

A. INTRODUCTION AND METHODOLOGY

This chapter assesses the potential impacts to historic resources as a result of construction and/or operation of the project alternatives. Because construction-related impacts to historic structures could be permanent, they are addressed below rather than in Chapter 17, “Construction and Construction Impacts.”

REGULATORY CONTEXT*NATIONAL HISTORIC PRESERVATION ACT (SECTION 106)*

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as implemented by federal regulations appearing at 36 CFR Part 800, mandates that federal agencies consider the effect of their actions on any properties listed on or determined eligible for listing on the National Register of Historic Places (NR) and afford the federal Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. Federal agency preservation officers, in consultation with the State Historic Preservation Office (SHPO), must determine whether a proposed action would have any effects on the characteristics of a site that qualify it for the State and National Registers (S/NR). Revised Section 106 regulations were published on May 19, 1999. The basic steps of the Section 106 process, as revised, are as follows:

- All properties that may be affected by the project and that are included in or eligible for the National Register must be identified, in consultation with the SHPO. If properties are found that may be eligible for the National Register, but for which no determination has yet been made, the agency consults with the SHPO to determine eligibility or ineligibility.
- If there are such properties, the potential effect of the proposed project on each property must be evaluated, in conjunction with the SHPO, to determine if the project would have adverse effects on them. In order to determine potential effects on the historic properties, the Advisory Council’s Criteria of Adverse Effect must be applied, in consultation with the SHPO, to determine whether adverse effects would occur. In general, a proposed project is deemed to have an adverse effect if it would cause a change in the quality of the property that qualifies it for inclusion in the National Register. The Advisory Council is notified of any findings of adverse effects.
- If the analysis indicates that the proposed project will have an adverse effect, SHPO is consulted to seek agreement on ways to avoid or reduce the effects. This mitigation is typically implemented through either a Memorandum of Agreement (MOA) or Programmatic Agreement. The Advisory Council may choose to participate in the consultation when there are substantial impacts to historic properties, when a case presents important questions of policy or interpretation, when there is a potential for procedural problems, or when there are issues of concern to Indian tribes or Native Hawaiian organizations. The Advisory Council must be invited to participate when the federal agency sponsoring the project wants the

Council's involvement, when the project would have an adverse effect on a National Historic Landmark, or when a Programmatic Agreement will be prepared.

Programmatic Agreements are used when effects on historic properties are similar and repetitive or are multi-state or regional in scope; or when effects on historic properties cannot be fully determined prior to approval of an undertaking, among other reasons.

- Execution of the MOA or Programmatic Agreement and implementation of the terms therein satisfies the requirement of Section 106 that the Council be given a reasonable opportunity to comment on the undertaking as well as demonstrating that the federal agency has taken into account the effects of the action.

The review under Section 106 can be conducted in coordination with analyses conducted for the National Environmental Policy Act (NEPA). In addition, because the views of the public are essential to informed federal decisionmaking in the Section 106 process, the public should be informed about the project and its effects on historic properties, and given the opportunity to comment. This public comment element can be combined with the public participation component required by the National Environmental Policy Act (NEPA). The public participation efforts being conducted for the East Side Access Project are described in Chapter 23, "Process and Public Participation."

SECTION 4(F) OF THE FEDERAL DEPARTMENT OF TRANSPORTATION ACT

In addition, historic properties are also protected from adverse effects, by Section 4(f) of the Department of Transportation Act of 1966.* Section 4(f) prohibits actions by the Secretary of Transportation that require "use" of a historic property that is listed in or eligible for inclusion in the National Register, unless a determination is made that there is no feasible and prudent alternative to the use of such land, and all possible planning has been undertaken to minimize harm to the 4(f) property. For historic properties, "use" constitutes a significant adverse impact. This includes direct physical impacts, such as demolition or removal of part of a historic property. It also includes adverse contextual impacts (these are referred to as "constructive use," which occurs when changes caused by the project that are near the historic structure cause a substantial impairment in the historic resource's important qualities). Constructive use could occur from such changes as noise, visual intrusion, or other such elements that would significantly alter the setting of the historic resource.

STATE HISTORIC PRESERVATION ACT

The New York State Historic Preservation Act of 1980 (SHPA) closely resembles NHPA, and requires that state agencies consider the effect of their actions on properties listed on or determined eligible for listing on the State Register of Historic Places.

METHODOLOGY

In general, potential impacts on historic or architectural resources can include both direct physical impacts—demolition, alteration, or damage from construction on nearby sites—and indirect, contextual impacts, such as the isolation of a property from its surrounding environment, or the

* Section 4(f) has been recodified as Section 303 of Title 49 of the United States Code, although the preservation provision is still known as Section 4(f).

introduction of visual, audible, or atmospheric elements that are out of character with a property or that alter its setting. Portions of the TSM Alternative that require major construction, and elements of the Preferred Alternative—including new tunnels under buildings on Park Avenue, new Long Island Rail Road (LIRR) pedestrian entrances, work in Grand Central Terminal (GCT), ventilation facilities and substations, new tunnels and tracks in the Sunnyside Yard area, and *new yards*—may affect historic structures.

The No Action Alternative would not be considered an “undertaking”—it involves measures that are available to the LIRR as routine management and do not require a major new construction effort. The No Action Alternative would therefore not result in any significant adverse impacts to historic resources, and it does not require analysis or definition of an Area of Potential Effect (APE).

To assess and compare the potential impacts of the TSM and Preferred Alternatives, an inventory of historic and architectural resources in areas that could be affected by the alternative options was compiled. This chapter includes discussions of the methodology used to prepare the inventory, a brief background history of the area, a description of the identified and potential historic resources, and an assessment of the potential impacts of the project options. This work was prepared in accordance with NHPA, SHPA, and the National Environmental Policy Act (NEPA).

DEFINITION OF THE AREA OF POTENTIAL EFFECT

Areas of Potential Effect (APEs) for the Preferred Alternative were identified in consultation with, and approved by, SHPO in correspondence dated June 21, 1999 and August 4, 2000. They are described below and mapped in Figures 7-1 through 7-6. APEs include locations that may potentially be affected by construction or that may experience effects once construction is completed and the new system is operational.

The APEs defined for the project’s Preferred Alternative are as follows:

- For most portions of the project, the APE for construction impacts is the area within 50 feet of major construction elements, including excavation sites, soft ground tunneling, and cut and cover construction.
- Where the effects of construction may extend farther, as when proposed construction would require the underpinning of buildings, the APE is the area within 100 feet from construction activity boundaries, or the entire footprint of the structure, whichever is larger.
- For locations where project elements would be visually prominent, the APE includes the area within 75 feet of the new elements, to ensure that the area within the visual context of the change is covered. This includes any locations where demolition of existing structures is proposed, where an existing building would be physically or visually altered, and any other visually prominent project elements.
- In areas where proposed work is not anticipated to have physical or contextual (e.g., visual) effects outside the limits of the proposed work, the APE is the area within the confines of proposed work at GCT or within the boundaries of affected rail yards. This includes surface trackwork, construction within GCT not visible to the public, and work within existing railroad yards (including Yard A/Arch Street Yard, Sunnyside Yard, and the smaller yards that would be affected by the project—Blissville, Maspeth, and Fresh Pond Yards in Queens and Highbridge Yard in the Bronx).

- For work within GCT that would be visible to the public, the APE is the area within visual range of any proposed changes within the terminal itself.
- *In addition, for the sites being assessed to illustrate the effects of potential new storage yards on Long Island, the APE includes the area within visual range of the proposed rail yard sites.*

Where no impacts are anticipated, no APEs have been defined. Once the project is completed and operational, there would be no difference in the visual characteristics above-grade for soft ground tunneling, cut and cover sections, or underpinned buildings. Therefore, no APE for operations has been defined for visual or contextual concerns for these types of construction. In addition, no APE has been defined for construction impacts or operational impacts where the existing 63rd Street Tunnel would be used or areas where deep tunneling would take place. As described in detail in Chapter 11, “Noise and Vibration,” vibrations due to construction and/or operation of the project would not be expected to result in any impacts to structures near an existing tunnel or where hard rock tunneling would be used. Thus, there is no APE related to construction or to operation of new service for the existing 63rd Street Tunnel or for the portion of tunnel in Manhattan leading to GCT (north of 55th Street).

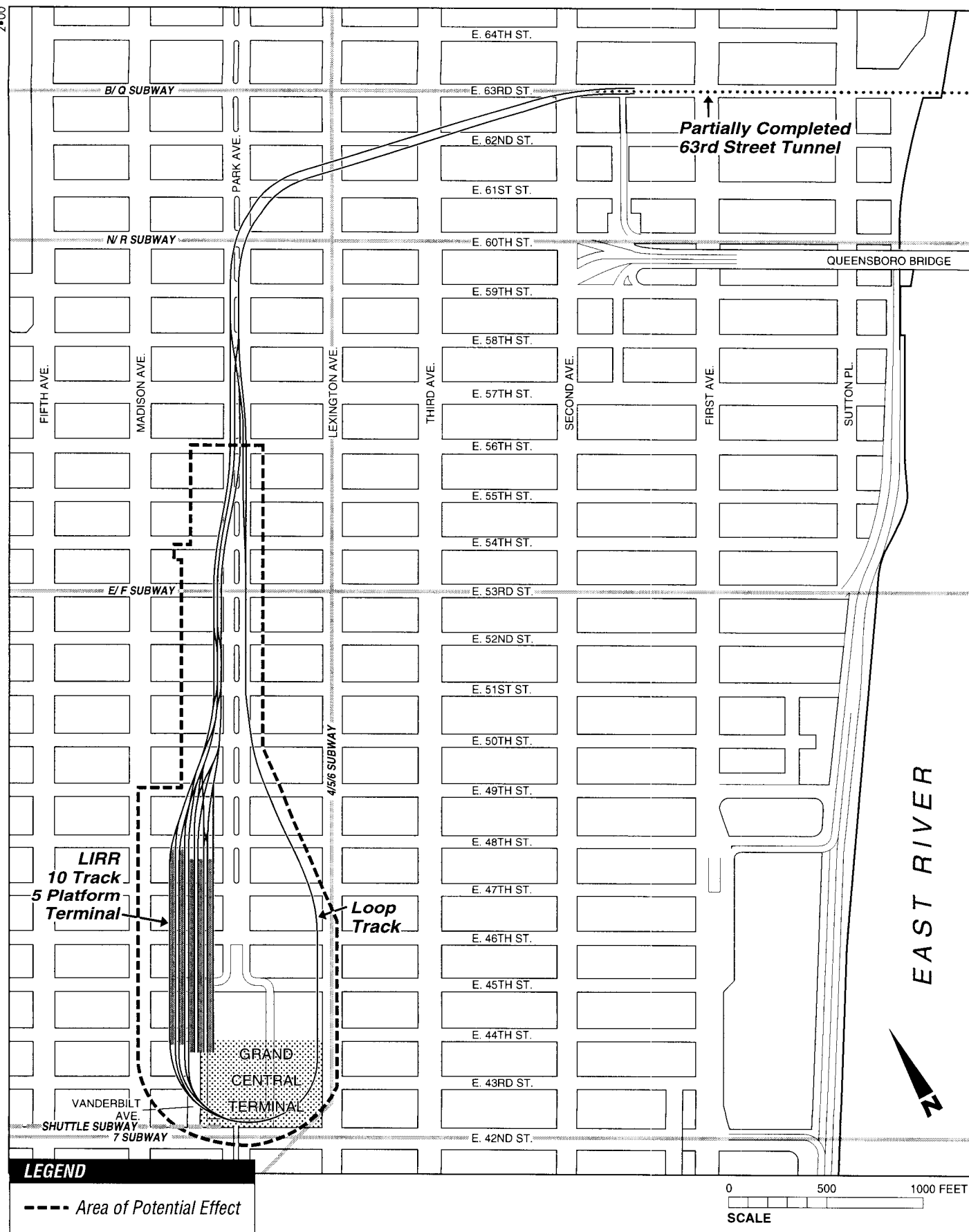
For the TSM Alternative, APEs have been defined only for elements that would require construction and could affect known or potential historic resources. APEs have been determined using the same methodology as described above for the Preferred Alternative. Project elements that would require major construction would be visible, and, therefore, an area within 75 feet of the construction activity boundaries has been determined as the APE for the following project elements: construction of a pedestrian bridge connecting the LIRR and subway stations at the Hunters Point Avenue bridge, a new flyover ramp and on ramp within the LIE right-of-way, creation of a new covered pedestrian walkway between the Long Island City station and East River ferry terminal, and enlargement of a ferry slip at the terminal (see Figures 2-1 and 2-2 in Chapter 2, “Project Alternatives” for project element locations).

IDENTIFICATION OF HISTORIC PROPERTIES/STRUCTURES WITHIN THE APES

Once the APEs were determined, a list of officially recognized historic resources within the APEs was compiled. This includes properties or districts listed on the S/NR or determined eligible for such listing; National Historic Landmarks (NHL); New York City Landmarks and Historic Districts (NYCL), and properties that have been considered for designation (“heard”) by the New York City Landmarks Preservation Commission (LPC) at a public hearing or calendared for consideration at such a hearing (these are “pending” NYCLs).

