HISTORIC AND CULTURAL RESOURCES

CHAPTER 9

Environmental review for historic and cultural resources includes a survey and planning process that helps protect New York City's cultural heritage from the potential impacts of projects undergoing CEQR. Historic resources and archaeological sites are identified and evaluated, and if impacts are found, they are mitigated or avoided to the greatest extent practicable.

As with each technical area assessed under CEQR, it is important for an applicant to work closely with the lead agency during the entire environmental review process. The lead agency may determine it is appropriate to consult or coordinate with the City's expert technical agencies for a particular project. Here, the New York City Landmarks Preservation Commission (LPC) should be consulted for information, technical review, and recommendations for mitigation relating to historic and cultural resources. If consultation is appropriate, it is recommended that LPC be contacted as early as possible in the environmental review process. Section 700 further outlines appropriate coordination. This chapter first defines historic and cultural resources, as well as the criteria used to determine eligibility of an historic resource (Section 100). Then, if it is determined that a project might be of a type that may impact historic and cultural resources (Section 200), a survey is conducted to identify both known and potential resources (Section 300). Next, the impact of the project on these resources is analyzed (Section 400), and if significant impacts are identified, then mitigation measures are discussed and considered (Section 500). Alternatives (Section 600) are also discussed.

100. DEFINITIONS

Historic and cultural resources include both architectural and archaeological resources. Architectural resources generally include historically important buildings, structures, objects, sites, and districts. They 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, that may provide an understanding of the long period of Native American occupation in the area before the arrival of the Europeans (pre-contact), and the period when the Native American, Europeans, and people of African ancestry initially encountered each other (contact). They can also shed light on historic periods—through the discovery of resources such as burials, foundations of earlier buildings, artifacts (objects made, used, or modified by humans), wells, and privies (brick or stone-lined subsurface structures used for the disposal of human waste. They were often filled with household garbage when made redundant by public sewers and so can act as time capsules). As a general rule, archaeological resources do not include 20th and 21st Century artifacts. Finally, it should be noted that, as archaeological resources are almost always within the ground, their significance cannot be known until they are exposed and analyzed. Therefore, until it is confirmed that a site contains significant archaeological resources—sites that may have such resources are presumed to and are referred to as potentially significant.

110. 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 Tayern block in Lower Manhattan.

120. STRUCTURES

A structure is a built work composed of interdependent parts or elements in an organized pattern. A structure is distinct from a building, which is a construction for the purpose of shelter. A structure is a functional construction made for a purpose other than shelter, such as a bridge, wharf, or other engineering project. The "Cyclone" roller



coaster 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.

130. 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, and precontact stone tools are examples of objects.

140. SITES

A site is a location or place that possesses historic, cultural, or archaeological value, either because a significant event or sequence of events took place there, or because an important building or structure, whether now standing, ruined, or vanished, is or was, located there. A site can be important because of its association with significant historic (or pre-contact) 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 pre-contact habitation site or a battlefield.

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

150. 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 may consist of historic or archaeological resources. The African Burial Ground and The Commons Historic District is an example of an archaeological historic district.

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., the New-York Historical Society, the Dakota, the 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.

160. HISTORIC AND CULTURAL RESOURCES UNDER CEQR

For the purposes of CEQR, the following are always considered historical and cultural resources:

- Designated New York City landmarks, interior landmarks, scenic landmarks, and properties within designated New York City historic districts.
- Resources calendared for consideration as one of the above by LPC.
- Resources 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 listing on, the State and/or National Register of Historic Places.
- Resources recommended by the New York State Board for Historic Preservation for listing on the State and/or National Registers of Historic Places.



- National Historic Landmarks.
- Resources not identified by one of the programs listed above, but that meet their eligibility requirements.

161. Eligibility requirements for the National or State Register or local landmark designation

The U.S. Secretary of the Interior has established criteria of eligibility for listing on the National Register of Historic Places. See <u>36 CFR Part 60</u>. New York State and LPC have adopted these criteria for use in identifying significant historic resources for SEQRA and CEQR review.

It should be noted that even if a property is excluded from eligibility for the National or State Register(s), it may be eligible for designation under the New York City Landmarks Law, which has different criteria for eligibility from those of the National Register. Consequently, the New York City Landmarks Law criteria are also applicable in assessing historic resources that may be affected by the project. For example, if a property is not eligible for the National Register for any reason, but it is eligible for designation under the New York City Landmarks Law, the potential for impacts to this historic resource must be considered under CEQR. Below are the criteria for eligibility for both the National Register and New York City Landmarks.

