## Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State

by

The New York Archaeological Council

Adopted by the New York State Office of Parks, Recreation and Historic Preservation

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#### 1.0 INTRODUCTION

Standards for Phase IA, IB II and III Cultural Resource Investigations; the Production of Cultural Resource Management Reports; and the Curation of Archaeological Collections, have been developed in order to ensure a degree of uniformity in the approach taken by archaeologists in New York State. It is hoped that all archaeologists, private developers, local, state and federal agencies will make use of these standards toward the fulfillment of their preservation obligations under a variety of federal, state and local laws and preservation ordinances.

The purpose of these guidelines is to ensure that archaeological work of the highest caliber is carried out in New York. These guidelines will help to clarify expectations for the often diverse approaches to cultural resource investigations utilized by the increasing number of individuals and corporate groups that are becoming involved in cultural resource compliance reviews. All professional/Supervisory level personnel must meet the qualifications set forth in 36 CFR 61. Their aim is to promote consistent, high quality performance, and documentation. Although detailed in some cases, these guidelines are not intended to be all-encompassing nor to address all possible situations.

It is likewise expected that published guidelines will result in more acceptable, efficient, and cost-effective research on New York archaeological sites. Innovation beyond the scope of these recommended procedures is expected and encouraged.

Good judgement and common sense must prevail. These guidelines will be subject to periodic revision and refinement.

## 2.0 PHASE I CULTURAL RESOURCE INVESTIGATIONS: RECONNAISSANCE

#### 2.1 Goals of Phase I Investigations

The primary goal: of Phase I Cultural Resource Investigations are to identify archaeologically sensitive areas, cultural/sacred areas and standing structures that are at least 50 years old, that may be affected by a proposed project and to locate all prehistoric and historic cultural/archaeological resources that may exist within the proposed project area. The goals of Phase I work need to be flexible to reflect the size of the project and stage of project planning and can be undertaken in subphases (Phase IA and IB) if appropriate.

When a review process determines that a project will not affect any known or recorded sites(s) but is located in an area where insufficient previous survey has been conducted, and where there is a moderate or high probability that previously unrecorded sites may occur, Phase I culture resource investigations should be conducted. The purpose of these investigations is to locate *all* surface and/or subsurface sites that occur within the project area. Site locations are frequently discovered as a result of documentary search, informant interviews, land surface inspection and subsurface testing.

Due to the complexities often characterizing projects and sites located in urban settings, these guidelines apply primarily to projects situated in non-urban environments. At some point in the near future, guidelines will be established for Phase I work in urban environments (cf. Pennsylvania guidelines) as well as underwater contexts.

#### 2.2 Phase IA Literature Search and Sensitivity Assessment

Phase IA investigations are intended to gather information concerning the environmental/physical setting of a specific project area as well as its cultural setting. It is the interrelationship of the physical environment and the cultural, historical setting that provide the basis for the sensitivity assessment. This research should include a consideration of relevant geomorphology and soils information, culture history, and previous archaeological research to provide for the development of explicit expectations or predictions regarding the nature and locations of sites. Regardless of the project size, archaeologists should consider all relevant data in developing these expectations. The specific source from which background information should be drawn will vary according to project size and the availability of comparative data. information presented and analyses performed should assist reviewers in understanding and evaluating the importance of environmental and cultural /historical resources within and surrounding the project area. Finally, it should also provide the rationale for developing the research design, the sensitivity assessment, and for selecting appropriate Phase IB field methodology as well as for evaluating project impacts.

#### 2.2.1 Environmental/Physical Setting

A summary of relevant information, with accompanying maps (where appropriate), concerning the environmental/physical setting should address the following: geology, soils, hydrology, physiography/geomorphology, climate, flora, fauna, and recent human/natural -disturbances.

#### 2.2.2 Background Research

Background research should include a preliminary review of manuscripts, maps, atlases, and historical documents, unpublished notes, previous surveys, State and local site inventories, and published material relevant to the project area to locate possible sites and provide the basis for documenting the cultural setting for the project area. The specific sources from which background information should be drawn will vary according to project size and the availability of comparative data. Where information pertaining to the specific project area or environs is not available, expectations should be developed from regional or state plans for the conservation of archaeological resources, investigations of similar environments outside the local area, or other environmental data. The results of this background research should be included in the report as documentation and justification for the sensitivity assessment and site location predictions.

The following list of topics may be useful in considerations of cultural setting. A comprehensive treatment of the cultural setting of a project area will most likely only involve some subset of this list. These have been adapted from a list of historic contexts

developed by the New York State Historic Preservation Office (NYS SHPO).

- Transportation
- Economy

Industry

Agriculture

Social Organization

Government

Education

• Social Change

Contact and Settlement Post-Revolutionary

War Expansion

Social and Political Movements

- Religion
- Communication
- Recreation

Entertainment

Tourism

Demography

Immigration

Emigration

- Community Planning and Development
- Engineering
- Architecture
- Science
- Art and Literature
- Ethnicity

It is recognized that a variety of individuals, especially those interested in or living near a specific project area, may have information not available from any other source. Such information can enhance the data gathered from the written record alone. Informant interviews with persons (e.g. avocational archaeologists, landowners, state or local government agency staff) who may be familiar with the project area and possible archaeological sites can make a valuable contribution to these investigations.

A field visit to the project area should be undertaken to determine the possibility of prior disturbance/destruction and the physiographic evidence for potential sites. Where conditions at the time of the field visit differ from those portrayed on map resources, the current conditions should be described and the map resources amended accordingly. If the initial field check shows that any sites have been previously destroyed, or that for other obvious reasons no sites exist there, the appropriate review agency should be consulted. It maybe determined that no further Phase I survey is required. The basis for such conclusions must be submitted in writing with supporting documentation (e.g. building/grading plans, photographs).

#### 2.2.3 Sensitivity Assessment

An estimate of the archaeological sensitivity of a given area provides the archaeologist with a tool with which to design appropriate field procedures for the investigation of that area. These sensitivity projections are generally band upon the following factors: statements of locational preferences or tendencies for particular settlement systems, characteristics of the local

environment which provide essential or desirable resources (e.g. proximity to perennial water sources, well-drained soils, floral and faunal resources, raw materials, and/or trade and transportation routes), the density of known archaeological and historical resources within the general area, and the extent of known disturbances which can potentially affect the integrity of sites and the recovery of material from them.

The analysis of data gathered for the environmental/physical setting and the cultural setting must address the following questions: Given the data gathered for the environmental/physical setting and the cultural setting of the project area what is the likelihood of finding prehistoric or historic cultural/ archaeological resources? What types of sites are likely to be found? What is the likely condition of sites that might be found?

#### 2.3 Phase IB Field Investigation Guidelines

Appropriate field investigations comprise a systematic, on-site field inspection designed to assess archaeologically sensitive areas and environmental characteristics relevant to site locations and formation processes. Such investigations include, but are not limited to systematic surface survey, subsurface shovel testing, and remote sensing studies.

Subsurface testing is often the major component of this level of investigation and is required except in those cases in which the presence or absence of resources can be determined by direct observation (e.g. surface survey), by the examination of specific documented references, or by the detailed documentation of prior disturbance of such a degree that all traces of intact cultural resources have been erased.

Field-testing procedures for Phase IB Field Investigations should verify site locations provided by informants, confirm site locations suggested by the literature search, and discover previously unknown sites. The areas to be subjected to a field survey are selected on the basis of the data gathered during the Phase IA evaluation and all probable locations of project construction, staging areas, or any other areas of potential impact. Detailed evaluation of specific resources is not carried out at this level; however, it is necessary to record and describe sites as fully as possible to aid in the formulation of recommendations for avoidance if site boundaries are adequately defined or further evaluation. The precise locations of identified resources with respect to areas of impact of the proposed project must be clearly established.

Because portions of project areas often differ in the likelihood of containing sites, contracted archaeologists encountering or anticipating considerable diversity in site densities within the project area should devise survey strategies in consultation with the appropriate review agency. In cases where sampling specific portions (or strata) of a project area is planned, sampling designs that ensure equal probability of identifying sites in all surveyed locales must be devised. Some areas may, however, be eliminated from survey due to the lesser probability that sites would occur. Areas characterized by more than 12-15 per cent slope may fall into this category; obvious exceptions to elimination of such areas

of slope would include terraces and possible rockshelter sites. Where the field testing or literature search reveals areas of disturbance in which no sites could remain intact, documentation of this disturbance via photographs, construction plans, stratigraphic profiles, soil borings, etc. must be included in the Areas of standing water may also he excluded from testing, if appropriate and if reasonable explanations for avoiding Areas not subjected to intensive such areas are presented. archaeological investigations should documented be photographically in the archaeological report and on project area maps.

#### 2.3.1 Systematic Surface Survey

Areas that have not been plowed and disked in the past should not be plowed or disked to facilitate a systematic surface survey. If previous plowing cannot he documented, a limited shovel testing program to document the presence of a plowzone should be undertaken. Each systematic surface survey should he performed according to the following standards, unless alternative methods have been developed in consultation with the appropriate review agency. A limited -subsurface shovel-testing program should also be conducted in conjunction with (and prior to) all surface surveys in order to assess plowzone depths and characteristics of underlying soils.

If all non-wooded, previously cultivated portions of the project area can be plowed and disked, a systematic surface investigation can he undertaken once the area has been prepared and subjected to a steady rainfall. Systematic controlled surface survey may only be performed if adequate side visibility (i.e. 70% or better) exists. Plowing and disking in strips with intervening areas of unplowed ground no wider than 15 meters may be an acceptable means of field preparation if and only if shovel tests are excavated at 15-meter intervals throughout the unplowed areas.

