

**MEMORANDUM OF AGREEMENT  
AMONG  
THE FEDERAL HIGHWAY ADMINISTRATION,  
THE ILLINOIS DEPARTMENT OF TRANSPORTATION,  
AND THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER,  
REGARDING THE  
CONSTRUCTION OF THE MACOMB BYPASS, ILLINOIS ROUTE 336 (FAP-315)  
MCDONOUGH COUNTY, ILLINOIS**

**WHEREAS**, the Illinois Department of Transportation (IDOT), plans to construct a bypass around Macomb linking US 67, US 136, and proposed IL 336 (FAP-315) in McDonough County, Illinois (Project), IDOT Sequence #10622; and

**WHEREAS**, the Federal Highway Administration (FHWA) may fund the Project thereby making the Project an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. Section 470f, and its implementing regulations, 36 C.F.R. Part 800; and

**WHEREAS**, the FHWA has defined the undertaking's area of potential effect (APE) as the proposed alignment from the proposed IL 336/US 136 interchange west of Macomb to the proposed US 67/US 136 interchange east of Macomb, McDonough County; and

**WHEREAS**, FHWA in consultation with the Illinois State Historic Preservation Officer (SHPO) has determined that no standing structures that are eligible for listing on the National Register of Historic Places are within the project's APE; and

**WHEREAS**, FHWA and IDOT, in consultation with SHPO, have identified some 40 archaeological habitation sites (Sites), that appear to be eligible for the National Register of Historic Places under Criterion D and will be adversely effected by this Project; and

**WHEREAS**, the Sites include both prehistoric and historic habitation sites that cannot be affiliated with historic Indian Tribes and the Sites are important for the scientific data they likely contain and they do not require preservation in place; and

**WHEREAS**, in accordance with 36 CFR Part 800, the FHWA acknowledges and accepts the advice and conditions outlined in the Council's "Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites," published in the Federal Register on June 17, 1999; and

**WHEREAS**, FHWA has invited the IDOT to participate in consultation and to become a signatory to this MOA; and

**WHEREAS**, FHWA completed the Section 106 consultation process for this Project and intended to address the adverse effects to archaeological resources through the Programmatic Agreement for the Mitigation of Adverse Effects to Illinois Archaeological Habitation Sites Between the FHWA and Illinois SHPO (Habitation Sites PA), which expired January 2009; and

**WHEREAS**, FHWA and the Illinois SHPO have consulted and developed this Memorandum of Agreement to address the adverse effects to archaeological historic properties given the Habitation Sites PA has expired; and

**WHEREAS**, execution and implementation of this MOA evidences that FHWA has satisfied its Section 106 responsibilities for the Project; and

**NOW, THEREFORE**, FHWA, IDOT, and SHPO agree that the Project shall be implemented in accordance with the following stipulations to ensure that potential effects on historic properties are taken into account.

## **STIPULATIONS**

FHWA, IDOT, and SHPO agree that the following steps will be undertaken for the Project:

### **I. ARCHAEOLOGICAL MITIGATION (PHASE III)**

- A. IDOT will prepare a data recovery plan with a research design for the affected Sites in consultation with the SHPO that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation, and the Advisory Council on Historic Preservation's Treatment of Archaeological Properties: A Handbook. A generalized data recovery plan (DRP) for prehistoric sites (appendix A) and for historic sites (appendix B) may be used and examples are attached to this agreement. The generalized DRPs will apply primarily to small archaeological habitation sites and IDOT's Cultural Resources Unit professional personnel will make the final determination on whether to use the generalized DRP or to develop a project specific DRP. Factors in the making of this determination will include, but not be limited to, site type, location, project type, and project schedule.
- B. Human remains are not expected to be found during the investigations covered by this MOA. However, if encountered, required notifications of the discovery will be made to the county coroner and the SHPO, then after authorization under Illinois Human Skeletal Remains Protection Act (20 ILCS 3440, 17 IAC 4170) and its rules (the Act), the remains along with any associated artifacts will be removed following procedures for recording and reporting established under the ACT. No excavation of human remains will be performed except under the direction of a Certified Skeletal Analyst (17 IAC 4170.300(f)). Disposition of the remains and associated artifacts will be accomplished as determined under the ACT.

