



December 6, 2024

Tara Rutland, P.E.  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway, Albany, NY 12233

Re: Lead Background Sampling Plan  
Site No. 152255 – Long Island Railroad Smithtown Viaduct Site

Ms. Rutland,

LiRo Engineers, Inc. (LiRo), on behalf of the Long Island Rail Road (LIRR), has prepared this Background Sampling Plan for the LIRR Smithtown Viaduct site in Smithtown, New York (Site). This plan is prepared in accordance with May 2024 correspondence with the New York State Department of Environmental Conservation (NYSDEC), and the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation. The approximate Site location is shown on *Figure 1*.

A background soil study was requested by the NYSDEC in May 2024. The purpose of the plan is to determine if the lower level lead concentrations identified in the soil samples collected during the RI are attributable to background conditions in the soil in this area of Suffolk County. This Plan presents the collection of soil samples on the properties adjacent to the Site to determine if the lead is a naturally occurring component of the soil in this area.

#### RI Summary

Twenty-four soil borings were advanced to a depth of 15 feet below grade (bg) as part of the March 2022 Remedial Investigation (RI). Twenty of the soil borings were advanced onsite and four soil borings were advanced offsite. One soil sample was collected from each of the following soil boring intervals: 0-2", 2-12", 1-2', 2-4', 4-6', 6-8', 8-10', 10-12', 12-15'. A total of 216 soil samples were collected for lead via United States Environmental Protection Agency (USEPA) Method 6010.

The onsite lead concentrations ranged from 0.96 to 5,100 milligrams per kilogram (mg/kg). Although exceedances of the lead Unrestricted Use Soil Cleanup Objective (SCO) were identified in 64 of the 180 onsite soil samples, only 13 of these samples exceeded the Restricted Residential Use SCO, and seven samples exceeded the Commercial Use SCO.

Three of the four remote off-site borings were advanced within the adjacent park east of the Site. The off-site lead concentrations ranged from 1.2 to 2,400 mg/kg. Exceedances of the lead UUSCO were identified in 13 of the 36 off-site soil samples while only six of these samples exceeded the Restricted Residential Use SCO and three samples exceeded the Commercial Use SCO.



### Background Sampling Scope

The surrounding properties to be included in this investigation are listed below, and shown in *Figure 2*. The proposed sampling scope includes 10 soil boring locations throughout the surrounding properties. The sample location areas are as follows:

<b>Sampling Area</b>	<b>Appx. Location</b>	<b>Parcel Owner</b>	<b>Tax Parcel ID No.</b>	<b>Soil Boring IDs</b>
Park land north of the Site	North of Route 25A	Suffolk County	0800072000100056000	LBS-SB-1, LBS-SB-2, LBS-SB-3
Park land west of Whisper the Bull Statue	South of Route 25 A, North of W. Main St.	Unknown	Unknown	LBS-SB-4
Vacant land	Northeast of the Site, north of the River, east of the former commercial property	Town of Smithtown	0800072000400028000	LBS-SB-5
Paul T. Given Park	Southeast of the Site	Town of Smithtown	0800072000400026000	LBS-SB-6, LBS-SB-7, LBS-SB-8
Private Property	Southwest of the Site	Revocable Trust of Joanne L. D'Agostino	0800072000400006000	LBS-SB-9, LBS-SB-10

The approximate location of the proposed boring locations are shown in *Figure 3*. Two soil samples will be collected per boring: one sample from the 0-1' bg interval, and one sample from the 1-2' bg interval. Each soil sample will be placed in a laboratory-supplied jar, labeled, and placed in a cooler with ice.

The soil samples will be submitted to an Environmental Lab Accreditation Program (ELAP)-certified laboratory under chain of custody protocol. The samples will be analyzed for lead via United States Environmental Protection Agency (USEPA) Method 6010C. Quality Assurance/Quality Control (QA/QC) samples will be collected in accordance with the NYSDEC-approved November 2020 RIWP. Data validation will be conducted by an independent third party chemist not affiliated with the laboratory.

Upon receipt of the analytical data, LiRo will prepare a summary letter report for discussion with the NYSDEC. The results of the investigation will be discussed between the LIRR, LiRo, and the NYSDEC to determine the applicability to the proposed supplemental RI Scope of Work.



If you have any questions, please contact me at (516) 595-2905 or [drakosm@liro-hill.com](mailto:drakosm@liro-hill.com).

