

Board of Public Works and Safety

Agenda Item

Cover Sheet

MEETING DATE: December 17, 2024

- Consent Agenda Item
- New Item for Discussion
- Previously Discussed Item
- Miscellaneous

ITEM #: 11

INITIATED BY: Andrew Rodewald

- Information Attached
- Bring Paperwork from Previous Meeting
- Verbal
- No Paperwork at Time of Packets



TO: NOBLESVILLE BOARD OF PUBLIC WORKS AND SAFETY
FROM: ANDREW RODEWALD, PROJECT MANAGER, ENGINEERING
SUBJECT: SUPPLEMENTAL TO SERVICES AGREEMENT WITH
USI CONSULTANTS FOR BODEN ROAD – SEGMENT ONE DESIGN (EN-338-10)
DATE: DECEMBER 17, 2024

The City entered into agreement with USI Consultants for preliminary design of the Boden Road corridor, from Greenfield Avenue to SR 38, in late 2020. The intent was to establish roadway and storm sewer layout in preparation for future development. Since that time, multiple grant applications have been submitted in order to fund various portions of the project. To date, the roundabout at 156th Street has been completed, and funding for a roundabout at 166th Street received through INDOT. Furthermore, INDOT recently completed a roundabout at SR 38. Thus, all intersections along the corridor are programmed.

Another INDOT Rural Call grant application was received in 2023 for the southernmost segment, between Beauty Berry Drive (roughly the Boden entrance to Ruoff Music Center) and 156th Street. We have called this “Segment One.” The final design services agreement with USI was entered into in September 2023. Since that time, preliminary engineering and environmental investigations have been underway. During this environmental process, items were found in a portion of the project disturbance area that necessitates further investigation than was in the original scope of services. This historical evaluation is best to continue during the winter months when crops are not in the fields. Further, this additional time will impact the overall project schedule if it is not handled immediately.

Attached are further details on the initial investigation as well as what services will be required to proceed with the Section 106 environmental process through INDOT.

I recommend the Board of Public Works approve the supplemental professional services agreement with USI Consultants for Boden Road Segment One design (EN-338-10).

In advance, I greatly appreciate your consideration of this request.

AMENDMENT NO. 1 TO SERVICES AGREEMENT

1. Background Data:

- a. Effective Date of Services Agreement: September 26, 2023
- b. City: City of Noblesville, Indiana, a municipal corporation
- c. Contractor: USI Consultants, Inc.
- d. Project: Boden Road Segment One Design (EN-338-10)

2. Nature of Amendment

- Modifications to Payment to Contractor
- ~~Modifications to other terms and conditions of the Agreement~~

3. Description of Modifications

Attachment 1, "Modifications"

City and Contractor hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect.

Signature Page Follows

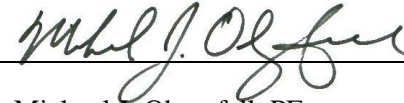
Approved by the Board of Public Works and Safety of the City of Noblesville this _____ day of _____, 2024.

CITY:

CONTRACTOR:

Jack Martin, President

By:



Printed: Michael J. Obergfell, PE

John Ditslear, Member

Title: President

Date Signed:

12/9/2024

Laurie Dyer, Member

Robert J. Elmer, Member

Rick L. Taylor, Member

Attest:

Evelyn L. Lees, Clerk
City of Noblesville, Indiana

Modifications

1. City shall pay Contractor the following additional or modified compensation. Section IV. Compensation and Appendix D, Paragraph A are modified to read as follows:

SECTION IV. COMPENSATION

- 4.1 Contractor proposes to furnish all labor, materials and supplies in accordance with the conditions of this Agreement necessary to complete the work as defined in Section 2.1. Compensation shall not exceed **\$481,700.**

Appendix D, Paragraph 1 is modified as follows:

A. Amount of Payment

1. The CONSULTANT shall receive as payment for the services performed under this Agreement the total fee not to exceed ~~\$404,900~~ **\$481,700** unless a modification of the Agreement is approved in writing by the LOCAL PUBLIC AGENCY.