Archaeological field crews should align themselves at 3-meter to 5-meter intervals in a straight line and pass across the prepared areas searching the surface for artifacts. Each artifact find spot or artifact concentration should be clearly marked and assigned a unique field number. After the artifacts have been flagged, a surface map identifying artifact locations and/or concentrations, depending upon the specific situation and number of artifacts, should be prepared.

#### 2.3.2 Subsurface Shovel Testing

Subsurface shovel-testing programs should he performed according to the following standards, unless alternative methods have been developed in consultation with the appropriate review agency. Where surface visibility is impaired (e.g. grass lawns, wooded areas), the field survey consists of the excavation of 30 to 50-centimeter minimum diameter test units to undisturbed or non-artifact bearing subsoil at a maximum of 15-meter intervals (or 2 per 460 square meters of surface area = 16 tests per acre = 44 tests per hectare). All excavated soils should be screened through ½-inch hardware cloth.

Transects should he established with a compass and taped and/or paced measurements depending upon local conditions. Transects and shovel tests should be numbered in a systematic fashion. Soils excavated from shovel tests should he carefully screened as noted above in order to recover cultural material. All stratigraphic profiles should be described in field notebooks or on appropriate field forms. Information recorded in notebooks should include, but not he confined to, descriptions of soil type, texture, color, condition, and the presence or absence of cultural materials or cultural features.

Documentation of field work activities should include the recording of field observations in notebooks and on appropriate forms. Photography should be employed to document field conditions, observations, and field techniques.

When cultural materials are discovered in isolated shovel-test units, a minimum of four additional units should he dug in the vicinity or the initial test units should he expanded to insure against mistaking evidence of actual sites for "stray finds."

If no cultural resources identified through the Phase IA and/or Phase IB surveys will be impacted by the proposed project, then the survey process is complete. If cultural resources identified by these studies are within the proposed impact area, further evaluation may be required to determine the potential eligibility of the resource(s) for inclusion in the State or National Register of Historic Places (NRHP). The extent of additional cultural resource study may be reduced by project modifications (e.g. realignment, relocations) that avoid or minimize potential impacts, only if sufficient testing to define valid site boundaries or buffer zones has been completed.

#### 2.4 Phase IB Report

The final Phase IB report should present the results of the field investigations, including a description of the survey design and methodology; complete records of soil stratigraphy and an artifact catalog including identification, estimated date range, and quantity or weight, as appropriate. The locations of all test units must be accurately plotted on a project area map, with locations of identified resources clearly defined. Photographs that illustrate salient points of the survey are an important component of the final report. Detailed recommendations and supporting rationale for additional investigation must be incorporated into the conclusions of the Phase IB study. For a detailed summary of the requirements for Phase I Reports refer to the NYAC Standards for the Production of CRM Reports (Section 6).

#### 2.5 Disposition of Collections

Provisions for the responsible curation of the archaeological collection (material remains and associated records) generated as a result of Phase I investigations, is an integral part of any reconnaissance level survey. Collections made during Phase I field investigations are often the only collections made from a site, especially if mitigation measures include site avoidance. These collections may represent the remains of resources eligible for listing on the State and/or National Register. However, since the sites will be avoided, no Phase II investigations are conducted and

evaluation of the site cannot be completed based solely upon the results of Phase I work. Arrangements must be made in advance of any field work for the proper processing, documentation, and curation of collections as outlined in Standards for the Curation of Archaeological Collections (Section 7).

## 3.0 PHASE II CULTURAL RESOURCE INVESTIGATIONS: SITE EVALUTION

#### 3.1 Goals of Phase II Investigations

The primary goals of Phase II Cultural Resource Investigations are to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site sufficient to evaluate its Potential National Register eligibility. These objectives necessitate the recovery and analysis of artifacts, their context and distribution, and any other pertinent data necessary for an adequate evaluation. Based on this information, each site can be assessed to determine its eligibility for the State or National Registers of Historic Places. A site's significance and eligibility are directly related to data collected during a Phase II investigation, the site's integrity, research questions that maybe answered at the site, and the site's importance in relation to the known archaeological database.

A Site is eligible the National Register if it meets one or more of the following criteria (as set forth in, NYCRR 427 and 428 or 36 CFR 800):

- Associated with events that have made a Significant contribution to the broad patterns of our History
- Associated with the lives of persons significant in our past;
- C. Embodies the distinctive characteristics of a type, period or method of construction or represents a significant and distinguishable entity whose components may lack individual distinction; or,
- D. Has yielded. or may be likely to yield, information important in prehistory or history.

Specific data are needed to adequately address these criteria and to prepare a proper site significance evaluation. These include, but may not be limited, site boundaries and an estimate of site size: temporal and/or cultural affiliation; intra-site artifact/feature patterning; site function; and placement within geographic and interpretive contexts. Additional important actors include the potential that the data present on the Site have for yielding additional important information and both the physical and temporal integrity of the site. This multivariate evaluation of site significance will also provide the initial framework on which to base a subsequent data recovery program if one is required as part of the data recovery plan for the site.

#### 3.1.1. Site Boundaries/Site Size

An estimate of the extent of the site is one dimension of variability important in interpreting site significance. Establishing site boundaries is also essential in determining how much of an impact a proposed project will have on a potentially eligible site. Since

project limits are arbitrarily defined in geographic space, it maybe necessary to estimate the likelihood that the site extends outside the project boundaries. National Register Bulletin Number 12 outlines various ways of estimating site boundaries. Site size is also an important factor in placing the occupation within regional and cultural settlement systems.

#### 3.1.2 Temporal and/or Cultural Affiliation

Assigning a site to a general time period or specific cultural phase or tradition is an integral aspect of significance. This information helps place the site within an initial context for interpretation and may interface with divisions of interest in the State Plan. Temporal/cultural divisions may horizontally across the site or vertically within the natural stratigraphy of the soils.

#### 3.1.3 Intra-site Artifact/Feature Patterning

Artifacts may be distributed across site area in a uniform, random, or clustered fashion. Identifying the characteristics of the horizontal and vertical distribution pattern provides the initial structure for interpreting the site. The presence of features (e.g. hearths, pits. cisterns, privy, well, postmolds) adds an additional component to the structure of the occupation as well as an information-rich element for analyzing the site's placement within the temporal/cultural and subsistence/settlement systems. Power assisted stripping should not be undertaken as part of site evaluation unless accompanied by intensive recovery and analysis of plowzone data. As a rule, power machinery use should be restricted to data recovery (Phase III) and the removal of sterile overburden.

#### 3.1.4. Site Function and Context

Using the existing information on intra-site clustering, artifact type distributions, and feature presence, a preliminary assessment of site function allows the tentative placement of the site within known temporal, regional and developmental context of the area. This classification and placement may also relate to study units defined as important in the State Plan.

#### 3.1.5. Data Potential and Site Integrity

The criteria for eligibility to the State and National Registers specifically requires the archaeologist to assess whether data present on the site have the potential to yield information important to understanding the area's history and prehistory. Part of this assessment necessitates and evaluation of whether the site has suffered physical impacts that have destroyed its research potential. Likewise, archaeologists must determine if temporal components exist in unmixed contexts, whether they be horizontal or vertical, and evaluate to what extent mixing has affected the research potential of the site.

Certain methods have a proven record of efficiently obtaining information relevant to the State or National Register criteria for archaeological sites. These procedures are outlined below.

#### 3.2 Phase II documentary Research

For both prehistoric and historic sites, Phase II documentary research provides two types of information: (1) information on the types of data expected from the site as derived form previous work on the site and/or on known sites in the locale and region; and (2) local, regional and national contexts within which to evaluate the importance of the site and to identify research questions that can be addressed. Research efforts should include more intensive interviews with local informants as well as regional and state experts; specific research of published and unpublished site reports from the region to determine how the site may fit within local and regional chronologies, subsistence/settlement systems, and established theoretical contexts; construction of expectations concerning the types of data that may be present and the types of field strategies appropriate for obtaining these data; and review of research issues and theoretical contexts within the disciplines of anthropology, archaeology, and history to which the data on the site might be relevant. Research questions for historic sites should focus on issues that can not be addressed solely through written records. The results of this review should form the basis for any future data recovery plans.

#### 3.3 Phase II Field Work/Excavation Guidelines

Phase II field work is not limited to the documentation of the presence/absence of artifacts as in the Phase IB investigations, nor to a specific impact zone as in a Phase m data recovery program. The Phase II investigation is often the last time a site will be examined and the last opportunity for an archaeologist to collect information from the entire site area. It is essential that basic or "base-line" information be collected at the Phase II level of investigation for future reference and research.

#### 3.3.1. Surface Investigation Guidelines

Systematic controlled surface surveys may only be performed if adequate surface visibility (70% or better) exists. A systematic survey of the project/site area may help to provide a tentative estimate of the site's horizontal boundaries s and the presence/absence of artifact concentrations. With landowner permission, it may be possible to quickly check outside the project limits to determine if the site extends beyond these arbitrary boundaries. No area should be plowed that has not been previously plowed. Depth of plowing should not exceed the depth of existing plow zone. This depth can be determined from the Phase I shovel testing program.

Systematic surface survey will provide information only on those items present within the plow zone. If the Phase IB investigations showed that sub-plowzone components are present, then additional subsurface excavations will be necessary to estimate site boundaries. In either case subsurface testing is warranted to maximize the recovery of information from the plowzone, sub-plowzone, and to appropriately address the criteria for eligibility.