161.1. National Register Criteria

To be considered 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. Described below are the National Register's criteria for associative values and measures of integrity, both of which must be met in order to be eligible for listing. These criteria apply to both archaeological and architectural resources. More guidance on the National Register criteria described below 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.

161.1.1. 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.
 - o 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 Kingsland Homestead Museum, which dates to ca. 1774, is an important example of an otherwise lost building tradition, the English vernacular tradition.
- Be associated with the lives of persons significant in the past.
- Embody distinctive characteristics that possess high artistic values and/or are representative of a type, period, method of construction, work of a master, or a significant and distinguishable entity whose components may lack individual distinction.
 - 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.

- Have yielded, or have 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. Significance for archaeological sites is usually related to this criterion. 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 nothing but a notorious slum.

161.1.2. 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 above, 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 pre-contact period." The National Register criteria recognize seven measures that define integrity:

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 an 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, are 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 Office (SHPO) at the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and LPC is 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 or the labor and skill in constructing or altering a resource. Examples of workmanship in historic buildings include tooling, carving, and painting.

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 an 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 possesses at least one and typically several of these aspects. The aspects important to a particular property determine the significance of the property. The property must retain the aspects for which it is significant and the essential physical features that contribute to a property's significance must continue to be present and visible. For example, a building considered 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 – for example, if the resource was altered before that period, its integrity is not affected (see the discussion of significant alterations above).

161.1.3. SPECIAL CONSIDERATIONS

Certain kinds of individual properties may qualify for listing on the National Register if they are integral parts of districts that meet the eligibility criteria, but would not usually be considered for individual listing on the National Register. These types of properties include: properties less than 50 years old, religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, and commemorative properties. However, these properties may be eligible for the National Register in certain circumstances, described below. These "criteria considerations" are found in 36 CFR Part 60.

Although properties typically must be at least 50 years old to be eligible for the National Register, younger properties that are of exceptional local, state, regional, or national importance 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 former Whitney Museum of American Art building (completed in 1966), since 2016 occupied by the Met Breuer Museum, which is considered exceptionally important as the work of an internationally renowned architect (Marcel Breuer), and representative of modern architecture during the 1950s and 1960s.
- 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 National Register if they have achieved additional significance, as follows:

Religious properties deriving primary significance from architectural or artistic distinction or
historical importance; and cemeteries deriving 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 can 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 it is associated with exceptionally significant events in United States history. For burial sites, please see Section 511 below; 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 an 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 an historical figure of outstanding importance, if no other appropriate site or building directly associated with his or her productive life exists.
- 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.

161.2. New York City Landmarks Law Criteria

Even if a property is excluded from eligibility for the National or State Register(s), it may be eligible for designation under the New York City Landmarks Law, which has different criteria for eligibility from those of the National Register. For further information on LPC designated properties and historic districts, see the LPC website.

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"); land-scape 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. A property is eligible for designation as a landmark if it meets the following criteria: any improvement (building, structure, place, work of art, and/or object), any part of which 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 or 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 is eligible for designation as an historic district if it contains improvements that have a special character or special historical or aesthetic interest or value that represent one or more periods or styles of architecture typical of one or more eras in the history of New York City; and the area, by reason of such factors, constitutes a distinct section of the City.

200. DETERMINING WHETHER AN HISTORIC AND CULTURAL RESOURCES ASSESSMENT IS APPROPRIATE

210. ARCHAEOLOGICAL RESOURCES

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

- 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 that for footings or piles.

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

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

For any projects that would result in new ground disturbance (as described above), assessment of both precontact and historic archaeological resources is appropriate.

220. ARCHITECTURAL RESOURCES

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

- 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, such as a tower within a plaza, which is either conforming or non-conforming with the street wall in terms of its height, footprint, and/or setback. Visual context is the character of the surrounding built or natural environment. This may include the following: the architectural components of an area's buildings (e.g., height, scale, proportion, massing, fenes-



tration, 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 on an historic landscape or on an historic structure if the features that make the structure significant depend on sunlight. For example, stained glass windows that cannot be seen without sunlight, or buildings containing design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements, such as deep window reveals and prominent rustication. Please refer to Chapter 8 of this Manual, "Shadows," for further guidance.

