropriate. An estimate should be given of the remaining time before the first repairs to the structure are expected.
B1. Rehabilitation for Continued Vehicular Use (two-lane or one-lane option) Meeting Secretary of Interior’s Standards for Rehabilitation

B2. Rehabilitation for Continued Vehicular Use (two-lane or one-lane option) NOT Meeting Secretary of Interior’s Standards for Rehabilitation

This alternative is to rehabilitate the structure for continued vehicular use, either with two lanes or one lane of traffic across the bridge, as appropriate. Attachment B of the Historic Bridge PA (“Standard Treatment Approach for Historic Bridges”) states that when rehabilitation is the selected alternative, the bridge owner will develop plans to rehabilitate the bridge in accordance with the “Secretary of the Interior’s Standards for Rehabilitation” (Secretary’s Standards) and applicable guidelines, or as close to the Secretary’s Standards as is practicable. This is in keeping with the Historic Bridge Programmatic Section 4(f) Evaluation, which states that rehabilitation of the historic bridge without affecting the historic integrity of the structure must be examined.

The Standards were written for buildings and not bridges. Therefore, sometimes it is hard to directly apply them to bridge rehabilitation projects. However, some general principles can be applied. Generally, you should start out with the option of least harm. If that is not possible, investigate the next least harmful option. Repairs should occur before replacement of materials; if replacement is needed, materials should be replaced in-kind, etc.

Sometimes, rehabilitating a bridge following the Secretary’s Standards (B1) will result in a bridge that is still structurally or geometrically deficient and the project Purpose and Need is not met. In that case, a rehabilitation that does not meet the Secretary’s Standards (B2) must also be explored. For example, if a rehabilitation project following the Secretary’s Standards (B1) involves retaining a historic railing that does not meet current design standards (through obtaining a design exception), another rehabilitation alternative (B2) that replaces the railing with a new one that meets design standards should be examined. It could be that this second alternative (B2) also does not meet purpose and need for other reasons or is not prudent, but it must be explored nonetheless.

The discussion for Alternative B1 and B2 should describe the members or elements that are in need of replacement or repair, the materials and construction techniques that will be used in the rehabilitation, the bridge’s load capacity before and after the rehabilitation, how the bridge will serve traffic following the rehabilitation, and the cost of the alternative. The discussion should describe how this alternative would affect the structural, functional, and geometric deficiencies outlined in the purpose and need. The discussion should explain which elements of the bridge that contribute to its historic nature will need repair or replacement, and how the repair or replacement affects the overall historic material integrity. Include a statement regarding the expected service life of the bridge once rehabilitation has been completed.

A table should be used to summarize the existing conditions and applicable design criteria. In a table format, the reader can quickly and easily see comparable information regarding the structure’s deficiencies. This table could manifest itself in several ways, but a format

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4 The Secretary of Interior’s Standards for Rehabilitation can be found at the following website: [http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm](http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm)
similar to that shown as an example in Figure 2 (attached) is recommended to capture the relevant information.

1. This alternative is Feasible:
   a. If the minimum design standards in the Indiana Design Manual, including those from Chapter 72-7.0 “Historic Bridge on Low-Volume Local Road,” can be addressed, or
   b. If INDOT approves a design exception for continued vehicular use, or
   c. If the bridge spans an active railroad, the minimum design standards of the railroad can be addressed.

2. This alternative is Prudent:
   a. Select Bridge - If the initial rehabilitation cost is less than 80% of the replacement cost, rehabilitation is warranted; or if the initial rehabilitation cost is equal to or greater than 80% of the replacement cost, the owner may request further consultation with FHWA to determine rehabilitation eligibility.
   b. Non-Select Bridge - If the initial rehabilitation cost is less than 40% of the replacement cost, rehabilitation is warranted.

3. This alternative may not be Prudent and replacement may be warranted if the initial rehabilitation cost of a Non-Select Bridge is greater than or equal to 40% of the replacement cost, or the bridge meets any two of the following criteria that cannot be economically corrected as part of a rehabilitation project:
   a. The bridge’s waterway opening is inadequate (i.e., National Bridge Inventory Item 71 is rated 2 or 3).
   b. The bridge has a documented history of catching debris due to inadequate freeboard or due to piers in the stream.
   c. The bridge requires special inspection procedures (i.e., the first character of National Bridge Inventory Item 92A or 92C is Y).
   d. The bridge is classified as scour-critical (i.e., National Bridge Inventory Item 113 is rated 0, 1, 2, or 3).
   e. A fatigue analysis conducted in accordance with Indiana Design Manual indicates the bridge has fatigue-prone welded details that are expected to reach the end of their service lives within the next 20 years.
   f. The bridge has a Sufficiency Rating of lower than 35.

When evaluating this alternative, explain whether a design exception is needed. If so, what specific exception(s) would be needed? Explain the factors involved and explain whether it would be appropriate to pursue the design exception(s).

C1. Rehabilitation for Continued Vehicular Use (one-way pair option) Meeting Secretary of Interior’s Standards for Rehabilitation

C2. Rehabilitation for Continued Vehicular Use (one-way pair option) NOT Meeting Secretary of Interior’s Standards for Rehabilitation

A bridge may be rehabilitated and left in place, and a new bridge and new approaches may be built adjacent to it. This effectively creates one bridge and approaches for each direction.
of travel to create a one-way pair. For this situation, the new bridge must meet all design standards for a new bridge. Where appropriate, the new one-way bridge must be able to accommodate future widening to provide for two-way travel. Attachment B of the Historic Bridge PA states that when rehabilitation is the selected alternative, the bridge owner will develop plans to rehabilitate the bridge in accordance with the Secretary’s Standards and applicable guidelines, or as close to the Secretary’s Standards as is practicable. This is applicable in a one-way pair option, and this is in keeping with the Historic Bridge Programmatic Section 4(f) Evaluation, which states that rehabilitation of the historic bridge without affecting the historic integrity of the structure must be examined.

Sometimes, rehabilitating a bridge following the Secretary’s Standards (C1) will result in a bridge that is still structurally or geometrically deficient and the project Purpose and Need is not met. In that case, a rehabilitation that does not meet the Secretary’s Standards (C2) must also be explored. It could be that this second alternative (C2) also does not meet purpose and need for other reasons or is not prudent, but it must be explored nonetheless.

The discussion should describe how this alternative would affect the structural, functional, and geometric deficiencies outlined in the purpose and need. In addition to many of the same issues that are addressed in the rehabilitation option described above, which can be incorporated into the discussion by reference, the analysis of this alternative should include details regarding the new bridge and its appearance, location, and potential impacts to the historic bridge. Additionally, this alternative should outline how much new right-of-way will be required, and the associated cost. Include a statement regarding the expected service life of the bridge once rehabilitation has been completed.

1. This alternative is Feasible:
   a. If the minimum design standards in the Indiana Design Manual, including those from Chapter 72-7.0 “Historic Bridge on Low-Volume Local Road,” can be addressed, or
   b. If INDOT approves a design exception for continued vehicular use for the Select bridges that require a design exception, which are listed in Chapter 5, Volume 4 (List of Select and Non-Select Bridges) of the Historic Bridge Inventory, or
   c. If the bridge spans an active railroad, the minimum design standards of the railroad can be addressed.

2. This alternative is Prudent:
   a. Select Bridge - If the initial rehabilitation cost is less than 80% of the replacement cost, rehabilitation is warranted; or if the initial rehabilitation cost is equal to or greater than 80% of the replacement cost, the owner may request further consultation with FHWA to determine rehabilitation eligibility.
   b. Non-Select Bridge - If the initial rehabilitation cost is less than 40% of the replacement cost, rehabilitation is warranted.

3. This alternative may not be Prudent and replacement may be warranted if the initial rehabilitation cost of a Non-Select Bridge is greater than or equal to 40% of the replacement cost, or the bridge meets any two of the following criteria that cannot be economically corrected as part of a rehabilitation project:
Historic Bridge Alternatives Analysis Layout

a. The bridge’s waterway opening is inadequate (i.e., National Bridge Inventory Item 71 is rated 2 or 3).
b. The bridge has a documented history of catching debris due to inadequate freeboard or due to piers in the stream.
c. The bridge requires special inspection procedures (i.e., the first character of National Bridge Inventory Item 92A or 92C is Y).
d. The bridge is classified as scour-critical (i.e., National Bridge Inventory Item 113 is rated 0, 1, 2, or 3).
e. A fatigue analysis conducted in accordance with Indiana Design Manual indicates the bridge has fatigue-prone welded details that are expected to reach the end of their service lives within the next 20 years.
f. The bridge has a Sufficiency Rating of lower than 35.

When evaluating this alternative, explain whether a design exception is needed. If so, what specific exception(s) would be needed? Explain the factors involved and explain whether it would be appropriate to pursue the design exception(s).

D. Bypass (non-vehicular use)/Build New Structure

This alternative calls for the rehabilitation of the historic bridge for non-vehicular use and the construction of a new bridge. Therefore, many of the same issues that are covered by the previous options may also be included or referenced in the analysis of this alternative. Remember that load capacity and safety requirements for pedestrian bridges are not the same as vehicular bridges. As a result, additional information regarding pedestrian load ratings and railings should be included in the discussion of this alternative. Additionally, site considerations need to be taken into account and explained, such as how pedestrian access will be achieved, parking issues, ADA requirements, etc. The cost of the alternative should be included. The discussion should describe how this alternative would affect the structural, functional, and geometric deficiencies outlined in the purpose and need.

It is also important to note that for Select Bridges, the owner is responsible for rehabilitation costs associated with the historic bridge. For Non-Select Bridges, a responsible party other than the owner must come forward to fund preservation/maintenance for this to be a prudent alternative.

Because all Select Bridges must be preserved, it is possible that the feasible and prudent alternative would be to implement this alternative while affecting the historic integrity of the existing bridge. It might not be possible to avoid affecting the historic integrity of the existing bridge. In that case, two alternatives should be explored and labeled as D1 and D2. The alternative that bypasses the existing structure and builds a new structure without affecting the historic integrity of the existing structure should be labeled as Alternative D1. The alternative that bypasses the existing structure and builds a new structure while affecting the historic integrity of the existing structure should be labeled as Alternative D2.

When evaluating this alternative, explain whether a design exception is needed. If so, what specific exception(s) would be needed? Explain the factors involved and explain whether it would be appropriate to pursue the design exception(s).
E. Relocation of Historic Bridge and New Bridge Construction

This alternative calls for the moving of the historic bridge to a new location for some other use and the construction of a new bridge in its place. Discussion of the conditions of the new location for the historic structure along with an explanation of its future use should be provided. The analysis should also include discussion of any realignment of the roadway, new right-of-way or easements that are required by the new bridge structure, and what type of structure will replace the existing historic bridge. The cost of the new structure should be discussed. The discussion should describe how this alternative would affect the structural, functional, and geometric deficiencies outlined in the purpose and need.

It is important to note that for Select Bridges, the owner is responsible for rehabilitation costs associated with the historic bridge in its new location/use. For Non-Select Bridges, a responsible party other than the owner must come forward to fund relocation/preservation/maintenance for this to be a prudent alternative.

F. Replacement -- Demolition of Historic Bridge and New Bridge Construction

This alternative calls for the demolition of the historic bridge and the construction of a new bridge in its place. Because this alternative calls for the construction of a new bridge, many of the same issues that are covered by the relocation option can be included or referenced in the analysis of this alternative. The cost of the new structure should be discussed. The discussion should describe how this alternative would affect the structural, functional, and geometric deficiencies outlined in the purpose and need.

