Chapter 8: Contaminated Materials

A. INTRODUCTION

This chapter evaluates the potential for contaminated materials to exist within or near the Study Area for the Proposed Project. Construction activities associated with the Proposed Project would involve soil disturbance at various locations throughout the study area. The Study Area, for the purposes of this Chapter, is the LIRR ROW, the area within 100 feet on either side of the right-of-way along the 9.8-mile project length, and the area within 200 feet where changes to grade crossings, including areas to be disturbed for utility installations/relocations, or potential property acquisitions are proposed. This chapter presents and interprets available information on potentially contaminated sites within the Study Area.

An analysis was conducted to evaluate whether construction or operation of the Proposed Project could potentially increase exposure of people or the environment to contaminated materials, and whether the Proposed Project may result in potential significant adverse impacts to public health and/or the environment. The potential for significant adverse impacts depends on the type of materials present and their location relative to or within the Study Area, their levels, and whether exposure to the contaminated materials would be associated with the Proposed Project, either during construction or during subsequent operations. The potential for significant adverse impacts from contaminated materials can occur when: a) contaminated materials exist on a site, and b) an action would increase pathways to their exposure; or c) an action would introduce new activities or processes involving contaminated materials. Contaminated materials are substances that pose a threat to human health or the environment. They can include hazardous wastes, which are explicitly defined by regulations promulgated under the Federal Resource Conservation and Recovery Act (RCRA), the regulatory framework for the proper management of both hazardous and non-hazardous waste. The responsibility for regulating contaminated materials falls on the various federal, state and local agencies, including the New York City Department of Health and Mental Hygiene (DOHMH), New York State Department of Health (NYSDOH), New York State Department of Environmental Conservation (NYSDEC), the Department of Transportation (DOT), and the United States Environmental Protection Agency (USEPA). The regulatory obligation is typically dependent upon the nature and occurrence of the specific contaminant.

Many contaminated materials cause physical harm following exposure, either by direct contact, inhalation as vapor or particles in the air, and/or ingestion of contaminated soil/agriculture or groundwater. The effect of these materials on human health is dependent upon the nature and toxicity of the contaminant and the amount of exposure. Public health may also be compromised when contaminated vapors from such materials migrate through the subsurface soil and/or along preferential pathways (e.g., building foundation structures, utility conduits, etc.) and accumulate beneath concrete slabs or infiltrate into buildings through cracks and openings, thereby creating hazardous breathing conditions.

B. PRINCIPAL CONCLUSIONS AND IMPACTS

Soil, soil gas and groundwater beneath a site can become contaminated as a result of past or present uses within the Study Area or on nearby properties. Portions of the Study Area are and/or were used historically for railroad operations and other industrial activities. Common contaminants found in the subsurface at railroad properties include creosote, petroleum products, solvents, volatile and semi-volatile organic compounds, heavy metals, polychlorinated byphenols (PCBs), pesticides, and herbicides.

Based on the methodology described in the following section, 153 "Category B" sites were identified within the Study Area. As further discussed below, a Category B site is defined as sites that had some reasonable potential to have been impacted by the presence of contaminated materials and thus additional analysis is prudent. As noted below, the identification of a site as "Category B" does not necessarily indicate that the site is contaminated. Subsurface investigations, which would only be performed at the sites within or close to an area where subsurface disturbance would be required for the Proposed Project, would be required to determine that contamination actually exists. No further analysis is recommended for "Category A sites" (defined in the following section).

Several properties that are part of the Proposed Project were identified, either in whole or in part, as Category B sites (see below).

The locations of all Category A and B sites are shown on **Figures 8-1 through 8-22** and correspond to the database summary table included in **Appendix 8-A**.

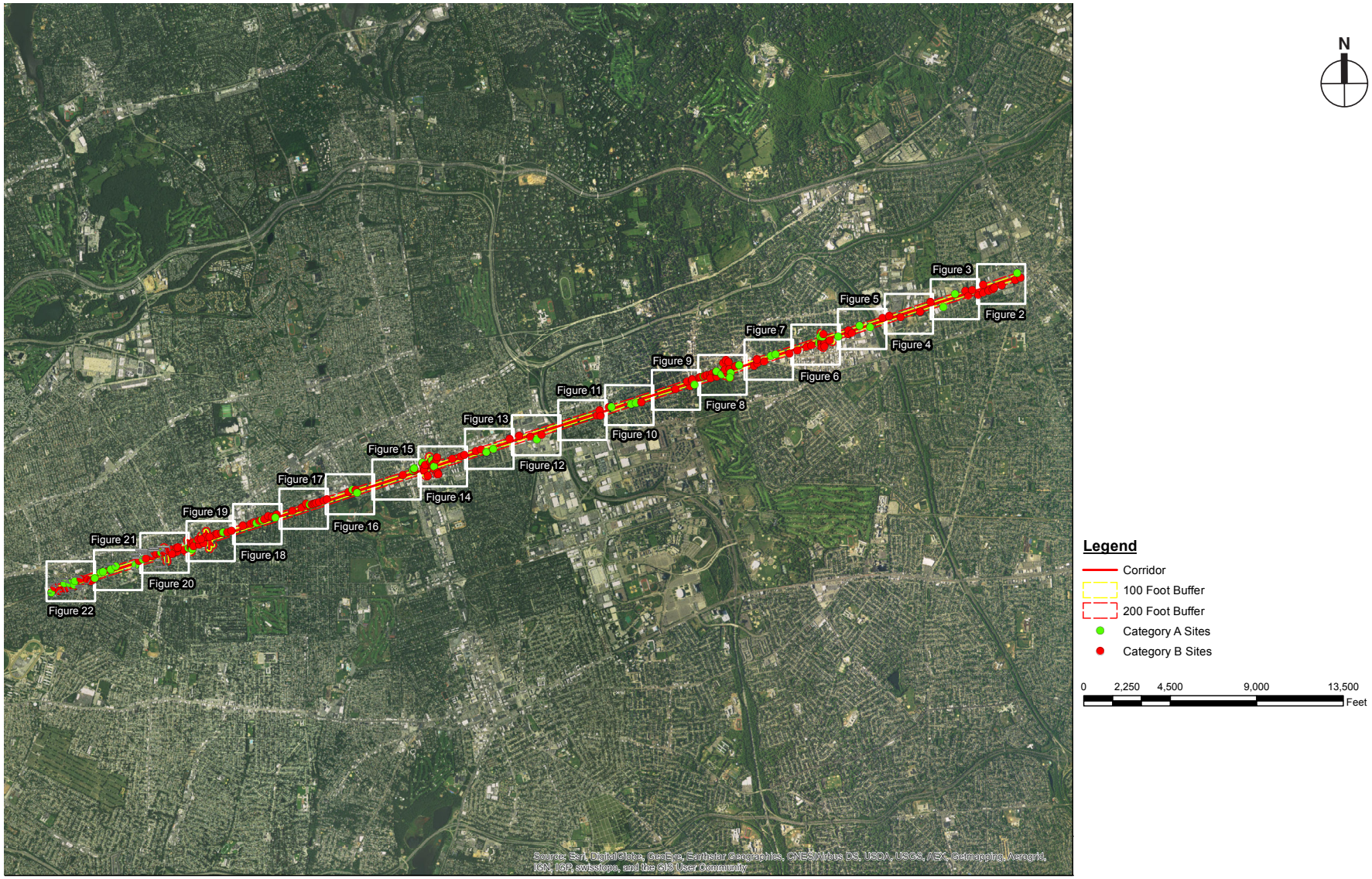
C. METHODOLOGY

A review of the environmental history of the Study Area was conducted. Resources consulted in this review are:

- Historical aerial photographs and Sanborn Fire Insurance Maps;
- Federal and state database records for contaminated sites and sites potentially containing hazardous substances; and
- A site reconnaissance limited to publicly accessible portions of the Study Area, focusing on contaminated sites, potentially contaminated sites, and readily identifiable Recognized Environmental Conditions (RECs).

