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MEMORANDUM

TO:	Andrew Brooks, Environmental Program Manager Federal Aviation Administration, Eastern Regional Office
FROM:	Richard Grubb & Associates, Inc.
DATE:	July 7, 2020
RE:	LaGuardia Airport Access Improvement Project Section 106 Revised APE and Combined Phase IA and Historic Architecture Addendum, Long Island Rail Road Track Work New York State Historic Preservation Office Project Review No. 18PR05235

Introduction

This document presents the results of additional investigations carried out in response to recent modifications to the Port Authority of New York and New Jersey's (Port Authority) LaGuardia Airport (LGA) Access Improvement Project located in the Borough of Queens, City of New York, New York (Project; Proposed Action). The Port Authority proposes to improve access to the Airport through the construction and operation of a new automated people mover (APM) AirTrain system to provide a time-certain transportation option for air passenger and employee access to LGA. The modifications to the Project are confined to the Long Island Rail Road (LIRR) right-of-way and extend beyond the limits of the Area of Potential Effects (APE) studied and reported on to date (Richard Grubb & Associates, Inc. 2019a, 2019b, 2019c, 2019d, 2019e, 2020a, 2020b).

Because the project includes federal involvement, the undertaking is subject to Section 106 of the National Historic Preservation Act (NHPA), as amended and re-codified (54 United States Code [U.S.C.] § 306108), and its implementing regulations at 36 Code of Federal Regulations [CFR] § 800. The US Department of Transportation's Federal Aviation Administration (FAA), as lead federal agency for the undertaking, is responsible for ensuring compliance with Section 106 and is utilizing the concurrent NEPA/EIS process to meet its Section 106 obligations, as outlined in 36 CFR § 800.8 (c).

At FAA's request, Richard Grubb & Associates, Inc. (RGA), working on behalf of Ricondo & Associates, Inc. (Ricondo), the prime environmental consultant for the FAA's EIS document, completed the following analysis for archaeology and historic architecture. Research included a review of contextual background information compiled as part of prior cultural resources studies for the Project (Richard Grubb & Associates, Inc. 2019a, 2019b, 2019c, 2019d, 2019e, 2020a, 2020b). Additional research utilized available on-line databases, historic maps, atlases, aerial photographs, newspapers, railroad histories, and other published and electronic documents. Principal Senior Archaeologist Mary Lynne Rainey, M.A and Principal Senior Architectural Historian Philip A. Hayden,

ADDITIONAL OFFICES Pennsylvania New York North Carolina Maryland

M.A. prepared this document. Both Ms. Rainey and Mr. Hayden exceed the Secretary of the Interior's professional qualifications standards (36 CFR § 61) for their respective disciplines (Attachment A). Geographic Information Systems (GIS) Analyst David Strohmeier provided essential support and prepared the survey mapping. Patricia McEachen prepared report figures. Related project records, including photographic documentation, are on file at RGA's offices in Cranbury, New Jersey.

Project Description of New Work

The Port Authority's Proposed Action and its various enabling projects and connected actions are described in detail in previous technical studies prepared in support of Section 106 and NEPA compliance (Richard Grubb & Associates, Inc. 2019a, 2019b, 2019c, 2019d, 2019e, 2020a, 2020b). One of these connected actions involves alterations to the Mets-Willets Point Station of the LIRR. Improvements include service changes from an events-only station to a full service facility; initiation of LIRR shuttle service from the Mets-Willets Point LIRR Station to Grand Central and Penn Stations in Manhattan; increased platform space; track bypass capabilities; track elevation for resiliency; signal modifications; and buildings to accommodate support services and ticketing. This memorandum addresses changes in the work limits within the LIRR right-of-way required as part of the connected action.

To accomplish the required improvements at the Mets-Willets Point LIRR Station, the railroad must make corresponding changes along the right-of-way to the east and west of the Project location, including minor track re-alignment, installation of a new universal crossover and interlocking, signal component replacements, and relocation of LIRR utilities (communications, signal, and power lines). New ductwork would be located between three and four feet below the top of finished grade. There would be no increase in the number of tracks along these sections of the right-of-way, no impacts would occur to existing bridges and retaining walls, and all work would be limited to existing railroad property.

Revised Area of Potential Effects

Under Section 106, the APE is defined in 36 CFR § 800.16(d) as follows: "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." The term "historic property" is defined as a cultural resource (resource or property) listed in or eligible for listing in the National Register of Historic Places (NRHP).

The revised APE for archaeological resources (APE-Archaeology) includes areas that would be directly affected by ground disturbances resulting from LIRR changes within the right-of-way. The APE-Archaeology corresponds with the Limits of Disturbance (LOD) for this work and extends approximately 2,575 feet east of the original APE-Archaeology for the Project across Flushing Creek to College Point Boulevard, and approximately 3,615 feet west to 108th Street. The LIRR right-of-way varies in width between approximately 60 feet and 140 feet. The depth of impacts associated with the additional track work and signalization improvements is anticipated to be limited to the depth of the existing railroad bed or berm.

