NORTH CAROLINA
OFFICE OF STATE ARCHAEOLOGY

ARCHAEOLOGICAL INVESTIGATION STANDARDS AND GUIDELINES

FOR BACKGROUND RESEARCH, FIELD METHODOLOGIES, TECHNICAL REPORTS, AND CURATION

NC DEPARTMENT OF
NATURAL AND CULTURAL RESOURCES

-November 2023-

About the North Carolina Office of State Archaeology

The North Carolina Office of State Archaeology (OSA) is an office of the Division of Archives and History within the Department of Natural and Cultural Resources. The OSA was created by the North Carolina General Assembly in 1973 to coordinate and implement a statewide archaeological preservation program. Elements of this program include maintaining a statewide computer-based inventory of archaeological sites, enforcing the North Carolina Archaeological Resource Protection Act (G.S. 70 Article 2), and ensuring the proper treatment of human burials in cooperation with the individuals and organizations specified in the Unmarked Human Burial and Human Skeletal Remains Protection Act (G.S. 70 Article 3). An important aspect of North Carolina's statewide archaeological preservation program is to implement the policies of the National Historic Preservation Act of 1966, as amended, and later, North Carolina General Statute 121-12a. G.S. 121-12a provides for consideration of National Register properties in undertakings funded or licensed by the state.

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PART 1. BACKGROUND RESEARCH

Introduction

Prior to the initiation of fieldwork, a records search should be conducted at the North Carolina Office of State Archaeology (OSA). The purpose of this search is to determine whether any previously recorded archaeological sites are located in the project area and to better understand local cultural and historical contexts. Compiling and synthesizing information about previous work and sites in the vicinity around a project area allows for better prediction of site types that may be identified and provides a baseline of knowledge for making assessments of site significance.

Qualifications

Individuals seeking to do background research at an OSA facility must meet or be under the supervision of an individual who meets the *Secretary of the Interior's Professional Qualification Standards* as described in 36 CFR Part 61 (see Qualifications and Permitting below). In situations where a supervised individual is to conduct records research, it is expected that they will have been trained and proficient in pertinent research methods, including use of GIS, prior to scheduling an appointment.

Making an Appointment

Prior to doing a record search, researchers must first make an appointment to access the files at the OSA Raleigh Office or Western Office. Please contact us at least 24 hours prior to when you would like to visit. Appointments are scheduled at the Raleigh Office for any day but Wednesday. Appointment availability at the Western Office may vary depending on staff schedules.

First time visitors must submit a Consultant Questionnaire and Curriculum Vitae for those who will be conducting the background research and all project directors/principal investigators who may work on North Carolina projects. An email that includes vitae for all staff listed on the questionnaire should be sent to osafilesearch@dncr.nc.gov. Your questionnaire will not be considered complete until all vitae have been received.

To make an appointment to do a records search at the Raleigh or Western office, please submit a Site File Research Scheduling Form. Records searches for compliance projects must include an ER number in the appointment request. Compliance projects must be reviewed by the OSA before initiating the background research process.

A guide to conducting site file research at the OSA is provided in APPENDIX A. Printed and digital versions of the guide are available at the Raleigh and Western offices for use during your appointment.

Accessing Records

Maps

Site locations, reviewed areas, and surveyed areas are added to OSA's Geographic Information System (GIS), which is available for access during background research appointments on computers in the Raleigh and Western offices. Scans of the paper topographic quadrangle maps used for these records prior to 2012 are accessible as base-mapping in GIS. Most of the data from the paper maps have been digitized.

Site Forms

OSA staff are in the process of scanning site forms for all previously recorded sites. Data from many site forms have been added to a site database (SiteForm) that is available on computers in the Raleigh and Western offices. Site forms that have not yet been data entered or scanned are available in boxes stored in the map room and are organized by county.

Reports

Many reports are now available in digital form on computers in the Raleigh and Western offices. Paper copies of all reports are stored at the Raleigh Office library. The Western Office has paper copies of reports from the western counties up to 2021.

PART 2. TERRESTRIAL FIELD METHODOLOGY

Introduction

For compliance projects, our office requests consultation with the designated Office of State Archaeology (OSA) Review Archaeologist to discuss appropriate methodologies prior to archaeological field investigations. The methodology standards outlined below are to be used for clarification and guidance but allow for exceptions based on various factors.

The field methodology guidelines are organized in three parts. The introduction provides information concerning definitions, qualifications, and special conditions. The second section differentiates forms of field investigation according to objectives, level of effort, and associated activities (i.e., monitoring, reconnaissance survey or due diligence, Phase I identification survey, Phase II evaluation/testing, and Phase III data recovery/mitigation or treatment). The third section provides standards and guidelines for undertaking and documenting fieldwork activities.

Definitions

Defining an Archaeological Site

According to the National Park Service (NPS), an archaeological site is defined as "the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure" (as defined in the 'How to Apply the National Register Criteria for Evaluation' portion of National Register Bulletin 36).

For the purposes of archaeological site identification, the OSA defines an archaeological site as a location where at least one artifact or feature greater than 50 years of age has been identified. All archaeological sites identified as a result of field investigations must receive a trinomial site number and require a completed OSA site form or cemetery form (APPENDIX B and APPENDIX C).

All materials – including artifacts, floral and faunal remains, and sediment samples, along with related documentation such as original field notes, maps, photographs, artifact inventory lists, and analysis forms – recovered and created for purposes of compliance with state and federal regulations shall be permanently curated in an approved archaeological repository, preferably in the state of North Carolina. Since archaeological investigations are inherently destructive and non-replicable, these guidelines ensure that collected artifacts and associated documentation from work done in the public interest will be available to future researchers.

Site Occurrence Probability Categories

The following site probability categories can be used to aid in the design of survey strategies. Thresholds for certain environmental variables used in classifying areas as high or low probability vary regionally and should be derived from previous survey data in the Site Record Inventory at OSA and in consultation with the OSA region review archaeologist. Contact information for the appropriate review archaeologist can be found at the OSA Contact page.

Low Probability – This designation typically applies to areas with poorly drained soils; and/or areas that are disturbed to such a degree that archaeological materials, if present, would lack sufficient integrity to be considered eligible for listing in the National Register. Areas identified as low probability through the inspection of topographic and soil maps should still be verified and documented in the field using visual inspection and subsurface testing, as appropriate. In many cases, it may be suitable to survey low probability areas at a reduced sampling interval.

High Probability – This designation typically applies to areas that provide low-cost resource access according to factors such as local geology, arable soil, water sources, ecological diversity, and transportation routes. Relevant factors will vary by region and expected site types. Archival and historic (deeds/parcel history) research should be done in advance of fieldwork to determine high probability areas where structures or activity areas are shown on historic maps (topographic, post office routes, soils maps, Sanborn maps, highway maps, etc.) and aerial images regardless of soil type or distance to water. Archival research can also be critical in defining potential for unmarked cemeteries or resources connected with underrepresented populations such as enslaved peoples.

Area of Potential Effects

According to 36 CFR 800.16(d), the Area of Potential Effects (APE) for a project is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties." In the case of archaeological sites, the APE is often the maximum area of potential ground disturbing activities (the area of disturbance) associated with a project, including permanent and temporary impacts. Certain undertakings, such as repairing the foundations of a historic building, may have a very limited APE, while others, such as the implementation of land management practices, may cover large areas. The Area of Potential Effects as originally defined for a project may change if it is re-designed.

Cemeteries and Grave Sites

According to North Carolina General Statute 65, Article 12, a cemetery is "a tract of land used for burial of multiple graves." Cemeteries containing interments greater than 50 years of age should receive a trinomial site number. If the cemetery is associated with other historic site elements, or is located within a prehistoric site, it should be assigned a separate site number. A

cemetery form should be completed with the cemetery site number; if other archaeological resources are present, they should be recorded on a site form with the separate site number. Given the possibility for unmarked graves in historic cemeteries, even burial locations with a single above-ground marker should be recorded as cemeteries.

Prehistory and History

Within these guidelines, archaeological sites are referred to as prehistoric, historic, or multicomponent. National Register Bulletin 36 defines prehistoric, or pre-contact, resources as "the archaeological remains of indigenous American societies as they existed before substantial contact with Europeans and resulting written records." Bulletin 36 defines historic, or post-contact, resources as "sites and structures dating from time periods since significant contact between Native Americans and Europeans."

There are a variety of terms that have been used interchangeably with prehistoric and historic. All of these designations can vary regionally based on when contact between Native Americans and Europeans began. When writing reports, time period designations should be used consistently and should be more specific whenever possible (i.e., describing a site as Early Woodland period rather than prehistoric).

Qualifications and Permitting

Principal Investigator Qualifications

Principal investigators of archaeological compliance investigations must meet the *Secretary of the Interior's Professional Qualification Standards* as described in 36 CFR Part 61 and outlined in 48 FR 44716. For archaeology, minimum qualifications are:

- A graduate degree in archaeology, anthropology, or closely related field.
- At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management.
- At least four months of supervised field and analytic experience in general North American archaeology.
- Demonstrated ability to carry research to completion.
- A professional in prehistoric archaeology shall have at least one year of full-time professional experience at a supervisory level in the study of archaeological resources in the prehistoric period. A professional in historic archaeology shall have at least one year of full-time professional experience at a supervisory level in the study of archaeological resources of the historic period.

Archaeological Investigations on State Lands

If an area to be archaeologically investigated includes lands owned or leased by the state of North Carolina, excluding highway rights-of-way, the Principal Investigator must obtain an Archaeological Resources Protection Act (ARPA) permit from the State Archaeologist, according to the provisions of North Carolina General Statute Chapter 70, Article 2. Permits should be applied for well in advance of the anticipated fieldwork start date and require at least 30 days for issuance.

Permit applications can be obtained from the State Archaeologist, 4619 Mail Service Center, Raleigh, NC 27699-4619, or online from the OSA Permits page. A criminal background check by the State Bureau of Investigation is required for the Principal Investigator. Fingerprint cards and release forms can also be obtained from the State Archaeologist. While no fees are required to obtain the ARPA permit itself, a cost of $38.00 is required for the criminal background check. Certified checks or money orders for that amount, made out to the Office of State Archaeology, should be submitted with the fingerprint card, release form, and completed permit application.

Planning and Contingencies

Background Research

Prior to the fieldwork phase of a project, background research of previous investigations and previously recorded archaeological sites must be undertaken at the OSA. Records are updated constantly, so consultants must conduct a background research review before each new project to ensure that the most up-to-date information is used.

Access to archaeological site files, reports, and related documents is provided to qualified professional archaeologists and authorized representatives of federal, state, or local agencies and institutions whose purpose is to effect planning decisions regarding archaeological resources. Persons having access to site files will be expected to maintain the confidentiality of site location information in accordance with North Carolina General Statute 70-18.

Due to the number of researchers desiring access to the site files and the limited space and equipment available, appointments are necessary. See PART 1. BACKGROUND RESEARCH above for more information about background research at the OSA.

Background research should also include a thorough review of archival documents. Archival and historic (deeds/parcel history) research should be done in advance of fieldwork to determine high probability areas where structures or activity areas are shown on historic maps (topographic, post office routes, soils maps, Sanborn maps, highway maps, etc.) and aerial images. This research can be critical in assessing the likelihood that archaeological resources related to underrepresented communities may be present. It may be necessary to visit county clerk offices, local historical or genealogical societies, universities, or museums to gather all relevant information.

Changes in Field Strategies/Methodologies

Any changes in survey, testing, or data recovery strategies/methods should be undertaken only after consultation with the OSA review archaeologist.

Inadvertent Discovery of Human Remains

If human skeletal remains are encountered during archaeological investigations, the provisions of North Carolina General Statute Chapter 70, Article 3 apply. The State Archaeologist should be contacted immediately. Investigations can resume after contact has been made and the consultation process has been initiated. The Principal Investigator shall notify the State Archaeologist as to the cultural and biological characteristics of the remains as soon as such determination has been made. Consultation between the State Archaeologist and the Principal Investigator will determine where the remains will be held after excavation.

If the skeletal remains are determined to be Native American, consultation will be undertaken between the State Archaeologist and the Executive Director of the North Carolina Commission of Indian Affairs. If the skeletal remains are not Native American, the State Archaeologist will publish notice of the discovery in an effort to determine next of kin.

Forms of Investigation

Monitoring

Objective

The goal of archaeological monitoring is to determine the presence or absence of archaeological deposits while ground disturbing activities are taking place. Archaeological monitoring is not a primary survey strategy, but it may be used in certain situations when deemed appropriate. For example, on-site monitoring of construction activities may be undertaken to ensure that a specific archaeological site, cemetery, or geographic area is not adversely affected by earthmoving activities.

Description

Ground-disturbing activities should be undertaken in such a manner that the monitoring archaeologist is able to observe excavations in real time and communicate with machine operators as work progresses. At the discretion of the monitoring archaeologist, ground-disturbing activities are halted if a suspected archaeological feature or deposit is encountered. The monitoring archaeologist should examine the exposed materials or feature and determine what additional work is necessary. In most instances, this will include recording locational data, photographing features and recovering archaeological remains.

The OSA review archaeologist should be consulted prior to the development and implementation of a monitoring strategy for those projects subject to Section 106, and a *Secretary of Interior (SOI)* qualified archaeologist must be present for all ground-disturbing activities to be monitored.

Reconnaissance Survey/Due Diligence

Objective

Reconnaissance surveys are systematic examinations designed to assess the potential for the presence of archaeological remains in a given project area. They are especially recommended as a means of acquiring information for planning intensive identification surveys of large areas. Based on the results of a systematic reconnaissance survey, it may be possible to divide a project area into zones of high probability or low probability based on the potential for sites to occur and to develop a more targeted Phase I survey. Reconnaissance survey reports should be reviewed by OSA staff for compliance before additional fieldwork is done.

Description

Reconnaissance surveys have two main components: a cultural resource assessment and field investigations. Cultural resource assessments summarize data from previously recorded sites in and near the project area and review the history and prehistory of a region to assess the potential for various archaeological site types. This should include intensive archival and historic deed research. Geological and ecological conditions in the project area relevant to the distribution of archaeological sites should also be considered through reference to data such as soil maps and LiDAR.

Reconnaissance field investigations entail systematic pedestrian reconnaissance and judgmental shovel tests to document the extent and types of ground cover and soil conditions. Sufficient documentation during a reconnaissance survey may eliminate the need for further field investigations in low probability areas based on various factors, such as disturbance or wet conditions and poor soil drainage. Exploratory subsurface excavations made to examine soil profiles, such as shovel tests and cores, should be carefully documented with regard to their location, means of excavation, depth, characteristics, and contents.

Phase I Identification Survey

Objective

The goals of a Phase I archaeological survey are to identify archaeological sites, define their boundaries within a project area, and provide National Register of Historic Places (NRHP) eligibility assessments for all identified sites (if possible at this stage without a formal Phase II Evaluation/Testing). The assessments are presented in the survey report as recommendations

(e.g., not eligible, no further work recommended; portion within project area not eligible; unassessed, additional work recommended; eligible, recommend avoidance; etc.). If a site extends outside of the boundary of the project area, an NRHP eligibility recommendation should only be made for the portion of the site that was actually investigated. NRHP eligibility assessments should also be made for any previously recorded site or portion of a previously recorded site in the project area that was formerly unassessed.

Description

Phase I surveys have two main components: a cultural resource assessment and field investigations. Cultural resource assessments summarize data from previously recorded sites in and near the project area and review the history and prehistory of a region to assess the potential for various archaeological site types. This should include intensive archival and historic deed research. Geological and ecological conditions in the project area relevant to the distribution of archaeological sites should also be considered through reference to data such as soil maps and LiDAR.

Subsurface investigation through systematic shovel testing is the most commonly employed Phase I survey strategy. Systematic pedestrian reconnaissance can be used to investigate areas where subsurface testing is infeasible. Limited test unit excavations might be employed to determine if features are present on identified sites. In certain depositional environments, Phase I investigations may also include remote sensing, stripping, and/or deep testing. Detailed guidelines for undertaking these activities are presented in Field Methodologies below.

Phase II Evaluation/Testing

Objective

The primary goal of Phase II evaluation/testing is to render a definitive determination of NRHP eligibility. If a site is recommended as eligible for listing in the NRHP as a result of Phase II investigations, the project archaeologist should evaluate potential adverse effects to the site, both direct and indirect, resulting from any undertakings that might damage its integrity. The Phase II work should collect enough information to provide specific recommendations regarding mitigation activities, including a research design that identifies the datasets that would be created as a result of data recovery and the questions these data could be used to answer.

Description

All methods employed during Phase II evaluation/testing should be directed toward achieving the primary goal discussed above. These methods should focus on documentation of site integrity (intra-site structure and subsurface integrity) and assessment of site significance. This is, again, a two-part process with field investigations and contextual research.

Field investigations usually consist of sets of close-interval shovel tests and larger, formal excavation units. The primary focus of unit excavation should be to document and evaluate features and/or culturally derived stratigraphy, and the number and placement of test units should be adequate to provide definitive information regarding site integrity.

Geomorphological analysis should also be considered at this step to provide important insights on site formation processes and site integrity. Remote sensing, mechanical stripping, and specialized analyses (e.g., soil micromorphology, radiometric dating) may be necessary to assess NRHP eligibility.

The cultural resources research for a Phase II evaluation requires a literature review directed specifically toward assessing the current state of knowledge concerning sites like the one being evaluated. Without this contextual information, it is not possible to judge whether a site might possess the potential to provide important information about the past.

Phase III Data Recovery/Mitigation or Treatment

Objective

The primary goal of Phase III data recovery is to mitigate the adverse effects of a given undertaking on a NRHP-eligible archaeological site. In the case of data recovery, this is achieved by conducting excavations to obtain information commensurate with the site's potential to address specific, formal research questions, and thereby produce, as per NRHP evaluation criterion D, information important to the understanding of history or prehistory.

Phase III data recovery is implemented when all other options, including avoidance and/or preservation, are deemed infeasible for a site or project area. After a formal finding of adverse effects is made, it is necessary to estimate the level of effort required to adequately mitigate adverse effects and fully address all research questions posed for the project. A Memorandum of Agreement (MOA) among the lead federal agency, State Historic Preservation Officer (SHPO), other agencies and/or consulting parties may be required prior to the development of a detailed data recovery plan and field investigations.

Under Section 106, Phase III work is undertaken with the understanding that excavation itself will destroy or significantly alter the integrity of a given site or portion of a site. As a result, after data recovery the mitigated site or portion of a site will no longer be considered eligible for listing in the NRHP.

Description

All methods employed during Phase III data recovery should be directed toward achieving the primary goal discussed above and should focus on collecting datasets to address specific research questions. Research questions should be formulated based on the results of Phase II

or other site assessments. Data recovery is generally accomplished by excavating formal test units across the site, often as a set of horizontally-expansive blocks. Excavation may include mechanical stripping to expose features or other cultural deposits.

Field Methodologies

Remote Sensing and Geophysics

There are various types of remote sensing techniques, which can be used to help "gather background environmental data, plan more detailed field investigations, discover certain classes of properties, map sites, locate and confirm the presence of predicted sites, and define features within properties" (see the National Park Service's notice regarding the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation). Remote sensing covers all techniques other than excavation and physical inspection methods to observe and record visual, electromagnetic, or other geophysical properties on or below the earth's surface. Remote sensing techniques include soil resistivity, proton magnetometer, gradiometer, ground penetrating radar (GPR), and various photographic techniques (aerial, infrared, etc.).

Although remote sensing techniques are, under certain conditions, an effective and efficient means to obtain information about the size, frequency, and distribution of subsurface archaeological features, geophysical methods typically do not allow for the full characterization of anomalies without direct archaeological investigation, i.e., ground-truthing. By the same token, systematic surface collection and traditional subsurface testing (shovel-testing) are poor sampling techniques for identifying most types of archaeological features and determining their distribution. When used together, remote sensing and traditional archaeological survey techniques can provide a more robust approach to the Phase I survey and site identification process. The feasibility and applicability of remote sensing surveys should be seriously considered at all stages of archaeological investigation.

Although the operation of geophysical equipment is mostly standard across disciplines, considerable expertise is necessary to effectively design, conduct, and interpret geophysical surveys of cemeteries and archaeological sites. Interpretation of the data and classification of geophysical anomalies must be done by, or under the direct supervision of, a qualified professional with demonstrated experience applying this technique to archaeological resources in the eastern United States.

Whenever a remote sensing survey is conducted, appropriate reporting should include documentation of the following:

- Semi-permanent datum points recorded using a GPS receiver with sub-decimeter accuracy that mark the geophysical grid corners or survey boundaries.

- Any anomalies selected for ground truthing. It is recommended that a representative sample of geophysical anomalies of archaeological interest be ground-truthed via soil coring and/or hand excavation (does not apply to cemetery contexts). Systematic ground truthing may be more appropriate during the Phase II testing phase or determined unnecessary in certain circumstances where previous testing has already occurred, or in historic contexts where detailed mapping/records may exist (e.g., Sanborn maps).
- Detailed discussion of the instruments used, how the data were collected, post-processing software used, and what specific processing steps were taken must be included in the report.
- Pertinent environmental, soil, and weather conditions during data collection, including dielectric value of the soil (or Relative Dielectric Permeability [RDP]) for GPR.
- Anomaly/target IDs, descriptions, and interpretations.
- Scaled maps with relevant site landmarks and/or datums visible and showing the distribution of anomalies and images/figures showing representative examples of survey results, including radargrams, amplitude slice maps, other gridded data, etc.

Metal Detection Surveys

Systematic metal detecting can provide information for developing recommendations of National Register eligibility for historic period sites during Phase I surveys by providing information on 1) site dates, through recovery of datable objects (e.g., nail types); 2) artifact diversity, and thereby site function; 3) artifact distribution, and thereby site size and organization; and 4) artifact clustering, which may relate to intact features or other deposits below the plow zone. If these types of information would be helpful in completing the National Register assessment of a historic period site during a Phase I survey, then systematic metal detecting is recommended.

