

PERIODIC REVIEW REPORT

Ballpark at St. George Station Staten Island, New York NYSDEC Site No. V00228

Prepared for

**New York City
Economic Development Corporation**
New York, New York

Prepared by



TRC Environmental Corporation
New York, New York

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TRC Project No. 341863

August 2023

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TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
ENGINEER OF RECORD CERTIFICATION	iii
1.0 INTRODUCTION	1-1
2.0 SITE INSPECTION.....	2-1
3.0 CONCLUSION.....	3-1
3.1 Corrective Measures Required.....	3-1
3.1.1 Baseball Stadium	3-1
3.1.2 Empire Outlets (South Site 2).....	3-2
3.1.3 New York Wheel (North Site 1).....	3-3
3.2 Institutional and Engineering Controls Certifications.....	3-5

FIGURES

1	Site Location Map
2	Stadium Development Plan
3	Site Layout Plan
4	Empire Outlets Development (South Site 2 and South Site 1) Aerial Photo Location Plan
5	Soil and Sediment Removal Locations

APPENDICES

A	Institutional and Engineering Controls Certification Form
B	Annual Site Inspection Records
C	TRC Site Inspection Photographs
D	Stadium Gas Monitoring System Records
E	New York Wheel Periodic Review Report
F	Empire Outlets Documentation
G	Corrective Measures Work Plan
H	NYSDEC Deed Restriction Modification Letter
I	Ferry Landing Electrical Utility Interconnect Documentation
J	Ferry Landing Water Hydrant Documentation
K	Synthetic Turf Sports Field Documentation



ENGINEER OF RECORD CERTIFICATION

I, James Peronto, am currently a registered professional engineer licensed by the State of New York and that this Periodic Review Report was prepared in accordance with all applicable statutes and regulations and in substantial accordance with the Department-approved Site Management Plan for the Ballpark at St. George Station Site on Staten Island, New York (NYSDEC Site No. V00228).

For each institutional or engineering control (IC/EC) identified for the Site, except as noted below and on the completed IC/EC certifications, I certify that all the following statements are true:

- (a) the institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by DER;
- (b) nothing has occurred that would impair the ability of such control to protect public health and the environment;
- (c) nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control;
- (d) access to the site will continue to be provided to DER to evaluate the remedy, including access to evaluate the continued maintenance of this control; and
- (e) if a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for their intended purpose under the document.

Exceptions to the above certification of the institutional and engineering controls include the following:

- 1. The filing of an updated deed restriction allowing use of the property for commercial and/or industrial uses is in process as indicated in Section 3.2 and the associated NYSDEC letter in Appendix H.
- 2. The incomplete site cover on the NY Wheel area where the final site cover has not been constructed and the existing temporary cover area is fenced thereby restricting public access as described in NY Wheel area PRR in Appendix E.
- 3. The indoor combustible gas monitoring system has not yet been installed for the Terminal Building on the NY Wheel Site where the building interior construction is not complete, and the building is not operational or occupied.
- 4. Repair of the Site shoreline stabilization features where parts of the shoreline seawall have collapsed and soil and riprap stone covers are deteriorated must be completed in accordance with a NYSDEC-approved Corrective Measures Work Plan.

All use restrictions, institutional controls, engineering controls and/or any operation and maintenance requirements applicable to the site are contained in a deed restriction created and recorded pursuant to ECL 71-3605 and that any affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.



08/03/2023
Date

Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.



1.0 INTRODUCTION

TRC Environmental Corporation (TRC) was retained by the New York City Economic Development Corporation (NYCEDC) to conduct an annual periodic review and prepare a Periodic Review Report (PRR) for the Ballpark at St. George Station site (hereinafter referred to as the “Site”) on Staten Island, New York. The location of this Site is shown on Figure 1. The subject Site was reportedly utilized as a railroad locomotive and railcar servicing and maintenance facility and a railcar switchyard from 1883 to 1994. The City of New York purchased the Site in November 1998 for the development of a minor league baseball stadium and accessory public parking lots. The stadium, known as the Richmond County Bank Ballpark, is the home of the Staten Island Yankees, the NY-Penn League affiliate of the New York Yankees. The stadium development plan is provided as Figure 2. The last PRR for the Site was prepared by TRC in July 2022 for the August 26, 2010 to April 23, 2021 period.

Since the stadium was constructed and opened in 2001, portions of the Site were redeveloped. The Site was previously subdivided to include the Empire Outlets site (also referred to as “South Site 2”) on the south side of the baseball stadium and the New York Wheel site (also referred to as “North Site 1”) on the north side of the baseball stadium. Figure 3 provides the locations of both development projects on the Site. A copy of the PRR for the New York Wheel site and the Construction Completion Report (CCR) for the Empire Outlets site, which were prepared by others for each of these two development projects on the Site, are provided in Appendices E and F. In addition, copies of 2022 and 2023 Site Inspection Reports prepared for the Empire Outlets area are provided in Appendix F.

TRC was retained by the NYCEDC to conduct several phases of environmental investigations of this property from 1998 to 2000. On December 1, 1999, the New York State Department of Environmental Conservation (NYSDEC) and the City of New York entered into a Voluntary Cleanup Agreement (VCA) (Index Number W2-0852-99-10) that required the completion of the site investigation and remediation, if necessary. A Notice of Agreement documenting the finalization of the VCA for all parties who may acquire interest in the property was filed with Richmond County in December 1999.

The subject property is located in the northeastern St. George section of Staten Island. The subject site consists of approximately 52 acres of shoreline property, of which 26 acres comprise upland area and the remaining 26 acres are located under water. The Site includes the



approximately 2.2-acre South Site 2 (Empire Outlets) in its southeastern portion and the approximately 8.9-acre North Site 1 (New York Wheel) in its northwestern portion both shown on Figure 3. The aerial photograph on Figure 4 shows the South Site 2 area in the northwestern portion of the Site (within red-colored Site boundary outline) and the adjoining off-site South Site 1 area in the southeastern portion of the Empire Outlets building development footprint.

The Site is bounded by the following: a waterfront promenade along the New York Harbor to the northeast; a parking lot identified as South Site 1 to the southeast (with the Saint George Ferry Terminal beyond); Richmond Terrace roadway, which is highly developed with residences and small commercial/retail buildings, to the southwest; and undeveloped parkland and a portion of Bank Street to the northwest. The elevation of the Site is approximately 20 feet lower than the adjacent Richmond Terrace to the southwest, with a retaining wall separating the two.