Appendix D, Paragraph 2 is modified as follows:

2. Environmental Document Components including.....~~\$67,100.00~~—\$143,900.00
 - a. Phase ~~4a~~ **II** Archeology (CRA,Inc.)
 - b. Section 106 (~~MPPA-B~~) (**MPPA-A**) & Noise Analysis (Lochmueller)



October 4, 2024

Ms. Ruth Hook, CPESC, CESSWI
Environmental Manager
USI Consultants, Inc.
8415 E. 56th Street
Indianapolis, IN 46216
rhook@usiconsultants.com

RE: Des. No. 2201638 - Boden Road Corridor
Beauty Berry Lane to 156th Street
City of Noblesville, Hamilton County, Indiana
Loch Group No. 121-2029, Supplemental Scope of Work and Fee Justification (No. 1)

Dear Ruth,

Thank you for this opportunity to work with USI Consultants, Inc. on the above referenced project. Please find our proposal for the supplemental Section 106 services per your request dated July 24, 2024.

PROJECT UNDERSTANDING – The project involves the addition of one travel lane in each direction of Boden Road between Beauty Berry Lane and 156th Street. The total length of the project is approximately 0.6-mile. Additional permanent right-of-way will be required from undisturbed land. For the purposes of the services detailed herein, the assumed survey area extends 80 feet east and west of the centerline for Boden Road for a total width of 160 feet.

Of two previously unrecorded archaeological sites (12H2038 and 12H2039) identified during the Phase Ia survey, Site 12H2039 contained artifacts in apparently undisturbed soils beneath the plow zone. The site cannot be avoided by the project. Therefore, a Phase II National Register of Historic Places evaluation is recommended to better evaluate the extent and integrity of the archaeological deposits at the site.

As confirmed by the INDOT, Cultural Resources Office, the project is ineligible for the MPPA, due to the need for a Phase II evaluation. As such, the project will require full Section 106 Consultation.

These services are outside our current scope of work as defined in our executed subconsultant agreement dated December 20, 2023. The following details the supplemental effort by the CONSULTANT regarding carrying out the full Section 106 consultation process that results in a No Historic Properties Affected (NHPA) effects determination. The environmental services required to develop these services shall be in accordance with the INDOT Cultural Resources Manual (March 2014). The supplemental tasks to be performed shall include the following items. The additional services included as part of this supplemental request are defined below.

ENVIRONMENTAL SERVICES – The CONSULTANT shall carry out the below supplemental environmental analyses defined below. The additional tasks to be performed shall include the following items.

- 1) **Task Management** – The CONSULTANT shall complete the following supporting supplemental tasks for management of the Section 106 consultation process:
 1. *Project Organization/Coordination* – This task includes all file management, project updates, review of project budget, resourcing, and general project management activities associated with the advancement of the required Phase II archaeological investigation and associated NHPA effects finding.
 2. *Meetings (2X)* – Effort under this task provides for attendance by two members of the CONSULTANT at up to two (2) additional virtual meetings. These meetings are anticipated to be internal coordination meetings associated with the planning for the Phase II archaeological investigation and associated NHPA effects finding.
- 2) **Section 106 Consultation (MPPA)** – The CONSULTANT shall complete the following supporting supplemental tasks for additional archaeological investigations required for Section 106 of the National Historic Preservation Act clearance:
 1. *Consulting Party Early Coordination Letter* – The CONSULTANT shall prepare a list of potential consulting parties that will be invited to participate in the Section 106 process. This task includes the preparation of an early coordination letter that will be distributed to consulting parties. The letter shall be submitted to INDOT Cultural Resources Office (CRO) for approval ahead of distribution. One revision to the early coordination letter that addresses comments received by INDOT is anticipated. It is also assumed comments on the early coordination letter will be received from INDOT within 60 days of its submittal.
 2. *Area of Potential Effects (APE) Delineation and Field Inspection* – Upon review of preliminary design information, the CONSULTANT will formulate an APE, which will define the limits of the survey for aboveground resources that are listed or determined eligible for inclusion in the National Register of Historic Places (NRHP). The APE may extend beyond the defined survey limits. A Historian-Section 106 Specialist, who meets the *Secretary of the Interior's Professional Qualification Standards* as per 36 CFR Part 61, shall complete this field inspection documenting properties rated as Contributing, Notable, and Outstanding. As part of this task, it is assumed up to one undocumented aboveground resource, that potentially merits a Contributing rating, is present within the project area and will require documenting. It is assumed the field investigation will be completed in one 10-hour day. Effort for this task also includes mobilization and demobilization.
 3. *Historic Property Short Report (HPSR)* – The CONSULTANT shall prepare an HPSR that documents the results of the Qualified Professional's survey of aboveground resources and makes NRHP-eligibility recommendations. The preparation of an HPSR assumes there are no properties rated as Notable or Outstanding within the probable APE, requiring the development of a historic context by the Qualified Professional. It is assumed that no properties within the probable APE will be considered eligible for the NRHP. The HPR shall be submitted to INDOT CRO for approval, prior to disseminating to the consulting parties. One revision to the early coordination letter that addresses comments

received by INDOT is anticipated. It is also assumed comments will be received from INDOT within 60 days of its submittal.