A survey grid should first be established and tied into a site datum, and the datum should be mapped, preferably with GPS technology. Coverage should be systematic within the study grid. Metal detecting study lanes should be no wider than 1.5 meters (5 feet) in order to ensure adequate coverage. The vegetation or leaf litter may need to be removed within study lanes in order to effectively sweep the metal detector across the ground surface. All metal detector 'hits' should be flagged, numbered, and mapped. A sample of hits should be examined through excavation. Notes should be maintained on each of the 'hits' that are investigated, which should include at a minimum the following information: site number (if applicable), date, project number, what the object was, depth of object, and whether it was retained or discarded.

Remote Sensing for Cemetery Surveys

Although GPR is the preferred survey method for documenting cemeteries in North Carolina due to its non-invasive approach, other remote sensing techniques, such as magnetometer,

electrical resistivity, and electromagnetic conductivity (EM) may provide complementary or even better results depending on site conditions. Specific survey parameters for doing cemetery work will depend on the instrument and the soil conditions within the cemetery, but there are a few method-specific guidelines for minimum standards:

When clearing the survey area of vegetation and brush, care should be taken to avoid damaging grave markers or disturbing any shrubbery, flowers, plants, or other articles planted or placed within the cemetery to designate where human remains have been interred.

All ground penetrating radar surveys in cemeteries should involve the collection of radargrams and the later processing of that data into three-dimensional volumes for creating amplitude slice maps. Graves can appear in radar data as positive or negative (gaps in an otherwise strong reflector) anomalies. Real-time flagging of hyperbolas in radargrams visible on the radar system display screen is highly discouraged if it is the sole survey result because tree roots (among other things) look very much like graves in radar profiles; furthermore, grave shafts might be located between hyperbolas, which is only visible in amplitude/time slice maps. Historic graves can present as subtle reflections and identification requires careful analysis by experienced personnel who are familiar with both the cultural context of the cemetery and interpreting GPR results in a cemetery setting.

Because graves can be relatively small, radar data in cemeteries should be collected along transects spaced no more than 50 cm apart (25 cm spacing recommended). GPR survey transects should ideally be oriented to cross perpendicular to the long axis of observed graves (if graves are oriented east-west, GPR transects should run north-south, if possible). Radar antennas with central frequency ranges from 200-700 MHz are recommended. Lower frequency antennas may be too low in resolution to differentiate side-by-side graves. Most soils in North Carolina rapidly attenuate radar energy, so depth penetration typically does not exceed two meters, unless soils are sandy. Radar surveys in cemeteries typically detect grave shafts (the soil within the grave), roads/paths, building and wall (outer walls, plot boundaries) foundations, utility lines (e.g., irrigation), and burial containers (coffins and vaults) if the depth of penetration is sufficient. If possible, GPR surveys should include a minimum of 10 meters beyond the observable cemetery boundary to investigate the potential for unmarked burials.

Pedestrian Reconnaissance

Systematic pedestrian reconnaissance is an acceptable method of survey in recently plowed or disked fields that have a surface visibility of fifty percent or greater. It may also be used as a first step to assess field conditions in areas that have a surface visibility of less than fifty percent. Systematic pedestrian survey should be conducted at an interval no greater than 10 m.

Systematic pedestrian reconnaissance survey should be supplemented with subsurface investigations, especially when the surface visibility is less than fifty percent. Shovel tests may be excavated at an expanded interval, depending on the field conditions. Shovel tests should also be excavated in areas possessing particularly high probability for archaeological sites regardless of surface visibility.

Sites identified by pedestrian survey in areas with surface visibility of fifty percent or greater should be investigated with shovel tests at a density of no less than 4 per acre, which is roughly comparable to excavating shovel tests at 30-meter intervals on transects spaced 30 meters apart. Since the purpose of the shovel tests is to assess the nature of subsurface deposits at the site, they should be evenly distributed to provide a representative sample. If clustering is apparent in the surface distribution of artifacts, additional shovel tests should be excavated in areas of high artifact density to assess the likelihood of features or other intact archaeological deposits.

For some sites, a complete surface artifact collection may not be necessary to provide a recommendation regarding further work and NRHP eligibility. A sample of artifacts may be collected from a site, particularly on sites with dense surface scatters and/or those that have a large quantity of similar artifact types. An appropriate representative sampling method should be used. Material that is not collected should be described in at least general terms and the location included on the site map (see Documentation below).

Excavation

Shovel Testing

Shovel tests should be at least 30 cm in diameter and should be excavated either 10 cm into sterile subsoil or hydric soil or to a depth of one meter below ground surface, whichever comes first. The fill from each shovel test should be screened through 1/4-inch (6.35-mm) or finer hardware mesh. Notes should be kept on each shovel test documenting the shovel test location, soil stratigraphy using USDA soil descriptions, Munsell color codes, depth, and the presence or absence of artifacts (Figure 1). A representative sample of shovel tests should be documented with photographs. Artifacts collected from shovel tests should be bagged separately by shovel test, and separated according to the natural soil or cultural strata with which they were associated.

Figure 1. Sample Shovel Test Log

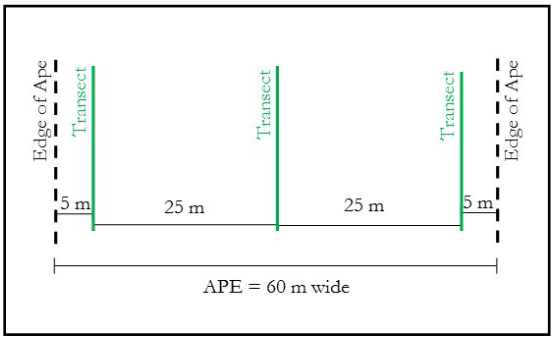
Site Number	Transect	Shovel Test Number	Latitude	Longitude	Soil Horizon	Depth to Base of Stratum (cm)	Soil Color	Soil Texture	Artifacts
31AX345	AA	STP-23-001	36.53353	-77.558272	A	8	10YR 4/3 Brown (brown)	Silt Loam	Nail wire
					Ab	30	10yr 5/3 (brown)	Silt Clay	
					B	62	10YR 5/8 Yellowish brown (yellowish brown) mottled with 10yr 6/4 (light yellowish brown)	Silt Clay	
31AX346	BB	STP-23-012	36.53353	-77.557891	A	12	10YR 4/3 Brown (brown)	Silt Loam	
					Ab	39	10yr 5/3 (brown)	Silt Clay	Morrow Mountain I, quartz, complete
					B	61	10yr 7/6 (yellow)	Silt Clay	
31AX346	BB	STP-23-014	36.53384	-77.557934	A	14	10YR 3/3 Dark brown (dark brown)	Silt Loam	Flake, rhyolite
					B	52	10yr 7/3 (very pale brown)	Silt Clay Loam	

The standard shovel test interval should be no greater than 30 m and transects should be spaced no greater than 30 m apart. A smaller or reduced shovel test interval may be appropriate in areas with particularly high probability or potential for significant, intact archaeological deposits. Conversely, an expanded shovel test interval may be appropriate in low probability areas or when employed in conjunction with other survey strategies, such as systematic pedestrian reconnaissance. Staggered grid or transect arrangements are recommended. A staggered grid reduces the area in between shovel test locations, thus increasing the potential to capture smaller sites that may not be intercepted by a non-staggered grid.

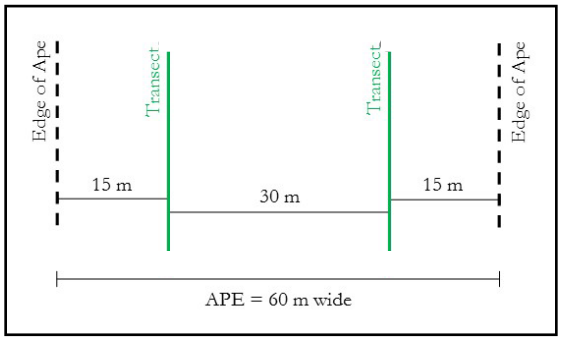
If shovel test transects parallel the edge of the Area of Potential Effects (APE), the transect nearest the edge of the APE should be no further than half a standard shovel test interval as defined for the project from the edge of the APE. For example, if the shovel test interval used for a particular project is 25 m, the transects nearest the edges of the APE should be no further than 12.5 m from the edge of the APE. If the APE is 60 m wide and shovel tests are excavated at 25-m intervals, there should be three shovel test transects, and the transects nearest the edges of the APE would be 5 m from the edge of the APE. If shovel tests were excavated on only two transects, the distance from the transects to the edge of the APE would be 17.5 m, which is greater than half of a standard shovel test interval as defined for the project, and not deemed adequate coverage for a high probability area (Figure 2).

Radial shovel tests excavated to define site boundaries should be placed at a reduced interval no greater than half that of the standard interval (e.g., if the standard interval is 30 m, the radial shovel test interval should be no greater than 15 m). At least two negative shovel tests should be excavated in each direction along site margins to determine the extent of the site. Internal radial shovel tests or close-interval shovel tests may be appropriate on some sites, for example to better delineate areas of artifact concentrations, to further investigate soil conditions, and/or to better assess site significance.

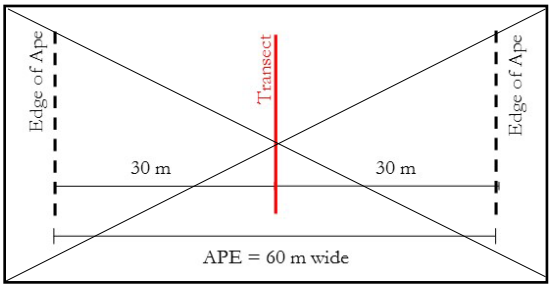
Figure 2. Examples of Shovel Test Transect Placements (Across 60-Meter-Wide Survey Corridor)



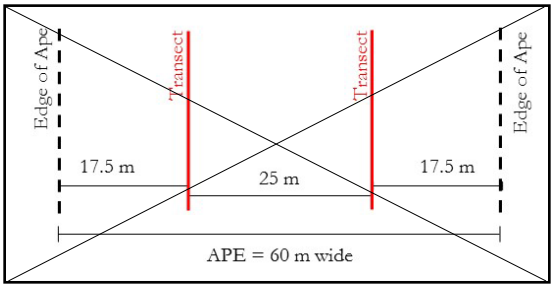
Adequate Coverage (recommended)
Three shovel test transects spaced 25 m apart on 60-m wide corridor, with shovel tests excavated at 25 m intervals.



Adequate Coverage (minimum)
Two shovel test transects spaced 30 m apart on 60-m wide corridor, with shovel tests excavated at 30 m intervals.



Not Adequate Coverage
One shovel test transect on 60-m wide corridor, regardless of shovel test interval on transect.



Not Adequate Coverage
Two shovel test transects spaced 25 m apart on 60-m wide corridor, with shovel tests excavated at 25 m intervals.

Close-Interval Shovel Testing

While shovel tests are primarily excavated to locate sites and define site boundaries, close-interval shovel tests may be excavated to help define site integrity. This includes documenting soil stratigraphy, artifact counts and distributions, and the presence/absence of culturally derived features or stratigraphy.

Close-interval shovel tests should be placed no greater than 15 m apart, and when possible intermediate to tests previously dug to delineate the site. All shovel tests should be excavated and recorded as described above in Shovel Testing. They should be clearly marked in the field and placed on project maps, preferably using GPS technology.

Soil Coring and Augering

Soil coring and augering are useful for investigating soils to determine whether they are likely to contain intact cultural deposits, or to examine soil variation across a delineated site. Cores and augers can be used either judgmentally, as part of a reconnaissance survey, or systematically within a survey area or site. Coring and augering should not be used as a means of identifying sites but may be used to identify features within sites.

Augers are best used to examine soil conditions in areas where deeply buried deposits are possible due to alluvial, colluvial, and aeolian processes, since augers may be used to examine soils to depths beyond what is accessible through shovel testing. Notes should be kept on each auger test documenting soil stratigraphy using USDA soil descriptions and Munsell color codes, and auger test locations should be clearly marked in the field and placed on project maps.

Soil core probes 1/2- to 3/4-inch in diameter are appropriate for systematically assessing soil conditions across a site. If a systematic core survey is to be conducted, a study grid should first be established. The study grid should be tied into a datum, and the datum should be mapped, preferably with GPS technology. Coverage should be systematic within the study grid. Notes should be kept on each core documenting soil stratigraphy using USDA soil descriptions and Munsell color codes. A map showing the probing transects should be included in the resulting report.

If soil coring and/or augering are going to be used in a cemetery context, see Cemetery Delineation and Soil Probing and Augering below for cemetery-specific guidance.

Test Unit Excavation

The number and distribution of excavation units should be determined by the information collected from shovel tests or other survey methods, such as remote sensing. The number and placement of test units may vary according to site size, distribution of artifacts, and any features or cultural strata encountered during site survey and delineation activities.

Test units may vary in size based on the extent of site boundaries, topography, and soil conditions. The size of any one unit should range from a minimum of 0.5-m square to 2-m square, with 1 square meter considered the standard test unit size.

Units should be excavated in set arbitrary levels within natural stratigraphy, such as fluvial deposits. Arbitrary levels of 10 cm are typical. The thickness of excavation levels in cultural stratigraphy should vary according to the nature of the deposit. Where present, the plow zone can be excavated as a single level, regardless of thickness. Midden soils may be excavated in 10 cm levels, but thinner arbitrary levels (e.g., 5 cm) may be appropriate in areas with microstratigraphy, especially dense artifact concentrations, and/or unique depositional environments such as rock shelters.

The fill from each test unit should be screened by level through 1/4-inch (6.35-mm) or finer hardware mesh. Artifacts should be bagged separately by unit and level.

Photographs and a formal profile drawing should be made of at least one wall of each excavation unit. At a minimum, the base of excavation in each unit should be photographed. Ideally, the bottom of each level should be photographed. Notes should be kept on each unit documenting soil stratigraphy using USDA soil descriptions and Munsell color codes, level depths, features and disturbances, and artifact types and quantities.

A permanent site datum should be established that is easy to relocate, and it should be included on the site map and preferably mapped with a GPS device. All excavation units should be clearly marked in the field and placed on project maps, preferably using GPS technology. The site map should also include the site boundary, unit datums, surface features if present, and topography.

Feature Excavation

Prior to excavation, features should be photographed in plan view, characterized using USDA soil descriptions and Munsell color codes, and drawn to scale. Feature locations should be plotted on site maps and plans, preferably using GPS technology.

With some exceptions (e.g., small-diameter post holes, masonry foundations) features should be bisected, and the profile photographed and drawn to scale. If a feature is determined to be a natural disturbance during the excavation process, its excavation may be considered complete after profile documentation. Features should be excavated by stratigraphic zone; if a feature zone is greater than 10 cm thick, it may be appropriate to excavate the zone in arbitrary levels. Each feature zone should be photographed and characterized using USDA soil descriptions and Munsell color codes.

It will often be appropriate to collect soil samples from features for specialized processing and analysis. Consultation with the specialist(s) who will conduct these analyses prior to the initiation of fieldwork activities will ensure appropriate sampling methods are employed. The remaining feature fill should be screened with no greater than 1/8-inch (3.175-mm) hardware mesh; water screening feature fill through 1/16-inch (1.18-mm) window screen is recommended.

Artifacts recovered from features should be kept separate from the general unit artifacts and should be bagged according to the specific context from which they derived within the feature (e.g., which half if bisected, and which stratigraphic zone and/or level if applicable).

Machine-Assisted Excavation

Deep Testing

In certain depositional environments (alluvial, colluvial, and aeolian), deep testing may be an appropriate methodology to identify and uncover buried cultural remains. A geomorphological study should precede and/or accompany any deep testing program.

All trenches should comply with OSHA guidelines for trenching and excavation safety. Trench profiles should be 'cleaned' (walls made plumb with shovel and trowel) and inspected for stratigraphy and cultural features. Photographs and a formal profile drawing should be made of at least one wall of each trench. The soil stratigraphy should be documented using USDA soil descriptions and Munsell color codes, and the depth of each stratum should be recorded. All trench locations should be mapped, either with GPS technology or by being tied into an established datum.

Deep testing trench excavations may be done in conjunction with coring and augering, or unit excavation within the trenches. For data recovery projects, mechanical stripping may be used to expose soil horizons with intact cultural features identified by deep testing.

Mechanical Stripping

Mechanically stripping the plow zone or natural overburden in an area may sometimes be an efficient way to expose soil horizons which may contain archaeological features.

An area should first be examined with subsurface investigations such as shovel tests to ensure the presence and depth of the intact cultural deposits. The area that is stripped should be marked on the project map, and preferably mapped with GPS technology.

The machine operator should strip to no closer than 5 cm above the soil horizon of interest, and the remainder of the overburden should be removed by shovel skimming. Exposed features should be treated in a similar manner to those exposed during unit excavation (see Feature Excavation above).

Special Analyses

When appropriate, special analyses should be used to enhance understanding of the archaeological record by answering specific research questions. These analyses include, but are not limited to geomorphological, faunal, shell, pollen, macrobotanical, phytolith, blood residue, and absolute dating. As these analyses produce the best results following specific sampling and processing protocols, consultation with the specialist(s) who will conduct a given analysis should take place prior to the initiation of fieldwork activities. Any expense or time needed for analysis by a specialist should be included in the initial scope of work, and reports should not be submitted until those analyses have been completed.

Artifact Sampling

Sampling strategies may be appropriate on sites with highly redundant quantities of one or more class(es) of material such as brick, shell, or glass. When developing a sampling strategy, the research potential and requirements of potential analytical techniques should be considered to determine sampling parameters for an artifact class.

All sampling decisions and actions should be well documented. At minimum, all materials should be weighed and photographed, and the total weight recorded. The amount of material retained for curation should be discussed with and approved by the OSA review archaeologist prior to implementation, when possible, and the justification for that strategy should be explained in the resulting report. The report and artifact catalog should note the discard of artifacts.

For more information on proper artifact sampling strategies, review the NPS collecting strategy guidelines, which are found in Chapter 5: Curation Prior to the Field and Chapter 6: Curation in the Field and Lab of their Managing Archaeological Collections online publication. Also refer to Discard and Sampling in Part 4 below.

Hazardous materials such as asbestos, active explosives or armaments, arsenic, radon, or biohazard waste should not be collected for curation. Photography and documentation should be done in the field if it is safe to do so.

Cemetery Delineation

Cemeteries are protected under North Carolina General Statutes Chapters 14-148 and 14-149 and are afforded consideration under Chapter 65. Cemeteries should be fully delineated through archaeological investigations before any avoidance measures are recommended. If a cemetery buffer is defined without archaeological investigation (GPR or probing) undertaken, then burials may extend beyond the initial proposed buffer. Cemetery delineation should include:

Pedestrian Survey

Bidirectional pedestrian survey at 2 meter transect intervals within an initially proposed 10-meter buffer as defined by initial visual observation and supported by photographs (minimum of 5 transects).

Ground Penetrating Radar

Ground penetrating radar should be done whenever field conditions allow for it. Refer to Ground Penetrating Radar for guidelines on GPR surveys of cemeteries.

Soil Probing and Augering

In cases where GPR surveys are not feasible or impractical (e.g., heavily wooded areas), close interval probing may be used. Soil sampling tubes or augers can also be used and may provide greater information about soil disturbances than probing alone. Recommendations for appropriate methods for probing surveys include:

- Establish site datum and record survey grid boundaries with GPS points.
- Systematic probing transects should be spaced no more than 2-4 feet apart and extend a minimum of 10 meters beyond the last recognizable grave marker or depression.
- Record the locations of any positive probing “hits” and provide a map showing probing transects and the locations of all positive locations.

Protection/Avoidance

Once the cemetery has been delineated, an appropriate buffer should be determined in consultation with the OSA. If the cemetery is on private property, the final buffered cemetery boundary should be mapped by a licensed surveyor, recorded on deeds or plats, and filed with the appropriate county to ensure that the county and any future landowners are aware of its presence. High-visibility construction fencing during construction activities may be recommended near cemeteries that do not have a fence or other physical barrier. If a permanent fence will be added, it should have a gate for accessibility.

While buffer recommendations may vary depending on a variety of factors, the OSA offers the following general guidance:

10-meter (32.8 feet) Buffer

- Modern (mid-20th-century and later) cemeteries.
- Fenced cemeteries unless determined to, or thought to have potential to, be associated with an enslaved community.
- All cemeteries that have been delineated with Ground Penetrating Radar (assuming the GPR survey was done by a professional archaeologist using approved methodologies) or other type of recommended cemetery delineation method where GPR is not feasible (e.g., probing).

15-meter (49.2 feet) Buffer

- Older, post-emancipation family cemeteries.
- Older, post-emancipation community cemeteries.
- Older, pre-emancipation cemeteries that research has shown to have a low potential to be associated with an enslaved community.

30-meter (98.4 feet) Buffer

- Older, pre-emancipation cemeteries determined to, or thought to have potential to, be associated with an enslaved community that have not been delineated with GPR or other recommended cemetery delineation method where GPR is not feasible (e.g., probing).

Documentation

Field Documentation

The following types of documentation should be used during field investigations: shovel test forms, unit excavation forms, feature forms, field notes, maps, and photography.

At a minimum, the information documented on shovel test forms should include a reference to the project (name or number), date of excavation, excavator(s), shovel test location, soil stratigraphy using USDA soil descriptions, Munsell color codes, depth, and the presence or absence of artifacts.

All maps should include clearly marked reference points that should be established in the field for each site to enable revisits, if warranted. Clearly marked datums should be established in the field for all sites at the Phase II and III levels of effort. These points should be clearly noted on all site maps, and ideally plotted using GPS/GIS data.

Notes should be maintained on photography in the field and should include a reference to the project name or number, the coordinates of the location being photographed, the date the photograph was taken, the photographer, and the subject of the photograph including the cardinal direction of the view depicted**.**

3D-modeling should be considered as a means of documenting Phase II and III excavations. Structure from motion photogrammetry provides the opportunity to create 3D models of excavation units and features to scale, from which accurate volumes can be calculated. In addition to its analytical utility for standardizing data for comparison within and between sites, 3D models provide a means of documenting archaeological field work activities at high resolution with little additional effort.