It is important to note that this alternative is NOT an option for Select Bridges. For Non-Select Bridges, this becomes a prudent alternative after the bridge has been marketed per the requirements of the Historic Bridge PA, and no responsible party other than the owner has come forward to fund relocation/preservation/maintenance of the bridge.

VII. MINIMIZATION AND MITIGATION

In addition to evaluating if there is a feasible and prudent avoidance alternative, minimization and mitigation of unavoidable impacts to the historic resource is required. Minimization means that the impacts are reduced to the maximum extent possible. Mitigation refers to actions that compensate for the impacts to the historic resource.

A. Minimization

If design modifications that lessen the harm to a rehabilitated historic bridge are utilized, they should be noted. Such measures might include:

- Hiding strengthening members
- Replacing rivets that need to be replaced with round-headed bolts, rather than polygonal-headed bolts
- Use of non-standard or aesthetic railing
- Design exceptions
B. Bridge Marketing

For Non-Select Bridges, explain the marketing measures that have occurred per the Historic Bridge PA, including when notices were published in newspapers, when the bridge was posted to the INDOT marketing website, and when signs were installed at the bridge site. Indicate whether any serious inquiries have been made about the structure as a result of the marketing efforts so far.

C. Mitigation

The Historic Bridge PA prescribes the mitigation measures for impacts to historic bridges. Please explain whether the bridge owner will need to consult with the Indiana SHPO to determine if photo documentation of the bridge is needed. If this consultation has already occurred and the requirements are known, specify the photo documentation standards and distribution requirements. If this consultation has not yet occurred, please indicate that it will occur as appropriate.

VIII. PRELIMINARY PREFERRED ALTERNATIVE

This section should specifically note which alternative is recommended as feasible and prudent, and therefore is the preliminary preferred alternative for the proposed project. This statement should be short and explicit.

An alternatives analysis table should be included to quickly and easily show comparable information regarding the alternatives side-by-side. This table could manifest itself in several ways to show how the alternatives compare to each other. The tables shown as examples are recommended since they includes the issues considered in the alternatives analysis (Figures 6-7).

APPENDICES

Any of the items listed as appendices here can also be incorporated into the text of the document as appropriate, in place of or in addition to appendices.

A. MAPS

Maps that show the bridge location must be included. All maps should include a scale, a north arrow, and a key or legend. To accurately illustrate the bridge location, three types of maps are recommended for inclusion in the document:

1. Overview map showing the bridge location within the county and state.
2. USGS topographic quadrangle map (1:24000 scale) showing the bridge location. The caption of the topographic map should be properly titled, for example; “Portion of the USGS 7.5’ series Miami, Indiana topographic quadrangle showing the location of the project area.”
3. Aerial photograph with the bridge identified. Aerial photographs must include the date of aerial photos in the caption. For example, “A 2008 aerial photograph showing the project location.”
B. PHOTOGRAPHS

Color photographs of the project area that show the bridge approaches, views looking upstream and downstream of the bridge, and land use surrounding the bridge are recommended. Provide photographs depicting in sufficient detail the overall condition of the bridge and its elements. The photographs can then be used in reviewing and evaluating the existing condition and alternatives recommendations. The following procedures apply to photographs.

1. Log all photographs as taken.
2. Beneath each photograph, identify the following:
   a. the photo vantage point,
   b. the direction the photographer is looking, and
   c. the description of the view.

C. DRAWINGS

Provide schematics, as necessary, for the existing bridge cross section and the preferred alternative bridge cross section. Consider providing separate schematics according to spans outlining the work that needs to be undertaken for specific alternatives. Highlighting and marking up these drawings to illustrate the proposed work is helpful for consulting parties that are not familiar with engineering drawings. Example drawings are attached (s 3-4).

D. COST ESTIMATES

A preliminary cost estimate should be included for each alternative discussed. Minor miscellaneous items may be combined into one lump-sum item. The preliminary cost estimate, projected to the scheduled contract letting, should be based on INDOT’s current construction-cost-estimating software system. An example cost estimate is attached (Figure 5).
FIGURE 1. EXAMPLE PURPOSE AND NEED STATEMENT

The purpose of the project is to provide a structurally sufficient and hydraulically adequate structure that provides a safe and efficient crossing of CR 100 over Blue Creek at this location. The need for the action is due to the poor condition of the existing structure. The structure is suffering from overall deterioration. According to the most recent bridge inspection (2011), the deck is in fair condition and the superstructure and substructure are both in poor condition. The bridge inspection report noted several deficiencies as outlined in the existing conditions section of the document. The most recent sufficiency rating (2011) for the bridge was determined to be 37.9 (of out of a possible 100 points).

The bridge has a clear roadway width of 22 ft. This is below current INDOT design standards for this type of roadway (travelway plus 2 ft on each side; Figure 55-3A from the Design Manual). The location of the pier in the center of the waterway causes drift to accumulate and is causing considerable scour with the possibility of debris hitting the pier, resulting in damage to or failure of this member.
### FIGURE 2. TABLE TEMPLATE TO SUMMARIZE BRIDGE’S EXISTING CONDITIONS AND APPLICABLE DESIGN CRITERIA

<table>
<thead>
<tr>
<th>Design Element</th>
<th>Design Manual Section</th>
<th>Minimum Design Criteria</th>
<th>Existing Condition</th>
<th>Proposed Condition&lt;sup&gt;5&lt;/sup&gt;</th>
<th>Design Exception Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Lane</td>
<td>Chapter &amp; Section/Figure No.</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Shoulder</td>
<td>Chapter &amp; Section/Figure No.</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Structural Capacity</td>
<td>Chapter &amp; Section/Figure No.</td>
<td>Load Rating</td>
<td>Load Rating</td>
<td>Load Rating</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Clear Roadway Width</td>
<td>Chapter &amp; Section/Figure No.</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Vertical Clearance</td>
<td>Chapter &amp; Section/Figure No.</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Other elements as applicable</td>
<td>Chapter &amp; Section/Figure No.</td>
<td>Measurement</td>
<td>Measurement</td>
<td>Measurement</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

<sup>5</sup> What the rehabilitation work will provide after completion.
FIGURE 3. DRAWING EXAMPLE TO ILLUSTRATE NEEDED WORK FOR A REHABILITATION ALTERNATIVE ON A STEEL TRUSS

*orange indicates members to be replaced
*blue indicates members to be repaired

ELEVATION
SCALE: 1/16" = 1'-0

FIGURE 4. DRAWING EXAMPLE TO ILLUSTRATE NEEDED WORK FOR A REHABILITATION ALTERNATIVE ON A CONCRETE RAILING

- Remove and Reset/Replumb Stone on New Mortar Bed
- Remove and Replace Roll Panel
### FIGURE 5. EXAMPLE COST ESTIMATE FOR A REHABILITATION ALTERNATIVE

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Code</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Item Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>105-06845</td>
<td>CONSTRUCTION ENGINEERING</td>
<td>1</td>
<td>LS</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>2</td>
<td>110-01001</td>
<td>MOBILIZATION AND DEMOBILIZATION</td>
<td>1</td>
<td>LS</td>
<td>$60,000.00</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>3</td>
<td>201-01015</td>
<td>CLEARING AND GRUBBIN</td>
<td>1</td>
<td>LS</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>4</td>
<td>202-02241</td>
<td>GUARDRAIL, REMOVE</td>
<td>1,400</td>
<td>LFT</td>
<td>$6.00</td>
<td>$8,400.00</td>
</tr>
<tr>
<td>5</td>
<td>202-XXXXX</td>
<td>TEMP. TRAFFIC SIGNALS AND EQUIPMENT, REMOVE</td>
<td>1</td>
<td>LS</td>
<td>$3,000.00</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>6</td>
<td>207-08263</td>
<td>SUBGRADE TREATMENT, TYPE IA</td>
<td>425</td>
<td>SYS</td>
<td>$10.00</td>
<td>$4,250.00</td>
</tr>
<tr>
<td>7</td>
<td>303-01180</td>
<td>COMPACTED AGGREGATE, NO. 53</td>
<td>60</td>
<td>TON</td>
<td>$25.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>8</td>
<td>402-07433</td>
<td>HMA SURFACE, TYPE B</td>
<td>35</td>
<td>TON</td>
<td>$75.00</td>
<td>$2,625.00</td>
</tr>
<tr>
<td>9</td>
<td>402-07438</td>
<td>HMA INTERMEDIATE, TYPE B</td>
<td>46</td>
<td>TON</td>
<td>$65.00</td>
<td>$2,990.00</td>
</tr>
<tr>
<td>10</td>
<td>402-07441</td>
<td>HMA BASE, TYPE B</td>
<td>185</td>
<td>TON</td>
<td>$55.00</td>
<td>$10,175.00</td>
</tr>
<tr>
<td>11</td>
<td>406-05520</td>
<td>ASPHALT FOR TACK COAT</td>
<td>0.1</td>
<td>TON</td>
<td>$400.00</td>
<td>$40.00</td>
</tr>
<tr>
<td>12</td>
<td>601-01522</td>
<td>GUARDRAIL TRANSITION TYPE TGB</td>
<td>4</td>
<td>EACH</td>
<td>$2,000.00</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>13</td>
<td>601-02103</td>
<td>GUARDRAIL, W BEAM, SHOP CURVED, 6 FT. 3 IN. SPACING</td>
<td>200</td>
<td>LFT</td>
<td>$60.00</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>14</td>
<td>601-94689</td>
<td>GUARDRAIL END TREATMENT, OS</td>
<td>4</td>
<td>EACH</td>
<td>$3,000.00</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>15</td>
<td>601-99105</td>
<td>GUARDRAIL, W BEAM, 6 FT. 3 IN. SPACING</td>
<td>1,200</td>
<td>LFT</td>
<td>$35.00</td>
<td>$42,000.00</td>
</tr>
<tr>
<td>16</td>
<td>706-05732</td>
<td>CONCRETE BRIDGE RAILING TRANSITION, TBC</td>
<td>4</td>
<td>EACH</td>
<td>$2,000.00</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>17</td>
<td>801-05775</td>
<td>MAINTAINING TRAFFIC</td>
<td>1</td>
<td>LS</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>18</td>
<td>609-XXXXX</td>
<td>EXISTING BRIDGE REHABILITATION COST</td>
<td>14,220</td>
<td>SFT</td>
<td>$85.00</td>
<td>$1,208,700.00</td>
</tr>
</tbody>
</table>

