SECTION 6.4.10
HAZARDOUS WASTE AND CONTAMINATED MATERIALS

Transportation projects that include the acquisition of right-of-way; construction easements; or excavation or other disturbance of soils as part of planned construction activities, relocation of utilities, and/or structure demolition or modification have the potential to encounter hazardous and/or contaminated (non-hazardous) materials. The presence or release of these materials on construction sites can expose workers, the general public, and the environment to these materials. In addition, the unexpected encounter of either known or suspect hazardous and/or contaminated materials during construction can lead to project delays and add substantial cost to a project.

Established environmental regulations would be followed during the removal and disposal of identified hazardous waste, non-hazardous solid waste, and construction and demolition (C&D) debris. Hazardous wastes are listed wastes that are ignitable, corrosive, reactive, or toxic. Non-hazardous solid waste includes materials such as general trash, both friable and non-friable asbestos-containing materials, non-hazardous paint waste, most petroleum contaminated soil, and empty drums and tanks. C&D debris includes uncontaminated concrete, asphalt pavement, brick, glass, soil and rock. The storage, transportation, and disposal of contaminated and hazardous materials are regulated at the Federal level by the USEPA. At the State level, most of the environmental regulations are promulgated and enforced by the NYSDEC.

The management of subsurface contamination is subject to various regulatory programs including the Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, commonly referred to as "Superfund") and Resource Conservation and Recovery Act (RCRA), as well as the State Inactive Hazardous Waste Disposal Site Remedial Program, Brownfield Cleanup Program, New York State Environmental Conservation Law and Article 12 of the New York State Navigation Law (relating to petroleum spills). NYSDEC's Technical Guidance for Site Investigation and Remediation (DER-10) establishes methods for site investigation and clean up, and the Solid Waste Management Facilities Regulations control disposal of excavated materials (6NYCRR Part 360).

NYSDOT requires that a Contaminated Materials and Hazardous Substances Assessment (assessment) be performed to identify the potential of encountering hazardous and non-hazardous contaminated materials because of the planned construction work. The environmental assessment screens each of the properties under review for possible contamination, focusing on current and previous activities, a review of available environmental records and files for that property, historical maps and photos, and a review of the surrounding land use.

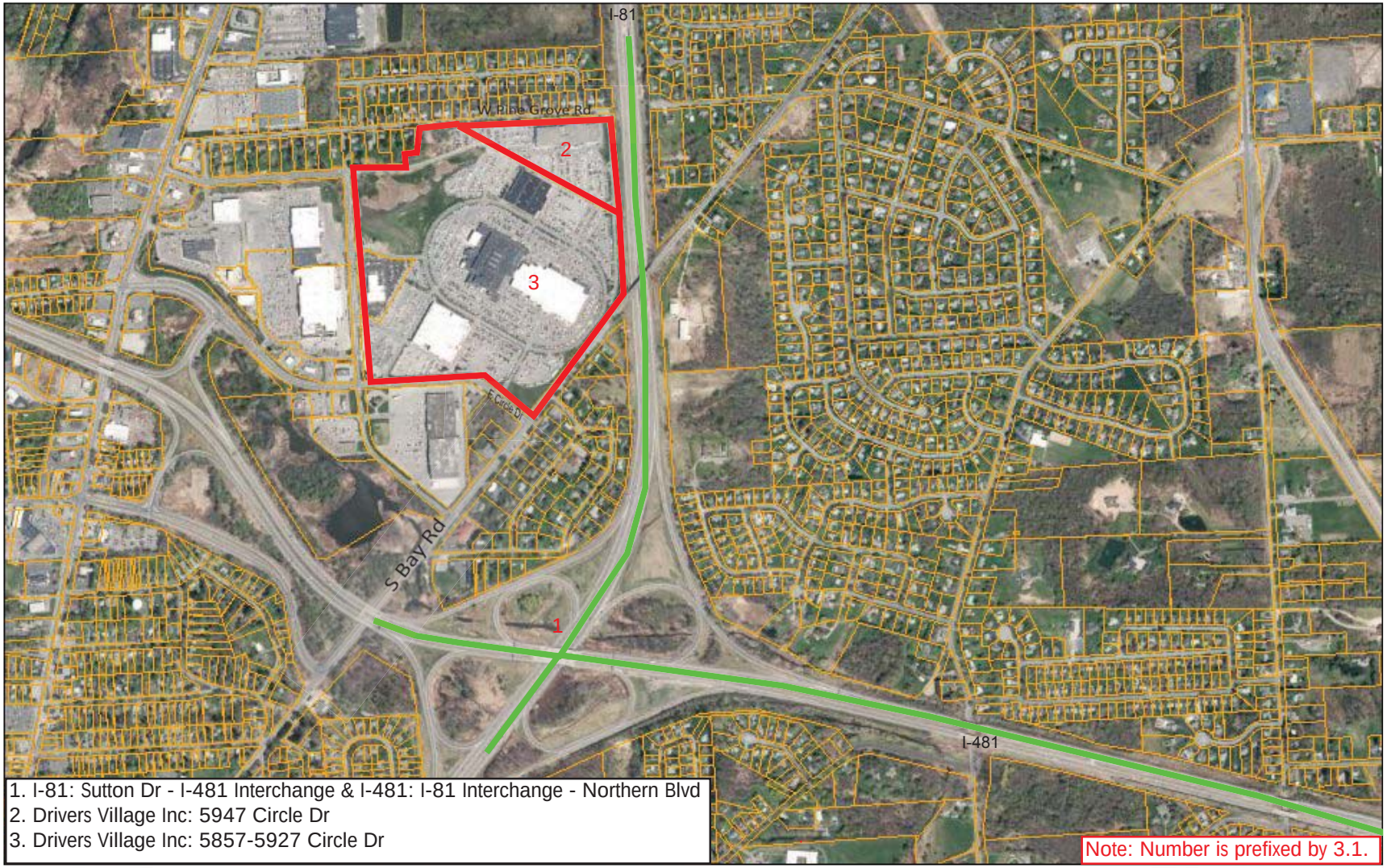
The methodology as described in the NYSDOT TEM was followed during this assessment to identify sites of potential environmental concern based on existing and past property uses. The procedures described in TEM also generally follow those steps outlined in the American Society for Testing and Materials (ASTM) Standard Practice E 1527-05, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," and are also consistent with ASTM Standard Practice E 1528-06, "Standard Practice for Limited Environmental Due Diligence; Transaction Screen Process," and ASTM Standard Practice E 1903-97, "Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process," but are adapted to more closely meet the needs of NYSDOT projects.

As part of the screening to identify sites of potential environmental concern based on existing and past property uses, sites within and/or adjacent to the project study areas were reviewed using Federal and State databases database records obtained from Environmental Data Resources Inc. (EDR) in 2010. Additional information was acquired from EDR in 2016 for the study areas and areas that were identified as missing from the earlier EDR database. The search radii varied by database but included the databases shown in **Table 6.4.10-1.**

Other records and sources of information were also used for the review including historic topographic maps, historic land use maps, Sanborn Fire Insurance maps, city directories, historic aerial photographs, and public records held by the City of Syracuse, Town of Dewitt, Village of East Syracuse, Town of Cicero, and Onondaga County. In addition, NYSDEC's website was reviewed to identify additional environmental (i.e., spills, remediation, and bulk storage) database records. Work also included a sidewalk reconnaissance inspection and the collection of photographs to identify sites of potential environmental concern based on existing and past property uses, as having a potential to have contaminated materials and/or hazardous substances.

6.4.10.1 AFFECTED ENVIRONMENT

As described in **Section 6.1, Introduction**, the Project Area includes portions of I-81, I-690, I-481, and adjacent streets that may be altered by one or both of the project alternatives. The Project Area is divided into four study areas: I-81 Viaduct Study Area, I-481 South Study Area, I-481 East Study Area, and I-481 North Study Area (see **Figure 6.1-1)**. A Hazardous Waste/Contaminated Materials (HW/CM) Screening Assessment was completed for the Project Area and identified over 200 sites of potential concern. Due to the number of sites, only a tabular listing of each site of potential concern is included in this section. **Table 6.4.10-2** and **Figures 6.4.10-1 to 6.4.10-19** identify the current property name, address, general reason(s) for concern, and the affected project alternative(s). Additional detail on each site of potential concern is found in the HW/CM Screening Assessment report located in **Appendix L**.



Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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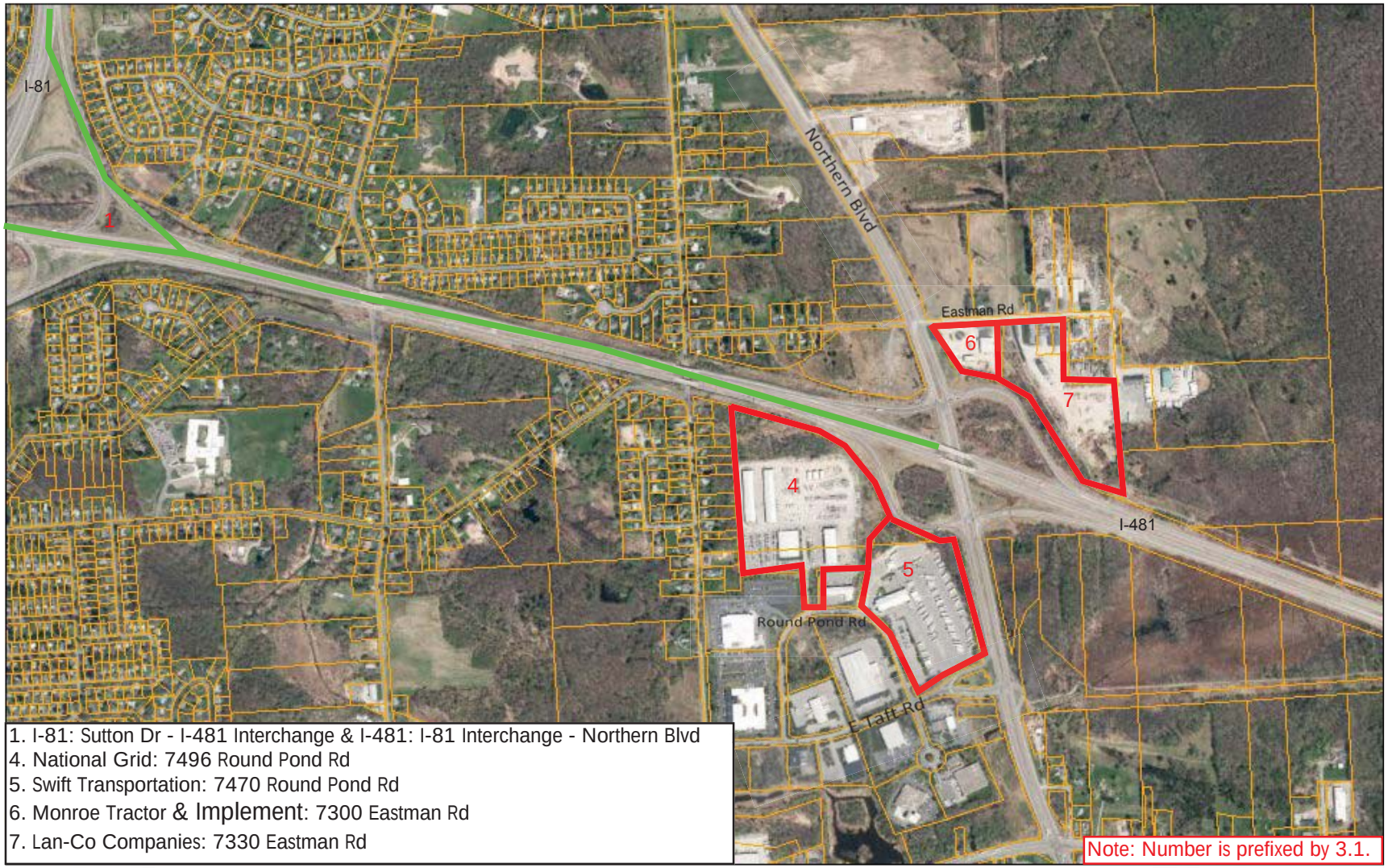
Sites of Potential Environmental Concern - I-481 North Study Area



1. I-81: Sutton Dr - I-481 Interchange & I-481: I-81 Interchange - Northern Blvd
4. National Grid: 7496 Round Pond Rd
5. Swift Transportation: 7470 Round Pond Rd
6. Monroe Tractor & Implement: 7300 Eastman Rd
7. Lan-Co Companies: 7330 Eastman Rd

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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Sites of Potential Environmental Concern - I-481 North Study Area

1. I-481: I-90 - Route 592 Interchange
2. Inficon Inc: 2 Technology Pl
3. Joy Process Mechanical: 6747 Benedict Rd
4. Ultra Dairy: 6750 Benedict Rd

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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Sites of Potential Environmental Concern - East Study Area

1. I-481: I-90 - Route 592 Interchange
5. CSX: Dewitt Railroad Yard
6. Penske Truck Rental: 6755-6773 Manlius Center Rd
7. 84 Lumber: 6801 Manlius Center Rd
8. Allied Spring & Services Inc: 6800 Manlius Center Rd
9. B&C Self-Storage: 5991 Drott Dr