Recording a Site

Site locations should be mapped, preferably using GPS technology, and clearly depicted on project maps. Photography should be used to document site conditions, any above-ground features, or other site characteristics deemed important.

In addition, an individual site map should be made that includes the site boundary, project area boundary if it is near or intersecting the site, shovel test locations and corresponding numbers (if not on labeled grid), areas of artifact concentrations, areas of disturbance, structures or other above-ground features, topographical features, and anything else that would assist with site relocation and explaining site formation processes. Any materials not collected should be described in at least general terms with representative photographs and the location included on the site map.

Recording a Site Revisit

When an attempt is made to revisit a previously recorded site, the same procedures described above for recording a site should be used. If the site is not relocated within the previously mapped boundary, a record should still be made, and a site form submitted, demonstrating that there are no longer archaeological remains at that location. This will ensure that no redundant future attempts are made to relocate the site in that area.

When a site is not relocated, a map should be made that includes the originally mapped site boundary, project area boundary if it is near or intersecting the site, and negative shovel test locations and corresponding numbers (if not on labeled grid). Representative photographs of the location should be included.

Recording a Cemetery

Cemetery locations should be mapped, preferably using GPS technology, and clearly depicted on project maps. Cemeteries containing interments greater than 50 years of age should receive a trinomial site number. Given the possibility for unmarked graves in historic cemeteries, even burial locations with a single above-ground marker should be recorded as cemeteries.

If the cemetery has 10 or fewer interments, then the information available on the grave markers should be documented for all interred individuals. If the cemetery has more than 10 interments, then only the information for the oldest and the most recent interments is necessary, along with a total count of marked burials in the cemetery, and an estimate of unmarked burials (if any are observed). Descriptions may be included of any unusual markers.

Cemeteries are not usually eligible for inclusion in the NRHP unless they possess high artistic value, contain the remains of an important individual for which no other associated property exists, or represent a significant connection to an underrepresented community. *National Register Bulletin 41 (Guidelines for Evaluating and Registering Cemeteries and Burial Places)* provides guidance on the special criteria for evaluating cemeteries.

GIS Mapping

Use of GIS technologies allows for the creation of more accurately mapped sites and field conditions. The following recommendations apply when using GIS technologies and submitting shapefile information to the OSA:

- An Esri geodatabase or shapefile is preferred, and the recommended projections are NAD 83 NC State Plane (ft) or WGS 1984 Web Mercator.
- Archaeological sites recorded as part of the same project should be grouped together into one polygon shapefile or feature class. Attributes should at a minimum include state site number (if known), temporary site number, and site type (historic/prehistoric/ both). Survey areas should be submitted as a separate shapefile or feature class.

For more complex datasets, please contact the OSA GIS Specialist to devise a data submission plan.

PART 3. TECHNICAL REPORTS

Introduction

The report guidelines are intended to inform the preparation of technical reports for the purposes of compliance with federal and state historic preservation legislation. The majority of reports received by the Office of State Archaeology (OSA) for review are the result of archaeological investigations conducted for compliance with Section 106 of the National Historic Preservation Act (NHPA).

Report guidelines were first established in 1979, expanded in 1982, and revised in 1988. Revisions made in 2017 were the result of discussions among the OSA staff and consultation with members of the North Carolina Archaeological Council (NCAC) and the archaeological consultant community. The current version clarifies expectations, particularly as submission processes have changed to keep pace with technology.

Report review is conducted by the staff archaeologist with responsibility for the geographic area in which the investigation was undertaken. Other staff archaeologists may also participate in the report review as deemed appropriate by OSA staff. If a reviewer has questions or comments concerning any aspect of the project report, they will transmit them to the project sponsor and/or report author. The staff of the OSA ensure that comments and/or determinations are provided within the 30-day review period stipulated in 36 CFR 800.4. Any comments on the report will be contained in a letter signed by the State Historic Preservation Officer (SHPO) or their deputy. If comments are substantive, we may request that the report be revised and re-submitted before we can provide determinations of National Register eligibility or comments regarding project effects on archaeological resources. Once all comments have been addressed, a letter will be sent to request a hard copy of the report. Concurrence letters will not be sent until after the hard copy of the final archaeological survey report is received.

Several types of reports are accepted and reviewed by the OSA: monitoring, reconnaissance, Phase I, Phase II, and Phase III. Each report must stand on its own as a complete and self-explanatory document. The minimum standards and recommended format for the preparation of technical reports are discussed below. Comments and determinations will only be provided for projects that have been subject to review by the SHPO. However, professional non-compliance reports of archaeological investigations conducted in North Carolina, including reconnaissance surveys and research excavations, will be accepted into the Site File library.

Please see the end of this document for appendices that include, the North Carolina Archaeological Site Form (APPENDIX B), North Carolina Office of State Archaeology Cemetery Site Form (APPENDIX C), and the handbook for completing both the site form and the cemetery form (APPENDIX D).

Submission of Reports

All reports of archaeological investigations conducted in compliance with Section 106 of the NHPA or other state or federal regulations shall be submitted following the procedures described below. The report will be reviewed by the OSA review archaeologist assigned to that particular region (see OSA Contact page for current review assignments).

The OSA uses Citrix ShareFile for archaeological consultants and federal and state agencies submitting digital archaeological reports and site files for Environmental Review (ER). Citrix ShareFile is a secure online file sharing and transfer service. All digital ER archaeological survey files (i.e., reports, site forms, GIS data, etc.) must be submitted by archaeological consultants or agency representatives through ShareFile. We will no longer accept CDs or USBs. To request a ShareFile account for your organization, please review our ShareFile User Guidelines (APPENDIX E) and fill out a ShareFile User Access Form.

You must submit a transmittal letter, preferably by email, to the Environmental Review Branch (environmental.Review@dncr.nc.gov) to begin the report review process. The transmittal letter must include the name of the ShareFile folder where the report and site forms to be reviewed are located and the date the documents were uploaded. OSA will not begin review of any documents submitted to ShareFile until the Environmental Review Branch receives a transmittal letter.

If the principal investigator (PI) has not previously submitted a curriculum vita (CV) to the OSA demonstrating that they meet the Secretary of the Interior's Professional Qualification Standards as described in 36 CFR Part 61, then a CV should be submitted along with the cover letter transmitting the report. PIs who have already demonstrated their qualifications to the OSA (for previous projects or for background research requests) do not need to include their CV in any subsequent submissions.

The initial report submission should include:

- One (1) digital copy of the archaeological survey report, to be sent through ShareFile.
- One (1) digital copy of each NC Site Form(s) with site map(s) for each site that was recorded as part of the archaeological investigation, to be sent through ShareFile. Please submit each site form as separate documents.

Hard copies of reports will be requested by the OSA once the review archaeologist has determined that no further changes to the report are needed. Concurrence letters will not be sent until after the hard copy of the final archaeological survey report is received.

Hard copies of the final archaeological survey report must be submitted to the Environmental Review Branch using the following addresses:

By US Postal Service

Renee Gledhill-Earley
State Historic Preservation Office
4617 Mail Service Center
Raleigh, NC 27699-4617

By FedEx, UPS, or courier

Renee Gledhill-Earley
State Historic Preservation Office
109 East Jones Street, Room 258
Raleigh, NC 27601

Plagiarism

Any direct quotations from another author or research and analysis done by another researcher should be clearly identified and cited appropriately within a report. Failure to properly attribute writing and research constitutes plagiarism and is in violation of the Register of Professional Archaeologists Code and Standards.

Site and Accession Numbers

All reports of archaeological investigations must use permanent archaeological site numbers issued by the OSA. Cemeteries within a project area that have interments 50 years old or older should also have a permanent site number assigned. If the cemetery is associated with other historic site elements, or is located within a prehistoric site, the cemetery component should receive a separate site number. Reports that discuss archaeological sites and/or cemeteries will not be accepted without permanent site numbers.

Site number assignments will be made in response to email requests sent to site.numbers@dncr.nc.gov. When requesting state site numbers from the OSA please provide the following information. It is helpful to provide this information in table format, such as an Excel spreadsheet.

- Your project or temporary site number for each site.
- What county each site is in.
- Site type--the time period(s) represented by each site—prehistoric, historic, or both.
- Whether you would like an accession number assigned. If you are requesting these for some but not all, please indicate.
- A map or maps—topographic type clearly marked with the map's name, county in which it's located, and labeled site location. If all sites legibly fit on one map one is fine for all.
- One of the following: shapefiles (preferred), kmz/kml files, or the UTMs and datum for each site.

While we will request maps showing site polygons, it is our preference that shapefiles also accompany the site number request. This helps to ensure the most accurate plotting for the sites. We prefer shapefiles submitted as polygons, even for small sites. If you choose to submit shapefiles or kmz/kml files we do not require submission of UTMs.

If artifacts are to be curated at the Office of State Archaeology Research Center (OSARC), accession numbers should be obtained from the Site Registrar when site numbers are requested and assigned. Curation standards for material to be curated by the OSARC are included as PART 4. CURATION in this document.

Please be advised that it may take up to five business days to fulfill site and accession number requests. No permanent site numbers will be assigned on the basis of informal contacts such as telephone calls. No single numbers or blocks of numbers will be assigned in advance of field investigations or in anticipation of survey results.

Site and Cemetery Forms

All newly identified or revisited archaeological sites and cemeteries documented in a report of field investigations should be recorded using the appropriate OSA forms. Reports must be accompanied by the appropriate forms to be considered complete and sufficient for review. Forms should be submitted along with reports following the ShareFile procedures described above for report submissions.

Archaeological sites should be recorded using the North Carolina Archaeological Site Form version VIII. This form is located in APPENDIX B and is also available on the OSA Forms page. Earlier versions of this form (including Site Form III) will no longer be accepted. Do not change the format, font size, or font type of the site form.

Cemeteries containing interments greater than 50 years of age should receive a trinomial site number. If the cemetery is associated with other historic site elements, or is located within a prehistoric site, the cemetery component should receive a separate site number and a cemetery form should be submitted. This form is located in APPENDIX C and is also available on the OSA Forms page. Given the possibility for unmarked graves in historic cemeteries, even burial locations with a single above-ground marker should be recorded as cemeteries. See PART 2. TERRESTRIAL FIELD METHODOLOGY for guidelines concerning cemetery documentation.

Site and cemetery forms should be stand-alone documents, not bound or incorporated into reports. All site and cemetery forms should have at least one map attached that includes the site boundary, project area boundary if it is near or intersecting the site, shovel test locations and corresponding numbers (if not on labeled grid), areas of artifact concentrations, areas of disturbance, structures or other above-ground features, topographical features, and anything

else that would assist with site relocation and explaining site formation processes. Maps and artifact inventories should be added as the final page(s) of each site form.

Curation

All materials – including artifacts, floral and faunal remains, and sediment samples, along with related documentation such as original field notes, maps, photographs, artifact inventory lists, and analysis forms – recovered and created for purposes of compliance with state and federal regulations shall be permanently curated in an approved archaeological repository, preferably in the state of North Carolina. Since archaeological investigations are inherently destructive and non-replicable, these guidelines ensure that collected artifacts and associated documentation from work done in the public interest will be available to future researchers.

Principal investigators and project sponsors (including government agencies) are expected to arrange for the clear legal transfer of ownership, or, if necessary, permanent or long-term loan of all such materials to the curation facility.

Reports of archaeological investigations must include the name of the repository; name(s) of official contacts who can provide information on, and access to, the project collections; accession numbers; and other information such as mailing addresses and telephone numbers of the approved repository. Following 36 CFR 79.6, when possible, collections should be deposited in a repository that is in the state of origin and houses collections from a similar geographic region or cultural area. If the chosen repository is outside of North Carolina, an explanation for that choice should be provided.

If a landowner requests that artifacts be returned to them rather than curated in an appropriate repository, those artifacts should be thoroughly documented through photographs and notes so that they can still be studied by future researchers. At a minimum, photographs should be taken of representative diagnostics. These photographs and notes should be permanently curated in an approved archaeological repository, preferably in the state of North Carolina.

See PART 4. CURATION for requirements if curating artifacts at the OSA Research Center and Lab.

Courtesy Reports

Reports of archaeological investigations done without a recommendation by the OSA, the lead federal agency, or a Tribal Historic Preservation Office will be considered courtesy reports. The OSA will accept reports done for non-compliance purposes to be stored for future researchers but will not review those reports for compliance with guidelines.

Monitoring Reports

On-site monitoring of construction activities may be undertaken to ensure that a specific archaeological site, cemetery, or geographic area is not adversely affected by earthmoving activities. See PART 2. TERRESTRIAL FIELD METHODOLOGY for guidelines regarding monitoring activities.

The complexity and length of a monitoring report will be proportional to the number and types of resources discovered. If no resources were uncovered, a simple letter report stating the dates and nature of monitoring activities will suffice.

If resources are identified, new or updated site forms should be submitted along with the report. To ensure acceptance by the OSA, all monitoring reports should include:

- Principal Investigator and crew.
- Date(s) of investigation.
- USGS topographic map with project area indicated.
- Client and project description.
- Relevant legislation and SHPO environmental review number.
- Discussion of monitoring process and results, including extent of area monitored, including map; description of any artifacts or features identified; photographs of identified features, if applicable; curation plans for materials collected; and recommendations for further work.

Reconnaissance Survey/Due Diligence Reports

In certain circumstances, particularly with large, phased projects, reconnaissance surveys may be an appropriate first step in the compliance process. The reconnaissance survey should be used to identify readily apparent archaeological sites and areas with a high probability of containing sites. See PART 2. TERRESTRIAL FIELD METHODOLOGY for guidelines regarding reconnaissance survey activities.

Due to the contingencies associated with compliance archaeology, we request that permanent site numbers be assigned, and site forms be submitted for all sites and cemeteries identified as a result of reconnaissance surveys. See Site and Cemetery Forms above for information concerning site and cemetery forms.

All reconnaissance reports must include the following information to be considered complete and sufficient for the purposes of receiving OSA-advised SHPO comments on survey methodology, site or cemetery eligibility, or the need for further work:

Title Page and Table of Contents

The Table of Contents should be appropriately paginated, and should include lists of tables, maps, and figures.

Management Summary

The management summary provides the contract sponsor, the report reviewer, and others with a succinct but complete synopsis of the project. A management summary is similar to but generally more detailed than an abstract. The management summary should include:

- Project title, client, and project description.
- Relevant legislation and SHPO environmental review number.
- A brief statement of project goals and objectives.
- A summary of the survey methodology (e.g., the survey involved a pedestrian walkover in transects with judgmental shovel tests, etc.).
- Total project acreage.
- A summary of the results, including:
    - A list of sites found or investigated (using permanent site numbers).
    - A summary of the information derived from the investigations.
- A summary of project recommendations for further investigations (no further investigations, targeted Phase I survey, etc., with specific reference to sites fitting each category).

Introduction

This section provides detailed information pertinent to the location of the archaeological investigations, the reasons for the work, personnel, and dates of the work. The contract specifications or scope of work should be briefly described in this section and attached as an appendix to the report. The introduction should include:

- Name and description of the project.
- Contracting agency or individual.
- Relevant legislation and SHPO environmental review number.
- Verbal description of the project location, including the county(ies).
- Map showing general location of project within the county(ies).
- Map(s) showing the boundaries of the project area depicted on USGS topographic imagery at 1:24,000 scale.
- Principal investigator and crew members.
- Dates of investigation.
- Brief description of contract specifications or scope of work, including project objectives.

Environmental Setting

The environmental setting of the project area should be described, considering relevant factors such as geology, vegetation, climate, soils, and topography. Emphasis should be placed on the relationship of the environmental setting to the cultural resources of the study area. The environmental setting should include:

- Total acreage of the project area.
- Map of project area boundaries showing recent aerial imagery at a scale of 1:24,000 or less.
- Types of current and historic land use (wooded, pasture, cultivated, developed, etc.) within the project area by percentage, and wetland delineations.
- Climate, topography, geology, and hydrology of the project area as relevant to the archaeological investigations.
- Distribution of soils, including slope percentages, as mapped by the NRCS, including estimates of the acreage within each soil category.

Archaeological and Historical Background

This section should consider the subject project area within the context of previous archaeological investigations and the broader cultural context of the region. This information provides the basis for identifying site types likely to occur in the project area and evaluating the potential for NRHP-eligible archaeological sites to be present. It should conclude with predictions of site locations and site types expected to be present in the project area based on environmental and cultural factors.

It is expected that archaeologists working in the region will be familiar with broader trends in prehistory and established chronologies. This background section should provide locally specific contexts and address research potential based on current relevant discussions in archaeological literature.

When conducting research, a two-phased approach should be implemented. The first phase of the background research should gather information about the prehistory and history of local American Indian communities from antiquity to present, periods of European colonization and migration, major industries, prominent families or persons who lived in the vicinity of the project area, and the presence of enslaved individuals or other underrepresented communities.

The second phase begins after field work is completed. The objective of this second phase is to collect information for proposing any additional field work on archaeological sites found during the reconnaissance survey to assess National Register eligibility.

The archaeological and cultural background should include:

- Information on how the background research was conducted, including:

    - Locations where research was performed (e.g., local or regional libraries, the archives at the OSA, online sources, etc.).
    - Date(s) that research was conducted at the OSA along with the name of the individual who came to the office for that research.
- Summary of previous archaeological investigations within **two miles** of the project area, including a table that lists:
    - Site number.
    - Time period (specific time periods where possible).
    - Eligibility.
    - Site discovery method (surface, subsurface, or both).
- Summary of current and relevant archaeological research, including new insights on prehistoric trends of the region, from the past ten to twenty years including published books, masters theses or dissertations, and articles from journals such as *North Carolina Archaeology*, *Southeastern Archaeology*, *American Antiquity*, and *Historical Archaeology*;
- Summary of relevant local history, including major industries, transportation routes, prominent families, and potentially underrepresented populations. This should include:
    - Archival and historic (parcel/deed) research.
    - List of historic maps consulted and resultant findings.
- Expected archaeological potential for the project area, including expected site types and settings for both prehistoric and historic sites, and potential research questions for the region.

Methodology

This section contains detailed discussions of the methods and techniques used during the project to identify areas with high potential for sites and/or identify readily apparent archaeological resources. The methodology section should include:

- Field Methods, including:
    - Date that staff reviewer was contacted regarding field methods and date that reviewer concurred with methods.
    - A discussion of the survey techniques used, specifying any variations in techniques due to varying field conditions (i.e., ground cover, alluviation, erosion, development).
    - Details related to survey intensity, with specific attention to pedestrian transect spacing.
    - Details related to when and where judgmental shovel testing occurred, including:
        - Field conditions considered indicative of intact soil horizons or buried horizons.
        - Specifications of subsurface tests, including shape, size, depth, and excavation technique(s).

        - Data recorded for each subsurface test.
        - Procedures followed for preserving contextual information of collected materials.
        - Mapping and photography procedures.
- Lab Methods, including:
    - General methods used to process and catalog artifacts.
    - Explanation of how artifacts were analyzed, including information such as the classification or typological schemes that were used to describe different artifact types.
    - Information on curation methods used and the location where the curated collection will be housed. The standards for collections to be curated by the OSA Research Center (OSARC) are detailed in PART 4. CURATION of this document. Following 36 CFR 79.6, curation at OSARC is strongly recommended. If a collection will not be curated by the OSARC, a justification should be provided for the chosen curation facility.

Results

This section describes field conditions and site potential identified during the investigation. Any sites discovered should be described, whether or not they will be impacted by the proposed undertaking. Standing historic structures or ruins within the project area should be noted as to location, materials, and apparent type. If present, archaeological components associated with structures should be described.

If any materials are recovered, they should be described by means of customary references to amount and type.

The survey results should include:

- Field survey time, specifically how many person-days in the field were necessary to cover the project area using the techniques described.
- Percentage of the overall project area investigated with different survey methodologies, including detailed map(s) of pedestrian transects and judgmental shovel test locations.
- Representative photographs of landscape conditions.
- For any shovel tests excavated, description (soil color, type, and horizon) and images of representative soil profiles, and the extent to which excavated soils resemble those mapped by the National Resource Conservation Service.
- Classification of project area with regard to archaeological site potential, illustrated with map(s) and representative photographs of project area.
- Table, if more than one site is identified, that lists site numbers, site types, temporal range and/or cultural affiliation of the sites.

- Individual site descriptions (if sites are located), including:
    - Cultural affiliation and functional type.
    - Site map, showing shovel test locations, features if present, and relevant landmarks.
    - At least one representative photograph of the site vicinity.
    - Amount and type of materials recovered from site and artifact collection biases (e.g., surface visibility, previous collections).
    - Stratigraphy of site with reference to shovel test profiles, soil horizons, and at least one representative photograph (do not need drawings of shovel test profiles).
    - Description and photograph(s) of features and/or selected diagnostic artifacts if present.

Recommendations

This section should serve as a proposed scope of work for a targeted Phase I survey, if deemed appropriate. Criteria to consider for a Phase I survey include whether there are sites with the potential for intact deposits, whether field conditions indicate the possibility of deep intact deposits or other indications of high probability for NRHP-eligible sites, and whether archival evidence indicate the possibility of significant historic resources (particularly those related to underrepresented communities). If no further work is proposed, justification should be provided for that recommendation based on the cultural resources assessment and field investigations undertaken for the reconnaissance survey. This section should include:

- Summary of what types of archaeological sites might be expected in the project area based on the background research and field investigations.
- Expected effects of project on any archaeological sites in the project area, and recommended methods for additional investigations or avoidance.
- Map(s) indicating areas proposed for further investigation.

References Cited

The references cited should include a full bibliographic citation following the Society for American Archaeology (SAA) standard format for all sources referenced in the report. All references should be complete and consistent in form.

Appendices

The appendices should include the following items:

- An artifact catalog that lists all the artifacts recovered during the survey (if any).
- Shovel test records for, at minimum, all positive shovel tests.

- Any maps, figures, or tables not incorporated into the body of the report. Please note that site forms should not be included as an appendix of the report.