4. Phase II Testing Proposal – The CONSULTANT shall review the testing plan prepared for Site 12H2039 and coordinate approval through INDOT CRO and SHPO. Effort as part of this task includes one round of revisions based on comments from INDOT CRO. It is also assumed comments will be received from INDOT within 60 days of its submittal.
5. Phase II NRHP Evaluation Report – The CONSULTANT shall review the Phase II NRHP Evaluation Report prepared by Cultural Resource Analysts, Inc. (CRA) and coordinate submittal of the document to INDOT CRO. The Phase II archaeological testing plan and report will be completed by CRA; a separate scope and fee is attached. It is assumed comments will be received from INDOT within 60 days of its submittal. Should it be determined through the completion of the Phase II testing that Site 12H2039 is eligible for the NRHP warranting Phase III data recovery work, then additional services will be required as part of the Section 106 process. These additional services will be considered out of scope, and additional or supplemental services will be required. Effort as part of this task includes one round of revisions based on comments from INDOT CRO.
6. Preliminary Effects Report - No additional effort for this task is included as part of this scope.
7. Effects Finding Preparation – The CONSULTANT shall prepare the appropriate level of effects documentation for the likely preferred alternative associated with the project. It is anticipated the project will result in a finding of “No Historic Properties Affected.” The effects documentation shall be submitted to INDOT CRO for approval prior to distribution to consulting parties. This task assumes one round of revisions to address comments from INDOT CRO. It is also assumed comments will be received from INDOT within 60 days of its submittal. In addition, this task includes the preparation of a public notice advertising the opportunity for the public to comment on the effects finding and will include coordinating the publication of this notice with the appropriate newspaper. Should it be determined that the project will result in a finding of “No Adverse Effect” or “Adverse Effect,” additional services will be required to complete the Section 106 process. These additional services will be considered out of scope, and additional or supplemental services will be required to complete the required coordination with consulting parties and/or the preparation of a Memorandum of Agreement (MOA), if required.

Schedule: It is anticipated that the Section 106 Consultation will be concluded within twelve (12) to fourteen (14) months of receiving Notice to Proceed, or equivalent design detail that includes topographic survey, plan and profile of the proposed roadway, proposed right-of-way and construction limits, typical cross sections.

Fee: The above scope of work has an associated lump sum fee of \$76,800.00 and is good for one year.

Assumptions: The following assumptions are included with this scope of work:

- The designers will provide the CONSULTANT with the topographic survey, plan and profile of the existing and proposed roadway, construction limits, right-of-way (permanent and temporary), and easements.
- No properties or sites eligible for inclusion in the NRHP will be identified.
- No Section 4(f) resources will be impacted by the project.

Archaeology (CRA):

- There will be no issues or delays in obtaining access to the project area, including obtaining landowner permission.
- Digital mapping (AutoCAD or ArcView shapefile format) for the project limits will be provided by the client.
- No more than 4 sq m will be hand excavated.
- No more than 105 sq m will be mechanically excavated.
- CRA will contract an operator and machine for the excavation.
- No more than 1 large feature, 2 small-to-medium feature, and 4 post holes will be excavated during the phase II investigation.
- No more than 1,200 artifacts will be recovered during the hand excavation of units and features.

Thank you for including Lochmueller Group on this project. Please do not hesitate to contact me at 317-334-6858 or rwinebrinner@lochgroup.com should you have any questions.