The Site parcel was formerly identified on Tax Map Nos. 16 and 17 as Lot 20 of Block 2, excluding the railroad right-of-way. Since the redevelopment of the North Site 1 and South Site 2, Lot 20 was subdivided into Lots 15 (part of), 20 and 22 as shown on Figure 3.

Prior to the development of the minor league baseball stadium on the Ballpark at St. George Station Site, approximately three acres at the eastern end of the site were used as a public parking lot for the Staten Island Ferry terminal, located immediately east of the property. An area in the central portion of the site, approximately 3 acres in size and covered with shredded asphalt shingles, was also used for ferry parking. The western portion of the site, beyond the shingle-covered area, was characterized by an open grassed area with sparse tree growth. The entire northern edge of the site consisted of shoreline and various shoreline features including pilings, the remains of several dilapidated piers, damaged concrete bulkheads, and assorted debris. Several railroad tracks extended into the southern corner of the site. The only building was a small shack located at the eastern end of the site that was occupied by the parking lot attendant.

Remediation activities conducted prior to the baseball stadium development included the removal of an arsenic hot spot in the surface soil, the removal of lead hot spots in the sediments, the capping of soils containing polycyclic aromatic hydrocarbons (PAH) and metals with clean soil, pavement or structures. In addition, based on the detection of methane in the soil gas at several locations, a passive sub-slab gas venting system was installed below the concrete slab-covered areas of the new stadium building and indoor combustible gas monitoring system was installed. The soil and shoreline sediment removal locations are shown on the attached Figure 5.



In addition, the removal of soil contaminated with arsenic was conducted in the vicinity of surface soil sample SS-7 at the location shown on Figure 5. The top 12 inches of soil/fill materials were removed from the location. Prior to backfilling the area with clean soil, a permeable white filter fabric liner was placed over the excavation area as a demarcation liner.

Prior to the baseball stadium development, sediments contaminated with lead were removed from the vicinity of sediment samples SD-4 and SD-6. The top 3 feet of sediment was removed from these two shoreline areas shown on Figure 5. Prior to backfilling the area with clean sand and gravel, a black geotextile filter fabric was placed over the excavated shoreline area. The geotextile filter fabric used is a non-biodegradable, black, ultraviolet resistant, nonwoven, needle punched polypropylene fabric. Natural stone riprap was provided over the SD-4 and SD-6 removal areas and along much of the shoreline for stabilization and to prevent erosion.

Capping of other contaminated soils/fill across the Site was accomplished through the construction of baseball stadium development features (e.g., pavement, structures, riprap) or through the placement of a clean soil cover over impacted soil materials. Clean soil covers are present over areas of the site not covered by paved surfaces or permanent structures (e.g., buildings). The clean soil cover consists of at least 18 inches of clean soil in the open landscaped areas, except for the areas immediately surrounding the large pre-existing trees in the western-most wooded park area, where at least 6 inches of clean soil cover exists except for immediately adjacent to existing mature trees with exposed roots where a 6-inch thick layer of wood mulch is present. Some of the bermed landscaped areas have clean soil thickness of up to 36-inches in depth. The top 6 to 8 inches of all clean soil covers consist of topsoil material.

A permeable demarcation filter fabric was also placed below the soil cover layer in areas not covered by buildings or pavement with less than 18 inches of clean soil cover. The filter fabric liner was not placed within the drip line of existing and new trees or shrubs in this area, due to concerns regarding plant mortality. The fabric used was a light-duty, permeable, non-biodegradable, white geotextile fabric.

The stormwater management system installed for the baseball stadium development consisted of a series of swales and catch basins across the developed area that collected and directed stormwater to two hydrodynamic separator devices, four onsite detention basins and to stormwater outfalls along the shoreline. The two separators and four detention basins collected stormwater runoff from the paved parking lots and roadways to provide for the removal of solids and floating debris prior to



discharge to shoreline outfalls. Under the Site redevelopment, the one separator device and two detention basins on the Empire Outlets site (South Site 2) were eliminated and replaced with new stormwater management practices. Whereas, on the NY Wheel site (north Site 1), the central detention basin adjacent to the west side of the stadium was eliminated. The new stormwater management practices associated with the fully developed NY Wheel site will be installed when this site development is completed. The western-most basin in the wooded area just west of the NY Wheel site remains on the Site. The inspection of the eliminated basins and separator is no longer a part of annual site inspection reported in this PRR. The new stormwater controls installed or planned as part of the site development projects include a combination of underground stormwater detention systems and hydrodynamic separators located in the new development site areas. Descriptions of the new stormwater controls installed or planned on the Site for each of the two development projects are included in each of the respective attached reports in Appendix E and F.

A passive sub-slab methane venting system and interior continuous combustible gas monitoring system was installed for the ballpark stadium building during the construction of the baseball stadium in 2000-2001. The sub-slab vent piping consists of solid and perforated PVC piping. The piping consists of interconnected sections of solid and perforated 4-inch diameter Schedule 40 polyvinylchloride (PVC) pipe in below-grade gravel filled trenches overlain by a 6-inch thick interconnecting gravel layer. The tops and sides of the perforated piping are covered with a filter fabric to prevent clogging of the piping perforations with backfill and cover materials. In those areas finished with a concrete slab, the gravel layer is overlain with a 6-millimeter (mil) thick plastic vapor barrier. The plastic is covered with a sand layer that underlies the concrete slab. The vent piping exits the building as a set of four pipes at two locations: at the far, northwestern end of the stadium structure (left field side) and at the far northeastern end of the stadium structure (right field side). Generally, each set of vent pipes is associated with sub-slab vent piping that covers that half of the stadium. The vent piping that exits the building is constructed of 4-inch diameter Schedule 40 steel pipe. The steel piping is painted black for corrosion protection. Each pipe terminates at a gooseneck end with a mushroom cap and screen. The exterior vent pipe gooseneck sections are enclosed in chain link fencing.