Phase I Identification Survey (Intensive Survey) Reports

Phase I intensive surveys are designed to identify all archaeological resources within the project area and, if possible, to determine their eligibility for listing in the NRHP. Phase I survey reports will also assess project effects on archaeological sites in the APE. See PART 2. TERRESTRIAL FIELD METHODOLOGY for guidelines regarding Phase I survey activities.

Phase I reports should follow the same outline as the reconnaissance survey reports, but with additional information included in certain areas as needed to make NRHP eligibility recommendations. All Phase I reports must include the following information to be considered complete and sufficient for the purposes of receiving OSA-advised SHPO determinations of site eligibility, comments on the need for further work, and assessments of the effects of proposed undertakings on archaeological sites:

Title Page and Table of Contents

The Table of Contents should be appropriately paginated, and should include lists of tables, maps, and figures.

Management Summary

The management summary provides the contract sponsor, the report reviewer, and others with a succinct but complete synopsis of the project. A management summary is similar to but generally more detailed than an abstract. The management summary should include:

- Project title, client, and project description.
- Relevant legislation and SHPO environmental review number.
- A brief statement of project goals and objectives.
- A summary of the survey methodology (e.g., the survey involved a pedestrian walkover in transects with shovel tests every 30 meters, etc.).
- Total project acreage, along with a breakdown of how many acres were surveyed intensively versus acres surveyed at a reconnaissance level.
- Description of factors that limited the intensity or coverage of the survey in any area.
- Field survey time, specifically how many person-days in the field were necessary to cover the project area using the techniques described.
- A summary of the results, including:
    - A list of sites found or investigated (using permanent site numbers) with eligibility recommendations.

    - A summary of the information derived from the investigations.
- A summary of project recommendations for further investigations, no further investigations, site avoidance, etc., with specific reference to sites fitting each category.

Introduction

This section provides detailed information pertinent to the location of the archaeological investigations, the reasons for the work, personnel, and dates of the work. The contract specifications or scope of work should be briefly described in this section and attached as an appendix to the report. The introduction should include:

- Name and description of the project.
- Contracting agency or individual.
- Relevant legislation and SHPO environmental review number.
- Verbal description of the project location, including the county(ies).
- Map showing general location of project within the county(ies).
- Map(s) showing the boundaries of the project area depicted on USGS topographic imagery at 1:24,000 scale.
- Principal investigator and crew members.
- Dates of investigation.
- Brief description of contract specifications or scope of work, including project objectives.

Environmental Setting

The environmental setting of the project area should be described, considering relevant factors such as geology, vegetation, climate, soils, and topography. Emphasis should be placed on the relationship of the environmental setting to the cultural resources of the study area. The environmental setting should include:

- Total acreage of the project area.
- Map of project area boundaries showing recent aerial imagery at a scale of 1:24,000 or less.
- Types of current and historic land use (wooded, pasture, cultivated, developed, etc.) within the project area by percentage, and wetland delineations.
- Climate, topography, geology, and hydrology of the project area as relevant to the archaeological investigations.
- Distribution of soils, including slope percentages, as mapped by the NRCS, including estimates of the acreage within each soil category.
- Other environmental factors as deemed relevant.

Archaeological and Historical Background

This section should consider the subject project area within the context of previous archaeological investigations and the broader cultural context of the region. This information provides the basis for identifying site types likely to occur in the project area and evaluating the potential for NRHP-eligible archaeological sites to be present. It should conclude with predictions of site locations and site types expected to be present in the project area based on environmental and cultural factors.

It is expected that archaeologists working in the region will be familiar with broader trends in prehistory and established chronologies. This background section should provide locally specific contexts and address research potential based on current relevant discussions in archaeological literature.

When conducting research, a two-phased approach should be implemented. The first phase of the background research should gather information about the prehistoric and historic occupations of local American Indian communities from antiquity to present, periods of European colonization and migration, major industries, prominent families or persons who lived in the vicinity of the project area, and the presence of enslaved individuals or other underrepresented communities.

The second phase begins after field work is completed. The objective of this second phase is to collect additional information if needed to assess National Register eligibility for any archaeological sites identified or revisited during the Phase I survey.

The archaeological and cultural background should include:

- Information on how the background research was conducted, including:
    - Locations where research was performed (e.g., local or regional libraries, the archives at the OSA, online sources, etc.).
    - Date(s) that research was conducted at the OSA along with the name of the individual who came to the office for that research.
- Summary of previous archaeological investigations within **two miles** of the project area, including a table that lists:
    - Site number.
    - Time period (specific time periods where possible).
    - Eligibility.
    - Site discovery method (surface, subsurface, or both).
- Summary of current and relevant archaeological research, including new insights on prehistoric trends of the region, from the past ten to twenty years including published books, masters theses or dissertations, and articles from journals such as *North Carolina Archaeology*, *Southeastern Archaeology*, *American Antiquity*, and *Historical Archaeology*;
- Summary of relevant local history, including major industries, transportation routes, prominent families, and potentially underrepresented populations. This should include:

    - Archival and historic (parcel/deed research).
    - List of historic maps consulted and resultant findings.
- Expected archaeological potential for the project area, including expected site types and settings for both prehistoric and historic sites, and potential research questions for the region.

Methodology

This section contains detailed discussions of the methods and techniques used during the project to locate and evaluate sites. The methodology section should include:

- Field Methods, including:
    - Date that staff reviewer was contacted regarding field methods and date that reviewer concurred with methods.
    - A discussion of the survey techniques used, specifying any variations in techniques due to varying field conditions (i.e., ground cover, alluviation, erosion, development).
    - Details related to survey intensity, with specific attention to transect spacing and subsurface testing interval(s).
    - Specifications of subsurface tests, including shape, size, depth, and excavation technique(s).
    - Data recorded for each subsurface test.
    - Procedures followed for preserving contextual information of collected materials.
    - Mapping and photography procedures.
- Lab Methods, including:
    - General methods used to process and catalog artifacts.
    - Explanation of how artifacts were analyzed, including information such as the classification or typological schemes that were used to describe different artifact types.
    - Information on curation methods used and the location where the curated collection will be housed. The standards for collections to be curated by the OSA Research Center (OSARC) are detailed in PART 4. CURATION of this document. Following 36 CFR 79.6, curation at OSARC is strongly recommended. If a collection will not be curated by the OSARC, a justification should be provided for the chosen curation facility.

Results

This section describes sites located and materials recovered during the investigation. All sites discovered should be described, whether or not they will be impacted by the proposed undertaking. Standing historic structures or ruins within the project area should be noted as to

location, materials, and apparent type. If present, archaeological components associated with structures should be described.

Recovered materials should be described by means of customary references to amount and type. The use of tables is encouraged for the presentation of data from large numbers of sites.

The survey results should include:

- Field survey time, specifically how many person-days in the field were necessary to cover the project area using the techniques described.
- Percentage of the overall project area investigated with different survey methodologies, including map(s) noting shovel test locations.
    - If other survey strategies (such as probing or ground penetrating radar) were used, additional maps should be included noting areas covered using different strategies.
- Total number of shovel tests excavated per designated study area, along with:
    - Description of soils (color, type, and horizon).
    - Images of representative soil profiles from shovel tests of surveyed areas (may be included as an appendix).
    - The extent to which excavated soils resemble those mapped by the National Resource Conservation Service.
- Portions of the overall project area not intensively investigated, if any, and reason(s) why these areas were not examined (wet, disturbed, etc.), including map(s) showing areas not intensively surveyed labeled with associated rationale for exclusion.
- Table, if more than one site is identified, that lists site numbers, site types, temporal range and/or cultural affiliation of the sites, and site NRHP eligibility recommendations.
- Individual site descriptions, including:
    - Cultural affiliation and functional type.
    - Estimate of site size and percentage of site area covered by artifact collections.
    - Site map, showing site boundaries, shovel test locations, features if present, and relevant landmarks.
    - At least one representative photograph of the site vicinity.
    - Amount and type of materials recovered from site and artifact collection biases (e.g., surface visibility, previous collections).
    - Stratigraphy of site with reference to shovel test profiles, soil horizons, and at least one representative photograph (do not need drawings of shovel test profiles).
    - Description and photograph(s) of features and/or selected diagnostic artifacts if present.
    - Effects of project on individual sites.

Significance Evaluations and Recommendations

Significance evaluations must be presented with explicit reference to the eligibility criteria for listing in the NRHP following National Register Bulletin 36, and should be consistent with contemporary research interests of the archaeological community. Evaluation of each site must be framed by the information potential for local, regional, statewide, or national research problems, and/or the historical importance of the resources with regard to important people and events.

While archaeological sites are most frequently considered eligible under criterion (d) for their ability to yield important information about the past, all four criteria should be considered when developing a recommendation. In some cases, multiple criteria may be applicable. All evaluations should be accompanied by a justification that applies the NRHP eligibility criteria and assesses site integrity.

Recommendations regarding the treatment of sites will usually be phrased in terms of "further work," "no further work," or "avoidance" (i.e., preservation in place). Appropriate recommendations should be presented for each site recorded during the survey and should be consistent with the site significance evaluations.

Sites recorded during the survey that are not located within the proposed area of ground disturbance, or that will not be affected by the project, should also be considered in the recommendations. Sites with boundaries beyond the proposed area of disturbance should be considered unassessed overall, but the portion of the site within the project area can be assessed for eligibility.

The significance evaluations and recommendations should include:

- An evaluation of each site located during the survey according to the criteria for listing in the NRHP, including a contextualized justification for each evaluation.
- Site-specific recommendations for further work, including:
    - Description of type(s) and amount(s) of further work if recommended; or
    - Description of recommended avoidance, management, and preservation procedures if recommended.

References Cited

The references cited should include a full bibliographic citation following the Society for American Archaeology (SAA) standard format for all sources referenced in the report. All references should be complete and consistent in form.

Appendices

The appendices should include the following items:

- The scope of work for the project approved by the OSA staff reviewer.
- An artifact catalog that lists all of the artifacts recovered during the survey.
- Shovel test records for, at minimum, all positive shovel tests.
- Any maps, figures, or tables not incorporated into the body of the report. Please note that site forms should not be included as an appendix of the report.

Phase II Evaluation/Testing Reports

The primary goal of a Phase II testing project is to determine the potential of a previously recorded archaeological site to contribute important information to local, regional, or national prehistory or history, and render its eligibility for inclusion in the NRHP. The end results of the investigation should be an evaluation of the NRHP-eligibility of each site.

This level of investigation may include controlled surface collections, intensive shovel testing, excavation of test units, geomorphological analysis, mechanical stripping of disturbed soils, or other appropriate methods for the determination of the extent and nature of the archaeological deposits at the site. See PART 2. TERRESTRIAL FIELD METHODOLOGY above for guidelines regarding Phase II activities.

Given the variable nature of individual archaeological sites and the variety of appropriate investigation methods, guidelines for testing methodology are left to the individual researchers in consultation with the OSA staff review archaeologist. The research designs developed (and the field methodologies employed) should be specifically directed toward the type of resource being investigated and should be more focused than that developed for a Phase I survey.

An updated North Carolina Archaeological Site Form VIII that includes the results of the testing phase should be submitted to the OSA for each site investigated.

Phase II reports should follow the same outline as the reconnaissance and Phase I survey reports, but with information tailored to the specific sites being evaluated for NRHP eligibility recommendations. All Phase II reports must include the following information to be considered complete and sufficient for the purposes receiving OSA-advised SHPO determinations of site eligibility, comments on the need for further work, and assessments of the effects of proposed undertakings on archaeological sites:

Title Page and Table of Contents

The Table of Contents should be appropriately paginated, and should include lists of tables, maps, and figures.

Management Summary

The management summary provides the contract sponsor, the report reviewer, and others with a succinct but complete synopsis of the Phase II investigation results. A management summary is similar to but generally more detailed than an abstract. The management summary should include:

- Project title, client, and project description.
- Relevant legislation and SHPO environmental review number.
- A brief statement of project goals and objectives.
- A summary of the Phase II methodology.
- Total acreage of investigated areas.
- A summary of the results, including:
    - A list of sites investigated with eligibility recommendations.
    - A summary of the information derived from the investigations.
- A summary of project recommendations for no further investigations, site avoidance, data recovery, etc., with specific reference to sites fitting each category.

Introduction

This section provides detailed information pertinent to the location of the archaeological investigations, the reasons for the work, personnel, and dates of the work. The contract specifications or scope of work should be briefly described in this section and attached as an appendix to the report. The introduction should include:

- Name and description of the project.
- Contracting agency or individual.
- Relevant legislation and SHPO environmental review number.
- Verbal description of the project location, including the county(ies).
- Map showing general location of project within the county(ies).
- Map(s) showing the boundaries of the project area and the location of the sites excavated depicted on USGS topographic imagery at 1:24,000 scale.
- Principal investigator and crew members.
- Dates of investigation.
- Brief description of contract specifications or scope of work, including project objectives.

Archaeological and Historical Background

For Phase II reports, the archaeological background section should be focused on the previous archaeological investigations that have been conducted at each specific site being

tested/evaluated, and the cultural background section should be focused specifically on the time period(s) associated with the site(s).

The archaeological and cultural background should include:

- Information on how the background research was conducted, including locations where research was performed (e.g., local or regional libraries, the archives at the OSA, online sources, etc.).
- Summary of previous archaeological investigations at the sites being evaluated.
- Summary of current archaeological research relevant to issues under investigation at the Phase II sites including published books, masters theses or dissertations, and articles from journals such as *North Carolina Archaeology*, *Southeastern Archaeology*, *American Antiquity*, and *Historical Archaeology*.
- Summary of relevant local history, including major industries, transportation routes, prominent families, and potentially underrepresented populations as needed to assess the significance of sites under evaluation. This may include:
    - Archival and historic (parcel/deed research).
    - List of historic maps consulted and resultant findings.
- Environmental factors may be described in this section if that information is needed to understand the potential eligibility of the evaluated sites. For example, a description of the geology of the area is useful if discussing quarry sites, and discussion of plants native to the area might help demonstrate the meaningful nature of plants found at a cemetery.

Methodology

This section contains detailed discussions of the methods and techniques used during the project to evaluate sites. The methodology section should include:

- Field Methods, including:
    - Date that staff reviewer was contacted regarding field methods and date that reviewer concurred with methods.
    - A discussion of the field techniques used.
    - Specifications of subsurface tests, including shape, size, depth, and excavation technique(s).
    - Data recorded for each subsurface test.
    - Procedures followed for preserving contextual information of collected materials.
    - Mapping and photography procedures.
- Lab Methods, including:
    - General methods used to process and catalog artifacts.

    - Explanation of how artifacts were analyzed, including information such as the classification or typological schemes that were used to describe different artifact types.
    - Information on curation methods used and the location where the curated collection will be housed. The standards for collections to be curated by the OSA Research Center (OSARC) are detailed in PART 4. CURATION of this document. Following 36 CFR 79.6, curation at OSARC is strongly recommended. If a collection will not be curated by the OSARC, a justification should be provided for the chosen curation facility.
- Specialized Analyses, including:
    - Methods undertaken for the collection and processing of any specialized analysis samples.
    - The name and qualifications of the individual(s) undertaking those analyses.

Results

This section should describe the results of the field investigations and any specialized analyses for each site investigated during Phase II investigations. The results should include:

- Field survey time, specifically how many person-days in the field were necessary to cover the project area using the techniques described.
- Table, if more than one site is identified, that lists site numbers, site types, temporal range and/or cultural affiliation of the sites, and site NRHP eligibility recommendations.
- Map of all delineated sites within the project's Area of Potential Effects (APE).
- Individual site descriptions, including:
    - Cultural affiliation and functional type.
    - Site map, showing site boundaries, shovel test and/or test unit locations, features if present, and relevant landmarks.
    - At least one representative photograph of the site vicinity.
    - Amount and type of materials recovered from site and artifact collection biases.
    - Stratigraphy of site with reference to shovel test profiles, soil horizons, geomorphological analysis, and representative photographs.
    - Description and photograph(s) of features and/or selected diagnostic artifacts if present.
- Effects of project on individual sites.

Significance Evaluations and Recommendations

Significance evaluations must be presented with explicit reference to the eligibility criteria for listing in the NRHP and should be consistent with contemporary research interests of the

archaeological community. Evaluation of each site must be framed by the information potential for local, regional, statewide, or national research problems, and/or the historical importance of the resources with regard to important people and events.

If sites are evaluated as eligible for the NRHP, recommendations for potential project modifications to avoid or lessen adverse effects should be included, if possible. The report should also contain a draft research design that identifies the datasets that would be created as a result of data recovery activities at the site, and research topics and questions that may be addressed using these datasets.

The significance evaluations and recommendations should include:

- An evaluation of each site investigated according to the criteria for listing in the NRHP, including a contextualized justification for each evaluation.
- Site-specific recommendations for further work, including:
    - Description of type(s) and amount(s) of further work if recommended; or
    - Description of recommended avoidance, management, and preservation procedures if recommended.

References Cited

The references cited should include a full bibliographic citation following the Society for American Archaeology (SAA) standard format for all sources referenced in the report. All references should be complete and consistent in form.

Appendices

The appendices should include the following items:

- The scope of work for the project approved by the OSA staff reviewer.
- An artifact catalog that lists all of the artifacts recovered during the investigations.
- Any maps, figures, or tables not incorporated into the body of the report. Please note that site forms should not be included as an appendix of the report.

Phase III Data Recovery/Mitigation Plans

A data recovery plan (DRP) should be submitted for sites that will be adversely impacted by the proposed undertaking for approval by the OSA staff reviewer prior to Phase III excavations. In addition to the technical archaeological reports of the data recovery investigations, provisions should be made for some type of public reporting of the results. Such reporting could include a report, pamphlet or brochure, an exhibit, a public program, or a web site. All DRPs must include the following information to be considered complete and sufficient for the purposes of receiving OSA-advised SHPO concurrence on the proposed methods:

Project Background

- Project title, client, and project description.
- Relevant legislation and SHPO environmental review number.
- Description of the proposed undertaking.
- Recommendations of the agencies involved.
- Data recovery justification and conditions (why preservation is not feasible, whether consultation with TPHOs or other parties is appropriate).
- Supervisory personnel.

Description of Archaeological Site

- Summary of previous research at the site proposed for data recovery.
- Site size, chronology, type, and structure.

Research Orientation

- Research Context(s) – State of Current Research Summary (for example: Middle Archaic of the Inner Coastal Plain, Archaeology of Postbellum Tenancy, Archaeology of Early Twentieth Century Mill Villages); explains significance of and prioritizes research topics.
- Potentially addressable research topics - explain the significance of each topic/research question, and what type(s) of data can be used to investigate it (for example: regional social history, site occupation, ethnicity, household socio-economy, foodways, health, craft production, environmental change).

Data Recovery Methods

- Archival research, including summary of previous archival work and anticipated additional research (including what repositories will be consulted).
- Outreach methods for community engagement and obtaining information from relevant groups.
- Oral history protocols, if applicable.
- Fieldwork, including:
    - Percentage of site that will be excavated and/or stripped, and explanation of sampling procedures.
    - Spatial Control, description of methods & equipment for establishing and recording datums, laying out grids, making maps.
    - Investigation methods used with detailed descriptions of procedures (close-grid shovel testing, remote sensing, excavation unit sampling, and/or mechanical stripping).
    - Feature excavation procedures, including sampling strategies and processing of fill.

- Provisions for specialized analyses (timing with regard to other aspects of project, personnel, sampling).
- Provision for consultation if DRP needs to be modified while fieldwork is underway.
- Provision for discovery of human remains.

Data Analysis and Curation Methods

- Collection documentation processes, including databases and photography.
- Planned analyses for different classes of artifacts with information on resources to be consulted.
- If high quantities of iron objects are expected, x-ray plan for analysis, documentation, and conservation plan.
- Provisions for sampling/selective discard prior to curation.
- Curation arrangements.

Reporting schedule

The reporting schedule should include expected start and end dates for fieldwork, expected timeframe for completion for any specialized analyses (if proposed), expected dates of submission for draft and final reports, and expected timeframe for completion of any outreach products.

References Cited

The references cited should include a full bibliographic citation following the Society for American Archaeology (SAA) standard format for all sources referenced in the report. All references should be complete and consistent in form.

Phase III Data Recovery/Mitigation Reports

If an NRHP-eligible archaeological site cannot be avoided and will be adversely affected by the proposed project, data recovery excavations may be undertaken as mitigation. Such excavations are intended to retrieve the important information that makes the site significant prior to its destruction.

Given the individual nature of each archaeological site, data recovery methodology and reporting requirements will be developed through consultation among the principal investigator, the staff of the OSA, consulting parties including representatives of descendant communities, and representatives of the federal or state agency project sponsors. See PART 2. TERRESTRIAL FIELD METHODOLOGY above for guidelines regarding data recovery activities.

An updated North Carolina Archaeological Site Form VIII that includes the results of the data recovery phase should be submitted to the OSA for each site investigated.

Phase III reports should follow the same outline as the Phase I survey reports. All Phase III reports must include the following information to be considered complete and sufficient for the purposes receiving OSA-advised SHPO concurrence that the adverse effects to the site have been mitigated:

Title Page and Table of Contents

The Table of Contents should be appropriately paginated, and should include lists of tables, maps, and figures.

Management Summary

The management summary provides the contract sponsor, the report reviewer, and others with a succinct but complete synopsis of the Phase III investigation results. A management summary is similar to but generally more detailed than an abstract. The management summary should include:

- Project title, client, and project description.
- Relevant legislation and SHPO environmental review number.
- A brief statement of project goals and objectives.
- A summary of the Phase III methodology.
- Total acreage of investigated areas.
- A summary of the information derived from the investigations.

Introduction

This section provides detailed information pertinent to the location of the archaeological investigations, the reasons for the work, personnel, and dates of the work. The contract specifications or scope of work should be briefly described in this section. The introduction should include:

- Name and description of the project.
- Contracting agency or individual.
- Relevant legislation and SHPO environmental review number.
- Verbal description of the site location, including the county.
- Map showing general location of site within the county.
- Map(s) showing the boundaries of the project area and the location of the site excavated depicted on USGS topographic imagery at 1:24,000 scale.
- Principal investigator and crew members.
- Dates of investigation.
- Brief description of contract specifications or scope of work, including project objectives.

