Ohio Archaeological Inventory Site Form Preparation & Submission

for use with ArcGIS Survey 123



State Historic Preservation Office Ohio History Connection Columbus, Ohio 2023

TABLE OF CONTENTS

| OHIO ARCHAEOLOGICAL INVENTORY SITE FORM PREPARATION AND SUBMISSION IN U ARCGIS SURVEY 123 | |
|--|---|
| DETERMINING ARCHAEOLOGICAL SITE BOUNDARIES AND ISOLATED FIND SITES | 4 |
| Prepare a Survey Results Map with all OAI Sites Depicted | 5 |
| COMPLETING THE SURVEY123 OAI SITE FORM | 5 |
| Site Identification | |
| Site Name | |
| Project Name/Number (Internal Project and/or Field Site number) | |
| * Form Version / Isolated Find or Standard Site Form Isolated Find | |
| New Form | |
| Revised Form | |
| LOCATION INFORMATION | 6 |
| Prehistoric | 7 |
| Prehistoric Temporal Periods: | |
| Basis for Assignment of Prehistoric Temporal Period(s): | |
| Prehistoric Artifact(s) – Collected or observed: Historic | |
| Historic Temporal Periods: | |
| Basis for Assignment of Historic Temporal Period(s): | |
| Historic Artifact(s) – Collected or observed: | |
| Additional Site Details | |
| Affiliated Ohio Historic Inventory Number | |
| Affiliated Ohio Historic Inventory Property Name | |
| PHYSICAL DESCRIPTION | 9 |
| * Archaeological Setting | |
| * Prehistoric Site Type(s) | |
| Habitation Types: | |
| Extractive Sites: Ceremonial Sites: | |
| * HISTORIC SITE TYPE(S) | |
| CONDITION AND DISTURBANCES | |
| | |
| * Site Condition * Dominant Agent(s) of Disturbance | |
| * Current Dominant Land Use | |
| SITE SETTING | |
| * GLACIAL GEOMORPHOLOGY | |
| * GLACIAL GEOMORPHOLOGY. * REGIONAL GEOMORPHOLOGICAL SETTING | |
| * LOCAL ENVIRONMENTAL SETTING | |
| SLOPE | |

TABLE OF CONTENTS

| * DRAINAGE SYSTEM | 18 |
|--|----|
| REPORTING INFORMATION | |
| * Investigation Type * Site Area * Basis for Site Area Estimate | 19 |
| FORM PREPARER DETAILS | |
| Field date Artifact Repository Special Status | 21 |
| * DESCRIPTION OF SITE: | 21 |
| * Physical description of site, setting, and interpretation * Site Relationships and Significance | |
| * REFERENCES | |
| * SITE MAP AND IMAGES | |
| Additional images (optional) | 22 |
| APPENDIX A, B & C ATTACHED | 23 |

Ohio Archaeological Inventory Site Form Preparation and Submission in Use of ArcGIS Survey 123

To complete Ohio Archaeological Site Inventory forms you must first be assigned OAI site inventory numbers. To receive OAI numbers, send an email to the Archaeology Survey Manager <u>ArchSurvey@ohiohistory.org</u> indicating the County name or names and the number of newly identified sites within each county. Details to the definition and determination of an archaeological site and its boundaries are found below ("Determining Archaeological Site Boundaries and Isolated Find Sites").

When updating sites previously inventoried to the OAI (i.e. Revised Form), first contact the Survey Manager sharing a summary of the survey method(s) and of new/additional discovery.

Note that Survey123 only saves forms with the SHPO once they have been Submitted. To avoid loss of form data when saved as draft It is best to first prepare all required materials prior to initiating and submitting forms. Unsubmitted Drafts are saved to your local machine and may not be present for your later use depending on your or your institution's pc management practices.

Determining Archaeological Site Boundaries and Isolated Find Sites

Sites delineation boundaries are most commonly identified through a close association of artifacts or cultural features. **Isolated Finds** are single artifact locations more widely separated from other artifacts. Some Multi-Component sites, especially those with divergent temporal associations (e.g., both Prehistoric- and Historic-era materials) with overlapping boundaries may best be treated as two separate sites ("splitting") with some overlapping of site boundaries. Multi-component sites lacking defined separation are treated as a single site. Contact the Archaeology Survey Manager with specific questions or additional assistance in site delineation.