**SUB TOTAL**

$1,445,680.00

**CONTINGENCIES - 20%**

$289,136.00

**TOTAL**

$1,734,816.00
### FIGURE 6. ALTERNATIVES ANALYSIS TABLE TEMPLATE

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Meets Project Purpose &amp; Need?</th>
<th>Construction Cost</th>
<th>ROW Amount &amp; Cost</th>
<th>Total Cost</th>
<th>Other Factors</th>
<th>Feasible &amp; Prudent?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- No Build</td>
<td>Yes/No</td>
<td>Cost</td>
<td>ROW in acres &amp; Cost</td>
<td>Cost</td>
<td>If applicable, explain</td>
<td>Yes/No. If no, explain.</td>
</tr>
<tr>
<td>B-1-Rehabilitation for Continued Vehicular Use (two-way or one-way option) (Rehab Work = No Adverse Effect)</td>
<td>Yes/No</td>
<td>Cost</td>
<td>ROW in acres &amp; Cost</td>
<td>Cost</td>
<td>If applicable, explain</td>
<td>Yes/No. If no, explain.</td>
</tr>
<tr>
<td>B-2-Rehabilitation for Continued Vehicular Use (two-way or one-way option) (Rehab Work = Adverse Effect)</td>
<td>Yes/No</td>
<td>Cost</td>
<td>ROW in acres &amp; Cost</td>
<td>Cost</td>
<td>If applicable, explain</td>
<td>Yes/No. If no, explain.</td>
</tr>
<tr>
<td>C1-Rehabilitation for Continued Vehicular Use (one-way pair option) (Rehab Work = No Adverse Effect)</td>
<td>Yes/No</td>
<td>Cost</td>
<td>ROW in acres &amp; Cost</td>
<td>Cost</td>
<td>If applicable, explain</td>
<td>Yes/No. If no, explain.</td>
</tr>
<tr>
<td>C2-Rehabilitation for Continued Vehicular Use (one-way pair option) (Rehab Work = Adverse Effect)</td>
<td>Yes/No</td>
<td>Cost</td>
<td>ROW in acres &amp; Cost</td>
<td>Cost</td>
<td>If applicable, explain</td>
<td>Yes/No. If no, explain.</td>
</tr>
<tr>
<td>Bypass (non-vehicular use)</td>
<td>Yes/No</td>
<td>Cost</td>
<td>ROW in acres &amp; Cost</td>
<td>Cost</td>
<td>If applicable, explain</td>
<td>Yes/No. If no, explain.</td>
</tr>
<tr>
<td>Relocate</td>
<td>Yes/No</td>
<td>Cost</td>
<td>ROW in acres &amp; Cost</td>
<td>Cost</td>
<td>If applicable, explain</td>
<td>Yes/No. If no, explain.</td>
</tr>
<tr>
<td>Replacement</td>
<td>Yes/No</td>
<td>Cost</td>
<td>ROW in acres &amp; Cost</td>
<td>Cost</td>
<td>If applicable, explain</td>
<td>Yes/No. If no, explain.</td>
</tr>
</tbody>
</table>
## FIGURE 7. ALTERNATIVES ANALYSIS TABLE EXAMPLE

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Meets Project Purpose &amp; Need?</th>
<th>Constructio n Cost</th>
<th>ROW Amount &amp; Cost</th>
<th>Total Cost</th>
<th>Other Factors</th>
<th>Feasible &amp; Prudent?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- No Build</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Deterioration of superstructure would continue &amp; lead to eventual closure of the bridge. Bridge's waterway opening is inadequate. Bridge does not meet the required load capacity.</td>
<td>The alternative is not prudent because it does not meet the project purpose and need.</td>
</tr>
<tr>
<td>B-1: Rehabilitation for Continued Vehicular Use (two-way or one-way option) (Rehab Work = No Adverse Effect)</td>
<td>No</td>
<td>$1,417,323</td>
<td>No new ROW required</td>
<td>$1,417,323</td>
<td>Design exception needed to retain existing railing. Bridge's waterway opening would still be inadequate.</td>
<td>The alternative is not feasible because it cannot be constructed in accordance with sound engineering principles and practices and it does not meet the project purpose and need.</td>
</tr>
<tr>
<td>B-2: Rehabilitation for Continued Vehicular Use (two-way or one-way option) (Rehab Work = Adverse Effect)</td>
<td>No</td>
<td>$1,525,480</td>
<td>No new ROW required</td>
<td>$1,525,480</td>
<td>Total replacement of character-defining railing. Bridge's waterway opening would still be inadequate.</td>
<td>The alternative is not feasible because it cannot be constructed in accordance with sound engineering principles and practices and it does not meet the project purpose and need.</td>
</tr>
<tr>
<td>C-1: Rehabilitation for Continued Vehicular Use (one-way pair option) (Rehab Work = No Adverse Effect)</td>
<td>No</td>
<td>$3,99,5523</td>
<td>2.5 acres ($15,000)</td>
<td>$4,010,523</td>
<td>Impacts to 3.0 acre of wetland. Design exception needed to retain existing railing. Existing Bridge's waterway opening would still be inadequate.</td>
<td>The alternative is not feasible because it cannot be constructed in accordance with sound engineering principles and practices and it does not meet the project purpose and need. Additionally, increased wetland impacts and mitigation costs make it not prudent.</td>
</tr>
<tr>
<td>C-2: Rehabilitation for Continued Vehicular Use (one-way pair option) (Rehab Work = Adverse Effect)</td>
<td>No</td>
<td>$3,99,5523</td>
<td>2.5 acres ($15,000)</td>
<td>$4,118,680</td>
<td>Impacts to 3.0 acre of wetland. Total replacement of character-defining railing. Existing Bridge's waterway opening would still be inadequate.</td>
<td>The alternative is not feasible because it cannot be constructed in accordance with sound engineering principles and practices and it does not meet the project purpose and need. Additionally, increased wetland impacts and mitigation costs make it not prudent.</td>
</tr>
<tr>
<td>Bypass (non-vehicular use)</td>
<td>Yes</td>
<td>$2,533,633</td>
<td>2.5 acres ($15,000)</td>
<td>$2,548,633</td>
<td>Impacts to 3.0 acre of wetland. Responsible party other than owner must come forward to assume ownership of bridge.</td>
<td>This alternative is not prudent because no party has come forward to fund preservation/maintenance of the historic structure.</td>
</tr>
<tr>
<td>Relocate</td>
<td>Yes</td>
<td>$1,693,633</td>
<td>0.5 acre ($5,000)</td>
<td>$1,698,633</td>
<td>Responsible party other than owner must come forward to take &amp; relocate bridge.</td>
<td>This alternative is not prudent because no party has come forward to fund relocation/preservation/maintenance of the historic structure.</td>
</tr>
<tr>
<td>Replacement</td>
<td>Yes</td>
<td>$1,693,633</td>
<td>0.5 acre ($5,000)</td>
<td>$1,698,633</td>
<td>None</td>
<td>Yes.</td>
</tr>
</tbody>
</table>
MEMORANDUM OF AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND
THE INDIANA STATE HISTORIC PRESERVATION OFFICER
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 C.F.R. Section 800.6(b)(iv)
REGARDING THE **(UNDERTAKING)**
IN **(CITY)**, **(NAME)** TOWNSHIP, **(NAME)** COUNTY, INDIANA
DES. NO. **(XXXXXXX)**

WHEREAS the Federal Highway Administration ("FHWA") proposes to **(action)** for
**(undertaking)** in **(City)**, **(name)** Township, **(name)** County, Indiana; and

WHEREAS the FHWA, in consultation with the Indiana State Historic Preservation Officer
("Indiana SHPO"), has defined the **(undertaking)**'s area of potential effects ("APE"), as the
term is defined in 36 C.F.R. Section 800.16(d), to be the area within **(boundaries)**; and

WHEREAS the FHWA, in consultation with the Indiana SHPO, has found that **(name of
historic property or properties)** is/are within the APE; and

WHEREAS the FHWA, in consultation with the Indiana SHPO, has determined, pursuant to 36
C.F.R. Section 800.4(c), that **(name of historic property or properties)** is/are eligible for
inclusion in the National Register of Historic Places ("National Register");

Or, WHEREAS the FHWA and the Indiana SHPO both recognize that **(name of historic
property or properties)** is/are listed on the National Register of Historic Places ("National
Register"); and

WHEREAS the FHWA, in consultation with the Indiana SHPO, has determined pursuant to 36
C.F.R. Section 800.5(a) that the **(undertaking)** will/may have an adverse effect on **(name
of historic property or properties)**; and

WHEREAS the FHWA has consulted with the Indiana SHPO in accordance with Section 106 of
the National Historic Preservation Act (16 U.S.C. 470f) and its implementing regulations (36
C.F.R. Section 800) to resolve the adverse effect on **(name of historic property or
properties)**; and

WHEREAS the public was given an opportunity to comment on the undertaking's adverse effect
in a notice published on **(date(s) of publication)** in the **(name of publication)**; and

WHEREAS the FHWA has notified the Advisory Council on Historic Preservation ("Council")
of the adverse effect and invited the Council's participation in the project, pursuant to 36 CFR
Section 800.6(a)(1), in a letter dated **(date of letter)**; and

WHEREAS the Council declined to participate in consultation in a letter dated **(date of
letter)**;
Section 106 MOA Template
Last Updated March 2014

Or, WHEREAS the Council declined to participate in consultation through lack of response to the FHWA’s invitation within fifteen (15) days; and

WHEREAS the FHWA, in consultation with the Indiana SHPO, has invited the Indiana Department of Transportation (“INDOT”) to participate in the consultation and to become a signatory to this memorandum of agreement; and

Optional: WHEREAS the FHWA, in consultation with the Indiana SHPO, has invited **(name or names—if an LPA project, the LPA will be an invited signatory)** to participate in the consultation and to become a signatory/signatories to this memorandum of agreement; and

Optional: WHEREAS the FHWA, in consultation with the Indiana SHPO, has invited **(name or names)** to participate in the consultation and to become a concurring party to this memorandum of agreement; and

Optional: WHEREAS the FHWA has determined that with regard to Section 4(f) resources, a net benefit is achieved when the transportation use, the measures to minimize harm, and the mitigation incorporated into the project results in an overall enhancement of the Section 4(f) property when compared to both the future do-nothing or avoidance alternatives and the present condition of the Section 4(f) property, considering the activities, features and attributes that qualify the property for Section 4(f) protection; and

Optional: WHEREAS the FHWA has determined that this project has a net benefit on **(name of historic property or properties)**, a Section 4(f) resource/Section 4(f) resources from which a small amount of right-of-way will be required and of which a conversion to a transportation use will occur; and

Optional: WHEREAS the SHPO signature serves as a concurrence in the use of the Net Benefit Programmatic 4(f) for this resource; and

WHEREAS the FHWA has consulted with the Indiana SHPO in accordance with Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and its implementing regulations (36 C.F.R. Part 800) concerning the scope of work as presented in the materials and plans dated **(date)**, and has agreed to proceed with the project as proposed (optional: with the recommendations provided by the Indiana SHPO in a letter dated **(date)**); and

NOW, THEREFORE, the FHWA and the Indiana SHPO agree that, upon the submission of a copy of this executed memorandum of agreement, as well as the documentation specified in 36 C.F.R. Section 800.11(e) and (f) to the Council pursuant to 36 C.F.R. Section 800.6[b][1][iv]) and upon the FHWA's approval of the **(undertaking)**, the FHWA shall ensure that the following stipulations are implemented in order to take into account the effect of the **(undertaking)** on historic properties.

---

1 Usually this date will be the date the finding of effect was signed as the most recent plans and materials are part of the 800.11 documentation.
I. MITIGATION STIPULATIONS

A. List mitigation stipulation or stipulations here... …Be sure to clearly spell out roles, responsibilities, and timeframes. Use active tense. For example state “The County will create and install an interpretive sign at the project site within three years of execution of this agreement” instead of “An interpretive sign will be created.”

B. …

C. …

II. OBJECTION RESOLUTION PROVISION

Disagreement and misunderstanding about how this memorandum of agreement is or is not being implemented shall be resolved in the following manner:

A. If the Indiana SHPO or any invited signatory to this memorandum of agreement should object in writing to the FHWA regarding any action carried out or proposed with respect to the **(undertaking)** or implementation of this memorandum of agreement, then the FHWA shall consult with the objecting party to resolve this objection. If after such consultation the FHWA determines that the objection cannot be resolved through consultation, then the FHWA shall forward all documentation relevant to the objection to the Council, including the FHWA's proposed response to the objection. Within 45 days after receipt of all pertinent documentation, the Council shall exercise one of the following options:
   i. Provide the FHWA with a staff-level recommendation, which the FHWA shall take into account in reaching a final decision regarding its response to the objection; or
   ii. Notify the FHWA that the objection will be referred for formal comment pursuant to 36 C.F.R. Section 800.7(c), and proceed to refer the objection and comment. The FHWA shall take into account the Council's comments in reaching a final decision regarding its response to the objection.