A list of potential historic resources within the APEs was also compiled. These were identified based on field surveys of the APEs and by using sources listed at the end of this chapter. Potential historic resources comprise properties that may be eligible for listing on the S/NR and/or designation as NYCLs. Criteria for listing on the National Register are found in the *Code of Federal Regulations, Title 36, Part 60*. Following these criteria, districts, sites, buildings, structures, and objects are eligible for the Registers if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- Are associated with historic events;
- Are associated with significant people;
- Embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic value, or are otherwise distinguished; or



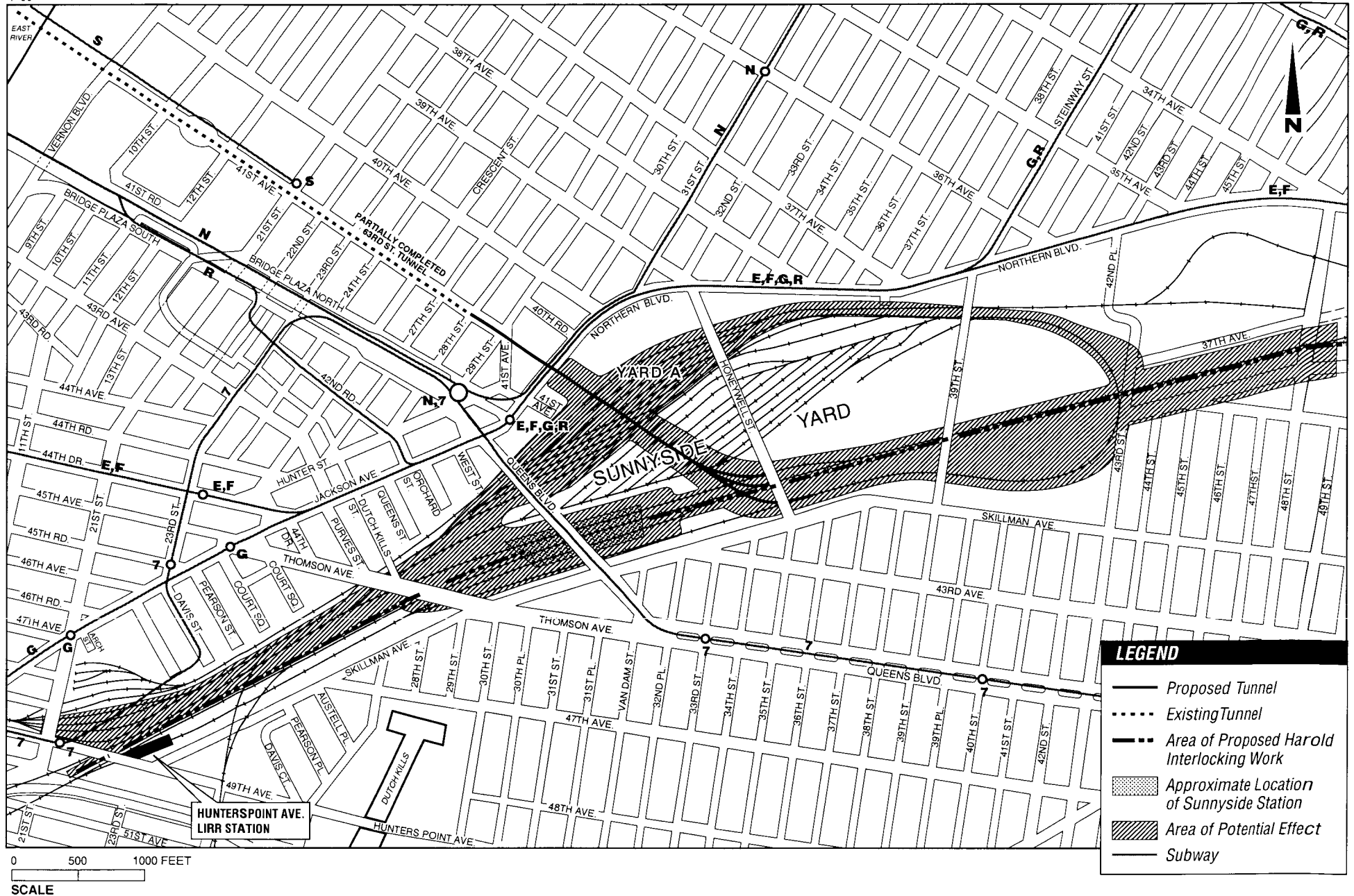
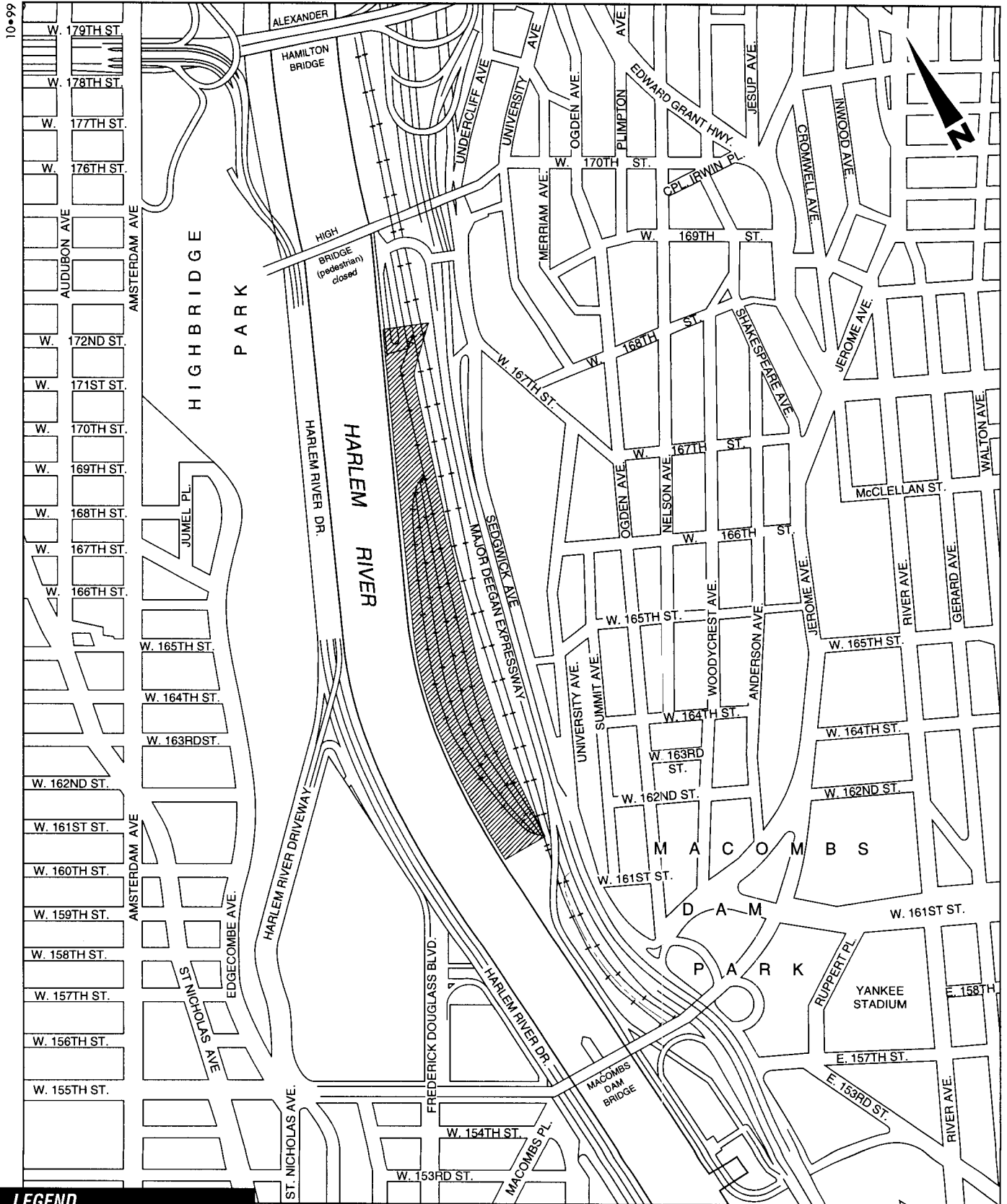


Figure 7-2

Queens Alignment and Area of Potential Effect – Historic Resources

Figure 7-5

Fresh Pond Yard and Area of Potential Effect – Historic Resources



LEGEND

Highbridge Yard and Area of Potential Effect

0 400 1000 FEET
SCALE

MTA / LIRR
East Side Access

Figure 7-6
**Highbridge Yard and Area of Potential Effect
– Historic Resources**

- May yield information important in prehistory or history.

Properties that have achieved significance within the last 50 years are ordinarily not eligible. Determinations of eligibility are made by SHPO.

In addition, LPC designates historically significant properties in New York City as New York City Landmarks and/or Historic Districts, following the criteria provided in the *Local Laws of the City of New York, New York City Charter, Administrative Code, Title 25, Chapter 3*. Buildings, properties, or objects are eligible for landmark status when a part is at least 30 years old. Landmarks 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. There are four types of landmarks: individual landmark, interior landmark, historic district, and scenic landmark. MTA's transportation facilities are exempt from local laws and ordinances pursuant to Public Authorities Law Section 1266, Subdivision 8. MTA nevertheless intends to continue to seek the advice and counsel of the New York City Landmarks Preservation Commission (LPC) as it goes forward in the same manner as it has in the past. As MTA's plans develop, MTA anticipates that it will submit to LPC information regarding the project, and would expect that LPC, if it so chooses, would hold a public hearing and issue a report on MTA's plans in the manner that LPC issues reports with respect to city-owned properties.

Properties in the project's APEs that appear to meet one or more of the Register criteria were identified as potential historic resources. For each of these properties, New York State Building-Structure Inventory forms ("Blue forms") were submitted to SHPO for evaluation and determination of whether SHPO considers the properties to be eligible for the Registers. SHPO has subsequently made determinations of eligibility for these resources. Copies of these findings are included in the appendix. *LPC has also been consulted.*

Known historic resources and potential resources identified by SHPO for this project as eligible for listing on the S/NR are identified and described below in section C, "Existing Conditions."

EVALUATION OF POTENTIAL IMPACTS ON HISTORIC RESOURCES

Once the historic resources in the APEs were identified, the impacts of the project on those resources were assessed. As described above, project impacts on known historic resources and those potential resources determined by SHPO to meet eligibility criteria for listing on the S/NR identified in this chapter may include both physical impacts and contextual impacts. Direct impacts could include physical destruction, demolition, damage, or alteration of a historic resource. In addition, visual impacts, such as changes in the appearance of a historic resource or in its setting—including introduction of incompatible visual, audible, or atmospheric elements to a resource's setting, or elimination of publicly accessible views to the resource—are also considered. Project-related impacts, including impacts during construction and impacts during operation once the project is completed, are described below in section E, "Probable Impacts of the Project Alternatives."

B. BACKGROUND HISTORY

MANHATTAN

In 1832, the New York and Harlem Railroad opened the first railroad in New York City, its horse-drawn "street railroad" on Fourth Avenue (now Park Avenue) between Union Square and 23rd Street. At this time, the City of New York extended from the Battery to as far north as

approximately 8th Street, with a population of around a quarter of a million. To the north, the hilly terrain of Manhattan was largely undeveloped, although small settlements were located to the north, including the village of Harlem. Construction of the railroad stimulated development northward as people moved to less congested areas of the city within commutable distance to the commercial areas of Wall Street and the City Hall area.

In 1837, the railroad was converted to steam-powered rail service and extended along Fourth Avenue to 125th Street in Harlem. The railroad depot was located at Fourth Avenue between 26th and 27th Streets. In 1842, the use of steam power was outlawed south of 32nd Street, since the area was well settled. This part of Park Avenue was built up primarily with 3- to 4-story residential buildings with shops on the ground floor, with some churches, hotels, and finer homes located along the avenue. In the early 1850's, the street cut in Park Avenue south of 42nd Street was bridged and subsequently turned into a railroad tunnel, an arched brick structure which still runs beneath Park Avenue and now carries automobile traffic.

North of 42nd Street, the character of the neighborhood was quite different. Park Avenue north of 42nd Street was one of the more unappealing streets in New York. Open railroad tracks and switching yards ran down the center between factories, garbage dumps, and stockyards on either side. A brewery stood on the site now occupied by St. Bartholomew's Church and the site of the Waldorf-Astoria Hotel was formerly a potter's field. Residential development was sparse since residents were fearful of moving north of Murray Hill to areas consisting of shanty towns, slaughterhouses, and charitable institutions. Later, large institutions located along Park Avenue, including Columbia College at 49th Street (built in 1857), Normal College for Girls (now Hunter College) built in 1873, and the Seventh Regiment Armory erected in 1880.

By 1869, Cornelius Vanderbilt consolidated the New York and Harlem Railroad and the New York and Hudson River Railroad to form the New York Central and Hudson River Railroad. He commissioned architect John B. Snook to design Grand Central Depot, which opened in 1871 at Park Avenue and 42nd Street. The proposed site was already occupied by railroad buildings, including two locomotive houses, a depot, a carhouse and stables located along Fourth Avenue between 42nd and 44th Streets. The new station proved to be inefficient and in a constant state of rearrangement, due to such shortcomings as trains only being able to exit the depot in reverse. Shortly after its completion, the tracks in Park Avenue between the station and 56th Street were depressed below street level in a deep cut and roofed over. They were subsequently enclosed within a tunnel that ran from 57th Street to 96th Street.

By 1889, the city demanded that railroads electrify operations, and a proposal to erect a new depot was made by William Wilgus, the chief engineer of the New York Central and Hudson River Railroad, who was responsible for the submerging of tracks and electrification of the railroad lines. A limited competition was held and won by the architectural firms of Reed & Stem and Warren & Wetmore, which devised a system for separating automobile, pedestrian, train, and subway traffic by using ramps to route Park Avenue around the new terminal, which was completed in 1913, with the viaduct finished in 1919. The construction of the new GCT, its accompanying facilities, and tracks necessitated the demolition of approximately 200 buildings.

Wilgus proposed a novel plan to raise revenues for construction of the new depot—by selling and leasing the air rights over the tracks between Madison and Lexington Avenues from 42nd to 50th Streets (and including the west blockfronts on Park Avenue between 50th and 52nd Street) to allow for construction of revenue-producing office and apartment buildings. The railroad set up a subsidiary company to take care of rentals and its other real estate business, and

development of the newly available real estate began prior to completion of the terminal building. In the January 25, 1913 *Harper's Weekly*, the railroad placed an ad entitled "The Terminal City," which described GCT and corresponding development on the covered tracks as a "great Terminal City, a city within a city." By the time it was fully developed in the late 1920's, this 48-acre terminal area, which became known as Terminal City, had a post office; eight major luxury hotels, including the Waldorf-Astoria, Roosevelt Hotel, and Barclay Hotel (now the Hotel Intercontinental); 11 office buildings, including the New York Central Building, Postum Building at 250 Park Avenue, Graybar Building, Vanderbilt Concourse and Vanderbilt Office buildings; six large luxury apartment buildings; and the Yale Club. Though designed by several architectural firms—including Warren & Wetmore, joint architects with Reed & Stem of GCT—these buildings were tall, typically built of brick with stone bases, and shared a common aesthetic of Classical and Renaissance detailing. By covering the tracks between 42nd and 52nd Streets, the railroad had returned 30 blocks of prime land for development and recouped a large portion of its investment. It also paved the way for the creation of Park Avenue as one of the most prestigious residential districts in the nation.