In conjunction with the installation of the methane venting system, a continuous interior combustible gas monitoring system was installed within the lower level of the stadium structure in areas where methane accumulation was considered to be a potential concern. The sensor system



consists of 18 sensors and a monitoring panel. Drawings depicting the layout and details for the soil gas vent piping system and gas monitoring system are included in Appendix K of the Site Management Plan (SMP).

As presented in Section X of the VCA, institutional controls in the form of a deed restriction known as a Declaration of Covenants and Restrictions were originally recorded on September 14, 2005 with the Office of the Richmond County Clerk, Staten Island, New York. In line with recent site redevelopment activities, NYCEDC submitted a request to modify the deed restriction to specifically allow use of the property for commercial and/or industrial uses (versus the existing deed restriction language that prohibits use for any purpose other than as a sports stadium, public parking lot, and water-front esplanade). On January 5, 2022, NYSDEC issued a letter to NYCEDC approving this change of use restrictions. A copy of the letter is provided in Appendix H. A filing for the revised deed restriction incorporating the revised use restriction language in the NYSDEC letter is being prepared by the NYC Law Department for NYCEDC for submittal to NYSDEC for review and approval. Following NYSDEC's approval of the revised deed restriction, it will be submitted by the NYC Law Department to the Richmond County Clerk's Office for recording. The current deed restriction requirements include the following:

- a provision that the City of New York, on behalf of itself and its successors and assigns, consents to the enforcement by the NYSDEC, or if at any such time the NYSDEC shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens (hereafter referred to as the "Relevant Agency"), of the deed restrictions and covenants not to contest such enforcement;
- a land use restriction that prohibits the site from ever being used for purposes other than for the current use, which is a minor league baseball stadium, public parking lot and water-front esplanade, without prior permission from the NYSDEC, or if at any such time the NYSDEC shall no longer exist, any New York State agency or the Relevant Agency;
- a site ground water use restriction that prohibits the use of ground water underlying the site without treatment rendering it safe for drinking water, irrigation, or industrial purposes, as appropriate, unless prior written permission to use site ground water without treatment is obtained from the NYSDEC or the Relevant Agency;
- a requirement that the City of New York and its successors and assigns are to continue in full force and effect any institutional and/or engineering controls required, including the sub-slab methane venting system and the gas monitoring system, pursuant to the



VCA and maintain such controls unless prior permission to discontinue such controls is obtained from NYSDEC or the Relevant Agency;

- a requirement that written approval be obtained from NYSDEC or the Relevant Agency prior to any excavation activities on the site exceeding the following limitations: the clean soil cover consisting of at least 18 inches in open areas, the clean soil cover and filter fabric demarcation layer in the western wooded open area, the paved surfaces and underlying imported subgrade layer, and the footprints of existing buildings and structures and underlying imported subgrade materials. The limits of the above described areas are shown on the site map provided in Schedule B of the deed restriction. If excavation occurs on the property, any soils excavated must be managed, characterized and properly disposed of off-site in an approved and permitted facility in accordance with regulations and directives of the NYSDEC or Relevant Agency, or re-deposited onsite and covered with filter fabric and clean soil cover, unless it is demonstrated to the satisfaction of the NYSDEC or Relevant Agency that such soil is not contaminated with any substance that will pose a risk to human health; and
- a requirement that any deed of conveyance of the property, or any portion thereof, shall indicate that the conveyance is subject to the Declaration of Covenants and Restrictions, unless the NYSDEC or Relevant Agency has consented to the termination of such covenants and restrictions.

TRC prepared an Operation Maintenance and Monitoring (OM&M) Plan for the Site in March 2006. The OM&M Plan summarized the completed remedial activities and presented the operation, maintenance, and monitoring requirements for the Site remedial measures to ensure the long-term protection of public health and the environment. The OM&M Plan was used by AKRF to prepare a Site Management Plan (SMP) in February 2015 based on the NYSDEC SMP template. The SMP was updated by AKRF for the NY Wheel site in September 2016 with the addition of a Health and Safety Plan (HASP) Addendum (SMP Appendix E) and a Gas Monitoring System Operations & Maintenance (O&M) Plan (SMP Appendix P). The SMP will be updated after completion of the Site corrective measures identified in this report. The SMP will be revised in the next reporting period to reflect the new synthetic turf field cover system that was installed in the baseball stadium during this reporting period.

This Periodic Review Report along with the attached Institutional and Engineering Controls (IC/EC) Certification Form (Appendix A) is required to be completed and submitted to NYSDEC to document compliance with the SMP and to certify that the institutional and engineering controls are unchanged (unless otherwise approved by NYSDEC) and the remedy remains protective of public health and the environment. Also provided are copies of the PRR



prepared for the new site development activities that have occurred on North Site 1 (New York Wheel) portions of the Site and the CCR prepared for the site development activities that occurred on South Site 2 (Empire Outlets) in Appendices E and F, respectively. In addition, copies of the 2022 and 2023 Site Inspection Reports prepared for the South Site 2 (Empire Outlets) are provided in Appendix F. Copies of completed/signed IC/EC Certification forms for both of those Site parcels are also provided in Appendix A as supporting documentation for the IC/EC form provided for the entire Site. Section 2 of this report provides an overview of the findings of the site inspections that were conducted by TRC for the periodic review for the baseball stadium portion of the Site between South Site 2 and North Site 1. Conclusions regarding and any required corrective measures for the overall Site and the associated certifications are provided in Section 3.



2.0 SITE INSPECTION

The accessible soil-covered areas, paved surfaces, shoreline stone riprap, stadium building ground level concrete floor slab, and sub-slab gas vent pipes associated with the baseball stadium portion of the Site (Lot 20) were inspected by TRC to verify their continued long-term integrity. This included the Site area between the South Site 2 (Empire Outlets) and North Site 1 (New York Wheel) as well as the shoreline of the Site. In addition, the baseball stadium building indoor combustible gas monitoring system was inspected to verify its continued operation. The Site areas occupied by the construction sites for the adjacent New York Wheel and Empire Outlets developments are being inspected by others and, as a result, the documentation of the inspections associated with each are presented separately with the reports in Appendices E and F, respectively.