The review portion of this analysis was used to focus the reconnaissance efforts in an attempt to confirm the presence of specific potential issues identified by the regulatory and historical data.

The analysis was conducted in general accordance with the American Society for Testing and Materials (ASTM) Designation E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-13). However, the search radius for off-site properties was modified to 100 feet from the right-of-way, which is appropriate for a corridor project. The term REC is defined in E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." Data collection efforts associated with this analysis were also performed in general accordance with the New York State Department of Environmental Conservation



Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-1

Source: *New World Matrix*

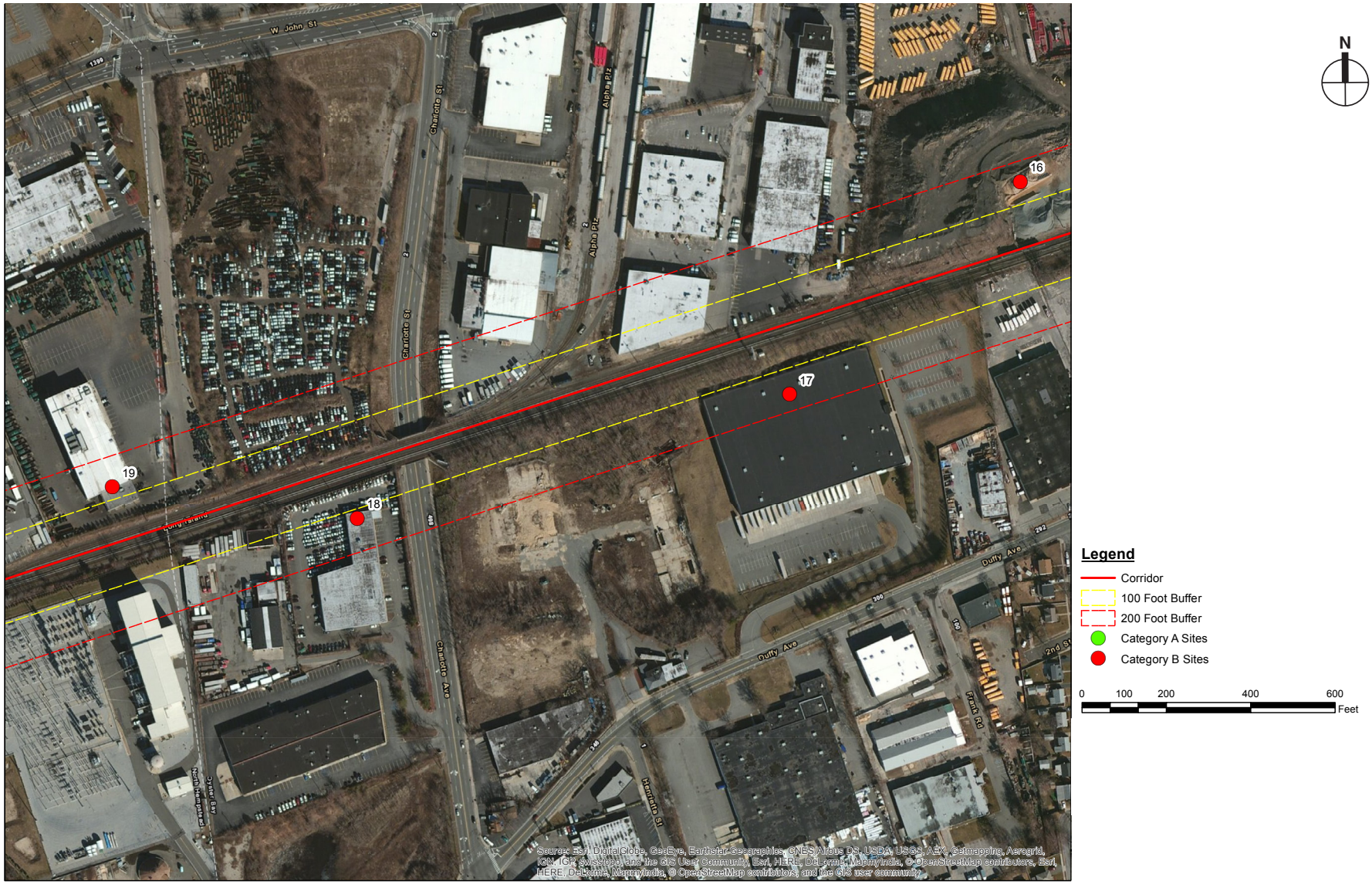
LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-2

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-3



Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-4

Source: *New World Matrix*

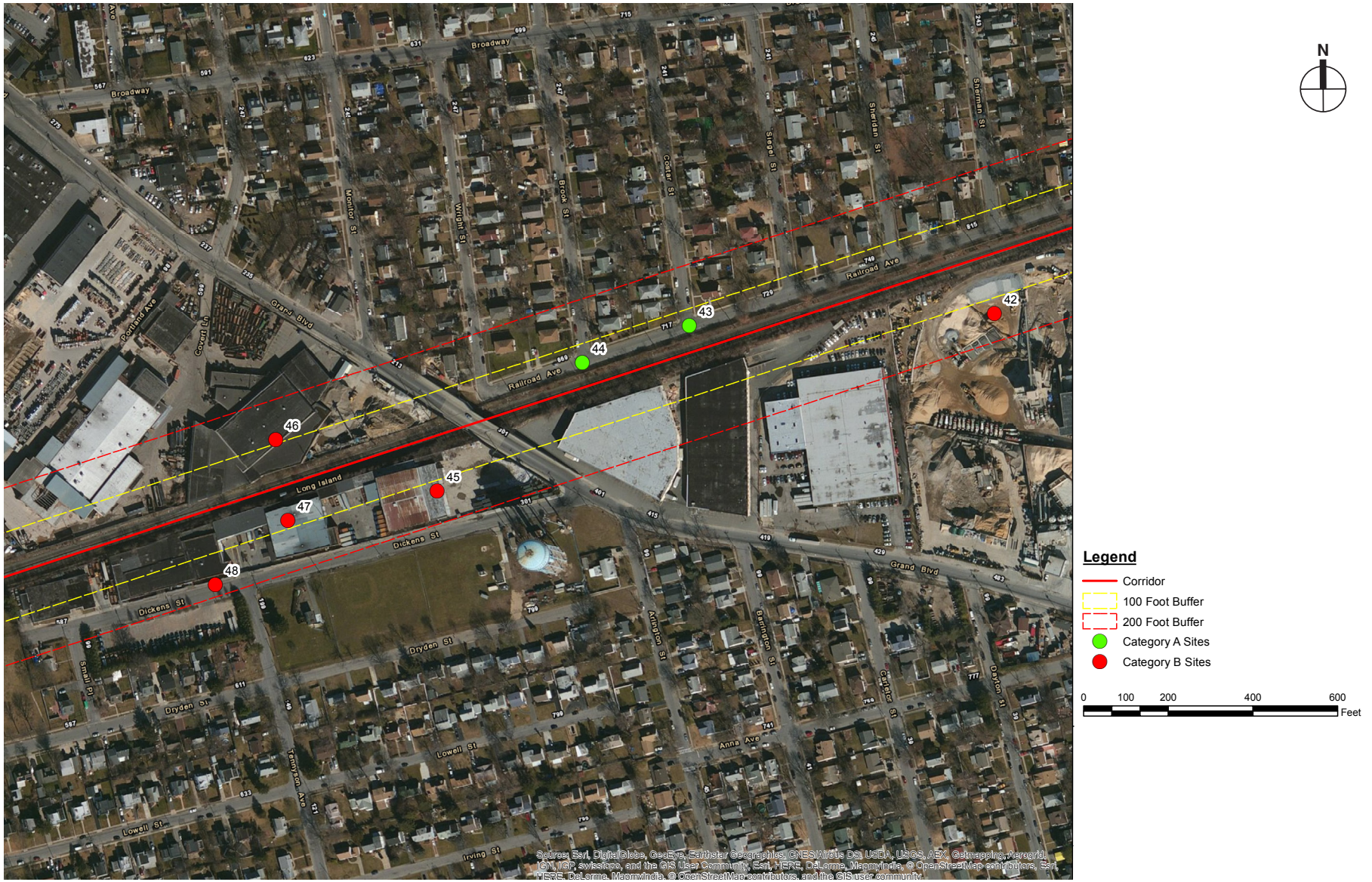
LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-5