Systematic surface survey includes, but is not limited to, walking close interval transects (5 meter intervals or less) and marking each artifact location for point provenience mapping or collection within standard units or cells established at a systematic interval across the project/site. All artifact locations identified during a systematic surface survey must be documented either through piece plotting or by surface collection cell.

If artifacts are collected by surface cells, both the size and spacing of the units should be determined on the basis of the results of the Phase IB survey and any other appropriate considerations. If a site appears to have low artifact density (e.g. less than 5 artifacts per collect cell), then a larger collection cell may be justified. Collection cell size should not exceed 5 meter x 5 meter since it is unlikely that the plowing process moved artifacts more than this. In general, the size and spacing of the cells should be less than that used in the Phase IB investigations. If the artifacts appear to be evenly distributed across the project area, then an interval as large as 10 meters could be justified. If the artifacts appear to be tightly clustered, then intervals of 5 meters or less may be warranted.

In the case of historic sites, where evidence of a foundation was found during the Phase IB investigation, a more clustered or radial pattern of collection could occur using the foundation walls or an historic feature as a focal point.

#### 3.3.2 Subsurface Testing/Excavation Guidelines

Subsurface testing is an essential component of a site evaluation. Methods included, but are not limited to, a systematic shovel-test program, test unit excavations, and remote sensing. In most cases, the majority of the information used in evaluating a sites' significance and eligibility for inclusion on the State or National Registers derives from this testing. As with surface inspection, subsurface investigation should be designed to gather sufficient data to provide an accurate estimate of site boundaries, both for plowzone and sub-plowzone components. In addition. information on the presence and degree of artifact clustering is derived form this method. Artifacts analyzed by cluster contribute to interpretations of site function as does evidence for features collected during testing. Subsurface methods increase the volume of soil examined, thereby increasing the chances of recovering diagnostic cultural material and radiocarbon samples that will help identify the temporal component present. Recovery of tools assists in identifying intra-site structure and contribute to the overall interpretation of site types. Subsurface testing is a major means of assessing the physical and cultural integrity of a site and provides valuable information on the data potential present.

**Shovel Tests**: The excavation of shovel-test units (round or square no larger than 0.25 meters) within a project/site area is a quick and efficient method of obtaining site-specific information. In order to obtain data on site boundaries and artifact variability both horizontally and vertically on the site, the spacing and depth of units should be carefully selected. As previously discussed under Surface Investigation Guidelines (Section 3.3.1) information from the Phase IB survey should be used to establish these parameters.

For example, if the results of the Phase IB investigations revealed that a large, uniform distribution of artifacts was present, then shovel tests spaced at 10-meter intervals may be justified. However, if discreet artifact clustering is identified, then interval no greater than 5 meters are warranted. Similarly, if the Phase IB investigations isolated a sub-plowzone component, then depth of all shovel tests should exceed the maximum depth of artifacts previously identified by at least 10 centimeters. On deep, flood-

plain deposited soils, it may be prudent to extend all shovel -tests to a minimum depth of 1.0 meter. If information obtained in the previous Phase I investigations, Phase II excavations or soil borings indicate that deeply buried stratified cultural deposits may exist in a project area, mechanically excavated trenches may be appropriate to determine the presence/absence of such phenomena.

All excavated soils should be screened through hardware cloth no greater than 1/4 inch in size. If it is expected that large number of small artifacts may be present, such as beads and micro-flakes, then a sample of the soil should be passed through 1/8 inch or smaller mesh, as well. Artifacts from the plowzone and different soil levels should be provenienced separately.

The results of the shovel-testing program should be sufficient to provide an accurate estimation of the site boundaries, at least within the project limits and to prepare a distribution map identifying the amount, degree, and type of artifact clustering present.

**Test-Unit Excavations:** Test-unit excavations are larger, more rigorously controlled excavation units that shove-test units. Common types of test units are squares and trenches. Units usually measure a minimum of 1.00 square meters and rarely exceed 5.00 square meters. This range accommodates 1.00 x 1.00 meter squares as well as 1.00 meter wide x 5.00 meter long trenches. The size, configuration, and depth of excavation units are contingent upon parameters derived from the Phase IB survey as well as the information collected during surface survey and shovel-testing.

Excavation units should be placed in those areas of the site most likely to yield data relevant to adequately address the goals and objectives of the Phase II investigations. Placement of test units should reflect the results of the systematic surface survey and/or shovel-testing program as well as the expectations regarding site type/function. For prehistoric sites, this may mean excavation of test units within clusters of high artifact concentrations; on historic sites, placement of units adjacent to foundation walls or in suspected midden locations may be appropriate.

During Phase II field work, it is not necessary to aim for excavation of a specific sampling fraction of the entire site area. Rather, it is more important to provide coverage of all the artifact clusters and structural features present since these are the areas likely to yield the most information on the site.

The choice of natural vs. arbitrary excavation levels and level thickness should facilitate the controlled collection of information necessary for evaluating site significance. Units should be excavated by hand using trowels or shovel skimmed; features should always be trowelled. It is common for the plowzone to be removed as one natural layer. However, it is rarely appropriate to remove the subsoil as a layer. Instead the subsoil (and unplowed topsoils) should be excavated in arbitrary levels within natural stratigraphic layers. The thickness of each arbitrary level should never exceed 10 centimeters.

In general, all measurements should be recorded in the metric system with English equivalents reported in parentheses. However, in cases of historic sites, when considered appropriate and approved by the SHPO, measurements may be recorded in feet and inches with metric equivalents reported in parentheses. In urban settings, where mechanized equipment is used to remove asphalt and fill, particular care must be taken to maintain vertical and horizontal control via careful measurements in those instances where excavation in predetermined thicknesses is not possible.

All excavation units must have appropriate documentation including profiles of at least one wall, feature plans and profiles and photographic documentation. All appropriate samples should be collected even when funds are not immediately available for their analysis. For instance, soil samples from features and unit levels and carbon samples should be routinely collected for present or future analysis.

**Remote Sensing**: Remote sensing covers all techniques that use other than excavation and physical inspection methods to observe and record subsurface phenomena. Frequently, techniques include soil resistivity, proton magnetometer, gradiometer, ground penetrating radar (GPR), and various photographic techniques (aerial, infrared, etc.).

In order for the data collected through the use of remote sensing techniques to be of value in evaluation the nature, extent, and importance of an archaeological resource, caution is necessary in using these techniques and interpreting their results. First, the archaeologist must clearly understand the characteristic of the data recovered and the potential limitations of the technique being utilized. Second, the natural geophysical properties of an area are important and will directly affect the results. Close coordination between the archeologist and the geophysical specialist are thus necessary to ensure accurate interpretation of the data. Third, the nature and importance of phenomena identified through remote sensing must be evaluated through actual excavation and recording of some, or all the phenomena unless anomalies will be avoided.

#### 3.4 Phase II Analysis and Report

The archaeologist must provide sufficient information about the site to allow the review agency to make a determination of eligibility to the State or National Register of Historic Places; to assess the expected impacts to the site from the proposed construction; and to offer recommendations to mitigate the adverse impact either through avoidance, redesign, data recovery, recordation, or a combination of these. The archaeologist should provide an explicit discussion of the sites(s) eligibility, or non-eligibility for listing on the State or Nation Register based on the data collected during the Phase II investigation. The rationale for evaluation of significance should be clearly stated and justified. The report should also include a discussion of the impacts that are likely to occur on the site(s) if the project proceeds as planned and offer appropriate recommendations for resource management or impact mitigation.

If site avoidance is recommended for a cultural resource, the report should include detailed site protection requirements to be implemented before, during and after construction to ensure that the resource is not accidentally impacted. If Phase III data recovery investigations are recommended for all or part of a site as an appropriate means of mitigation, the archaeologist should provide recommendations that should he used the basis for developing a data recovery plan (see Section 4.2).

#### 3.5 Urban Contexts

Due to the complex and diverse of implementing regulations methods in urban contexts, Phase II field strategies should be undertaken only after intensive documentary and map research has been completed for the parcel under study. The field strategies selected to obtain sufficient information for addressing the State or National Register criteria should he formulated in consultation with the appropriate reviewing agency.

#### 3.6 Underwater Sites

As with urban contexts, submerged sites constitute a special category of cultural resources. Phase II methods should be designed in cooperation with the reviewing agency in compliance with specific guidelines for the systematic and scientific conduct of these types of investigations.

#### 3.7 Supplemental Phase II Investigations

In specific cases, where a site with unique, historically documented data is excavated, but the Phase II excavations do not recover the physical evidence expected, it may be appropriate for all involved parties to consider additional Phase II investigations, undertaking archaeological monitoring during the initial phases of construction, or site stripping. As an example, if strong documentary evidence exists for the presence of human burials, but none is discovered during the field investigations, it may be conduct supplemental monitoring during appropriate to preliminary site preparations or construction to identify such features if present. Where such monitoring is employed, contingency plans should be made to implement resource evaluation and data recovery and such plans should be accounted for in archaeological and construction schedules. Monitoring is, however, never a substitute for adequate Phase II Investigations.

#### 3.8 Disposition of Collections

Provision for the responsible curation of the archaeological collection (material remains and associated record) generated as a result of Phase II investigation at an acceptable repository is an integral part of any site evaluation. Arrangements must be made in advance of any field work for the proper processing, documentation, and curation of collections as outlined in the Standard for the Curation of Archaeological Collections (Section 7).

