

F. Historic Resources

100. Definitions

110. HISTORIC RESOURCES

The term "historic resources" encompasses districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. For CEQR, this includes:

- Designated New York City Landmarks, Interior Landmarks, Scenic Landmarks, and properties within designated New York City Historic Districts.
- Properties calendared for consideration as one of the above by the New York City Landmarks Preservation Commission (LPC).
- Properties listed on or formally determined eligible for inclusion on the State and/or National Register of Historic Places, or contained within a district listed on or formally determined eligible for the State and/or National Register of Historic Places.
- Properties recommended by the New York State Board for listing on the State and/or National Registers of Historic Places.
- National Historic Landmarks.
- Properties not identified by one of the programs listed above, but that meet their eligibility requirements.

Historic resources include both *architectural and archaeological* resources. Architectural resources include historically important buildings, structures, objects, sites, and districts. They also may include: bridges, canals, piers, wharves, and railroad transfer bridges that may be wholly or partially visible above ground. Archaeological resources are physical remains, usually subsurface, of the prehistoric (Native American) and historic periods—such as burials, foundations, artifacts, wells, and privies. The African Burial Ground is an example of an archaeological resource.

Historic resources can generally be classified as buildings, structures, objects, sites, or districts.

111. Buildings

A building is a structure created to shelter human activity. The historical or architectural

value of individual buildings may range from the monumental, such as the American Museum of Natural History, to the modest or unique, such as the Fraunces Tavern block in Lower Manhattan.

112. Structures

A structure is a built work composed of interdependent parts or elements in an organized pattern. The term "structure" is used to distinguish from buildings those functional constructions made for purposes other than shelter. Bridges and other engineering projects are good examples of historic structures. The "Cyclone" rollercoaster at Coney Island is an example of a structure, as are military fortifications, such as Fort William and Fort Jay on Governors Island or the batteries at Fort Wadsworth on Staten Island.

113. Objects

An object is an item of functional, aesthetic, cultural, historical, or scientific value that may be movable but is related to a given environment or setting. The designated sidewalk clocks in Manhattan and Queens, or Native American stone tools are examples of objects.

114. Sites

A site is the location or place where a significant event or sequence of events took place, or the location of an important building or structure, whether now standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value. A site can be important because of its association with significant historic (or prehistoric) events or activities, buildings, structures, objects, or people, or because of its potential to yield information important in prehistory or history. Examples of sites include a Native American habitation site or a battlefield

Urban landscape features are also a type of site, and include, parks, gardens, or streetscapes which are planned open spaces within a built urban environment. Examples include Central Park, Prospect Park, and the historic grid plan of Lower Manhattan streets.

115. Districts

A district is a geographically definable area that possesses a significant concentration of associated buildings, structures, urban landscape features, or archaeological sites, united historically

or aesthetically by plan and design or physical development and historical and/or architectural relationships. Although composed of many resources, a district derives its importance from having a coherent identity. A district can consist of historic or archaeological resources. The African Burial Ground and The Commons Historic District is an example of a district with archaeological resources. The Central Park West-West 73rd-74th Street Historic District (which is within the larger Upper West Side-Central Park West Historic District) is an example of a district unified by plan or design. This district reflects the vision of Edward Clark, president of the Singer Sewing Machine Company, and his heirs, who used restrictive covenants governing height and setbacks to create homogeneous residential streetscapes surrounding the monumental buildings that define Central Park West (e.g., New-York Historical Society, the Dakota, American Museum of Natural History). An example of a district notable for its historical and/or architectural relationships is the Brooklyn Heights Historic District, which comprises a concentration of buildings of several styles predating the Civil War, including Federal, Gothic Revival, and Italianate.

120. CRITERIA FOR ELIGIBILITY

The U.S. Secretary of the Interior has established criteria of eligibility for listing on the National Register of Historic Places (Code of Federal Regulations, Title 36, Part 60); New York State and LPC have adopted these criteria for use in identifying significant historic resources for SEQRA and CEQR review. In addition, the criteria for local designation as defined in the New York City Landmarks Law, which are not identical to the Secretary of Interior's, are applicable in assessing historic resources that may be affected by the action.

121. National Register Criteria

To be considered significant and eligible for the National Register, a property must represent a significant part of the history, architecture, archaeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of properties associated with that aspect of the past. The scope of significance may be local, state, regional, or national. The consideration of whether a property represents an important aspect of an area's history or prehistory is related to its associative values; the consideration of its characteristics is related to its integrity. The National Register's criteria for associative values and measures of integrity are described below.

These criteria apply to both archaeological and architectural resources. More guidance on the National Register criteria is provided in the U.S. Department of the Interior's *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, as well as numerous other National Register Bulletins (see Section 730, below).

121.1. Associative Values

The National Register criteria for evaluation identify the values that make a building, structure, object, site, or district significant. To be significant, property must meet at least one of these criteria:

- Be associated with events that have made a significant contribution to the broad patterns of history.
- Be associated with the lives of persons significant in the past.
- Embody distinctive characteristics of a type, period, or method of construction or that represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction.
- Have yielded or have the potential to yield information important in prehistory or history.

Thus, architectural significance can range from buildings that are examples of an architectural style, such as the Greek Revival residences in Brooklyn Heights; that are monumental, such as the American Museum of Natural History; or that represent the work of a renowned architect, such as the Bayard Condict Building at 65-69 Bleecker Street in Manhattan, which is the only building in New York City by the well-known architect Louis H. Sullivan. Buildings can also be significant if they are associated with historic events or patterns. For example, the Bowne House in Flushing, Queens, possesses important historical associations because it contains the kitchen wing of the oldest house in Queens, built by John Bowne in 1661 with additions that date to 1680 and 1696. Similarly, Flushing's second oldest house, the Kingland Homestead Museum, which dates to ca. 1774, is an important example of an otherwise lost building tradition, the English vernacular tradition.

Significance for archaeological sites is usually related to the fourth criterion: the site has yielded, or has the potential to yield, information important in prehistory or history. As applied in practice, this

means that potential resources are more important if they can provide information about the past that cannot be determined from other sources. For example, Five Points, an archaeological site that was adjacent to Foley Square in Manhattan, was significant because the archaeological assemblage provided a profile of this 19th century neighborhood that belied the Victorian description of it as a notorious slum.

121.2. Integrity

To be eligible for the National Register, a property must not only be significant under one of the four associative criteria for eligibility listed in Section 121, but it also must have integrity. Integrity is the ability of a property to convey its significance. It is defined in the federal guidelines as "the authenticity of a property's historic identity, evidenced by the survival of physical attributes that existed during the property's historic or prehistoric period." The National Register criteria recognize seven measures that define integrity, as follows:

- *Location.* Location is the place where the historic property was constructed or the place where the historic event occurred. The location of a property, together with its setting (see below), is important in recapturing a sense of history.
- *Setting.* Setting is the physical environment of a historic property. While location refers to the specific place where a property was built or an event occurred, setting refers to the character of the place in which the property played its historical role. It involves the relationship of the property to its surrounding features (such as topography, vegetation, and other buildings or open spaces).
- *Design.* Design is the combination of elements that create the form, plan, space, structure, and style of a property. It includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials (and thus, massing, pattern of fenestration, textures and colors of surface materials, etc.).
- *Materials.* These are physical elements combined or deposited during a particular period of time and in a particular pattern. A property must retain the key exterior materials dating from the period of its significance. If the property was altered *before* the period that gave it significance, the materials of the alteration rather than the original materials will be

important. According to the *Secretary of the Interior's Standards for Rehabilitation* (36 CFR Part 68), significant historic alterations are defined as "changes which may have taken place in the course of time and are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right and this significance shall be recognized and respected." Consultation with the State Historic Preservation Officer (SHPO) at the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and LPC would be helpful in determining if significant alterations or additions have occurred.