Archaeological and Historical Background

For Phase III reports, the archaeological background section should be focused on the previous archaeological investigations that have been conducted at the specific site being mitigated, and the cultural background section should be focused specifically on the time period(s) associated with the site.

The archaeological and cultural background should include:

- Information on how the background research was conducted, including locations where research was performed (e.g., local or regional libraries, the archives at the OSA, online sources, etc.).
- Summary of previous archaeological investigations at the site being mitigated.
- Summary of current archaeological research relevant to issues under investigation at the Phase III site including published books, masters theses or dissertations, and articles from journals such as *North Carolina Archaeology*, *Southeastern Archaeology*, *American Antiquity*, and *Historical Archaeology*.
- Summary of relevant local history, including major industries, transportation routes, prominent families, and potentially underrepresented populations if needed to contextualize the archaeological data. This may include:
    - Archival and historic (parcel/deed research).
    - List of historic maps consulted and resultant findings.

Methodology

This section contains detailed discussions of the methods and techniques used during the project to evaluate sites. The methodology section should include:

- Field Methods, including:
    - Date that staff reviewer was contacted regarding field methods and date that reviewer concurred with methods.
    - A discussion of the field techniques used.
    - Specifications of subsurface tests, including shape, size, depth, and excavation technique(s).
    - Data recorded for each subsurface test.
    - Procedures followed for preserving contextual information of collected materials.
    - Mapping and photography procedures.
- Lab Methods, including:
    - General methods used to process and catalog artifacts.

    - Explanation of how artifacts were analyzed, including information such as the classification or typological schemes that were used to describe different artifact types.
    - Information on curation methods used and the location where the curated collection will be housed. The standards for collections to be curated by the OSA Research Center (OSARC) are detailed in PART 4. CURATION of this document. Following 36 CFR 79.6, curation at OSARC is strongly recommended. If a collection will not be curated by the OSARC, a justification should be provided for the chosen curation facility.
- Specialized Analyses, including:
    - Methods undertaken for the collection and processing of any specialized analysis samples.
    - The name and qualifications of the individual(s) undertaking those analyses.

Results

This section should describe the results of the field investigations and any specialized analyses for each site investigated during the Phase III investigations. The results should include:

- Field survey time, specifically how many person-days in the field were necessary to cover the project area using the techniques described.
- Map of delineated site within the project's Area of Potential Effects (APE).
- Map of mitigated site showing site boundaries, locations of features and/or relevant landmarks, and locations of any subsurface investigations.
- Amount and type of materials recovered from site and artifact collection biases.
- Stratigraphy of site with reference to shovel test profiles, soil horizons, geomorphological analysis, and representative photographs.
- Description and photograph(s) of features and/or selected diagnostic artifacts if present.
- Results of any specialized analyses undertaken.

References Cited

The references cited should include a full bibliographic citation following the Society for American Archaeology (SAA) standard format for all sources referenced in the report. All references should be complete and consistent in form.

Appendices

The appendices should include the following items:

- The scope of work for the project approved by the OSA staff reviewer.

- An artifact catalog that lists all of the artifacts recovered during the investigations.
- Any maps, figures, or tables not incorporated into the body of the report. Please note that site forms should not be included as an appendix of the report.

Addendum Reports

Addendum reports are appropriate when there have been slight changes or additions to project areas and additional Phase I identification survey investigations are warranted. The structure may also be appropriate for targeted Phase I surveys that were preceded by a reconnaissance survey and report. Addendum reports are similar to standard Phase I Identification Survey reports in the way they are organized and the information that is conveyed but certain sections can be omitted or abbreviated from the addendum report so long as the original report is referenced.

At a minimum, addendum reports should include the following sections in the same format as standard Phase I Identification Survey reports: management summary or abstract, introduction, methodology, results, significance evaluations and recommendations, and references cited (see Phase I Identification Survey for detailed descriptions of what is required in those sections).

Noted differences with addendum reports and standard Phase I reports are with the environmental setting section and the archaeological and cultural background section. An environmental or natural setting section is not required in addendum reports if a thorough one was included in the original report. An archaeological background of the entire project area is also not necessary in the addendum report but any previous archaeological research for portions of the project area directly covered by the addendum survey should be summarized in the addendum report. Historic maps should be consulted for portions of the project area directly covered by the addendum survey and any relevant results should be provided.

Archaeological Investigations on State Lands

Archaeological investigations on lands owned or leased by the state of North Carolina, excluding highway rights-of-way, require an Archaeological Resources Protection Act (ARPA) permit be obtained from the State Archaeologist, according to the provisions of North Carolina General Statute Chapter 70, Article 2. See Qualifications and Permitting above for information on how to obtain a permit.

The report guidelines for archaeological investigations requiring an ARPA permit are the same as those described above for Phase I, Phase II, and Phase III reports. The type of report that is submitted should be consistent with the level of intensity of the archaeological investigations.

PART 4. CURATION

Introduction

As an office within the Department of Natural and Cultural Resources (DNCR), the Office of State Archaeology (OSA) is the state agency responsible for preservation of North Carolina's archaeological collections and associated documentation. To ensure availability for researchers and the public, archaeological collections and records should be acquired, processed, stored, and handled in ways that will contribute to their long-term preservation.

The OSA has a stewardship responsibility for archaeological materials owned or maintained by the department. Artifact collections have been donated by individual collectors, institutions, agencies, and corporations, or acquired through DNCR activities and Section 106 compliance work. Collections may be on indefinite, long-term loan to the OSA through interagency agreements with other state or federal agencies having statutory or regulatory control over artifacts and records. Collections are permanently curated at the Office of State Archaeology Research Center (OSARC), a specially designed facility intended for the archival curation and management of North Carolina's archaeological collections.

A main goal for OSARC collections management is to work with agencies to achieve OSA system compatibility for newly acquired collections, and to help these agencies organize older collections to meet professional standards like those detailed in these guidelines. Collections donated from private or corporate sources can also be accommodated by the OSA, thus adding to the state's inventory of prehistoric and historic archaeological research materials.

This part of the guidelines instructs state and federal agencies, private consulting firms, museums, and individuals on how prehistoric and historic archaeological materials and associated records should be preserved for curation at the OSA. Collections are frequently recovered under the authority of various laws, including state laws such as the North Carolina Archives and History Act (G.S.121); the Public Records Act (G.S.132); the Indian Antiquities, Archaeological Resources, Unmarked Human Skeletal Remains Protection, and Archaeological Record Program Acts (G.S.70); and the Transportation Act (G.S.136); and federal laws such as the Antiquities Act (16 U.S.C. 431-433); the Archeological and Historic Preservation Act (16 U.S.C. 469-469c); Sections 106 and 110 of the National Historic Preservation Act (54 U.S.C. 300101 et seq.); the Archeological Resource Protection Act (16 U.S.C. 470aa-mm); and the Native American Graves Protection and Repatriation Act (P.L. 101-601).

These instructions apply to archaeological collections of statewide significance held by the OSA on behalf of the DNCR. They are consistent with the Standards and Guidelines for Curation of Federally Owned and Administered Archeological Collections (36 CFR 79) promulgated by the National Park Service. Definitions included in the federal rule (36 CFR 79.4) are incorporated by reference.

These procedures should be followed in preparing artifact collections and documentation for submission to the OSA. Please note that requirements apply equally to artifact collections and to related records such as field notes, drawings, maps, photographs, artifact inventories, and similar forms of documentation.

Archaeological collections submitted to the OSA for long-term ("in perpetuity") curation must conform to the following instructions. Variations or exceptions to the requirements must be approved in advance. Potential depositors should email the OSARC Laboratory Supervisor for information at any stage in the planning or execution of a project. Questions on conservation will be answered by the Laboratory Supervisor. Consultations are encouraged at all phases of research, from preliminary planning to fieldwork to analysis, because experience has shown this practice to be beneficial and cost-effective for both the depositors and the OSA.

Collection Submission

To request submission of a collection to the OSARC, email osa.curation@dncr.nc.gov with details of the collection. Decisions on the acceptance of collections will be made in writing by the State Archaeologist or their designee (North Carolina Administrative Code T07:04R.0803). After a request has been approved, the Laboratory Supervisor will provide an Incoming Collections Form that should be completed and returned prior to collection submission.

Responsibilities

The cleaning, sorting, cataloging, documenting, conserving, and packaging of archaeological materials are the responsibilities of the depositor. Collections accessioned into the permanent collections of the OSA must conform to the following instructions.

Costs of specialized analyses involving such materials that are part of regulatory compliance reports, and which precede acceptance of collections by the OSA, are the responsibility of the individual or agency.

Ownership

Materials recovered from private lands must be accompanied by an agreement signed by the landowner stating that the materials recovered from the subject property have been permanently donated for curation to the State of North Carolina. A Deed of Gift form must accompany all collections.

Federal or state agencies wishing to donate or loan collections from projects they have undertaken should submit cover letters addressed to the OSA Laboratory Supervisor stating those intentions. These communications must precede the actual transfer of collections by at least one month and include or reference the terms of agreements reached with the OSA for permanent care of the materials (cf. 36 CFR 79.8).

Curation Fees

The OSARC charges fees for curation services at $200.00 per cubic foot, or $220.00 per standard archival storage box measuring 12” wide, 15” long, and 10” high. See the Packaging below for more information on box sizes.

Accession Numbers

All collections to be submitted for curation must be assigned an OSA accession number. Accession numbers are site-specific, so collections containing materials from more than one site will be assigned an individual accession number for each site. Accession numbers are also specific to the year of excavation, so collections from revisited sites should receive a new accession number.

Accession numbers can be obtained from the OSA Site Registrar in response to email requests sent to site.numbers@dncr.nc.gov, preferably when site numbers are requested. Accession numbers assigned by the Registrar consist of a four-digit number for the year followed by a period and another four-digit number that is consecutively assigned for each site, which starts over at 0001 each calendar year. For example, the first accession number assigned in 2016 was designated as 2016.0001.

Provenience Numbers

It is the responsibility of the submitting party to assign a unique identifying number for each sample- or artifact-yielding provenience on a site. As used here, the term provenience refers to the smallest spatial unit designated during a field investigation, composed of both horizontal and vertical parameters. For example, if artifacts were collected from two different strata during the excavation of a shovel test, this constitutes two proveniences. Provenience numbers should be appended to the end of the site’s accession number, and this combined number is the catalog number for any given artifact. For example, if a site is assigned a general accession number 2016.0001, then any artifact from the first provenience on the site will have the 12-digit catalog number 2016.0001.0001.

A provenience number log should be provided listing all the provenience numbers in a collection along with their associated contextual information. See Inventories and Lists below for information on how provenience number logs should be submitted to OSARC, and Sorting and Cataloging below for more information regarding the organization of collections.

Conservation Standards

For guidance concerning conservation needs in the field or laboratory, consult published sources such as "Conservation Practices on Archaeological Excavations: Principles and Methods," by Corrado Pedeli and Stefano Pulga (Getty Conservation Institute, Los Angeles, 2013) or the National Park Service (NPS) Museum Handbook, Part I: Museum Collections, Chapter 8: Conservation Treatment, available online.

Treatment Measures

All artifacts requiring conservation must be treated prior to submission to the OSARC. A list of objects with a description of their treatments, including chemicals used, must accompany collections.

Artifact Processing and Packaging

The OSA requires that materials submitted for curation meet certain general conditions prior to acceptance, as outlined below:

Cleaning

All artifacts should be cleaned and stabilized prior to shipment to the OSA, except in instances where an uncleaned condition would facilitate a particular form of analysis.

Artifacts should be cleaned with water or dry brushed. Wash only those materials that will not deteriorate or where cleaning with water will not destroy archaeological evidence (e.g., carbon deposits, slip on pot sherds, etc.).

Artifacts, specimens, or samples that require special care (i.e., those which must not be washed or otherwise cleaned or processed) should be clearly separated from other materials and marked: SPECIAL TREATMENT REQUIRED.

Sorting and Cataloging

A standardized method of collections cataloging must be employed for each collection and project. Include a full, written explanation of the cataloging method employed with each collection. The cataloging system described below is recommended, but not required by the OSA Laboratory Supervisor.

The formerly recommended cataloging system consisted of letters designating the artifact class (e.g., *p* for pottery, *b* for bone, *eb* for ethnobotanical materials) followed by a sequential specimen number unique to that catalog entry (1, 2, 3, 4, 5…). The OSARC no longer utilizes letters to designate artifact class. It is also not required to assign unique specimen numbers; identifying artifacts by their 12-digit catalog number (provenience number appended to accession

number) is sufficient. Artifact catalogs for these collections should be sorted by site number, provenience number, material type, and artifact type. Artifacts should then be bagged separately. See Inventories and Lists below for information on how artifact catalogs should be submitted to the OSARC, and Packaging below for information on how artifacts should be bagged.

Discard and Sampling

Sampling strategies may be appropriate for collections with highly redundant quantities of one or more type(s) of material such as brick, shell, or glass. When developing a sampling strategy, the research potential and requirements of potential analytical techniques should be considered to determine sampling parameters for an artifact class.

All sampling decisions and actions should be well documented. At minimum, all materials to be discarded should be counted (if appropriate), weighed, and photographed, and the total weight before discarded should be recorded. The amount of material retained for curation should be discussed with and approved by the OSA Laboratory Supervisor prior to implementation when possible and the justification for that strategy should be explained in the accompanying report. The report and artifact catalog should note the discard of artifacts. For more information on proper artifact sampling strategies, review the NPS collecting strategy guidelines, which are found in Chapter 5: Curation Prior to the Field and Chapter 6: Curation in the Field and Lab of their Managing Archaeological Collections online publication.

Hazardous materials such as asbestos, active explosives or armaments, arsenic, radon, or biohazard waste should not be collected for curation. Photography and documentation should be done in the field if it is safe to do so.

Artifact Labeling

All diagnostic artifacts should be labeled. When there is a large quantity of diagnostic artifacts from a single provenience, label a sample (e.g., if a unit has 200 plain creamware body sherds, label 10%). Artifacts should also be labeled in situations where objects from two different proveniences are going to be bagged together, such as refits or cross-mended fragments. It is not necessary to individually label artifacts without a stable surface, including corroded or concreted metal, slag, coal, and wood fragments, or other large quantities of undiagnostic artifacts such as flakes, shatter, and brick fragments. Provide a written explanation of labeling practices.

Labeling should be done using a lacquer basecoat and topcoat (such as Acryloid B72 or B67), with the information written clearly in archival ink (such as Pigma Micron pens) between the two coats. Labels of printed acid free paper and applied with a basecoat and topcoat of lacquer are also acceptable. If possible, labels should be positioned so that they are not visible on the side of the artifact most likely to be photographed.

For more information on proper artifact labeling, see the NPS artifact labeling guidelines, which are found in Chapter 8: Collections Management of their Managing Archaeological Collections online publication.

Packaging

Artifact Bags

Artifacts must be completely dry before packing into artifact bags.

Artifact bags should be clear, archival-quality, acid-free, polyethylene storage bags, and be a minimum of 4-mil thick. Bags with white blocks for labeling are preferred. Paper bags will not be accepted for permanent artifact curation storage.

Artifact bags should have a self-sealing, zip-lock closure. Open-ended bags will not be accepted for curation as they are unreliable and compromise the integrity of the collection when tape, staples, or twist-ties fail.

Information should be written on the bags with permanent marker. If bags with white blocks are used, the information should be written on the white block area.

For Phase 1 survey, artifacts should be separated into interior bags by material type (metal, glass, ceramic, etc.). The minimum information that should be included on these interior artifact bags is the accession and catalog number and material identity. Interior bags should be placed together into an overall provenience bag, which should be labeled with the site number, accession and catalog number, and all other appropriate provenience information, such as date of excavation and excavator(s) initials.

For Phase 2 and 3 collections generated by assessment, data recovery, or other research projects, artifacts should be bagged by provenience, material type, and artifact identity i.e., square nails, wire nails, and screws should be bagged separately (see Sorting and Cataloging above). Interior bags should be labeled in permanent ink with the accession and catalog number, material type, and artifact identity. Larger exterior bags should include site number, accession and catalog range, all other appropriate provenience information, dates, and excavator information. Bags containing heavy artifacts that could be damaging to smaller artifacts may be bagged together by artifact type (e.g., bricks), alternatively heavy artifacts can be placed in the bottom of the box. They should not be placed on top of fragile artifacts.

For very small units/collections/sites artifact bags from multiple proveniences within the same site may be grouped together into larger external bags. Catalog number ranges should be marked on these larger external bags that have multiple proveniences from the same site bagged within them.

Artifact Tags

A tag replicating what is written on each bag should be laser-printed or written in permanent ink on acid-free paper. These tags should be inserted into each bag with the text-side clearly visible upon bag closure. Tags must be at least 1”x 2” or 12-point font size. Tags must specify site number, accession and catalog numbers, appropriate provenience information, material type, and artifact identity.

The acid-free paper tag does not need to be bagged separately and can come into contact with the curated artifacts in the bag, with the exception of materials that may render the tag illegible, such as carbonized plant materials and metal artifacts. In such cases the tag should be placed into its own unlabeled bag.

Fragile Specimens

Fragile items (bone, wood, shell, etc.) should be wrapped in acid-free tissue paper and bagged, boxed, or placed in vials.

Use ethafoam sheets (1/32” thick) or bubble wrap to package large fragile items. These products are available in multiple widths. Do not use newspaper; it is highly acidic and unstable and will not be accepted.

To pack fragile items within standard boxes, place ethafoam sheets or shredded acid-free paper at the bottom, to act as a buffer and reduce excess volume. Do not use newspaper or packing peanuts. Place materials in position, then fill the remaining volume with ethafoam, cotton, or shredded acid-free tissue paper to keep the materials in an upright or stable position within the exterior storage box.

Ethnobotanical or radiocarbon samples may not be placed in the same exterior boxes with stone or ceramic artifacts. Sample-specific identifiers should indicate the nature of the contents (e.g., wood, charcoal, carbonized seeds, etc.). All C-14 samples should be packaged and labeled in the same manner in which they would be sent to a C-14 laboratory. Note that the Office of State Archaeology does not fund C-14 dating and analysis should be complete before submission.

Mounted microscope slides should be stored in an acid-free cardboard archival box or sleeve. Each slide should be numbered, and the associated catalog number and other relevant contextual information associated with each slide number, written in permanent ink on the container. The box or sleeve should itself be bagged and labeled according to the information in the Artifact Bags and Artifact Tags above.

Metal Artifacts

Silica gel should be included as a desiccant if plastic bags are used for the storage of ferrous metal artifacts, but silica gel must not come in contact with artifact surfaces. A small, perforated plastic bag of silica gel should be placed in each artifact bag or container holding metal. The laboratory supervisor recommends mixing orange/green indicating silica beads with clear silica beads in a 2.5”x 3” polyethylene bag. The bag should be perforated, filled halfway, and placed with metal artifacts. Do NOT use blue/cobalt indicating silica beads, as it is a health hazard.

Fine or delicate metal artifacts may be stored in small archival boxes or vials.

Soil and Flotation Samples

Soil samples intended for flotation will not be accepted for curation. Flotation samples should be processed and their contents treated according to the standards provided above. Only soil samples taken to allow for chemical, pollen, phytolith, or similar analyses will be curated. Contact the OSARC Laboratory Supervisor regarding waterlogged samples.

Floated samples should be completely air-dried and packaged in a 4-mil plastic bag with a zipper closure. Use a permanent marker to label bags with the catalog number and standard provenience information for the sample. The same information should be included on an acid free tag placed inside the sample bag. See Artifact Tags for more information on labeling information.

Floated sample box exterior labels should include the standard provenience information and be marked as containing floated samples. See Boxes below for more information.

Oversized and Bulk Artifacts

Oversized artifacts that do not fit into artifact bags must be securely tagged with cotton string (no wire) with appropriate information and can be placed in archival-quality interior boxes within the overall storage box or alone in a box if heavy.

The OSARC Laboratory Supervisor should be notified in advance concerning any oversized artifacts that do not fit in a standard-sized archival box (12” wide, 15” long, and 10” high). Such items will be charged a minimum standard curation fee of $220 as the item will be, in theory, taking up the space of at least 1 standard-sized archival box. These items should be appropriately labelled, preferably with ink and an affixed tag.

The OSARC Laboratory Supervisor should be contacted in advance concerning the curation of bulk materials such as oyster shell, brick, mortar, and daub; see Discard and Sampling for more information.

Boxes

Space limitations at the OSA require that materials submitted for curation meet certain storage conditions prior to acceptance:

Artifact collections submitted for curation should be in acid-free archival storage boxes (i.e., Hollinger record storage boxes) measuring 12” wide, 15” long, and 10” high. It is preferable to use additional boxes rather than exceed these measurements.

Half boxes (6” wide, 15” long, 10” high) may be submitted for paper documentation or for smaller collections.

The weight of boxed collections should be distributed as evenly as possible. Storage boxes must not exceed 30 lbs total weight, regardless of box size.

Record storage boxes may contain archival-quality, acid-free interior boxes as a substitute for large plastic bags. These interior boxes can be used as containers and dividers for separate site collections or proveniences. For smaller collections both paper documentation and artifacts can be curated in the same box.

Each box should contain a box catalog that specifically lists the contents of the box.

Once all materials have been packaged and boxed, a label must be placed on the ‘width’ (shorter) end of each closed box. This label should include the project name, site numbers, excavating institution, and catalog number ranges that are included in the box. Additionally, NC DOT collections should include the PA or project TIP number. Labels should be laser-printed in large font, bold letters, and double spaced for easy reading. Box labels must be self-adhesive or securely attached to boxes with adhesive tape. The minimum label size for standard storage boxes is 3” x 5”.

Multiple boxes containing materials from a single site or project should be numbered sequentially (“Box 1 of 3, 2 of 3,” etc.) on the box label. All inventory records, such as packing lists and similar inventory control documents, must reference those numbers.