The annual baseball stadium and shoreline area site inspections were completed on January 6, 2023 and June 30, 2023 by Mr. Robert Bowden of TRC under the direction of Mr. James Peronto of TRC; both are State of New York-licensed Professional Engineers (PEs). The 2022 inspection was delayed until January 2023 due to a lack of available 2022 NYCEDC funding. Copies of the completed TRC Annual Site Inspection Logs are provided in Appendix B. Copies of photographs taken during the TRC site inspections documenting the observed conditions are provided in photograph logs in Appendix C. Specific photo numbers from the photograph log are referenced in the site inspection findings summarized below.

Covers

The annual site inspections included visual walkover surveys of the soil covered areas. The items inspected included the vegetation, any mulch cover, and the topsoil for any signs of erosion, settlement, subsistence, movement, or other undesirable conditions. During the site inspection, areas where sparse vegetation growth was observed include some bare soil spots in the grassed soil covered area along the outside of the outfield fencing (Jan. 2023 Photo 3 and June 2023 Photo 3), the former playground area outside of the left field fencing (Jan. 2023 Photo 8, June 2023 Photo 8), the small landscaped area outside of the right field fence (Jan 2023 Photo 9, June 2023 Photo 11), and the area along the west end of the stadium area bordering the NY Wheel area construction fence (Jan. 2023 Photo 5, June 2023 Photo 5). Although access was restricted to the western wooded area that was fenced off due to the adjacent New York Wheel incomplete project and paused construction activities, tall grass/weed vegetation was observed present over most of the



wooded area (Jan. 2023 Photos 28 and 29, June 2023 Photos 28 and 29). None of the white filter fabric demarcation liner that underlies the soil covered wooded area was observed in any of the stadium area portion of the Site inspected by TRC. **The bare soil areas must be revegetated with grass seed or otherwise permanently stabilized.**

The inspections also included visual walkover surveys of paved areas (concrete sidewalk, pavers, and asphalt roadway) which included the portion of Bank Street between the stadium and the shoreline and the western plaza area near left field (Jan. 2023 Photos 1, 4, 5, 6, 7, 8, 12, 13, 14, and 29; June 2023 Photos 1, 4, 7, 12, and 14). Damaged areas in the concrete sidewalk and asphalt paved Bank Street roadway surface, including cracks and potholes, were noted during the inspection (Jan. Photos 5 and 7, June Photo 7). However, none of the underlying subgrade was observed at observed damaged pavement locations. **The asphalt paved roadway damage (e.g., large cracks, potholes) will be repaired by the City during routine annual maintenance of the roadway.**

The interior ground-level concrete floor slab of the stadium building was inspected to observe the condition of both previously repaired and any new floor cracks that need to be caulked, sealed and/or otherwise repaired to minimize potential sub-slab vapor intrusion. During the inspection, TRC observed that some of the caulking/filler used to repair prior floor cracks had deteriorated/delaminated and portions of the cracks are exposed (Jan. 2023 Photos 35 and 36 and June Photos 34 and 35). **All new concrete floor cracks and previously repaired deteriorated cracks must be filled/repared by the stadium operator.**

Subslab Passive Exterior Gas Vent Pipes

The exterior steel vent pipes of the sub-slab passive gas venting system were inspected to ensure that they are in good condition and secure. Sets of gas vent gooseneck pipes are located inside fenced enclosures located outside of the right field/first base line and left field/third base line walls. In addition, gas measurements were obtained from each vent pipe with a portable organic vapor analyzer and a portable landfill gas meter. As indicated in the Gas Survey Logs completed by TRC and provided in Appendix B, no organic vapors or methane gas were measured at the vent pipes during the January 2023 and June 2023 site inspections.

Gas vent pipe aspects inspected include the general condition of the exterior steel vent piping, any corrosion on the piping, the pipe end caps/screens, and the chain-link fencing enclosure



surrounding each set of the vent pipes. The sets of four vent pipes located at both the northwestern end (left field/third base line side) and northeastern end (right field/first base line side) of the stadium structure were inspected. The fencing for the easternmost (right field side) vent piping was recently replaced in 2022 as part of the construction of the new ferry landing utility interconnect and the fencing was observed to be in good condition . However, there was vegetation growing with the fenced enclosure that requires removal (Jan. 2023 Photo 11 and June 2023 Photo 11). At the westernmost vent piping (left field side), TRC observed that the west side of the chain-link fence enclosure was partially open and requires repair (Jan. 2023 Photo 10 and June 2023 Phot 10). In addition, some invasive vegetation (vines) that could spread and obstruct the air flow of the vent piping has grown on the protective fencing at the same westernmost fenced vent pipe enclosure location (Jan. 2023 Photo 10 and June 2023 Photo 10). Some of the left field side vent piping also has signs of peeled paint and corrosion. **In response to these findings, at the western end (left field) vent piping the following corrective measures are needed: the fence enclosure must be repaired, the invasive vegetation on the fencing must be removed/eradicated, and the vent pipe corrosion removed and the piping primed/painted.** The vent pipe enclosure fencing at the easternmost (right field) location was replaced in 2022 by the construction contractor as part of the utility interconnect project completed at that location. **Vegetation growing inside of the eastern end (right field) fenced enclosure must be removed.**

Site Shoreline

The stone riprap and gravel cover present at the SD-4 and SD-6 shoreline sediment remediation areas was visually inspected. Items assessed during the inspection included the continued uniform presence of stone riprap and gravel cover across the two remediation areas and any exposure of the underlying black filter fabric demarcation liner. As was the case in the prior site inspections, TRC observed that some of the armor stone covering the SD-4 area had been washed away and as a result much of the underlying gravel cover is exposed and unprotected (Jan. 2023 Photo 24). **As part of the shoreline restoration work, larger/heavier stone riprap must be replaced over this entire SD-4 area to fill in those areas where the prior smaller/lighter stone cover has washed away and to cover the remaining smaller stone/concrete debris and gravel.** At location SD-6 adjacent to the 911 Memorial Plaza deck that overhangs the shoreline,



there is still sufficient large stone cover present along with the underlying gravel visible between the stone cover (Jan. 2023 Photo 19 and June 2023 Photos 18 and 19).