## II. PROFESSIONAL STANDARDS

For the purpose of implementing this MOA, IDOT shall continue to employ departmental staff with qualifications that meet the requirements of 36 CFR Part 61, Appendix A. At a minimum, the professional staff required to carry out the terms of this MOA shall consist of one permanent, full time, archaeologist. In the event of a prolonged absence of the IDOT archaeologist, IDOT will, in consultation with SHPO, appoint an archaeologist that meets the requirements of 36 CFR Part 61, Appendix A.

## III. DURATION

This MOA will be null and void if its stipulations are not carried out within ten years from the date of its execution. In such an event, the FHWA shall so notify the parties to this MOA and, if it chooses to continue with the Project, then it shall reinstate review of the Project in accordance with 36 CFR Part 800.

## IV. POST REVIEW DISCOVERIES

- A. *Procedures for an Unanticipated Discovery of Human Remains and Burials:* In the case of an unanticipated discovery of human remains or burials on Federal land, IDOT will follow the procedures outlined by the Native American Graves Protection and Repatriation Act, as amended (43 CFR 10, Subpart B), and pursuant to the Archaeological Resources Protection Act of 1979 (43 CFR 7). In the event of an unanticipated discovery of human remains or burials on non-Federal lands during IDOT construction activities, IDOT will comply with 20 Illinois Compiled Statutes 3440/0.01, et seq. (Human Skeletal Remains Protection Act) and follow these procedures:

(a) Upon encountering human remains or an unmarked human burial during ground disturbing construction activities, IDOT will ensure that the construction contractor immediately stops work within a one-hundred-fifty (150) foot radius from the point of discovery. IDOT will ensure that the construction contractor implements interim measures to protect the discovery from vandalism and looting, but must not remove or otherwise disturb any human remains or other items in the immediate vicinity of the discovery.

(b) Immediately following receipt of such notification, the IDOT will ensure that construction activities have halted within a one-hundred-fifty (150) foot radius from the point of discovery and assume responsibility for implementing additional measures, as appropriate, to protect the discovery from looting and vandalism until the requirements of state law have been completed.

(c) IDOT will determine if the skeletal remains are human, the degree to which they were disturbed, and, if possible, assess their potential age and cultural affiliation without any further disturbance.

(d) IDOT will notify the county coroner, SHPO, and other interested parties within forty-eight (48) hours of the discovery.

(e) Within seventy-two (72) hours after notification the county coroner will determine jurisdiction. If the remains are older than 100 years, the county coroner will notify the SHPO.

(f) The SHPO is responsible for notifying FHWA, IDOT, and other interested parties within twenty-four (24) hours of its findings.

(g) If it is determined that intact or fragmented human remains are present IDOT will consult with the SHPO, FHWA, and other interested parties regarding additional measures to avoid and protect or mitigate the adverse effect of the project on the human remains and burial site. These measures may include:

- i. formal archaeological evaluation of the site;
- ii. if the remains are determined to be Native American, consultation with appropriate Tribes will be required;
- iii. visits to the site by the SHPO and other interested parties;
- iv. exploration of potential alternatives to avoid the human remains or burial;
- v. for Native American remains, implementation of a mitigation plan by IDOT in consultation with appropriate Tribes, including procedures for disinterment and re-interment;
- vi. implementation of the mitigation plan; and
- vii. FHWA approval to resume construction following completion of the fieldwork component of the mitigation plan.

**B.** *Procedures for an Unanticipated Discovery of Historic Properties:* In the event of an unanticipated discovery of historic properties during IDOT construction activities, IDOT will follow these procedures:

(a) The construction contractor must immediately stop all construction activity within a three-hundred (300) foot radius of the discovery, notify IDOT of the discovery and implement interim measures to protect the discovery from looting and vandalism. Within forty-eight (48) hours of receipt of this notification of the discovery, the IDOT shall:

- i. inspect the work site to determine the extent of the discovery and ensure that construction activities have halted;
- ii. clearly mark the area of the discovery;
- iii. implement additional measures, as appropriate, to protect the discovery from looting and vandalism; and
- iv. notify the FHWA, the SHPO, and other interested parties of the discovery.

