

Ohio Archaeological Inventory Form Instruction Manual



OHIO HISTORICAL SOCIETY
Ohio Historic Preservation Office



OHIO HISTORICAL SOCIETY

With the support of the
U.S. Department of the Interior's
Historic Preservation Fund
and the
Ohio Historic Preservation Office
of the Ohio Historical Society

Copyright © 2007 Ohio Historical Society, Inc. All rights reserved.

The publication of these materials has been made possible in part by a grant from the U.S. Department of the Interior's National Park Service, administered by the Ohio Historic Preservation Office. However, its contents do not necessarily reflect the opinions of the Department of the Interior, nor does the mention of trade names or commercial products imply their endorsement.

The Ohio Historic Preservation Office receives federal assistance from the U.S. Department of the Interior's Historic Preservation Fund. U.S. Department of the Interior regulations prohibit unlawful discrimination in departmentally federally assisted programs on the basis of race, color, national origin, age or disability. Any person who believes he or she has been discriminated against in any program, activity, or facility operated by a recipient of Federal assistance should write to: Office of Equal Opportunity, U.S. Department of the Interior, National Park Service, 1849 C Street N.W., Washington D.C. 20240.

Ohio Historic Preservation Office

567 East Hudson Street
Columbus, Ohio 43211-1030
614/ 298-2000 Fax 614/ 298-2037

Visit us at www.ohiohistory.org

Table of Contents

Introduction and General Instructions	1
Definition of Archaeological Resource (Site)	1
Submitting an Ohio Archaeological Inventory Form	2
 Itemized Instructions	 3
A. Identification	3
1. Type of Form	3
2. County	4
3. Trinomial Site Number	4
4. Site Name(s)	4
5. Project Site Number	5
6. Other State Site Number	5
7. Source	5
B. Location	5
1. UTM	5
2. Longitude/Latitude	7
3. Township/Range/Section/Township Name	7
4. Quadrangle Name	8
5. Quadrangle Date	8
6. Confident of Site Location	8
C. Ownership	8
1. Name(s)/Address/Phone	8
2. Tenant	8
3. Ownership Status	8
D. Temporal Affiliations	9
1. Affiliations Present	9
2. Prehistoric Temporal Period(s)	9
3. Number of Prehistoric Temporal Period(s)	9
4. Basis for Assignment of Prehistoric Temporal Period(s)	9
5. Prehistoric Cultural Components	9
6. How Prehistoric Period(s)/Component(s) Determined	12
7. Categories of Prehistoric Materials Present	13
8. Specific Prehistoric Materials Collected	13
9. Historic Affiliation	13
10. Historic Temporal Period(s)	13
11. Number of Historic Temporal Period(s)	14
12. Basis for Assignment of Historic Temporal Period(s)	14
13. How Historic Temporal Period(s) Determined	14
14. Functional Categories of Historic Materials Present	14
15. Specific Historic Materials Collected	17
16. Materials Observed but not Collected	17
17. Affiliated OHI Number	17
E. Physical Description	18
1. Archaeological Setting	18
2. Prehistoric Site Type	18
3. Historic Site Type	20
4. Bases for Site Type Assignment	21
5. Site Condition	22
6. Dominant Agent(s) of Disturbance	22
7. Nature of Disturbance	23

E. Physical Description (cont'd.)	23
8. Current Dominant Land Use	31
9. Land Use History	31
10. Site Elevation	31
11. Physiographic Setting	32
12. Glacial Geomorphology	33
13. Regional Setting	34
14. Local Setting	36
15. Soils	37
16. Downslope Direction	37
17. Slope Gradient	38
18. Drainage System	43
19. Closest Water Source	44
20. Horizontal Distance to Water	45
21. Elevation above Closest Water	45
F. Reporting Information	45
I. Investigation Type	46
2. Surface Collection Strategy	47
3. Collection Method and Percentage	47
4. Surface Visibility	47
5. Surface Conditions	47
6. Site Area	47
7. Basis for Determining Site Area	47
8. Confidence of Site Boundaries	47
9. Percentage Excavated	48
10. Name of Form Preparer	48
11. Institution	48
12. Date of Form	48
13. Field Date	48
14. Time at Site	48
15. Weather Conditions	49
16. Local Informants	49
17. Artifact Repository(ies)	49
18. Private Collections	49
19. Photographs	49
20. Photograph Repository	49
21. National Register Status	49
22. State Registry Status	50
23. Significance Discussion	50
24. Special Status	50
G. References	50
H. Radiometric Dates	50
I. Description of Site	51
1. Physical Description and Setting	51
2. Relationship to other Sites in Area	51
J. Continuation Section	51
K. Sketch Map, Project Map, USGS Map	52
Appendix A: Isolated Find Forms	
Appendix B: County Codes	
Appendix C: Township & County Map	
Appendix D: Physiographic Sections Map	
Appendix E: Glacial Deposits Map	

INSTRUCTION MANUAL FOR COMPLETING THE OHIO ARCHAEOLOGICAL INVENTORY FORM

INTRODUCTION

The Ohio Archaeological Inventory (OAI) form is the result of a cooperative effort between the Ohio Historic Preservation Office (OHPO) of the Ohio Historical Society and the Ohio Archaeological Council (OAC). The current form has been in use since August 1985, when it replaced the inventory form that had been in use between 1975 and July 1985. The decision to revise the OAI form, often the only record of an archaeological resource's (site's) existence, was based on the need to develop a comprehensive, standardized inventory that could be computerized and used for planning, management, and research purposes. The previous OAI form was not adequate to meet the diverse needs of its many users, including local, state, and federal agency staff, cultural resource management consultants, environmental consultants, academic researchers, and other interested parties. At first glance, the OAI may appear to be forbidding in its length. However, the OAI form was designed to be both comprehensive and "user-friendly." For example, much of the form's length can be attributed to the "multiple choice" approach that is used in many sections of the form. These sections simply require a check mark in the appropriate blank. The OAI form was designed to accommodate the recordation of both prehistoric and historic sites on the same form, which also increased the length of the form. Many times, however, only the section dealing with one of these temporal affiliations will need to be completed. Please refer to this INSTRUCTION MANUAL for directions on the proper completion of all sections of the OAI form. If you do not understand something in the INSTRUCTION MANUAL, please contact the Archaeology Survey Manager at the OHPO for clarification.

GENERAL INSTRUCTIONS

DEFINITION OF ARCHAEOLOGICAL RESOURCE (SITE)

The Ohio Archaeological Inventory (OAI) form is to be used to record archaeological resources, as defined in 36 CFR 296.3(a), *except that the 100 year minimal age criterion is waived.*

The regulations in 36 CFR 296 implement provisions of the Archaeological Resources Protection Act of 1979, as amended (16 U.S.C. 470aa-mm) by establishing uniform definitions, standards, and procedures. Accordingly, an **archaeological resource** means any material remains of past human life or activities which are of archaeological interest. **Of archaeological interest** means that the object, site, or other material remains are capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through the application of scholarly techniques such as controlled observation, contextual measurement, controlled collection, analysis, interpretation, and explanation.

Material remains means the physical evidence of human habitation, occupation, use, or activity, *including* the site, location, or context in which such evidence is found. Examples of material remains include, but are not limited to, the following:

- a.) Surface or subsurface structures, shelters, facilities, or features (including, but not limited to, domestic structures, storage structures, cooking structures, ceremonial structures, artificial mounds, earthworks, fortifications, canals, reservoirs, horticultural/agricultural gardens or fields, bedrock mortars or grinding surfaces, rock alignments, cairns, trails, borrow pits, cooking pits, refuse pits, burial pits or graves, hearths, kilns, post molds, wall trenches, and middens);
- b.) Surface or subsurface artifact concentrations or scatters and the three-dimensional relationship of artifacts to each other in the ground;
- c.) Whole or fragmentary tools, implements, containers, weapons and weapon projectiles, clothing, and ornaments (including, but not limited to, pottery and other ceramics, cordage, basketry and other weaving, bottles and other glassware, bone, ivory, shell, metal, wood, hide, feathers, pigments, and flaked, ground, or pecked stone);
- d.) By-products, waste products, or debris resulting from manufacture or use of human-made or natural materials;
- e.) Organic waste (including, but not limited to, vegetal and animal remains, and coprolites);
- f.) Human remains (including, but not limited to, bone, teeth, mummified flesh, burials, and cremations);
- g.) Rock carvings, rock paintings, intaglios, and other works of artistic or symbolic representation;
- h.) Rockshelters and caves or portions thereof containing any of the above material remains;
- i.) All portions of shipwrecks (including, but not limited to, armaments, apparel, tackle, and cargo);
- j.) Paleontological remains, and unworked minerals or rocks *only* when they are found in a direct physical relationship with archaeological resources;
- k.) The physical site, location, or context in which any of the foregoing are situated;
- l.) And any portion or piece of any of the foregoing.

NOTE: An artifact found in an isolated context is an archaeological resource according to this definition and will need to be recorded in the Ohio Archaeological Inventory. There is a separate OAI form designed strictly for single artifacts from isolated contexts. **Appendix A** contains the Instructions for completing the one-page Ohio Archaeological Inventory Isolated Find Form.

SUBMITTING AN OHIO ARCHAEOLOGICAL INVENTORY FORM

Completed Ohio Archaeological Inventory forms should be submitted to the Archaeology Survey Manager at the Ohio Historic Preservation Office. Forms will be reviewed for consistency and completeness before they are accepted by the OHPO. Some sections of the OAI forms are marked with an asterisk (*). These sections must be completed for acceptance of the form. However, it is not necessary to complete asterisked items of the Historic sections if the site contains only Prehistoric materials, and vice versa. Furthermore, it *is* necessary to complete sections that are not asterisked *if the data in these sections supplies pertinent supporting documentation for the asterisked sections*. The asterisks primarily should serve as a way to quickly review the completeness of a form before submitting it to the OHPO.

OAI forms should be typed or neatly hand-written in black ink. The ink must not “bleed” through the paper. Please remember that these forms make up a permanent archive of information and care should be taken to provide complete and correct data in a legible format.

The preferred method of correcting information on a form is to use correction fluid to cover the incorrect information and to add the correct information. If you plan to write over the correction fluid, make certain the correction fluid is completely dry and is not going to flake off after it dries, *before* you write over it. Do *not* write over the correction fluid if you are not sure that the dried fluid will not fall off (taking the corrected response with it). In limited cases, it may be more feasible to draw a *single line* through the incorrect response than to use correction fluid. Regardless of the method of correction, the correct response must be clear and unambiguous.

The OAI forms are printed on acid-free stock for archival purposes. Do not staple extra pages to the form. Do not tape portions of maps or photographs to the form. Do not submit photocopies of the form that are not printed on archival quality acid-free paper (minimum weight 24#).

In order to facilitate survey projects that are conducted for compliance with the National Historic Preservation Act of 1966, as amended, the OHPO will often assign state site numbers *before* it receives the completed OAI form. This process is done on a case-by-case basis after the surveyor has determined the boundaries of sites and thus, the number of sites within a particular project area that are going to be recorded on OAI forms. Call the Archaeology Survey Manager at the OHPO for state site numbers. Once site numbers are assigned, the OAI forms must be submitted to the OHPO in a timely and professional manner. For projects that are not compliance-related, the OAI site number will be assigned only *after* receipt and review of the OAI form. The form preparer will be informed of the assigned number by telephone, mail, or email (whichever has been requested or is most expedient). Any person who is planning to record an archaeological site in the Ohio Archaeological Inventory should *first* conduct a literature search of the sites already recorded in the OAI to make certain that the site does not already have an assigned site number!

Forms that are incomplete or that have inconsistent responses will be returned to the form preparer for completion and corrections.

OAI forms, Continuation Sheets, and Isolated Find Forms may be obtained free of charge from the Ohio Historic Preservation Office, 567 East Hudson Street, Columbus, OH 43211, (614)-298-2000.

ITEMIZED INSTRUCTIONS FOR COMPLETING THE OHIO ARCHAEOLOGICAL INVENTORY FORM

A. Identification

***1. TYPE OF FORM**

Select as many as appropriate. "New Form" should be selected when inventorying new archaeological sites, or sites for which an OAI form has never been completed, either from recent or old fieldwork, notes, non-OHPO/OAC inventory forms, master's theses, doctoral dissertations, journal articles, etc. "Revised Form" should be selected if an OAI form already exists for the site and you are submitting another OAI form because parts of the old form need to be revised based on your new data. "Transcribed Data" is selected if information to complete the

form is being transcribed from primary or secondary documentary evidence (e.g., field notes, theses, dissertations, journal articles, etc.). In most cases when “Transcribed Data” is selected, the form preparer has no personal experience or familiarity with the actual site.

There are two methods for doing “**Revised Forms.**” If the existing form for the site is one of the early 3 x 5 cards or one of the one-page forms, it will be necessary to complete the standard OAI form (selecting “Revised Form”). Be sure to include pertinent information from the original form and indicate the original form as the source of that data. For example, if the original form indicated that the site had an Early Archaic component based on the recovery of Kirk projectile points, but your survey turned up only debitage with no assigned temporal component, the site would still be considered to have an Early Archaic component, based on the findings of the earlier work. It would not be redefined as an unassigned prehistoric site. If the existing OAI form is the standard 10-page form but your more recent work requires substantial change to the old form, it will also be necessary to complete another standard form (selecting “Revised Form”). If your new work has resulted in only minor changes to what is known about the site, then you may submit those minor revisions on Continuation Sheets. When doing so, it is necessary to use the letter and number of the sections being revised. Be sure to include updated information on *all* sections that have new information. This would include not only the obvious sections concerning artifacts and temporal affiliations, but also parts of section F, such as the name of the new form preparer, the name of the institution, date of new form, field date, and artifact repository. Please include any new reports as section G (References). If the size or shape of the site has changed since the original form, please include a copy of the topographic quadrangle with the site boundaries marked. (For more information on requirements for site maps, please see section K, below.)

2. COUNTY

Please write in the name of the County in which the site is located. If the site extends across the border of two or more counties, indicate the County in which the majority of the site lies. Write the name(s) of the other county(ies) under the Continuation Section (J). Make sure that the UTM coordinates you indicate in section B (see below) actually fall within the County that contains the majority of the site!

*3. TRINOMIAL STATE SITE NUMBER

The OAI uses a standard trinomial system of numbering archaeological sites: 33 (for Ohio), followed by a dash or a space, followed by a two-letter abbreviation for the County name, followed by a dash or a space, followed by the sequential number of the site within the County. For example, 33-AB-4 is the site number for the fourth site recorded in the OAI for Ashtabula County, Ohio. The site number must also be placed in the appropriate space at the top of each page and in the appropriate space along the lower right margin of page 1. Follow the instructions above to obtain site numbers. The abbreviations for Ohio’s counties are listed in **Appendix B**.

4. SITE NAME(S)

Indicate the name(s) generally applied to the site either locally or in the literature (i.e., the accepted professional, scientific, technical, or traditional name for the site). Usually this is the name of the property owner (either at the present time or when the site became well known) or

some descriptive term for the site. It is not necessary to include the word “site” as part of the name. If necessary, use the Continuation Section (J) to list additional names. Examples of site names include: Seip Mound; Conneaut Works; Phoenix Pottery; Hawkins Mill; Ames Rockshelter; Leo Petroglyph; South Park Village; Tulip Tree #1; Irishtown Bend; W.R. Hanna Shipwreck; Old Maid’s Orchard; Sitting Dog; Haunted School; Odd Fellows Cemetery; Fort Miamis; Goat Hill Mine; Dague Farm/Paleo Crossing; Monongahela Trail; Bates Farm; Fox Kame; Watervliet Community; Sunwatch/Incinerator; Guiler Barn; Dry Creek #4; Mears Cabin; Bouquet’s Camp.

5. PROJECT SITE NUMBER

If the site has an alphabetic or numerical designation specifically for a given project, indicate it here. Examples: Lancaster Bypass 4; Smith Field A; WSU 33-Gr-116; Mill Rd. Site 6.

6. OTHER STATE SITE NUMBER

List old or other state site numbers for the site, if appropriate. For instance, many “Groups” of mounds and earthworks were originally assigned a single number. More recently, some of these “Groups” have been broken up into individual sites. For example, 33-CT-11/ 1&2 have become 33-CT-11 and 33-CT 641; 33-HA-365/ 1&2 became 33-HA-365 and 33-HA-771. It is also possible that new work in an area may combine formerly separate sites into a single site. That information is also indicated here.