Source: Syracuse-Onondaga County G.I.S. on the Web
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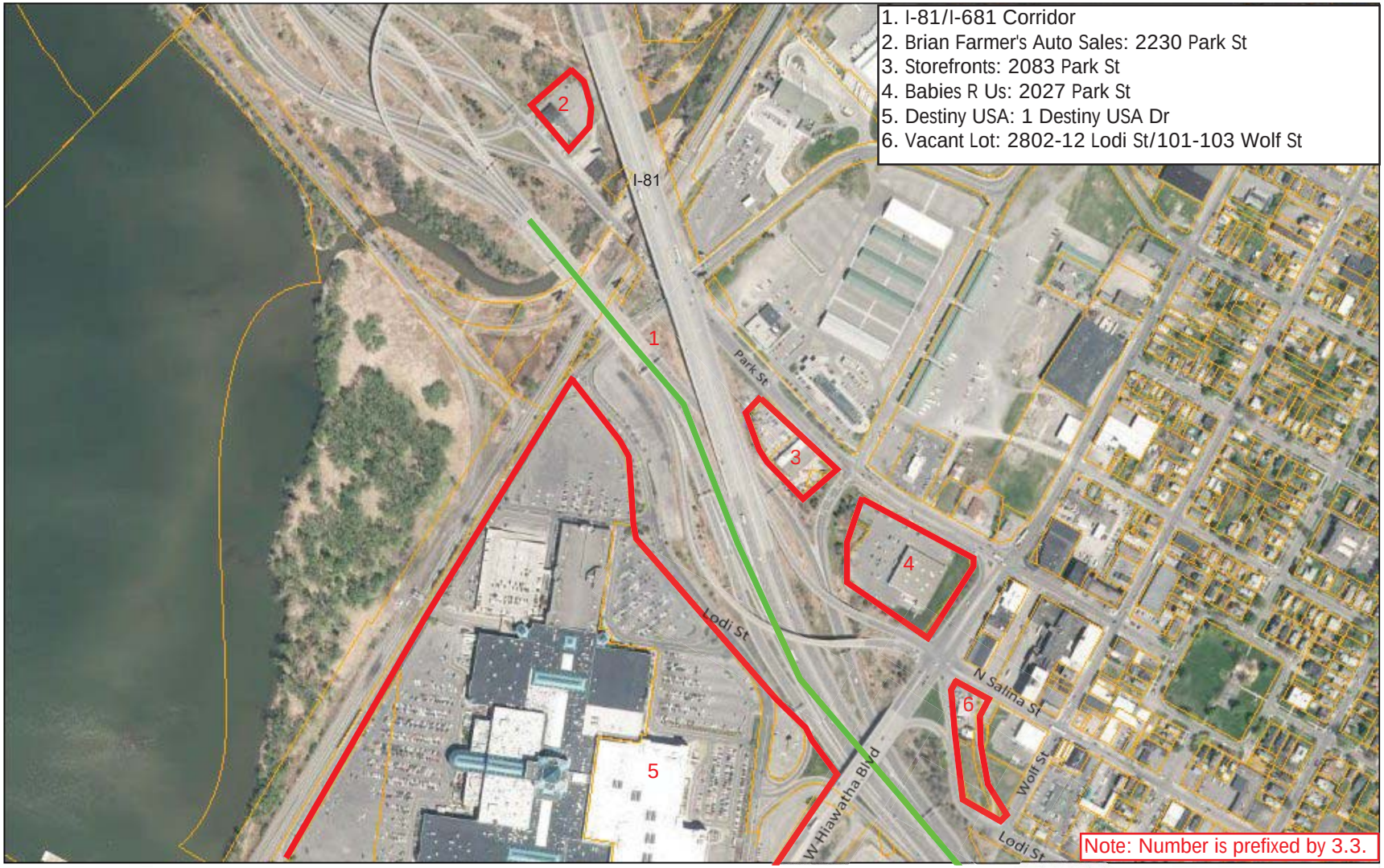
Sites of Potential Environmental Concern - East Study Area



Source: Syracuse-Onondaga County G.I.S. on the Web
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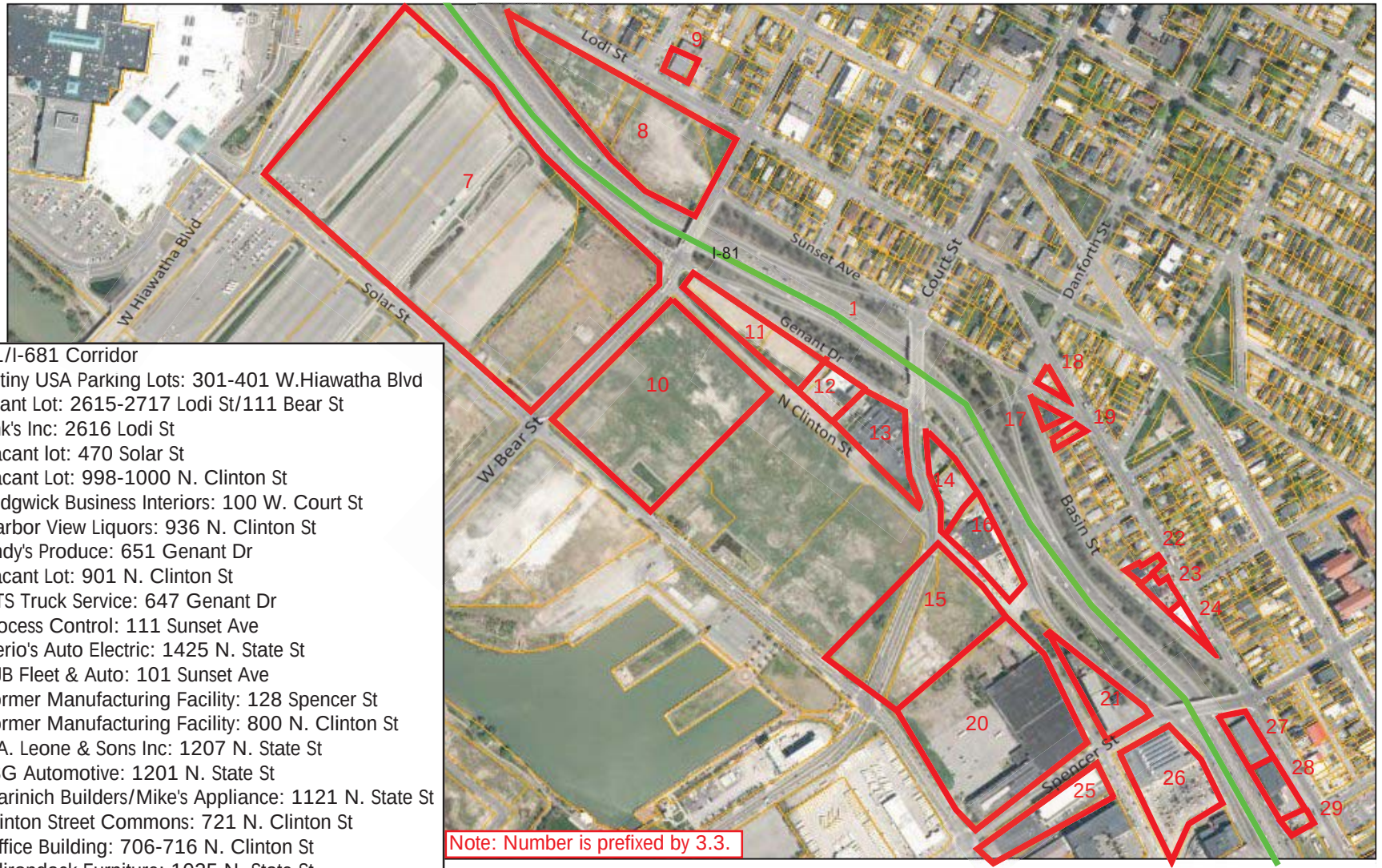
Sites of Potential Environmental Concern - I-81 Viaduct Study Area



1. I-81/I-681 Corridor
7. Destiny USA Parking Lots: 301-401 W.Hiawatha Blvd
8. Vacant Lot: 2615-2717 Lodi St/111 Bear St
9. Brink's Inc: 2616 Lodi St
10. Vacant lot: 470 Solar St
11. Vacant Lot: 998-1000 N. Clinton St
12. Sedgwick Business Interiors: 100 W. Court St
13. Harbor View Liquors: 936 N. Clinton St
14. Andy's Produce: 651 Genant Dr
15. Vacant Lot: 901 N. Clinton St
16. DTS Truck Service: 647 Genant Dr
17. Process Control: 111 Sunset Ave
18. Cerio's Auto Electric: 1425 N. State St
19. DJB Fleet & Auto: 101 Sunset Ave
20. Former Manufacturing Facility: 128 Spencer St
21. Former Manufacturing Facility: 800 N. Clinton St
22. P.A. Leone & Sons Inc: 1207 N. State St
23. RSG Automotive: 1201 N. State St
24. Marinich Builders/Mike's Appliance: 1121 N. State St
25. Clinton Street Commons: 721 N. Clinton St
26. Office Building: 706-716 N. Clinton St
27. Adirondack Furniture: 1025 N. State St
28. County Wide Appliance Service: 1001 N. State St
29. Hiawatha Used Cars: 931 N. State St

Note: Number is prefixed by 3.3.

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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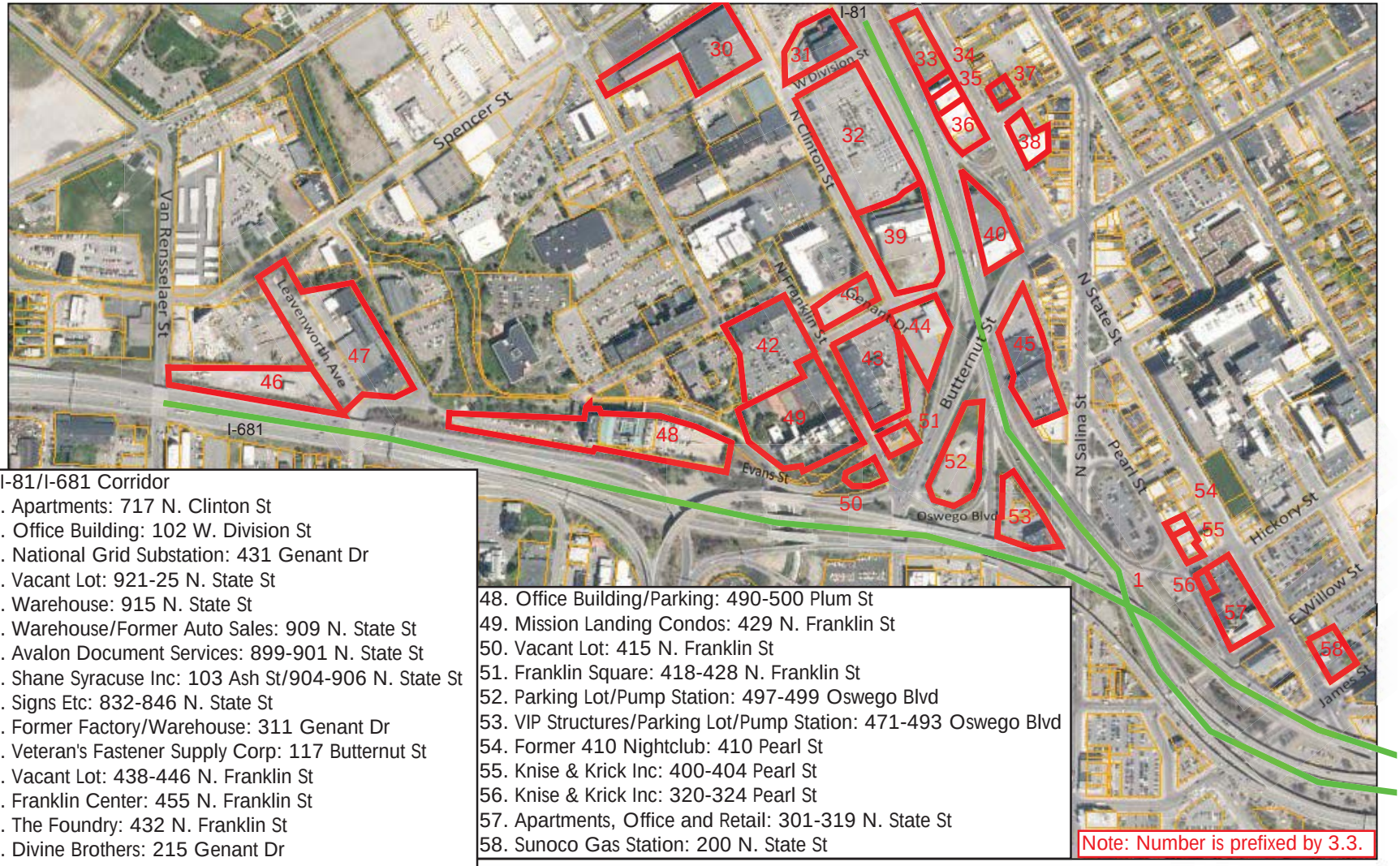
Sites of Potential Environmental Concern - I-81 Viaduct Study Area



1. I-81/I-681 Corridor
30. Apartments: 717 N. Clinton St
31. Office Building: 102 W. Division St
32. National Grid Substation: 431 Genant Dr
33. Vacant Lot: 921-25 N. State St
34. Warehouse: 915 N. State St
35. Warehouse/Former Auto Sales: 909 N. State St
36. Avalon Document Services: 899-901 N. State St
37. Shane Syracuse Inc: 103 Ash St/904-906 N. State St
38. Signs Etc: 832-846 N. State St
39. Former Factory/Warehouse: 311 Genant Dr
40. Veteran's Fastener Supply Corp: 117 Butternut St
41. Vacant Lot: 438-446 N. Franklin St
42. Franklin Center: 455 N. Franklin St
43. The Foundry: 432 N. Franklin St
44. Divine Brothers: 215 Genant Dr
45. Learbury Center: 329 N. Salina St
46. NYSDOT: Van Rensselaer St & I- 690
47. Burns Bros. Contractors: 400-420 Leavenworth Ave

48. Office Building/Parking: 490-500 Plum St
49. Mission Landing Condos: 429 N. Franklin St
50. Vacant Lot: 415 N. Franklin St
51. Franklin Square: 418-428 N. Franklin St
52. Parking Lot/Pump Station: 497-499 Oswego Blvd
53. VIP Structures/Parking Lot/Pump Station: 471-493 Oswego Blvd
54. Former 410 Nightclub: 410 Pearl St
55. Knise & Krick Inc: 400-404 Pearl St
56. Knise & Krick Inc: 320-324 Pearl St
57. Apartments, Office and Retail: 301-319 N. State St
58. Sunoco Gas Station: 200 N. State St

Note: Number is prefixed by 3.3.