Terminal City was a unique and progressive attempt at creating a planned sector within the city on such an ambitious scale and with an integrated design—it remained unmatched until the design and construction of Rockefeller Center (1931-40), which borrowed many of Terminal City's design elements. Further, at the core of the development was the vision of Park Avenue as a grand boulevard, which was transformed from a railroad corridor to a tree-lined avenue with a planted central mall. The development of Terminal City served to create a new fashionable district, which was further augmented by the construction of luxury elevator apartment buildings to the north along Park Avenue. With the office boom of the 1950's and 1960's, many of the masonry apartment buildings on Park Avenue south of 59th Street were replaced with steel and glass office buildings of curtain wall design pioneered by Lever House, built in 1950-52.

SUNNYSIDE YARD, QUEENS

Sunnyside Yard was built by the Pennsylvania Railroad and opened in 1910, with Long Island Rail Road service commencing in September and Pennsylvania Railroad service in November of that year. Prior to construction of the yard, the area first consisted of farms that were subdivided during the 1880's and 1890's. By 1891, more than 100 small frame and brick houses had been built on the site of the future Sunnyside Yard, including a small hamlet, Sunnyside, built between Northern and Queens Boulevards. By 1903, many houses filled the future yard site on the blocks from 32nd to 43rd Streets and between Skillman Avenue and Northern Boulevard. Most of the land in the area was low-lying and boggy, and therefore cheap. By 1901, the Pennsylvania Railroad had made the decision to build tunnels from New Jersey to Manhattan and over to Long Island City and to build a large railroad yard in the Sunnyside area. The New York Tunnel Extension, as the project was named, had the primary goal of providing an all-rail line to a centrally located station in New York City and replacing the existing terminal in Jersey City, which was only reached from New York by ferries. In 1910, the Pennsylvania Railroad opened tunnels under the East River, culminating a decade-long modernization program for the Long Island Rail Road (in 1900 the Pennsylvania Railroad had acquired a majority of LIRR stock) which included the electrification of LIRR lines in Queens, erection of a large coal-fired power plant in Hunters Point, and completion of McKim, Mead, & White's New York Pennsylvania Station (now demolished).

Between 1902 and 1905, the railroad gradually bought up all the land south of Northern Boulevard between 21st and 43rd Streets. In 1907, it began leveling the area, including an entire 200-acre hill, and filling in the low-lying meadow and swamp land. By the time the work was completed in 1908, more than 250 acres of former tidal marsh had been filled in. Approximately 52 streets were demapped and the railroad purchased and subsequently demolished around 400 structures located on the Sunnyside Yard tract. In 1909, the viaduct bridges were built over the yard—at Hunters Point Avenue, Thomson Avenue, Bridge Approach (now Queens Boulevard), Honeywell Street, Harold Avenue (now 39th Street), and Laurel Hill Avenue (now 43rd Street) at the eastern edge of yard—and miles of track were laid. The construction of the Bridge Approach viaduct, opened in December 1910, was a direct result of the construction of the Queensboro Bridge in 1901-08. It was built by the Pennsylvania Railroad to provide an outlet for traffic that came off the first bridge to connect Queens to Manhattan.

The general plan of Sunnyside Yard was submitted to the Board of Estimate and Apportionment in June 1906 and approved in February 1907. The purpose of the yard was to furnish facilities for the storage and care of passenger train equipment using Pennsylvania Station. Sunnyside Yard was divided into two separate yards, the “North Yard” and “South Yard.” The North Yard would be used to store suburban railroad cars and the South Yard would be used for storage, cleaning, and repair of Pullman Company cars, dining cars, and coaches. In between the two were planned numerous yard buildings “devoted to the various motive-power requirements,” including a power house and auxiliary sub-station, battery repair house, and general store house. Built in 1910, these structures were fire-proof, constructed of brick, with steel frames and flat roofs. Additional buildings erected in Sunnyside Yard—switch houses and a larger Yardmaster’s Office—were also built of brick with hipped roofs and bay windows. A total of 22 buildings were originally built in the yard. The Sunnyside Yard buildings, though modest in detailing and appearance, were key to the efficient functioning of the yard and the Pennsylvania Railroad and independent Pullman Company. In subsequent years, some of the structures have been removed and a variety of new structures have been built in Sunnyside Yard. The latter include a laundry building between the auxiliary substation and battery house.

C. EXISTING CONDITIONS

There are no known historic resources located within any of the TSM APEs. Three structures that field survey identified as potential historic resources have been previously determined ineligible for listing on the State and National Registers as part of an unrelated project, described below. There are no potentially eligible historic resources within the remaining TSM APEs.

Both officially designated and potential historic resources have been identified within the APEs defined for the Preferred Alternative. There are 10 designated historic structures located within the Manhattan alignment APE, a historic district within the Queens alignment APE, two historic bridges located just outside the Highbridge Yard APE, a designated historic structure within the Yaphank West site APE, and an S/NR-eligible historic district within the Pilgrim Hospital site APE. There are no known historic resources (i.e., properties listed or eligible for listing on the S/NR, NHLs, NYCLs, or properties that have been considered for NYCL designation) in the remaining project APEs—Roosevelt Island; Blissville, Maspeth, and Fresh Pond Yards; and Cerro Wire, Babylon, Yaphank East, Ronkonkoma, and Riverhead site APEs. A total of 12 historic structures potentially eligible for listing on the S/NR were identified within the APEs—8 within the Manhattan alignment APE and 4 within the Queens alignment APE. Of these resources, a total of nine structures—seven in Manhattan and two in Queens—have been determined to meet

eligibility criteria by SHPO. There are no potentially eligible historic resources located within the Roosevelt Island APE and Maspeth, Fresh Pond, Blissville, and Highbridge Yard APEs; and Cerro Wire, Babylon, Yaphank East, Yaphank West, Ronkonkoma, Pilgrim Hospital, and Riverhead site APEs.

A brief discussion of historic resources in the applicable APEs follows. APEs in which no designated or potential resources were identified are not discussed.

TSM ALTERNATIVE APE

Within the APE for the covered pedestrian walkway between the Long Island City station and East River ferry terminal, three structures may fall within the APE depending upon the trajectory of the walkway, which has not yet been designed. Two 2-story brick structures, located along the west side of Second Street contiguous with the ferry parking lot, were constructed in the early 20th century as tunnel ventilation facilities for the Pennsylvania Railroad's New York Tunnel Extension Project, and are similar in character to those erected for that project in Sunnyside Yard. However, as part of the *Hunters Point Waterfront Development Final Environmental Impact Statement* (June 1990), SHPO determined in December 1989 that these structures are not eligible for listing on the State and National Registers of Historic Places. Furthermore, a small 1-story, Romanesque Revival-style stone structure on Second Street near Borden Avenue at the ferry terminal, formerly a bank erected in 1890, has also not been determined eligible for listing on the Registers in conjunction with the environmental review for the Hunters Point Waterfront Development Project. Therefore, there are no potentially eligible historic resources located within this APE.

MANHATTAN ALIGNMENT

As described above, the project's APE in Manhattan includes areas close to major construction elements or visual changes associated with the Preferred Alternative. Historic resources in that APE are as follows.

KNOWN HISTORIC RESOURCES

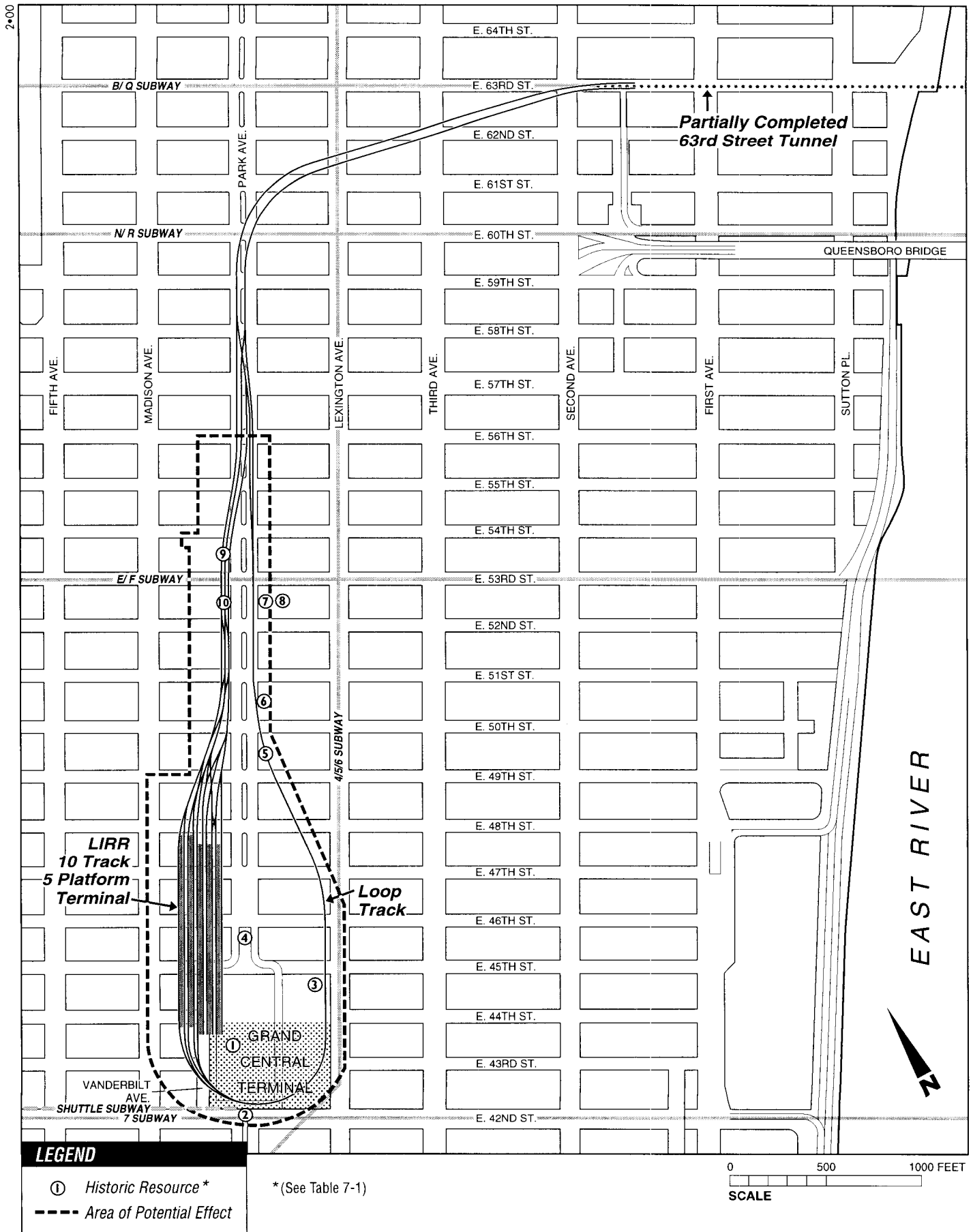
The 10 designated historic resources within the Manhattan alignment APE are among the most well known of New York City's historic resources (see Table 7-1 and Figure 7-7). Most prominent of these is **Grand Central Terminal** (NHL, S/NR, NYCL), which was saved from demolition by being one of the first buildings to be designated as a NYCL by the New York City Landmarks Preservation Commission (LPC). The entire terminal is listed on the S/NR. The exterior and portions of the public spaces in the Main and Dining Concourse levels are NYCLs (Figure 7-7 #1). Completed in 1913, Grand Central is a monumental but low-rise structure. It is a scientific and artistic accomplishment—a major engineering feat and an architectural treasure. The overall execution of GCT was the work of three talents: engineer William Wilgus and architects Reed & Stem and Warren & Wetmore. Wilgus conceived the terminal's two-tier underground track design. With a loop at its southern end, it allows empty trains to be moved out of the station as quickly as possible. Reed & Stem developed the pedestrian ramp concept for the interior and the elevated roadway that surrounds the building and connects Park Avenue from 40th Street on the south to 46th Street on the north. As described below, this viaduct is separately designated as a historic resource. Whitney Warren was responsible for the building's monumental Beaux-Arts facade and design of the interior. The clock and sculpture on the facade, by Jules-Felix Coutan, boasts a group of figures representing Mercury, Hercules, and Minerva.

Table 7-1

Known Historic Resources Within the Manhattan Alignment APE*

Ref. No.	Name	Address	NYCL	SR	NR	NHL	Pending NYCL	S/NR Eligible
1	Grand Central Terminal	East 42nd Street at Park Avenue	X	X	X	X		
2	Park Avenue Viaduct	Park Avenue between East 40th and East 42nd Street	X	X	X			
3	Grand Central Terminal Post Office	Southwest corner of Lexington Avenue and East 45th Street						X
4	New York Central (Helmsley) Building	230 Park Avenue	X					X**
5	Waldorf-Astoria Hotel	301 Park Avenue	X					X**
6	St. Bartholomew's Church and Community House	Park Avenue at East 50th Street	X	X	X			
7	Seagram Building	375 Park Avenue	X					X**
8	Four Seasons Restaurant (interior)	99 East 52nd Street	X					X**
9	Lever House	390 Park Avenue	X	X	X			
10	Racquet & Tennis Club	370 Park Avenue	X	X	X			
Notes: * See accompanying Figure 7-7. ** Determined by SHPO (February 2000) to meet eligibility criteria for listing on the S/NR as part of the review of the proposed project. NYCL: New York City Landmark. SR: New York State Register of Historic Places. NR: National Register of Historic Places. NHL: National Historic Landmark. Pending NYCL: Site has been calendared for a public hearing about its designation as a New York City Landmark or heard for designation as such. S/NR Eligible: Site has been found eligible for listing on the New York State and National Registers of Historic Places.								

Its public interior spaces, including the Main and Dining (formerly Suburban) Concourses and the Biltmore Room are grand, marble-clad rooms with connecting vaulted passageways. The Main Concourse is a voluminous space, 275 feet long, 120 feet wide, and 125 feet high, with a barrel vaulted ceiling decorated with illuminated constellations. Its north wall is lined with the arched open entrances to the Metro-North Railroad (MNR) tracks and platforms, and its south wall occupied by a series of marble ticket booths. The Biltmore Room, on the Main Concourse level, is a large, square space with glossy marble walls and a high ceiling, currently occupied by a modern newsstand in the center of the room. The Biltmore Room was once GCT's Incoming Station and was in the base of the Biltmore Hotel. The Dining Concourse is also an inspiring visual space, with the entrances to the Metro-North lower level tracks extending along the north wall surmounted by sculpted foliate arched plaques. The flow of pedestrians between the many entrances, exits, ramps, and passages not only works efficiently to connect the terminal with other systems around it, but acts to create a sense of unity as well. Given the function and life of GCT, many view the terminal complex as the greatest micro-city in America. The ceiling of the main concourse was recently restored as part of a major restoration and renovation of the



terminal's interior. This ongoing project also included construction of an originally planned grand staircase on the east side of the concourse to match the one on the west side, and newly designed retail spaces, including on the Main Concourse level along the Biltmore Concourse and the Lexington and Shuttle Passageways, in keeping with the historic character of the interior spaces.