300. ASSESSMENT METHODS

For projects that may affect historic resources (see Section 200), the first step in evaluating a project's potential effects on historic resources is to consider what area the project might affect and then identify historic resources—whether officially recognized or eligible for such recognition—within that area. (See Section 160 for a discussion of the standards for eligibility for listing on the National or State registers and local landmark designation.) The methods of choosing a study area and identifying and evaluating historic resources within that study area are explained in this section. LPC should be consulted as early as possible in this process.

310. STUDY AREAS

311. Archaeological Resources

The area of subsurface work for the proposed project 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 almost always hidden below ground. Therefore, to assess whether the impact area may contain significant archaeological resources, data must be gathered to predict the likelihood of archaeological resources existing in the impact area. For precontact resources, it is appropriate to determine whether there are known pre-contact archaeological resources within a half-mile radius of the site. For historic archaeological resources, it is appropriate to determine how, and if, the site was developed historically and 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 may be affected by the project. The size of the study area directly relates to the anticipated extent of the project's potential impacts, and should be large enough to permit examination of the relationships between the proposed project and the existing historic resources. These relationships may be:

PHYSICAL (e.g., a project may require alteration of a resource or may threaten a resource's structural integrity during construction);

VISUAL (e.g., a project may alter the streetscape or background context in which a resource is viewed and understood); or

HISTORICAL (e.g., a project may change the historical context of a resource if it changes its historic character, feeling, association, or the way it is understood by the public. This may 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 was replaced by another activity).

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 a project involves 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:

- Projects that affect historic districts.
- Projects 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).
- Projects that result in changes over a larger area (e.g., a large-scale development or an area rezoning).
 For generic actions, it may be appropriate to identify any "soft" sites that may be developed because of the project (see Chapter 2, "Establishing the Analysis Framework") and then consider study areas for each of those sites that are appropriate in size for the expected changes.
- Projects 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, or shadows from a new skyscraper that may extend outside a 400' radius and affect sun-sensitive features of historic resources).

320. ANALYSIS TECHNIQUES

321. Archaeological Resources

After the study areas have been established, all known archaeological resources within those areas are identified, and the potential for unknown resources is investigated.

LPC is the only City agency that has archaeologists on staff. At any agency's request, LPC can review projects undergoing CEQR to determine if they have the potential to impact archaeological resources, if those resources may be significant, and if so, what steps should be taken. To do so, LPC should be provided with a site plan, an explanation of the proposed project including likely excavation depths if known, and photographs of the site. For more detailed information, consult LPC's 2018 "Guidelines for Archaeological Work in New York City." It is recommended that lead agencies and applicants contact LPC as early as possible when planning a project.

321.1. Identifying Known Resources

Some archaeological resources have already been identified through City, state, or federal processes identified above in Section 160. 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 designated as National Historic Landmarks. In addition, the SHPO and LPC maintain records of known archaeological sites and will assist in identifying archeologically "sensitive" areas that may contain archaeological resources.

If LPC indicates that the project area includes a known site or is archaeologically sensitive, then further analysis of the project's impact on those archaeological resources must be performed.

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, or exceed depths at which archaeological resources are likely to exist, then further investigation is likely not necessary. However, 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, if the lead agency has not already done so, they may wish to contact LPC to determine whether the consideration of archaeological resources on the site is appropriate.

Appropriate methodologies for identifying potential archaeological resources, based on federal standards and guidelines—particularly the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation, Federal Register, Vol. 48, No. 190—as well as LPC's 2018 "Guidelines for Archaeological Work in New York City" are summarized in this subsection. LPC will complete this assessment for lead agencies, but the lead agency may use an archaeologist who is registered by the Register of Professional Archaeologists, and/or qualified for such registration to complete the 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 pre-contact or historic material remains (artifacts, structures, refuse, etc.) existing on the site of the project. 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 (Subsection 161, 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. As a general rule, archaeological resources do not include 20th and 21st Century artifacts.

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 field testing or excavation. The initial assessment of a site's archaeological sensitivity is typically made through background or archival research. 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 project. Field work (archaeological testing or excavation) is most often not needed until after this initial evaluation of sensitivity.

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

DETERMINE PAST USES ON THE SITE

STEP 1:

Contact the appropriate agencies and other sources to determine whether any known pre-contact archaeological resources are located near the project site (see Subsection 321.1, above). Presence of other pre-contact resources in the vicinity is used as an indicator of the site's potential sensitivity for pre-contact resources.

STEP 2:

Determine the original topography of the project site. Early historical maps and documentary sources may be used. This step helps assess pre-contact 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 pre-contact 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.