Isolated Finds - Most instances of single artifacts found at distances greater than 20 meters as an Isolated Find. Those found within areas of intensive agricultural tilling or notable slope-wash near to a identified site, may best be treated as site-associated. That is often best determined within the field, but in general terms a 20 m artifact separation distance is recommended in determining and treatment as an **Isolated Find**. Please note the Isolated find can be used for re-fitted artifacts found in proximity, as well as in inventory of a single Prehistoric and a single Historic artifact found in close association.

Prepare a Survey Results Map with all OAI Sites Depicted

Prior to initiating your form, prepare an OAI Sites and Survey Areas results map as this must be uploaded before submitting your form.

Each site form will require uploading of an OAI survey results plotting map. This map is likely found within the associated survey report which if necessary can be cropped and formatted to meet the OAI Survey123 formatting needs (see details below). Survey results maps should depict and label project survey boundaries and all project-investigated OAI sites, labelled in use of OAI site numbers. This single map can then be uploaded for use in each project-associated site forms.

The OAI and Survey Results map requires use of the USGS 7.5' Topographic map as background, essential for its depiction of structures, roads, and other critical landscape features. The map must follow the scale and image parameter formatting indicated below:

Scale: The OAI plotting location map should be at a scale depicting approximately 2.5 to 3 three miles in the cardinal directions (ca. 1:15:000). Exceptionally large surveys may require segmenting the survey results map into sections, with each image depicting approximately 2.5 to 3 cardinal miles. Maps may only require keys if they depict non-standard symbolic information necessary in interpreting your map.

Digital formatting requirements: To assure the map is printable to a standard 8.5" x 11" page, be sure your map is formatted to approximately 7.5" x 7.5" that being 1088 x 1088 pixels at 150 dpi.

See **Appendix A** for example map.

Completing the Survey123 OAI Site Form

Complete each form entry section. Entries indicated by a red asterisk (*) must be completed before a form can be submitted.

Site Identification

* OAI Site Number – Enter the assigned OAI site number as a six-character string (e.g., AD1234).

OAI Trinomial – Enter the assigned OAI site number as an eight-character string (e.g., 33AD1234).

Site Name – Note: Most sites lack benefit or need for name recognition beyond that of the site trinomial. Only provide naming where a site is so referenced within journals or publications, or as is known by the community, or where naming will increase needed awareness for protection.

Project Name/Number (Internal Project and/or Field Site number)

If or as useful enter your organization project name/number and Field Site number (e.g. Foremost Solar / FS 1).

* Form Version / Isolated Find or Standard Site Form

Isolated Find - Selecting Isolated Find will enable the OAI Survey123 application to display the fewer fields required of the Isolated Find.

New Form – Selected if you are preparing inventory for a previously uninventoried archaeological site that is not an Isolated Find.

Revised Form – Selected when re-inventorying a site that has been previously inventoried to the OAI. Limited additional site discovery may best be updated through use of a Continuation Sheet. Contact <u>ArchSurvey@ohiohistory.org</u> for the preferred method and see OAI Preparer's Manual p. 5 for details.

Note that larger site complexes with multiple large well-defined features or activity loci (e.g. Villages, Geometric Earthworks, Industrial, Military-related sites, etc.) may best be treated through the assignment of a primary site number for the larger complex, with additional site numbers assigned to observed artifact clusters or features within.

Location Information

* Site Location Map

Enter the field-collected Latitude and Longitude values in decimal degrees (e.g., "39.4443 N 83.43210 W) within the Search window. If necessary, carefully navigate to the center point of your site location. Zoom in to confirm accuracy, click on the location and select the checkbox in lower right corner to save. This will populate the form's Latitude and Longitude as well as select geographically referenced attributes.

* County

For sites crossing county borders, enter the County with the site boundary centerpoint.

* Decimal Degrees Latitude and Decimal Degrees Longitude

Auto-filled based on the site boundary center point or entered within the Search window (see Site Location Map above).

* Quadrangle Name

Auto-populated based on provided Lat/Longs. Or type or select Quadrangle name from County-associated dropdown list.

* Township/Community Name

Select the Township or Community Name from the county-associated drop-down list.

- * Ownership Status Select the Ownership type. For question of multiple or Unknown ownership, apply the following:
 - Private Single Site lies within a single property.
 - Private (multiple) Site extends over one or more privately owned properties.
 - Multiple Government Site extends over multiple government-owned properties.
 - Mixed-Government/Private Site exists within both government and private properties.
 - Unknown used in cases of transcribed or reported sites and where this information may be lacking.