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

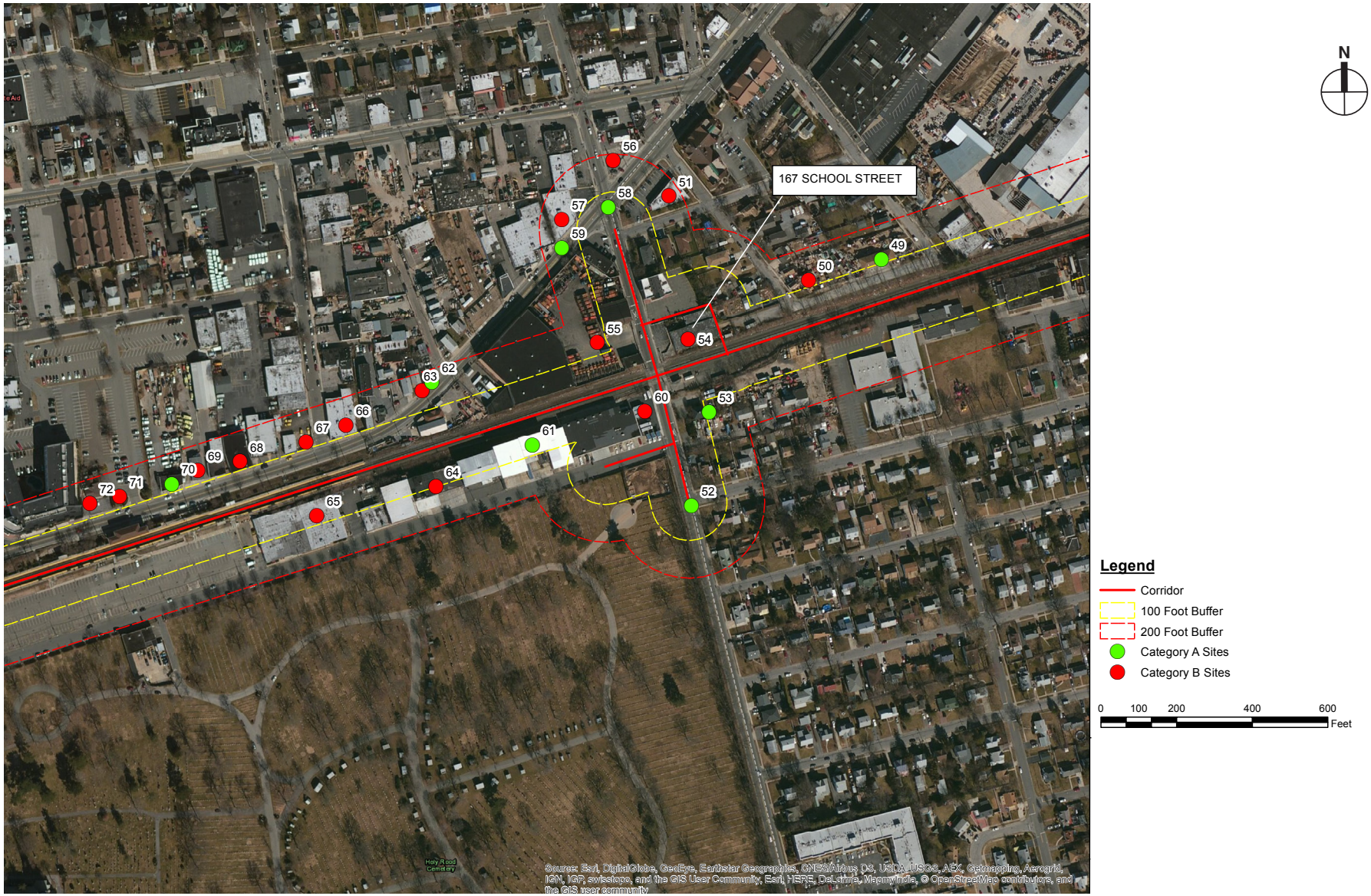
Contaminated Materials Study Sites
Figure 8-6



Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

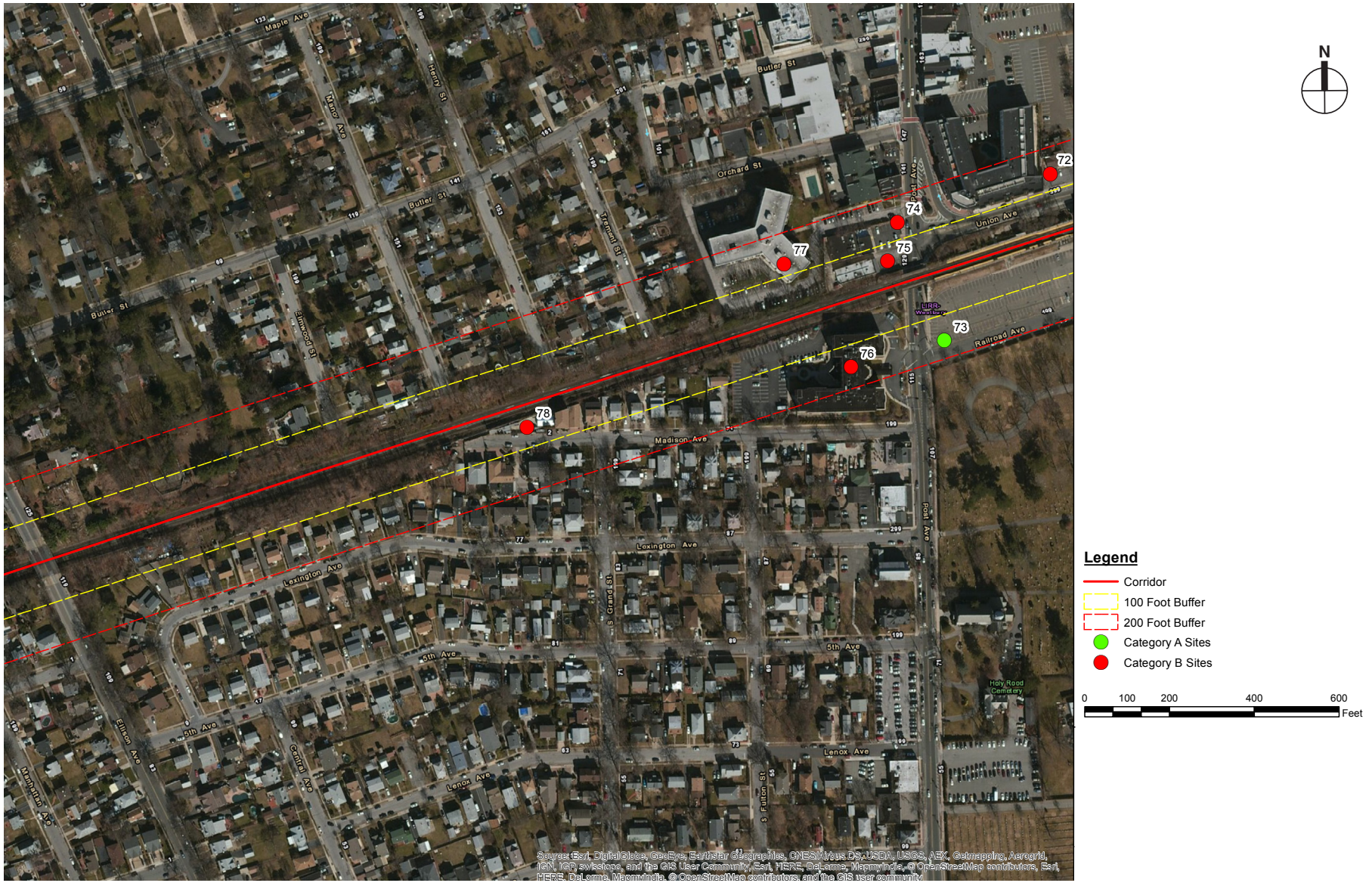
Contaminated Materials Study Sites
Figure 8-7



Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-8



Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-9

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-10

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-11

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-12

Source: *New World Matrix*

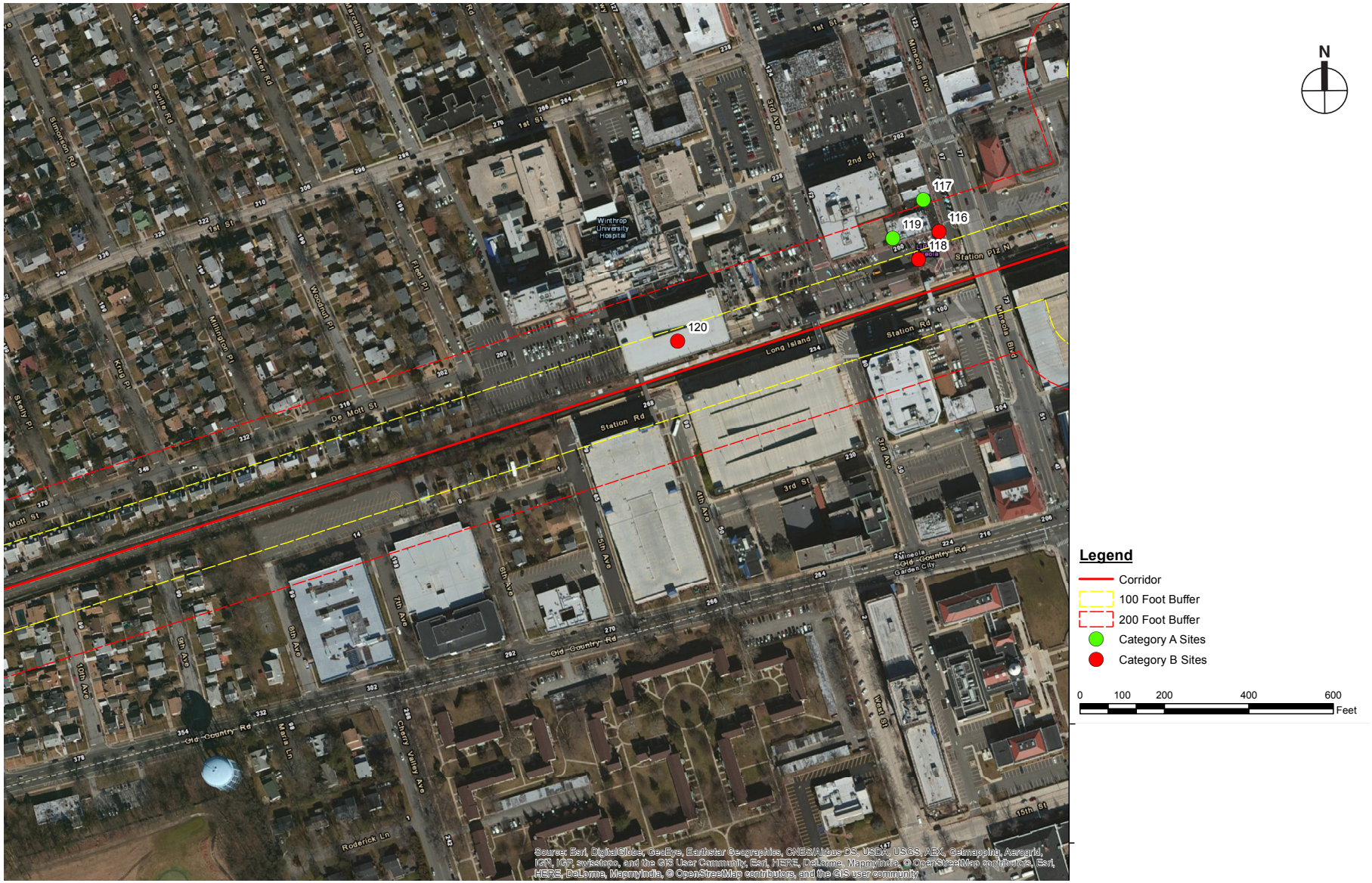
LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-13