Other routine changes performed in the below-grade portions of GCT through time have likely removed original mechanical features. As identified in the Major Investment Study (MIS) published for the Long Island Transportation Corridor for the MTA/Long Island Rail Road East Side Access project in April 1998, it is unlikely that original below-grade mechanisms associated with the signaling system at the terminal—including signaling stations, switching mechanisms, or other original features related to the electrification and operation of the railroad—remain extant. These mechanisms, while considered technologically innovative at the time of construction, have subsequently been replaced, upgraded, or removed as part of the routine maintenance of the system throughout the years. In addition, correspondence with SHPO during preparation of the MIS indicated that the underground signal systems and mechanical controls of a similar historic resource were eliminated from further eligibility consideration. Likewise, tracks are replaced frequently and platforms are periodically upgraded. During preparation of the MIS, the tracks and platforms at GCT were determined not eligible for the Registers by SHPO.

Part of the elevated roadway that carries Park Avenue traffic around GCT, the **Park Avenue Viaduct** (S/NR, NYCL) was completed in 1919. The viaduct is connected to the upper story of the terminal on the south facade, rising from 40th Street in the center of Park Avenue for a distance of two blocks to meet the elevated roadway on the south facade of GCT (Figure 7-7 #2). It was conceived by Reed & Stem as part of the original 1903 plan for the station and its design carried out by Warren & Wetmore.

The **United States Post Office at GCT** (S/NR-eligible) is a monumental 8-story-tall building located northeast of GCT (Figure 7-7 #3). It was built between 1906-1919 to the designs of Warren & Wetmore and Reed & Stem, and is one of only a few surviving elements of Grand Central Terminal City. It is distinguished by a rusticated stone ground story and variety of decorative features. It is significant for its early Beaux-Arts design in the grand style deemed appropriate for the great public services of urban centers and as part of an early attempt at creating a planned sector of the city. Originally meant to be topped by an additional 12 stories, a tower was recently constructed above it.

The **New York Central Building** (S/NR-eligible, NYCL) is located one block north of GCT (Figure 7-7 #4). The 35-story-tall office building straddles Park Avenue between 45th and 46th Streets and is now known as the Helmsley Building. It is related to GCT, and was also designed by Warren & Wetmore and built in 1927-1929 to be the headquarters of the New York Central Railroad and the lynchpin of the complex of hotels and office buildings sponsored by the railroad. The tower, with its pyramidal roof and ornate cupola, once dominated Park Avenue. On each side, the tower is flanked by lower wings. Arches in the base permit north- and southbound traffic to flow around GCT. In the interior, which is also part of the Landmark designation, there is an impressive lobby and two pedestrian corridors (known as the East and West Helmsley Walks) between 45th and 46th Streets. As part of MTA MNR's Grand Central North project, two pedestrian entrances have recently been completed at the East and West Helmsley Walks to create street level and train platform connections. Continuing up Park Avenue to 49th Street, the **Waldorf-Astoria Hotel** (S/NR-eligible, NYCL) occupies an entire city block (Figure 7-7 #5).

Designed by the firm of Schultze & Weaver and built between 1929 and 1931, it is perhaps New York's most famous hotel. The building is also a good example of the Art Deco style, with beacon-topped vertically massed towers rising to 47 stories, grey brick and limestone exterior, and Art Deco detailing.

St. Bartholomew's Church (S/NR, NYCL) and its adjoining courtyard is on Park Avenue in the block north of the Waldorf-Astoria Hotel (Figure 7-7 #6). Constructed in 1914-1919, the Byzantine-inspired design is a good example of the work of Bertram Goodhue of Cram, Goodhue & Ferguson. It features bands of limestone and salmon-colored brick, and carvings representing the life of Saint Bartholomew. The triple-arched entrance portal on Park Avenue, designed by Stanford White of McKim, Mead & White, was moved to this site from the congregation's previous church on Madison Avenue. The adjacent Community House, added in 1926-1928, complements the church's design.

Two blocks north of the Waldorf-Astoria Hotel is the **Seagram Building** (S/NR-eligible, NYCL), built in 1955-1958 (Figure 7-7 #7). This is the only building in New York designed by International Style master Mies van der Rohe and an outstanding example of the corporate International Style glass tower. The tower rises behind an open plaza on Park Avenue with a curtain wall composed of bronze spandrel panels and transparent glass. The lobby, designed by Philip Johnson, is also included in the designation, and provides access to the **Four Seasons Restaurant** (S/NR-eligible, NYCL), an interior landmark also designed by Johnson (Figure 7-7 #8). The use of high quality materials such as travertine for the lobby walls and bronze, wood, and marble of the finest craftsmanship in the Four Seasons are further representative of the International Style's restrained and elegant characteristics. Johnson's collaboration with a variety of other expert designers in the fields of furniture, horticulture and industrial design resulted in a series of unified spaces that makes the restaurant one of the most notable International Style interiors in the United States.

Another icon of the corporate International Style is **Lever House** (S/NR, NYCL) occupying the Park Avenue blockfront between 53rd and 54th Streets (Figure 7-7 #9). Designed by Gordon Bunshaft of Skidmore, Owings & Merrill and built in 1950-52, this building heralded the advent of the glass curtain-wall skyscraper as the new symbol of corporate America and precipitated the transformation of Park Avenue south of 59th Street from an area of masonry residential buildings to tall glass office buildings. The building is undergoing a major restoration of its curtain wall structural system.

Directly south of Lever House and offering a contrast to that building's design is the **Racquet & Tennis Club** (S/NR, NYCL), an outstanding survivor from Park Avenue's history as a luxury avenue lined by fine masonry institutional and apartment buildings (Figure 7-7 #10). Built in 1916-1919, the 5-story building designed in the form of a Renaissance palazzo is representative of the style established by the architectural firm of McKim, Mead & White for private club design.

POTENTIAL HISTORIC RESOURCES DETERMINED ELIGIBLE FOR LISTING ON THE S/NR

Seven potential historic resources identified within the Manhattan alignment APE have been determined to meet eligibility criteria for listing on the S/NR (see Table 7-2 and Figure 7-8). These resources are extant structures remaining from the Terminal City development above the tracks around GCT. They form a cohesive group defined by a similarity in height, construction

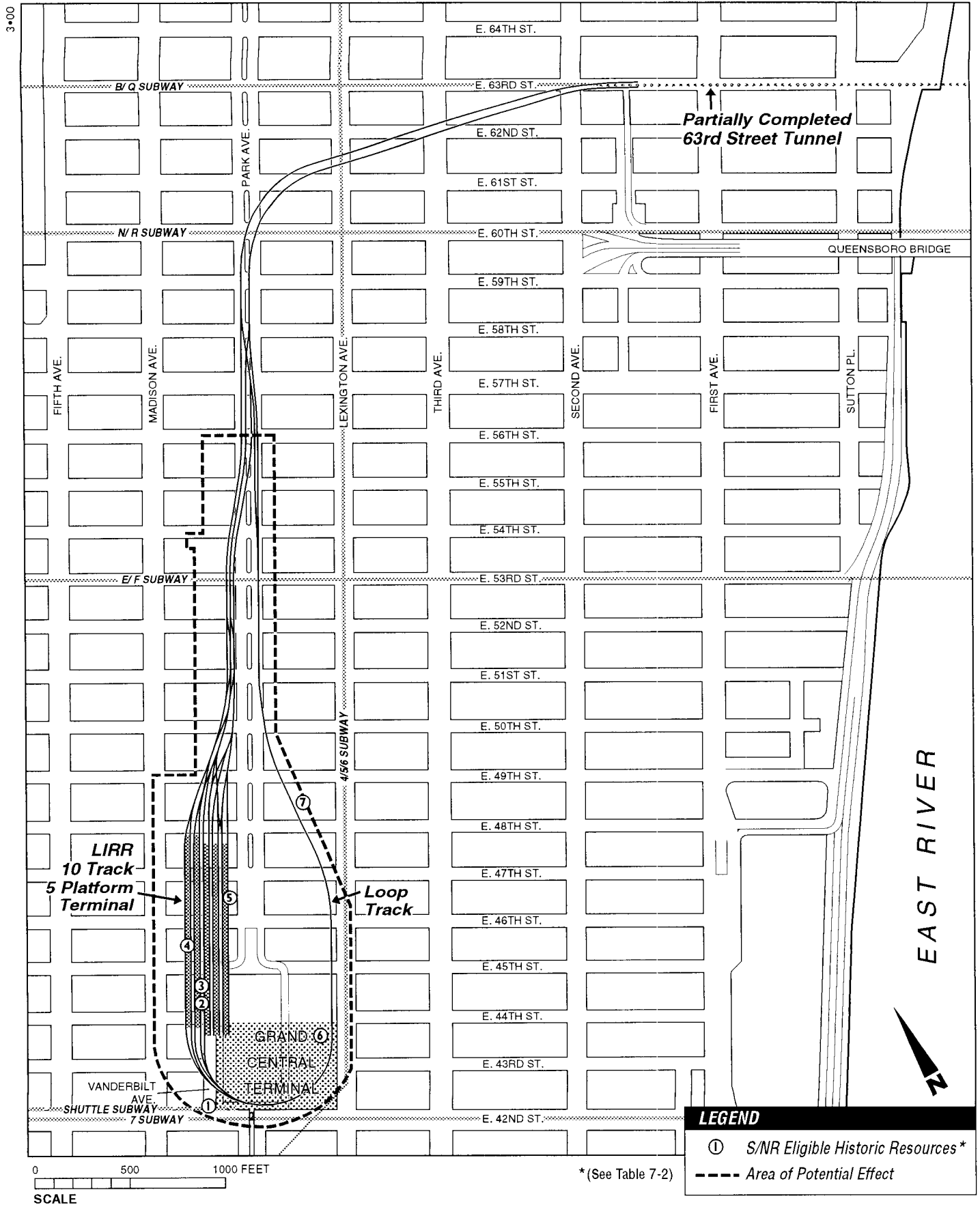


Table 7-2

**Determination of Eligibility for Potential Historic Resources
Identified Within the Manhattan Alignment APE***

Ref. No.	Name	Address	Block	Lot	Notes	Determined	
						Eligible**	Not Eligible
1	Vanderbilt Avenue Building	51 East 42nd Street	1277	27	1913; Warren & Wetmore	×	
2	Yale Club	50 Vanderbilt Avenue	1279	28	1915; James Gamble Rogers	×	
3	Vanderbilt Concourse Building	52 Vanderbilt Avenue	1279	45	1914; Warren & Wetmore	×	
4	Roosevelt Hotel	45 East 45th Street	1281	21	1924; George B. Post	×	
5	Postum Building	250 Park Avenue	1282	34	1925; Cross & Cross	×	
6	Graybar Building	420 Lexington Avenue	1280	60	1925-27; Sloan & Robertson	×	
7	Hotel Intercontinental (formerly Barclay Hotel)	111 East 48th Street	1303	14	1927; Cross & Cross	×	
8 **	Chase Manhattan Bank (formerly Union Carbide Building)	270 Park Avenue	1283	21	1957; Skidmore, Owings & Merrill		×
Notes: * Corresponds to Figure 7-8. Determined eligible: eligibility determinations made by SHPO, November 1999 and February 2000. ** Only resources determined eligible for listing on the S/NR and potential resources pending eligibility determinations are mapped.							

materials—stone, terra-cotta, and buff brick—and design, with prominent stone base, cornice, and classical detailing. However, intervening modern buildings preclude creation of a contiguous historic district. Therefore, the properties were identified as potentially individual eligible resources.

The **Vanderbilt Avenue Building** spans the blockfront between East 42nd and East 43rd Streets across Vanderbilt Avenue from GCT (see Figures 7-8 #1 and 7-9). The 6-story limestone base of the building was erected in 1913 and designed by Warren & Wetmore. It is distinguished by elegant classical detailing, including window treatment defined by slender Corinthian columns, ornamental plaques, and a dentiled cornice. It was erected as an office building by the American Real Estate Company, to which the property was leased by the New York Central Railroad. An ad placed in the January 4, 1913 *Real Estate Record & Guide* advertised the building's provision of "direct, indoor passageways to Grand Central and subways" and its location "in the heart of the most talked about business section in the City." By 1929, 11 additional stories had been erected above it, consisting of nine stories faced in brick topped by a 2-story attic and bracketed cornice.

Two blocks north is the **Yale Club**, located at the northwest corner of Vanderbilt Avenue and East 44th Street (see Figures 7-8 #2 and 7-9). It was built by the Yale Leasing Company on property owned by the New York Central Railroad. Designed by James Gamble Rogers in 1915, it is 21 stories tall with a facade principally neo-classical in derivation. It has a limestone base

with arched windows at the second story and flat pilasters spanning the third to fifth stories. It is crowned by a loggia with a prominent bracketed cornice at the 21st floor. The Yale Club was started in 1897 at a house at Madison Square, subsequently moving to a location at 30 West 44th Street due to an increase in membership. The growth of the institution as a national center of Yale graduate influence affected its decision for a new location, in proximity to GCT and its commuter trains to New Haven, Connecticut. The structure was in fact built over the railroad tracks with an underground pedestrian connection to GCT. Its construction on property owned by the New York Central Company necessitated compliance with design regulations imposed by the railroad, including materials and height—a well-defined cornice at a level of about 81 feet above the street. James Gamble Rogers, a noted early 20th century architect, designed several prominent buildings in New York, including Butler Library at Columbia University and the Columbia-Presbyterian Medical Center. He also served as Architectural Advisor for Yale University, designing the Harkness Memorial Quadrangle and most of the Yale colleges at the University.