7. SOURCE (of Item A.5 and/or A.6.)

Indicate the source (reference) and location of the information given in Items A.5 and A.6, above. For example: XYZ’s field notes on the Newfield Housing Subdivision Project, on file at the OHS Collections facility, Columbus, OH.

B. Location

*1. UTM

The Universal Transverse Mercator (UTM) grid system provides a simple and accurate method for recording the geographical location of a site. All archaeological resources recorded in the OAI are required to have the UTM coordinates of the midpoint of the site listed in this section. Exceptionally large or long linear sites may have additional UTM coordinates recorded in the Continuation Section (J).

The UTM grid system divides the world into 60 north-south **Zones** each covering a strip that is 6° of longitude in width. The Zones are numbered consecutively, with Zone 1 beginning at 180° west longitude and covering the distance between 180° and 174° west longitude. The Zones progress eastward, so that the mainland United States falls within Zones 10 through 19. **Ohio lies completely within Zones 16 and 17.** The division between Zone 16 and 17 in Ohio follows the 84° west longitude line, in the western part of the state.

In each Zone, coordinates are measured east (“right”) and north (“up”) (mnemonic device: read-right-up) in meters. A central meridian through the middle of each 6° zone is assigned an **Easting** value of 500,000 meters. Grid values to the *west* of the central meridian are less than 500,000; those to the *east* of the meridian are greater than 500,000. The **Northing** values are measured continuously from zero at the Equator, in a northerly direction. These three values, the Zone, Easting, and Northing make up the complete UTM coordinate reference (mnemonic device: ZEN).

The UTM grid is depicted on all U.S.G.S. quadrangles published since 1959, regardless of scale. The newest maps have the actual grid lines drawn over the entire map in 1,000-meter intervals. Many maps, however, still only have small *blue* UTM tick marks drawn in the margin of all four sides of the map. (Do not confuse the blue UTM tick marks with the black latitude and longitude tick marks.)

To find the UTM coordinates of a site, you will need the appropriate U.S.G.S. 7.5’ quadrangle, a sharp pencil, a 2-foot long (minimum) metal straight edge, a UTM coordinate counter, and a flat surface large enough to hold the map. The UTM coordinate counter may have several scales depicted so be certain to use the correct scale (1:24,000). At this scale, the counter covers 1,000 meters, marked in 20-meter increments. UTM coordinate counters can be purchased from the U.S. Geological Survey or from a number of private companies, many of which now have catalogs on-line. The straight edge should be a good quality metal ruler at least 2 feet in length. These can be purchased at many college bookstores or at any stores that carry art, drafting and cartography supplies.

First, determine the Zone by reading the number from the information printed in the lower left corner of a U.S.G.S. 7.5’ topographic quadrangle. Next, if the map does not have the grid lines printed over it, you will need to carefully draw a thin pencil line connecting the appropriate tick marks. You will want to draw your lines so that you connect tick marks with the same number at the top and bottom of the map, and tick marks with the same number at the left and right sides of the map. For the Easting, choose tick marks that will fall nearest to, but west of the site, to draw your line. Place the coordinate counter so that the zero mark is on the line you drew (the entire left side of the scale should be aligned with that line), and the horizontal part of the grid lies across the middle of the site. The horizontal scale in this case should increase from 0 to 1,000 as you read to the right. Read the numbers from the map margin that identify the grid line, and add the numbers from the coordinate counter, reading eastward (“right”). Thus, if the grid line was 567,000 and the site was 340 meters east of that line, the Easting would be 567340.

Then do the same for the Northing. Draw the line connecting the same numbers in the left and right margins of the map, choosing the tick lines that will allow you to draw the line so it is nearest to, but south of the site. Place the coordinate counter so that the zero mark is on the line you drew (scale at the bottom should be completely aligned with the grid line), and the vertical scale passes through the center of the site. The vertical scale in this case will increase from 0 to 1,000 as you read “up.” Thus, if the grid line was 4,348,000 and the site was 150 meters north of that line, the Northing would be 4348150. Your complete UTM coordinate should have a 2-digit Zone, followed by a 6-digit Easting, followed by a 7-digit Northing. Due to the scale indicated on the coordinate counter, it is recommended that Easting and Northing

numbers be rounded to the nearest 10 meters. The Ohio Archaeological Inventory form has the final “0” preprinted as a reminder.

NOTE: There are a number of websites that will provide electronic access to the U.S.G.S. 7.5’ topographic quadrangles and also supply you with UTM coordinates (e.g., www.topozone.com). If you take this route, PLEASE be sure the website uses the North American 1927 datum (NAD 1927) to calculate the UTM coordinates. If you use GPS to record a site’s location in the field, please take the reading at the approximate center of the site. Please make sure your system uses the NAD1927 system or convert the number to the NAD 1927 system *before* submitting it on an OAI form. Please round to the nearest 10 meters except in those cases when the amount of work done at a site (e.g., mitigation) has resulted in records of features that warrant more precise data for contextual analyses. **In all cases, please be certain that you copy the numbers accurately and have the right number of digits!**

2. LATITUDE/LONGITUDE

The preferred method of recording site location is the UTM grid system. It is not necessary to complete this section unless you are using a U.S.G.S. map that pre-dates 1959 and lacks the UTM tick marks.

*3. TOWNSHIP / RANGE / SECTION / TOWNSHIP NAME

The numerical designations for “Township” and “Range” are *usually* located on the edges of the U.S.G.S quadrangle map in *red* (see below for exceptions). “Township” (T) designations run north-south and “Range” (R) designations run east-west. Copy the number (and directional designation if given) directly from the quadrangle. If the Township has been subdivided into one-mile square “Sections,” these will be marked on the quadrangle as a *red* number from 1 to 36 in each Township. Record the site according to the “Section Number” in which it occurs and indicate with a check or “X” which “Quarter Section” the majority of the site lies in.

Ohio had 9 original land surveys and 46 sub-surveys, and was the test state for the Federal Rectangular Survey System used in the states that were surveyed after Ohio. However, large portions of Ohio were not surveyed using a rectangular survey system. For these areas, the quadrangles will not indicate a Township and Range. If a site is located in a part of Ohio that does not use the Township and Range system, check “Not Applicable.” If the quadrangle indicates a Township and Range, but no Section Numbers, write “N/A” in the space for Section. Additional information about Ohio’s various major land surveys can be obtained from the State Auditor’s Office (www.auditor.state.oh.us). If the particular U.S.G.S. quadrangle that you are using includes lands surveyed using the Federal Rectangular Survey System *and* another system, the *red* T and R numbers may be *inside* the map border, rather than in the margin. Please make sure you look at the entire map before you mark “Not Applicable.”

The “Township Name” appears in bold black letters on the quadrangle maps. A copy of a map that shows the majority of Townships that currently exist or have existed in the past in Ohio is included in **Appendix C**.

***4. QUADRANGLE NAME**

The name of the quadrangle map will be found in both the lower right and upper right corners of the map. If the site overlaps quadrangle maps, indicate the “Quadrangle Name” where the majority of the site is located. Indicate other quadrangle names (with dates, see below) in the Continuation Section (J).

***5. QUADRANGLE DATE**

The date of publication is found under the quadrangle name in the lower right corner of the map. If the map has been revised, include the dates of revision, as well.

***6. CONFIDENT OF SITE LOCATION**

Select only one. In most cases, the “No” choice will only be selected if the form is based on transcribed or reported data. If the person or firm responsible for completing the OAI form has visited the site, the choice is expected to be “Yes.”

C. Ownership

***1. NAME(S) / ADDRESS / PHONE**

Indicate the property owner’s name, complete address, and telephone number. If there is more than one property owner, list additional owner(s) in the Continuation Section (J). Note that this is a required field. Archaeologists should gather this information while in the field if their client has not supplied it. It may be necessary to check deed records at the Auditor’s Office or the County Courthouse if not obtained in the field. Some counties have this data available online.

2. TENANT

If applicable, list the tenant’s name, complete address, and telephone number. If there are additional tenants, list their information in the Continuation Section (J). This information should be obtained in the field.

***3. OWNERSHIP STATUS**

Select only one, as appropriate. Use the “Private (multiple)” category if the site extends over one or more property lines **or** if there are two or more owners for a single property. For example, multiple members of the same family (including spouses), if they are listed as joint owners on the deed of the property, should be considered “Private (multiple)” owners. Use the “Multiple Government” category if the site extends over one or more government property lines, regardless of the levels of government. Use the “Mixed-Government/Private” category if the site exists on both government and private property. “Unknown” should be used only in cases of transcribed or reported sites, where this information may be lacking.

D. Temporal Affiliations

*1. AFFILIATIONS PRESENT

Select only one, as appropriate. If only “Historic” is selected, skip to Item D.9. If only “Prehistoric” is selected, you do not need to complete sections D.9 through D.15. Similarly, if only “Historic” is selected, skip sections D.2 through D.8. The “Unrecorded” response is intended for transcribed data where the affiliation is unclear from the original source material.

Prehistoric

*2. PREHISTORIC TEMPORAL PERIOD(S) REPRESENTED

Select as many as appropriate. The “Protohistoric” temporal period represents the time between the first, *indirect* contact between prehistoric American Indians and Euroamericans, and the initial appearance of written records of *direct* encounters (i.e., the beginning of the Historic period). In Ohio, this will generally be between about 1600 and 1750. “Protohistoric” is included as a “Prehistoric Temporal Period” because the social and material culture of the “Protohistoric” period was essentially a continuation of “Late Prehistoric” period lifeways. Use “Unassigned Prehistoric” only when no Prehistoric Temporal Period can be reasonably assigned and demonstrated in sections D.4 through D.6, below.

*3. MINIMUM NUMBER OF PREHISTORIC TEMPORAL PERIODS REPRESENTED

If the site has a prehistoric component, this number will be at least “1.” In many cases, the minimum number can be calculated by adding the number of periods checked off in D.2, above. For example, the presence of a Thebes projectile point and a Brewerton projectile point would result in both Early Archaic and Late Archaic being checked in D.2 and the minimum number of temporal periods would be “2.” However, this is not always the case. For example, a Madison triangular point is a diagnostic type for both the Late Woodland and the Late Prehistoric periods, and both temporal periods should be checked in D.2. Similarly, a Hi-Lo projectile point is a diagnostic type for both Paleo-Indian and Early Archaic. But the *minimum* number of temporal periods represented by either of these diagnostic types would be “1.”

*4. BASIS FOR ASSIGNMENT OF PREHISTORIC TEMPORAL PERIOD(S)

Select as many as appropriate. “Diagnostic Features” may include things like mounds, geometric earthworks, rock cairns, petroglyphs, etc. **If you have selected “Unassigned Prehistoric” in section D.2, leave this section blank.** If “Other” is selected, you must specify what that other basis was (e.g., dendrochronology, thermoluminescence, archaeomagnetism, etc.). Do not check “Other” if you have not actually assigned a prehistoric temporal period. “Unrecorded” should be used only for transcribed data.

5. PREHISTORIC CULTURAL COMPONENT(S) REPRESENTED

The following is a relative chronological order of professionally recognized Prehistoric Cultural Components in Ohio prehistory. Select those that most accurately reflect the Prehistoric Cultural Components Represented at the site. Be as specific as can be reasonably demonstrated

in D.6, below. Try to list the Prehistoric Cultural Components Represented in chronological order, beginning with the most recent and adding successively earlier components.

If this list does not include your choice(s), select “Other” and specify the component on the form. The component should be one that is widely recognized as having application in Ohio. The list of Prehistoric Cultural Components will be expanded as justified. If you wish to see a component added to the list, please contact the Archaeology Survey Manager for instructions on submitting supporting documentation.

List of Prehistoric Cultural Components

MONONGAHELA TRADITION

Riker Phase

FORT ANCIENT TRADITION

Madisonville Phase

Anderson Phase

Feurt Phase

Baldwin Phase

Brush Creek Phase

Baum Phase

Philo Phase

WHITTLESEY TRADITION

South Park Phase

Greenwood Phase

Fairport Phase

Riverview Phase

Hale Phase

SANDUSKY TRADITION

Indian Hills Phase

Fort Meigs Phase

Wolf Phase

Eiden Phase

Esch Phase

Leimbach Phase

WESTERN BASIN TRADITION

Springwells Phase

Younge Phase

Riviere au Vase Phase

Oliver Phase

CENTRAL OHIO VALLEY EARLY LATE WOODLAND

- Peters Phase
- Newtown Phase
- Chesser Phase
- Intrusive Mound Culture
- Cole Complex

WESTERN BASIN MIDDLE WOODLAND

SCIOTO HOPEWELL CULTURE

ADENA CULTURE

GLACIAL KAME CULTURE

RIVERTON TRADITION

- Maple Creek Phase
- Buffalo Phase
- Transitional Archaic Phase
- Transitional Period Culture
- Central Ohio Valley Archaic Phase

LAURENTIAN ARCHAIC TRADITION

- Brewerton Phase
- Feeheley Phase
- Dunlop Phase
- McKibben Phase
- Genesee Phase
- Stringtown/Satchel Phase
- Satchel Phase
- Lamoka/Dustin Phase

SIDE-NOTCH TRADITION

- Big Sandy Phase
- Otter Creek Phase
- Brewerton Phase

EVA TRADITION

- Morrow Mountain Phase
- Eva Basal Notch Phase
- Nettling Complex

BIFURCATE TRADITION

- Kanawha Phase
- LeCroy Phase
- St. Albans Phase
- MacCorkle Phase
- Blue Creek Phase

KIRK TRADITION

Kirk Stemmed/Serrated Phase
Decatur Phase
Kirk Corner-Notched Phase
Palmer Phase

KIRK/PALMER COMPLEX

THEBES TRADITION

Dovetail Phase
Thebes Phase

DALTON TRADITION

Greenbriar Phase
Hardaway Phase
Dalton Phase

LANCEOLATE PLANO COMPLEX

Agate Basin-like Complex
Hell Gap Complex
Hi Lo Complex
Unfluted Fluted

CUMBERLAND COMPLEX

CLOVIS COMPLEX

Holcombe Complex
Crowfield Complex
Barnes Complex
Gainey Complex
Enterline/Lux Complex

OTHER (SPECIFY) (Please contact the Archaeology Survey Manager, Ohio Historic Preservation Office regarding documentation.)

6. DESCRIBE HOW PREHISTORIC TEMPORAL PERIODS AND CULTURAL COMPONENTS WERE DETERMINED

If you have selected any temporal period other than “Unassigned Prehistoric” in section D.2, and/or listed any components in D.5, you must complete this section. Please list all culturally diagnostic artifacts and features, including type names (e.g., Adena point, Cole Cordmarked pottery, Madisonville Incised pottery, bladelets, octagonal enclosure, etc.). Whenever possible include illustrations or photographs, or indicate that these are available in a source cited in section G, below. Identify the “Researcher” who made these decisions. When listing artifacts and/or features please correlate this information with section D.5 by using the letter designation from D.5. It is very important to complete this section to support your selections in D.2 and D.5, above.

*7. CATEGORIES OF PREHISTORIC MATERIALS PRESENT AT SITE

Select as many categories as appropriate. “Lithics” includes both ground and flaked stone artifacts. However, fire-cracked rock (FCR) should be listed under “Other” because it provides a different kind of information than ground and flaked stone artifacts provide. “Faunal Remains” and “Floral Remains” include animal and plant remains recovered through surface collection, excavation, and/or flotation. Examples of “Faunal Remains” include, but are not limited to, animal bone, horn, teeth, gastropod and mussel shells, turtle shells, otoliths, and fish scales. Examples of “Floral Remains” include, but are not limited to, wood, nutshell, charcoal, cordage, basketry, and seeds. Note that this section is for all prehistoric materials *present* at the site, not just those collected.

8. SPECIFIC PREHISTORIC CULTURAL MATERIALS COLLECTED

List the types of “Prehistoric Cultural Materials Collected” and indicate the number of each type listed. Use the Continuation Section (J) or a separate Continuation Sheet if necessary. Please do *not* list each non-diagnostic artifact separately, but rather combine them into useful analytical classes (e.g., primary, secondary, and tertiary flakes). Please make sure information about diagnostic artifacts is specified in section D.6 before collapsing them into a single class. For example, if you have already listed the various projectile point type names in D.6, you can collapse all of them into “diagnostic projectile points - #” in section D.8. Any prehistoric cultural materials present at the site that were *not* collected should be noted in section D.16, below.