STEP 3:

Research the development history of the site, as far back in time as possible to 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, historical maps and New York City Department of Buildings records may be helpful, as well as other documentary sources when available.

DETERMINE DISTURBANCE ON THE SITE

STEP 4:

If there is evidence of several cycles of construction and demolition, consider whether later construction or demolition episodes would have disturbed any potential 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, historical maps are used for this analysis. Construction records filed at the Department of Buildings may also be useful.

Determination of the extent to which later land modification activities have affected earlier archaeological resources requires comparing the documented depth and horizontal extent of disturbance with the depths and horizontal extent 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 which can be quite extensive (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; 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.

DETERMINE SIGNIFICANCE OF PAST USES THAT MAY REMAIN

STEP 5:

If any past uses of interest are identified during step 3, intensive research may address whether these uses would be likely to result in meaningful archaeological resources. Research should focus on whether there were activities that have a discernible or physical signature and whether remains could 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. Because research issues change as the knowledge base increases, consultation with LPC is recommended in determining significance of potential resources.

For pre-contact archaeological resources, research cannot directly determine pre-contact use of the site. Rather, it is used to predict the likelihood of pre-contact use. Any identified potential for pre-

contact archaeological resources is considered significant at the initial, research level, since few precontact sites have been documented in New York City.

For archaeological resources of the historical 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 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.

DETERMINE WHAT ARCHAEOLOGICAL RESOURCES ARE PRESENT WITHIN THE PROJECT AREA

STEP SIX: FIELDWORK

Archaeological testing determines whether archaeological resources are, in fact, present. If any such resources are found, archaeological testing may also be used to determine their extent and 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 (see Subsection 512), or mitigation of impacts through, for example, recovery of archeological resources (see Subsection 513). For example, if an archaeological site is located at the periphery of the construction area and may be disturbed during construction staging activities but not by the project itself, then enclosing the site with temporary fencing and adjusting the construction program to avoid the site may be sufficient. If avoidance is not feasible, then a data recovery program is implemented (see Subsection 513).

Field 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 is registered by the Register of Professional Archaeologists, and/or qualified for such registration. The archaeologist should submit a work plan to the lead agency and LPC for review and approval before any work may be undertaken. This work plan sets forth how the work will be accomplished and what tests the potential resources should meet to be considered significant. If significant 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 including the depths of all excavation; an explanation of what any analysis yielded; and a discussion about whether significant, or potentially significant, resources were encountered. Significant artifacts recovered from such sites must be stabilized and deposited in an appropriate repository as explained in Subsection 514. If the study concludes that no archaeological resources are present or significant, no further work is needed. The lead agency consults with LPC for assistance in reviewing and approving the field testing report.

It should be noted that it is not always possible to complete archaeological field testing during the environmental assessment phase. In these cases, if the preliminary determination of the site's potential sensitivity and the project's potential for significant impact is made through an Environmental Assessment Statement, and if field research is determined to be appropriate mitigation, a Conditional Negative Declaration may be appropriate or the project 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 Chapter 1, "Procedures and Documentation," for a discussion of Conditional Negative Declarations and Type I actions). In addition, the lead agency may elect to use an archaeological restrictive declaration to address identified archaeological issues after the environmental review process has been successfully concluded. A restrictive declaration is a legal agreement that specifies that archaeological work will occur once the applicant's project has been approved—but before it may proceed. The archaeological work is overseen by LPC; such agreements mandate that the applicant may not apply for Department of Buildings permits, including certificates of occupancy, until LPC has issued documents specified in the agreement after the successful completion of archaeological work. LPC may be contacted for sample restrictive declarations.

CONCLUSIONS ABOUT POTENTIAL ARCHAEOLOGICAL SENSITIVITY OF SITE

Based on the information provided in steps 1 through 6, above, the lead agency can draw conclusions as to the archaeological sensitivity of the site. Consultation with LPC as early as possible 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 Subsection 161, above), or under state or local law, then the site is archaeologically "sensitive." The locations of sensitivity should be pinpointed as much as possible. The effects on those potential resources are then assessed (see Section 410, below).

If no known or potential archaeological resources are identified on the site, consideration of archaeological resources is complete. If resources were identified, the project's effects on those resources must be evaluated (see Section 410, below). LPC should be consulted in this evaluation as early as possible because it is the only city agency that has professional archaeologists on staff.