Sincerely,



Robert Winebrinner
Environmental Project Manager
Lochmueller Group

emc: Dave Henkel, PE, PTOE, Lochmueller Group
Chad Costa, Lochmueller Group
Trevor Wieseke, Lochmueller Group



Supplement #1

Project: Boden Road Corridor - Added Travel Lanes, Beauty Berry Drive to 156th Street in Noblesville
Client: USI Consultants, Inc.
Des. No.: 2201638
RFP No.: N/A
Lochgroup Project No.: 121-2029

TASK DESCRIPTION	STAFF HOURS BY CLASSIFICATION										TOTAL HOURS / TASK	TOTAL DOLLARS / TASK
	Rate Year	Senior Project Manager II	Senior Project Manager I	Environmental Specialist IV	Environmental Specialist II	Environmental Specialist I	Historian/Sec. 106 Specialist IV	Historian/Sec. 106 Specialist II	IT Systems Specialist	Admin Assistant		
DIRECT LABOR												
TASK 1: TASK MANAGEMENT												
SubTask 1.1a: Project Organization & Coordination	2024	1	0	6	0	0	2	1	0	0	10	\$540.37
SubTask 1.1b: Project Organization & Coordination	2025	2	0	12	0	0	4	1	0	0	19	\$1,078.52
SubTask 1.2: Meetings (2x)	2024	1	0	2	0	0	4	2	0	0	9	\$473.41
SUBTOTAL Task 1: Task Management		4	0	20	0	0	10	4	0	0	38	\$2,092.30
TASK 2: SECTION 106 CONSULTATION												
SubTask 2.1: Consulting Party Early Coordination Letter	2024	2	0	0	0	0	8	20	0	0	30	\$1,354.18
SubTask 2.2: APE Delineation & Field Inspection	2024	0	0	6	0	0	4	10	0	0	20	\$918.40
SubTask 2.3: Historic Property Short Report	2024	4	0	6	0	0	18	36	2	1	67	\$3,109.35
SubTask 2.4: Phase II Testing Proposal	2024	0	0	0	0	0	4	2	0	0	6	\$290.40
SubTask 2.5: Phase II NRHP Evaluation Report	2025	0	0	0	0	0	6	2	0	0	8	\$410.76
SubTask 2.6: Preliminary Effects Report	2025	0	0	0	0	0	0	0	0	0	0	\$0.00
SubTask 2.7: Effects Finding Preparation	2025	4	0	8	0	0	24	36	2	1	75	\$3,658.70
SubTask Task 2: Section 106 Consultation		10	0	20	0	0	64	106	4	2	206	\$9,741.79
Total Hours	ECI	14	0	40	0	0	74	110	4	2	244	\$11,834.09
2023 Hourly Rate		\$74.33	\$64.99	\$51.25	\$35.40	\$28.32	\$51.44	\$37.41	\$50.52	\$25.67		
2024 Hourly Rate	3.5%	\$76.93	\$67.26	\$53.04	\$36.64	\$29.31	\$53.24	\$38.72	\$52.29	\$26.57		
2025 Hourly Rate	3.5%	\$79.62	\$69.61	\$54.90	\$37.92	\$30.34	\$55.10	\$40.08	\$54.12	\$27.50		
2026 Hourly Rate	3.5%	\$82.41	\$72.05	\$56.82	\$39.25	\$31.40	\$57.03	\$41.48	\$56.01	\$28.46		
Total Direct Labor Cost												\$11,834.09
Overhead @ 186.80%												\$22,106.08
Labor + Overhead												\$33,940.17
Profit @ 10.2%												\$3,461.90
FCCM @ 0.18%												\$21.30
Total Labor Cost												\$37,423.37
DIRECT EXPENSES												
	No.	Unit	No.	Unit	Rate							
Mileage (Indy to Project Site)	1	Trips x	50	Mi./Trip x	\$0.49							\$24.50
Mileage (Evansville to Project Site)	0	Trips x	0	Mi./Trip x	\$0.49							\$0.00
Lodging		Rooms x		Nights x	\$110.00							\$0.00
Per Diem		Staff x		Days x	\$41.00							\$0.00
Printing & Postage												\$150.00
SUBCONSULTANT FEES												
Phase II NRHP Evaluation (CRA)												\$39,195.00
Total Direct Expense Cost and Subconsultant Fees												\$39,369.50
TOTAL FEE:												\$76,800.00

Proposal for a Phase II National Register Of Historic Places Evaluation at Site 12H2039 in Hamilton County, Indiana

Robert Winebrinner
Lochmueller Group
RWinebrinner@lochgroup.com

Project Identification

Boden Road Added Travel Lane (Des 2201638)

