STANDARDS
AND
GUIDELINES
FOR
ARCHAEOLOGICAL INVESTIGATIONS
IN MARYLAND

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STANDARDS AND GUIDELINES
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Prepared by

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PREFACE

In 1981, the Maryland Historical Trust (Trust) issued the first statewide guidelines for archaeological work conducted in Maryland. For over a decade, the Guidelines for Archeological Investigations in Maryland (McNamara 1981) served as the minimum standards for all phases of archeological work performed in the state. The 1981 guidelines greatly improved the general quality and consistency of archeological investigations and resulting project reports for Maryland. However, the Trust realized that revisions to the 1981 document were necessary to address changes in federal and state historic preservation legislation and regulations, to incorporate advances in archeological methods and techniques, and to correct other deficiencies identified by the Trust’s subsequent experience in the review of archeological projects.

These new standards and guidelines provide an expanded discussion of the goals, methods, and required products of the major stages of archeological work in Maryland. These phases include: identification survey (Phase I), site evaluation (Phase II), and data recovery/treatment (Phase III). This document also contains the minimum requirements for the processing and curation of collections and associated reporting. In addition, the document presents information regarding other types of cultural resource investigations (such as archival studies, historic preservation plans, work conducted for Trust grant/loan/easement projects, and site registration). The revised standards and guidelines also address the following important issues related to archeological research conducted in Maryland: professional qualifications, permits, treatment of human remains, multidisciplinary investigations, public education/interpretation, and use of the Trust’s library facilities. The standards and guidelines contain a listing of additional sources of technical information. Appendices include copies of report recording forms and other reference materials.

The revised standards and guidelines are intended for use by a broad and diversified audience. In addition to use by professional archeologists working in Maryland, the Trust anticipates that the document will serve as a reference for project sponsors, agency officials, Trust grant and loan recipients, and owners of properties on which the Trust holds historic preservation easements. Archeological investigations conducted for compliance with federal or state historic preservation statutes and regulations will be required to adhere to the standards and guidelines presented in this new document. Academic researchers and private scholars conducting investigations in Maryland also are encouraged to follow applicable sections of this document. The Trust will adhere to the principles presented herein for its own archeological activities, as required by Maryland law and regulations.

We envision that the new standards and guidelines will promote further improvement in the quality of archeological research, enhance the use of appropriate methods, provide consistency in reporting, and heighten agency and project sponsors’ understanding of the value and rationale for archeological investigations in the state of Maryland. Adherence to these minimum standards will help achieve these goals, as well as facilitate the Trust’s review of individual projects. Additionally, the new standards and guidelines, like the earlier 1981 Guidelines, are designed to allow for and even encourage archeologists and researchers to employ innovative approaches, consistent with the spirit and intent of these standards and guidelines, to fulfill project-specific goals.

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ACKNOWLEDGMENTS

The authors wish to extend their appreciation for the guidance, assistance, and support they received from their co-workers, colleagues, and the interested public in the preparation of these standards and guidelines. Many individuals, agencies, and organizations provided valuable insights and constructive comments which the authors employed in the original drafting of this document and its subsequent revision. While these parties are too numerous to name individually, the authors particularly acknowledge the contributions of the Council for Maryland Archeology, the Maryland Advisory Committee on Archeology, and the Archaeological Society of Maryland, Inc. The authors also offer thanks to the Maryland State Highway Administration, which generously permitted the use of several of its illustrations for the figures presented herein. Finally, the authors express special appreciation to Linda Durbin for her exceptional word processing assistance.

The authors are grateful for all of the contributions which served to enhance the overall quality and usefulness of these standards and guidelines. Comments on this document may be directed to the Office of Archeology, Maryland Historical Trust, 100 Community Place, Crownsville, Maryland 21032.
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I. INTRODUCTION

A. Authority

The Maryland Historical Trust (Trust), Maryland’s State Historic Preservation Office (SHPO), issues these standards and guidelines under the authority of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470a[b][3][D], [E], [F], and [G]), and Article 83B, §§ 5-607 (b)(8), (10), and (12), 5-617 (f)(1), 5-618 (g), and 5-623 (b)(2), of the Annotated Code of Maryland.

B. Scope and Purpose

This document represents a revision of Maryland Historical Trust Technical Report Number 1, “Guidelines for Archeological Investigations in Maryland,” (McNamara 1981). It presents minimum standards and guidelines for archeological projects in Maryland, and it recognizes the need for the procedures of historic preservation to be flexible to meet changing scientific and professional practice. In this spirit, many aspects of field procedures are left to the discretion of archeological researchers. The principal purpose of this document is to ensure the development of archeological information which is useful and of consistently good quality. Since archeological properties are non-renewable, fragile resources, it is important to undertake investigations according to carefully devised research plans that cause minimal harm to the properties while providing the most critical and significant historical data.

The primary audience intended for these standards and guidelines is the community involved with “compliance” archeology. This type of archeology entails the identification, evaluation, and treatment of historic properties in fulfillment of federal and state historic preservation laws. The group in compliance archeology which will benefit most from this document includes governmental personnel and their agents (e.g., environmental consultants and developers requiring federal or state permits or licenses), as well as grantors of historic preservation easements to the Trust and recipients of certain Trust grants and loans. These people may learn some of the basic archeological practices associated with historic preservation in Maryland; and they may find information on the essential archeological studies and documentation needed to comply with federal and state historic preservation laws. Professional archeologists working in the compliance field (most frequently as contractors) will also find in these standards and guidelines a formal statement of the minimum levels of effort for investigations in Maryland. Archeologists should not, however, view this document as a detailed textbook of the archeological methods and techniques which they are expected to have learned elsewhere. Explanations of archeological procedures are purposefully simplified herein for the general reader.

The secondary audience for these standards and guidelines consists of individuals and organizations involved with archeological studies that are not tied directly to compliance with federal or state law. Independent and academic researchers, as well as those who fund or oversee their work, can benefit from this document’s descriptions of the Maryland Inventory of Historic Properties, state antiquities permits and curation facilities, and Maryland’s resources for conducting research (e.g., State artifact collections and the Trust’s library of contract archeology reports). Additionally, local governments may find in these standards and guidelines a model from which to develop historic preservation procedures for their own jurisdictions.

1. Compliance Archeology One goal of this document is to facilitate the review of projects requiring compliance with federal and state historic preservation laws and regulations. Specific types of information are required by the governmental agencies responsible for identifying and treating historic
properties, as well as by those who are obliged to review activities affecting historic properties. The following chapters go beyond the National Park Service's (NPS) Archeology and Historic Preservation; Secretary of the Interior’s Standards and Guidelines (Dickenson 1983) to specify the documentation the SHPO/Trust requires from other governmental units and their agents to provide formal, substantiated comments as required by federal and state law. While the present volume discusses standards and guidelines for terrestrial archeology, preservation professionals should contact Trust staff to learn of corresponding documents on underwater archeology and historic architecture to assist and enhance multidisciplinary projects in which a number of different cultural resources may face impacts.

The Trust’s Office of Preservation Services reviews projects for effects on historic properties under the federal and state laws noted above. The most common review is conducted pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, or Article 83B, §§ 5-617 and 5-618, of the Annotated Code of Maryland. These laws (and their implementing regulations) require agencies to consider the effects of their undertakings on properties included in or eligible for the National Register of Historic Places and the Maryland Register of Historic Properties, respectively. It is important to emphasize that the governmental agencies which initiate the undertakings are responsible for compliance with the historic preservation laws. The SHPO’s role is a consultative one, for the provision of information, advice, and recommendations on how to eliminate adverse effects on historic properties.

Agency officials should begin their consultation with the SHPO as early in the project planning process as possible (when alternative project locations, configurations, and methods are still available; when conducting programmatic discussions; etc.) in order to provide adequate time to address historic preservation concerns and to prevent avoidable delays. This coordination should commence with the agency official submitting a written request to the SHPO for assistance in the identification of historic properties. The request should include: 1) a brief description of the proposed undertaking and the nature of federal or state agency involvement; 2) a clear delineation of the project’s area of potential effects on a section of a U.S. Geological Survey 7.5’ quadrangle (or other 1” = 2000’ scale map); 3) a summary of the agency’s review of existing information on known and potential historic properties that may be affected by the undertaking; and 4) a detailed description of past land use on the subject property.

Upon receipt of this information from the sponsoring governmental agency, SHPO staff archeologists and architectural historians review the Maryland Inventory of Historic Properties for recorded archeological sites and standing structures, as well as other available documents, to determine if known historic properties exist in the project’s area of potential effects. Staff will also examine survey records, historic maps, historic and prehistoric settlement models, and descriptions of present and past land use to assess the potential of the project area to contain historic properties that have not yet been identified. Based on this review, SHPO staff will inform the inquiring agency of its recommendations of the need for further survey or other historic preservation activities. Since the SHPO reviews over 4000 projects annually, on a first come -- first served basis, a response may take up to 30 days from the receipt of complete documentation from the requesting agency. Recommendations from the SHPO may include: 1) advising that no further studies are warranted (when, for example, prior surveys or documented past disturbance indicate that no significant archeological resources would be present); 2) calling for additional investigations to locate or evaluate the significance of properties (when archeological resources are known to or may exist in the area of potential effects); or 3) requesting the development of treatment plans for identified historic properties (when projects may adversely affect archeological resources). Figure 1 illustrates the review steps in a flow chart. The Advisory Council on Historic Preservation provides additional information on the review process in its course, "Introduction to Federal Projects and Historic Preservation Laws," and its publications.
Planning of a Project ("Undertaking"), with Funding, Permitting, or Licensing from a Federal or State Agency

Government Agency Determines Project's Area of Potential Effects for Historic Properties

Government Agency Assesses Needs for Identification and Evaluation of Historic Properties

* Prior Survey Found No Historic Properties or * Low Potential for Historic Properties

Phase I Archeological Investigation (No Documented Archeological Resources, but Potential for Significant Archeological Properties)

Phase II Archeological Investigation (Documented Archeological Resources that May Be Significant)

No Historic Properties

Historic Property Exists

Government Agency Assesses Effects

No Effect

Adverse Effects

Exceptions to the Criteria of Adverse Effects

Consultation; Memorandum of Agreement

No Adverse Effects

Treatment (Phase III Archeological Investigation or other Mitigation Measures)

Proceed with Project

Figure 1. Flow chart of a government agency's steps in complying with Federal (Section 106 of the National Historic Preservation Act of 1966) or State (Article 83B, Sections 5-617 & 5-618, of the Annotated Code of Maryland) historic preservation laws for archeology. Consultation with the State Historic Preservation Office and other interested parties should occur throughout the process.
Other historic preservation compliance activities will necessitate consultation with the SHPO. These activities may involve: federal agencies locating, inventorying, and nominating to the National Register of Historic Places properties under the agencies’ ownership or control (16 U.S.C. 470h-2); Maryland state agencies locating, documenting, and nominating properties under those agencies’ ownership or control that may be eligible for the Maryland Register of Historic Properties (Article 83B, §§ 5-617 and 5-618 [a][1], of the Annotated Code of Maryland); individuals or organizations obtaining financial assistance through the Trust’s Historic Preservation Loan or Grant Programs (established by Article 83B, §§ 5-612 and 5-613, respectively, of the Annotated Code of Maryland); or individuals and organizations participating in the Trust’s Easement Program. Governmental agencies, consulting historic preservation professionals, and others who are involved with some facet of compliance reviews should realize that the Trust’s requests for adherence to specific standards and guidelines stem, in part, from statutory responsibilities to comply with National Park Service requirements.

2. **Archeology Beyond Compliance** Those researchers conducting archeological investigations in Maryland for academic and similar purposes will find much of use and interest in these standards and guidelines. For example, archeological projects proposed for caves and for certain lands owned or controlled by the state require permits from the Trust; and this document describes procedures for acquiring such permits. Archeologists conducting surveys and discovering previously unidentified cultural resources also will learn how to record archeological properties for the Maryland Inventory of Historic Properties.

It is not the intention of the Trust to use these standards and guidelines to direct or oversee the research of academic archeologists and other professional scholars. The Trust believes, however, that Maryland’s entire archeological community would benefit from consistent recording of archeological finds in conformance with the basic procedures outlined herein and from reporting results with reference to the historic contexts established in The Maryland Comprehensive Historic Preservation Plan (Weissman 1986). The Trust strongly recommends that all archeological work in the state take place according to professional standards and under the direct supervision of individuals who meet the Secretary of the Interior’s “Professional Qualifications Standards” (Dickenson 1983:44738-44739; Chapter VII). Organizations which fund or oversee the work of archeologists and local governments which plan to develop their own historic preservation laws are encouraged to consider these recommendations. In addition to acquiring a familiarity with the present standards and guidelines, archeological researchers should establish and maintain contacts with Trust staff for assistance in locating unpublished studies and records on cultural properties and to ensure that appropriate laws, regulations, and guidelines are followed.

C. **Organization**

Chapter II describes the goal of the identification component of historic preservation activities (Phase I), and discusses the research designs, archival studies, fieldwork, and analysis associated with locating archeological historic properties. Chapters III and IV provide corresponding information for the evaluation of an archeological property’s significance (Phase II) and for the treatment or mitigation of adverse effects on an archeological historic property (Phase III). Comments on other archeological investigations for archival studies; historic preservation plans; Trust grant, loan, and easement projects; the registration of archeological properties; and academic research are included in Chapter V. Chapter VI presents the required minimum standards for the processing and curation of collections, including artifacts and associated records. Additionally, Chapter VII contains standards and guidelines for the production of archeological reports and other documentation; and Chapter VIII (Special Provisions)
addresses professional qualifications, permits, treatment of human remains, and education. Finally, numerous references and appendices provide supplementary sources of technical archeological information.

D. Definitions

This Introduction closes with a list of some useful definitions of words and phrases in Maryland historic preservation:

Advisory Council on Historic Preservation - means the independent federal agency established by the National Historic Preservation Act of 1966 (16 U.S.C. 470i) and charged with advising the President and the Congress on historic preservation issues and with reviewing federal and federally assisted projects that affect historic properties.

Area of Potential Effects - means the geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is also called the "project area" or "study area" for purposes of these guidelines.

Archeological Property - means any object (e.g. artifact), site, or district which embodies human activity. For the purposes of this document, an archeological property must date from prehistoric or historic times (i.e., at least 50 years ago). Not all archeological properties (archeological resources) are necessarily historic properties.

Artifact - means any object which has been made or has been intentionally modified by human action. For the purposes of this document, the object must date from prehistoric or historic times (i.e., generally at least 50 years ago) to be an artifact.

Collection - means "material remains that are excavated or removed during a survey, excavation or other study of a prehistoric or historic resource, and associated records that are prepared or assembled in connection with the survey, excavation or other study" (36 CFR § 79.4[a]). Collections may include artifacts, specimens, field notes, drawings, photographs, and other materials.

Historic Contexts - means an organizational framework that groups historic properties by similarities in geographic region, time/developmental period, and theme. Historic contexts form a statewide system for the identification and evaluation of all known or expected historic property types and are the basis for developing appropriate treatment measures for those properties.

Historic Property - means any district, site, building, structure, monument, or object significant in the prehistory, history, terrestrial or underwater archeology, architecture, engineering, or culture of Maryland and which is included in or eligible for the National Register of Historic Places or the Maryland Register of Historic Properties. Historic properties include artifacts, records, and remains related to a district, site, building, structure, or object. Archeological sites are referred to as archeological properties in these guidelines.

Maryland Inventory of Historic Properties - means the Maryland Historical Trust's list of all districts, sites, buildings, structures, and objects of known or potential value to the prehistory, history, terrestrial or underwater archeology, architecture, engineering, and culture of Maryland.
Maryland Register of Historic Properties - means the Maryland Historical Trust's list of all properties included in or determined by its Director to be eligible for listing in the National Register of Historic Places by the United States Department of the Interior. (See Historic Property.)

National Register of Historic Places - means the United States Department of the Interior's list of districts, sites, buildings, structures, and objects that possess integrity and are associated with significant historical events; are connected with the lives of important people from the past; are embodiments of distinctive or artistic forms of construction; or have yielded or may yield information important in prehistory or history. (See Historic Property.)

Preservation and Historic Preservation - mean "identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance and reconstruction, or any combination of the foregoing activities" (16 U.S.C. 470w[8]).

Principal Investigator - means an individual who assumes responsibility for conducting or directly supervising a specific archeological project and who meets the Secretary of the Interior's "Professional Qualifications Standards" (Dickenson 1983:44738-44739; Chapter VII).

State Historic Preservation Officer (SHPO) - means the individual appointed by the Governor of Maryland to administer the State Historic Preservation Program under the provisions of the National Historic Preservation Act of 1966. SHPO can also refer to the office or staff of this individual.

State Plan - means The Maryland Comprehensive Historic Preservation Plan, prepared by the Maryland Historical Trust (Weissman 1986). The plan includes a description and evaluation of: the goals and benefits of historic preservation to Maryland; threats to Maryland's historic properties; preservation mechanisms in Maryland; the Trust's programs -- needs and recommendations; and recommendations for further actions to improve the overall effectiveness of preservation in Maryland.

Undertaking - means any project, activity, or program that can result in changes in the character or use of historic properties, if any such properties are located in the area of potential effects. Undertakings are also referred to as projects in these guidelines.

E. Additional Information

For additional information or assistance concerning the compliance review process or these standards and guidelines, contact the Trust's Archeological Services Unit/Office of Preservation Services, (410) 514-7628. The Trust's Office of Archeology provides guidance and oversight regarding general issues in Maryland archeology, (410) 514-7661.
II. IDENTIFICATION (PHASE I)

A. Goal

For Maryland, the goal of identification for compliance projects is to locate archeological properties that may be eligible for the National Register of Historic Places or the Maryland Register of Historic Properties, as appropriate, in an undertaking's area of potential effects. The various activities that comprise identification are grouped together under the designation of Phase I Archeological Investigation. Phase I studies entail development of research designs, archival and background research, field survey, analysis, and reporting. While Phase I investigations serve to discover or to locate archeological properties, Phase II and Phase III projects evaluate the significance of the resources and mitigate adverse project effects, respectively (see Chapters III and IV).

As a rule, Phase I surveys in Maryland involve some form of sampling -- for example, according to systematically arranged transects -- to permit the economical investigation of land with a high assurance that significant archeological resources have not been overlooked. Surveys which are designed to locate all historic properties in an area of potential effects will help to prevent the delays associated with discovering historic properties during a construction project (36 CFR § 800.11). The use of sampling in field survey is consonant with the Advisory Council’s admonition for federal agencies to “make a reasonable and good faith effort to identify historic properties ...” (36 CFR § 800.4[b]; see section below entitled D. Field Survey, I. General Considerations).

B. Research Designs

All identification projects should begin with the formulation of an explicit plan or program of archeological study -- a research design. The research design, part of which might take the form of a proposal written in response to a request for bids, is a framework that describes activities to accomplish the goals of an identification study. Important components of research designs are statements and discussions which justify chosen methods and techniques as the most logical and otherwise suitable means to locate potentially significant archeological resources.

The Objectives section of a research design should begin with a discussion of why archeological identification is needed for the particular project. First, it is necessary to name the governmental agencies and other parties involved in an undertaking; to describe the nature of the undertaking (e.g., construction of a transmission line with certain access roads) and its area of potential effects (including the area where both the direct results and indirect consequences of a project may occur); and to cite which specific laws, regulations, guidelines, and other requirements have either called for or apply to the project. Based on this information, project archeologists should ensure that an appropriate level of research is conducted.

Specific objectives of a Phase I Archeological investigation are to include:

- delineation and inventorying of all archeological properties (that may be eligible for the National Register or the Maryland Register) in the area of potential effects;
- characterization and interpretation of all identified archeological properties with respect to the cultural/temporal periods of the State Plan;
- appraise the results of the investigations in light of existing models of settlement patterning;
- if sufficient data are available, evaluation of National Register or Maryland Register eligibility;
- assessment of the undertaking’s impacts on the identified archeological properties; and
- determination of the need for additional archeological work.
The Methods and Techniques portion of a research design should describe the amounts and kinds of archival or background research, field investigations, and analytical studies anticipated to achieve the goals and objectives of the project. Descriptions of general research methods (e.g., cultural ecological modeling, sampling) and specific research techniques (e.g., pedestrian survey, soil chemistry analyses) should be justified to ensure that appropriate and successful strategies are planned for a particular project area's size, accessibility, environmental characteristics, and expected archeological properties. An explicit discussion of methods and techniques will also help agency reviewers and other archeologists to judge the quality and effectiveness of the work and permit scientific replication of analyses.

The Expected Results section of the research design should discuss the number, size, location, age, and general cultural characteristics of the archeological resources anticipated in the area of potential effects. Thorough background research into the project area and into predictive models of settlement for analogous locations can provide the basis for these expectations. Whenever possible, a preliminary field check should take place to provide familiarity with the micro-environment(s).

Additional technical information for developing strategies for identification surveys includes the archeological publications listed in the "Secretary of the Interior's Standards for Identification, Recommended Sources of Technical Information" (Dickenson 1983:44723). Among numerous other sources on survey methods and techniques are professional journals and publications by Ammerman (1981), Ammerman and Feldman (1978), Flannery (1976), Hirth (1978), McManamon (1984), and Redman (1974).