B. If comments or recommendations from the Council are provided in accordance with this stipulation, then the FHWA shall take into account any Council comment or recommendations provided in accordance with this stipulation with reference only to the subject of the objection. The FHWA's responsibility to carry out all actions under the memorandum of agreement that are not the subjects of the objection shall remain unchanged.

III. POST-REVIEW DISCOVERY

In the event that one or more historic properties--other than **(name or names of historic property or properties)**-- are discovered or that unanticipated effects on historic properties are found during the implementation of this memorandum of agreement, the
FHWA shall follow the procedure specified in 36 C.F.R. Section 800.13, as well as IC 14-21-1-27 and IC 14-21-1-29, by stopping work in the immediate area and informing the Indiana SHPO and the INDOT Cultural Resources Office of such unanticipated discoveries or effects within two (2) business days. Any necessary archaeological investigations will be conducted according to the provisions of IC 14-21-1 and 312 IAC 21, and the most current Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites.

IV. AMENDMENT

Any signatory to this memorandum of agreement may request that it be amended, whereupon the parties shall consult to consider the proposed amendment. 36 C.F.R. 800.6(c)(7) shall govern the execution of any such amendment.

V. TERMINATION

A. If the terms of this memorandum of agreement have not been implemented by **(Month)** **(Number of Day)** **(Year)**, this memorandum of agreement shall be considered null and void. In such an event, the FHWA shall so notify the parties to this memorandum of agreement and, if it chooses to continue with the **(undertaking)**, then it shall reinstitute review of the **(undertaking)** in accordance with 36 C.F.R. Sections 800.3 through 800.7.

B. Any signatory to this memorandum of agreement may terminate it by providing thirty (30) days notice to the other parties, provided that the parties shall consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the FHWA shall comply with 36 C.F.R. Sections 800.3 through 800.7 with regard to the review of the **(undertaking)**.

C. In the event that the FHWA does not carry out the terms of this memorandum of agreement, the FHWA shall comply with 36 C.F.R. Sections 800.3 through 800.7 with regard to the review of the **(undertaking)**.

The execution of this memorandum of agreement by the FHWA, the Indiana SHPO, and **(name or names of any invited signatory or signatories)**, the submission of it to the Council with the appropriate documentation specified in 36 C.F.R. Section 800.11(e) and (f), and the implementation of its terms evidence that the FHWA has afforded the Council an opportunity to comment on the **(undertaking)** and its effect on historic properties and that the FHWA has taken into account the effects of the **(undertaking)** on historic properties.

SIGNATORIES (required):
FEDERAL HIGHWAY ADMINISTRATION
INDIANA STATE HISTORIC PRESERVATION OFFICER

INVITED SIGNATORIES:
INDIANA DEPARTMENT OF TRANSPORTATION
Optional: PROJECT APPLICANT (WHEN NOT INDOT)
Optional: OTHER PARTIES WITH RESPONSIBILITIES SPECIFIED UNDER THE MOA

Optional: CONCURRING PARTIES:
CONCURRING PARTY NAMES

**Signature pages for each signatory are separate so that concurrent signatures may be obtained.**
REQUIRED SIGNATORY

FEDERAL HIGHWAY ADMINISTRATION

By: _________________________________________  Date: ________________

Richard J. Marquis, Division Administrator
REQUIRED SIGNATORY

INDIANA STATE HISTORIC PRESERVATION OFFICER

By: _____________________________  Date: ________________

Chris Smith, Deputy Director
INVITED SIGNATORY

INDIANA DEPARTMENT OF TRANSPORTATION

By: _________________________________________  Date: ________________

Laura Hilden, Environmental Services Director  Date: ________________
Optional: **INVITED SIGNATORY**

**PROJECT APPLICANT (WHEN NOT INDOT)**

By: _________________________________________  Date: ________________

Name, Title

Date: ________________
Optional: **CONCURRING PARTY**

By: _________________________________________  Date: ________________

Name, Title

Date: ________________
Public Notice
(Des. No. XXXXXXX)

The (project sponsor) is planning to undertake a (type of project), funded in part by the Federal Highway Administration. The project is (add in details of project). The project is located (add in location of project).

(Briefly describe the project in more detail, indicate impacts, (i.e. R/W acquired, relocations, etc.).)

The proposed action (impacts) / (doesn't impact) (choose which is appropriate) items listed on or eligible for the National Register of Historic Places. The (Federal Highway Administration / INDOT, on behalf of the FHWA) (choose which is appropriate) has issued an (type of effect finding) for the project, due to the (reason for finding). In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on the historic elements as per 36 CFR 800.2(d), 800.3(e) and 800.6(a)(4). Pursuant to 36 CFR 800.6(a) (4), the documentation specified in 36 CFR 800. 11 (**d) or (e)** (choose which is appropriate) is available for inspection in (**name of consulting firm's office goes here**). This documentation serves as the basis for the (FHWA's / INDOT's) (choose which is appropriate) “(type of effect finding)” finding. The views of the public on this effect finding are being sought. Please reply to the contact listed below.

Please reply with any comments to the contact listed below no later than (**date to respond**)--set 30 days after the notice is published in the paper. This will need to be set by the person submitting the notice to the newspaper!

Contact:
(Consultant Name
Address
Phone
Fax
Email)

INDOT should not be listed as the contact person unless INDOT has specifically requested to be the contact or the consultant has coordinated with INDOT to be the contact.
Acronyms

ACHP  Advisory Council on Historic Preservation
APE  Area of Potential Effects
ARPA  Archaeological Resources Protection Act
ASR  Archaeological Short Report
CE  Categorical Exclusion
CEQ  Council on Environmental Quality
CRO  Cultural Resources Office, INDOT
DEIS  Draft Environmental Impact Statement
DHPA  Division of Historic Preservation and Archaeology
DNR  Department of Natural Resources
DOE  Determination of Eligibility
EA  Environmental Assessment
ECL  Early Coordination Letter
EIS  Environmental Impact Statement
ES  Environmental Services
FHWA  Federal Highway Administration
FONSI  Finding of No Significant Impact
GIS  Geographical Information System
GPS  Global Positioning System
HABS  Historic American Buildings Survey
HAER  Historic American Engineering Record
HLFI  Historic Landmarks Foundation of Indiana
HUD  Housing and Urban Development
IC  Indiana Code
IHHPAA  Indiana Historic Preservation and Archaeology Law
IHSSI  Indiana Historic Sites and Structures Inventory
INDOT  Indiana Department of Transportation
Keeper  Keeper of the National Register
LPA  Local Public Agency
MOA  Memorandum of Agreement
MOU  Memorandum of Understanding
NAGPRA  Native American Graves Protection and Repatriation
NEPA  National Environmental Policy Act
NHPA  National Historic Preservation Act
NRHP  National Register of Historic Places
NR  National Register
ES  INDOT Environmental Services, INDOT
PA  Programmatic Agreement
PI  Public Involvement or Principal Investigator
PDP  Project Development Process
PZ  Plow zone
ROD  Record of Decision
ROW  Right-of-Way
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>SAFETEA-LU</td>
<td>Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users</td>
</tr>
<tr>
<td>SFN</td>
<td>Structure File Number</td>
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<tr>
<td>SHAARD</td>
<td>Indiana State Historical Architectural and Archaeological Database</td>
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<tr>
<td>SHPO</td>
<td>State Historic Preservation Officer/Office</td>
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<tr>
<td>SPMS</td>
<td>Scheduling Project Management System</td>
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<td>STA</td>
<td>State Transportation Agency</td>
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<td>STP</td>
<td>Shovel Test Pit</td>
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<tr>
<td>THPO</td>
<td>Tribal Historic Preservation Officer</td>
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<td>USDA</td>
<td>U.S. Department of Agriculture</td>
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<td>UMT</td>
<td>Urban Mass Transportation</td>
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<td>UTM</td>
<td>Universal Transverse Mercator</td>
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Glossary

A

Abutment: A substructure supporting the ends of a single span or the extreme ends of a multi-span superstructure and, in general, retaining or supporting the approach embankment.

Accidental discovery: Archaeological deposits encountered during an undertaking, generally through means of earth-moving equipment. Accidental discoveries could include, but are not limited to, artifact concentrations and human remains. If such deposits are encountered at anytime during the undertaking, construction must cease until archaeologists at the Indiana Department of Natural Resource, Division of Historic Preservation and Archaeology are notified and the nature of the archeological deposits are assessed.

Adverse Effect: In 36 CFR Part 800, this is one of the determinations that can be made through consultation with the State Historic Preservation Office (SHPO). This finding means that an undertaking has an effect on a historic property that alters the characteristics of the property that qualify if for inclusion in or eligibility for the NRHP (NRHP). Mitigation is required to resolve the undertaking’s effect on the property.

Advisory Council on Historic Preservation (ACHP): An independent federal agency responsible for overseeing the Section 106 process to ensure that cultural resources are considered during federal project planning and implementation. ACHP regulations implementing the Section 106 process are found in 36 CFR 800.

Alluvial deposition: Soils or sediments formed in material deposited by the action of running water, such as a floodplain or delta.

Alternative: One of a number of specific transportation improvement proposals, alignments, options, design choices, etc. in a study. Following detailed analysis, one improvement alternative is chosen for implementation.

Archaeological investigation: Study of prehistoric and historic locales which provide understanding of past human behavior, cultural change, and related topics through scientific and scholarly techniques such as literature research, excavation, analysis, and interpretation.

Archaeological report: Any document that describes archaeological activities and presents conclusions and interpretations drawn from these activities. Archaeological reports often describe fieldwork and the results of this work and must be prepared by or under the supervision of qualified archaeologists. There are various kinds of archaeological reports, including cultural resource management studies.
Archaeological resource: The location of a building, structure, district, site, or objects constructed or deposited at least 50 years ago where the location itself possesses archaeological research value.

Archaeological technician: A person, usually with a B.A. degree in anthropology, or equivalent experience, who does archaeological field and laboratory work.

Architectural historian: An individual with a degree in the history of architecture capable of identifying the age, style, and social context of historic buildings.

Area of Potential Effects (APE): 36 CFR Section 800.16(d) defines the APE as “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. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.”

Assemblage: a group of artifacts related by provenience and date of excavation.

Avoidance: active attempts to avoid threatened resources by partial or complete project redesign or relocation.

B

Boundary description: A precise description of the lines that bound a historic property.

Boundary justification: An explanation of the reasons for selecting the boundaries of a historic property.

Bridge: A structure, including supports, erected over a depression or an obstruction such as water, highway, or a railway having a track or passageway for carrying traffic or other moving loads, and having a length measured along the center of the roadway of more than 20 ft (6.1 m) between undercopings of abutments or extreme ends of openings for multiple boxes.

Building: A resource created principally to shelter any form of human activity, such as a house.

C

Categorical Exclusion (CE): Categorical exclusions (CEs) are actions that meet the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts. They are actions that: 1) Do not induce significant impacts to planned growth or land use for the area; 2) Do not require the relocation of significant numbers of people; 3) Do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; 4) Do not have significant impacts on travel patterns; and do not otherwise-- either individually or cumulatively--have any significant environmental impacts.
Cemetery Development Plan: IC 14-21-1-26.5 mandates that a development plan is needed for most projects that will disturb the ground within 100 feet of a cemetery or burial ground for the purpose of erecting, altering, or repairing any structure.

Certificate of Approval (COA): IC 14-21-1-18 (a) and (b) require that a certificate of approval be obtained before using state funds to alter, demolish, or remove an historic site or historic structure, if it is owned by the state or if it is listed in either the Indiana Register of Historic Sites and Structures or the NRHP. The application must be submitted to the Division of Historic Preservation and Archaeology (DHPA), and heard by the Indiana Historic Preservation Review Board (Review Board).