Sincerely,

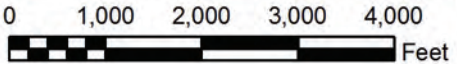
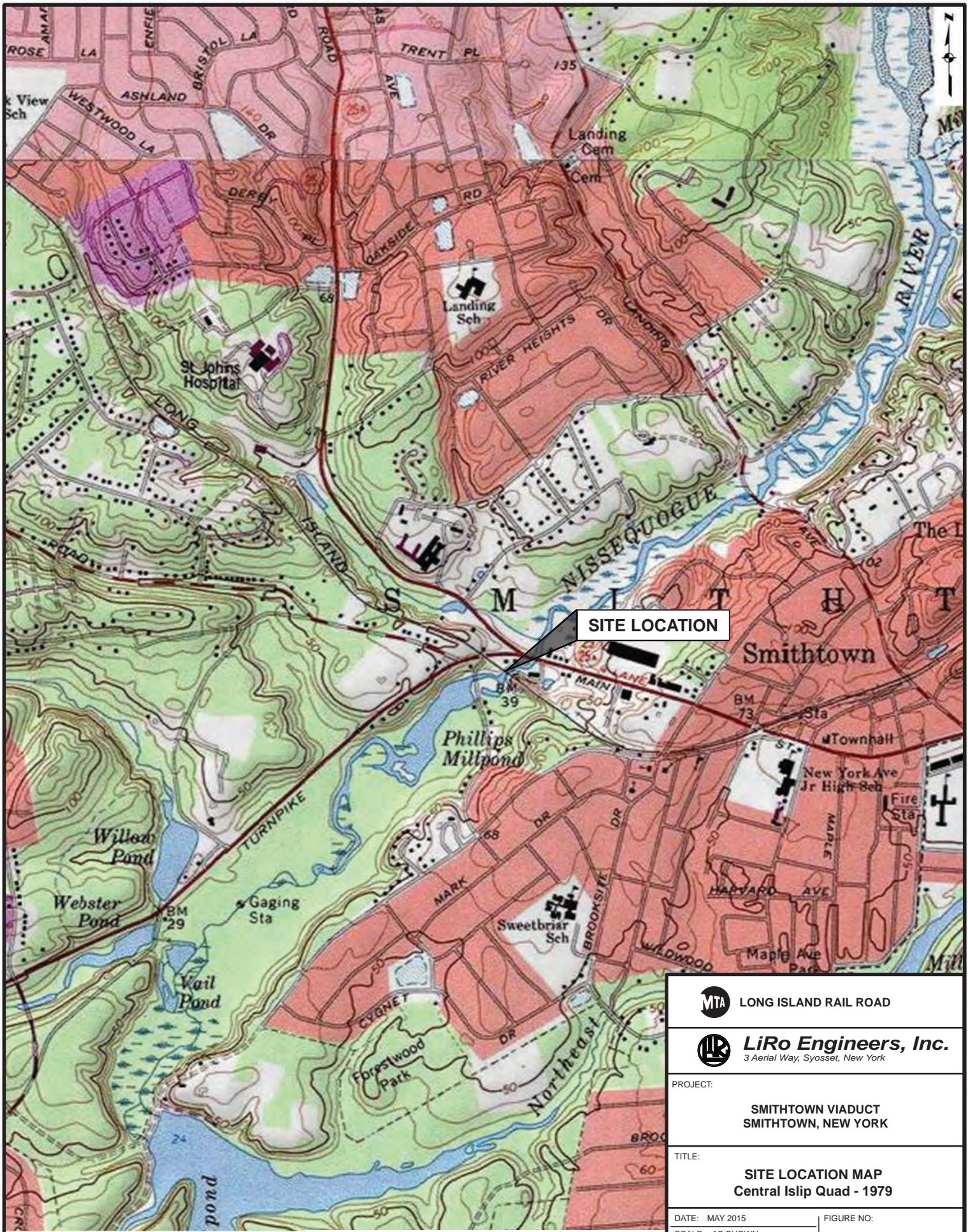
**LiRo Engineers, Inc.**



A handwritten signature in blue ink, appearing to read 'Maria Drakos', is positioned above the printed name.