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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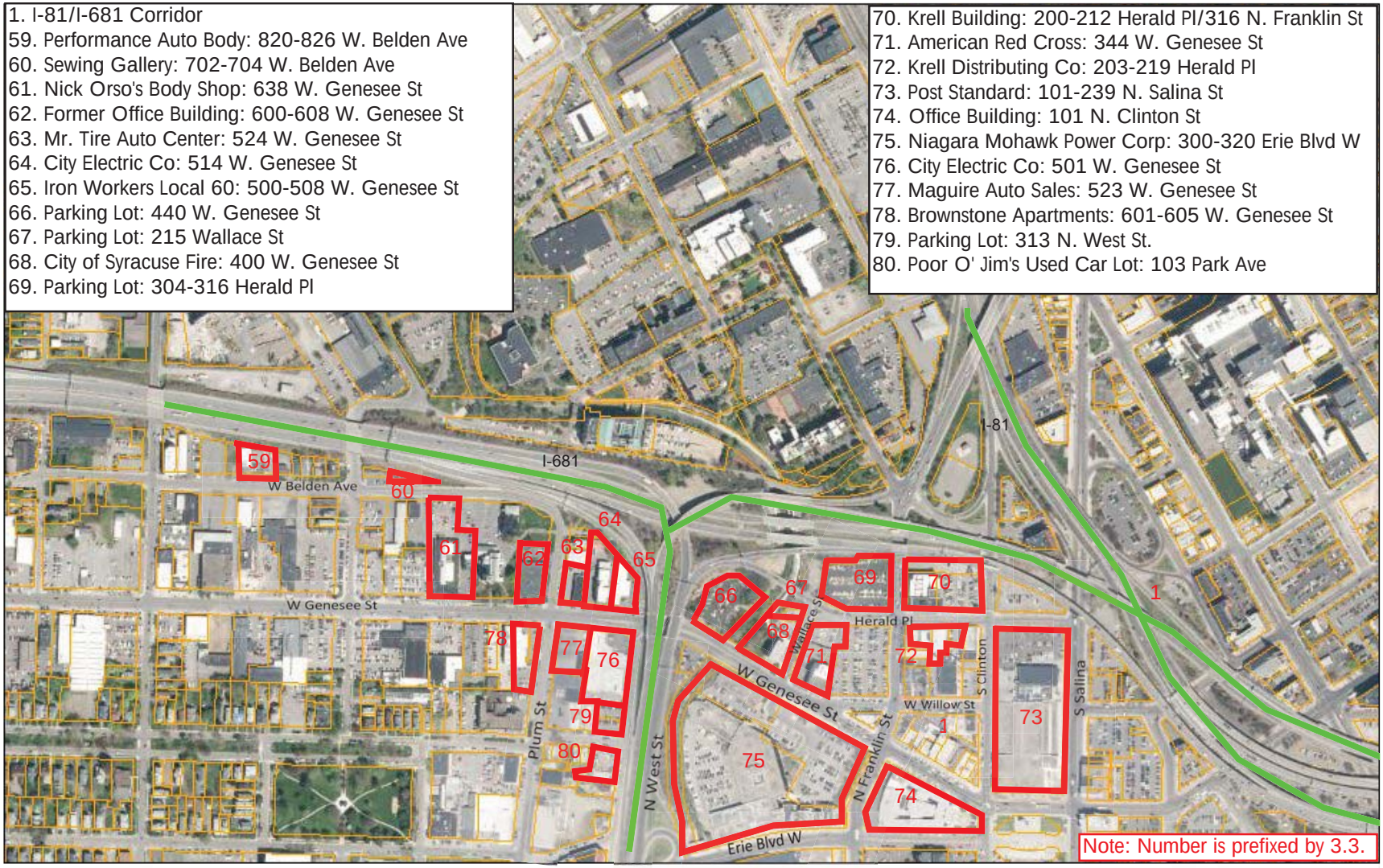
Sites of Potential Environmental Concern - I-81 Viaduct Study Area

1. I-81/I-681 Corridor
59. Performance Auto Body: 820-826 W. Belden Ave
60. Sewing Gallery: 702-704 W. Belden Ave
61. Nick Orso's Body Shop: 638 W. Genesee St
62. Former Office Building: 600-608 W. Genesee St
63. Mr. Tire Auto Center: 524 W. Genesee St
64. City Electric Co: 514 W. Genesee St
65. Iron Workers Local 60: 500-508 W. Genesee St
66. Parking Lot: 440 W. Genesee St
67. Parking Lot: 215 Wallace St
68. City of Syracuse Fire: 400 W. Genesee St
69. Parking Lot: 304-316 Herald Pl
70. Krell Building: 200-212 Herald Pl/316 N. Franklin St
71. American Red Cross: 344 W. Genesee St
72. Krell Distributing Co: 203-219 Herald Pl
73. Post Standard: 101-239 N. Salina St
74. Office Building: 101 N. Clinton St
75. Niagara Mohawk Power Corp: 300-320 Erie Blvd W
76. City Electric Co: 501 W. Genesee St
77. Maguire Auto Sales: 523 W. Genesee St
78. Brownstone Apartments: 601-605 W. Genesee St
79. Parking Lot: 313 N. West St.
80. Poor O' Jim's Used Car Lot: 103 Park Ave



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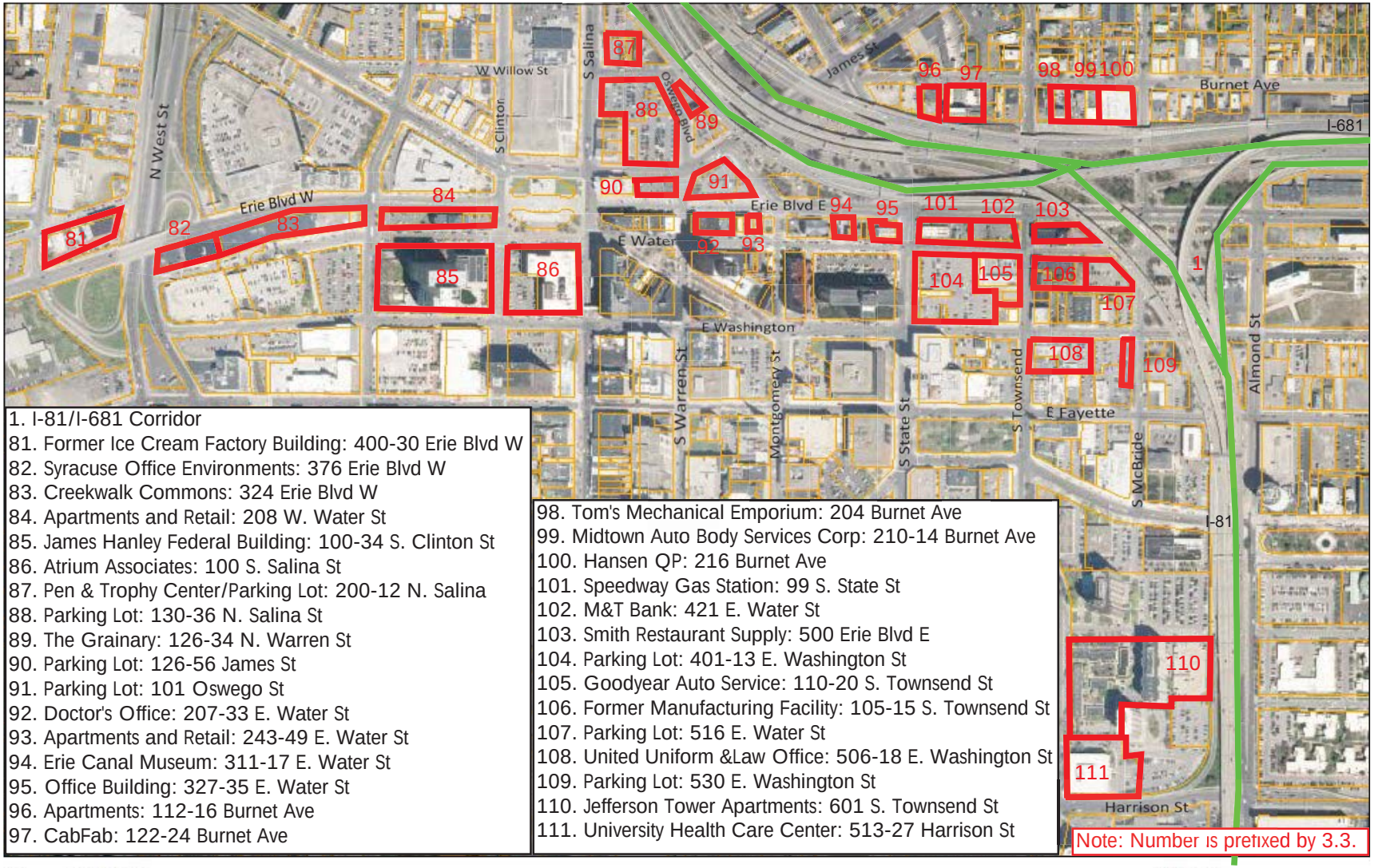
Sites of Potential Environmental Concern - I-81 Viaduct Study Area



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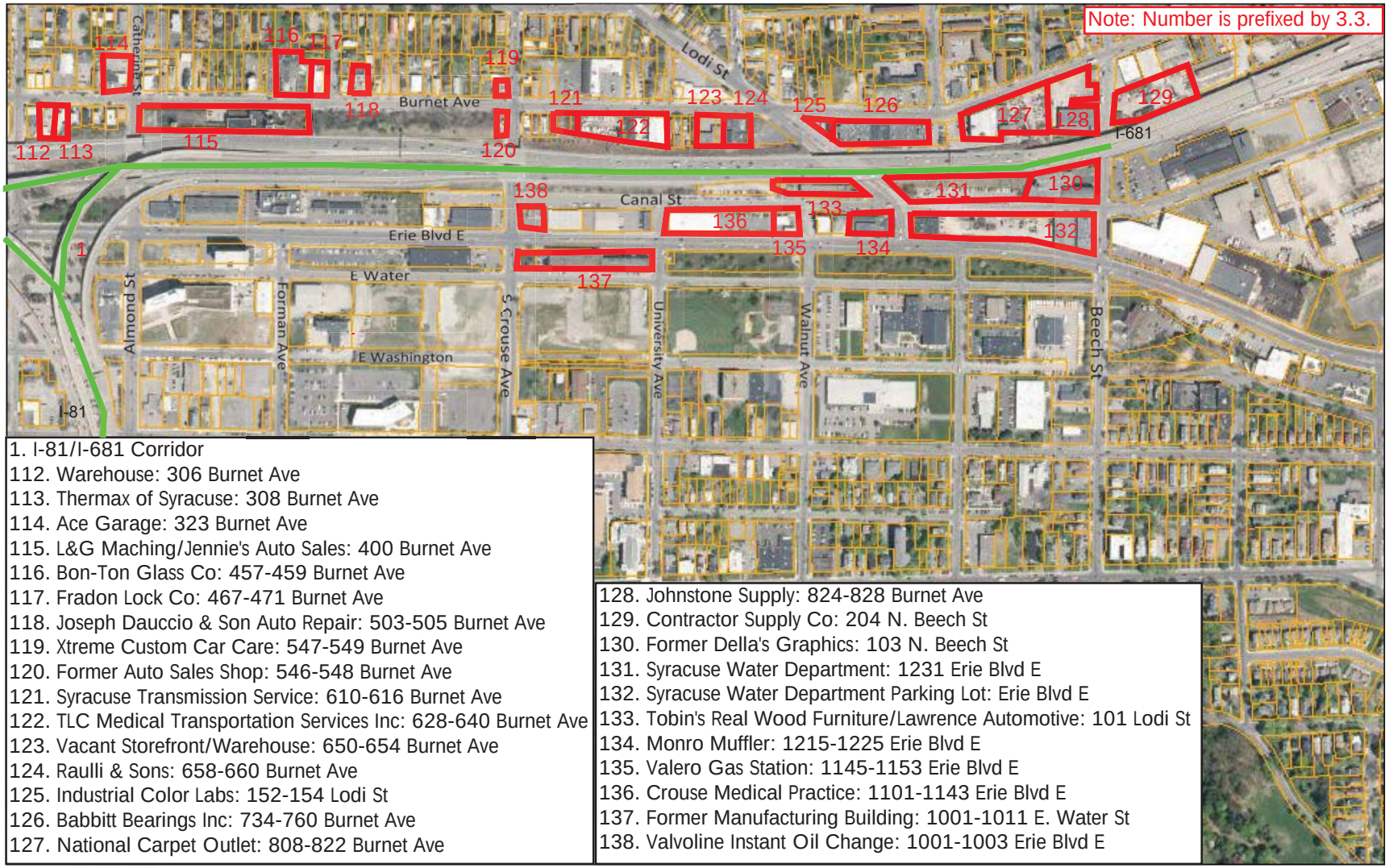
Sites of Potential Environmental Concern - I-81 Viaduct Study Area



1. I-81/I-681 Corridor
112. Warehouse: 306 Burnet Ave
113. Thermax of Syracuse: 308 Burnet Ave
114. Ace Garage: 323 Burnet Ave
115. L&G Maching/Jennie's Auto Sales: 400 Burnet Ave
116. Bon-Ton Glass Co: 457-459 Burnet Ave
117. Fradon Lock Co: 467-471 Burnet Ave
118. Joseph Dauccio & Son Auto Repair: 503-505 Burnet Ave
119. Xtreme Custom Car Care: 547-549 Burnet Ave
120. Former Auto Sales Shop: 546-548 Burnet Ave
121. Syracuse Transmission Service: 610-616 Burnet Ave
122. TLC Medical Transportation Services Inc: 628-640 Burnet Ave
123. Vacant Storefront/Warehouse: 650-654 Burnet Ave
124. Raulli & Sons: 658-660 Burnet Ave
125. Industrial Color Labs: 152-154 Lodi St
126. Babbitt Bearings Inc: 734-760 Burnet Ave
127. National Carpet Outlet: 808-822 Burnet Ave
128. Johnstone Supply: 824-828 Burnet Ave
129. Contractor Supply Co: 204 N. Beech St
130. Former Della's Graphics: 103 N. Beech St
131. Syracuse Water Department: 1231 Erie Blvd E
132. Syracuse Water Department Parking Lot: Erie Blvd E
133. Tobin's Real Wood Furniture/Lawrence Automotive: 101 Lodi St
134. Monro Muffler: 1215-1225 Erie Blvd E
135. Valero Gas Station: 1145-1153 Erie Blvd E
136. Crouse Medical Practice: 1101-1143 Erie Blvd E
137. Former Manufacturing Building: 1001-1011 E. Water St
138. Valvoline Instant Oil Change: 1001-1003 Erie Blvd E

Source: Syracuse-Onondaga County G.I.S. on the Web
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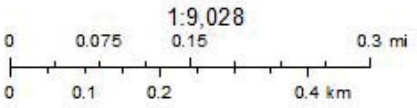
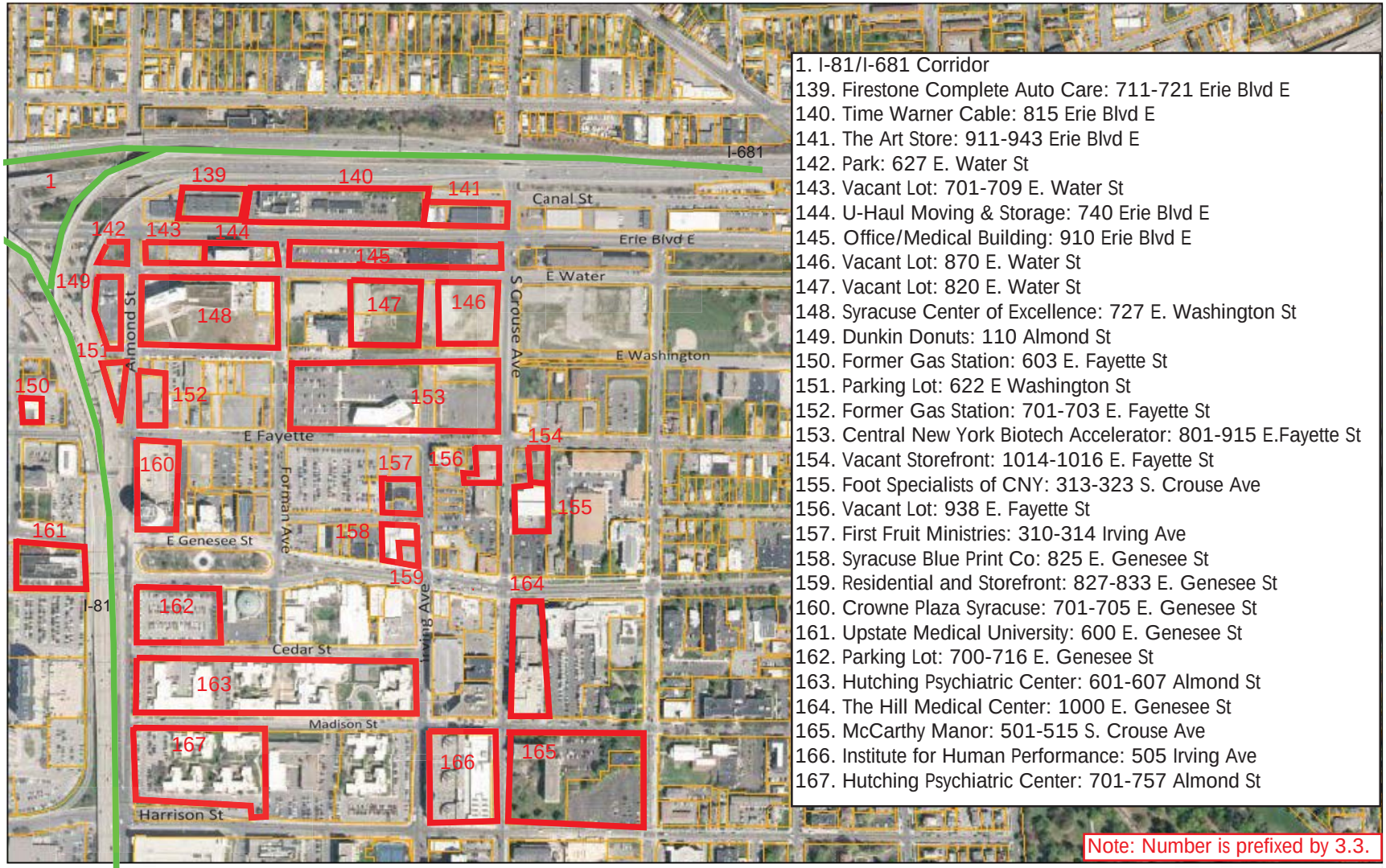


Sites of Potential Environmental Concern - I-81 Viaduct Study Area



1. I-81/I-681 Corridor
139. Firestone Complete Auto Care: 711-721 Erie Blvd E
140. Time Warner Cable: 815 Erie Blvd E
141. The Art Store: 911-943 Erie Blvd E
142. Park: 627 E. Water St
143. Vacant Lot: 701-709 E. Water St
144. U-Haul Moving & Storage: 740 Erie Blvd E
145. Office/Medical Building: 910 Erie Blvd E
146. Vacant Lot: 870 E. Water St
147. Vacant Lot: 820 E. Water St
148. Syracuse Center of Excellence: 727 E. Washington St
149. Dunkin Donuts: 110 Almond St
150. Former Gas Station: 603 E. Fayette St
151. Parking Lot: 622 E Washington St
152. Former Gas Station: 701-703 E. Fayette St
153. Central New York Biotech Accelerator: 801-915 E.Fayette St
154. Vacant Storefront: 1014-1016 E. Fayette St
155. Foot Specialists of CNY: 313-323 S. Crouse Ave
156. Vacant Lot: 938 E. Fayette St
157. First Fruit Ministries: 310-314 Irving Ave
158. Syracuse Blue Print Co: 825 E. Genesee St
159. Residential and Storefront: 827-833 E. Genesee St
160. Crowne Plaza Syracuse: 701-705 E. Genesee St
161. Upstate Medical University: 600 E. Genesee St
162. Parking Lot: 700-716 E. Genesee St
163. Hutching Psychiatric Center: 601-607 Almond St
164. The Hill Medical Center: 1000 E. Genesee St
165. McCarthy Manor: 501-515 S. Crouse Ave
166. Institute for Human Performance: 505 Irving Ave
167. Hutching Psychiatric Center: 701-757 Almond St

Note: Number is prefixed by 3.3.

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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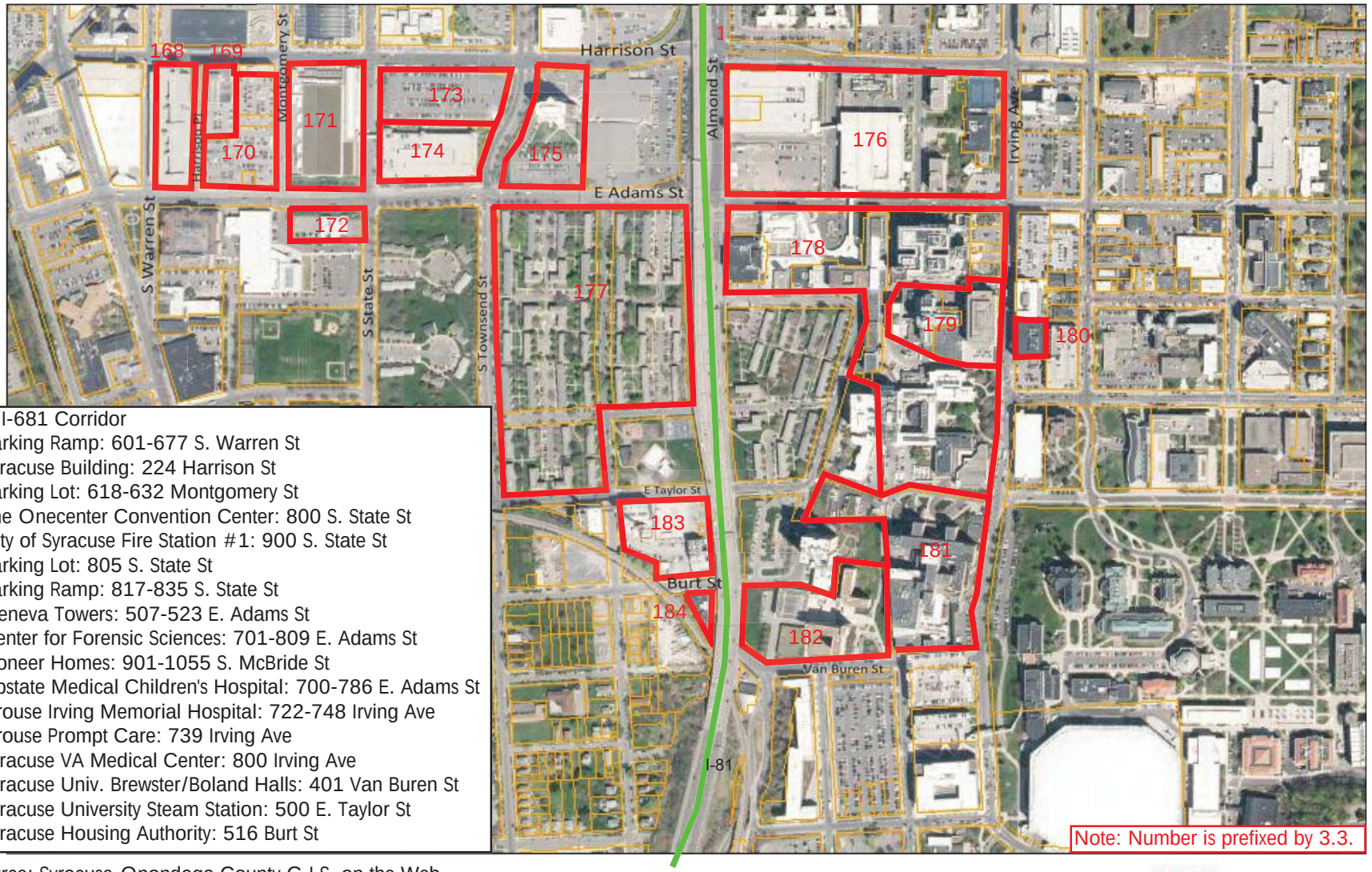
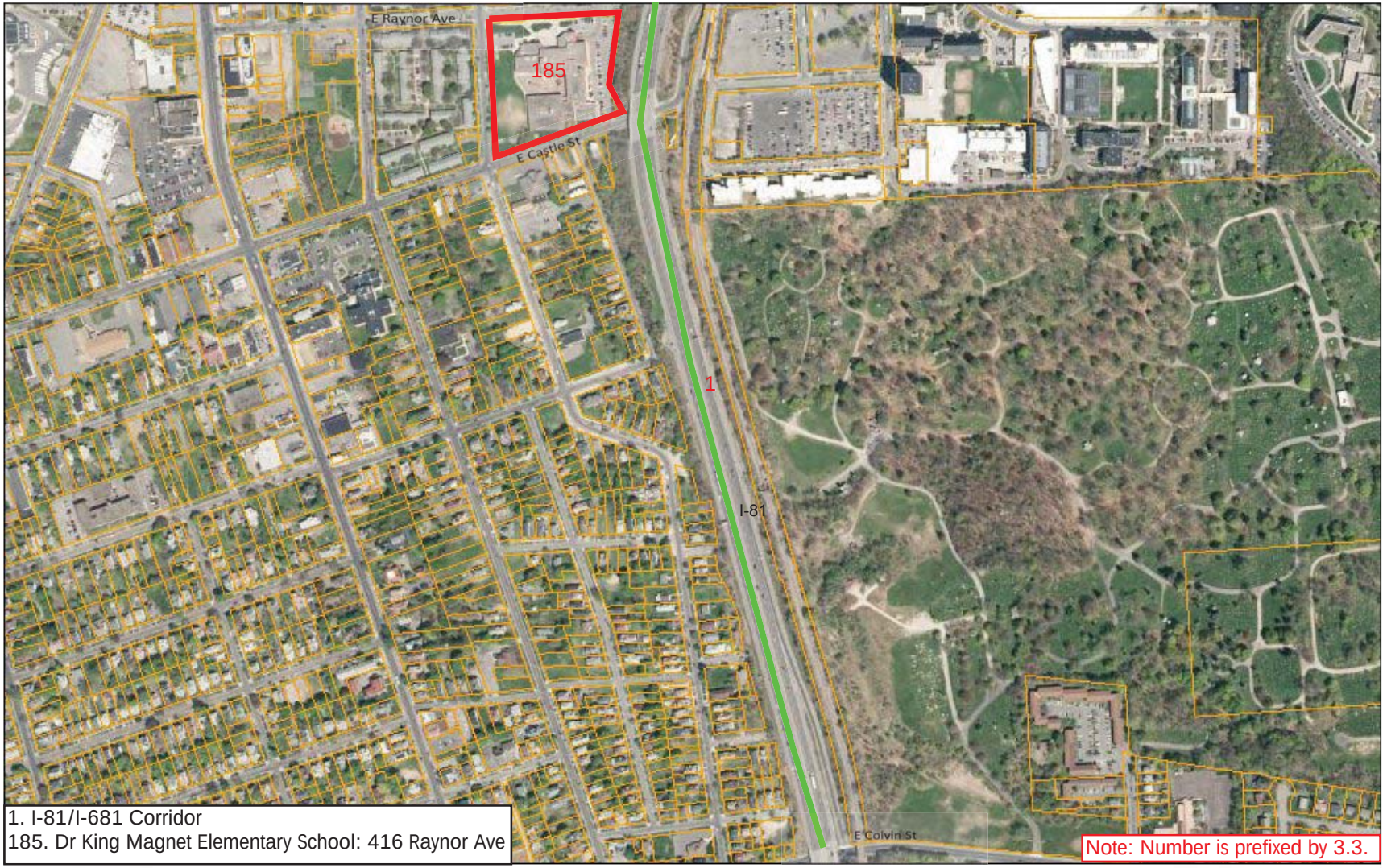
Sites of Potential Environmental Concern - I-81 Viaduct Study Area