Associated Paper and Digital Records

All text documents should be provided in both paper and digital format. This means that handwritten documents should be scanned at a resolution of no less than 300 dpi, and this digital scanned copy provided along with the original or a high-quality copy of the original. Conversely, a paper copy should also be provided of text documents produced digitally.

Text documents should be laser-printed or copied on archival quality paper and should not contain staples, paper clips, or rubber bands. Acid-free folders or blank sheets of acid-free paper may be used to separate/divide groups of documents. These documents should be placed in standard-size, acid-free folders and the folders should be labeled with the following information: site number, accession number, and a list of what documents are included in the folder.

All digital media should be provided in duplicate via Citrix ShareFile. Please reach out to osa.curation@dncr.nc.gov for a link to Citrix ShareFile. Images should be in jpeg or tiff format, with tiff preferred, and be no less than 300 dpi. Text documents should be in pdf or MS Word format, along with an unformatted txt copy. Tables and databases should be in MS Excel along with an unformatted CSV copy. Unformatted copies are requested to ensure the data in these files remain accessible regardless of software programming changes over time. Please do not submit MS Access databases, as this program is being phased out of use.

Files should be named using a consistent and descriptive format that at a minimum contains the site number, accession number, and file type (for example, OR333_2017-0033_ArtifactCatalog, OR333_2017-0033_ShovelTestForms, OR333_2017-0033_PhotoLog). Please note that the periods in accession and catalog numbers should be replaced with hyphens to avoid unexpected problems with applications; spaces should also be avoided but readability maintained using hyphens, CamelCase (each word capitalized), and underscores. Files should be in organized folders, minimally by site.

Collections deposited for curation should be accompanied by two categories of records: those that document the fieldwork activities that produced the collection, and those that itemize the resulting contexts and materials themselves. Specific guidelines concerning these associated records are provided below.

Documentation of Fieldwork

Site Forms

No materials will be accepted for curation without a complete OSA Site Form (see APPENDIX A), including attached site map(s) and artifact catalog, on file at the OSA. Blank site forms can be downloaded from the OSA Forms page.

Field Records

At least one paper OR original copy and one digital scan of all original field documentation must accompany each collection submitted for curation. The paper copy may be original, produced as a photocopy, or as a laser-print of a scan made at no less than 300 dpi. Original notes, drawings, maps, and other forms of documentation also may be submitted for permanent storage with the artifact collections.

All project field notes, correspondence, analysis sheets, feature records, etc., must be complete, organized, and clearly labeled with the site number, author, and date. Field notebooks or other bound records should be labeled on the exterior cover in permanent marker.

Metal fasteners of any kind should not be affixed to paper records. If original notes in this form are to be submitted as documentation for curation, the binding should be carefully removed and the pages placed in a standard-size, acid-free folder.

Photographs and Photograph Catalogs

Digital photograph files should accompany each archaeological collection. The number of images submitted should be commensurate with the amount of work undertaken at a site. Minimally, an overall site view should be provided, along with images of any identified features. For evaluation, data recovery, and research projects, all excavations and identified features should be documented with photographs.

A printed copy of images is not required; images should be submitted digitally through Citrix ShareFile. Images taken as RGB color digital tiffs are preferred; jpeg images are acceptable. Please email osa.curation@dncr.nc.gov for a link to Citrix ShareFile for uploading images.

All digital image files should be renamed using a standard naming format that includes the site number, accession or catalog number, and image number (for example, 31OR333_2017-0033_IMG001). Please note that the periods in accession and catalog numbers should be replaced with hyphens to avoid unexpected problems with applications. Photographs should be contained in a subfolder named 'Photographs' within the site folder with artifact, field, and projects images separated.

Prepare and submit a photo log of all photographic documentation. Original image numbers can be included, but image file names should correspond to entries in the photo log. Information provided for each image should include at a minimum photographer, date, direction, and description of subject.

As noted, copies of photograph files do not need to be printed. For older collections, prints, negatives, and slides should be scanned prior to curation. Contact the OSARC Laboratory Supervisor for recommendations prior to preparing and submitting legacy photographic materials.

Maps, Drawings, and Charts

Maps, drawings, and charts should be saved as TIFF or JPEG files at resolutions no less than 600 dpi. Copies of maps, drawings, or chart files do not need to be printed. Contact the OSARC Laboratory Supervisor for recommendations regarding any legacy oversize paper records that may require curation.

Inventories and Lists

Packing Lists

All shipments to the OSA must be accompanied by a packing list, which provides the name of the submitting party, the project name, environmental review number if applicable, county, site number(s), accession number(s), box numbers, and a summary of box contents (Figure 3).

The leftmost column of the packing list should be labeled Catalog Numbers and should contain the range of accession numbers and catalog numbers associated with materials in each box. Consultant catalog numbers (if applicable) should be placed in the adjacent column. If materials from more than one site are present in a collection, a site field should also be included. Box numbers indicated on the packing list should be marked on box labels.

Figure 3. Sample Packing List

ABC Inc., Open Field Transmission Line, ER 17-0170, Wake County				
Catalog Nos.	**ABC Cat. Nos.**	**Site**	**Box**	**Materials**
2017.0017.0001 to 2017.0017.0030	87-1 to 87-30	WA3333	1	Associated documents, NA ceramic and lithic
2017.0018.0001 to 2017.0018.0010	87-31 to 87-41	WA3334	1	Associated documents, historic ceramics, glass
2017.0019.0001 to 2017.0019.0042	87-42 to 87-84	WA3335	2	Associated documents, NA lithic
2017.0019.0043 to 2017.0019.0080	87-85 to 87-112	WA3335	3	NA Lithic

Provenience Number Logs

As mentioned above (see Provenience Numbers above), a provenience number log should be provided with all artifact collections (Figure 4). This table should list each of the accession and catalog numbers in a collection along with their associated provenience information.

Figure 4. Sample Provenience Log

Catalog No.	**ABC Inc., Cat. No.**	**Site**	**Unit**	**Strat**	**Depth (cmbs)**	**Excavators**	**Date**
2017.0017.0001	87-1	WA3333	ST1	2	20-35	CM Hyde, RL Jones	1/15/17
2017.0017.0002	87-2	WA3333	ST2	1	10-20	EL Smith, O Taylor	1/15/17
2017.0017.0003	87-3	WA3333	ST2	2	30-70	EL Smith, O Taylor	1/15/17
2017.0017.0004	87-4	WA3333	ST3	2	26-50	CM Hyde, RL Jones	1/15/17
2017.0017.0005	87-5	WA3333	ST4	2	30-55	EL Smith, O Taylor	1/15/17
2017.0017.0006	87-6	WA3333	ST5	2	20-44	CM Hyde, RL Jones	1/15/17
2017.0017.0007	87-7	WA3333	ST6	2	30-50	EL Smith, O Taylor	1/15/17

Artifact Catalogs

Artifact catalogs should be included in the box containing the associated artifacts (Figure 5).

Catalogs should be sorted by site number, provenience number, and then material type. The order in which the material types are organized is at the discretion of the creator of the artifact catalog. If the artifact catalog is for a project that contains information from multiple sites, then the catalogs should be separated by site. Each catalog should then be organized by provenience, and then grouped by material type. See Sorting and Cataloging above for more information.

Figure 5. Sample Artifact Catalogs

Site #	Catalog #	Test Unit #	Strat	Level	Count/ Qty	Material/ Class	Object	Type	Form	Treatment/ Decoration	Color	Comments
31XY1234	2017.0001.0001	TU 1	1	1	1	Glass	Container Glass	Machine-Made Bottle	Body Frag	Embossed Letters	Colorless	Mold Seam
31XY1234	2017.0001.0002	TU 1	1	2	1	Lithic	Biface	Metavolcanic	Base Frag			
31XY1234	2017.0001.0003	TU 1	2	1	1	NA Ceramic	Coarse Sand Temper	Mount Pleasant	Rim Sherd	Cord-Marked		
31XY1234	2017.0001.0003	TU 1	2	1	4	NA Ceramic	Coarse Sand Temper	Mount Pleasant	Body Sherd	Cord-Marked		
31XY1234	2017.0001.0003	TU 1	2	1	6	Lithic	Debitage	Quartz	Interior Flake			
31XY1234	2017.0001.0004	TU 2	1	1	8	Glass	Container Glass		Body Frag		Amethyst	

Site #	Catalog #	Test Unit #	Strat	Level	Count/ Qty	Material/ Class	Object	Type	Form	Treatment/ Decoration	Color	Comments
31XY1235	2017.0002.0001	TU 1	1	1	2	Hist Ceramic	Whiteware	Transfer Printed	Body Frag		White and Blue	
31XY1235	2017.0002.0002	TU 2	1	1	1	Glass	Container Glass	Machine-Made Bottle	Base Frag	Maker's Mark	Colorless	Owens-Illinois Glass Company
31XY1235	2017.0002.0002	TU 2	1	1	4	Glass	Window Glass				Aqua	
31XY1235	2017.0002.0003	TU 2	1	2	2	Metal	Cut Nail	Iron	Frag			Corroded

Collections Without Artifacts

If a landowner requests that artifacts be returned to them rather than curated in an appropriate repository, those artifacts should be thoroughly documented through photographs and notes so that they can still be studied by future researchers. At a minimum, photographs with a scale should be taken of representative diagnostics. An artifact catalog should still be created, with retention noted. These photographs and notes should be permanently curated in an approved archaeological repository, preferably in the state of North Carolina. Following 36 CFR 79.6, curation at OSARC is strongly recommended.

If no sites were identified during an archaeological survey, then associated records do not need to be submitted for curation.

Human Remains

North Carolina and federal statutes and attendant regulations provide general directions for the recovery, handling, treatment, analysis, and disposition of human skeletal remains and associated objects. These include the Indian Antiquities, Archaeological Resources, Unmarked Human Skeletal Remains Protection, and Archaeological Record Program Acts (G.S.70), Abandoned and Neglected Cemeteries (G.S. 65 Article 12), and the Native American Graves Protection and Repatriation Act (P.L. 101-601). Regardless of the historical or cultural associations of discovered human remains, all burials deserve respectful treatment transcending the care afforded to any other class of archaeological materials.

The exact methods for recovery and disposition of human remains should be determined on a case-by-case basis. Each case requires specificity that goes beyond the general regulatory requirements. Legal procedures must be followed, but the methods of how each burial is to be handled should be properly defined in the terms of agreements among the concerned parties (descendants, landowners, agencies, and archaeologists). Each agreement should precisely outline mutual responsibilities and the steps to be taken for recovery, treatment, analysis, and disposition of the remains.

As it is impossible in these guidelines to predict the terms and conditions of such agreements, we provide no particular instructions on the handling of human remains here. The State Archaeologist or federal agency officials should be contacted for direct guidance whenever burials are discovered. Law enforcement officials, local or state medical examiners, Tribal authorities, landowners, and other individuals should also be involved in consultations.

In almost every instance, short- or long-term curation of human remains is an important consideration. Unlike other archaeological materials, most human remains will eventually be returned to the next of kin or descendants for reburial. The remains must be carefully handled, documented, and protected from unnecessary harm or deterioration during the entire process of removal, transportation, and analysis.

The types of scientific and historical information to be gained studying human burials will vary from one instance to the next and are without question important to our understanding of human culture and history. But human remains are not artifacts in the same sense as stone tools, glass fragments, or ceramic vessel sherds. Human remains must be afforded the special considerations fixed in law and through mutually agreeable terms established among the concerned parties.

APPENDIX A

Site File Research Guide for Accessing Site Files and Conducting Background

NORTH CAROLINA
OFFICE OF STATE ARCHAEOLOGY

SITE FILE RESEARCH GUIDE

FOR ACCESSING FILES AND CONDUCTING BACKGROUND RESEARCH

NC DEPARTMENT OF
NATURAL AND CULTURAL RESOURCES

-2022-

Accessing Site Files

All individuals wishing to access site files at the North Carolina Office of State Archaeology (OSA) must submit a request online and be familiar with our *Archaeological Investigation Standards and Guidelines for Background Research, Field Methodologies, Technical Reports, and Curation.*

PLEASE NOTE: OSA is a separate office from the Historic Preservation Office (HPO). To access National Register and historic structure surveys, submit a request on HPO's website.

In addition, per Section 112 of the National Historic Preservation Act and Section 106 requiring OSA to ensure that all actions taken by consultants meet professional standards, all individuals given access OSA site files, must be archaeological or historic preservation specialists and meet or be operating under a supervisor who meets the Secretary of the Interior professional qualifications for archaeology.

We **STRONGLY** encourage individuals performing background research to have a basic understanding of ArcGIS and Microsoft Access. OSA staff are unable to perform research for you and we expect that all consultants will be able to conduct their own research with minimal assistance from OSA staff.

Scanning, Copying and Printing

Consultants may copy and print site files for a fee. Please see the breakdown of fees below:
Copying and Printing: 10 cents per page
Scanning: 5 cents per page*

You do not need to pay at the time of your appointment. Our office will bill your company at the end of each month if applicable.
*To continue building our digital report and site file library, please ask an OSA staff member to scan reports or site forms for you. If an OSA staff member scans a document for you, the fee is waived.

Terms to Know

- ER: Environmental Review, projects funded, licensed, or permitted by federal or state governments
- GS: General Statute, projects that require review under NC General Statute 121
- CH: Clearinghouse, projects which are subject to SEPA
- CT: Cell Towers, projects funded by the FCC
    - ER, GS, CH, and CT projects all receive tracking numbers, e.g., ER 19-1830
- PA: Programmatic Agreement
    - NCDOT PA
        - An agreement between HPO/OSA, and NCDOT to transfer the authority for cultural resource reviews for most transportation projects from HPO/OSA to NCDOT.
        - These projects receive a tracking number from NCDOT, e.g., PA 18-01-0001.
        - Various forms are generated by NCDOT archaeologists for each project. These forms are submitted to OSA as an "Annual Report." Each annual report is given a Bib number but because the "report" is a collection of forms, they are not stored in the report library. Instead, each form can be accessed on the L Drive in the folder "L:\PAs\NCDOT PA\Annual Reports" and are organized by the fiscal year in which the report was generated.
- L drive: if the File Explorer, under This PC
    - Drive name **OSAR2$ (\\wv1cradmfp01) (L:)**

Mapping Symbology

	Scanned Paper Quadrangles	ArcGIS Map Symbol
Site Location (Point):	Prehistoric – AH99	Prehistoric
	Historic – AH999**	Historic
	Both – AH99&99**	Both
	Historic Sites with Multiple Components – AH99*1*	Historic
Site Location (Polygon):	Prehistoric – AH99	Prehistoric
	Historic – AH999**	Historic
	Both – AH99&99**	Both
	Historic Sites with Multiple Components – AH99*1*	Historic
Location Accuracy	**Scanned Paper Quadrangles**	**ArcGIS Map Symbol**
Accurate	*	*
Within 100 Meters	#	#
Within 500 Meters	@	@
Within 1000 Meters	%	%
Unreliable	X	X
Environmental Review Project Areas	**Scanned Paper Quadrangles**	**ArcGIS Map Symbol**
Surveyed Area (Linear):		N/A
Surveyed Area (Polygon):		
Reviewed Area, Recommended for Survey (Linear)		
Reviewed Area, Recommended for Survey (Polygon):		
Reviewed Area, Cleared, Inactive, NO survey (Linear):		
Reviewed Area, Cleared, Inactive, NO survey (Polygon):		
Survey Method	**Scanned Paper Quadrangles**	**ArcGIS Map Symbol**
	N/A	JPO- Judgemental Pedestrian Only
	N/A	J- Judgemental Pedestrian and Judgemental Shovel Testing
	N/A	SP- Systematic Pedestrain
	N/A	SS- Systematic Shovel Testing
	N/A	SPS- Systematic Pedestrian and Systematic Shovel Testing
	N/A	O-Other
Survey Type	**Scanned Paper Quadrangles**	**ArcGIS Map Symbol**
		R- Reconnissance
		I-Intensive

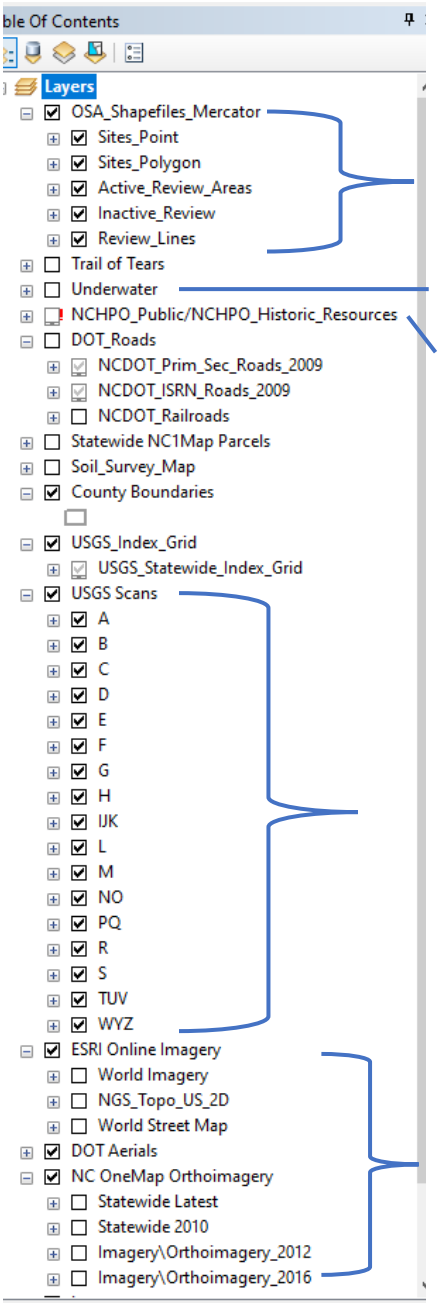
Using OSA's ArcGIS

Opening a map

OSA staff will have GIS open for you before you arrive.

Layers

To turn on or off a layer, click the square to the left of the layer name. A check mark will appear when the layer is turned on. To view sublayers, click on the box with the plus sign to the left of the layer name.



Terrestrial archaeological sites and compliance projects

Underwater archaeological sites

HPO Data: This layer is a copy of HPO Web. Please consult HPO for further information on these sites. Note: **!** indicates a layer is not working. Please see an OSA staff member if you need this layer.

USGS Quad Maps
Prior to GIS, sites and compliance projects were mapped onto paper quad maps. These maps have been scanned onto GIS and are organized in alphabetical order. Not all of the data from these quads has been digitized in GIS.

Topographic maps, aerials, and other useful background maps

Consultant Tools

The Background Research Buffer Tools were created specifically for consultant use and will generate a buffer around your APE and excel spreadsheets containing information on all sites and surveys within the buffer.

If for some reason the tool bar is missing from the map, click on Customize > Toolbars > Background Research Buffer Tool.

- **Point** tool: users create a point; for projects with a small footprint; e.g. cell towers.

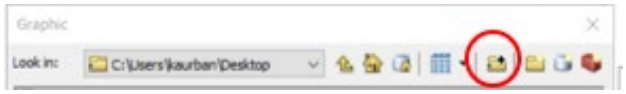
You do not need to change anything in this top box before creating a point.

- **Draw Polygon** tool: users draw the project area on the map.

You do not need to change anything in this top box before drawing a polygon.

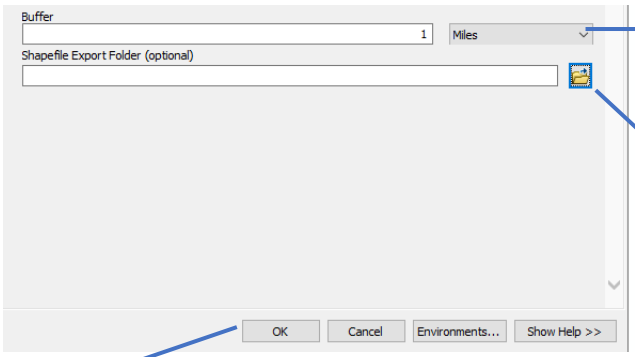
- **Add Shapefile** tool: users who have a shapefile for project area.

Click on the folder



Use the Connect to Folder button to find the folder your shapefiles are in. Note: if the shapefiles are in a zip folder, they must be extracted.

- **For all Tools**



You will need to specify a buffer distance (e.g. 1 mile). This distance cannot be zero but can be very small if you already have a buffered shapefile (e.g. 1 cm).

If you'd like to export the sites and surveyed areas within your buffer, add a file path. This path should be to your thumb drive but can also be to a file on the desktop if you are planning to email it to yourself. Shapefiles of sites and surveys within your buffer will automatically save to the selected folder

Click Ok. A new dialog box will pop up indicating the tool is running. When complete, 2 excel spreadsheets with site numbers and surveys within the buffer will automatically open and the dialog box will say "Completed." Click close on the dialog box.

Other Useful Tools

 Zoom in or out by selecting the zoom in or out tool and then dragging a box around an area

 Pan to an area of the map by using this tool, not the vertical or horizontal scroll bar

 Search tool can be used to search for a feature such as site number or location such as a street address

 Search for coordinates

 Selection tools can be used to select or unselect a shapefile or multiple shapefiles.

 Identifying tool can be used to identify a shapefile's attributes.

 Add data such as shapefiles from your external drive

 Zoom to the full extent of the state

Closing a map

CLOSE MAP WHEN FINISHED BUT DO NOT SAVE

If you have any questions, please see an OSA Staff Member

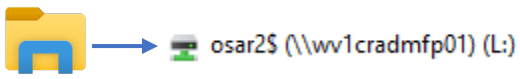
Digital Site Files

As of 2019, staff at the OSA are working towards having all paper formats digitized for easier access for all of our consultants conducting background research.

We highly encourage always checking through the digital files first before pulling out the paper copies. We appreciate your patience as we go through this long-term transition.