* Temporal Affiliation(s) Present

* **Temporal Affiliation(s) Present.** Choose the associated Temporal Affiliation(s) from the dropdown list. Choosing the Affiliation enables the Form to show affiliation-specific content.

Note: "Unknown" is reserved for sites with greater likelihood as American Indian associated, be that either Proto-Historic- or Historic-era, but for which survey presently lacks sufficient discovery for a clear determination. Locations referenced by primary/first-hand account or otherwise confidently chronicled, or where artifacts reflect a period of written or chronicled history would best be indicated as "Historic".

Prehistoric

- * Prehistoric Temporal Period(s) Represented Select as many as apply. Select "Unknown" only for sites lacking a specific Temporal Period.
- * Basis for Assignment of Prehistoric Temporal Period(s) Select as many as apply.

Select "Not Applicable" for sites lacking a specific Temporal Period. Note: Selection of "Radiometric" enables the additional entry of Radiometric Dates and associated C-14 data. * Prehistoric Artifact(s) – Collected or observed.

Material Category – Select from the dropdown list.

Artifact and Raw Material Description – Enter artifact(s) and raw material description. For larger artifact volumes it is acceptable to group artifacts by shared attribute types (e.g., "Upper Mercer reduction debitage"). For artifacts observed but not collected, add "(observed)" to the end of each entry. For Revised Form reporting only add what you have identified, and add to the Description the year of reporting (e.g., "Adena Stemmed point - Van Port (2023)"

Count – Enter count of artifacts.

Historic

- * Historic Temporal Period(s) Represented Select as many as apply. Note: select "Historic" only when no other selections apply.
- * Basis for Assignment of Historic Temporal Period(s) Select as many as apply.

Not applicable: Select "Not applicable" if "Historic" is the selected Temporal Period.

Diagnostic Architectural Remains: Structural remains were observed contributing to the determination of a specific Historic Temporal Period or Periods.

Diagnostic Artifacts: Artifacts recovered or observed indicating specific Historic Temporal Periods.

Diagnostic Features: Buried or partially buried remains contributing to the determination of specific Historic Temporal Periods.

Documentary Evidence: Printed or digital documentation such as maps, county histories, census records, deed records, diaries, and newspaper accounts allowing for determination of specific Historic Temporal Periods.

No Historic Assignment Basis Selected: Select sites known to be Historic in age but lacking sufficient temporal details to attribute to a specific Historic Temporal Period.

Oral Tradition: Includes statements from landowners, descendants of former occupants, neighbors, etc. spoken or without formal recordation.

* Historic Artifact(s) - Collected or Observed

Material Category – Select from the dropdown list.

Artifact Description – For larger artifact volumes group artifacts by shared attribute types (e.g., "New Albany slip stoneware fragments"). For artifacts observed but not collected, add "(observed)" to the end of each entry. For Revised Form reporting only add what you have identified and add to the Description the year of reporting (e.g., "Flow-blue service-ware fragments (2023)".

Count – Enter the count of artifacts.

Additional Site Details

Describe or briefly summarize Prehistoric and/or Historic features investigated or observed.

Affiliated Ohio Historic Inventory Number - enter as a 10-character string (e.g. "ADA0123401")

Affiliated Ohio Historic Inventory Property Name - see associated OHI inventory form for property Name(s).

Physical Description

- * Archaeological Setting select one (the vast majority of Ohio sites are open air (Open Sites).
- * Prehistoric Site Type(s) select as many as appropriate.

Site Type describes the principal activities or roles to each site location as interpreted through archaeologically associated remains. Ohio's environment results in favoring preservation of highly durable materials, with the majority of prehistoric sites represented by lithic tools and manufacturing debris. Although the majority are likely associated with temporary episodes of resource procurement, for purposes of the OAI those sites are frequently recorded as site type **"Unknown**". Other factors frequently resulting in indeterminate site types are limitations in survey, depletion of archaeological materials through erosion, collection activities, wind deflation, etc.

Habitation Types:

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. Locations with one or more concentrations of FCR but lacking sufficient investigation may select Camp to indicate higher probability for use as temporary settlement.