C. Archival and Background Research

The purpose of archival and background research is to acquire information on a project area's known and potential archeological properties prior to initiating time-consuming and costly field investigations. Most archival and background studies should be completed and their results assessed before fieldwork begins so that the preliminary survey strategies outlined in contract proposals may be refined. The non-field research will help guide the field survey by indicating where any documented Maryland Register or National Register eligible archeological sites are located and where other significant archeological properties may be found.

Documentary research in libraries, archives, and other facilities can provide both primary and secondary archeological information. Several of the most basic archival sources which describe known archeological sites and their locations are the Maryland Inventory of Historic Properties, the Maryland Register of Historic Properties, the National Register of Historic Places, and lists of sites for which determinations of (National Register or Maryland Register) eligibility have been made. It is important to note that standing structures included in the Inventory and the two Registers may also indicate the possibility of archeological resources from the historic period. Published and unpublished reports on previous archeological investigations in or near the current project area are also essential sources. Other documentary materials which can be useful in locating potentially significant archeological properties, depending on the nature of the undertaking and project tract include:

- contractors'/developers' maps and planning documents;
- historic maps and atlases, including early U.S. Geological Survey quadrangles;
- National Archeological Database (see Chapter VII.D);
- insurance records and maps;
- publications on local prehistory and history:
compilations of environmental data, (e.g., geomorphological studies and the Soil Conservation Service’s soil survey books with aerial photographs):
- building permits;
- tax maps;
- ground disturbance records.

Figure 2 illustrates how historic maps may provide information on historical settlement in a study area.

Informant interviews are another potential means by which one can obtain data on a project area’s archeological resources. Contacting people who live or work near a study site can yield very specific data on archeological sites and past land use. Preliminary field visits are necessary to establish a network of local contacts; and meetings with local chapters of the Archeological Society of Maryland, Inc., and with the Council for Maryland Archeology can offer the opportunity to discuss an area with a sizeable number of individuals. Maryland’s State Terrestrial Archeologist and archeologists of MHT’s Office of Preservation Services can provide the names of contact persons and may, in some instances, possess additional project-specific archeological knowledge.

From informants and from data sheets of the Maryland Inventory of Historic Properties, it is often possible to determine if collections of archeological specimens from a project tract exist and where they are located. Avocational archeologists or repositories like the Trust may possess the collections (see Chapter VI.C). Examination of the collections can provide an investigator with an idea of the kinds and ages of archeological resources expected in a project area; these studies can also suggest the range of variability of cultural materials present in a locality. Furthermore, by assessing the amount of past collecting of artifacts from a site, one might be better able to judge the integrity of an archeological property.

Collection studies, informant interviews, and documentary research together assist in predicting the number, location, and nature of archeological resources in a study area. Additionally, these activities enable the refinement of appropriate historic contexts for the interpretation of new archeological finds. Fully developed contexts provide the basis for well-reasoned discussions of the potential significance of the resources with respect to important research issues and comparative data from similar archeological properties.

Several of the most important facilities for conducting archival and background research are:
- Maryland Historical Trust
  100 Community Place
  Crownsville, MD 21032
- Jefferson Patterson Park and Museum
  10515 Mackall Road
  St. Leonard, MD 20685
- St. Mary’s City Commission
  P.O. Box 39
  St. Mary’s, MD 20686
- Maryland State Archives
  Hall of Records
  350 Rowe Boulevard
  Annapolis, MD 21401
- Enoch Pratt Free Library
  Baltimore, MD 21201
- Maryland Historical Society
  201 West Monument Street
  Baltimore, MD 21201
- Smithsonian Institution
  Washington, DC
- National Archives
  Washington, DC
- Library of Congress
  Washington, DC
- Local museums
- University and public libraries
- County and municipal government offices.
Figure 2. Illustration of a historic map providing information on historical settlement. (Used with the permission of the Md. State Highway Administration - Project Planning Division. Produced for or by the Archeology group.)
Numerous other sources of information are located in the Maryland Preservation Organizations Directory (Dorbin 1987).

D. **Field Survey**

1. **General Considerations** The Advisory Council’s regulations for the Section 106 review process state that federal agency officials “shall make a reasonable and good faith effort to identify historic properties that may be affected by the undertaking...” (36 CFR § 800.4(b)). In the same manner, archeologists conducting Phase I surveys for all federal and state compliance projects in Maryland are to conduct their investigations with “a reasonable and good faith effort.” This statement means first that some form of sampling should be employed so as to collect an appropriate amount of representative information in the area of potential effects. Secondly, whatever field procedures are followed must be well justified and systematically applied. Surveys performed according to a judicious sampling plan will help to reduce project costs while yielding credible information on the distribution of archeological properties throughout a project tract.

All surveys should be intensive and should include pedestrian (walkover) examinations of the ground surface as well as subsurface testing. This work should delineate all potentially significant archeological properties -- both known sites and previously unreported resources -- and should record current land-use features. Furthermore, sufficient geomorphological field studies should be conducted (with a specialist, if necessary) to ascertain whether intact archeological resources might exist in the soils and land forms of a project’s area of potential effects. The intensity of sampling (e.g., spacing of transects) must directly relate to the expected sizes of the archeological properties, the possibilities of spatial patterning of the resources, and the field conditions. (Archeologists considering the use of staged or nested approaches [Redman 1974:28-30] should contact the staff of MHT’s Office of Preservation Services as early in the planning process as possible.) While sampling of the area of potential effects is generally necessary, surveyors should retain all of the prehistoric and historic artifacts recovered from the sampled land for analysis and curation. (Recall that this document’s definition of artifact includes only those cultural items which are at least 50 years old. Therefore, an archeologist need not collect clearly modern objects like styrofoam cups or aluminum pull-tabs. It may be useful, however, to save a modern cultural object if it is critical for the interpretation of an archeological property’s stratigraphy and integrity.)

**Pedestrian survey.** which in some cases may be carried out simultaneously with subsurface testing, should include the examination of exposed sections of soil for artifacts and features. Even in areas covered with thick vegetation, it may be possible to discern features like trash dumps, wells, cellar holes, foundations, earth mounds, or rock cairns. The differential growth of vegetation, as at sites with ornamental trees and flowers where historic houses once stood, may also signal buried archeological deposits. Other potential targets of walkover surveys are standing historic structures, which may have associated archeological resources, and caves and rockshelters; the latter locations -- most frequently found in steep terrain -- may have been sites of prehistoric occupation.

Systematic walkover surveys may, in large measure, constitute the primary testing strategy of an area where deep burial processes, such as alluvial, colluvial, or aeolian deposition, are not expected and when the surface of a project tract has at least 50 percent exposed soil. This level of ground exposure affords a reasonable level of confidence to the recognition of most significant archeological resources in Maryland. However, the visibility of artifacts in many soils is often best following a washing rain; and the replication of collecting surface artifacts may be important to characterize the distribution of archeological materials (Ammerman and Feldman 1978; Ammerman 1993). If one can determine that
a survey tract was previously plowed even though it now is heavily covered by vegetation, the ground may be replowed to the same degree as before in order to expose the soil for pedestrian survey. It is important to document the prior cultivation, generally by limited subsurface testing, so as not to compromise the integrity of archeological resources.

Pedestrian surveyors should design field techniques to delineate archeological properties and to identify cultural affiliation and research potential. For example, if artifact collection by quadrats is proposed for a plowed field, then the sampling units should be small enough to reveal site boundaries and activity areas; but they should not be so overly small (piece-ploting in the extreme case) that the scattering effects of cultivation are ignored and the results provide a false sense of accuracy. Finally, there should always be an accompanying, even if minimal, component of subsurface testing. The objectives of this excavation work are to provide: 1) information on the subsurface characteristics (including depth and integrity) of archeological properties discovered on the exposed surface; and 2) reasonable confirmation that no buried archeological resources are present where none are visible on the ground surface. In general, some systematic surface surveys of cultivated project areas can be more cost effective than subsurface investigations.

A larger subsurface survey component is necessary for project areas where less than 50 percent of the ground surface is exposed soil. The recommended form of survey and the one which appears to be the most effective in Maryland is the excavation of shovel test pits (STPs) according to a carefully justified sampling strategy. STPs are circular holes dug to the width of a shovel blade (ca. 35 cm diameter) and to the depth of subsoil, which is devoid of cultural material. In order to lend assurance that the base of a given pit is culturally sterile, excavation should continue at least 10 cm into the subsoil. Digging by shovel should proceed according to recognizable soil horizons and strata, with each soil or stratum being screened individually through hardware cloth (generally 1/4" mesh) to recover small archeological materials. Stratigraphic excavation, even at the scale of STPs, can, in some instances, shed light on the integrity and significance of archeological properties. Excavators should place artifacts and other cultural items in bags with horizontal and vertical provenience, as well as with other pertinent information. Before backfilling the STPs, field personnel also should systematically record data on the study area's soils and stratigraphy, including depths of strata, content, soil textures (Soil Survey Staff 1975), and soil colors (Munsell Color 1975).

When local ground surface conditions warrant subsurface testing, the recommended form for most intensive surveys is the excavation of STPs according to a systematic, transect sampling procedure (Redman 1974:17-18). This strategy appears to be the most cost-effective and rigorous for surveying the frequently wooded lands and irregular topography of Maryland. The intervals between STPs and transects should be based on the background research, specifically on the expected diameters and spatial patterning of archeological properties and on any additional information relating to archeological resource size and visibility. When establishing survey grids, field personnel should choose the tools and techniques (tapes, compasses, transits, pacing) appropriate for the task of identifying archeological properties under given field conditions. Records must be made on how survey grids were established with reference to local environmental features (e.g., distance and direction to datum points, standing buildings, or highway intersections). A small number of extra test pits should be excavated around STPs that appear to produce "isolated" cultural materials, in order to look for archeological resources of a smaller diameter than the test interval.

Special environmental characteristics of a project area may make modified forms of intensive subsurface surveys more reasonable. For example, in the case where the land has steep slopes, the
pedestrian component of the survey is generally reliable for revealing the need for any subsurface investigation. Slopes of 10 percent and greater are believed to rarely contain significant archeological properties (see, for example, Kavanagh [1982]). Furthermore, in areas where significant, deeply buried archeological deposits may exist, it is necessary to carry out a minimal amount of excavation to a depth below that which is reachable by hand shovel. Floodplains, areas covered by colluvium, and bogs may be some of the locations with deep archeological properties. Augering may, in these situations, identify cultural strata; and backhoe trenching with limited hand excavation and sieving of soil from exposed column samples may discern artifacts and other cultural materials. The excavation of deep pits by hand or by mechanical means must meet all federal, state, and local statutes for human safety (e.g., OSHA requirements for the shoring of trenches). Prior to commencing surveys in areas that may have deeply-buried archeological resources, agencies should consult with the Trust's Archeological Services staff to determine the amount of deep testing which is appropriate. Also, whenever alternative identification procedures are proposed (e.g., aerial photography, other forms of remote sensing, soil chemistry studies, etc.), consultation with Archeological Services staff should precede fieldwork.

2. Special Considerations in Urban Settings

Since cities generally lack large tracts of land which are not covered by either pavement or buildings, field surveys in urban settings commonly take different forms than in rural areas. Survey strategies are directly related to the difficulty and large expense of conducting excavations in soils that are covered by concrete, standing buildings, rubble, or other hard materials. Archeological work in cities can also be costly for its extraordinary logistical problems and disruptions of municipal services. In addition, urban areas have often experienced intensive historic activity spanning several hundred years, with subsequent development building upon earlier episodes of historic occupation. Thus, archeological properties in urban contexts are frequently characterized by complex and deep stratigraphy and often consist of overlapping deposits representing several time periods of use.

For these reasons, Phase I investigations of urban settings initially entail detailed archival and background research to determine the types, time periods, and possible locations of prehistoric or historic archeological resources predicted within the area of potential effects. Chapter V.A presents a discussion of the goals, objectives, methods, and reporting requirements for an archival study. This background research is also useful for defining the most appropriate testing strategies and sampling plan for the project area.

In urban settings that still retain large expanses of open space (such as parklands or sizable residential tracts) it may be feasible to employ the surface and subsurface testing methods discussed in section D.1 above. However, when it would not be possible to examine the soil of an urban project area except by mechanical excavation (e.g., backhoe, jack hammer), Phase I field investigations may proceed in the following manner.

A pedestrian field check/disturbance study should occur in conjunction with the archival and background research, to assess the likelihood that significant, prehistoric or historic archeological properties exist in an area of potential effects. Documentary studies, interviews, and other background research should establish whether known or probable archeological resources are present. During the field check, there should be an examination of present land use to further consider how historic and modern building activities may have disturbed or affected the integrity of archeological properties. The contractor should then produce a report on the results of these Phase I studies and on the potential for significant archeological properties existing in the area of potential effects. Any excavation would await review of the report by Trust staff and would form part of a new Phase II project (Chapter III). In some
instances, the archival study and disturbance assessment alone may be sufficient to demonstrate that the area of potential effects has a low potential for containing significant archeological properties, and thus eliminate the necessity for undertaking costly field excavations.

Certain other urban settings may already contain a documented high potential for the presence of archeological properties (based on historical association, previously identified resources, or the undisturbed nature of the project area). In these situations, a cost effective course of action for identification would combine all the archival work and field checking of Phase I with more intensive background research, if necessary, and excavation of Phase II evaluative test units. Systematic test strategies should target the full range of potential resource types, based on the results of the archival study. A single report would describe all of the Phase I and II studies, and it would contain clear evaluations of the significance of all identified archeological resources.

Consultation with the Archeological Services unit of the Trust's Office of Preservation Services should precede all stages of urban compliance projects, to determine the most appropriate level of investigation for a given project area. Furthermore, there should be consultation with Archeological Services staff prior to field identification surveys when alternative discovery techniques are considered.

E. Analysis

Analyses of archeological resources identified through Phase I investigations should be geared, minimally, toward qualitative and quantitative description, as well as determination of the need for further field study. Analyses requiring greater expenditures of effort, such as radiocarbon dating and certain microscopic use-wear studies of stone tools, would be more appropriate during Phase II evaluation and Phase III data recovery projects when archeological significance and significant archeological properties are being examined (see below). The preservation of significant archeological properties is, after all, the goal of both federal and state historic preservation laws.

One of the primary analytical tasks should be the classification of all artifacts and features discovered. Analytical procedures must be explicit to permit the confirmation of results by other researchers. Investigators should conduct their identifications of archeological materials using the best current standards of professional knowledge and with reference to professional publications of comparative samples. Another important step is the cultural and temporal characterization of the archeological resources with respect to historic contexts of The Maryland Comprehensive Historic Preservation Plan (Weissman 1986). Examinations of the individual archeological materials should also involve the interpretation of the larger archeological property in terms of cultural behavior and at least regarding function or use.

Supplementary analytical activities should, when possible, provide information on site significance and integrity. In this regard, one must judge whether the quantity and quality of the observed archeological resources indicate that the archeological property might meet the eligibility criteria for the National Register of Historic Places (see section III E. below). Researchers, for example, should employ the results from their sample survey - whenever possible - to estimate the frequencies of different classes of artifacts and features for the entire archeological property. This estimate could serve an important role in comparisons with other known sites and in deciding on the need for further work. The examination of natural and cultural formation processes of the archeological record can also offer insights on site integrity, and therefore on significance. As an illustration, one should study the temporal homogeneity of archeological materials according to individual strata or other provenience units. Even at the Phase
I level, the detection of a number of mixed artifacts dating from multiple time periods might allow characterization of a site as "disturbed": this lack of integrity probably would obviate the need for further archeological investigations.

F. Reporting

Following the analysis of archeological resources, researchers must prepare complete draft and final reports on all of the Phase I activities. Chapter VII below contains standards and guidelines for these reports, copies of which must be submitted to the Trust's Office of Preservation Services. Additionally, Chapter VI discusses the requirements for processing and curation of the resulting collections (including artifacts and associated records).
III. EVALUATION (PHASE II)

A. Goal

The goal of evaluation for compliance projects is to determine if an archeological property identified in an undertaking’s area of potential effects is eligible for inclusion in the National Register of Historic Places (for Federal projects) or the Maryland Register of Historic Properties (for State projects). In Maryland, the various activities that comprise evaluation are grouped together under the designation of Phase II Archeological Investigation. Phase II studies entail development of research designs, archival and background research, field studies, analysis, and reporting.

B. Research Designs

As with identification studies, all evaluation projects should start with the formulation of an explicit research design. General aspects of research designs appear in Chapter II. More specific comments on research strategies for evaluative studies follow.

The Objectives of Phase II archeological investigation are to include:

- defining the horizontal and vertical limits of the archeological property in question;
- interpreting the archeological resource in terms of the activities, functions, time span, and historic contexts (from the State Plan) it represents;
- investigating research questions (from the State Plan and other sources) that can provide information on the property’s local or regional significance;
- decisively evaluating the eligibility of the property for the National Register or the Maryland Register, as appropriate, and according to the proper criteria (36 CFR § 60.4 and Maryland Department of Housing and Community Development Title 05.08.05, respectively);
- determining the impact of the proposed undertaking on the archeological property with reference to the federal Criteria of Effect and Adverse Effect (36 CFR § 800.9) or the State Criteria of Effect and Adverse Effect (Maryland Department of Housing and Community Development Title 05.08.06.13) for Federal and State projects, respectively; and
- assessing the need for additional archeological treatment of the property.

The Methods and Techniques portion of a research design should justify the proposed research strategies. These strategies should be designed to investigate the smallest sample of the property necessary to meet the outlined research objectives. Extant research reports (e.g., Phase I archeological investigations) and other readily accessible documents are several of the sources for development of a section on Expected Results; this portion of the research design should discuss the quantity, age, condition, and other general characteristics of the archeological materials and features anticipated in the study. Additional technical information for developing strategies for archeological evaluation projects includes the publications listed in the “Secretary of the Interior’s Guidelines for Evaluation, Recommended Sources of Technical Information” (Dickenson 1983:44725-447260), as well as the works by Binford et al. (1970), Flannery (1976), Redman (1987), and Redman and Watson (1970).

C. Archival and Background Research

The purpose of Phase II archival and background research is to supplement the existing information on a previously identified archeological property and to determine the resource’s significance and
eligibility for the National Register or Maryland Register. Investigators should carry out documentary research, informant interviews, and collection studies, as appropriate, to achieve these objectives. In addition to the sources noted in Chapter II, materials useful for the more intensive Phase II studies include:

► publications on the nature and significance of the general archeological property type;
► early lithographs and photographs;
► court records (deeds, mortgages, etc.);
► real property records;
► ordinances and resolutions;
► transportation records (e.g., ship manifests for a port);
► wills and probate inventories; and
► census data.

While most of the above items pertain to historical archeology, Phase II background research on certain prehistoric resources may entail consultation with soil scientists and geomorphologists on natural site formation processes. Reexaminations of the chronological and stratigraphic relationships of existing artifact collections might also provide new insights on a given site’s integrity and significance. Finally, the various components of Phase II archival and background research should lead to refinement of the historic contexts particular to the investigated archeological resource.

D. Field Studies

Phase II studies require the investigation of adequate portions of archeological properties to evaluate the significance of the resources. Still, the investigated areas of the properties should be the smallest ones which allow the attainment of the research goals. Besides reducing project time and costs, small samples can prevent the destruction of significant archeological features and information (Dickenson 1983:44724). The practice of limiting sample size below the level which would compromise resource integrity will also ensure that the proper review agency (Advisory Council on Historic Preservation or SHPO) is afforded its legally mandated opportunity to comment on governmental undertakings that may affect historic properties. In this connection, while the emphasis of Phase II field studies needs to be on archeological resources within areas of potential effects, investigators also should establish the total horizontal and vertical extent of the resources whenever possible. The determination of archeological boundaries, even if they extend outside of the precise limits of an undertaking, will provide more accurate information on resource size and can be to an agency’s advantage. For example, in the context of resource treatment, an agency might preserve outer archeological site areas in place in lieu of conducting further excavations within the area of potential effects. (It is not the intention of these guidelines, however, to suggest that Phase II field studies should extend beyond the area of potential effects off of the lands that are under the ownership, control, or jurisdiction of an agency in a given undertaking.)

Due to the diversity of archeological properties and the different constraints of undertakings, the precise amounts and kinds of Phase II field studies need to be determined on a case by case basis. Still, all archeological evaluation projects must include excavation as a major component of field sampling. Systematic walkovers of sites and intensive, replicated surface collecting can, however, be useful techniques for the establishment of site boundaries, the estimation of quantities of archeological materials, and the determination of where to place larger excavation units (Ammerman and Feldman 1978; Redman and Watson 1970). As with Phase I surveys, the surface examination of sites should proceed only if at least 50 percent of the resource area has exposed soil and generally only after a washing rain. When
there is less visibility of the ground surface, one must rely on subsurface testing.

Generally, the excavation of systematically placed transects of close-interval shovel test pits (or, in some cases, auger holes) can determine the limits of an archeological property relatively quickly (e.g., Chartkoff 1978). This intensive shovel testing may also locate concentrations of artifacts and features for more detailed examination. The next step in a multi-stage Phase II investigation is to use the information generated by surface collection or test pits to decide which arrangement of larger excavation units would most efficiently provide for the evaluation of resource significance and the study of related research issues (see above). Also, sufficient geomorphological field studies should be conducted (with a specialist, if necessary) to interpret the natural context of the archeological resources.