Scanned/Digital Reports

1) Click on the file explorer icon on the task bar and then select the L drive from the table of contents



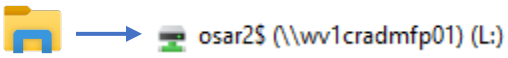
2) Open the Library folder 

3) Open the Reports folder 

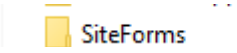
4) Search for Reports by Bib Number e.g.: Bib00001, or Bib08000.
    - Reports can be copied to your external drive or print reports using the scanner in the work room

Scanned Site Forms

1) Click on the file explorer icon on the task bar and then select the L drive from the table of contents



2) Open the SiteForms folder



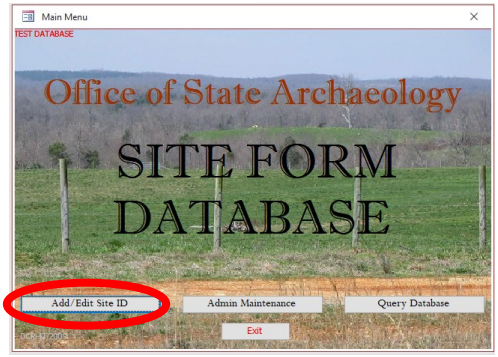
3) Select county which corresponds to site
4) Search for site form using the site number. You may copy site forms to your external drive or print site forms using the printer in the work room

Site Form Database

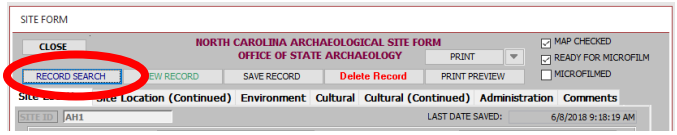
Site Form Access Database

Site forms received by OSA prior to 2018 may have been added to our site form database. If you are unable to find the digital version, they will likely be on the database. To access these files:

1) Open Access Database from the shortcut on the desktop
2) Select Add/Edit Site ID



3) Select Record Search in upper left corner



4) Search for record using county abbreviations and the site number
    - If a blank screen appears, the site form has not been data entered into the Access Database. Click close and repeat Step 3
5) PDF site form
    1. Select the dropdown menu to the right of the PRINT Button

    2. Select CutePDF
    3. Select Okay
    4. Select Print
6) Save file to your external drive. To search for a new file, select RECORD SEARCH in upper left corner and repeat process

Note: Some downloaded database site forms may only contain database codes as opposed to text. To find text to the corresponding codes use the NC OSA Site Form Database Codes word document found on the SiteForms L drive folder.

Paper Site Files

Please note our paper records are the ORIGINAL VERSIONS.
Please take care not to misplace or tear these files. Most cannot be replaced.

If you access a paper document, please fill out our **File Removal Sheet** on the wall in the Map Room to document what you pulled, the day, and time. This helps us keep track of our paper documents. If you cannot find a report or site form, please see an OSA staff member for assistance.

Paper Site Forms

- If a site form has not been entered into the OSA Access Database or Scanned Site Forms, the original paper copy can be found in boxes in either the Library or Map Room
  - Counties AL-NH are on the last bookshelf in the Library.
  - Counties NP-YD are on the top shelves of the Map Room cabinets.
  - Scanning: please ask an OSA staff member to scan these items for you.
  - Copying or printing: You may copy or print files yourself.
    - Please fill out the **Consultant Scan/Copy/Print Log** in the black binder on the counter in the Copy Room.
  - Place paper documents in the Site Form drop box in the Map Room under the File Removal Sheet.

Paper Reports

- If a Report has not been scanned into the Reports folder, the original paper copy can be found in the OSA Library.
- Boxes are organized by Bib number.
- Scanning: please ask an OSA staff member to scan these items for you.
- Copying or printing: You may copy or print files yourself.
  - Please fill out the **Consultant Scan/Copy/Print Log** in the black binder on the counter in the Copy Room.
- Place paper documents in the Report drop box in the Map Room under the File Removal Sheet.

APPENDIX B

North Carolina Office of State Archaeology (OSA) Site Form (version VIII)

This appendix is intended to illustrate what information is collected on the OSA Site Form. Fillable version can be downloaded from the OSA Forms page.

NORTH CAROLINA ARCHAEOLOGICAL SITE FORM VIII
Office of State Archaeology/Division of Archives & History

1. STATE SITE NUMBER:
2. SITE/VESSEL NAME(S):
3. OTHER SITE NUMBER:
4. INSTITUTION ASSIGNING: CODE:
5. PROJECT SITE NUMBER:
6. SITE COMPONENT: 7. SITE REMAINS:

SITE LOCATION INFORMATION

8. COUNTY:
9. QUAD MAP: MAP CODE:
10. BODY OF WATER:
11. COORDINATE SYSTEM: MAP UNITS:
12. MAP ZONE: MAP DATUM:
13. MAP EASTING: MAP NORTHING:
14: RECORDED W/ GPS?: GPS DATA POST-PROCESSED?:

******ATTACH USGS MAP AND ANY ADDITIONAL SITE MAPS******

15. DATE RECORDED: RECORDED BY:
16. RESULT OF COMPLIANCE PROJECT: PROJECT NAME:
17. PROJECT TRACKING NUMBER(S):
18. CODING DATE: CODED BY:

19. CURATION FACILITY:	20. ACCESSION NUMBER:	ORDER:
1.	1.	1.
2.	2.	2.
3.	3.	3.

21. ARTIFACT INVENTORY ATTACHED:
22. BIBLIOGRAPHIC REFERENCE #'S:
23. RECOMMENDATIONS:

ENVIRONMENTAL INFORMATION

24. GEOGRAPHIC SITUATION:
25. ELEVATION/DEPTH: FT. AMSL
26. SLOPE PERCENT: LOW % HIGH % SLOPE FACE DIRECTION:
27. SOIL/BOTTOM COMPOSITION:

28. NRCS SOIL TYPE CODE: SOIL SERIES NAME:

29. MODERN VEGETATION:

30. DISTANCE TO WATER/FROM SHORE: (Meters)

31. NEAREST PERMANENT WATER TYPE:

32. DRAINAGE BASIN:

33. SITE SIZE

34. GROUND VISIBILITY: LOW % GROUND VISIBILITY: HIGH %

35. UNDERWATER VISIBILITY (FEET):

36. SITE CONDITION:

37. PERCENT DESTROYED: DATE DESTROYED:

38. DESTRUCTION CAUSES:

INVESTIGATIONS

39. COLLECTION MADE:

40. COLLECTION STRATEGY:

41. AREA COVERED IN CONTROLLED COLLECTION: (SQ. M.)

42. TEST MADE:

43. TESTING METHODS:

44. EXCAVATION DATE: 45. INSTITUTION EXCAVATING:

PREHISTORIC SITE INFORMATION

45. CULTURAL COMPONENT(S):

46. SITE FUNCTION(S):

47. MIDDEN:

48. LITHICS:

- ☐ 1 Hafted Bifaces/Projectile Pts.
- ☐ 2 Bifaces
- ☐ 3 Unifacial Tools
- ☐ 4 Other Unifacial Tools
- ☐ 5 Cores
- ☐ 6 Primary Debitage
- ☐ 7 Secondary Debitage
- ☐ 8 Tertiary Debitage
- ☐ 9 Ground Or Pecked Stone
- ☐ 10 Shatter
- ☐ 99 Other

49. TOOL TYPES AND FREQUENCIES: # #

☐ 1 - Clovis	☐ 31 - PPt. (Triangular)
☐ 2 - Hardaway Blade	☐ 32 - PPt. Frag.(Notched/Stemmed)
☐ 3 - Hardaway-Dalton	☐ 33 - PPt. Frag. (Triangular)
☐ 4 - Hardaway Side-Notched	☐ 34 - PPt. Frag. Indeterminate)
☐ 5 - Palmer Corner Notched	☐ 35 - End Scraper (Type I)
☐ 6 - Kirk Corner-Notched	☐ 36 - End Scraper (Type II)
☐ 7 - St. Albans Side Notched	☐ 37 - End Scraper (Type III)
☐ 8 - LeCroy Bifurcated Stem	☐ 38 - Side Scraper (Type I)
☐ 9 - Kanawha Stemmed	☐ 39 - Side Scraper (Type II)
☐ 10 - Kirk Serrated	☐ 40 - Side Scraper (Type III)
☐ 11 - Kirk Stemmed	☐ 41 - Pointed Scraper
☐ 12 - Stanly Stemmed	☐ 42 - Oval Scraper
☐ 13 - Morrow Mtn. I Stemmed	☐ 43 - Pisgah Triangular

☐ 14 - Morrow Mtn. II Stemmed	☐ 44 - Haywood Triangular
☐ 15 - Guilford Lanceolate	☐ 45 - Garden Creek Triangular
☐ 16 - Halifax Side-Notched	☐ 46 - Copena Triangular
☐ 17 - Savannah River Stemmed	☐ 47 - Connestee Triangular
☐ 18 - Sm. Savannah R. Stemmed	☐ 48 - Madison
☐ 19 - Gypsy Stemmed	☐ 49 - South Appalachian Pentagonal
☐ 20 - Swannanoa Stemmed	☐ 50 - Transylvania Triangular
☐ 21 - Badin Crude Triangular	☐ 51 - Otarre
☐ 22 - Yadkin Large Triangular	☐ 52 - Plott
☐ 23 - Roanoke Large Triangular	☐ 53 - Big Sandy
☐ 24 - Uwharrie Triangular	☐ 54 - MacCorkle
☐ 25 - Caraway Triangular	☐ 55 - Bradley Spike
☐ 26 - Clarksville Small Triangular	☐ 56 - Swansboro
☐ 27 - Pee Dee Pentagonal	☐ 57 - Yadkin-Eared
☐ 28 - Randolph Stemmed	☐ 58 - Piscataway
☐ 29 - PPt. (Notched)	☐ 59 - Roanoke Small Triangular
☐ 30 - PPt. (Stemmed)	☐ 60 - Swansboro
	☐ 99 - Other

50. OTHER MISCELLANEOUS ITEMS:

☐ 1 Human Bone Or Teeth	☐ 9 Phytolith Sample(s)
☐ 2 Non-Human Bone Or Teeth	☐ 10 T-L Sample(S)
☐ 3 Antler	☐ 11 Sediment Sample(s)
☐ 4 Unworked Marine/River Shell	☐ 12 Wood
☐ 5 Worked Marine/River Shell	☐ 13 Fiber
☐ 6 Turtle Shell	☐ 14 Fabric
☐ 7 C-14 Sample(s)	☐ 15 Fire-Cracked Rock
☐ 8 Pollen Sample(s)	☐ 99 Other

PREHISTORIC CERAMICS:

51. CERAMIC TEMPER:	52. SURFACE TREATMENT:	53. TYPE NAME:
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.
6.	6.	6.
7.	7.	7.
8.	8.	8.
9.	9.	9.
10.	10.	10.

HISTORIC SITE INFORMATION

54. PERIOD OF OCCUPATION BEGIN: PERIOD OF OCCUPATION END:

55. REFINED DATE FROM: REFINED DATE TO:

56. HISTORIC AFFILIATION:

57. HISTORIC DEFINITION:

58. SITE TYPE/FEATURE:

(NOTE: IF RESPONSE 58 IS #65, WATER VESSEL, COMPLETE ITEMS 59 – 76, AND APPLICABLE ITEMS FROM HISTORIC ARTIFACTS)

VESSEL INFORMATION

59. DATA SOURCE:

60. PRIMARY HULL CONSTRUCTION: DETAIL:

61. HULL FASTENINGS: DETAIL:

62. HULL DESIGN/CONSTRUCTION DETAILS:

63. WRECKAGE DIMENSIONS: LENGTH: FEET WIDTH: FEET DEPTH: FEET
HOW DETERMINED:

64. ESTIMATED ORIGINAL DIMENSIONS: LENGTH: FEET WIDTH: FEET DEPTH: FEET
HOW DETERMINED:

65. ESTIMATE OF ORIGINAL VESSEL REMAINING: %

66. MEANS OF PROPULSION: PRIMARY: SECONDARY: DETAILS:

67. SAIL POWERED: NUMBER OF MASTS: OBSERVABLE REMAINS:
SAIL CONFIGURATION (IF POSSIBLE TO DETERMINE):
DETAILS:

68. ENGINE POWERED: MECHANISM: DETAILS:
ENGINE NUMBER: TYPE: FUEL:
BOILER NUMBER: TYPE:

69. ALTERNATE MEANS OF POWER (IF ANY): DETAILS:

70. CAUSE OF LOSS: DETAILS:

71. COUNTRY OF CONSTRUCTION (IF KNOWN):

72. ARTIFACT CATEGORIES OBSERVED:
- ☐ Cargo
- ☐ Ordnance
- ☐ Ship's Equipment
- ☐ Personal Effects
- ☐ Other

73. PURPOSE OF CRAFT: DETAILS:

74. TYPE OF VESSEL:

75. VESSEL DESCRIPTION:

76. VISIT HISTORY (DATE, ORGANIZATION, PURPOSE, RESULTS):

HISTORIC ARTIFACTS

77. ACTIVITIES GROUP:
- ☐ 1 - Construction Tools
- ☐ 2 - Farm Tools
- ☐ 3 - Toys
- ☐ 4 - Fishing Gear
- ☐ 5 - Colonial-Indian Pottery
- ☐ 6 - Storage Items
- ☐ 7 - Ethnobotanical
- ☐ 8 - Associated With Stable Or Barn
- ☐ 9 - Other

78. AGRICULTURE:
- ☐ 1 - Farm Tool
- ☐ 3 - Fencing Material

	☐ 2 - Assoc. w/ Stable/Barn	☐ 9 - Other
79. ARCHITECTURAL GROUP:	☐ 1 - Window Glass ☐ 2 - Nails ☐ 3 - Spikes	☐ 4 - Construction Hardware ☐ 5 - Door Lock Parts ☐ 9 - Other
80. ARMS GROUP:	☐ 1 - Musket Balls, Shot, Sprue ☐ 2 - Gun Flints, Gunspalls	☐ 3 - Gun Parts, Bullet Molds ☐ 9 - Other
81. CLOTHING GROUP:	☐ 1 - Buckles ☐ 2 - Thimbles ☐ 3 - Buttons ☐ 4 - Scissors ☐ 5 - Straight Pins	☐ 6 - Hook & Eye Fasteners ☐ 7 - Bale Seals ☐ 8 - Glass Beads ☐ 9 - Other
82. HISTORIC MISCELLANEOUS:	☐ 1 - Bone Fragment ☐ 2 - Furniture Hardware ☐ 3 - Button Manufacturing Blanks	☐ 4 - Silversmithing Debris ☐ 9 - Other
83. KITCHEN GROUP:	☐ 1 - Ceramics ☐ 2 - Wine Bottle ☐ 3 - Case Bottle ☐ 4 - Tumbler ☐ 5 - Pharmaceutical Bottle	☐ 6 - Glassware ☐ 7 - Tableware ☐ 8 - Kitchenware ☐ 9 - Other
84. MILITARY OBJECTS:	☐ 1 - Swords ☐ 2 - Insignia ☐ 3 - Bayonets	☐ 4 - Artillery Shot & Shell ☐ 9 - Other
85. PERSONAL ITEMS:	☐ 1 - Coins ☐ 2 - Keys	☐ 3 - Personal Items ☐ 9 - Other
86. PIPES:	☐ 1 - Tobacco Pipe ☐ 2 - Stub-Stemmed Pipes	☐ 3 - Pipe Stems ☐ 9 - Other

87. TEMPORALLY DIAGNOSTIC ARTIFACTS:

COMMENTS

88. OWNER/TENANT INFORMATION:

89. DIRECTIONS TO SITE:

90. RESEARCH POTENTIAL:

91. EXPLANATION OF RECOMMENDATIONS:

92. EXCAVATION RESULTS:

93. EXPLANATION OF IMPACTS:

94. TESTING RESULTS:

95. FEATURE DESCRIPTION:

96. OTHER IMPORTANT ARTIFACT TYPES:

97. HISTORIC CERAMIC TYPES:

98. HISTORIC SITE DESCRIPTION:

99. COMMENTS:

100 – 107: OFFICE OF STATE ARCHAEOLOGY USE ONLY

100. NATIONAL REGISTER STATUS:
101. NATIONAL REGISTER CRITERION:
102. DATE ON NATIONAL REGISTER:
103. TYPE OF FORM:
104. RECORDER STATUS:
105. FORM RELIABILITY:
106. LOCATIONAL RELIABILITY:
107. FORM DATA CHECKED BY: DATE:

APPENDIX C

North Carolina Office of State Archaeology (OSA) Cemetery Site Form

This appendix is intended to illustrate what information is collected on the OSA Cemetery Site Form. Fillable version can be downloaded from the OSA Forms page.

North Carolina Cemetery Site Form

Identity

Cemetery name(s) _____

State site number: 31_____ State Property Office complex number ____ ____ _____
(CTY) (CO) (COMP)

Other site numbers _____ Organization assigning other number _____

Recorded by _____ Organization name (if any) _____

Mailing address_____

Phone number(s) _____ Email _____

Form submitted by _____ Date Submitted_____

Reason for recording cemetery _____

If compliance, provide:

Tracking number _____

Compliance project name_____

Location and Ownership

County _____ City, town, community or township _____

Cemetery address (if applicable) _____

Directions to cemetery:

Access to cemetery: Restricted (explain)_____
Unrestricted

Cemetery owner name and address:

USGS topographic quadrangle map name_____

Provide coordinates in Latitude ____* _____' _____" Longitude ____* _____' _____"

OR Universal Transverse Mercator (UTM)

Datum: NAD27 NAD83 Zone ___ Easting _____ Northing _____

*****Please attach a map showing the cemetery's location*****

Description

Public cemetery _____ Entity Name _____

Private cemetery: Family

Church (Name, denomination)_____

Fraternal/Organization (Name)_____

Other (explain) _____

Status: in use
maintained
neglected
abandoned

Size of cemetery (approx) _____

Number of graves (approximate) _____

Is the cemetery enclosed? Yes
No

Type of enclosure: wall
fence
hedge
other_____

Condition of enclosure
Good
Poor
Other _____

Number of marked graves _____ unmarked graves _____ legible markers _____

Period of use began _____ Period of use ended _____

Date of earliest marker _____ Date of most recent marker _____

Marker type(s) wood
limestone
granite
marble
concrete
ceramic
encased paper
other_____

If unusual markers present, please describe:

Please use the table attached to list the individuals buried in the cemetery and provide transcriptions of any marker inscriptions

Cultural Affiliation: Native American
African American
Slave
White
Unknown
Other _____

Are historic or prehistoric artifacts present?
Yes
No
Unknown
Describe _____

Has the cemetery been documented in a cemetery survey? Yes
No

Publication (Please provide publication information and/or Web address):

Special/historical significance of cemetery:

Research potential:_____

Recommendations :_____

Any other information pertinent to the cemetery:

Environment and Condition

Topographic situation_____ Elevation (feet AMSL) _____ Modern vegetation _____ __

Slope range: low ___ % high ___ % Slope Face Direction _____ NRCS Soil type _____

Soil series name _____ Soil composition _____

Distance to water (meters): _____ Nearest water type : _____

Drainage basin: _____ Ground visibility: low _____ % high _____ %

General condition of cemetery:

- Well maintained and preserved
- Marginally maintained
- Not maintained
- Overgrown, but easily identifiable
- Overgrown, not identifiable
- Not identifiable as burial site (known to exist by oral tradition)

Explain: _____

Have markers or other aspects of cemetery been damaged? Yes
No

Damage caused by (check all that apply):

- Vandalism
- Animals/grazing
- Farming operations
- Industrial operations
- Development or construction activities
- Custodial care
- Natural activities
- Neglect or attrition
- Other means (describe) _____

Percent destroyed (estimate) _____ Date destroyed, if known _____

Is cemetery currently threatened?

Yes (please explain) _____
No

OFFICE OF STATE ARCHAEOLOGY USE

National Register Status

- Determined Eligible
- Placed on the Study List
- Approved for Nomination by NRAC
- Currently listed on NRHP
- Removed from NRHP
- Not eligible after evaluation
- Unassessed
- North Carolina Archaeological Record Program

Form reliability

- Complete
- Incomplete
- Unreliable

Criterion

A B C D

Date listed _____

Locational reliability

- Accurate
- Unknown
- Unreliable
- Within 100 meter radius
- Within 500 meter radius
- Within 1 km radius

Form Checked by _____ Date_____

Name(s) on marker	Birth date	Death Date	Marker Type	Marker Material	Condition of marker	Inscription

APPENDIX D

Handbook for Completing the North Carolina Office of State Archaeology (OSA) Site Form and Cemetery Form

NORTH CAROLINA
OFFICE OF STATE ARCHAEOLOGY

ARCHAEOLOGICAL SITE FORM HANDBOOK

VERSION VIII

-October 2023-

Update

The North Carolina Office of State Archaeology (OSA) forms for recording historic and prehistoric archaeological sites provide a standardized method for recording site information for access and management. This guide outlines the basic procedures for requesting permanent site numbers and recording archaeological sites. These instructions are intended for professional archaeologists operating through cultural resource management or academic research programs.

Requesting Permanent Numbers

All archaeological sites identified through field investigations receive a trinomial site number to be included on a completed OSA site form submitted for compliance review. Any artifacts to be curated with the OSA Research Center require an OSA-assigned accession number. Please make requests for site and/or accession numbers by email to site.numbers@dncr.nc.gov. Questions may be directed to this email address or contact the Site Registrar.

Please do not send partially completed site forms as a means of making a request. Completed site forms should be submitted after the requested site numbers and applicable accession numbers have been assigned by our office.

Please provide the information below when requesting state site numbers from the OSA. It is helpful to provide this information in a table format, such as an Excel spreadsheet. The Site Number Request Table may be used as a template when submitting a request for permanent site numbers.

- Project or temporary site number for each site
- County in which the site is located
- Age of the site: prehistoric, historic, or both
- The sites for which an artifact accession number is being requested
- A topographic map(s) clearly noting site location(s) and boundaries, map name (i.e., quadrangle name), and county. If all sites legibly fit on a single map, one may be submitted for multiple sites.
- GIS information in the form of shapefiles (preferred), kmz/kml files, or the UTMs and datum for each site
  We request both a map and shapefiles to ensure the most accurate plotting of sites in our GIS record. If you choose to submit shapefiles or kmz/kml files, we do not require the submission of UTMs. Please review the following section for how to best submit GIS data when requesting site numbers.