Project Background

In May 2024, Cultural Resource Analysts, Inc., (CRA) personnel conducted a phase Ia archaeological reconnaissance survey for a proposed added travel lane project in Hamilton County, Indiana. The area surveyed for the proposed project included approximately 5.16 ha (12.80 acres) on both sides of Boden Road from Beauty Berry Lane to 156th Street in the City of Noblesville. Two previously unrecorded archaeological sites (12H2038 and 12H2039) were identified during the survey. Sites 12H2038 and 12H2039 are both mid-nineteenth- through early twentieth-centuries historic artifact scatters associated with non-extant structures. At Site 12H2039, artifacts were found in apparently undisturbed soils beneath the plow zone within a portion of Site 12H2039, which suggests the better potential for intact archaeological deposits to be found at the site. The site cannot be avoided by the project. Therefore, a phase II National Register of Historic Places evaluation is recommended to better evaluate the extent and integrity of the archaeological deposits at the site.

Scope of Services

This document provides a recommended work plan to evaluate the NRHP eligibility of Site 12H2039. This work plan is considered preliminary until it is approved by the Indiana Division of Historic Preservation and Archaeology (DHPA). All archaeological investigations will be conducted following the guidance provided *Draft Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites* issued by the DHPA. Qualified professional archaeologists on staff at CRA will supervise all aspects of projects under this plan. Specifically, Andrew Martin, RPA and/or Lisa Kelley, RPA will act as the principal investigators for this project.

Site 12H2039

Site 12H2039 is in a plowed agricultural field east of Boden Road, approximately 230 m north of its intersection with Klipsch Music Center Road. Within the survey area for the proposed project, the site covers 1,188 sq m. The historic component dates between the mid-nineteenth and early twentieth centuries based on artifact analysis and mapped data, which shows a structure on site from 1866 through 1909. There were 320 artifacts recovered from the ground surface and 12 shovel tests. The bulk of surface artifacts were recovered from the east half of the site, though the west half of the site had a concentration of artifacts that were buried below the plow zone in a Zone II. Zone II in this area also had a much higher density of architectural material. While the eastern half of the site had more domestic material, it appears to be limited to the plow zone. The sub-plow zone deposit in the western half of the site suggests that at least that portion of the site has not been significantly impacted by plowing and is relatively undisturbed. The distribution of various artifact types in distinct areas of the site (e.g., domestic material concentrated in the east and architectural material in the west) also suggests spatial integrity that may be related to as-yet unidentified archaeological features.

Field Methods

The phase II investigation of Site 12H2039 will involve a combination of mechanical removal of the plow zone, as well as the hand excavation of test units and features (if present). Fieldwork will begin with the excavation of hand excavated 0.5-x-0.5 m or 1.0-x-1.0 m test units to assess the stratigraphic context of the site and target high probability areas, particularly Zone II in the west half of the site. Specifically, six 0.5-x-0.5 m units will be initially spaced throughout the area of the site with the buried horizon. Those units having an abundance of artifacts or presence of potential features will be expanded into 0.5-x-1.0 or 1.0-x-1.0 m units. Test units also may be used to investigate features such as builder's trenches, foundations, and privies. Up to 4 sq m of test unit excavation will be conducted. Based on the phase Ia survey results, it is anticipated that most of these units will be excavated to between 55 and 60 cm below ground surface (bgs).

Following the excavation of the test units, a backhoe/trackerhoe with a smooth edge bucket will be used to mechanically remove the plow zone. To sample 10 percent of the site, approximately 105 sq m will be mechanically removed at Site 12H2039. The stripped surface and cut wall of any mechanical excavations will be inspected for any evidence of features or buried midden deposits. The backdirt will also be examined for temporally diagnostic materials. A combination of small strip blocks and trenches will be mechanically excavated in areas determined to have the highest probability for features based on the results of test unit excavation and phase Ia results. However, limited stripping may occur in other low to moderate probability areas to fully assess the spatial distribution at the site. It is anticipated that no more than four postholes, one large feature (cellar, cistern, or privy), and two small-to-medium features (such as trash pits or yard depressions) will be excavated during this part of the investigation. Additional field and laboratory methods are discussed in more detail below.