321.3. Future No-Action Condition

To assess the future No-Action condition, consider and note whether any changes to the existing and potential archaeological resources (identified above in Subsections 321.1 and 321.2) are likely to occur in the future without the project.

321.4. Future With-Action Condition

The proposed project's effects on any designated or potential archaeological resources identified above in Subsections 321.1 and 321.2 are then analyzed in the With-Action condition. The assessment specifically considers whether the project may result in disturbance or destruction of those archaeological resources.

322. Architectural Resources

322.1. Identifying Known Resources

As described in Section 160, 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 Historic Preservation for listing on the State and/or National Registers of Historic Places. The information on listed resources is available from LPC and the New York State Office of Parks, Recreation and Historic Preservation.

If any listed historic resources are located in the study area, then further analysis of the project's impact on these resources must be performed. In addition, whether or not the study area includes any listed resources, potential resources should be investigated.

322.2. Identifying Potential Resources

Any potentially eligible architectural resources that may be affected by the project should be identified. Identification of potential historic resources requires some knowledge of an area's history, the broad patterns of historical development in New York City, and the various architectural styles represented in the City. Therefore, the lead agency should consult with LPC for assistance in making determinations of eligibility on the basis of federal, state, and local criteria. Architectural resources are usually identified through a combination of field surveys and documentary research. It should be noted that the passage of time or changing perceptions of significance may justify reevaluation of properties that were previously determined ineligible for the State and/or National Register or for designation as New York City landmarks or historic districts. Records and documentation of this research effort should be prepared for the lead agency's files or for submission to the reviewing agency, if appropriate.

As described in Section 100, above, historic resources are considered significant if they meet the criteria for eligibility for 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. 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, described in Subsection 161, 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.

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 at www.nps.gov/history and the Advisory Council on Historic Preservation at www.achp.gov.

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 requires careful judgment and knowledge about current perceptions of significance and about the history and architecture of New York City. Consultation with LPC or SHPO is encouraged.

RESEARCH

Documentary research of resources' historical and cultural significance is often needed to supplement visual inspections. An assessment of the development history of the study area before field surveys are performed helps identify resources in the area; a post-field survey analysis may provide additional information about any specific resources identified. For example, this information may be used to ascertain a property's association with important events or persons, or its architect and date of construction. A scan of historic records, maps, and photographs is also useful for determining the property's integrity: alterations and changes may be traced through the use of these documents. The information needed to evaluate significance depends on the property's history and reason for significance. The following information can assist in determining significance:

- 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 a 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, or owner).
- Representation of a style, period, or method of construction.
- Persons responsible for the design or construction of the property (e.q., 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 National Register and local landmarks criteria.

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 to the lead and interested agencies when possible. Depending on the reasons for importance, additional information should also be provided. Maps indicating the location of the resource(s) and black-and-white photographs of the resources are also helpful. 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, may include the following:

- Type of structure (e.g., dwelling, church, shop, apartment building).
- 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, portecocheres), 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 potential 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 potential districts may 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 to, 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 in 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 determines whether any previously unidentified architectural resources are located in the study area. If the lead agency uses an environmental or architectural consultant, the consultant conducting the assessment should meet

the professional standards set forth in the Secretary of the Interior's Standards and Guidelines "Professional Qualifications Standards" (see 48 FR 44716, September 1983). A private applicant or agency can make a preliminary assessment of potential importance, but the final recommendation under CEQR is made by LPC as the local expert agency, which also possesses additional proficiency by means of its Certified Local Government (CLG) status under Section 106 of the National Historic Preservation Act.

If potential architectural resources are identified, the project's effects on those resources must be assessed (see Section 420, below). This involves considering the future No-Action condition (Subsection 322.3, below) and With-Action conditions (Subsection 322.4). If no known or potential resources were identified, the evaluation of architectural resources is complete, and no further historic and cultural resources assessment is needed.