At other locations along the site shoreline, TRC observed the loss of riprap and gravel fill from along the base of the concrete seawall/bulkhead that runs along portions of the shoreline. Due to this condition, portions of the shoreline concrete seawall/bulkhead collapsed following a significant 2010 storm event and, as a result, sections of the adjacent inland soil area having at least an 18-inch thick, clean soil cover had also collapsed (dropped approximately 6 inches to 1 foot). During the July 2012 inspection, the underlying white demarcation filter fabric or historic fill soil were not evident in the collapsed shoreline soil areas. However, after Hurricane Sandy in October 2012, additional clean soil cover eroded and the underlying white demarcation fabric and/or underlying fill was exposed at several locations inland and adjacent to the retaining wall along the shoreline. During the 2023 site visits, TRC could only access the shoreline from the 911 Memorial and western-most wooded area due to the presence of the construction fence for the New York Wheel project being installed into the concrete seawall/bulkhead. Adjacent to the New York Wheel construction site is where the concrete seawall/bulkhead was previously observed undermined/collapsed and the adjacent inland soil eroded. The concrete seawall/bulkhead along the entire site shoreline continues to be undermined by wave action and the underlying gravel fill eroded (Jan. 2023 Photos 24 and 25 and June 2023 Photos 23, 24, and 25). At one location, the concrete seawall/bulkhead and chain-link fencing that runs along the bulkhead has collapsed and broken away with adjacent inland soil cover eroded (Jan. 2023 Photos 23 and 25 and June 2023 Photos 23 and 25). In addition, one of the stormwater outfalls was observed to be partially blocked with some of the dispersed gravel fill along the shoreline and should be cleared (Jan. Photo 26 and June 2023 Photo 26).

The NYC Office of Management and Budget (OMB) registered and assigned funding to NYCEDC for the shoreline seawall/bulkhead repair work. Federal Emergency Management Agency (FEMA) provided funding for the shoreline repairs and, as a result, a competitive public procurement was required along with a more detailed project review and approval process. After the original FEMA grant for the project expired in November 2022, the FEMA grant was reapproved in February 2023. The new FEMA grant expires in September 2024. NYCEDC has selected and contracted with an engineering firm for the engineering design, preparation of



project bid documents, and the review of competitive bids for the project construction. The following is the current 18-month schedule for the project design and construction.

Design Start: April 26, 2023

Design Completion: September 20, 2024

Construction Start: March 20, 2024

Construction Completion: October 20, 2024

Indoor Combustible Gas Monitoring System

The original indoor fixed combustible gas monitoring system installed in 2001 was replaced in 2022. The new system consists of a Sentry 5000-32IT controller and 18 new Sentry Model 5100-28-IT infrared combustible gas detectors. The new controller and sensors were installed at the same locations of the prior gas monitoring system. Gas monitoring system manufacturers and TRC recommend that combustible gas monitoring system inspections and calibrations be conducted at least every 6 months. TRC recommends conducting the semiannual gas monitoring system calibrations during the heating season and in the Spring just prior to the start of the minor league baseball season. The inspections and calibrations are to be performed by persons qualified in the maintenance of the gas monitoring system. NYCEDC has issued a service contract to a factory-trained/certified company, Economy Plumbing & Heating, to conduct the inspections and calibrations of the gas monitoring system. Copies of records for the new gas monitoring system inspections/calibrations conducted by Economy Plumbing & Heating in June 2022 and June 2023 are provided in Appendix D. The system calibration performed on June 5, 2023 indicated that one of the gas detectors (#104) failed calibration. Troubleshooting of the system by the service contractor indicated there was a wiring/programming issue with the controller and detector that was corrected on June 8, 2023. The calibration reports for June 5 and 8, 2023 provides the calibration record for the gas detectors including detector #104.

TRC also checked the gas monitoring system control panel during the January 6, 2023 and June 30, 2023 TRC site inspections. On those dates, the front panel of the monitoring system controller was observed to have a green-colored LED light indicating a SAFE normal operating condition with no alarms present. In addition, TRC's review of the controller menu screens indicated there were no alarms or warnings on those dates. On each day, TRC downloaded electronic copies of the History Report from the controller. The two History Reports document



the most recent monitoring system calibration dates of June 28, 2022, and June 5 and 8, 2023. Copies of these History Reports are provided with the gas monitoring system records in Appendix D.

During the two site inspections, TRC also conducted an indoor ambient air survey of methane and organic vapors in the lower level of the stadium building including in each of the rooms where gas monitoring sensors are installed. The indoor air monitoring results are summarized on the completed copies of the Gas Survey Log provided in Appendix B of the PRR. As indicated on the completed logs, the following instrumentation was used in the field for the surveys: a Thermo Scientific TVA2020 toxic vapor analyzer equipped with a PID and FID and a Landtec GEM 2000 or 5000 landfill gas analyzer for methane, oxygen, and carbon dioxide content. The findings of these surveys indicated no detectable methane gas at the monitored locations during both events. No organic vapors were detected during the January 2023 visit; however, a low organic vapor concentration (2.5 ppm) and odor was detected in the Fire Pump Room (Room 1.12.01) during the June 30, 2023 event. The source of this low organic vapor reading is being investigated by the operator; however, based on prior site inspection findings, the suspected source is the storage of paint containers in the area. Following the site inspection, the stadium operator verified that paint storage at the location was the source of the organic vapor and indicated that the paint would be removed from this area.

New Electrical Utility Interconnect for New Ferry Landing

A new electrical utility interconnection between the stadium and the new ferry landing off the adjacent Site shoreline was constructed in April-May 2021. A 15-day advanced email notification of this soil cover disturbance work was submitted by TRC to NYSDEC on March 4, 2021, with a follow-up email notification submitted on April 1, 2021. A copy of the written notification included a site figure depicting the location of this work is provided in Appendix I. Under contract to NYCEDC, TRC provided oversight of the on-site soil management activities and conducted adjacent community air monitoring during the soil excavation/backfill work. The soil excavation activities started on April 12, 2021 and were completed on May 27, 2021.