1. I-81/I-681 Corridor
168. Parking Ramp: 601-677 S. Warren St
169. Syracuse Building: 224 Harrison St
170. Parking Lot: 618-632 Montgomery St
171. The Onecenter Convention Center: 800 S. State St
172. City of Syracuse Fire Station #1: 900 S. State St
173. Parking Lot: 805 S. State St
174. Parking Ramp: 817-835 S. State St
175. Geneva Towers: 507-523 E. Adams St
176. Center for Forensic Sciences: 701-809 E. Adams St
177. Pioneer Homes: 901-1055 S. McBride St
178. Upstate Medical Children's Hospital: 700-786 E. Adams St
179. Crouse Irving Memorial Hospital: 722-748 Irving Ave
180. Crouse Prompt Care: 739 Irving Ave
181. Syracuse VA Medical Center: 800 Irving Ave
182. Syracuse Univ. Brewster/Boland Halls: 401 Van Buren St
183. Syracuse University Steam Station: 500 E. Taylor St
184. Syracuse Housing Authority: 516 Burt St

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

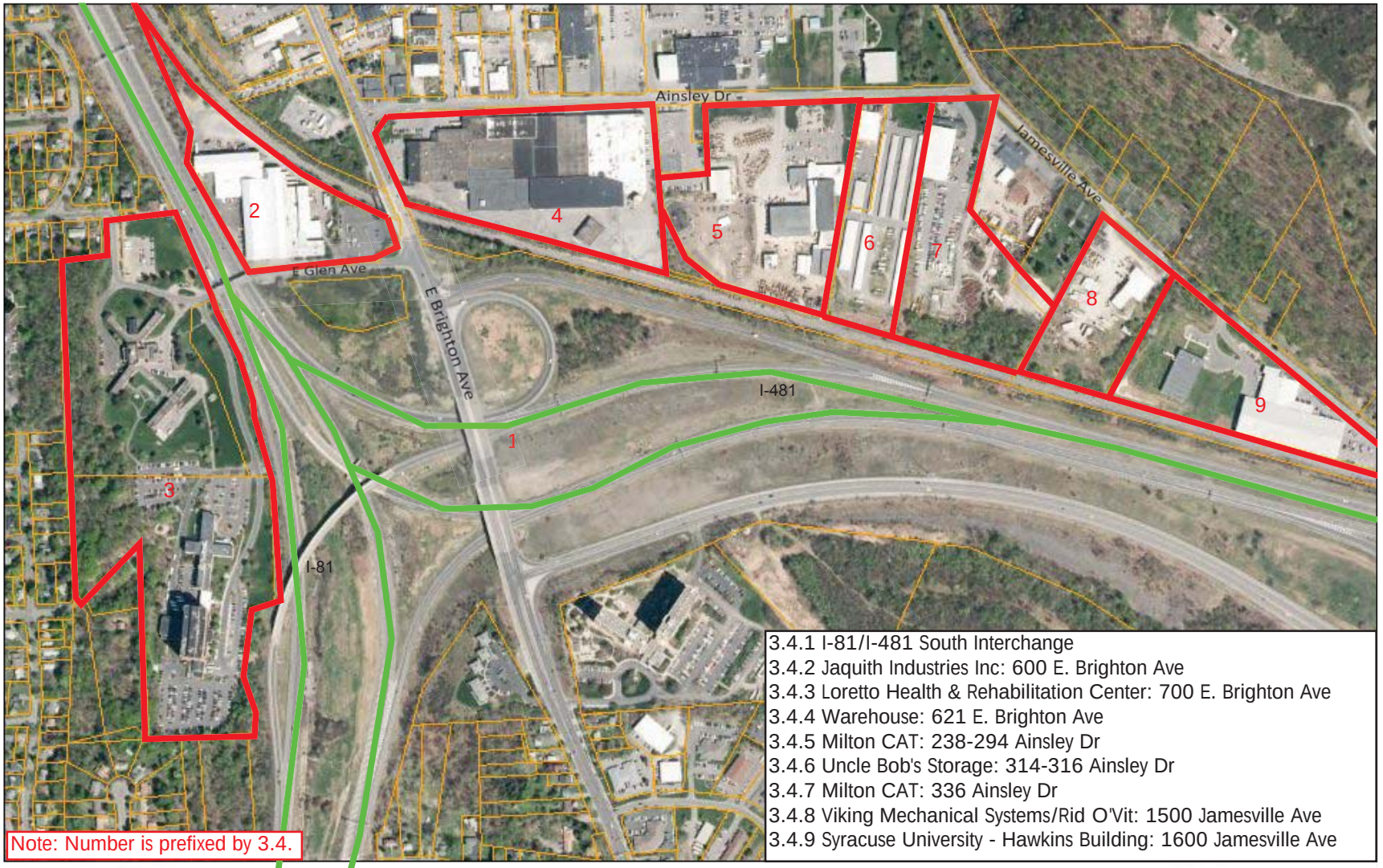
Sites of Potential Environmental Concern - I-81 Viaduct Study Area



1. I-81/I-681 Corridor
185. Dr King Magnet Elementary School: 416 Raynor Ave

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

Sites of Potential Environmental Concern - I-81 Viaduct Study Area



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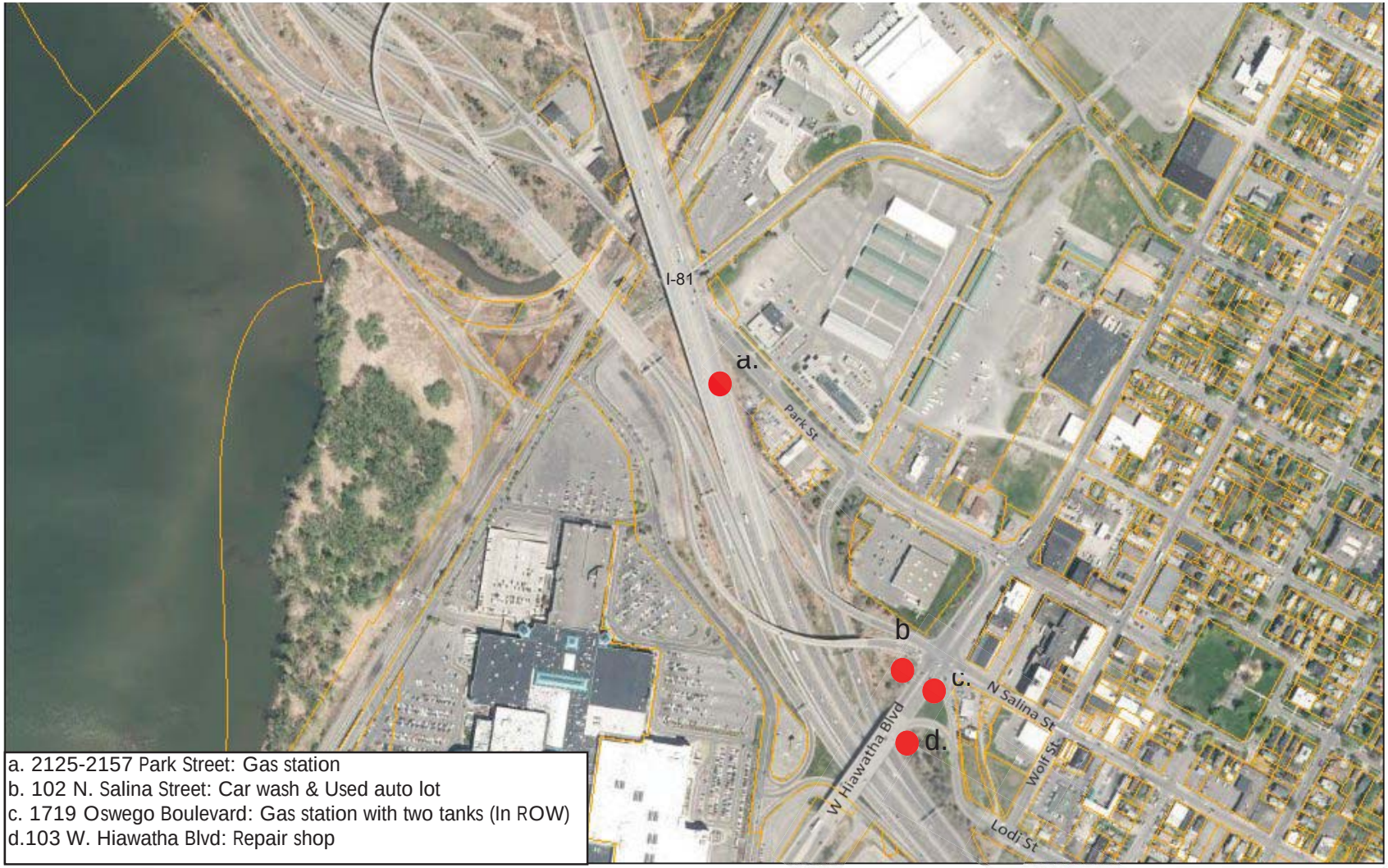
Sites of Potential Environmental Concern - I-481 South Study Area



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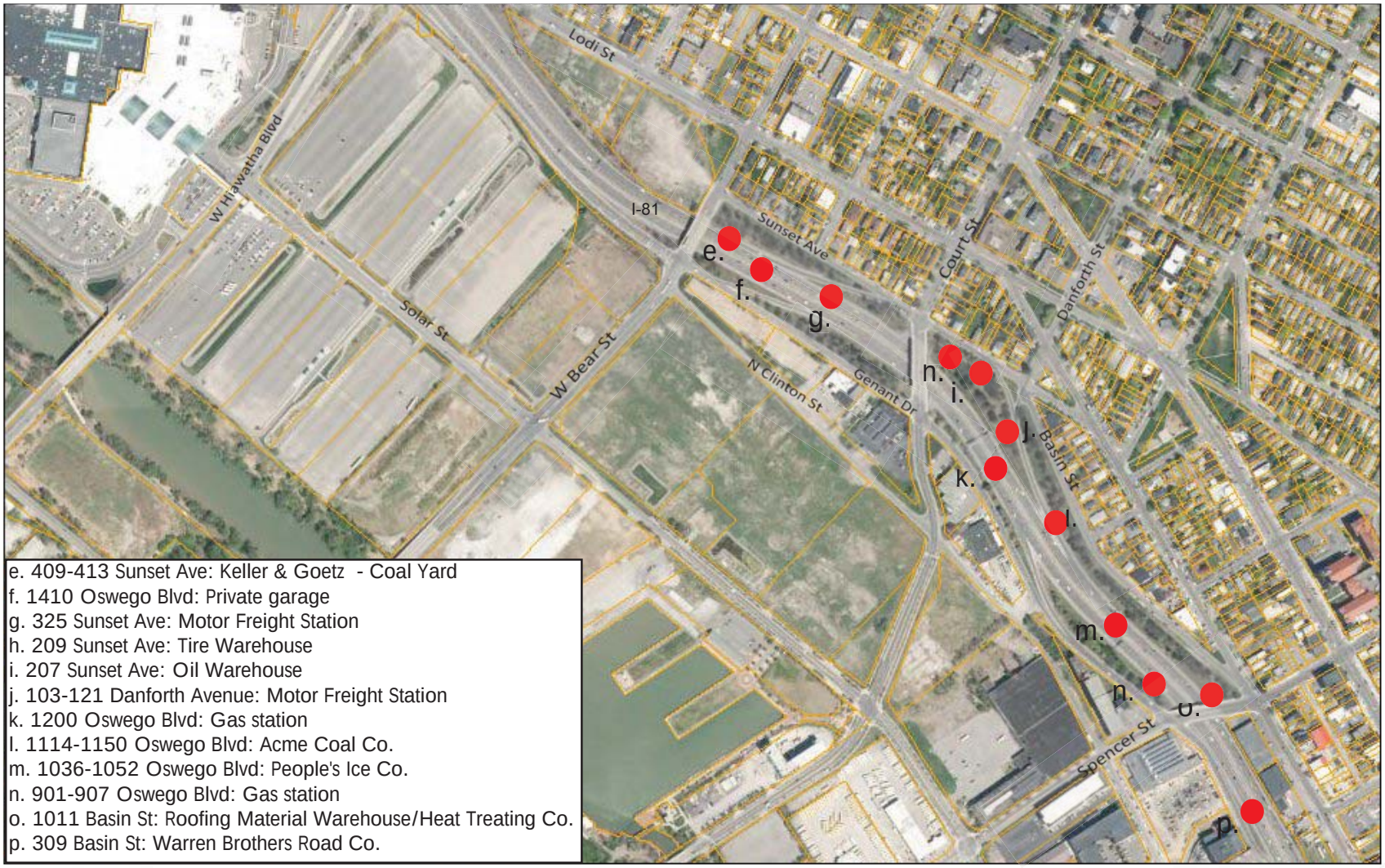
Sites of Potential Environmental Concern on the I-81/I-681 Highway Corridor



e. 409-413 Sunset Ave: Keller & Goetz - Coal Yard
f. 1410 Oswego Blvd: Private garage
g. 325 Sunset Ave: Motor Freight Station
h. 209 Sunset Ave: Tire Warehouse
i. 207 Sunset Ave: Oil Warehouse
j. 103-121 Danforth Avenue: Motor Freight Station
k. 1200 Oswego Blvd: Gas station
l. 1114-1150 Oswego Blvd: Acme Coal Co.
m. 1036-1052 Oswego Blvd: People's Ice Co.
n. 901-907 Oswego Blvd: Gas station
o. 1011 Basin St: Roofing Material Warehouse/Heat Treating Co.
p. 309 Basin St: Warren Brothers Road Co.

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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Sites of Potential Environmental Concern on the I-81/I-681 Highway Corridor

Source: Syracuse-Onondaga County G.I.S. on the Web
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Sites of Potential Environmental Concern on the I-81/I-681 Highway Corridor

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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Sites of Potential Environmental Concern on the I-81/I-681 Highway Corridor

rr. 400-406 Canal St: Furniture Co.
ss. 416-418 Canal St/617-619 Erie Blvd E: Central City Boiler Works/Auto Service
tt. 411-415 Canal St: William Sherlock Wood Working Factory
uu. 420-430 Canal St/627-639 Erie Blvd E: Central City Roofing Co/Wholesale liquors
vv. 625-27 Harrison St: Auto Washing, Polishing, Lubricating and Filling Station

Source: Syracuse-Onondaga County G.I.S. on the Web
http://www.fsihost.com/onondaga

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Sites of Potential Environmental Concern on the I-81/I-681 Highway Corridor

Table 6.4.10-1
Datasets for Hazardous Materials Inventory

National Priorities List (NPL)	State/Tribal Brownfield
National Priorities List Delisted (NPLD)	Federal Brownfield
Comprehensive Environmental Response, Compensation, and Liability Information	Hazardous Materials Information Reporting System (HMIRS)
No Further Remedial Action Planned Sites (CERC-NFRAP)	NYSDEC Spills (SPILLS)
Corrective Action Sites (RCRA COR)	Non Generator (NON GEN)
Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal	Toxic Chemical Inventory Release System (TRIS)
Resource Conservation and Recovery Act (RCRA) Large and Small Quantity Generators	Toxic Substances Control Act (TSCA)
Federal Institutional and Engineering Controls (Fed IC/EC)	FIFRA/TSCA Tracking Systems (FTTS)
Emergency Response Notification System (ERNS)	Integrated Compliance Information System (ICIS)
NYSDEC Registry of Inactive Hazardous Waste Disposal Sites (SHWS)	PCB Activity Database System (PADS)
State/Tribal Solid Waste Landfills (SWL)	Material Licensing Tracking System (MLTS)
State/Tribal Leaking Underground Storage Tanks (LUST)	Radiation Information Database (RADINFO)
State/Tribal Storage Tanks (UST/AST)	Facility Index System (FINDS)
State/Tribal Institutional & Engineering Controls (IC/EC)	RCRA Administrative Action Tracking System (RAATS)
State/Tribal Voluntary Cleanup Program (VCP)	Risk Management Plan (RMP)
Hazardous Substance Waste Disposal (HSWDS)	Tribal Lands
Hazardous Waste Manifest (Manifest)	Potentially Responsible Party (PRP)
Manufactured Gas Plants (MGP)	Aerometric Information Retrieval System (AIRS)
National Pollutant Discharge Elimination System (NPDES)	

Table 6.4.10-2
Hazardous Waste and Contaminated Materials Potential Sites of Concern

Property Name and Address	Current or Former Uses						Acquired Property with Building Demolition	Alternative	
	Auto Related	Dry Cleaner	Manufacturing	Tanks	Railroad	Other		Community Grid	Viaduct
I-81:Sutton Dr south to I-481 Interchange and I-481; I-81 Interchange east to Northern Blvd						X – Roadway Corridor		X	
Burick Auto Dealer: 5947 Circle Dr	X							X	
Burick Auto Dealer: 5857-5927 Circle Dr	X			X				X	
National Grid: 7496 Round Pond Rd				X		X – Natural Gas Fueling Station		X	
Swift Transportation: 7470 Round Pond Rd	X			X				X	
Monroe Tractor: 7300 Eastman Rd	X							X	
Lan-Co Companies: 7330 Eastman Rd						X – Solid Waste Landfill		X	
I-481: from the I-90 South to Route 592 Interchange						X – Roadway Corridor		X	
Inficon Inc: 2 Technology Pl			X	X				X	
Edward Joy Company:6747 Benedict Rd			X					X	
Ultra Dairy: 6750 Benedict Rd			X	X				X	
CSX: Dewitt Railroad Yard					X			X	
Penske Truck: 6755-6773 Manlius Center Rd	X			X				X	
84 Lumber: 6801 Manlius Center Rd				X		X – Lumber Yard		X	
Allied Spring & Services Inc: 6800 Manlius Center Rd	X				X			X	
B&C Self-Storage: 5991 Drott Dr	X			X				X	
I-81/I-681 Highway Corridor: (historical sites not longer present)	X			X	X	X – Roadway Corridor		X	X
625-627 Harrison St	X			X				X	X
309 Basin St				X		X – Asphalt Plant		X	X
1011 Basin St			X					X	X
207 Sunset Ave					X	X – Oil Warehouse		X	X
209 Sunset Ave					X	X – Tire Warehouse		X	X
325 Sunset Ave					X	X – Motor Freight Station		X	X
103-121 Danforth Ave						X – Motor Freight Station		X	X
901-907 Oswego Blvd	X			X				X	X
1036-1052 Oswego Blvd	X		X					X	X
1114-1150 Oswego Blvd				X		X – Coal Co		X	X
1200 Oswego Blvd	X			X				X	X
100-104 Canal St			X	X				X	X
106 Canal St			X					X	X
206 Canal St			X					X	X
218 Canal St			X					X	X
320-324 Canal St	X			X				X	X
400-406 Canal St			X					X	X
416-418 Canal St			X					X	X
411-415 Canal St			X					X	X
420-430 Canal St			X					X	X
100-108 Decker St					X	X – Tin Shop		X	X
108-112 S. Townsend St					X	X – Freight House		X	X
106-108 Pearl St			X					X	X

Table 6.4.10-2 (cont'd)
Hazardous Waste and Contaminated Materials Potential Sites of Concern

Property Name and Address	Current or Former Uses						Acquired Property with Building Demolition	Alternative	
	Auto Related	Dry Cleaner	Manufacturing	Tanks	Railroad	Other		Community Grid	Viaduct
205-209 Pearl St			X					X	X
269 James St	X			X				X	X
103 W. Hiawatha Blvd	X							X	X
1719 Oswego Blvd	X							X	X
409-413 Sunset Avenue						X – Coal Yard		X	X
108-116 N. State St	X			X				X	X
340 Erie Boulevard W			X					X	X
354 Erie Boulevard W	X		X					X	X
345 Erie Boulevard E	X							X	X
433-443 Erie Blvd E	X							X	X
524-530 Erie Blvd E	X			X				X	X
617-619 Erie Blvd E	X							X	X
627-639 Erie Blvd E:				X				X	X
232-236 James St			X					X	X
220-222 James St			X					X	X
428-430 N. West St						X – Motor Freight Station		X	X
436-438 N. West St	X		X					X	X
426 N. West St	X							X	X
316 N. West St	X							X	X
218-220 N. West St	X							X	X
200-208 N. West St			X					X	X
106 N. West St			X					X	X
102 N. Salina St	X							X	X
2125-2157 Park St	X							X	X
108-110 N. State St						X – Lumber Yard		X	X
Nick Orso's Body Shop: 638 W. Genesee St	X			X				X	X
Former Office Building: 600-608 W. Genesee St	X							X	X
601-605 W. Genesee St	X							X	X
Iron Workers Local 60: 500-508 W. Genesee St	X							X	X
City Electric Co. Inc.: 501 W. Genesee St	X		X	X				X	X
City Electric Co: 514 W. Genesee St	X					X – Aluminum Company		X	X
Maguire Auto Sales: 523 W. Genesee St	X							X	X
Mr. Tire Auto Center: 524 W. Genesee St	X			X				X	X
Parking Lot:440 W. Genesee St	X							X	X
City of Syracuse Fire: 400 W. Genesee St				X				X	X
American Red Cross: 344 W. Genesee St	X					X – Chemical Company		X	X
Parking Lot: 313 N. West St./100-102 Park Ave	X							X	X
Poor O' Jim's Used Car Lot: 103 Park Ave	X							X	X
Niagara Mohawk Power Corp: 300-320 Erie Blvd W	X		X	X		X – Manufactured Gas Plant		X	X
Former Ice Cream Factory: 400-430 Erie Blvd W			X	X				X	X
Creekwalk Commons: 324 Erie Blvd W	X							X	X
Syracuse Office Environments: 376 Erie Blvd W	X		X	X	X			X	X
Parking Lot: 215 Wallace St			X					X	X
Krell Building: 200-212 Herald Pl/ 316 N. Franklin St			X				X	X	X
Krell Distributing Co. Inc.: 203-219 Herald Pl	X			X				X	X
Parking Lot: 304-316 Herald Pl	X							X	X

Table 6.4.10-2 (cont'd)
Hazardous Waste and Contaminated Materials Potential Sites of Concern

Property Name and Address	Current or Former Uses							Alternative	
	Auto Related	Dry Cleaner	Manufacturing	Tanks	Railroad	Other	Acquired Property with Building Demolition	Community Grid	Viaduct
Sewing Gallery: 702-704 W. Belden Ave	X							X	X
820-826 W. Belden Ave	X							X	X
NYSDOT: Van Renesselaer St & I-690				X	X	X – Mineral Processing Company		X	X
Burns Brothers Contractors: 400-420 Leavenworth Ave, 389 Spencer St Rear			X	X	X			X	X
Office Building/Parking Ramp: 490-500 Plum St/ 144 Evans St			X	X	X			X	X
Vacant Lot: 415 N Franklin St	X							X	X
Franklin Square: 418-428 N. Franklin St	X							X	X
Mission Landing Condos: 429 N. Franklin St			X	X				X	X
The Foundry: 432 N. Franklin St			X			X – Brownfield Site		X	X
Vacant Lot: 438-446 N. Franklin St			X					X	X
Franklin Center: 455 N. Franklin St			X	X				X	X
Divine Brothers: 215 Gernat Dr			X					X	X
Former Factory/Warehouse: 311 Genant Dr			X	X		X – Electric Substation		X	X
Veteran's Fastener Supply Corp : 117 Butternut St			X				X	X	X
Learbury Center: 329 N. Salina St			X			X – Coal Yard, Foundry	X	X	X
Knise & Krick Inc: 400-404 Pearl St			X					X	X
Former 410 Nightclub: 410 Pearl St						X – Electric Company, Warehouse		X	X
Parking Lot/Pump Station: 471-481/493 Oswego Blvd				X		X – Warehouse	X	X	X
Parking Lot/Pump Station: 497-499 Oswego Blvd						X – Paper Warehouse, Grain and Feed Warehouse		X	X
Apartments: 717 N. Clinton St			X			X – Paint Stripping Company		X	X
Clinton Street Commons: 721 N. Clinton St			X					X	X
Office Building:706-716 N. Clinton St			X	X			X Smoke Stack Demo	X	X
Office Building: 102 W. Division St			X	X				X	X
National Grid Substation: 431 Genant Dr	X					X – Electric Substation		X	X
Avalon Document Services: 899-901 N. State St						X – Printing Company	X	X	X
Warehouse/Former Auto Sales Center: 909 N. State St	X					X – Warehouse	X	X	X
Warehouse: 915 N. State St						X – Warehouse	X	X	X
Vacant Lot: 921-925 N. State St						X – Warehouse		X	X
Hiawatha Used Cars: 931 N. State St	X							X	X

Table 6.4.10-2 (cont'd)
Hazardous Waste and Contaminated Materials Potential Sites of Concern

Property Name and Address	Current or Former Uses						Acquired Property with Building Demolition	Alternative	
	Auto Related	Dry Cleaner	Manufacturing	Tanks	Railroad	Other		Community Grid	Viaduct
County Wide Appliance Service: 1001 N. State St			X			X – Appliance Repair		X	X
Adirondack Furniture: 1025 N. State St			X					X	X
Marinich Builders/ Mike's Appliance Sales & Service: 1121 N. State St						X – Appliance Repair, Plating Company		X	X
RSG Automotive:1201 N. State St	X			X		X – Solid Waste Landfill		X	X
Shane Syracuse Inc.:103 Ash/904-906 N. State St						X – Blacksmith		X	X
Signs Etc: 832-846 N. State St			X					X	X
Former Manufacturing Facility: 128 Spencer St			X			X – Brownfield Site		X	X
Vacant Lot: 998-1000 N. Clinton St					X	X – Warehouse		X	X
Harbor View Liquors: 936 Clinton St N						X – Computer Service Company		X	X
Sedgwick Business Interiors: 100 W. Court St			X			X – Printing Company		X	X
Vacant Lot: 2615-2717 Lodi St, 111 Bear St			X	X	X			X	X
Process Control: 111 Sunset Ave	X					X – Printing Company		X	X
DJB Fleet & Auto: 101 Sunset Ave	X							X	X
Cerio's Auto Electric: 1425 N. State St	X			X				X	X
Vacant lot: 470 Solar St				X		X – Oil Company		X	X
Andy's Produce: 651 Genant Dr	X							X	X
DTS Truck Service: 647 Genant Dr	X		X		X			X	X
Vacant Lot: 901 N. Clinton St	X		X					X	X
P.A. Leone & Sons Inc.: 1207 N. State St						X – Electric Company		X	X
Former Manufacturing Facility: 800 N. Clinton St			X	X				X	X
Destiny USA Parking Lots: 301-401 W. Hiawatha Blvd	X			X	X	X – Salt Company; Brownfield Site		X	X
Destiny USA: 1 Destiny USA Dr	X			X	X	X – Brownfield Site, Superfund Site		X	X
Vacant Lot: 2802-2812 Lodi St, 101-103 Wolf St	X		X	X	X	X – Superfund Site		X	X
Brink's Inc: 2616 Lodi St				X		X – Contractor Yard, Warehouse		X	X
Babies R Us: 2027 Park St	X		X	X		X – Paint Facility		X	X
Storefronts: 2083 Park St						X – Paint Facility		X	X
Brian Farmer's Auto Sales: 2230 Park St	X							X	X
Knise & Krick Inc.: 320-324 Pearl St			X					X	X
Apartments, Office & Retail Space: 301-319 N. State St			X	X				X	X
Sunoco Gas Station: 200 N. State St	X			X				X	
Apartments: 112-116 Burnet Ave						X – Storage Facility, Paint Shop, and Warehouse		X	X
CabFab: 122-124 Burnet Ave				X		X - Foundry		X	X