The revised APE for architectural resources (APE-Architecture) is based on the work activities associated with the Proposed Action and their potential to affect cultural resources, including potential direct and indirect effects caused by the construction and operation of the Project. Direct effects may include physical damage or destruction of a resource or its setting. Indirect effects may result from proximate construction activities or include the introduction of visual, audible, or atmospheric elements that alter the characteristics or use of a historic property that qualifies it for include those properties that may be impacted by visual changes, patterns of use, or may experience a change in historic character associated with the construction of the Project.

With respect to the newly identified railroad work, the proposed LOD extends approximately 2,575 feet east and approximately 3,615 feet west of the previously established limits of the APE-Architecture. As described, the proposed work is limited to the LIRR right-of-way; involves limited adjustments of trackwork, signaling, and utilities; and is fully consistent with normal maintenance and repair activities associated with an active railroad corridor. The potential for visual, atmospheric, or audible effects beyond the LOD is therefore limited. Accordingly, the APE-Architecture has been delineated to match the LOD, which is the same as the APE-Archaeology. A map of a portion of the Project location depicting the revised APEs for both Archaeology and Architecture appears in Figure 1.

Historic Context

Detailed historic contexts associated with the Project have been presented in previous technical studies (Richard Grubb & Associates, Inc. 2019a, 2019b, 2019c, 2019d, 2019e, 2020a, 2020b). For the purposes of this addendum, the following discussion focuses on the LIRR and its right-of-way located within the APEs for archaeology and historic architecture.

The Flushing Rail Road Company (FRR) was incorporated on February 24, 1852 to build a line between the East River near Hunter's Point and Main Street in the village of Flushing. Construction commenced in May 1853 by the contracting firm of Morris and Allen, and the railroad opened on June 26, 1854 (Coverdale and Colpitts 1945: 62-63). The company was sold in foreclosure in April 1858 and reincorporated as the New York & Flushing Railroad Company (NY&FRR). The NY&FRR created a subsidiary known as the North Shore Railroad on July 1, 1863 for the purposes of extending its line from the existing terminus at Flushing to Hemstead Harbor (Seyfried 1963: 21). Construction began in March 1864 and reached only as far as Great Neck when it opened for service on October 27, 1866 under an operating agreement with the NY&FRR (Coverdale & Colpitts 1945: 66). The NY&FRR merged with other companies to form the Flushing & North Side Railroad (F&NSRR) (Panamerican Consultants Inc. 2003: 3-19). In 1874, the F&NSRR consolidated with other lines to form the Flushing, North Shore & Central Railroad (FNS&CRR). Two years later in 1876, the FNS&CRR and other competing rail lines on Long Island joined the LIRR system.

The railroad was still single track in 1891, but by 1903 increasing traffic and operational demands led the company to expand the line to two tracks (Wolverton 1891; Hyde 1903; Sanborn Map Company 1914: Vol. 14, Sh 70). At the same time, growing concerns over accidents at grade crossings were on the rise, brought about by development pressures and the increasing popularity of the personal automobile. The first quarter of the twentieth century included numerous calls for large-scale grade

separation programs throughout the LIRR system, which counted over 1,000 crossings within its territory. Between 1913 and 1938 the LIRR would eventually expend \$22 million on grade separation projects (Coverdale & Colpitts 1945: 38).

As early as 1909, the New York State Legislature had appropriated funds to help eliminate grade crossings on the LIRR through a densely settled section of Flushing. The project extended from the east side of Flushing Creek, across Lawrence Avenue (present-day College Point Boulevard), over Main Street and Broadway in Flushing, and out to Auburndale. With additional support from the city and the railroad, the total cost of the project was estimated at between \$900,000 and \$1.1 million (*New York Times* 1910: 7 October: 6). The undertaking would also coincide with the planned electrification of the line using a third-rail system with 600 volts direct current (Coverdale & Colpitts 1945: 39).

Options available for eliminating the crossings included either depressing or elevating the streets or the railroad. Depressing the infrastructure was expensive and disruptive to existing utilities, and it posed significant drainage problems. Elevating the streets impacted adjacent private property. Elevating the railroad was the simplest approach because it involved chiefly the railroad's existing right-of-way and it connected more easily to other elevated segments planned elsewhere on the system. An elevated structure could consist of a steel viaduct or a solid embankment. The latter was the least expensive and simplest to build, and it was the preferred approach by the railroad (*New York Times* 1910: 7 October: 6; *Brooklyn Daily Eagle* 1928: 20 March: 3). In separating the grades, the dangers of electrocution from contact with the third rail were also lessened.

At Lawrence Avenue, the proximity of Flushing Creek and a high water table made it impractical to depress the tracks through this section of the line. Accordingly, the railroad engineers developed plans to elevate the tracks on an earthen berm with concrete retaining walls and carry the railroad over Lawrence Avenue and Main Street (*New York Times* 1910: 7 October: 6). Other sections of the grade elimination project included depressing the tracks through deep cuts. By the second decade of the twentieth century, such structures were commonplace within railroad properties around the nation and especially on the Pennsylvania Railroad (PRR), the self-described "Standard Railroad of the World" and the controlling corporate entity of the LIRR. The PRR's standard Maintenance of Way Plans for concrete and stone retaining walls (Plan 59845, Revised 1912) provided the model for such structures over the railroad's system (Smith 1967: 3). The Delaware, Lackawanna, and Western Railroad's extensive use of concrete in its major grade separation campaigns in New Jersey at the turn of the century is perhaps the most well-known example of the early use of concrete by railroads for grade elimination projects (*Engineering Record* 1904a, 1904b, 1904c; Lynn Drobbin and Associates 1994: 620; Taber and Taber 1980: 36, 69-100).

Work on the Flushing Grade Elimination Project was in progress by January 1912, when Ralph Peters, President of the LIRR, reported to the newspapers:

We expect the North Shore Division to be double tracked to Great Neck and the electrification to be completed to Port Washington before the end of the year. The concrete abutments are now being put in between Main and Lawrence streets for the elimination of grade crossings through the village of Flushing (*Brooklyn Daily Eagle* 1912: 3 January: 7).

Construction of the corresponding concrete retaining walls continued into March 2012 (*Brooklyn Daily Eagle* 1912: 10 March: 4). By May, another newspaper account described the progress in more detail:

From Flushing Creek, where the work starts, a retaining wall of concrete has been built to Main Street, the principal highway in Flushing, and the fill for the elevation of the tracks is well underway. Over Lawrence Street [sic], which lies between Main Street and the creek, a bridge of steel has been built which will accommodate two tracks at present but which, when completed, will be able to carry four (*New York Times* 1912: 17 May: 17).

Excavations to depress other portions of the grade separation through Flushing were used to supply the fill for the elevated sections (*New York Times* 1912: 17 May: 17). The whole construction between Flushing Creek and Main Street was completed by December 1912, and in October 1913, the company completed the corresponding electrification (*The Chat* 1912: 28 December: 4).

In 1923, the New York State Transit Commission (successor to the Public Utility Commission) identified the need for another elimination of four dangerous crossings on the west side of Flushing Creek in Corona at present-day National Street, 102nd Street, 104th Street, and 108th Street. The estimated cost for this project was \$1 million (State of New York Transit Commission 1924: 20). The commission cited both the volume of traffic and number of accidents as justification. As reported in one newspaper:

Over the four Corona crossings there is substantial vehicular and a considerable amount of pedestrian traffic. A count taken March 5, 1926, showed a train movement in both directions of 112 passenger trains, nine freight trains and two light engines between the hours of 6:30 a.m. and 12 midnight. There have been twelve accidents at these crossings resulting in the death of five persons and the injury of five (*Daily News* 1928: 13 April: Brooklyn Section, 3).

On April 12, 1928, the Transit Commission formally ordered the LIRR to eliminate a total of 31 grade crossings on its system, including the group of four identified in Corona. At the time, it was the single largest number of crossings ordered abolished by the Commission at one time (Figure 2) (*Daily News* 1928: 13 April, Brooklyn Section, 3). The so-called Corona Grade Elimination Project, comprising the four crossings, was not without opposition in the local community. More than 100 property owners and residents of Corona filled the chambers of the Transit Commission on March 20, 1928 to voice their opposition. The prospect of a twenty-foot-tall solid concrete embankment adjacent to their homes threatened to physically divide the community and raised complaints over the loss of light and air. Commission members pointed out that all buildings were located between 25 and 35 feet away from the proposed structure, providing ample light and air, improved traffic safety, and relief from chronic street congestion. It added that a steel viaduct created even greater noise and vibration than a solid embankment. The proposed grade separation was approved as planned, and subsequent efforts by residents to sue over the new embankment appear to have waned (*Brooklyn Daily Eagle* 1928: 20 March: 3; *Brooklyn Daily Times* 1930: 7 August: 12).

The final design to complete the Corona Grade Elimination Project included a new elevated embankment utilizing a standard combination of loose earth and concrete retaining walls with earthen fill and a combination of steel deck-girder and through-girder bridges over the cross streets.

Construction began in March 1929 and was well underway by July 1930, when a newspaper published a view of the project looking southeast at the intersection of National Street (Figure 3) (*Daily News* 1930: 6 July: B5). The image depicted tall retaining walls of reinforced concrete as high as the second story of nearby buildings. At the street crossings, the concrete was scored with deep horizontal grooves, creating a decorative finish on what would become the bridge abutments. Elsewhere, the retaining walls were left unfinished, revealing the frozen impressions of the wooden forms used to create them. A crane busily dropped tons of material into the void between the walls, building up the embankment to track level. The source of the fill material for this project is not known; however, the LIRR's practice of using soils taken from elsewhere on the line suggests the fill was obtained on Long Island. A single large borrow pit in Cold Spring, along the Port Jefferson Branch was one such source and provided the materials used for the railroad's extensive grade separation program at Jamaica, completed in 1913 (Ziel and Foster 1965: 124-125). Just as likely, deposits of porous coal ash gathered from across the LIRR/PRR system were often used for fill and may have provided material.

On October 13, 1930, westbound trains began operating over the Corona embankment. Eastbound traffic, which still utilized the old street-level tracks, was scheduled to switch to the elevated structure within the following two weeks (*Times Union* 1930: 14 October: 10). When completed, the project extinguished existing crossings at National Avenue, 102nd Street, 104th Street, and 108th Street. In addition, an existing bridge at Junction Avenue was elevated and rebuilt, and a new separated crossing was opened at 111th Street. Lattice towers mounted on top of the embankment carried the 11,000-volt transmission lines used to power the third-rail system. Along with a new station at Corona, the cost of the entire project had risen to \$1,450,000 (Gutterman 1931: 128). A Sanborn fire insurance map from 1930 documents the new retaining walls and bridges in situ (Sanborn Map Company 1930: Vol 19, Sh 42).

The right-of-way was altered once again in 1936 with the construction of the Grand Central Parkway (GCP), a major four-lane highway. The portion of the road built across the LIRR right-of-way was part of a 14.6-mile long northern extension of the highway from the Robert F. Kennedy Bridge (formerly known as the Triborough Bridge) to the Northern State Parkway in Queens. This required construction of a two-span, elliptically arched, steel though girder bridge with solid deck on concrete abutments and piers faced with rusticated coursed ashlar. During the 1950s, the GCP was reconstructed with expanded lanes on the western side of the original roadway. This necessitated the expansion of the LIRR bridge from two spans to three (National Environmental Title Research 1954; 1966). Except for alterations made in the vicinity of the Mets-Willets Point LIRR Station for the 1939 and 1964 World's Fairs at Flushing Meadows-Corona Park, the railroad right-of-way has remained largely unchanged.

Previous Investigations

There are no previous investigations for either above-ground or below-ground cultural resources within the expanded APE. The GCP (USN 08101.012153), which includes the bridge carrying the LIRR across the highway, was previously determined not eligible for listing in the NRHP on August 23, 2017, due to an overall loss of integrity. One additional railroad-related resource, a single-span deck plate girder bridge over Shea Road, was previously identified (RGA97) and recommended not eligible for listing in the NRHP in the original Reconnaissance survey for the Project (Richard Grubb

& Associates, Inc. 2019a: 6-14, Appendix D, Table 4). The railroad corridor as a whole has not been surveyed as a potential linear historic district.

Identification of Historic Properties

Archaeology

In previously completed Phase IA Archaeological Assessment surveys for the Project direct APE (Richard Grubb & Associates, Inc. 2019b), the proposed MTA/Tully site APE (Richard Grubb & Associates, Inc. 2019e), and the proposed drainage facilities APE (Richard Grubb & Associates, Inc. 2020b), environmental and cultural contexts were considered in evaluating the potential for archaeological resources to be present. Research regarding known archaeological sites documented in the APE-Archaeology concluded that prior to historic development, this general area contained a wide range of Native American sites on upland settings adjacent to Flushing Bay and the expansive marshy meadows along Flushing Creek. Most of the known prehistoric sites were documented in the early twentieth century, and include shell middens, camp sites, isolated finds, and sites with no information recorded. It was further concluded that the APE-Archaeology geographically corresponds with many areas that were filled marshland during the late nineteenth and twentieth century, as local communities and public infrastructure expanded. The prior surveys assessed the APE-Archaeology with low prehistoric and historic archaeological sensitivity due to the environmental setting, documentation of historic filling, and degree of disturbance resulting from numerous major construction projects, such as the LaGuardia Airport, Grand Central Parkway, Citi Field, and the dense network and history of transportation and utility infrastructure in this part of Queens.

The LIRR right-of-way, which comprises the newly revised APE-Archaeology, was established in the mid-nineteenth century and was thereafter subject to upgrades and major changes in the early twentieth century to eliminate dangerous grade crossings (see Historic Context). The APE-Archaeology includes areas to the east that are predominantly railroad bed overlying filled marshland adjacent to and inside tidal Flushing Creek. The LIRR culvert over Flushing Creek will remain in place, and work on the east side of the Creek to College Point Boulevard is within an elevated berm with concrete retaining walls. Upgrades extending west of Mets-Willet Point LIRR Station to 108th Street are also within an elevated berm that comprises the right-of-way. The depth of impacts is anticipated to be within three to four feet below grade, within the railroad berms. The newly revised APE-Archaeology is assessed with low archaeological sensitivity due to the presence of berms and/or retaining walls that support the elevated tracks, prior disturbance associated with railroad construction and improvements, and/or historic filling. The track work and signalization upgrades within the APE-Archaeology will be confined to the right-of-way and are unlikely to affect intact archaeological resources.

Historic Architecture

The new portion of the Project APE-Architecture contains five resources over 50 years of age, listed in Table 1. The location of each resource in relation to the APE-Architecture, the Project location, and nearby historic properties appears in Figure 1.

No.	BIN #	Historic	Date	Description	Current
		Resource			NRHP Status
		Name			
1	7703560	LIRR Bridge over	1930	Skewed three-span steel through-	Unevaluated
		108th Street		girder with solid deck on iron	
				piers and scored concrete	
				abutments	
2	7703570	LIRR Bridge over	1929	Single-span steel through girder	Unevaluated
		111th Street		with solid deck on scored	
				concrete abutments	
3	7076770	LIRR Bridge over	1937;	Three-span, elliptically arched,	Unevaluated ¹
		Grand Central	expanded c.	steel though girder with solid deck	
		Parkway	1955	on concrete abutments and piers	
				faced with rusticated coursed	
				ashlar.	
4	N/A	LIRR Corona	1930	Earthen filled poured reinforced	Unevaluated
		Grade		concrete retaining walls with	
		Elimination		integral bridge abutments.	
		Retaining Walls			
5	N/A	LIRR Flushing	1912	Earthen filled poured reinforced	Unevaluated
		Grade		concrete retaining walls with	
		Elimination		integral bridge abutments.	
		Retaining Walls			

Table 1: Identified historic resources inside the revised APE-Architecture

¹ The previously recorded Grand Central Parkway (USN 08101.012153), including the LIRR Bridge over Grand Central Parkway, was determined not eligible for listing in the NRHP on August 13, 2017.

BIN = Bridge Identification Number

NRHP = National Register of Historic Places

Based on the project description for the proposed activities within the expanded APE-Architecture, further analysis to evaluate these resources for eligibility to the NRHP or to assess Project effects is not warranted. The proposed activities are limited to adjustments of trackwork, signaling, and utilities and are fully consistent with normal maintenance and repair activities associated with an active railroad corridor. The undertaking will have no physical impact to the identified bridges and retaining walls, and the potential for visual, atmospheric, or audible effects are negligible. The activity does not have the potential to cause effects on historic properties, if present. Therefore, no further investigation is required.

This conclusion is also consistent with the provisions of the Advisory Council on Historic Preservation's (ACHP's) Program Comment to Exempt Consideration of Effects to Rail Properties Within Rail Rights-of-Way published on August 17, 2018 and amended June 10, 2019 (ACHP 2019). Under the Activities-based Approach, undertakings to maintain, improve, or upgrade rail properties located in rail rights-of-way that are limited to the activities specified in Appendix A of the Program Comment are exempt from the requirements of Section 106 because their effects on historic rail properties are foreseeable and likely to be minimal or not adverse. The proposed actions relating to track and trackbed (Exempted Activity A. 1), signals, communications, and power generation

(Exempted Activity D. 1), and utilities (Exempted Activity K. 1) would all qualify as exempted activities under the Program Comment.

Finally, the Project as a whole has already received an adverse effect determination, which will be minimized and mitigated through a Memorandum of Agreement currently under development.

Conclusions and Recommendations

RGA recommends adjustments to the APE-Archaeology and APE-Architecture as discussed herein to take into account changes in the work limits within the LIRR right-of-way required as part of improvements to the Mets-Willets Point LIRR Station, a connected action to the Project.

The APE-Archaeology for these improvements is assessed with low archaeological sensitivity due to the presence of berms and/or retaining walls that support the elevated tracks, prior disturbance associated with railroad construction and improvements, and/or historic filling. The track work and signalization upgrades within the APE-Archaeology will be confined to the right-of-way and are unlikely to affect intact archaeological resources. No further archaeological investigation is recommended.

A corresponding review of historic architecture located five resources over 50 years of age inside the expanded APE-Architecture. The proposed activities within the LIRR corridor do not have the potential to cause effects on historic properties, if present. Further analysis to evaluate these resources for eligibility to the NRHP or to assess Project effects is not warranted.

If the FAA concurs with RGA's recommendations, the FAA should notify the SHPO of the revised APE and its identification efforts; explain the nature and extent of potential effects on historic properties, if present; and present a finding that the newly identified work has no potential to cause effects to historic properties. The FAA should share its findings and the results of this technical memorandum with the SHPO and consulting parties for their review and comment. Any comments received should be immediately shared with the SHPO.

Cited figures and a list of referenced appear on the following pages. Attachments are located at the end of the document. For questions regarding archaeology, please feel free to contact Mary Lynne Rainey, Principal Senior Archaeologist at <u>mlrainey@rgaincorporated.com</u> or at 609-655-0692. For questions about historic architecture, please reach out to Philip A. Hayden, Principal Senior Archaeologist at <u>mlrainey@rgaincorporated.com</u> or by telephone at 443-682-0725.

RICHARD GRUBB & ASSOCIATES



Figure 1: Aerial photograph showing a detail of the Project location with the revised LOD/APE-Archaeology, revised APE-Architecture, Project components, previously identified historic properties, and newly identified unevaluated resources (World Imagery, ESRI 2019).





Figure 2: 1928 Daily News newspaper map insert depicting the location of the four Corona crossings slated for elimination by the State of New York Transit Commission. The project was planned and carried out as a single undertaking (*Daily News* 1928: 13 April: Brooklyn Section, 3).



Figure 3: 1930 Daily News newspaper photograph depicting the Corona Grade Elimination Project under construction at the intersection of present-day National Street, looking southeast. Note the crane dumping fill into the concrete retaining wall structure (*Daily News* 1930: 6 July: B5).

References

Advisory Council on Historic Preservation

2019 Program Comment to Exempt Consideration of Effects to Rail Properties Within Rail Rightsof-way. Issued August 17, 2018 (Amended June 10, 2019). 84 Federal Register No. 125, pp. 31075-31082. Advisory Council on Historic Preservation, Washington, D.C.

Brooklyn Daily Eagle, The

- 1912 "Year of Development is Railroad Co.'s Plan." 3 January 1912. Brooklyn, New York: 7.
- 1912 "L.I.R.R. 1912 Plans." 10 March 1912. Brooklyn, New York: 4.
- 1928 "Corona Residents Protest Elevation of L.I.R.R. Crossing." 20 March 1928. Brooklyn, New York: 3.

Brooklyn Daily Times, The

1930 "Plan Grade Crossing Fight." 7 August 1930. Brooklyn, New York: 12.

Chat, The

1912 "L.I.R.R. Development is Being Rapidly Finished." 28 December 1912. Brooklyn, New York: 1, 4.

Coverdale & Colpitts

1945 The Pennsylvania Railroad Company: Corporate, Financial, and Construction History of Lines Owned, Operated, and Controlled to December 31, 1945. Volume 4. Coverdale & Colpitts, Consulting Engineers, New York, New York.

Daily News, The

- 1928 "Board Dooms 31 Grade Crossings." 13 April 1928. New York, New York. Brooklyn, Section:3.
- 1930 "Crossing Perils of Corona to be Abated by December." 6 July 1930. New York, New York: B5.

Environmental Systems Research Institute (ESRI)

2019a World Street Map, Geographic Information System data. http://server.arcgisonline.com/ArcGIS/rest/services/World Street Map/MapServer June 2019.

Engineering Record, The

- 1904a "Improvements on the Morris & Essex Division of the Lackawanna R.R. I." *The Engineering Record*, November 12, 1904 (50:20): 562-565.
- 1904b "Improvements on the Morris & Essex Division of the Lackawanna R.R. II." *The Engineering Record*, November 19, 1904 (50:21): 592-596.
- 1904c "Improvements on the Morris & Essex Division of the Lackawanna R.R. III." *The Engineering Record*, November 26, 1904 (50:22): 618-621.

Gutterman, Irving G.

1931 "Reduce Long Island Crossings: Large Number of Separations Completed during 1930 and More are Being Undertaken This Year." New York Times, 5 April 1931. New York, New York: 128.

Hyde, E. Belcher

1903 Atlas of the Borough of Queens, City of New York. E. Belcher Hyde, Brooklyn, New York.

Lynn Drobbin and Associates

1994 Ampere Railroad Station. Historic American Buildings Survey (HABS No. NJ-1212). On file, New Jersey Historic Preservation Office, Trenton, New Jersey.

New York Times, The

- 1910 "Flushing Opposes Train Raising Plan." 7 October 1910. New York, New York: 6.
- 1912 "North Shore Line Electrified Soon." 17 May 1912: 17.

National Environmental Title Research

- 1954 Historic Aerial Photographs, Corona, New York Vicinity. Electronic Document, historicaerials.com, accessed July 4, 2020.
- 1966 Historic Aerial Photographs, Corona, New York Vicinity. Electronic Document, historicaerials.com, accessed July 4, 2020.

Panamerican Consultants, Inc.

2003 Final Report, Cultural Resources Baseline Study, Flushing Bay Ecosystem Restoration Project, Queens County, New York. On file, New York State Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

Richard Grubb & Associates, Inc.

2019a Historic Architecture Reconnaissance Survey, LaGuardia Airport Access Improvement Project, Borough of Queens, City of New York, New York, July 25, 2019; Revised October 18, 2019. Prepared for Ricondo & Associates, Inc., on Behalf of the Federal Aviation Administration for Submittal to the New York State Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

Richard Grubb & Associates, Inc.

2019b Phase IA Archaeological Survey, LaGuardia Airport Access Improvement Project, Borough of Queens, City of New York, New York, July 25, 2019; Revised October 10, 2019. Submitted to Ricondo & Associates, Inc., Chicago, Illinois, Federal Aviation Administration, and New York State Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

Richard Grubb & Associates, Inc.

2019c Memorandum, LaGuardia Airport Access Improvement Project, Section 106 Additional Historic Architecture Analysis, December 20, 2019. To Andrew Brooks, Environmental Program Manager, Federal Aviation Administration, Eastern Regional Office. From Richard Grubb & Associates, Inc.