322.3. Future No-Action Condition

To assess the future No-Action condition, consider whether any changes to the existing or eligible architectural resources (identified in Subsections 322.1 and 322.2) are likely to occur without the proposed project. These changes may 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 With-Action Condition

The proposed project's effects on any designated or potential architectural resources identified in Subsections 322.1 and 322.2 are then assessed in the future With-Action condition. The analysis considers 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 (See Subsection 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 an historic or cultural resource has been determined significant. The project's effects on resources should be compared with the future No-Action conditions to assess impacts. Thus, impact assessment is directly related to the proposed project and how it would affect the distinguishing characteristics of any resources identified. The assessment asks three major questions: (1) would there be a physical change to the property?; (2) would there be a physical change to its setting, such as context or visual prominence (also known as indirect impacts)?; and (3) if there would be a physical change to the property or setting, is the change likely to alter or eliminate the significant characteristics of the resource that make it important? Put another way, if not for this project, would there be an impact on historic resources? 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 project or construction project) activities. The lead agency should consult with LPC (for New York City landmarks) and/or the SHPO (for State or National Register resources) in making this determination. 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 that would not occur but for the proposed action. If any significant archaeological resources were identified on the site of the proposed project (Subsection 321.2, above), and the project may disturb or destroy those resources in any way, a significant adverse impact would occur. If archaeology cannot be completed at a site to verify the initial assessments, then it is presumed that the site contains significant archaeological resources (usually referred to as "potentially significant resources"). If archaeology can be completed, the actual assessment of significance can be a two-step process. First, are archaeological resources actually present? And two, are they significant? For example, on a site with the potential to contain a mid-



nineteenth century cistern, archaeological testing could reveal that the cistern had been largely destroyed in the past and no artifacts recovered, and so would likely not be considered a significant archaeological resource. Possible impacts may occur under the following circumstances:

- 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 a project does not have a physical impact on archaeological resources, or the same or similar impacts would occur under the No-Action Scenario, no significant adverse impact would occur, and no further archaeological work is necessary.

420. ARCHITECTURAL RESOURCES

Assessment of the magnitude of the impact is a matter of informed judgment, based on the proposed project and the reasons for which a resource was determined important. If the project would affect those characteristics that make a resource eligible for listing on the State and/or National Register or for New York City designation, this would most likely be a significant adverse impact. Most important are the characteristics of association and integrity, described in Subsection 161, above.

Possible impacts to architectural resources may include the following:

- Physical destruction, demolition, damage, alteration, or neglect of all or part of an historic property. For
 example, alterations that would add a new wing to an historic building or replacement of the resource's entrance may result in adverse impacts, 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 project 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 project that would result in a new building at the end of a street so that views of an 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, re-creation of its 18th-century appearance may 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 may 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 may 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 an historic landscape or on an historic structure (if the features that make the resource significant de-



pend 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 may result in a significant adverse impact. For more information, see Chapter 8, "Shadows."

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 designing mitigation measures is required when significant impacts occur to architectural or archaeological resources.

510. ARCHAEOLOGICAL RESOURCES

There are multiple mitigation options if a significant or potentially significant archeological resources are likely to be impacted by proposed construction. Redesigning a project to avoid significant impacts is the preferred approach. If project redesign (see Section 512 below) is not practicable, then mitigation must both reveal information about the past and convey that understanding to the research community and the public. Options include, but are not limited to, additional or complete excavation of a site (see Section 512 below), specialized artifact treatments and analyses, detailed documentary research, exhibition either physical or digital, and/or videos or other forms of visual documentation like 3-dimmensional scanning. (See LPC's 2018 "Guidelines for Archaeological Work in New York City" for more information).

511. Human Remains

LPC regulates all work (including subsurface work) in the African Burial Ground and The Commons Historic District and within landmarked cemeteries and parks. The protocols for work within these areas are prescribed in LPC's 2018 "Guidelines for Archaeological Work in New York City." It is a general principle of these protocols that every effort be made to ensure that burials within these landmarked sites 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, LPC shall 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 a project's significant adverse impact on potential archaeological resources, the project may 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 may be left undeveloped.

513. Excavation

When avoidance of significant archaeological resources is not an option, then a data recovery program is appropriate mitigation. As the value or significance of the archaeological resource relates to its potential to provide important information, the adverse effects of the project on the resource are considered mitigated when the information has been recovered through systematic archaeological investigation, which includes proper testing, excavation, analysis, curation of artifacts and a written report that summarizes all of this work. The process is similar to that of testing. The lead agency reviews and approves the scope of work after consultation with LPC. scope specifies the level of field effort, identifies the research issues, details the treatment of artifacts, and outlines the content of the final report. For guidance please see LPC's 2018 "Guidelines for Archaeological Work in New York City." Once the fieldwork has been completed, the archaeologist must stabi-

lize 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: summarizes the significance of what was found; provides detailed descriptions of all excavation work area by area; describes laboratory techniques; outlines the analysis; and synthesizes 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 Subsection 514).