The **Vanderbilt Concourse Building** is immediately adjacent to the Yale Club on Vanderbilt Avenue, occupying the southwest corner at 45th Street (see Figures 7-8 #3 and 7-10). It is an office building designed by Warren & Wetmore and constructed in 1914 by the New York Central Co. It is 20 stories high, with a buff-colored brick facade above a 6-story limestone base. The base is enlivened by decorative details such as plaques beneath the windows on the third through fifth stories and between the windows on the sixth story. It is crowned on each facade by a 3-story central loggia and cornice, beneath which there is a balcony supported on corbels.

The **Roosevelt Hotel**, a 22-story building, occupies the entire block bounded by Madison and Vanderbilt Avenues between 45th and 46th Streets (see Figures 7-8 #4 and 7-10). Built in 1924, it was designed by George B. Post, a prominent New York architect of that era. It is set on a 4-story limestone base ornamented with Italian Renaissance details such as columned loggias and balustrade balconies. The building has a prominent 3-story attic defined by a dentiled string course, quoins, and stone window surrounds, surmounted by a cornice. Dedicated to the memory of Theodore Roosevelt, its interiors were designed in such American evocative styles as Colonial and Adams. The Roosevelt was the first hotel to incorporate ground-floor shops in an attempt to find a substitute source of revenue for the sale of liquor, banned during the Prohibition years (1920-1933).

The **Postum Building** occupies the block bounded by Park and Vanderbilt Avenues between East 46th and East 47th Streets (see Figures 7-8 #5 and 7-11). Set on a large limestone base, the building is U-shaped with wings that rise 16 stories flanking a central block of 20 stories. It was designed by Cross & Cross in an understated Classical vocabulary and built in 1924. It has brick facades and terra-cotta ornament, with decorative features including plaques along the top of the base and colonnades between the 18th and 19th floors. Cross & Cross worked primarily in New York City and are known for their designs of corporate offices, including the Art Deco RCA Tower (now the General Electric Building) and the Citibank-Farmers' Trust Building, and upper-class apartment buildings.

Directly east of GCT, the **Graybar Building** was erected in 1925 to the designs of Sloan & Robertson (see Figures 7-8 #6 and 7-11). At the time of construction, it was the largest office building in the world. It is 30 stories high and faced in a buff-colored brick above a limestone base relieved by a mixture of abstract Classical and Moorish elements. Pavilions rise on either side of a 2-story base, creating a large exterior court along Lexington Avenue. The building's basements were built as an extension of GCT, and a portion of the ground floor was utilized as



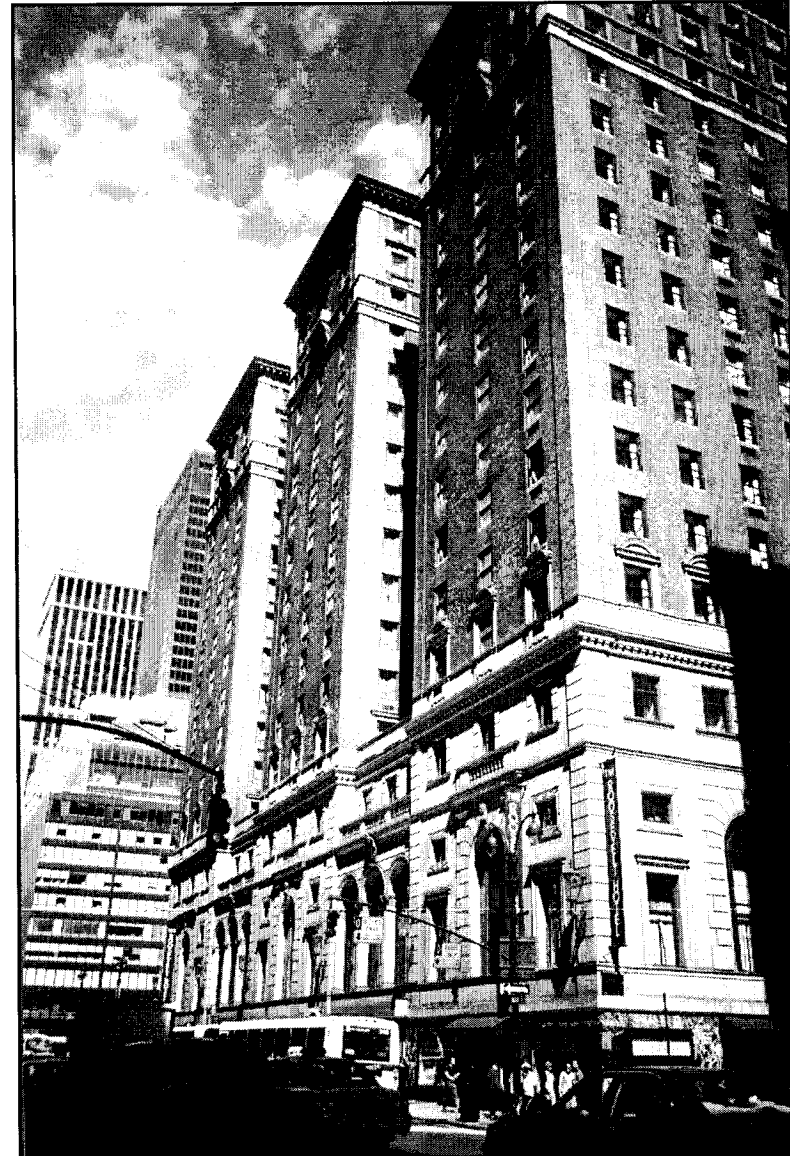
Vanderbilt Avenue Building, 51 East 42nd Street 1



Yale Club, 50 Vanderbilt Avenue 2



Vanderbilt Concourse Building, 52 Vanderbilt Avenue 3



Roosevelt Hotel, 45 East 45th Street 4



Postum Building, 250 Park Avenue 5



Graybar Building, 420 Lexington Avenue 6

Figure 7-11

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East Side Access

**Manhattan Alignment APE •
State/National Register Eligible Historic Resources**

space for the adjacent Grand Central Post Office. The southernmost of the building's three entrances provides direct access to GCT via a concourse running the depth of the building. Currently, the Graybar building is undergoing a major capital improvement program, to include a new lobby, and exterior work is underway at the base of the building to create a new entry and storefronts.

North on Lexington Avenue, the former **Barclay Hotel** (now the Hotel Intercontinental) occupies the eastern portion of the block along Lexington Avenue between East 48th and East 49th Streets (see Figures 7-8 #7 and 7-12). At the time of construction in 1927, the building filled a fully independent block bounded on the west by Park Lane, a former street that bisected the block. Designed by Cross & Cross, the Barclay was built as a luxurious apartment hotel that catered to relatively permanent tenants. It is 14 stories high, "H" shaped in plan, and Renaissance Revival in style. The primary entrance on East 48th Street consists of three round-arched entrances. It is faced in brick above a 3-story limestone base. Balconies on scrolled brackets, limestone string courses, and a decorative 14th-story attic surmounted by a cornice reflect its history as a luxury residential building.

QUEENS ALIGNMENT

KNOWN HISTORIC RESOURCES

The Sunnyside Gardens Historic District (S/NR) consists of a planned residential community built between 1924 and 1935, covering an area of roughly 16 city blocks (see Figure 7-13). Sunnyside Gardens was conceived and designed by the founders of the Regional Planning Association of America (RPAA), including architect Clarence Stein; landscape architect Henry Wright; Alexander Bing, a wealthy philanthropist; and historian Lewis Mumford. Consisting of primarily low-scale brick rowhouses surrounding landscaped interior courtyards, some apartment houses, parks, and playgrounds, Sunnyside Gardens was the first planned community in the United States that reflected the utopian ideal of the British garden city movement. Embraced by the RPAA founders, the movement favored the development of small self-sufficient communities with plenty of open space and replacement of the large, unhealthy, and congested urban environment. The Sunnyside Gardens Historic District is across Barnett Avenue from the LIRR's Main Line tracks just east of Sunnyside Yard. The tracks here are on an embankment separated from Barnett Avenue by low-rise garages and industrial buildings.

POTENTIAL HISTORIC RESOURCES DETERMINED ELIGIBLE FOR LISTING ON THE S/NR

Two potential historic structures identified within Sunnyside Yard in the Queens alignment APE have been determined to meet eligibility criteria for listing on the S/NR (see Table 7-3 and Figure 7-14). These structures date from the original construction of Sunnyside Yard and are Switch Tower Q, and Office. The two buildings were erected by the Pennsylvania Railroad in 1910 under contract by the John F. Ferguson Company, based in Paterson, New Jersey. They are simply designed with ornament typically confined to use of stone lintels and sills, with peaked roofs and bay windows. The outside and party walls were constructed of hard-burned red brick and the structures were built with concrete floors and steel roofs covered with book-tile, roofing-felt, and gravel. They were equipped with steam heating, hot and cold water, toilet facilities, electric lights and telephones. Unlike Pennsylvania Station itself, the buildings in Sunnyside Yard are not particularly distinguished architecturally. They were, however, an integral part of the functioning of Sunnyside Yard, which was a key component in the construction of

Pennsylvania Station and the new tunnels that connected the station to areas in New Jersey and Long Island. While the structures serve as examples of railroad architecture of that time, they are potentially significant, not for their architecture, but for their association with the history of the construction of a major railroad project—an historic event that greatly affected transportation patterns in and outside of New York City.

Table 7-3

**Determination of Eligibility for Potential Historic Resources
Identified Within the Queens Alignment APE***

Ref. No.	Name	Address	Block	Lot	Notes	Determined	
						Eligible	Not Eligible
1	Switch Tower Q (formerly Signal Cabin Q, Yardmaster's Office)	East of Queens Boulevard Viaduct	239	1	1910	×	
2	Office (formerly Signal Cabin F)	West of Thomson Avenue	72	1	1910	×	
**	Stores & Lavatory Building	Building #3: West of Honeywell Street	239	1	1910; John F. Ferguson Co. for the Pennsylvania Railroad		×
**	Electric Battery/Machine Repair Building	Building #4: West of Honeywell Street	239	1	1910		×
Notes: * Corresponds to Figure 7-14. Determined eligible: eligibility determination made by SHPO, November 1999. ** Only resources determined eligible for listing on the S/NR are mapped.							

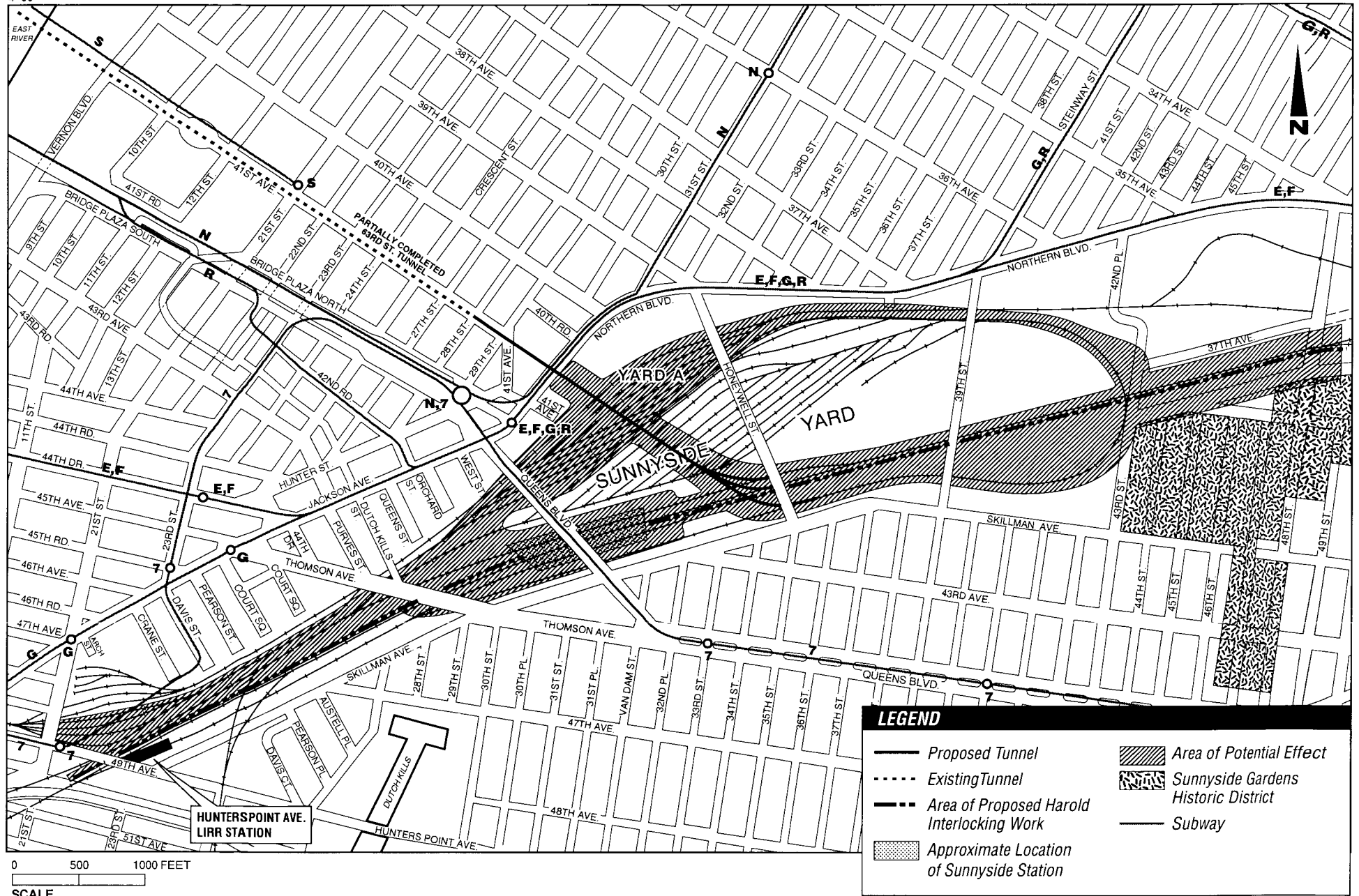
Switch Tower Q is located at the south end of Sunnyside Yard just east of the Queens Boulevard viaduct (see Figures 7-14 #1 and 7-15). Eighty-three feet by 14 feet, it consists of a 2-story block flanked by 1-story wings. It has hipped roofs with copper flashing and a copper bay window on the north facade. This structure was built for combined use as a signal cabin and yardmaster's office and is identified as "Signal Cabin 'Q,' Yardmasters Office" in historic documents pertaining to the construction of Sunnyside Yard.* The 2-story portion of the building is similar to the signal cabins built in the yard (described below) though described as "special" due to its extension containing tool rooms and the yardmaster's offices.