(b) IDOT/FHWA will have seven (7) business days following notification to determine the National Register eligibility of the discovery after considering the filed comments of the SHPO and other interested parties. IDOT/FHWA may assume the newly discovered property to be eligible for the National Register for the purposes of Section 106 pursuant to 36 CFR § 800.13(c)

(c) If the find is determined to be potentially significant the IDOT will consult with the SHPO and other interested parties regarding appropriate measures for site treatment. For properties determined eligible for the National Register, IDOT/FHWA will notify the SHPO and other interested parties, of those actions for which it proposes to resolve adverse effects. The SHPO and other interested parties will have seven (7) business days to provide their views on the proposed actions to resolve adverse effects. These measures may include:

- i. formal archaeological evaluation of the site;
- ii. visits to the site by the SHPO and other interested parties;
- iii. exploration of potential alternatives to avoid the site;
- iv. preparation of a mitigation plan by IDOT in consultation with other interested parties for approval by the SHPO;
- v. implementation of a mitigation plan; and
- vi. FHWA approval to resume construction following completion of the fieldwork component of the mitigation plan.

(d) If the find is determined to be either isolated or completely disturbed by construction activities, the IDOT will consult with the SHPO and other interested parties prior to resuming construction.

(e) Dispute Resolution: The FHWA will seek and take into account the recommendations of the ACHP in resolving any disagreements that may arise regarding determination of effects.

## V. DISPUTE RESOLUTION

Should any signatory to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with such party to resolve the objection. If FHWA determines that such objection cannot be resolved, FHWA will:

- A. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the ACHP. The ACHP shall provide FHWA with its advice on the resolution of the objections within thirty days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and signatories and provide them with a copy of this written response. FHWA will then proceed according to its final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the thirty day time period FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories to the MOA and provide them and the ACHP with a copy of such written response.
- C. FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

## **VI. AMENDMENTS**

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

## **VII. TERMINATION**

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment. If within thirty days an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories. Once the MOA is terminated and prior to work continuing on the undertaking, FHWA must request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. FHWA shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by the FHWA, the Illinois SHPO and IDOT and implementation of its terms evidence that FHWA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

FEDERAL HIGHWAY ADMINISTRATION

By: Max Tull Date: January 6, 2010

ILLINOIS STATE HISTORIC PRESERVATION OFFICER

By: Ann E. Haas Date: Jan 5, 2010

**INVITED SIGNATORY**

ILLINOIS DEPARTMENT OF TRANSPORTATION

By: Barbara D. Stevens Date: January 5, 2010

## **APPENDIX A: STANDARD DATA RECOVERY PLAN FOR PREHISTORIC SITES**

### **Introduction**

The Illinois Transportation Archaeological Research Program (ITARP), a joint program of the University of Illinois at Urbana-Champaign (UIUC) and the Illinois Department of Transportation (IDOT), prepared this data recovery plan for the archaeological mitigation of prehistoric habitation sites. This plan was developed in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716), and "The Treatment of Archaeological Properties" published in 1980 by the Advisory Council on Historic Preservation. All procedures outlined in this plan are implemented using standard ITARP techniques, which are outlined in ITARP Field Manual 2005: Standard ITARP Field Procedures for Phase I, II and III Archaeological Investigations.

The IDOT and the Illinois State Historic Preservation Officer have jointly determined that the prehistoric sites to be investigated with this recovery plan are eligible for the National Register of Historic Places under Criterion D and that these sites may not be avoided by the proposed project.

### **Natural Setting**

The natural setting for archaeological sites excavated under this data recovery plan will be examined (prior to conducting further excavation) in the appropriate existing documentation (such as the Geological Survey Soil Survey) and in the field. A verbal description of the natural setting will accompany maps and photographs in the final reporting of the site.

### **Summary of Previous Investigations**

In general, sites to be investigated under this data recovery plan were recorded by ITARP personnel during the Phase I survey of the proposed project area. When necessary, existing archaeological and historical property lists will be consulted and oral histories conducted to fully develop a site's history and aid in locating possible features and an understanding of a site's stratigraphy and distribution across the landscape. Phase I testing at the site will have revealed the presence of intact cultural material and the site's potential to significantly contribute to our understanding of the prehistory of this area in order to warrant additional investigation.

### **Research Design**

The data generated by excavations at the prehistoric site(s) will be used to examine at least three topics: (1) chronology; (2) technology; and (3) subsistence practices. Insights into changing patterns of community organization may also be granted, as may insights into changes in social organization. The data recovered will then be compared to data from other regional sites.