Individual test units should measure at least 1 x 1 m to 2 x 2 m, depending on site size and expectations of artifact density and feature preservation. There should be an appropriate number of these units to ensure the sufficient sampling of an archeological property and its contents to determine the resource’s eligibility for the National Register or Maryland Register, as appropriate. The cost-effective positioning of test units demands that archeologists carefully consider available data on intrasite patterning before choosing one or more forms of a sampling regime. In cases where initial site investigations have demonstrated that archeological deposits are or may be present at a considerable depth, a minimal amount of deep testing (with safety precautions) is necessary to evaluate the significance of the buried resource. Mechanical excavation (e.g., by backhoe) may accompany hand digging in these situations; and it is highly recommended that archeologists discuss deep testing and other alternative strategies with the archeological staff of the Trust’s Office of Preservation Services prior to fieldwork.

The excavation of test units should normally continue at least 10 cm into the subsoil, in order to lend assurance that the bases of pits are culturally sterile. Digging by shovel and trowel should proceed according to recognizable soil horizons and strata, with each soil or stratum being screened individually through hardware cloth (generally 1/4" mesh) to recover small archeological materials. Mapping and photographing of the excavations and the archeological finds should supplement the systematic recording of notes on field activities. Excavators should place artifacts and other cultural items in bags with horizontal and vertical provenience, as well as with other pertinent information. Excavation strategies should enable the retrieval of specialized data (through recovery of soil samples, flotation, fine mesh screening). Before backfilling the test units, field personnel also should record data on each pit’s stratigraphy, including depths of strata, content, soil textures (Soil Survey Staff 1975), and soil colors (Munsell Color 1975). Finally, all Phase II fieldwork should be conducted on a grid system, which is tied in to a permanent, local environmental feature (e.g., concrete and metal datum point, standing building). This practice will allow later researchers to relocate the test areas.

E. Analysis

Analytical studies carried out as part of Phase II investigations should be geared toward the evaluation of an archeological property’s eligibility for the National Register or Maryland Register, as appropriate. This work must entail: 1) the interpretation of site activities, functions, time span, and historic contexts; and 2) the study of research questions dealing with the resource’s local or regional significance. Initial analytical activities should be the identification and classification of all artifacts and features according to explicit procedures and using the best current standards of archeological knowledge (see Chapter II and Figure 3).
Figure 3. Some basic lithic analysis conducted for one Phase II investigation. (Used with the permission of the Md. State Highway Administration - Project Planning Division. Produced for or by the Archeology group.)
More detailed analyses at the Phase II level should include, whenever possible, the dating of a sample of archaeological components from good contexts with chronometric techniques (e.g., radiocarbon). In the absence of adequate specimens for these procedures, one should date artifacts by comparison with previously dated, standard classes in combination with relative dating techniques. To examine site activities and functions, archeologists should use appropriate techniques such as the analyses of artifact morphology, use-wear, spatial patterning, and raw material sources; interpretive power will, of course, be largely dependent on other comparative, historical, ethnographic, and experimental archeological studies. Additionally, the flotation of soil samples is important for identifying micro-flora and fauna and for examining the spatial patterns of minute archeological materials (e.g., micro-debitage). Project archeologists should develop, on a case by case basis, a program of specialized analyses for the refinement of historic contexts and the investigation of particular research questions dealing with local and regional site significance. For the examination of resource significance (and integrity), however, some general analytical activities should include: 1) cross-mending of artifacts and minimum vessel analysis, when possible; 2) stratigraphic comparisons; 3) detailed soil studies; 4) estimating artifact and feature frequency for the archeological property as a whole; and 5) comparisons of the subject property with other known resources according to research themes identified in the State Plan.

The final components of Phase II analyses are less mechanical and include the formal evaluation of significance of a subject archeological property and the determination of project effect. Assessments of significance are considerations of all the available data and interpretations of the archeological resources with respect to the National Register Criteria for Evaluation (36 CFR § 60.4):

The quality of significance in American ... archeology ... is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

(a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
(b) that are associated with the lives of persons significant in our past; or
(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
(d) that have yielded, or may be likely to yield, information important in prehistory or history.

Criteria for evaluation for the Maryland Register of Historic Properties (Title 05.08.05.07) are essentially equivalent to those of the National Register (see Chapter V.D.2 below); for compliance archeology, the important difference in the two registers is that the national one is used with federal projects, and the Maryland one serves for state projects.

While those archeological resources that are significant most frequently meet Criterion (d) (important information), it is necessary for evaluators to examine all four criteria and appropriate criteria considerations. An example of an archeological property in Maryland which meets several National Register criteria is the Simpsonville Stone Ruins (18HO80), a district with a concentration of late eighteenth through early twentieth century mill-related features. The archeological remains of this village reflect the importance of mills in the economic development of Howard County (Criterion a); include structures that embody the earliest development of mill technology (Criterion c); and demonstrate the capacity to yield important information on the agricultural, architectural, cultural, and economic themes in the State Plan (Criterion d). Additional information on the evaluation of National Register eligibility

It is unnecessary to complete official nomination forms for the National Register or Maryland Register (National Register Registration Forms) as part of Phase II compliance projects. The determination of an archeological property’s eligibility for the registers is generally sufficient. However, when an archeological property is found to be eligible for the National Register/Maryland Register, one does need to determine the effect of the given project (undertaking) on the significant resource. The ACHP has described the criteria of effect and of adverse effect at 36 CFR § 800.9. When considering project effect, archeologists should discuss with their clients and involved agencies possibilities of eliminating or reducing impacts (e.g., through project redesign to avoid sites).

F. Reporting

Following the analysis of archeological resources, researchers must prepare complete draft and final reports on all of the Phase II activities. Chapter VII below contains standards and guidelines for these reports, copies of which must be submitted to the Trust’s Office of Preservation Services. Additionally, Chapter VI discusses the requirements for processing and curation of the resulting collections (including artifacts and associated records).
IV. TREATMENT (PHASE III)

A. Goal

The goal of treatment for compliance projects is to avoid, minimize, or mitigate an undertaking’s adverse effects on an archeological property(s) listed in or determined eligible for inclusion in the National Register of Historic Places or the Maryland Register of Historic Properties. Additionally, treatment objectives may incorporate the promotion and enhancement of archeological properties (through education, interpretation). Adverse effects may include the destruction or substantial alteration of a significant archeological property, or its transfer out of federal/state ownership without protective restrictions. Treatment measures may entail in-place preservation, recovery of important data, or destruction without recovery of the significant archeological property(s), or a combination of those measures. Other innovative treatment measures may include nominating a site to the National Register of Historic Places, developing an historic preservation plan, or implementing an archeological resource training or interpretation program. In Maryland, the various activities that comprise recovery are grouped together under the designation Phase III Archeological Investigation/Data Recovery.

B. Process

The specific treatment measures selected for a given undertaking are negotiated between the pertinent agency(s), the Trust, the Advisory Council on Historic Preservation (if the project is subject to Section 106), and other involved parties (such as the project sponsor, applicant, property owner, etc.), as appropriate. The involved federal or state agency is ultimately responsible for determining an undertaking’s treatment measures. The Trust and Advisory Council fill an advisory role in the consultation process. Often the negotiation process concludes with the consulting parties executing a formal Memorandum of Agreement (MOA) for the undertaking (pursuant to 36 CFR §§ 800.5 & 800.6). The MOA includes stipulations specifying the agreed upon treatment measures. Execution of the MOA demonstrates that the agency has provided the Trust and the Advisory Council (for Section 106) with an opportunity to comment and has taken into account the undertaking’s effects on historic properties.

The agency should not proceed with implementing the treatment measures until the consultation process is complete and the MOA is signed, if applicable. Commencement of treatment in advance of review completion may foreclose the Trust’s or Advisory Council’s opportunity to comment on the undertaking’s effects.

Treatment measures are decided on a case by case basis. In determining appropriate treatments for a given historic property, the consulting parties must thoroughly weigh the property’s research value and characteristics which make it eligible for the National Register against the goals of the undertaking itself and other pertinent societal needs. The consulting parties must carefully consider the standards and principles contained in the sources of technical information listed below in reaching their treatment decision.

It is essential for agencies to evaluate a project’s effects on historic properties early in project planning when the widest range of project alternatives is open. Early consideration and planning will allow adequate time to effectively evaluate all treatment measures, conclude consultation and implement the selected treatments well in advance of construction.

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C. Sources of Technical Information

Additional guidance and technical information on treatment measures and the development of agreements may be found in the following sources:

- Treatment of Archeological Properties (ACHP 1980);
- Preparing Agreement Documents (ACHP 1989);
- Consulting About Archeology Under Section 106 (ACHP 1990);
- The Section 110 Guidelines (ACHP and NPS 1989);
- Secretary of the Interior’s Standards and Guidelines for Architectural and Engineering Documentation (Dickenson 1983: 44730-34);
- Secretary of the Interior’s Standards and Guidelines for Archeological Documentation (Dickenson 1983: 44734-37);
- Secretary of the Interior’s Standards for Historic Preservation Projects (Dickenson 1983: 44737-42);

The Advisory Council’s course, “Preparing Agreement Documents”, is a valuable source of information regarding treatment measures and documents.

D. Preservation In Place

Generally, the most desirable treatment option for archeological sites is preservation in place. Preserving the widest range of archeological properties will ensure the survivability of these non-renewable resources for future generations. It is impossible to predict what information will be considered valuable in the future or what new techniques will be available to retrieve and analyze data. Resources considered unimportant today may be of great value in the future. Therefore, when practical, preservation in place is the preferred treatment, and it is often the most cost effective measure. Furthermore, it safeguards the resource for future research, interpretation, and appreciation.

Preservation may be achieved in several ways -- through avoidance, protection, and acquisition of protective easements. However, mere avoidance of an archeological property does not guarantee its long term protection and preservation. Preservation treatments should incorporate measures to protect the archeological property from natural deterioration, vandalism and other potential impacts, as appropriate, and include mechanisms to ensure its preservation in perpetuity (as feasible, given an agency’s ownership, jurisdiction, or control of the archeological property). Generally, sites slated for preservation should not be extensively excavated, but only receive limited testing as necessary to determine the property’s National Register eligibility and site characteristics.

The following sources, in addition to the Corps of Engineers’ notebook listed above, contain further specific guidance regarding site avoidance, stabilization, and protection measures:

- Filter Fabric: A Technique for Short-term Site Stabilization. (Thorne 1988);
- Intentional Site Burial: A Technique to Protect Against Natural or Mechanical Loss. (Thorne 1989);
- Revegetation: The Soft Approach to Archeological Site Stabilization. (Thorne 1990); and
- Site Stabilization Information Sources. (Thorne 1991).
1. **Avoidance** One form of preservation in place is avoidance. It is often feasible to avoid impacting archeological properties through redesign of a project. It may be possible to reroute a proposed road or utility corridor alignment to bypass an archeological site. Projects may be redesigned to maintain archeological properties within protected open spaces (such as a wooded buffer, median, or recreational area). Changes in construction techniques may also achieve site avoidance, such as redesigning a shore erosion control project to entail fill and vegetative planting instead of bank grading and structural improvements. Figure 4 illustrates how a significant historic mill complex was avoided by realigning proposed transportation improvements.

   In certain instances, it may be feasible to bury an archeological property using filter cloth and clean fill. For example, sites may be buried beneath the construction limits of a new parking lot or interchange. However, site burial methods should include exercising care to limit potential compaction and prevent changes in soil chemistry and structure. In addition, burial practices should include measures to provide potential access to the site for future research. For instance, installing a permanent datum or reference points in the site vicinity will facilitate the site’s relocation for future study.

2. **Protection** Site protection and stabilization efforts may be employed to enable preservation in place by shielding the resource from future damage inflicted through natural and human forces. Protective measures may be temporary, during project construction, or may encompass permanent treatments. Such measures may include: fencing, routing of construction activities and staging areas to prevent inadvertent disturbance, explicit resource protection measures in contractor specifications, berms, site stabilization efforts to prevent erosion or deterioration of exposed features and elements, vegetative planting to screen soil exposure, signage, and routine law enforcement patrols to deter vandalism.

3. **Easements/Covenants** Although avoidance and protection enable site preservation in place, these measures do not guarantee the long term and perpetual safety of the resource. Acquisition of an historic preservation easement or protective covenant on an historic property is a positive legal tool to secure the property’s maintenance and preservation in perpetuity, regardless of changes in property ownership. An easement is a legal instrument designed to protect and preserve a historic property in perpetuity without conveying or transferring ownership of the property. Easements offer the strongest protection for archeological sites. Such protection cannot be found on a permanent basis in any other programs, such as National Register listing or compliance.

   Easements as a treatment measure are most frequently employed when a historic property is transferred out of federal or state ownership, and therefore no longer protected by the provisions of federal and state laws. A property that is transferred with appropriate easement/covenant language will be afforded protection and proper care in perpetuity.

   The Trust has an active easement program and currently holds easements on over 350 historic properties throughout Maryland. Under easement terms, the landowner agrees to give up rights to develop most or all of the property and agrees to perform a minimum level of maintenance to the historic property. The Trust as easement holder agrees to monitor the property to ensure compliance with the terms of the easement. Each easement is negotiated between the Trust and landowner/donor and tailored to suit the specific needs and characteristics of the given historic property. For donations of gift easements, the property owner/donor may be eligible for certain federal income tax, estate, inheritance, gift and property tax incentives.

   For additional information on the easement program or copies of the Trust’s standard easement, contact the Trust’s Office of Preservation Services at (410) 514-7628.
Figure 4. Example of site avoidance through project redesign. (Used with the permission of the Md. State Highway Administration - Project Planning Division. Produced for or by the Archeology group.)
4. **Owner-Request for Archeological Site Protection Under State Law** Significant sites on private property can enjoy all the protections afforded to state-owned sites through an important provision of Maryland’s historic preservation law. Article 83B. § 5-621. of the Annotated Code of Maryland allows owners of significant sites to request that all state laws for the protection of archeological sites on state-owned lands also apply to their land. For the state to grant this request, two tests must be met:

a. The owner must petition the Maryland Historical Trust in writing to apply the provisions of state law relating to the protection of historic properties on state land or in caves to that portion of the owner’s land containing the site; and

b. The Trust must determine that the site is eligible for listing in the Maryland Register of Historic Properties and warrants such protection.

Once these requirements are met, the site enjoys all of the protections that any site on state property or in a cave would be afforded. The most important protections include:

- A site cannot be disturbed or excavated without a permit from the Trust’s Office of Archeology.
- Only qualified persons may conduct archeological excavations at the site.
- Persons convicted of illegally disturbing or destroying the site can be subject to fines up to $1,000 and imprisonment for a term of up to 30 days for each day a violation continues.
- Illegally obtained artifacts can be appropriated by the state and may be returned to the rightful owner.
- Because the land is protected the same as state-owned land, the owner has the full assistance of state law enforcement and other authorities in protecting sites and in prosecuting pothunters or other violators.

It is important to note that the owner of any site protected through the owner request mechanism of state law is not restricted or prevented in any way from personally developing or using the land, unlike easement protections. The owner is free to carry out activities that may affect the site and they do not need to obtain an archeological permit to do so. This may be considered an advantage to the owner. However, the owner will not realize the potential tax benefits that generally accrue from the donation of a preservation easement.

For further information regarding the owner request procedures, contact the Trust’s Office of Archeology at (410) 514-7661.

E. **Acceptance of Loss**

In rare instances, preservation in place or recovery may not constitute viable treatment options for a given undertaking or archeological property. An undertaking which entails life-threatening or serious health/safety issues may be required to meet overriding public needs which supersede the project’s preservation values. Also, if testing demonstrates that a significant archeological property does not have further data which may be used to address valuable research questions, then recovery is not an appropriate treatment option or justifiable expense.

Acceptance of loss is a serious decision and must be carefully considered by all the consulting parties. The parties exhaustively consider all possible research and interpretive values the property may possess, thoroughly evaluate all feasible treatment measures, and seek the views of outside experts in reaching a
conclusion. The decision for destruction without recovery must be well justified. If acceptance of loss is the selected option, the parties should consider implementing alternative treatment measures (see section IV.G) to mitigate the destruction of the resource.

F. Data Recovery

When in-place preservation is not feasible, the adverse effects to archeological properties generally may be mitigated by recovering the property’s valuable information. The purpose of data recovery is to retrieve and analyze the maximum amount of information from an archeological property necessary to address important research topics. Recovery is accomplished through detailed archeological excavation, recordation, background research, analyses, and reporting, performed in accordance with a well defined and justified data recovery plan.

Data recovery should also contribute to broader historic preservation issues, such as: developing and refining historic preservation plans or predictive models; applying and testing of state-of-the-art methods; addressing professionally established research topics and priorities. As noted above, the various activities that comprise recovery in Maryland are grouped together under the designation Phase III Archeological Investigation/Data Recovery.

Data recovery involves a substantial commitment of time and funds, and should be firmly based on sound background data, planning, and a valid research design. Data recovery must be preceded by appropriate background research, identification and evaluation (usually accomplished during Phase I and II investigations), in order to understand the property’s significant characteristics and data expectations. Efficient and cost effective measures should be employed to maximize retrieval of the data necessary to achieve the desired goals, yet minimize costs. The consulting parties determine the extent of recovery efforts on a case by case basis. Data recovery must be conducted in accordance with a comprehensive research design/data recovery plan, reviewed by the Trust, Advisory Council, and other involved parties, as appropriate. Completion of an approved data recovery plan generally fulfills an agency’s compliance responsibilities for an undertaking, unless unexpected discoveries occur during construction (see Section IV.H below).

1. Research Design/Data Recovery Plan All data recovery efforts must be guided by an explicit and thorough research design/data recovery plan. Careful development of the Phase III research design is critical for the retrieval of significant information -- the main goal of this phase of research. The Trust and Advisory Council (for Section 106 projects) review substantive contents of the plan to ensure that the proposed research questions are viable and answerable based on the site’s data expectations, the methodology is appropriate, and the amount and areas proposed for investigation are reasonable for the given archeological property and undertaking. The Trust may also request peer review of data recovery plans through the Maryland Advisory Committee on Archaeology (established by Article 838, § 5-624, of the Annotated Code of Maryland) or the Council for Maryland Archeology.

General aspects of research designs appear in Chapters II and III. Although the research design establishes a framework for the data recovery efforts, it must also include an element of flexibility to allow modifications to the testing and analytical strategies based on field and research results. More specific comments on research strategies for data recovery efforts follow.
The *Objectives* of Phase III archeological investigations must include:

- basic description of the archeological property under study and the characteristics which make it eligible for the National or Maryland Registers;
- maximum retrieval of important data relevant to the defined research questions from the archeological property;
- testing and addressing explicitly stated pertinent hypotheses and research questions (from the State Plan and other sources) that provide valuable information on the property's local or regional significance, with valid justification of the hypotheses' and questions' importance and relevance;
- determining the property's characteristics and variability, including inter- and intra-site patterning; and
- public education/interpretation of the data recovery results.

The *Methods and Techniques* section of the plan should justify the research strategies planned to retrieve the maximum amount of data necessary to meet the study objectives. Discussion should address methods to be used in background research, fieldwork, analyses, data management and dissemination of results. Methods and Techniques should include a schedule and a justification of the proposed methodology's relevance to the research questions. Furthermore, the section should describe proposed treatment and disposition of the recovered materials and records, and provide evidence that a qualified repository has agreed to curate the collection. Finally, it should discuss the proposed methods for informing the interested public about the project, making the results of the research available to the public, and involving the interested public in the data recovery, if feasible. If human remains or associated grave goods are expected during recovery, the plan should include provisions for obtaining necessary permits and for consultation with relevant Indian Tribes, descendants, or other interested parties, as required under federal, state and local laws, regarding the treatment and final disposition of materials. For additional information or guidance regarding human remains' issues, contact the Trust's Office of Archeology at (410) 514-7661.

*Expected Results* should rely heavily upon previous research reports (Phase I and II investigations) and other readily available documents, in order to discuss the quantity, age, condition, and other general characteristics of the archeological materials and features anticipated in the study. The anticipated results must be applicable to the proposed research questions and hypotheses.

In addition to the above elements, the plan should also discuss provisions for regular status reports, meetings, and site visits to keep agency managers, the Trust, and other interested parties informed as work progresses.

Additional technical information for developing archeological data recovery strategies is available in the sources listed in Section IV.C.

2. **Archival and Background Research** For Phase III investigations, the main purpose of archival and background research is to augment information on a previously identified archeological property in order to address the desired research questions/hypotheses. Research should focus on summarizing previous work on the resource, analyzing existing collections from the property, refining the proposed research questions/hypotheses, and clarifying the methodologies necessary to address those research issues. As appropriate, investigators should conduct documentary research, informant interviews, and collection studies to achieve the desired study objectives, utilizing the sources listed in Chapters I and II and other materials.
3. Field Studies  In order to achieve the goal of maximum data retrieval, Phase III fieldwork strategies generally employ excavation of a substantial portion or sample of the archeological property. However, total excavation of the property is generally not appropriate or advisable, except in extraordinary circumstances. The precise amount and type of Phase III archeological and ancillary field studies must be determined on a case by case basis, based on the nature of the archeological property under study, the geomorphological characteristics of the project location, the research questions, and the undertaking itself. There are no minimum sample sizes applicable to data recovery. If the undertaking will not totally destroy the archeological resource, field recovery should focus primarily on the site areas slated for impact, and establish a permanent datum and grid to facilitate future research at the site. However, limited sampling outside the impact area may be necessary for accurate site interpretation and analyses. Studies outside the area of potential effects may only be feasible if the property under examination falls within the ownership, jurisdiction, or control of the involved agency for a given undertaking. A well-reasoned sampling strategy will maximize data retrieval and minimize costs.