Certified Local Government (CLG): A local government officially certified to carry out some of the purposes of the National Historic Preservation Act, as amended.

Chert: An isotopic form of cryptocrystalline or microcrystalline quartz that Native American peoples used to manufacture stone tools.

Colluvial deposition: A deposit of sediments accumulated through the action of gravity at the base of a cliff or slope.

Consultant: An individual, partnership or firm with qualified expertise in engineering, environmental, cultural resource, or public involvement disciplines who is contracted by the originating office to provide technical services.

Consultation: Process of seeking, discussing, and considering the views of other participants, and where feasible, seeking agreement with them regarding matters arising in the Section 106 process.

Consulting Party: Individual or entity, identified as a result of the NEPA and/or Section 106 public involvement activities, that has expressed an interest in the effects of the undertaking on historic resources. Consulting parties are invited to participate in the consultation process.

Context: An artifact's or a site's setting in time and place, its association to others of similar form, and its general relationship to other artifacts or sites in the archaeological record.

Contributing Resource - Indiana Historic Sites and Structures Inventory: Any property meeting the basic inventory criterion of being at least 40 years old, but not important enough to stand on its own individually. Such resources are important to the density or continuity of an area’s historic fabric. Such properties can be listed in the NRHP if they are part of a historic district, but they would not usually qualify individually.

Contributing Resource - National Register of Historic Places: A building, site, structure, or object adding to the historic significance of a property or district.

Controlled Surface Collection: Systematic walkover of the site area at close intervals (5 m or less) and an intensive collection of all artifacts. This procedure relies on adequate surface
visibility (i.e., at least 30%). The site should be plowed, disked and rain-washed to maximize surface visibility. Controlled surface collection is appropriate only if it is certain that the topsoil has been disturbed by previous plowing or other action.

**Criteria-National Register of Historic Places:** The criteria used to evaluate the eligibility of properties for listing in the National Register of Historic Places. The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded, or may be likely to yield, information important in prehistory or history.

**Cultural affiliations:** The known, projected, or hypothesized cultural, ethnic, or tribal group (e.g., Hopewellian, Mississippian, Miami, historic Irish or German, etc.) with which archaeological remains may be identified on the basis of careful scientific study.

**Cultural period:** A period of time that has similar artifacts, social organization, and other factors, and is located within a defined geographic area. The major Cultural Periods of the Midwestern United States are the Paleo-Indian, the Archaic, the Woodland, the Mississippian (or Late Prehistoric), Proto-historic, and the Historic.

**Cultural resource:** Archaeology and history/architecture resources (building, object, structure, or site).

**Cultural resource investigation:** A study concerning the identification, evaluation, and/or mitigation of archaeological and history/architecture resources.

**Cultural Resource Management (CRM):** The development and maintenance of programs designed to investigate, manage, and/or preserve cultural resources (including evidences of prehistoric and historic) that are threatened by modern development. These resources do not exist in a vacuum; instead, they are situated in an environment where people live, work, build new buildings and new roads, require sanitary landfills and parks, need safe and protected environments. On frequent occasions, the expansion or modification of cities and towns and rural areas impact or threaten to impact the cultural resources. In these circumstances, decisions must be made to strike a balance between the various interests: practical growth with an eye toward the protection of the cultural resources.
**Culture history:** the chronological and spatial framework for describing the development of human societies and cultures, and the documented process of change involved in this development. Studies in culture history are primarily concerned with defining the geographic extent, relative age, and course of development of cultures. All archaeological reports are expected to contain a relevant cultural history.

**Culvert:** A structure not classified as a bridge that provides an opening under the roadway (INDOT definition).

**Cumulative Impact:** Impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Curation:** The storing of archaeological material, including objects, photographs, illustrations, and the physical information regarding the discovery, in a facility equipped to safeguard and preserve the material for future generations.

**Data recovery:** Investigations generally involving large-scale excavation of archaeological material from a site, commonly referred to as a Phase III investigation. Individual investigations are designed to recover information related to the significance of the site, that is, the investigations will be problem-oriented and designed to answer specific questions.

**Designation Number (Des. No.):** Unique 7-digit number assigned to an INDOT or LPA project when programmed.

**Determination of Effect:** A finding made by FHWA of federal actions, in conjunction with the State Historic Preservation Office and the Advisory Council on Historic Preservation, which determines whether a proposed project affects a property included on or eligible for the NRHP.

**Determination of Eligibility:** A finding based on the process of assembling documentation to render professional evaluation of the historical significance of a property. The INDOT acting on behalf of the FHWA applies the NRHP criteria when deciding matters of historical significance.

**Diagnostic artifact:** An artifact that informs as to time, cultural affiliation, manufacturing process, function, etc.

**Direct Effects:** Effects that are caused by a given action and occurring at the same time as the action. Changes in noise levels, traffic volumes or visual conditions are some examples of direct effects generated by transportation improvements.
**District:** An area that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan of physical development.

**District office:** One of six INDOT offices throughout Indiana responsible for administering project development, design, construction and maintenance activities within their geographic regions.

**Division of Historic Preservation and Archaeology (DHPA):** In 1981, the General Assembly established the Division of Historic Preservation and Archaeology within the Indiana Department of Natural Resources (DNR) to carry out the federal-state partnership of the 1966 National Historic Preservation Act. The Director of the DNR is designated as the State Historic Preservation Officer (SHPO) for Indiana. The Director of the DHPA is Deputy SHPO and is charged with the daily oversight of the state’s preservation programs and policies.

**Documentation for Consultation:** Refers to documentation used to comply with 36 CFR Section 800.6(a)(1). Standards for documentation are described by 36 CFR Section 800.11(e).

**E**

**Effect:** Alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register.

**Eligible for Inclusion on the NRHP:** Includes both properties formally determined as such in accordance with the regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.

**Eligibility:** Ability of a property to meet the National Register criteria.

**Environmental:** In a scientific context, a combination of external or extrinsic conditions present in nature. In a planning context, a category of analytical studies of aesthetic values, ecological resources, cultural resources, sociological and economic conditions, etc.

**Environmental Assessment (EA):** An Environmental Assessment means a concise public document—for which a Federal agency is responsible—that serves to:

1. Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a “Finding Of No Significant Impact” (FONSI).
2. Aid an agency's compliance with the Act when no environmental impact statement is necessary.
3. Facilitate preparation of a statement when one is necessary.

And shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.
Environmental Document: When all studies have been completed, potential impacts documented, avoidance alternatives have been evaluated and mitigation is planned, this information is compiled into a written report. The significance of the impacts will determine what level of document is produced. These documents are titled EIS, EA or CE.

Environmental Impact Statement (EIS) - The detailed statement required by the National Environmental Policy Act of 1969 when an agency proposes a federal action that significantly affects the environment. This report contains a summary of all environmental and engineering studies, noting the impacts and mitigation. After review, the FHWA will issue a Record of Decision (ROD).

Environmental Scoping Manager - A professional in each of the Department’s six district offices involved in overseeing and coordinating district efforts related to environmental issues, operations and evaluations.

Evaluation: Process by which the significance and integrity of a historic property are judged and eligibility for National Register listing is determined.

Excavation: The scientifically controlled recovery of subsurface materials and information from an archaeological site. Recovery techniques are designed to produce maximum knowledge about the utilization of the site, and its relation to other sites and the natural environment. Recovery techniques may include the use of heavy equipment (e.g., backhoe, etc.), specialized instruments (pollen coring tools, etc.), and hand tools.

Excavation block: Term meaning a large square or rectangular area of ground, usually excavated by hand in smaller sections, or squares, called units.

Feasible and Prudent: A term used in the Section 4(f) process, which refers to the viability of an alternative that avoids the use of a Section 4(f) resource. The term "feasible" refers to an alternative that is possible to engineer, design and build. The term "prudent" means there are unique problems or unusual factors involved with the use of such alternatives. This means that the cost, social, economic and environmental impacts, and/or community disruption resulting from such alternatives reach extraordinary magnitudes. One can use a totality of these circumstances to establish that these unique problems, unusual factors or other impacts reach extraordinary magnitudes. A transportation agency must select an avoidance alternative if it is feasible and prudent. By contrast, an alternative may be rejected if it is not feasible and prudent. An alternative may be considered not feasible and prudent for any of the following reasons:

- Does not meet project purpose and need
- Excessive cost of construction
• Severe operational or safety problems
• Unacceptable impacts (social, economic or environmental)
• Serious community disruption
• A combination of any of the above

Feature: A localized area of human use or modification. Sometimes part of an activity area (e.g., hearth of a cooking area), cluster of artifacts (e.g., flint chips), and/or structures in the ground (e.g., fireplace, drain, post-holes).

Federal Action: A highway or transit project proposed for FHWA or FTA funding. It also includes actions such as joint and multiple-use permits, other federal permit and approvals, changes in access control, etc., that may or may not involve a commitment of federal funds.

Federal Highway Administration (FHWA): An agency of the U.S. Department of Transportation responsible for carrying out federal highway and transportation mandates through a network of several regional offices and a Division Office in each state.

Field director/supervisor: Individual, usually with a M.A. degree in anthropology or equivalent experience, who is capable of the day-to-day supervision of an archaeological project under the overall direction of a Principal Investigator.

Field investigation: A survey that describes the type, location and condition of properties in a specific geographic area combined with background research.

Field Review: A site visit conducted by INDOT, a LPA, and/or consultants to gather or verify cultural resources or other data, define a scope of work, analyze, and make decisions for specific projects.

Finding of No Significant Impact (FONSI) - A determination by a Federal agency briefly presenting the reasons why an action/project will not have a significant effect on the human environment and for which an Environment Impact Statement will not be prepared. It shall include the Environmental Assessment, or a summary of it, and shall note any other environmental documents related to it (CFR 1501.7(a)(5)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference (40 CFR - 1508.3).

Fire-cracked rock (FCR): Stones fractured prehistorically during cooking or heating. The presence of FCR on a site’s surface is indicative of subsurface features, and is often used in a site’s determination of potential eligibility or significance.

Floral or Ethnobotanical Analysis: The study of seeds, and sometimes pollen (palynology) and larger plant remains.

Flotation analysis: The process of soaking and screening soil samples in water to collect very small artifacts and organic material, such as seeds, nutshell, bone fragments, and charcoal, that
float to the top. A soil sample to be “floated” generally consists of one gallon (4L) of soil per 10-cm level of a unit or feature.

**G**

**Geographic Information System (GIS):** A system for capturing, storing, analyzing and managing data and associated attributes that are spatially referenced to the earth. In the strictest sense, it is a computer system capable of integrating, storing, editing, analyzing, sharing, and displaying geographically-referenced information. In a more generic sense, GIS is a tool that allows users to create interactive queries (user-created searches), analyze the spatial information, and edit data.

**Geometric Design:** Pertains to those engineering activities involving standards and procedures for establishing the horizontal and vertical alignment and dimensions of slopes of a highway. It includes engineering work involved with proportioning the visible elements of a facility, tailoring the highway to the terrain, the controls of environmental and land space usage, and the requirements of the highway user, individually and collectively.

**Geophysics:** Ground-based measurement techniques that are non-invasive means of identifying archaeological sites and features. They may include (but are not limited to) metal-detecting, magnetometry, electrical resistivity, electromagnetic conductivity, and ground-penetrating radar.