Village: A geographical area utilized by a large group (greater than circa 5 households) as year-round primary domicile, frequently longer than one year, generally bearing evidence of permanent structures.

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

Unspecified Habitation: A geographical area exhibiting evidence of longterm settlement but at least at present is found 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: relatively large site size; higher density of artifacts; diversity of tool types; wider variety of lithic source materials; larger amounts 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 with a higher degree of confidence. Sites with only two or three such factors may be better defined through the selection as **Camp**.

Extractive Sites:

Quarry: An area from where 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 have been modified into portable preforms or finished tools. Larger Workshop sites are frequently in close proximity to Quarries due to the weight and/or bulk of the raw materials being transported. Smaller workshops can be found well removed from Quarry areas where extensive finishing or remanufacture has occurred.

Ceremonial Sites:

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

Earth Mound: A conical or low-profile mounded deposit of earth or soil, frequently placed over one or more human interments.

Stone Mound: A deposit consisting primarily of portable rock, frequently placed over one or more human interments.

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

Mound Group: Two or more mounds whose spatial relationship indicates they were potentially contemporaneous or otherwise associated. This selection may be made without the benefit of subsurface examination. If subsurface exploration occurred indicating the mounds held no relationship beyond spatial proximity, they should be recorded as separate archaeological sites. If subsurface exploration indicates that a culturaltemporal relationship exists, they may be documented as a single archaeological site.

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

Geometrical Earthwork: A single or a series of earthen walls or embankments arranged into one or more geometrical patterns, frequently seen as circles, squares, octagons, or parallel lines.

Cemetery: A geographical area indicating two or more human interments in likely association.

Isolated Burial(s): The location of a single human interment. This may include more than one "Isolated Burial" if the interments are found separated within a larger site context. Museo 300 Interments found together in a localized area within a site context would be classified as a Cemetery.

Petroglyph / Pictograph: A rock carving and/or painting representing whole or in part an object, animal, human, or other symbolic representation.

Unknown: This is selected when insufficient information exists to place the site into the established categories outlined above. The majority of Phase I surveys will not likely provide the level of investigation needed to select an established site type category.

* Historic Site Type(s)

Select as many as appropriate. Historic site type(s) allow for comparative evaluation and research to sites of comparable activities or function(s).

Note that Farmsteads are recorded through selection of both "Subsistence" and "Residential".

Residential: Single, multiple, or secondary dwellings; hotels, motels, or inns; institutional housing, orphanage, county homes; 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.

Refuse/Trash Deposit: Locations of deposits specific to historic refuse.

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

Unknown: Selected only when insufficient information exists to place the site into any of the established categories outlined above.

State the bases on which site type assignment(s) were made – Optional (briefly summarize).

Condition and Disturbances

* Site Condition - select only one, as appropriate (please note that most plow zone sites are not by definition fully disturbed).

Undisturbed: 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: Sufficient fieldwork has determined that either horizontal or vertical disturbances have occurred, but not enough to determine a full extent of disturbance.

NOTE: Disturbed-Extent Unknown is generally selected for agriculturally disturbed sites not yet systematically sub-surface tested.

Disturbed-Extent Known: Selected when sufficient fieldwork has been conducted to confidently determine disturbance and type and degree of disturbance. Disturbance extent generally results from Phase II or III investigations (Evaluation or Mitigation) but may be observed through intensive Phase I survey, often through a combination of techniques to generally include intensive shovel testing or probing. Known extent is more frequently observed with Historic-era built-environment sites such as farmsteads and residences.

Fully Disturbed: Selected when sufficient field investigations have been conducted to indicate both 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. NOTE: Ohio agricultural fields are more frequently recorded as "Disturbed Extent Unknown" or "Disturbed-Extent Known" and not "Fully Disturbed". Exceptions to this are where intensive techniques such as remote sensing, systematic excavation or intensive shovel testing have demonstrated little or no plausibility for intact subsurface features or feature remnants.

Destroyed: Selected when sufficient field investigations have been conducted to demonstrate that no cultural resources (in-situ or disturbed) remain at the site. Usually resulting from mechanical removal or significant environmental event or events such as stream or slope erosion.

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

Unrecorded: Selected only for sites reported through a transcribed source and which lacks details to potential disturbance.

* Dominant Agent(s) of Disturbance - select as many as appropriate.

Non-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.). Private and commercial logging is generally included in this category.