Fieldwork strategies generally utilize intensive excavation of close interval shovel test pits and test units, as described in Chapters I and II, and accompanying recordation and data retrieval techniques. Test unit excavations often focus on opening large block areas, in order to expose and examine activity areas, architecture, and patterns of site use. Figure 5 illustrates the testing strategy of Phase III excavation blocks at the Higgins site. Although excavation focused within the project area limits, one block excavation was located outside the impact area. In some cases, use of mechanical equipment (Gradall or backhoe) is acceptable and advisable to remove an overburden of deposits (such as fill, plowzone, alluvial soils) above desired test levels. However, heavy equipment should only be employed following adequate manual sampling of the deposits slated for mechanical removal. For example, a Gradall is sometimes used in rural settings to remove the plowzone, but only after the plowzone has been sampled, to expose features existing beneath the plowzone level. In a floodplain setting, it is often appropriate and necessary to remove levels of alluvial soils to reach deposits which contain the cultural materials. In an urban environment, mechanical equipment can be used to expeditiously remove modern strata (such as parking surfaces, fill, demolition debris). Use of mechanical equipment is decided on a case by case basis, taking into account site characteristics, location, and so forth. When mechanical equipment is utilized, it must be closely supervised by a qualified archeologist, in order to ensure that archeological resources are not inadvertently disturbed. Heavy equipment should only be used in dry and stable ground conditions, to prevent destruction of the archeological deposits.

Phase III fieldwork may also contain a formal recordation component for archeological properties which contain substantial structural or architectural remains (such as foundations, earthworks, ruins, industrial complexes). During the negotiation process, the consulting parties agree on who will determine the level and kind of recordation documentation necessary for the project. Generally the parties agree that the agency will contact the Historic American Building Survey/Historic American Engineering Record (HABS/HAER) Division of the National Park Service (for federal projects) or the Trust’s Office of Research, Survey and Registration (for state projects) to determine the recordation efforts appropriate for the resource involved. Documentation may include recording significant historical information, architectural plans and features, engineering details, landscape elements, and acquiring significant oral historical information related to the historic property. Furthermore, the documentation results are deposited in a permanent repository such as the Library of Congress or the Maryland State Archives. Figure 6 represents a plan view drawing of the structural remains of the Wilson’s Mill in Dorchester County. For further technical information on recordation, refer to the Secretary of the Interior’s Standards and Guidelines for Architectural and Engineering Documentation (Dickenson 1983: 44730-44734).
Figure 5. Placement of Phase III block excavations at the Higgins Site. (Used with the permission of the Md. State Highway Administration - Project Planning Division. Produced for or by the Archeology group.)
Figure 6. Recordation of structural remains of historic mill. (Used with the permission of the Md. State Highway Administration - Project Planning Division. Produced for or by the Archeology group.)
4. **Analysis** Analysis is an integral component of Phase III investigations and is essential for interpreting the fieldwork results and fulfilling data recovery goals. Phase III analytical studies should be directed towards maximum retrieval of information from excavated materials in order to address defined research questions. This work must entail: 1) the interpretation of site activities, functions, time span, and historic contexts; and 2) the study of the research questions/hypotheses addressing the resource’s local, regional, or national significance. Initial analytical activities should involve the identification and classification of all artifacts and features according to explicit procedures and using the best current standards of professional knowledge. More detailed specialized analyses at the Phase III level should include the items discussed in Chapter II.E, as appropriate to the resource under study. Phase III analyses should also integrate the newly acquired data with the results of previous Phase I and II investigations, in order to reliably interpret the site as a whole.

5. **Public Education/Interpretation** Phase III investigations must include measures to inform the general public and interested parties about the results of data recovery efforts. Since Phase III investigations essentially mitigate adverse effects to a significant archeological property and are often undertaken at considerable public expense, the public should receive tangible evidence of the research results. Chapter VIII.E presents a more detailed discussion of public interpretation efforts. The appropriate public education program for a given project should be developed in consultation with the Trust.

6. **Reporting** Following the analysis of archeological resources, researchers must prepare complete draft and final reports on all of the Phase III activities. Chapter VII below contains standards and guidelines for these reports, copies of which must be submitted to the Trust’s Office of Preservation Services. Additionally, Chapter VI discusses the requirements for processing and curation of the resulting collections (including artifacts and associated records).

G. **Other Treatment Measures**

Although preservation and recovery are the most common treatment measures employed to mitigate adverse effects on archeological properties, some undertakings may entail alternative forms of mitigation given the nature of the undertaking itself or the resources involved. The Trust encourages and welcomes innovative solutions to historic preservation problems, if they achieve the mitigation goals. Such solutions may be incorporated with more traditional treatment measures or employed alone, and may be used to mitigate "acceptance of loss" situations. Alternative treatment measures should be thoroughly considered and discussed with the Trust and Advisory Council (for federal projects) prior to implementation.

Examples of alternative treatment options include:

- development of an historic preservation plan/cultural resource management plan for a specific property, facility, or geographic region (see section V.B);
- development, testing, and refinement of a predictive model for site locations of a particular time period, type, or geographic region;
- initiating cultural resource sensitivity, educational, or interpretive programs for agency staff or the general public;
- acquiring a perpetual historic preservation easement on a significant archeological property to compensate for acceptance of loss of a similar site type;
- preparing a National Register nomination on an individual historic property, district, or a multiple resource nomination;
- synthesizing existing archeological data pertaining to a particular geographic region, time period, or resource type.
H. Planning for Unexpected Discoveries

Although completion of a data recovery program or other treatment measure performed pursuant to an MOA fulfills an agency’s historic preservation responsibilities, it is advisable to develop a plan for addressing unexpected discoveries that may arise during construction. Construction may expose significant features that were not included in the data recovery program or were inaccessible for recovery. The discovery plan may be included as a stipulation of the MOA or a component of a data recovery program. Having an approved plan in place enables the agency to proceed with the undertaking in a discovery situation following the plan actions and avoids the need for additional consultation and potential delays. The Advisory Council’s regulations (36 CFR § 800.11) include provisions for considering properties discovered during project implementation.

Discovery plans generally include provisions for promptly considering and recovering, if warranted, significant archeological properties discovered during construction. The plan may incorporate professional archeological monitoring during project ground disturbing activities with associated reporting, recording and recovery of major features or artifacts uncovered where practical. **However, monitoring does not substitute for proper identification, evaluation, and treatment of archeological properties during project planning.** The plan may also include provisions for expedited consultation with the Trust to determine an appropriate course of action for the discovered resource.

In the absence of an approved discovery plan, an agency must provide the Advisory Council (for federal projects) and the Trust (for state projects) with an opportunity to comment when a previously unidentified property that may be eligible for inclusion in the National or Maryland Registers is discovered during project implementation.

Federal and state historic preservation laws do not require the agency to stop all work on the undertaking during discovery situations. However, the agency should make a good faith effort to avoid or minimize harm to the historic property until it has completed consultation or implementation of the discovery plan provisions.

If human remains are discovered during construction, those resources warrant exceptional care and consideration. See Chapter VIII.C for a more detailed discussion regarding the treatment of human remains.

For discovery situations occurring on Trust grant, loan, or easement projects, the project sponsor or property owner should contact the Office of Preservation Services immediately for appropriate guidance on how to proceed. Construction should not continue in the area of the discovery until the Trust agrees to resumption of work.
V. OTHER CULTURAL RESOURCE INVESTIGATIONS

Phases I, II and III archeological investigations are the most frequently undertaken types of archeological study in Maryland. However, other types of cultural resource investigations exist which may be better suited to a particular project or archeological property under consideration. These other types of investigations include: archival studies and archeological assessments; historic preservation plans; studies for Trust grant, loan, or easement projects; and registration activities. Prior to initiating an alternative method of investigation, the study sponsor should consult with the Trust’s Office of Preservation Services for guidance on the appropriateness of the proposed investigation and methodology. In general, all other cultural resource investigations should conform to the standards and reporting requirements presented in these guidelines, as appropriate. Furthermore, the Trust encourages individuals conducting academic and independent research on archeological properties to adhere to applicable sections of these standards and guidelines.

A. Archival Studies and Archeological Assessments

For certain projects, such as large scale or urban undertakings, an archival study or archeological assessment may be conducted as a separate investigation, in order to determine the necessity for subsequent archeological work. Assessments of archeological potential are often produced as part of preliminary project planning and may be incorporated within various environmental documents. The archival study and archeological assessment may provide a cost effective method for initial identification and evaluation of archeological properties in a project’s area of potential effects and for determining additional actions necessary to complete a project’s identification and evaluation efforts.

The following list provides examples of large undertakings that may be conducive to the preparation of an archival study or archeological assessment prior to initiation of Phase I identification studies:

- a major transportation project which involves multiple alternates covering extensive acreage;
- a large scale undertaking (such as a development, coal mine, or utility project) whose area of potential effects encompasses a broad expanse of land (several hundred acres or more);
- an undertaking which will entail multiple years of planning and will examine many potential alternates (such as 10 year planning for future dredge disposal sites).

Urban areas (such as Baltimore, Frederick, Annapolis) have witnessed intensive occupation and use throughout historic time periods, which may span nearly 300 years. Archeological research in urban areas has demonstrated that significant archeological resources do survive within an urban context. Often, later historic materials have accumulated above the earlier levels, sealing the older deposits in place. Therefore, archival research is an integral first step toward identifying the types of archeological resources expected in a project area. Figure 7 illustrates the locations of former structures dating from the nineteenth and early twentieth centuries within an urban project setting in Cumberland, Maryland. Background research is also useful for defining the most appropriate, subsequent testing strategies for the project area.

1. Goals The goals of archival study or archeological assessments are to inventory, locate, and predict the location of prehistoric and historic archeological properties within a given area of potential effects, through the study of relevant archival documents, maps, and other sources. Goals also include the development of justifiable recommendations on the nature and extent of additional investigations (such as Phase I or II work) warranted to identify and evaluate archeological properties in the project area.
Figure 7. Locations of former urban structures identified through historic map research. (Used with the permission of the Md. State Highway Administration - Project Planning Division. Produced for or by the Archaeology group.)
Archival studies or assessments may also include discussion of the project’s potential effects on historic properties along with a description of recommended identification, evaluation, and treatment measures.

2. **Objectives** In order to achieve the desired goals, the background studies must address the following objectives:

- identify inventoried sites in the study area;
- describe the area’s cultural history for prehistoric and historic time periods, with emphasis on settlement patterns and land use trends;
- describe the area’s environmental characteristics and conditions;
- identify possible areas of ethnic and social diversity;
- identify industry, commerce, and growth in the study area and their relationships to regional patterns;
- develop a predictive model for historic sites based on maps, atlases, inventoried historic structures, and other sources;
- develop a predictive model for prehistoric sites based on environmental characteristics (e.g., geomorphology, lithic resource availability, and prior research results);
- describe the study area’s land use history, current conditions, and evidence of prior disturbances which may have affected the archeological record; and
- develop defensible recommendations on whether or not additional archeological investigations are warranted along with a description of the nature and extent of any recommended work, based on the above factors.

For urban project settings, the objectives should also include the following items:

- determine the developmental growth of the area;
- identify the range of social and economic activities which have occurred in the study area and identify the social groups associated with each activity;
- identify the types of historic properties that may be associated with each social group and activity;
- identify past construction activities which may have impacted or buried the various types of predicted archeological resources in the study area;
- develop research questions that will assist in assigning significance to particular resource types once they are identified; and
- determine the types of archeological properties anticipated in the project area and their expected eligibility for the National or Maryland Registers.

3. **Methods** The methods employed for archival study or archeological assessments generally involve background research, informant interviews and resulting analyses to fulfill the desired goals. Background research should incorporate the sources discussed in Chapters I and II. Generally, detailed field investigations are not a component of these studies. However, a basic site visit is advisable in order to determine existing conditions in the project area and identify other factors pertinent for the development of appropriate recommendations.

4. **Analysis** The analysis phase of these investigations entails a careful review and evaluation of all the compiled background data, aimed at addressing the study goals and developing appropriate recommendations.
5. **Reporting Requirements** Resulting archival study reports should follow the standards outlined in Chapter VII, as appropriate. Archeological assessments may take a shorter form, depending upon the needs and requirements of the sponsoring agency. Reports should highlight the following information:

- statement of methodology and resources used;
- descriptive historic and prehistoric overviews;
- predictive models for prehistoric and historic site occurrence and for locations of sites eligible for inclusion in the National or Maryland Registers;
- assessment of the area’s potential for containing archeological properties, with appropriate justification;
- detailed recommendations on the need and extent of further work; and
- detailed mapping (inventoried sites, areas predicted for site locations, areas slated for additional investigation, etc.).

Archival studies and archeological assessments intended for distribution to the general public should not disclose the precise locations of archeological properties, in order to protect those properties from potential disturbance and vandalism. See Section V.D.3 below for additional information regarding confidentiality of site information.

B. **Historic Preservation Plans**

Agencies with the responsibility of managing large installations or land tracts or with ongoing responsibilities for the administration of historic properties may benefit from the development of historic preservation plans (HPPs), also referred to as cultural resource management plans (CRMPs). These plans provide an overview of the project area’s cultural background, describe inventoried historic properties and predicted resources, and present working management recommendations on the appropriate treatment and consideration of the area’s historic properties (both known and predicted resources). Generally, HPPs are developed to address all historic property types on the facility (including architectural and archeological resources). Prior identification and evaluation investigations greatly enhance an HPP’s usefulness for future planning and compliance decisions. However, facilities which encompass large acreage may find it impractical and cost prohibitive to undertake such investigations prior to plan development. The degree of prior investigation will influence the focus and research strategy for a given plan. In order to develop an effective plan, it is essential that the investigators have a working knowledge and understanding not only of the area’s historic properties, but also of the agency’s mission, programs, and processes.

As with other cultural resource investigations, the decision to undertake an HPP/CRMP and the proposed level of effort should be developed in consultation with the Trust and Advisory Council, as appropriate. The content and form of an HPP will vary depending upon the nature of the agency, project area, and historic properties involved. Investigators should be clear on the precise objectives of a particular HPP in advance of study initiation, in order to use the most appropriate methods and analysis.

HPPs can form the basis of a formal Programmatic Agreement (PA), to cover an agency’s compliance responsibilities under state or federal law. The PA is negotiated between the agency, the Trust, and the Advisory Council (for Section 106 projects). These agreements may help streamline the agency’s compliance responsibilities and eliminate the need for extensive project specific reviews.
Valuable **sources of technical information** regarding HPPs and PAs include the Advisory Council's publication *Preparing Agreement Documents* (1989) and the Secretary of the Interior's *Standards and Guidelines for Preservation Planning* (Dickenson 1983: 44716-44720).

1. **Goals** The general goal of an HPP is to establish a process for agencies to integrate the administration and treatment of historic properties under the agency's ownership or control with the agency's programs and mission. Implementation of the plan will enable the agency to fulfill its historic preservation responsibilities in a manner appropriate to the nature of the affected historic properties, the project area, and the agency itself.

2. **Objectives and Methods** As stated above, the exact objectives and methods for an HPP will vary from project to project. Investigators should seek clear guidance and direction from the agency prior to the start of investigations.

3. **Reporting Requirements** Reporting requirements and format will also vary depending upon the needs and priorities of the sponsoring agency. In general, reporting should incorporate the Trust's report standards in Chapter VII. Furthermore, the plan should be integrated with existing agency database management systems to facilitate the plan's use and effectiveness.

The Advisory Council (1989: 57-59) provides the following suggested outline and contents for an historic preservation plan:

- Foreword - explaining the basis upon which the plan is being prepared;
- Introduction - explaining the organization and use of the plan;
- Overview - describing the area's cultural background, history, prehistory, architecture, architectural history, landscape, ethnology, and surrounding environment; and presenting a context for evaluating treatment strategies for different historic property types;
- Inventory - descriptions of all the area's known cultural properties that are eligible or potentially eligible for inclusion in the National Register;
- Predictions - predicting the nature and distribution of the area’s historic properties that have not yet been identified, based on the overview, along with a discussion of ways to verify those predictions;
- Identification System - establishing procedures for the identification and evaluation of historic properties that may be affected by the agency;
- Management System - establishing procedures for the agency's management and treatment of historic properties in the study area, including:
  - procedures for the use of historic properties in a way that does not cause significant damage or deterioration;
  - procedures for positively preserving historic properties;
  - procedures for maintaining historic properties;
  - procedures for avoiding or mitigating adverse effects on historic properties; and
  - procedures for consultation with relevant parties during implementation of the plan.

C. **Maryland Historical Trust Grant, Loan, and Easement Projects**

Recipients of grant and loan assistance from the Trust or owners of properties on which the Trust holds an easement may need to undertake archeological investigations to fulfill Trust funding requirements.
or easement provisions. Frequently these investigations are linked to the rehabilitation, alteration, or use of a standing historic property. Recommended investigations may fall into the category of Phase I, II, or III investigation, as needed to meet project goals. However, in some instances, archeological work is conducted to fulfill specific project needs -- for instance to determine dates of building construction or alteration, to locate and examine building elements no longer readily visible, or to identify landscape features and patterns of property use.

For all grant, loan, or easement projects, the Trust’s Office of Preservation Services will determine the specific type and extent of investigations warranted. Close coordination with the Trust will ensure that the appropriate level of effort is attained for a given project. In all instances, the cultural resource investigations should follow the standards presented herein.

D. Registration

Historic properties identified in Maryland are recorded in the Maryland Inventory of Historic Properties maintained by the Trust. The Trust adds new properties on an ongoing basis, as a result of forms submitted by professionals conducting investigations for compliance or broader survey projects, by Trust staff, and by the general public. Significant historic properties worthy of preservation may also be nominated for listing in the National Register of Historic Places and Maryland Register of Historic Properties. Listing provides national and statewide recognition of an historic property’s importance. However, listing itself does not restrict a private property owner’s rights regarding the use of the land where the site is located. Both federal and state historic preservation laws afford equal consideration to properties that are listed, or eligible for listing, in the National or Maryland Registers.

For further information on the Trust’s inventory and registration programs, contact its Office of Research, Survey and Registration at (410) 514-7644.

1. Maryland Inventory of Historic Properties

The Trust compiles and maintains the Maryland Inventory of Historic Properties, under the authority of Article 83B, § 5-615, of the Annotated Code of Maryland. The Inventory is a broad-based catalogue of information on districts, sites, buildings, structures, and objects of known or potential value to the prehistory, history, terrestrial and underwater archeology, architecture, engineering, and culture of Maryland. It is divided into two sections: standing structures/non-archeological sites, and archeological sites. There are separate inventory forms and official number designations for these two sections. As of 1994, the Inventory includes over 75,000 architectural properties, and 8,000 archeological sites. The Inventory is not an all-inclusive list, but represents a record of all historic properties recorded with the Trust to date. The Trust adds numerous new historic properties to the Inventory each year.

All newly identified archeological properties must be recorded on Maryland Inventory of Historic Properties Archeological Site Survey forms and submitted to the Trust for number assignment and entry into the Inventory. The Trust does not issue new site numbers prior to submission of a completed inventory form. Archeological site numbers consist of a trinomen, for example - 18BA25: 18 refers to Maryland, BA refers to the county (Baltimore County), and 25 represents the 25th site recorded in the county. The Trust generally issues new site numbers within 30 days after receiving complete inventory documentation. Subsequent research on a previously identified historic property requires completion and submittal of appropriate supplemental data sheets. To obtain copies of the Trust’s current inventory form and data sheets for recording archeological properties, contact the Office of Research, Survey, and Registration at (410) 514-7644.
While there is general consensus about what constitutes an archeological site, occasionally cases arise which must be evaluated on an individual basis, taking into consideration the context of the resource (e.g., low density sites, recent vintage resources, questions about site limits). The Trust’s Office of Research, Survey, and Registration will provide guidance in making a decision as to what constitutes a site and which resources warrant a site number.

For an archeological resource which does not qualify for official site designation, the Trust issues a Maryland Random Finds Number, or "X Number," a catalog number for artifacts whose provenience is (1) vague or unknown, or (2) known but consists of isolated finds. A vague or unknown site provenience often characterizes older collections or privately donated artifacts. On the other hand, many artifacts recovered during recent surveys have precise provenience, but they are isolated finds. (Of course, future investigation may eventually warrant site designation of a location where X-numbered specimens have been collected; the X-numbered objects would then be cross-referenced to the site.) Trust X numbers are not to be confused with site numbers or to be considered quasi-site numbers.

An X number can be assigned to a single artifact, or to a group of artifacts from one farm, project, etc. In the latter case, lot numbers can be assigned to individual specimens as appropriate. Provenience information for X-numbered lots is to be documented in project reports or catalogs. Collections being prepared for curation by the Trust that include non-site-specific artifacts must use the Maryland Random Finds Number (X Number) system. X numbers can be obtained by calling the Trust’s Office of Research, Survey and Registration.

2. **National Register of Historic Places and Maryland Register of Historic Properties** The Trust also maintains the Maryland listings of the National Register of Historic Places and the Maryland Register of Historic Properties. These Registers include the official federal and state lists of historic properties worthy of preservation. The criteria for evaluation for the National and Maryland Registers are identical, and presented in 36 CFR § 60.4 and COMAR 05.08.05.07. Listing in the Registers requires a formal nomination process through the Trust.