514. Repositories

Artifacts recovered from significant archaeological sites should be curated in an appropriate repository. The NYC Archaeological Repository: The Nan A. Rothschild Research Center is managed by the Archaeology Department of LPC and was opened in 2014 to curate significant archaeological collections that were excavated by archaeologists on city-owned land. Please see Appendix H of the LPC's 2018 "Guidelines for Archaeological Work in New York City" for more information about the repository's requirements. For significant projects that do not meet the NYC Archaeological Repository criteria, the New York State Museum may accept the associated collection for curation. The Museum curates collections from all parts of the state including New York City. If the Museum declines a collection, then additional discussion should be held with LPC as to other options.

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. Publications that provide guidance on how to design a project that mitigates the potential for significant adverse impacts are published by the National Park Service, U.S. Department of the Interior (see Section 732.3.).

521. Redesign

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

521.1. Relocating the Project

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

521.2. Contextual Redesign

When a proposed project would alter the setting of an architectural resource that is not 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, street wall, 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.

521.3 Adaptive Reuse

A project that conforms to the Secretary of the Interior's Standards for Rehabilitation may eliminate the potential for significant adverse effects to historic resources. Adaptive reuse recognizes the need to alter or add to a historic resource to accommodate new uses while also retaining its special character. The Rehabilitation Standards allow for the expansion and modification of historic buildings to accommodate new uses.

An overall evaluation of the project in context with the distinct set of features and spaces that justify its historic resource's significance must be understood. In some adaptive reuse cases, a project may alter a distinct feature or space of the historic resource and would not affect its eligibility for local, State, or federal registers.

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 Subsection 520.

522. 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 project. 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 may 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, duration and other 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). Additional reference documents that may prove helpful include "The Secretary of the Interior's Standards for Blasting," by Michael Lynch, on file at SHPO and LPC; and "Protecting a Historic Structure During Adjacent Construction," by Chad Randl.

523. Data Recovery

For projects 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. Demolition of a New York City Landmark requires LPC approval prior to any demolition work. In addition, LPC must

approve the proposed scope of work for Historic American Buildings Survey (HABS) recordation prior to any demolition work.

Recordation projects typically follow agreed-upon standards, such as those established by the HABS or Historic American Engineering Record (HAER). These are documentation programs administered by the National Park Service. Recordation projects frequently select these programs since they provide 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 (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 available from the National Park Service, Mid-Atlantic Regional Office in Philadelphia.

524. Relocating Architectural Resources

This measure is the least preferred of all mitigation measures for standing structures, 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 may endanger the resource and, by removing it from its original context and setting, may threaten its integrity and the reasons for its significance. As noted earlier, relocated resources are not normally accepted for listing on the State and/or 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 (e.g., ships or machinery) can normally be moved to avoid project impacts on them without adverse effect, unless their current location is historically or culturally significant, their structural integrity would 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 reduce or avoid impacts on archaeological resources are those that would allow the archaeological resource to remain in place, undisturbed and undestroyed. Any project alternative that achieved this result is 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 project, 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 may 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 project 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. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects that their federal permits or federally funded activities and programs have on significant historic properties and to give the Advisory Council on Historic Preservation a reasonable opportunity to comment. "Significant historic properties" are those properties that are included in, or eligible for, the National Register of Historic Places. The federal agency coordinates with the State Historic Preservation Officer (SHPO) and any other appropriate consulting parties—such as the local government, the applicant for a permit, and the interested public. The federal agency, in consultation with all other consulting parties, assesses the potential adverse impacts of the federal action on the historic property. The consultation process usually results in a Memorandum of Agreement between the Federal agency and the consulting parties that outline agreed-upon measures that the federal agency will take to avoid, minimize, or mitigate the adverse effects of its action. This process may run concurrently with any environmental review conducted pursuant to NEPA, SEQRA, or CEQR.

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 laws 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.

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, and the Abandoned Shipwreck Act of 1987. Finally, the National American Graves Protection and Repatriation Act of 1990 includes a process for museums and federal agencies to return certain pre-contact cultural items -- human remains, funerary objects, sacred objects, or objects of cultural patrimony -- to lineal descendants, and cultural



ally affiliated Indian tribes and Native Hawaiian organizations. It includes provisions for unclaimed and culturally unidentifiable pre-contact cultural items, intentional and inadvertent discovery of precontact cultural items on Federal and tribal lands.