Historic Construction: Subsurface disturbance resulting from the construction of buildings, structures, pipelines, utilities, or similar.

Water: Observable disturbance resulting from water action, including precipitation, erosional slope wash, lake wave action, hydraulic compaction, and the action of flowing water within a natural stream, river, or artificial drainage such as a canal or drainage ditch.

Transportation: Disturbance resulting from the construction of roads or lanes, railroads, canals, airports, bridges, etc.

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

Mining: Strip, open pit mining, shaft mining, or the deposition of raw materials and/or tailings from mining activity. NOTE: If documenting a quarry or mining-related feature as an archaeological site, these features are part of the site rather than a disturbance.

Vandalism: Disturbances resulting from unauthorized excavation or other collecting.

Unrecorded: This response is intended only for transcribed information lacking sufficient reporting details to confidently assign.

Nature of Disturbance/Destruction – describe or summarize observed disturbances.

* Current Dominant Land Use - Select only one from the dropdown list.

Site Setting

* Site Elevation in meters A.M.S.L. (elevation taken from site center-point).

* Physiographic Setting

Select only one, as appropriate **(see Appendix Map B)**. Physiographic Setting reflects broad-scale areas resulting from mass geomorphological process. Five settings are found within Ohio, generally reflective of commonly shared resource availability. Regional settings and their definitions are derived from Thornbury's Regional Geomorphology of the United States (1965), Wiley: New York.

* Glacial Geomorphology

Select only one, as appropriate (see Appendix Map C).

* Regional Geomorphological Setting

Select only one, as appropriate.

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 floodplains, terraces, and valley hillslope.

Upland Hill Slope: Broad and generally flat expanses located between stream valleys. 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 linear and 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. Contemporary beach ridges generally extend from the water line to a place where there is a definite change of materials or physiography. Ancient or abandoned beach ridges are associated with former water bodies large enough to also have produced waves and/or tides.

Hill or Ridge Top: Pronounced elevations generally at points dividing stream or river valleys.

Lake Plains Interfluvial Zone: Large areas within the till plains of a former lakebed situated between deeply incised post-glacial stream valleys.

Unrecorded: This response is intended only for transcribed data.

* Local Environmental Setting

Local Environmental Setting is the immediate and surrounding landform within the regional geomorphological setting. These localized environments generally reflect specific habitation choices based on shared environments and resource availability.

Floodplain: An expanse or strip of level to relatively level land adjacent to a stream or river subject to either past or contemporary flooding.

Low Rise on Floodplain: An elevation or projection within 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: Landmass surrounded by water.

Terrace Types:

T-1 (First or lowest terrace): The initial, level surface found above the floodplain and more or less parallel to the flood plain or stream channel. The first terrace may extend into tributary stream channels. The first terrace may represent the only terrace or maybe 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 the oldest major stream valleys such as the Ohio, Great Miami, Tuscarawas, and Muskingum Rivers, among others. If higher terraces (5th, 6th, etc.) are thought to be locally important, they should be coded as fourth terraces.

Terrace Remnant: An isolated often ancient former terrace generally the result of past stream or glacial meltwater and lacking direct association with other recognized terraces.

Unknown Terrace: A surface of higher elevation generally paralleling the floodplain but lacking identification to a specific terrace sequence.

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 channel banks. 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. Beach Ridge: A local manifestation of the definition to "Beach Ridge" given in Regional Geomorphological Setting above.

Kame: A generally conical hill of stratified sands and gravels frequently deposited by a stream within or under glacial ice.

Drumlin: A long, oval shaped hill or ridge formed by a stream within or under glacial ice drift.

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

Moraine: Broad and largely flat expanses of glacial drift composed of gravel, sand, clay, etc. as carried and deposited by a glacier either beneath the ice (ground moraine), along its sides (lateral moraine), or at its lower end (terminal moraine).

Glacial Hummock: A lower hill generally located on moraine, composed of unsorted sands and gravels deposited by a glacier.

Wetland Hummock: A lower hill within a fertile area of deep humus-rich soil, rising slightly above a plain, swamp, or bog, frequently covered with hardwood vegetation.

Bluff: At or near the margin of a high, steep, broad-faced bank or cliff.

Bluff Base: Lowest portion of a bluff where it approaches the valley floor. Can serve as shelter comparable to a rock shelter.

Bluff Edge: The upper portion of a bluff and the adjacent upland area.