- *Workmanship.* This is the physical evidence of the crafts of a particular culture or people; the evidence of labor and skill in constructing or altering a resource. Examples of workmanship in historic buildings include tooling, carving, painting, etc.
- *Feeling.* Feeling is the physical characteristics that evoke the aesthetic or historic sense of a particular period of time.
- *Association.* This is the direct link between a historic property and an important historic event or person. Like feeling (above), association requires the presence of physical features that convey this relationship.

To retain integrity, a property will possess at least one and typically several of these aspects. Which of these qualities are important to a particular property depends on why the property is significant. The essential physical features that contribute to a property's significance must continue to be present and visible; the property must retain the identity for which it is significant. For example, a building significant as an example of a particular architectural style must retain the distinctive design characteristics of that style. The measures of integrity relate to the period for which the resource is significant; if the resource was altered, etc., before that period, this will not affect its integrity (see the discussion of significant alterations above).

121.3. Special Considerations

Certain kinds of individual properties are not usually considered for listing on the National Register. These are properties less than 50 years old, religious properties, moved properties,

birthplaces and graves, cemeteries, reconstructed properties, and commemorative properties. (Such properties do qualify if they are integral parts of districts that meet the eligibility criteria.) However, these properties can be eligible for the Register in certain circumstances, described below. These "criteria considerations" are found in 36 CFR Part 60. In addition, it should be noted that even if a property is excluded from eligibility for the National or State Register(s), it could be eligible for designation under the New York City Landmarks Law, which has different criteria for eligibility from those of the National Register (see Section 122, below). Further, even if a property is not eligible for the National Register for any reason, if it is eligible for designation under the New York City Landmarks law, the potential for impacts must be considered under CEQR.

Although properties typically must be at least 50 years old to be eligible for the National Register, younger properties that are of exceptional importance to a community, state, region, or the nation may still be eligible. The 50-year criterion was created as guidance, to ensure that sufficient time has passed to allow an evaluation of the historical value of a place. However, a property less than 50 years old may be eligible for the National Register if its exceptional contribution to an area's history, architecture, archaeology, engineering, and/or culture can clearly be demonstrated. Examples of properties in New York City determined eligible for listing or listed on the National Register before they were 50 years old include the following:

- The Chrysler Building (completed in 1930), which was listed on the Register because it is considered the epitome of "style moderne" architecture.
- The Whitney Museum of American Art (completed in 1966), which is considered exceptionally important as the work of an internationally renowned architect (Marcel Breuer), and representative of modern architecture during the 1950's and 1960's.
- The Lever House building (completed in 1952), which is important as one of the first corporate expressions of the International style of architecture in America.
- The Municipal Asphalt Plant (completed in 1944), which was the first successful American use of the parabolic arch form in reinforced concrete.

The other kinds of properties typically not eligible for the National Register—cemeteries, birthplaces or graves of historical figures, properties primarily religious in nature, commemorative properties, and moved or reconstructed buildings or structures—can qualify for the Register if they have achieved additional significance, as follows:

- Religious properties deriving primary significance from architectural or artistic distinction or historical importance; cemeteries that derive their primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events. For example, Trinity Church and Graveyard in Manhattan are both listed on the National Register. The church, the third to stand at this site for Trinity Parish, which was formed in 1697, is an outstanding example of Gothic Revival style. The graveyard's antiquity gives it importance, and it forms an integral and historical component of the setting in which the church now stands.
- A cemetery may also be considered significant if it contains headstones of aesthetic significance, such as headstones inscribed with early death heads or skulls and bones, or important funereal statuary. New York's 18th century African Burial Ground was designated a National Historic Landmark and listed on the National Register based on two criteria of significance: it has the potential to yield information important in history and, because it is associated with exceptionally significant events in United States history. For burial sites, please see Section 511; reference may also be made to the U.S. Department of the Interior's *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places*.
- A building or structure removed from its original location but that is significant primarily for architectural value or is the surviving structure most importantly associated with a historic person or event.
- A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived.

- A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life.
- A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance.

The U.S. Department of the Interior's *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* provides more information about these criteria considerations.

122. New York City Landmarks Law Criteria

The New York City Landmarks Law establishes criteria for designation of significant cultural resources. That law was established to achieve the following goals, among others:

- Effect and accomplish the protection, enhancement, and perpetuation of such buildings, structures, places, works of art, and objects (collectively termed, "improvements"); landscape features; and districts that represent or reflect elements of the City's cultural, social, economic, political, and architectural history.
- Safeguard the City's historic, aesthetic, and cultural heritage, as embodied and reflected in such improvements, landscape features, and districts.

The New York City Landmarks Law recognizes several types of resources:

- *Landmark.* As set forth in the Landmarks Law, a property eligible for designation as a Landmark is as follows: any improvement (building, structure, place, work of art, and/or object), any part of that is 30 years old or older, that has a special character or special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the City, State, or nation.
- *Interior Landmark.* A property is eligible for designation as an Interior Landmark if it meets the following criteria: it is an interior (the visible surfaces of the interior of an improvement) or part thereof, any part of which is 30 years old or older, and that is customarily open or accessible to the public, or to which the public is customarily invited, and

that has a special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the City, state, or nation.

- *Scenic Landmark.* A New York City-owned property is eligible for designation as a Scenic Landmark if it meets the following criteria: it is a landscape feature (any grade, body of water, stream, rock, plant, shrub, tree, path, walkway, road, plaza, fountain, sculpture, or other form of natural or artificial landscaping) or an aggregate of landscape features, any part of which is 30 years old or older, that has or have a special character of special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the City, State, or nation.
- *Historic District.* An area eligible for designation as a Historic District is as follows: any area that contains improvements (buildings, structures, places, works of art, and objects) that have a special character or special historical or aesthetic interest or value; and that represent one or more periods or styles of architecture typical of one or more eras in the history of New York City; and that cause such area, by reason of such factors, to constitute a distinct section of the City.

200. Determining Whether a Historic Resources Assessment is Appropriate

210. ARCHAEOLOGICAL RESOURCES

Archaeological resources usually need to be assessed for actions that would result in any in-ground disturbance. In-ground disturbance is any disturbance to an area not previously excavated, and includes new excavation deeper and/or wider than previous excavation on the same site. Examples of actions that typically require assessment are as follows:

- Above-ground construction resulting in ground disturbance, including construction of temporary roads and access facilities, grading, or landscaping.
- Below-ground construction, such as installation of utilities or excavation, including for footings or piles.

Analysis of archaeological resources is typically not necessary in the following circumstances:

- Actions that would not result in ground disturbance.
- Actions that would result in disturbance only of areas that have already been recently excavated for other purposes, such as basements, concourses, sunken plazas, etc. If the proposed area to be excavated substantially exceeds the previous disturbance in depth or footprint, archaeological assessment may be appropriate.

For any actions that would result in new ground disturbance (as described above), assessment of both prehistoric and historic archaeological resources is generally appropriate. The Landmarks Preservation Commission (LPC) is the only City agency which has archaeologists on staff. At any agency's request, the Landmarks Preservation Commission can review CEQR actions. To do so, the Commission should be provided with a site plan, an explanation of the proposed project, and photographs of the site. For more detailed information, consult the LPC's *Guidelines for Archaeological Work in New York City*, 2001. It is recommended that lead agencies and applicants contact the LPC as early as possible.