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-14



Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-15

Source: *New World Matrix*

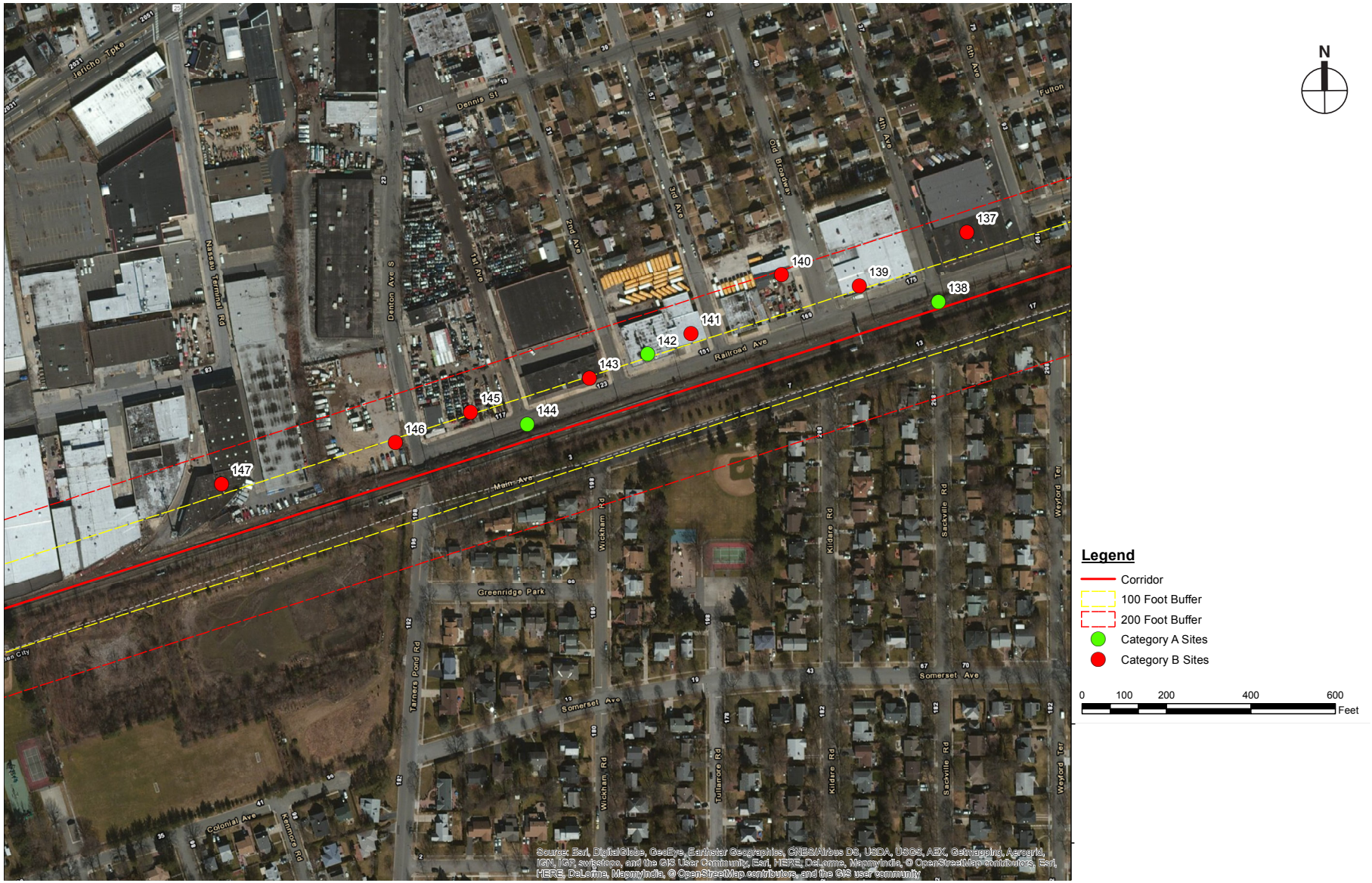
LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-16

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-17



Source: *New World Matrix*

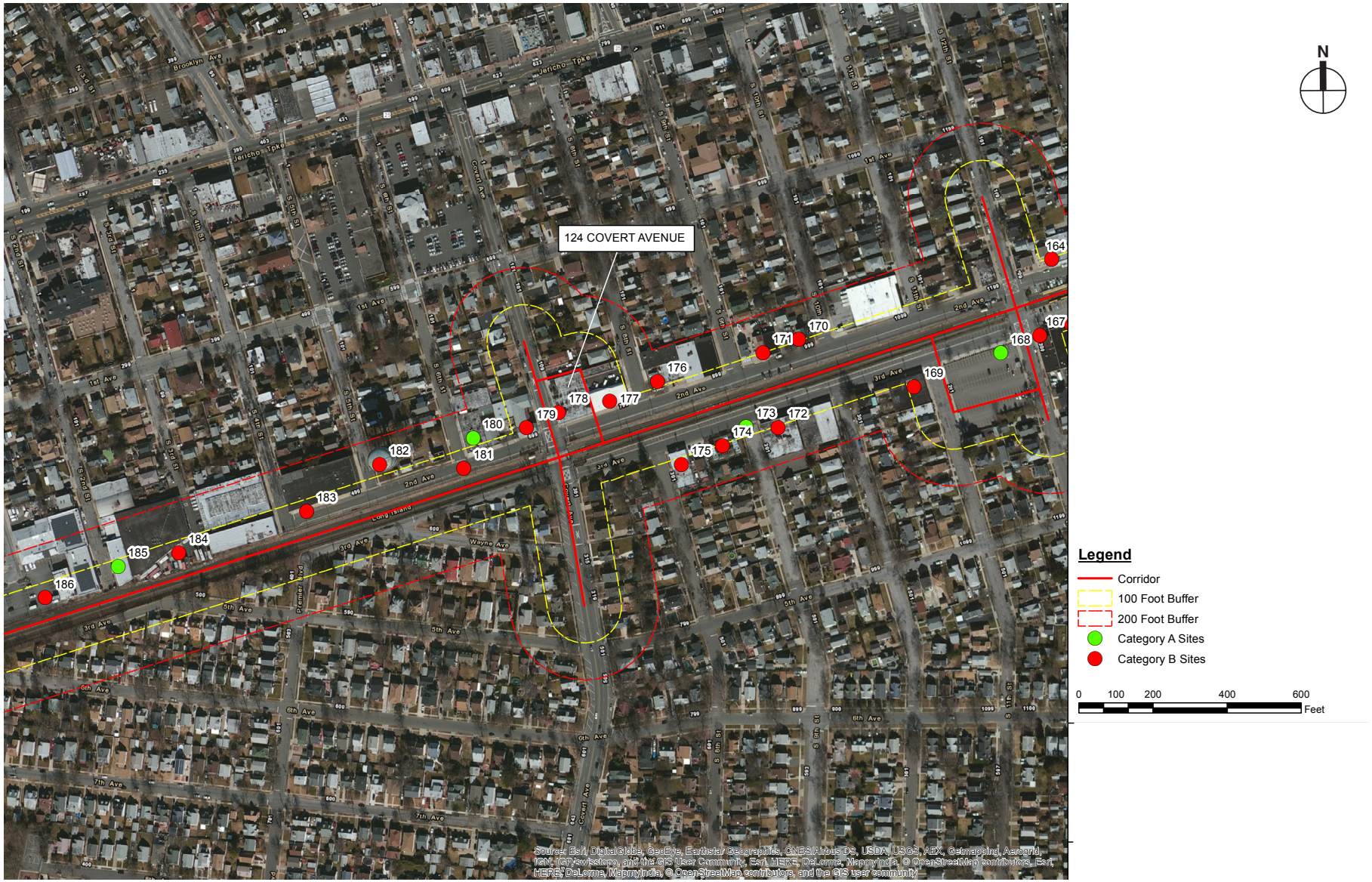
LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-18