**H**

**Historic bridge:** Bridges included in or eligible for inclusion in the NRHP.

**Historic Bridge Inventory (HBI):** A statewide survey of bridges on public roads and on public right-of-way that were built in or before 1965. It includes a historic context for bridges in Indiana, NRHP eligibility determinations, and Select and Non-Select status determinations.

**Historic context:** An organizing structure for interpreting history that groups information about historic properties that share a common theme, common geographic location, and common time period. The development of historic contexts is a foundation for decisions about planning, identification, evaluation, registration, and treatment of historic properties, based upon comparative significance.

**Historic district:** A significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

**Historic Property:** Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the NRHP (NRHP)--maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance that meet the National Register criteria.
History/Architecture resource: A building, structure, district, site, or object constructed at least 50 years ago. For definitions of these kinds of history/architecture resources, see the National Register Bulletin *How to Apply the National Register Criteria for Evaluation* (1998).

Historical significance: Importance for which a property has been evaluated and found to meet the National Register criteria.

Identification: Process through which information is gathered about historic properties.

Identification of alternatives: INDOT’s engineering and environmental evaluations, in which the INDOT identifies and chooses an initial set of study alternatives that address the stated program objectives and the project need, and which are sensitive to the resources and land uses of a study area. The process involves a wide variety of possible options, assessing the merits and drawbacks, and choosing those that should be carried forward. Alternatives to be studied normally include the No-Build or no-action alternative, an upgrading of the existing roadway alternative, new transportation routes and locations, transportation systems management strategies, multimodal alternatives if warranted, and any combination of the above.

Impact: Positive or negative effects on the natural or human environment resulting from transportation projects.

In situ: A term that refers to an artifact that is still in the location where it was discarded or left by an occupant of a site.

Indian tribe: Means an Indian tribe, band, nation, or other organized group or community, Federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Indiana Historic Preservation Review Board (Review Board): Nine member committee that makes decisions on a number of preservation-related issues and provides public oversight to the programmatic and regulatory activities of the DHPA. The Board officially nominates Indiana properties to the NRHP, approves funding recommendations for the DHPA federal matching grant program, and considers applications for certificates of approval for state-funded projects that will alter, demolish, or remove historic properties.

Indiana Historic Sites and Structures Inventory (IHSSI): A comprehensive, statewide inventory of Indiana’s historic properties. The inventory is maintained by the SHPO for the purpose of locating, identifying, and evaluating cultural resources and to ensure that historic properties are taken into consideration in planning and development through the environmental review process.

Indiana State Historic Architectural and Archaeological Research Database (SHAARD): A database managed by DHPA that allows users to search cultural resource information on known
historic and archaeological resources throughout Indiana. Data was collected from cultural resource inventories, the National Register, and CRM projects. Available at: https://secure.in.gov/apps/dnr/shaard/welcome.html

**Indirect (or Secondary) Effects** – Impacts that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern or land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

**Integrity:** Authenticity of a property’s historic identity, evidenced by the survival of physical characteristics that existed during the property’s historic or prehistoric period. The seven aspects of integrity are design, location, setting, materials, workmanship, feeling, and association. In the NRHP criteria for eligibility, the concept of integrity is central to resource eligibility. A resource can be significant, but unless it has certain amount of integrity, it cannot be eligible.

**K**

**Keeper of the National Register (Keeper):** The official responsible for the administration of the National Register within the National Park Service. One duty of the Keeper is to provide a formal determination of eligibility on cultural resources when there is a disagreement submitted on eligibility issues. The disagreement could occur between the federal agency and the State Historic Preservation Officer or between the agency and a private entity. The Keeper is the ultimate authority on issues of National Register eligibility and a formal determination resolves any such issues with finality.

**L**

**Lead agency:** A federal agency or designee taking primary responsibility for preparing an engineering or environmental document.

**Legal notice** - A formal announcement published according to legal requirements by INDOT or a Local Project Sponsor Agency in a periodical or newspaper to provide official public notice of an action or approval of interest to the public.

**Level:** A horizontal layer of soil in a unit that is usually excavated together, although it may be excavated in sub-levels. A level may be arbitrary (10 cm deep, for example) or natural (yellow sandy clay, for example).

**Literature review:** Secondary source review identifying the types of cultural resources that may be expected in the APE and establishes a comparative basis for evaluating cultural resources. A literature search may include written reports (including published, unpublished, reproduced, and manuscripts forms), books, articles, etc., pertinent to the investigations carried out for a cultural resource management study.
Local government: A city, county, parish, township, municipality, borough, or other general purpose political subdivision of a state.

Local Public Agency (LPA): The cities, towns, and counties that make up the smaller political subdivisions of the state.

Local significance: Importance of a property to the history of its community, such as a town or county.

Location map: A graphic drawing used in study reports and meeting presentations to show the orientation and the relationship of the project with its study area in comparison with existing roadways, features, developments, municipalities, and principal land uses nearby. The graphic typically will be large enough to show all major roadways, major cities, and principal topographic controls on the region. A 7.5’ USGS topographic map illustrating the project area is required for all projects submitted to INDOT’s INDOT Environmental Services.

LPA project: Any highway improvement project or enhancement project that is funded through the Department and matched with local resources.

Mapping: A plan surface with graphic or photographic representation of land or water depicting the study area for a project. Existing alignments, alternatives, engineering design features, and environmental constraints are plotted on various types of mapping. Photogrammetric (aerial) mapping assists in resource identification and studies. Topographic (base) mapping provides a foundation in alignment layout. Property tax maps, insurance maps, and historical atlases are also consulted. The type and scale of mapping are selected to fit the terrain and land use intensity of the study area as will as the level of detail in the proposed design.

Memorandum of Agreement (MOA): The document that records the terms and conditions agreed upon to resolve the adverse effects of an undertaking on historic properties.

Memorandum of Understanding (MOU): An interagency agreement.

Metropolitan Planning Organization (MPO): The organization designated by the governor and local elected officials as responsible, together with the state, for transportation planning in an urbanized area. It serves as the forum for cooperative decision making by principal elected officials of general local government.

Minimization: Refers to a step in the alternatives analysis and means that unavoidable impacts are reduced to the maximum extent possible.

Mitigation: The restoration, creation, enhancement or, in exceptional circumstances, preservation of resources expressly for the purpose of compensating for impacts.
Mitigation Measures: Specific design commitments made during the environmental evaluation and study process that serve to moderate or lessen impacts deriving from the proposed action. These measures may include planning and development commitments, environmental measures, right-of-way improvements, and agreements with resource or other agencies to affect construction or post-construction actions. Mitigation includes:

- Reducing and eliminating impacts.
- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impacts by replacing or providing substitute resources or environments.

National Environmental Policy Act (NEPA): Passed in 1969, the federal legislation requiring agencies of the federal government to document the environmental impact of transportation projects. Various approaches, steps, and approvals now used in the INDOT Project Development process originated with the National Environmental Policy Act. The NEPA process is enforced by regulations of the Council on Environmental Quality (CEQ). INDOT complies with NEPA by following 23 CFR 771, FHWA’s regulations governing the preparation of environmental impact and related procedures.

National Historic Landmark: A historic property evaluated and found to have significance at the national level and designated as such by the Secretary of the Interior.

National Historic Preservation Act (NHPA): This is the primary legislation that governs historic and archaeological preservation in the United States. The Act, in its policy statement, emphasizes the importance of supporting the spirit and direction of the nation through its links with the past, sustaining the people’s sense of direction and ensuring future generations “a genuine opportunity to appreciate and enjoy the rich heritage of our nation.” It is stated that the Federal Government would foster productive harmony between modern society and historic resources, provide preservation leadership, administer historic resources, encourage preservation of non-federally owned historic resources, and encourage preservation and use of the historic built environment. It set up a broad program to implement this policy, including the expansion and maintenance of the NRHP, the formation of the Advisory Council on Historic Preservation, and the requirement that federal agencies take into account the effect of their activities and programs on historic properties.

National Register Files for the State of Indiana: A repository of all properties (structures, buildings, objects, and sites) officially nominated to the NRHP by the Secretary of the Interior. The National Register Files for the State of Indiana are located at the Department of Natural Resources, Division of Historic Preservation and Archaeology (DHPA).
**National Register of Historic Places (NRHP):** The national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture. It is maintained by the Secretary of the Interior under authority of Section 101 (a)(1)(A) of the National Historic Preservation Act, as amended.

**National significance:** Importance of a property to the history of the United States as a nation.

**No Adverse Effect:** In 36 CFR Part 800, this is one of the determinations of effect that can be made through consultation with the State Historic Preservation Office (SHPO). This finding means that an undertaking may have an effect on a historic property, but the effect is not adverse. It means the undertaking will not significantly alter the qualities of the property that make the property eligible for or listed on the NRHP (NRHP).

**No Historic Properties Affected:** In 36 CFR Part 800, this is one of the determinations of effect that can be made through consultation with the State Historic Preservation Office (SHPO). This finding means that the undertaking will have no effect on any historic properties because A) there are no historic properties in the area of the undertaking, or B) there are historic properties in the area of the undertaking but the undertaking will have no effect on them.

**No Potential to Cause Effects:** In 36 CFR Part 800, this is one of the determinations of effect that can be made. This finding means an undertaking is a type of activity that does not have the potential to cause effect on historic properties, assuming such properties are present.

**Non-contributing resource - Indiana Historic Sites and Structures Inventory:** Such properties are usually either built after 1950 or are older structures that have been badly altered and have lost historic character or are otherwise incompatible with their historical surroundings. These properties were not included in the inventory unless they were located within a historic district.

**Non-contributing resource - National Register of Historic Places:** A building, site, structure, or object that does not contribute to the historic significance of a property.

**Non-select bridge:** A bridge included in Indiana’s Historic Bridge Inventory that is listed in or eligible for inclusion in the NRHP, but is not a suitable candidate for preservation or is not an excellent example of a given type of historic bridge. The Bridge PA defines treatment measures for Non-Select bridges.

**Notable resource - Indiana Historic Sites and Structures Inventory:** A property that is above average in its importance. Further research or investigation may reveal that the property could be eligible for NRHP listing.

**Notice-To-Proceed:** Letter affirming that the contracting agency has approved the contract, has arranged for access to the project area, and has released the funds for the archaeology firm to do the work. Work on the project should not begin until the agency has given the notice-to-proceed.
INDOT Environmental Services (ES): An administrative unit of the INDOT responsible for managing environmental programs, including developing and providing environmental policy procedures and technical guidance for other INDOT offices.

Outstanding Resource - Indiana Historic Sites and Structures Inventory: A property that has enough historic or architectural significance that it is already listed, or should be considered for individual listing, in the NRHP. Such resources can be of local, state, or national importance.

Phase Ia (Archaeological Reconnaissance): The purpose of a Phase Ia archaeological reconnaissance is to identify archaeological resources within the project area. If archaeological resources are present, the Phase Ia survey also seeks to define the horizontal, and to a lesser degree, vertical extant of those resources, as well as the cultural affiliation and integrity of the deposit in order to decide if the site(s) are eligible for listing on the National Register. In project areas where the ground surface visibility is greater than 30%, a controlled surface collection is utilized. Shove probe survey is used when there is less than 30% ground surface visibility.

Phase Ib: The Phase Ib is designed to build upon the previous Phase I when additional information is required to better evaluate a site, and to guide areas for Phase II investigations. Phase Ib may involve controlled surface collection, piece plotting, or subsurface sampling.

Phase Ic (Subsurface Archaeological Reconnaissance): The systematic excavation of trenches in alluvial or colluvial sediments. Alluvial and colluvial sediments are soils that, because of deposition, may contain buried archaeological resources that have no surface manifestation.