220. ARCHITECTURAL RESOURCES

Generally, architectural resources should be assessed if the proposed action would result in any of the following effects, whether or not any known historic resources are located near the site of the action:

- New construction, demolition, or significant physical alteration to *any* building, structure, or object.
- A change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature. Visual prominence is generally the way in which a building, structure, object, or landscape feature is viewed. For example, a building may be part of an open setting, a tower within a plaza, or conforming or not conforming with the streetwall in terms of its height, footprint, and/or setback. Visual context is the character of the surrounding built or natural environment. This can include the following: the architectural components of an area's buildings (e.g., height, scale, proportion, massing, fenestration, ground-floor configuration, style), streetscapes, skyline, landforms, vegetation, and openness to the sky.

- Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects.
- Additions to or significant removal, grading, or replanting of significant historic landscape features.
- Screening or elimination of publicly accessible views.
- Introduction of significant new shadows or significant lengthening of the duration of existing shadows over a historic landscape or on a historic structure if the features that make the structure significant depend on sunlight (for example, stained glass windows that cannot be seen without sunlight).

300. Assessment Methods

For actions that may affect historic resources (see Section 200), the first step in the evaluation of an action's effects on historic resources is to consider what area the action might affect and then identify historic resources—whether officially recognized or eligible for such recognition—within that area. The methods of choosing a study area and identifying and evaluating historic resources within that study area are explained in this section.

310. STUDY AREAS

311. Archaeological Resources

The area of subsurface work of the proposed action is considered the impact area. However, environmental review for archaeological resources is a predictive endeavor. Unlike architectural resources, which are evident and can be immediately evaluated, potential archaeological resources are hidden below ground. Therefore, to assess whether the impact area may contain significant archaeological resources, data must be gathered from the surrounding area to predict the likelihood of archaeological resources existing in the impact area. For prehistoric resources, it is appropriate to determine whether there are known prehistoric archaeological resources within a half-mile radius of the site. For historic archaeological resources, it is appropriate to determine if there are known historic archaeological resources in the nearby area, such as on the present-day full tax lot or within the boundaries of the nearest adjacent mapped streets.

312. *Architectural Resources*

For architectural resources, the study area is the area in which any resources could be affected by the action. It should be large enough to permit examination of the relationships between the proposed action and the existing historic resources.

These relationships are *physical* (e.g., an action may require alteration of a resource or may threaten a resource's structural integrity during construction), *visual* (e.g., an action may alter the streetscape or background context in which a resource is viewed and understood), and *historical* (an action can change the historical context of a resource if it changes its historic character, feeling, or association (see Section 122, above) or the way it is understood by the public; this could occur if a formerly public building, such as a library or recreational facility, became private, or if obvious and tangible links to the resource's history were removed, such as if bustling meat market activity within a building that is historically significant *because* of that association with the meat market were replaced by another activity). Thus, the size of the study area is directly related to the anticipated extent of the action's impacts. For most proposals, a study area defined by the radius of 400 feet from the borders of the project site is adequate. However, study areas of different sizes are sometimes appropriate. If an action facilitates only limited construction visible from few locations, for example, a smaller study area may be appropriate. Examples of situations for which a larger study area may be appropriate include:

- Actions that affect historic districts.
- Actions that involve construction in areas with difficult subsurface conditions (e.g., where dewatering could change the water table over a wider area and affect historic buildings some distance from the project site).
- Actions that result in changes over a larger area (e.g., a large-scale development or an area rezoning). For generic or programmatic actions, it may be appropriate to identify any "soft" sites that may be developed because of the action (see Chapter 2C, Section 400 for more information on identifying soft sites) and then consider study areas for each of those sites that are appropriate in size for the expected changes.

- Actions that result in changes that are highly visible and can be perceived from farther than 400 feet *and* could affect the context of historic resources some distance away (e.g., changes to the skyline around Central Park).

320. ANALYSIS TECHNIQUES

321. *Archaeological Resources*

321.1 *Identifying Known Resources*

Some archaeological resources have already been identified through City, state, or federal processes identified above (see Section 110). These are listed on, or have been determined eligible for, the State and/or National Registers of Historic Places; designated New York City Landmarks or Historic Districts or properties calendared for such designation; properties listed on, determined eligible for, or recommended by the New York State Board for listing on the State and/or National Registers; or National Historic Landmarks. In addition, the SHPO and the LPC maintain records of known archaeological sites and areas that are considered likely to contain archaeological resources (these areas are referred to as archaeologically "sensitive"). (For these sources, see Section 730, below.)

If these sources indicate that a known archaeological site or known sensitive area is located near the project site, this is an indication that the site itself may also contain such resources; this possibility should be explored as described in Section 321.2, below. If these sources indicate that a known site or sensitive area is located on the project site, then further analysis of the action's impact on those archaeological resources must be performed. In addition, whether or not the project site or surrounding area include any known resources, after this evaluation of known archaeological resources is complete, unknown archaeological resources should be considered (see Section 321.2, below).

321.2. *Investigating Unknown Resources*

The next step in the assessment of archaeological resources is to identify unknown resources that may exist on the site. If documented disturbances on the site exceed depths at which archaeological resources have been found in the immediate vicinity (see Section 321.1, above), then further investigation will most likely not be necessary. If any part of the site has not been excavated to this depth, analysis continues for that part

of the site, as described below. If the extent of disturbance on the site is unknown, analysis continues for the entire site as described below. At this point in the analysis, the lead agency may wish to contact the Landmarks Preservation Commission to determine whether the consideration of archaeological resources on the site is appropriate or can be eliminated.

Appropriate methodologies for identifying potential archaeological resources, based on federal standards and guidelines—particularly the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Federal Register, Vol. 48, No. 190*—as well as guidelines appropriate for archaeological work in New York City, are summarized in this section. Use of an archaeologist may be appropriate for this evaluation of unknown archaeological resources.

Typically, the initial analysis of unidentified archaeological resources consists of two parts, often performed simultaneously:

1. A determination of the potential for any prehistoric or historic material remains (artifacts, structures, refuse, etc.) existing on the site of the action. This depends on the site's past uses, as well as whether those remains, if any, would have survived subsequent disturbance by other activities, such as construction of later buildings.
2. An evaluation of the potential significance of any such remains. For this step, the National Register criteria for evaluation (Section 121, above) are applied. Archaeological sites are most likely to be found significant under the fourth criterion—having the potential to yield information important in prehistory or history—but the other criteria may also be applicable.

After this assessment, a site that is found likely to contain significant material remains is considered to be potentially "archaeologically sensitive." The site's actual, rather than potential, sensitivity cannot be ascertained without some testing or excavation. However, in New York City, the initial assessment of a site's archaeological sensitivity is typically made through background or archival research, without excavation. This documentary research phase should be extensive enough to allow the lead agency to evaluate the likelihood that significant resources are located on the site, and then whether these resources would be affected by the proposed action (Section 500, below). Field work

(archaeological testing or excavation) is most often not needed until after this initial evaluation of sensitivity and determination of the action's significant impacts.

The following research steps are appropriate to determine the potential sensitivity of a project site.

Determine Past Uses on the Site.