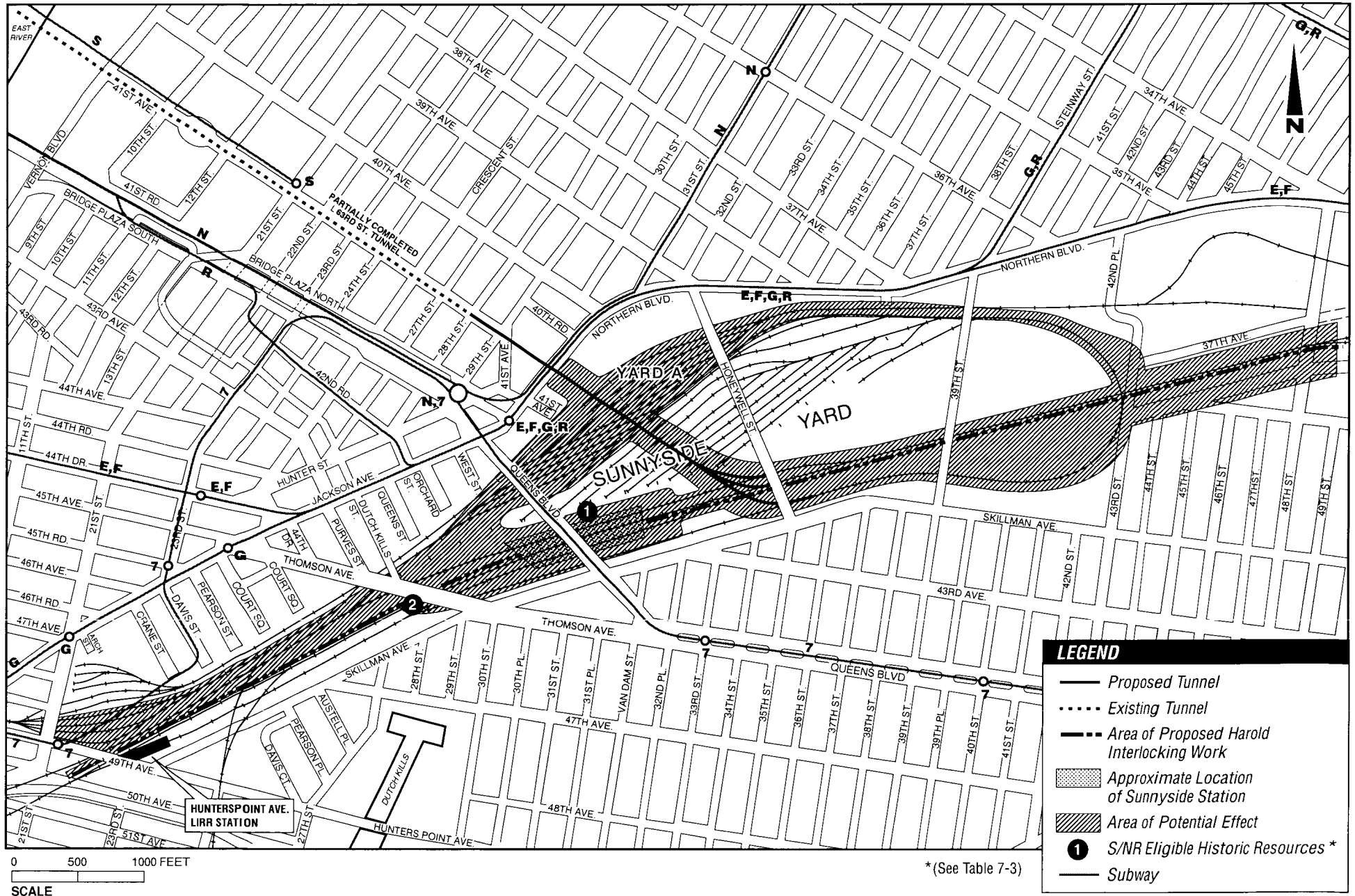
The small 2-story structure just west of the Thomson Avenue Viaduct, identified on the 1998 Sanborn real estate atlas as "Office" was originally built as **Signal Cabin F**, one of three original signal cabins built in Sunnyside Yard (see Figures 7-14 #2 and 7-15). It is 2 stories, measures 27 feet by 17 feet, with a hipped roof and bay window on the south facade. In historic documents, the signal cabins are described to be of "standard Pennsylvania Railroad type," with the exception of Signal Cabin Q, Yardmaster's Office, described above. Of the remaining two signal cabins, "Switch Tower R" (as identified on the 1998 Sanborn map) is located west of the 39th Street viaduct and is not within the APE. Therefore, it has not been identified as a potential historic resource within in the APE. The other signal cabin—identified on the Sanborn map as a small 2-story structure, "Switch Tower," within the APE between the 39th Street and Honeywell Street Viaducts—was originally built as Signal Cabin H. However, this structure, subsequently named "Harold," was recently demolished and replaced with a more modern structure.

* "The New York Tunnel Extension of the Pennsylvania Railroad," *Transactions of the American Society of Civil Engineers* (1910).



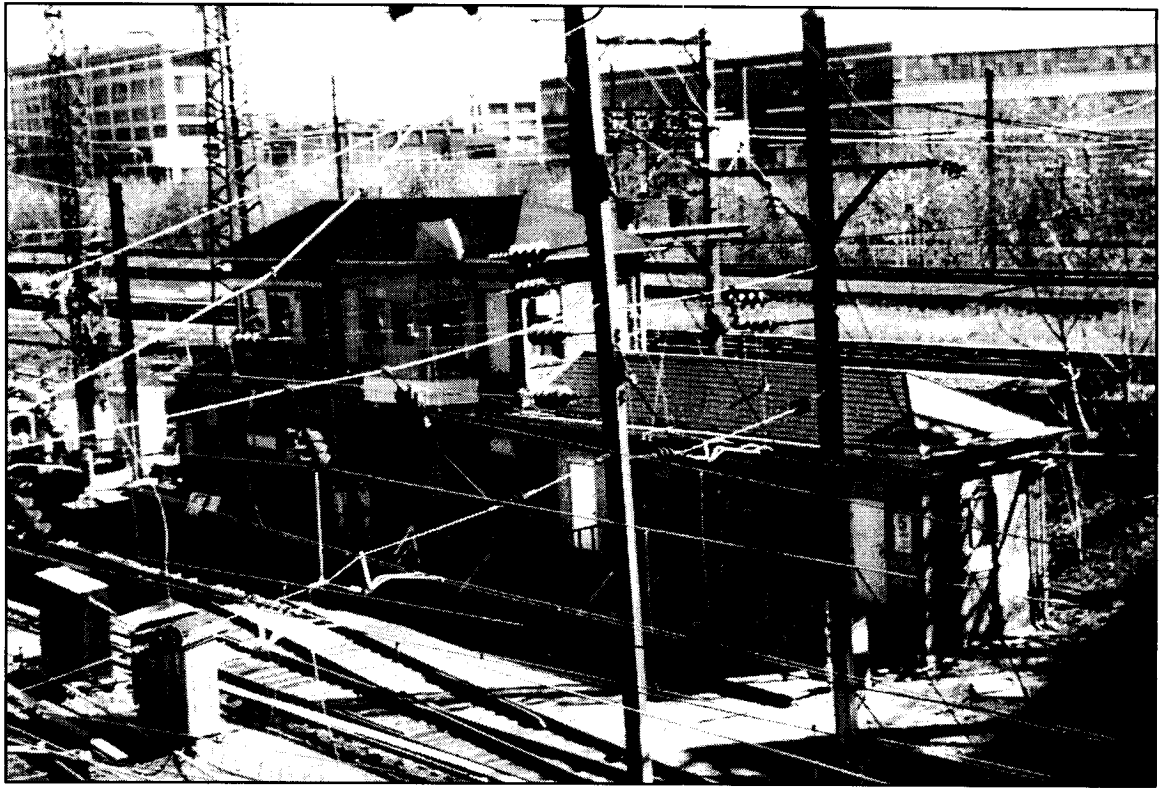
Hotel Intercontinental (formerly Barclay Hotel), 111 East 48th Street **7**



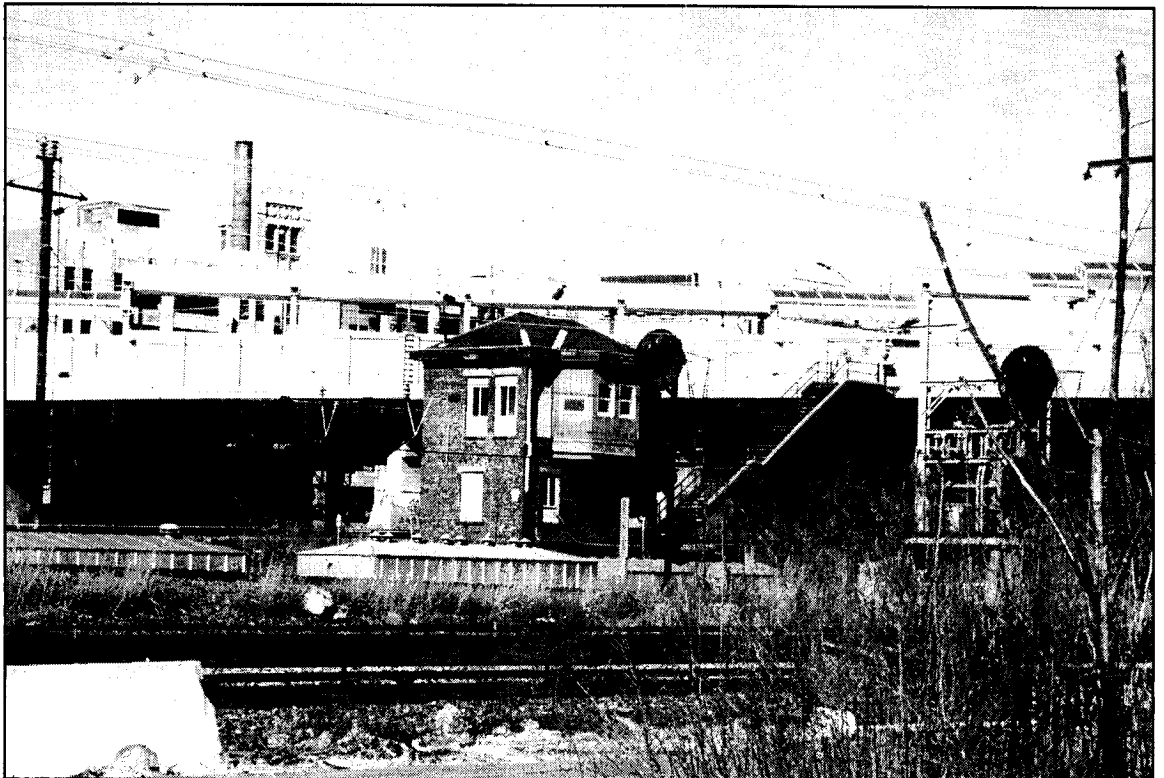


Queens Alignment – State/National Register Eligible Historic Resources

Figure 7-14



Switch Tower Q (formerly Signal Cabin Q Yardmaster's office), Sunnyside Yard 1



Office (formerly Signal Cabin F), Sunnyside Yard 2

MTA / LIRR

East Side Access

Figure 7-15

**Queens Alignment APE •
State/National Register Eligible Historic Resources**

HIGHBRIDGE YARD, THE BRONX

There are no known historic resources within the Highbridge APE. However, there are two historic resources located outside the APE—the High Bridge Aqueduct (S/NR, NYCL) and Macombs Dam Bridge (S/NR-eligible, NYCL). The former is a National Historic Landmark. These visually prominent historic bridges are briefly described below but are not expected to be affected by the project, as they are outside the APE. Therefore, due to the distance of these resources from the Highbridge APE, there is no potential for direct physical impacts or contextual impacts (see Figure 7-16).

High Bridge spans the Harlem River approximately 800 feet north of the Highbridge APE (Figure 7-16 #1). Built in 1838-48, High Bridge was an integral part of the Croton Aqueduct system which carried drinking water from the Croton Reservoir in Westchester County to New York City. Its design—consisting of 15 stone arches that span the river—was modeled after ancient Roman Aqueducts. In 1923, Navy engineers replaced the central piers in the Harlem River with a steel arch to allow large ships to travel the river. The aqueduct is no longer in use.

Macombs Dam Bridge, south of High Bridge, extends over the river between West 155th Street and St. Nicholas Place in Manhattan, and Jerome Avenue and East 162nd Street, in the Bronx (Figure 7-16 #2). Designed by Alfred Pancoast Boller and built between 1890-95, it consists of a swing bridge composed of latticework steel topped by finials with piers capped by shelter houses, and steel viaduct approaches on both ends. It is the oldest metal truss swing bridge and third-oldest bridge in New York City.

YAPHANK WEST SITE, LONG ISLAND

The Suffolk County Almshouse Barn (S/NR) is located approximately one-quarter mile north of the yard site, west of Yaphank Avenue. The property listed on the S/NR encompasses less than one acre (approximately 200 feet north and south of the barn and 100 feet east and west of the barn) and the property is surrounded by agricultural fields and municipal and industrial facilities. The barn is a large, multi-bay structure with a gable roof and wood shingles, with two large, louvered cupolas with cross gable roofs punctuating the main roof. The designated area surrounding the barn includes pathways, ramps, and a drainage system. The barn is the only intact historic building remaining in Suffolk County's cooperative extension farm—a modern working farm complex. Constructed in 1871, the barn was built as part of the no longer extant 19th century Suffolk County Almshouse and farm complex. This complex, originally consisting of a main almshouse building, the Children's Home, and the Almshouse Barn, was established to house Suffolk County's indigent population. Typical of most county almshouses, a broad range of agricultural activities were undertaken at the original 170-acre farm site. The Almshouse Barn is significant both as a distinguished agricultural building and for its link to late 19th century agricultural practices on eastern Long Island.