Historic

*9. AFFILIATION PRESENT

Select only one, as appropriate. “Aboriginal” means Native American, or people of American Indian descent, from the Historic period (i.e., after about 1750). Do not use the “Aboriginal” category for native-born Americans who are not descendants of American Indians. If you select “Aboriginal” and check a temporal designation in D.10, below, for the latter nineteenth century or twentieth century, you should justify the selection through documentary records (e.g., census or deed records), oral history, or other means. The “Undetermined” category should be used only for transcribed data in which the affiliation cannot be determined.

*10. HISTORIC TEMPORAL PERIOD(S) REPRESENTED

Select as many as appropriate, using the most specific category(ies) that you can. In other words, category j., “Historic,” should be selected *only* when none of the other categories apply. Categories k through m (18th, 19th, or 20th centuries) should be selected when the site cannot be placed in more specific categories within those centuries, but when you *can* be more specific than just “Historic.” The term “Historic Aboriginal” in this section is synonymous with the term “Aboriginal” in D.9, above, and should be used only when you know the site includes a Native American component that postdates the Protohistoric period (i.e., the American Indian component can be documented with records and/or by oral history), but you are uncertain of the dates of this component.

*11. MINIMUM NUMBER OF HISTORIC TEMPORAL PERIODS REPRESENTED

This will be the sum of the periods indicated in D.10, as long as the instructions for completing D.10, above, were followed.

*12. BASIS FOR ASSIGNMENT OF HISTORIC TEMPORAL PERIOD(S)

Select as many as appropriate. “Documentary Evidence” includes, but is not limited to, maps, county histories, census records, deed records, diaries, and newspaper accounts. “Oral Tradition” includes statements from landowners, descendants of former occupants, neighbors, etc., either on tape or spoken without formal recordation.

If “Other” is selected, you must specify what that other basis was. **If you have selected only “Historic” in section D.10, leave this section blank.** You do not need to specify a basis for assigning a historic temporal period if you have not assigned one. “Unrecorded” should be used only for transcribed data.

13. DESCRIBE HOW HISTORIC TEMPORAL PERIOD(S) WERE DETERMINED

If you have selected any temporal period(s) other than simply “Historic,” you must complete this section. List all culturally diagnostic artifacts, features, and structural remains (e.g., 1843 coin, hand molded brick, pearlware, amethyst glass, canal towpath, millrace, etc.). If you selected “Documentary Evidence” in section D.12, please list the source (e.g., 1905 15’ USGS map of Akron, 1963 7.5’ USGS map of North Olmsted, ODNR mine map 1942, Beers 1866 Atlas of Delaware County, etc.). If you selected “Oral Tradition” in section D.12, please list the name of the informant, relationship to site, and date information was obtained.

When listing items in this section, please correlate this information with section D.10 by using the letter designation from D.10. It is very important to complete this section to support your temporal selections in D.10, above.

*14. FUNCTIONAL CATEGORIES OF HISTORIC MATERIALS PRESENT AT SITE

Select as many as appropriate. Where an item may be assigned to more than one category, select the category that is *most* appropriate. Identification of a “Functional Category” should be based on the artifact’s original intended function, unless it was clearly modified for a new function. For example, a Civil War saber should be classified as “Military” even though it may have had both “Ceremonial” and “Weapons” uses. Brass ammunition casings that have been reworked into a toy truck would be classified under “Toys & Games” rather than “Weapons.”

The following are brief lists of materials that may be included in the specified “Functional Categories.” The list is *not* all-inclusive, but should provide enough information through representative samples to allow the researcher to select the appropriate categories. The list was derived mainly from South’s (1977) *Method and Theory in Historical Archeology*, but expanded to account for many more categories of artifacts that are commonly recovered from historic sites in Ohio. Please note that the “Functional Categories” list in the OAI has *many* more specific categories than those supplied in either South (1977) or Ball’s (1984) article,

“Historic Artifact Patterning in the Ohio Valley.” Please *do not* use the “Other” category to write in “Activities,” which was a catchall category in the schemes of both South and Ball for many functional categories that appear as individual categories on the OAI. Note also that this section is for all historic materials *present* at the site, not just those collected.

Kitchen: food and beverage containers (including milk, beer, wine, and liquor bottles); tableware (including dinnerwares, serving vessels, drinking glasses, silverware); food preparation vessels (including mixing bowls, pots, pans); canning supplies (including jars, rings, liners, lids); various utensils most often associated with food preparation, serving, and consumption (including bottle openers, cleavers, sausage stuffers, strainers); various vessels commonly associated with the display or serving of food (including candy dishes, fruit bowls, lunch pails); etc.

Furniture: functional and decorative room furnishings (including tables, chairs, chests, beds, sinks, toilets, picture frames, flower pots, vases, candlesticks, lamps, curtain rods, floor coverings); large appliances (including televisions, phonographs, stoves, washing machines); component parts of such furnishings (including drawer pulls, cabinet hinges, upholstery tacks, chair rungs, faucets, claw feet); etc.

Personal: miscellaneous items generally held or used by a single person (including coins, keys, watches, rings, tobacco pipes, dentures, eyeglasses, pens, matches, pocket knives, scissors, sewing kits, piggy banks, beads, other jewelry or bric-a-brac); miscellaneous items associated with personal hygiene or health (including tweezers, combs, mirrors, cosmetics containers, medicine bottles, syringes); etc.

Clothing: articles designed to be worn as either functional or decorative attire (including clothes, footwear, headdresses, hats, belts, gloves); component parts of such apparel (including boot nails, shoe soles, clasps, buttons, buckles, corset stays); etc.

Toys & Games: miscellaneous items generally associated with child or adult recreation (including dolls, playing cards, dice, dominoes, darts, marbles, balls, poker chips, board game pieces, toy cars, toy animals, toy soldiers, chess pieces, phonograph records); musical instruments and their component parts (including harmonicas, mouth harps, fiddle and guitar strings, horns, fifes, piano keys, drumsticks); etc.

Printed Matter: items with hand-written or mechanically printed information (including books, newspapers, magazines, handbills, advertisements, maps, letters, diaries, receipts, billboards, store signs); items used to produce such printed information (including typewriter keys, printer’s type blocks); etc.

Religious/Ceremonial: ideological symbols (including crosses, crucifixes, menorahs); miscellaneous items with specific symbolic or ceremonial functions (including non-functional ceremonial swords or daggers, statuary from Christmas nativity scenes, flags, flagpoles, trophies, honorific medallions); mortuary-related items (including gravestones, caskets); etc.

Military: items made expressly for use within a military context (including uniforms, ammunition, firearms, insignia, identification tags). NOTE: These items are often mirrored in

other functional categories, but are recognizably distinct in form and reflect their ownership or use within a *corporate* context (national armed forces or state militia).

Weapons: items associated with a *private* context of hunting, recreation, personal protection or crime (including firearms, shell casings, bullets, musket balls, bullet molds, swords, daggers, blackjacks, switchblades, clay pigeons, targets, bows and arrows); etc.

Transportation: items, and their component parts, associated with the movement of people and/or goods (including wagon wheels, horse tack, horseshoes, bicycle wheels, spark plugs, automobile headlights, automobile safety glass, road signs, railroad spikes, railroad tracks, oar locks, anchors, canoe paddles, canal lock grates); etc.

Architectural: items associated with the construction of buildings and other large structures (including bricks, foundation stones, cement blocks, window glass, window sash weights, nails, roofing slates, shingles, siding, downspouts, terra cotta detailings, duct work, door knobs, lock plates); etc.

Miscellaneous Hardware: items for which a specific function can be determined but whose larger context is unknown (including bolts, nuts, washers, andirons, pulley wheels, cleats, chains, turnbuckles, rivets, coat hooks, pipes); etc. For example, a small bolt which may have been used in a toy truck, a rifle, or a cabinet would be classified in this category unless it were found incorporated in one of these items. This category should be used as a residual category for things that generally are components of other items and are thus multifunctional in a very broad sense.

Construction / Manufacturing Tools: tools or equipment designed to be used for constructing or manufacturing other goods (including hammers, saws, wrenches, screw drivers, drills, files, trowels, buckets, anvils, wheel barrows, hods, millstones, spinning wheels, shoe lasts, die stamps, pottery molds); etc.

Agricultural: tools or equipment used in food production activities (including sickles, hoes, plow parts, tractor parts, stock watering troughs, branding irons, bailing wire, field tile, barbed wire, yokes, milk cans, tobacco knives, seed grain); etc.

Fuel / Energy: items related to the extraction, and use of coal (including coal scuttles, coal, clinkers, cinders, slag); miscellaneous vessels for storage of fuels (including propane gas tanks, kerosene jugs, gasoline cans, gasoline pumps); miscellaneous items related to electricity (glass or ceramic insulators, electrical wiring, fuses, light bulbs, electrical switches, batteries); etc.

Food Remains: remains of animal and plant sources of food (including animal bone, clam shells, oyster shells, cherry pits, peach pits, corncobs, rinds, charred seeds, coprolites); etc.

Unrecorded: this response is intended only for transcribed data.

Unknown: any item for which the function cannot be determined (including rusted lumps of iron, metal scraps, melted blobs of glass); etc.

Other: use this category only when an item cannot be reasonably placed in one of the above functional categories (e.g., animal traps, dog licenses, fishing gear). You must specify what the item is that has been classified in the “Other” category. If more than one “Other” category is needed, use the Continuation Section (J).

15. SPECIFIC HISTORIC CULTURAL MATERIALS COLLECTED

Because each category of material in D.14, above, can include so many different types of items it is especially important to list the items here. List the types of “Historic Cultural Materials Collected” and indicate the number of each type listed. If necessary, use Continuation Section (J) or a separate Continuation Sheet. You should not list each artifact individually if they can be placed into useful descriptive groups. For example, rather than list what came out of each test unit (Unit A1: 3 pearlware sherds, 1 redware, 6 undecorated whiteware, 2 brick fragments, 1 square nail, 1 flat glass, 7 container glass; Unit B1: 2 green transfer print sherds, 2 undecorated whiteware, 10 wire cut nails, 6 brick fragments; Unit C1: 1 undecorated whiteware, 1 redware, 1 pearlware, 1 fragment doll’s face, 4 brick fragments, 2 flat glass, 1 wirecut nail, 3 pieces coal) it is better to list the artifact types and numbers from the whole site together (redware-2, pearlware-4, undecorated whiteware-9, green transfer print sherds-2, brick fragments-12, square nail-1, wirecut nails-11, flat glass-3, container glass-7, doll’s face fragment-1, pieces coal-3).

General

16. DESCRIBE PREHISTORIC AND HISTORIC CULTURAL MATERIALS OBSERVED BUT NOT COLLECTED

Describe the prehistoric or historic cultural materials that were observed at the site but that were not collected. In other words, any items included in sections D.7 and D.14, above, but *not* included in sections D.8 and D.15, above. Be sure to state your reason(s) for not collecting these items or classes of materials. If recent debris was noted but not collected, please indicate that here.

17. AFFILIATED OHIO HISTORIC INVENTORY SITE NUMBER AND NAME

If the historical archaeological site is associated with a building or structure that has been given an “Ohio Historic Inventory (OHI) Site Number,” indicate that number here. OHI site numbers begin with a 3-letter prefix for the County. The next 4 spaces represent the site number, right justified and zero-filled to the left when necessary. The next 2 spaces represent the geographical locator and should be completed with numeric responses, right justified and zero-filled to the left when appropriate. For example, WAY012205 is located in Wayne County, is the 122nd site recorded in Wayne County, and has a location code of 05. County codes are listed in **Appendix B**.

NOTE: A historical archaeological site that retains architectural and/or historical integrity should also be documented on an OHI. Likewise, an OAI form should be completed for a historical archaeological resource associated with an object, building, or structure that is recorded on an OHI form. Ohio Historic Inventory numbers should be obtained from the appropriate staff at the Ohio Historic Preservation Office.

E. Physical Description

*1. ARCHAEOLOGICAL SETTING

Select only one, as appropriate. “Archaeological Setting” applies to *both* prehistoric and historical archaeological resources.

Rockshelter/Cave: A “Rockshelter/Cave” site is a shelter that is formed by a ledge of overhanging rock. Typically such shelters are the result of undercutting erosion of sandstone, conglomerate, shale, or limestone cliffs or bluff faces. As long as the site is sheltered by the overhanging rock, this is the appropriate response regardless of whether the artifacts are collected from the surface or excavated from the ground.

Open: An “Open” site lacks the natural “roof” which provides protection from the elements (as frequently found in rockshelters and caves). An “Open” site can be found in a field, in woods, in urban environments, etc.

Submerged: This response is intended for sites that are partially or totally underwater. The water may be a river, pond, lake, etc. and may be natural or man-made.

Unrecorded: This response is intended only for transcribed data in cases where the setting is uncertain.

Unknown: This response is only appropriate when the site is known only from local tradition or oral history. It is rarely used.

Other: Please specify.

*2. PREHISTORIC SITE TYPE

Select as many as appropriate, using the following definitions. **Note: The distinction between camps, hamlets, and villages can be established only by extensive subsurface exploration. Phase I surveys are generally insufficient for this purpose.**

Habitation:

Camp: A geographical area utilized as a short-term and/or seasonal domicile, may be associated with a special-purpose activity (e.g., hunting, specific gathering and/or collecting), and may or may not have been utilized repeatedly.

Village: A geographical area utilized by a large group (>5 households) for year-round primary domicile, frequently longer than one year, containing evidence of “permanent” structures.

Hamlet: A geographical area utilized by a small group (1 to 4 households) for year-round primary domicile, frequently for longer than one year.

Unspecified Habitation: A geographical area used for habitation but lacking information concerning size or duration of occupation. **The preferred determining factor for this category is evidence of structural remains (e.g., post molds).** However, a *substantial combination* of the following may also be useful indicators for this category: fairly large site size; numerous artifacts; variety of tool types; variety of lithic source materials; large amount of fire-cracked rock; pottery; food remains; evidence for the full range of production sequences for tool manufacture (including resharpening); features other than post molds (including storage pits, firepits, hearths, earth ovens, caches, etc.). Sites with most of these factors can be considered to be habitation sites of some sort with a fairly high degree of confidence. Sites with only three or four of these factors may inspire less confidence, in which case BOTH “Unspecified Habitation” and “Unknown” should be selected.

Extractive:

Quarry: An area from which raw material (including flint, clay, pipestone, etc.) has been removed or extracted from the earth. A “Quarry” may be excavated down into a nearly level surface or horizontally into a hillside.

Workshop: An area where raw material is modified into artifacts, either preform or finished. “Workshops” are frequently in close proximity to “Quarries” due to the weight and/or bulk of the raw materials being transported.

Ceremonial:

Unspecified Mound: A mound of unknown construction material or shape.

Earth Mound: A deposit of earth and other soil materials, frequently placed over one or more human burials (skeletons).

Stone Mound: A deposit consisting primarily of rock, frequently placed over one or more human burials (skeletons).

Effigy Mound: An earthen mound constructed in the shape or outline of a natural object, frequently an animal (e.g., Serpent Mound).

Mound Group: Two or more mounds whose spatial relationship indicates that they were (probably) relatively contemporaneous and, therefore, related. This selection may be made without the benefit of subsurface examination. If subsurface exploration has occurred, and the mounds are determined to have no relationship beyond their spatial proximity, they should be treated as separate archaeological sites. If subsurface exploration indicates that a cultural-temporal relationship exists between the mounds, they should be treated as a single archaeological site.

Hilltop Enclosure: A hilltop that has been modified by the construction of an enclosing wall of earth and/or stone.

Geometrical Earthwork: A single or series of earthen walls arranged into a geometrical pattern, frequently including circles, squares, octagons, parallel lines, etc.

Cemetery: A geographical area containing the remains of deceased humans, frequently evidenced by the location of graves containing skeletal remains.

Isolated Burial(s): The location of a single human burial. A site may have more than one “Isolated Burial” if the individual burials are found *scattered* within a site context. If the burials are found together in a localized area within a site context, they should be classified as a “Cemetery.” For example, a site may have a burial in a midden and another in a pit under a house. In this case, the burials represent isolated burials, and not a cemetery. An “Isolated Burial” may be reclassified as a “Cemetery” if subsequent investigations uncover additional burials.