1. Contact the appropriate agencies and other sources to determine whether any known prehistoric archaeological resources are located near the project site (see Section 321.1, above). Presence of other prehistoric resources in the vicinity is used as an indicator of the site's potential sensitivity for prehistoric resources.
2. Determine the original topography of the project site. Early historical maps and documentary sources can be used. This step will help to assess prehistoric and other archaeological historic resources. If the site was once located near a water source, on a well-drained elevated site, or near a wetland, it is more likely to have been utilized by prehistoric, Native American groups. On project sites near the waterfront that are the result of landfilling operations since the 1600's, original land surface may be deeply buried. Additionally, the extent to which the shoreline has altered over the last 14,000 years as a result of climatic changes is also considered.
3. Research the development history of the site, as far back in time as possible. In this way, determine whether the site had any historic uses that may be of archaeological interest (such as 17th, 18th, or 19th century uses). What is of archaeological interest depends on current research issues in New York City, and therefore involves some judgment. This is discussed further in step 5, below. The development history also provides information about more recent uses and the extent to which these uses may have disturbed the site (step 4, below). For this step, historic maps and buildings department records can be helpful, as well as other documentary sources when available.

Determine Disturbance on the Site.

4. If there is evidence of several cycles of construction and demolition, consider whether later construction or demolition episodes disturbed any remains from past uses

(identified in step 3). Excavation of late 19th and 20th century building foundations and/or basements, filling, grading, and construction of utility lines may have disturbed earlier, potentially significant archaeological resources. Typically, construction records filed at the Buildings Department are a good source of this information; historic maps can also be useful.

Determination of the extent to which later land modification activities have affected earlier archaeological resources requires comparing the documented depth of disturbance with the depths at which archaeological resources would be expected. This depth depends on the original topography (step 2, above) and the amounts of filling and alteration that have occurred (step 3). The depths at which archaeological resources from the same period have been found in the vicinity are a good indicator. Depths at which significant archaeological resources have been found in New York City vary, and 17th century remains have been identified below 19th century foundations in Lower Manhattan, so the mere presence of later basements may not have disturbed potentially significant archaeological resources. If documented disturbance clearly exceeds depths at which archaeological resources might be expected, then no further work may be necessary.

This step can be performed before, after, or simultaneously with step 5, below (determining significance of past uses), depending on which method proves more useful and expedient. For example, if it is clear that no uses with any potential for significance were ever located on the site, there may be no reason to document the disturbance to the site. On the other hand, if it is clear that the locations of past uses have been disturbed, their significance does not need to be examined.

Determine Significance of Past Uses that May Remain.

5. If any past uses of interest are identified during step 3, intensive research can address whether these uses would be likely to result in meaningful archaeological resources: are they activities that have a discernible or physical signature? And do these remains provide information that answers important research questions?

Significance is a function of whether the resource is likely to contribute to current knowledge of the history of the period in question. Following are some examples of archaeological issues currently of interest in New York City. However, research issues change as the knowledge base increases. (Consultation with LPC is recommended in determining significance of potential resources.)

For prehistoric archaeological resources, research cannot directly determine prehistoric use of the site. Rather, it is used to predict the likelihood of prehistoric use. Any identified potential for prehistoric archaeological resources is considered significant at the initial, research level, since few prehistoric sites have been documented in New York City and the discovery of any intact prehistoric site would be significant.

For archaeological resources of the historic period, archival research can ascertain the history of uses on the site and their potential significance. Examples of uses currently of potential interest from the historic period include:

- Early landfilling techniques (relevant on sites within a few blocks of the current waterfront through much of the City, where filling created new land surfaces in submerged areas).
- Buried derelict ships or hulls (relevant on similar sites to those of landfilling techniques; often incorporated into the landfill as part of the fill-retaining structures).
- Any uses during the 17th and 18th centuries, including colonial and Federalist residences and businesses, and Revolutionary War remains.
- 19th century residences or workplaces where deposits containing refuse associated with occupants may be preserved. Such refuse can provide important information on consumer preferences, differential access to consumer goods, diet, and other topics of current research interest. Remains related to house-lot infrastructure, including wells, cisterns, and privies, may have research potential in that they provide information about access

to services and public health issues during the period before public utilities were available to residents; such features also often contain significant domestic refuse deposits.

Residences constructed after City services (water and sewer) were available are generally not considered archaeologically significant. For residences that predate extension of urban services that continued to be used after City water and sewer were available, the archival phase may involve collecting information about the occupants through such sources as early deeds, tax records, and census lists. On the other hand, if the archival phase demonstrates that no potentially significant uses were located on the site, this additional research may not be necessary.

Conclusions About Potential Archaeological Sensitivity of Site.

Based on the information provided in steps 1 through 5, above, the lead agency can draw conclusions as to the potential archaeological sensitivity of the site. Consultation with LPC is recommended for this evaluation. If past uses may have left remains on the site that were not later disturbed, and if these remains may be important according to the National Register criteria for eligibility (see Section 120, above), then the site may host significant archaeological resources, or may be archaeologically "sensitive." The locations of potential sensitivity should be pinpointed as much as possible. The effects on those potential resources are then assessed (see Section 420, below).

If no known or potential archaeological resources were identified on the site, consideration of archaeological resources is complete. For actions being evaluated through an Environmental Assessment Statement, a Negative Declaration may be appropriate at this point, if no other issues have been raised in other technical areas. (Chapter 1 of this Technical Manual explains the issuance of Negative Declarations). If resources were identified, the action's effects on those resources must be evaluated (see Section 410, below). This involves considering conditions in the future without the action (Section 321.3, below) and with the action (Section 321.4).

The LPC is the only city agency that has archaeologists on staff. The LPC's archaeologists will assist agencies in fulfilling their obligation to identify potential impacts on archaeological

resources. It is recommended that the lead agency consult with the LPC as early in the process as possible. If the lead agency uses an archaeological consultant, he or she should be a Registered Professional Archaeologist ("RPA") and/or be qualified under the federal standards set by the Department of the Interior. Lead agencies should consult the LPC's *Guidelines for Archaeological Work in New York City*, 2001, which describes in detail each step of archaeological work that may be needed.

321.3 Future No Action Condition

To assess the future no action condition, consider whether any changes are likely to occur to the existing archaeological resources identified in Sections 321.1 and 321.2. If any archaeological resources—either designated or potential—are identified on the site, any expected changes to the site or surrounding area that would affect those resources should be noted.

321.4 Future Action Condition

The proposed action's effects on any designated or potential archaeological resources identified above in Sections 321.1 and 321.2 are then analyzed in the future action condition. The assessment specifically considers whether the action could result in disturbance or destruction of those archaeological resources.

322. Architectural Resources

322.1. Identifying Known Resources

Designated architectural resources include (1) designated New York City Landmarks, Interior Landmarks, and Scenic Landmarks, and properties within designated New York City Landmark Historic Districts; (2) properties calendared for consideration as one of the above by the New York City Landmarks Preservation Commission; (3) properties listed on or formally determined eligible for inclusion on the State and/or National Register of Historic Places, or contained within a district listed on or formally determined eligible for the State and/or National Register of Historic Places; (4) National Historic Landmarks; and (5) properties recommended by the New York State Board for listing on the State and/or National Registers of Historic Places. The information on listed resources is available from the agencies responsible for their identification or assigned responsibility for maintaining these records: the New York City Landmarks Preservation Commission and the New York State Office of Parks, Recreation and Historic

Preservation (see Section 730, below).

If any listed historic resources are located in the study area, then further analysis of the action's impact on these resources must be performed. In addition, whether or not the study area includes any listed resources, after this evaluation of listed historic resources is complete, potential resources should be investigated (see Section 322.2, below).