The **National Register of Historic Places** is a list of properties acknowledged by the federal government as worthy of preservation for their significance in American history and culture. National Register properties include districts, buildings, sites, and objects of significance to the local community, state, or the nation. The National Register is maintained by the Secretary of the U.S. Department of the Interior and administered by the National Park Service. In Maryland, the National Register program is administered by the Trust. Certain state and federal regulatory protections, financial assistance, and tax benefits are available for resources listed in or determined eligible for the National Register.

The **Maryland Register of Historic Properties**, established by the Maryland legislature in 1985, is also a list of properties considered worthy of preservation for significance in Maryland history and culture. Also maintained by the Trust, the Maryland Register includes districts, sites, buildings, structures, monuments, and objects. Inclusion in the Maryland Register in most cases requires that the resource be listed in or determined eligible by the Director of the Trust for listing in the National Register of Historic Places. Certain state regulatory protections and grant and loan programs are available for resources listed in or determined eligible for the Maryland Register.

3. **Confidentiality** Both federal and state law provide for the confidentiality of information regarding the location and character of an historic property, if the federal agency or the Trust determines that disclosure of that information may create a substantial risk of harm, theft, or destruction for the
property or area where the property is located (16 U.S.C. 470w-3 and Article 83B, § 5-615 [d], of the Annotated Code of Maryland, and COMAR 05.08.05.10B).

Project planning documents, reports, and report abstracts intended for public use or distribution should withhold site-specific locational data, and provide only general descriptive information necessary for planning and review purposes. For further guidance on this issue, contact the Trust’s Office of Preservation Services. Additional technical information is presented in National Register Bulletin 29, Guidelines for Restricting Information on the Location of National Register Properties.

E. Academic Research

As stated in Chapter I, the Trust does not desire nor intend to direct and oversee the research of academic archeologists and other scholars conducting archeological investigations outside the scope of applicable federal and state historic preservation statutes. However, the Trust strongly encourages academic and independent scholars to follow applicable sections of these standards and guidelines to ensure consistency of recording archeological properties and reporting research results in Maryland. At a minimum, the Trust requests investigators to:

► record archeological properties on standard MHT inventory forms and submit completed forms to the Trust for entry in the Maryland Inventory of Historic Properties;
► provide the Trust with copies of research reports, articles or other publications for the Trust’s library; and
► submit to the Trust completed National Archeological Database (NADB) - Reports Recording Forms for all reports and publications (see Section VII.D).

The Trust’s archeological collection facility and library contain valuable reference sources and materials for individuals conducting research on archeology, history, and related topics in the Middle Atlantic Region (see Chapter VI.C and VIII.F). Researchers are welcome and encouraged to use these facilities.
VI. PROCESSING AND CURATION OF COLLECTIONS
(ARTIFACTS AND RECORDS)

Archeological investigations generally result in the retrieval of material remains (artifacts, specimens) and the production of associated records (notes, maps, photographs). Materials and records are an integral component of an archeological investigation. These irreplaceable items, frequently obtained with considerable public and private effort and expense, require professional processing and curation to ensure their stability, long term preservation, and accessibility for future research and public interpretation. Archeological collections should be deposited in a qualified repository which will safeguard and permanently curate the collection in accordance with current professional standards.

In 1990, the Department of the Interior/National Park Service issued federal curation regulations, entitled "Curation of Federally-Owned and Administered Archeological Collections" (36 CFR § 79). The federal regulations establish definitions, standards, guidelines, and procedures which federal agencies are required to follow, in order to preserve archeological collections. The regulations presented in 36 CFR § 79 must be followed for federal compliance projects, as appropriate. Although the regulations are legally applicable only to federal agencies and programs, they offer pertinent guidance that may be applied to the treatment of all archeological collections.

The federal curation regulations provide a useful definition of the term collection, which will be followed in this document.

Collection means material remains that are excavated or removed during a survey, excavation or other study of a prehistoric or historic resource, and associated records that are prepared or assembled in connection with the survey, excavation or other study. [36 CFR § 79.4(a); emphasis added].

In 1988, the Council for Maryland Archeology's Curatorial Committee issued a series of minimum standards for the processing and curation of archeological collections in Maryland. The 1988 standards form the basis for the principles presented in this chapter. However, the Trust has refined and expanded these minimum standards in consultation with the Council.

The standards presented in this chapter must be followed for all collections to be curated by the Trust. The Trust strongly recommends adherence to these requirements for all other archeological collections generated in Maryland, in order to standardize curation practices, ensure professionally acceptable treatment of archeological materials, and facilitate the availability of collections and documentation for future research. The Trust reserves the right to waive all or portions of these standards for extraordinary circumstances (for example, exceptional collections generated by non-professionals or from emergency salvage excavations).

This chapter presents the minimum standards and related discussion on the following items: the goal of the standards, disposition and curation of collections, the Maryland State Archeological Collections, processing material remains and associated records, the Trust's collection submittal requirements, and sources of technical information. To obtain copies of the Trust's catalog sheets, Deed of Gift, Transfer Deed, and other collection documentation forms, contact the Office of Archeology at (410) 514-7661.
A. Goal

The goal of the following minimum standards is to ensure that all archeological collections generated by professional or avocational archeologists in Maryland receive appropriate processing, packaging, documentation, and curation. Treatment of collections in accordance with these minimum standards will help provide for the long-term preservation of these materials and records.

These standards outline overall procedures for the cleaning, labeling, cataloging, packaging, documentation, and curation of collections (including material remains and records). However, these standards are not intended to substitute for more detailed laboratory methods and procedures, which professionals are expected to have already learned through other sources. It is assumed that archeologists will employ the best applicable current standards of professional knowledge in their treatment of artifacts and records. The procedures presented herein are minimum standards. Professionals are encouraged to utilize additional professionally recommended procedures for the treatment and curation of archeological materials and records, whenever appropriate.

The disposition of a project’s artifact and records collection should be decided prior to initiation of fieldwork and in consultation with the Trust. Prior to processing any collection, the archeologist should contact the selected repository for its procedures on appropriate labeling, cataloging, and packaging techniques.

B. Disposition and Curation of Collections

To ensure the long-term preservation of archeological materials and associated records, collections should be deposited with an appropriate curation repository. The federal curation standards provide a definition of the term repository:

Repository means a facility such as a museum, archeological center, laboratory or storage facility managed by a university, college, museum, other educational or scientific institution, a Federal, State or local Government agency or Indian tribe that can provide professional, systematic and accountable curatorial services on a long-term basis. [36 CFR § 79.4(j)]

The regulations also present detailed standards to determine whether a repository has the capability to provide adequate long-term curatorial services. Required factors include appropriate physical facilities, temperature and humidity controls, security, controlled access, fire protection and suppression, records maintenance and storage, routine inspection, and qualified staff (36 CFR § 79.9). Collections generated by federal agencies and programs must be curated by an appropriate repository.

In addition to considering a repository’s professional qualifications, the federal standards offer further guidance on how to select a suitable repository for a collection. In general, it is advisable to curate a collection in a repository which is located in the same state where the collection originated, and which maintains other collections from the same site, project area, or broader geographic region. Collections should not be subdivided and stored in multiple locations, unless such storage is warranted due to conservation, research, exhibit, or other legitimate purposes. Finally, material remains and their associated records should be curated at the same repository in order to sustain the collection’s integrity and research value (36 CFR § 79.6[b]).
The following facilities in Maryland currently meet the minimum federal standards for curation repositories:

- The Maryland State Archeological Collections;
- Historic St. Mary's City Archaeological Laboratory;
- Baltimore Center for Urban Archaeology (BCUA), Archaeological Laboratory;
- Museum and Archeological Regional Storage Facility (MARS, a National Park Service facility); and
- Eastern Applied Archeology Center (EAAC, a National Park Service facility).

The Historic St. Mary's City Archaeological Laboratory only curates collections recovered from sites within the St. Mary's City National Historic Landmark, (301) 862-0973. The BCUA laboratory accepts collections from sites within Baltimore City and Baltimore County, (410) 396-3156. The MARS facility principally curates federally-owned collections, (301) 344-3523. The EAAC primarily curates National Park Service collections on a short term basis, (301) 344-6260. For other collections from Maryland, the Trust encourages their curation at the Maryland State Archeological Collections (see section C below), the principal repository for archeological materials recovered from sites in Maryland. Section G below explains the Trust's procedures and requirements for accepting collections for curation.

Situations may arise where a property owner requests to keep the material remains recovered from the owner's private property. Under these circumstances, the archeologist should strongly encourage the owner to donate the collection to a suitable repository by explaining the ethical reasons for appropriate curation and by providing information on incentives for such a donation (tax benefits, recognition, ensuring accessibility for future generations). A repository may be willing to accept the entire collection and then loan selected items back to the property owner for display or study purposes. If a property owner insists on retaining possession of the artifacts recovered from private property, the items must be returned to the owner.

Prior to transfer of material remains to requesting private property owners, the objects should be cataloged, processed, and packaged in accordance with professional minimum standards. In addition, the objects should be thoroughly recorded, including photographs and drawings of diagnostic artifacts and other objects critical to the interpretation of the archeological resources. The resulting documentation should be incorporated into any associated collection records, all of which should be deposited in a suitable repository along with a clear identification of the location of the transferred material remains in the owner's possession. Finally, the archeologist should provide the owner with written curatorial recommendations on how to store and handle the collection to avoid or minimize damage and deterioration of the items. The owner should also be supplied with information on incentives for the future donation of the collection to an appropriate repository, and sources for additional technical assistance and advice.

C. The Maryland State Archeological Collections

Archeological collections curated by the State of Maryland consist of historic and prehistoric artifacts from throughout the state. The Maryland State Archeological Collections, maintained by the Maryland Historical Trust, include specimens from all periods of American prehistory and history, ranging in date from the Paleoindian period of 10,000 to 12,000 years ago through recent centuries. Some 4,000,000 artifacts -- representing nearly 1400 archeological sites -- comprise the collections. The artifacts were recovered from archeological surveys and excavations by state archeologists, consultants, amateur
archaeologists, and private donors. The artifacts and the contexts in which they were found constitute a major part of the surviving record of prehistoric Indians in Maryland, and supplement our understanding of the written record of historic time periods. In addition to the artifacts, the state collections contain the associated records (field notes, photographs, maps, etc.) related to the curated material remains.

The archaeological collections are currently stored in the stack area of the old Hall of Records building in Annapolis with climate control, security, and controlled access. A computerized box inventory facilitates retrieval and use of the collections. The repository meets the federal standards for a curation facility set forth in 36 CFR § 79.

Collections relating to Maryland's first permanent European settlement and capital, St. Mary's City, are curated by the Historic St. Mary's City Commission in southern Maryland. Jefferson Patterson Park and Museum also maintains collections recovered on the park and from elsewhere in southern Maryland. For information on the St. Mary’s City or Jefferson Patterson Park collections, contact the Commission at (301) 862-0976 or the Park at (410) 586-0050. It is anticipated that all state archaeological collections, except those curated at St. Mary’s City, will be moved to a proposed new Maryland Archeological Curation Laboratory located at Jefferson Patterson Park and Museum within the next five years.

The Maryland State Archeological Collections are curated and made available for study, exhibit, and other appropriate uses. Agencies or individuals considering donation of their collections to the state, researchers desiring to study the collections, or those requiring further information regarding the collections should contact the Trust’s Office of Archeology at (410) 514-7661.

All new collections slated for curation by the Maryland Historical Trust must meet the minimum standards presented herein prior to acceptance. The Trust may refuse to accept any new collections that fail to meet these standards.

D. Processing Material Remains

Archeological investigations often produce material remains from the area under study. The federal regulations provide the following definition of material remains:

*Material remains* means artifacts, objects, specimens and other physical evidence that are excavated or removed in connection with efforts to locate, evaluate, document, study, preserve or recover a prehistoric or historic resource. [36 CFR § 79.4(a)(1)]

Material remains may comprise a wide variety of items including: architectural elements, artifacts of human manufacture, natural objects used by humans, waste or debris resulting from the manufacture or use of human-made or natural materials, organic materials, human remains, elements of shipwrecks, components of petroglyphs or art works, environmental or chronometric specimens, and paleontological specimens recovered in direct physical association with a prehistoric or historic resource (36 CFR § 79.4 [a][1][i-x]). The nature and composition of the material remains will prescribe its specific handling and treatment. However, the following general procedures must be followed in the processing of material remains.
1. **Cleaning**

  ► All artifacts must be cleaned.

  (Exceptions: Artifacts designated for special studies, such as blood residue analysis, can be curated in an unwashed state. These artifacts must be packaged separately from the rest of the collection. Containers with these special artifacts must be clearly marked, and any specific instructions must accompany the artifacts. The artifact inventory must note the artifacts’ unwashed condition.)

2. **Labeling**

  ► a. All artifacts must be permanently labeled with provenience information including, at a minimum, the official state site number (or X number for isolated finds) and official state lot number.

  The artifact label or catalog number is an essential designation which relates the individual object to its provenience of recovery. The horizontal location of an artifact in a site and its vertical position within the soil are critical factors for developing accurate site interpretation. Without an appropriate label, this provenience information may become lost and is very difficult, if not impossible, to reconstruct. If an artifact becomes separated from its bag or is removed for study or exhibit purposes, the label ensures that the object may be returned to its appropriate place.

  The Trust’s curation facility employs a lot number system for labeling and cataloging. The label consists of the official state inventory number, represented as a trinomen (for example 18BA25) and the official state lot number. For material remains not associated with an inventoried site, a Maryland Random Finds Number, or "X Number", should be used in place of the site number. The Trust’s Office of Research Survey and Registration designates official site and X numbers. See Chapter V.D.1 for an explanation of the site and X number system.

  Beneath the site or X number, a lot number is designated. Lot numbers may refer to one object or to a group of objects from one provenience unit (such as objects recovered from a level within an excavation unit, or one section of a surface collection). Each artifact or group of artifacts from a different provenience unit must have its own lot number. Lot numbers are assigned sequentially and are keyed to their collection’s catalog (see sections D.2.h and F below). The **Trust’s Archeological Research Services Manager** must be contacted to obtain the next available lot number for any previously recorded site. This requirement is essential, in order to ensure that lot numbers are not duplicated during subsequent work at the same archeological site.

  Archeologists may add additional designations following the official site and lot numbers, if desired, to suit individual cataloging and analyses needs. However, the catalog must include a key translating the full provenience system utilized. The Trust recognizes that under certain circumstances, alternative procedures to the lot number system may be warranted. For example, federal agencies may require consultants to use an agency’s own labeling practices. If an alternative system is proposed for collections to be curated by the Trust, **prior written concurrence of the Trust’s Archeological Research Services Manager** must be obtained before this option can be employed.

  ► b. Artifacts must be marked directly on their surface using permanent waterproof ink and a clear overcoat, such as Acryloid B-72. Porous artifacts can receive a clear undercoat as a
marking base. Dark artifacts can be prepared for marking with an undercoat (such as titanium dioxide in Acryloid B-72 or white gesso), or marked directly with contrasting waterproof ink. The Trust discourages the use of gesso since it is not long lasting and may peel. Archeologists must employ the best current standards of professional knowledge in labeling artifacts with ink, sealant, and white backing - when needed. Contact the Trust’s Archeological Services Manager for a list of acceptable marking materials and procedures.

- c. **Artifacts too small to be marked, or impractical to mark for other reasons (such as fragility or unwashed condition), must be placed in perforated polyethylene zip-lock bags (minimum thickness = 2 mil) or other acceptable packaging material** (see item 3.a below). Provenience information must be written in permanent black marker on the bag’s exterior, and must be duplicated with permanent ink on an archivally stable tag (such as acid-free paper, mylar, or tyvek) enclosed in the bag.

- d. **For small collections (i.e., < 200 objects), all artifacts must be labeled, as feasible.**

- e. **For large collections (i.e., ≥ 200 objects), certain classes of artifacts (e.g. shell, fire-cracked rock, flakes, window glass, nails, brick, slag, mortar, coal) need not be individually labeled.** These items may be grouped together by material type within each provenience, and must be marked and bagged as specified in item D.2.c above. However, all diagnostic artifacts (for example, projectile points and ceramics) must be individually labeled, as feasible. **Prior written concurrence of the Trust’s Archeological Research Services Manager must be obtained before this option can be employed.**

- f. All non-human bone must be labeled, as feasible. Non-human bones too small to be individually labeled should be processed following the procedures outlined in item D.2.c above. (See section D.4.c below for a discussion of processing human remains.)

- g. All other classes of archeological material (for example processed floral and soil samples) must be assigned a lot number and appropriately labeled with provenience information.

- h. All collections must be accompanied by a catalog (see section F) which includes a key clearly translating the labeling system employed to record the provenience information.

3. **Packaging**

- a. **Artifacts must be stored in perforated, permanently marked, polyethylene zip-lock plastic bags (minimum thickness = 2 mil), as feasible.** Tiny or delicate objects must be stored in archivally stable, acid-free materials with appropriate padding and protection (see item D.3.e below). Perforation of plastic bags or other airtight packaging is necessary to allow air exchange and avoid cargo sweat.

- b. **All plastic bags must be permanently labeled on the exterior and on an interior tag with appropriate provenience information.** Provenience information must be written in permanent black marker on the bag’s exterior, and must be duplicated with permanent ink on an archivally stable tag (such as acid-free paper, mylar, or tyvek) enclosed in the bag.

- c. **Artifacts must be grouped and bagged by provenience, and separated by material type within the provenience.** (Exceptions may be warranted for small lot sizes and for legitimate research,
conservation, and exhibit purposes. However, the documentation accompanying the collection must provide an explanation and justification for the organization system employed.

- d. All other classes of material remains (such as floral and faunal samples) must be placed in acceptable, sealed, perforated containers and permanently labeled with the provenience information (including site and lot numbers).

- e. Archivally stable, acid-free packing materials must be used for packaging all objects. Fragile and delicate objects must be specially packaged to ensure proper protection during shipping and storage. The Trust recommends the use of small acid free boxes padded with acid free foam core or ethafoam blocks. For oversize items (such as mill stones, ship’s timbers, or architectural elements), contact the Trust’s Archeological Research Services Manager for appropriate packaging recommendations.

- f. All artifacts must be placed in acid-free boxes (e.g., "Hollinger") for shipping and final storage. (Use only the box type specified by the designated curatorial repository.) Artifacts should be packaged by sequential lot number, whenever possible. The Trust prefers, but does not require, the use of inert corrugated plastic (coroplast) boxes. The Trust accepts two standard box sizes:
  
  - standard records box (12.5" wide x 15" long x 10" high), and
  - a half-size box (12.5" wide x 15" long x 5" high).

- g. Specialized storage containers or packaging materials may be utilized, if warranted. However, use of alternative materials requires the prior written approval of the Trust’s Archeological Research Services Manager.

- h. All artifact containers must be permanently labeled to identify the containers’ contents, provenience, and lot numbers.

4. Special Considerations

- a. Wet Material Remains: Material remains recovered from submerged sites or water logged contexts (such as a marshy area or soil levels beneath the water table) require special handling and treatment to ensure the stability and long term preservation of the objects. Wet conditions often promote excellent preservation of certain materials, particularly organic remains (such as wood, leather, cloth, and botanical remains). However, once these materials are excavated and removed from their wet environment, rapid deterioration will occur unless the items are appropriately and promptly treated. Projects involving or anticipating the recovery of wet material remains must include provisions and funding for the appropriate treatment and conservation of those materials by a trained professional conservator.

The Trust may refuse to accept collections with unconserved material remains. For additional guidance on the treatment of wet material remains, contact the Trust’s Chief Conservator at (410) 514-7661.

- b. Conservation: Like wet material remains, certain other types of materials also require professional handling and treatment to ensure their long term preservation. Such items may include metal objects (buttons, buckles, hardware) or organic materials (bone implements, leather) which will
deteriorate without proper stabilization and treatment. The Trust strongly recommends professional conservation of unstable material remains prior to curation of the collection, whenever possible. Items which particularly warrant conservation include those objects recovered from a site that are critical to the site’s interpretation, as well as exhibit-quality objects. Projects which anticipate the recovery of unstable material remains (such as well and privy excavations or intensive historic site investigations) must include provisions and funding for the appropriate treatment of those materials by a trained professional conservator.

The Trust may refuse to accept collections with unconserved material remains. For additional guidance on the treatment of unstable material remains, contact the Trust’s Chief Conservator at (410) 514-7661.

c. Human Remains: In general, the Trust does not encourage the excavation and long term curation of human remains, unless those remains are imminently threatened by natural or human forces, or unless the remains have outstanding research potential. Procedures for the treatment of human remains and associated grave goods may vary depending on the anticipated final disposition of the remains and the wishes of descendants or culturally affiliated groups. Treatment procedures must be established prior to initiating any excavation of human remains or undertaking a project which anticipates their recovery. Any treatment decisions must conform with applicable federal and state legislation, regulations, and policies in addition to these standards and guidelines. Chapter VIII.C presents a more detailed discussion of special provisions related to human remains and cemeteries.