## 4.0 PHASE III CULTURAL RESOURCE INVESTIGATIONS: DATA RECOVERY

Phase III Cultural Resource Investigations are required if an archaeological/historical resource listed on or eligible for inclusion on the State or National Register of Historic Places is

identified and impacts to this resource by a proposed project are anticipated. When a data recovery plan is developed, it should be based on a balanced combination of resource-preservation, engineering, environmental and economic concerns. Mitigation may take the form of avoidance through project redesign, reduction of the direct impacts on the resource with data recovery on the portion to be destroyed, data recovery prior to construction, recordation of structural remains, and/or a combination of the above.

#### 4.1 Goals of Phase III Data Recovery/Impact Mitigation

While varying quantities and quality of data are collected during Phase I and Phase II cultural resource investigations, Phase III investigations are specifically designed to recover information contained in a significant archaeological site before all or part of it is destroyed. Thus the goals of Phase III Data Recovery/Impact Mitigation excavations focus on collecting and preserving cultural, environmental, and any other data of value form a site before it is lost. Due to the project-specific nature of this phase, data recovery plans should be development on a case-by case basis in consultation with the SHPO, project sponsor, interested parties, and other involved state and federal agencies.

#### 4.2 Phase II Research Design/Data Recovery Plan

A research design is an integral part of any professional archaeological project. In any Phase III investigations, a research design takes the form of a data recovery plan that must be approved by the SHPO and other involved state and federal agencies prior to commencement of work. The data recovery plan shall be consistent with the Secretary of the Interior's Standards and guidelines for Archaeological Documentation (48 FR 44734-37) and take into account the Council's publication, Treatment of Archaeological Properties (Advisory Council on Historic Preservation, (draft) 1980). The data recovery plan should reflect a knowledge of the existing archaeological/historic database and research questions considered important at the local, regional and/or national level. The data recovery plan must provide a detailed discussion of the research topics and questions to be addressed; the types of data that must be gathered in order to address these questions; strategies and methodology for recovery of the necessary data; methods of analysis and interpretation; a schedule for completion of various aspects of the investigations; the name and background of all key project personnel and consultants who will participate in the research; disposition of collections and field records; and any other necessary information deemed appropriate by the SHPO and other involved state and federal agencies or the Advisory Council on Historic Preservation.

#### 4.3 Phase III field Work/Excavation Guidelines

Data Recovery should be as complete as possible. It should be tailored to the research questions established in the data recovery plan, and to whatever degree possible, to future archaeological research. The basic field work and excavation guidelines established for Phase I and Phase II investigations should be followed for any similar work undertaken in this phase. As a general rule, artifactual information should not be sacrificed for feature information and vice versa. Whenever possible,

mechanized stripping should be restricted to that portion of the site expected to be destroyed.

When preparing to undertake field work for a Phase III data recovery program an archaeologist must be prepared to provide the following; an explicit statement of the procedures used to collect the archaeological data; an explanation and justification of the methodology employed in data collection and recording; a discussion of the system for identifying and recording the spatial and contextual provenience of cultural material and other physical data; detailed descriptions of specialized procedures such as flotation, soil chemistry (pH, phosphates, etc), and collection of radiocarbon samples; and any other relevant information as deemed appropriate by the reviewing agency.

Structural components such as depositional strata and cultural features identified during subsurface testing should be fully and accurately described and documented by acceptable means. Locations of all sampling and testing units should be recorded on project/site maps. Any important contextual relationships and associations between objects, cultural features, and environmental features should be described and explained.

Unless a site is to be completely destroyed, permanent reference points should be established at the site to facilitate relocation of excavation units and features.

#### 4.4 Phase III Analysis and Report

The Phase III report is expected to be special in both content and format. The description, analysis, and interpretation of information collected should consider all forms of data collected. The reader should be given as complete and accurate an understanding of the site, its function, temporal and cultural affiliations, etc. as possible. All types of data analyzed (e.g. faunal, floral, geological or geomorphological, architectural, historical) should be integrated into site interpretation.

Any additions or modifications to the approved data recovery plan should be explained and justified. In addition, decisions made after field work has been completed as to whether or not to analyze all data collected should be addressed.

Excavation units and any other subsurface tests should be described in detail including stratigraphic profiles, soil conditions and characteristics, depths of deposits; and description and justification for excavation techniques. Depending on the nature and complexity of the site, it may be appropriate to discuss individual excavation units separately or to treat common deposits located in more than one unit together.

All laboratory procedures relevant to artifact and special sample processing, differential handling of certain classes of material, artifact identification and cataloging, and storage should be discussed.

Any previous applicable work should be incorporated into the analysis of the site. Examples of such work would include, but not be restricted to local and regional work that is directly related to

the site, culture(s), or time period(s) represented; related work in other geographic areas; theoretical or descriptive archaeological work; and any relevant research or information from other disciplines that have direct bearing on the analyses and interpretation of data collected at this site.

The report should include a discussion of contributions and potential contributions the Phase III investigations have made or could make to state, local, or national prehistory or history as appropriate. It may also be possible to discuss the study's contributions to broad anthropological and theoretical issues or to the State Plan if data generated during the investigations are suitable for such purposes.

Finally, the archaeologist should disseminate the information to the archaeological community and the lay public. An integral part of any data recovery should be publications, presentations at meetings and/or community programs, such slide talks and exhibits.

#### 4.5 Supplemental Phase III Investigations

If an approved Phase III data recovery plan does not result in recovery of the physical evidence known to exist at a particular site and if the site will be destroyed, then all involved parties should strongly consider undertaking archaeological monitoring during the initial phase of construction or additional Phase III investigations which could possibly include mechanized site Archaeologically supervised stripping or site stripping. destruction under archaeological control can be a very effective means of evaluating the validity of a project field research design, particularly if the data recovery plan employs a sampling regime. It provides a means of assuring that data collected during the implementation of the data recovery plane are representative of the true nature of the archaeological site. Destruction under control may also be applicable to situations where looting of uncollected materials within the project impact zone may occur following the completion of data recovery. As previously noted, Phase III investigations are specifically designed to recover information contained in a significant archaeological site before If deemed appropriate, this all or part of is destroyed. supplemental work should ensure that the goals of Phase III are satisfied before the site and its associated data are lost. Under no circumstances should such activities be undertaken on sites or portions of sites not subject to imminent destruction. Monitoring is not a substitute for an adequate Phase III investigation.

#### 4.6 Disposition of Collections

Provisions for the responsible curation of the archaeological collection (material remains and associated collections) generated as a result of Phase III investigations at an acceptable repository is an integral part of any data recovery plan. Arrangements must be made in advance of any field work for the proper processing, documentation, and curation of collections as outlined in Standards for the Curation of Archaeological Collections (Section 7).

#### 5.0 DISCOVERY OF HUMAN REMAINS

The discovery of human remains and items of cultural patrimony as defined by Section 3001 of the Native American Graves Protection and Repatriation Act (NAGPRA) in any phase of cultural resource investigations requires special consideration and care. Any discoveries of human remains on State lands must be reported to the State Museum. At all times human remains must be treated with the utmost dignity and respect. Should human burials be encountered, the location should immediately be secured and protected from damage and disturbance. Unless burial excavation is the purpose of or an explicit component of the approved research design, human remains should be left in-situ until consultation with the project sponsor, the SHPO, federally recognized Native American groups, concerned parties, and involved state and federal agencies has taken place. excavation, study and disposition of human remains should take place in accordance with all applicable federal, state, and local The NYAC Policy on Human Remains (dated 1972. Appendix B) and Guidelines for Consideration of Traditional Cultural Values in Historic Preservation Review published by the President's Advisory Council on Historic Preservation can provide helpful guidance on the proper treatment of human remains.

## 6.0 STANDARDS FOR THE PRODUCTION OF CRM REPORTS

The following report guidelines summarize general content and suggested formats for any CRM report. It is understood that reports written for agencies that have their own specific report requirements should be written accordingly, but these reports should also include the information outlined in these standards. The National Park Service report format is also an appropriate model for reports.

These standards have not been designed to exclude categories of information not listed, nor to offer a rigid format for final reports. It is also important to note that repots are expected to pertain only to the level of research and analysis appropriate to the level of cultural resource investigation undertaken. In addition, these standards have been prepared under the assumption that CRM reports must fulfill the needs of the lead agency involved as well as those of any other reviewer. Finally, any report prepared in accordance with NYAC standards should include completed New York State Prehistoric or Historic Archaeological Site Forms and Building Structure Inventory forms where appropriate.

For the purposes of these guidelines, a "reviewer" is anyone who reads, examines, or studies the report for a lead agency, municipality, citizen group. university, or similar body in order to evaluate the cultural resource investigations completed, the results and the recommendations.

Given the potential distribution of the CRM report, it is also important to provide information that will allow appropriate reviewers the opportunity to make informed evaluations but at the same time protect the fragile archaeological/histoircal resource base from potential dangers posed by unscrupulous individuals.

As such some type of non-disclosure statement or method of site location protection within the report will be required.

#### 6.1 Title Page

Each report should contain a title page that provides at least the following: the title of the report, including the level of investigation (e.g. Phase IA. IB, I, II, or III); the name and location of the minor civil subdivision (city/village/town, county, state) of the project; any pertinent project identification number (e.g. Highway PIN, Permit Number); author(s). contributor(s), project director(s), principal investigator(s); date report was prepared; name and address of the project sponsor for whom the report was prepared; and the organizational affiliation with address of the archaeological consultant.

#### **6.2** Table of Contents

The table of contents should be arranged in a logical manner and should constitute a list of primary and secondary internal divisions of the report with their beginning page numbers. Lists of figures, tables, and plates (with page numbers) should immediately follow the list of section headings. They may be listed on separate pages if the lists are lengthy. It may also be appropriate to list authors of sections and subsections in the proper place within the table of contents.