Saddle: A relatively flat area occurring between ridges or hilltops, connecting 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: **Hill** refers to a natural elevation of the land, rising prominently above the surrounding land, usually of limited extent and having a well-defined outline. Generally rising less than 300 meters from base to summit. **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.

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.

Slope

* Down Slope Direction - select one, as appropriate.

* Slope Gradient – entered by percent as a range (5-10%) or by the highest value of a range (10%).

* Drainage System

- * Major Drainage Location mapping will auto-generate the correct major drainage watershed.
- * Minor Drainage Location mapping will auto-generate the correct minor drainage watershed.
- * Water Source
 - * Closest Water Source Type select only one, as appropriate (note that Ephemeral streams are topographically depicted as dashes and dots)
 - * Horizontal Distance to Closest Water Source taken from site center point, entered in meters.

Reporting Information

* Investigation Type – select as many as appropriate.

Aerial Photograph: Select where archival or contemporary aerial photography or satellite imagery was used to locate or interpret archaeological resources.

Auger / Soil Corer: Select where augering or coring was substantive or provided key information to testing or investigation.

Chemical Analysis: Specify the type of chemical analysis employed and details as needed.

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

Examination of Collection: Visual examination of an artifact collection or their detailed images.

Geophysical Survey: Use of other Geophysical Survey techniques as a principle or supplemental means in survey or site investigation.

Mitigation / Block Excavation: Systematic excavation of archaeological sites for research or mitigation.

Reported: Sites documented all or in part through published references or by informant contact and which have not been previously reported in the Ohio Archaeological Inventory. Informant information can be provided within the Site Description field found within the form section "Text Narratives".

Shovel Test(s): The excavation of 50 cm x 50 cm square-walled units complying with the minimum test unit size and shape defined within the OHPO *Archaeology Guidelines*. Select Shovel Testing only when used to locate sites or delineate site boundaries in areas with poor surface visibility. Do not select Shovel Test for surface collected sites where a test or tests were applied solely in the identification of general soil stratigraphy.

Test Pit(s): The excavation of square or rectangular units larger than 50 cm x 50 cm. These may be the result of expanded (50 cm x 50 cm) shovel tests or excavated uniquely as separate units. 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 longer rectangular units, resulting in the exposure of a large area in effort to identify the presence of undisturbed cultural deposits. Vertical stratigraphic information is collected as with the test pits, but with substantially expanded horizontal coverage.

Plow Zone 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): Select when recording sites where testing and/or excavation are known to have been conducted but where the strategy remains unknown. Most often applied to transcribed data or "reported" sites.

Visual Inspection/Walkover: Select this response where Visual Inspection or Walkover survey provides the primary means or is a significant supplement in survey.

Windshield Survey: This is generally found with earlier-era survey reporting resulting from driving surveys where sites were initially reported through visual observation by automobile.

Unrecorded: This response is intended only for transcribed data lacking details in investigation types.

- * Surface Visibility select only one, as appropriate. Select the range reflecting surface visibility at the time of survey.
- * Site Area entered in square meters.

Provide the **Site Area** in square meters rounding to the nearest integer. Isolated Finds are assigned a default Site Area of 1 m^2 , but for purposes of visibility, will be graphically displayed within SHPO GIS mapping as a circle 15 m in diameter. Site

Area can be generated through GIS polygon tools or if needed can be estimated by multiplying length x width using close approximations for the long and the narrow axes of the boundary/polygon. Site polygon boundaries should be as accurate as survey allows but are understood to generally be an estimate based on the distribution extent of identified artifacts or features defined at the time of survey.

* Basis for Site Area Estimate

Select the primary method in determining Site Area from the available choice list.

Global Position System – GPS: The site area was determined through GPS.

Guessed: The site area is visually or otherwise estimated without physical measurement.

Historic Maps: The site area measurement is based on data from historic sources with sufficient or reasonable scale, such as County Atlases, plat books, Sanborn maps, coal mine maps, etc.

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

Aerial: 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 through Transit, Alidade or similar instruments.

Range Finder: The site area was determined through the use of a Range Finder or similar.

Unrecorded: This response is intended only for transcribed data.

* Confident of Site Boundaries?

Confident of Site Boundaries – Unless Phase II or III investigations have been completed Confidence is most frequently recorded as "**No**". Also select "No" if the survey prohibited the complete delineation of the site (i.e. it appears likely that the site extends outside of the survey area). Phase I survey applying intensive/concentrated methods may in certain conditions provide sufficient confidence in site delineation.