322.2. Identifying Potential Resources

Any potentially eligible architectural resources that may be affected by the action should be identified. Records and documentation of this effort are prepared for the lead agency's files or for submission to the reviewing agency, if appropriate. As described in Section 100, above, historic resources can be considered significant if they meet the criteria for eligibility to the National Register, established by the U.S. Secretary of the Interior, or criteria for local designation set forth in the New York City Landmarks Law. The National Register criteria address both historic and architectural significance: a property may be associated with significant events or persons, or may be a notable representation of a particular architectural style or the work of an important architect or builder (see Section 121, above). Similarly, the New York City Landmarks Law's criteria include historical, architectural, aesthetic, and cultural value (see Section 122). Usually, architectural resources are identified through a combination of field surveys and documentary research. Efforts to identify potential architectural resources generally follow the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* and the criteria of the New York City Landmarks Law. The National Register and the New York City Landmarks Law's criteria are then applied to determine if these potential resources may be eligible for the National Register or for local designation by the Landmarks Preservation Commission. This methodology is summarized below.

The passage of time or changing perceptions of significance may justify reevaluation of properties that were previously determined ineligible for the Register or for designation as City Landmarks or Historic Districts. Usually, identification of potential historic resources requires some knowledge of an area's history, of the broad patterns of historical development in New York City, and of the various architectural styles represented in the City. More information on surveying historic resources and applying the National Register criteria is available in the federal

regulations and in numerous bulletins published by the National Park Service and the Advisory Council on Historic Preservation (see Section 730, below). Consultation with LPC is advised; LPC can assist in making determinations of eligibility on the basis of federal, state, and local criteria.

Field Survey. The survey for unidentified resources begins with field inspection of the study area, including the project site. During this inspection, structures that appear to have particular cultural, architectural, or historical distinction are identified. This survey can require careful judgment and knowledge about current perceptions of significance and about the history and architecture of New York City. Consultation with LPC or SHPO would be helpful and should be considered.

Research. Research of resources' historical and cultural significance is often needed to supplement visual inspections. Documentary research can be used to gather the information needed to apply the National Register and New York City Landmarks Law criteria to any potential resources in the study area. Research conducted into the development history of the study area before field surveys are performed can help to identify resources in the area; research conducted after surveying can provide information about any specific resources identified. For example, research can be used to ascertain a property's association with important events or persons, or its architect and date of construction. Research is also useful for determining the property's integrity: alterations and changes can be traced through building records, historic maps, and historic photographs.

The information needed to evaluate significance depends on the property's history and reason for significance. In most cases, the following information relating to a property's history is needed:

- Historically significant events and/or patterns of activity associated with the property.
- Periods of time during which the property was in use.
- Specific dates or periods of time when the resource achieved its importance (e.g., date of construction, date of specific event, period of association with an important person, period of an important activity).
- Information about any alterations.

- Historically significant persons associated with the property (e.g., its tenants, visitors, owner).
- Representation of a style, period, or method of construction.
- Persons responsible for the design or construction of the property (e.g., architect, builder).
- Quality of style, design, workmanship, or materials.
- Historically or culturally significant group associated with the property and the nature of its association.
- Information the property has yielded or may be likely to yield.

Documentation. For any properties in the study area that appear to be important, information provided should be sufficient to enable the lead agency or coordinating agencies (LPC and/or SHPO) to make a decision concerning the significance of the resources using the National Register and local criteria. This information should include dates of construction and alteration, for example. In addition to written descriptions, maps indicating the location of the resource(s) and black-and-white photographs of the resources can be helpful.

For all potentially important resources, the date or approximate date of construction, the name of the architect or builder, the architectural style, and the approximate dates of alterations to the resource should be provided, when possible. Depending on the reasons for importance, additional information should also be provided. For historically important resources, this includes any available information about that history, such as important occupants or events. For architecturally important resources, all those design elements that contribute to the building or structure's architectural importance should be noted. For example, for a building that may be a fine representation of the Gothic Revival style, those features for which that style is known—such as pointed gables, steep roof pitch, and board and batten siding—should be documented. Features that may contribute to a resource's value, and therefore should be noted, can include the following:

- Type of structure (e.g., dwelling, church, shop,

apartment building, etc.).

- Building placement (detached, row, flush to the street, set back, etc.).
- General characteristics, including overall shape of plan (rectangle, side hall, center hall), number of stories, structural system, number of vertical divisions or bays, construction materials (e.g., brick, stone, poured concrete), wall finish (e.g., kind of bond, coursing, shingle, half-timber), and roof shape.
- Specific features, including location, number, and appearance of porches (e.g., stoops, porte cocheres), windows, doors, chimneys, and dormers.
- Materials of roof, foundation, walls, and other structural features.
- Important exterior decorative elements (facades, lintels, cornices, etc.).
- Interior features that contribute to the character of the building or that may possess significance independent of the value of the exterior of the building.
- Number, type, and location of outbuildings or dependencies.
- Important features of the immediate environment, including proximity to the street or sidewalk, landscaping, and views.

For historic districts, in addition to the information considered for individual resources, other considerations include the qualities that give the district coherence distinct from its surroundings, the boundaries of the district, the individual or groups of buildings that contribute to the character of the district, and the buildings or structures that detract from or diminish its coherence. Therefore, descriptions of districts can also include the following types of information:

- General description of the natural and manmade elements of the district including structures, buildings, sites, objects, prominent geographical features, density, and landscaping.
- Numbers of buildings, structures, sites, and objects that contribute to the character of the proposed district, and those that do not contribute or may detract from it.

- General description of types, styles, or periods of architecture represented in the district, including scale, proportions, materials, color, decoration, workmanship and design.
- General description of physical relationships of the buildings to each other and to the physical environment, including facade lines, street plans, parks, squares, open spaces, density, landscaping, roof lines, and massing.
- General description of the district during the period or periods during which it achieved significance.
- Current and original uses of buildings and any adaptive uses.
- General description of the existing condition of buildings, restoration or rehabilitation activities, and alterations.
- Qualities that make the district distinct from its surroundings, including intangible characteristics such as socioeconomic or ethnic affiliations of the residents.
- Description of the qualities that give the district its special character or special historical or aesthetic interest or value.
- Description of the period or style of architecture represented by the district.

Conclusions about Unknown Architectural Resources. Based on the information gathered in the steps above, the lead agency can draw conclusions as to whether any previously unidentified architectural resources are located in the study area. A private or non-lead agency applicant can make a preliminary assessment of potential importance, but the final decision is made by the lead agency, usually with assistance from LPC and/or SHPO.

If potential architectural resources are identified, the action's effects on those resources must be assessed (see Section, 420, below). This involves considering the future no action condition (Section 322.3, below) and conditions with the action (Section 322.4).

If no known or potential resources were identified, the evaluation of architectural resources is complete. For actions being evaluated through an Environmental Assessment Statement, a

Negative Declaration may be appropriate at this point (Chapter 1 of this Technical Manual provides more information on Negative Declarations).

322.3. Future No Action Condition

To assess the future no action condition, consider whether any changes are likely to occur to the existing architectural resources identified in Sections 322.1 and 322.2. If any architectural resources—either designated or eligible—were identified in the study area, any expected changes to those resources should be noted. These changes could be physical (e.g., demolition, alteration), visual (e.g., changes to the resource's setting or context), or historical (e.g., change in use that affects its context).

322.4. Future Action Condition

The proposed action's effects on any designated or potential architectural resources identified in Sections 322.1 and 322.2 are then assessed in the future action condition. The analysis should consider the potential for physical and contextual effects on those resources. In the assessment of contextual effects, the appearance of any proposed new structures may be important. More information is provided in Section 420.