1. Chronology. It is expected that the recovered artifact assemblage at the prehistoric site(s) will suggest the presence of at least one cultural component (such as the Oneota or



Late Woodland). Insights into more precise time spans at both sites can be gained through analysis of point and ceramic styles, as well as the acquisition of charcoal samples for radiocarbon analysis.

2. Technology. The lithic artifacts recovered from the prehistoric site(s) are expected to reflect the inhabitant's use of this material for a variety of tasks involved in procuring and processing resources. Analysis of the lithic assemblage will identify raw materials, heating stage, overall stages of tool manufacture, and lithic reduction strategies. Analysis of the ceramics, if ceramics are recovered, may also aid in the identification of pottery manufacturing processes.
3. Subsistence. If plant and animal remains are recovered at the prehistoric site(s), standardized flotation samples will be collected and analyzed from excavated feature fills to identify patterns of plant and animal use by the site inhabitants. These data will be used in the interpretation of seasonality and site function.

### **Mitigation Plan**

Investigations will be conducted in compliance with the National Historic Preservation Act of 1966, as amended, and will be carried out by ITARP archaeologists who meet the Secretary of the Interior's professional qualification standards (48 FR 447838-9). In designing and carrying out the work, ITARP staff will also take into account the Advisory Council on Historic Preservation's publication on the "Treatment of Archaeological Properties."

Standard ITARP methods (as outlined in the ITARP Field Manual 2005) will be employed in all aspects of the data recovery. Portions of the plow zone at the site(s) will be removed; if warranted, a backhoe with a smooth-bladed bucket will likewise be utilized to carefully remove the plow zone at the site(s) in test trenches to recover artifacts, reveal features, and more fully investigate site stratigraphy.

If features are encountered, the archaeological studies will be conducted following the standard ITARP excavation techniques described in the ITARP Field Manual 2005. Any features encountered will be mapped by hand and tied into the site maps with an electronic transit. After plan mapping, features will be bisected along their long axis with hand tools (shovels and trowels). The subsequent profile will be mapped and photographed. Generally, the first half of each pit feature will be excavated as a single unit and screened with ¼-inch hardware cloth, with all artifacts bagged together; flotation samples generally will not be collected from the first halves of features. The second half of each pit will be excavated by fill zones identified in profile, with artifacts and flotation samples collected accordingly. At least one 10-liter flotation sample will be collected from each zone. Charcoal-rich zones will be more intensively sampled.

Human remains are not expected to be found during the excavations; however, if encountered, the remains will be mapped and removed in accordance with all procedures and guidelines associated with the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440, 17 IAC 4170). Disposition of the human remains and any burial artifacts will be accomplished under the provisions of the Act.

In the laboratory, all lithic artifacts will be washed, labeled and analyzed by ITARP personnel at the appropriate Survey Division office. Botanical, zoological and human remains will be analyzed by specialists at ITARP's main office at the University of Illinois or by qualified consultants.

All archaeological reports resulting from the project will comply with contemporary standards, including the Secretary of the Interior's "Standards for Final Reports of Data Recovery Programs" (42 FR 5377-79). The ITARP will also insure that all final archaeological reports are presented in a format acceptable to the Illinois State historic Preservation Officer (SHPO) following Illinois SHPO guidelines on report preparation, and that all such reports are presented in a format acceptable to the National Park Service for possible peer review and submission to the National Technical Information Service (NTIS). This report will be submitted to the Illinois DOT and IHPA in a timely manner after the completion of all field and laboratory investigations.

### **Curation**

All artifactual materials, records, photographs and other data associated with this project will be curated at the University of Illinois at Urbana-Champaign and managed by the Illinois Transportation Archaeological Research Program (ITARP) in accordance with federal standards as outlined in 36 CFR Part 79.

## **APPENDIX B: STANDARD DATA RECOVERY PLAN FOR HISTORIC SITES**

### **Introduction**

The Illinois Transportation Archaeological Research Program (ITARP), a joint program of the University of Illinois at Urbana-Champaign (UIUC) and the Illinois Department of Transportation (IDOT), prepared this data recovery plan for the archaeological mitigation of historic sites. This plan was developed in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716), and "The Treatment of Archaeological Properties" published in 1980 by the Advisory Council on Historic Preservation. All procedures outlined in this plan are implemented using standard ITARP techniques, which are outlined in *ITARP Field Manual 2005: Standard ITARP Field Procedures for Phase I, II, and III Archaeological Investigations*.