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

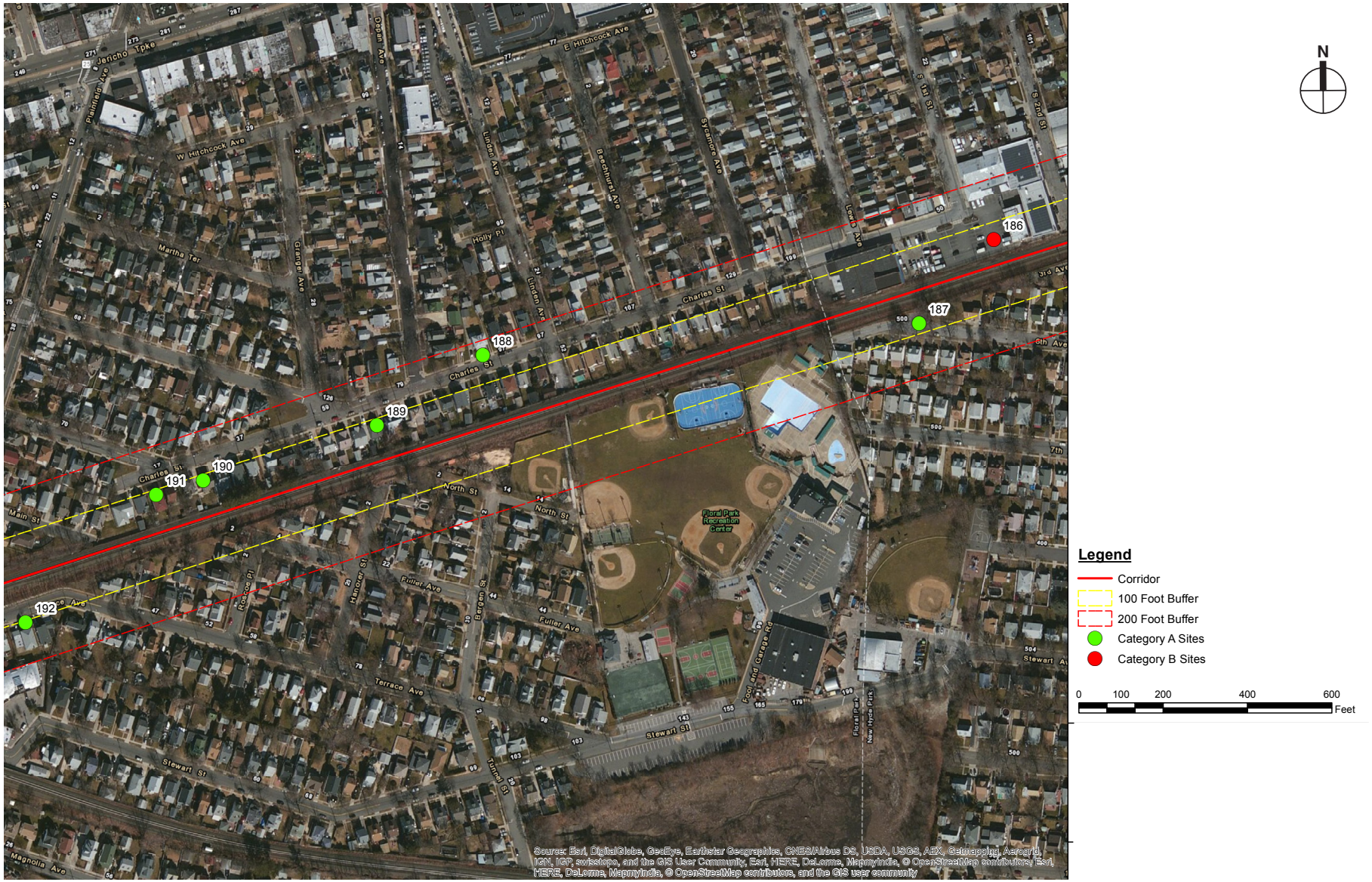
Contaminated Materials Study Sites
Figure 8-19



Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-20



Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-21

Source: *New World Matrix*

LIRR Expansion Project
Floral Park to Hicksville

Contaminated Materials Study Sites
Figure 8-22

(NYSDEC) Records Search Requirements included in Appendix 3A of Draft DER-10, *Technical Guidance for Site Investigation and Remediation*.

Following data acquisition, sites were divided into two groups (Categories A and B) depending upon the likelihood of potential contamination, based on the professional judgment of geologists, engineers, and environmental health and safety professionals. Category A included sites that did not appear reasonably likely to have been affected such that on-site soil, soil gas, or groundwater would have been contaminated, and therefore did not warrant additional analysis. Category B included sites that had some reasonable potential to have been contaminated and where additional analysis is prudent. Examples of the types of sites identified and their categorization include the following:

- Category A: Small quantity hazardous waste generators, fuel oil tanks with no known spills, electrical vaults with no known spills, closed status spills, closed status petroleum bulk storage sites, spills confined to manholes or vaults, and spills on surface streets.
- Category B: Active status spills, large quantity hazardous waste generators; auto wreckers; auto repair shops; machine shops; metalworks; paint shops; dry cleaners; gas stations; underground petroleum storage tanks; rail yards; bulk petroleum and chemical storage facilities; known contaminated soil and groundwater; electric substations; and miscellaneous manufacturers.

The selection of Category B sites was exercised conservatively so as to reduce the possibility of eliminating a potentially contaminated site from further investigation. As noted previously, the identification as "Category B" does not necessarily indicate that contamination is present at the parcel, but rather that additional investigation is warranted to determine if contamination is present and whether construction activity associated with the Proposed Project could expose workers or residents to contaminated materials.

Information interpreted from Sanborn Maps and aerial photographs included potential RECs (e.g., filling stations, gas tanks, etc.) was incorporated into the database summary table included in **Appendix 8-A**. Copies of Sanborn Maps and aerial photographs are also included as **Appendix 8-B**.

D. EXISTING CONDITIONS

The review of documents (historical maps, aerial photograph review, database review and study area reconnaissance) utilized to establish existing conditions identified the following general history:

- During the 1940s, the eastern portion of the Study Area between New Cassel and Hicksville contained primarily undeveloped and/or agricultural land, based on available aerial photographs. The remainder of the eastern end of the study area contained a mixture of sparse residential and commercial uses. Aerial photographs and Sanborn Map coverage was not available for this time period for the western portion of the study area.
- During the 1950s, the eastern end of the study area in the vicinity of Hicksville appeared to remain primarily agricultural land, with the early development of some industrial areas, identified as primarily automotive and manufacturing. Moving west from New Cassel towards Carle Place, usage was increasingly residential in nature, with a cemetery in Westbury, south of the railroad. Additional commercial/industrial development was identified in the vicinity of Carle Place, including dry cleaners, automotive and

manufacturing facilities. From Carle Place west towards Mineola the development appeared more residential, with a Garden City Golf Club to the south of the railroad between Mineola and Garden City. From Garden City west to Floral Park, the development was primarily residential with some interspersed commercial and automotive uses, including gasoline stations and dry cleaners.

- By the 1960s the majority of the agricultural land had been developed with residential, commercial, or industrial uses, including those uses previously noted as well as truck rental, equipment manufacturing, oil refining, etc., with some concentrated industrial uses along the railroad including the New Cassel Industrial Area (NCIA) located south of Railroad Avenue between Grand Boulevard and Frost Street, which included various manufacturing and industrial uses, including electronic equipment manufacturing, metal furniture manufacturing, machine shops, plastics manufacturing, tool and die shops, transformer yards, pharmaceutical manufacturers, medical equipment sterilization facilities, and gravel and stone yards. The majority, the study area was developed by the 1960s and no significant changes were identified since that time.

Electrified railways require the operation of substations to convert electrical power to a form suitable for providing power to a rail system. Electrical equipment in substations (e.g., transformers, batteries, capacitors, switches, and voltage regulators) is known to contain hazardous materials, including mercury, PCB-containing oils and dielectric fluids, acids, and asbestos within associated insulating materials. Eight substations were identified within the Study Area, two of which, the Mineola and Floral Park substations, were remediated for mercury-related contamination in 2012, with no further investigation warranted. Solvents, oils and/or other chemicals used as part of former substation maintenance activities also have the potential to affect environmental conditions.