Test Units

Hand-excavated test units will provide information on stratigraphy, depth of cultural deposits, range of material culture, and feature potential. The plow zone will be removed in one natural level. Unit excavation will then proceed in 10-cm arbitrary levels within natural layers using shovels and trowels. All soil from these levels will be dry screened through 0.64 cm (0.25 in) hardware mesh in search of cultural materials. A standardized unit level form will be utilized which will record metric attributes of the unit, location data, artifacts recovered, and samples extracted. A profile of two walls (one E-W and one N-S) in each unit will be drawn to scale, and representative profiles will be photographed. The southwest corner of each excavation unit will be identified by grid coordinates (i.e., N1000/E1000). Furthermore, the surface and base elevations of each unit will be recorded relative to the datum. Typically, a 2-person crew can complete 4-unit levels in one 10-hour day.

Feature Excavation

Subsurface features will be fully excavated by hand except for large features such as wells, cisterns, and cellars, which will be sampled by test units or excavated using a combination of mechanical and hand excavation methods as described above. If large features are encountered, there will be mechanical removal of the edge of the feature (generally one-fourth to one-third of the feature, effectively "nicking" the side) via trenching to expose the profile. A 1-x-1 m test unit would be utilized to sample features such as a cistern or a cellar along the edge of the cut after the feature profile has been recorded. In the case of privies, after the edge has been removed with the backhoe and the profile recorded, the feature will be excavated in arbitrary within natural levels. It is the intent to fully excavate large features, unless prohibited by safety reasons. If a deep feature cannot be fully excavated, they will be bucket augered to ascertain depth (if possible). 10-L flotation samples will be taken from historic primary deposits, such as night soil zones in a privy and/or from the base of a cellar. No more than three flotation samples for the historic features are anticipated at this stage of

work. It is possible that no features are found. But if they are found, all other features and postholes beyond what is outlined above will be covered and left unexcavated. However, they will be photographed, and sub-meter global positioning system unit will be used to record their locations within the site. Every attempt to fully excavate privies will be made. Like wells, cisterns may be very deep, prohibiting safe excavation of these features at certain depths. This also can apply to privies and cellars, depending on how deeply they were constructed and how deeply buried they are. In the even that features such as privies, cellars, and cisterns cannot be excavated to their deepest extents, the bases of the features will be bucket augered to ascertain their depths and sample the deposits for cultural materials.

All features encountered during hand excavation or mechanical stripping will be mapped relative to the site datum. Features will then be measured, sketched, and photographed. Small to medium features will be bisected, and one-half of each feature will be excavated by zone to be exposed along their longest axes. These profiles will be sketched, photographed, and then the other half of each feature will be excavated. If the first half of each feature indicates a highly disturbed context, is sterile, or is not cultural, the second half will not be excavated. Features will be excavated in natural levels if those levels are evident in the visual stratigraphy. If the feature fill is homogenous to the eye, excavation of the feature will proceed in 10 cm levels.

Forms will be completed for each feature documented on the site, as well as level and/or zone forms if the feature is excavated. The soils from each feature excavation will be dry screened through 0.25-inch mesh hardware cloth. The results of each feature excavation will be documented on standard CRA forms and plotted on a base map. Individual forms will be completed for each excavated zone. After excavation of each feature is complete, wall profiles and plan views will be drawn and photographed, and a summary form will be completed.

If additional feature types (i.e., foundations, post holes, piers) are found other than the anticipated amount detailed above for each site, the field director will select the features for excavation with best potential for intact deposits, as well as the selection of deposits that best represent the temporal and spatial changes that occurred at the site.

Mechanical Stripping

As mentioned above, a backhoe with a smooth-edge bucket will be used to remove the plow zone from portions of the site, and the cut will be inspected for evidence of intact subsurface archaeological deposits, including features or midden. The back dirt will also be examined for temporally diagnostic materials. Stripping will be closely monitored by a qualified professional archaeologist and at the sign of any potential features, stripping will stop, and features will be exposed by hand. On average, 100–120 sq m will be stripped per 8-hr workday.

Horizontal and Vertical Control

Prior to the start of excavation work at the site, at least one permanent datum and two secondary datums will be established and their positions recorded by a submeter GPS. The sub-meter GPS will be used in conjunction with a geographic integrated system (GIS) (ArcGIS online) and the Field Maps application to establish system to provide a reference for digital horizontal and vertical positions. All features and test units will be mapped with the GPS as well as sketched by hand on a site schematic that will have an arbitrary N1000/E1000 grid reference. The horizontal location of strip blocks, excavation units, and cultural features will be referenced by their northing and easting position in relation to the site grid. The vertical location of all unit corners, excavation levels, and features will be referenced to an arbitrary elevation assigned to the ground surface at the site datum.

