

**MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
ILLINOIS DEPARTMENT OF TRANSPORTATION,
MCLEAN COUNTY,
AND ILLINOIS STATE HISTORIC PRESERVATION OFFICER,
REGARDING THE
EASTSIDE HIGHWAY, MCLEAN COUNTY, ILLINOIS**

WHEREAS, McLean County in coordination with the Illinois Department of Transportation (IDOT) plans to construct a new highway around the east side of Bloomington-Normal, McLean County, Illinois (Project), IDOT Sequence #16141D; 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 CFR Part 800; and

WHEREAS, the FHWA has defined the undertaking's area of potential effects (APE) as the preferred alignment (as shown in Exhibit A); and

WHEREAS, FHWA in consultation with the Illinois State Historic Preservation Officer (SHPO) has identified and evaluated six architectural resources. Potential impacts will be avoided to all except Duncan Manor, which is listed on the National Register of Historic Places (NRHP). The SHPO has concurred with FHWA's finding of No Adverse Effect to five of the six architectural resources (other than Duncan Manor), and SHPO will concur with FHWA's finding of No Adverse Effect to Duncan Manor, provided that (1) the SHPO reviews and approves the vegetative screening plan before the beginning of construction and (2) the SHPO reviews and approves the implementation of the vegetative screening plan by McLean County and IDOT (Exhibit B); and

WHEREAS, FHWA invited the following Tribes to enter consultation September 25, 2012: Iowa Tribe of Kansas and Nebraska, Iowa Tribe of Oklahoma, Kickapoo Traditional Tribe of Texas, Kickapoo Tribe of Kansas, Kickapoo of Oklahoma, Miami Tribe of Oklahoma, and Peoria Tribe of Indians in Oklahoma, and no Tribe expressed an interest in the Project; and

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

WHEREAS, FHWA has invited McLean County to participate in consultation and to become a signatory to this MOA; and

WHEREAS, FHWA and IDOT, in consultation with SHPO, have identified five archaeological sites that represent prehistoric (Native American) and Euro-American habitation sites (Sites), 11ML1051, 1055, 1060, 1063, and 1074, that will likely be adversely affected by the Project and

have been determined eligible for the National Register of Historic Places (NRHP) under Criterion D (Exhibit B); and

WHEREAS, the Sites have no affiliation with historic-era Native American Tribes but are important for the scientific data they likely contain. The Sites do not require preservation in place; and

WHEREAS, in accordance with 36 CFR Part 800.4(b)(2), FHWA and IDOT in coordination with the SHPO will implement a staged approach to the identification and NRHP evaluation of archaeological resources because not all high-priority parcels within the APE could be surveyed because of landowner refusal; and

WHEREAS, in accordance with 36 CFR Part 800, the FHWA acknowledges and accepts the advice and conditions outlined in the Advisory Council on Historic Preservation (ACHP)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 notified the (ACHP) of the preparation of this Memorandum of Agreement (MOA) in an email dated September 15, 2016, and the ACHP declined to participate October 14, 2016; 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, McLean County, 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, McLean County, and SHPO agree that the following steps will be undertaken for the Project:

I. ARCHAEOLOGICAL INVESTGATIONS

- A. Identification and Evaluation of Resources.** Additional archaeological surveys and test excavations will be conducted by IDOT in a staged fashion when access to sites and previously unexamined high-priority parcels is secured by McLean County. In coordination with the SHPO, IDOT and FHWA will make a good-faith effort to identify archaeological resources and to evaluate their NRHP eligibility.
- B. Mitigation of Adverse Effects.** For those sites determined eligible for the NRHP, McLean County, IDOT, and FHWA in coordination with the SHPO will attempt to avoid and minimize potential impacts. When impacts cannot

be avoided, data-recovery excavations will be conducted by IDOT. These investigations will follow the generalized data-recovery plans (DRP) for prehistoric and historic era habitation sites listed in Exhibit C.

- C. **Human Remains.** If human remains are discovered during the investigations covered by this MOA, the provisions of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440, 17 IAC 4170) and its rules (the Act), will be followed. 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. If the remains are determined to be Native American, the provisions of the Memorandum of Understanding regarding Tribal Consultation Requirements for the Illinois Federal Transportation Program, effective September 19, 2011, will be followed, and Tribes with an interest in McLean County will be notified.

II. DURATION

This agreement will be null and void if its stipulations are not carried out within five (5) years from the date of its execution. At such time, and prior to work continuing on the undertaking, the FHWA shall either (a) execute an agreement pursuant to 36 C.F.R. § 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 C.F.R. § 800.7. Prior to such time, the FHWA may consult with the other signatories to reconsider the terms of the agreement and amend it in accordance with Stipulation 6 below. The FHWA shall notify the signatories as to the course of action it will pursue.

III. POST REVIEW DISCOVERIES

If potential historic, architectural or archaeological properties are discovered or unanticipated effects on historic, architectural or archaeological properties found, the FHWA shall make reasonable efforts to avoid, minimize, or mitigate adverse effects to such properties and follow the requirements of 36 CFR Section 800.13(b).

IV. 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 any timely advice or comments regarding the dispute from the signatories and 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.

V. 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.

VI. TERMINATION

If any signatory to this MOA determines that its terms C 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, SHPO, IDOT, and McLean County 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.

[Signature Pages Follow]

**MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
ILLINOIS DEPARTMENT OF TRANSPORTATION,
MCLEAN COUNTY,
AND ILLINOIS STATE HISTORIC PRESERVATION OFFICER,
REGARDING THE
EASTSIDE HIGHWAY, MCLEAN COUNTY, ILLINOIS**

Signatory

FEDERAL HIGHWAY ADMINISTRATION

Signature:  Date: April 16, 2020

Name: Janis P. Piland

Title: Environmental Engineer

MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
ILLINOIS DEPARTMENT OF TRANSPORTATION, MCLEAN
COUNTY,
AND ILLINOIS STATE HISTORIC PRESERVATION OFFICER,
REGARDING THE
EASTSIDE HIGHWAY, MCLEAN COUNTY, ILLINOIS

Signatory

ILLINOIS STATE HISTORIC PRESERVATION OFFICER

By: Colleen Callahan Date: 3-30-2020

Name: Colleen Callahan

Title: Director, Illinois Department of Natural Resources and State Historic
Preservation Officer

APPROVED FOR EXECUTION

Date: 3/30/2020 Legal

Counsel: Kenee Snow

**MEMORANDUM OF AGREEMENT
AMONG
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ILLINOIS DEPARTMENT OF TRANSPORTATION,
MCLEAN COUNTY,
AND ILLINOIS STATE HISTORIC PRESERVATION OFFICER,
REGARDING THE
EASTSIDE HIGHWAY, MCLEAN COUNTY, ILLINOIS**

Invited Signatory

ILLINOIS DEPARTMENT OF TRANSPORTATION

Signature: *Paul A. James* Date: 04/14/2020

Name: *Kensil A. Garnett*

Title: *Region 3 Engineer*

**MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
ILLINOIS DEPARTMENT OF TRANSPORTATION,
MCLEAN COUNTY,
AND ILLINOIS STATE HISTORIC PRESERVATION OFFICER,
REGARDING THE
EASTSIDE HIGHWAY, MCLEAN COUNTY, ILLINOIS**

Invited Signatory

MCLEAN COUNTY

Signature: *Jerry Stokes* Date: *APRIL 14, 2020*

Name: *JERRY STOKES*

Title: *COUNTY ENGINEER*

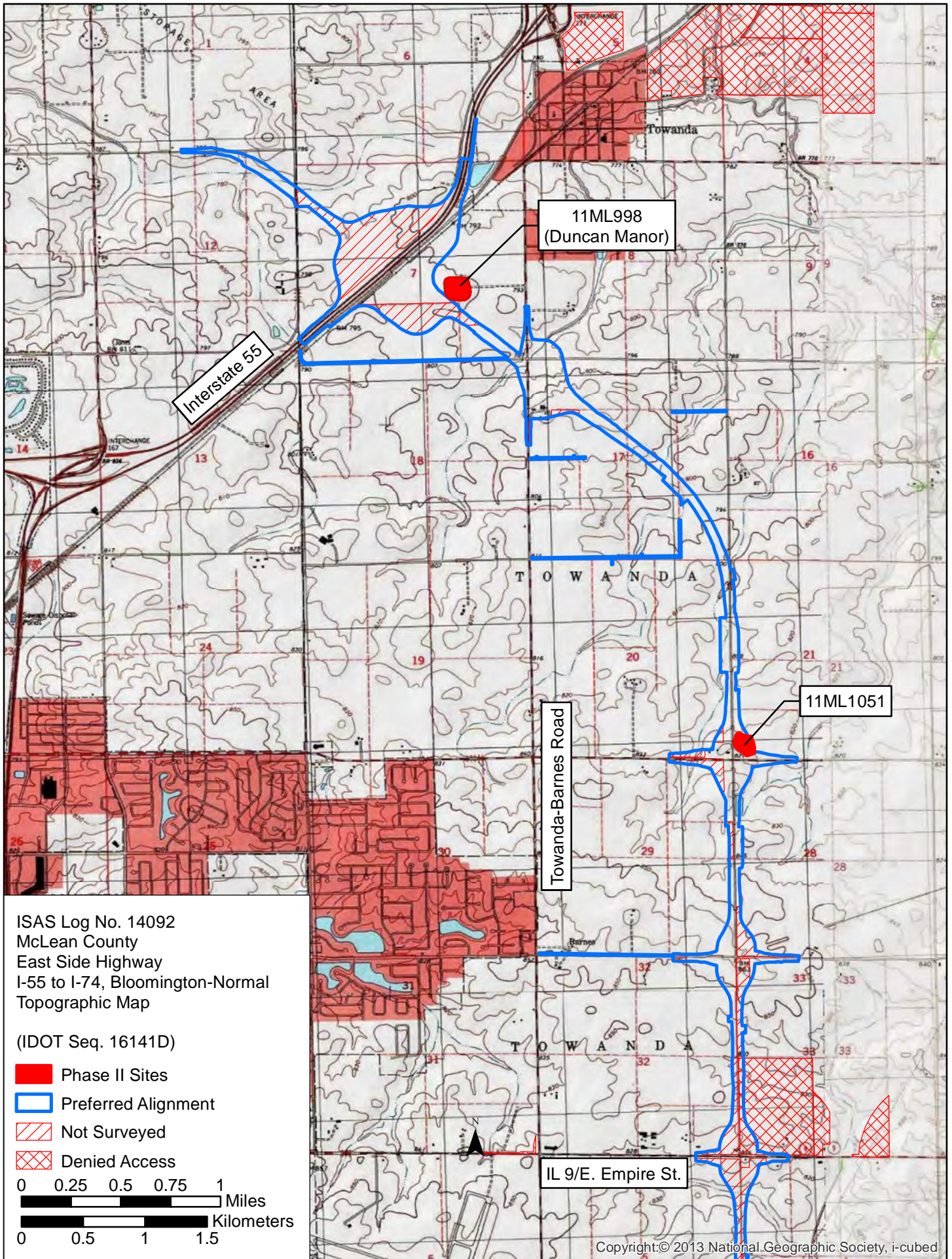





Figure A: Northern Portion


ISAS Log No. 14092
McLean County
East Side Highway
I-55 to I-74, Bloomington-Normal
Topographic Map

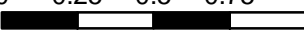
(IDOT Seq. 16141D)

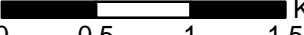
 Phase II Sites

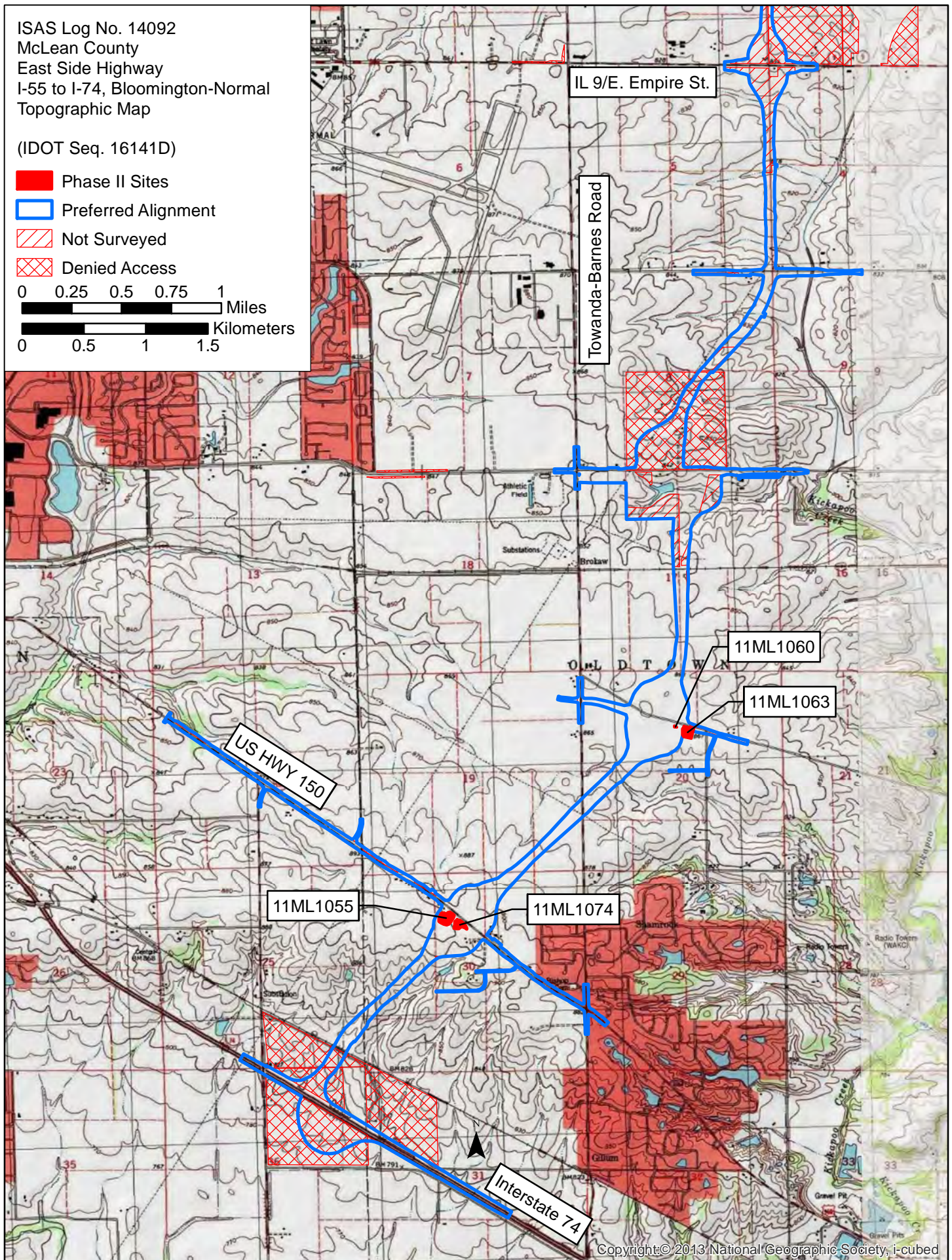
 Preferred Alignment

 Not Surveyed

 Denied Access

0 0.25 0.5 0.75 1
 Miles

0 0.5 1 1.5
 Kilometers



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Figure B: Southern Portion



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

RECEIVED
JUN - 8 2016

Preservation Services

June 8, 2016

McLean County
East Side Highway, Preferred Alternative
Bloomington
Section: 10-00183-01-ES
IDOT Sequence #16141D
IHPA Log #064122214

IHPA REVIEW

H/A _____
AC _____
AR _____
File _____

FEDERAL - Section 106 Project

CONDITIONAL NO ADVERSE EFFECT

Dr. Rachel Leibowitz
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701

Dear Dr. Leibowitz:

In ongoing coordination with your office, the Federal Highway Administration (FHWA), and McLean County, please find attached correspondence from McLean County that documents their efforts to engage the McLean County Historical Society and the current owners of Duncan Manor as consulting parties. Neither the owners nor the Historical Society responded to repeated attempts to solicit their comments regarding the project in general and visual impacts to Duncan Manor in particular.