A typical report table of contents may include the following: Management Summary; Introduction; Environmental/Physical Setting; Background Research and Sensitivity Assessment; Research Design; Field Methods and Procedures; Results; Summary, conclusions, and recommendations; References Cited; Acknowledgements; Appendixes: List of figures; List of Tables; and List of Photographs/Plates.

#### **6.3**Management Summary

The management summary, like an abstract, should serve as a brief, clear outline of the proposed project, the investigations, results, and recommendations. It is often used by non-archaeologists and should be written with this category of reader as well as any agency reviewer in mind.

The management summary should include sections outlining the following: project location, project description, project size; regulatory and/or lead agency, landform/environment, work completed, problems encountered, results, and conclusions and recommendations.

#### 6.4 Introduction

The introduction should outline and summarize all pertinent sections of the report and should include at least the following:

(1) The names of the project sponsor and the contact person; the date on which the consultant was contacted to perform the work; the date on which the parties contracted to perform the investigations; contract numbers and permit/project numbers; legislation relevant to the work.

- (2) A written description of the proposed project including the nature of the construction or land alteration, geographic limits of the project areas, potential impacts, and project alternatives, if any are known
- (3) The purpose of the investigations, discussion of the scope of work, and the report format
- (4) The composition of the research staff and the dates of investigation
- (5) The temporary and permanent repositories of field data, artifacts, and other import project materials
- (6) Sufficient maps and illustrations to identify the project location including, but not necessarily restricted to, the location of the project within the state and county, the location of the project area on a named USGS 7.5' topographic map or DOT map, and a project area map

#### 6.5 Environmental/Physical Setting

This section of the report should summarize the environmental factors relating to actual and potential cultural resources, including archaeological sites, landscapes and extant structures within or adjacent to the project area. This information is necessary for both developing research methods and for evaluating project impact. Minimally, the following should be included, with accompanying maps where appropriate; geology, soils, hydrology, physiography/geomorphology, climate, flora, fauna, and recent human/ natural disturbance.

#### 6.6 Background Research and Sensitivity Assessment

The section summarizing the background research and sensitivity assessment should be written in such a manner as to assist reviewers in understanding and evaluating the importance of archaeological resources in the project area as well as the rationale for any further research recommended. The following general guidelines apply for reporting the results of the background literature search and sensitivity assessment: specify the steps taken in obtaining information; cite all sources including oral testimony, and provide full references in the report; explain omissions and lack of cultural activity where pertinent to the conclusions of the sensitivity assessment; provide a summary of the cultural background and environmental attributes and limitations of the area; review information on known archaeological and other cultural resources and previous studies in the area; include information on the foci and extent of previous coverage of the area and the research questions addressed; and specify where all records resulting from the background research will be curated. DO NOT provide specific site locations in reports for public distribution;

#### 6.6.1 Background Research

Summaries of the following should be covered under Background Research: site file searches at the state and local levels; archaeological literature search, including both published and unpublished sources; examination of historic maps and archival information; searches of State and National Register files at SHPO, specifying SRHP/NRHP-listed, SRHP/NRHP-eligible, and SRHW/NRHP-inventoried sites; informant interviews; examination of institutional and private artifact collections; consultation with other professional archaeologists, locally active historians, and municipal authorities; field visit(s); the person(s) involved, the date of the visit, and the observations made.

A table listing the known cultural resources within a one-mile radius of project area should be included in the report with maps (see above *re* reports for public distribution) and photographs where appropriate.

#### **6.6.2 Sensitivity Assessments**

Summaries of the following should be covered under Sensitivity Assessment: the sensitivity rating expressed as low, moderate, high, or mixed, that reflects the likelihood that cultural resources are present within the project area; definition of the rating system used and its implications for further research; discussion of the types and conditions of cultural resources likely to be found within the project area; rationale for assigning the sensitivity rating; and relevant environmental and/or historic contexts such as those in SHPO's list developed for state-wide planning (see Section 2.21).

#### 6.7 Research Design

The research design should reflect a knowledge of the existing database and research questions considered important at least at the local and regional levels. The degree of complexity or detail should be appropriate to the level of investigations undertaken. This section of the report should include the following: an identification of the theoretical goals as stated in the form of specific hypothesis to be tested or problems to be investigated: the identification of the relevant analytical variables; specification of the data necessary for empirical testing: specification and justification of the methods and techniques for collecting and studying the data; and discussion of possible outcomes of the analyses.

#### **6.8** Field Methods and Procedures

This section of a Phase I report should include discussions of the following: walkover survey strategies designed to determine the presence of visible foundations, artifact scatters, disturbed ground, Excessive slope, etc.; the type and size of excavation/ collection unit used to locate resources and the reasons for this selection (e.g. shovel-test units for artifact recovery, larger units for surface collections, trenches for identifying buried historic foundations or deeply buried prehistoric sites); testing interval and design (e.g. single transect, regular grid, staggered grid) and rationale for this selection; when plowing and collecting, the length and interval between furrows, whether cultural material was piece-plotted or collected in systematically placed units, type weather and ground conditions (e.g. cloudy vs. bright sun, dry vs. moist soil, adequacy of potential artifact visibility); excavation and artifact recovery techniques (e.g. shovel vs. machine excavation, natural vs. arbitrary layers/ levels, depth to sterile soil, remote sensing methods, soil stripping strategies) and rationale; average depth of test units; typical soil profiles; the size of screen mesh; the adequacy of horizontal and vertical survey coverage; areas not surveyed and reasons why; and the potential biases in results (if any) from gaps in coverage.

This section of a Phase II report should, in addition, include discussions of the following: the type and size of excavation/ collection units used during the site examination; the field sampling strategy and rationale for its selection; the excavation/ collection techniques and how these relate to the data expected; and any impediments to the site examination that may have influenced the results.

This section of a Phase III report should, in addition, include discussions of the following: explanation of and justifications for the data recovery field strategy and methods; the treatment and analysis of floral, faunal, or other organic matter recovered; and all laboratory procedures relating to the stabilization, labeling, cataloging, and storage of artifacts and records, including the curation facility.

#### 6.9 Results

The results section of a report should clearly outline in the text and on maps the project boundaries, testing strategies, and cultural resources identified during testing. Depending upon the specific nature of the project and the investigations undertaken, it may be the site(s), standing structures, single test units, or single artifacts recovered from a plowed field that serve as the primary unit of discussion. Descriptions may be organized by starting at one end of a project area and moving to the other or by grouping similar resources together (e.g. all prehistoric resources separate from historic resources and standing structures).

#### 6.9.1 Components of a Phase I Report

Key components of this section of the text for a Phase I report should include the following: project site; the number of and intervals between shovel test units (with the shovel-test unit records included as an appendix); the number of tests actually excavated; the number of units, if any, that produced cultural material; the numbers and types of artifacts recovered and their cultural affiliation, if known (with the artifact list/ catalog included as an appendix); the nature of the artifact distribution (e.g., clusters of artifacts, uniform scatter, random distribution, features); physiographic context of the artifacts (e.g., floodplain. Terrace, swamp, lake); stratigraphic context of the artifacts (e.g. surface, plowzone, buried); lists of all standing structures that are at least 50 years old as well as structures that are less than 50 years old and are exempt from Office of Parks, Recreation and Historic Preservation (OPRHP) guidelines; site and structure inventory forms for all prehistoric and historic archaeological sites and standing structures that are at least 50 years old; and a master project map that details the testing strategy and results.

#### 6.9.2 Components of a Phase II Report

Key components of this section of the text for a Phase II report should include the following: the number of each type of excavation unit used in the site examination including detailed

descriptions of typical and unusual profiles of excavation units; the range of artifact types recovered from testing (with the artifact Catalog included as an appendix); the average density of material per unit as well as other summary statistics that help describe the site; the estimated site size and the Proportion of the site contained within the project boundaries; the size of the area actually excavated (total sq. m); the nature of the vertical stratification of the site (e.g. site contained within the plow zone, sub-plowzone, layered in the sub-plowzone); any internal clustering within the site; the types of features present (with photographs, floor plans, and profiles included as appropriate); temporal associations of the sites based on diagnostic artifacts or radiocarbon dating if available; summaries of floral, faunal and, other specialized analyses; summaries of functional, technological, and stylistic analyses of specific artifact groups; interpretations of site function; interpretations of the place of the site within a larger temporal, regional, or theoretical context and research potential of the site.

#### 6.9.3 Components of a Phase III Report

Key components of this section of the text for a Phase III report should include the following: complete artifact inventories integrating all phases of investigation; results of artifact analyses; results of all floral, faunal, and radiocarbon analyses; integration and interpretation of the results of all tests and analyses; the application of these integrated results to the research questions and goals of the study as made explicit in the research design; all pertinent plans and sections of excavation units and features encountered; and any biases or extraneous factors that may have affected the outcome of the excavations and analyses. All Phase III report photographs, tables, maps, and other graphics should be of publishable quality and follow National Park Service guidelines.

#### **6.9.4** Project Map Specifications

Project maps should include the following: an outline of the project boundaries in reference to fixed features such as roadways, power lines, rivers, canals, and railroads; the locations of all important features within the project boundaries such as standing structures, ditches, and disturbed areas; the locations of all test units actually excavated or collected differentiated according to those that contained artifacts and those that did not; the locations of all suspected artifact clusters and features such as foundations, wells, and middens: the identification of all structures that are at least 50 years old or other important standing structures in the project area; numbered photo angles of all photographs included in the text: a title block identifying the project name, location, date of investigation, and contractor performing the survey; key to all symbols used on the map; a bar scale using both English and metric measurements; and a north arrow (specify whether grid, magnetic, or geographic).