Petroglyph / Pictograph: A rock carving and/or painting representing (in whole or in part) an object, animal, human, or idea.

Other:

Unknown: This response is intended to be used when insufficient information exists to place the site into any of the established categories outlined above. *Most Phase I surveys will not provide the level of data needed to select an established site type category.*

Unrecorded: This response is intended only for transcribed data.

Other: This response is intended for specific site types that do not appear as a category. If you select this category you must specify what the site type is. **A response of “lithic scatter” for “Other (specify)” is not acceptable.** The term lithic scatter is an archaeological construct used to describe material surface manifestations of many prehistoric sites, identified by the presence of chipped-stone artifacts. It does not, however, describe the primary function of, or activities performed at, the site as this item is intended to reflect. The term lithic scatter can be used in the Site Description section (I.1.) but not in characterizing the “Prehistoric Site Type.” **The appropriate response for sites where the primary function is not known is “Unknown.”**

*3. HISTORIC SITE TYPE

Select as many as appropriate, using the following list of representative examples for each category.

Residential: Single, multiple, or secondary dwelling; hotel, motel, or inn; institutional housing, orphanage, county home; etc.

Commercial: Office, professional organization or association, financial institution, retail store or shop, department store, general store, restaurant or bar, warehouse, arcade, market, etc.

Social: Meeting hall, fraternal or patriotic organization, club, grange hall, YMCA or YWCA, Masonic hall, social or civic centers (Salvation Army, Community Center), etc.

Government: Town or City hall, correctional facility, fire station, police station, government office, customs house, land office, post office, courthouse, public works (excluding transportation), water works, sewage plant, etc.

Religious: Church or other religious structure, ceremonial site, church school, church-related residence, shrine, chautauqua, convent or monastery, rectory, etc.

Educational: School, college or university, library, research facility (laboratory, observatory, etc.), educational-related housing (dormitory, sorority or fraternity house), etc.

Mortuary: Cemetery, graves or burials, funeral home, mausoleum, crematory, etc.

Recreation: Theater, opera hall, auditorium, museum or exhibition hall, music facility, amusement park, zoo, fairground, sports facility, etc.

Subsistence: Food processing or storage facilities, animal facilities, agricultural outbuildings, etc.

Industrial: Mill, processing or manufacturing facilities, extractive facilities, energy facilities, communications facilities, company housing, etc.

Health Care: Hospital, clinic, nursing home, medical business or office, resort or spa, etc.

Military: Coast guard, naval, or air facilities, barracks, arms storage, fortification, post or military base, battle site, etc.

Transportation: Rail-, air-, water-, road-, pedestrian-, or canal-related.

Unrecorded: This response is intended only for transcribed data.

Unknown: This response is intended to be used when insufficient information exists to place the site into any of the established categories outlined above.

Other: This response is intended for specific site types that do not appear as a category. If you select this category you must specify what the site type is. **A response of “historic scatter” for “Other (specify)” is not acceptable.** The term historic scatter is an archaeological construct used to describe material surface manifestations of many historic sites. It does not, however, describe the primary function of, or activities performed at, the site as this item is intended to reflect. The term historic scatter can be used in the Site Description section (I.1.) but not in characterizing the “Historic Site Type.” Please use the term “dump” only for locations where there has clearly been substantial dumping activity over time, and not for sporadic littering (or field trash). **The appropriate response for sites where the primary function is not known is “Unknown.”**

4. STATE THE BASES ON WHICH SITE TYPE ASSIGNMENT(S) WERE MADE

List your reasons for selecting the particular site types in E.2 and/or E.3, above.

*5. SITE CONDITION

Select only one, as appropriate, using the following guidelines.

Undisturbed: This response is appropriate when sufficient fieldwork has been conducted to determine that neither horizontal nor vertical destruction (other than the archaeological shovel testing) has significantly impacted the site.

Disturbed-Extent Unknown: This response is appropriate when sufficient fieldwork has been conducted to determine that either horizontal or vertical disturbance has occurred, but not enough to determine the full extent of the disturbance. NOTE: This response is often used for agriculturally disturbed sites that have not been archaeologically tested. If the site has been disturbed and the extent of the disturbance is *known*, indicate so in Continuation Section (J).

Fully Disturbed: This response is appropriate when sufficient field investigations have been conducted to indicate that horizontal and vertical disturbance (other than archaeological testing) has fully altered the associations between the cultural remains at the site even though cultural materials are still present at the site.

Destroyed: This response is appropriate when sufficient field investigations have been conducted to indicate that *no* cultural resources (either *in situ* or disturbed) remain at the site.

Unrecorded: This response is intended only for transcribed data.

Unknown: This response is appropriate when the site was not physically visited by the reporting archaeologist, or when the amount of fieldwork at the site has been insufficient to allow an assessment of disturbance.

*6. DOMINANT AGENT(S) OF DISTURBANCE

Select as many as appropriate.

None Apparent: This response should be utilized for a site that has been classified as “Undisturbed” in E.5, above.

Agricultural: This category includes all activities associated with agriculture (e.g., plowing, disking, pasturing, operation of feedlots, forest clearing, etc.). “Logging” is generally included in this category.

Historic Construction: The construction of buildings and structures (including houses, garages, barns, warehouses, commercial buildings, factory buildings, etc.) placed upon subsurface footers or foundations; construction of dams, pipelines, and other utilities (e.g., telephone poles, cell towers, etc.) that cause disturbance extending below the ground surface. A house trailer placed on concrete footers would result in disturbance classified as “Historic Construction” but a house trailer placed on cinder blocks on top of the original ground surface would not.

Water: The results of water action, including precipitation, erosional slope wash, lacustrine wave action, hydraulic compaction, and the action of flowing water within a natural stream, river, or human-made drainage, such as a canal or drainage ditch.

Transportation: This category includes the construction of roads, railroads, canals, airports, bridges, etc.

Archaeological Excavation: Systematic and recorded excavation either by professional or amateur archaeologists.

Mining: This category includes strip or open pit mining (including gravel pits, sandstone and limestone quarries, coal strip mines, etc.), shaft mining, and the deposition of raw materials and/or tailings from mining activity. NOTE: If you are recording a quarry or mining-related site, however, these features are *part of the site, not disturbance*.

Vandalism: The unrecorded disturbance (including collecting activities) or destruction of an archaeological site.

Unrecorded: This response is intended only for transcribed data.

Other: This response is intended for agents of disturbance that are not categorized above. Please specify.

7. NATURE OF DISTURBANCE / DESTRUCTION

Please describe in detail.

*8. CURRENT DOMINANT LAND USE

Select only one, as appropriate. You should select the category that best describes the *current* dominant land use, not the proposed land use. You can include the latter under the Continuation Section (J). Please be as specific as possible in determining the “Current Dominant Land Use,” using the categories described below. The terms and definitions listed below are those used for Levels 1 and 2 Land Use / Land Cover, as provided in the Ohio Department of Natural Resources Miscellaneous Report No. 17 (1977, revised 1981), *Land Use/Land Cover Classification System*.

URBAN OR BUILT-UP LAND: Land in this category is comprised of areas of intensive use, with much of the land covered by structures. Included in this category are cities, towns, villages, strip developments along highways, transportation, power, and communications facilities, and areas such as those occupied by mills, shopping centers, industrial and commercial complexes, and institutions that may, in some instances, be isolated from urban areas.

As development progresses, land having less intensive or nonconforming use may be located in the midst of “Urban or Built-up Land” areas and will generally be included in this category. Agricultural land, forest, wetland, or water areas on the fringe of “Urban or Built-up Land” areas will *not* be included, *except* where they are surrounded and dominated by urban development. The “Urban or Built-up Land” category takes precedence over others when the

criteria for more than one category are met. For example, residential areas that also have sufficient tree cover to meet “Forest Land” criteria will be placed in the “Residential” subcategory of “Urban or Built-up Land.”

Residential: “Residential” land uses range from high density (e.g., multiple-unit structures of urban cores) to low-density, where houses are on lots of more than one acre, on the periphery of urban expansion.

Areas of sparse “Residential” land use, such as farmsteads, will be included in categories to which they are related. Rural residential and recreational subdivisions, however, are included in this category since the land is almost totally committed to “Residential” use, even though it may have forest or range types of cover, as well.

Residential sections that are integral parts of other uses may be difficult to identify. Housing situations such as those existing on military bases, at colleges and universities, living quarters for laborers near a work base or lodging for employees of agricultural field operations or resorts should be placed within the “Industrial,” “Agricultural,” or “Commercial and Services” categories, as described below.

Commercial and Services: “Commercial” areas are those primarily used for the sale of products and services. They are often abutted by residential, agricultural, or other contrasting uses that help to define them. Components of the “Commercial and Services” category include urban central business districts, shopping centers (usually in suburban and outlying areas), commercial strip developments along major highways and access routes to cities, junkyards, resorts, and so forth. The main buildings, secondary structures and areas supporting the basic use are all included (for example, the office buildings, warehouses, driveways, sheds, parking lots, landscaped areas, and waste disposal areas).

“Commercial” areas may include some noncommercial uses. Central business districts commonly include some institutions (such as churches and schools), and commercial strip developments may include some residential units. Recreational facilities that form an integral part of an institution should be included in this category. Intensively developed sections of recreational areas should be included in the “Commercial and Services” category, but extensive parts of golf courses, riding areas, ski areas and so forth would be included in the “Other Urban Built-Up” category.

Institutional land uses, such as various educational, religious, health, correctional, and military facilities are also components of this category. All buildings, grounds, and parking lots that compose the facility are included in the institutional unit, but areas not specifically related to the purpose of the institution should be placed in the appropriate category. Auxiliary land uses, particularly residential, commercial and services, and other supporting land uses on a military base would be included in this category, but agricultural areas not specifically associated with correctional, educational, or religious institutions are placed in the appropriate agricultural category.

Industrial: “Industrial” areas include a wide array of land uses from light manufacturing to heavy manufacturing plants. Light industrial areas may be, but are not necessarily, directly in contact with urban areas; many are now found at airports or in relatively open country. Heavy

industries use raw materials such as iron ore, timber, or coal. Included in this category are steel mills, pulp and lumber mills, electric-power generating stations, oil refineries and tank farms, chemical plants, and brick-making plants. Stockpiles of raw materials and waste-product disposal areas are usually visible, along with transportation facilities capable of handling heavy materials.

Surface structures associated with mining operations are included in this category. Surface structures and equipment may range from a minimum of a loading device and trucks to extended areas with access roads, processing facilities, stockpiles, storage sheds and numerous vehicles. Spoil material and slag heaps usually are found within a short trucking distance of the major mine areas. Areas of future reserves are included in the appropriate present-use category, such as "Agricultural Land" or "Forest Land," regardless of the expected future use.

Transportation, Communications, and Utilities: The land uses included in this category occur to some degree within all of the other "Urban or Built-Up" categories. "Transportation" includes land, water and air transportation.

Highways include rights-of-way, areas used for interchanges, and service and terminal facilities. Rail facilities include stations, parking lots, roundhouses, repair and switching yards, and related areas, as well as overland track and spur connections.

Airports, seaports, and major lakeports are isolated areas of high utilization, usually with no well-defined intervening connections. Airport facilities include the runways, intervening land, terminals, service buildings, navigation aids, fuel storage, parking lots, and a limited buffer zone. Terminal facilities generally include the associated freight and warehousing functions. Port areas include the docks, shipyards, dry-docks, locks, and waterway control structures.

"Communications and Utilities" areas include those involved in processing, treating, and transporting water, gas, oil, and electricity, and areas used for airwave communications. Pumping stations, electric substations, and areas used for cell phone, radio, radar, or television antennas are the major types of "Communications" facilities. Small facilities, or those associated with an industrial or commercial land use, are included within the larger category with which they are associated. Long-distance gas, oil, electric, telephone, water, or other transmission facilities rarely will constitute the dominant use of the lands with which they are associated.

Industrial and Commercial Complexes: The "Industrial and Commercial Complexes" category includes those industrial and commercial land uses that typically occur together or in close functional proximity. Such areas commonly are labeled with terminology such as "Industrial Park," but since functions such as warehousing, wholesaling, and occasionally retailing may be found in the same structures or nearby, the more inclusive category title has been adopted.

Mixed Urban or Built-Up Land: This category typically includes developments along transportation routes and in cities, towns, and built-up areas. "Residential," "Commercial," "Industrial," and occasionally other land uses may be included, but a mixture of industrial and commercial uses would be placed in the "Industrial and Commercial Complexes" category. Isolated farmsteads intermixed with strip or cluster settlements may be included within the "Mixed Urban or Built-Up Land" category, but other agricultural land uses should be excluded.

Other Urban or Built-Up Land: “Other Urban or Built-Up Land” typically consists of uses such as golf driving ranges, zoos, urban parks, cemeteries, waste dumps, water-control structures and spillways, the extensive parts of such uses as golf courses and ski areas, and undeveloped land within an urban setting. Open land may be in very intensive use, but as a use that does not require structures (such as urban playgrounds, botanical gardens, or arboreta).

AGRICULTURAL LAND: “Agricultural Land” may be defined broadly as land used primarily for the production of food and fiber. When lands produce economic commodities as a function of their wild state, such as wild rice, cattails or certain forest products commonly associated with wetland, however, they should be included in the “Wetland” category. Similarly, when wetlands are drained for agricultural purposes, they should be included in the “Agricultural Land” category. When such drainage enterprises fall into disuse, and if wetland vegetation is reestablished, the land reverts to the “Wetland” category. A number of subcategories are recognized within the “Agricultural Land” category.

Cropland and Pasture: The several components of “Cropland and Pasture” now used for agricultural statistics include: cropland harvested, including bush fruits; cultivated summer-fallow and idle cropland; land on which crop failure occurs; cropland in soil-improvement grasses and legumes; cropland used only for pasture in rotation with crops; and pasture on land more or less permanently used for that purpose. Brushland in the Eastern States, typically used to some extent for pasturing cattle, is included in the “Shrub and Brush Rangeland” category rather than the “Cropland and Pasture” category. Such grazing activities generally occur on land where crop production or intensive pasturing has ceased, for any variety of reasons, and the land has grown up in brush. Such brushlands often are used for grazing, somewhat analogous to the extensive use of rangelands in the West.

Orchards, Groves, Vineyards, Nurseries, and Ornamental Horticultural Areas: Land on which orchards, groves and vineyards produce various fruit and nut crops. Nurseries and horticultural areas include floricultural and seed-and-sod areas and some greenhouses, and are used perennially for those purposes. Tree nurseries that provide seedlings for plantation forestry also are included here. Isolated small orchards, such as the fruit trees on the family farm, are not included.

Confined Feeding Operations: “Confined Feeding Operations” are large, specialized livestock production enterprises, chiefly cattle feedlots, dairy operations with confined feeding, and large poultry farms, but also including hog feedlots. These operations have large animal populations restricted to relatively small areas. The result is a concentration of waste material that is an environmental concern. The waste-disposal problems justify a separate category for these relatively small areas. Excluded are shipping corrals and other temporary holding facilities. Such occurrences as thoroughbred horse farms generally do not have the animal population densities that would place them in this category.

Other Agricultural Land: Other land uses typically associated with the first three categories of “Agricultural Land” are the principal components of the “Other Agricultural Land” category. These include farmsteads, holding areas for livestock such as corrals, breeding, and training facilities on horse farms, farm lanes and roads, ditches and canals, small farm ponds, and similar uses.

RANGELAND: “Rangeland” historically has been defined as land where the potential natural vegetation is predominantly grasses, grass-like plants, forbs, or shrubs where natural herbivory was an important influence in its pre-modern state. The historical connotation of “Rangeland” is expanded in this classification to include those areas in the Eastern States which commonly are called brushlands.

Herbaceous Rangeland: The “Herbaceous Rangeland” category encompasses lands dominated by naturally occurring grasses and forbs, as well as those areas of actual rangeland which have been modified to include grasses and forbs as their principal cover, when the land is managed for rangeland purposes and not managed using practices typical of pastureland. It includes the tall grasses (or true prairie), short grass, bunch grass or palouse grass, and desert grass regions. Respectively, these grass regions represent a sequence of declining amounts of available moisture. Most of the tall grass region has been plowed for agriculture. Typical occurrences of grasslands include such species as the various bluestems (*Andropogon*), grama grasses (*Bouteloua*), wheatgrasses (*Agropyron*), neettlegrasses (*Stipa*), and fescues (*Festuca*).

Shrub and Brush Rangeland: The Eastern brushlands are typically former croplands or pasturelands (cleared from original forest land) which now have grown up in brush, in transition back to forest land, to the extent that they are no longer identifiable as cropland or pasture. Many of these brushlands are grazed in an extensive manner by livestock and provide wildlife habitat. These areas usually remain as part of the farm enterprise, even though not being used at their former levels of intensity. Eastern brushland areas traditionally have not been included in the rangeland concept because of their original forested state prior to clearing for cropland or pasture, and generally have been summarized statistically with pastureland. Because they now function primarily as extensive grazing land, they are included here as part of the “Rangeland” category. After sufficient forest growth has occurred, they should be classified as “Deciduous,” “Evergreen,” or “Mixed Forest Land,” as appropriate.

FOREST LAND: “Forest Lands” have a tree-crown area density (crown closure percentage) of 10% or more, are stocked with trees capable of producing timber or other wood products, and exert an influence on the climate or water regime.

Lands from which trees have been removed to less than 10% crown closure, but which have not been developed for other uses, also are included. For example, lands on which there are rotation cycles of clearcutting and blockplanting are part of “Forest Land.” On such lands, when trees reach marketable size (which for pulpwood in the southeastern United States may occur in 2 to 3 decades), there will be large areas that have little or no visible forest growth. The pattern can sometimes be identified by the presence of cutting operations in the midst of a large expanse of forest. Unless there is evidence of other use, such areas of little or no forest growth should be included in the “Forest Land” category. “Forest Land” that is grazed extensively would be included in this category because the dominant activities are forest related. Lands that meet the requirements for “Forest Land” and also for an “Urban or Built-Up” category should be placed in the latter category. The only exceptions in classifying “Forest Land” are those areas that would otherwise be classified as “Wetland” if not for the forest cover. Since the wet condition is of much interest to land managers and planning groups, and is so important as an environmental surrogate and control, such lands are classified as “Forest Wetland.”

Deciduous Forest Land: “Deciduous Forest Land” includes all forested areas having a predominance of trees that lose their leaves at the end of the frost-free season or the beginning of a dry season. In most parts of the United States these would be the hardwoods such as oak (*Quercus*), maple (*Acer*) or hickory (*Carya*) and the "soft" hardwoods, such as aspen (*Populus tremuloides*). Tropical hardwoods are included in the “Evergreen Forest Land” category. Deciduous forest types characteristic of “Wetland,” such as tupelo (*Nyssa*) or cottonwood (*Populus deltoides*), also are not included in this category.

Evergreen Forest Land: “Evergreen Forest Land” includes all forested areas in which the trees are predominantly those which remain green throughout the year. Both coniferous and broad-leaved evergreens are included in this category. In most areas the coniferous evergreens predominate. The coniferous evergreens are commonly referred to or classified as softwoods, and include such eastern species as the longleaf pine (*Pinus palustris*), slash pine (*Pinus elliottii*), shortleaf pine (*Pinus echinata*), loblolly pine (*Pinus taeda*), and other southern yellow pines; various spruces (*Picea*) and balsam fir (*Abies balsamae*); white pine (*Pinus strobus*), red pine (*Pinus resinosa*), and jack pine (*Pinus banksiana*); and hemlock (*Tsuga canadensis*). Evergreen species commonly associated with “Wetland,” such as tamarack (*Larix laricina*) or black spruce (*Picea mariana*), are not included in this category.

Mixed Forest Land: “Mixed Forest Land” includes all forested areas where both evergreen and deciduous trees are growing and neither predominates. When more than one-third intermixture of either evergreen or deciduous species occurs in a specific area, it is classified as “Mixed Forest Land.” Where the intermixture land use or uses total less than one-third of the specified area, the category appropriate to the dominant type of “Forest Land” is applied, whether “Deciduous” or “Evergreen.”

WATER: Water as defined by the Bureau of the Census includes all areas within the landmass of the United States that persistently are water-covered.

Streams and Canals: The “Streams and Canals” category includes rivers, creeks, canals, and other linear water bodies. Where the watercourse is interrupted by a control structure, the impounded area will be placed in the “Reservoirs” category.

The boundary between streams and other bodies of water is the straight line across the mouth of the stream up to one nautical mile (1.85km). Beyond that limit, the classification of the water body changes to the appropriate category, whether it be “Lakes,” “Reservoirs,” “Bays,” or “Estuaries.” These latter categories are only used if the water body is considered to be "Inland water" and, therefore, included in the total area of the United States. No category is applied to waters classified as "other than inland water" or offshore marine waters beyond the mouths of rivers (U.S. Bureau of the Census 1970).

Lakes: “Lakes” are non-flowing, naturally enclosed bodies of water, including regulated natural lakes, but excluding reservoirs.

Reservoirs: “Reservoirs” are artificial impoundments of water used for irrigation, flood control, municipal water supplies, recreation, hydroelectric power generation, and so forth. Dams, levees, other water-control structures, or the excavation itself usually will be evident to

aid in the identification, although the water-control structures themselves and spillways are included in the “Other Urban or Built-Up Land” category.

In most cases reservoirs serve multiple purposes and may include all of the land use functions just mentioned. In certain cases like the Tennessee River, the entire length of the trunk stream is impounded. In such a situation the stream exists as a stair-step series of impoundments with waterway, flood-control, recreation and power-generation functions, but is still considered a reservoir, since the additional functions are the result of impoundment.

WETLAND: “Wetlands” are those areas where the water table is at, near, or above the land surface for a significant part of most years. The hydrologic regime is such that aquatic or hydrophytic vegetation usually is established, although alluvial and tidal flats may be non-vegetated. “Wetlands” frequently are associated with topographic lows, even in mountainous regions. Examples of “Wetlands” include marshes, mudflats, and swamps situated on the shallow margins of bays, lakes, ponds, streams, and human-made impoundments (such as reservoirs). Shallow water areas where aquatic vegetation is submerged are classed as open water and are not included in the “Wetland” category.

Extensive parts of some river floodplains qualify as “Wetlands,” as do regularly flooded irrigation overflow areas. These do not include agricultural land where seasonal wetness or short-term flooding may provide an important component of the total annual soil moisture necessary for crop production. Areas in which soil wetness or flooding is so short-lived that no typical wetland vegetation is developed properly, belong in other categories.

Cultivated wetlands such as the flooded fields associated with rice production and developed cranberry bogs are classified as “Agricultural Land.” Uncultivated wetlands from which wild rice, cattails, wood products, and so forth are harvested, or wetlands grazed by livestock, are retained in the “Wetland” category.

“Wetland” areas drained for any purpose belong to other land use and land cover categories, such as “Agricultural Land,” “Rangeland,” “Forest Land,” and “Urban or Built-Up Land.” When the drainage is discontinued and such use ceases, classification may revert to “Wetland.” Wetlands management for wildlife purposes may show short-term changes in land use as different management practices are used, but are properly classified as “Wetland.”

Forested Wetland: “Forested Wetlands” are wetlands dominated by woody vegetation. “Forested Wetland” includes seasonally flooded bottomland hardwoods and wooded swamps, including those around bogs.

Non-forested Wetland: “Non-forested Wetlands” are dominated by wetland herbaceous vegetation or are non-vegetated. These wetlands include tidal and non-tidal fresh, brackish, and salt marshes and non-vegetated flats, and also freshwater meadows, wet prairies, and open bogs.

The following are examples of vegetation associated with “Non-forested Wetlands”:
narrow-leaved emergents such as cattail (*Typha*), bulrush (*Scirpus*), sedges (*Carex*), saw grass (*Cladium*) and other grasses (for example, *Panicum* and *Zizaniopsis miliacea*), and broad-leaved emergents such as waterlily (*Nuphar*, *Nymphaea*), pickerelweed (*Pontederia cordata*), arrow arum (*Peltandra*), arrowhead (*Sagittaria*), water hyacinth (*Eichhornia crassipes*), and

alligatorweed (*Alternanthera philoxeroides*) typical of brackish to freshwater locations. Mosses (*Sphagnum*) and sedges (*Carex*) grow in wet meadows and bogs.

BARREN LAND: “Barren Land” is land of limited ability to support life and in which less than one-third of the area has vegetation or other cover. In general, it is an area of thin soil, sand, or rocks. Vegetation, if present, is more widely spaced and scrubby than that in the “Shrub and Brush” category of “Rangeland.” Unusual conditions, such as heavy rainfall, occasionally result in growth of short-lived, more luxuriant plant cover. Wet, non-vegetated barren lands are included in the “Non-forested Wetland” category.

Land may appear barren because of human activities. When it may reasonably be inferred from the data source that the land will be returned to its former use, it is not included in the “Barren Land” category, but classified on the basis of its site and situation. “Agricultural Land,” for example, may be temporarily without vegetative cover because of cropping season or tillage practices. Similarly, “Industrial Land” may have waste and tailing dumps; and areas of intensively managed “Forest Land” may have clear-cut blocks evident.

When neither the former nor the future use can be discerned and the area is obviously in a state of land use transition, it is considered to be “Barren Land,” in order to avoid inferential errors.

Beaches: “Beaches” are the smooth sloping accumulations of sand and gravel along shorelines. The surface is stable inland, but the shoreward part is subject to erosion by the wind and water and to deposition in protected areas.

Sandy Areas Other than Beaches: “Sandy Areas Other than Beaches” are composed primarily of dunes -- accumulations of sand transported by the wind. Sand accumulations most commonly are found in deserts, although they also occur on coastal plains, river floodplains and deltas, and in periglacial environments.

Bare Exposed Rock: The “Bare Exposed Rock” category includes areas of bedrock exposure, desert pavement, scarps, talus, slides, volcanic material, rock glaciers, and other accumulations of rock without vegetation cover.

Strip Mines, Quarries, and Gravel Pits: Those extractive mining activities that have significant surface expression are included in this category. Vegetative cover and overburden are removed to expose such deposits as coal, iron ore, limestone, etc. Quarrying of building and decorative stone, and recovery of sand and gravel deposits also result in large open surface pits. Current mining activity is not always distinguishable, and inactive, unreclaimed and active strip mines, quarries, borrow pits and gravel pits are included in this category until other cover or use has been established, after which the land would be classified in accordance with the resulting use or cover. Unused pits or quarries that have been flooded, however, are placed in the appropriate “Water” category.

Transitional Areas: The “Transitional Areas” category is intended for those areas that are in transition from one land use activity to another. All that actually can be determined in these situations is that a transition is in progress, and inference about past or future use should be avoided. This transitional phase occurs when, for example, forest lands are cleared for

agriculture, wetlands are drained for development or when any type of land use ceases. This includes areas that have become temporarily bare as construction is planned for such future uses as residences, shopping centers, industrial sites or suburban and rural residential subdivisions. Land being altered by filling, such as occurs in spoil dumps or sanitary landfills, also is indicative of this transitional phase. Do not select "Transitional Lands" based on *expected* future changes (e.g., expected to change from agricultural field to a residential development). Base the selection on the condition at the time of survey.

Mixed Barren Land: The "Mixed Barren Land" category is used when a mixture of "Barren Land" features occurs and the dominant land use occupies less than two-thirds of the area. Where more than one-third intermixture of another use or uses occurs in a specific area, it is classified as "Mixed Barren Land." Where the intermixed land use or uses total less than one-third of the specific area, the category appropriate to the dominant type of "Barren Land" is applied.

Unrecorded: This response is intended only for transcribed data.

Other: Please specify. This category includes all activities that do not fit into the categories established above.

Unknown: Should be utilized *only* if insufficient information exists to place the site into any of the above categories.

9. LAND USE HISTORY

Describe the pattern of "Historic Land Use" (as far as is known) in relationship to the preservation/destruction of cultural remains and/or resources, using the activity categories in section E.8, above (whenever possible). Please use the Continuation Section (J) or a separate Continuation Sheet if necessary.

*10. SITE ELEVATION

Record the elevation of the point from which the UTM coordinate was taken (in meters above mean sea level). This point should be the approximate center of the site. This information can frequently be approximated or interpolated from the USGS quadrangle maps. Data obtained by the use of a calibrated surveying altimeter or GPS unit will provide a higher degree of accuracy, however it is usually sufficient to round to the nearest meter. If the site occupies an area with a considerable range of elevation, additional elevations may be indicated in the Continuation Section (J). Make certain you are giving the elevation *in meters*.

*11. PHYSIOGRAPHIC SETTING OF SITE

Select only one, as appropriate. The physiographic classification of Ohio has been adopted from the Ohio Geological Survey classification used in preparing County Soil Surveys. A copy of the map showing these areas is included as **Appendix D**. Please use this map or the descriptions in the County Soil Surveys to determine the proper response, as listed below.

LAKE PLAIN (This is also the appropriate response for sites submerged in Lake Erie.)

LEXINGTON PENEPLAIN

UNGLACIATED PLATEAU

TILL PLAIN

GLACIATED PLATEAU

UNRECORDED (This response is intended only for transcribed data.)

***12. GLACIAL GEOMORPHOLOGY**

Select only one, as appropriate. “Glacial Geomorphology” is described in all County Soil Surveys published since 1964. Soil surveys are the preferred source for information on “Glacial Geomorphology” since the detailed scale of the soil maps allows for precise delineation of the boundaries of glacial features. If recent soil surveys are not available, the following sources may be used:

White's *Glacial Geology of Northeastern Ohio* (1982) is the appropriate source for the northeastern portion of the state. The *GLACIAL MAP OF OHIO* described below is also useful.

Goldthwait, White, and Forsyth's *Glacial Map of Ohio* (1961) is the appropriate source for the remainder of the state. Their map was adapted by the Division of Geological Survey of the Ohio Department of Natural Resources as *GLACIAL MAP OF OHIO*, and this map is included here as **Appendix E**. This map can also be accessed (with zoom capabilities) at www.ohiodnr.com/geosurvey.

The “Glacial Geomorphology” categories listed below follow the Ohio Geological Survey standard and are used in soil surveys and in the keys to the maps listed above.

Not Applicable: Use this category only when the site has not been affected by Pleistocene glaciation (i.e., when the “Unglaciaded Plateau” category has been selected in E.11, above, and the site is not situated on glacial outwash or lake deposits). This category includes what is called “Colluvium” on the Glacial Map.

Wisconsin End / Lateral Moraine

Kansan Ground Moraine (Shown on the map as “Pre-Illinoian,” this category should be used for both “Ground Moraine” and “Dissected Ground Moraine.”)

Wisconsin Kame / Kettle / Esker / Drumlin

Illinoian Ground Moraine (Includes both “Ground Moraine” and “Dissected Ground Moraine.”)

Wisconsin Lacustrine Deposit (Shown as “Lake Deposits” on the map. Check the Soil Survey book to distinguish between “Wisconsin” and “Post Wisconsin” deposits.)

Illinoian Outwash (Shown as “Outwash” on map. Check Soil Survey book to distinguish between “Illinoian” and “Wisconsin” outwash.)

Post Wisconsin Lacustrine Deposit (Shown as “Lake Deposits” on the map. Check the Soil Survey book to distinguish between “Wisconsin” and “Post Wisconsin” deposits.)

Wisconsin Ground Moraine (Includes both “Ground Moraine” and “Wave-planed Ground Moraine.”)

Wisconsin Outwash (Shown as “Outwash” on map. Check Soil Survey book to distinguish between “Illinoian” and “Wisconsin” outwash.)

Unrecorded This response is intended only for transcribed data.

Other: Please specify. This response will be used very rarely, when none of the above categories are applicable.

*13. REGIONAL GEOMORPHOLOGICAL SETTING

Select only one, as appropriate. The category of “Regional Geomorphological Setting” is utilized to denote the dominant geomorphological process or agency in the development of the regional land surface. Thus, this section is meant to identify the dominant *regional* geomorphology of the land formation where the site occurs. Definitions utilized are derived from Thornbury's *Regional Geomorphology of the United States* (1965), Wiley: New York.

Stream Valley: The geographical area composed of lowlands and the surrounding area, the form of which is the result of the flow of water. The category “Stream Valley” includes all landforms within the valley, such as the valley floor, floodplain, and terraces.

Upland Hill Slope: The upland area located at an elevation above floodplains or terraces, usually sloping down towards a stream valley. The crest of an “Upland Hill Slope” is a “Hill or Ridge Top.” The boundary between “Stream Valleys” lies along such crests.

Beach Ridge: A gently sloping zone, typically with a concave profile of unconsolidated materials (generally sands and gravels) which extends inland from a modern or abandoned low water line of a body of water. The “Beach Ridge” generally extends from the water line to a place where there is a definite change of materials or physiography. Beaches are associated with bodies of water large enough to have waves and/or tides.

Hill or Ridge Top: The upland area, usually relatively flat, of variable size, which lies above the “Upland Hill Slope” and forms the division between “Stream Valleys.” Note that this category does not include most of the side slope areas, unlike the “Hill or Ridgetop” category in the “Local Environmental Setting” section, E.14, below.

Lake Plains Interfluvial Zone: Broad area of the till plains section situated between deeply incised post-glacial stream valleys.

Unrecorded: This response is intended only for transcribed data.

*14. LOCAL ENVIRONMENTAL SETTING

Select only one, as appropriate. Accurate information on “Local Environmental Setting” is contained in County Soil Surveys. Past experience has shown that the U.S. Natural Resources Conservation Service (NRCS) will often provide additional information concerning the local environment. Contact the resident soil scientist at the Natural Resources Conservation Service Office.

TERRACE:

Unknown: A surface of higher elevation, paralleling the floodplain. Stream terraces usually form a local sequence, as indicated below.

T-1 (First or lowest terrace): The first level surface above the floodplain and more or less parallel to the stream channel. The first terrace may extend into tributary stream channels. The first terrace may represent the only terrace or may be the lowest (in elevation) of a series of terraces in the stream valley.

T-2 (Second terrace): Terrace, as described above, which exists above the first (lowest) terrace and below the third terrace (if existent).

T-3 (Third terrace): Terrace, as described above, which exists above the second terrace and below the fourth terrace (if existent).

T-4 (Fourth terrace): Terrace, as described above, which exists above the third terrace. Fourth terraces are rare in Ohio and are found only in major stream valleys such as the Ohio, Great Miami and Scioto Rivers. If higher terraces (5th, 6th, etc.) are thought to be locally important, they should be coded as fourth terraces.

BEACH RIDGE: A *local* manifestation of the definition to “Beach Ridge” given in E.13, above.

TERRACE REMNANT: A section of an ancient terrace.

NATURAL LEVEE: A long, broad, low ridge or embankment of sand and coarse silt, built up by a stream on its floodplain primarily along both banks of its channel. A typical cross section would include a steep face or bank on the stream side of the levee with a gently sloping backslope which grades into the floodplain.

FLOODPLAIN: A surface (expanse) or strip of relatively level land adjacent to a stream or river which may (or may not) be subject to contemporary flooding.

LOW RISE ON FLOODPLAIN: Any major projection on a floodplain which is not a terrace, terrace remnant, or natural levee.

ALLUVIUM: A general term for deposits resulting from the activity of water, including sediments laid down by modern or past rivers and streams, lakes and ponds, and estuaries.

ISLAND: A landmass surrounded by water.

KAME: A conical hill of stratified sands and gravels deposited in contact with glacial ice.

DRUMLIN: A long, oval shaped hill or ridge formed by glacial drift.

ESKER: A winding narrow ridge of sand and/or gravel deposited by a stream flowing within or under glacial ice.

MORAINE: Drift, composed of gravel, sand, clay, etc. carried and deposited by a glacier along its sides (a lateral moraine), at its lower end (a terminal moraine), or beneath the ice (a ground moraine).

GLACIAL HUMMOCK: A low hill composed of unsorted sands and gravels deposited by a glacier.

WETLAND HUMMOCK: A fertile area of deep humus-rich soil, rising slightly above a plain, swamp, or bog, frequently covered with hardwood vegetation.

BLUFF: A high, steep, broad-faced bank or cliff.

BLUFF BASE: Lowest portion of a bluff where it approaches the valley floor, where slopes become more gentle.

BLUFF EDGE: The upper portion of a bluff and the adjacent upland area.

SADDLE: A relatively flat area that usually occurs between ridges or hilltops, and connects the summits of two higher elevations. A saddle typically is a small flat area with two up-slopes in opposite directions and two down-slopes at right angles to the up-slopes.

HILL OR RIDGETOP: A "Hill" is a natural elevation of the land, rising rather prominently above the surrounding land, usually of limited extent and having a well defined outline, and generally rising less than 300 meters from base to summit. A "Ridgetop" refers to a long narrow elevation of the earth's surface, usually with steep sides, occurring either as an independent hill or as part of a larger mountain, hill, or divide between drainage systems. The steep-sided upland between valleys or between a valley and a hill is also defined as part of a ridge. Therefore, both the sides and the top of the ridge should be included in the "Ridgetop" category for the "Local Environmental Setting."

CLOSED DEPRESSION: A depression or area with no external surface drainage, as indicated by closed contour lines. Sink holes and kettles are typical examples.

UNRECORDED: This response is intended only for transcribed data.

OTHER: Please specify.

*15. SOILS

Information for this section is best obtained from the County Soil Surveys for Ohio. Soil Survey books can be accessed at regional U.S. Natural Resources Conservation Services offices, the Ohio Department of Natural Resources, the Ohio Historical Society, and many university and metropolitan libraries. The Ohio Historic Preservation Office has a partial set available for researchers to use.

SOIL ASSOCIATION: A group of soils displaying similar physical properties. The “Soil Association” can be determined from the General Soil Map that appears in each County Soil Survey book. For example, the Cardington-Alexandria-Bennington Association, composed of three named “Soil Series,” occurs in Franklin County.

SOIL SERIES-PHASE/COMPLEX: A “Soil Series-Phase/Complex” includes soils that have profiles that are almost alike. Except for differences in the texture of the surface layer or of the underlying material, all the soils of one “Series” have major horizons that are similar in composition, thickness, arrangement, and other important characteristics. Soils of one “Series” can differ in texture of the surface layer, in slope, stoniness, or some other characteristic that affects use of soils by humans.

On the basis of such differences, a “Soil Series” can be divided into “Soil Phases.” A “Soil Phase” name usually reflects a soil feature that affects use or management. A “Soil Complex” is a mapping unit made up of soils of different “Series” or of different “Soil Phases” within a single “Soil Series.” A “Soil Complex” consists of areas of two or more soils, so intricately mixed or so small in size that they cannot be shown separately on soil maps produced for County Soil Surveys. Each area of a “Soil Complex” contains some of each of the two or more dominant soils, and the pattern and relative proportion are about the same in all areas. Generally, the name of a “Soil Complex” consists of the names of the dominant “Soil Series,” joined by a hyphen. “Soil Series-Phase/Complex” information can be obtained from County Soil Survey Reports for the county in question. An example of the response sought would be Cardington silt loam, 2-6 % slopes, eroded.

REFERENCE: Source utilized to obtain soil information. Use the *American Antiquity* bibliographic format (see also “References” under G, below). The publication date of reports is important since soil surveys have markedly improved in accuracy since the 1920s. Also, “Soil Association” and “Soil Series” names have changed over the years. It should be noted that current soil information frequently can be obtained from the Natural Resources Conservation Service Office in those counties for which recent County Soil Survey Reports have not been published.

***16. DOWNSLOPE DIRECTION**

Select only one, as appropriate. The “Downslope Direction” is the direction in which water would drain from the site. The direction usually can be determined from USGS quadrangle maps if it was not obtained in the field.

N = NORTH

NW = NORTHWEST

NE = NORTHEAST

E = EAST

ALL = ALL DIRECTIONS (as from the top of a knoll or hummock)

FLAT = NO DRAINAGE (water loss is only through evaporation or percolation into the soil)

S = SOUTH

SW = SOUTHWEST

SE = SOUTHEAST

W = WEST

UNRECORDED: This response is intended only for transcribed data.

***17. SLOPE GRADIENT**

The “Slope Gradient” to be inserted here is that which can be obtained from the County Soil Survey Report. Enter the appropriate percentage of slope the way it appears as part of the “Soil Phase”(i.e., 0-2%, 2-6%, 6-12%, etc.), as established by the Soil Conservation Service (Natural Resources Conservation Service) or Ohio Department of Natural Resources. If you obtained the specific slope within a site’s boundaries when in the field, put that information into the “Site Description” section (I.1, below). It is recognized that the 10-foot contour interval of the USGS quadrangle maps is too coarse and is not suitable for measuring or calculating slopes for the vast majority of archaeological sites.

UNRECORDED: This response is intended only for transcribed data.

*18. DRAINAGE SYSTEM

Select ONLY from the list provided here. This “Drainage System” section allows delineation of the master stream for drainage from the locality of the site. **Not all of the streams in Ohio are utilized in this classification, only those that drain over 100 square miles.** “Drainage System” information is found on the map, PRINCIPAL STREAMS AND THEIR DRAINAGE AREAS (reprinted 1999), and from *Drainage Areas of Ohio Streams*, by William P. Cross (1967), both published by the Ohio Department of Natural Resources’ Division of Water, and from which this list has been produced. More recently (2001), this map has been republished as part of the book, *A Guide to Ohio Streams*, edited by Randall E. Sanders, and available from the Ohio Chapter of the American Fisheries Association and ODNR. Additional data on the drainage areas of all Ohio streams can be found in the *Gazetteer of Ohio Streams*, 2nd edition, Water Inventory Report No. 29 (2001), compiled by J.C. Krolczyk, and edited by V. Childress (www.ohiodnr.com/water).

The **OHIO RIVER** and **LAKE ERIE** can be selected **only** as major (not minor) drainages. All other streams on this list can be minor drainages in this scheme. Each stream on this list drains at least 100 square miles. Any stream that has at least one tributary that drains at least 100 square miles may be considered a major drainage in this scheme; those streams are indicated by CAPITAL LETTERS on this list. Tributaries are indicated by indentation; streams flow into the stream under which they are indented. **Again, select only from the list provided here!**

EXAMPLES:

1. If the site is located on the bank of the **OHIO RIVER** or **LAKE ERIE**, or the closest water source that drains the site drains directly into the **OHIO RIVER** or **LAKE ERIE**, and is not on the attached list, then the site has a major drainage (**OHIO RIVER** or **LAKE ERIE**) but no minor drainage.
2. If the site is located on the bank of the WABASH RIVER, or the closest water source that drains the site drains into a tributary other than Beaver Creek or the Mississinewa River, then the major drainage would be the **OHIO RIVER** and the minor drainage would be the WABASH RIVER.
3. However, if the site is located on the bank of Beaver Creek or the Mississinewa River, or the closest water source that drains the site drains into either Beaver Creek or the Mississinewa River, then the major drainage would be the WABASH RIVER and the minor drainage would be either Beaver Creek or the Mississinewa River.
4. The East Fork Whitewater River flows into the WHITEWATER RIVER, which flows into the GREAT MIAMI RIVER. Indian Creek flows into the GREAT MIAMI RIVER. The GREAT MIAMI RIVER flows into the **OHIO RIVER**.

OHIO RIVER

The following tributaries drain at least 100 square miles and flow directly into the **OHIO RIVER**. The streams are listed in order of geographical position from west to east. City names are supplied to facilitate geographical reference for some drainages.

· Between Cincinnati and Portsmouth:

Mill Creek
Whiteoak Creek
Eagle Creek
OHIO BRUSH CREEK
West Fork Ohio Brush Creek

· Between Portsmouth and Marietta:

Little Scioto River
Pine Creek
Symmes Creek
RACCOON CREEK
Little Raccoon Creek
Leading Creek
Shade River
Little Hocking River

· Between Marietta and East Liverpool:

DUCK CREEK
West Fork Duck Creek
East Fork Duck Creek
Little Muskingum River
Sunfish Creek
Captina Creek
Wheeling Creek
Short Creek
Cross Creek
Yellow Creek

· Between East Liverpool and Pittsburgh:

LITTLE BEAVER CREEK
West Fork Little Beaver Creek
Middle Fork Little Beaver Creek
North Fork Little Beaver Creek

OHIO RIVER (cont'd.)

WABASH RIVER

Beaver Creek
Mississinewa River

GREAT MIAMI RIVER

WHITEWATER RIVER

East Fork Whitewater River
Indian Creek

FOUR MILE CREEK

Sevenmile Creek
Twin Creek

STILLWATER RIVER

Greenville Creek
Loramie Creek

MAD RIVER

Buck Creek

LITTLE MIAMI RIVER

Caesar Creek
Todd Fork
East Fork Little Miami River

SCIOTO RIVER

SCIOTO BRUSH CREEK

South Fork Scioto Brush Creek
Sunfish Creek

PAINT CREEK

Rocky Fork
Rattlesnake Creek
North Fork Paint Creek

Deer Creek

BIG DARBY CREEK

Little Darby Creek
Mill Creek

Rush Creek

Little Scioto River

OLENTANGY RIVER

Whetstone Creek
BIG WALNUT CREEK

Alum Creek
Little Walnut Creek*

SALT CREEK

LITTLE SALT CREEK
Middle Fork

* The Little Walnut Creek drainage is that stream that enters the Scioto River near the small village of Little Walnut, south of Ashville. On some maps this creek is called Walnut Creek. Do not confuse this Little Walnut/Walnut Creek with the Walnut Creek that enters the Scioto south of Chillicothe (which is not on this list of drainages).

OHIO RIVER (cont'd.)

HOCKING RIVER

Rush Creek
Monday Creek
Sunday Creek
Federal Creek

MUSKINGUM RIVER

WOLF CREEK

West Branch Wolf Creek

MOXAHALA CREEK

Jonathan Creek

LICKING RIVER

North Fork Licking River

SOUTH FORK LICKING RIVER

Raccoon Creek

Wakatomika Creek

WALHONDING RIVER

Kokosing River

Killbuck Creek

MOHICAN RIVER

Clear Fork

Black Fork

LAKE FORK

Jerome Fork

Muddy Fork

TUSCARAWAS RIVER

STILLWATER CREEK

Little Stillwater Creek

SUGAR CREEK

South Fork Sugar Creek

Conotton Creek

SANDY CREEK

Nimishillen Creek

Chippewa Creek

WILLS CREEK

Buffalo Creek

Seneca Fork

Salt Fork

Salt Creek

Meigs Creek

MAHONING RIVER

West Branch Mahoning River

Eagle Creek

Mosquito Creek

SHENANGO RIVER

Pymatuning Creek

LAKE ERIE

The following tributaries drain at least 100 square miles and flow directly into **LAKE ERIE**. The streams are listed in order of geographical position from west to east. City names are supplied to facilitate geographical reference for some drainages.

- Ohio-Michigan State Line Area

- River Raisin
Tenmile Creek

- Between Toledo and Cleveland

- PORTAGE RIVER
MIDDLE BRANCH PORTAGE RIVER
South Branch Portage River
Muddy Creek
HURON RIVER
West Branch Huron River
Vermillion River
BLACK RIVER
West Branch Black River
East Branch Black River
ROCKY RIVER
West Branch Rocky River

- Between Cleveland and Erie, PA

- Chagrin River
GRAND RIVER
Mill Creek
Ashtabula River
Conneaut Creek

LAKE ERIE (cont'd.)

MAUMEE RIVER

St. Mary's River

ST. JOSEPH'S RIVER

Fish Creek

West Branch St. Joseph's River

East Branch St. Joseph's River

TIFFIN RIVER

Bean Creek

Lick Creek

AUGLAIZE RIVER

Blanchard River

Flatrock Creek

Ottawa River

LITTLE AUGLAIZE RIVER

Prairie Creek

Middle Creek

Blue Creek

South Turkeyfoot Creek

BEAVER CREEK

Cutoff Ditch

Swan Creek

SANDUSKY RIVER

Tymochtee Creek

Honey Creek

Wolf Creek

CUYAHOGA RIVER

***19. CLOSEST WATER SOURCE**

Indicate the "Closest Water Source" by name in the space provided. If the "Closest Water Source" is an unnamed tributary, state that and add the name of the stream that it flows into (e.g., "Unnamed tributary of Captina Creek"). Then select only one, as appropriate, from the following *types* of water sources. Please refer to the USGS guide to *Topographic Map Symbols*, available from ODNR, if necessary. Copies also are available for researchers to use at the Ohio Historic Preservation Office.

Note that the "Closest Water Source" should be the closest water source *recognized today*, even if it has altered course since the site was occupied. However, if the site is prehistoric, do not use any category below that applies only to historic sites. If the site has both a prehistoric and historic component, you should indicate the prehistoric component's "Closest Water Source" and the historic component's "Closest Water Source" (if they are different),

disregarding the instruction to select only one. If it is clear that the site was originally closer to water than it is today, (e.g., as a result of stream rechanneling), please note that in the “Description of Site” section (I.1), below.

Permanent Stream: A stream (run, creek, river, etc.) which contains water throughout the normal year. Permanent streams are shown as solid blue lines on USGS quadrangle maps and are named.

Lake / Pond: A natural body of standing water formed in a depression. Large bodies are normally designated as “Lakes,” while small bodies are designated as “Ponds,” although the size of “Lakes” and “Ponds” differs with local usage. “Lakes” are typically shown and named on USGS quadrangle maps. “Ponds” may be shown, and may also be named if of sufficient size.

Ephemeral Stream: A stream (tributary, run, or portion of a creek or river) which contains water on an intermittent basis (usually after rain). Ephemeral, or intermittent, streams are shown as broken blue lines on USGS quadrangle maps.

Permanent Spring: A source of water that discharges from below ground on a year-round basis. Springs are usually located at low elevations on hillsides.

Swamp / Bog: An area of permanently wet, spongy land, which may or may not contain open water. Swamps and bogs are normally indicated on USGS quadrangle maps with a marsh symbol.

Intermittent Spring / Seep: A source of water which discharges from below ground on an intermittent basis, usually in the spring of the year or after extensive rains.

Slough / Oxbow Lake: Lakes occurring on the flood plain of a stream as a result of the cutting off of an old stream meander.

Artificial Lake / Pond (historic sites only): A lake or pond formed by human activity which may include the construction of a dam across a stream valley, or the excavation of a depression into the earth's surface. This category may be utilized only if the construction of the lake/pond predates or is contemporaneous with the construction of the historic site.

Artificial Stream / Ditch (historic sites only): Canals, millraces, channelized drainage ditches, etc.

Unrecorded: This response is intended only for transcribed data.

Other: Please specify (e.g., well [for historic sites only]).

*20. HORIZONTAL DISTANCE TO CLOSEST WATER SOURCE

Measure the minimum horizontal distance (**in meters**) from the “Closest Water Source” indicated in E.19, above, to the point where the UTM coordinates were measured.

21. ELEVATION ABOVE CLOSEST WATER SOURCE

Measure the minimum vertical distance (**in meters**) from the “Closest Water Source” indicated in E.19, above, to the point where the UTM coordinates were measured.

F. Reporting Information

***1. INVESTIGATION TYPE**

Select as many as appropriate, and specify where requested or otherwise necessary. More detailed information about some types of investigation can be found in the Ohio Historic Preservation Office’s *Archaeology Guidelines* (1994).

Reported: Sites initially or only identified through published references or informant contact and which have not been previously reported in the Ohio Archaeological Site Card File or on OAI forms. Informant contact includes both the identification and location of sites and the analysis of collections.

Examination of Collection: Personal visual examination of an artifact collection.

Surface Collection: If the site was surface collected, please complete items F.2 through F.5, below, where applicable. Any pedestrian reconnaissance that resulted in the collection of artifacts should be recorded under “Surface Collection.” A visual examination of a site without any collection of materials should be listed as “Other: walkover” or “Other: visual examination.”

Auger / Soil Corer: Testing of a site with a soil augering or coring device.

Shovel Test(s): The excavation of 50 cm x 50 cm units, following the recommendations in the OHPO *Archaeology Guidelines*. The purpose of most shovel testing is to locate sites and to delimit site boundaries in areas with poor surface visibility.

Test Pit(s): The excavation of square or rectangular units larger than 50 cm x 50 cm. They may either expand a shovel test unit or be separate from any other unit. The walls of test pits are sufficiently broad to enable visual observations of natural strata, and their floors are large enough to detect outlines of cultural features. The purpose of most test pits is to answer questions regarding relationships of strata or to better define features found during shovel testing.

Test Trench(es): The excavation of long rectangular units, resulting in the exposure of a large area in order to determine if any undisturbed cultural deposits are extant. Vertical stratigraphic information is the same as produced by the excavation of test pits, but the horizontal coverage is much greater.

Deep Test(s): The excavation of test trenches to a depth which will encounter at least the B Horizon. Deep testing is usually performed in floodplain situations in order to locate buried sites.

PZ or Humus Removal: Manual or mechanical stripping of the plow zone and/or humus from an area larger than a shovel test, test pit or test trench in order to expose undisturbed cultural remains.

Testing / Excavation (strategy unknown): When testing and/or excavation are known to have been conducted but the strategy is unknown. Most often used for transcribed data or “Reported” sites.

Mitigation / Block Excavation: Systematic excavation of archaeological sites for research or mitigation. Does not imply total excavation of site.

Aerial Photograph: The use of aerial photography to locate and/or interpret archaeological resources. Includes the use of archival photographs and modern photographs taken for the study.

Remote Sensing: Specify the remote sensing technique employed.

Chemical Analysis: Specify the type of chemical analysis employed.

Unrecorded: This response is intended only for transcribed data.

Other: Please specify (e.g., walkover, visual examination, detailed mapping, detailed photographic recording, etc.).

*2. SURFACE COLLECTION STRATEGY

If “Surface Collection” was selected as an “Investigation Type” in F.1, above, a “Surface Collection Strategy” must be indicated here. Select as many as appropriate (see Charles L. Redman, *Archaeological Sampling Strategies*, Addison-Wesley, 1974, or Clive Orton, *Sampling in Archaeology*, Cambridge, 2002, for concise overviews of archaeological sampling procedures). See also the appropriate sections in the OHPO *Archaeology Guidelines*.

Not Applicable: No surface collection was made.

Grab Sample: Surface collection was performed in a haphazard, or non-systematic, manner.

Diagnostics: Collection of only temporally, culturally and/or functionally diagnostic artifacts from the surface of the site.

Controlled-Unknown: Systematic surface collection of the site is known to have been made, but the collection strategy is unknown.

Controlled-Total: Systematic collection of all cultural material from the surface of the site. Please complete item F.3, below, to describe the methods used.

Controlled-Sample: Systematic collection of a sample of cultural materials from the surface of the site (e.g., collection within transects). Please complete item F.3, below, to describe the methods used.

Unrecorded: This response is intended only for transcribed data.

Other: Specify surface collection strategy if different from the above choices. Please complete Item F.3, below, to describe the methods used.

3. IF SURFACE COLLECTION STRATEGY IS CONTROLLED-TOTAL, CONTROLLED SAMPLE, OR OTHER, DESCRIBE METHODOLOGY AND PERCENTAGE

Discuss sampling methodology and percentage. Briefly explain the reasoning behind your choices.

4. SURFACE VISIBILITY

Select only one, as appropriate. This is an *estimate* of the percentage of the ground surface that was visible during the fieldwork.

5. DESCRIBE SURFACE CONDITIONS

List ground cover, distinguish between plowed or disked field, and denote soil conditions.

*6. SITE AREA

Record the site size **in square meters** and round off to the nearest integer. An Isolated Find spot has a default site area of 1 square meter. Record site dimensions, shape, etc. in the "Site Description" section (I.1), below. The **Unrecorded** response is intended only for transcribed data.

*7. BASIS FOR SITE AREA ESTIMATE

Select only one, as appropriate.

Guessed: The site area was simply estimated without any attempt at measurement.

Historic Maps: The site area measurement was based on data from historic sources with sufficient scale, such as county atlases, plat books, Sanborn maps, coal mine maps, etc.

Aerial Photograph: The site area measurement was based on archived or modern aerial photographs.

Paced: The site area was determined by pacing across the horizontal extent of the site.

Taped: The site area was determined with the use of tape measures during the fieldwork.

Transit / Alidade: The site area was measured using either of these instruments.

Range Finder: The site area was determined through the use of this instrument.

Unrecorded: This response is intended only for transcribed data.

Other (specify): This response is used if none of the above categories are appropriate. Please be specific as to the type of equipment used. For example, “Trimble GPS (with differential correction).” Please do not select “Other” and write in “positive shovel tests.” It is generally assumed that artifact distribution has something to do with defining a site’s boundaries. In such cases, you would indicate *how* you determined where to put the shovel tests (i.e., paced, taped, guessed, etc.) to select the “Basis for Site Area Estimate.”

*8. CONFIDENT OF SITE BOUNDARIES

Select only one, as appropriate. This item refers to the two-dimensional surface area of the site. Please indicate information about the third dimension of the site, depth below ground surface, in the “Site Description” section (I.1), below. **If the site area extends beyond the project area, and you are not permitted to go beyond the project area to determine the site boundary, select “No.”**

9. ESTIMATED PERCENTAGE OF SITE EXCAVATED

Estimated horizontal area of site excavated. Please do not complete this item (i.e., leave blank) if the only subsurface investigation was the excavation of shovel tests in the reconnaissance phase. Generally, this item should be completed only when an archaeological site has gone through a Phase II eligibility assessment or a Phase III data recovery where archaeological excavation was employed. The intent of recording this data is to get an idea of how much of the site’s surface area has been excavated versus how much has been left intact.

Unrecorded: This response is intended only for transcribed data.

*10. NAME OF FORM PREPARER

List the name of the person completing the form. If the form was completed by more than one person, please list *all* of the names here.

*11. INSTITUTION

List the Institutional affiliation (if any) of the form preparer(s).

*12. DATE OF FORM

List the year and month that the form was completed. Use 4 digits to designate the year, two numeric digits to represent the month. (i.e. February 2003 would read: 2003/02).

*13. FIELD DATE

List the year and month for the field investigations at the site. If there was more than one period of investigation, list the month and year of the *last* period of investigation, and note the others in the Continuation Section (J), below. Use 4 digits to designate the year, two numeric digits to represent the month. (i.e. February 2003 would read: 2003/02).

14. TIME SPENT AT SITE

List the length of time spent on field inspection.

15. WEATHER CONDITIONS

State the general weather conditions at the time of field inspection.

16. LOCAL INFORMANTS

List the names, addresses, and phone numbers of all local informants who have information regarding the site. If necessary, use the Continuation Section (J), below, or a separate Continuation Sheet to list all of the local informants.

*17. ARTIFACT REPOSITORY(IES)

List the location of all artifact repositories. Use the Continuation Section (J), below, or a Continuation Sheet if artifacts are housed at more than two institutions. This item includes field notes, etc. from the investigations, as well as artifacts. If the artifact repository or curational facility has confirmed acceptance, please include the accession number. If the curational facility has *not* confirmed acceptance of materials, please indicate the name of the institution and the phrase “pending acceptance.” **It is your responsibility to update this information on a Continuation Sheet once final arrangements are confirmed.** If artifacts are to be returned to the landowner, you must be certain that all of the “Owner” information in section C, above, is accurate and complete.

18. PRIVATE COLLECTIONS

List names, addresses, and phone numbers of the owners of private collections from the site. Use the Continuation Section (J), below, or a Continuation Sheet, if necessary.

19. PHOTOGRAPHS

Select as many as appropriate (for both site and artifact photographs). Use the Continuation Section (J), below, or a Continuation Sheet, if necessary.

20. PHOTOGRAPH REPOSITORY

List the location of the repository for any artifact, site and/or aerial photographs. Use the Continuation Section (J), below, or a Continuation Sheet, if necessary.

*21. NATIONAL REGISTER STATUS

Select only one, as appropriate. Note the symbol (†) after all but one of the responses. **Any response with the symbol (†) indicates an official decision from the Keeper of the National Register.** Please indicate the date of such decisions in the space provided. In most archaeological investigations, the correct response for this item will be “National Register Status Not Assessed.”

22. STATE REGISTRY STATUS

Select only one, as appropriate. Note the symbol (†) after all but one of the responses. Any response with the symbol (†) indicates an official decision from the Ohio Historical Society. Please indicate the date of such decisions in the space provided. In most archaeological investigations, the correct response for this item will be “Not Assessed for State Registry.”

23. SIGNIFICANCE DISCUSSION

Discuss your opinion as to the potential significance of the site in terms of the National Register (36 CFR 60.15) and/or State Registry [Ohio Administrative Code 149-1-02, Section C(i)] criteria. Remember that archaeological sites can be significant under *any* of the four National Register of Historic Places Criteria for Evaluation, not just criterion D, so all of the criteria should be addressed when assessing a site’s eligibility. If you are recording a site under the requirements of Section 106 of the National Historic Preservation Act of 1966 [as amended], this item should be completed. Please supply sufficient information to support your conclusions.

*24. SPECIAL STATUS

Select only one, as appropriate. “Special Status” generally refers to the management of archaeological sites owned by federal, state, or local governments, etc. Some of these categories will be marked on USGS topographic maps. “Military Installation” includes Military Reserves. Examples of the “Other” category include Energy Reserves or properties with Conservation/Preservation Easements or Covenants.

G. References

List the primary documentary sources in which field investigations, artifact analyses, and/or site interpretations are discussed, as well as any other sources cited on the form. Be sure to use the exact name of the report and the name(s) of all of the authors. Use the Society for American Archaeology’s Style Guide for *American Antiquity*, as described in Volume 57(4): 763-770, 1992, or use their website: www.saa.org/publications/styleguide for the most up-to-date version.

H. Radiometric Dates

List separately each radiometric assay/date for the site. Other information regarding individual dates (for example descriptions of features from which the samples were obtained) should be included in the “Site Description” section (I.1), below. Additional radiocarbon dates

and references may be reported in the Continuation Section (J), below, or on a separate Continuation Sheet, as indicated in H.3, using the same data categories.

Materials Dated: For each assay, include information on the type of material(s) used to obtain the date (e.g., unidentified wood charcoal, burned nutshell, shell, bone, etc.).

Date: Report the date **in uncorrected/uncalibrated years B.P.**, with the standard deviation.

Laboratory: List the name of the radiocarbon laboratory that ran the assay.

Sample #: Give the number assigned by the laboratory to the individual sample.

Reference(s): Indicate any documentary sources where this date has been reported, including issues of the journal *Radiocarbon*, if known.

I. Description of Site

This is a general narrative section for any information that has not been specifically solicited within the main body of the OAI form. **It should not be simply a repetition of information that has already been indicated elsewhere on the form.** The following guidelines are presented to aid with the “Description of Site.”

***1. DISCUSS THE PHYSICAL DESCRIPTION AND SETTING OF THE SITE**

This section should include the site dimensions (including cardinal directions) and the configuration (shape) of the site. The spatial relationship of the site to topographic and other natural features, and other cultural features should be addressed. Where applicable, describe any known features (types, location within the site, and dimensions). When recognized, debris patterning and artifact clustering should be discussed. Disturbances to site areas also should be detailed, as well as the impact that the disturbance has had upon the resource.

***2. DISCUSS THE RELATIONSHIP BETWEEN THE SITE AND OTHER SITES IN THE AREA**

On the basis of site setting, debris assemblage, site size and configuration, etc., discuss the relationship between this site and other sites *on a local or regional scale*. In some cases, the appropriate scale may be a drainage system; in other cases, a more restricted area (e.g., the project area or a particular township) may suffice. Choose the scale that best allows you to interpret the site within an archaeological context. Where applicable, specific temporal periods, traditions, cultures and phases should also be discussed in this light.

J. Continuation Section

The “Continuation Section” should be used for additional information for which space is not provided in the main body of the OAI form. It can also be used for information not requested on the OAI form, but which is necessary for a complete understanding of the site being recorded. **When using the “Continuation Section” for additional information from one of the sections given on the OAI form, it is necessary to indicate the corresponding section letter and item number.** If more space is required, please use Continuation Sheets, numbering the first as page 11 in the designated space.

*K. Sketch Map or Copy of Project Map of Site

Please provide a “Sketch Map” of the site that illustrates the location of the site relative to nearby landmarks, such as barns, roads, cliff faces, stream banks and so forth. This kind of map is essential in cases where recent construction (or destruction) has altered the landscape, rendering conventional maps, such as USGS quadrangle maps, misleading or inaccurate. Recent engineer “Project Maps,” such as those derived from aerial photographs, may be used as well. Include North arrow and scale. **A copy of the relevant portion of a USGS 7.5’ topographic quadrangle map indicating the site location must also be appended to the OAI form.** Outline the total area surveyed and include the location of all identified sites on the portion of the USGS quadrangle map appended. Site size and shape should be indicated as accurately as possible. The USGS map must **clearly** show all contour lines, streams, roads, buildings, names, etc. to allow for the accurate transfer of the site locations to the OHPO base maps and the efficient and accurate use of the locational data by other researchers. You must include a *scale* on the copy of the USGS map if it is not the same as an original 7.5’ map scale. **Any form that is not accompanied by a legible USGS map with the sites clearly and properly indicated will be returned to the form preparer for correction.**

*SITE LOCATION

List three directional points of reference for the “Site Location.” The bearings should originate from the center point of the site toward fixed “Permanent Features” (i.e., road intersections, buildings, benchmarks, radio tower, etc.), preferably present on a USGS quadrangle map. The “Distance to Permanent Features” from the site should be listed *in meters*. The compass “Direction of the Bearing” also should be included.

Quadrangle Name

Please list the name of the USGS 7.5' topographic quadrangle that includes the area of the site. The name of the quad map will be found in the lower right and upper right corners of the map. Since the default site size for an Isolated Find in Ohio is only 1 square meter, the site should *not* overlap more than one quad map.

Quadrangle Date

The date of publication is found under the quadrangle name in the lower right corner of the map. If the map has been revised, include the dates of revision, as well.

TEMPORAL AFFILIATION

For Prehistoric sites, please use the list of Prehistoric Temporal Periods (D.2) and Prehistoric Temporal Components (D.5) presented in the main text of the OAI Instruction Manual. For Historic sites, please use the Historic Temporal Periods (D.10) presented in the OAI Instruction Manual. You *must* indicate a temporal affiliation, even if it is "Unassigned Prehistoric" or "Unassigned Historic".

Artifact Description

Please include enough descriptive information to support whatever Temporal Affiliation you have listed. Include names of diagnostics as well as a description of the artifact. For example: Late Prehistoric shell-tempered sherd, Late Archaic Brewerton point base, prehistoric groundstone $\frac{3}{4}$ grooved axe, primary flake of Delaware chert with some cortex, 19th-20th century undecorated whiteware, brick stamped "BOYD" produced by Robinson Clay Products Co. (OH) 1921-1942.

REPORTING INFORMATION

You may include additional information (beyond the categories listed below) here, if available. Types of data relevant to this section might include weather and surface conditions, investigation type, likelihood of additional materials being present in this locality, where the find was curated, etc.

Name of Form Preparer

List the name of the person completing the form. If the form was completed by more than one person, please include *all* of the names here.

Institution Name

List the Institutional affiliation (if any) of the form preparer(s).

Institution Address (include city, state, and zip code)

Please give the complete address for the Institution listed above.

Institution Telephone Number and FAX Number

Please give the complete telephone and FAX information for the Institution listed above.

Date of Form

List the month and year that the form was completed. You must use 4 digits to designate the year.

Field Date

List the month and year for the field investigations at the site. If there was more than one period of investigation, list the month and year of each of them. You must use 4 digits to designate the year.

PRIMARY REFERENCE

List the contract report that contains the information about the site's identification and interpretation. Be sure to use the exact name of the report and the names of all of the authors. Use the Society for American Archaeology's Style Guide for *American Antiquity*, as described in Volume 57(4): 763-770 (1992), or use their website: www.saa.org/publications/styleguide for the most up-to-date version. If there is no report for the project, indicate the project name and lead agency.

MAPPING

A copy of the relevant portion of a USGS 7.5' topographic quadrangle map indicating the site location must also be appended to the Ohio Archaeological Inventory Isolated Find form. Outline the total area surveyed and include the location of all identified sites. An isolated find should be indicated as a small dot marked as accurately as possible on the map, with its site number. The USGS map must **clearly** show all contour lines, stream, roads, buildings, names, etc. to allow for the accurate transfer of the site locations to the Ohio Historic Preservation Office's base maps. You must include a scale on the copy of the map if it is not the same as an original 7.5' map scale. **Any form that is not accompanied by a legible USGS map with the sites clearly and properly indicated will be returned to the form preparer for correction.**

**APPENDIX B:
COUNTY CODES**

County Name	Codes			County Name	Codes		
	OAI	OHI	NR		OAI	OHI	NR
ADAMS	AD	ADA	01	LICKING	LI	LIC	45
ALLEN	AL	ALL	02	LOGAN	LO	LOG	46
ASHLAND	AS	ASD	03	LORAIN	LN	LOR	47
ASHTABULA	AB	ATB	04	LUCAS	LU	LUC	48
ATHENS	AT	ATH	05	MADISON	MA	MAD	49
AUGLAIZE	AU	AUG	06	MAHONING	MH	MAH	50
BELMONT	BL	BEL	07	MARION	MN	MAR	51
BROWN	BR	BRO	08	MEDINA	ME	MED	52
BUTLER	BU	BUT	09	MEIGS	MS	MEG	53
CARROLL	CA	CAR	10	MERCER	MR	MER	54
CHAMPAIGN	CH	CHP	11	MIAMI	MI	MIA	55
CLARK	CL	CLA	12	MONROE	MO	MOE	56
CLERMONT	CT	CLE	13	MONTGOMERY	MY	MOT	57
CLINTON	CN	CLI	14	MORGAN	MG	MRG	58
COLUMBIANA	CO	COL	15	MORROW	MW	MRW	59
COSHOCTON	CS	COS	16	MUSKINGUM	MU	MUS	60
CRAWFORD	CR	CRA	17	NOBLE	NO	NOB	61
CUYAHOGA	CU	CUY	18	OTTAWA	OT	OTT	62
DARKE	DA	DAR	19	PAULDING	PA	PAU	63
DEFIANCE	DE	DEF	20	PERRY	PE	PER	64
DELAWARE	DL	DEL	21	PICKAWAY	PI	PIC	65
ERIE	ER	ERI	22	PIKE	PK	PIK	66
FAIRFIELD	FA	FAI	23	PORTAGE	PO	POR	67
FAYETTE	FE	FAY	24	PREBLE	PR	PRE	68
FRANKLIN	FR	FRA	25	PUTNAM	PU	PUT	69
FULTON	FU	FUL	26	RICHLAND	RI	RIC	70
GALLIA	GA	GAL	27	ROSS	RO	ROS	71
GEAUGA	GE	GEA	28	SANDUSKY	SA	SAN	72
GREENE	GR	GRE	29	SCIOTO	SC	SCI	73
GUERNSEY	GU	GUE	30	SENECA	SE	SEN	74
HAMILTON	HA	HAM	31	SHELBY	SH	SHE	75
HANCOCK	HK	HAN	32	STARK	ST	STA	76
HARDIN	HR	HAR	33	SUMMIT	SU	SUM	77
HARRISON	HN	HAS	34	TRUMBULL	TR	TRU	78
HENRY	HY	HEN	35	TUSCARAWAS	TU	TUS	79
HIGHLAND	HI	HIG	36	UNION	UN	UNI	80
HOCKING	HO	HOC	37	VAN WERT	VW	VAN	81
HOLMES	HS	HOL	38	VINTON	VI	VIN	82
HURON	HU	HUR	39	WARREN	WA	WAR	83
JACKSON	JA	JAC	40	WASHINGTON	WN	WAS	84
JEFFERSON	JE	JEF	41	WAYNE	WE	WAY	85
KNOX	KN	KNO	42	WILLIAMS	WI	WIL	86
LAKE	LA	LAK	43	WOOD	WO	WOO	87
LAWRENCE	LE	LAW	44	WYANDOT	WY	WYA	88

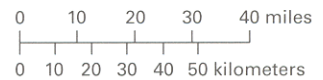
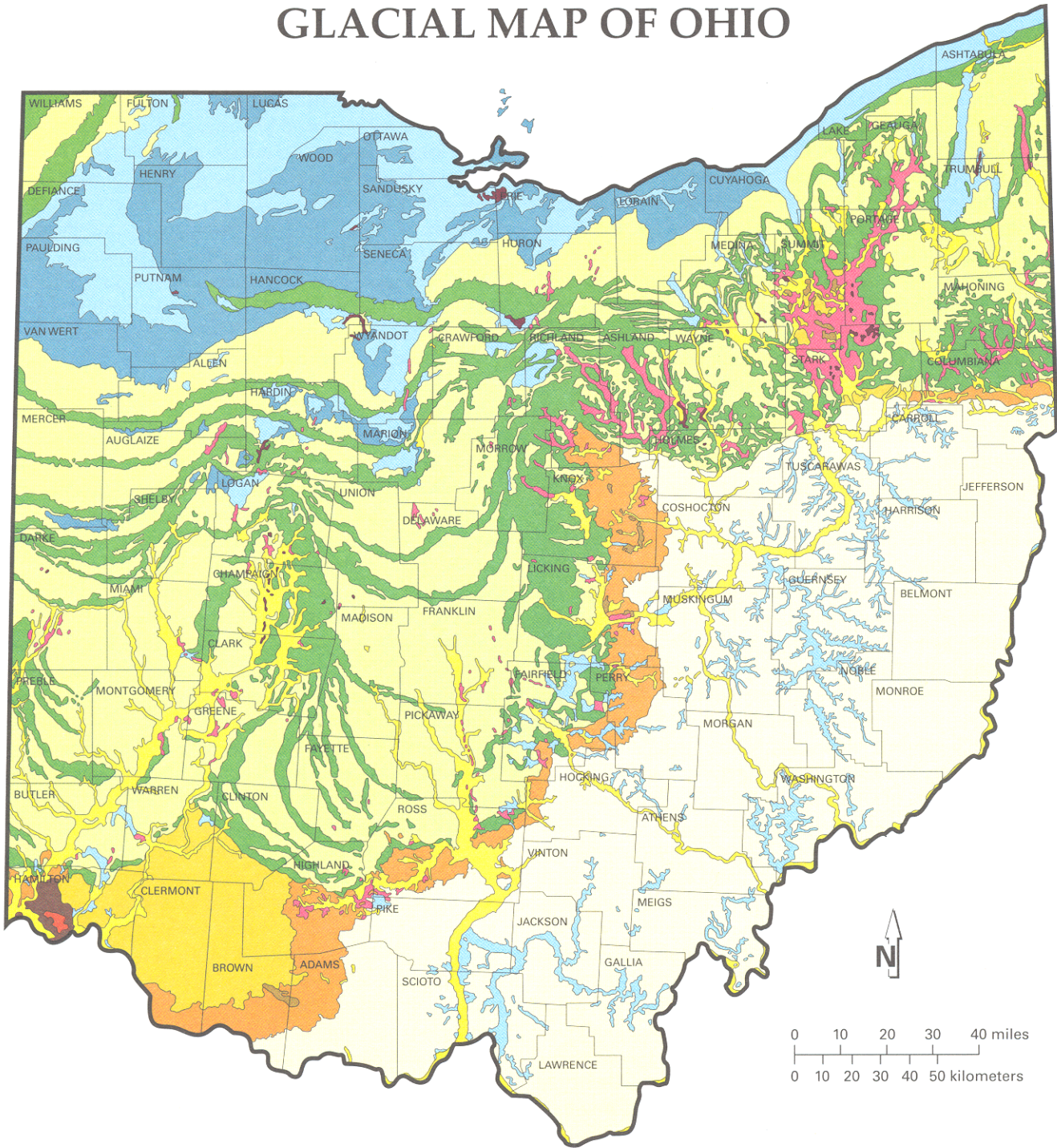
APPENDIX C:



This map is intended to show the majority of townships that currently exist or have existed in the past. Especially in urban areas, all or parts of some townships may have been incorporated into cities or villages. Boundaries are based primarily on U.S. Geological Survey and county engineers' maps.



GLACIAL MAP OF OHIO



WISCONSINAN (14,000 to 24,000 years old)		ILLINOIAN (130,000 to 300,000 years old)		PRE-ILLINOIAN (older than 300,000 years)		 Kames and eskers
 Ground moraine	 Ground moraine	 Dissected ground moraine	 Dissected ground moraine	 Ground moraine	 Dissected ground moraine	 Outwash
 Wave-planed ground moraine	 Hummocky moraine					 Lake deposits
 End moraine						 Peat
						 Colluvium



GLACIAL DEPOSITS OF OHIO

Although difficult to imagine, Ohio has at various times in the recent geologic past (within the last 1.6 million years) had three-quarters of its surface covered by vast sheets of ice perhaps as much as 1 mile thick. This period of geologic history is referred to as the Pleistocene Epoch or, more commonly, the Ice Age, although there is abundant evidence that Earth has experienced numerous other ice ages throughout its 4.6 billion years of existence.

Ice Age glaciers invading Ohio formed in central Canada in response to climatic conditions that allowed massive buildups of ice. Because of their great thickness, these ice masses flowed under their own weight and ultimately moved south as far as northern Kentucky. Oxygen-isotope analysis of deep-sea sediments indicates that more than a dozen glaciations occurred during the Pleistocene. Portions of Ohio were covered by the last two glaciations, known as the Wisconsinan (the most recent) and the Illinoian (older), and by an undetermined number of pre-Illinoian glaciations.

Because each major advance covered deposits left by the previous ice sheets, pre-Illinoian deposits are exposed only in extreme southwestern Ohio in the vicinity of Cincinnati. Although the Illinoian ice sheet covered the largest area of Ohio, its deposits are at the surface only in a narrow band from Cincinnati northeast to the Ohio-Pennsylvania border. Most features shown on the map of glacial deposits of Ohio are the result of the most recent or Wisconsinan-age glaciers.

The material left by the ice sheets consists of mixtures of clay, sand, gravel, and boulders in various types of deposits of different modes of origin. Rock debris carried along by the glacier was deposited in two principal fashions, either directly by the ice or by meltwater from the glacier. Some material reaching the ice front was carried away by streams of meltwater to form outwash deposits. Material deposited by water on and under the surface of the glacier itself formed features called kames and eskers, which are recognized by characteristic shapes and composition. A distinctive characteristic of glacial sediments that have been deposited by water is that the material was sorted by the water that carried it. Thus, outwash, kame, and esker deposits normally consist of sand and gravel. The large boulder-size particles were left behind and the smaller clay-size particles were carried far away, leaving the intermediate gravel- and sand-size material along the stream courses.

Material deposited directly from the ice was not sorted and ranges from clay to boulders. Some

of the debris was deposited as ridges parallel to the edge of the glacier, forming terminal or end moraines, which mark the position of the ice when it paused for a period of time, possibly a few hundred years. When the entire ice sheet receded because of melting, much of the ground-up rock material still held in the ice was deposited on the surface as ground moraine. The oldest morainic deposits in Ohio are of Illinoian and pre-Illinoian age. Erosion has significantly reduced these deposits along the glacial boundary, leaving only isolated remnants that have been mapped as dissected ground moraine and hummocky moraine.

Many glacial lakes were formed in Ohio during the Ice Age. Lake deposits are primarily fine-grained clay- and silt-size sediments. The most extensive area of lake deposits is in northern Ohio bordering Lake Erie. These deposits, and adjacent areas of wave-planed ground moraine, are the result of sedimentation and erosion by large lakes that occupied the Erie basin as Wisconsinan-age ice retreated into Canada. Other lake deposits accumulated in stream valleys whose outlets were temporarily dammed by ice or outwash. Many outwash-dammed lake deposits are present in southeastern Ohio far beyond the glacial boundary. Peat deposits are associated with many lake deposits and formed through the accumulation of partially decayed aquatic vegetation in oxygen-depleted, stagnant water.

The term glacial drift commonly is used to refer to any material deposited directly (*e.g.*, ground moraine) or indirectly (*e.g.*, outwash) by a glacier. Because the ice that invaded Ohio came from Canada, it carried in many rock types not found in Ohio. Pebbles, cobbles, and boulders of these foreign rock types are called erratics. Rock collecting in areas of glacial drift may yield granite, gneiss, trace quantities of gold, and very rarely, diamonds. Most rocks found in glacial deposits, however, are types native to Ohio.

Certain deposits left behind by the ice are of economic importance, particularly sand and gravel, clay, and peat. Sand and gravel that have been sorted by meltwater generally occur as kames or eskers or as outwash along major drainageways. Sand and gravel are vital to Ohio's construction industry. Furthermore, outwash deposits are among the state's most productive sources of ground water.

Glacial clay is used in cement and for common clay products (particularly brick). The minor quantities of peat produced in the state are used mainly for mulch and soil conditioning.