The FHWA and IDOT, in consultation with your office, have determined that with the installation of vegetative screening (see attached) the undertaking will not adversely affect the qualities that made Duncan Manor eligible for listing on the National Register of Historic Places. At this time, we are requesting State Historic Preservation Officer (SHPO) concurrence with our finding that the undertaking will not cause an adverse effect to Duncan Manor provided that the SHPO reviews and approves the vegetative screening plan.

In accordance with 36 CFR Part 800.3(c)(4), the FHWA will proceed to the next step in the Section 106 process if we do not receive a response from your office within 30 days.

Sincerely,

Brad H. Koldehoff
Cultural Resources Unit
Bureau of Design & Environment

CONCUR

By: R. Leibowitz SHPO
Deputy State Historic Preservation Officer

Date: 6/16/16



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

McLean County
East Side Highway, Preferred Alternative
Bloomington, Normal
Section: 10-00183-01-ES
IDOT Sequence #16141D
ISAS Log #14092
IHPA Log #064122214

June 29, 2016

Federal - Section 106 Project

Archaeological Properties – Adverse Effect

Dr. Rachel Leibowitz
Deputy State Historic Preservation Officer
1 Old State Capitol
Illinois Historic Preservation Agency
Springfield, Illinois 62701

Dear Dr. Leibowitz:

In continuing consultation with your office, the Federal Highway Administration (FHWA), and McLean County please find attached copies the Archaeological Survey Report completed by Illinois State Archaeological Survey (ISAS) personnel concerning archaeological resources within the undertaking's Area of Potential Effect (APE). The APE encompasses the Preferred Alternative, which covers 1,199 acres.

Potential impacts to architectural resources have been coordinated with your office, resulting in a Conditional No Adverse Effect finding for Duncan Manor. This property, which is listed on the National Register of Historic Places (NRHP), falls outside the APE, but the undertaking will affect its view shed (see attached concur letter dated June 8, 2016).

The archaeological survey resulted in the identification of 54 sites. However, because certain landowners within the APE denied access to survey crews, further survey work is required. This additional survey work will be conducted when access has been secured. Accordingly, IDOT in coordination with FHWA will implement a phased (or staged) approach to the identification and NRHP evaluation of archaeological resources within the APE, in accordance with 36 CFR Part 800.4(b)(2).

Five sites within the APE warrant NRHP consideration under Criterion D: 11ML1051, 1055, 1060, 1063, and 1074. Based on current plans, potential impacts to these five sites cannot be avoided (see attached letter from McLean County dated February 26, 2016). The sites do not warrant preservation in place, but additional efforts will be made to avoid and minimized impacts as project design plans are finalized. Yet, based on current project design information, it is

likely all or most of these five sites will be at least partially impacted, resulting in an Adverse Effect.

Therefore, a Memorandum of Agreement will be developed stipulating, that when access is secured, IDOT will ensure: (1) additional survey work will be conducted, targeting high-probability areas, (2) test excavations will be conducted to evaluate NRHP eligibility, and (3) when impacts to NRHP-eligible sites cannot be avoided, the sites will be subject to data-recovery excavations prior to the initiation of construction activities.

In coordination with the FHWA, IDOT requests the concurrence of the State Historic Preservation Officer (SHPO) in our Determination of Eligibility and Adverse Effect findings described above, in addition to our plan to stage the work required to complete the Section 106 process.

Please provide your written concurrence with the above findings within 30-days. In accordance with 36 CFR Part 800.3(c)(4), the FHWA will proceed to the next step in the Section 106 process if we do not receive a response from your office within 30 days.

Sincerely,

A handwritten signature in black ink, appearing to read "Brad Koldehoff". The signature is fluid and cursive, with a long horizontal stroke at the end.