Maps accompanying a Phase II report should, in addition to the information listed for project maps. Include the following: estimates of site boundaries; detailed maps of all individual site excavations; site locations labeled with site name and number locations of features and any radiocarbon dated samples. Maps accompanying a Phase III report should also include the locations

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of all excavation units, backhoe trenches, and areas of machine stripping.

#### 6.10 Summary, Conclusions and Recommendations

The final section of an archaeological survey report should serve as a stand-alone summary of the activities and findings reported in detail in the body of the report.

#### 6.10.1 Components of a Phase I Report

For a Phase I report, this section should summarize the scope, methodology, areal coverage, and findings of the investigations; identify any areas where archaeological materials were discovered; point out gaps in survey coverage or areas where weather, owneraccess refusal, or other conditions prevented or necessitated less than thorough investigations; indicate the institutional repository for artifacts, field notes, and records for the project; evaluate the results of the investigations in terms of the project's theoretical orientation, bias., and assumptions identified in the research design; compare the results of the investigations to those of others conducted in the area; place the study within a regional context in terms of its contribution to regional knowledge and the degree to which its results reflect what is known of the area; assess the project impact; explain the need for and general scope of additional work, if any; make and justify recommendations for project modifications to protect sites if accurate site boundaries can be established; and consider secondary effects of the project as well as the direct impacts (e.g. housing development resulting from road, sewer, or waterline construction or site isolation resulting from gravel mining.

#### 6.10.2 Components of a Phase II Report

For a Phase II report, this section should summarize the arguments regarding the significance or non-significance of the resources investigated; state whether or not sufficient information has been collected to address the criteria for eligibility for listing on the State of National Registers of Historic Places such as information pertinent to the integrity, research potential, and the adequacy of horizontal and vertical boundary information; and present possible options for the treatment of ant resources considered significant (e.g. avoidance through redesign, protective conditions, and/or data recovery) along with specific recommendations as to how these might be implemented.

#### 6.10.3 Components of a Phase III Report

For a Phase III report this section should include summaries of the research design and of the recovery, analysis, and interpretation of information collected during the data recovery program; an evaluation of the success of the data recovery plan and any modifications made to it; an interpretation of data recovered from the site(s) and their importance in relation to the relevant to the historic context(s) established for the region; a discussion of contributions the Phase III investigations have made to the current state of knowledge of prehistory or history and the state plan; recommendations for updating or revising research questions, goals, and preservation priorities in the state historic preservation plan; recommendations for supplemental Phase III investigations, if appropriate (Section 4.5); recommendations for the conservation, short-term, and long-term curation of the collection; and finally, recommendations for dissemination of all appropriate information to the archaeological community and public outreach programs.

#### 6.11.1 References Cited

Every effort should he made to insure that this part of the report is complete and accurate. We urge the consistent adoption of the American Antiquity format and refer readers to its most recently Published style guide.

## 7.0 STANDARDS FOR THE CURATION OF ARCHAEOLOGICAL COLLECTIONS<sup>1</sup>

#### 7.1. **Definitions**

For the Purposes of these standards, the following definitions apply:

- **7.1.1.** 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.
- **7.1.2 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. Classes of material remains (and illustrative examples) that maybe in a collection include, but are not limited to:
- (A) Components of structures and features (such as houses, mills, piers, fortifications, raceways, earthworks, and mounds);
- (B) Intact or fragmentary artifacts of human manufacture (such as tools, weapons, pottery, pottery, basketry, and textiles);
- (C) Intact or fragmentary natural objects used by humans (such as rock crystals, feathers, and pigments);
- (D) By-products, waste products or debris resulting from the manufacture or use of man-made or natural materials (such as slag, dumps, cores, and debitage);
- (E) Organic material (such as vegetable and animal remains, and coprolites);
- (F) Human remains (such as bone, teeth, mummified flesh, burials, and cremations);
- (G) Components of petroglyphs, pictographs, intaglios or other works of artistic or symbolic representation;
- (H) Components of shipwrecks (such as pieces of the ship's hull, rigging, armaments, apparel, tackle, contents, and cargo);
- (I) Environmental and chronometric specimens (such as pollen, seeds, wood, shell, bone, charcoal, tree core samples, soil, sediment cores, obsidian, volcanic ash, and baked clay);and
- (J) Paleontological specimens that are found in direct physical relationship with the prehistoric or historic resource.

<sup>1</sup> Adapted from Department of the Interior, National Park Service 356 CFR 79 and the Standards of Research Performance of the Society of Professional Archaeologists.

**7.1.3. 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. Some records such as field notes, artifact inventories, and oral histories may be originals that are prepared as a result of the fieldwork, analysis, and report preparation. Other records such as deeds, survey plans, historical maps and diaries may be copies of original public or archival documents that are assembled and studied as a result of historical research.

Classes of associated records (and illustrative examples) that may be in a collection include, but are not limited to:

- (A) Records relating to the identification, evaluation, documentation, study, preservation or recovery of a resource (such as site forms, field notes, drawings, maps, photographs, slides, negatives, films, video and audio cassette tapes, oral histories, artifact inventories, laboratory reports, computer cards and tapes, computer disks and diskettes, printouts of computerized data, manuscripts, reports, and accession, catalog, and inventory records);
- (B) Records relating to the identification of a resources using remote sensing methods and equipment (such as satellite and aerial photography and imagery, side scan sonar, magnetometers, subbottom profilers, radar, and fathometers);
- (C) Public records essential to understanding the resource )such as deeds, survey plats, military and census records, birth, marriage, and death certificates, immigration and naturalization papers, tax forms, and reports);
- (D) Archival records essential to understanding the resource (such as historical maps, drawings and photographs, manuscripts, architectural and landscape plans, correspondence, diaries, ledgers, catalogs, and receipts);and
- (E) Administration records relating to the survey excavation or other study of the resource (such as scopes of work, requests for proposals, research proposals, contracts, antiquities permits, reports, documents relating to compliance with Section 106 of the National Historic Preservation Act [16 U.S.C. 47f], and National Register of Historic Places nomination and determination of eligibility forms).
- **7.1.4** Curatorial services means providing curatorial services means managing and preserving a collection according to professional museum and archival practices, including but not limited to:
- (A) Inventorying, accessioning, labeling, and cataloging a collection;
- (B) Identifying, evaluating, and documenting a collection;
- (C) Storing and maintaining a collection using appropriate methods and containers, under appropriate environmental conditions and physically secure controls;
- (D) Periodically inspecting a collection and taking actions as may be necessary to preserve it;
- (E) Providing access and facilities to study a collection; and
- (F) Handling, cleaning, stabilizing, and conserving a collection in such a manner to preserve it.

- 7.1.5 Qualified museum professional means a person who possesses training, knowledge, experience and demonstrable competence in museum methods and techniques appropriate to the nature and content of the collection under the person's management and care, and commensurate with the person's duties and responsibilities. In general, a graduate degree in museum science or subject matter applicable to archaeology, or equivalent training and experience, and three years of professional experience are required for museum positions that demand independent professional responsibility as well as subject specialization (archaeology) and scholarship. Standards that may be used, as appropriate, for classifying positions and evaluating a person's qualifications include, but are not limited to, the following federal guidelines:
- The Office of Personnel Management's Classification Standards for Positions under the General Schedule Classification System" (U.S. Government Printing Office, stock No. 906-028-00000-0, 1981) are used by Federal agencies to determine appropriate occupational series and grade levels for positions in the Federal service. Occupational series most commonly associated with museum work are the museum curator series (GS/GM-1O15) and the museum technician and specialist series (GS/GM-1016). Other scientific and professional series that may have collateral museum duties include, but are not limited to, the archivist series (GS/GM-1420), the archeologist series (GS/GM-193), the anthropologist series (GS/GM-190), and the historian series (GS/GM-170). In general, grades GS-9 and below are assistants and trainees while grades GS-11 and above are determined according to the level of independent professional responsibility, degree of specialization and scholarship, and the nature, variety, complexity, type, and scope of the work.
- (B) The Office of Personnel Management's "Qualification Standards for Positions under the General Schedule (Handbook X-118)" (U.S. Government Printing Office stock No. 906-030-00000-4, 1986) establish educational, experience, and training requirements for employment with the Federal Government under the various occupational series. A graduate degree in museum science or applicable subject matter, or equivalent training and experience, and three years of professional experience are required for museum positions at grades GS-11 and above.
- (C) The "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" (48 FR 44716, Sept. 29, 1983) provide technical advice about archeological and historic preservation activities and methods for use by Federal, State and local Governments and others. One section presents qualification standards for a number of historic preservation professions. While no standards are presented for collections manager, museum curators or technicians, standards are presented for other professions (i.e. historians, archeologists, architectural historians, architects, and historic architects) that may have collateral museum duties.

#### 7.2 Responsibilities of the Archaeologist

1. If material remains are collected as a result of a survey, excavation, or other study of a prehistoric or historic resource, a

system for identifying and recording their proveniences must be maintained.