Contact the Trust’s Office of Archeology for guidance and information on the appropriate handling and treatment of human remains and associated grave goods, at (410) 514-7661.

d. Selective Discarding of Material Remains: Certain types of material may have questionable long term research value and thus may not warrant permanent curation with the collection. These materials may include: brick, mortar, slag, coal, shell, and recent 20th century debris (i.e., less than 50 years old). It may be more prudent to discard these items following analyses, rather than to permanently curate the materials with the collection. A project’s principal investigator, in consultation with the Trust, should employ the best professional knowledge and judgement to decide the most appropriate disposition of these materials. Factors to consider in reaching the decision to selectively discard materials include: the archeological context of recovery, the items’ research potential, the amount and manageability of the materials. The principal investigator should carefully consider the potential future research value of the items. Depending upon the situation, the selective discard may encompass all, none, or a portion of the materials. It may be prudent to retain a sample of the materials slated for discard for future study and analyses. Items slated for selective discard must still be analyzed and cataloged. The collection’s catalog must specify the types and quantities of discarded materials, along with a justification for the selected disposition, and note that the items were discarded.

For further guidance or questions regarding the selective discard of material remains, contact the Trust’s Archeological Research Services Manager at (410) 514-7661.

e. Other Types of Material Remains: Other types of material remains (specimens, flotation and soil samples, etc.) must be appropriately processed before curation. Projects proposing or anticipating the recovery of these types of material remains should include adequate provisions in the budget for appropriate processing and specialized analyses. If sufficient funding is not available for analyses, the materials should be appropriately processed and packaged to ensure their long term
preservation for future analyses. Only soil samples retained for back-up analyses should be curated without prior processing. However, soil samples will survive best if they are very dry or frozen for storage.

Contact the Trust’s Archeological Research Services Manager for further guidance and assistance regarding the processing, storage and analyses of other types of material remains, at (410) 514-7661.

E. Processing Associated Records

Archeological investigations also generate important associated records, in addition to the materials recovered. Federal regulations define these associated records:

Associated records means original records (or copies thereof) that are prepared, assembled and document efforts to locate, evaluate, record, study, preserve or recover a prehistoric or historic resource. [36 CFR § 79.4(2)]

These records may encompass a broad variety of materials including: field notes, maps, drawings, photographs, slides, negatives, films, video and audio tapes, oral histories, artifact inventories, computer disks and diskettes, manuscripts, reports, remote sensing data, public records, archival records, and administrative records relating to the archeological investigations. The materials contain essential documentation of the archeological research and warrant appropriate treatment to ensure their long term preservation for future researchers.

The scope of a given archeological investigation will determine what kinds of associated records are produced for the project. The nature and composition of the resulting records will prescribe their specific handling and treatment. However, the following general procedures must be followed in the processing of associated records.

1. Required Records

   a. Two archivally stable copies of all original project records must be prepared and submitted for curation with the collection. The original on acid-free paper and one copy on acid-free paper by a heat fusion process (e.g. Xerox dry process) is acceptable, or two copies on acid-free paper. Records should be submitted unbound, unpunched, double-sided (if feasible), and on 8½” by 11” paper.

   b. All associated photographic documentation (including transparency slides, negatives, and contact sheets) must be submitted for curation with the collection. Photographic documentation must be prepared on an archivally stable medium using the best known archival processing. The American National Standards Institute (ANSI) periodically publishes standards related to photography. One complete copy of the photographic documentation is acceptable.

   c. An inventory of all associated records and a catalog of photographic materials, along with an explanation of labels must accompany all collections (see section F below).

2. Labeling

   a. All project records must contain permanent labels. Labels must identify, at a minimum, the project name, site number, and date of preparation. Labels should be written directly on the records or sleeves, as appropriate, and not on adhesive materials that may be subject to separation.
b. All photographic documentation must be clearly labeled. Labels must contain, at a minimum, the site number, date the photograph was taken, the provenience within the site of the photograph (feature/square, layer/level), and the direction of view, as appropriate.

3. Packaging

a. All records must be packaged using archivally stable, acid-free materials. Containers must be permanently labeled.

b. All photographic documentation must be stored in archivally stable, acid-free containers. Contact the repository prior to packaging for a list of approved materials. Containers must be permanently labeled.

F. Cataloging Material Remains and Records

All collections, including the material remains and associated records must be inventoried. An itemized descriptive catalog(s) must accompany all collections. The catalog must provide a detailed description of the items, identifying and classifying the archeological materials and records according to best current professional standards. The catalog maintains an essential record of the objects represented; therefore, it should present as much information about the items as possible. Should an item ever become lost, stolen, or deteriorate beyond recognition, the catalog may be the only surviving record of that item. Catalogs are a means of obtaining information about a collection or specific items within the collection without handling the actual objects themselves. A detailed catalog will help minimize the need for subsequent handling of the objects. In addition to item-specific descriptions, the catalog should specify the collector or donor’s name, project name, official Maryland site and lot numbers, and date of collection. To obtain samples of the Trust’s standard specimen and photograph catalog, contact the Office of Archeology at (410) 514-7661.

Catalogs are frequently prepared and maintained in a computer database. The Trust strongly encourages submittal of a copy of the computer database on standard computer storage media, with appropriate labeling and identification of utilized software, with the collection for permanent curation. However, two archivally stable paper copies of the inventory also must always accompany the collection.

G. Maryland Historical Trust - Collection Submittal Requirements

To submit a collection to the Trust for permanent curation in the Maryland State Archeological Collection, the following procedures must be followed.

1. Transfer of Ownership Prior to acceptance of a collection, the Trust requires a signed Deed of Gift transferring ownership of the materials to the Trust. The consulting archeologist is responsible for informing the project sponsor or property owner about the necessity for executing the Deed of Gift prior to transmitting the collection. The Trust may make exceptions to the signed Deed of Gift requirement, in unusual circumstances. However, prior written consent of the Trust’s Chief, Office of Archeology, is required before acceptance of a collection without a Deed of Gift. In the case of federally owned collections, a signed Memorandum of Understanding for Curatorial Services must accompany the collection. For collections owned by State of Maryland agencies other than the Maryland Historical Trust, a signed interagency Letter of Agreement and Transfer Deed is required. The Trust recognizes that federal and state collections agreements may take considerable time to execute; and it will agree to
take temporary custody of a government-owned collection, without a signed agreement, only upon written confirmation from the agency that the agreement is forthcoming.

2. **Collection Documentation** Certain documentation must accompany each collection submitted to the Trust for curation. The Trust’s Office of Archeology ([410] 514-7661) may provide the sample forms mentioned below. Comparable forms may be used, provided that those forms contain the same information in a similar format. All documentation must be submitted on acid-free paper. The following items constitute the required documentation which must be submitted with each collection.

   - a. A completed document which transfers ownership of the collection to the Trust or authorizes the Trust to provide curatorial services:
     - DEED OF GIFT (for collections from non-state or non-federal ownership)
     - MEMORANDUM OF UNDERSTANDING FOR CURATORIAL SERVICES (for federally-owned collections)
     - LETTER OF AGREEMENT and TRANSFER DEED (for state-owned collections).
   - b. Two copies of a typed and complete MHT ARCHEOLOGICAL SPECIMEN CATALOG, or an MHT-approved equivalent. These must be submitted on acid-free paper as an original and one copy. Standard catalog forms and instructions are available from the Trust’s Archeological Research Services Manager.
   - c. A list of all associated records (see item E.1.c above).
   - d. A list of conserved objects, along with the conservator’s report of conservation treatment(s) and photographic documentation.
   - e. A list of those objects needing conservation treatment, with a justification of why the material was not conserved by the current project.
   - f. A complete MHT ARTIFACT COLLECTION BOX INVENTORY FORM. This inventory lists the sites, lot numbers, and general contents of each individually-numbered box, and is necessary to incorporate collections into the MHT computerized collection control system.
   - g. A completed COLLECTION AND RECORD TRANSMITTAL FORM.

3. **Inspection** Acceptance of any collection is subject to inspection and approval by the Trust’s Archeological Research Services Manager. Through inspection, the Trust strives to ensure adequacy of artifact and record processing, packaging, and documentation. Collections not meeting the minimum requirements stipulated herein will be returned to the donor at the donor’s expense. For this reason, close coordination with the Trust’s Archeological Research Services Manager is required. For large collections (more than 10 boxes), pre-shipment inspection by the Trust’s Archeological Research Services Manager at the donor’s facility is recommended.

4. **Shipping/Transmittal**
   - a. Shipment/transmittal of collections is the responsibility of the donor. Collections should be packaged using inert material and sufficiently secured to avoid any in-shipment damage.
will not be accepted unless the Trust's Archeological Research Services Manager receives notification at least 48 hours prior to delivery and issues written or verbal approval for the transmittal.

> b. For large collections (more than 10 boxes), actual placement of the collections on assigned shelves in the MHT facility is also the responsibility of the donor. This must be coordinated with the Trust's Archeological Research Services Manager.

H. Sources of Technical Information

Additional guidance and technical information on the appropriate processing and curation of collections may be found in the following sources:

- Preserving Field Records (Kenworthy et al. 1985);
- A Conservation Manual for the Field Archeologist (Sease 1987);
- Curation of Federally-Owned and Administered Collections: Final Rule (36 CFR § 79);
- National Park Service Museum Handbook Part I: Museum Collections (NPS 1990B); and

The American National Standards Institute (ANSI) periodically issues various technical publications, including standards relevant to the processing and storage of associated records (paper and photographic documentation). Public libraries generally maintain the current catalogue of ANSI publications. For further information on ANSI, contact the American National Standards Institute, 11 West 42nd Street, New York, New York 10036, (212) 642-4900.

The Trust periodically issues fact sheets which provide guidance and recommendations on acceptable collection processing and packaging materials (inks, markers, boxes, sealants, etc.), as well as lists of suppliers for those materials. To obtain copies of the current fact sheets and for additional information and assistance regarding processing and curation, contact the Trust’s Office of Archeology or the Trust’s Chief Conservator at (410) 514-7661.
VII. REPORTS AND DOCUMENTATION

The preceding chapters have described standards and guidelines for identification, evaluation, and resource treatment. Written reports are required products for the three types of archeological investigations, and these documents need to contain specific kinds of information to allow agency personnel (at the SHPO, the governmental agency sponsoring an undertaking, and the Advisory Council) to make informed decisions regarding the identification and treatment of significant sites. The submittal of reports which lack key information may cause project delays. For this reason, the Trust accepts only complete reports -- not management summaries -- for review. This chapter indicates the essential components of compliance reports. Individuals conducting research outside of the compliance field also can refer to these discussions to learn of several standard documentary procedures (e.g., submittal of official site inventory forms and National Archeological Database forms [see section VII. D], etc.).

With respect to compliance projects, it is necessary to submit complete draft reports to the Trust’s Office of Preservation Services for review. Due to the SHPO's workload, a response with comments may take up to 30 days from the receipt of a document. Authors of reports should address all SHPO comments and should prepare final, revised documents for resubmittal to the Trust.

Contractors should discuss with their employing agencies or other clients which party will submit draft and final reports -- with cover letters containing agency contract numbers/names -- to the Trust’s Office of Preservation Services for review. This action can eliminate confusion and prevent delays. Clear prose and illustrations will also permit reviewers to more readily interpret the methods and results presented in reports. Contractors should refer to the latest American Antiquity style guide for technical questions of style; supplementary guidance on the citation of historical records is available in the latest publication instructions for Historical Archaeology. Valuable resources for other aspects of composition include the most recent edition of the Chicago Manual of Style and Harrison (1945). The Advisory Council’s course, “Introduction to Federal Projects and Historic Preservation Law,” is recommended for increasing competence in preparing compliance documents; and periodic examination of recent final versions of cultural resource reports in the Trust library will reveal the level of work acceptable to Maryland’s reviewers.

In order to augment the quality of the State’s compliance archeology, staff of the Office of Preservation Services may send copies of draft data recovery proposals and data recovery reports out for additional peer review. Archeological contractors need to be aware then, that two copies of Phase III proposals (budgetary information not required) and Phase III reports must be submitted to the MHT for comment. For other compliance reports, it is sufficient to send the Trust single copies of draft and final documents. Beyond the submittals to the Trust’s Office of Preservation Services, archeologists must ensure that one extra copy of all final compliance reports is sent both to the Southern Maryland Regional Center Archeologist and the Archeology Group of the Maryland State Highway Administration at the following respective addresses:

Jefferson Patterson Park and Museum
10515 Mackall Road
St. Leonard, MD 20685;

Archeology Group
Project Planning Division
State Highway Administration
707 North Calvert Street
Baltimore, MD 21203-0717.
Wider dissemination of the results of investigations is an important professional responsibility; and it is recommended that contractors and other researchers submit copies of their final reports to other appropriate regional archeologists (e.g., county archeologists, depositories suggested by the Council for Maryland Archeology).

Addressing agency comments by revision is essential to improving reports (which are available for limited public inspection) and preventing project delays. To increase report quality and to reduce the need for revision, Appendix I contains a current Trust checklist for the review of reports. It includes the most critical items which should be included in these documents; the remaining sections of this chapter describe other important elements of reports in Maryland. The Trust reserves the right to drop from its list, "Sources of Consultant Services in Maryland Archeology," the names of contractors whose reports do not meet the State's Standards and Guidelines.

Reports submitted to the Trust for review should consist of bound, 8½" x 11" typed pages. Figures may be larger in size for clarity, if they can be folded to fit in the bound report as pages or inserts in a pocket. In order to facilitate storage of the reports in the Trust library, the use of bulky three-ring binders should be avoided. Contractors should also prepare final reports which are typed single-spaced and double-sided; this practice will conserve more library space. The final report submitted to the Trust must be prepared on acid-free paper.

A. Suggested Outline

1. **Title Page**
   - title of report which includes the name, nature, and location (with county) of the project (including descriptions of "Phase I, II, or III," as appropriate) and which is identical to the title on any report cover
   - clear designation of report's author(s) with complete mailing address
   - clear designation of project's principal investigator(s) with complete mailing address
   - names and complete mailing addresses of the lead government agency and of the government agent (e.g., engineering firm, developer, or project sponsor, if appropriate)
   - date of current version of report (i.e., latest production date)

2. **Abstract**
   - a summary -- at most one half page long -- of the purpose of the historic preservation work, nature of the given governmental undertaking, location of the undertaking with name and number of the Maryland Archeological Research Unit (from the Council for Maryland Archeology map in Appendix II), findings, and recommendations

3. **Table of Contents**
   - entries for all report chapters and headings/sub-headings
   - lists of figures (one list for all forms of illustrations [e.g., line drawings, plates]), tables, and appendices
   - page numbers for all entries
4. **Introduction**

- brief statement on the purpose of the historic preservation work
- identification of the lead governmental agency (or project sponsor, if appropriate) and description of its proposed undertaking with:
  
  a. anticipated direct and indirect project impacts
  b. agency contract or project numbers/names
  c. specific law calling for the current historic preservation work
  d. any governmental agents directly involved with the historic preservation project

- locator maps:
  
  a. copy of the Council for Maryland Archeology’s map of Maryland Archeological Research Units (Appendix II) with project location
  b. copy of U.S. Geological Survey 7.5’ quadrangle (1" =24,000', generally) showing the area of potential effects (as defined in 36 CFR § 800.2[c] and determined by the governmental agency)

- dates when background research and field investigations were conducted
- acres and hectares examined
- numbers and titles of historic preservation personnel
- description of the organization of the report

5. **Research Design**

- detailed statement of objectives, including applicability of the work to regional research questions
- methods and techniques of archival and background research, field studies, analysis
- expected results
- final disposition of artifacts and field records

Nota bene. If a formal scope of work or proposal was prepared, authors may refer to this document, when it is located in an appendix, to avoid lengthy repetition.

6. **Results of Archival and Background Research**

- past and present natural environments: factors relevant for consideration of historic property potential, integrity, and significance
- cultural setting:
  
  a. synopsis of best current professional knowledge of prehistoric and historic contexts with appropriate level of detail
  b. discussions of prior investigations should include a table of known archeological properties -- and of documented historic structures, if pertinent to the study -- in the vicinity (e.g., within a 2-mile radius of project site); a figure should illustrate the locations of archeological resources only when they are in or adjacent to the current area of potential effects
  c. critical examination of the previous archeological research and revision of project expectations in context of predictive modeling
7. **Results of Field and Laboratory Investigations**

- field conditions and constraints
- qualitative and quantitative description and analysis of the archeological resources with reference to published comparable studies and employing official Maryland inventory numbers (Archeological site numbers issued by the Trust’s Office of Research, Survey, and Registration must be utilized in the text and the figures of both draft and final reports.)
- maps depicting locations of identified resources along with boundaries of area of potential effects, positions of survey transects/test pits or units/surface collection quadrats, artifact distribution/density maps, permanent datum points
- illustrations of representative soil profiles and of all diagnostic artifacts that are important for the interpretation of a site
- interpretations that refer to historic contexts; research questions; and integrity/significance (eligibility for the Maryland and National Registers), when possible and appropriate

8. **Summary and Recommendations**

- summary of results and evaluation of methods and techniques employed
- assessment of impact of governmental undertaking on identified cultural properties
- need for additional investigations or resource treatment
- discussion of the study’s public interpretation measures, if applicable

9. **References Cited**

- listing of all references according to the latest *American Antiquity* format

10. **Appendices**

- relevant project correspondence
- scope of work or proposal, if appropriate
- state antiquities permits (projects on state lands) or federal Archeological Resources Protection Act permits (projects on federal lands)(see Chapter VIII.B)
- full copies of ancillary studies (e.g., faunal or soil analyses)
- artifact inventory
- conservation report
- Maryland Inventory of Historic Properties update forms for archeological sites (reports should only include the update forms, not the longer forms for the initial reporting of sites to the Trust’s Office of Research, Survey, and Registration)
- qualifications of principal investigator(s): maximum resume length of 2 pages per individual; needs to clearly demonstrate that the person meets National Park Service requirements published in the Code of Federal Regulations (36 CFR § 61) and in Dickenson (1983:44738-44739) (see Chapter VIII.A)
- National Archeological Database - Reports Recording Form (accompanying the final report as a separate attachment; see section D, in this chapter, and Appendix III)
B. **Standards for Illustrations**

The following elements must characterize all report illustrations (maps, drawings, photographs, etc.), which shall be called "figures" and numbered in a single running series:

- informative title (including location and orientation of the camera for all landscape photographs) with any necessary citations
- scale (or indication that an historic source lacks a scale)
- north arrow
- key
- clarity (e.g., original photographs, halftones, or clear photocopies)
- utility (i.e., illustrations providing useful information which cannot readily be transmitted in written form)

C. **Special Considerations for Phase I and Phase II Reports**

1. **Phase I Reports** This section highlights several of the essential elements of compliance reports for Phase I identification surveys; the more general requirements for reporting on archeological compliance projects are found in the previous outline. Reports should begin with clear statements on the goals and objectives of the project. Since archeologists often work in jurisdictions where identification surveys are called by different names, it is essential that researchers working in Maryland define the level of survey being performed. In other words, it is insufficient to declare only that a "Phase I survey" was conducted; one must describe briefly what purpose the survey fulfilled. In this regard, one also needs to explain: what type of governmental undertaking is proposed; what governmental agency is responsible for considering historic properties for the project; what particular historic preservation law mandates the archeological work; and what form of investigation -- for example, intensive survey -- is being performed.

In addition to the project's research design, reports must contain other substantive sections, including one which describes the kinds of archeological resources, from each cultural/temporal period, that are likely to occur in the study area (cultural background). Discussions should incorporate relevant information on current and past environments and land use; and statements on archeological potential need to relate quantified areas of potential effects (in acres and in hectares) to available data on site density. Here, one should prepare a table of the archeological properties previously recorded for the area of potential effects and its vicinity. In order to reduce the threat of vandalism to archeological resources, illustrations should depict only those sites that are either within or immediately adjacent to project boundaries.

A section on research methods and techniques should be explicit and carefully justified. For example, it is insufficient just to describe the kinds of sampling strategies employed, the spacing of survey transects, and the analytical procedures used. One must discuss why these particular research methods and techniques were considered the best for the job, relating them to archeological expectations (e.g., known site, feature, or artifact sizes) and research questions.

Chapters dealing with results and recommendations need to incorporate official Maryland inventory numbers, when archeological properties are found (with copies of state inventory form updates included as an appendix). Maps should clearly depict the locations of identified resources along with boundaries of areas of potential effects and positions of test pits or survey transects. Finally, the recommendations
need to discuss site integrity and significance, as possible, and to justify the call for more research or the termination of study in the context of project impacts and potential effects.

2. **Phase II Reports** This section highlights several of the essential elements of compliance reports for Phase II evaluative studies; the more general requirements for reporting on archeological compliance projects are found in the previous outline. As with Phase I reports, documents describing evaluations must begin with a statement of the purpose of the work. It is insufficient to declare only that a "Phase II project" was conducted. One must also explain: what type of governmental undertaking is proposed; what governmental agency is responsible for considering historic properties for the project; and what particular historic preservation law mandates the archeological investigations.

In addition to the project’s research design, reports must contain other substantive sections, including one which describes, according to cultural/temporal periods, the kinds of archeological resources that occur in the area of potential effects (cultural background). Discussions should incorporate information on current and past environments and land use which may be important to evaluations of resource significance. The description of research methods and techniques should be explicit and carefully justified (see Chapter III). Project maps must show the locations of excavation units and other field investigations. Other maps need to clearly depict the boundaries of archeological properties, the distribution of artifacts and other cultural materials, site features, and the undertaking’s area of potential effects. Drawings of representative soil profiles must show the vertical limits of archeological components. Concluding chapters also are to contain a detailed discussion of resource integrity and significance. There should be a summary of: 1) information provided by the archeological property; 2) future information potential with respect to the estimated quantity of data and the ability to address specific research questions; 3) comparisons of the subject property with other local and regional resources from similar historic contexts. Finally, there must be a definitive statement on resource eligibility for the National Register or Maryland Register with explicit designation of evaluative criteria, as well as a consideration of project effects and the need for further site treatment.