Table 6.4.10-2 (cont'd)
Hazardous Waste and Contaminated Materials Potential Sites of Concern

Property Name and Address	Current or Former Uses						Acquired Property with Building Demolition	Alternative	
	Auto Related	Dry Cleaner	Manufacturing	Tanks	Railroad	Other		Community Grid	Viaduct
Tom's Mechanical Emporium: 204 Burnet Ave	X							X	X
Midtown Auto Body Services Corp: 210-214 Burnet Ave	X		X			X – Storage Warehouse		X	X
Hansen QP: 216 Burnet Ave						X – Printing Company		X	X
Warehouse: 306 Burnet Ave	X							X	X
Thermax of Syracuse: 308 Burnet Ave	X							X	X
Doctor's Office: 207-233 E. Water St	X		X	X				X	X
Apartments and Retail Space: 243-249 E. Water St		X	X					X	X
The Grainary: 126-134 N. Warren St	X			X			X	X	X
Atrium Associates: 100 S. Salina St				X				X	X
The Post Standard Newspaper: 101-239 N. Salina St	X		X	X		X – Newspaper Printing		X	X
Pen & Trophy Center/Parking Lot: 200-212 N. Salina St/111-121 E. Willow St						X – Warehouse		X	X
Parking Lot: 130-136 N. Salina St /137 N. Warren St/121-157 James St	X		X	X				X	X
Parking Lot: 126-156 James St						X – Tin Shop, Painting Shop		X	X
Parking Lot: 101 Oswego St						X – Erie Canal Basin, Parking Garage		X	X
Ace Garage: 323 Burnet Ave	X							X	
L&G Maching/Jennie's Auto Sales: 400 Burnet Ave	X		X		X	X – Shipping Company	X	X	X
Bon-Ton Glass Co.: 457-459 Burnet Ave		X	X	X				X	X
Fradon Lock Co: 467-471 Burnet Ave		X		X		X – Warehouse		X	X
Joseph Dauccio & Son: 503-505 Burnet Ave	X							X	X
Former Auto Sales Shop: 546-548 Burnet Ave	X							X	X
Xtreme Custom Car Care: 547-549 Burnet Ave	X		X	X				X	
Syracuse Transmission Service: 610-616 Burnet Ave	X					X – Oil Warehouse		X	X
Office/Medical Building: 910 Erie Blvd E	X	X		X		X – Lumber Yard and Junk Yard		X	
The Art Store: 911-943 Erie Blvd E			X			X – Paint and Varnish Company		X	X
Valvoline Instant Oil Change: 1001-1003 Erie Blvd E	X			X		X – Coal Yard		X	X
Time Warner Cable:815 Erie Blvd E	X				X	X – Bus Terminal, Train Station		X	X
U-Haul Moving & Storage: 740 Erie Blvd E	X		X	X				X	
Firestone Complete Auto Care: 711-721 Erie Blvd E	X		X	X				X	X
Syracuse Center of Excellence: 727 E. Washington St	X		X			X – Environmental Restoration Site		X	X
Parking Lot: 622 E Washington St	X							X	X
Dunkin Donuts: 110 Almond St			X					X	X
Park: 627 E. Water Street	X			X		X – Lumber Yard		X	X

Table 6.4.10-2 (cont'd)
Hazardous Waste and Contaminated Materials Potential Sites of Concern

Property Name and Address	Current or Former Uses							Alternative	
	Auto Related	Dry Cleaner	Manufacturing	Tanks	Railroad	Other	Acquired Property with Building Demolition	Community Grid	Viaduct
Vacant Lot: 701-709 E. Water St	X			X		X – Brownfield Site, Lumber Yard		X	X
Vacant Lot: 820 E. Water St	X					X – Typesetting Company		X	
Vacant Lot: 870 E. Water St	X			X		X – Blacksmith, Chemical Lab		X	
Former Manufacturing Building: 1001-1011 E. Water St	X		X	X		X – Blacksmith, Junk Yard		X	
Former Gas Station: 701-703 E. Fayette St	X			X				X	X
TLC Medical Transport Services Inc.: 628-640 Burnet Ave	X		X					X	X
Vacant Storefront/Warehouse: 650-54 Burnet Ave				X		X – Chemical Supply Company		X	X
Raulli & Sons: 658-660 Burnet Ave			X					X	X
Babbitt Bearings Inc.: 734-760 Burnet Ave	X		X					X	X
National Carpet Outlet: 808-822 Burnet Ave	X			X				X	
Johnstone Supply: 824-828 Burnet Ave				X				X	
Contractor Supply Co.: 204 N. Beech St					X	X – Contractor Storage Yard		X	
Former Della's Graphics: 103 N. Beech St						X – Oil Storage		X	
Syracuse Water Department: 1231 Erie Blvd E	X			X		X – Blacksmith Shop		X	
Syracuse Water Department: Erie Blvd E	X			X				X	X
Monro Muffler: 1215-1225 Erie Blvd E	X			X				X	X
Valero Gas Station: 1145-1153 Erie Blvd E	X			X		X – Warehouse		X	X
Crouse Medical Practice: 1101-1143 Erie Blvd E	X					X – Coal Company		X	X
Industrial Color Labs: 152-154 Lodi St	X			X		X – Printing Company		X	X
Tobins Real Wood Furniture / Lawrence Automotive: 101 Lodi St	X		X		X		X	X	X
Crowne Plaza Syracuse: 701-705 E. Genesee St	X		X	X				X	X
First Fruit Ministries: 310-314 Irving Ave	X							X	
Syracuse Blue Print Co.: 825 E. Genesee St	X					X – Printing Company		X	
Central New York Biotech Accelerator: 801-915 E. Fayette St	X	X	X	X		X – Printing Company		X	
Vacant Lot: 938 E. Fayette St	X			X				X	
Vacant Storefront: 1014-1016 E. Fayette St				X				X	
Foot Specialists of CNY: 313-323 S. Crouse Ave	X			X		X – Printing Company		X	
Residential and Storefront: 827-833 E. Genesee St	X							X	

Table 6.4.10-2 (cont'd)
Hazardous Waste and Contaminated Materials Potential Sites of Concern

Property Name and Address	Current or Former Uses						Acquired Property with Building Demolition	Alternative	
	Auto Related	Dry Cleaner	Manufacturing	Tanks	Railroad	Other		Community Grid	Viaduct
Parking Lot: 700-716 E. Genesee St				X					
Hutchings Psychiatric Center: 601-607 Almond St	X			X				X	X
Hutchings Psychiatric Center: 701-757 Almond St				X				X	X
Center for Forensic Sciences: 701-809 E. Adams St	X			X				X	X
The Hill Medical Center: 1000 E. Genesee St				X				X	X
McCarthy Manor: 501-515 S. Crouse Ave				X				X	X
Institute for Human Performance: 505 Irving Ave				X				X	X
Pioneer Homes: 901-1055 S. Mcbride St				X				X	X
Crouse Irving Memorial Hospital: 722-748 Irving Ave				X				X	
Crouse Prompt Care: 739 Irving Ave				X				X	
Upstate Medical University/Children's Hospital: 700-786 E. Adams St				X				X	X
Part of Erie Canal Museum: 311-317 E. Water St			X			X – Former Erie Canal		X	X
Office Building: 327-335 E. Water St			X					X	X
M&T Bank: 421 E. Water St						X – Lumber Yard, Tin Shop, Paint Shops		X	X
Speedway Gas Station: 99 S. State St	X		X	X				X	X
Smith Housewares and Restaurant Supply: 500 Erie Blvd E	X	X	X					X	
Parking Lot: 516 E. Water St	X		X					X	
Former Manufacturing Facility: 105-115 S. Townsend St			X			X – Glass Warehouse			X
Goodyear Auto Service Center: 110-120 S. Townsend St	X			X					X
Parking Lot: 401-413 E. Washington St	X		X	X		X – Printing Company			X
Apartments and Retail Space: 208 W. Water St	X		X	X		X – Printing Company		X	X
Office Building: 101 N. Clinton St	X							X	X
James Hanley Federal Building: 100-134 S. Clinton St			X	X		X – Paints		X	X
Upstate Medical University: 600 E. Genesee St		X						X	X
Former Gas Station: 603 E. Fayette St	X			X					X
United Uniform and Michael J O'Brien Law Office: 506-18 E. Washington St	X								X
Parking Lot: 530 E. Washington St	X			X		X – Greasing Station, Lubricating Company			X
University Health Care Center: 513-527 Harrison St	X			X		X – Junkyard, Paint Shop		X	X

Table 6.4.10-2 (cont'd)
Hazardous Waste and Contaminated Materials Potential Sites of Concern

Property Name and Address	Current or Former Uses							Alternative	
	Auto Related	Dry Cleaner	Manufacturing	Tanks	Railroad	Other	Acquired Property with Building Demolition	Community Grid	Viaduct
Jefferson Tower Apartments: 601 S. Townsend St	X	X		X		X – Junkyard		X	X
Geneva Towers: 507-523 E. Adams St	X					X – Printing Company		X	X
Parking Lot: 805 S. State St	X		X	X		X – Warehouse		X	X
Parking Ramp: 817-835 S. State St	X		X	X		X – Warehouse, Foundry		X	X
City of Syracuse Fire Station #1: 900 S. State St	X			X				X	
Syracuse Building: 224 Harrison St	X			X				X	
Parking Ramp: 601-677 S. Warren St	X			X		X – Warehouse		X	
Parking Lot: 618-632 Montgomery St	X					X – Warehouse		X	
The Onecenter Convention Center: 800 S. State St	X	X	X	X		X – Junkyard		X	
Syracuse Housing Authority: 516 Burt St					X	X – Lumber Yard		X	X
Syracuse University Brewster/Boland Halls: 401 Van Buren St						X		X	X
Syracuse University Steam Station: 500 E. Taylor St				X	X	X – Steam Station		X	X
Syracuse VA Medical Center: 800 Irving Ave				X				X	X
Dr King Magnet Elementary School: 416 Raynor Ave				X				X	X
I-81/I-481 South Interchange					X	X – Roadway Corridor		X	
Jaquith Industries Inc: 600 E. Brighton Ave			X	X				X	
Loretto Health & Rehabilitation Center: 700 E. Brighton Ave				X				X	
621 E. Brighton Ave				X		X – Warehouse, Solid Waste Landfill		X	
Milton CAT: 238-294 Ainsley Dr	X				X			X	
Uncle Bob's Storage: 314-16 Ainsley Dr						X – Storage Facility		X	
Milton CAT: 336 Ainsley Dr	X			X				X	
Viking Mechanical Systems/ Rid O Vit: 1500 Jamesville Ave						X – Warehouse		X	
Syracuse University - Hawkins Building: 1600 Jamesville Ave				X				X	

6.4.10.2 NO BUILD ALTERNATIVE

The No Build Alternative would maintain the highway in its existing configuration with only routine maintenance and minor repairs to ensure safety of the traveling public. As such, there would be no effects related to hazardous and/or contaminated materials associated with the No Build Alternative.

6.4.10.3 ENVIRONMENTAL CONSEQUENCES OF THE VIADUCT ALTERNATIVE

PERMANENT/OPERATIONAL EFFECTS

The Viaduct Alternative would affect a total of 46 bridge and ramp structures, 24 buildings, and one building-associated structure (a smokestack). A detailed inspection of each property and any building structure on that site would be completed as the design advances. Additional information on the individual property acquisitions is given in **Section 6.3.1, Property Acquisition, Displacement, and Relocation**. Nineteen (19) of the 24 sites on the property acquisition list for this alternative were also listed in **Table 6.4.10-2** as sites that have a potential to exhibit signs or have a history of contamination.

Prior to demolition, asbestos surveys would be required to identify, locate, and quantify asbestos-containing materials in these structures. In addition, the buildings likely contain mercury fluorescent light bulbs and PCB light ballasts, batteries, refrigerators/freezers that contain ozone depleting refrigerants, and miscellaneous operational and maintenance equipment, chemicals and products. These items represent a business environmental risk and must be removed prior to demolition and reclaimed/salvaged or transported off-site for proper disposal.

The potential for encountering future contamination associated with any sites impacted by the project would be reduced by the cleanup actions conducted during construction of the alternative. Nineteen of the properties on the acquisition list were included in the 185 total identified sites located adjacent to the I-81 Corridor and listed as locations where subsurface contamination may be encountered. Additional properties of concern were identified outside the I-81 corridor area and are both listed in **Table 6.4.10-2** and shown on the associated figures. Areas where subsurface contamination and orphan underground storage tanks are identified would be addressed when encountered during construction for the Project.

Operationally, maintenance and cleanup of any future releases would be performed in accordance with applicable State and Federal laws and standard NYSDOT roadway operating procedures.

CONSTRUCTION EFFECTS

Based on the past and present property uses within and adjacent to the Project Area, subsurface contamination is anticipated to be identified during construction at numerous sites. Many of the sites in **Table 6.4.10-2** were identified as having historical petroleum storage and sales operations, automotive repair and sales, and fleet/trucking operations. Soils may be contaminated by petroleum products (fuels and lubricants); parts washing and cleaning solvents; antifreeze; and, lead and mercury from spills and illegal disposal practices, as well as abandoned or leaking underground tanks and are the most common environmental issue encountered along urban highway corridors.

A number of dry cleaning establishments and printers were also identified along the corridor. Dry cleaning operations involve the use chlorinated volatile organic compounds and spotting chemicals whereas printers use the same chemicals plus dyes/pigments which often contain

a variety of metals including arsenic, cyanide and silver. A large number of sites were also used for industrial manufacturing, production, and warehousing with the potential for a wide range and variety of chemical materials products.