PILGRIM HOSPITAL SITE, LONG ISLAND

The yard site is located within the southern, inactive portion of the Pilgrim Psychiatric Hospital Center (S/NR-eligible). The buildings on the site are the center's utility structures, including the power house, and are monumental brick structures with Gothic and Romanesque Revival-style design features and ornament including turrets, round arched openings, and decorative brickwork and corbeling (see Figure 7-17). The Pilgrim Psychiatric Center opened in 1931 as the third psychiatric institution in Suffolk County, following the Branch Lunatic Asylum in Central

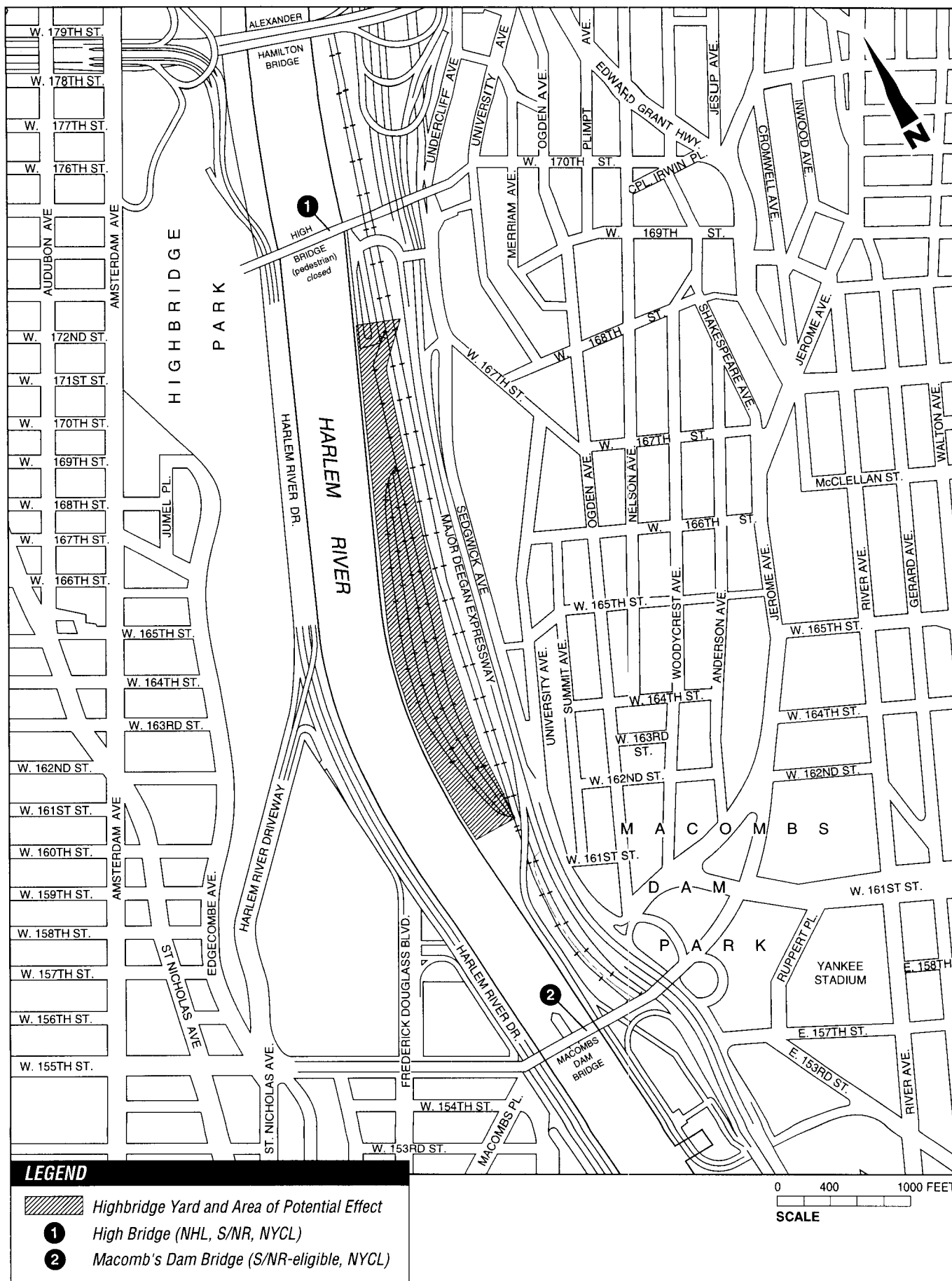
Islip and Kings Park State Hospital, which both opened in the late 19th century. Built to ease overcrowding conditions of psychiatric institutions in New York and on Long Island, it was named after mental health pioneer Dr. Charles Pilgrim. It was built on 1,057 acres and became the largest psychiatric hospital in the world. Today it consists of 84 buildings on approximately 840 acres of land. In 1996, Central Islip and Kings Park Hospitals closed, with most of their remaining patients transferred to the Pilgrim Psychiatric Center, which now serves approximately 1,200 inpatients in part of its campus.

D. FUTURE CONDITIONS COMMON TO ALL ALTERNATIVES

In the future, the status of the potential historic resources may change. Eligible historic resources may be listed on the State and National Registers, and potential historic resources may be found eligible or listed on the S/NR. Potential historic resources may also be calendared for public hearings and/or designated as NYCLs. It is also possible, given the project's completion year of 2010, that additional sites will be identified as historic resources and/or potential historic resources in this time frame.

Historic resources that are listed on the S/NR or that have been found eligible for listing are given a measure of protection from the effects of federally sponsored or assisted projects under Section 106 of the National Historic Preservation Act. Although preservation is not mandated, federal agencies must attempt to avoid adverse impacts on such resources through a notice, review, and consultation process. Properties listed on the Registers are similarly protected against impacts resulting from state-sponsored or state-assisted projects under the State Historic Preservation Act. Private owners of properties eligible for, or even listed on, the Registers using private funds, can, however, alter or demolish their properties without such a review process. Privately owned properties that are New York City Landmarks, in New York City Historic Districts, or pending designation as Landmarks are protected under the New York City Landmarks Law, which requires LPC review and approval before any alteration or demolition can occur. For example, LPC has recently approved a renovation plan for the East and West Helmsley walks of the designated New York Central Building. Designs call for doubling the height of the passageways by removing the mezzanine floor, installing skylights, restoring the bronze storefronts along the walks, and constructing windows at the 45th Street side of the building to permit pedestrians to see the vehicles traveling on the viaducts. Publicly owned resources are also subject to review by LPC prior to the start of a project; however, LPC's role in projects sponsored by other city or state agencies generally is advisory only.

Changes to the historic resources identified above or to their settings may occur irrespective of the proposed project. As described above, the Graybar building, a S/NR-eligible historic resource, is currently undergoing renovation including exterior work that may affect the appearance of the building. The Pilgrim Psychiatric Center has been the subject of several recent redevelopment plans, and a large portion of the campus, possibly including the proposed yard site, is being offered for sale. Therefore, redevelopment on a portion of the campus, which could include demolition of the S/NR-eligible structures, may occur irrespective of the proposed project. It is possible that some historic resources in the APEs may deteriorate, while others may be restored.





Pilgrim Psychiatric Center Utility Buildings

E. PROBABLE IMPACTS OF THE PROJECT ALTERNATIVES

As described earlier, this analysis considers the potential impacts that might occur to identified known and potential historic resources as a result of construction and/or operation of the project alternatives. Because any impact that might occur during construction could result in permanent, rather than temporary, impacts to historic structures, those impacts are considered in detail below in addition to operational impacts.

Throughout the preparation of the EIS, SHPO was consulted regarding the various elements of the analysis. In addition, representatives of SHPO met with representatives of East Side Access on April 26, 2000. Copies of the correspondence are included in Appendix B. SHPO concurred with the information and findings contained in this historic resources chapter in correspondence dated January 12, July 7, and August 4, 2000.

NO ACTION ALTERNATIVE

Under the No Action Alternative, none of the potential project impacts described below would occur.*

TSM ALTERNATIVE

As described above, the TSM Alternative would require construction of project elements separate from the Preferred Alternative. However, as no known or potential historic resources have been identified in any of the TSM APEs, no impact analysis was undertaken.

PREFERRED ALTERNATIVE

As noted in Chapter 2 ("Project Alternatives"), Option 2 has been selected as the preferred engineering option for East Side Access. One of the key factors in this decision was the risk and potential impacts to the Racquet & Tennis Club and Lever House during construction. The effects of both options on historic resources are described below. For the Manhattan alignment, where project elements for Options 1 and 2 differ and may have dissimilar effects, the options are assessed separately. It should be noted that neither option would involve work on, or changes to, the facades of GCT, nor the elevated roadway that surrounds the building. Therefore, no impacts have been assessed for the exterior historic features of the terminal and the Park Avenue Viaduct, which would remain unchanged. Project elements are the same for both options for other project areas; therefore, only one assessment has been conducted for these areas. As no known or potential historic resources have been identified in the Roosevelt Island APE; Blissville, Maspeth, and Fresh Pond Yards APEs; and the Cerro Wire, Babylon, Yaphank East, Ronkonkoma, and Riverhead Site APEs, no impact analysis was undertaken.

MANHATTAN ALIGNMENT: GRAND CENTRAL TERMINAL

Potential Physical Impacts

As described in Chapters 2, "Project Alternatives," and 17, "Construction and Construction Impacts," both project options would involve both above-ground and below-grade construction

* See page S-6 of the Executive Summary or pages 2-1 through 2-5 of Chapter 2, "Project Alternatives," for a discussion of the No Action Alternative.

MTA/LIRR East Side Access FEIS

within the public areas of the terminal building. The project elements common to both options that would require physical changes in the Main and Dining (lower) Concourse levels are as follows:

- On the Main Concourse level—*Potential* construction of escalators in the Biltmore Room (subject to SHPO review, as discussed below). This would require cutting into the floor of the Biltmore Room and Biltmore Passage to make the access connections between the Main Concourse level and a proposed LIRR passenger area to be built below it (described below).
- On the Main Concourse level—Possible creation of a new LIRR ticketing area in the area of modern stores along the Shuttle Passageway. Construction would involve removal of the retail spaces and replacement with a newly designed space to meet LIRR ticketing functions, requiring, e.g., the construction of ticket sale booths.
- On the Dining Concourse level—Construction along the north wall, in the areas of tracks 114 and 117, to provide access to a newly constructed LIRR passenger *concourse* area, which would be built adjacent to this area.

In addition to these elements common to both options, Option 1 would require the following additional changes not required in Option 2:

- On the Main Concourse level—Construction of elevators in the northern portion of the Biltmore Room, in addition to the escalators to be built there (see above), and construction of an escalator just outside the room in the Biltmore Concourse. This would require cutting into the floor of the Biltmore Room and Biltmore Passage to make the access connections between the Main Concourse level and a proposed LIRR passenger area to be built below.
- On the Main Concourse level—Creation of a new LIRR ticketing area to be located either in the Main Concourse or in the area of modern stores along the Shuttle Passageway. If located in the Main Concourse, LIRR ticketing operations and sales would utilize the east, partially used ticketing windows along the south wall. No physical construction would be required, except likely for the installation of signage. If located in the area of the stores along the Shuttle Passageway, construction would involve removal of the retail spaces and replacement with a newly designed space to meet LIRR ticketing functions, requiring, e.g., the construction of ticket sale booths.
- The new passenger area on the Dining Concourse level would be small, and would connect to the new platforms and tracks to be created west of the existing publicly accessible track area at GCT.

In addition to the work required by both options, Option 2 would require the following additional changes not required in Option 1:

- The new passenger *concourse* area to be created west of the existing publicly accessible track area would be a large, new passenger concourse with retail spaces and ticketing areas. That new space would provide access to new platforms and tracks on a new lower level below GCT's existing lower level.

In addition, both project options would require below-grade work that would be located outside the terminal building in the area of the terminal's subsurface transportation network.

Under Option 1, neither construction of the proposed LIRR terminal, nor reconstruction of the lower-level loop track, would have the potential to undermine the structure. The new 10-track, five-platform LIRR terminal to be built in the terminal's lower level would be located in the area of an existing rail yard—Metro-North's Madison Yard, sited away from and northwest of the building. Its construction and that of the LIRR passenger area would also require the removal and reconstruction of several tracks and platforms. The LIRR passenger area would be located adjacent, and connected to, the Dining Concourse level in the area of tracks 114 and 117, and would provide access to the new LIRR terminal. Reconstruction of the lower level of the loop track (which would be lowered) would take place within the existing trackbed of the loop track and would therefore not be expected to affect the structure of the building. Neither the proposed construction of the LIRR terminal and corresponding passenger area nor loop-track work would significantly alter the terminal's historic two-tier track design.

As described in Chapter 2, "Project Alternatives," the deeper station in Option 2 would be constructed beneath the existing lower level of GCT's transportation network, northwest of the terminal building and similarly would not have the potential to undermine the structure. It would connect via escalators to a *concourse* to be built in the existing lower level of the terminal in the area currently occupied by Metro-North's Madison Yard. The new passenger *concourse* area would be occupied by staircases, escalators, and retail uses. *This option might also have* an escalator connection from the LIRR *concourse* to the Biltmore Room. Construction of the proposed *concourse* would require that the lower-level loop track be taken out of operation for train use. However, the original design concept behind the loop track, which permitted trains to circle around under the station without having to back out, would still be maintained by the retention of the upper-level loop track, which would remain unchanged structurally and programmatically. Therefore, this change would not constitute a significant adverse impact on the historic character of the terminal building or its transportation uses.

Furthermore, the removal of the tracks and platforms, and other work that may affect subsurface operational mechanisms in Grand Central Terminal for both Options 1 and 2 are not anticipated to have any adverse impacts; either there are no significant historic features remaining, or they have been determined by SHPO not to be eligible for the Registers.

For all of these project elements—those with the terminal building itself and those located in the terminal's transportation portion—the design would be developed in consultation with SHPO to ensure that no adverse effects would occur to the building. A construction protection plan would also be implemented to minimize the effects of construction on the historic features of the building, so that construction does not result in any structural or architectural impacts to these features. The plan would be developed in consultation with SHPO and approved by SHPO prior to start of construction.

Potential Contextual Impacts

As described above, design specifications would be developed in consultation with SHPO to ensure that no adverse contextual effects would occur to GCT. Visible elements that could change the visual appearance of the public areas of GCT include:

- On the Main Concourse level—The proposed escalators in the Biltmore Room (Option 1 and *possibly Option 2*); proposed elevators in the Biltmore Room and an escalator outside of the Biltmore Room (Option 1); and proposed LIRR ticketing operations either utilizing

the east ticket windows in the Main Concourse (Options 1 and 2) or in the area of existing stores off the Shuttle Passageway (Option 1).

- On the Dining Concourse level—Along the northern wall in the area of the entrances to tracks 114 and 117 (Options 1 and 2).