D. **National Archeological Database**

The Trust possesses the Reports section of the National Archeological Database (NADB) for the state of Maryland. NADB is a computerized informational system dealing with archeological investigations across the United States; it concentrates on cultural resource management. The National Park Service, together with consultants, developed NADB in the 1980s with funding from the United States Congress (NPS 1990A). One goal of this project was the improved coordination of federal archeological activities by providing agencies with quicker access to a comprehensive listing of archeological reports and project data. The Reports section of NADB records annotated bibliographical information about reports and other documents that summarize archeological and related studies. As of 29 June 1994, Maryland’s Reports database contains entries on 2,286 documents on file at the Trust.

In addition to the federal utilization of Maryland’s contribution to NADB, Trust staff archeologists plan to use the Reports database for a variety of tasks. For example, NADB will improve the SHPO’s capacity: 1) to manage data on archeological survey coverage according to geographical area; 2) to address specific research problems in different areas of the State; 3) to review compliance projects in a timely manner; and 4) to retrieve bibliographical information in the Trust library. While there currently is no public access to NADB at the Trust because of a lack of computer hardware and the preliminary nature of the system’s configuration, the Trust envisions providing limited public use of NADB in the future. Presently, researchers may gain access to NADB-Reports through a telecommunications link;
information on this procedure is available through the National Archeological Database Coordinator (Archeological Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127).

The success of NADB depends upon the continual updating of the basic system elements, i.e., the inclusion of bibliographic information from new archeological reports submitted to the SHPO. In order to provide for the future utility of the system, all authors of archeological reports submitted to the Trust for compliance review must simultaneously send a completed copy of the brief NADB-Reports Recording Form (Appendix III). Revised compliance reports require new NADB forms only when any of the changes would be reflected in the forms (e.g., new year of publication/production). The Trust encourages all other authors of publications on Maryland archeology to send copies of their written work together with completed NADB forms to its library. A noteworthy change in the instructions for the forms is the need to record the acreage of field projects as a keyword (Category 4; see Appendix III).
VIII. SPECIAL PROVISIONS

This final chapter provides expanded discussions on several topics mentioned earlier and applicable to archeological investigations in Maryland. These topics include: professional qualifications, permits for archeological work, treatment of human remains, considerations for multidisciplinary investigations, curation of artifacts and documentation, public education/interpretation, and the Trust's library facility.

A. Professional Qualifications

All archeological investigations should be conducted by or under the direct supervision of individuals meeting appropriate professional qualifications for archeology. The Secretary of the Interior's "Professional Qualifications Standards" (Dickenson 1983:44738-44739) establishes the following minimum professional qualifications in archeology:

The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus:

1. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management;
2. At least four months of supervised field and analytic experience in general North American archeology; and
3. Demonstrated ability to carry research to completion.

In addition to these minimum qualifications, a professional in prehistoric archeology should have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology should have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period.

These minimum qualifications must be met for all archeological work conducted to fulfill compliance with Section 106 (36 CFR § 800.4[b]) and the state historic preservation law (Article 83B, § 5.618 [g]). The Trust strongly recommends adherence to these standards for all other archeological investigations in Maryland as well.

Agencies and project sponsors are not prohibited from using non-professionals (such as students, volunteers, avocational archeologists) to assist with aspects of archeological projects. Volunteer assistance may augment the amount of work accomplished for a project, help reduce total project costs, and fulfill public education requirements. Use of volunteer assistance must be weighed against other project needs and priorities to ensure that desired schedules are met and quality data are retrieved. Finally, all volunteers must be supervised by a qualified professional archeologist in order for the investigations to meet professional standards.

B. Permits

Archeological investigations conducted on federal or state-owned property may require a permit, as
outlined below. Project sponsors should obtain any necessary permits before initiating archeological investigations on federal or state-owned land.

The purpose of federal and state archeological permit legislation is to deter looting and vandalism of archeological properties as well as to prevent unauthorized and unprofessional site excavation. The recovery of artifacts from their original context (through casual artifact collection, metal detecting, or intentional pot hunting) removes and destroys valuable archeological information which contributes to a full knowledge and understanding of a site. In addition, archeological testing itself is destructive by nature and should only be conducted by qualified professionals and in accordance with appropriate professional standards. The recovery and investigation of archeological resources is generally not desirable or advisable, unless the resources are threatened or unless there is a justifiable reason for investigation. Archeological permit legislation helps ensure the safety, survivability, and appropriate investigation of archeological resources located on lands (or waters) owned or controlled by Maryland or the federal government.

1. **Federal Permits** The Archeological Resources Protection Act of 1979 (16 U.S.C. 470aa - 470mm) requires a permit for any excavation or removal of archeological resources located on federally owned property or Indian lands. The Act also includes both civil and criminal penalties for any violations of permit requirements, as well as for unauthorized removal, damage, or vandalism of archeological resources located on public lands.

The land manager for the federal agency which owns or manages the public land to be investigated is responsible for issuing permits. In order to qualify for a permit, the proposed investigations must comply with the following criteria:

a. The research must be conducted by a qualified professional.

b. The investigations must advance archeological knowledge in the public interest.

c. The resources removed will remain the property of the United States. The recovered resources plus any associated records and data must be delivered promptly to a qualified repository for curation.

d. The research must not be inconsistent with any land management plan, policy, objectives, or requirements applicable to the property under consideration.

Permit procedures may vary depending on the policies of the particular federal agency which owns or controls the property slated for investigation. Some agencies do not require a permit for investigations conducted to fulfill the agency’s own responsibilities under Section 106 for a proposed undertaking. Project sponsors should contact the land manager of the appropriate federal agency to determine if a permit is required and initiate the application process, if necessary.

2. **State Permits** Article 83B, §§ 5-620, 5-625, 5-626, and 5-628, of the Annotated Code of Maryland generally require that a permit be obtained from the Trust prior to conducting any archeological investigation or other activity that may affect archeological resources on state-owned or controlled land, including submerged lands; or in any cave, including caves located on private as well as state-owned or controlled land. There are three exceptions to this requirement: 1) projects conducted by or for the Maryland State Highway Administration (SHA) do not require a permit; 2) projects conducted by or under contract to the Maryland Historical Trust do not require a permit; and 3) landowners of properties protected under § 5-621 do not need a permit (see Chapter IV.D.4).
These provisions of Maryland law are principally intended to prevent pothunting and looting. However, the Trust requires researchers and consulting archeologists wishing to conduct investigations on state-owned or controlled lands, or in public or privately-owned caves to obtain permits prior to initiating the investigations, except as noted above. Failure to obtain required permits can result in prosecution, the imposition of substantial fines, imprisonment, and the confiscation or forfeiture of all excavated materials and recorded information (Article 83B, § 5-630).

It is the Trust’s policy to require the project sponsor or applicable state agency to be the permit applicant, rather than the consulting archeologist hired to perform the work. Permit applications are reviewed by the Trust and by the state agency administering the land for which the permit is requested. Since several individuals and agencies are involved in this process, applicants should anticipate that permit approvals may require several weeks. Generally, the Trust will issue a permit within 30-60 days of receiving complete application materials. Additional time may be needed for processing by the land managing agency.

To qualify for a permit under Maryland law, an applicant must demonstrate that the proposed project will be of public benefit. Examples of the type of public benefit that would fulfill this requirement include: survey and data recovery investigations to comply with state or federal historic preservation laws; investigations leading to publications disseminating significant new archeological data or interpretations; recovery of important artifact collections necessary for research and interpretation that will be of major public benefit; providing college-level education and training in archeology; and salvage and appropriate preservation of archeological information and resources threatened with imminent destruction.

For further information about permits for archeology on state-owned or controlled terrestrial land or in public or privately-owned caves, contact the State Terrestrial Archeologist at (410) 514-7665. For information about permits for archeology on submerged lands, contact the State Underwater Archeologist at (410) 514-7662.

C. Human Remains and Cemeteries

The archeological investigation or treatment of any human remains and burial sites must be undertaken with sensitivity for the wishes of descendants and groups culturally affiliated with the deceased, and must be conducted in full compliance with applicable federal and state law. Any excavation of burials should be preceded by careful consideration, thorough planning, and extensive consultation. If a proposed project area contains or is likely to contain human remains (e.g., based on the proximity of known burials, historical records, oral accounts, or the results of previous investigations), the project sponsor or archeologist should consult with the Trust to determine an appropriate course of action. The consultation process is likely to include the participation of the Maryland Commission on Indian Affairs for prehistoric burial sites, descendants, culturally affiliated groups, and other interested parties as pertinent to the human remains concerned.

The Federal Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001-3013) establishes protection and procedures for the treatment of Native American human burials located on federally-owned property or Indian lands. NAGPRA gives certain rights regarding the treatment and disposition of human remains, funerary objects, sacred objects, and objects of cultural patrimony to lineal descendents and to federally recognized Indian tribes when these groups demonstrate cultural affiliation. The law encourages the avoidance and preservation of archeological sites which contain Native American
burials on federal lands. NAGPRA requires federal agencies to consult with qualified culturally affiliated Indian Tribes or lineal descendants prior to undertaking any archeological investigations which may encounter human remains or upon the unanticipated discovery of human remains on federal land. The consulting parties decide the appropriate treatment and disposition of human remains and other cultural items recovered. This consultation may be a lengthy process and should occur early in project planning.

Current Maryland burial law, Article 27, §§ 265 and 267, of the Annotated Code of Maryland, requires authorization from the State's Attorney of the appropriate county or Baltimore City for the removal of any human remains, monuments, gravestones, or other markers from a cemetery. The law also stipulates that any remains or materials removed must be relocated in an accessible place in a permanent cemetery. The law provides penalties for unauthorized removal of human remains and the willful destruction/injury to any cemetery structures (such as a tomb, monument, gravestone, building, wall, fence, railing) or vegetation (trees, shrubs, plants). In addition, if a burial is to be disinterred and then reinterred in a different cemetery, a permit must be obtained from the County Health officer or the State Department of Health and Mental Hygiene (Health - General Article, § 4-215).

In general, the Trust does not encourage the excavation of human remains, unless those remains are imminently threatened by natural or human forces, or unless those resources have outstanding research potential. However, cemeteries and burials should be located, recorded, and evaluated as archeological properties when discovered through archeological investigations.

During a Phase I identification survey, archeologists should record cemeteries on a Maryland Inventory of Historic Properties - Archeological Site Survey form. A Phase II site evaluation should examine the significance of the cemetery/period applying the National/Maryland Register criteria. Phase I and II efforts should utilize non-destructive techniques to determine boundaries, age, cultural affiliation and significance of the cemetery/burial. Such techniques may include extensive background and historical research, informant interviews, thorough visual examination, careful probing, and ground penetrating radar. Excavation of cemeteries and burials is only appropriate for Phase III investigations, and must occur in full compliance with applicable federal and state law and following appropriate consultation with all relevant parties.

Generally, cemeteries and human remains are not considered eligible for the National or Maryland Registers (36 CFR § 60.4; COMAR 05.08.05.07). However, cemeteries/burials may be eligible if they are integral parts of a larger historic district or site; if they derive primary significance from graves of persons of transcendent importance, age, association with historic events, or distinctive design features; or if their principal significance is their ability to yield important information. For further guidance on assessing the significance of cemeteries, see the National Park Service’s National Register Bulletin 41, Guidelines for Evaluating and Registering Cemeteries and Burial Places.

If identification and evaluation efforts determine that a cemetery or burial is not eligible for the National or Maryland Registers, the project sponsor/agency should comply with appropriate federal and Maryland law in further treatment of the resource. Furthermore, if human remains are discovered during construction, all work should halt in the vicinity of the discovery until the appropriate authorities (Maryland State Police, State’s Attorney of the county, and the Maryland Historical Trust) have been notified and the relevant parties have agreed upon a course of action.

Maryland is considering revisions to its cemetery and burial laws and may be developing revised policies on the treatment of Native American burials. For any project which may entail cemetery or
burial investigation, the sponsor should contact the Trust’s Office of Archeology at (410) 514-7661 for guidance.

D. **Multidisciplinary Investigations**

Certain projects may entail multidisciplinary investigations to identify and evaluate a project area’s full range of historic property types -- including architectural resources, terrestrial and submerged archeological sites. Although different disciplines are involved in the examination of these varying resources, all cultural resource investigations entail similar types of background research, analysis, and reporting. The Trust strongly encourages project sponsors to integrate these multidisciplinary investigations and results. Such integration will result in a more cost effective and meaningful product and avoid unnecessary duplication of research and reporting efforts. Many consulting firms employ staff who are qualified in multiple disciplines.

For further guidance on successful incorporation of diverse cultural resource investigations, contact the Trust’s Office of Preservation Services at (410) 514-7628.

E. **Public Education/Interpretation**

The establishment and implementation of federal and state historic preservation laws have clearly demonstrated that protection and consideration of archeological properties are in the public interest. Thus, it is important that investigations conducted to comply with such laws include a public interpretation element to inform a large audience about the study results and provide opportunities for public participation. Public education is a required part of all Phase III archeological investigations. However, it should also be implemented, as appropriate, for other types of investigations.

Public education/interpretation may encompass many varied mechanisms and mediums. The measures appropriate for a given project will depend upon the nature of: the project itself, the archeological property under study, the resource’s location, and the priorities and interests of the involved agency, project sponsor and interested public. Public interpretation programs should be developed in consultation with the Trust. Upon request, the Trust may provide guidance on measures best suited to a particular project and resource. Public interpretation may be implemented during fieldwork or upon completion of analysis and reporting. Consulting parties must consider what methods will be most effective and efficient for a given project without impeding project schedule and implementation. Public education should be aimed at increasing public awareness and sensitivity to archeological resource protection and include means to safeguard the archeological property from any potential vandalism which increased public attention could inadvertently cause. Finally, agencies and project sponsors should take advantage of the positive public relations benefits which will be generated by a successful public education program.

The following list includes a sample of various public education/interpretation efforts:

- public open house to view fieldwork results;
- on-site press conference;
- press releases;
- popular publications (brochures, booklets, fact sheets);
- poster;
- volunteer opportunities for field and lab work;
- tours for school groups;
set slide talks to schools and special interest groups;
set video productions; and
set exhibits or displays.

F. **Maryland Historical Trust Library**

The Trust's library is the state's principal repository for information regarding Maryland's architectural, archeological, and cultural resources. The holdings of the library currently include:

- inventory forms for 75,000 historic structures and 8,000 archeological sites;
- National Register nomination forms;
- map collections, including copies of historical maps and atlases;
- photographs, negatives, and slides;
- books, plans, and other publications;
- professional journals; and
- site, survey, and research reports.

The library is open to the public by appointment on Tuesdays, Wednesdays and Thursdays. However, all material relating to Maryland's archeological sites is accessible only to legitimate researchers with prior approval from the Trust's Office of Archeology. All reference materials must be used at the library; materials are not available for loan. Appointments to use the library may be made by calling the librarian at (410) 514-7655.
REFERENCES CITED

Advisory Council on Historic Preservation

Advisory Council on Historic Preservation and National Park Service

Ammerman, Albert J.

Ammerman, A.J., and M.W. Feldman

Barnes, Mark R., Alton K. Briggs, and Jerry J. Neilsen

Binford, Lewis R., Sally R. Binford, Robert Whallon, and Margaret Hardin

Butler, William B.

Chartkoff, Joseph L.

Council for Maryland Archeology Curatorial Committee
1988  Minimum Standards for the Processing and Curation of Archeological Collections Recovered by Professional and Amateur Archeologists within Maryland. Ms. on file, Maryland Historical Trust, Crownsville, Maryland.

Dickenson, Russell E.
1983  *Archeology and Historic Preservation; Secretary of the Interior’s Standards and Guidelines.* Federal Register 48(190):44716-44742.

Dorbin, Amy B. (editor)
1987  *Maryland Preservation Organizations.* Maryland Historical Trust, Annapolis.

Dunnell, Robert C.

Flannery, Kent V. (editor)

Flannery, Kent V.
Glassow, Michael A.

Harrison, Margaret W.

Hirth, Kenneth G.

Kavanagh, Maureen

Kenworthy, Mary Anne, Eleanor M. King, Mary Elizabeth Ruwell, Trudy Van Houten
1985 *Preserving Field Records*. The University Museum, Philadelphia.

King, Thomas F.

King, Thomas F., Patricia P. Hickman, and Gary Berg

Klinger, Timothy C., and L. Mark Raab

Knoerl, John, Diane Miller, and Rebecca H. Shrimpton

Lees, William B., and Vergil E. Noble (editors)

Leone, Mark P., and Parker B. Potter, Jr.

Lynott, Mark J.

Maryland Historical Trust

McGimsey, Charles R., III, and Hester A. Davis (editors)

McManamon, Francis P.

McNamara, Joseph M.
Moratto, Michael J., and Roger E. Kelly

Munsell Color

National Park Service

Raab, L. Mark, and Timothy C. Klinger

Redman, Charles L.

Redman, Charles L., and Patty Jo Watson

Schiffer, Michael B., and George J. Gumerman (editors)

Sease, Catherine

Sharrock, Floyd W., and Donald K. Grayson

Soil Survey Staff


Thorne, Robert M.
1989 Intentional Site Burial: A Technique to Protect against Natural or Mechanical Loss. Technical Brief No. 5. Archeological Assistance Program, National Park Service, Washington, D.C.
U.S. Army Corps of Engineers

Weissman, Peggy B.
ADDITIONAL SOURCES OF TECHNICAL INFORMATION

The following sources, in addition to the materials referenced in the text and listed in References Cited, provide technical information on various issues related to the investigation, evaluation, treatment, and consideration of archeological properties.

♦ Advisory Council on Historic Preservation:
  1986 Section 106, Step-by-Step.

Advisory Council on Historic Preservation and National Park Service:


♦ Maryland Historical Trust:
  Weissman, Peggy B.

Trust publications are available from its Planning and Educational Outreach Office, 100 Community Place, Crownsville, Maryland 21032, (410) 514-7616.

♦ National Clearinghouse for Archaeological Site Stabilization:
  The Clearinghouse serves as a central repository for information on site stabilization techniques and effectiveness. It maintains a bibliography of references on stabilization. The Clearinghouse facilitates information exchange and promotes communication among government, professionals, and the private sector to improve technologies applied in the protection and stabilization of archeological sites. To obtain or exchange information, contact the National Clearinghouse for Archaeological Site Stabilization, Center for Archaeological Research, University of Mississippi, University, Mississippi 38677.

♦ National Park Service:

Materials regarding HABS/HAER are available from: HABS/HAER Division - National Park Service, P.O. Box 37127, Washington, D.C. 20013-7127.
♦ National Park Service Archeological Assistance Program Technical Briefs:

7 Federal Archeological Contracting: Utilizing the Competitive Procurement Process. (Jameson, Ehrenhard, and Husted 1990)
9 Volunteers in Archeology. (Davis 1990)

To obtain copies of the Technical Briefs, contact the Archeological Assistance Division, P.O. Box 37127, Washington, D.C. 20013-7127, (202) 343-4101.

♦ National Register of Historic Places Bulletin Series:

12 Definition of National Register Boundaries for Archeological Properties.
15 How to Apply the National Register Criteria for Evaluation.
16A How to Complete the National Register Registration Form.
16B How to Complete the National Register Multiple Property Documentation Form.
21 How to Establish Boundaries for National Register Properties.
23 How to Improve the Quality of Photos for National Register Nominations.
24 Guidelines for Local Surveys: A Basis for Preservation Planning.
28 Using the UTM Grid System to Record Historic Sites.
30 Guidelines for Evaluating and Documenting Rural Historic Landscapes.
32 Guidelines for Evaluating and Documenting Properties Associated with Significant Persons.
35 National Register Casebook: Examples of Documentation.
36 Historical Archeological Sites: Guidelines for Evaluation. (in preparation)
39 Researching a Historic Property.
41 Guidelines for Evaluating and Registering Cemeteries and Burial Places.

The National Register Bulletin Series may be obtained from the National Register of Historic Places, National Park Service, U.S. Department of the Interior, P.O. Box 37127, Washington, D.C. 20013-7127.
APPENDIX I

MARYLAND HISTORICAL TRUST REVIEW CHECKLIST

FOR ARCHEOLOGY SITE AND SURVEY REPORTS
ARCHEOLOGY SITE & SURVEY REPORTS
REVIEW CHECKLIST

<table>
<thead>
<tr>
<th>Report Components</th>
<th>Y/N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I.</strong> Research Design that describes:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B) survey area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) methodology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D) expected results</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>II.</strong> Site Evaluations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) utilize NR criteria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B) reference appropriate historic context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) sufficient information to document decision</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>III.</strong> General Content:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) level of effort appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B) summarizes results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) interprets resulting data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D) assesses project effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E) provides appropriate recommendations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report Components</td>
<td>Y/N</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----</td>
<td>----------</td>
</tr>
<tr>
<td><strong>IV. State Plan:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) incorporates appropriate historic contexts/themes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>V. Misc. Items Included:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) standard site forms and numbers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B) map of project area on USGS 7.5' topo. quad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) states disposition of records and artifacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D) principal investigator meets 36CFR61 qualifications (resume provided)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E) NADB form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F) artifact inventory</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VI. Report Meets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) MD Guidelines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B) Secretary of Interior’s Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VII. Concur with Recommendations:</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ADDITIONAL COMMENTS:**
APPENDIX II

MARYLAND ARCHEOLOGICAL RESEARCH UNITS: MAP

PREPARED BY THE COUNCIL FOR MARYLAND ARCHEOLOGY
Maryland Archeological Research Units.