Artifact Sampling

No additional pedestrian survey or surface collection is recommended at Site 12H2039 as the spatial distribution and boundaries of the site have been defined by the phase Ia survey. However, and as mentioned above, any historic or precontact diagnostic artifacts seen on the surface or in the back dirt during the phase II work will be collected.

The phase Ia survey recovered an average of 15 artifacts per shovel tests for a total of 181 artifacts from 12 shovel tests. Therefore, we expect to recover a moderate assemblage of historic artifacts (possibly up to 1,200) during the phase II work from the test units. All artifacts from test units and features will be collected, except for certain architectural items (e.g., brick, concrete, mortar, ceramic sewer pipe), which will be counted, weighed, and discarded. The principal investigator will look at all architectural material prior to discard to identify any diagnostic markers such as a paver brick maker's mark or evidence of burning. Coal, slag, and charcoal also will be discarded after counting and weighing.

Daily Record Check

Standardized field records will be used to document fully the techniques, methods, observations, and results of this fieldwork. This includes maintaining daily notes as well as photographic, test unit, feature, bag, and flotation logs. Each artifact bag containing artifacts, soil, or other samples will be checked at the end of each day to insure that these are properly labeled and entered into the bag inventory.

Laboratory Methods

All cultural material recovered during the phase II fieldwork will be transported to CRAs Evansville office for processing and analysis. Possible specialized analysis that may be required includes the examination of faunal and ethnobotanical remains from features at the site.

Initial processing of recovered artifacts involves washing all artifacts, sorting the artifacts into the major material classes (i.e., ceramic, faunal, historic, and lithic) for further analysis, and assigning catalog numbers. In general, catalog numbers consist of the site number and a unique number for each provenience lot or diagnostic specimen. If the landowner would like to retain the artifacts, they will be returned to them after analysis and reporting has been completed. If not, all field notes, records, and site photographs will be curated with the Applied Archaeology Laboratories at Ball State University according to their outlined standards.

Archival Research

Additional archival research will be conducted to establish a more complete historical context for the site. A combination of primary sources and other documents will be consulted, including, but not limited to, historic maps, federal population census data, historic newspapers, deed and property transfer records, probate records, local library collections, and local histories. These resources may provide valuable information concerning the identities of the site's owners, site function, and the age of any occupations.

Deliverables

An email summary of the work will be submitted to the client within 1 week of the completion of the fieldwork. A report of the phase II investigation will be prepared according to INDOT and DHPA guidelines detailing the project background, methodology, research design, results, analyses, and conclusions of the work. A new site form documenting the reinvestigation of Site 12H2039 will be submitted to DHPA through SHAARD. A digital copy of the report will be provided to INDOT for review, after which the report will be submitted to DHPA and uploaded to SHAARD for review.

Schedule

Assuming there are no delays in obtaining approval of the archaeology plan, and weather conditions allow, CRA anticipates the phase II investigation(s) at Site 12H2039 to proceed within the following timeframes:

- We anticipate the archaeology plan will be reviewed and approved by INDOT within 30 days of submittal and DHPA within 30 days of submittal.
- Fieldwork and archival research for the phase II investigation will be completed within 25 days of the approved archaeology plan.
- The final report of the investigation will be submitted within 4–6 months of completion of fieldwork.
- We anticipate the archaeological report will be reviewed and approved by INDOT within 60 days of submittal and DHPA within 30 days of submittal.

Cost Proposal

The phase II NRHP evaluation of Site 12H2039 can be completed for a lump sum of **39,195**. This amount assumes that INDOT will agree with the level of effort proposed to evaluate the site.

Assumptions

- There will be no issues or delays in obtaining access to the project area, including obtaining landowner permission.
- Digital mapping (AutoCAD or ArcView shapefile format) for the project limits will be provided by the client.
- No more than 4 sq m will be hand excavated.
- No more than 105 sq m will be mechanically excavated.
- CRA will contract an operator and machine for the excavation.
- No more than 1 large feature, 2 small-to-medium feature, and 4 post holes will be excavated during the phase II investigation.
- No more than 1,200 artifacts will be recovered during the hand excavation of units and features.

FOR Cultural Resource Analysts:

Accepted by:

Signed: *Lisa Kelley*
Lisa J. Kelley, RPA
Principal Investigator – Indiana

Signed: _____
Name: