Long Island Rail Road Expansion Project

Floral Park to Hicksville

Final Environmental Impact Statement

Appendix 6-A

Phase 1A Archaeological Investigation

April 2017

Revised Final Draft

Phase IA Archaeological Sensitivity Assessment
for the
Metropolitan Transportation Authority
Long Island Rail Road Main Line Expansion Project
from
Floral Park to Hicksville, Nassau County, New York

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Executive Summary

The Metropolitan Transportation Authority (MTA) Long Island Rail Road (LIRR) is proposing the Main Line Expansion Project from Floral Park to Hicksville (the "Proposed Project" or "LIRR Expansion Project"). The Proposed Project extends along the main line approximately 9.8 miles from the Village of Floral Park to the Hamlet of Hicksville and includes the following major components: installation of a third rail track; grade separation of seven (7) grade crossings; various station and substation improvements and modifications including new parking structures; construction of retaining and/or sound attenuation walls; and other related railroad infrastructure improvements including moving of subsurface utilities within the LIRR right-of-way (ROW) and at the seven grade crossings.

No previously identified archaeological sites, NYS Museum sites, National Register archaeological listings, archaeological districts, or Museum areas are located within the archaeological area of potential effect (APE) or within the one-quarter-mile Study Area for the LIRR Expansion Project (Figure 1; Figures 2a-2d).

The LIRR ROW along the 9.8-mile length of the LIRR Expansion Project Corridor from Floral Park to Hicksville has been determined to possess little to no prehistoric or historic archaeological potential. Therefore, the project actions concerning the third track alignment, railroad infrastructure modifications, passenger rail station modifications, construction of retaining walls, and subsurface utility relocations will have no effect on archaeological resources.

The actions associated with the grade crossing modifications will create ground disturbance in the seven proposed locations. However, research has documented that installation of multiple utility lines, excavation for catch basins and storm drains, construction and demolition of structures and realignment of streets have impacted each of the grade crossing locations. Due to the extent of prior subsurface disturbance, it is highly unlikely that project actions will directly impact any intact archaeological resources that may once have been present at the seven grade crossings.

The preliminary list of construction staging area locations indicates that areas under consideration include existing LIRR substations, commercial properties, station parking lots, existing roads, potential commercial property takings, a wooded area, and the LIRR ROW on both sides of the existing track. Most of these areas do not possess prehistoric or historic archaeological potential due to the extent of documented prior subsurface disturbance across the ROW. The wooded area mentioned above is a recharge basin/sump that has been excavated and therefore does not possess archaeological potential. The remaining staging areas are located in existing parking lots, or on extant streets, and are paved. From an archaeological perspective, paved surfaces serve to protect any buried archaeological resources that may be present. The use of the staging areas during construction would have no effect on archaeological resources.

The Proposed Project would involve four commercial property takings located at or near the grade crossing locations. The takings would be required due to restricted or eliminated access as a result of

project actions, the need for the property as a staging area, for drainage improvements, for utility relocations, surface parking, or parking structure. Due to the extent of prior subsurface disturbance that has occurred at these locations, and given that the extant buildings cover almost all their respective lots, it is highly unlikely that the removal of these structures would have the potential to impact intact archaeological resources that may have been present prior to their construction.

Proposed parking-related project actions include the creation of new surface parking lots in New Hyde Park, improvements to existing surface lots in Mineola, and the construction of parking structures for the Mineola, Westbury, and Hicksville stations. Each of the six proposed parking structure locations are currently functioning as surface parking lots.

The locations of proposed parking improvements in New Hyde Park, Mineola, Westbury, and Hicksville possess very little to no archaeological potential. The cartographic research completed for this assessment and discussed in detail in Chapter 4 has shown that historic development on these locations had been sparse prior to the creation of the existing paved parking lots and none of the documented structures on any of the proposed parking structure locations exhibited basements, evidence of which often survives building demolition. The creation of new surface parking lots in New Hyde Park and improvements to existing surface lots in Mineola will not create new ground disturbance in undisturbed soils. The extent of prior subsurface disturbance at these locations has in all likelihood destroyed the integrity of any remains of earlier development. In addition, prior subsurface disturbances were noted during the field view walkovers for some of the existing parking lots that had drainage systems in place, underground utilities, and had obviously been graded prior to paving.

In summary, the proposed parking improvements in New Hyde Park, Mineola, Westbury, and Hicksville will have no effect on archaeological resources.

Because some aspects of the proposed parking facilities and locations are preliminary in nature, it is possible that as project plans progress, certain facilities and locations could be eliminated from the Proposed Project and other facilities and locations could be added. Should changes to the parking facilities and locations be proposed as the project design progresses, an assessment of potential direct impacts to archaeological resources would be undertaken in consultation with the New York State Historic Preservation Office of the Office of Parks, Recreation and Historic Preservation.

Table of Contents

List of Appendices

List of Figures

List of Photos

1 INTRODUCTION

1.1 Project Description

The Metropolitan Transportation Authority (MTA) Long Island Rail Road (LIRR) is proposing the Main Line Expansion Project from Floral Park to Hicksville (the "Proposed Project" or "LIRR Expansion Project"). The Proposed Project extends along the main line approximately 9.8 miles from the Village of Floral Park to the Hamlet of Hicksville and includes the following major components: installation of a third rail track; grade separation of seven (7) grade crossings; various station and substation improvements and modifications including new parking structures; construction of retaining and/or sound attenuation walls; and other related railroad infrastructure improvements including moving of subsurface utilities within the LIRR right-of-way (Figure 1) and at the seven grade crossings. Approvals associated with the Proposed Project require preparation of an Environmental Impact Statement (EIS) in accordance with the New York State Environmental Quality Review Act (SEQRA). MTA-LIRR is the lead state agency for SEQRA. The New York State Department of Transportation (NYSDOT) is an involved agency.

The MTA is North America's largest transportation network, serving a population of 15.2 million people in a 5,000-square-mile area that extends from New York City to Long Island, the southeastern portion of New York State, and Connecticut. The LIRR system comprises over 700 miles of track on 11 different branches. It extends 120 miles from Montauk, Long Island to Pennsylvania Station in Manhattan. LIRR serves 124 stations in Nassau, Suffolk, Queens, Brooklyn, and Manhattan, providing service for over 80 million customers each year.

The LIRR Main Line serves as the central artery of the commuter rail system in Nassau and Suffolk Counties. At various points east of Jamaica, five LIRR branches split off from the Main Line: the Hempstead, Oyster Bay, Port Jefferson, Ronkonkoma, and Montauk Branches. The number of tracks along the Main Line corridor varies: it primarily has four tracks west of Floral Park, but narrows to two tracks east of Floral Park through to Hicksville. The Main Line is also used by the New York & Atlantic Railway for freight service.

The Proposed Project addresses the heavily utilized 9.8-mile-long, two-track Main Line segment between Floral Park and Hicksville (Figure 1). This busy portion of the Main Line services the Ronkonkoma and Port Jefferson Branches, some Montauk Branch trains, and all Oyster Bay Branch trains. This portion of the corridor is problematic for several reasons, including:

- Severe congestion during peak periods.
- Frequent delays with rippling effects to other branches.
- Insufficient track capacity to operate both eastbound and westbound service during peak periods.

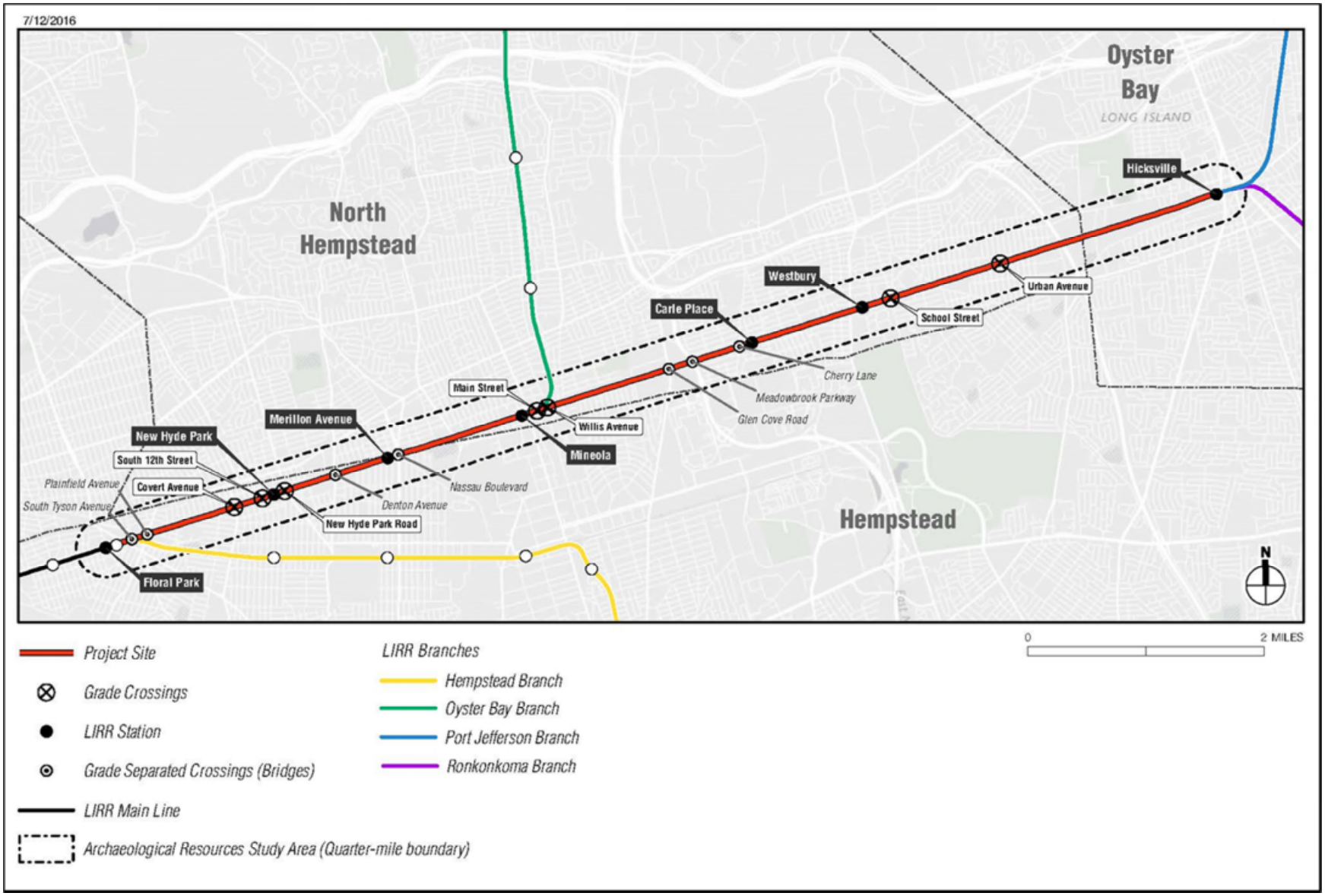

Figure 1 Project Location

- Conflicts between railroad traffic, roadway traffic, and pedestrians.
- Traffic delays due to grade crossings.

1.2 Regulatory Framework

This Phase IA archaeological assessment has been prepared for the Proposed Project as part of the Environmental Impact Statement (EIS) in accordance with the New York State Environmental Quality Review Act (SEQRA) of 1975. It has been prepared in compliance with the National Historic Preservation Act (NHPA) of 1966, as amended, the SEQRA, and the New York State Historic Preservation Act (SHPA) of 1980 (Section 14.09).

The EIS for the Proposed Project has been prepared pursuant to the requirements of the State Environmental Quality Review Act (SEQRA) (Article 8 of the Environmental Conservation Law and its implementing regulations at 6 NYCRR 617). The purpose of the EIS is to provide an objective analysis of the potential environmental impacts of the Proposed Project in all phases of construction and operation. LIRR is the lead state agency for SEQRA for this Proposed Project. The New York State Department of Transportation (NYSDOT) is an involved agency for approval of the work associated with the elimination of the grade crossings and proposed parking facilities. LIRR and NYSDOT issued a Draft Scoping Document on May 5, 2016 and the Technical Memorandum on November 9, 2016.

This Phase IA archaeological assessment has been prepared in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (36 CFR 61), the Standards for Cultural Resource Investigations and the Curation of Archaeological Collections issued by the New York Archaeological Council (1995), and the Phase I Archaeological Report Format Requirements issued by the New York State Historic Preservation Office (SHPO) of the Office of Parks, Recreation and Historic Preservation (OPRHP) in 2005.

According to the SEQRA, archaeological resources that may be impacted by proposed projects must be identified and evaluated to determine whether they possess historic significance as defined by the National Park Service (NPS). NPS oversees the National Register of Historic Places in conjunction with the OPRHP.

Archaeological resources are subject to direct impacts of project actions. Ground disturbance associated with proposed construction has the potential to impact both identified and as yet unidentified archaeological resources that may be present within the construction footprint. Because archaeological resources are usually below ground and not visible at the surface, a Phase IA archaeological assessment is completed to assess the likelihood for encountering potential National Register-eligible archaeological resources as a result of proposed project actions.

1.3 Project Purpose

The primary purpose of the Main Line Expansion Project is to improve rail service and reliability along the LIRR Main Line. The goals and objectives of the Proposed Project are as follows:

- Reduce delays to commuters from Main Line congestion and rippling effects.
  - Improve on-time performance on all branches.
  - Add resiliency and accelerate recovery time from unplanned service disruptions.
  - Reduce train delays due to roadway incidents or accidents near grade crossings.

- Add operational flexibility eastbound and westbound.
  - Improve mobility with additional intra-Island service.
  - Improve mobility with additional reverse peak service.
  - Facilitate scheduled and unscheduled maintenance.

- Provide additional track capacity to accommodate system-wide service growth.

- Improve public safety and roadway conditions.
  - Eliminate Main Line grade crossings while avoiding residential property acquisition.
  - Enhance north-south vehicular and pedestrian connectivity in communities along the Main Line.
  - Reduce traffic delays due to grade crossings.

- Reduce noise and improve neighborhood quality-of-life.
  - Reduce noise from train horns
  - Reduce noise from crossing-gate warning bells

1.4 Project History

Beginning in 2005, an initiative similar in intent to the Proposed Project was considered. That project also comprised the installation of a third track within a widened right-of-way and separation of up to five (5) grade crossings in the Floral Park to Hicksville corridor. However, the project was dropped because of certain issues including: it would have resulted in a substantial number of residential and commercial property takings at the location of at-grade crossings; it would have required multiple partial property takings to accommodate a widened right-of-way; and it would have required a lengthy construction schedule within downtown areas.

It is noted that review of historic and archaeological resources was conducted as part of the earlier proposed project, and that SHPO consultation had been initiated. The LIRR ROW from Floral Park to Hicksville was determined to possess no archaeological potential due to extensive prior subsurface

disturbance. The SHPO concurred that the project, as proposed in 2005, did not have the potential to impact any eligible or listed prehistoric or historic period archaeological sites. SHPO further stated that if, during later stages of the project, the design changes, or additional information is uncovered suggesting that there is the potential for impacts to archaeological resources, additional coordination would be undertaken. However, the project was dropped.

The current Proposed Project has been modified to address the negative elements of the earlier project. Implementation of the Proposed Project would require no residential property takings and greatly reduce the number of commercial takings. It would eliminate seven (7) rail grade crossings and as replacement provide seven (7) grade separated crossings, thereby enhancing vehicular and pedestrian traffic safety. Finally, the construction schedule of the Proposed Project has been reduced substantially. Overall, the Proposed Project presents an enhanced approach to solving infrastructure deficiencies on the LIRR Main Line. Appendix A contains the proposed project plans as presented in the November 2016 Technical Memorandum.

1.5 Description of Proposed Project Actions

As stated above, the LIRR Expansion Project from Floral Park to Hicksville extends along the LIRR main line approximately 9.8 miles from the Village of Floral Park to the Hamlet of Hicksville (Figure 1). The Proposed Project includes the following specific elements that will create ground disturbance:

- Installation of a third Main Line track from Floral Park to Hicksville.
- Modifications to railroad infrastructure including signal systems, substations, culverts, interlockings, crossovers, sidings, track bed, power systems, communications, and signals.
- Construction of retaining walls along portions of the corridor.
- Elimination of seven existing grade crossings within the project limits to provide grade separated crossings or potentially, in one or two cases, full closures to vehicular traffic.
- Modifications to passenger rail stations and parking (e.g., modified and improved platforms, passenger shelters, Americans with Disabilities Act (ADA) enhancements, and parking modifications including new parking facilities at the New Hyde Park, Mineola, Westbury and Hicksville stations).
- Proposed parking modifications include surface parking lot improvements for the New Hyde Park and Mineola stations and construction of parking structures for the Mineola, Westbury, and Hicksville stations.

- Utility relocations, including electric, signal, communications, gas, water, sewer, and storm sewer conveyances and drainage systems at the grade-separated crossings.

In addition to the above listed project elements, a preliminary list of the locations for construction staging areas has been developed. The staging areas also have the potential to create ground disturbance and are considered to be components of the archaeological area of potential effects (APE).

It is noted that several of the proposed action locations are preliminary in nature. It is possible that as the project progresses, certain actions will be eliminated from the design and certain other actions may be added. In the event that actions are added, they will be assessed for archaeological potential in consultation with SHPO.

1.6 Phase IA Study Area

The Study Area for archaeological resources extends one-quarter-mile from the LIRR centerline along the 9.8-mile-long LIRR Expansion Project Corridor from Floral Park to Hicksville, Nassau County, New York (Figures 2a – 2d). The size of the Study Area was determined to take into account any potential commercial property takings and construction and staging areas that may be located beyond the LIRR ROW.

Figure 2a Archaeological Study Area

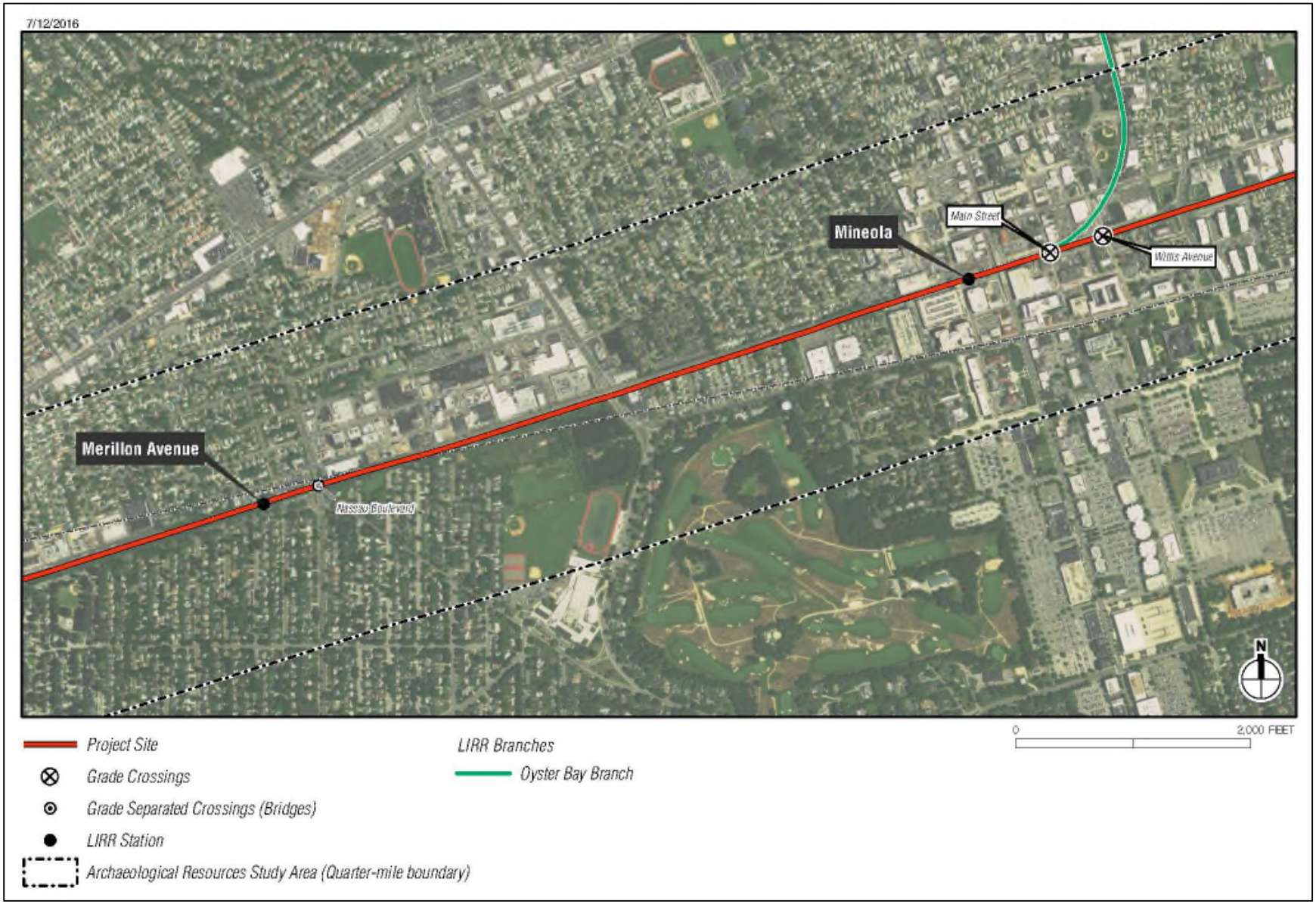

Figure 2b Archaeological Study Area

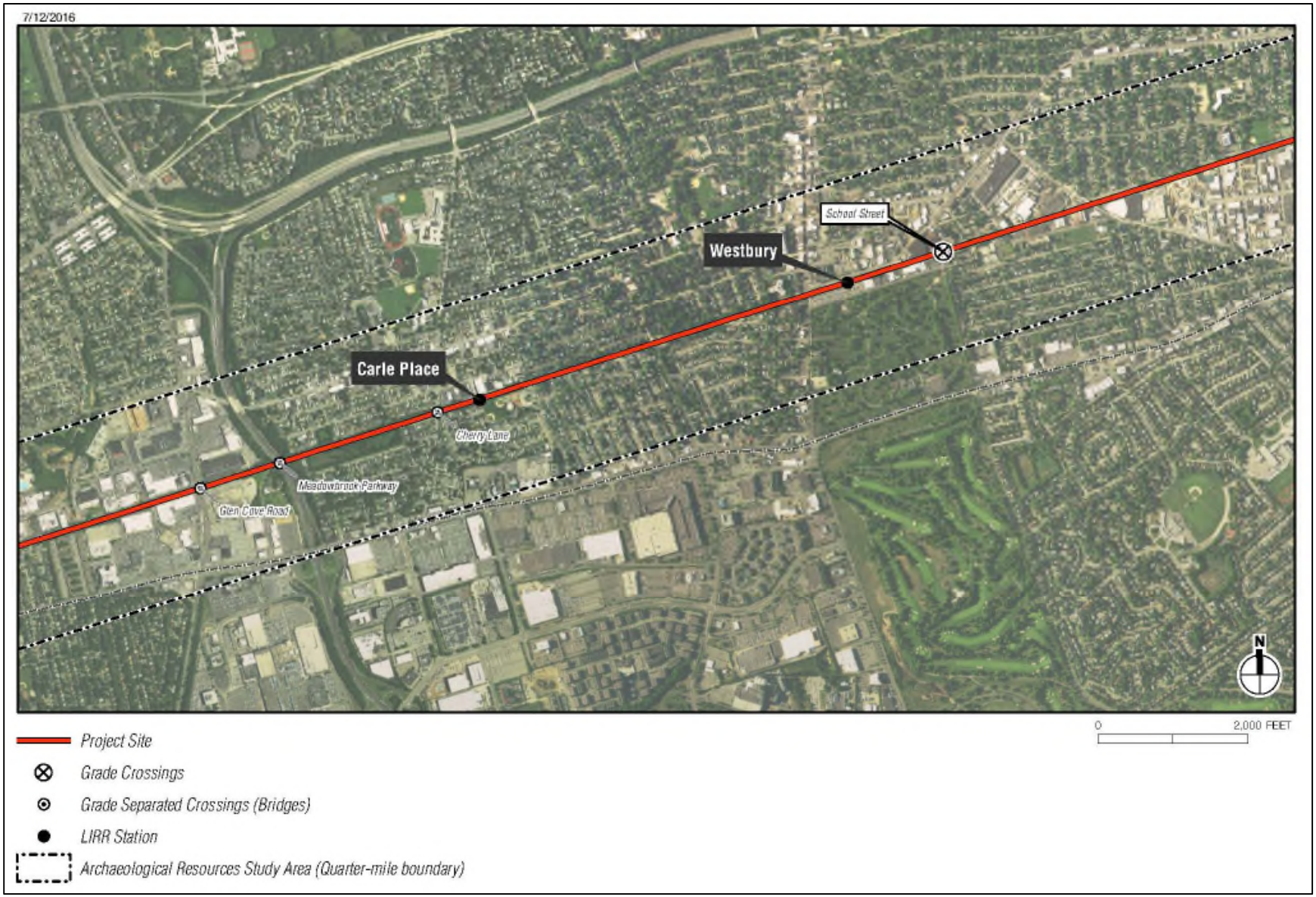

Figure 2c Archaeological Study Area

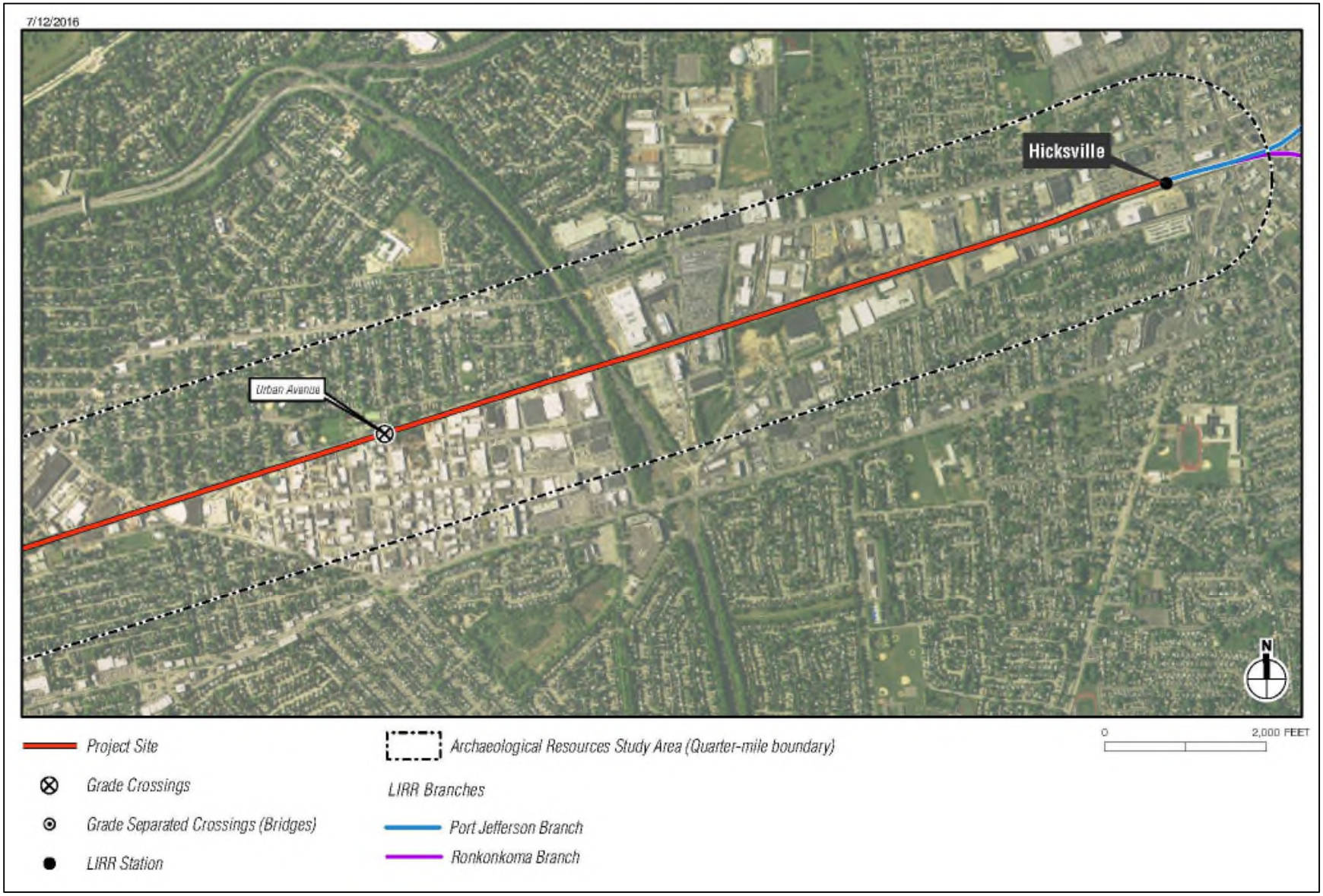

Figure 2d Archaeological Study Area

1.7 Archaeology Area of Potential Effects (APE)

Archaeological resources are the physical remains of past human activity at a location, usually below ground, and not visible at the surface. Archaeological sites may date to the prehistoric or the historic periods and significant associated features may include burials, midden deposits, hearths, storage pits, foundation remains, and shaft features such as wells, cisterns, privies, or cesspools. Archaeological resources are concerned with project actions that will result in ground disturbance.

The first step in the Phase IA archaeological assessment process is to establish the APE. The archaeological APE consists of horizontal and vertical components. The horizontal component of the APE is defined as the footprint of necessary construction activity that would result in ground disturbance. The vertical component of the APE is the depth to which the necessary construction activity would extend.

For the LIRR Expansion Project, the archaeological APE includes the LIRR ROW 9.8-mile-long corridor from Floral Park to Hicksville. However, there are additional portions of the APE that will lie beyond the LIRR ROW; more specifically the seven grade crossings and the potential locations of construction staging areas and the locations of proposed parking garage structures and improvements to surface parking lots. There are a small number of proposed commercial property takings for parking improvements. The components of the archaeological APE for the Proposed Project are discussed below. See Appendix A for the project plans.

1.7.1 Proposed Alignment of Main Line Third Track

Currently, the LIRR Main Line segment between the Floral Park Station and the Hicksville Station comprises two tracks. Various rail sidings exist on both the north and south sides and run parallel to the Main Line, but these sidings are not continuous. The LIRR Expansion Project would minimize property impacts and optimize these existing rail sidings by incorporating them into the third track alignment. As a result, the third track would be placed on the north side of the existing two Main Line tracks in some locations and on the south side in other locations, as described below. In railroad terminology, the "alignment" refers to the location of the track. This includes the "horizontal alignment", which refers to the location of the track relative to existing features (e.g., north or south of the existing Main Line tracks), as well as the "vertical alignment", which refers to the height or elevation of the track (e.g., higher or lower than the existing Main Line tracks).

1.7.1.1 Horizontal Alignment

Between Floral Park and Roslyn Road in Mineola, the new track location is proposed south of the existing alignment within the existing LIRR ROW. The proposed tack alignment would then shift to the north side of the existing tracks east of Roslyn Road in Mineola, and would continue to just east of Carle Place Station near the western limit of the Village of Westbury, all within the existing ROW. The entire alignment would gradually shift to the south between Carle Place and Westbury Station, connecting to the existing tracks and providing a new track south of the existing alignment at Westbury Station. East of

Westbury Station, the new third track would gradually shift to the north, crossing underneath the existing Grand Boulevard Bridge and tying into an existing siding track located west of Hicksville Station. On the east end of Hicksville Station, an additional crossover track (between the southern tracks) would be installed to provide greater train capacity in and out of the station, again, all within the existing ROW.

In general, a buffer of 8.5 feet would exist between the centerline of the new track and the limits of the ROW. The design maintains 13 to 14 feet of clearance between tracks. In several areas, existing underutilized rail sidings would be incorporated into the third Main Line track. In some locations, the two existing Main Line tracks would be shifted slightly to the north or south to facilitate a more desirable alignment and avoid additional property impacts to keep all three tracks within the existing ROW:

- Between Roslyn Road and Glen Cove Road, relocating the existing tracks slightly to the north minimizes the impacts on the residential properties on the south side of the Main Line and industrial properties on the north side of the ROW;
- Between Carle Place Station and Post Avenue, the existing tracks would be realigned slightly to the south to enable all three tracks to be centered underneath the Ellison Avenue Bridge and minimize property impacts to the north;
- From west of School Street to east of Grand Boulevard, shifting the existing tracks to the south would reduce property impacts on both sides of the ROW and avoid impacts to the Grand Boulevard overpass.

1.7.1.2 Vertical Alignment

The vertical profile is the height or elevation of the track. The existing tracks are at ground level with respect to the surrounding land in New Hyde Park and portions of New Cassel, elevated in Floral Park, Carle Place and Hicksville, and in a below-grade cut in portions of Westbury and New Cassel. In some locations, the Proposed Project would maintain the Main Line (including the new third track) at roughly the same elevation as it currently exists, while at other locations, the tracks will be higher than at present.

The proposed elimination of certain grade crossings and construction or reconstruction of roadway underpasses (as described in the sections below) requires a change in the vertical profile of the Main Line to avoid taking residential properties. Because the tracks would be raised, the roadway would not have to be lowered as far, minimizing impacts to driveways and nearby intersections. At Covert Avenue in New Hyde Park, the Main Line will be raised approximately five feet above its current elevation. At Nassau Boulevard in Garden City, the Main Line will be raised approximately two feet. Similarly, the Main Line will be raised approximately three feet over School Street in Westbury and Urban Avenue in New Cassel.

1.7.2 Proposed Modifications to Other Railroad Infrastructure

The modifications to other LIRR infrastructure include signal systems, substations, drainage systems/culverts, interlockings, crossovers, sidings, track bed, power systems, communications, and signals. These improvements and modifications will occur within the LIRR ROW along the 9.8-mile Project Corridor between Floral Park and Hicksville (Figure 1).

1.7.2.1 Interlockings, Crossovers, Communications & Signals

The Proposed Project would include signal improvements, modifications to existing interlockings, and installation of new interlockings. Within the interlockings are crossovers, which allow trains to move from one track or route to another and provides operational flexibility. To facilitate movements between the two existing Main Line tracks and the new third track, several interlockings within the project limits would be modified. Signal equipment would be relocated within the LIRR ROW. Existing communication systems, including cable for ticket vending machines and public address systems would be relocated as required.

1.7.2.2 Proposed Modifications to Substations

Eight LIRR traction power substations exist within the project limits:

- Floral Park Substation, located on Plainfield Avenue opposite 111 Plainfield Avenue.
- New Hyde Park Substation, located at Third Avenue and South 9th Street.
- Merillon Avenue Substation, located at Atlantic Avenue and Hilton Avenue.
- Mineola Substation, located at the southwest corner of Main Street and Front Street.
- Carle Place Substation, located in the southeast quadrant of Meadowbrook State Parkway and the LIRR just north of Mallard Road.
- Westbury Substation, located southeast of Union Avenue and Sullivan Street north of the LIRR.
- New Cassel Substation, located at Broadway and Bond Street north of the LIRR.
- Hicksville Substation, located on the south side of West Barclay Street near Marion Place.

With the exception of the Floral Park Substation (which was replaced in 2010), seven existing substations need to be enhanced to accommodate the new third track. These substations are roughly 40 years old and near the end of their operating service life. The present conditions of the substations, including the inability to secure spare parts, warrant their replacement rather than modification. Given tight site constraints, it is currently anticipated that the new replacement substations would occupy the same parcels as the present equipment.

1.7.2.3 Proposed Modifications to Drainage Systems

As discussed above, the vertical alignment of the proposed Main Line (including the new third track) would predominantly follow the existing ground topography with a raised profile in certain locations. In most cases, the new third track would displace existing station platform areas and/or existing drainage ditches. Therefore, relocation and upgrading of drainage ditches and channels would be required. The Proposed Project would include a combination of drainage improvements, such as reuse of existing drainage ditches within the LIRR ROW, wherever practical, stormwater swales, connections to local recharge basins, potential deepening of existing recharge basins to accommodate additional flow, and extension of existing culvert crossings.

The proposed grade separated roadway crossings (underpasses) would require separate stormwater facilities. Conceptual drainage improvements have been identified for each grade crossing to ensure proper stormwater drainage and to minimize the potential for flooding (Appendix A).

1.7.3 Proposed Modifications to Passenger Rail Stations

The LIRR Expansion Project would include improvements to five of the passenger rail stations within the Project Corridor—New Hyde Park Station, Merillon Avenue Station, Mineola Station, Carle Place Station, and Westbury Station (Figure 1). As part of the separate Hicksville Station and North Track Siding Improvements Project, station improvements at Hicksville Station are currently being implemented.

The five modified stations would accommodate the new third track, enhance pedestrian access and ADA accessibility, improve platforms and passenger waiting areas, and meet the requirements of the LIRR station guidelines and applicable codes and include the following elements:

- Removal of all platforms and replacement with platforms to accommodate 12-car trains (platforms would be heated to facilitate snow removal).

- Eight-foot-wide side platforms, meeting LIRR minimum station guidelines, with ten-foot-wide platforms in certain locations, where feasible.

- Canopies for both the eastbound and westbound platforms per LIRR station guidelines.

- Canopies over egress walkways.

- Platform furnishings and accoutrements (e.g., benches, shelters, and signage), per LIRR station guidelines and Enhanced Station Initiative.

- Closed circuit television (CCTV) at each station to improve safety and security.

- Provision of pedestrian overpasses/underpasses to connect the eastbound and westbound platforms. At Merillon Station, ADA-compliant elevators may be provided to existing ADA-compliant walkway under bridge. Pedestrian overpasses would include ADA-compliant elevators (except for the Mineola Station building and the east end of the Westbury Station platform), as well as covered stairs for general access at each platform.

- A minimum of four staircases at each platform to comply with NEPA 130 egress requirements. Stairs would be heated to facilitate snow removal.

- A minimum of two ADA-compliant ramps at each platform per NYS Building Code accessible egress requirements. Ramps would be heated to facilitate snow removal.

1.7.4 Proposed Construction of Retaining Walls

A retaining wall is a structure that holds back, or retains, the adjacent earth or other material and prevents it from sliding down to a more natural or gradual slope. Essentially, a retaining wall is designed to resist the pressure from the material being held back. The LIRR Expansion Project would include installation of several types of retaining walls along the corridor. The main purpose of these retaining walls is to reduce impacts to adjacent properties and minimize the need for property acquisition.

Proposed retaining wall locations are:

Floral Park Station to New Hyde Park Station

- Floral Park Station to South 5th Avenue: Construct retaining walls on south side of LIRR ROW.
- South 5th Avenue to South 12th Street: Construct retaining walls on south side and north side of LIRR ROW.

New Hyde Park Station to Merillon Avenue Station

- New Hyde Park Road to Merillon Avenue Station: Construct retaining walls on south side of LIRR ROW.

Merillon Avenue Station to Mineola Station

- No proposed retaining walls.

Mineola Station to Carle Place Station

- Mineola Station: Construct retaining walls on south side of LIRR ROW.
- Main Street to Willis Avenue: Construct retaining walls on south side of LIRR ROW.
- Willis Avenue to Glen Cove Road: Potential replacement of existing low-level retaining wall on north side of LIRR ROW; Construct retaining walls on south side of LIRR ROW.
- Roslyn Road to Glen Cove Road: Construct retaining walls on south side of LIRR ROW near Roslyn Road and on north side of LIRR ROW near Glen Cove Road.
- Glen Cove Road to Meadowbrook Parkway: Construct retaining walls on north side of LIRR ROW.
- Meadowbrook Parkway to Carle Place Station: Construct retaining walls on north side of LIRR ROW.

Carle Place Station to Westbury Station

- Carle Road to Westbury Station: Construct retaining walls on north side of LIRR ROW near Carle Road and on south side of LIRR ROW near Westbury Station.

Westbury Station to Hicksville Avenue Station

- Westbury Station: Construct retaining wall on south side of LIRR ROW.
- Westbury Station to Urban Avenue: Construct retaining walls on north and south sides near School Street.

- Urban Avenue to Hicksville Station: Construct retaining walls on north side of LIRR ROW from Urban Avenue to Wantagh State Parkway.

In some locations, where the exterior of the retaining walls faces the adjacent communities, the retaining walls would receive architectural treatments to harmonize with the surrounding aesthetics. In areas where retaining walls are required and where noise impacts may occur, a sound wall would be provided on top of the retaining wall. In segments of the ROW that do not require retaining walls, but where noise impacts may occur, sound attenuation walls would be installed.

1.7.5 Proposed Grade Crossing Modifications

Along the LIRR Main Line segment between Floral Park and Hicksville are seven locations where the east-west rail line crosses the street bed of a north-south vehicular roadway. These seven locations would be modified by closing or by creating a grade separated crossing (Figure 3 and Appendix A). The locations are:

- **New Hyde Park/Garden City**
  - Covert Avenue
  - South 12th Street
  - New Hyde Park Road

- **Mineola**
  - Main Street
  - Willis Avenue

- **Westbury/New Cassel**
  - School Street
  - Urban Avenue

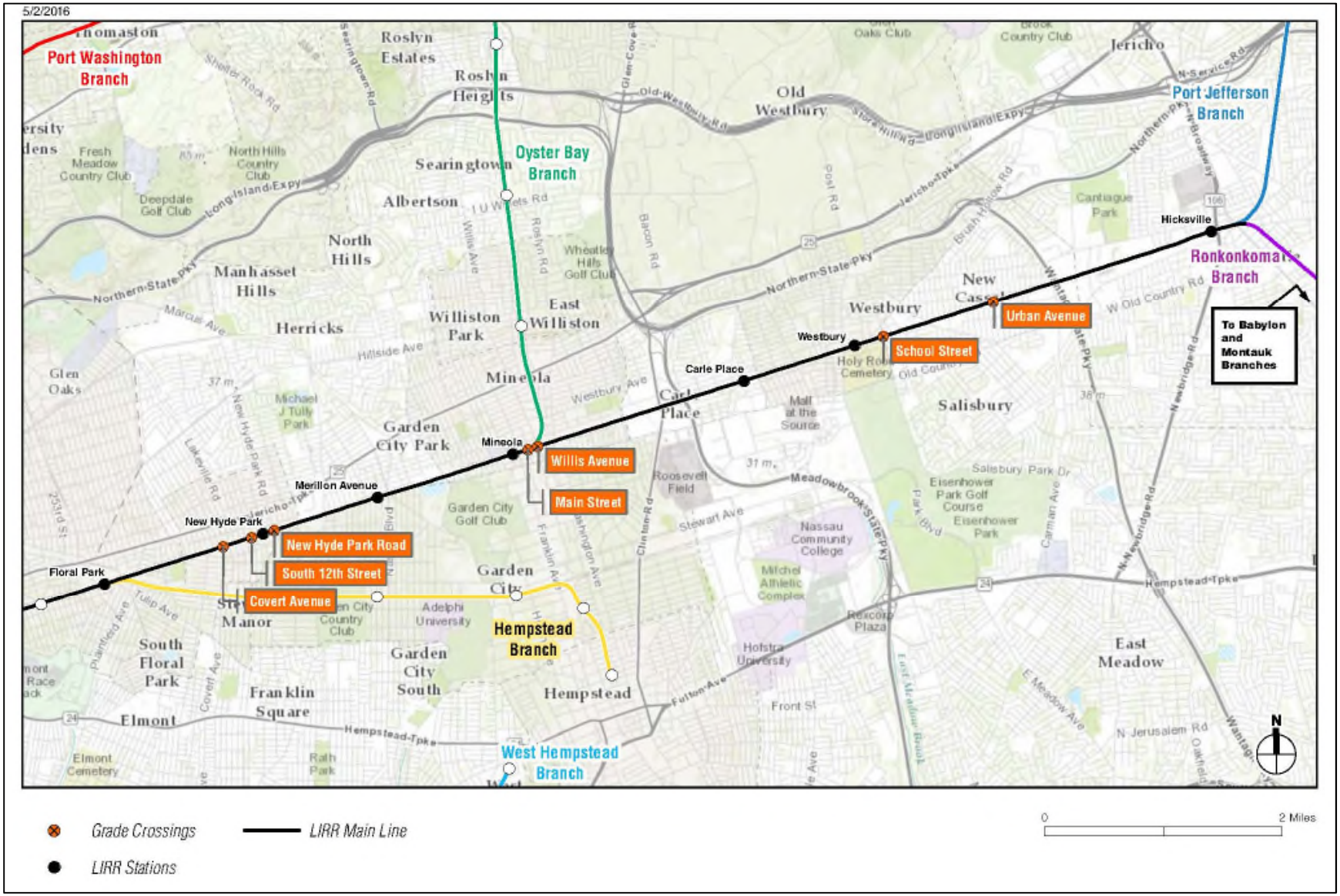

Figure 3 Existing Grade Crossings

1.7.6 Proposed Parking Improvements

Proposed project actions include construction of parking structures for the Mineola, Westbury, and Hicksville stations. Surface parking lot improvements are also planned for the New Hyde Park and Mineola stations (Appendix A). The proposed improvements are:

- **New Hyde Park**
  - New surface lot at 115 New Hyde Park Road between Plaza Avenue and Second Avenue. (Stormwater drainage to be installed below surface lot).

- **Mineola**
  - Existing Main Street surface parking around LIRR substation at southwest quadrant of Main Street crossing of tracks to be improved; demolition of former LIRR Mineola Electrical Substation building. Potential gain of limited commuter parking.
  - New multi-level parking structure (with 1 level below grade) on Second Street west of #85 Willis Avenue.
  - New multi-level structure (with 1 level below grade) (total height approx. 48 feet) on Village-owned lot west of Mineola Boulevard between Harrison Avenue and First Street.

- **Westbury**
  - New multi-level parking structure on south side of LIRR tracks in current surface lot.
  - New multi-level parking structure on north side of LIRR tracks on existing Village-owned surface parking lot south of Scally Place.

- **Hicksville**
  - New multi-level parking deck (with 1 level below grade) south of West Barclay Street (west of pump station) on existing surface parking lot.
  - New multi-level parking deck (with 1 level below grade) north of West Barclay Street (west of Bob's Self Storage) on existing surface parking lot.

1.7.7 Potential Commercial Property Takings

The Proposed Project would involve a small number of commercial property takings/structure takings located at or near the grade crossing locations. The takings would be required due to restricted or eliminated access as a result of project actions, the need for the property as a staging area, surface parking, or parking structure. These properties include:

- 124 Covert Avenue – at the northeast corner of Covert and Second avenues in New Hyde Park, currently a taxi repair business building.
- 115 New Hyde Park Road - at the northwest corner of New Hyde Park Road and Plaza Avenue in New Hyde Park, currently the Safeguard Self Storage building.
- 167 School Street in Westbury - at the northeast quadrant of the School Street crossing of the LIRR tracks, currently the Dependable Acme Thread Products complex.

- 117 Urban Avenue in New Cassel - currently the J.H. Auto Collision building at the southwest quadrant of the LIRR Crossing of Urban Avenue.

It is noted that the Nassau Tower and the former Mineola Substation buildings of the LIRR at the southwest quadrant of the Main Street crossing of the LIRR tracks in Mineola would be demolished in order to facilitate the Main Line third track alignment and surface parking improvements, respectively.

A small number of strip takings from commercial properties in New Hyde Park, Garden City, Westbury, Mineola, and New Cassel are anticipated (Appendix A). The partial acquisitions may be needed for retaining wall construction for new third track/station platform, sidewalk widening at grade crossing eliminations, roadway shifts for grade crossing eliminations, and for elevator and stairs for new pedestrian bridge for the Willis Avenue grade crossing elimination. None of the strip takings will impact extant commercial buildings.

1.7.8 Preliminary Construction Staging Areas

A preliminary list of proposed construction staging areas has been developed for the Project Corridor. They are (from west to east):

1.7.8.1 Floral Park Station to New Hyde Park Station

- **Floral Park Station to South 5th Avenue:**
  - LIRR substation on Plainfield Avenue; northwest quadrant of Plainfield Avenue and LIRR.
  - Industrial properties on Plainfield Avenue; south of LIRR.
  - LIRR ROW adjacent to Terrace Avenue.

- **South 5th Avenue to South 12th Street:**
  - Western end of 3rd Avenue between Covert Avenue and Wayne Avenue.
  - Station parking area on 3rd Avenue east of Baer Place.

1.7.8.2 New Hyde Park Station to Merillon Avenue Station

- **New Hyde Park Station:**
  - Station parking area on 3rd Avenue east of Baer Place.

- **New Hyde Park Road to Merillon Avenue Station:**
  - Commercial property acquisition at 115 New Hyde Park Road.

1.7.8.3 Merillon Avenue Station to Mineola Station

- **Merillon Avenue Station:**
  - Main Avenue between Wickham Road and Kildare Road, opposite Tullamore Playground (Village of Garden City property).

- **Nassau Boulevard to Mineola Station:**
  - LIRR ROW.

1.7.8.4 Mineola Station to Carle Place Station

- **Mineola Station:**
  - Station parking area west of Mineola Boulevard.
  - Station parking area on Front Street east of Mineola Boulevard.
  - Triangle track worker area between Main Street and Willis Avenue.

- **Main Street to Willis Avenue:**
  - Station parking area on Front Street east of Mineola Boulevard.
  - Triangle track worker area between Main Street and Willis Avenue

- **Willis Avenue to Glen Cove Road:**
  - Triangle track worker area between Main Street and Willis Avenue.
  - LIRR ROW south of existing tracks between Willis Avenue and Roslyn Road.

- **Roslyn Road to Glen Cove Road:**
  - North side of existing tracks near the LIRR Monopole south of soccer field and off Voice Road.

- **Glen Cove Road to Meadowbrook Parkway:**
  - Macy's ramp south of existing tracks west of Meadowbrook State Parkway.

- **Meadowbrook Parkway to Carle Place Station:**
  - Recharge basin/wooded area on Atlantic Avenue between Meadowbrook State Parkway and Silver Lake Boulevard.

1.7.8.5 Carle Place Station to Westbury Station

- **Carle Place Station:**
  - Station parking and LIRR ROW north of Carle Place Station.

- **Carle Road to Westbury Station:**
  - LIRR ROW north and south of existing tracks.

1.7.8.6 Westbury Station to Hicksville Station

- **Westbury Station:**
  - Station parking south of Westbury Station.

- **Westbury Station to Urban Avenue:**
  - Station parking south of Westbury Station.
  - 167 School Street commercial building acquisition east of School Street north of tracks.
  - LIRR ROW south of existing tracks east of School Street.

- **Urban Avenue to Hicksville Station:**
  - LIRR ROW north and south of existing tracks.
  - Hicksville Station.
  - Station parking north of existing platforms east of Newbridge Road.

1.7.9 Utility Relocations

Project actions associated with the LIRR Expansion Project include the relocation of utilities from one side of the ROW to another in multiple locations along the Project Corridor. The utility relocations are necessary due to conflicts with the installation of the third track across most of the corridor, the modifications to the grade crossings, and other infrastructure improvements within the ROW.

As part of the engineering design process, LIRR conducted a preliminary utility inventory to determine the type, location, and ownership of utilities within the Project Corridor (including at the affected grade crossings and adjacent roadways). Utilities located within the Project Corridor include: LIRR signals and communications; gas; electric; fiber optic; telephone; cable; water; sanitary sewer; and storm sewer. In general, PSEG-LI electric transmission, LIRR signal and communications, Verizon, and Cablevision are located within the ROW; other types of utilities cross the LIRR ROW along local roads, aerial structures (such as transmission poles), and/or through underground structures.

There are PSEG-LI (formerly LIPA) power lines parallel to, and within the LIRR ROW on either the north or the south sides of the Main Line, with dedicated rectifier feeds for LIRR substations and signal/communication lines. A direct burial underground PSEG-LI power line is also present in some locations. In many cases, LIRR utility lines are located on both sides of the LIRR ROW or across the ROW from PSEG-LI. There are some instances where PSEG-LI poles support LIRR, Cablevision, and Verizon utilities, and are not located underground.

In general, utility relocation work is expected to include:

- Relocation of PSEG-LI 13.2 kV and 69 kV transmission lines within the LIRR ROW (for example, between Covert Avenue and New Hyde Park Station, poles and transmission lines would be relocated from the south side of the Main Line to the north side).

- Relocation of National Grid gas lines, including at the seven grade crossing elimination locations.

- Relocation of underground and aerial fiber optic and telephone lines and cable television equipment.

- Replacement and/or relocation of rail signal, power, and communications equipment.

- Further coordination with municipalities and regional agencies regarding water and sanitary sewer mains that parallel or cross the LIRR ROW and potential relocations (e.g., Nassau County Department of Public Works).

2 SURVEY METHODOLOGY

2.1 Study Area

The Study Area for archaeological resources extends one-quarter-mile from the LIRR centerline along the 9.8-mile-long LIRR Expansion Project Corridor from Floral Park to Hicksville, Nassau County, New York (Figure 1; Figures 2a – 2d). The size of the Study Area was determined to take into account any potential commercial property takings and construction and staging areas that may be located beyond the LIRR ROW.

2.2 Phase IA Objectives and General Methodology

This Phase IA survey report is part of the EIS that is being prepared for the Proposed Project in accordance with the New York State Environmental Quality Review Act (SEQRA) of 1975. According to the SEQRA, archaeological resources that may be impacted by proposed projects must be identified and evaluated to determine whether they possess historic significance as defined by the National Park Service (NPS). NPS oversees the National Register of Historic Places in conjunction with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP).

Archaeological resources are subject to direct impacts of project actions. Ground disturbance associated with proposed construction has the potential to impact both identified and as yet unidentified archaeological resources that may be present within the construction footprint. Because archaeological resources are usually below ground and not visible at the surface, a Phase IA archaeological survey is completed to assess the likelihood for encountering potential National Register-eligible archaeological resources as a result of proposed project actions.

2.3 Technical Approach

Archaeological resources are the physical remains of past human activity at a location, usually below ground, and not visible at the surface. Archaeological sites may date to the prehistoric or the historic periods and significant associated features may include burials, midden deposits, hearths, storage pits, foundation remains, and shaft features such as wells, cisterns, privies, or cesspools. Archaeological resources are concerned with project actions that will result in ground disturbance.

The first step in the Phase IA archaeological assessment process is to establish the APE. The archaeological APE consists of horizontal and vertical components. The horizontal component of the APE

is defined as the footprint of necessary construction activity that would result in ground disturbance. The vertical component of the APE is the depth to which the necessary construction activity would extend.

For the LIRR Expansion Project, the archaeological APE includes the entire LIRR ROW corridor from Floral Park to Hicksville. There are also portions of the APE that lie beyond the LIRR ROW; the preliminary locations of construction staging areas, the locations of proposed parking garage structures, improvements to surface parking lots, and commercial property takings. Because the construction staging areas have only been tentatively defined, the Phase IA archaeological assessment has also taken into account previously identified resources and potential resource areas within the one-quarter-mile Study Area (Figures 2a-2d).

A field view of the Project Corridor was conducted on June 7, 2016, which included visual inspection of the seven railroad stations, seven grade crossings, commercial property acquisitions, partial commercial property acquisitions or strip takings, and proposed parking garage and surface parking lot locations. In addition, a windshield survey of the entire 9.8-mile-long Project Corridor and the one-quarter-mile Study Area was conducted. The purpose of the field view was to examine existing conditions and to take notes and photographs of observed conditions. The principal focus of the walkover and windshield survey was to note the extent of prior disturbance across the Project Corridor and identify any areas which appeared relatively undisturbed. A second field view was conducted on November 1, 2016 because certain project actions had been modified and/or dropped from consideration in the DEIS. For example, additional parking structure locations had been added to the project actions, while certain other previously assessed locations had been eliminated.

A search for previously identified archaeological resources within or in the vicinity of the Project Corridor was undertaken. The State Historic Preservation Office (SHPO) of OPRHP has developed the Cultural Resources Information System (CRIS), an online research tool. Through CRIS, it is possible to research the geo-referenced locations of historic resources and archaeological resources, download accompanying documentation, and save the CRIS-generated map. CRIS includes depictions of archaeological sites, NYS Museum sites, cemeteries, National Register archaeological listings, archaeological districts, archaeological surveys, consultation projects, Museum areas, and archaeologically sensitive areas. CRIS was utilized for the LIRR Expansion Project.

Cartographic research on the Project Corridor was conducted at the New York Public Library (NYPL) Map Division and through the online Digital Collections Gallery of the NYPL. Several historic maps dating from the late-18th century through the 19th century were reviewed, including the 1859 Walling Map of Long Island and the 1906 E. Belcher Hyde Map of Long Island. Historic atlases of Long Island were reviewed, including the 1873 Beers Atlas, the 1891 Wolverton Atlas, and the 1914 E. Belcher Hyde Atlas. The Sanborn Map Company fire insurance maps from the late-19th century through the mid-20th century were reviewed on microfilm at the NYPL to document changes in land use and development patterns of specific lots within the APE over time. Of potential archaeological concern were the proposed locations of parking garage structures, commercial property takings, and construction staging areas beyond the LIRR ROW, as well as the proposed improvements at the seven grade crossings.

The documentation of the extent of prior subsurface disturbance in the APE is a critical component of the research involved in an assessment of archaeological potential. In densely settled urban areas, such as the LIRR Expansion Project Corridor, archaeological sensitivity is often very low, because past construction, demolition, and rebuilding activities have already compromised the integrity of any archaeological resources that may once have been present within the APE.

In order to assess the level of prior subsurface disturbance at the seven grade crossing locations, a review of the existing utilities maps was conducted. Underground utility installations, repairs, and upgrades most often involve trenching beneath street and/or sidewalk locations. For example, depths of three to four feet below the surface are commonplace for water lines in the Northeast. Excavation to such depths would, in most cases, preclude the possibility for encountering intact archaeological deposits.

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3 PREHISTORIC AND HISTORIC OVERVIEW

3.1 Prehistoric Overview of Project Corridor

There are no prehistoric sites within the one-quarter mile Study Area around the Project Corridor according to the results of the CRIS search for archaeological resources. The environmental setting of the Project Corridor may serve to explain the lack of previously identified sites.

The Project Corridor lies within the central portion of Nassau County, in the Atlantic Coastal physiographic province. More specifically, the Project Corridor is located within the area known as the Hempstead Plains, which developed as an outwash plain during the retreat of the last Wisconsin glacier from Long Island.

The Hempstead Plains represents an area of native grassland, a true prairie ecosystem that once covered an estimated 40,000 acres of central Nassau County (See Figure B-1 in Appendix B). Although treeless, the Hempstead Plains once supported grasses and varieties of berries, herb species, and wildflowers (Merwin 2000). Today, as a result of the extensive development of central Nassau County, only a few acres remain. A pocket of the prairie ecosystem is located on the grounds of Nassau Community College in Garden City (Kreussling 2013).

Prior to Euro-American contact and settlement, the Hempstead Plains would have supported variety of plant and animal species sought by Native American groups of hunter-gatherers for subsistence and perhaps for medicinal purposes. However, relatively little is known about prehistoric settlement and subsistence patterns for the interior portions of Nassau County, as most archaeological excavation has focused on the coastal regions of the county. Many campsites and village sites have been found where fresh water meets salt water, such as the coast of Long Island Sound. Multiple shell middens have been excavated along the protected shores of coves and bays on both the north and south shores of Long Island (Merwin 2000).

The Nassau County Museum files and the Suffolk County Archaeological Association Cultural Resources Inventory characterize the interior portion of the island as areas of “low activity” or “insufficient data.” (Gonzalez and Rutsch 1979; Merwin 2000). Kent Lightfoot has suggested that many sites located away from the coast represent short duration camp sites or procurement stations, where limited hunting and gathering activities were performed, resulting in very low diversity and low frequency of artifacts left in the archaeological record (Lightfoot 1988). Prehistoric utilization of the Hempstead Plains was probably focused on seasonal resource procurement and would not have resulted in long term occupation sites. The likelihood of encountering archaeological evidence of short term occupation sites is very low.

3.2 Historic Overview of the Project Corridor

The Project Corridor was originally composed of several isolated historic settlements, some dating to the 17th century. The following discussion is organized by present day place names and offers a brief history of development for each. The information was taken from the body of research that was gathered for the earlier Main Line Expansion Project that was not carried forward.

3.2.1 Floral Park

Floral Park was founded during the late 19th century by John Lewis Childs, a prosperous grower of flowers and seeds. His advertising leaflets started the first seed catalogue business in America. Later, Childs bought the land surrounding the East Hinsdale post office and renamed it Floral Park and named the streets and avenues for flowers and trees. The post office was soon renamed and, in 1888, the LIRR similarly changed the name of its station. In 1926, Floral Park became a Village of the First Class with a population over 5,000. With this growth came the need for public facilities: police, fire protection, and schools were all built by the 1920s. The Village Hall was built in 1936, providing a central focus for the community at Tulip and Carnation Avenues. Infrastructure and transportation network improvements came to the town in the 1950s, as storm and sanitary sewers were constructed, while Jericho Turnpike was widened in the early 1960s, creating further changes to the streetscape. Changes also occurred to the LIRR through Floral Park in the 1960s, with the elimination of the grade crossings at Tulip, Carnation, S. Tyson, and Plainfield Avenues and the elevation of the tracks through the town. Floral Park has continued to flourish with a strong business and community focus, with improvements made to streetscapes, parks, and recreational facilities.

3.2.2 New Hyde Park

At the end of the Civil War, two young German immigrants, John C. Christ and Philip J. Miller resided in New Hyde Park. John Christ operated a store and hotel along the Jericho Turnpike. Miller was responsible for New Hyde Park's first Civic Improvement Program, planting a variety of trees along Millers Lane, Ingraham Lane, and New Hyde Park Road. This commitment to beautification continued in the 1920s, as thousands of additional trees were planted, and this shaded suburban landscape continues to be attractive to residents today. Transportation connections, including the LIRR, tied New Hyde Park into the surrounding network, allowing for strong growth. Early commuters to Manhattan used Jericho Turnpike's trolleys, then buses, as well as the LIRR. The trolley line along the north side of Jericho Turnpike only functioned from 1907 to the 1920s, when it was driven out of business by the growth of the automobile and the bus system and the continued reliability of the LIRR. In 1927, the Village was incorporated. Growth has continued through the 20th century to the present, with an active business community and an involved residential community working hard to retain the key elements that make New Hyde Park "A Great Place to Live" (http://vnhp.org/default.htm).

3.2.3 Garden City

In 1869, New York City merchant millionaire Alexander Turney Stewart purchased almost 10,000 acres of the Hempstead Plains and began to develop one of Americas earliest planned villages. Garden City from the outset contained wide avenues, hundreds of trees and shrubs; sixty well built homes on spacious lots, and a hotel, all of which was connected to the other areas of Long Island and New York via its own railroad line, Stewart's Central Railroad of Long Island. Garden City incorporated in 1919 and its growth led to adjacent residential development in the new areas of Stewart Manor and Garden City Park. Continued population growth led to the construction of hundreds of new houses in Garden City in the 1930s. Currently, Garden City is a well maintained suburban community, with mature tree lined streets, large residential lots, and an active commercial core. The links with the LIRR Main Line and the Hempstead Branch provide residents with easy and dependable access to work locations in Manhattan and elsewhere.

3.2.4 Mineola

Mineola served for many years as the center of Nassau County. First settled by farmers in the 1630s, the village grew slowly until 1844 when the first post office was established and then named "Hempstead Branch." In 1858 the village was officially named Mineola, from the Algonquin Indian word "Meniolagamika," meaning "a friendly or pleasant village." The town was also famous as the location for the Mineola Fair, which ran every year from 1865 to 1953, and was the premier agricultural fair in the region during that period. In 1900, Governor Theodore Roosevelt (an Oyster Bay resident) laid the cornerstone of the first Nassau Courthouse, which is now known as the "Old Courthouse." In the 20th century, the rise of suburbanization led to continued growth and prosperity in Mineola, which built on its strong network of transportation facilities, including the LIRR as well as the Jericho Turnpike, which tied the community to the rest of Long Island, as well as providing easy access for commuters to Manhattan. Today, Mineola retains its healthy residential neighborhoods and business centers, with active community organizations driven to maintain the quality of life in town.

3.2.5 Carle Place

Carle Place, located in the Town of North Hempstead, was originally settled by a cattle farmer, Thomas Carle, in 1656. It was first known as Frogs Hollow and was later named after one of Thomas Carle's descendants, Silas Carle. Carle, a pharmaceuticals merchant, built a large house there in 1800 that later became a local landmark around which the community developed. LIRR rail service went through the town without stopping, until 1923 when the town had grown enough to warrant a station. Today, Carle Place is predominately residential with a large commercial area in its westernmost section.

3.2.6 Westbury

The area that became Westbury was first settled in the 17th century and the village was named Westbury in 1675 by Henry Willis, an English Quaker, after his hometown in England. Primarily a Quaker village, the town was shaken during the Revolutionary war as British soldiers and German mercenaries occupied

local homes, stole livestock, and cleared the forests for firewood. Many of the German Hessians chose not to return to Europe after the war, and settled nearby in what would become New Cassel. By 1840, the LIRR had been built through Westbury, making it easier for new immigrants to work on Westbury's farms. Immigrants included German, Italian, Irish, and Polish families. During and following the Civil War, many African American families came to the village and the few stores that comprised the small village around the railroad depot were primarily black-owned. From the late 19th century into the 20th century, the village transformed from a sleepy farming community into a wealthy suburban enclave, as mansions were built in what is now known as Old Westbury. In 1938, the Northern State Parkway was constructed and in 1940, Roosevelt Raceway (once one of the foremost harness tracks in the region, operating until 1988) was built. By the 1950s Westbury was largely built out, and by 1960, the population reached 15,000.

3.2.7 New Cassel

New Cassel is part of the Town of North Hempstead. It was originally settled by former slaves in the mid-1700s who established a small farming community. Later, Hessian mercenaries, who had fought for the British during the Revolution, established their own farming community and named it New Cassel after a town in Germany. The LIRR was constructed through the community in the 1840s, but a station was not built until 1875. Development in the area started to accelerate after World War II (1941-1945). The proximity to the railroad and Old Country Road made it attractive to manufacturers and others to relocate causing the area to thrive. Today, there are efforts by North Hempstead Town officials to revitalize the downtown and Prospect and Union Avenues. The goal of the effort is to ease traffic congestion and make the area more pedestrian-friendly with wider sidewalks, decorative street lamps, benches, and planters.

3.2.8 Hicksville

Valentine Hicks and his associates helped secure the incorporation of the LIRR in 1834 and extended the railroad into Hicksville by 1837. Initially advertised as an excellent stopover for sportsmen, Frederick Heyne and John Heitz purchased 1,000 acres from Hicks and the Hicksville Association and in 1850 Frederick Heyne laid out streets on his property map and advertised lots for sale to his fellow Germans living in New York City. John Heitz laid out wide, regular tree lined streets. Using the LIRR station depot as their business center, Heyne and Heitz's development grew quickly around the Grand Central Hotel (once located on Broadway across from Kennedy Memorial Park), as sportsmen came to the area by train, and then traveled to various Long Island locations for hunting and fishing. As a tourism and sporting location, Hicksville continued to grow through the 20th century, with the LIRR encouraging tourism and bringing thousands of visitors to the town. Although the sporting life has declined, the suburban residential and commercial strength of Hicksville remains.

3.3 Overview of LIRR Development

The LIRR was originally conceived during the early 1830s to provide a faster route between New York City and Boston, which at that time took as long as 16 hours by ship. The concept was a combination rail-ferry service which would utilize a railroad from the City of Brooklyn to Jamaica in Queens, to a point on the north shore of Long Island, connecting with a ferry to Connecticut that would then connect with another railroad to provide the last leg of the trip to Boston. In 1832, Major D.B. Douglass established the Brooklyn and Jamaica Railroad and began building a rail line from downtown Brooklyn through Jamaica, Queens, and into the flat interior of Long Island, across the Hempstead Plains. In 1834, the LIRR was established and began operations in April 1836 by leasing the tracks from the Brooklyn and Jamaica Railroad. By 1837, the LIRR had extended the tracks to Hicksville and this segment is part of the current Main Line corridor.

During the late-1840s, the New York, New Haven and Hartford Railroad Main Line across coastal Connecticut had eclipsed the LIRR rail-ferry service as the faster and more direct route through New England and subsequently by 1850, the LIRR declared bankruptcy. The LIRR slowly recovered over a period of 30 years through a series of mergers and acquisitions of other independent rail lines across Long Island, such as the South Side Railroad of Long Island, the New York & Flushing Railroad (formerly the Flushing Railroad), the Central Railroad of Long Island, and the Flushing & North Side Railroad.

In 1861, the LIRR had constructed a new Main Line that extended from Jamaica, Queens to Hunters Point in Long Island City on the East River waterfront. From Hunters Point, passengers transferred to ferries to complete the journey into Manhattan. In 1880, Austin Corbin purchased the LIRR with the intention of transforming the LIRR into a high density carrier. Through a series of innovative programs including modernization of the roadbed and equipment, the LIRR expanded its service to its greatest extent. In 1891, Corbin and the LIRR management proposed the construction of a set of tunnels under the East River to Manhattan. At about the same time, the Pennsylvania Railroad Company was also formulating plans to construct a set of tunnels under the Hudson River from New Jersey to Manhattan. The Pennsylvania Railroad and the LIRR eventually cooperated on building a Manhattan connection.

In 1900, the Pennsylvania Railroad took ownership and control of the LIRR. This coincided with the plans to build Pennsylvania Station on the west side of Manhattan and its connecting tunnels under the Hudson and East Rivers. Also at this time, a program to upgrade the entire physical plant of the LIRR was initiated. In 1910, Pennsylvania Station opened and initiated LIRR service through the East River tunnels. The extensive upgrades to the LIRR physical plant (electrification, track elevation, grade separations) and realignments of the railroad from 1901 to 1916 resulted in an almost wholesale replacement of the LIRR of the 1890s, including nearly all the earlier stations, water tanks, switches, towers, signals, and track. In addition, many of the stations built during the late-19th century were replaced. Track was replaced with heavier, sturdier steel. Triple track was installed from Queens Village to Floral Park by 1907. By 1910, almost all of the heavily used tracks on the western end of the LIRR had been double- and triple-tracked, with electrified third rail extending to Mineola and beyond by 1925.

In 1965, the Pennsylvania Railroad sold the LIRR to the State of New York. The state established the Metropolitan Commuter Transportation Authority (forerunner to the MTA), and the LIRR became the first government-owned commuter railroad in the United States. Since 1965, continuous upgrades and modernization of the railroad's infrastructure, rolling stock, and systems have been ongoing.

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4 RESULTS OF SURVEY

4.1 Archaeological Site File Search

There are no previously identified prehistoric or historic sites located within the ¼-mile study area around the Project Corridor according to the results of the CRIS database search for archaeological resources.

4.1.1 Prehistoric Sensitivity Considerations

The Nassau County Museum files and the Suffolk County Archaeological Association Cultural Resources Inventory characterize the interior portion of Long Island as areas of "low activity" or "insufficient data" (Gonzalez and Rutsch 1979). Sites located away from the coast likely represent short duration camp sites or procurement stations, where limited hunting and gathering activities were performed, resulting in very low diversity and low frequency of artifacts left in the archaeological record. Precontact utilization of the Hempstead Plains was probably focused on seasonal resource procurement, and would not have resulted in long term occupation sites. The likelihood of encountering archaeological evidence of short term occupation sites is very low (Lightfoot 1988; Merwin 2000).

4.1.2 Historic Sensitivity Considerations

The lack of previously identified historic period archaeological resources can be understood through review of the background research and cartographic review conducted for the LIRR Expansion Project.

4.2 Site Reconnaissance Walkover and Windshield Survey

To prepare the Phase 1A, a walkover survey of the Project Corridor was conducted of the seven train stations and seven grade crossings. In addition, a windshield survey of the entire 9.8-mile-long Project Corridor and the ¼-mile study area was conducted. The focus of the walkover and windshield surveys was to assess the extent of prior disturbance across the Project Corridor.

The Project Corridor is densely developed with very little open land. The seven train stations have associated surface parking lots and/or parking structures in proximity. The seven grade crossings are located amid dense suburban development. The following photographs were taken on June 7, 2016 and November 1, 2016 to document existing conditions.

Photos 1-7 depict the existing conditions at the seven stations in the Project Corridor. Photos 8-20 depict the existing conditions at the seven grade crossings proposed for modifications and the potential commercial property takings at the crossings. Photos 21-28 depict the existing conditions at the proposed parking structure locations in Mineola, Westbury and Hicksville.

Photo 1 – Floral Park Station. Note that the LIRR tracks are elevated at this location, and there is station parking adjacent to the ROW. The surrounding area is densely settled with residential and civic structures.

Photo 2 – New Hyde Park Station. Note that the LIRR tracks are at surrounding street grade at this location. The area is densely settled with residential and commercial structures.

Photo 3 – Merillon Avenue Station. Note that the LIRR tracks are on a slight embankment at this location; the slope seen in the foreground is a result of the cut made for the Nassau Boulevard underpass beneath the LIRR tracks.

Photo 4 – Mineola Station. Note that the LIRR tracks are at surrounding street grade at this location.

Photo 5 – Carle Place Station. Note that the LIRR tracks are on an embankment cut through the side of a hill sloping to the south at this location. Industrial buildings flank the ROW to the north; dense residential area flanks the ROW to the south.

Photo 6 – Westbury Station. Note that the LIRR tracks are on an embankment through this area.

Photo 7 – Hicksville Station. Note that the LIRR tracks are elevated at this location and there is station parking adjacent to the ROW.

Photo 8 - Covert Avenue grade crossing looking northeast. Note one-story brick building at northeast corner – 124 Covert Avenue is a potential taking. Surrounding area is densely settled, mixed residential and commercial. Noted subsurface utilities include electric, water, stormwater, and sewer. Station parking is flanking LIRR ROW, in surface lots in proximity to New Hyde Park Station.

Photo 9 – South 12th Street grade crossing looking south. Surrounding is mixed residential and commercial area, densely settled. Subsurface utilities noted include gas, water, sewer, and stormwater. Note village-owned surface parking lot for New Hyde Park Station is located on southwest corner of crossing.

Photo 10 – New Hyde Park Road grade crossing looking south. Industrial and commercial structures are adjacent to LIRR ROW; densely settled residential area beyond. Subsurface utilities noted include electric, sewer, water, and stormwater.

Photo 11 – New Hyde Park Road grade crossing looking northwest. Note commercial building on northwest corner of crossing – 115 New Hyde Park Road – is a potential property taking.

Photo 12 – Main Street, Mineola grade crossing looking north. Area is densely settled residential and commercial, with much railroad infrastructure and a station west of crossing. East of crossing is where Oyster Bay Branch leaves the Main Line, arcing to the north. Marked-out utilities include water, sewer, stormwater, telephone, and electric.

Photo 13 – Main Street, Mineola grade crossing looking south. Note frame structure on southwest corner of crossing – the LIRR's Nassau Tower, a potential property taking, which is likely to be demolished for installation of the third Main Line track.

Photo 14 – Former Mineola Substation building in southwest quadrant of Main Street, Mineola grade crossing – a potential property taking**,** which will likely be demolished for surface parking improvements. Note the Nassau Tower structure at extreme right of photo.

Photo 15 – Willis Avenue grade crossing of Main Line tracks looking south. Subsurface utilities noted include water, sewer, stormwater, and electric.

Photo 16 – Willis Avenue grade crossing looking south across Main Line (foreground) and Oyster Bay Branch (background) crossings. Subsurface utilities noted include water, sewer, stormwater, and electric.

Photo 17 – School Street grade crossing looking northeast. Mixed industrial and commercial structures adjacent to both sides of ROW; residential area to south and commercial district to north. Cemetery to the southwest of Railroad Avenue is well-removed from crossing. Subsurface utilities noted include water, sewer, and electric.

Photo 18 – School Street grade crossing looking at northeast corner of crossing at 167 School Street, Acme Dependable Threaded Products, Inc. industrial building – a potential property taking.

Photo 19 – Urban Avenue grade crossing looking south. Area to the south of LIRR ROW is mixed industrial and commercial; area to the north of LIRR ROW is densely settled residential. Note structure on the southwest corner of the crossing – 117 Urban Avenue (foreground) is a potential property taking.

Photo 20 – Urban Avenue grade crossing looking north. Subsurface utilities noted include telephone, electric, water, sewer, and stormwater.

Photo 21 – Looking southwest from Second Street at Mineola village-owned Muni Lot 23, west of Willis Avenue at proposed parking structure location. Lot is paved with drainage and overhead lighting. Lot lies between commercial structures and the LIRR ROW to the south.

Photo 22 – Looking south from Harrison Street at First Street across surface parking lot for Mineola Station that runs along Third Avenue, west of Mineola Boulevard, proposed parking structure location. There are multiple manholes across lot for stormwater drainage. Area is densely settled, mixed residential and commercial.

Photo 23 – Looking south from Scally Place toward Union Avenue and Westbury Station across village-owned surface parking lot, proposed parking structure location. Lot appears landscaped, with curbed section divides, tree plantings, and overhead lighting with surveillance cameras. Scally Place is primarily residential; Union Avenue is primarily commercial.

Photo 24 – Looking west toward Post Avenue across Westbury village-owned surface parking lot adjacent to south LIRR ROW, proposed parking structure. Currently a large lot with multiple stormwater drains and overhead lighting. There is an entrance to a tunnel under the tracks at center right of photo. Cemetery to south of Railroad Avenue is far removed from proposed location.

Photo 25 – Looking east across south side of surface parking lot on south side of West Barkley Street, proposed parking structure location. Street grade lot abuts LIRR ROW at Hicksville Station. Note elevated track structure. Stormwater drainage manholes are evident across lot.

Photo 26 – Looking east across north side of surface parking lot for Hicksville Station on south side of West Barkley Street, proposed parking structure location. Street grade lot is in primarily commercial area.

Photo 27 – Looking south from West John Street across surface parking lot for Hicksville Station north of West Barkley Street, east of Marion Place, proposed parking structure location. Elevated LIRR structure and Hicksville Station are in background. Hertz building at right of photo, not within parking lot parcel.

Photo 28 – Looking southeast across surface parking lot for Hicksville Station north of West Barkley Street, east of Marion Place, proposed parking structure location. Elevated LIRR structure and Hicksville Station seen in background. Large white building at left of photo is Bob's Self Storage.

4.3 Cartographic Review

4.3.1 Historic Development of Project Corridor

Background research indicates that historic development first occurred during the 17th century in what are now Mineola, Carle Place, and Westbury. New Cassel was first settled during the mid-18th century and Floral Park, New Hyde Park, Garden City, and Hicksville were settled during the 19th century. These settlements, however, were not necessarily adjacent to or in the vicinity of the Project Corridor. Although the LIRR Main Line corridor was extended to Hicksville by 1837, not all of the present day Main Line stations were constructed as early as the Hicksville Station and, more often than not, as discussed above, the present day stations are not in their original locations.

Cartographic review of historic maps and atlases that depict the Project Corridor reveal that residential and commercial settlement was quite sparse along the rail corridor between the towns, villages, and hamlets up through the turn of the 20th century and somewhat concentrated around station locations by the last quarter of the 19th century. Selected historic maps are presented in Appendix B.

The 1859 Walling *Topographic Map of the Counties of Kings and Queens, New York* depicts the route of what would become the LIRR Main Line corridor from Jamaica to Hicksville. Floral Park, New Hyde Park, and Garden City have not yet been established, sparse development is shown at Mineola and Westbury, Carle Place and New Cassel are not identified, and Hicksville displays sparse development.

The 1873 *Beers Atlas of Long Island, New York* shows that Floral Park has not yet been established, New Hyde Park and Garden City are labeled and show that the street grids have been laid out, Mineola and Westbury are depicted and the LIRR stations noted, Carle Place is not identified, New Cassel is depicted with a street grid, and Hicksville is shown with the LIRR station located between Jerusalem Avenue and Broadway. Scattered development can be seen along the Project Corridor, but the majority of the depicted blocks fronting the Main Line tracks are lotted, but vacant (Appendix B).

The Wolverton 1891 Atlas depicts Floral Park with a street grid in place on the north side of the tracks, with a station on the south side, off Tulip Avenue. J. H. Childs (the founder of Floral Park, formerly named East Hinsdale) is noted as owning property on both sides of the tracks close to the station. Garden City is shown laid out with a street grid and labeled as the lands of the A. T. Stewart Estate (Alexander T. Stewart was the founder of the planned community of Garden City). There is a station on the south side of the tracks in the western part of the street grid, but it is not named. The Central Branch of the LIRR also passes through the Garden City community to the south of the Main Line. New Hyde Park is depicted with a partial street grid that crosses the tracks, a Post Office, and LIRR station located on the north side of the tracks. Development along the Project Corridor in the above mentioned communities is very sparse, with scattered structures depicted some distance from the Main Line tracks (Appendix B).

The 1891 atlas shows that Mineola has seen more development than surrounding communities along the LIRR Main Line in the Project Corridor. A block and lot street grid has been developed for the area on

both sides of the Main Line tracks (labeled the Central Line Extension on this map), centered on Main Street, where the Oyster Bay Branch diverges to the northeast and the former Hempstead Branch diverges from the Main Line and turns south to run down Main Street. The Mineola depot is depicted on the south side of the Main Line tracks in the triangle formed by the three rail lines. Although over a dozen blocks have been lotted, most of the lots remain vacant (Appendix B).

Carle Place is not labeled in 1891. Westbury is shown with a partial street grid and the LIRR station is shown on the south side of the tracks. New Cassel is labeled and displays a street grid, but no station or structures are depicted. Hicksville is shown with a street grid, but very few of the blocks are lotted. There are blocks flanking the Project Corridor west of New Bridge Road, but all are vacant. The LIRR Main Line seems to end at the depot located off Jerusalem Avenue; the Northport Branch diverges to the northeast (later the Port Jefferson Branch) and the Greenpoint Branch (later the continuation of the Main Line) diverges to the southeast (Appendix B).

The 1906 E. Belcher Hyde *Map of Nassau County, New York* indicates moderate increases in development in that the street grids have expanded for Floral Park, New Hyde Park, West Garden City, and Mineola. Carle Place is not yet labeled. Westbury, New Cassel, and Hicksville also have expanded street grids, although development along the Project Corridor is still sparse (Appendix B).

The 1914 E. Belcher Hyde *Atlas of Nassau County, Long Island, New York* indicates that much of the Project Corridor has experienced increased development or is being planned for increased development. The street grid of Floral Park has expanded; the community of Bellrose appears on the north side of the Main Line corridor; Floral Park Estates has been laid out to the east of Floral Park; the street grid of New Hyde Park has grown; Garden City Park, Garden City Estates North, and West Garden City have been laid out to the north of the Main Line tracks; the Merillon Avenue Station has been built on the north side of the tracks in Garden City Estates North; the block and lot street grid in Mineola has been expanded to Jericho Turnpike on the north side of the Main Line tracks, the passenger station is located on Main Street within the triangle formed by the Main Line and the Oyster Bay and Hempstead Branches, and numerous formerly vacant lots have been developed (Appendix B).

To the east, planned developments of Mineola Park, Westbury Estates, and Westbury Heights have been laid out on the north side of the Main Line tracks; Carle Place is not labeled; the street grid of Westbury has grown on both sides of the Main Line tracks; New Cassel is laid out, but appears mostly undeveloped across the Project Corridor; and Hicksville has an expanded street grid to the east of the Hicksville Station, but the Project Corridor remains mostly undeveloped.

Late-19th century through mid-20th century Sanborn Map Company fire insurance maps were available for developed portions of the Project Corridor. These maps were reviewed for potential resources and, together with the historic maps and atlases of the Project Corridor, formed the basis of the assessments presented below.

4.4 Archaeological Assessment of Project Actions

4.4.1 Proposed Alignment of Main Line Third Track

The LIRR ROW along the 9.8-mile length of the LIRR Expansion Project Corridor from Floral Park to Hicksville has been determined to possess little to no prehistoric archaeological potential. The LIRR has utilized the corridor since the 1830s and has extensively impacted the landscape as a result of track construction, reconstruction, widening, construction of stations, erecting of switching/signal towers, and multiple other support structures. Although the Hempstead Plains would have been utilized by Native American groups for hunting of game, the traces of such activities, often identified in the archaeological record as camp sites, would not have survived the extensive land alterations within the LIRR ROW.

The LIRR ROW along the length of the LIRR Expansion Project Corridor has been determined to possess little to no historic archaeological potential. The cartographic review of late-18th century maps and 19th century atlases has shown that the LIRR Main Line corridor was sparsely developed until the second quarter of the 20th century. The maps indicate limited residential, commercial, and light industrial development fronting the railroad and around station locations along the Main Line corridor through World War II (1941-1945). Although suburban development along the Main Line corridor had its origins in the early-20th century, intensive suburban development did not occur until post-World War II (1941-1945). As a result of the extensive operations-related improvements undertaken by the LIRR within the ROW, and the intensive 20th century suburban development adjacent to the LIRR ROW, it is highly unlikely that remnants of historic occupation have survived intact within or adjacent to the ROW.

The LIRR-owned Nassau Tower structure (Unique Site Number [USN] 05954.000046) is located in the ROW at the southwest corner of the Main Street crossing of the tracks in Mineola. This structure would be demolished for the Main Line third track alignment. This National and State Register listed structure is within the LIRR ROW, but its location possesses little to no potential for intact archaeological resources, due to the extent of prior subsurface disturbance across the area.

Project actions associated with the LIRR Expansion Project also include the relocation of utilities from one side of the ROW to the other in multiple locations, and the construction of retaining walls in numerous locations on both sides of the ROW along the Project Corridor. These actions will create ground disturbance in numerous locations, however, based on the extent of prior subsurface disturbance documented for the ROW itself, and the area immediately adjacent, these actions are unlikely to impact any intact archaeological resources that may once have been present.

4.4.2 Proposed Modifications to Other Railroad Infrastructure

The modifications to other LIRR infrastructure include signal systems, substations, drainage systems/culverts, interlockings, crossovers, sidings, track bed, power systems, communications, and signals. These improvements and modifications will occur within the LIRR ROW along the 9.8-mile Project Corridor between Floral Park and Hicksville.

Based on the extent of prior subsurface disturbance documented for the LIRR ROW itself and the area immediately adjacent, due to the substantial amount of construction and disturbance related to the railroad since 1837, these actions are unlikely to impact any intact archaeological resources that may once have been present. In particular, the eight substations within the Project Corridor will be modified within their existing footprints. No additional ground disturbance is anticipated.

4.4.3 Proposed Modifications to Passenger Rail Stations

The Proposed Project includes modifications to the passenger rail stations, including modified and improved platforms, passenger shelters, and ADA access enhancements such as reconstructed pedestrian ramps, bridges, and elevators. The Project Corridor includes the Floral Park, New Hyde Park, Merillon Avenue, Mineola, Carle Place, Westbury, and Hicksville stations; the Proposed Project would modify the New Hyde Park, Merillon Avenue, Mineola, Carle Place, and Westbury stations. Given the extent of documented prior disturbance at the station locations within the LIRR ROW and the area adjacent to both sides of the ROW, these actions are unlikely to impact any intact archaeological resources that may once have been present.

4.4.4 Proposed Construction of Retaining Walls

Multiple locations for construction of retaining walls along the north and the south sides of the LIRR ROW have been proposed. In some cases, sound attenuation walls are proposed for areas of anticipated high noise levels. These actions will create ground disturbance, however, given the extent of documented prior disturbance within the LIRR ROW and the area adjacent to both sides of the ROW, these actions are highly unlikely to encounter any intact archaeological resources that may once have been present. Due to the substantial amount of construction and disturbance related to the railroad since 1837, there is little to no potential for encountering intact deposits within or immediately adjacent to the ROW.

4.4.5 Proposed Grade Crossing Modifications

Seven grade crossing locations would be modified either by closing or by creating a grade separated crossing. Three of the locations are located in New Hyde Park/Garden City and are close to the New Hyde Park Station: Covert Avenue; South 12th Street; and New Hyde Park Road (Figure 2a). Two of the grade crossings are in Mineola, near the Mineola Station: Main Street; and Willis Avenue (Figure 2b). Two of the grade crossings are located in Westbury/New Cassel and are east of the Westbury Station: School Street (Figure 2c); and Urban Avenue (Figure 2d).

4.4.5.1 Covert Avenue (New Hyde Park/Garden City)

The Covert Avenue grade crossing would be reconstructed to provide a two-lane grade separated underpass with a sidewalk on the east side. The existing access from Covert Avenue to the commercial building at the northeast corner of Covert and Second Avenues (124 Covert Avenue) would be restricted, potentially requiring acquisition.

The present day configuration of the Covert Avenue grade crossing dates to the mid-20th century. In 1906, Covert Avenue crossed the Main Line tracks from the south and became 6th Street on the north side. Covert Park was located on the south side of the tracks, west of Covert Avenue. No structures are located on the four corners of the crossing in 1906.

The 1910 and 1922 Sanborn fire insurance maps depict 80-foot-wide Covert Street (Avenue) on the south side of the tracks and 60-foot-wide 6th Street continuing to the north of the tracks. Water mains and fire hydrants have been installed in Covert Street as far north as Wayne Avenue; no water main is depicted for 6th Street. The four corners of the grade crossing have been laid out in blocks and lots, but no structures are depicted.

By 1914, the rectilinear street grid had been implemented, and the blocks lotted. However, none of the four corners of the Covert Avenue crossing had been built on. The northeast corner, the location of present day 124 Covert Avenue, is depicted as the property of Mineola Realty Associates and is vacant. The vacant block on the northwest corner of the crossing is shown as belonging to the Garretson Estate. The vacant blocks on the southeast and southwest corners of the crossing are not labeled.

Review of the existing utilities maps for the Covert Avenue crossing has indicated that substantial prior subsurface disturbance has occurred, as multiple underground services are in place beneath the pavement and flanking sidewalks. Prior soil disturbance has been created by the installation of the following:

- Catch basins depicted for all four corners of the crossing.
- Water lines run north-south on both sides of Covert Avenue and east-west in 2nd and 3rd Avenues.
- Sewer line runs north up Covert Avenue from 2nd Avenue.
- Sewer line runs south down Covert Avenue from 3rd Avenue.
- Gas lines in Covert Avenue, 2nd Avenue, and 3rd Avenue.
- Fiber optic cable runs north-south on the west side of Covert Avenue.
- Sewer and storm sewer manholes are depicted in the crossing area.

4.4.5.2 South 12th Street (New Hyde Park/Garden City)

There are two options being considered for the South 12th Street grade crossing. Option 1 would permanently close South 12th Street to vehicular traffic across the LIRR tracks and provide an ADA-compliant pedestrian bridge over the tracks with ramps landing along Second Avenue and Third Avenue. The pedestrian bridge would connect to the village-owned surface parking lot on the southwest corner of the South 12th Street crossing.

Option 2 would create a one-way grade-separated southbound underpass with a sidewalk on the east side. It should be noted that the street numbering system in New Hyde Park was changed post-1922. Prior to that date, South 12th Street was known as 1st Street and the north-south running street numbers increased to the west. Today, the streets are numbered in the reverse order. The east-west running avenues have also been renumbered.

In 1906, South 12th Street (1st Street) crossed the Main Line tracks in much the same configuration as today. No structures are depicted on the four corners of the crossing.

The 1910 Sanborn fire insurance map depicts South 12th Street (1st Street) as 60-feet-wide, with water mains and fire hydrants. The four corners of the grade crossing have been laid out in blocks and lots, but no structures are depicted for the northeast, southeast, and southwest corners. There is a one-story dwelling on the northwest corner of the crossing, on the north side of 4th Avenue (today's 2nd Avenue), approximately 50 feet north of the Main Line ROW.

By 1914, a siding is depicted on the north side of the tracks, just west of South 12th Street. A spur line is depicted off the siding, and it continues eastward to the L. I. Seed Company building at the corner of Herkomer Street and 4th Avenue (today's 2nd Avenue). The blocks at all four corners of the crossing have been lotted. The southwest, southeast, and northwest corners are vacant; there is a small, two-story dwelling on the northeast corner. The one-story dwelling on the northwest corner of the crossing depicted on the 1910 Sanborn map is gone; the vacant lot is depicted as belonging to J. H. Taft and H. Baer.

The 1922 Sanborn map shows that the southwest and southeast corners of the crossing are lotted, but still vacant of structures.

Review of the existing utilities maps for the South 12th Street crossing has indicated that substantial prior subsurface disturbance has occurred, as multiple underground services are in place beneath the pavement and flanking sidewalks. Prior soil disturbance has been created by the installation of the following:

- Catch basins shown for all four corners of the South 12th Street and 2nd Avenue intersection.
- Sewer line runs north-south in the middle of South 12th Street.
- Storm sewer manholes depicted on the southeast and southwest corners of South 12th Street and 3rd Avenue.
- Water lines run north-south on the west side of South 12th Street and east-west in 2nd and 3rd Avenues.
- Fiber optic cable runs east-west in 2nd Avenue and turns north up South 12th Street.
- Fiber optic cable runs east-west in 3rd Avenue and turns south down South 12th Street.
- Gas line runs north-south on the east side of South 12th Street.
- Gas lines run east-west in 2nd and 3rd Avenues.

4.4.5.3 New Hyde Park Road (New Hyde Park/Garden City)

There are two options being considered for the New Hyde Park Road grade crossing. Under Option 1, the crossing would be reconstructed as a five-lane grade-separated underpass with sidewalks on the east and west sides of the underpass and a kiss-and-ride area northeast of the tracks. Pedestrian access from Garden City to the LIRR station would be provided via a pedestrian crossing parallel to and south of the tracks.

This option would require the acquisition of the commercial building at the northwest corner of New Hyde Park Road and Plaza Avenue (Safeguard Self Storage building at 115 New Hyde Park Road). The space created with this acquisition would be used to connect Second Avenue to Plaza Avenue and provide space for a kiss-and-ride area, and the remaining space would be used for parking, drainage, and stormwater management.

Under Option 2, the crossing would be reconstructed as a four-lane grade separated underpass with sidewalks on the east and west sides of the underpass. This option would involve construction of a kiss-and-ride area on the southwest side of New Hyde Park Road. This option would not require the acquisition of any buildings.

New Hyde Park Road is depicted crossing the Main Line tracks on the 1859 Walling map as Hyde Park Road, but no structures are depicted for the four corners of the crossing. By 1906, New Hyde Park Road (Hyde Park Road) crossed the Main Line tracks in much the same configuration as today. No structures are depicted on the four corners of the crossing.

The 1910 and 1922 Sanborn maps depict New Hyde Park Road as New Hyde Park Avenue (Hyde Park Avenue), suggesting that changes have been implemented since 1906. The corridor is shown as 65-feet-wide, and has been laid out in blocks to the east and west, but not lotted. Three east-west thoroughfares have been laid out on the north side of the Main Line tracks, but are labeled "Not Named." The four corners of the crossing are shown as vacant.

By 1914, Clince Avenue (present day Clinch Avenue) had been constructed to end at its intersection with New Hyde Park Road (Hyde Park Road) to the southeast of the tracks. No structures are depicted for the four corners of the crossing; the land east of New Hyde Park Road on both sides of the tracks is indicated as land belonging to the Glen Falls Trust Co. or Uncas Realty Company. The vacant lands on the northeast and southeast corners of the crossing are not labeled.

Review of the existing utilities maps for the New Hyde Park Road crossing has indicated that substantial prior subsurface disturbance has occurred, as multiple underground services are in place beneath the pavement and flanking sidewalks (on the north side of the crossing). Prior soil disturbance has been created by the installation of the following:

- Water lines run north-south on the west side of New Hyde Park Road.
- Gas line runs north-south on the west side of New Hyde Park Road.
- Gas lines run east-west across New Hyde Park Road to the north and south of the crossing.
- Sewer lines run north-south on both sides of New Hyde Park Road.
- Sewer line runs east-west across 2nd Avenue and crosses New Hyde Park Road north of the crossing.
- Storm sewer manholes are shown on the east side of New Hyde Park Road, north of 2nd Avenue.
- Fiber optic cable runs north-south on the west side of New Hyde Park Road.
- Telephone line runs north-south on the west side of New Hyde Park Road.

4.4.5.4 Main Street (Mineola)

There are two options being considered for the Main Street grade crossing. Option 1 would permanently close Main Street to vehicular traffic across the LIRR tracks and provide a pedestrian bridge over the LIRR tracks with elevators. The pedestrian bridge would connect to the improved surface parking area on the LIRR property at the southwest corner of Main Street and span over the LIRR tracks. The surface parking improvements would require the demolition of the former Mineola Electrical Substation building.

Under Option 2, the Main Street crossing would be reconstructed as a one-way grade separated northbound traffic underpass, and provide a pedestrian bridge over the LIRR tracks with elevators. The pedestrian bridge would span over the LIRR tracks, connecting to the improved surface parking area on the LIRR property at the southwest corner of Main Street. The surface parking improvements would require the demolition of the former Mineola Electrical Substation building. On the north side of the tracks, two four-foot-wide sidewalks would be constructed. This reduced sidewalk width would allow for the construction of the underpass without the acquisition of the commercial building on the northwest side of the tracks.

In 1891, the Main Street crossing of the LIRR Main Line tracks appears to be offset; Main Street is much wider on the south side, as it is accommodating the tracks of the Hempstead Branch. The Oyster Bay Branch diverges from the Main Line and heads northeastward from the west side of Main Street. A brick depot and a frame structure, possibly the Nassau Tower, are depicted on the south side of the Main Line tracks in the triangle formed by the three rail lines. The northeast corner of the crossing is occupied by A. R. Arison's Hotel; there is a Post Office located on the northeast corner; and the southwest and southeast corner blocks are lotted, but vacant.

The 1906 map does not have Main Street crossing the Main Line tracks. The location of the present day Main Street crossing of the Main Line tracks is occupied by the Mineola Station in the triangle formed by the divergence of the Queens and Nassau Line (labeled Hempstead Branch in 1891) running southward down the route of present day Main Street and the divergence of the Oyster Bay Branch to the northeast.

The 1908 Sanborn fire insurance map depicts the one-story Mineola Station located on the south side of the Main Line tracks, in the triangle formed by the three rail lines. On the north side of the Main Line tracks there is a two-story building (offices of the 1st National Bank, formerly the Arison Hotel) located some distance from the tracks on the northeast corner of Front and Main streets. There is a one-story general store with a dwelling at the rear north of the northeast corner of Front and Main streets (former Post Office building). The two-story Nassau County Bank building has been constructed at the southeast corner of Front and Main streets (the location of present day Davenport's Restaurant). There was no Sanborn coverage of the southwest corner of the crossing.

The 1914 atlas shows more or less the same conditions at the Main Street crossing as the 1908 Sanborn map. The block at the southwest corner of the crossing is vacant.

Review of the existing utilities maps for the Main Street crossing has indicated that substantial prior subsurface disturbance has occurred, as multiple underground services are in place beneath the pavement and flanking sidewalks. Prior soil disturbance has been created by the installation of the following:

- Catch basins depicted for all four corners of the crossing.
- Storm sewer manholes shown on Main Street north and south of the crossing.
- Fiber optic cable encased in 36-inch sleeve is depicted running north-south on the west side of Main Street.
- Water lines run north-south on the east side of Main Street and east-west in Front Street.
- Sewer line runs north-south on east side of Main Street through the crossing, then turns slightly to run up the middle of Main Street north of Front Street.
- Gas line in center of Main Street south of the crossing.
- Gas lines run across Main Street north of the crossing.
- Electric line on west side of Main Street north of the crossing.
- Telephone line on west side of Main Street south of the crossing.

4.4.5.5 Willis Avenue (Mineola)

There are two options being considered for the Willis Avenue grade crossing. Under Option 1, a two-way grade-separated underpass with a pedestrian bridge and elevators would be constructed. This option would include the construction of a parking garage between Main Street and Willis Avenue in place of the existing at grade municipal lot on the north side of the tracks adjacent to the commercial building at 85 Willis Avenue. This scenario also would require reconstructing the parking area at the northwest corner of Second Street and Willis Avenue.

Under Option 2, a one-way grade separated southbound underpass with pedestrian bridge and elevators would be constructed. This option would also include the construction of a parking garage between Main Street and Willis Avenue in place of the existing municipal lot on the north side of the tracks adjacent to the commercial building at 85 Willis Avenue.

The 1891 atlas indicates that the former name for Willis Avenue was First Avenue. By that time, the crossing location had been laid out in blocks and lots. The northwest corner of the crossing is shown as belonging to Dr. Hamlick; it has been lotted, but no structures are shown. The southwest corner contains one frame dwelling south of Front Street, labeled Fleet. The northeast corner block is shown as belonging to W. M. Hewlett and there is one small frame structure depicted near the Main Line ROW. The southeast corner block is indicated as belonging to Eastman and no structures are shown.

By 1906, the street name for Willis Avenue has been designated. The configuration of the Willis Avenue crossing is much the same as shown in 1891.

The 1908 Sanborn map of Mineola shows Willis Avenue as a 50-foot-wide thoroughfare, with water mains and fire hydrants. The northwest and northeast corners of the crossing are depicted as vacant blocks. The southwest corner contains a two-story dwelling at 209 Front Street, which appears to front on

50-foot-wide Front Street, which is adjacent to the Main Line ROW. The large block at the southeast corner of the crossing is vacant.

By 1914, more development is seen on the blocks surrounding the Willis Avenue crossing; there are additional structures on many lots. The northwest corner of the crossing is depicted as a vacant triangle-shaped parcel bounded by the Oyster Bay Branch tracks; the Birdsall Coal Company is located on the remainder of the lot on the north side of the Oyster Bay Branch tracks. The block at the northeast corner of the crossing also contains the Oyster Bay Branch tracks and is labeled as the Mineola Development Company; and there is a small, two-story structure shown near the Main Line ROW. The southwest corner of the crossing contains a two-story dwelling. The large lot on southeast corner is vacant and shown as the property of McKeefer.

Review of the existing utilities maps for the Willis Avenue crossing has indicated that substantial prior subsurface disturbance has occurred, as multiple underground services are in place beneath the pavement and flanking sidewalks. Prior soil disturbance has been created by the installation of the following:

- Catch basins depicted for all four corners of the Main Line tracks and Willis Avenue.
- Water line runs north-south west of center in Willis Avenue under Main Line and Oyster Bay Branch tracks.
- Water line runs east-west in Front Street south of Main Line tracks.
- Gas line in 8-inch sleeve runs north-south in center of Willis Avenue under Main Line and Oyster Bay Branch tracks.
- Storm sewer manholes shown along Willis Avenue south of the Main Line tracks and in Front Street.
- Multiple manholes of unknown function depicted east-west in Hinck Way, north of the Main Line tracks.

4.4.5.6 School Street (Westbury)

The School Street crossing would be reconstructed as a two-way grade separated underpass with a sidewalk on the east side. Railroad Avenue would be reconstructed to maintain access to School Street. Acquisition of a narrow strip of land would be required from the commercial property on the southeast corner of the intersection of School Street and the LIRR tracks to build a service road to maintain access to the existing business. It also would require the acquisition of the commercial property (167 School Street, Dependable Acme Thread Products) at the northeast quadrant of the crossing, due to the elimination of access to School Street.

The 1891 and 1906 maps indicate that the northern portion of New Cassel has been laid out in a street grid, but no street names are noted and no structures are depicted.

By 1914, the development of Westbury Hills had been laid in a non-conforming street pattern across the northern portion of New Cassel and the remaining street grid in New Cassel has been given street names that are in existence today.

The School Street crossing of the Main Line tracks appears mostly undeveloped. However, the Westbury Station is shown at the northwest corner of the crossing in a triangle-shaped parcel created by the intersection of School Street, Union Avenue and the Main Line ROW. The block at the northeast corner of the crossing is vacant. The block at the southwest corner is vacant and the large vacant parcel at the southeast corner of the crossing is shown as the land of Charles Crosby.

Review of the existing utilities maps for the School Street crossing has indicated that substantial prior subsurface disturbance has occurred, as multiple underground services are in place beneath the pavement and flanking sidewalks. Prior soil disturbance has been created by the installation of the following:

- Sewer line runs north-south in center of School Street under the Main Line.
- Fiber optic cable runs north-south on west side of School Street under the Main Line.
- Water lines run north-south on west side of School Street north and south of the Main Line crossing.
- Gas lines run north-south on the east side of School Street north and south of the Main Line crossing.
- Gas lines run east-west across School Street to adjacent commercial properties north and south of the Main Line crossing.

4.4.5.7 Urban Avenue (New Cassel)

The Urban Avenue crossing would be reconstructed as a two-lane grade separated underpass with a sidewalk on the west side. One commercial property at the southwest quadrant of the crossing (117 Urban Avenue, J. H. Auto Collision) would be acquired due to the elimination of access to Urban Avenue. The driveway to 109 Urban Avenue, the Cryostar Industries building, would be reconstructed due to access issues raised by the construction of the underpass.

The 1891 and 1906 maps indicate that the northern portion of New Cassel has been laid out in a street grid, but no street names are noted and no structures are depicted.

The 1914 map depicts Urban Avenue as running from Grand Boulevard to the south, across the Main Line tracks, and ending at the line of the Westbury Hills development on the north. There are no structures depicted on any of the four corners of the crossing.

Review of the existing utilities maps for the Urban Avenue crossing has indicated that substantial prior subsurface disturbance has occurred, as multiple underground services are in place beneath the pavement and flanking sidewalks. Prior soil disturbance has been created by the installation of the following:

- Sewer line runs north-south in center of Urban Avenue under Main Line.
- Water line runs north-south on west side of Urban Avenue under Main Line.
- Fiber optic cable runs north-south on east side of Urban Avenue under Main Line.
- Interconnected catch basins and storm drains/storm sewer manholes are depicted for all four corners of the crossing.

- Gas lines running east-west across Urban Avenue to adjacent commercial properties are depicted approximately 100 feet south of the crossing; no extant gas line is shown for the crossing.

4.4.5.8 Archaeological Assessment Summary of the Grade Crossings

The actions associated with the grade crossing modifications will create ground disturbance in all seven crossing areas. It has already been determined that the LIRR ROW and the area immediately adjacent has no archaeological potential, due to extensive and repeated prior disturbance.

There are few areas in the grade crossings portion of the APE that have archaeological potential based on cartographic research, but on closer inspection, these areas have already been impacted by subsurface disturbance. Early 20th century structures and early railroad-related structures fronted on the Main Line corridor, but have since been removed. It is possible that remains of these structures could be extant; however, the potential for encountering intact deposits is very low. The installation of multiple utility lines, excavation for catch basins and storm drains, demolition of structures, and realignment of streets have impacted the soils at the grade crossing locations. It is highly unlikely that project actions will directly impact any intact archaeological resources that may once have been present at the seven grade crossings.

4.4.6 Proposed Parking Improvements

Parking modifications include new parking facilities at the New Hyde Park, Mineola, Westbury, and Hicksville stations. Some of the modifications are to improve existing surface lots and other proposed modifications include replacement of existing surface lots with multi-level parking structures.

4.4.6.1 New Hyde Park

A new parking lot and kiss-and-ride are proposed for the New Hyde Park Station, at the northeast corner of New Hyde Park Road and the LIRR tracks. This will require the acquisition of the commercial property and demolition of the existing structure at 115 New Hyde Park Road. Stormwater drainage will be installed beneath the surface parking lot. The location does not possess archaeological potential due to extensive prior disturbance, notably the construction of the existing commercial building.

A new pedestrian stairway will be constructed on village-owned property on the southwest corner of New Hyde Park Road and the LIRR tracks. This property has already been impacted by the installation of multiple utility lines on the west side of New Hyde Park Road.

4.4.6.2 Mineola

At the Mineola Station, improvements to surface parking areas in the vicinity of the LIRR substation are proposed near the southwest corner of Main Street and the LIRR tracks. This would require the demolition of the former Mineola Electrical Substation building (USN 05954.000047) at 57 Main Street. This National and State Register listed structure is within the LIRR ROW, but its location possesses little

to no potential for intact archaeological resources, due to the extent of prior subsurface disturbance across the area.

Also near the Mineola Station, Option 1 for the Willis Avenue grade crossing would include the construction of a parking garage between Main Street and Willis Avenue, in place of the existing municipal lot on the north side of the tracks adjacent to the commercial building at 85 Willis Avenue. The 1891 Wolverton Atlas and the 1908 Sanborn map show this parcel as vacant. The 1914 Belcher Hyde Atlas indicates that this location was once three lots; two fronting the Oyster Bay Branch tracks and one double lot fronting 2nd Street. The easternmost lot is vacant. There is a small footprint, 2-story structure on the westernmost lot fronting the tracks. However, as a result of the extensive operations-related improvements undertaken by the LIRR within the ROW, and the intensive 20th century suburban development adjacent to the LIRR ROW, it is highly unlikely that remains of this structure would have survived intact.

The 1914 atlas also depicts a 2-story structure of unknown function in the center of the double lot fronting 2nd Street labeled Sultzberger. The 1927 Sanborn map indicates that this 2-story structure has been replaced by commercial structures. The 1927 map depicts the double lot fronting 2nd Street as the 1-story Wilson & Company Meat Depot building, with a 1-story cold storage structure at the rear, and a 2-story cold storage structure adjoining on the east. No basements are indicated for these structures. A rail spur across Lot 7 to the cold storage structure at the rear of the meat depot building is depicted coming off a siding of the Oyster Bay Branch of the LIRR. There is a wooden truss construction storage structure located between the rail spur and the ROW of the LIRR Oyster Bay Branch on Lot 7. Lots 113 and 212 to the west of Lot 7 contain a 1-story double storefront labeled Wholesale Meats that fronts on 2nd Street. Two additional 1-story structures adjoin the rear of the double storefront. No basements are indicated for these structures.

The configuration of 1-story buildings across Lots 7, 113, and 212 persists through 1965 (Sanborn 1925 revised to 1963; Sanborn 1925 revised to 1965). The Wilson & Company Meat Depot on Lot 7 remains in operation; the double storefront on Lots 113 and 212 is a Wholesale Produce warehouse by 1963. These buildings were all razed post-1965 to make way for the existing municipal parking lot.

It is unlikely that remains of the former Sultzberger structure fronting 2nd Street are extant below the paved parking lot at this location. The construction and demolition of the Wilson & Company Meat Depot buildings have likely compromised the archaeological integrity of any remains of the earlier structure. Additional subsurface disturbance across the parcel was created by the construction of village-owned Mineola Municipal Lot 23, which included the installation of a drainage system and electric lines for overhead lighting. The potential for encountering intact, significant archaeological resources at the proposed parking structure location is very low to none.

The Option 1 scenario also would require reconstructing the small parking area at the northwest corner of Second Street and Willis Avenue. The reconstruction of this small lot is not anticipated to create substantial ground disturbance of undisturbed soils at this location.

An additional parking structure has been proposed for the existing Mineola Village-owned surface parking lot west of Mineola Boulevard and between Harrison Avenue and First Street. The extant lot runs through from First Street to Harrison Street along Third Avenue, west of Mineola Boulevard. The current designation of this parcel is Block 414, Lots 320, 319, 318, and 18. Lot 320 comprises the most area of the existing parking lot and fronts on 3rd Avenue and extends from 1st Street to Harrison Avenue. Lots 318 and 18 front on Harrison Avenue and adjoin Lot 320 to the east. Lot 319 fronts on 1st Street and abuts Lot 320 to the east.

The 1891 Wolverton Atlas shows this entire parking lot parcel as vacant. The 1908 Sanborn map indicates No Exposure for this parcel, indicating no development has occurred by this time. The 1914 Belcher Hyde Atlas shows future Block 414 as vacant and not lotted; the entire block is noted as the property of Mattie T. Willets.

The 1917 Sanborn map indicates that Harrison Avenue and 1st Street have been constructed west of Mineola Boulevard, past the present day corridor of 3rd Avenue by this time. However, 3rd Avenue has not yet been constructed from 1st Street to Harrison Avenue. Most of the existing parking lot parcel is depicted as vacant and not lotted, but there is a small footprint, 1-story dwelling fronting Harrison Avenue, that is likely located on future Lot 18.

The 1927 Sanborn map shows that 3rd Avenue has been completed to Harrison Avenue and Block 414 has been lotted and partially developed. There are four 2-story dwellings with garages at the rear on four lots fronting Harrison Avenue. These dwellings are shown on the northern portion of present day Lot 320 and on Lots 318 and 18. The 1-story dwelling shown on the 1917 map has been replaced by the easternmost of the four 2-story dwellings. There is one 2-story dwelling with garage at rear on one lot fronting 3rd Avenue, which is located in the center of present day Lot 320. No basements are indicated on the Sanborn map for these dwellings. Lot 319, fronting 1st Avenue, is vacant, as are the two additional lots on Lot 320 fronting 3rd Avenue.

The configuration of 2-story dwellings and garages persists through 1963 (Sanborn 1925 revised to 1963). However, by 1965, all buildings have been demolished (Sanborn 1925 revised to 1965). The entire footprint of the proposed parking structure parcel is vacant and the southwest corner of Lot 320 and all of Lot 319 are labeled as Parking.

This location was visited on November 1, 2016. It is highly likely that the construction of the village-owned lot required substantial grading following demolition of the 2-story dwellings to make the surface elevations of all the incorporated lots comparable. In addition, the field view walkover revealed that stormwater drains have been installed across the lots comprising the existing parking lot, creating additional subsurface disturbance. It was noted that the stormwater drain covers are marked “John E. Potente & Sons Hicksville LI NY.”

The potential for encountering intact, significant archaeological resources beneath the pavement of the existing village-owned parking lot at the proposed parking structure location of former Lots 320, 319, 318, and 18 is very low to none.

4.4.6.3 Westbury

A parking garage is being considered for the Westbury Station to replace an existing station parking area south of the tracks and north of Railroad Avenue. Holy Rood Cemetery is located on the south side of Railroad Avenue from the proposed location. The cemetery was established in 1930, decades after the LIRR was constructed to Westbury and would not have historically included land beyond its present northern boundary. The parking garage location under consideration does not possess archaeological potential, due to the 20th century development of the area surrounding the station, including the construction of Railroad Avenue, the existing drainage and lighting systems across the existing parking lot, and the extant pedestrian tunnel under the LIRR tracks.

An additional parking structure has been proposed for the Westbury Station for the existing village-owned surface parking lot north of the tracks and the Westbury Station on Union Avenue, south of Scally Place. The current designation of this parcel is Block 228, and incorporates Lots 792, 793, and 771. Lot 792 comprises most of the area of the existing parking lot and extends from Scally Place on the north to Union Avenue on the south. Lot 792 is a T-shaped lot with its arms along present day Scally Place. The trunk of the T-shaped lot extends south to Union Avenue. Lots 793 and 771 are located below the western arm of the T-shaped lot, with Lot 771 abutting the trunk portion of Lot 792. The proposed parking structure parcel does not include the eastern arm of T-shaped Lot 792; this portion of the lot will likely remain as surface parking.

The 1873 Beers Atlas and the 1906 E. Belcher Hyde Atlas show that very little development has occurred to the north of the LIRR tracks and the Westbury Station. The major streets such as Post Avenue and Maple Avenue have been laid out, but whole tracts including the proposed parking structure location are vacant.

The 1910 Sanborn map also indicates that Scally Place, currently at the northern boundary of Lot 792, has not yet been built. Most of present day Lot 792 is vacant in 1910, however; there are two structures shown on the trunk portion of the T-shaped lot, fronting on Railroad Avenue (precursor to Union Avenue) and north of the LIRR tracks. The trunk portion of the T-shaped lot appears to be two lots, with the 2-story Oriental Hotel located on the western lot, and a small shed situated a considerable distance from Railroad Avenue on the eastern lot. It is unknown whether the Oriental Hotel and small shed belong to one property owner at this time. No basements are indicated for these structures.

The future Lot 771 below the western arm of the T-shaped Lot 792 is depicted as having a small footprint, 2-story structure of unknown function. No basement is indicated for this structure. This structure is depicted at the rear of lots that front on Post Avenue. The future Lot 793, adjacent to Lot 771 on the west, is vacant.

The 1914 E. Belcher Hyde Atlas shows that Scally Place has not yet been built. The arms of future Lot 792 are shown as vacant and belong to Mrs. Skelley. The trunk of the T-shaped lot is shown as two lots; the western lot contains a 2-story structure belonging to A. Morrison and the eastern lot contains a 1-story frame garage belonging to Willits. No basements are indicated for these structures. Future Lot 771

appears to contain a small footprint, 2-story structure; no basement is indicated. Future Lot 793 is shown as vacant.

The 1920 Sanborn map shows that Scally Place has not yet been constructed and the arms of the present day, T-shaped Lot 792 are vacant. The trunk of T-shaped Lot 792 displays the same configuration of structures seen on the earlier maps. However, the former Oriental Hotel is simply noted as Hotel, and the 1-story structure on the adjacent lot is labeled as a wagon shed. No basements are indicated for either structure.

Future Lot 771 contains a small footprint, 2-story structure with a 1-story extension at the rear. The structure is labeled Dwelling; no basement is indicated. Future Lot 793 is shown as vacant.

The 1929 Sanborn map indicates that Scally Place has been built from Post Avenue on the west, eastward to a point one lot west of Kusch Avenue (present day Linden Avenue). The arms of T-shaped Lot 792 front on Scally Place. Railroad Avenue on the north side of the LIRR tracks has been renamed Union Avenue. The structures on the trunk portion of T-shaped Lot 792 are shown in much the same configuration as on the earlier maps; however, the two lots have been combined into one. The hotel is depicted on the western portion of the lot and the former wagon shed on the eastern portion of the lot has been reconfigured and is now labeled as a 1-story automobile garage. No basements are indicated.

Future Lot 771 shows the dwelling depicted on the 1920 map in the same configuration. Future Lot 793 is shown to have a 1-story automobile garage by this time. No basements are indicated for either structure. Access to these two structures at the rear of lots fronting on Post Avenue is through a narrow corridor labeled Right of Way.

The 1929 revised to 1941 Sanborn map shows that both arms and trunk of T-shaped Lot 792 are vacant of structures. The hotel and wagon shed on the former double lot fronting Union Avenue have been demolished.

The structures on future Lots 771 and 793 are shown in the same configuration as that of the 1929 map. No basements are indicated for either structure. The Right of Way access corridor is extant.

The 1929 revised to 1968 Sanborn map depicts all of present day Lot 792 as a Parking Field. Existing conditions on Lots 771 and 793 and the Right of Way corridor are unchanged from the earlier Sanborn 1929 revised to 1941 map.

Historic aerial photographs of the proposed parking structure location were researched in order to determine when the existing surface parking lot incorporated Lots 771 and 793. A series of historic aerials from 1966 to 2013 were viewed online. The 1966 photograph showed existing conditions the same as that of the Sanborn 1929 revised through 1968 map. The next available historic aerial photograph dated to 1994 and showed that the structures on Lots 771 and 793 had been removed and the lots had been incorporated into existing surface parking lots. Therefore, the present day extent of the surface parking lot on the proposed parking structure location was achieved between 1968 and 1994.

This location was visited on November 1, 2016. The existing village-owned parking lot appeared landscaped, with signage, curbed section divides containing trees and multiple overhead light poles, some with surveillance cameras. The extant parking lot includes all of Lots 792, 771, and 793, as well as other former individual lots not included in the current project.

The potential for encountering intact, significant archaeological resources beneath the pavement of the existing village-owned parking lot at the proposed parking structure location on former Lots 792, 771, and 793, is very low to none. The arms of T-shaped Lot 792 never saw historic development and the hotel and shed that had been documented on the Sanborn 1910 map on the former double lot of the trunk portion of the T-shaped lot were razed by 1941. These structures did not have basements and it is unlikely that intact or significant remains would be preserved below the existing paved parking lot.

It is highly likely that the construction of the Village-owned lot required grading following demolition of the structures on Lots 771 and 793 (and others not included in the proposed parking structure footprint) to make the surface elevations of all the incorporated lots comparable. The existing surface lot gently slopes to the south from Scally Place to Union Avenue. In addition, the field view walkover revealed that underground electric lines have been installed across the existing parking lot, creating additional subsurface disturbance.

4.4.6.4 Hicksville

Two parking structures have been proposed for the Hicksville Station. The first is a multi-level parking structure south of West Barclay Street (west of pump station) on an existing surface parking lot north of the tracks, adjacent to the ROW. The existing surface lot is at surrounding street grade; the adjacent LIRR tracks are on a substantial embankment over surrounding street grade. The lot is currently in use for station parking. The current designation of this parcel is Block 184, Lots 227, 231, and 232.

The 1873 Beers Atlas shows that (West) Barkley Street has not yet been constructed west of Strong Street. There is a large parcel depicted west of Strong Street, between (West) John Street and the LIRR tracks that is labeled J. Forgie. The future route of (West) Barkley Street is indicated by dashed lines and bisects the Forgie parcel. A structure is indicated within the future footprint of (West) Barkley Street; no other structures are depicted. The proposed parking structure is located to the south of the dashed line of (West) Barkley Street and the LIRR tracks.

The 1914 E. Belcher Hyde Atlas indicates that future Block 184 consists of large vacant parcels. The proposed site of the parking structure between (West) Barkley Street and the LIRR tracks is shown as portions of two large parcels. To the east is a vacant parcel labeled The Clancy Map; to the west is a parcel labeled Henry McEllister. There is a Freight Depot structure close to the LIRR tracks on McEllister's parcel. This would seem to be the location of the present fenced-off out parcel of the existing parking lot. This fenced-off parcel is not included in the proposed parking structure footprint.

The 1895, 1902, 1908, 1917, 1925, and 1925 revised to 1947 Sanborn maps were reviewed for the proposed parking structure location. There is no coverage for this location on any of the above mentioned Sanborn maps. It is likely that there were no structures present to include for fire insurance purposes.

The 1925 revised to 1968 Sanborn map indicates that the proposed parking structure location remained vacant of structures. A large parking lot is shown to the west of the proposed location. There is a 1-story structure fronting West Barkley Street abutting the proposed location on the east labeled Truck and Machinery Storage Karlson & Reed, Inc., Contractors. There is a spur line coming off the LIRR in the southern portion of the proposed location that leads to the Pabst Brewing Company beverage and beer depot on West Barkley Street to the east. There is a wide area surrounding the LIRR Main Line tracks labeled Full of Tracks. The area surrounding the proposed parking structure location is host to commercial and industrial enterprises by the late-1960s.

This proposed location was visited on November 1, 2016. The existing surface parking lot was most likely disturbed and subsequently graded and paved when the LIRR Main Line tracks were elevated on a substantial embankment through this portion of Hicksville. There is no historic archaeological potential for the proposed parking structure location, based on the lack of historic development. The potential for encountering intact, significant prehistoric archaeological resources is very low to none, based on the extent of probable prior subsurface disturbance.

The second proposed Hicksville location is a multi-level parking structure north of West Barclay Street (west of Bob's Self Storage) and south of West John Street, east of Marion Place, on an existing surface parking lot north of the LIRR tracks and ROW. The existing surface lot is at surrounding street grade and is currently in use for station parking. This proposed parking structure is across West Barkley Street from the first proposed parking structure location discussed above.

The 1873 Beer Atlas shows that (West) Barkley Street has been constructed westward from Newbridge Road to Strong Street, ending at the property line of a large parcel belonging to J. Forgie. (West) John Street is constructed west of Strong Street and marks the northern boundary of the Forgie parcel. The future route of (West) Barkley Street is indicated by dashed lines and bisects the Forgie parcel. A structure is indicated within the future footprint of (West) Barkley Street; no other structures are depicted. The proposed parking structure location is north of (West) Barkley Street and south of (West) John Street on the Forgie parcel.

The 1914 E. Belcher Hyde Atlas shows that the proposed parking structure is located within a large lot belonging to Rev. Ernest Gulweiler between (West) John Street and (West) Barkley Street. A 2-story structure is located at the southeast corner of this lot, placing it under the present day Bob's Storage building, adjacent to the proposed parking structure. No other structures are shown on the Gulweiler parcel.

The 1895, 1902, 1908, 1917, 1925, and 1925 revised to 1947 Sanborn maps were reviewed for the proposed parking structure location. There is no coverage for this location on any of the above mentioned Sanborn maps. It is likely that there were no structures present to include for fire insurance purposes.

The 1925 revised to 1968 Sanborn map indicates that the proposed parking structure location consists of one lot with a 1-story Truck and Machinery Storage building that fronts on West Barkley Street in the

southeast corner of the lot. Notes on the Sanborn map suggest that this structure dates to 1967. No basement is indicated.

Historic aerial photographs of the proposed parking structure location were researched in order to determine when the existing surface parking lot was expanded to include the southeast corner of the lot. A series of historic aerials from 1966 to 2013 were available to review online. The review indicated that by 1980, the 1-story structure on the southeast corner of the parcel was gone.

This proposed location was visited on November 1, 2016. There is a Hertz Rental Car building on Marion Place, adjacent to the proposed parking structure location. The Bob's Self Storage building abuts the existing parking lot on the east. There is no historic archaeological potential for the proposed parking structure location, based on the lack of historic development prior to 1967. The potential for encountering intact, significant prehistoric archaeological resources is very low to none, based on the lack of previously identified resources within a 0.25-mile search radius and the extent of probable prior subsurface disturbance associated with the construction of West Barkley Street, the construction and demolition of the 1-story building, and the likely grading associated with the construction of the surface parking lot.

4.4.6.5 Archaeological Assessment Summary of Proposed Parking Improvements

The locations of proposed parking improvements in New Hyde Park, Mineola, Westbury, and Hicksville possess very little to no archaeological potential. The cartographic research completed for this assessment and discussed in detail above has shown that historic development on these locations had been sparse prior to the creation of the existing paved parking lots and the extent of prior subsurface disturbance at these locations has in all likelihood destroyed the integrity of any remains of earlier development. The creation of new surface parking lots in New Hyde Park and improvements to existing surface lots in Mineola will not create new ground disturbance in undisturbed soils. None of the documented structures on any of the proposed parking structure locations exhibited basements. Evidence for prior subsurface disturbances was also noted during the field view walkovers for some of the existing parking lots that had drainage systems in place, underground utilities, and had obviously been graded prior to paving.

In summary, the proposed improvements to existing surface parking lots in New Hyde Park and Mineola and the proposed construction of multi-level parking structures on existing surface parking lots in Mineola, Westbury, and Hicksville will have no effect on archaeological resources.

4.4.7 Potential Commercial Property Takings

The Proposed Project would involve a few commercial property takings located at or near the grade crossing locations (Appendix A). The takings would be required due to restricted or eliminated access as a result of project actions, the need for the property as a staging area, for drainage improvements, for utility relocations, surface parking, or parking structure. These properties include: 124 Covert Avenue in New Hyde Park at the northeast corner of Covert and Second avenues, currently a taxi repair business building; 115 New Hyde Park Road, at the northwest corner of New Hyde Park Road and Plaza Avenue, currently the Safeguard Self Storage building; the Nassau Tower and former Mineola Electrical Substation buildings of the LIRR at the southwest quadrant of the Main Street crossing of the LIRR tracks

in Mineola; 167 School Street in Westbury, at the northeast quadrant of the School Street crossing of the LIRR tracks, currently the Dependable Acme Thread Products complex; and 117 Urban Avenue, currently the J.H. Auto Collision building at the southwest quadrant of the LIRR crossing of Urban Avenue in New Cassel.

Due to the extent of prior subsurface disturbance that has occurred at these locations, and given that the extant buildings each cover nearly the entire footprint of their respective lots, it is highly unlikely that the removal of these structures would have the potential to impact intact archaeological resources that may have been present prior to their construction.

It is anticipated that the Proposed Project would also include a number of partial acquisitions, or strip takings, from commercial properties for actions associated with the seven grade crossings (Appendix A). Such actions are anticipated to include retaining wall construction, sidewalk widenings, slight shifts in existing roadway configurations, reconstruction of driveways, and pedestrian bridge construction. None of the strip takings assessed to date possess archaeological potential due to the extent of prior disturbance at these locations. Most are located along the LIRR ROW or have previously been impacted by underground utility installations. Should additional takings be proposed as project design progresses, an assessment of archaeological potential would be undertaken in consultation with SHPO to avoid the potential for adverse impacts to archaeological resources.

4.4.8 Preliminary Construction Staging Areas

A preliminary list of potential staging areas has been developed for the Project Corridor, as listed in Chapter 1.7.8. Staging areas can be of archaeological concern, if located in areas of little to no documented prior ground disturbance. The storage of construction materials and equipment, repeated crossing by heavy construction vehicles, and parking of heavy construction vehicles have the potential to impact archaeological resources in undisturbed, unpaved areas.

Review of aerial photos of the Project Corridor revealed that the preliminary staging areas under consideration for the LIRR Expansion Project include existing LIRR substations, commercial properties, station parking lots, existing roads, potential commercial property takings, a wooded area, and the LIRR ROW on both sides of the existing track. Most of these areas do not possess prehistoric or historic archaeological potential, due to the extent of documented prior subsurface disturbance.

Many of the proposed staging areas are located in existing parking lots, or on extant streets, and are paved. From an archaeological perspective, paved surfaces serve to protect any buried archaeological resources that may be present.

One staging location under consideration is a wooded area on Atlantic Avenue between the Meadowbrook State Parkway and Silver Lake Boulevard in Carle Place, north of the existing tracks. The wooded area lies between two residential developments, and represents a groundwater recharge basin, or sump. It was not possible to inspect this location closely during the field view, but aerial photographs show that the parcel appears to have been heavily disturbed toward the center with taller vegetation around the perimeter. The CRIS search depicted this parcel as water. The recharge basin/sump was likely

excavated in tandem with the flanking residential development and does not possess archaeological potential.

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5 CONCLUSIONS AND RECOMMENDATIONS

No previously identified archaeological sites, New York State (NYS) Museum sites, National Register archaeological listings, or archaeological districts are located within the Project Corridor or within the ¼-mile archaeological resources study area for the LIRR Expansion Project.

The LIRR ROW along the 9.8-mile length of the Project Corridor has been determined to possess little to no prehistoric or historic period archaeological potential. Therefore, the proposed Third Track alignment, including the demolition of the LIRR Nassau Tower in Mineola, proposed modifications to railroad infrastructure, including existing substations, proposed modifications to passenger rail stations, construction of ROW retaining walls, proposed drainage improvements, and utility relocations would have no adverse impact on archaeological resources.

The Proposed Project would involve ground disturbance at the seven proposed grade crossing locations. However, research has documented extensive prior disturbance at each of the grade crossing locations, through the installation of multiple utility lines, excavation for catch basins and storm drains, construction and demolition of structures, and realignment of streets. Due to the extent of prior subsurface disturbance, it is highly unlikely that the proposed grade crossing modifications would have the potential to impact any intact archaeological resources that may once have been present at the seven grade crossing locations.

The Proposed Project would involve a few commercial property takings and/or building demolitions, located at or near the grade crossing locations. The takings would be required due to restricted or eliminated access as a result of project actions, the need for the property as a staging area, for drainage improvements, for utility relocations, surface parking, or parking structure. These properties include: 124 Covert Avenue in New Hyde Park at the northeast corner of Covert and Second avenues, currently a taxi repair business building; 115 New Hyde Park Road, at the northwest corner of New Hyde Park Road and Plaza Avenue, currently the Safeguard Self Storage building; the Nassau Tower and former Mineola Electrical Substation buildings of the LIRR at the southwest quadrant of the Main Street crossing of the LIRR tracks in Mineola; 167 School Street in Westbury, at the northeast quadrant of the School Street crossing of the LIRR tracks, currently the Dependable Acme Thread Products complex; and 117 Urban Avenue, currently the J.H. Auto Collision building at the southwest quadrant of the LIRR crossing of Urban Avenue in New Cassel. Due to the extent of prior subsurface disturbance that has occurred at these locations, and given that the extant buildings cover almost all their respective lots, it is highly unlikely that the removal of these structures would have the potential to impact intact archaeological resources that may have been present prior to their construction.

The preliminary list of construction staging area locations includes existing LIRR substations, commercial properties, station parking lots, existing roads, potential commercial property takings, a wooded area, and certain areas within and adjacent to the LIRR ROW. These areas do not possess prehistoric or historic period archaeological potential due to the extent of documented prior subsurface disturbance. The wooded area is a recharge basin/sump that has been excavated and, therefore, does not possess archaeological potential. The remaining staging areas are proposed for existing parking lots, or on

extant streets, and are paved. From an archaeological perspective, paved surfaces serve to protect any buried archaeological resources that may be present. Therefore, the use of the staging areas during construction would have no effect on archaeological resources because all work would occur on the paved surfaces with no subsurface disturbance.

The locations of proposed parking improvements in New Hyde Park, Mineola, Westbury, and Hicksville possess very little to no archaeological potential. The cartographic research completed for this assessment has shown that historic development on these locations had been sparse prior to the creation of the existing paved parking lots and the extent of prior subsurface disturbance at these locations has in all likelihood destroyed the integrity of any remains of earlier development. The demolition of the former Mineola Electrical Substation building within the LIRR ROW for improved surface parking in Mineola will have no effect on archaeological resources, due to the extent of prior subsurface disturbance across the area. Evidence for prior subsurface disturbance was noted during the field view walkovers for some of the existing parking lots that had drainage systems in place, underground utilities, and had obviously been graded prior to paving.

It is noted that several of the proposed action locations are preliminary in nature. It is possible that as the project progresses, certain actions will be eliminated from the design and certain other actions may be added. In the event that actions are added, they will be assessed for archaeological potential in consultation with SHPO.

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

APPENDIX A

Project Plans

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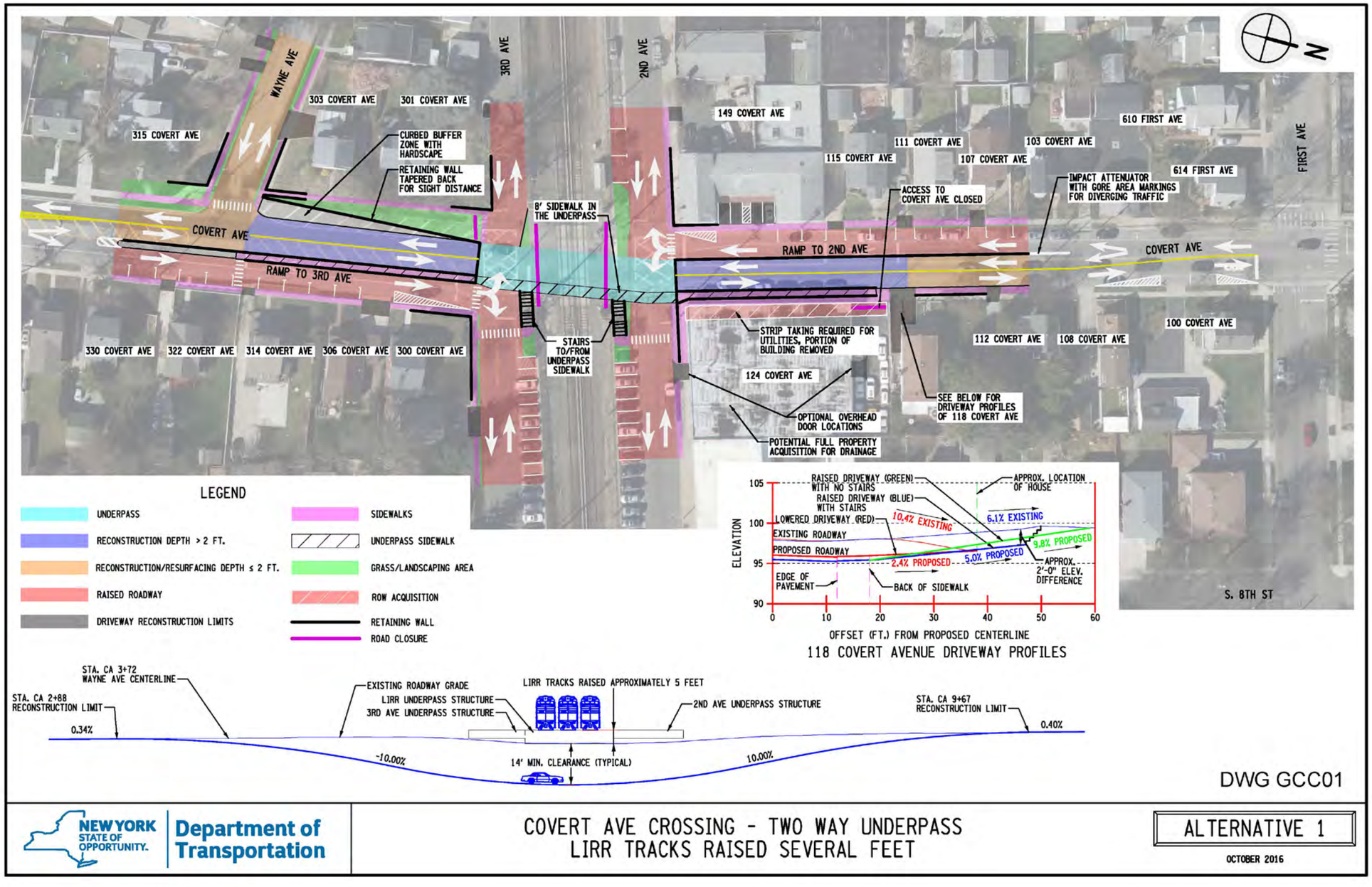

Figure A-1 Covert Avenue Crossing (Alternative 1: Two-Way Underpass – LIRR Tracks Raised Several Feet)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

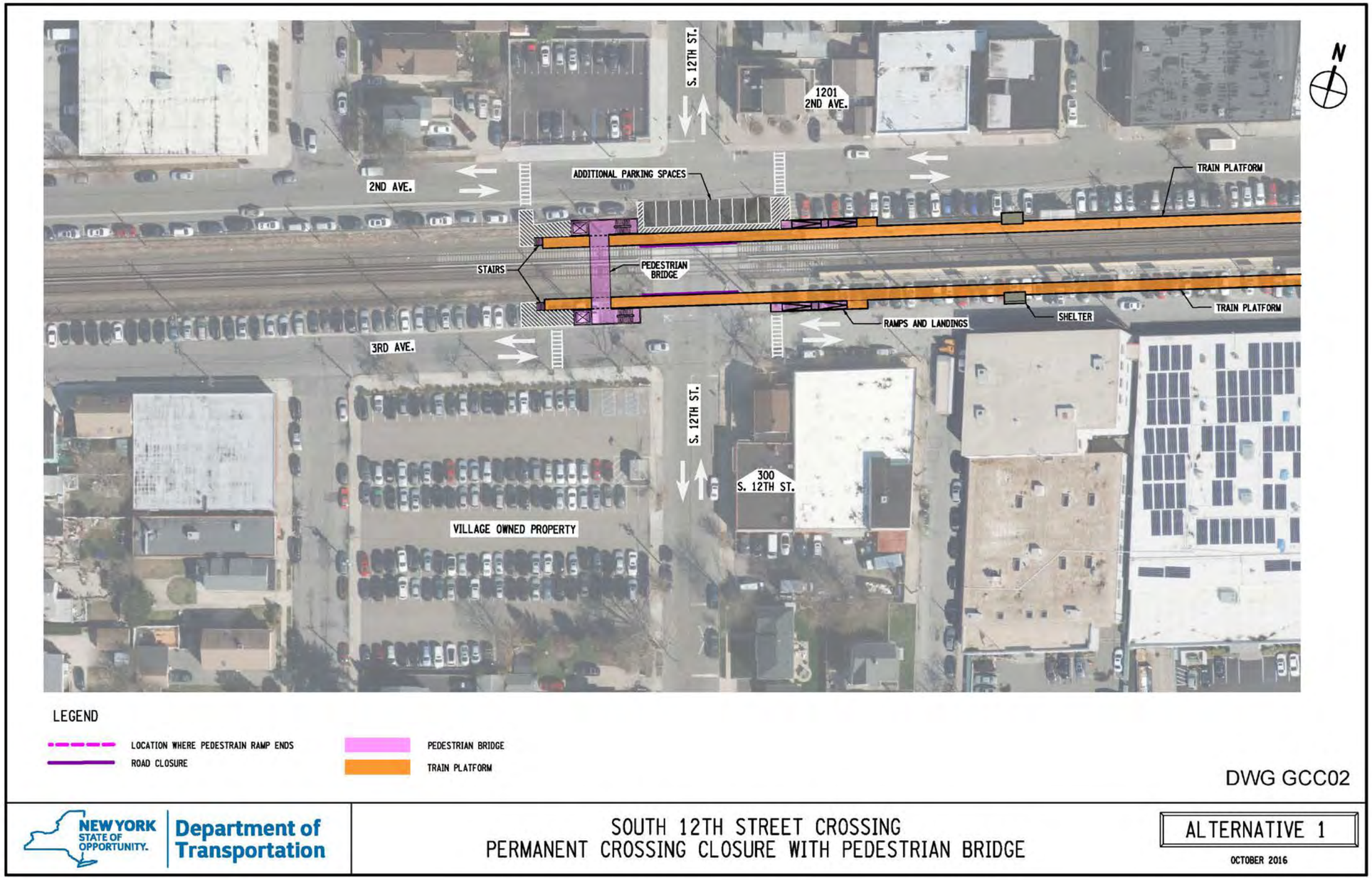

Figure A-2 South 12th Street Crossing (Alternative 1: Permanent Crossing Closure with Pedestrian Bridge)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

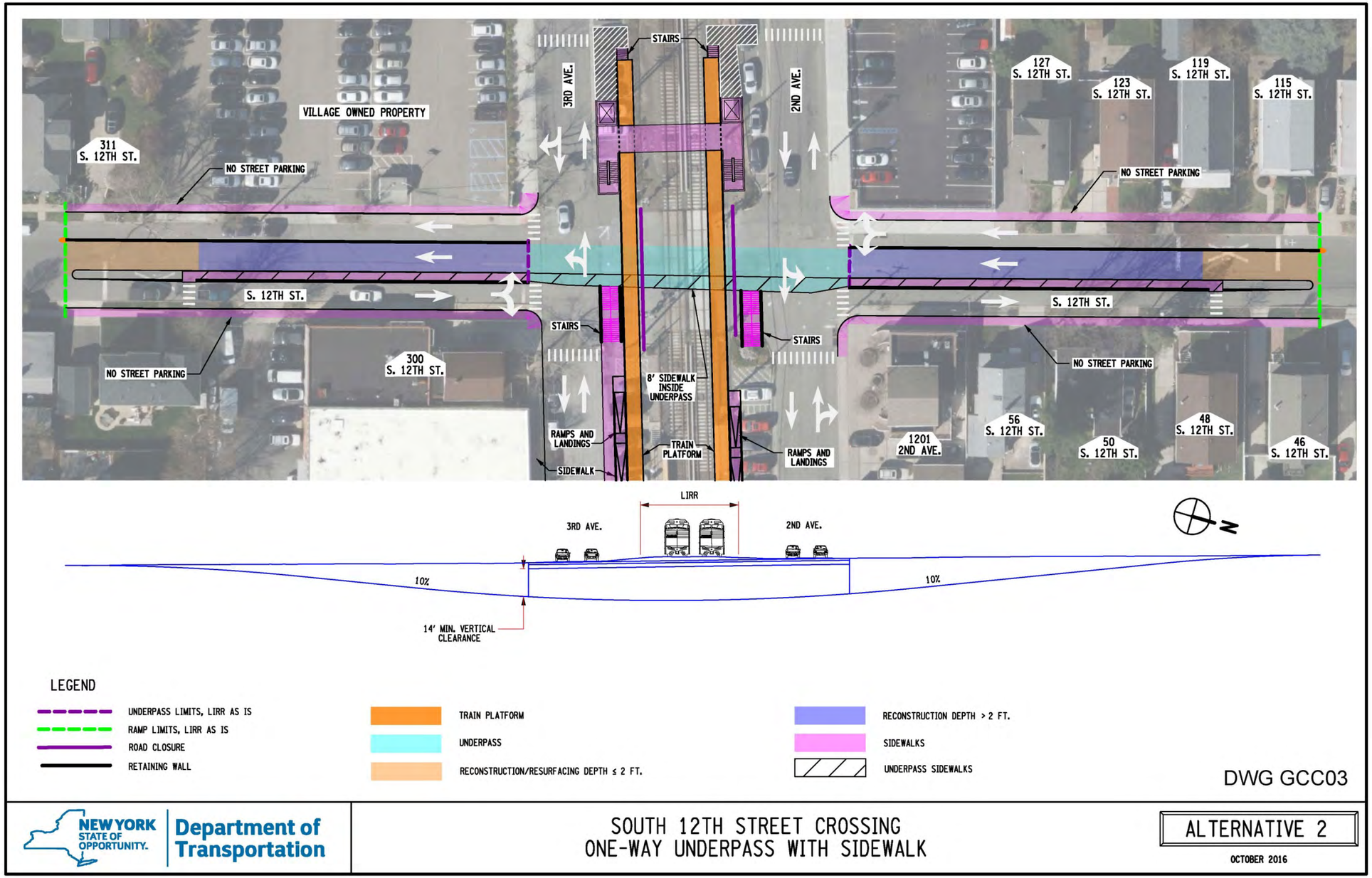

Figure A-3 South 12th Street Crossing (Alternative 2: One-Way Underpass with Sidewalk)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

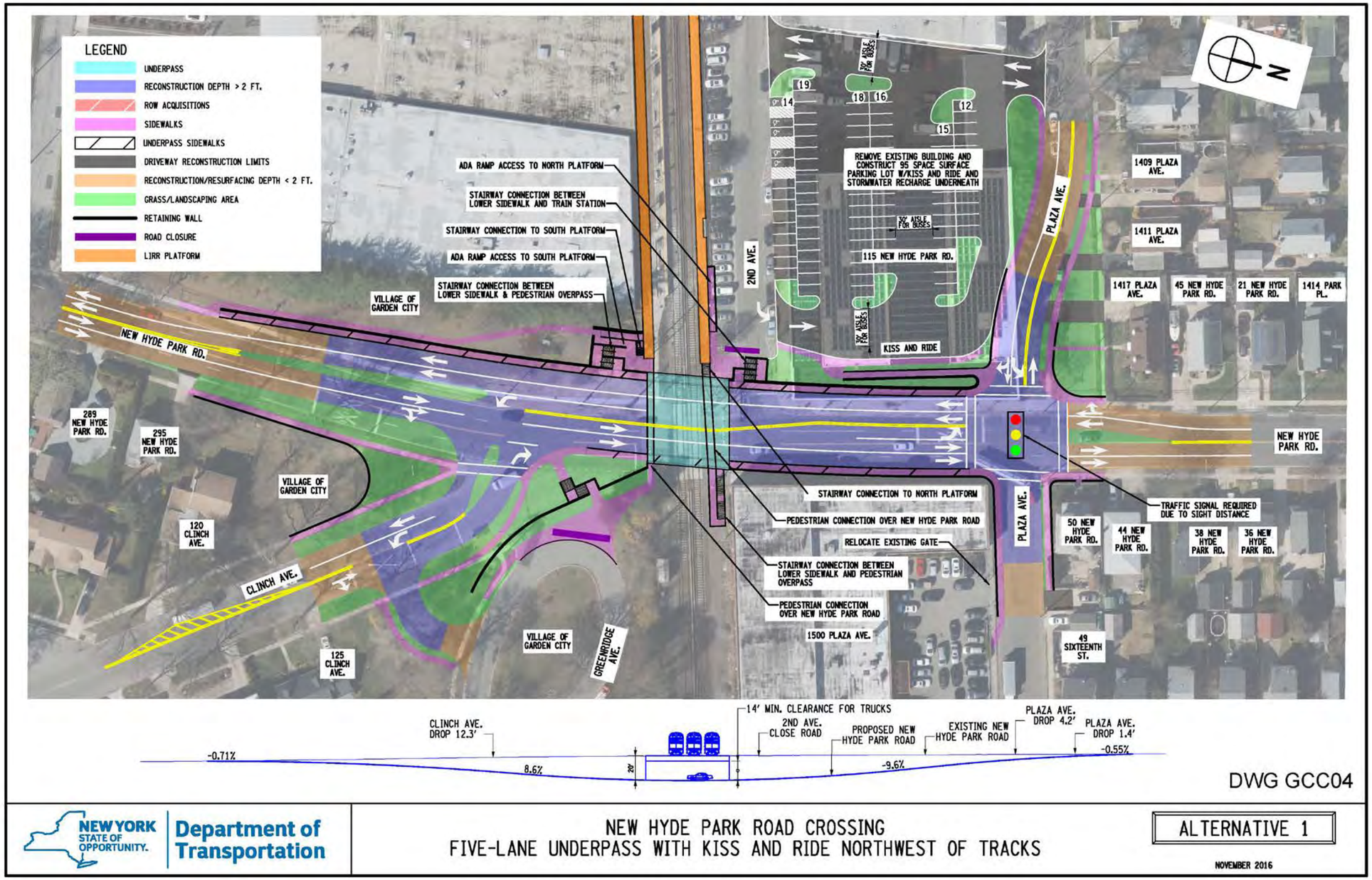

Figure A-4 New Hyde Park Road Crossing (Alternative 1: Five-Lane Underpass with Kiss and Ride Northwest of Tracks)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

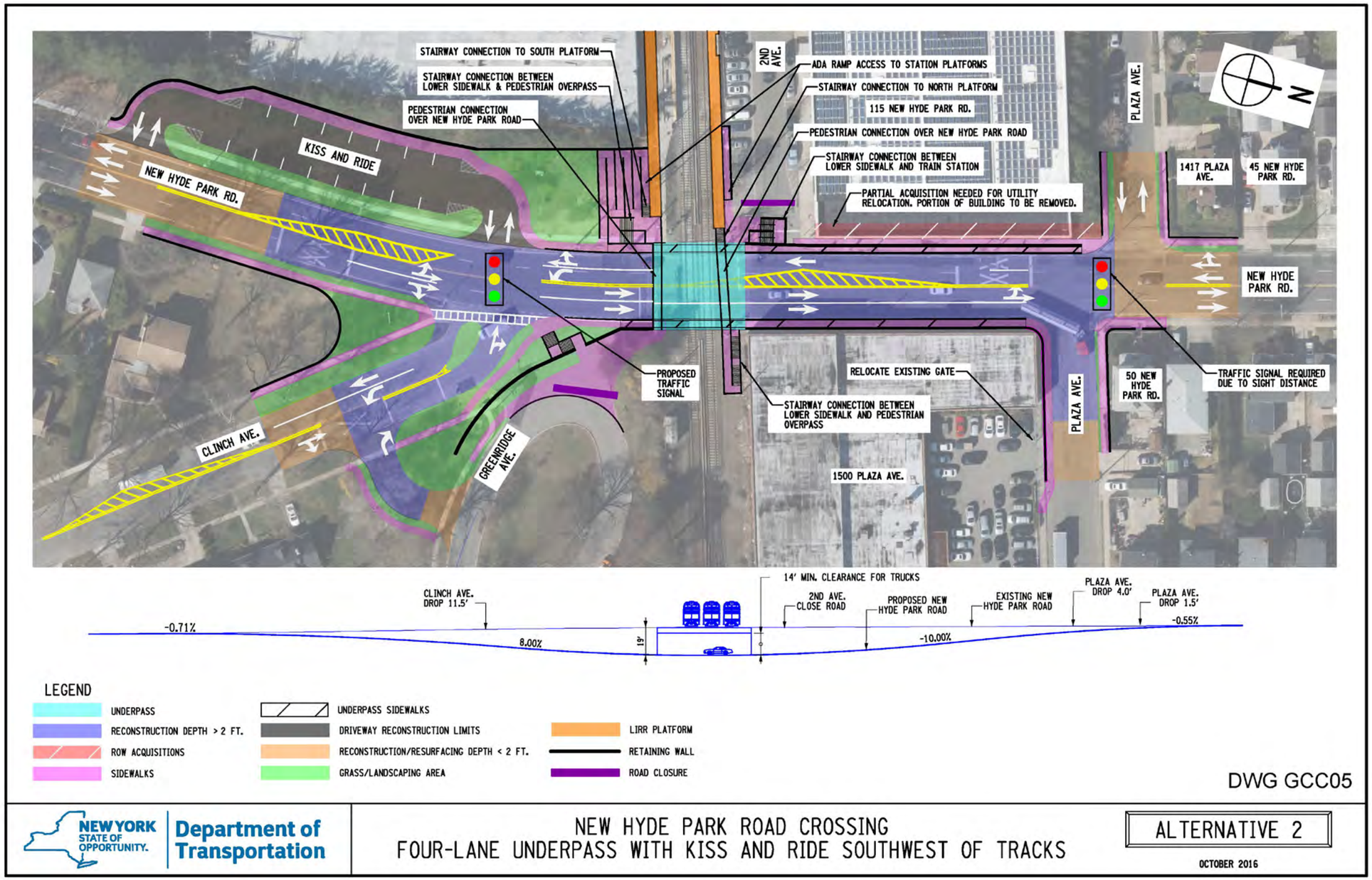

Figure A-5 New Hyde Park Road Crossing (Alternative 2: Four-Lane Underpass with Kiss and Ride Southwest of Tracks)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

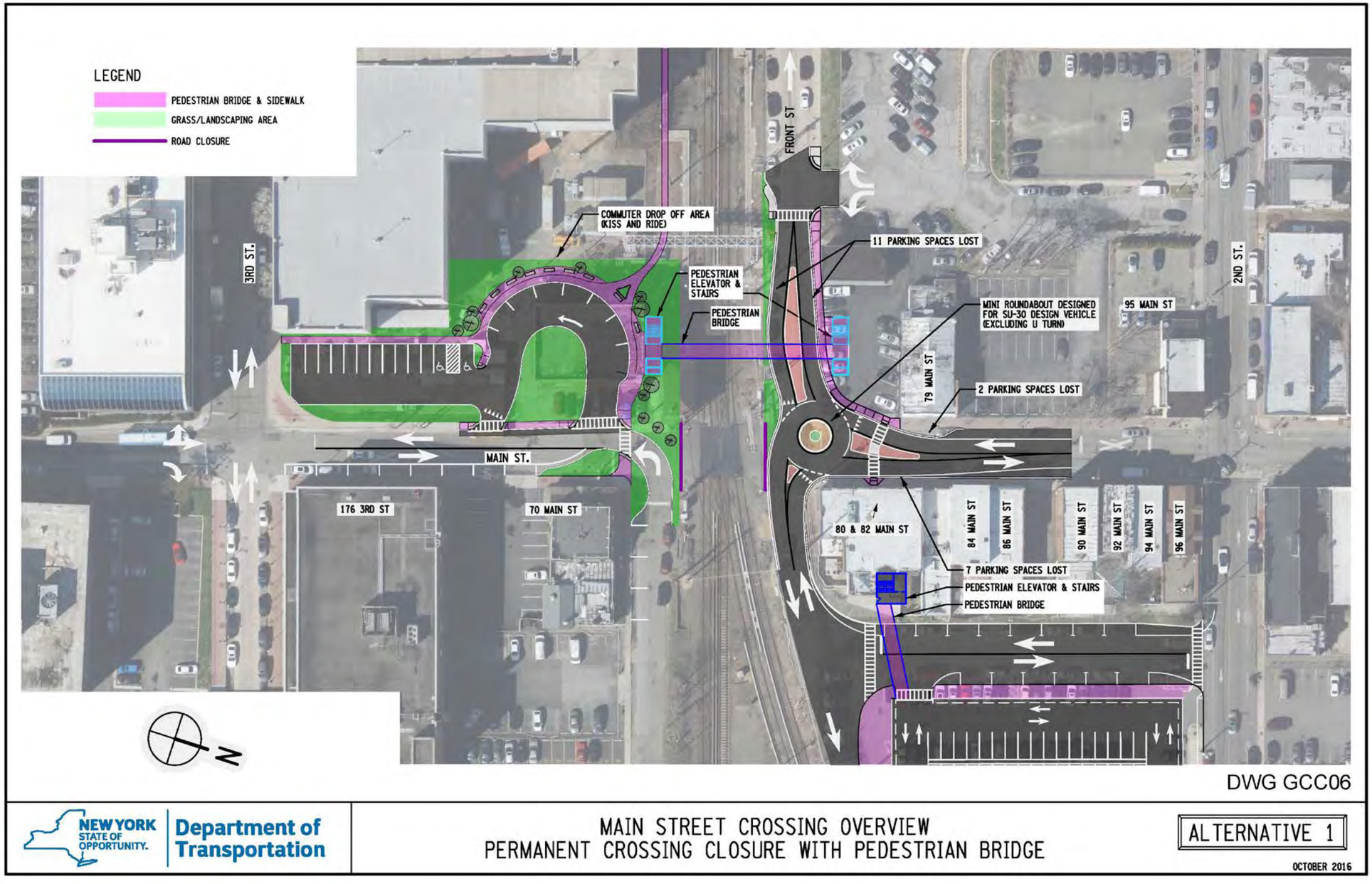

Figure A-6 Main Street Crossing Overview (Alternative 1: Permanent Crossing Closure with Pedestrian Bridge)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

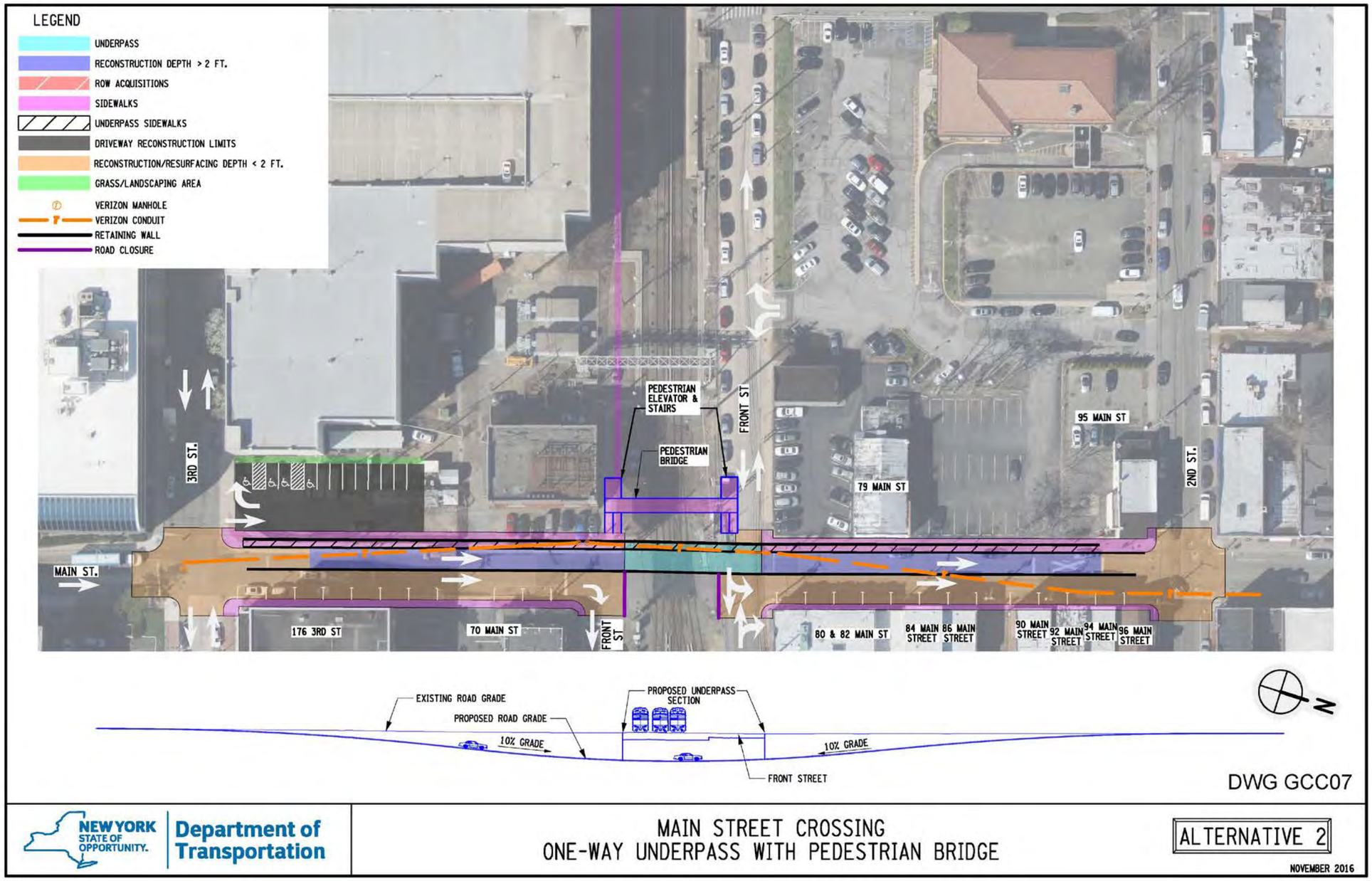

Figure A-7 Main Street Crossing (Alternative 2: One-Way Underpass with Pedestrian Bridge)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

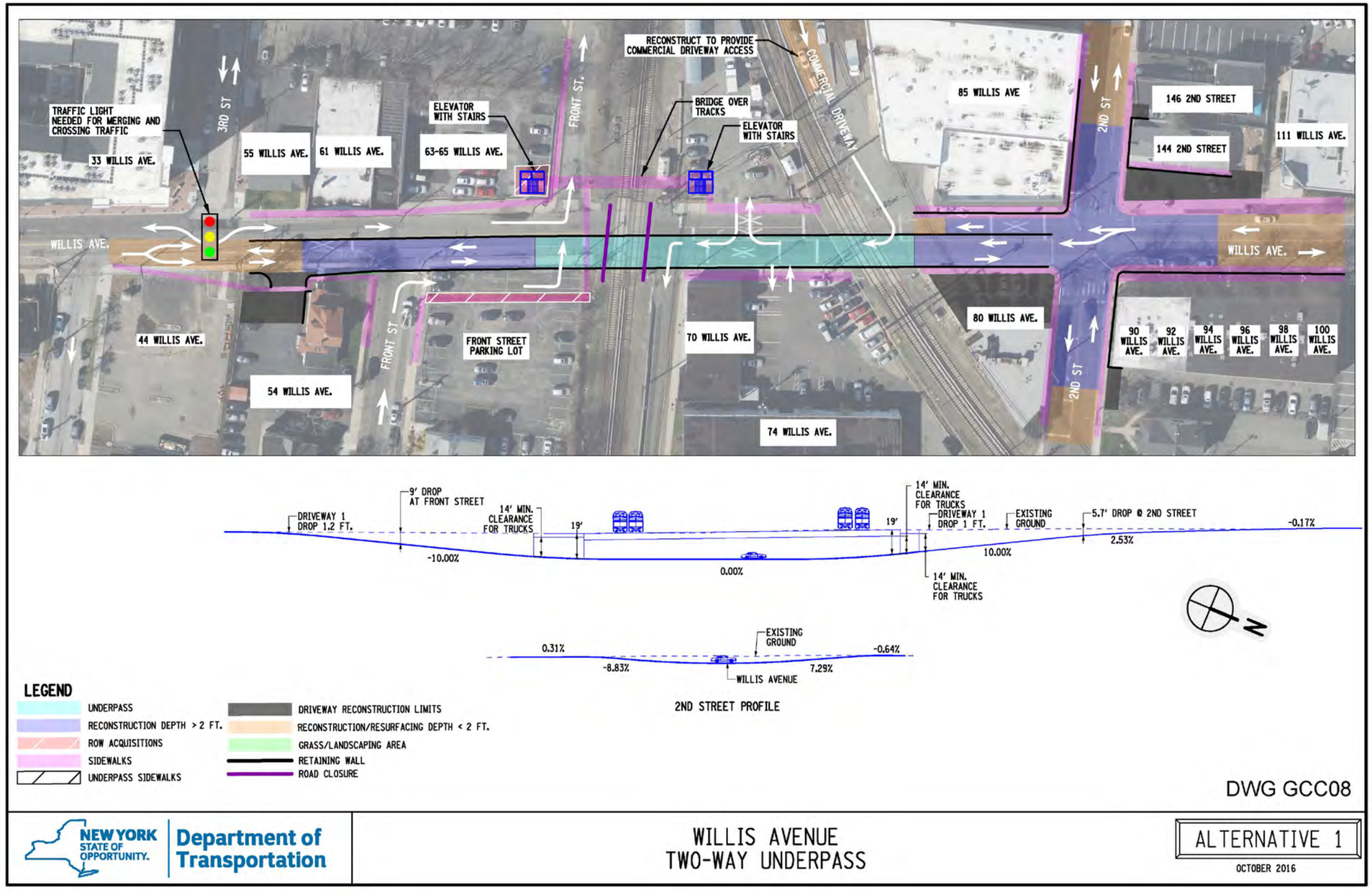

Figure A-8 Willis Avenue (Alternative 1: Two-Way Underpass)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

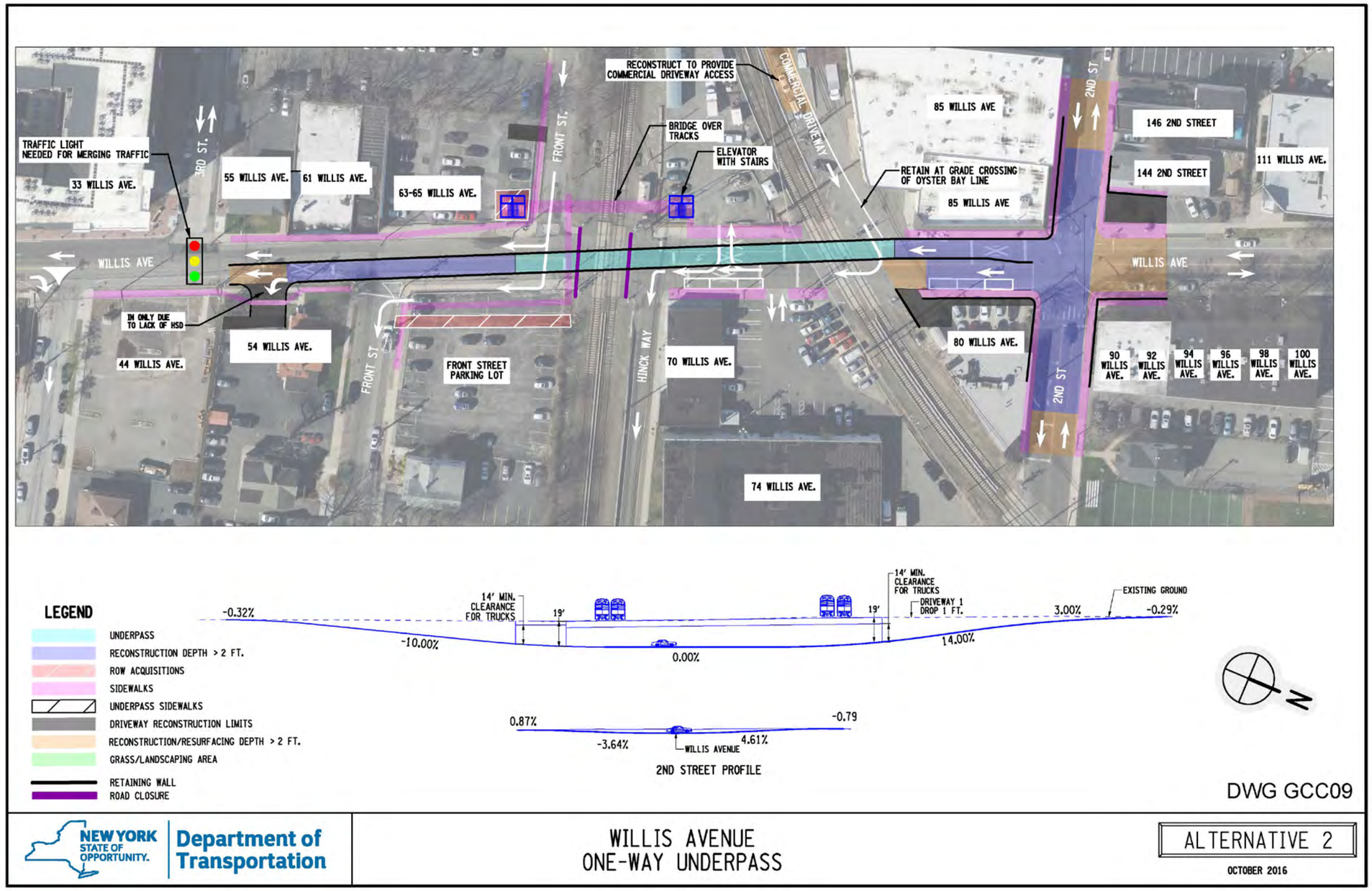

Figure A-9 Willis Avenue (Alternative 2: One-Way Underpass)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

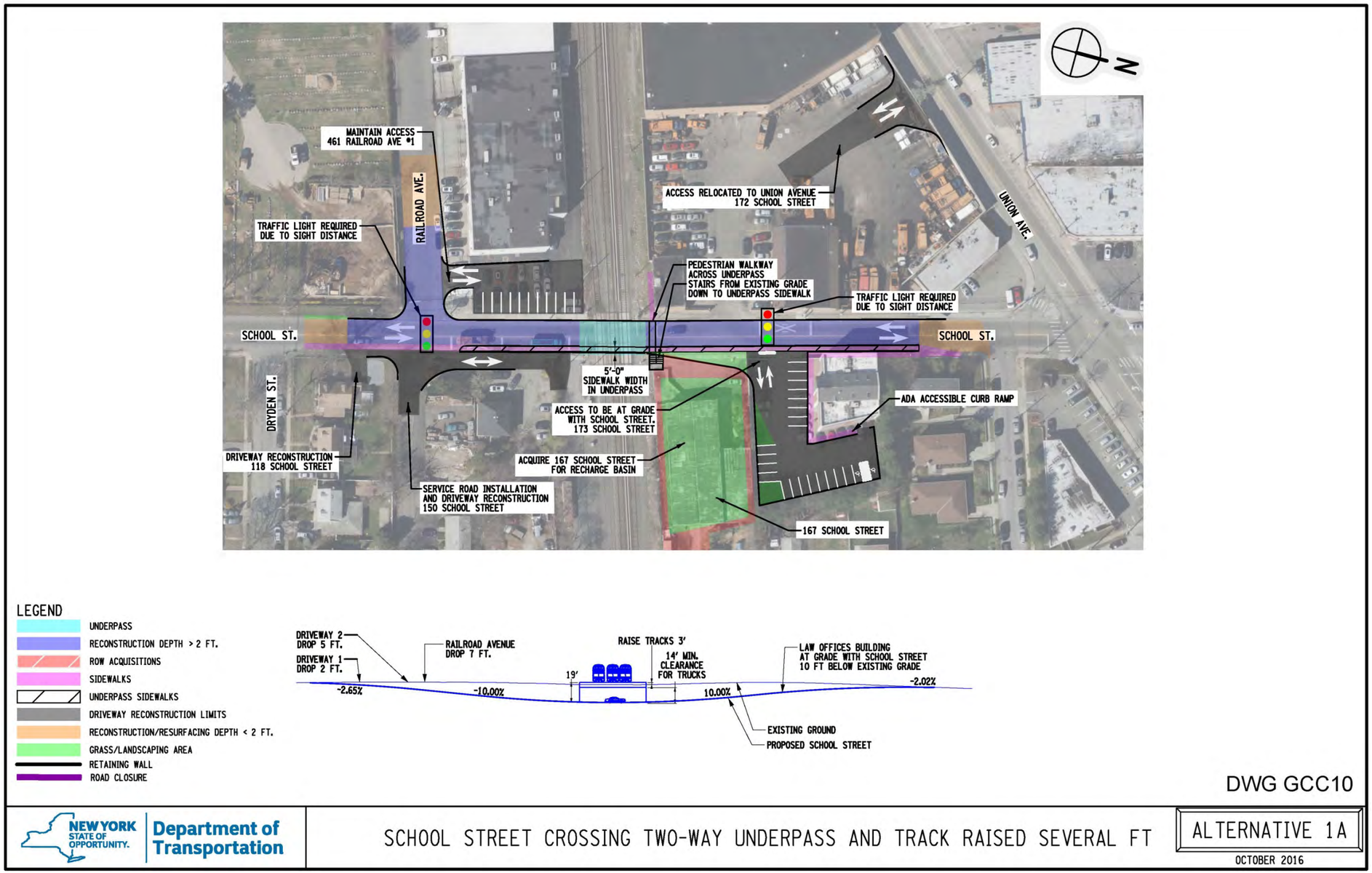

Figure A-10 School Street Crossing (Alternative 1A: Two-Way Underpass and Track Raised Several Ft)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

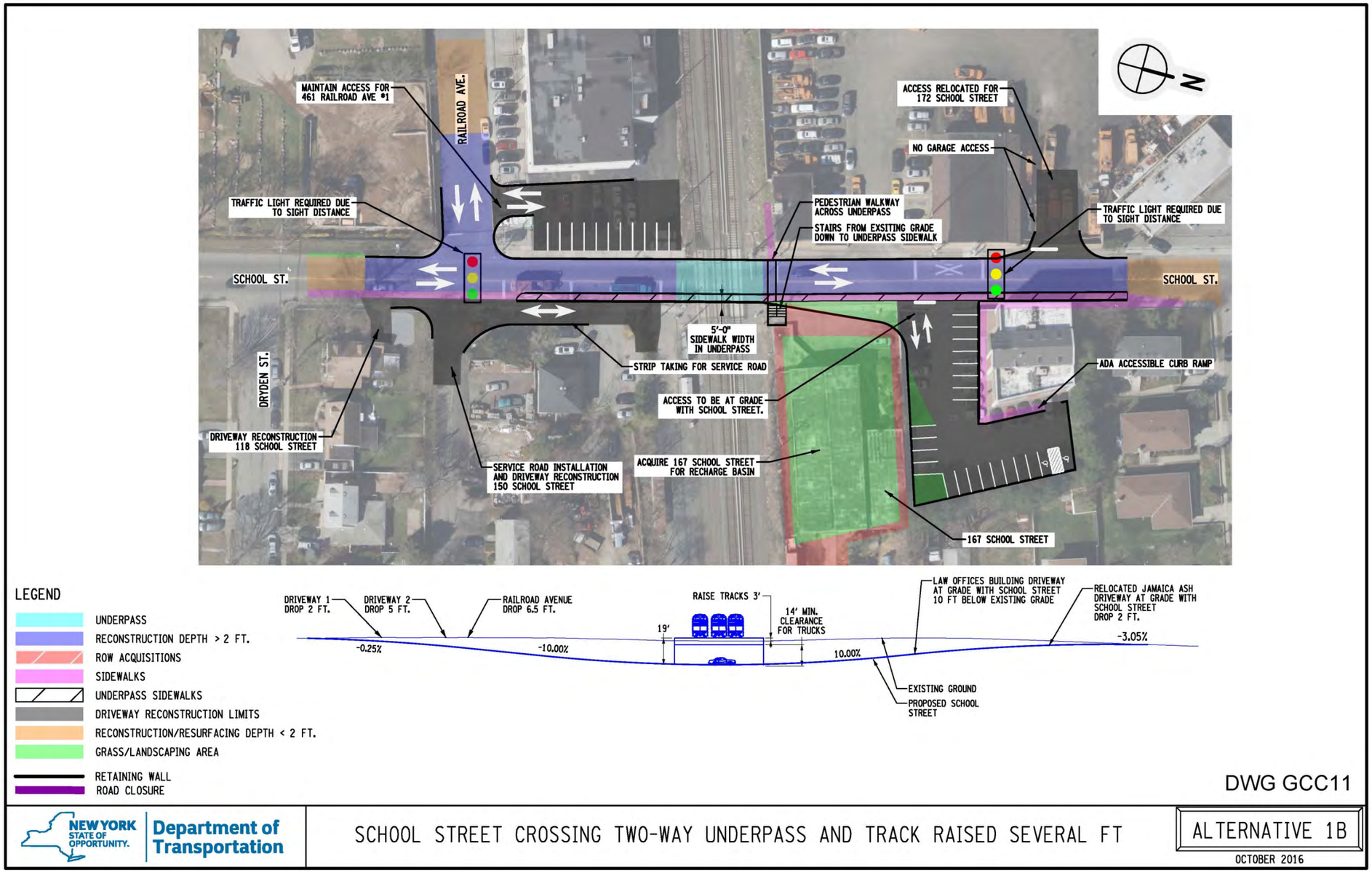

Figure A-11 School Street Crossing (Alternative 1B: Two-Way Underpass and Track Raised Several Ft)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

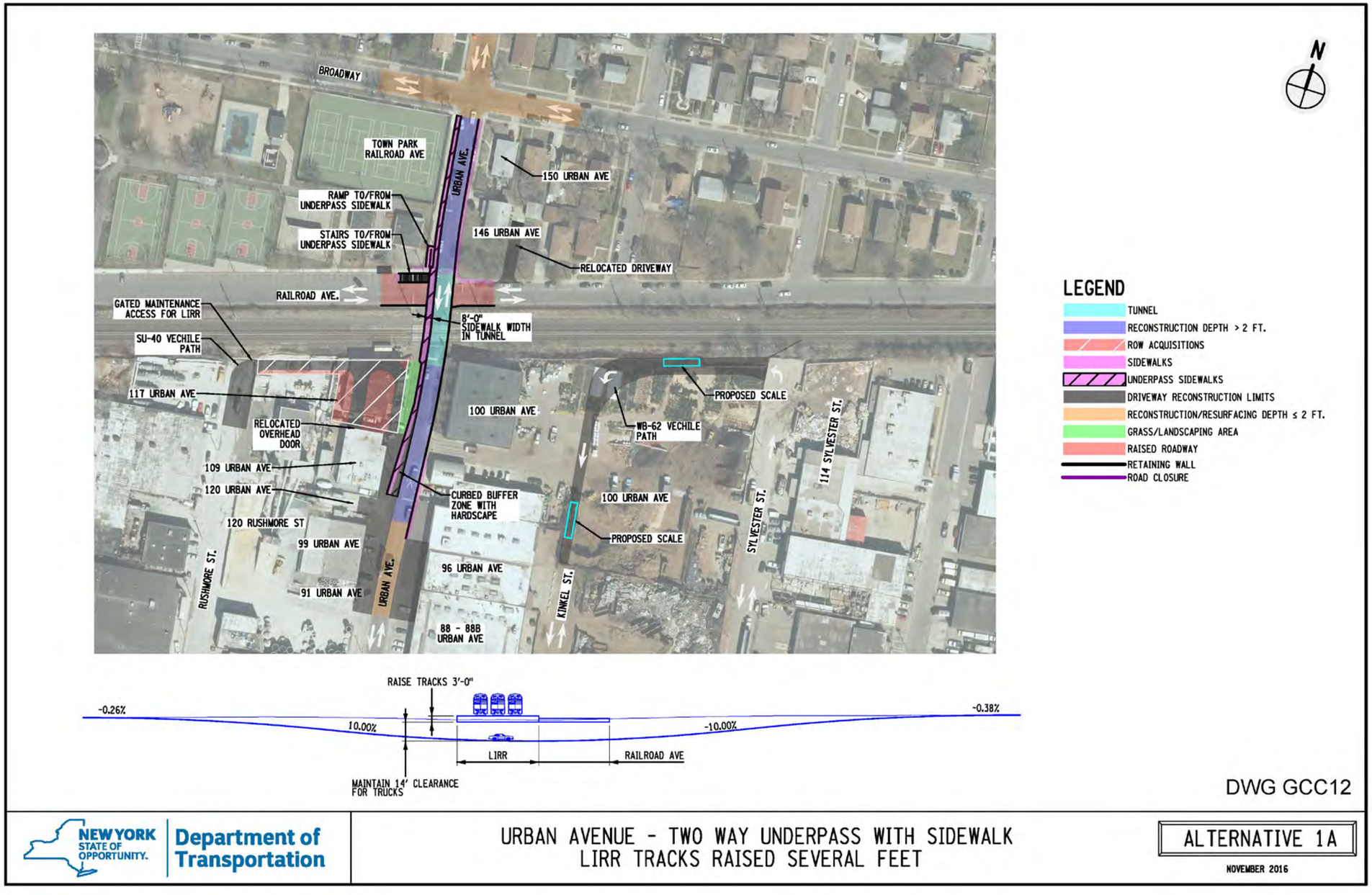

Figure A-12 Urban Avenue (Alternative 1A: Two-Way Underpass with Sidewalk and LIRR Tracks Raised Several Feet)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

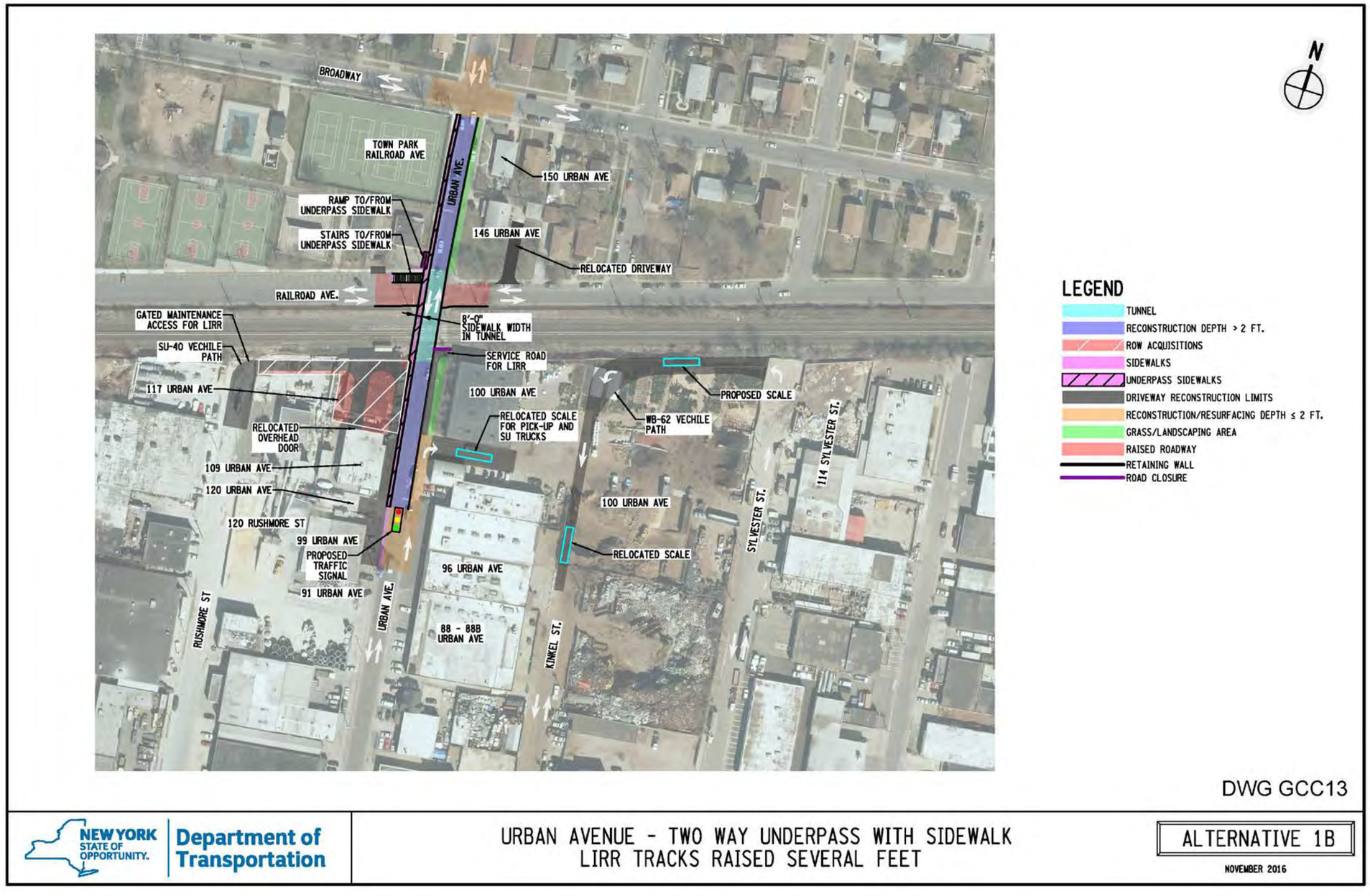

Figure A-13 Urban Avenue (Alternative 1B: Two-Way Underpass with Sidewalk and LIRR Tracks Raised Several Feet)

Project Plans as developed November 2016.
Actual Project Plans have been advanced.

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APPENDIX B

Selected Historic Maps

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Figure B-1 - ***Map of the Progress of His Majesty's Armies in New York during the late campaign illustrating the accounts published in the London Gazette*** **(1776). The LIRR Expansion Project is located within the area labeled "Hamsted Plains" (today's Hempstead Plains).**

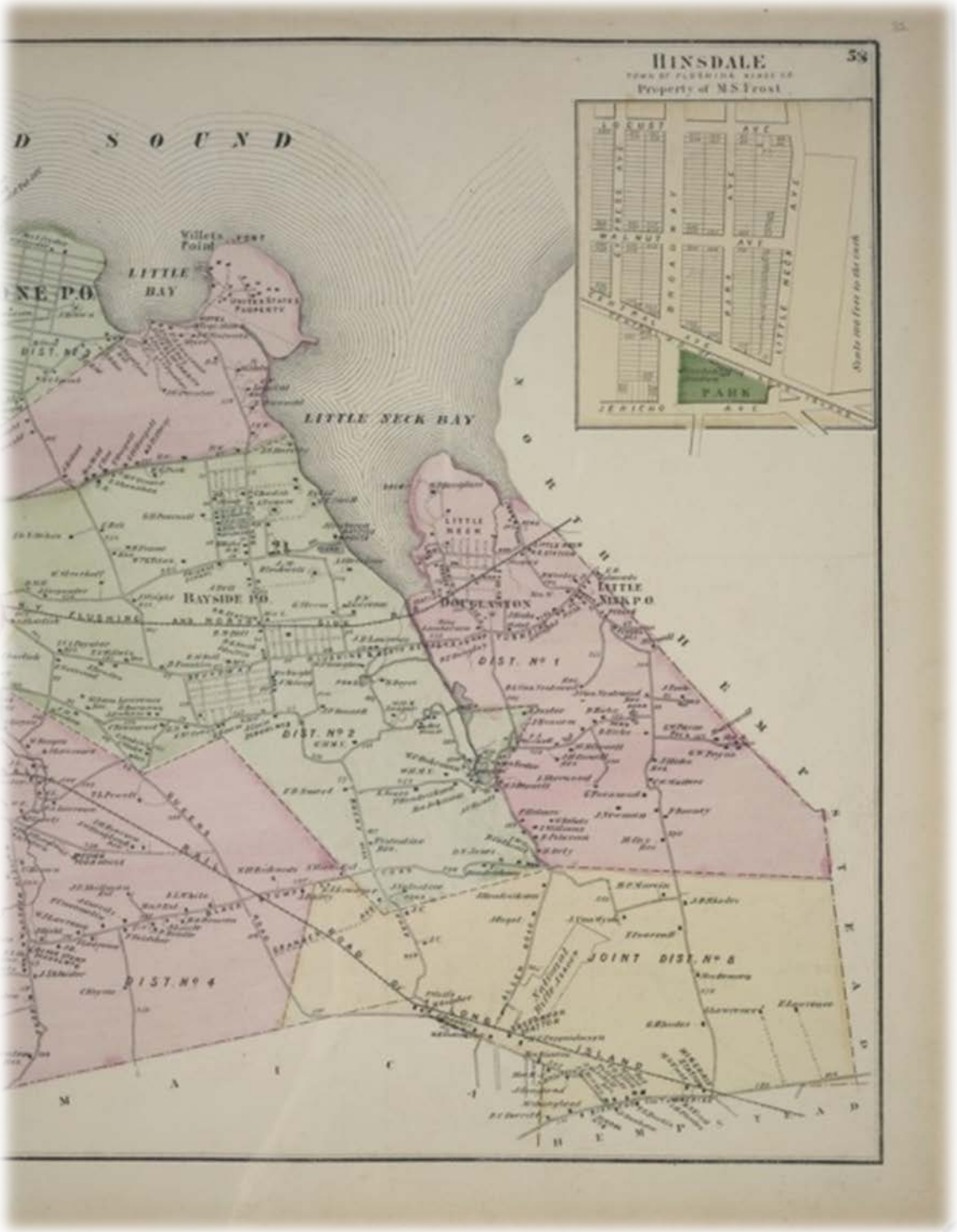

Figure B-2 - Portion of Beers 1873 *Atlas of Long Island New York* depicting then eastern Queens. Lower right hand portion of map depicts the "Hinsdale Station" along the LIRR Main Line; inset shows detail of Hinsdale. Hinsdale would be renamed Floral Park.

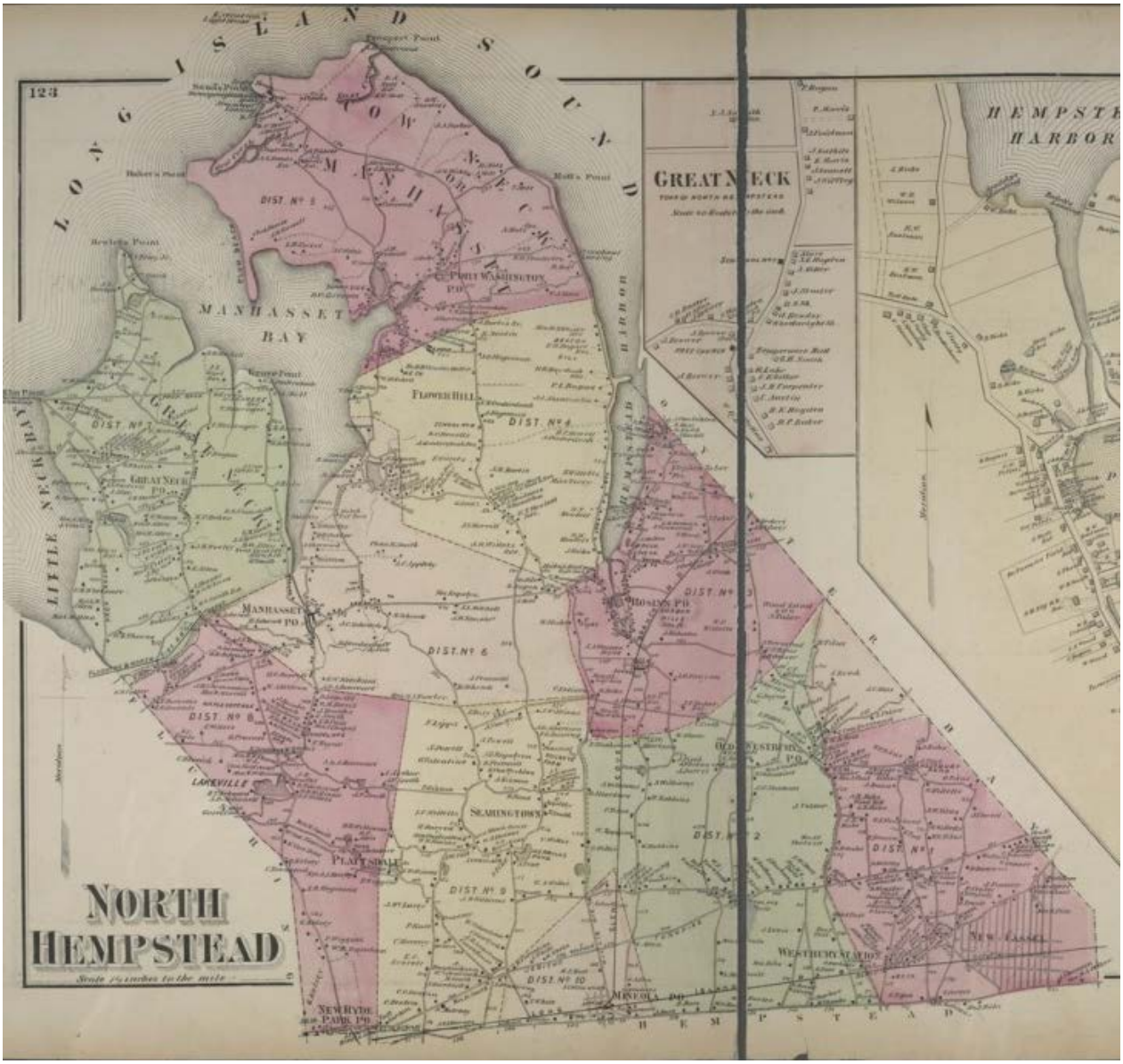

Figure B-3 - Portion of Beers 1873 *Atlas of Long Island New York* depicting the Town of North Hempstead. Lowest portion of map depicts the Main Line corridor from New Hyde Park, through Mineola and Westbury, to New Cassel. Note sparse development along rail corridor and paper streets of New Cassel.

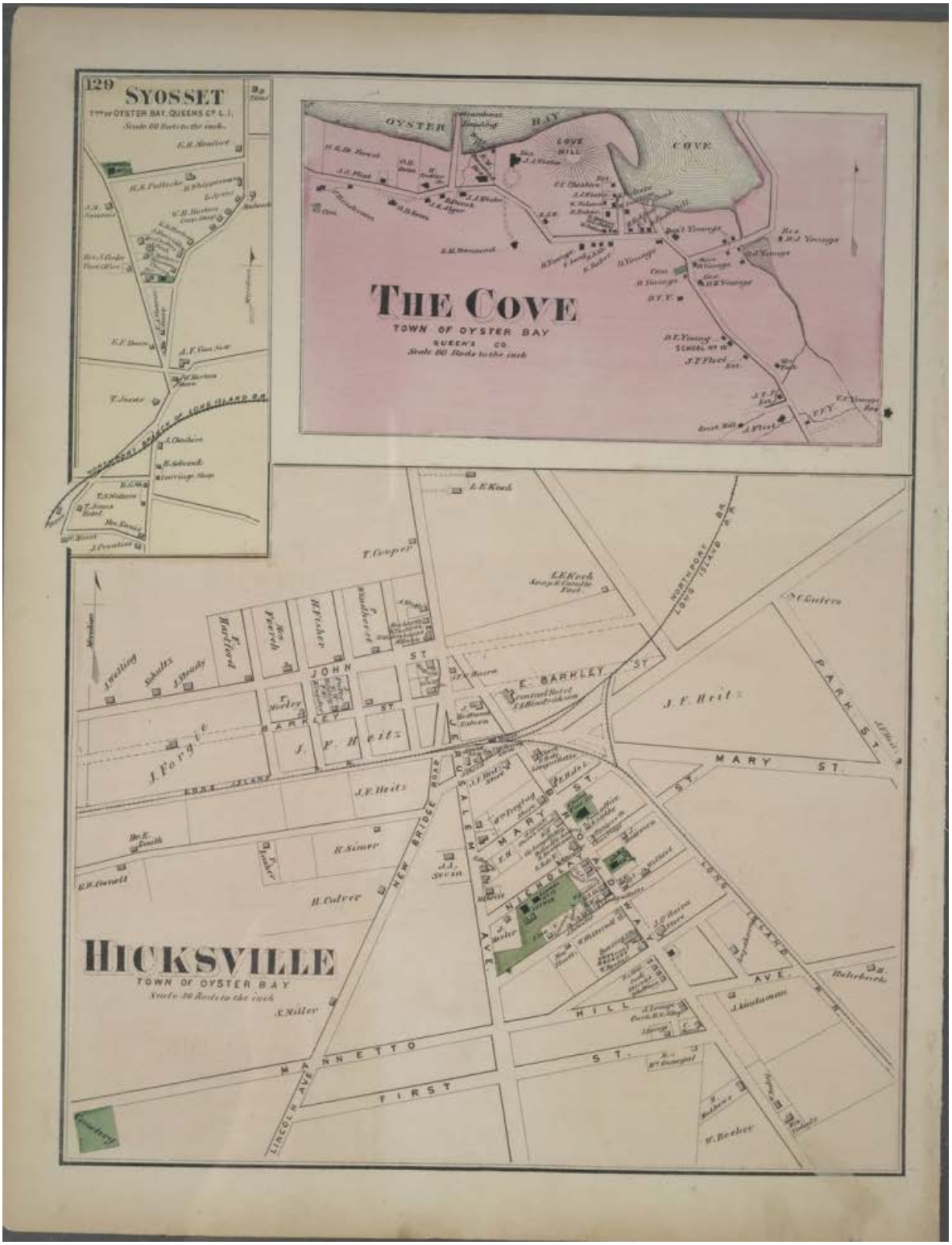

Figure B-4 - Portion of Beers 1873 *Atlas of Long Island New York* depicting the hamlet of Hicksville. Note the LIRR Northport Branch curving to the north off the Main Line corridor from the Hicksville Station between Jerusalem Avenue and Broadway. Much of the area is laid out in lots but very few structures have been built along the rail corridor.

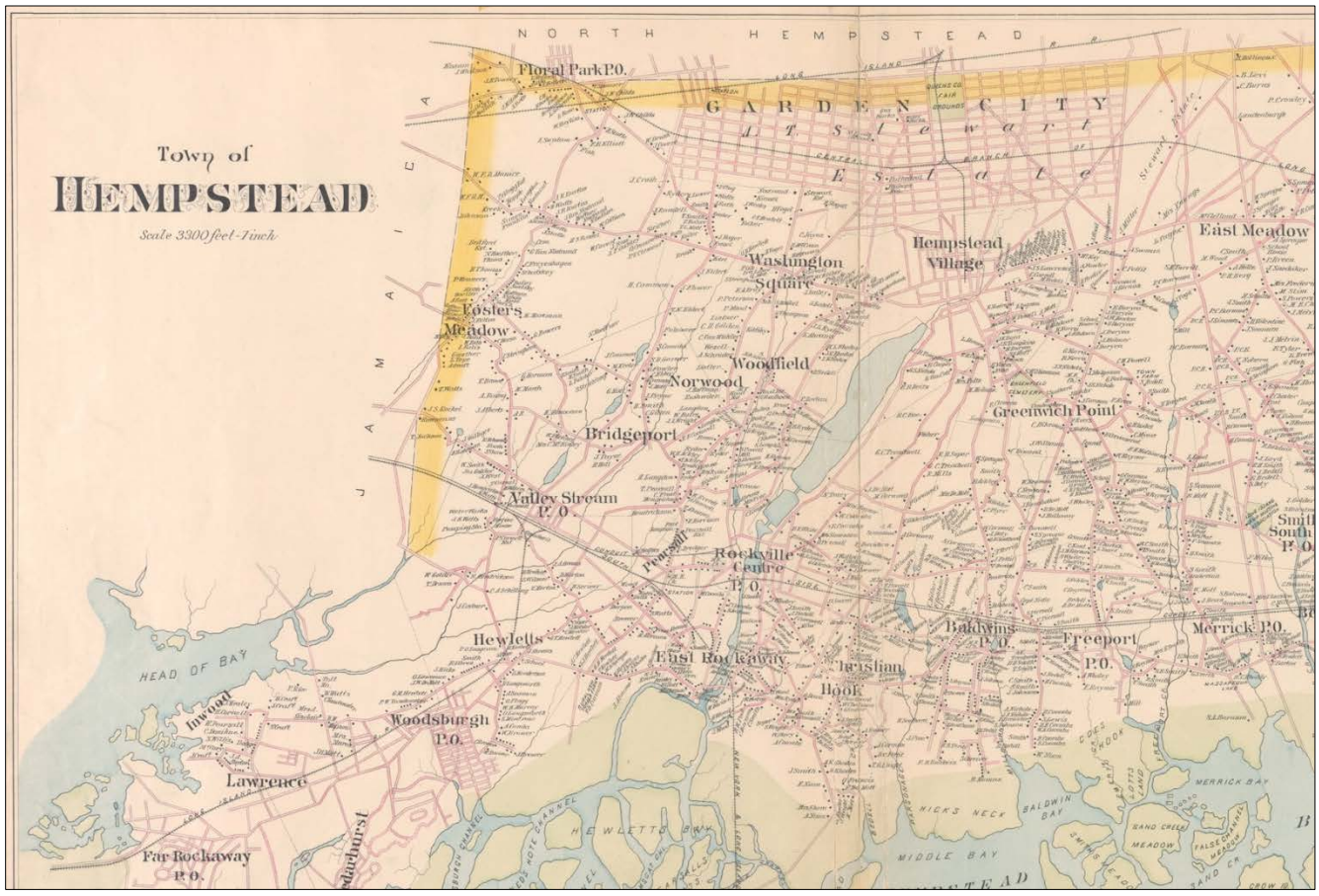

Figure B-5 - Enlarged portion of 1891 *Wolverton Atlas of Queens County New York* showing Floral Park and Garden City along Main Line corridor at top of map depiction. Note that Garden City has been laid out as a paper street grid across the A. T. Stewart Estate lands south of the Main Line corridor.

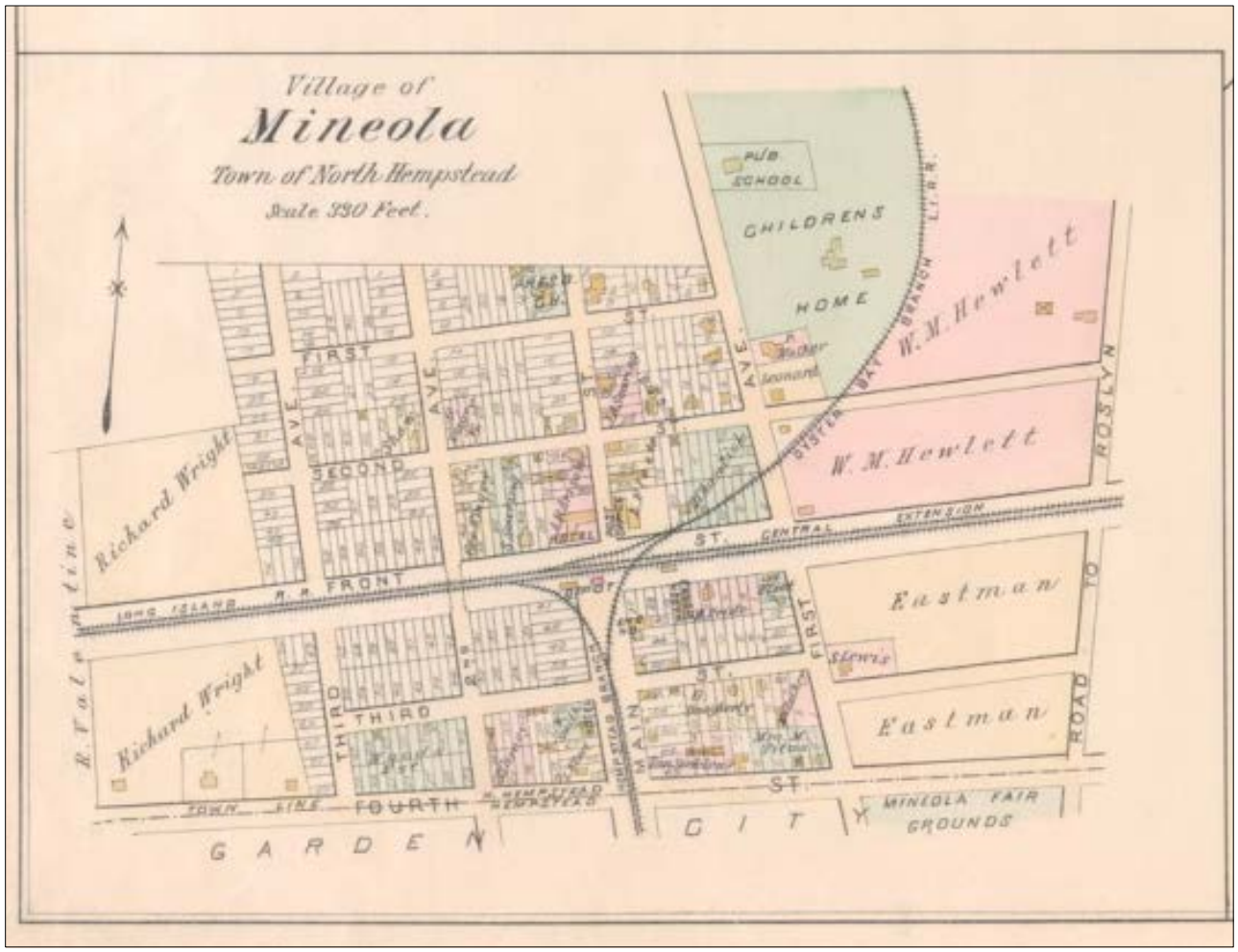

Figure B-6 - Enlargement of portion of 1891 Wolverton Atlas of Queens County New York showing the Village of Mineola. Note that Main Street now crosses the Main Line corridor, and the LIRR Hempstead Branch diverges from the Main Line tracks to run south along the west side of Main Street. Note that the street one block west of Main Street, today's Mineola Boulevard, is labeled 2nd Avenue and the street one block to the east of Main Street, today's Willis Avenue, is labeled 1st Avenue. The blocks surrounding the Mineola Station have been lotted and some structures have been built.

Figure B-7 – Enlargement of a portion of 1891 Wolverton Atlas of Queens County New York showing the Main Line corridor running across the extreme bottom of the depiction from New Hyde Park to New Cassel. There has been little development along the Main Line corridor between Mineola and Westbury and Westbury and New Cassel.

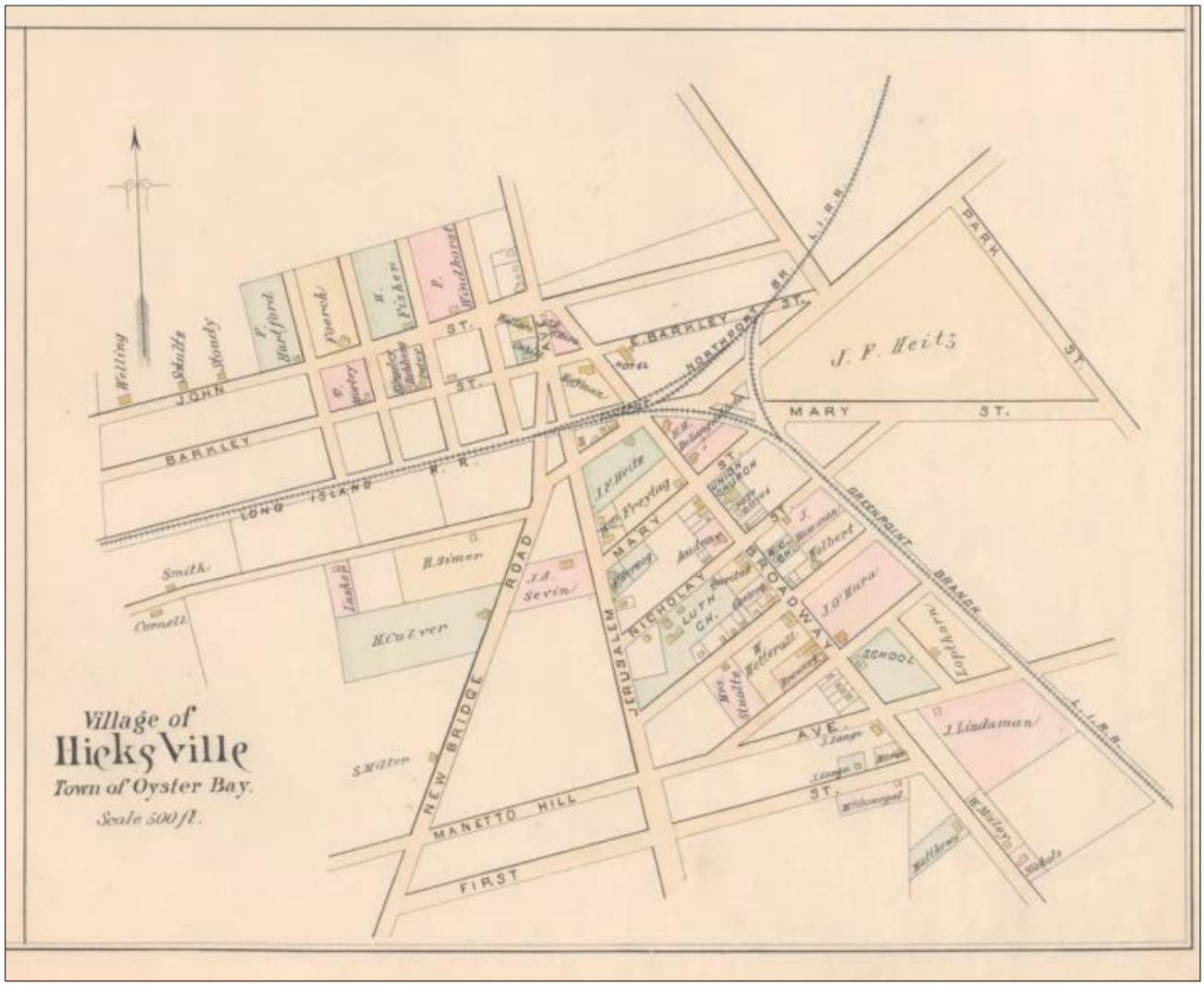

Figure B-8 – Enlargement of portion of 1891 Wolverton Atlas of Queens County New York showing the Village of Hicksville. There are no structures depicted adjacent to either side of the Main Line corridor to Jerusalem Avenue. Development is concentrated along Jerusalem Avenue and Broadway, primarily to the south of the Main Line corridor and west of the LIRR Greenpoint Branch, which runs to the southeast from the Hicksville Station.

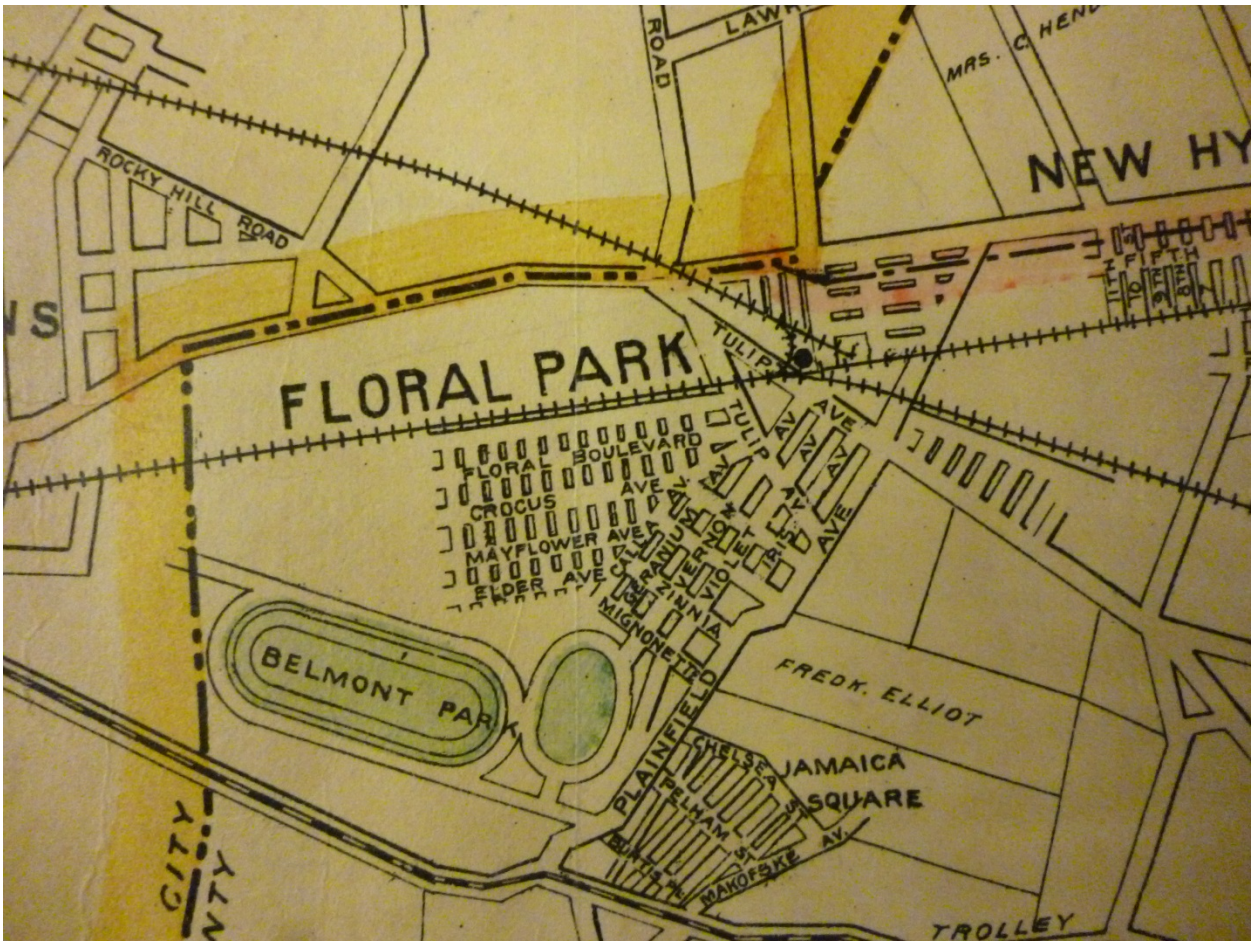

Figure B-9 Enlargement of portion of Belcher-Hyde 1906 *Map of Nassau County Long Island* showing that Floral Park (formerly Hinsdale) has been partially laid out (and the streets named for trees and flowers) to the south of the Main Line.