400. Determining Impact Significance

Federal regulations, which have become a widely recognized standard, define an adverse effect as the introduction of tangible and intangible elements that compromise or diminish the characteristics for which a resource has been determined significant. Thus, impact assessment is directly related to the proposed action and how it will affect the distinguishing characteristics of any resources identified. The assessment asks two major questions: will there be a physical change to the property or its setting as a result of the proposed action? If so, is the change likely to diminish the qualities of the resource—including non-physical changes, such as context or visual prominence—that make it important? As explained in Chapter 2 of this Manual, the action's effects should be compared with the future no action conditions to assess impacts. Impacts may result from both temporary (e.g., related to the construction process) and permanent (e.g., related to the long-term or permanent result of the proposed action or construction project) activities. When significant adverse impacts are identified, the lead agency should consult with LPC (for City Landmarks) and/or the SHPO for State or National

Register resources. Section 700, below, provides more information on the regulations governing designated resources.

410. ARCHAEOLOGICAL RESOURCES

Significant adverse impacts on archaeological resources are physical—disturbance or destruction—and typically occur as a result of construction activities. If any potential significant archaeological resources were identified on the site of the proposed action (Section 321.2, above), and the action could disturb or destroy those resources in any way, a significant adverse impact would occur. Possible impacts can occur in such circumstances as the following:

- Construction resulting in ground disturbance, including construction of temporary roads and access facilities, grading, landscaping; or
- Below-ground construction, such as excavation or installation of utilities.

If an action would not have a physical impact on archaeological resources, no significant adverse impact would occur, and no further archaeological work is necessary.

420. ARCHITECTURAL RESOURCES

Some of the types of impacts to architectural resources may include the following:

- Physical destruction, demolition, damage, or alteration or neglect of all or part of a historic property. Such alterations as addition of a new wing to a historic building or replacement of the resource's entrance could result in adverse impacts, for example, depending on the design.
- Changes to the architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features. An example would be recladding an architectural resource with new brickwork.
- Isolation of the property from or alteration of its setting or visual relationships with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of

height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor. For example, if all the buildings on a block, including an architectural resource, are four stories high, and a proposed action would replace most of those with a 15-story structure, the four-story architectural resource would no longer conform to the streetscape. Another example would be a proposed action that would result in a new building at the end of a street, so that views of a historic park beyond were blocked.

- Introduction of incompatible visual, audible, or atmospheric elements to a resource's setting. An example would be construction of a noisy highway or factory near a resource noted for its quiet, such as a park.
- Replication of aspects of the resource so as to create a false historical appearance. If a house was built during the Revolutionary War but later underwent extensive alteration, recreation of its 18th-century appearance could have an adverse impact on that resource.
- Elimination or screening of publicly accessible views of the resource. For example, if a resource is located along the waterfront and is visible across the water, tall new buildings proposed between the architectural resource and the water that would block views of the resource could result in an adverse impact.
- Construction-related impacts, such as falling objects, vibration (particularly from blasting or pile-driving), dewatering, flooding, subsidence, or collapse. Such impacts could occur to an architectural resource adjacent to a construction site if adequate precautions are not taken.
- Introduction of significant new shadows, or significant lengthening of the duration of existing shadows, over a historic landscape or on a historic structure (if the features that make the resource significant depend on sunlight) to the extent that the architectural details that distinguish that resource as significant are obscured. For example, if a resource is noted for its stained glass windows, and those windows are only visible in the sunlight, significant blocking of that sunlight could result in a significant adverse impact. (For more information, see Chapter 3E of this Manual.)

Assessment of the magnitude of the impact is a matter of informed judgment, based on the proposed action and the reasons for which a resource was determined important. Generally, if the action would affect those characteristics that make a resource eligible for the National Register or for New York City designation, this could be a significant adverse impact. Most important are the characteristics of association and integrity, described in Sections 121.1 and 121.2, above.

500. Developing Mitigation

Mitigation measures for historic resources are based on the nature of the impact as well as the significant attributes of the historic resource at risk. They are developed on a case-by-case basis; typical measures are described below. Consultation with LPC and/or SHPO on mitigation when designing mitigation measures is required when significant impacts would occur to architectural or archaeological resources.

510. ARCHAEOLOGICAL RESOURCES

511. Human Remains

The LPC regulates all work (including subsurface work) in the African Burial Ground and The Commons Historic District and within landmarked cemeteries. The protocols for work within these areas are laid out in the LPC's 2001 *The Guidelines for Archaeological Work in New York City*. It is a general principle of these protocols that every effort must be made to ensure that burials will not be disturbed and, in the event that burials are found in these areas, they be preserved in place.

For work outside these landmarked areas, but within an area thought to contain human remains, the LPC should be consulted to develop appropriate methodologies. For work within private cemeteries, the State Division of Cemeteries must be contacted about relevant regulations.

If unexpected human remains are encountered during any phase of work on any site, all construction work must cease and the police and medical examiner must be contacted immediately.

512. Redesign

To mitigate an action's significant adverse impact on potential archaeological resources, the action can be redesigned so that it does not disturb the resources. For example, if potential resources may be located only in one corner of the site, that corner can be left undeveloped.

513. Fieldwork

Often, only the potential for significant prehistoric or historic archaeological resources will have been established for use in determining an action's impacts. Mitigation for significant adverse impacts on these potential resources often calls for excavation in the form of archaeological testing to determine whether archaeological resources are, in fact, present. If any such resources are found, archaeological testing can also be used to determine their extent and their significance.

If this testing program indicates that significant resources are present, further measures are required. These are either the avoidance of the resource through redesign (Section 512), or mitigation through data recovery (Section 514). For example, if an archaeological site is located at the periphery of the construction area and may be disturbed during construction but not by the project itself, then enclosing the site with temporary fencing and adjustment of the construction program to avoid the site may be sufficient. If avoidance is not feasible, then a data recovery program is implemented (Section 514).

More detailed documentary research and subsequent investigation, including field research, generally call for specialized expertise. It is recommended that the lead agency consult with staff of the LPC and/or an investigator certified by the Registry of Professional Archaeologists (ROPA).

If the preliminary determination of the site's potential sensitivity and the action's potential for significant impact was made through an Environmental Assessment Statement, and if field research is determined to be appropriate mitigation, a Conditional Negative Declaration may be appropriate (Chapter 1 of this Manual provides information about Conditional Negative Declarations) or the action description may be altered, to provide for necessary field research to be conducted concurrently with or subsequent to environmental

review, but prior to site disturbance. However, a Conditional Negative Declaration may not be used if the affected resource is designated, calendared for designation, listed on or formally determined eligible for inclusion on the Registers, recommended by the New York State Board for such listing, or a National Historic Landmark (see the discussion of Conditional Negative Declarations and Type I actions in Chapter 1.

513.1. Field Testing

The documentary analysis determines whether there is a potential that significant archaeological resources may be impacted by the proposed project. However, the resources the site actually contains cannot be known until the site is physically tested. This testing is done by scientifically examining the subsurface conditions through borings, small hand excavated trenches, or mechanical excavation. The type of testing that should be used is dependent upon site conditions and the type of resource. The testing must be supervised by a professional archaeologist who has the qualifications outlined above in Section 513. The archaeologist should submit a scope of work to the lead agency for review and approval before any work may be undertaken. This document shall set forth how the work will be accomplished and what tests the potential resources should meet to be considered significant. The lead agency may wish to consult with the LPC for assistance in reviewing and approving the scope of work. If artifacts are uncovered, the archaeologist must stabilize and analyze them. The archaeologist is required to submit a report outlining his or her findings, including: site plans detailing where the work was undertaken; an explanation of what any analysis yielded; and a discussion about whether significant, or potentially significant, resources were encountered. Artifacts recovered from such sites must be stabilized and deposited in an appropriate repository as explained in Section 514. If the study concludes that no archaeological resources are present or significant no further work is needed. The lead agency may wish to consult with the LPC for assistance in reviewing and approving the field testing report.