Structural elements of rail line operations often contain hazardous substances in the building materials, including lead-based paint and asbestos. Suspected structures include bridges, pedestrian tunnels, overpasses, station buildings, and signal huts.

Based on the above historical uses, some of the potential contaminants of concern are described below. The list is a summary only and not a comprehensive list of all contaminants that could be encountered:

- *Creosote- and Arsenic-Treated Railroad Ties.* Wooden railroad ties are treated with creosote as a wood preservative. Railroad ties were also historically treated with an arsenic-based preservative. Railroad tracks and rights-of way are often treated with herbicides to limit vegetation growth. Impacts from rail yards may also include spills from herbicides, solvents, diesel and other petroleum products associated with cargo loading and unloading, train car maintenance, fueling, etc.
- *Volatile organic compounds (VOCs).* Petroleum-related compounds including benzene, toluene, ethylbenzene, and xylene (BTEX), are common, as are a variety of chlorinated compounds including tetrachloroethene (also known as perchloroethylene, or "perc") and tricholoroethene, which are common ingredients in solvents, degreasers, and cleansers, and in chemicals commonly used in dry cleaners. VOCs present the greatest potential for concern, since they can generate vapors, as well as contaminate soil and groundwater. Former or current gasoline stations, auto body shops, dry cleaners, and other industrial land uses are the most likely sources for substantial VOC contamination.

- *Semivolatile organic compounds (SVOCs)*. The most common SVOCs in developed areas are polycyclic aromatic hydrocarbons (PAHs), which are constituents of partially combusted coal or petroleum-derived products, such as coal ash and fuel oil. PAHs are commonly found in urban fill material, which likely underlies some of the more developed urban portions of the study area. In addition, petroleum-related SVOCs could be present, associated with tanks currently or formerly located in or near the study area.
- *Polychlorinated biphenyls (PCBs)*. Commonly used as a dielectric fluid in stationary or train-mounted transformers, some underground high-voltage electric pipelines, and hydraulically-operated machinery, PCBs are of special concern at electrical transformers and railyard/train maintenance locations where leakage into soil may have occurred. PCBs and/or PCB-containing materials were once widely used in manufacturing and industrial applications (e.g., hydraulic lifts, transformers, and plastic manufacturing.). PCBs generally travel only short distances in soil.
- *Metals (including lead, arsenic, cadmium, chromium, and mercury)*. Metals contamination is frequently associated with smelters, platers, foundries, and metalworks, and heavy metals are found in paint, ink, petroleum products, and coal ash. These metals tend not to migrate far in soil and, therefore, they are of greatest concern at the site where they are generated. Metals at levels above natural background levels are frequently present in fill material. Mercury contamination is often attributed to releases from faulty electrical equipment, including thermometers, switches, meters, gauges, and batteries, which are found at electrical substations.
- *Pesticides, herbicides, and rodenticides*. These are commonly used to control rodents, insects, and/or vegetation along railroad tracks, in vacant structures and/or at vegetated lots. Although the toxic elements of these chemicals can vary greatly depending upon the type, the toxins can include dioxins, organochlorines, phosphates/phosphides and other contaminants that can accumulate in the fatty tissues of humans and cause organ damage, cancer and various cardiovascular, metabolic and neurological disorders. LIRR has used a variety of pesticides, herbicides, and rodenticides along the right-of-way. Data regarding herbicide use are available for the years 2011 to 2015; only anecdotal information is available for the preceding time period. At this time, the history of pesticide and rodenticide use is not available. All chemicals are applied by licensed applicators and in accordance with USEPA approved label instructions. LIRR Yards and its ROW are typically sprayed once per year. Yards are sprayed manually by the vendor. Chemicals are sprayed by machine along the ROW from a maintenance-of-way hi-rail vehicle by a New York State licensed applicator contracted by the LIRR. Only pesticides and herbicides legally allowed for use are sprayed on LIRR property.

  Current herbicide use in the entire LIRR system comprises the following brands of chemicals:

  - Accord XRT II
  - Dimension 2EW
  - Oust Extra
  - Westar

  A new herbicide application contract that has not yet been implemented has proposed the following chemicals:

  - Accord XRT II

- Arsenal Powerline
- Velpar DF
- Proclipse 65 WDG

Federal regulation under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires that all pesticides distributed or sold in the United States be licensed by the USEPA. Licensing requires stringent testing in accordance with 40 CFR Part 158 to show that the use of such chemicals will not cause "unreasonable adverse effects on the environment" [7 U.S.C. §136 et seq. (1996)]. USEPA has found that they are not persistent in the environment and therefore do not pose a long-term risk to human or wildlife health, and would result in no significant adverse impacts.

- *Fuel oil and gasoline storage tanks*. Numerous properties within and adjacent to the Study Area currently have, or once had, ASTs or USTs for fuels, including heating oil and gasoline. Some of these tanks may have been removed, and others, although no longer in use, may remain buried in place or within basements. **S**ome of the tanks are known to have leaked, and others may have leaked, though the leaks have not been discovered or documented. Some spills have been remediated in accordance with New York State regulations, and others are in the process of being remediated.
- *Historic coal yards*. Coal yards were present historically on both sides of the LIRR. Coal contains VOCs (including BTEX) and SVOCs (including PAHs).
- *Fill materials of unknown origin*. In the past, waste materials, including ash, demolition debris, and industrial wastes, were commonly used as fill material. Even fill material consisting primarily of soil may exhibit elevated levels of contamination.
- *Asbestos*. Asbestos is a common component of building materials, especially insulation, fireproofing, tile flooring, plaster, sheetrock, ceiling tile, mastic, and roofing materials. In addition to materials within existing structures, subsurface utility lines may be coated with asbestos or encased in "transite," an asbestos-containing material (ACM). Asbestos was widely used before 1980. There are well-defined regulatory programs to manage asbestos during demolition and construction work.
- *Lead-based paint*. Lead-based paint (LBP), when released as dust or otherwise, is potentially hazardous, especially to children. The use of LBP was restricted by the Consumer Products Safety Commission in 1978, but the restriction does not apply to industrial paint. LIRR structures (e.g., bridges) have LBP. When LIRR renovates structures containing LBP, all precautions are taken to remove LBP, which is then disposed of as hazardous waste in accordance with the protocols for such disposal. LBP that is released (as dust or otherwise) is potentially hazardous, especially to children.

Based on regulatory databases, aerial photographs, Sanborn maps and a site reconnaissance, a total of 208 individual properties were identified within the Study Area. Of these, 153 were classified as "Category B" sites. These locations are included on **Figures 8-1 through 8-22**, and the data is summarized in **Appendix 8-A**. The following properties included in the Proposed Project were classified as "Category B" sites:

- 117 Urban Avenue (site #36) had a NY Aboveground Storage Tank (AST) listing for a 240-gallon aboveground waste oil tank, was historically identified as an auto facility, and is currently Hicksville Auto.
- 167 School Street (site #54) was shown as a coal yard on historical Sanborn maps.