Form Preparer Details

- * First Name
- * Last Name

- *** Institution/Organization** (enter your institution name)
- * Date of Form: mm/dd/year
- * Field Date: mm/dd/year. Enter the date when the site was last visited.

Artifact Repository – enter the institution name where artifacts will be retained. Provide Accession number if available.

Special Status – Select from list. The majority of sites will be lacking special status (i.e. "None").

* Description of Site:

* Physical description of site, setting, and interpretation.

Provide a brief summary of key site and archaeological survey details. This short narrative is helpful in understanding principal site attributes as well as an aid in confirming accuracy to several key components in the site form data.

Descriptions should include the following details in the order as may be considered best to your site, and with each generally stated in one or two sentences. The Descriptions will likely result in two to three paragraphs.

- 1. Physical setting: Describe the local site setting / notable setting details.
- 2. Investigation method(s) with site dimensions and site area: Investigation method(s) and resulting site dimensions and area (in m²).
- 3. Brief summation of artifacts/features: Briefly/succinctly summarize identified artifacts/features.
- 4. **Temporal and Functional interpretations:** State temporal period(s) or cultural affiliations and where possible any interpreted functional roles.
- 5. Historic-era Sites/Archive Mapping: For Historic-era sites provide an accounting of presence/absence of resources depicted to the available archive mapping (County Atlas and Gazetteers, 15' and 7.5' USGS Topographic Series Quadrangles). If noteworthy, include Ownership histories as found to the County Atlas & Gazetteers, and other significant/referenced information. Consider adding additional references to the Form References list.

* Site Relationships and Significance

Significance potential relative to regionally comparable sites.

Site Relationships and Significance narratives are intended to provide evaluative context both temporarily and by regional environments. Although each OAI site may aid in furthering understanding of our past, those with greater potential in interpreting culture history and cultural practices generally warrant greater treatment and measures in preservation or in further investigation.

Provide a brief narrative evaluating this site with those temporally comparable, locally and/or regionally, such as by watershed or other common geographic boundaries. For those lacking regionally temporal comparisons describe what this suggests, or if lack of regional survey may be a contributing factor. For sites with potential Significance but are lacking local or regional comparisons, consider what is known of the Temporal period elsewhere and how this site contributes or does not contribute in interpreting the past. Note any resulting recommendations of need for additional work or potential for nomination/listing to the National Register of Historic Places.

* References

Associated Reports - Add the associated survey report within the Survey 123 OAI References Form. When entering your title please use Title Case without use of hard returns (see example below). Once added, select the reference title from the dropdown list. This list is Search enabled allowing you to type in a key word or words to identify your report. Consider adding other form-cited publications to include as a form Reference.

If adding your reference during form preparation, Close and Save your form as a draft. When returning to the form the report will be found within the drop-down list. For due diligence survey lacking an associated report select "No associated report. Inventory reporting is in due diligence only."

Report title example:

"Phase I Archaeological Survey of the Proposed Upper Deer Creek Solar Farm in Pleasant Township, Clark, and Goshen Township, Champaign Counties, Ohio"

Institution: Please add your Firm or Institution Name.

* Site Map and Images

* Site Map - Site(s) and Survey Area Delineation Map.

For map preparation details see Page 1: "Prepare a Survey Results Map with all OAI sites shown".

Additional images (optional) - As useful, consider including images of:

Temporally or functionally diagnostic artifacts (with scale).

Archaeological features and site views.

Archival Mapping Images – Historic maps and other print documentation, especially to noted Historic-era sites.

Appendix A, B & C attached.

APPENDIX A:



Example OAI Sites and Survey Area results map

APPENDIX B:



PHYSIOGRAPHIC SECTIONS OF OHIO

STATE OF OHIO George V. Vonovich, Governor DEPARTIMENT OF NATURAL RESOURCES Donald C. Anderson, Director DIVISION OF GEOLOGICAL SURVEY Thomas M. Berg, Chief



APPENDIX C:

STATE OF OHIO Bob Taft, Governor DEPARTMENT OF NATURAL RESOURCES Samuel W. Speck, Director DIVISION OF GEOLOGICAL SURVEY Thomas M. Berg, Chief



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 graveland 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. Futhermore, 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.