514. Excavation

When avoidance of the significant archaeological resources is not an option, then a data recovery program becomes the mitigation. As the value or significance of the archaeological

resource relates to its potential to provide important information, the adverse effects of the action on the resource are considered mitigated when the information has been recovered through systematic archaeological investigation. The process is similar to that during testing. The lead agency should review and approve the scope of work after consultation with the LPC. This document should specify the level of field effort, identify the research issues, detail the treatment of artifacts, and outline the content of the final report. For guidance please see LPC's 2001 *The Guidelines for Archaeological Work in New York City*.

Once the fieldwork has been completed, the archaeologist must stabilize and analyze the artifacts in accordance with professional standards. The archaeologist should submit a final report to the lead agency for review and approval after consultation with the LPC. This document shall: summarize the significance of what was found; provide detailed descriptions of all excavation work area by area; describe laboratory techniques; outline the analysis; and finally synthesize all analysis undertaken. Mitigation is not considered to be complete until the final report has been reviewed and approved and the artifacts are curated in an appropriate repository (see Section 515).

515. Repositories

Artifacts recovered from significant archaeological sites should be curated in an appropriate repository. The City of New York does not currently maintain an archaeological repository. Artifacts should be curated in an appropriate facility that will curate the artifact collection to professional standards and make it available to researchers. Please see the LPC's 2001 *The Guidelines for Archaeological Work in New York City* for guidance.

520. ARCHITECTURAL RESOURCES

Possible mitigation measures for significant adverse effects on architectural resources include redesign; adaptive reuse; protective measures, including construction monitoring; and, as a last resort, documentation or relocation.

521. Redesign

This is the preferred mitigation measure for significant impacts on historic resources. Redesign techniques should be devised in consultation with the appropriate consulting agency (LPC and/or SHPO).

521.1. Relocating the Action

This mitigation measure involves avoiding the resource altogether by moving the proposed action away from the resource. When the relocated action will remain close to the architectural resource, this mitigation also calls for sympathetic contextual design of the redesigned project (see the discussion below under Section 521.2).

521.2. Contextual Redesign

When a proposed action will alter the setting of an architectural resource that is not actually physically affected, appropriate mitigation involves redesign of the proposal to be more compatible with the resource. This is a function of the distinguishing characteristics of the resource and the magnitude of impact. Possibilities include rearranging the proposed building's massing so that important views are not blocked or adding design elements that complement or echo the features of the architectural resources. New design should be compatible with the size, scale, color, material, and character of the property, neighborhood, streetwall or environment. Particular attention to fenestration, setbacks, roof lines, and massing of the new structure as well as other aspects of design is advised. The new building should be clearly distinguishable from, although compatible with, the existing historic property.

An example of sympathetic design with an existing architectural resource is Carnegie Hall Tower, designed to be sympathetic to historic Carnegie Hall. The tower, immediately east of the original building, is clad in the same color brick, and through its decorative treatment of the facade, doorways, and fenestration, echoes the organization of the adjacent marquee and grand entrance to the concert hall. Horizontal bands of brick and stucco extend the horizontal lines of the old building to the new, but a very narrow separation distinguishes the old building from the new. The platform of the new building is level with the roofline of the original eight-story hall, and the tower is set back from the street.

522. Adaptive Reuse

Redesign can include incorporating the resource into the project rather than demolishing it. This is known as "adaptive reuse." Adaptive reuse is the fitting of new requirements, functions, or uses into an existing historic space. It is acceptable only if it does not affect the structure or character of the historic resource. Successful adaptive reuse projects in New York include the Puck Building on Lafayette Street and Jefferson Market Library in Greenwich Village.

When repairs or alterations are required to the historic resource, distinctive stylistic features should be treated with sensitivity so that the form and integrity of the historic structure is not materially affected by the new construction. Repair of the original is always preferred. When replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Replacement or repair should be an accurate duplication of the original, based on evidence (e.g., historic photographs, blueprints) and not on conjectural designs or availability of different architectural elements from other buildings and structures (refer to the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*, available from the U.S. Department of the Interior, National Park Service, Preservation Assistance Division—see Section 732.2, below).

523. Construction Protection Plan

A construction protection plan should be used to protect historic resources that may be affected by construction activities related to a proposed action. The plan should be developed in coordination with the appropriate consulting agency (LPC and/or SHPO) and fulfilled by a foundation and structural engineer. Elements of the plan could include the following:

- Borings and soil reports of the water table establishing composition, stability, and condition;
- Existing foundation and structural condition information and documentation for the historic property;
- Formulation of maximum vibration tolerances based on impact and duration and considerations using accepted engineering

standards for old buildings;

- Dewatering procedures, including systematic monitoring and recharging systems;
- Protection from falling objects and party wall exposure; and
- Monitoring during construction using tell-tales, seismographic equipment, and horizontal and lateral movement scales.

Reference should also be made to "New York City Landmarks Preservation Commission Guidelines for Construction Adjacent to a Historic Landmark," "Protection Programs for Landmark Buildings" (both on file with LPC) and "Technical Policy and Procedures Notice No. 10/88, Procedures for the Avoidance of Damage to Historic Structures Resulting from Adjacent Construction" (on file with the New York City Department of Buildings).

524. Data Recovery

For actions that involve significant alterations or demolition of historic resources for which other mitigation measures are not feasible, data recovery or recordation of historic structures is the last resort. This measure is not usually considered full mitigation for New York City Landmarks or for properties calendared for consideration as Landmarks. Data recovery mitigation typically requires coordination with LPC and/or SHPO.

Recordation projects typically follow agreed-upon standards, such as those established by the Historic American Buildings Survey (HABS) or Historic American Engineering Record (HAER). This is a documentation program administered by the National Park Service. Recordation projects frequently select this program since it provides a uniform and widely accepted standard for the documentation, monitored by professional staff, and resulting in materials that are then housed at the Library of Congress, where they are accessible to a broad range of researchers. The resulting documentation comprises a verbal description of the interior and exterior of the building(s); a discussion of the historical development of the resource and its context, including significant alterations to it; measured drawings (e.g., site plan, elevations, interior plans, etc.); and a series of large format black-and-white photographs illustrating the existing structure. Text, drawings, and photographs are submitted on archivally stable materials following a prescribed format. Guidance is

obtained from the National Park Service, Mid-Atlantic Regional Office in Philadelphia.

525. Relocating Architectural Resources

This measure is the least preferred of all mitigation measures, and is typically considered when there is no other prudent or feasible alternative, because it can have significant adverse impacts on the resource as well. Relocation can endanger the resource and, by removing it from its original context and setting, can threaten its integrity and the reasons for its significance. As noted earlier, relocated resources are not normally accepted for listing on the National Register. Relocation of historic resources cannot be undertaken without a permit from LPC (for designated New York City Landmarks or properties in Historic Districts) and consultation with SHPO, and/or the Federal Advisory Council on Historic Preservation.

According to guidelines issued by the Federal Advisory Council on Historic Preservation, historic properties that are movable by their nature as a matter of course (e.g., ships or machinery) can normally be moved to avoid project impacts on them without adverse effect, unless their locations themselves have achieved historic or cultural significance, their structural integrity might be impaired by the relocation, or their new location would make them vulnerable to deterioration or damage.

600. Developing Alternatives

610. ARCHAEOLOGICAL RESOURCES

Alternatives that would reduce or avoid impacts on archaeological resources would be those that would allow the archaeological resource to remain in place, undisturbed and undestroyed. Any project alternative that achieved this result would be suitable. Most often, these alternatives include relocation of any proposed excavation or other activity to another part of the site, or to another site altogether.