Submitting GIS Data

When requesting permanent state site numbers, please provide GIS data for all sites. To reduce the errors in location accuracy, we prefer receiving boundaries (i.e., polygons) of archaeological sites, surveyed areas, and/or Areas of Potential Effect (APE). The following is guidance for ease in submitting appropriate GIS data to OSA.

- Please use WGS 1984 Web Mercator (auxiliary sphere). This is the projection used by OSA, but we will also accept NAD 1983 North Carolina State Plane (Feet) or NAD 1927 UTM Zones 16, 17, or 18 (site form still requires UTMs).
- Zip GIS data into one file for transmission. For example, whether you are submitting one shapefile or three shapefiles, there should be one zipped file submitted. Zipping shapefiles ensures that all associated files (.prj, .dbf, .shp, etc.) are included. Tables and maps do not need to be zipped with GIS data.
- Sites should be grouped into individual shapefiles of like feature types (e.g., sites recorded as polygons should be merged into one shapefile, project APE in another). This limits the amount of processing done by OSA staff.
- Do not merge dissimilar data (e.g., APEs with sites).
- Please identify the site(s) by including the temporary site number in the attribute table.
- Some email providers may not allow .zip files as attachments. If this is the case, rename the file extension by adding "_rename". Example: "sites.zip" becomes "sites.zip_rename".
- In addition to GIS data, we request a map of site locations to ensure that sites are accurately plotted when they are imported into our GIS record.

Which Form to Use

Currently, two forms are used by the Office of State Archaeology for recording site information.

Form VIII

This is a general-purpose form designed to record detailed site information for management and planning purposes. Form VIII should be used under the following conditions:

a. To record all previously unrecorded historic and prehistoric archaeological sites.
b. To record all site revisits or updates. Instances that fall into this category include but are not limited to subsurface testing and excavation at the site.
c. To record attempted site revisits if the site is not relocated. If a site is not relocated in its originally recorded location, Fields 1 through 44 and Fields 88 through 99 should be filled out to the extent possible based on the work done to revisit the site.

Cemetery Form

Designed to stand alone, the Cemetery Form is used to record all historic cemeteries that have interments greater than 50 years in age.

Filling Out the Forms

When filling out either Form VIII or the Cemetery Form, it is imperative that the information entered is both complete and accurate. This is particularly important since the forms are used for archival and research purposes. Please complete all fields with accurate information, as appropriate. Forms that do not contain adequate information will be returned for completion.

The following is a field-by-field guide to the types of information required to accurately fill out Archaeological Site Form VIII.

Project Information

1. State Site Number: This field is for the permanent site number assigned by the OSA, as the central site data repository (since January 1983). This should be filled in after permanent site numbers have been obtained from the OSA.
2. Site Name(s): Record any name by which the site may be known. If there are two or more site names, a semi-colon should be used to separate site names.
3. Other Site #: This field primarily applies to site numbers assigned before 1983 by institutions or individuals other than the OSA. It is included on the form to allow cross-referencing between these earlier designations and current permanent site numbers.
4. Institution Assigning: Please record the name of the institution reporting the site. The institution code field can be skipped.
5. Project Site #: Individual archaeologists may wish to identify sites by a specific project abbreviation or otherwise temporary designation. Assigning specific project numbers will allow retrieval of information about a particular project area with only a knowledge of the alphanumeric prefix. Example: A site recorded during a survey of Bladen Lakes State Forest may be assigned the number BL77-142 (Bladen Lakes, 1977, site no. 142); information on all sites recorded during that survey would be retrieved by calling for BL77 data.
6. Site Component: Choose the appropriate period and setting from the drop-down menu; e.g., prehistoric or historic.
7. Site Remains: Describes whether the remains are above or below ground. Choose from the drop-down menu.

Site Location Information

8. County: Enter the county name followed by the appropriate two-letter abbreviation code (see Appendix A of this guide) to indicate the county where the site is located.
9. Quad Map and Mapcode: This field can be skipped.
10. Body of Water: If the site is an underwater resource, write in the name of the body of water in

which it is situated (e.g., Beaufort Inlet).

11. Coordinate System and Map Units: Choose from the drop-down menu.
12. Map Zone and Map Datum: Choose from drop-down menus the UTM zone (16, 17, or 18) and datum.
13. UTM Easting and Northing: Record the UTM coordinates of the site being reported.
14. Recorded with GPS? And GPS Data Post-Processed: Choose yes or no from the drop-down menu. *Attach USGS Map and Any Additional Site*: Append at end of the form.
15. Date Recorded: Use this space to record the Month, Day, and Year on which the site was initially recorded, visited, or re-visited.
16. Site Recorded as Result of Compliance Project: By checking the appropriate space, indicate if the site was recorded as a result of a compliance project.
17. ER #/CH #/Grant # (Obtain from OSA): If the site was recorded as a result of a compliance or grant project, contact the OSA for an appropriate Environmental Review, Clearinghouse, or Grant number.
18. Coding Date: Use this space to record the Month, Day, and Year on which the site form was completed.
19. Curation Facility: Indicate the name of the organization or institution where the artifacts from the site will be curated.
20. Accession Number(s): If applicable, indicate any accession or catalog number(s) assigned to artifacts recovered from the site by a particular curation facility. List accession numbers or ranges of numbers in historical order of assignment, if known.
21. Artifact Inventory Sheet Attached: Indicate if an artifact inventory sheet is included with the site form.
22. Bibliographic Reference Number: Reserved for internal use by the OSA to be filled in with the number assigned to the report. Leave blank.
23. Recommendations: Choose the item(s) that best describes recommendations for further action or research at the site. If none of the listed items pertain to the site, choose Other and use the space provided in Item 91 for a brief explanation.

Environmental Information

24. Geographic Situation: Choose the landform category that best identifies the topographic location of the site. If none of the indicated categories fit the site's location, please indicate by choosing Other. Definitions for the categories listed on the form are provided in Appendix B of this guide.
25. Elevation/Depth: Record the elevation of the site in feet or meters above mean sea level, or the depth at which the site is located, if underwater.
26. Slope Percent Low/High and Slope Face Direction: Percent slope may be calculated or obtained from NRCS soil data. Indicate the direction of the major downward slope at the site location.
27. Soil/Bottom Composition (SCS Typology): Note the soil composition category that best describes the soils present at the site location.
28. NRCS Soil Type Code: Record the specific soil type abbreviation and soil series name. This information may be obtained from U.S. Soil Conservation Service soils maps. If detailed maps are not available for the county where the site is located leave this space blank.

29. Modern Vegetation: Choose the category of vegetation currently covering the site. If none of the categories adequately describes the current site vegetation, please choose Other and describe the type of vegetation in the space provided.
30. Distance to Water/from Shore: Approximate distance (in meters) from site to nearest permanent water source, or to shore if underwater resource.
31. Nearest Permanent Water Type: Choose the type of permanent water that is nearest to the site and record the name of that water source when available. Use the Other category for situations not described by the categories listed. In the case of farm ponds, canals, and other man-made bodies of water, this field should be left blank. However, if the underlying original stream or water source can be identified from the USGS map then the original water type and distance should be coded.
32. Drainage Basin: Choose the name from the drop-down menu.
33. Estimated Site Size (m^2): Choose the category that best describes the maximum site area (in square meters).
34. Ground Visibility Low/High: Record the estimated percentage of ground surface visibility at the time the site was surveyed.
35. Underwater Visibility (Feet): Record visibility conditions when the underwater resource was visited.
36. Site Condition: Choose the relevant categories of environmental factors at the site. If none of the categories listed adequately describes the site, use the Other category and the space provided to describe the site's condition.
37. Percent Destroyed/Date Destroyed: Choose the estimated percentage of the site that has been destroyed and record the month and year in which the destruction occurred.
38. Destruction Causes: Choose the item or items which best describe destruction causes at the site. If none of the listed categories adequately describe the circumstances, then select Other and use the space provided for explanation. Additionally, if excavations have occurred at the site, they should be listed even if other types of site destruction have destroyed a greater portion of the site.

Investigations

39. Collections Made: Indicate if a surface collection was obtained for the site at the time of the survey.
40. Collection Strategy: Indicate the type of collection strategy used to obtain the surface materials from the site. If none of the listed categories adequately describes the methodology used, then select Other and use the space provided for explanation.
41. Area Covered in Controlled Collection: Record the approximate area (in square meters) covered in any controlled collections of surface materials from the site.
42. Test Made: Indicate if subsurface tests were conducted to determine the presence or absence of subsurface cultural deposits.
43. Testing Methods: Indicate the type of subsurface testing used at the site. If none of the listed categories adequately describe the methodology used, then select Other and use the space provided for explanation.
44. Excavation Date and Institution Excavating: Use these fields only for investigations utilizing test units. Indicate the Month and Year when excavations were conducted. Additionally, record the institution.

Prehistoric Site Information

45. Cultural Component(s): List in order of intensity the cultural components observed at the site. If additional space is needed for more than five (5) components, continue the list on the same line as the other values with codes separated by commas.

46. Site Function(s): Choose the category or categories that best describe the site functions.

47. Midden: Indicate the presence or absence of midden deposits at the site.

48. Lithics: Check the categories of lithic artifacts recovered from the site. If none of the categories adequately describe the artifacts, then select Other and describe in Item 96.

49. Tool Type and Frequencies: Check the categories of tool types and indicate how many of each type were recovered from the site. If none of the categories adequately describe the artifacts, then select Other and describe in Item 96.

50. Other Miscellaneous Items: Check any miscellaneous items or sample categories other than ceramics that were recovered from the site. If none of the listed categories apply, then select Other and describe in Item 96.

51-53. Indicate Combinations of Ceramics: These three fields are used to describe categories of prehistoric ceramics recovered from the site. Use Items 51 and 52 to record the temper and surface treatment of a ceramic category (e.g., sand tempered simple-stamped), and Item 53 to record a type name if applicable.

Historic Site Information

54. Period of Occupation Begin/End: Indicate the general beginning and ending periods of the site's occupation.

55. Refined Dates of Occupation: Use the space provided to record refined dates of occupation for the site.

56. Historic Affiliation: Choose the cultural and ethnic affiliation categories that best describe the site. If none of the categories listed adequately describe the site.

57. Historic Definition: Choose the categories of historic site functions provided on the site form that best describe or define the main structure at the site.

58. Site Type/Feature: Choose categories that best describe the overall definition of the site.

Vessel Information

Complete this section only if the response to Item 58 is Water Vessel.

Historic Artifacts

77.-86. Historic Artifact Groups: Indicate the presence of artifact categories within each of the listed Artifact Groups. If none of the categories for a given group sufficiently describe artifacts recovered from the site, then select Other and describe them in Item 96. The definitions and categories listed are based on those defined in South's (1977) *Method and Theory in Historical Archaeology*.

87. Temporally Diagnostic Artifacts: Indicate if temporally diagnostic artifacts are present in the assemblage.

Comments

88. Owner/Tenant Information: Record the name(s) and address(es) of the property owner or individual(s) who informed the archaeologist of the site's existence, or the individual(s) who lease the property from the landowner listed above.
89. Directions to Site: Provide a brief narrative describing the route to the site using estimated distances and referencing roadways, waterways, and landmarks as applicable.
90. Research Potential: In the space provided, and if necessary on an additional page, evaluate as succinctly as possible the research potential of the site in terms of general and specific problems of archaeological and anthropological method and theory. National Register of Historic Places criteria of significance may or may not be of relevance.
91. Explanation of Recommendations: Use the space provided to record a more detailed but succinct explanation of the recommendations listed in Item 23.
92. Excavation Results: Use only for investigations utilizing formal test units. Indicate test unit size, placement, and number, and briefly summarize findings.
93. Explanation of Impacts: Briefly describe environmental and artificial impacts to the site.
94. Testing Results: Briefly summarize the results of any subsurface tests conducted at the site. Indicate the total number of tests and the number of positive tests.
95. Feature Description: Give a brief description of any prehistoric features identified.
96. Other Important Artifact Types: Describe any historic artifacts not listed in Items 77-86.
97. Historic Ceramic Types: Identify historic ceramic types collected from the site.
98. Historic Site Description: Give a brief description of the site and any features observed.
99. Comments: Use the space provided to record any additional or miscellaneous information about the site.

Office of State Archaeology Use Only

100. National Register Status: OSA use only. Archaeological sites reported during Section 106 or similar compliance-related projects will be evaluated in accordance with appropriate criteria for inclusion in the National Register of Historic Places. Investigators must include NRHP significance recommendations in reports; final determinations will be entered into the state site inventory by OSA personnel. For further reference see: *National Register Bulletin 15*: "How to Apply the National Register Criteria for Evaluation" (National Park Service).

101-107. OSA use only.

Appendix A: North Carolina County Name Abbreviations

Alamance	AM	Cumberland	CD	Johnston	JT	Randolph	RD
Alexander	AX	Currituck	CK	Jones	JN	Richmond	RH
Alleghany	AL	Dare	DR	Lee	LE	Robeson	RB
Anson	AN	Davidson	DV	Lenoir	LR	Rockingham	RK
Ashe	AH	Davie	DE	Lincoln	LN	Rowan	RW
Avery	AV	Duplin	DP	Macon	MA	Rutherford	RF
Beaufort	BF	Durham	DH	Madison	MD	Sampson	SP
Bertie	BR	Edgecombe	ED	Martin	MT	Scotland	SC
Bladen	BL	Forsyth	FY	McDowell	MC	Stanly	ST
Brunswick	BW	Franklin	FK	Mecklenburg	MK	Stokes	SK
Buncombe	BN	Gaston	GS	Mitchell	ML	Surry	SR
Burke	BK	Gates	GA	Montgomery	MG	Swain	SW
Cabarrus	CA	Graham	GH	Moore	MR	Transylvania	TV
Caldwell	CW	Granville	GV	Nash	NS	Tyrrell	TY
Camden	CM	Greene	GR	New Hanover	NH	Union	UN
Carteret	CR	Guilford	GF	Northampton	NP	Vance	VN
Caswell	CS	Halifax	HX	Onslow	ON	Wake	WA
Catawba	CT	Harnett	HT	Orange	OR	Warren	WR
Chatham	CH	Haywood	HW	Pamlico	PM	Washington	WH
Cherokee	CE	Henderson	HN	Pasquotank	PK	Watauga	WT
Chowan	CO	Hertford	HF	Pender	PD	Wayne	WY
Clay	CY	Hoke	HK	Perquimans	PQ	Wilkes	WK
Cleveland	CL	Hyde	HY	Person	PR	Wilson	WL
Columbus	CB	Iredell	ID	Pitt	PT	Yadkin	YD
Craven	CV	Jackson	JK	Polk	PL	Yancey	YC

Appendix B: Topographic Situation Definitions

Listed below are definitions for the topographic situation categories used in Item 22, on page 2 of Archaeological Site Form V. These definitions have been drawn primarily from the American Geological Institute's 1972 edition of the "Glossary of Geology."

1. **Undifferentiated floodplain**: A surface (expanse) or strip of relatively level land adjacent to a stream or river.
2. **Terrace remnant on floodplain**: Section of an ancient dissected terrace now incorporated or surrounded by the present floodplain. These terrace remnants generally will have a cross-section featuring one steep face articulating in a sharp angle with the gently sloped back slope (wedge shaped).
3. **Low rise on floodplain**: Any major projection in a floodplain which is not a terrace or levee remnant. Examples would include elevated meander scars, former islands from ancient channels, and rock outcrops.
4. **Natural levee**: A long, broad, low ridge or embankment of sand and silt, built up by a stream on its floodplain and channel banks. A typical cross-section would include a steep face or bank on the stream side of the levee and a gentle backslope which grades into the floodplain surface.
5. **Levee remnant**: A dissected remnant of levee occurring near an existent or ancient stream channel. Such remains may or may not be in a floodplain. An example would be a former natural levee along a stream which has been segmented by flood erosion.
6. **1st terrace**: The first level surface in a stream valley above (if existent) the floodplain and more or less parallel to the stream channel. The first terrace may represent the only terrace or may be the lowest (in elevation) of a series of terraces in a stream valley.
7. **2nd terrace**: Terrace, as described above, which exists above the 1st terrace and below the third terrace.
8. **3rd terrace**: Terrace, as described above, which exists above both the 1st and 2nd terraces. Should there be more than three terraces (e.g., 4th terrace, 5th terrace) they should be coded as 3rd terrace and not 4th or 5th.
9. **Sand dune**: A low mound, ridge, band, or hill of loose sand piled or heaped up by the wind, commonly found along seashores and more rarely along the borders of large lakes or river valleys.
10. **Upland or talus slope**: An often steep, concave slope formed by the accumulation of loose rock fragments and soil (generally) at the base of a cliff or steep slope. This may be referred to as the foot of a mountain - the integration of a mountain or hill with the surrounding topography.
11. **Upland flats**: Also called upland plains. These consist of a relatively level area of land lying in the inland areas of North Carolina.
12. **Hill or ridgetop**: A hill is defined as a natural elevation of the land surface rising rather prominently above the surrounding land, usually of limited extent and having a well-defined outline (rounded rather than peaked or rugged) and is generally considered to be less than 300 meters (1000 feet) from base to summit. A ridgetop refers to the top of 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 or hill. A steep-sided upland between valleys or a valley and mountain (hill) is also defined as a ridge.

13. **Saddle (between ridge or hilltops)**: A level ridge connecting two higher elevations. A saddle typically is a small flat area with two upslopes in opposite directions and two downslopes at right angles to the upslopes.
14. **Stream confluences**: A place adjacent to the meeting of two or more streams. Should a site be located within 200 meters (656 feet) of a stream confluence, it should be coded as such (14) regardless of other topographic features on which the site is located.
15. **Terrace face**: The steep slope between the floodplain and terrace or between terraces. Sites once on the terrace may be found exposed on the terrace face, or sites buried within a terrace may be exposed by the erosion of a terrace edge.
16. **Hammock**: A fertile area of deep humus - rich soil - gently covered by hardwood vegetation, often rising slightly above a plain, swamp, or saltwater marsh. Also called a Hummock.
17. **Beach**: A gently sloping zone, typically with a concave profile of unconsolidated material (generally sand) that extends inward from the low water line to the place where there is a definite change in the material or physiography, as sand dunes or cliffs. Beaches are associated with bodies of water large enough to have waves and/or tides.
18. **Rock shelter**: An area protected by a ledge of overhanging rock. Typically, such shelters are the result of undercutting erosion of a limestone or sandstone cliff or bluff face.
19. **Island**: A tract of land completely surrounded by water such as an ocean, sea, lake, or stream.
20. **Fan (note whether colluvial or alluvial)**: A gently sloping fan-shaped mass of detritus, formed commonly at a place where there is a notable decrease in gradient (e.g., the intersection of a cliff and floodplain). An alluvial fan is stream deposited, and a colluvial fan is formed from rocks and soil eroded from a narrow portion of a cliff face.
21. **Toe slope/ridge toe**: A toe-shaped extension from the crest or side of a hill or other highland surface. Typically, a ridge toe divides two drainages, however minor. Ridge toes are also called spurs.
22. **Cave**: A naturally formed, subterranean open area or chamber, or series of chambers.
23. **Bluff**: A high bank or bold headland with a broad precipitous, almost perpendicular, sometimes rounded cliff face overlooking a plain or a body of water, especially on the outside of a stream meander.
24. **Cove**: A small, straight valley extending into a mountain or down a mountainside. A term used in the southern Appalachian Mountains for a relatively level area sheltered by hills or mountains.
25. **River shore**: A narrow strip of unconsolidated sediments (i.e., sand or silt) immediately adjacent to a stream; usually nonvegetated.
26. **Stream bank**: The sloping margin of a stream, serving to confine the water to its normal channel.
27. **Bench**: A small terrace or step-like ledge breaking the continuity of a slope; an eroded bedrock surface between valley walls.

99. **Other**: Please describe the situation coded as Other in detail in the space provided.

APPENDIX E

ShareFile User Guidelines

Citrix ShareFile User Guidelines

North Carolina Office of State Archaeology

1. This ShareFile folder is **ONLY** for submitting digital ER archaeological survey files (i.e., reports, site forms, GIS data, etc.) to the Office of State Archaeology (OSA).
    a. All other submission types must be sent to environmental.review@dncr.nc.gov.
    b. Contact the Historic Preservation Office to submit Historic Structure Survey Reports.
    c. Contact the OSA directly to submit documents outside of the ER process.
    d. Contact the Office of State Archaeology Research Center at osa.curation@dncr.nc.gov to submit curation documents.
2. Your agency's main ShareFile folder will be titled ER_submissions_YourAgencyName
3. When submitting digital files, create an individual project subfolder within the main folder using the following naming convention:
    a. ER Number_Date
4. When submitting **REVISED** reports, please create a new subfolder within the main folder using the following naming convention:
    a. ER Number_Date_revised
5. We recommend that applicants wait to conduct surveys until one has been requested by OSA. If you are submitting digital files for review before the project was assigned an ER tracking number due to other federal regulations, create an individual project subfolder within the main folder using the following naming convention:
    a. County Name_Project Name_Date
6. When submitting digital files within the above subfolders, use the following naming conventions:
    a. Reports: Report title
    b. Site Forms: Site number without the 31
        i. Example: WA1234
    c. All documents should be submitted as searchable PDFs.
    d. You may also create sub-sub folders, i.e., a folder for site forms.
7. You must still submit a transmittal letter to the Environmental Review Branch. **Review of this project will not begin until the transmittal letter is received**. The transmittal letter should include:
    a. The name of the ShareFile Folder the documents were uploaded.
    b. The date on which the documents were uploaded.
8. Please allow 30 days from receipt of a completed submission for the SHPO's review; incomplete submissions will be returned.
9. Do not add any other users to this folder without first checking with the OSA.