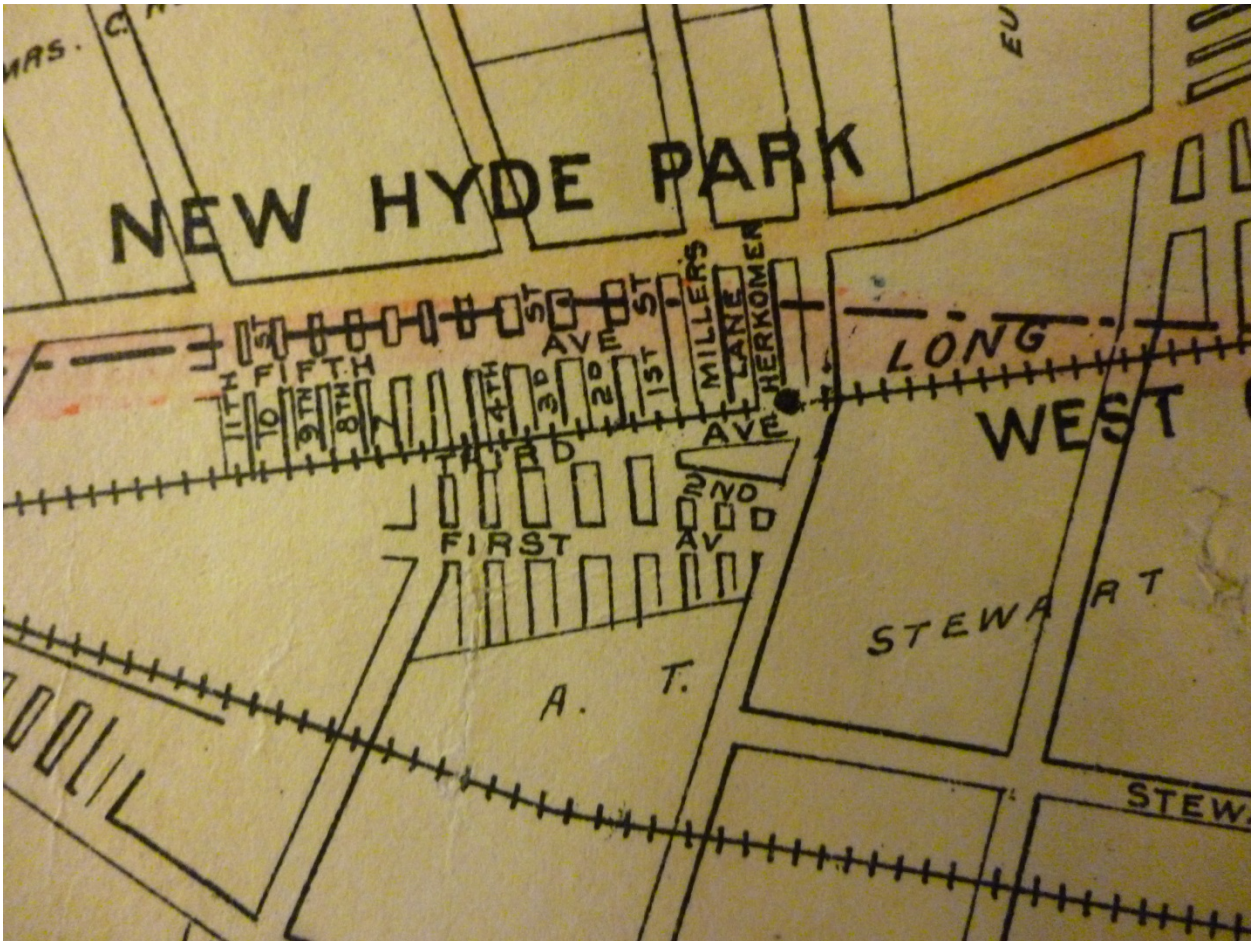

Figure B-10 - Enlargement of portion of Belcher-Hyde *1906 Map of Nassau County Long Island* showing that New Hyde Park has been laid out on both sides of the Main Line corridor. Note that the north-south street numbering follows the old system (today, 1st Street is 12th Street). The New Hyde Park Station is shown at the end of Herkomer Street, as it is today.

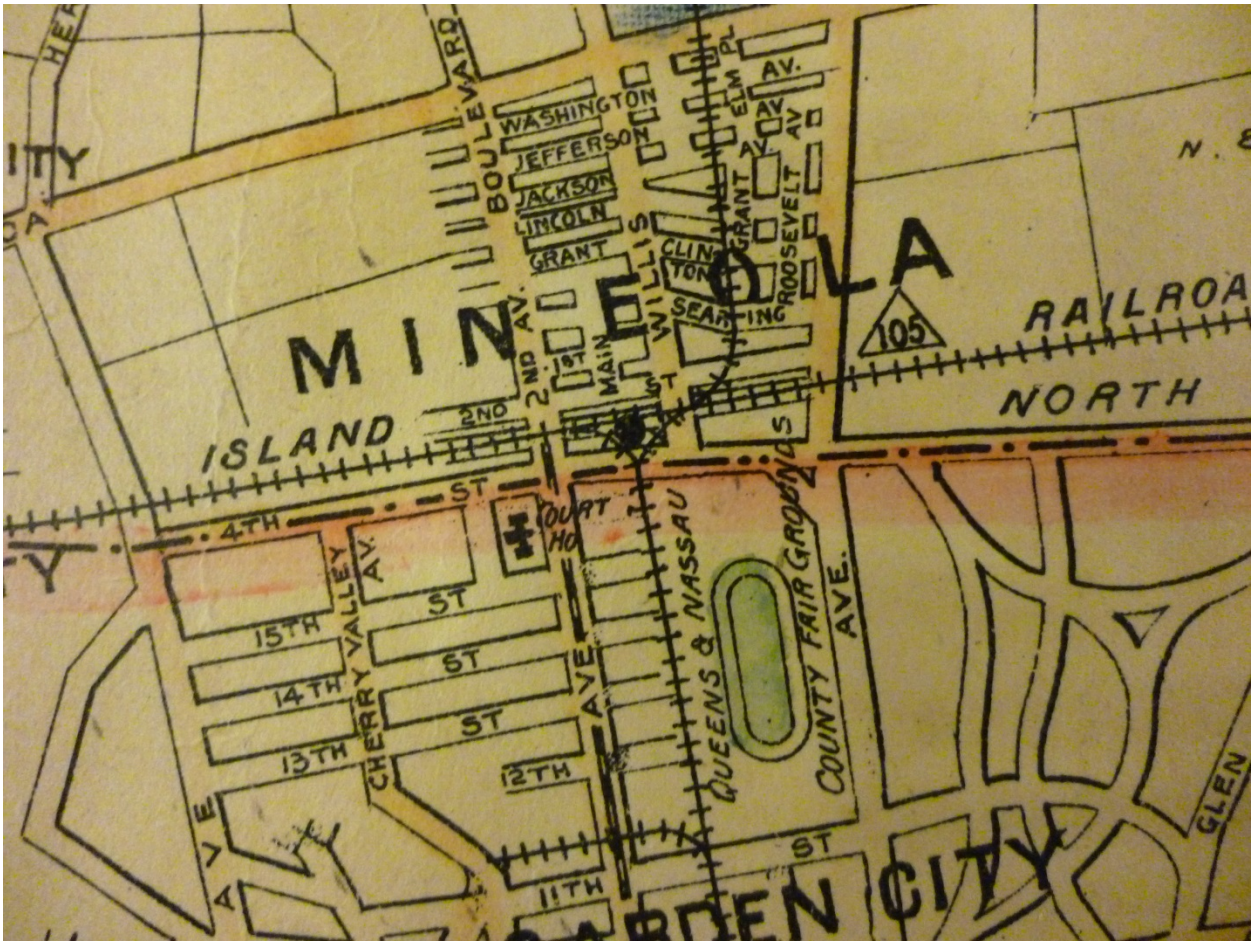

Figure B-11 - Enlargement of portion of Belcher-Hyde 1906 *Map of Nassau County Long Island* showing that the Mineola street grid has been laid out to the north and south of the Main Line corridor. Note that Main Street does not cross the Main Line tracks. The Queens and Nassau Branch of the LIRR is depicted running south of the Main Line tracks along the route that would become Main Street. The "Old" Court House and the County Fair Grounds are shown on the south side of the Main Line corridor

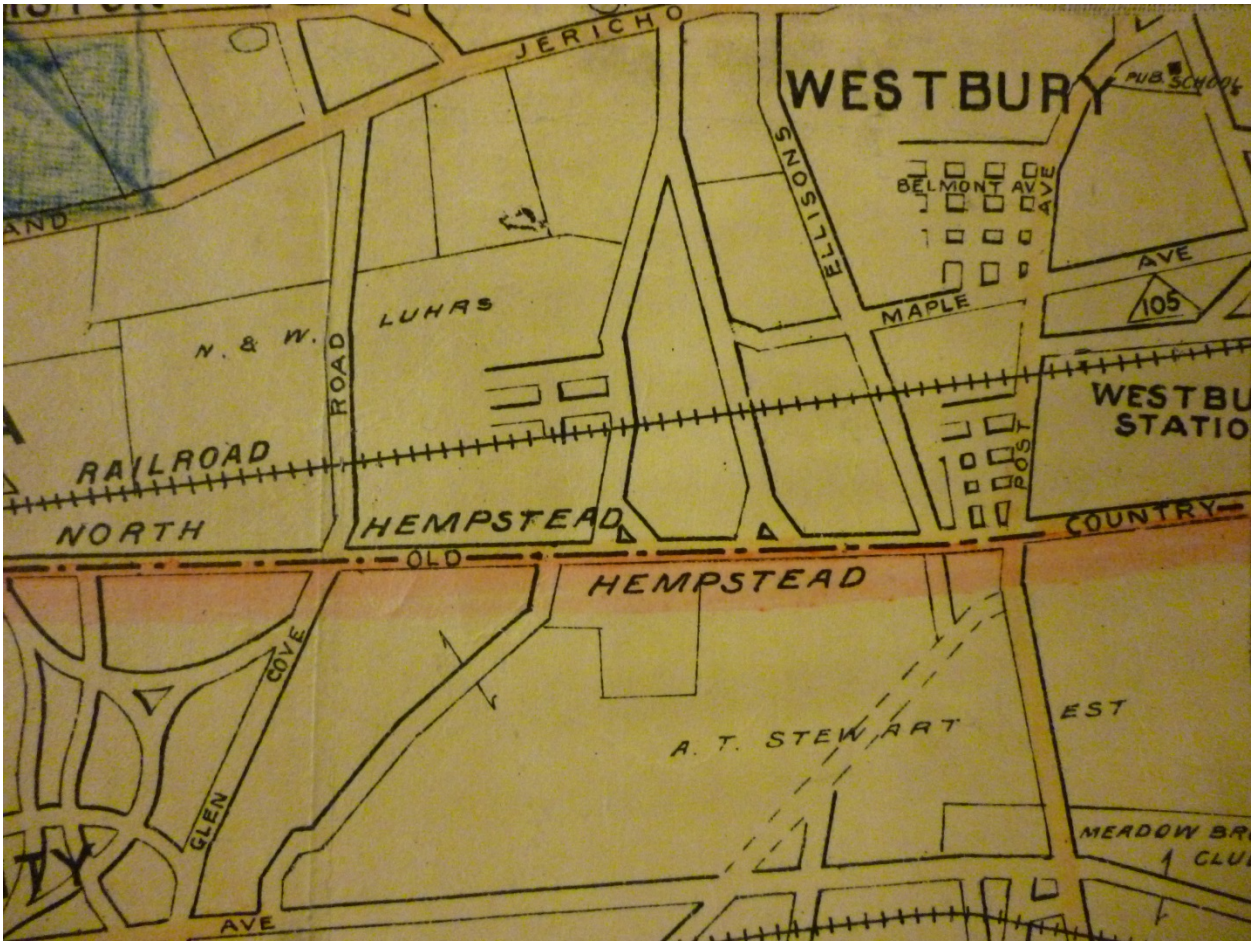

Figure B-12 - Enlargement of portion of Belcher-Hyde 1906 *Map of Nassau County Long Island* showing that Westbury has been partially laid out on both sides of the Main Line corridor.

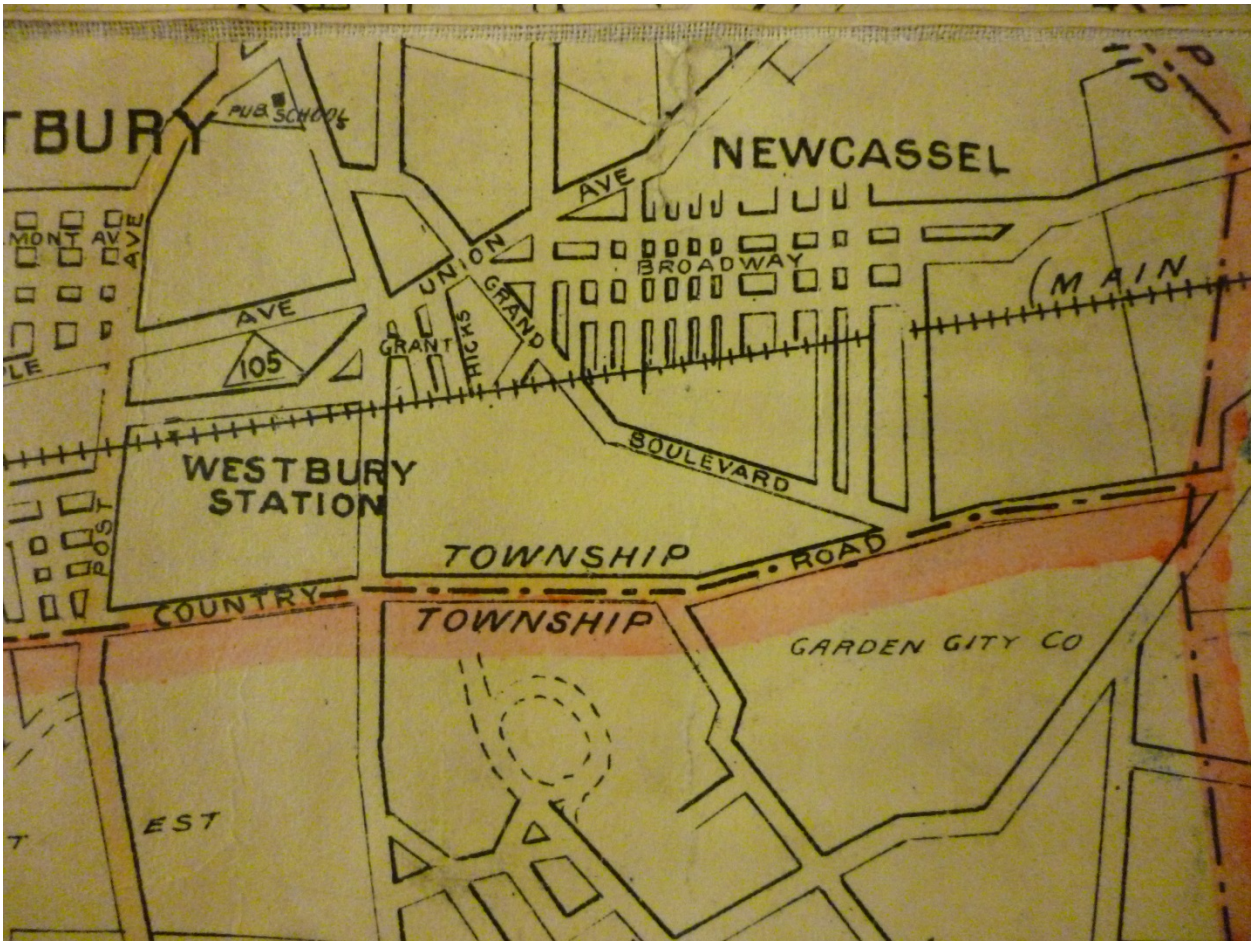

Figure B-13 - Enlargement of portion of Belcher-Hyde 1906 *Map of Nassau County Long Island* showing that the New Cassel street grid has been laid out on the north side of the Main Line corridor. Very little development is seen on the south side of the Main Line corridor between Westbury and New Cassel.

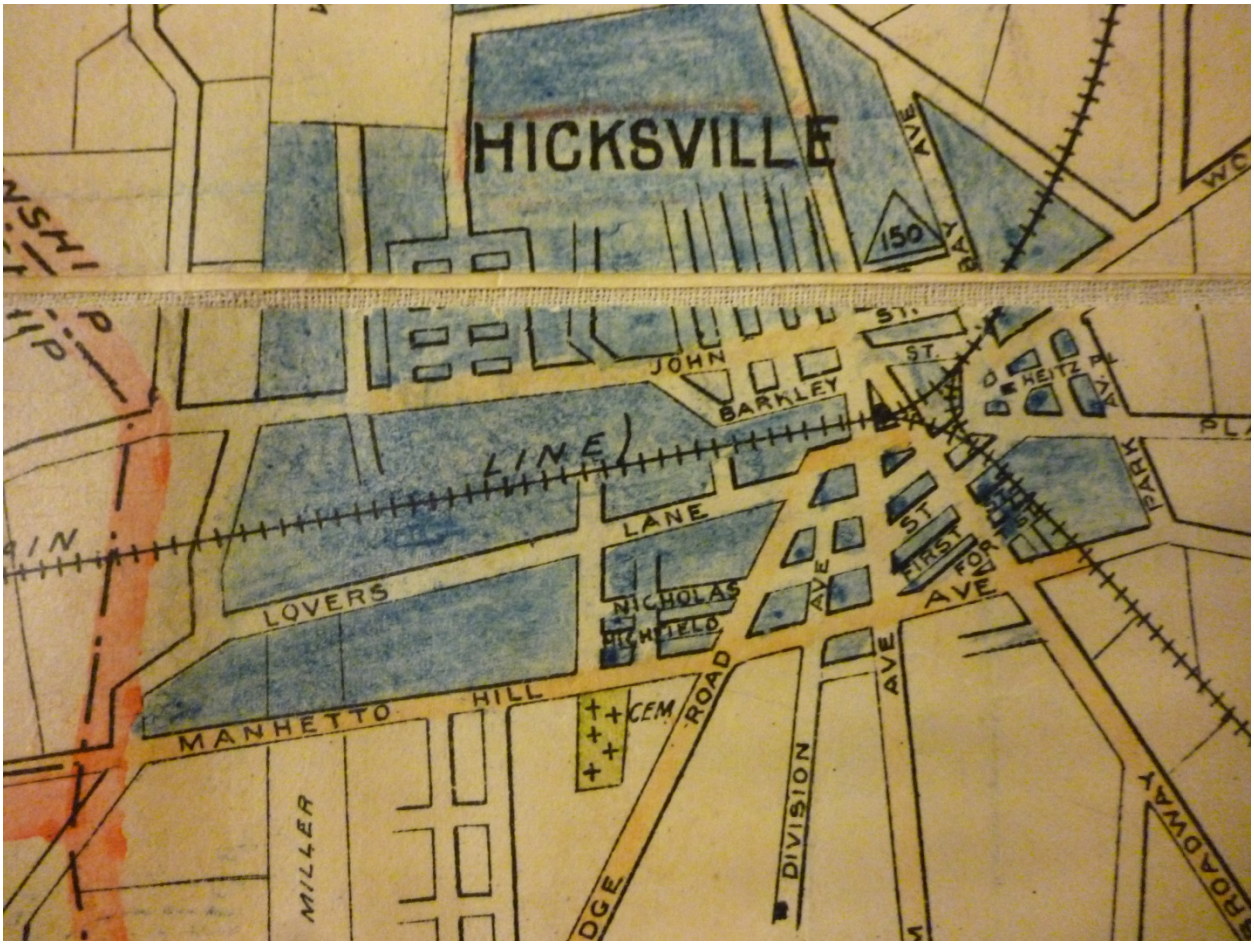

Figure B-14 - Enlargement of portion of Belcher-Hyde *1906 Map of Nassau County Long Island* showing that the hamlet of Hicksville street grid has grown slightly in the area surrounding the Hicksville Station. However, there are few new roads between New Cassel and Hicksville.

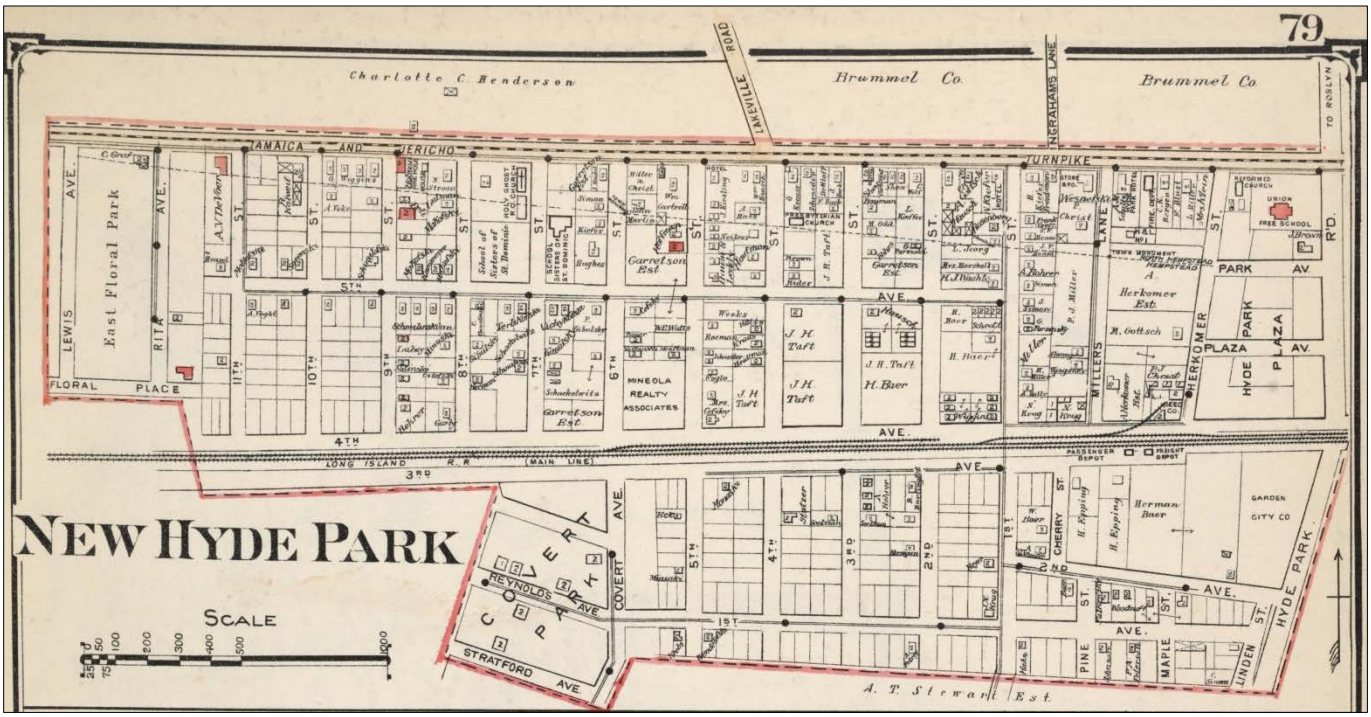

Figure B-15 Enlargement of portion of 1914 Belcher-Hyde *Atlas of Nassau County New York* showing New Hyde Park. Much of the village has been laid out in blocks and lots and multiple structures have been built. However, there are comparatively few structures adjacent to either side of the Main Line ROW. The street and avenue numbering system has not yet been changed to the modern form; 1st Street on the map is 12th Street today.

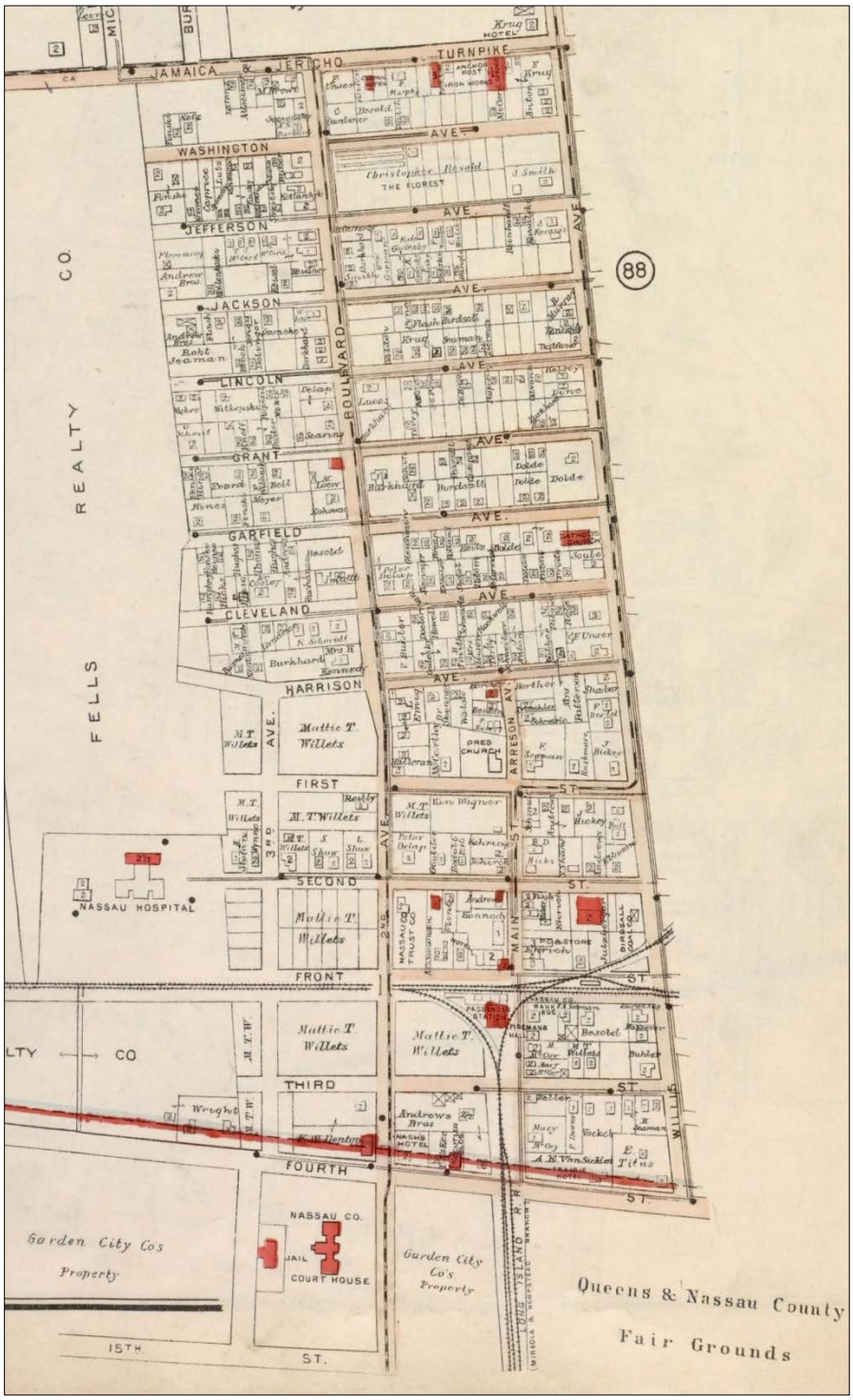

Figure B-16 – Enlargement of portion of Belcher-Hyde 1914 Atlas of Nassau County New York showing the Mineola Station and Main Street commercial center. Despite the growth seen across the blocks, there are relatively few structures located adjacent to the LIRR Main Line ROW on either side. Nassau Hospital has been established to the northwest of the Mineola Station. The station is still located on the south side of the Main Line tracks on Main Street.

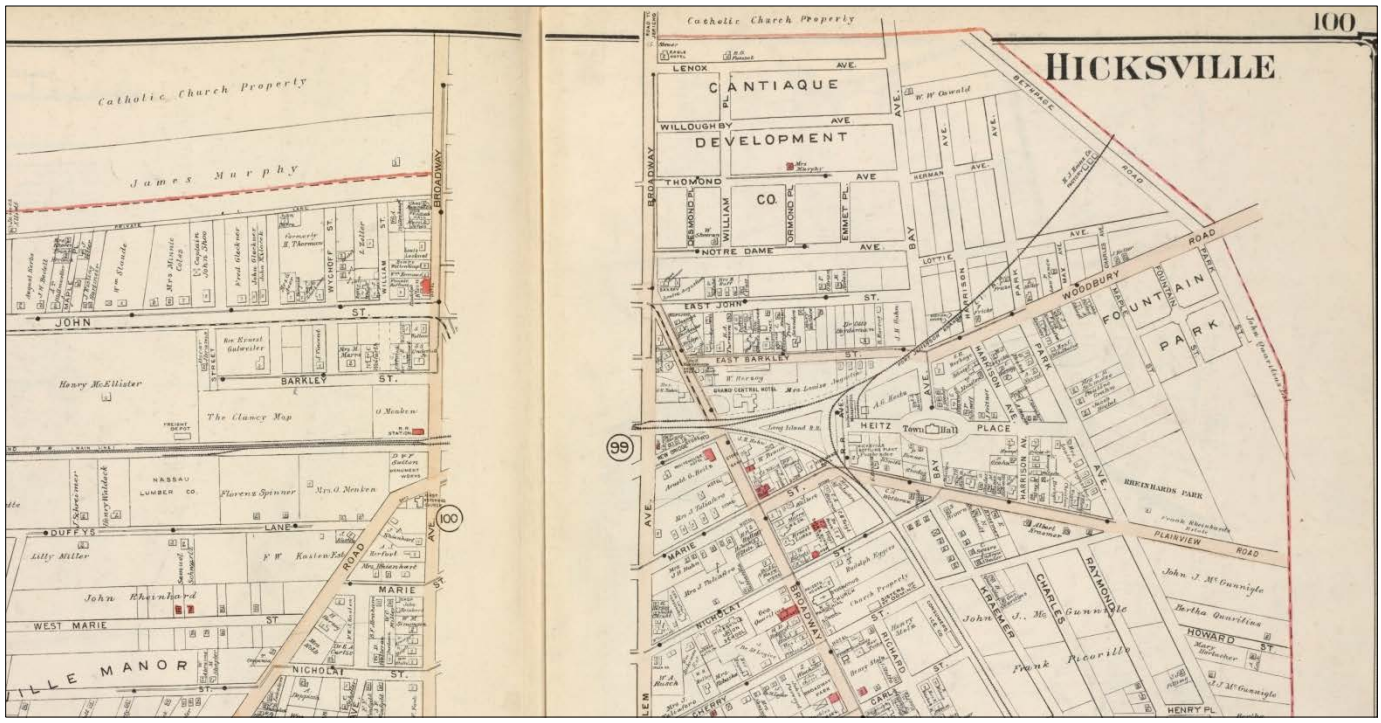

Figure B-17 - Enlargement of portion of Belcher-Hyde 1914 Atlas of Nassau County New York showing the Village of Hicksville commercial center east of Broadway. Despite the growth seen across the blocks, there are relatively few structures located adjacent to the LIRR Main Line ROW on either side. The Hicksville Station has been relocated to the northwest corner of the Jerusalem Avenue crossing of the Main Line tracks. The LIRR Port Jefferson Branch leaves the Main Line corridor at the Hicksville Station to run northward.

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