620. ARCHITECTURAL RESOURCES

Alternatives for significant adverse impacts on architectural resources typically involve incorporation of some of the mitigation measures described above. These include relocating the action, or redesigning the project in a more contextual manner. Often, smaller projects or projects redesigned to incorporate different massing, scale, material, or other design

characteristics can be appropriate alternatives. Coordination with LPC may be helpful in identifying appropriate alternatives

700. Regulations and Coordination

710. REGULATIONS AND STANDARDS

711. Federal Regulations

711.1. National Historic Preservation Act of 1966

If the action also falls within federal jurisdiction (that is, it is federally funded, licensed, or regulated), then the requirements of the National Historic Preservation Act of 1966, as amended (NHPA), and implemented by procedures set forth in 36 CFR Part 800 (*Protection of Historic Properties*), apply. The NHPA was amended in 1992. *Section 106* of the NHPA requires federal agencies to take into account the effects of their undertakings, including undertakings they assist or license, on historic properties, and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. In addition, *Section 111* of the NHPA mandates that federal agencies may lease and exchange historic properties and enter into contracts for the management of historic properties only after the agencies determine that the lease, exchange, or management contract will adequately ensure the preservation of the historic property.

711.2. Federal Department of Transportation Act

Other regulations that can apply include Section 4(f) of the Federal Department of Transportation Act of 1966 (DOTA), which applies to transportation projects (usually highways) funded by the Federal Department of Transportation. This law requires the federal agency responsible for the project to consider whether the project would infringe on publicly owned land or any site of national, state, or local historic significance, as determined by the appropriate officials. Such an infringement can occur only if there is no feasible and prudent alternative and if such program includes all possible planning to minimize harm to such properties.

711.3. Other Federal Laws

In addition to the DOTA, other similar acts dealing with specific modes of transportation also require protection of historic resources unless there

is no feasible and prudent alternative and unless all possible minimization of harm is planned. These include the Airport and Airway Development Act of 1970, the Federal-Aid Highway Act of 1968, and the Urban Mass Transit Act. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), a six-year, \$151 billion transportation program, gives states and municipalities a major role in decisions about transportation-related issues, and provides funds for enhancements related to the quality of life, including historic preservation.

In addition to all of the federal protections described above, archaeological resources are given special protection under the Archaeological Resource Protection Act of 1979. This act regulates the taking of archaeological resources on federal land. Other federal protections for archaeological resources are provided by the Historic Sites Act of 1935, the Antiquities Act of 1906, the Archaeological Recovery Act, the National Environmental Policy Act of 1969, the Abandoned Shipwreck Act of 1987, and the Native American Graves Protection and Repatriation Act of 1990.

712. State Regulations

For actions within state jurisdiction (that is, it is funded, licensed, or regulated by a state agency), the governing regulation is Article 14 of the New York State Historic Preservation Act of 1980 (SHPA). This law requires that state agencies must avoid or mitigate any significant adverse impacts on historic properties to the fullest extent practicable, feasible, and prudent. These requirements are the same as those of the State Environmental Quality Review Act, or SEQRA. The SHPA mandates consultation with the State Historic Preservation Officer (see discussion on coordination, below).

The SEQRA regulations, at 6 NYCRR §617.4(b)(9), include as a Type I action any Unlisted action (unless the action is designed for the preservation of the facility or site) occurring wholly or partially within, or substantially contiguous to, any historic building, structure, facility, site, district or prehistoric site that is listed on the National Register of Historic Places, or that has been proposed by the New York State Board on Historic Preservation for a recommendation to the State Historic Preservation Officer for nomination for inclusion in the National Register, or that is listed on the State Register of Historic Places. (The National Register of Historic Places is established by 36 CFR Parts 60 and 63 (1994)).

713. *City Regulations*

The New York City Landmarks Law establishes LPC and gives it the authority to designate City Landmarks, Interior Landmarks, Scenic Landmarks, and Historic Districts and to regulate any construction, reconstruction, alteration, or demolition of such Landmarks and Districts. Under the Landmarks Law, no new construction, alteration, reconstruction, or demolition can take place on Landmarks, Landmark sites, or within designated New York City Historic Districts until the LPC has issued a Certificate of No Effect on protected architectural features, Certificate of Appropriateness, or Permit of Minor Work. Actions reviewed under CEQR that physically affect Landmarks or properties within New York City Historic Districts require mandatory review by LPC, in the case of private properties, and in the case of certain City property, approval of LPC.

Both private applicants and public agencies must apply to LPC for any work on designated structures, sites, or structures within historic districts. The LPC issues permits to private applicants and reports to public agencies. No work on these protected resources may proceed prior to the issuance of a Landmarks Preservation Commission permit or report.

720. *APPLICABLE COORDINATION*

Where designated New York City Landmarks or properties already calendared for designation are involved, the lead agency must coordinate with the LPC. When properties listed on or formally determined eligible for the State and/or National Registers, recommended by the New York State Board for listing on the Registers, or National Historic Landmarks are involved, the lead agency should coordinate with either the LPC or SHPO. It is possible that coordination with both LPC and SHPO may be required (for example, if a property is a New York City Landmark and listed on the State and National Registers). Coordination with the SHPO is also required for actions that fall within state or federal jurisdiction (see above). The SHPO is responsible for coordination with the Advisory Council on Historic Preservation, as appropriate.

730. *LOCATION OF INFORMATION*

731. *Designated Resources*

- New York City Landmarks Preservation

Commission
One Centre Street, Municipal Building
9th Floor North
New York, NY 10007
nyc.gov/landmarks

Files on properties that have been designated New York City Landmarks or listed on the State and National Registers of Historic Places, and on the location of known archaeological sites in the City.

- New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Service Bureau
Peebles Island
Box 189
Waterford, NY 12188-0189
Information about properties listed on or determined eligible for listing on the State and/or National Registers of Historic Places, as well as the location of known archaeological sites in the State.

732. *Other Resources*

When a survey is appropriate to identify unknown potential historic resources, useful sources can include local academic institutions and museums (such as the Museum of the City of New York), historical societies (such as the New York Historical Society, the Bronx County Historical Society, the Brooklyn Historical Society, the Queens Historical Society, and the Staten Island Historical Society), and the City's public libraries. Both LPC and the SHPO should be consulted as to the likelihood that a site contains archaeological resources. Sources for detailed historical research include historic maps, which can be found at the New York Public Library, 42nd Street Branch, and the libraries and historical societies that have already been listed. Deeds and other land ownership records are housed at the various borough halls; Buildings Department records are also located in each Buildings Department borough office (see Chapter 3A, Section 730 for addresses). Tax records, 19th century Buildings Department records, and early plans and maps can be found at the Municipal Archives in Manhattan.

732.1 *Museums and Historical Societies*

- Museum of the City of New York
Fifth Avenue at 103rd Street
New York, NY 10029
- New York Historical Society

170 Central Park West
New York, NY 10024

- Bronx County Historical Society
3309 Bainbridge Avenue
Bronx, NY 10467
- Brooklyn Historical Society
128 Pierrepont Street
Brooklyn, NY 11201
- Queens Historical Society
143-35 37th Avenue
Flushing, NY 11354
- South Street Seaport Museum
207 Front Street
New York, NY 10038
- Staten Island Historical Society
441 Clarke Avenue
Richmondtown, Staten Island, NY 10306

732.2 Other Sources

- Local, community-based preservation groups

732.3 Publications

Publications that can be helpful in evaluating potential historic resources are available from the National Register of Historic Places, National Park Service, U.S. Department of the Interior, P.O. Box 37127, Washington, DC 20013-7127. The *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* and the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* can also be obtained from the National Park Service.