The IDOT and Illinois State Historic Preservation Officer have jointly determined that the historic sites to be investigated with this recovery plan are eligible for the National Register of Historic Places (NRHP) under Criterion D and that these sites may not be avoided by the proposed project.

### **Natural Setting**

The natural setting for archaeological sites excavated under this data recovery plan will be examined (prior to conducting further excavation) in the appropriate existing documentation and in the field. A verbal description of the natural setting will accompany maps and photographs in the final reporting of the site. Midwestern archaeological studies have noted a preference among early Euro-American pioneers to build their first homes along timber-prairie borders. Environmental factors, such as protection from the elements and proximity to timber, water, and wild animal resources, and cultural factors, such as origin of the settler and proximity to roads, both affect the placement of early settlement homes and farms. General Land Office survey and plat maps, coupled with native vegetation information from county soil surveys, assist in the reconstruction of local environments during the early settlement era. In much of the State, survey maps were created prior to and immediately following the initial Euro-American settlement. Government land transfer and original land entries/patents provide information about locations of early settlements. Further information from county history books, census data, and assorted primary source documents such as letters and diaries can also assist in reconstruction of the environmental and cultural factors affecting individual and group settlement. Aerial photographs and modern maps (US Geological Survey, USDA soil survey, etc.) provide documentation of more recent environmental conditions.

### **Summary of Previous Investigations**

In general, sites to be investigated under this data recovery plan were recorded by ITARP personnel during the Phase I survey of the proposed project area. When necessary, existing archaeological and historical property lists will be consulted and oral histories conducted to fully develop a site's history and aid in locating possible features and an understanding of a

site's stratigraphy and distribution across the landscape. Phase I testing at the site will have revealed the presence of intact cultural material and the site's potential to significantly contribute to the history of this area in order to warrant additional investigation.

### **Research Design**

The data generated by excavations at the historic site(s) will be used to examine at least three broad topics: (1) settlement patterns and land distribution; (2) architecture; and (3) subsistence practices. Insights into changing patterns of community organization may also be gained, as may insights into changes in social organization and subscription to mass-produced goods. The data recovered will then be compared with that from other regional sites.

- 1. Settlement Patterns and Land Distribution.** The mitigation of historic sites requires the study of patterns of settlement by the pioneers who came to Illinois. The types of sites, their location, number and distribution, all provide important information on early settlement patterns and how they influenced later land development and settlement. In order to understand these settlement patterns, detailed artifact and archival information is required to determine the age, type, and function of specific sites. In addition, data indicating when specific features originated and any transformations in function through time is also needed. Inter- and intra-spatial orientation of structures and features must also be studied.
- 2. Architecture.** Building techniques and architectural forms can reflect ethnic identity, stylistic concerns, economic status, and the relative availability of local and imported construction materials. Intact structures dating from the era of earliest Euro-American settlement are comparatively scarce, as many buildings have been abandoned, dismantled, or otherwise destroyed and/or replaced by more recent construction. Early structures are generally poorly documented and specific details regarding their construction are not available. Intact subsurface remains provide information on dwelling size and shape and details of cellar and footing construction. The distribution of hardware, wood, glass, and other structural items within and around the foundation fill offers clues to the appearance of the superstructure. Exposure and detailed mapping of complete foundations is necessary to document the size, orientation, and shape of the dwelling. The construction materials employed need to be identified along with their likely places of origin. Measured plan views, profiles, and photographs of structural features will provide details on construction techniques. Horizontal and vertical provenience data on other structural remains will aid in the interpretation of aspects of the building superstructure.
- 3. Subsistence.** Subsistence in early Euro-American farmsteads was based largely on foods produced directly for household consumption. With limited transportation systems and access to processed flour, wheat was an important crop. Water-powered gristmills were among the earliest important industries. Hogs were important sources of meat, cattle provided milk and butter, and chickens were commonly kept for eggs. Fruit trees and vegetable gardens were also important sources of food on many nineteenth century farms. In addition to these homegrown foods, wild plants and

animals supplemented the diet. Deer, various small game mammals, fish, waterfowl, and wild turkey were common, along with wild nuts and fruits, which were seasonally available. Flotation samples taken from feature contexts should provide abundant evidence of subsistence. Identification of carbonized and uncarbonized plant remains will document the range of wild, domestic, and exotic plant species present. Wild, domesticated, and imported animal resources will be identified through the analysis of faunal remains recovered from flotation samples, as well as larger specimens recovered through standard excavation procedures.