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2019d Addendum Historic Architecture Reconnaissance Survey, LaGuardia Airport Access Improvement Project, Borough of Queens, City of New York, New York, December 23, 2019. Submitted to Ricondo & Associates, Inc., Chicago, Illinois, Federal Aviation Administration, and New York State Office of Parks, Recreation, and Historic Preservation, Waterford, New York. Richard Grubb & Associates, Inc.

2019e Addendum Phase IA Archaeological Survey, LaGuardia Airport Access Improvement Project, Borough of Queens, City of New York, New York, December 23, 2019. Submitted to Ricondo & Associates, Inc., Chicago, Illinois, Federal Aviation Administration, and New York State Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

Richard Grubb & Associates, Inc.

2020a Memorandum, LaGuardia Airport Access Improvement Project, Section 106 Intensive Research, March 2, 2020. To Andrew Brooks, Environmental Program Manager, Federal Aviation Administration, Eastern Regional Office. From Richard Grubb & Associates, Inc.

Richard Grubb & Associates, Inc.

2020b Addendum Phase IA Archaeological Survey, Proposed Drainage Facilities, LaGuardia Airport Access Improvement Project, Borough of Queens, City of New York, New York, December 23, 2019. Submitted to Ricondo & Associates, Inc., Chicago, Illinois, Federal Aviation Administration, and New York State Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

Sanborn Map Company

- 1914 Insurance Maps of the Borough of Queens, City of New York. Volume 14. Sanborn Map Company, New York, New York.
- 1931 Insurance Maps of the Borough of Queens, City of New York. Volume 19. Sanborn Map Company, New York, New York.

Seyfried, Vincent F.

1963 The Long Island Railroad, A Comprehensive History, Part Two: The Flushing, North Shore & Central Railroad. Vincent F. Seyfried, Long Island, New York.

Smith, Hal

1967 Pennsylvania Railroad Standard Maintenance of Way Plans. The Builder's Compendium, Cossayuna, New York.

State of New York Transit Commission

1924 Third Annual Report for the Calendar Year 1923. J. B. Lyon Company, Albany, New York.

Taber, Thomas Townsend and Thomas Townsend Taber, III

1980 The Delaware, Lackawanna & Western Railroad in the Twentieth Century, 1899-1960. Originally Published 1977. Steamtown Volunteer Association, Scranton, Pennsylvania.

Times Union

1930 "All Corona Trains on 'L' Tracks Soon." 14 October 1930. Brooklyn, New York: 10.

Wolverton, Chester

1891 Atlas of Queens Co., Long Island, New York. Chester Wolverton, New York, New York.

Zeil, Ron and George H. Foster

1965 Steel Rails to the Sunrise: The Long Island Rail Road. Meredith Press, New York, New York.

ATTACHMENT A





MARY LYNNE RAINEY PRINCIPAL SENIOR ARCHAEOLOGIST (36 CFR 61)

Professional Experience Summary:

C U L T U R A L R E S O U R C E CONSULTANTS

YEARS OF EXPERIENCE: With this firm: 2010-Present With other firms: 28

EDUCATION: MA 2004 University of Connecticut: Anthropology

BA 1981 West Chester University, Pennsylvania: Anthropology

PROFESSIONAL

TRAINING: 2008 Portland, OR Addressing Cultural Resources in NEPA Analyses

2007 Atlanta, G. FERC Regulatory Overview and Guidance Seminar; &

FERC Environmental Compliance Seminar

2006 Washington, D.C. Advisory Council on Historic Preservation, Section 106 Essentials Course

PROFESSIONAL REGISTRATION: Register of Professional Archaeologists Mary Lynne Rainey has directed all phases of archaeological investigations (Reconnaissance, Phase I Intensive, Phase II Site Examination, Phase III Data Recovery) in the Northeast region, and has extensive knowledge of the prehistoric and historic archaeology of New England and the Mid-Atlantic states. Her experience in archaeological project management and large-scale feasibility for cultural resource compliance also spans the Great Lakes, Appalachian, Mid-Atlantic, and Gulf regions. She has worked on a wide range of Section 106 and NEPA projects in divergent market sectors under the regulatory authority of most federal agencies and many state historic preservation offices. She exceeds the qualifications set forth in the Secretary of Interior's Standards for an Archaeologist [36 CFR 61].

Representative Project Experience:

JFK Airport Lead-In Lights System, Borough of Queens, Queens County, New York, NY (Sponsor: Federal Aviation Administration). Project manager for a Phase I archaeological survey in connection with the FAA's proposed improvements to the JFK Airport Lead-In Lights (LDIN) System. Elements of the project included construction of a new equipment shelter and replacement of nearby light poles at the intersection of Lefferts Boulevard and North Conduit Avenue, in the Borough of Queens. The survey was completed in accordance with Section 106 of the National Historic Preservation Act. Background research and archaeological field investigations indicated that the APE had been heavily altered as a result of the construction of the Belt Parkway in the 1930s. No intact prehistoric or historic archaeological deposits were identified and no further archaeological survey was recommended.