The utility excavation was completed below the Site clean cover which consists of a concrete sidewalk, concrete paver/asphalt/concrete roadway and adjacent soil covered grassed areas at that location. The excavated materials were segregated and collected in plastic-sheeting



lined 20 cubic yard (cy) steel roll-off containers staged on site. The topsoil recovered from the top 18 inches of the landscaped area was segregated and temporarily stored in an on-site roll-off container for on-site reuse. A waste characterization sample was collected from the excavated soil planned for off-site disposal by a Clean Earth representative and chemically tested in accordance with the SMP and disposal facility requirements. The soil test results indicated that the soil contained low levels of semivolatile organic compounds, metals and pesticides and was characterized as non-hazardous. Five roll-off containers holding approximately 75 cubic yards (97.07 tons) of excavated soil was transported off site on May 11 and 26, 2021 and disposed of off-Site at the permitted Clean Earth of Carteret facility in Carteret, New Jersey. Two roll-off containers holding approximately 40 cy (32.68 tons) of concrete and asphalt were transported off site on April 16, 2021 and May 13, 2021 for disposal/recycling at the Cardella Waste materials recovery facility in North Bergen, New Jersey. Copies of the associated waste profiles, soil laboratory test report, facility acceptance letter, manifests, and scale tickets are provided in Appendix I.

The utility excavations were backfilled with approximately 30 cy (39.53 tons) of imported 3/8-inch stone that was imported from the Tilcon quarry in Pompton Lakes, New Jersey. Prior to backfill, the bottom and sides of the trench excavation were lined with plastic, orange-colored safety fencing for a demarcation layer. One approximately 18 cy (23.74 tons) truck load of topsoil for use as the cover of the excavations in the lawn areas was delivered on May 26, 2021 from the Impact Recovery and Reuse Center in Lyndhurst, NJ. Requests to Import Fill or Soil Forms for the stone backfill and topsoil were completed by TRC and submitted to the NYSDEC Project Manager on March 26, 2021 and May 17, 2021, respectively, for approval prior to the material import. NYSDEC email approvals for the material imports were received on March 31, 2021 and May 24, 2021. The excavation backfill activities were completed on May 27, 2021. Copies of the imported backfill and soil documentation are provided in Appendix I.

TRC prepared Daily Reports during TRC's oversight of the soil excavation and backfill activities and copies of the daily reports were emailed to NYSDEC during the work. The Daily Reports included community air monitoring results and photo logs. The construction contractor provided as-built drawings that show the location of the new electrical utility interconnect for the new Ferry Landing. The as-built drawings also include cross-section detail drawings of the new cover conditions at the location. Copies of the completed Request to Import Forms and NYSDEC



approvals, TRC Daily Reports, and the contractor as-built drawings for the new electrical conduit installation are provided in Appendix I.

New Fire Water Hydrant/Pipeline for New Ferry Landing

A new fire water hydrant was installed on the Site in June-August 2022 for fire protection at the new shoreline ferry landing. The construction work included trench excavation for the installation of the subsurface water line east and southeast of the stadium right field gate. The trench excavation included approximately 135 linear feet of trenching and the installation of a 6-inch diameter water service branch. A 15-day advanced email notification of this soil cover disturbance work was submitted by TRC to NYSDEC on May 13, 2022. A copy of the written notification that included a site figure depicting the location of this work is provided in Appendix J. Under contract to NYCEDC, TRC provided oversight of the on-site soil management activities and conducted adjacent community air monitoring during the soil excavation/backfill work.

The soil excavation activities started on June 9, 2022. The utility excavation was completed below the Site clean cover which consists of an asphalt/concrete paved roadway and concrete paver roadway at that location. The excavated materials were segregated and collected in plastic-sheeting lined 20 cubic yard (cy) steel roll-off containers staged on site. Five roll-off containers holding approximately 20 cubic yards each (116.05 tons) of excavated soil were transported off site on July 14, 2022 (3 loads), July 21, 2022 (1 load), and August 26, 2022 (1 load) and disposed of at the permitted Clean Earth of Carteret facility in Carteret, New Jersey. Two roll-off containers holding approximately 40 cy of concrete and asphalt were transported off site on June 20, 2022 and August 25, 2022 for disposal/recycling at the Cardella Waste materials recovery facility in North Bergen, New Jersey. Copies of the soil waste profile, soil laboratory test report, transporter and facility permits, facility acceptance letter, manifests/shipping and scale tickets are provided in Appendix J.

The bottom of the water line excavation was backfilled with approximately 15 cy (18.16 tons) of 3/8-inch stone imported from the Tilcon quarry in Pompton Lakes, New Jersey. The remaining excavation was backfilled with approximately 45 cy (60 tons) of virgin sand from the Eastern Concrete Materials quarry in Quinton, NJ. Prior to backfill, the bottom and sides of the trench excavation were lined with plastic, orange-colored safety fencing for a demarcation layer. Requests to Import Forms for the stone backfill and sand were completed by TRC and submitted



to the NYSDEC Project Manager for approval prior to the material import. The excavation backfill activities were completed on August 26, 2022. TRC prepared daily reports during TRC's oversight of the soil excavation and backfill activities and copies of the daily reports were emailed to NYSDEC during the work. Copies of the completed Request to Import Forms and NYSDEC approvals, Daily Reports, and as-built drawings for the new water line and hydrant installation are provided in Appendix J.

New Synthetic Turf Sports Field

In 2022, the natural grass turf soil and infield clay ballfield in the baseball stadium on the Site was replaced with a new synthetic turf field. The new synthetic turf system replaced the existing 18-inch thick ballfield soil cover system with a minimum of 7-inch-thick layer of clean preexisting soil/pea gravel and/or clean imported soil, a minimum 3-inch-thick layer of imported dense grade aggregate (DGA), a minimum 5-inch-thick layer of clean imported base stone, a minimum 1-inch-thick layer of clean imported finish stone, and a 2-inch-thick synthetic turf system. Different 2-inch-thick turf systems were installed for the infield and outfield grass areas, the infield clay area, and the warning track area. Langan Engineering, Environmental, Surveying Landscape Architecture and Geology (Langan) oversaw the construction activities during ground intrusive activities for the new synthetic turf field system and associated new stormwater drainage/detention system. A Site Management Plan Operations Report was prepared by Langan to document the completion of this work in accordance with the SMP. A copy of the Langan report is provided in Appendix K which includes all the below referenced documentation.

As part of the new synthetic turf field system, a new subsurface stormwater drainage system was installed. A 15-day advanced notification package for this soil cover disturbance work was prepared by Langan and submitted to NYSDEC on December 16, 2021. A copy of the written notification included the design drawing package depicting the location and extent of this work is provided in the Langan report in Attachment B of Appendix K.