712. State Regulations

For projects within state jurisdiction (it is funded, licensed, or regulated by a state agency), Article 14 of the New York State Historic Preservation Act of 1980 (SHPA) applies. This law requires that state agencies 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 Office (see discussion on coordination, below).

713. City Regulations

The New York City Landmarks Law establishes LPC and gives it the authority to designate 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. Projects 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 approval of LPC, in the case of certain City property. See N.Y.C. Admin. Code § 25-300 et seq. for further information.

Both private applicants and public agencies must apply to LPC for any work on designated structures, designated 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

Applicable coordination ultimately depends upon the following factors: the type of resource involved (Federal or City listed or eligible), the oversight legislation involved (Federal, State, and/or City), and the relationship among multiple agencies in the cases of large scale actions (such as Citywide actions or actions requiring a number of funding sources or discretionary approvals). The lead agency is the primary agency responsible for coordination. Examples of such types of coordination are listed below.

- When designated New York City landmarks, properties already calendared for designation, or identified properties eligible for LPC designation may be affected by a project, the lead agency coordinates with LPC.
- When properties listed on, or 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 coordinates with either LPC or SHPO, depending upon whether it is a Federal, State, or City action. The final determination of eligibility and/or treatment rests with the SHPO if it is a Federal or State
 action, and LPC if it is a CEQR action.
- In some cases, it is possible that coordination with both LPC and SHPO may be required. For example, some large scale projects involve Federal, State and City agencies and a number of discretionary actions. In this case, the SHPO would be the expert agency responsible for identification and treatment of State and National Register listed properties. LPC would be the expert agency responsible for identifying LPC designated and eligible properties. LPC also consults with the appropriate Federal, State and City agencies involved with the project regarding treatment of LPC eligible properties. When consultation with the Advisory Council on Historic Preservation (ACHP) is part of the project, SHPO is responsible for overall coordination



with the ACHP; however if LPC is a consulting party to a Federal action, LPC comments are considered separately from those of SHPO.

 Occasionally a lead and/or expert agency or a member of the public will request comments from SHPO on projects undergoing CEQR review. As a matter of policy, SHPO only consults informally and verbally on these actions and typically defers to the LPC.

730. LOCATION OF INFORMATION

731. Expert Agencies

New York City Landmarks Preservation Commission

One Centre Street
9th Floor North
New York, NY 10007
www.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. Archaeological reports may be found here: https://www1.nyc.gov/site/lpc/about/archaeology-reports.page

NYC Archaeological Repository: The Nan A. Rothschild Research Center

114 W 47th St

New York, NY 10036

http://archaeology.cityofnewyork.us/

Open by appointment. Website includes information about archaeological sites and the city's archaeological collections.

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Service Bureau Peebles Island Box 189 Waterford, NY 12188-0189 https://parks.ny.gov/shpo/

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. http://www.nysparks.com/shpo/environmental-review/

Information on the OPRHP's Environmental Review program and the review of projects that involve state or federal actions.

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 regarding 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 Li-

brary, 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. 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 http://www.mcny.org/

New York Historical Society

170 Central Park West New York, NY 10024 https://www.nyhistory.org/web/

Bronx County Historical Society

3309 Bainbridge Avenue Bronx, NY 10467 http://www.bronxhistoricalsociety.org/

Center for Brooklyn History

128 Pierrepont Street Brooklyn, NY 11201 http://www.brooklynhistory.org

Queens Historical Society

143-35 37th Avenue Flushing, NY 11354 http://www.queenshistoricalsociety.org/

South Street Seaport Museum

207 Front Street
New York, NY 10038
http://www.southstreetseaportmuseum.org/

Staten Island Historical Society

441 Clarke Avenue Richmondtown, Staten Island, NY 10306 http://www.historicrichmondtown.org/

732.2. Other Sources

New York City Municipal Archives

31 Chambers St. New York, NY 10007



https://www1.nyc.gov/site/records/about/municipal-archives.page

New York Public Library: http://www.nypl.org/

Brooklyn Public Library: http://www.brooklynpubliclibrary.org/

Queens Public Library: http://www.queenslibrary.org/

Local, community-based preservation groups

732.3. Publications

Publications that provide guidance on how to design a project that mitigates the potential for significant adverse impacts are published by the National Park Service, U.S. Department of the Interior, P.O. Box 37127, Washington, DC 20013-7127. These publications include <u>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</u> and <u>The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.</u>

732.4. Websites

Advisory Council on Historic Preservation: www.achp.gov

National Park Service, History and Cultural Division: www.nps.gov/history