MTA Metro-North Croton Falls Railroad Station Parking Expansion, Town of Somers, Westchester County, NY (Sponsor: MTA Metro-North). Project manager for a Phase I archaeological survey as part of the MTA Metro-North Croton Falls Railroad Station Parking Expansion project. Background research determined that the APE was sensitive for prehistoric archaeological resources and for potentially significant historic archaeological resources associated with the occupation of the site by the historic St. Joseph's School and Church. Archaeological field investigations resulted in no significant archaeological resources being identified. All work was completed in accordance with the New York State Environmental Quality Review Act (SEQR) and the New York State Historic Preservation Office (NYOPRHP) standards.

<u>Confidential Renewables Project – Transmission Landfall and Routing Feasibility</u>, Suffolk, Nassau, and Kings Counties, NY (Sponsor: Confidential Client). Served as Principal Investigator, Senior Archaeologist for analyses of feasibility for multiple offshore wind electric transmission landfall sites and routing in Long Island and Brooklyn, New York. The analyses consolidated regulatory issues identified through the New York State Energy Research and Development Authority (NYSERDA), and synthesized GIS environmental data and cultural resource background information to inform the selection of preferred landfall locations and terrestrial transmission routes. Key issues for critical path planning were identified for each landfall and route.

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PHILIP A. HAYDEN PRINCIPAL SENIOR ARCHITECTURAL HISTORIAN (36 CFR 61)

YEARS OF EXPERIENCE: With this firm: 2003-2015; 2018-Present With other firms: 20

EDUCATION: MA 1992 University of Delaware/Winterthur Program Early American Culture

BA 1984 Connecticut College American History & Historic Preservation

PROFESSIONAL TRAINING: Amtrak Safety Training, April 2014

NJ Transit Safety Training, December 2014

TWIC Certification December 2011

PATCO Safety Training December 2011

ACHP Advanced Seminar: Reaching Successful Outcomes in Section 106 Review, August 2011

CRM Best Practices Workshop, Trenton, NJ October 2006

Section 106: An Introduction, Washington, D.C., May 2005

Professional Experience Summary:

C U L T U R A L R E S O U R C E CONSULTANTS

Philip A. Hayden possesses over 30 years' experience in the fields of historic preservation, architectural history, and cultural resources management with an emphasis on transportation, railroad, and energy undertakings. Mr. Hayden has performed numerous investigations pursuant to the National Historic Preservation Act (NHPA, Sections 106 and 110), the National Environmental Policy Act (NEPA), the Department of Transportation Act (Section 4(f), and various state regulatory requirements. His experience includes preparation of identification and evaluation surveys, detailed historic contexts, effects determinations, Memorandums of Agreement (MOAs), Project Programmatic Agreements (PAs), and Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) documentation. Mr. Hayden exceeds the qualifications set forth in the Secretary of Interior's Standards for Historians and Architectural Historians [36 CFR 61].

Representative Project Experience:

WV Route 10 Operational Improvements Project, Mercer, Wyoming, and Logan Counties, WV (Sponsor: WV Division of Highways). This high-priority project for the West Virginia Department of Highways required cultural resources clearance for 70 miles of roadway improvements and numerous bridge replacements in a two-month period. Mr. Hayden, working as Principal Investigator and Senior Architectural Historian for TRC, identified areas of sensitivity, delineated multiple Areas of Potential Effects, prepared required Historic Property Inventory forms, evaluated National Register eligibility, and assessed project effects, leading to the successful clearance of all project activities by the West Virginia State Historic Preservation Officer.

Eight Point Wind Energy Center Project, Allegany and Steuben Counties, NY (Sponsor: NextEra, Eight Point Wind Energy Center LLC). Acting as Principal Investigator and Senior Architectural Historian with TRC, Mr. Hayden coordinated with the New York State Office of Parks, Recreation, and Historic Preservation to finalize the fieldwork methodology, develop an Area of Potential Effects, and conduct a reconnaissance-level architectural survey and assessment of effects on 797 newly identified historic resources in rural New York. The investigation was in support of US Army Corps of Engineers permits and Articles VII and X of the New York Public Service Law.

Architectural Survey, Hampton Roads Crossing Study / Supplemental Environmental Impact Statement, Newport News and Norfolk Counties, VA (Sponsor: VA Department of Transportation) Coordinated with and aided the principal cultural resources sub-consultant for Rummel, Klepper & Kahl with evaluating and preparing V-CRIS-based survey forms and personally surveyed approximately 175 buildings in Norfolk according to National Register Criteria, including many post-World War II residential developments, two mid-century commercial buildings, and the Wards Corner Shopping Center.

<u>Cameron Road / US 250 Widening and Resurfacing Project</u>, Marshall County, WV (Sponsor: WV Division of Highways). Delineated an Area of Potential Effects, identified and evaluated 76 mostly mail-order buildings and structures according to National Register Criteria, and assessed project effects as part of a Phase I Cultural Resource Management Report.

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