On February 11, 2022, February 18, 2022, and March 16, 2022, Langan provided NYSDEC written email notifications of the three soil disposal facilities planned for the project. The disposal facility notifications information including the contractor disposal facility notification, the disposal facility waste approval letter, waste profile/material characterization report, facility permits, and



waste characterization soil sample laboratory data report for each disposal facility are provided in Attachments E and F of Appendix K.

The soil excavation activities for the new turf field and drainage utilities started on February 1, 2022, with the completion of the project on April 22, 2022. Clean cover soils from the 0- to 1.0-foot below grade interval were excavated from across the ballfield and stockpiled on site for potential on-site reuse. In addition, deeper trench excavations from approximately 1.5- to 6-feet below grade (ftbg) were completed at select locations below the clean soil interval for the installation of the new storm drainage/detention system. The soils excavated from below the 0- to 1.0-ftbg clean soil cover were segregated and stockpiled separately for off-site disposal. The excavated soils were stockpiled on and covered by plastic sheeting until reuse or removal. A Request to Reuse Soil Form was completed by Langan for the reuse of the excavated 0- to 1-ftbg clean soil cover materials and submitted to the NYSDEC Project Manager on February 8, 2022. In an email dated February 9, 2022, the NYSDEC Project Manager approved the on-site reuse of the prior clean soil cover materials in accordance with the SMP. Copies of this documentation are provided in Attachments B and H of Appendix K. Some of the cover soils recovered from the 0- to 1.0-ftbg interval were reused on site to backfill trenches where existing buried utilities were removed. However, much of the prior cover soils could not be reused on site because it wasn't suitable drainage/structural material for the new turf field subbase.

Soils were disposed of at the following three permitted off-site disposal facilities:

- Impact Reuse & Recovery Center (IRRC) in Lyndhurst, New Jersey – 7,244.39 tons
- Bayshore Soil Management LLC (BSM) in Keasbey, New Jersey – 1,968.14 tons
- Hazleton Creek Associates Inc. (HCA) in Hazleton, Pennsylvania – 1,289.13 tons

Soils disposed of at the IRRC facility included soils excavated from the 0- to 1.0-ftbg clean soil cover interval. Some soils from the 1.0- to 1.5 ftbg clean soil cover interval were also disposed of at the IRRC facility. All other excavated soils from the 1- to 6-ftbg interval were disposed of at the BSM or HCA facilities. A total of approximately 8,360 cy (10,501.66 tons) of soil was transported and disposed off site. A summary of the soils transported off site and disposed of at these facilities is provided in the Material Disposal Log summary table in Attachment D of Appendix K. Copies of the soil disposal manifests are provided in Attachment F of Appendix K.

Clean borrow material was imported for the utility trench backfill and turf field subbase. Materials were imported to the project site from January 25, 2022 to April 7, 2022. The materials



included several types of mined virgin stone. The following stone types were imported from the indicated sources:

Stavola Construction Materials, Bridgewater, New Jersey

- 3/8-inch Virgin Finish Stone (Turf Field Subbase) – 1,126.09 tons
- Virgin Dense Graded Aggregate (DGA) (Turf Field Subbase) – 2,203.41 tons
- 3/4-inch Virgin Stone (Turf Field and Drainage Piping Subbase) – 48.43 tons
- 2.5-inch Virgin Stone (Stabilized Construction Entrance) – 38.57 tons

Tilcon Mt. Hope Quarry, Wharton, New Jersey

- 3/4-inch Virgin Stone (Turf Field and Drainage Piping Subbase) – 4,349.82 tons

The storm drainage utility excavations were backfilled with 3/4-inch stone and dense graded aggregate (DGA) for subbase. Prior to backfill, the bottom and sides of the trench excavation were lined with plastic, orange-colored safety fencing for a demarcation layer. A 1-inch thick layer of 3/8-inch finish stone was spread across the ballfield for final surface leveling below the synthetic turf field. The 2.5-inch stone was used for the temporary stabilized construction entrance.

Copies of the Request to Import Fill Forms completed by Langan for each imported borrow material and the associated NYSDEC Project Manager approval emails are provided in Attachment H of Appendix K. Supporting documentation attached to each of the completed forms include copies of the respective source Mine Registration Certificate, a letter from the material source describing the source, and a material gradation report. Copies of the material import tickets are provided in Attachment I of Appendix K. A summary of the imported borrow materials is provided in the Material Import Log summary table in Attachment G of Appendix K.

Daily reports were completed by Langan during their oversight of the soil excavation, backfill, and synthetic turf field construction activities. Daily Reports, which included community air monitoring plan (CAMP) monitoring data reports and photographic logs, were emailed to NYSDEC Project Manager during the work. Copies of the Langan Daily Reports, photographic logs and CAMP data are provided in Attachments J, K, and C, respectively, in Appendix K.

As-built drawings that document the extent and finished grade of the new turf ballfield, the installed demarcation layer, the new storm drainage system layout, and cross sections of the associated cover types are provided in Attachment A of Appendix J.



3.0 CONCLUSION

Based on the findings of the Site inspections and status of the on-going Site construction activities, corrective measures are required to existing site engineering controls and the completion of new engineering controls currently under construction is required to ensure the effective performance of the engineering controls and the continued protection of public health and environment. The following presents a summary of the engineering controls requiring corrective actions or construction completion for the baseball stadium area, the Empire Outlets area (South Site 2), and the New York Wheel area (North Site 1) portions of the Site. Also provided is a separate discussion of the Institutional and Engineering Controls Certification Forms (IC/EC Certification Form) completed for the Site including those completed for the Empire Outlets and New York Wheel projects. Copies of the supporting PRRs including the certifications for the New York Wheel and Empire Outlets projects are attached as Appendices E and F, respectively. Copies of all the completed/signed IC/EC Certification Forms are also provided in Appendix A.

3.1 Corrective Measures Required

3.1.1 Baseball Stadium

Based on the findings of the site inspections, the required corrective measures include the repair of the damaged shoreline concrete seawall/bulkhead and replacement of armor stone riprap along parts of the site shoreline and seawall/bulkhead, including at the SD-4 shoreline sediment remediation location. Also, adjacent eroded inland clean soil cover and underlying soil areas must be restored and the grassed soil cover reestablished at the restored locations along the seawall. Along the site shoreline, the separating demarcation fabric between any restored soil cover and underlying historic fill/soil must also be verified and reinstalled, as needed, and consistent with the original site remedy.