Portions of the highway alignment were also repurposed from former railroad corridors (New York Central West Shore/New York Central railroad from Van Rensselaer Street to Beech Street for the I-690 and the Lackawanna and Western railroad for I-81 south of E. Taylor Street). Rail lines and yards often have some degree of environmental impairment from cleaning, fueling and other operational activities through the years. Contamination typically found along railroad lines includes partially combusted fossil fuels consisting of polynuclear aromatic hydrocarbons; leachate from creosote-preserved railroad ties; pesticides used in maintenance of the corridor; strong acid or alkaline materials; spent cleaning and degreasing solvents; ignitable paint wastes; used oil; and lead contamination from older freight cars with plane bearings, as well as other heavy metals including chromium and arsenic. In addition, the current location of Erie Boulevard East coincides with the historical location of the Erie Canal and Oswego Boulevard coincides with the historical location of the Oswego Canal. These canals were backfilled with unknown materials to allow for construction of the area roadway network.

As the design advances, the need for hazardous waste/contaminated materials site investigations (Phase II Field Studies) will be identified and recommended to be performed at those locations with the suspected greatest likelihood of contamination and where substantial soil disturbance is proposed in the detailed design work. A determination of the need for a field investigation at each site will be reviewed with NYSDOT personnel. Once approved by NYSDOT, investigations will be performed by the consultant to determine the presence or absence of contamination or USTs, to assist with the development of remediation cost estimates, and to select and develop procedures for the protection of on-site workers and the adjacent public during remediation work.

The scope of the environmental investigation would include drilling investigations conducted with a direct push "hydraulic" or rotary drilling rig to collect soil samples for retrieval and examination. Soil samples should be collected and analyzed for both Target Compound List (TCL) and Target Analyte List (TAL) parameters for volatile, semi-volatile, pesticides, polychlorinated biphenyls (PCBs), and metals including mercury, cyanide and hexavalent chromium. If any of the results indicate that the sample has the potential to be hazardous, the soil sample would be further analyzed under the Toxicity Characteristic Leaching Procedure (TCLP) methodology (USEPA method 1311) for the parameter(s) in question. This additional TCLP analysis would allow for the determination of whether the samples meet the definition of RCRA hazardous waste. The results of these field studies would provide information to support the development of environmental remediation cost estimates and to determine budgetary allowances that should be set aside for construction.

To identify how contamination that is discovered in the field would be addressed, the Contractor would be required to prepare a site-wide Soil Management Plan prior to the start of work outlining procedures to be followed any time evidence of contamination, and/or potential contamination, is suspected or identified. Once evidence of contamination is

identified by the Contractor in the field, an Environmental Monitor hired by the Contractor will be on call to assist with the screening and management of soils that show signs of contamination (i.e., strange or noxious odors, unnatural colors or sheen, odors characteristic of petroleum or solvent contamination, elevated volatile vapor readings as measured by field screening instruments). These measures would assist with the protection of on-site workers, the collection of any necessary samples, and segregation of contaminated from non-contaminated soil. Ambient air would be monitored by the Contractor's Environmental Monitor for the protection of on-site workers and soil screening would be performed through visual observations and use of a photoionization detector (PID) or similar instrument. The Environmental Monitor would follow the procedures described in a Field Organic Vapor Monitoring Plan prepared by the Contractor.

However, not all contaminated sites exhibit signs of contamination such as petroleum odors, unnatural colors or sheen, or elevated volatile vapor readings as measured by field screening instruments. During construction, soils excavated from industrial and commercial sites identified as having the potential for contamination, would be closely reviewed and characterized by the Contractor to coordinate their proper management and disposal. The establishment and use of an excavated soil laydown yard(s) would be a necessary component of the Soil Management Plan to provide a means to stockpile and test suspect soils generated during this Project. Testing of materials associated with historical industrial property uses would be conducted before releasing soils to the Contractor as unclassified excavation.

Contaminated soils would be managed in areas identified for material stockpiles or direct loaded for transport to an approved landfill. Stockpiled soils would be placed on impervious pavement or on polyethylene sheeting and covered with sheeting or an equivalent material and then properly weighted to prevent contaminated runoff from precipitation and the release of odors. Any soils stored in roll-off containers awaiting transport would be completely covered and secured with waterproof tarpaulins. During transport, contaminated soils shall be covered to control dust emissions. Covering the materials during stockpile and transport would mitigate potential public exposure to dust and contamination.

INDIRECT EFFECTS

No indirect or secondary impacts would result from the removal of hazardous and contaminated materials associated with the Viaduct Alternative.

CUMULATIVE EFFECTS

The removal of hazardous and contaminated materials for the Viaduct Alternative and any other redevelopment that may occur within and adjacent to the Project Area would have a cumulative benefit as the risks associated with exposure to the hazardous or contaminated soils and other materials to be removed would be diminished.

MITIGATION

Mitigation strategies would start by monitoring excavated soils for evidence of contamination including petroleum and other odors, unnatural colors or sheen, evidence of construction and demolition debris, or elevated volatile vapor readings as measured by field

screening instruments. Any materials that were identified as contaminated would be handled within a temporary work exclusion zone that restricts the area to trained and properly protected workers in proximity to the excavated materials. A direct reading volatile vapor meter would be used by the environmental monitor to adjust the exclusion zone limits. Dust suppression techniques would be employed if necessary. The Contractor would also develop a Site-Specific Health and Safety Plan in conjunction with the Soil Management Plan to address the concerns associated with working with hazardous and contaminated materials found in the excavation materials.

Mitigation would result in the removal and proper disposal of all contaminated materials as well as the asbestos containing materials described in **Section 6.4.9.** The removal of asbestos containing materials would be completed in accordance with New York State Department of Labor (NYSDOL) Industrial Code Rule (ICR) 56 and applicable Federal regulations (e.g., OSHA, NESHAPS).

6.4.10.4 ENVIRONMENTAL CONSEQUENCES OF THE COMMUNITY GRID ALTERNATIVE

PERMANENT/OPERATIONAL EFFECTS

The Community Grid Alternative would affect a total of 63 bridge and ramp structures, five buildings, and one building associated structure (a smokestack). A detailed assessment of each property and any building structure on that site would be completed as the design advances. Additional information on the individual property acquisitions is given in **Section 6.3.1, Property Acquisition, Displacement, and Relocation**. Seven (7) of the sites identified on the property acquisition list were also listed in **Table 6.4.10-2** above as sites that have a potential to exhibit signs or have a history of contamination.

Prior to demolition, asbestos surveys would be required to identify, locate, and quantify asbestos-containing materials in these structures. In addition, the buildings likely contain mercury fluorescent light bulbs and PCB light ballasts, batteries, refrigerators/freezers that contain ozone depleting refrigerants, and miscellaneous operational and maintenance equipment, chemicals and products. These items represent a business environmental risk and must be removed prior to demolition and reclaimed/salvaged or transported off-site for proper disposal.

The potential for encountering future contamination associated with any sites impacted by the project would be reduced by the cleanup actions conducted during construction of the alternative. Seven of the properties on the acquisition list were included in the 185 total identified sites located adjacent to the I-81 Corridor as locations where subsurface contamination may be encountered. Additional properties of concern were identified outside the I-81 corridor area and are both listed in **Table 6.4.10-2** and shown on the associated figures. Areas where subsurface contamination and orphan underground storage tanks are identified would be addressed when encountered during construction for the Project.

Operationally, maintenance and cleanup of any future releases would be performed in accordance with applicable State and Federal laws and standard NYSDOT roadway operating procedures.

CONSTRUCTION EFFECTS

Subsurface contamination would be expected to be identified during construction at numerous sites within and adjacent to the Project Area. Many of the same sites identified in **Table 6.4.10-2** for the Viaduct Alternative were also identified under the Community Grid Alternative. Sites were identified as having historical petroleum storage and sales operations, dry cleaning establishments and printers, and sites that were used for industrial manufacturing, production, and warehousing. Soils may be contaminated by petroleum products (fuels and lubricants); parts washing and cleaning solvents; antifreeze; and, lead and mercury from spills and illegal disposal practices, as well as abandoned or leaking underground tanks and are the most common environmental issue encountered along urban highway corridors.

A number of dry cleaning establishments and printers were also identified along the corridor. Dry cleaning operations involve the use chlorinated volatile organic compounds and spotting chemicals whereas printers use the same chemicals plus dyes/pigments which often contain a variety of metals including arsenic, cyanide and silver. A large number of sites were also used for industrial manufacturing, production, and warehousing with the potential for a wide range and variety of chemical materials products.

Portions of the highway alignment were also repurposed from former railroad corridors (New York Central West Shore/New York Central railroad from Van Rensselaer Street to Beech Street for the I-690 and the Lackawanna and Western railroad for I-81 south of E. Taylor Street). Rail lines and yards often have some degree of environmental impairment from cleaning, fueling and other operational activities through the years. Contamination typically found along railroad lines includes partially combusted fossil fuels consisting of polynuclear aromatic hydrocarbons; leachate from creosote-preserved railroad ties; pesticides used in maintenance of the corridor; strong acid or alkaline materials; spent cleaning and degreasing solvents; ignitable paint wastes; used oil; and lead contamination from older freight cars with plane bearings, as well as other heavy metals including chromium and arsenic. In addition, the current location of Erie Boulevard East coincides with the historical location of the Erie Canal and Oswego Boulevard coincides with the historical location of the Oswego Canal. These canals were backfilled with unknown materials to allow for construction of the area roadway network.

As the design advances, the need for hazardous waste/contaminated materials site investigations (Phase II Field Studies) will be identified and recommended to be performed at those locations with the suspected greatest likelihood of contamination and where substantial soil disturbance is proposed in the detailed design work. A determination of the need for a field investigation at each site will be reviewed with NYSDOT personnel. Once approved by NYSDOT, investigations will be performed by the consultant to determine the presence or absence of contamination or USTs, to assist with the development of

remediation cost estimates, and to select and develop procedures for the protection of on-site workers and the adjacent public during remediation work.

The scope of the environmental investigation would include drilling investigations conducted with a direct push "hydraulic" or rotary drilling rig to collect soil samples for retrieval and examination. Soil samples should be collected and analyzed for both TCL and TAL parameters for volatile, semi-volatile, pesticides, PCBs, and metals including mercury, cyanide and hexavalent chromium. If any of the results indicate that the sample has the potential to be hazardous, the soil sample would be further analyzed under TCLP methodology (USEPA method 1311) for the parameter(s) in question. This additional TCLP analysis would allow for the determination of whether the samples meet the definition of RCRA hazardous waste. The results of these field studies would provide information to support the development of environmental remediation cost estimates and to determine budgetary allowances that should be set aside for construction.

To identify how contamination that is discovered in the field would be addressed, the Contractor would be required to prepare a site-wide Soil Management Plan prior to the start of work outlining procedures to be followed any time evidence of contamination, and/or potential contamination, is suspected or identified. Once evidence of contamination is identified by the Contractor in the field, an Environmental Monitor hired by the Contractor will be on call to assist with the screening and management of soils that show signs of contamination (i.e., strange or noxious odors, unnatural colors or sheen, odors characteristic of petroleum or solvent contamination, elevated volatile vapor readings as measured by field screening instruments). These measures would assist with the protection of on-site workers, the collection of any necessary samples, and segregation of contaminated from non-contaminated soil. Ambient air would be monitored by the Contractor's Environmental Monitor for the protection of on-site workers and soil screening would be performed through visual observations and use of a photoionization detector (PID) or similar instrument. The Environmental Monitor would follow the procedures described in a Field Organic Vapor Monitoring Plan prepared by the Contractor.

However, not all contaminated sites exhibit signs of contamination such as petroleum odors, unnatural colors or sheen, or elevated volatile vapor readings as measured by field screening instruments. During construction, soils excavated from industrial and commercial sites identified as having the potential for contamination, would be closely reviewed and characterized by the Contractor to coordinate their proper management and disposal. The establishment and use of an excavated soil laydown yard(s) would be a necessary component of the Soil Management Plan to provide a means to stockpile and test suspect soils generated during this Project. Testing of materials associated with historical industrial property uses would be conducted before releasing soils to the Contractor as unclassified excavation.

Contaminated soils would be managed in areas identified for material stockpiles or direct loaded for transport to an approved landfill. Stockpiled soils would be placed on impervious pavement or on polyethylene sheeting and covered with sheeting or an equivalent material and then properly weighted to prevent contaminated runoff from precipitation and the release of odors. Any soils stored in roll-off containers awaiting transport would be completely covered and

secured with waterproof tarpaulins. During transport, contaminated soils shall be covered to control dust emissions. Covering the materials during stockpile and transport would mitigate potential public exposure to dust and contamination.

INDIRECT EFFECTS

No indirect or secondary impacts would result from the removal of hazardous and contaminated materials associated with the Community Grid Alternative.

CUMULATIVE EFFECTS

The removal of hazardous and contaminated materials for the Community Grid Alternative and any other redevelopment that may occur within and adjacent to the Project Area would have a cumulative benefit as the risks associated with exposure to the hazardous or contaminated soils and other materials to be removed would be diminished.

MITIGATION

Mitigation strategies would start by monitoring excavated soils for evidence of contamination including petroleum and other odors, unnatural colors or sheen, evidence of construction and demolition debris, or elevated volatile vapor readings as measured by field screening instruments. Any materials that were identified as contaminated would be handled within a temporary work exclusion zone that restricts the area to trained and properly protected workers in proximity to the excavated materials. A direct reading volatile vapor meter would be used by the environmental monitor to adjust the exclusion zone limits. Dust suppression techniques would be employed if necessary. The Contractor would also develop a Site-Specific Health and Safety Plan in conjunction with the Soil Management Plan to address the concerns associated with working with hazardous and contaminated materials found in the excavation materials.

Mitigation would result in the removal and proper disposal of all contaminated materials as well as the asbestos containing materials described in **Section 6.4.9.** The removal of asbestos containing materials would be completed in accordance with New York State Department of Labor (NYSDOL) Industrial Code Rule (ICR) 56 and applicable Federal regulations (e.g., OSHA, NESHAPS).