- 165 East Second Street (site #95) has closed spills and closed leaking underground storage tanks and the potential on-site use of oils and chemicals. Great Neck Saw Manufacturers Inc. was identified as the current tenant.
- Foxes Store (site #111), 70-80 Main Street has a closed leaking underground storage tank and was historically identified as a print shop.
- 115 New Hyde Park Road (site #156) was shown as a Metal Works on historical Sanborn maps.
- 1403 Fourth Avenue (site #157) has closed spills and the potential on-site use of oils and chemicals.
- 124 Covert Avenue (site #178) has an LTANKS (leaking underground storage tank) listing associated with New York Telephone Co. and a leaking No. 2 fuel oil tank. Additionally, Verizon-New Hyde Park was identified as having an in- service aboveground waste oil tank.

TRANSPORT OF HAZARDOUS MATERIALS BY FREIGHT TRAINS

All of NY&A's freight train operations are subject to strict federal, state, and local safety regulations that cover both operating conditions and the methods of handling of cargo; this holds particularly true for the transportation of hazardous materials by rail. Like all rail carriers in the United States, NY&A is subject to the regulatory requirements imposed by the Federal Railway Administration (FRA), including rules specifically relating to the handling of hazardous materials. These rules—contained in 49 CFR 174—outline requirements specific to the type of hazardous material being transported, including specifications for car design and documentation. In addition, hazardous materials transporters are regulated by the Pipeline and Hazardous Materials Safety Administration (PHMSA) of the United States Department of Transportation, which promulgates registration and safety requirements in connection with the transportation of hazardous materials. All entities that transport hazardous waste are also regulated by the Environmental Protection Agency pursuant to the Resource Conservation and Recovery Act (RCRA), which requires substantial documentation and places safety-based restrictions on the means and manner of transport.

At the state level, NY&A must comply with all requirements set forth by the Rail Safety Bureau of the Office of Modal Safety & Security of NYSDOT and comply with any requests for inspection. Additionally, in the event that NY&A is transporting any hazardous waste, they must comply with inspection requests and oversight from the NYSDEC, which oversees New York's hazardous waste regulatory regime. In Nassau County, any activity that involves the storage of toxic or hazardous materials, including both fresh and waste materials, are also regulated by the Nassau County Health Department (NCHD); under Article XI of the Nassau County Public Health Ordinance and its attendant regulations, NCHD provides substantial guidance relating to the methods of storage, the requirements for safe transfer, and necessary registrations and permits. NY&A is also limited to operating within the general parameters set by LIRR with regard to corridor safety.

E. FUTURE WITHOUT THE PROPOSED PROJECT

In the future without the Proposed Project, it is assumed that changes in the use of the Study Area, including changes that require construction or soil excavation, would likely continue and there would still be a potential for disturbance of contaminated materials that could increase exposure. However, unlike the conditions in the future with the Proposed Project, regulatory

oversight of any required remediation and/or the implementation of proper environmental health and safety protocols would not necessarily be conducted. Nonetheless, sites currently undergoing remediation under a regulatory program, such as the Floral Park substations, would continue their efforts in those programs.

F. POTENTIAL IMPACTS OF THE PROPOSED PROJECT

Construction of the Proposed Project would require subsurface disturbance along the alignment, at LIRR stations, at properties that would be acquired as part of the Proposed Project and within areas that would require alterations to grade crossings including drainage system installation (see Chapter 13, "Construction"). Given the history of this area, described above, contaminated soil and/or groundwater may be encountered. Excavation and construction activities could disturb these contaminated materials and increase pathways for human exposure if not performed with appropriate safety procedures, air monitoring, and engineering controls (see Section G).

In addition to subsurface disturbance, construction of the Proposed Project would likely require demolition or renovation of existing buildings, structures or equipment, which, based on their ages could include asbestos containing materials (ACM), lead-based paint (LBP), mercury or PCBs, which would also be conducted in accordance with an approved health and safety programs.

G. MITIGATION FOR THE PROPOSED PROJECT

The potential for adverse impacts would be avoided by ensuring that construction activities are performed in accordance with the following protocols:

- Once the limits of subsurface disturbance associated with the Proposed Project have been determined, subsurface (Phase II) investigations would be conducted at all of the acquisition Category B sites and all other Category B sites where significant subsurface disturbance (based on proximity, depth of disturbance, type/mobility of contaminants, etc.) is proposed. The Phase II investigation would include the collection and laboratory analysis of soil, soil vapor and groundwater samples to ascertain if past on-site operations have affected subsurface conditions. Specifically, the samples would be tested for an extensive array of analytes based on the anticipated contaminants discussed in Section D to determine if they were released into the environment. The testing may include subsurface imaging (i.e., geophysical survey) to search for suspected buried tanks and other chemical and petroleum bulk storage containers, followed by sampling in these areas to determine if a release has occurred. Analytical results of the investigation would be compared to the cleanup standards established by the NYSDEC appropriate to the proposed site use.
- Based on the results of the subsurface investigations, a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) would be prepared for implementation during project construction. These plans would address both the remediation of known or potential environmental conditions that may be encountered during subsurface disturbance associated with project construction. The purpose of the RAP is to present measures for managing contaminated on-site soil and groundwater and USTs, removing any potentially unknown underground petroleum storage tanks in accordance with applicable federal, state, and local regulations. Contaminated soil management protocols would include guidelines for temporary on-site stockpiling and off-site transportation and disposal. The plans would incorporate safety and other measures to minimize the potential for impacts to the

community and construction workers. The RAP also would specify the need for engineering controls as warranted based on the testing, such as the incorporation of vapor mitigation systems into the project design.

- To minimize the potential for impacts to the community and construction workers, all demolition, excavation, and construction work involving soil disturbance would be performed under a site-specific environmental construction health and safety plan (CHASP). The CHASP would also be based on the results of the Phase II study and would specify appropriate testing and/or monitoring, and detail appropriate measures to be implemented (including notification of regulatory agencies, dust suppression techniques, appropriate air monitoring action levels and responses, etc.) if underground storage tanks, soil and groundwater contamination, or other unforeseen environmental conditions are encountered.
- If dewatering is required for construction, testing would be performed to ensure compliance with applicable discharge regulatory requirements. If necessary, pre-treatment would be conducted prior to discharge.
- Unless there is labeling or test data that indicated that electrical equipment, including transformers, is not mercury- and/or PCB-containing, removal and disposal would be performed in accordance with applicable federal, state and local regulations.
- Prior to any activities required as part of the Proposed Project that could disturb potential ACM, a comprehensive asbestos survey of areas (including underground utility vaults) to be disturbed by the Proposed Project would be conducted that included the sampling of all suspect materials to confirm the presence or absence of asbestos. All identified ACM would be removed and disposed of prior to construction in accordance with all federal, state, and local regulations. Asbestos abatement procedures and containment requirements will be based on the type and quantities of ACM to be removed.
- Any demolition activities with the potential to disturb LBP would be performed in accordance with applicable Occupational Safety and Health Administration regulations including OSHA 29 CFR 1926.62 - Lead Exposure in Construction. Methods for lead abatement will comply with LIRR abatement procedures and containment requirements.
- All material that needed to be disposed of (e.g., miscellaneous debris, tires, contaminated soil and any excess fill) would be characterized and disposed of off-site in accordance with applicable federal, state, and local requirements.

With the implementation of these protocols, no significant adverse impacts related to contaminated materials would result from demolition and/or construction activities related to the Proposed Project. Following construction, there would be no further potential for significant adverse impacts. ✷