- **2.** All associated records from an archaeological project should be intelligible to other archaeologists. If terms lacking commonly held referents are used, they should be clearly defined.
- **3.** During accessioning, analysis, and storage of the material remains and associated records in the laboratory, the archaeologist must take precautions to ensure that correlations between the material remains and the associated records are maintained, so that provenience, contextual relationships, and the like are not confused or obscured.
- **4.** The archaeologist must ensure that a collection resulting from a project will be deposited at a repository that can provide curatorial services, that employs at least one qualified professional with experience in collections management/curation.
- **5.** The initial processing of the material remains (including appropriate cleaning, sorting, labeling, cataloging, stabilizing, and packaging) must be completed, and associated records prepared and organized in accordance with the repository's processing and documentation procedures.
- **6.** A professional archaeologist should refuse to participate in any research, which does not comply with the above criteria.

#### 7.3 Guidelines for Selecting a Repository

- **1.** When possible, collections from New York should be deposited in a repository that:
  - (i) is in the state;
  - (ii) stores and maintains other collections from the same site or project location; or
  - (iii) houses collections from a similar geographic region or cultural area.
- **2.** The collection should not be subdivided and stored at more than a single repository unless such subdivision in necessary to meet special storage, conservation, or research needs.
- **3.** Material remains and associated records should be deposited in the same repository to maintain the integrity and research value of the collection.

## 7.4 Criteria for Institutions Serving as Repositories for Archaeological Collections

- 1. The institution must be chartered as a museum by the Board of Regents of the State of New York or similar body, or be an institution of higher education recognized by the State of New York.
- 2. The repository must certify, in writing, that the collection shall be cared for, maintained, and made accessible in accordance with the standards in this part.
- **3.** The repository must be able to provide adequate, long-term curational services including:
- (A) Accessioning, labeling, cataloging, storing, maintaining, inventorying and conserving the particular collection on a long-term basis using professional museum and archival practices; and
- **(B)** Comply with the following, as appropriate to the nature and content of the collection;
- (1) Maintain complete and accurate records of the collection, including:
  - (a) records on acquisitions;
  - (b) catalog and artifact inventory lists;

- (c) descriptive information, including field notes, site forms and reports
- (d) photographs, negatives, and slides;
- (e) locational information, including maps;
- (f) information on the condition of the collection, including any completed conservation treatments;
- (g) approved loans and other uses:
- (h) inventory and inspection records, including any environmental monitoring records;
- (i) records on any deaccessions and subsequent transfers, repatriations, or discards;
- (2) Dedicating the requisite facilities, equipment, and space in the physical plant to properly store, study, and conserve the collection. Space used for storage, study, conservation, and, if exhibited, any exhibition must not be used for non-curatorial purposes that would endanger or damage the collection;
- (3) Keeping the collection under physically secure conditions with storage, laboratory, study, and any exhibition areas by
  - (a) having the physical plant meet local electrical, fire, building, health and safety codes;
  - (b) having an appropriate and operational fire detection and suppression system;
  - (c) having an appropriate and operational intrusion detection and deterrent system;
  - (d) having an adequate emergency management plan that establishes procedures for responding to fires, floods, natural disasters, civil unrest, acts of violence, structural failures, and failures of mechanical systems within the physical plant;
  - (e) providing fragile or valuable items in a collection with additional security such as locking the items in a safe, vault, or museum specimen cabinet, as appropriate;
  - (f) limiting and controlling access to keys, the collection, and the physical plant; and
  - (g) periodically inspecting the physical plant for possible security weaknesses and environmental control problems, and taking necessary actions to maintain the integrity of the collection;
- (4) Requiring staff and any consultants who are responsible for managing and preserving the collection, and for conducting inspections and inventories as described in sections 3.(B)(7) and 3. (B)(8), to be either qualified museum professionals or professional archaeologists guided by a professional museum conservation consultant.
- (5) Handling, storing, cleaning, conserving and, if exhibited, exhibiting the collection in a manner that:
  - (a) is appropriate to the nature of the material remains and associated records;
  - (b) protects them from breakage and possible deterioration from adverse temperature and relative humidity, visible light, ultraviolet radiation, dust, soot, gases, mold, fungus, insects, rodents, and general neglect; and
  - (c) preserves data that may be studied in future laboratory analyses. When material remains in a collection are to be treated with chemical solutions or preservatives that will permanently alter the remains, when possible,

- retain untreated representative samples of each affected artifact type, environmental specimen or other category of material remains to be treated. Untreated samples should not be stabilized or conserved beyond dry brushing;
- (6) Storing site forms, field notes, artifacts, inventory lists, computer disks and tapes, catalog forms, and a copy of the final report in a manner that will protect them from theft and fire such as
  - (a) storing the records in a an appropriate insulated, fire resistant, locking cabinet, safe, vault or other container, or in a location with a fire suppression system;(b) storing a duplicate set of records in a separate
  - location; or
  - (c) ensuring that records are maintained and accessible through another party. For example, copies of final reports and site forms frequently maintained by the State Historic Preservation Officer, the State Archaeologist or the State museum or university. The Tribal Historic Preservation Officer and Indian tribal museum ordinarily maintain records on collections recovered from sites located on Indian lands. The National Technical Information Service and the Defense Technical Information Service maintain copies of final reports that have been deposited by Federal agencies. The National Archeological Database maintains summary information on archeological reports and projects, including information on the location of those reports.
- (7) Periodically inspecting the collection or having a professional conservation assessment done regularly for the collection for the purposes of assessing the condition of the material remains and associated records, and monitoring those remains and records for possible deterioration and damage; and performing only those actions as are absolutely necessary to stabilize the collection and rid it of any agents of deterioration.
  - (a) Material remains and records of a fragile or perishable nature should be inspected for deterioration and damage on a more frequent basis than lithic or more stable remains or records.
  - (b) Because frequent handling will accelerate the breakdown of fragile materials, material remains and records should be viewed but handled as little as possible during inspections
- (8) Periodically inventorying the collection by accession, lot, or catalog record for the purpose of verifying the location of the material remains and associated records
  - (a) Material remains and records of a valuable nature should be inventoried on a more frequent basis than other less valuable remains or records.
  - (b) Because frequent handling will accelerate the breakdown of fragile materials, material remains and records should be viewed but handled as little as possible during inventories.

- 9) Providing access to the collection for scientific, educational, and religious uses, subject to such terms and conditions as are necessary to protect and preserve the condition, research potential, religious or sacred importance, and uniqueness of the collection, such as
  - (a) Scientific and educational uses. A collection shall be made available to qualified professionals for study, loan and use for such purposes such as in-house and travelling exhibits, teaching, public interpretation, scientific analysis, and scholarly research. Qualified professionals would include, but not be limited to, curators, conservators, collection managers, exhibitors, researchers, scholars, archaeological contractors, and educators. Students may use a collection when under the direction of a qualified professional.
  - (b) Religious uses. Religious remains in a collection shall be made available to persons for use in religious rituals or spiritual activities. Religious remains generally are of interest to medicine men and women, and other religious practitioners and persons from Indian tribes, and other indigenous and immigrant ethnic, social, and religious groups that have aboriginal or historic ties to the lands from which the remains are recovered, and have traditionally used the remains or class or remains in religious rituals or spiritual activities.
  - (c) The repository shall not allow uses that would alter, damage, or destroy an object in a collection unless the repository determines that such use is necessary for scientific studies or public interpretation, and the potential gain in scientific or interpretive information outweighs the potential loss of the object. When possible, such use should be limited to unprovenienced, non-unique, non-fragile objects, or to a sample of objects drawn from a larger collection of similar objects.
  - (d) No collection (or part thereof) shall be loaned to any person without a written agreement between the repository and the borrower that specifies the terms and conditions of the loan. At a minimum, a loan agreement shall specify
    - (1) the collection or object being loaned;
    - (2) the purpose of the loan;
    - (3) the length of the loan
    - (4) any restrictions on scientific, educational or religious uses, including whether any object may be altered, damaged or destroyed;
    - (5) except as provided in section 2(9)(c), the stipulation that the borrower shall handle the collection or object being borrowed during the term of the loan so as to not damage or educe its scientific, educational, religious, or cultural value; and
    - (6) any requirements for insuring the object or collection being borrowed for any loss, damage or destruction during transit and while in the borrowers possession.
  - (e) The repository shall maintain administrative records that document approved scientific, educational, and religious uses of the collection.

#### Appendix A

FEDERAL LAWS, REGULATIONS AND GUIDELINES

National Historic Preservation Act of 1966, as amended.

36 CFR Part 800 Protection of Historic Properties

36 CFR Part 60 National Register of Historic Places

36 CFR Part 61 Procedures for Approved State and Local Government Historic Preservation Programs

36 CFR Part 79 Curation of Federally Owned and Administered Archaeological Collections

Archaeology and Historic Preservation: Secretary of Interior's Standards and Guidelines

Department of Transportation Act of 1966

National Environmental Policy Act of 1969

Archaeology and Historic Preservation Act of 1974

Archaeological Resource Protection Act of 1979

434 CFR Part 7 Protection of Archaeological Resources: **Uniform Regulations** 

Abandoned Shipwreck Act of 1987

Abandoned Shipwreck Act Guidelines

Native American Grave and Repatriation Act of 1990

#### NEW YORK STATE LAWS AND REGULATIONS

State Historic Preservation Act- Article 14 of Parks, Recreation and Historic Preservation Law

- 9 NYCRR Part 426 Authority and Purpose
- 9 NYCRR Part 427 State Register of Historic Places
- 9 NYCRR Part 428 State Agency Activities Affecting Historic and Cultural Properties

State Environmental Quality Review Act • Article 8 of

**Environmental Conservation Law** 

6 NYCRR Part 617 Sate Environmental Quality Review

The SEQR Handbook (1992 edition)

#### PERTINENT GUIDANCE DOCUMENTS AND "HOW TO" **MATERIALS**

Advisory Council on Historic Preservation

The Treatment of Archaeological Properties

Section 106 step-by-step.