Phase II (Archaeological Testing): The purpose of a Phase II is to document the nature, age, variety, density, and horizontal and vertical extent of archaeological deposits, document the extent of disturbances, gather adequate data to further evaluate the significance and eligibility of a site, and develop a mitigation plan, if necessary. The Phase II may involve a combination of test units, mechanically excavated trenches, and specialized analyses. Generally, the DHPA requires a minimum of 10% of the site’s area be tested. The Phase II investigation must proceed according to a DHPA approved plan, and be guided by specific research questions.

Phase III (Mitigation through Data Recovery): The purpose of the Phase III investigation is to conduct a full-scale archaeological investigation designed to realize the site's research potential through excavation, since the site will be largely destroyed by proposed construction activities. In Section 106 terms, the proposed undertaking will have an “adverse effect” on the archaeological site, and that effect is mitigated through the Phase III investigation. Terms of the Phase III are stipulated as part of an MOA between the federal agency, SHPO, and other consulting parties. The Phase III investigation must proceed according to a plan approved by the
DHPA, and be guided by specific research questions. Since every archaeological site is different, every Phase III plan will be tailored to the specific site. Generally, the DHPA requires a minimum of 25% of the site’s area (above and beyond the area tested during the Phase II) be tested during a Phase III.

**Photolog:** A photolog is a visual tool that provides project documentation of conditions within the project area concerning extent of ground disturbance and presence of architectural properties, and enables evaluation of cultural resources.

**Placard:** Plaque containing text with information about a bridge, i.e., builder, year built, designer and patents.

**Plans:** Technical drawings which show the location, character, and dimensions of prescribed project work, including layouts, profiles, cross-sections and other details.

**Plan, Archaeological:** A plan of investigation submitted to the DHPA and CRO for comment and approval before archaeological work may begin. Plans are necessary for Phase Ib, Phase Ic, Phase II, and Phase III investigations, and are required for any ground disturbance within Indiana state property or any cemetery. Archaeological plans include, at a minimum, a statement of landowner permission, a research design, and explicit methodology.

**Potential to Yield Information:** The likelihood of a property to provide information about an important aspect of history or prehistory through its physical composition and remains.

**Predictive Model:** The use of background information about the surrounding region as a basis for predicting the kinds of properties that may exist within the area of potential effects.

**Pre-qualified Consultant:** Those individuals or firms who meet the criteria and have been approved by INDOT for pre-qualification under the categories of Archaeological Investigations (5.9) and/or History/Architectural Investigations (5.10) or other types of environmental investigations under INDOT’s Consultant Prequalification manual (8-10-2005). The individual or firm should be listed by INDOT as pre-qualified at the time cultural resource investigations are undertaken. INDOT pre-qualification is separate from the Qualified Professional list maintained by the SHPO.

**Preservation in Place:** Regarding archaeological sites eligible for or listed in the NRHP whose importance has determined to lie in its preservation in place, as opposed to a site whose importance lies in the information that can be extracted from it via excavation (i.e., data recovery).

**Primary Consultant:** An individual, partnership or firm with qualified expertise in engineering, environmental or public involvement disciplines who is contracted by the originating office to provide technical services.
**Principal Investigator:** Individual, usually with a M.A. or PhD. degree or extensive experience, who designs research projects and oversees the field and laboratory tasks, and has the principal responsibility for preparing the report.

**Programmatic Agreement (PA):** Agreement between agencies designed to accomplish all agency goals, including timely and efficient coordination. Establishment of a procedure that will reduce the paperwork and processing time for certain federal actions with minor impacts on the human and natural environment; a process that provides effective communication while reducing paperwork and time commitments for all involved agencies.

**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):** The document that records the terms and conditions agreed upon to resolve the effects of an undertaking upon federally funded or approved highway maintenance and minor projects.

**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 Management and Preservation of Indiana’s Historic Bridges (Bridge PA):** The document that records the terms and conditions agreed upon to resolve the effects of an undertaking upon federally funded or approved highway bridge projects.

**Project Area:** That area involved in a highway improvement that will be directly impacted by the project. Direct impacts include land needed for construction or other highway-related uses, i.e., the construction footprint. This area can either be within existing right-of-way or include new right-of-way.

**Project Development Process (PDP):** The State of Indiana’s procedures for advancing a transportation improvement project from concept to construction. The philosophy behind the process emphasizes the integration of engineering and environmental studies and coordination among INDOT offices, state and federal resource agencies, and the public. The ultimate goal is to select, design, and construct the most reasonable, practical, cost-effective, technically sound and environmentally sensitive transportation improvement option.

**Project File:** A compilation of all data and study materials associated with environmental documents, including all pertinent information gathered during the environmental evaluation, supporting reports, telephone memorandums and pertinent correspondence.

**Projectile Point:** A type of stone tool that is chipped on both sides and has one end that has been modified to allow the point to be attached to a handle or shaft. Often referred to as “arrowheads,” but often actually spearheads.

**Provenience:** The source or origin of an artifact; the exact location where an object was found or made. This may include grid coordinates, operation number, stratum, and level.
Public Hearing: A meeting designed to afford the public the fullest opportunity to express support of, opposition to, or comment on a transportation project. Documentation is required.

Public Involvement: Coordination events and informational materials geared toward public participation in the Transportation Development Process.

Public Meeting: An announced meeting conducted by transportation officials designed to facilitate public participation in the decision-making process and to assist the public in gaining an informed view of a proposed project during the Transportation Development Process.

Public Need: An activity or project that provides important tangible and intangible gains to society; one that satisfies the expressed or observed needs of the public where accrued benefits significantly outweigh reasonably foreseeable detriments.

Q


Qualitative Analysis: A general concept that categorizes a process used in certain types of environmental or route location studies where multiple factors are compared in a systematic and comprehensive manner on the basis of sound judgment. Factors analyzed by using a qualitative analysis are such that they cannot be measured in monetary terms, have no apparent common denominators, and are not readily quantifiable.

Quantitative Analysis: The process used in certain environmental, economic, cost benefit, engineering, or traffic studies where multiple factors, elements, and/or outcomes are evaluated and compared by the use of measurable data. Certain mathematical models, formulas, numerical indices, rankings, and value matrices may be used to assist with such a process.

R

Record of Decision (ROD): A document prepared by the Division office of the Federal Highway Administration that presents the basis for selecting and approving a specific transportation proposal that has been evaluated through the various environmental and engineering studies. Typically, the ROD identifies the alternative selected in the Final EIS, the alternatives considered, measures to minimize harm, monitoring or enforcement programs, and an itemized list of commitments and mitigation measures.

Records Search/Literature Review: The initial state of archaeological investigation completed before fieldwork occurs. The records review is documentary research on the environment and known culture history of a project area using maps, previous survey results, local and regional syntheses, and site forms and records. The records review must be done at the Indiana DHPA.
Red Flags: Identified points of concern, including environmental and engineering issues, within the project study area.

Red Flag Cultural Resources: Previously identified historic properties, i.e., listed in or eligible for listing in the NRHP, prehistoric or historic period cemeteries, or other cultural resources likely to meet the National Register criteria.

Register of Professional Archaeologists (RPA): A national certification organization for professional archaeologists. Some states are currently requiring that cultural resource projects be conducted by RPA-certified or equivalent archaeologists to help insure that research is conducted satisfactorily. Visit http://www.rpanet.org for more information.

Remote Sensing: A set of field techniques including aerial photography, satellite imagery, LIDAR and rader.

Research Design: A plan for conducting an archaeological investigation; preparatory to undertaking a particular study. It includes a statement of the problem, basic assumptions, activities, and techniques, including strategies and methods required for problem solution and hypothesis testing, and a specification of the relevant data and how they will be utilized for a full understanding of the resource.

Right-of-Way: Land, property, or interest therein acquired for and devoted to transportation purposes such as construction, maintenance, operations, and protection of a facility.

Scope of Work/Scoping: A detailed, written list of tasks prepared in advance of engineering and environmental work to define requirements of studies. A scope of work is provided to prospective consultant firms--prior to the initiation of studies--to aid in preparing estimates of working hours, schedules, and costs required to prepare, complete, and deliver the work described. Scoping is the process of preparing the list of tasks.

Section 4(f): Section 4(f) of the USDOT Act of 1966 (Title 49, USC, Section 303) requires special considerations be made regarding the “use” of any publicly owned park, recreation area, wildlife/waterfowl refuge or historic property that is listed in or eligible for the NRHP. These properties are called “4(f) Properties.” “Use” is defined as a permanent easement, fee taking, or “constructive use” of a Section 4(f) property. This law applies only to USDOT activities including funding or approvals.

Section 4(f) Determination: Administrative action by which FHWA confirms that, on the basis of extensive studies and analysis, there are no “prudent and feasible” alternatives to the taking of land from resources protected under Section 4(f) of the U.S. Department of Transportation Act, as amended (49 USC 303). These resources include: parks or recreation areas that are publicly owned or open to the public, publicly owned wildlife or waterfowl refuges, or any significant historic sites.
Section 106: A section of the National Historic Preservation Act of 1966. This section of the act requires Federal agencies to take into account the effect of their undertakings on properties included in or eligible for inclusion in the NRHP, and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings.

Section 106 Process: Procedures based on Section 106 of the National Historic Preservation Act, that govern the identification, evaluation, and protection of historical and archaeological resources affected by state and federal transportation projects. Principal areas include evaluation of cultural resources based on NRHP criteria and application of the criteria of effect.

Select Bridge: A bridge included in Indiana’s Historic Bridge Inventory that is listed in or eligible for inclusion in the NRHP, is most suitable for preservation, and is an excellent example of a given type of historic bridge. The Bridge PA defines treatment measures for Select bridges.

Seriation: A relative dating technique used to place artifacts in chronological order based on similarities in style.

Shovel Test Probe (STP): A systematic method of surveying areas with less than 30% ground surface visibility. STPs are placed in 10-m intervals (5-m intervals on archaeological sites) and are a minimum of 30-cm in diameter and extend into undisturbed soils.

Significance: An assessment of a site's unique data and research potential within a specific archaeological, cultural, and/or environmental context. This assessment is expressed in relation to a site meeting one of the four criteria for eligibility to the NRHP.

Site: The location of a significant event, a prehistoric or historic occupation or activity or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure. The actual boundaries of sites may be based on the density of features and artifacts or on other criteria. In Indiana, a single artifact may be considered an archaeological site.

Span: The distance between the supports of a beam, arch or the like.

State Historic Preservation Officer (SHPO): The Governor-appointed official responsible for overseeing the national historic preservation program at the State level.

State Significance: Importance of a property to the history of the state where it is located.

State Site Form: Forms filled out by archaeologists on archaeological sites, filled out at the completion of cultural resource projects.

Stratigraphy: The study of the layers (strata) of sediments, soils, and material culture at an archaeological site. It is often used as a relative dating technique to assess the temporal sequence of artifact deposition.
Structure: The term structure is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.

Study area: A geographic area selected and defined at the outset of engineering and environmental evaluations which is sufficiently adequate in size to address all pertinent project matters occurring within it.

Substructure: The portion of the bridge below the pier and abutment seats, including footers and pilings. The substructure transmits the loads and stresses from the deck, superstructure, or other load supporting system to the ground.

Summary of Environmental Commitments: Commitments made during the environmental evaluation and study process to moderate or lessen impacts from the proposed action. These measures may include planning and development commitments, environmental measures, right-of-way improvements, and agreements with resource or other agencies to effect construction or post construction action.

Superstructure: The entire portion of a bridge above the abutment and pier seats, excluding the deck. The superstructure transmits the deck loads to the substructure. The superstructure and substructure are generally the two most important aspects of the bridge.

T

Test Unit: A formal hand excavation, usually one or two meters square or three, five, or ten feet square. When combined, units are referred to as an excavation block.