One should consult U.S. Geological Survey quadrangles to determine river drainages when project areas lie near the borders of Research Units.
APPENDIX III

NATIONAL ARCHEOLOGICAL DATABASE

(NADB) REPORTS RECORDING FORMS
Instructions for Completing
NADB - Reports Recording Forms

1.-4. The Maryland Historical Trust will complete these items.

5. AUTHORS
   This item contains the complete author reference in American Antiquity style (Appendix A).

   If the report is edited, add editor in parentheses after the name of the author or authors: (editor) or (editors).

   If there are two authors, the second author's name is entered as FN M. LN (where FN = First Name; M. = Middle Initial; LN = Last Name)

   Garner, Louise N. and William D. Strong
   or
   Williams, Terrance C., Jr. and Elizabeth Coates

   If there are more than two authors, all authors’ names but the first author are entered as FN M. LN, separated from one another by commas and a space. The last author’s name is preceded by “", and "": no period is placed at the end of the last author’s LN unless the author’s name ends in a Jr. or Sr. For example:

   Smith, Anne L., Robin K. Sawyer, and Frank W. Keyes III

6. YEAR
   This item records the year the report was published. If no date is available for a document, enter "0".

7. TITLE
   Record the complete title without abbreviations, unless the original title contains abbreviations. Do not end with a period. Use American Antiquity style (Appendix A).

   If an unpublished document comprises more than one volume, each volume should be considered a separate document with the volume number included after the title.

   If there is no title for a report, use keywords from the introduction of the report to reference the subject matter.

   If the document is an unpublished or letter report, and no title exists, enter "Letter Report: subject", where subject contains information about the project area and resources.

   For example:
   Letter Report: Survey, Spring Valley, Southeast Iowa

---

1 Adapted from the National Park Service (National Archeological Database. NADB - Reports. Version 2.01 [1989] and Version 2.02 [1992]).
8. PUBLICATION TYPE
Circle the appropriate kind of document.

1 Monograph or Book
The document is a monograph or book.

2 Chapter in a Book or Report Series
The document is a chapter in a book or report series. In this case, a NADB-REPORTS record should first be entered for the book or report series itself. Then, separate NADB-REPORTS records for individual chapters within the book/series should be entered with references to the larger book/series.

3 Journal Article
The document is published as an article in a journal.

4 Report Series (annual, multivolume sets)
The document is printed in a report series.

5 Dissertation or Thesis
The document is a Ph.D. dissertation or a Masters Thesis (also used for a Honor’s Thesis or Paper).

6 Paper Presented at a Meeting
The document is printed in the proceedings of a meeting or was presented at a meeting or conference.

7 Unpublished or Limited Distribution Report
The document is an unpublished report; an unpublished or published limited distribution report; or a letter report. This choice represents the majority of contract archeology reports.

8 Other
The document is of a type other than those identified above. The document may be an article in a titled volume of an edited series, or an article in a newspaper or magazine.

9. INFORMATION ABOUT PUBLISHER/PUBLICATION
Complete this item using American Antiquity style (Appendix A). For example, the contracted report by Quilty and Versaggi in Appendix A.17 would have the following entry here:


10. STATE/COUNTY
Begin by entering the two character U.S. Postal Service code for the state(s) to which the report refers. (For example, "Maryland" has the code "MD"). Next, for each state referenced by the report, list the county or counties discussed in the document. Additionally, record the name of a town when the report describes resources within corporate limits; otherwise, do not record town names.
If the report discusses a county that no longer exists, enter "uncoded county" in the county data field and list this county name in Keyword Category No. 4 (see item 12 below). When a report treats all counties within a state, enter "all counties" in the county data field. If a report pertains to all of the United States, enter "US" for the state code.

11. WORKTYPE
Circle all appropriate study types. Definitions of some common worktypes follow and are from NPS 28: Cultural Resources Management Guideline, Technical Supplement 1985:

CULTURAL RESOURCE MANAGEMENT PLAN
The document is used as a planning document to identify priorities and appropriate responses for the preservation of cultural resources when developmental or operational issues are raised.

ARCHEOLOGICAL OVERVIEW AND ASSESSMENT
The report summarizes and evaluates existing archeological data derived from previous work.

ARCHEOLOGICAL IDENTIFICATION STUDY [Phase I]
The report describes fieldwork to locate and describe the extent and nature of archeological resources in a specified area. The procedures for identifying the resources may involve sampling designs and methods to detect buried or submerged resources.

ARCHEOLOGICAL EVALUATION STUDY [Phase II]
The report or publication provides sufficient data from field and laboratory investigations that could be or have been used to determine the likelihood that identified resources or properties are eligible for the National Register of Historic Places.

ARCHEOLOGICAL DATA RECOVERY [Phase III]
The publication documents the data recovery procedures, including fieldwork and laboratory analysis, and so forth, undertaken when significant properties cannot be avoided and developmental activities will adversely disturb them; or for any archeological excavation project.

If you select 999 ("OTHER"), be sure to enter the description of the type of study in Keyword Category No. 1 (see item 12 below).

12. KEYWORDS AND KEYWORD CATEGORIES
Keywords are descriptive terms that describe important aspects of the research discussed in a report. For the purposes of NADB, keywords should not be identical to entries already in other sections of the NADB - Reports Recording Form. Enter keywords for each of the applicable keyword categories:

Category 0: Types of Resources and Features
These keywords refer to general descriptions about the types of resources and features described and discussed in the report. The keywords should include explanatory or functional descriptors, for example, sherd-and-lithic scatters; quarry sites; village sites; stratified sites; architectural sites; kill sites; submerged sites, and so forth.
"No resources" should be entered where no resources were identified in the area covered by a specific project assessment.

This category is meant as a general summary of the information contained in the site report and should not be used to enter site specific data, unless only one resource is discussed in the report. General tabulations of types of resources would be appropriate; individual site names or numbers should not be entered.

Category 1: Generic Terms/Research Questions/Specialized Studies

These keywords describe analytical research emphases, for example, historical archeology, lithic or ceramic analysis, chronology, settlement-subsistence studies, trade, osteology, predictive models, or any other identifier that might prove useful to archeologists or cultural resource managers.

If you selected "Other Non-Archeological Studies" in Worktypes, be sure to identify the type of study in this keyword category.

Category 2: Archeological Taxonomic Names

This category includes the formal taxonomic names as defined in the archeological literature and as presented in the report. Examples: South Platte phase, Big Game Hunting Tradition, Fort Ancient Aspect, etc. This category also includes cultural affiliation (e.g., Basketmaker III) and time periods (e.g., Middle Archaic period) (see Category 5, Time Period for comparison).

Category 3: Defined Artifact Types/Material Classes

The inclusion of defined artifact types should be restricted to those pertaining to the major research emphasis of a report, for example, Clovis points, Marcey Creek pottery.

If no artifact types are defined, include the material classes of artifacts. Avoid nonspecific descriptors in favor of functional or classificatory attributes. For example, Hopi ceramics, shell-tempered ceramics, or cord-marked ceramics are more informative than ceramics. Other examples include mammal bones, pollen, metal artifacts, marine shell, and so forth.

Category 4: Geographic Names or Locations

These keywords refer to archeological culture areas or physiographic regions, for example, Coastal Plain, Piedmont, Southeast, Animas-La Plata drainage basin, and so forth. Whenever appropriate, also record the number (integer) of acres studied in a document.

Former county designations and/or historic names should also be entered.

DO NOT ENTER UTM COORDINATES IN THIS OR ANY OTHER KEYWORD CATEGORY.

82
Category 5: Time Periods

Enter any dates as they appear in the publication. The only exceptions to actual dates are the following four terms: prehistoric, protohistoric, historic, or no dates.

Category 6: Project Name/Study Unit

This category is used for the names given to the projects and/or study units. Consistent use of the same project name will allow you to retrieve a list of reports pertaining to that project.

Use this category to enter additional contract numbers of sponsoring agencies that do not appear elsewhere.

Category 7: Other Keywords

Keywords that do not seem to fit any of the above categories can be entered in this category.


13. FEDERAL AGENCY CODE

Enter the lead Federal Agency which required or sponsored the preparation of the report. The name of the agency should be abbreviated, as indicated in APPENDIX B. If additional Federal agencies are involved, record the agency names into Keyword Category No. 6 (see item 12). Where documents and reports have no federal involvement, use the following codes: ACA = Academic; STA = State; PRI = Private; NA = Not Applicable; and UNK = Unknown.

14. CONTINUATION/COMMENTS

This item records any information for which space was unavailable in the previous data fields. Also, note any essential comments about the report not treated elsewhere on the NADB - Reports Recording Form.

FORM COMPLETED BY

Finally, recording the name and location of the person who completes the form will permit the quick resolution of any questions.

An example of a completed NADB - Reports Recording Form is included as Appendix C; Appendix C also contains a blank NADB form which can be photocopied for submittal with archeological reports.
APPENDIX A. AMERICAN ANTIQUITY FORMAT

The following has been reproduced by permission from the Society for American Archaeology: excerpt from the Style Guide in American Antiquity, Vol. 48, pp 438-441, 1983.


*Note:* Use appropriate format for foreign language titles, in respect to capitalization, accents, etc. For titles published in nonroman alphabets (e.g., Chinese, Cyrillic, etc.), give title in romanized transcription when possible, with English translation of the title following immediately in brackets.

2. Book, multiple authors.


*Note:* Place only the first author's name in reverse order. This example also illustrates how to treat a later edition. For ordinal number of edition, use 1st, 2d, 3d, 4th, 5th, etc. and set off numbered edition information with periods. Also, note whether edition is revised as in 1st rev. ed., 2d rev. ed., etc.

3. Edited book (editor as "author").


5. Reissued or reprinted book.


Michigan Basin Geological Society
U.S. Government Printing Office

7. Multivolume sets.

Biggar, H. P. (editor)
Thwaites, Reuben G. (editor)
1896-1901 The Jesuit Relations and Allied Documents. 73 vols. Burrows Brothers, Cleveland.
Beals, Ralph L., and Joseph A. Hester, Jr.

Note: The name of the set is italicized, and the volume number follows, set off by a comma, to specify reference to a single volume. The reference must be unequivocal about whether a particular volume or the entire set is referenced, and which volume in each case. ...

8. Titled volume in a series.

Madsen, David B., and James F. O'Connell (editors)
Plog, F. (editor)
Montet-White, Anta

Note: The volume title is italicized, the series title is given in full, and the publisher and place of publication is given unless that information is in the series title.

9. Article in journal.

Wilke, Philip J.

Note: Issue number is not used when the journal is paginated continuously throughout the volume (see next example). Note also that American Antiquity employs all digits in page references under all circumstances.
Shepard, Eugene

*Note*: If each issue of a journal begins with page 1, the issue number must be included, in parentheses, following the volume number.

10. Article, group author.

The Royal Society Conference of Editors

11. Article in magazine, no author.

The Puritans

*Note*: For an authored article in a magazine, follow the format for article in a journal, but use with issue number with month and page numbers as specified here.


Fritz, John M.

*Note*: Multiple editors are listed in full: "et al." is not used here.


Tuck, James A.

Browman, David L.

*Note*: When the volumes are individually titled, the volume title is italicized; otherwise, the series title is italicized. The name of the editor of a volume follows the volume title or series title and volume number, and is followed by the inclusive page numbers. The series editor's name may be given following the series name and volume number.
14. Article in proceedings, transactions, or annual reports series.

Gruhn, R., and A. L. Bryan

15. Paper presented at a meeting.

Carter, George

Note: Use Roman or Arabic numerals for the number of the conference, congress, etc., as is used in the name and be sure to include location.


Clark, Geoffrey A.

17. Contracted and proprietary reports.

Note: Use the following format only for reports that are not published as parts of any series (e.g., Arkansas Archeological Survey, Research Series, etc.). When a series is identified, follow the format for Series, given above (numbers 8, 13). Cite by editor(s) or author(s) as appropriate, date of completion or submission, and title. Follow that with the name of the institution or office through which the report was prepared, and then the agency or institution that paid for the report. Occasionally these will be the same; if so, indicate that clearly. Contract number should be given when available, and NTIS number when appropriate. Indicate where copies may be obtained, if known. Authors should make special efforts to obtain all the listed information for their citations, even when some is not given in the publication. However, when the information is not available, supply what is given on the title page, at least:

Cordell, Linda

Elston, Rober, Johnathon O. Davis, and Gail Townsend

Green, Dee F., and Polly Davis (compilers)
Quilty, Kenneth, and Nina M. Versaggi (editors)


Dunnell, Robert C.

Hevly, Richard H.

Note: For a master’s thesis, use the designation "Master’s thesis" in place of "Ph.D. dissertation." Be sure to indicate where the thesis or dissertation can be located.


Daniels, Steve, and Nicholas David

Whalen, Michael E.

Note: Use this form only if the manuscript has been accepted for publication. For book, cite the publisher as well as the place of publication. When the date of publication cannot be determined, use date of manuscript submission. Material submitted but not yet accepted for publication should be referenced in manuscript form (below).

20. Unpublished manuscript.

Adams, R. E. W.
1968 Maya Highland Prehistory: New Data and Implications. Ms. on file, Department of Anthropology, University of Minnesota, Minneapolis.

Note: Cite the year in which the manuscript was written. Give complete information about where a copy may be obtained, including university department name, university and city branch if more than one, and city and state names if they cannot be determined from university name. Do not use n.d. for "no date available," unless that is in fact the case. When manuscript is in possession of the author this should be stated as "Ms. in possession of author."
APPENDIX B. AGENCY CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Agency Name</th>
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</thead>
<tbody>
<tr>
<td>ACA</td>
<td>ACADEMIC INSTITUTION</td>
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<tr>
<td>AF</td>
<td>AIR FORCE</td>
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<tr>
<td>ARMY</td>
<td>DEPARTMENT OF THE ARMY</td>
</tr>
<tr>
<td>BIA</td>
<td>BUREAU OF INDIAN AFFAIRS</td>
</tr>
<tr>
<td>BLM</td>
<td>BUREAU OF LAND MANAGEMENT</td>
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<tr>
<td>BRCL</td>
<td>BUREAU OF RECLAMATION</td>
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<tr>
<td>CEQ</td>
<td>COUNCIL ON ENVIRONMENTAL QUALITY</td>
</tr>
<tr>
<td>CG</td>
<td>COAST GUARD</td>
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<tr>
<td>COE</td>
<td>ARMY CORPS OF ENGINEERS</td>
</tr>
<tr>
<td>COMM</td>
<td>DEPARTMENT OF COMMERCE</td>
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<tr>
<td>CPD</td>
<td>COMMUNITY PLANNING AND DEVELOPMENT DEPARTMENT</td>
</tr>
<tr>
<td>DOD</td>
<td>DEPARTMENT OF DEFENSE</td>
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<td>ED</td>
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<td>ECONOMIC DEVELOPMENT ADMINISTRATION</td>
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<tr>
<td>EPA</td>
<td>ENVIRONMENTAL PROTECTION AGENCY</td>
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<td>FAA</td>
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APPENDIX C.
NADB - REPORTS RECORDING FORMS: EXAMPLE OF A COMPLETED FORM; BLANK FORM

NADB - REPORTS RECORDING FORM

Complete items 5 through 14. Refer to the "Instructions for Completing NADB - Reports Recording Forms." The Maryland Historical Trust will record information for items 1 through 4.

1. DOCUMENT NO. ____________________________

2. SOURCE ____________________________ AND SHPO - ID ____________________________

3. FILED AT

4. UTM COORDINATES

Zone ___________ Easting ___________ Northing ___________
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Zone ___________ Easting ___________ Northing ___________
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Zone ___________ Easting ___________ Northing ___________
Zone ___________ Easting ___________ Northing ___________

Continuation, see 14.

5. AUTHORS ____________________________

6. YEAR __ __ __

Year published.

7. TITLE ____________________________

8. PUBLICATION TYPE (circle one)

1 Monograph or Book
2 Chapter in a Book or Report Series
3 Journal Article
4 Report Series
5 Dissertation or Thesis
6 Paper presented at a Meeting
7 Unpublished or Limited Distribution Report
8 Other
9. INFORMATION ABOUT PUBLISHER/PUBLICATION
Follow the American Antiquity style guide published in 1983, Vol. 48, pp. 438-441, for the type of publication circled.

10. STATE/COUNTY (Referenced by report. Enter as many states, counties, or towns, as necessary. Enter all, if appropriate. Only enter Town if the resources considered are within the town boundaries.)

STATE 1 ___ COUNTY _____________ TOWN _____________
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STATE 2 ___ COUNTY _____________ TOWN _____________
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STATE 3 ___ COUNTY _____________ TOWN _____________
__________________________

Continuation, see 14.

11. WORKTYPE (circle all code numbers that are appropriate)

0 General Management Plan/Environmental Document
1 Cultural Resources Management Plan
2 Cultural Resources Research Plan
3 Statement for Management
4 Outline of Planning Requirements
5 Cultural Resources Preservation Guide
6 Development Concept Plan
7 New Area Study/Reconnaissance Study
8 Boundary Study
9 Interpretive Prospectus
10 Special Planning/Management Study
11 Historical Study
12 Primary Document - Original
13 Primary Document - Translation
14 Advertisement
15 Popular Culture/History Document
16 Journal/Periodical
17 Historical Resource Study
21 Historical Base Map
22 Historical Handbook Text
23 Park Administrative History
24 Special History Study
30 Archeological General Considerations
31 Archeological Overview and Assessment
32 Archeological Identification Study (Phase I)
33 Archeological Evaluation Study (Phase II)
34 Archeological Data Recovery (Phase III)
35 Archeological Collections and Non-Field Studies
36 Socio-Cultural Anthropology Study
37 Social Impact Statement
38 Ethnohistory Study
39 Special Archeology/Anthropology Study
40 Field Reconnaissance, Sampling
41 Field Reconnaissance, Intensive
42 Paleo-environmental Research
43 Archeometrics
44 Archeoastronomical Study
46 Remote Sensing
47 Archeozoological Study
48 Archeobotanical Study
49 Bioarcheological Study
50 Historic Buildings Report-Beginning February 1956
51 Historic Buildings Report-After February 1957-Part I
52 Historic Buildings Report-Part II
54 Historic Buildings Report-After March 1960-Part III
56 HSR-Administrative Data-After December 1971
57 HSR-Historical Data
58 HSR-Archeological Data
59 HSR-Architectural Data
60 Historic Structures Preservation Guide-After December 1971
62 Historic Structures Report-After October 1980
63 Cultural Landscape Report (Historic Grounds Report)
64 Ruins Stabilization and Maintenance Report
65 Special Historic Architecture Study
70 Scope of Collection Statement
70 Historic Furnishings Report-After October 1980
72 Collection Condition Survey
73 Collection Storage Plan
82 Collection Management Plan (Collection Preservation Guide)
83 Special Curatorial Study
84 Archeological Field Work, Indeterminant
85 Archeological Survey, Indeterminant
86 Field Reconnaissance, Minimal
87 Underwater Survey
88 Resource/Site Based Work, Indeterminant
89 Minimal/Informal Site Visitation
90 Oral History
91 Subsurface Activity, Indeterminant
92 Testing/Limited Excavation
93 Major Excavation
94 Underwater Resource/Site Based Work
95 Artifact/Collection Based Study/Report
96 Literature Synthesis/Review/Research Design
97 Intensive Determination of Surface Characteristics
98 Environmental Research
99 Geomorphological Study
100 Geological Study
101 Paleontological Study
102 Population Reconstruction
103 Rock Art Study
104 Architectural Photography
105 Architectural Site Plan
106 Architectural Floor Plan
107 HABS Drawing
108 Physical Anthropology Study
109 Boat Survey
999 Other (Furnish a Keyword in Keyword Category 1 to identify the nature of this study.)

12. KEYWORDS and KEYWORD CATEGORIES

0 Types of Resources (or "no resources")
1 Generic Terms/Research Questions/Specialized Studies
2 Archeological Taxonomic Names
3 Defined Artifact Types/Material Classes
4 Geographic Names or Locations
5 Time
6 Project Name/Project Area
7 Other keywords

Enter as many keywords (with the appropriate keyword category number) as you think will help a person (1) who is trying to understand what the report contains or (2) who is searching the database for specific information. Whenever appropriate, record the number of acres studied in a document.

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Continuation, see 14.
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2. SOURCE ___________________________ AND SHPO - ID ___________________________

3. FILED AT

4. UTM COORDINATES

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6. YEAR ___ ___ ___

Year published.

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8. PUBLICATION TYPE (circle one)

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13. FEDERAL AGENCY CODE

14. CONTINUATION/COMMENTS (include item no.)

FORM COMPLETED BY

Name ___________________________ Date ______________

Address ______________________________________

City ___________________________ State _____________

Zip ___________________________

Telephone Number ___________________________