The new escalators in the Biltmore Room proposed for Options 1 and 2, and elevators in the Biltmore Room and the escalator just outside the room in the Biltmore Concourse proposed for Option 1 would change the visual appearance of these areas. *As described below, design and construction of these escalators would be subject to review and approval by SHPO.* These changes would be minimally visible as these areas are located at the periphery of the terminal and constitute minor visual additions within the larger terminal area. The elevators would be behind the existing north wall, integrated within an existing storefront for minimal impact on historic fabric. Within the Biltmore Room, the escalators not be out of character with the Biltmore Room's original use as a waiting area, nor with the other public areas in the terminal, which consist of a mixture of historic features and new modern amenities, including newly designed stores and installed escalators. In addition, the modern newsstand in the center of the room, which largely obscures views of the room due to its size and placement, would be removed, opening up the room to views of its historic walls and ceiling, and, therefore, providing a beneficial effect. The location of the escalator in the Biltmore Concourse would be in an area lined with modern stores, and in the same area as the already existing escalators that connect the Main Concourse level to the Dining Concourse level at the western end of the terminal. Thus, the installation of an escalator in an area defined by both historic and modern features and anticipated to be of a similar visual character as one that exists nearby, would not be anticipated to have a significant visual or contextual adverse effect on GCT's historic character.

The proposed creation of an LIRR ticketing area under Option 1 or 2 would similarly not be expected to cause any adverse visual or contextual impacts. If the east ticketing windows in the Main Concourse are used (Option 1 or 2), no changes would be made to the booths or ticket windows with the exception of the installation of some form of signage. Such a change would be minimally visible. Furthermore, the use of these ticket windows, which are only partially now used, would reuse a significant historic feature of the terminal and would be historically appropriate. If constructed in the area of the new stores along the Shuttle Passageway (Option 1), the ticketing area would replace newly constructed retail spaces with a facility that would be designed in keeping with rest of the public terminal areas. Though not yet designed, any significant historic architectural features would be retained. The removal of modern stores and replacement with a newly and appropriately designed area, also at the edge of the terminal, would not change GCT's context as both a historic and active train station.

As described above, the LIRR passenger area proposed for Option 1 and new *concourse* proposed for Option 2 would require changes along the north wall of the Dining Concourse level at the entrances to tracks 114 and 117, to provide access from the Dining Concourse level to these areas. It is expected that some or all of these entrances would need to be modified, as these entrances would no longer be providing access to the train tracks and platforms. Any significant decorative features, if located in areas of proposed construction, such as the sculpted foliate arched plaques above the entrances would be retained as part of the project design. Proposed plans would be submitted to SHPO for review and approval during the ongoing consultation process for this project alternative.

It is anticipated that the newly constructed facilities—the LIRR passenger area for Option 1 and concourse for Option 2—though proposed outside the existing public terminal areas in the area of tracks and platforms and Metro-North’s Madison Yard, would be visible from the northwestern portion of the Dining Concourse level in the vicinity of the proposed entrances to these areas. It is anticipated that the LIRR passenger area would include a waiting area with seating, while the concourse proposed for Option 2 would also include stores and would be located below the Dining Concourse level. While these elements would change the appearance of this portion of the terminal by essentially expanding the terminal’s public spaces, they would not be replacing any significant historic or architectural features, and would not alter GCT’s context as both a historic building a modern train terminal. In addition, since these areas would be added to the far northwest portion of the Dining Concourse level, behind the grand marble stairs that extend from the Main Concourse, they would be isolated from view from the Dining Concourse except when in close visual proximity.

MANHATTAN ALIGNMENT: OTHER HISTORIC RESOURCES

Potential Physical Impacts

As described in Chapter 2 (and detailed in Chapter 17), Option 1 would require that the Racquet & Tennis Club and Lever House be underpinned to allow the new tunnel to pass beneath the basements of these buildings. The buildings would be underpinned to support their foundations so that the tunnel could be constructed. The underpinning would be completed below the surface and proper care would be given to ensure that this underpinning would not result in any adverse impacts to the building fabric. While every effort would be made to ensure that the underpinning is successful, there is the potential, albeit low, that an accident or damage could occur. Again, the construction protection plan approved by SHPO would be implemented.

It is not anticipated that there would be any physical impacts resulting from the construction of the new LIRR pedestrian entrances, ventilation facilities, and substations for Options 1 and 2. None of the locations currently being considered for the proposed off-street pedestrian entrances for either project option are historic resources. One, however, is proposed in an existing storefront in a building adjacent to the Vanderbilt Concourse Building, a historic resource. The potential entrance at the store at 347 Madison Avenue would be located on East 45th Street at the corner of Madison Avenue. Therefore, although it would be located in a building adjacent to the Vanderbilt Concourse Building, no adverse physical impacts are anticipated, as the proposed entrance would be at a sufficient distance (85 feet) from this historic resource.

As described in Chapter 2, it is possible that the proposed pedestrian entrances could be constructed in different locations than those analyzed in this chapter. They would remain in the same general vicinity as those analyzed. If any entrance would be built within the APE of any historic resource (e.g., within 75 feet of that resource), it would be included in the construction protection plan to be approved by SHPO. If any entrance would be constructed within a historic resource, it would be included in the construction protection plan and its design would be reviewed and approved by SHPO.

With the exception of the proposed ventilation facility at 47 East 44th Street, most new ventilation facilities would be located below-grade, under existing streets and within the existing curb lines. Substations would also be underground. As described in Chapter 11, their design and construction would be undertaken so as to avoid any potential ground-borne vibration impacts to historic resources, including the Tennis & Racquet Club and Lever House located on blocks

between proposed ventilation facilities. The ventilation facility at 47 East 44th Street would be contiguous to the Yale Club. The current 5-story commercial building on the site, which is not distinguished architecturally or historically, would be razed for erection of the new facility. Since the Yale Club has been determined to be eligible for the Registers, it would be included in the construction protection plan.

As described in Chapter 2, Option 2 would also require ventilation elements above the trainshed. These could be created in existing buildings in the area, in pylon-type structures on the sidewalk, or beneath the streets and sidewalks. If any ventilation intake and exhaust features would be placed within a historic resource, no significant architectural features would be removed nor would the element be prominently visible. Any such affected historic resource would be included in the construction protection plan to be approved by SHPO.

Potential Contextual Impacts

Once the project is operational, there would be no impacts to historic resources from the below-grade ventilation facilities or substations, since these features would not be visible. Proposed sidewalk gratings and street-level exit maintenance hatches for ventilation facilities and substations, even if located near a historic resource, would be minimally visible and, therefore, would not adversely affect the visual character of the structure nor its context within an urban environment. This is also true for pylon-type ventilation structures proposed under Option 2. For the proposed above-ground ventilation facility contiguous with the Yale Club, as project plans proceed, the project would consult with SHPO and adjacent property owners in developing the building's design. It would therefore not be expected to negatively affect or alter the historic character of the adjacent Yale Club. Although the off-street pedestrian entrances have not been fully designed, the construction of an entrance in the place of an existing storefront of a non-historic building would not have any adverse visual impacts on the adjacent Vanderbilt Concourse Building. For any project elements located within the APEs (i.e., within 75 feet) of any historic resources, design specifications would be developed in consultation with SHPO, so that no adverse contextual effects would result.

QUEENS ALIGNMENT

Potential Physical Impacts

Construction of the Preferred Alternative project elements—loop track reconstruction, new Yard A access points and improvements, and new Yard A facilities, including a train washer and service and inspection shop—is not anticipated to have any physical impacts on historic resources, as there are no historic resources located within the APEs. The buildings to be demolished in Queens have been determined not to be eligible for the Registers. However, based on initial plans, it appears that two historic resources are located within the APEs of the proposed construction activities at Harold Interlocking and the new Sunnyside station (see Figure 7-14). Harold Interlocking tracks may run within 50 feet of the Office (formerly Signal Cabin F), and the proposed northern platform of the new Sunnyside station may be built less than 50 feet from Switch Tower Q (formerly Signal Cabin Q, Yardmaster's Office). Since SHPO has determined those structures to be eligible for the Registers, they would be included in the construction protection plan. Proposed Harold Interlocking construction on the north side of Barnett Avenue between 43rd and 48th Streets would be within 75 feet of the Sunnyside Gardens Historic District. Since the historic district is located on the opposite side of Barnett Avenue, a 60-

to 80-foot-wide street, no construction-period impacts are anticipated either from ground-borne vibrations or damage from construction machinery.

Potential Contextual Impacts

It is anticipated that when the project is completed, there would be no adverse impacts to the two historic resources, the Office and Switch Tower Q located in Sunnyside Yard within the project APEs. Proposed visible changes within the existing active rail yard, including construction of new tracks and the Sunnyside station, would not be expected to alter the structures' context within the yard, nor significantly alter the visual character of the yard surrounding the structures.

The proposed changes to the railroad embankment alongside Barnett Avenue between 43rd and 48th Streets as a result of the proposed Harold Interlocking work would not result in significant adverse effects on the context of the Sunnyside Gardens Historic District. As described above, Sunnyside Gardens is architecturally and historically significant as the nation's first planned community that successfully realized the English garden city concept. Dating from the 1920's and early 1930's, it was built over a decade after the completion of the LIRR tracks and the rail yards at Sunnyside. Therefore, Sunnyside Gardens and the LIRR tracks have historically co-existed. Prior to the construction of the garages and commercial buildings during the late 1950's and 1960's, which are not part of, nor do they relate historically to, the district, there were no structures between the LIRR embankment and Barnett Avenue to act as a buffer. Today, however, those structures are present and do form an effective buffer between the rail right-of-way and the historic district. Overall, the new work would not result in visual changes or adverse impacts to the historic district.

HIGHBRIDGE YARD, THE BRONX

Potential Physical Impacts

No impacts would occur to either High Bridge or Macombs Dam Bridge during construction at Highbridge Yard. Both bridges are some distance from the yard and proposed construction area.

Potential Contextual Impacts

Proposed new lighting in Highbridge Yard has the potential to affect views of High Bridge at night. To avoid any impacts on views of this bridge, which is itself lit at night, the new lighting would be designed with shielding so that it illuminates downward. This would avoid potential impacts on nighttime views of the bridge. Macombs Dam Bridge, located at a greater distance south of the yard, is too far away to be affected by any lighting changes.

YAPHANK WEST SITE, LONG ISLAND

Potential Physical Impacts

If a new railroad storage yard were created at Yaphank West, no impacts would occur to the Suffolk County Almshouse Barn during construction. This historic resource, as described above, is located approximately ¼ mile away from the proposed construction area.

Potential Contextual Impacts

It is possible that *a new yard at this site* would be visible in the distance from the Suffolk County Almshouse Barn across agricultural fields and the Long Island Rail Road tracks. However, it is not anticipated that the construction of a new rail yard, which would be located at a

substantial distance from the nominated historic boundaries of the Almshouse Barn site and on the opposite side of existing railroad tracks, would be prominently visible and, therefore, would not constitute a significant visual impact. In addition, as described above, much of the original context of the historic resource, including the original Almshouse complex structures, has been lost. Therefore, construction of a *new* rail yard would also not be anticipated to adversely impact any meaningful historic context relating to the Suffolk County Almshouse Barn.

PILGRIM HOSPITAL SITE, LONG ISLAND

Potential Physical Impacts

Construction of a *new* rail yard on the site of the Pilgrim Psychiatric Center could require the demolition of several S/NR-eligible structures. This demolition would constitute a significant adverse effect on historic resources. As noted in the introduction to this chapter, Section 4(f) of the Department of Transportation Act of 1966 prohibits actions by the Secretary of Transportation that have significant adverse effects on historic properties unless a determination is made that there is no feasible and prudent alternative. Consequently, if the Pilgrim Hospital site is selected and if development of a rail yard for storage of LIRR trains requires demolition of the historic structures, such a determination must be made. Alternatives to avoid adverse effects or mitigation measures would be developed in consultation with SHPO.

Potential Contextual Impacts

It is anticipated that demolition of the southern portion of the Pilgrim Psychiatric Center, if required, would constitute a significant adverse effect on this historic resource. The demolition of the buildings and replacement with an unrelated rail yard in immediate proximity to the Pilgrim Psychiatric Center site would significantly alter the historic resource's original context and setting, as well as introducing visual and audible railroad related uses that are out of character with the historic resource. Alternatives to avoid adverse effects or mitigation measures would be developed in consultation with SHPO.

F. MITIGATION MEASURES

As engineering *for the East Side Access Project* proceeds, ongoing consultation will be undertaken with the State Historic Preservation Office at the New York State Office of Parks, Recreation and Historic Preservation and with the federal Advisory Council on Historic Preservation. This ongoing consultation is mandated by Section 106 of the National Historic Preservation Act of 1966. The mitigation measures developed in consultation with SHPO are included in a Programmatic Agreement *executed by SHPO, FTA, and MTA, and included in Appendix B of this FEIS.*

As described earlier, proposed project construction would involve physical alterations to three known historic resources. Construction activities *for Option 2 in Manhattan* would be located within the public areas of Grand Central Terminal itself and the terminal's track area. *The design* would be developed in consultation with SHPO to ensure that no adverse physical effects would occur to *Grand Central Terminal* or any other historic resources, and a construction protection plan, to be developed in consultation with SHPO and approved by SHPO prior to the start of construction, would be implemented. To avoid potential contextual effects for work within Grand Central Terminal, any significant architectural or decorative features, if located in areas of proposed construction, would be retained as part of the project design and plans submitted to SHPO for review and approval.

To avoid significant adverse impacts to two historic resources—the Office (formerly Signal Cabin F) and Switch Tower Q (formerly Signal Cabin Q, Yardmaster’s Office)—located in Sunnyside Yard within the APE, and possibly in proximity to, the proposed Harold Interlocking work, and new Sunnyside station, respectively, these structures would be included in the construction protection plan to be approved by SHPO prior to the start of construction.

In addition, the proposed construction of an above-ground ventilation facility adjacent to the Yale Club in Manhattan could affect this historic resource. To avoid potential physical effects to this structure and any other historic resources near project elements, these resources would be included in the design specifications and construction protection plan to be approved by SHPO prior to the start of construction. If the Pilgrim Hospital Site is selected for one of the Long Island storage yards, both adverse physical and contextual effects may result from the demolition of the S/NR-eligible buildings. Therefore, alternatives to avoid adverse effects or mitigation measures would be developed in consultation with SHPO.

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