U. S. Department of the Interior

Technical Brief No.11 Legal Background of Archaeological Resource Protection

#### National Register Bulletins

- #12 Definition of National Register Boundaries for **Archaeological Properties**
- #15 How to Apply the National Criteria for Evaluation
- #16A How to Complete National Register Registration Forms
- #16B How to Complete National Register Multiple Property **Documentation Form**
- Guidelines for Restricting Information About Historic #29 and Prehistoric Resources
- #36 Evaluating and Registering Historical Archaeology Sites and Districts
- Guidelines for Evaluating and Documenting Traditional #38 **Cultural Properties**

- #41 Guidelines for Evaluating and Registering Cemeteries and Burial Places
- #43 Defining Boundaries for National Register Properties

To obtain copies and or updated versions of the above documents, please address your request to the relevant agencies listed below.

Advisory Council on Historic Preservation 1100 Pennsylvania Avenue, NW, Suite 809 Washington, DC 20004

National Register of Historic Places

National Park Service

U.S. Dept. of Interior

P.O. Box 37127

Washington, DC 20013-7127

Archaeological Assistance Division

National Park Service

U.S. Dept. of Interior

P.O. Box 37127

Washington, DC 20013-7127

New York State Office of Parks, Recreation and Historic

Preservation

Historic Preservation Field Services Bureau

Peebles Island

P.O. Beet 189

Waterford, NY 12188-0189

Phone 518-237-8643

New York State Museum

Anthropological Survey

Cultural Education Center

Empire State Plaza

Albany, NY 12230

New York State Department of Environmental Conservation 50 Wolf Road Albany, NY 12233

# **Appendix B**NYAC BURIAL RESOLUTION 15 September 1972

Whereas, the Native Americans of New York State regard the disturbance of their burial's in the ground as disrespectful to their dead; and

Whereas, the New York Archaeological Council, the representatives of the majority of the professional archaeologists working in New York State recognizes that the same legal and ethical treatment should be accorded all human burials irrespective of racial or ethic origins; and

Whereas, NYAC recognizes that despite our position the disturbance of burials by others is and will be a reality; therefore,

#### Resolved,

- 1) That the New York Archaeological Council urges a moratorium on planned burial excavation of Indian skeletons in New York State until such time as public opinion regards the recovery of skeletal data as a scientific endeavor irrespective of racial or ethnic identity,
- 2) That we oppose the excavation of burials for teaching purposes as pedagogically unnecessary and scientifically destructive.
- 3) That we agree in the future to reburial of Indian skeletons in a manner and at a time prescribed by the Native Americans whenever burials are chance encounters during archaeological excavations or other earth moving activities,
- 4)That we request the opportunity to study these skeletons for their scientific and historic significance before reburial, and
- 5)That when a burial ground is being disturbed by untrained individuals, a committee of local Native Americans and archaeologists should jointly plan the salvage of information and the preservation of remains.

#### Appendix C

#### NYAC CODE OF ETHICS AND PRACTICE

Archaeology is a profession, and the privilege of professional practice requires professional morality and professional responsibility, as well as professional competence, on the part of each practitioner.

- A. The Archaeologist's responsibility to the Public:
- (1) An archaeologist shall:
  - a. recognize a commitment to present archaeology and its research results to the public in a responsible manner;
  - b. actively support conservation of the archaeological resource base;
  - c. be sensitive to, and respect the legitimate concerns of, groups whose cultural histories are the subjects of archaeological investigations;
  - d. avoid and discourage exaggerated, misleading, or unwarranted statements about archaeological matters that might induce others to engage in unethical or illegal activity;
  - e. support and comply with the terms of the UNESCO Convention on the means of prohibiting and preventing the illicit import, export, and transfer of ownership of cultural property.
- (2) An archaeologist shall not:
  - a. engage in any illegal or unethical conduct involving archaeologist matters or knowingly permit the use of his/her name in support of any illegal or unethical activity involving archaeological matters;
  - b. give a professional opinion, make a public report, or give legal testimony involving archaeological matters without being as thoroughly informed as might reasonably be expected;
  - c. engage in conduct involving dishonesty, fraud, deceit, or misrepresentation about archaeological matters;
  - d. undertake any research that affects the archaeological resource base for which he/she is not qualified.
- B. The Archaeologist's Responsibility to Her/His Colleagues:
- (1) An archaeologist shall:
  - a. give appropriate credit for work done by others
  - b. keep informed and knowledgeable about developments in her/his field or fields of specialization;
  - c. accurately, and without undue delay, prepare and properly disseminate a description of research done and its results;
  - d. communicate and cooperate with colleagues having common professional interests;
  - e. give due respect to colleagues' interest in, and right to, inform about, sites, areas, collections, or data where there is mutual active or potentially active research concern;

- f. know and comply with all laws applicable to her/his archaeological research, as well as with any relevant procedures promulgated by duly constituted professional organizations;
- g. report knowledge of violations of this Code to proper authorities.
- (2) An archaeologist shall not:
  - a. falsely or maliciously attempt to injure the reputation of another archaeologist;
  - b. commit plagiarism in oral or written communication;
  - c. undertake research that affects the archaeological resource base unless reasonably prompt, appropriate analysis and reporting can be expected;
  - d. refuse a reasonable request from a qualified colleague for research data.
- C. The Archaeologist's Responsibility to Employers and Clients:
- (1) An archaeologist shall:
  - a. respect the interests of her/his employer or client, so far as is consistent with the public welfare and this Code of Standards.
  - b. Refuse to comply with any request or demand of an employer or client which conflicts with the Code or Standards;
  - c. Recommend to employers or clients the employment of other archaeological or other expert consultants upon encountered archaeological problems beyond her/his competence;
  - d. Exercise reasonable care to prevent her/his employees, colleagues, associates and others whose services are utilized by her/him from revealing or using confidential information. Confidential Information means information of a non-archaeological nature gained in the coarse of employment which the employer or client has requested be held inviolate, or the disclosure of which would be embarrassing or would be likely to be detrimental to the employer or client. Information ceases to be confidential when the employer or client so indicates or when such information becomes publicly known.
- (2) An archaeologist shall not:
  - a. reveal confidential information, unless required by law:
  - b. use confidential information to the disadvantage of the client or employer; or
  - c. use confidential information for the advantage of herself/himself or a third person, unless the client consents after full disclosure;
  - d. accept compensation or anything of value for recommending the employment of another archaeologist or other person, unless such compensation or thing of value is fully disclosed to the potential employer or client;
  - e. recommend or participate in any research which does not comply with the requirements of the SOPA Standards of Research Performance

## **Appendix D** GLOSSARY

**Adverse impact**: A damaging Change to the quality of the cultural resource's significant characteristics. An adverse impact will result in the loss of important information.

**Archaeological resources**: The subsurface remains of buildings, fireplaces. storage pits, habitation areas, and other features of past human activity. Investigating archaeological resources requires the use of a specialized set of techniques and methods for extracting the maximum information from the ground. Archaeological resources can be either prehistoric or historic in origin.

**Archaeological sites**: One type of cultural resource, unique in That they are the only way to learn about people who kept no written records. They also can be used to confirm, correct, and expand upon the written records left by our ancestors.

**Archaeology:** A set of methods and techniques designed to recover important information about the life-ways of past peoples and cultures from the remains they left in the ground.

Artifact: See Material remains.

Collection: Any 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.

**Cultural resources**: The collective evidence of the past activities and accomplishments of people. They include buildings. objects, features, locations, and structures with scientific, historic, and cultural value.

**Extant resources**: Buildings or structures which are still standing in much the same form as when they were first constructed. Historic houses, bridges, and farmsteads are examples.

**Feature**: Intact evidence of cultural activity, typically in the form of hearths, pits. cisterns, privies, wells, postmolds, or other intentional, permanent alterations of the ground surface.

**Historic property**: Any building, structure, object. district, place, site, or area significant in the history, architecture, archaeology, or culture of the State of New York, its communities, or the Nation.

**Impact:** Any Change, whether good or bad, in the quality of a cultural resource's significant historic, architectural, or archaeological characteristics.

**Impact mitigation**: A course of action, which lessens the harm that will be inflicted upon a cultural resource. It may include work restrictions, repair, restoration, documentation, the installation of a protective covering, or the planned removal of a resource. In the case of archaeological sites, the latter typically involves full-scale excavations.

**Material remains**: 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.

**National Register of Historic Places**: The nation's official list of historic, architectural, archaeological, and cultural resources worthy of preservation. The Register contains individual sites and historic districts of national, state, or local significance. The Register is maintained by the United States Department of the Interior.

**NYAC:** New York Archaeological Council, a not-for-profit association of professional archaeologists with an interest in New York State archaeology.

**Prehistoric/historic resources**: Prehistoric resources date to the time before written records for a specific area, while historic resources are those dating to the time or written records. In North America, the time of written records began about A.D. 1500 with the arrival of European explorers. However, some parts of the country were not visited by outsiders until much later.

**Reviewer**: Anyone who reads, examines, or studies the report for a lead agency. Municipality, citizen group, university, or similar body in order to evaluate the cultural resource investigations completed, the results, and the recommendations.

**SHPO**: State Historic Preservation Officer, who is an appointed official responsible for administering the National Historic Preservation Act (NHPA) within a state government or jurisdiction.

**Significant Property**: A cultural resource that meets the criteria of the State or National Register of Historic Places.

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