Theme: A trend or pattern in history or prehistory relating to a particular aspect of cultural development.

Transect: Term used to define the location of a line followed by archaeologists during survey and testing.

Tribal Historic Preservation Officer (THPO): The tribal official appointed by the tribe’s chief governing authority or designated by a tribal ordinance or preservation program who has assumed the responsibilities of the State Historic Preservation Office for purposes of Section 106 compliance on tribal lands in accordance with Section 101(d)(2) of the National Historic Preservation Act.

Tribal lands: All lands within the exterior boundaries of any Indian reservation and all dependent Indian communities.

U

Undertaking: A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal assistance; those requiring a federal permit, license, or
approval; and those subject to state or local regulations administrated pursuant to a delegation or approval by a federal agency.

**UTM Reference:** A set of coordinates (easting and northing) that indicate a unique location according to the Universal Transmercator Grid appearing on maps of the United States Geological Survey.

**V**

**Verbal Boundary Description:** A statement that gives the precise boundaries of a historic property.
Helpful Websites

Archaeological Guidance/Resources

Archaeological Guidance for the Clearance of Borrow and Disposal Sites
http://www.in.gov/dot/div/contracts/conmemo/con_memo.htm

Federal Lands in Indiana

Find-A-Grave
http://www.findagrave.com/

Historic Indiana Atlases

Indiana Draft Archaeological Guidelines

Indiana Government Land Office Records
http://www.g lorecords.b lm.gov/default.aspx

Indiana Historical Aerial Photo Index
http://129.79.145.7/arcims/IHAPI/viewer.htm

Indiana Map (GIS Atlas for Indiana)
http://www.indianamap.org/

Indiana State Historic Architectural and Archaeological Research Database:
https://secure.in.gov/apps/dnr/shaard/welcome.html

Indiana State Historic Architectural and Archaeological Research Database SHAARD GIS:
https://gis.in.gov/apps/dnr/SHAARDGIS/

National Park Service, Archaeology Professional Qualification Standards
http://www.cr.nps.gov/local-law/arch_stnds_9.htm

National Register Bulletin: Guidelines for Evaluation and Registering Archaeological Properties
http://www.nps.gov/history/nr/publications/bulletins/arch/

National Register Bulletin: Defining Boundaries for Archaeological Sites and Districts
http://www.nps.gov/history/nr/publications/bulletins/boundaries/

Post Review Discovery Guidance
http://www.in.gov/dot/div/contracts/conmemo/con_memo.htm

Qualified Professional Roster for Archaeology
http://www.in.gov/dnr/historic/3675.htm

Sanborn Fire Insurance Maps-Indiana City Index (Cities with Sanborn Maps)

Sanborn Fire Insurance Maps Available for Download (Indiana Spatial Data Portal)
http://gis.iu.edu/datasetInfo/sanborn.php
Secretary of the Interior’s Standards and Guidelines
http://www.cr.nps.gov/local-law/arch_stnds_9.htm

Soil Survey Info:
http://soils.usda.gov/survey/

Society for American Archaeology Editorial Policy and Style Guide
http://www.saa.org/Portals/0/SAA/Publications/new%20style%20guide.pdf

TerraServer (Aerial Imagery):

**Historic Structures Guidance/Resources**

DHPA architectural style guide:
http://www.in.gov/dnr/historic/3678.htm

Digital Collections of IUPUI University Library:
http://indiamond6.ulib.iupui.edu/cdm/search/cosuppress/

A Field Guide to Farm Buildings and Structures of the United States:
http://www.farmbuildingguide.org/

Historic Bridge Marketing Program:
http://www.in.gov/indot/2532.htm

INDOT Categorical Exclusion (CE) Manual:

IN-GenWeb Project
http://www.ingenweb.org/

Indiana Landmarks online architectural guide:
http://www.indianalandmarks.org/SiteCollectionDocuments/Publication%20PDFs/On%20Street%20PDF.pdf

Indiana Memory (Digital Archives):
http://www.in.gov/memories/

Indiana State Historic Architectural and Archaeological Research Database:
https://secure.in.gov/apps/dnr/shaard/welcome.html

Indiana State Historic Architectural and Archaeological Research Database SHAARD GIS:
https://gis.in.gov/apps/dnr/SHAARDGIS/

Indiana Historic Sites and Structures Inventory List Available by County:
http://www.indianalandmarks.org/Resources/ArchitecturalSurveys/Pages/SurveyReports.aspx

Indiana Historic Structures County Survey and Report Map:
http://www.indianalandmarks.org/resources/architecturalsurveys/pages/default.aspx

Indiana Historic Bridge Inventory:
http://www.in.gov/indot/2531.htm
Indiana Historic INDOT Garage Inventory and Evaluation:

Indiana Register Listing:
http://www.in.gov/dnr/historic/2823.htm

Indiana State Digital Archives:
http://www.indianadigitalarchives.org/

Model for Identifying & Evaluating the Historic Significance of Post-World War II Housing
http://www.trb.org/Main/Blurbs/167790.aspx

Multiple Property Documentation Form for Indiana’s Public Common and High Schools:
http://www.in.gov/dnr/historic/files/schoolsmpdf.pdf

Multiple Property Documentation Form for Round and Polygonal Barns of Indiana:
http://www.in.gov/dnr/historic/files/roundbarns.pdf

National Park Service, Historic Preservation Professional Qualification Standards
http://www.cr.nps.gov/local-law/arch_stnds_9.htm

National Park Service, Publications (guidance on evaluation and documentation):
http://www.nps.gov/history/nr/publications/index.htm

National Park Service, Secretary of the Interior's Standards for the Treatment of Historic Properties:
http://www.nps.gov/tps/standards.htm

National Park Service, Technical Preservation Services for Historic Buildings:
http://www.nps.gov/tps/

National Park Service, HABS/HAER:
http://www.nps.gov/history/hdp/

National Register Information System:
http://nrhp.focus.nps.gov/natreg/docs/All_Data.html

Qualified Professional Roster for Architectural History:
http://www.in.gov/dnr/historic/3675.htm

**Governmental Agencies**

Advisory Council on Historic Preservation:
http://www.achp.gov/

Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology:
http://www.in.gov/dnr/historic/

Federal Highway Administration (FHWA) Indiana:
http://www.fhwa.dot.gov/ indiv/index.htm

Indiana Historical Bureau:
http://www.in.gov/history/index.htm
Consulting Parties

AASHTO’s *Consulting Under Section 106*:  
[http://environment.transportation.org/pdf/PG06.pdf](http://environment.transportation.org/pdf/PG06.pdf)

Historic Landmarks:  
[http://www.historiclandmarks.org/Pages/default.aspx](http://www.historiclandmarks.org/Pages/default.aspx)

Indiana County Historians:  

Indiana County Historical Societies:  

Indiana Preservation & Archaeology Directory:  
[http://www.in.gov/dnr/historic/3656.htm](http://www.in.gov/dnr/historic/3656.htm)

Indiana Preservation Directory:  

Indiana Landmarks Regional Office Contact Information:  
[http://www.indianalandmarks.org/RegionalLandmarks/RegionalOffices/Pages/default.aspx](http://www.indianalandmarks.org/RegionalLandmarks/RegionalOffices/Pages/default.aspx)

LTAP Directory (Local Government Contact Information)  
[http://rebar.ecn.purdue.edu/LTAP1/Resources/Publications.aspx](http://rebar.ecn.purdue.edu/LTAP1/Resources/Publications.aspx)

Metropolitan Planning Organizations (MPO)  
[http://www.indianampo.com/MPO/mpos.htm](http://www.indianampo.com/MPO/mpos.htm)

National Conference of State Historic Preservation Officers:  
[www.ncshpo.org](http://www.ncshpo.org)

Local Preservation Groups and Programs

Canal Society of Indiana:  
[www.indcanal.org](http://www.indcanal.org)

Historic Southern Indiana:  
[http://www.usi.edu/hsi/](http://www.usi.edu/hsi/)

Indiana Alliance of Historic District Commissions:  
[http://pages.prodigy.net/hlfinro/](http://pages.prodigy.net/hlfinro/)

Indiana Covered Bridge Society:  
Indiana Main Street:
http://www.in.gov/ocra/2364.htm

Indiana National Road Association:
http://www.indiananationalroad.org/Indiana_National_Road/About_Us.html

Other Specialized Historical Organizations:
http://www.indianahistory.org/our-services/local-history-services/local-history-contacts/other-resources-in-indiana

Tribal Consultation

AASHTO’s Tribal Consultation Website:
http://environment.transportation.org/environmental_issues/tribal_consultation/recent_dev.aspx

List of Indiana Federally recognized tribes:

National Association of Tribal Historic Preservation Officers:
www.nathpo.org

Native American Consultation database:

Indiana Native American tribal history website:
http://www.accessgenealogy.com/native/indiana/ or http://www.native-languages.org/indiana.htm

ACHP Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects:
http://www.achp.gov/docs/hrpolicy0207.pdf

Laws/Regulations and Policies

INDOT Standard Specifications Manual:

INDOT Environmental Services Listserv
https://public.govdelivery.com/accounts/INSTATE/subscriber/new

INDOT Environmental Procedural Manual

INDOT Public Involvement Procedures Manual
Indiana archaeology and historic preservation law:
http://www.in.gov/legislative/ic/code/
http://www.in.gov/legislative/iac/title312.html

National Environmental Policy Act:
http://environment.fhwa.dot.gov/projdev/

National Historic Preservation Act of 1966
http://www.achp.gov/docs/nhpa%202008-final.pdf

National Park Service, Laws, Regulations and Standards Related to Cultural Resources:
http://www.cr.nps.gov/linklaws.htm

Section 106 law:

Section 4(f) Policy Paper:
http://environment.fhwa.dot.gov/4f/4fpolicy.asp

Section 106 Guidance

ACHP Section 106 website:
http://www.achp.gov/work106.html

ACHP Citizen’s Guide to Section 106:
http://www.achp.gov/citizensguide.html

ACHP Section 106 Archaeology Guidance:
http://www.achp.gov/docs/ACHP%20ARCHAEOLOGY%20GUIDANCE.pdf

ACHP Section 106 Regulations Section-by-Section Questions and Answers
http://www.achp.gov/106q&a.html

ACHP Section 106 Applicant Toolkit

NEPA Cumulative Impacts (FWHA):
http://contextsensitivesolutions.org/content/reading/considering/

Handbook on Coordinating NEPA and Section 106:
http://www.achp.gov/nepa106.html

National Register Evaluation Criteria
http://www.achp.gov/nrcriteria.html

Professional Organizations and Institutions

American Cultural Resources Association:
www.acra-crm.org
American Association of State Highway and Transportation Officials (AASHTO):  
http://environment.transportation.org/

Indiana State Museum:  
www.in.gov/ism

Association of Indiana Museums:  
www.indianamuseums.org

National Trust for Historic Preservation:  
www.nationaltrust.org

Register of Professional Archaeologists (RPA)  
http://www.rpanet.org/

**Forms**

Certificate of Approval Application:  
http://www.in.gov/dnr/historic/2812.htm

Federal Archaeology Permit:  
http://www.nps.gov/archeology/sites/permits.htm

IDNR, DHPA Forms:  
http://www.in.gov/dnr/historic/2812.htm

Indiana Archaeological Short Report Form:  
http://www.in.gov/dnr/historic/2812.htm

INDOT Consultant Prequalification Enrollment and List  
http://www.in.gov/indot/2732.htm

INDOT Request for Approval of Borrow or Disposal Site:  
http://www.in.gov/dot/div/contracts/standards/forms/IC-203.pdf