### **Mitigation Plan**

Investigations will be conducted in compliance with the National Historic Preservation Act of 1966, as amended, and will be carried out by ITARP archaeologists who meet the Secretary of the Interior's professional qualifications standards (48-FR-447838-9). In designing and carrying out the work, ITARP staff will also take into account the Advisory Council on Historic Preservation's publication on the "Treatment of Archeological Properties."

Standard ITARP methods (as outlined in the *ITARP Field Manual 2005*) will be employed in all aspects of the data recovery. The investigation of previously identified historic Euro-American sites will generally parallel that outlined for the prehistoric resources in Appendix A, with the following exceptions. A standard controlled surface collection grid (generally comprised of 10x10m collection units) will also be used, where possible, as the basis for a gridded metal detector survey to recover that class of artifacts. These individual grid cells will also form the parameters for subsequent machine-aided excavation units, which will be removed in an incremental fashion to increase the artifact sample from the site. Experience indicates that a significant percentage of the historic artifacts from a given site are located in the plow zone and this material, if collected systematically, can provide information about the location of activity loci that are generally not represented by subsurface features (i.e. barnyard activities).

Given this type of systematic plow zone sampling approach, hand excavated units will be used more sparingly on 19<sup>th</sup> century historic period sites, because intact subsurface deposits are generally rare outside the limits of subterranean facilities. Thus, adequate artifact samples can typically be derived from surface collection, metal surveys, feature excavation, and systematically collected, standard sized machine excavation blocks. However, more rigorous plow zone and A-Horizon sampling, including dry or water screening and bulk flotation sample collection, will be undertaken on sites believed to be attributable to historic Indian, French, and very early British/American period components to amass adequate samples and recover micro-artifacts, such as glass beads.

Due to the large size of many historic cellars and the extremely deep nature of some water collection facilities, standard ITARP excavation protocols allow these features to be sampled as opposed to completely excavated. The cellars will be excavated in quarters (similar to prehistoric structures) so that both the long and short axis profiles can be mapped and documented. Deeper features, such as wells and cisterns, will typically only be sampled to a reasonable depth (ca. one to two meters) because their absolute limits often cannot be established through hand excavation given personal safety considerations. The overall depths

of these features may be assessed through additional hand probing or machine trenching once the hand-excavated samples have been removed. Such sampling strategies, however, must obtain an adequate artifact assemblage and other forms of information to determine the feature's temporal placement and construction techniques. In addition, historic posts will be mapped in plan view, but only a subset may be formally excavated depending upon the number encountered and their relationship to other site features. Any posts that are not excavated will be hand-probed to assess their overall depth.

While not expected, should historic mortuary sites or features be encountered, the remains will be mapped and removed in accordance with all procedures and guidelines associated with the Illinois Human Skeletal Remains Protection Act (HSRPA, 20 ILCS 3440, 17 IAC 4170) and detailed in the ITARP excavation manual (ITARP 2005). Disposition of the human remains and any burial artifacts will be accomplished under the provisions of the Act.

In the laboratory, all artifacts will be washed, cleaned, labeled, and sorted by ITARP personnel at the appropriate Survey Division office, following standard ITARP procedures (ITARP 2005). Botanical, zoological, and historical materials will then be analyzed by ITARP specialists at the University of Illinois or by qualified consultants.

All archaeological reports resulting from the project will comply with contemporary standards, including the Secretary of the Interior's "Standards for Final Reports of Data Recovery Programs" (42-FR-5377-79). The ITARP will also insure that all final archeological reports are presented in a format acceptable to the Illinois State Historic Preservation Officer (SHPO), following Illinois SHPO guidelines on report preparation, and that all such reports are presented in a format acceptable to the National Park Service for possible peer review and submission to the National Technical Information Service (NTIS). These reports will be submitted to the Illinois DOT and the IHPA in a timely manner after the completion of all field and laboratory investigations.

### **Curation**

All artifactual materials, records, photographs, and other data associated with this project will be curated at the University of Illinois at Urbana-Champaign and managed by the ITARP in accordance with federal standards as outlined in 36 CFR, Part 79.