Maria Drakos  
Senior Scientist

cc: Maria Hall, LIRR

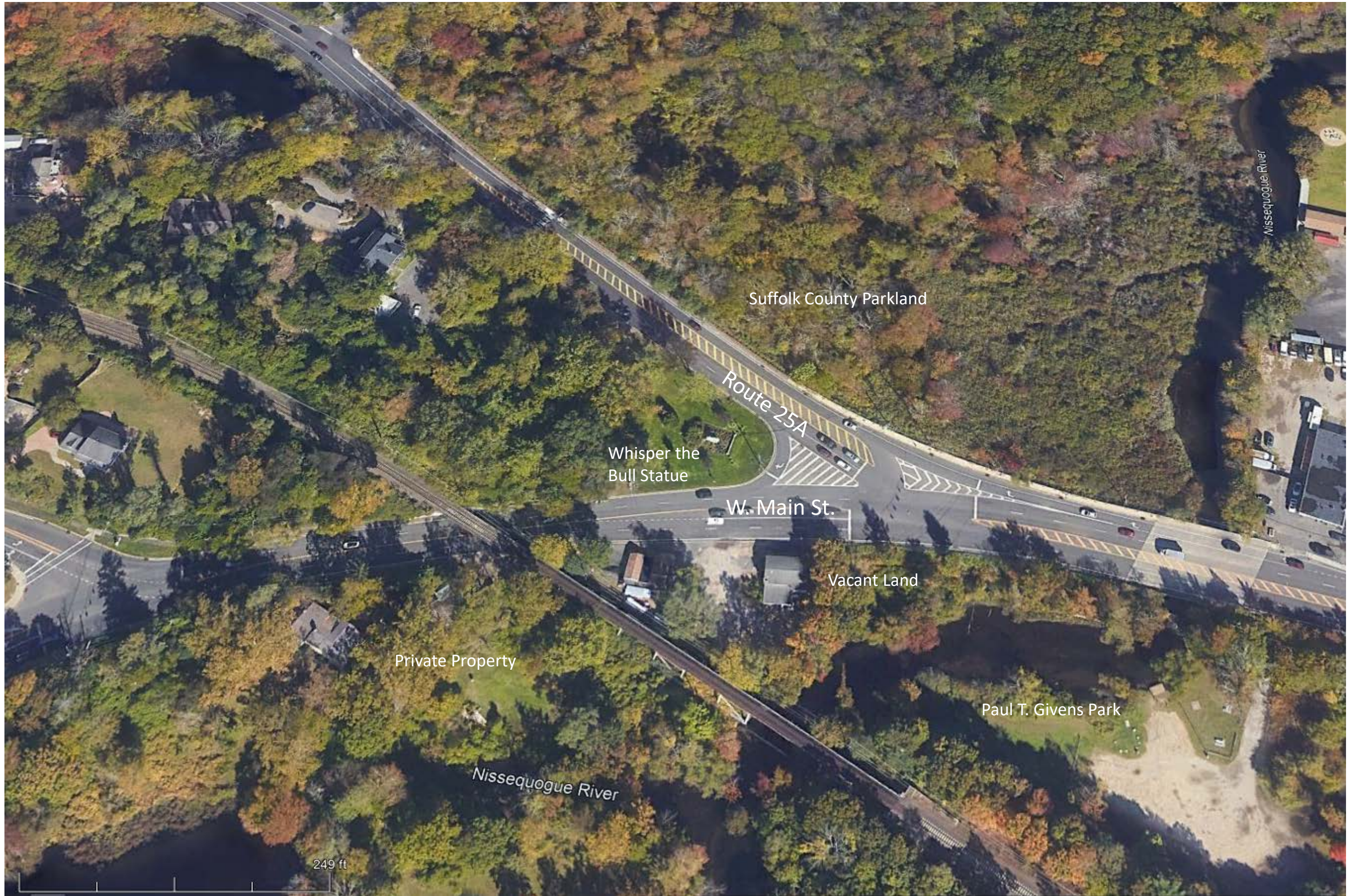






 LONG ISLAND RAIL ROAD	
 <b>LiRo Engineers, Inc.</b> 3 Aerial Way, Syosset, New York	
PROJECT:  SMITHTOWN VIADUCT SMITHTOWN, NEW YORK	
TITLE:  SITE LOCATION MAP Central Islip Quad - 1979	
DATE: MAY 2015	FIGURE NO:
SCALE: AS SHOWN	
PROJECT NO: 15-013-0242	
DRAWING BY: A.M.K.	
CHK BY:	

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**LEGEND**

-  Site Boundary
-  Proposed Soil Boring Location





- 1- Suffolk County Parkland  
Tax Map Parcel ID No.  
0800072000100056000
- 2- Whisper the Bull property
- 3- Town of Smithtown  
Paul T. Given Park  
0800072000400026000
- 4- Town of Smithtown Land  
0800072000400028000
- 5- Private Property  
(Joanne L. D'Agostino  
Revocable Trust,  
Michael D. D'Agostino  
Revocable Trust  
0800072000400006000

**LEGEND**

LIRR Property Boundary

Proposed Soil Boring Location