Brad H. Koldehoff
Cultural Resources Unit
Bureau of Design & Environment



HIGHWAY DEPARTMENT
Jerry Stokes, Acting County Engineer
102 S. Towanda Barnes Road
Bloomington, IL 61705
(309) 663-9445 FAX (309) 662-8038
highway@mcleancountyil.gov

February 26, 2016

Brad H. Koldehoff, RPA
Cultural Resources Unit
Bureau of Design and Environment
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764

RE: East Side Highway Environmental Assessment
Section 106 Archaeological Letter

Dear Mr. Koldehoff:

FHWA and IDOT, in consultation with the SHPO, have identified five archaeological sites that warrant National Register of Historic Places (NRHP) consideration under Criterion D because they may yield important information about the prehistory and history of the region: 11ML1051, 11ML1055, 11ML1060, 11ML1063, and 11ML1074.

Impacts to these five archaeological sites cannot be avoided. These sites cannot be avoided because they would be impacted for interchanges at US 150 (11ML1055 and 11ML1074), Cheney's Grove Road (11ML1060 and 11ML1063), and Fort Jesse Road (11ML1051). Moving the interchanges would impact the geometrics/connections the interchanges have with the roads they are connecting to and effect the location of the interchanges both upstream and downstream of any modified interchange locations. In addition, moving the interchange at US 150 to the east would impact wetlands, a stream, and wellhead protection areas while moving it west would impact several additional residences on the south side of US 150. Moving the interchange to the east at Cheney's Grove Road would impact a subdivision of residences while moving it west would impact Towanda Barnes Road a major north south road. Moving the interchange east at Fort Jesse Road would impact streams while moving it west would impact a stream and a wellhead protection area.

Test excavations/archaeological surveys will be required to evaluate the five sites NRHP eligibility after the Environmental Assessment (Phase 1) but prior to construction (Phase III). A Memorandum of Agreement (MOA) will be developed committing to further archaeological surveys.

Site 11ML998 (Duncan Manor) which is an archaeological resource, in addition to an architectural resource, will be avoided by the project.

We appreciate your input in our decision making process as we work to preserve our historic resources and heritage while accommodating the needs of Illinois' citizens today and in the future.

Sincerely,

Jerry Stokes, P.E.
McLean County Engineer (Acting)

EXHIBIT C

PART A: STANDARD DATA RECOVERY PLAN FOR PREHISTORIC SITES

Introduction

The Illinois State Archaeological Survey (ISAS), 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 ISAS techniques, which are outlined in ISAS Field Manual 2005: Standard ISAS 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 ISAS 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 Mississippian 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 ISAS archaeologists who meet the Secretary of the Interior's professional qualification standards (48 FR 447838-9). In designing and carrying out the work, ISAS staff will also take into account the Advisory Council on Historic Preservation's publication on the "Treatment of Archaeological Properties."

Standard ISAS methods (as outlined in the ISAS 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 ISAS excavation techniques described in the ISAS 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, 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 and screened with ¼-inch hardware cloth as appropriate. 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 ISAS personnel at the appropriate Survey Division office. Botanical, zoological and human remains

will be analyzed by specialists at ISAS'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 ISAS 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 ISAS in accordance with federal standards as outlined in 36 CFR Part 79

PART B: STANDARD DATA RECOVERY PLAN FOR HISTORIC SITES

Introduction

The Illinois State Archaeological Survey (ISAS), 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 ISAS techniques, which are outlined in *ISAS Field Manual 2005: Standard ISAS 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 ISAS 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 ISAS archaeologists who meet the Secretary of the Interior's professional qualifications standards (48-FR-447838-9). In designing and carrying out the work, ISAS staff will also take into account the Advisory Council on Historic Preservation's publication on the "Treatment of Archeological Properties."

Standard ISAS methods (as outlined in the *ISAS Field Manual 2005*) will be employed in all aspects of the data recovery. 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 19th 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 ISAS 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 ISAS excavation manual (ISAS 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 ISAS personnel at the appropriate Survey Division office, following standard ISAS procedures (ISAS 2005). Botanical, zoological, and historical materials will then be analyzed by ISAS 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 ISAS 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 ISAS in accordance with federal standards as outlined in 36 CFR, Part 79.