The NYC Office of Management and Budget (OMB) registered and assigned funding to NYCEDC for the shoreline seawall/bulkhead repair work which was recently provided by FEMA. NYCEDC has selected and contracted with an engineering firm for the design, preparation of project bid documents, and review of the competitive bids for the project construction. The following is the current 18-month schedule for the project design and construction.

Design Start: April 26, 2023



Design Completion: September 20, 2024

Construction Start: March 20, 2024

Construction Completion: October 20, 2024

In addition to the shoreline repairs, minor repairs that are required to maintain other site remedy components include filling of concrete floor cracks in the lower level of the baseball stadium building, painting of exterior sub-slab gas vent pipes, and repair of a fenced sub-slab gas vent pipe enclosure. None of these outstanding minor repairs are currently believed to present an immediate threat to public health or the environment. The NYCEDC and stadium operator are in the process of completing these repairs and expect to have them completed by September/October 2023. In addition, NYCDOT and NYCEDC will complete routine repair and maintenance of Bank Street paving and the landscaped areas along Bank Street.

A Corrective Measures Work Plan (CMWP) was previously prepared by TRC for the shoreline seawall/bulkhead restoration corrective measures required for the Site shoreline. The CMWP is provided in Appendix G of this report. Since this plan was prepared, additional shoreline erosion has occurred, and the preliminary existing conditions and engineering design drawings provided with the plan are being updated by the engineering firm awarded this work by NYCEDC. The CMWP, including the design drawings and project schedule, will be updated after the design for the shoreline seawall/bulkhead restoration is completed. The updated CMWP will be submitted to NYSDEC for review and approval prior to the shoreline restoration construction work.

3.1.2 Empire Outlets (South Site 2)

The following presents a summary of the engineering controls previously completed for the Empire Outlets area as summarized in the associated CCR provided in Appendix F of this report.

- The construction of the building concrete foundations/slabs and paved surfaces that serve as the site cover.
- The installation of vapor barriers and a passive sub-slab depressurization system (SSDS)e.
- The installation of an indoor combustible gas monitoring system.



GEI conducted site inspections of the Empire Outlets area on September 14 and 28, 2022 and on June 7 and July 12, 2023. Copies of the two GEI inspection reports are provided in Appendix F. The findings of the GEI site inspections of the Empire Outlets area indicated that there was no visible evidence of damage to the site cover system, no reported or observed soil disturbance activities, the accessible SSDS monitoring points were in good condition with no field detections of Volatile Organic Compounds (VOCs) or methane, the SSDS roof vents were in good condition, and no detections of VOCs or methane during indoor air quality screening in monitored spaces. However, during the July 12, 2023 calibration of the indoor gas monitoring system, two of the detectors did not connect to the mobile app for field testing or calibration and five other detectors failed the span gas calibration.

On July 31, 2023, the Empire Outlets operator placed an order for replacement gas detector head units and testing/calibration gas. The lead time on those units is approximately 9 weeks with delivery anticipated around October 1, 2023. In the meanwhile, the operator is looking into other suppliers that can provide the units sooner and the shelf life of the units so they can keep extra units on site for backup as needed.

3.1.3 New York Wheel (North Site 1)

The following presents a summary of the status of the construction of the engineering controls for the New York Wheel project as summarized in the associated PRR provided in Appendix E of this report.

- The historical Site cover was removed from North Site 1. The new cover has been partially installed (concrete Garage, Terminal Building and Wheel foundations, and some paved areas are in place). Where installed, the new cover was observed to be in good condition. The exception, a crack noted in an asphalt driveway west of the Garage, did not penetrate through the asphalt, and will be repaired during future construction. The cover will be restored throughout this area as subgrade construction is completed, which will be documented in subsequent PRRs. The new cover will consist of impervious surfaces (concrete foundations and asphalt or concrete paved areas) and landscaping (a minimum of 12 inches of imported clean soil underlain by a demarcation layer) and will meet the requirements outlined in the SMP.
- The sub-slab vapor depressurization system (SSDS) on North Site 1 was installed (with the exception of the wind turbine cap on the rooftop SSDS riser) and operational as of April 23, 2018. The vapor barrier had been installed beneath the ground-level enclosed Garage areas and beneath the Terminal Building foundation. A temporary cap was placed on the SSDS riser in late January 2018 to protect it from the elements; the temporary cap will be replaced with a permanent wind turbine cap as building



construction progresses. Once the Terminal Building construction is complete, indoor air quality sampling in the Terminal Building is necessary to demonstrate that the passive SSDS is adequate and does not need to be made active. In addition, a methane monitoring system will be installed in the Terminal Building in accordance with the SMP.

- Pre-soil disturbance groundwater samples and samples collected following the first phase of soil disturbance identified no evidence of significant petroleum contamination in the area of historical residual petroleum contamination in the northeastern portion of North Site 1. Of the six groundwater monitoring wells historically located in this area, only three could be located for sampling. These wells (and an additional historical well encountered during construction) were properly closed prior to the start of significant soil disturbance. Six wells will be re-installed in this area following the completion of construction, and one round of sampling for VOCs and SVOCs will be conducted to confirm that no residual petroleum contamination is present.
- The historical Site stormwater management system on North Site 1 was disturbed by the ongoing construction; the historical Western Basin and Central Basin were backfilled. These basins will be replaced by a new stormwater management system as summarized in Section 2.3.2 of the PRR in Appendix E.

Due to the stalled project construction, portions of North Site 1 are not yet provided with the required cover system. Upon completion of construction, the entire North Site 1 will be provided with a cover in accordance with the SMP. The final cover for this area will be documented in subsequent PRR submittals.

The North Site 1 sub-slab vapor barriers and depressurization system were installed. The indoor gas monitoring system will be installed after future completion of the Terminal Building. Upon completion of the Terminal Building construction, one round of indoor air quality sampling will be conducted in the building to demonstrate that the passive SSDS is adequate and does not need to be made active. The final completion of the indoor air quality testing and installation of indoor combustible gas monitoring system will be documented in subsequent PRR submittals after completion of the Terminal Building construction.

An annual site inspection of the NY Wheel area was conducted by AKRF on June 15, 2023. A copy of the completed site inspection log is provided in Appendix F of the NY Wheel PRR in Appendix E. The inspection of the NY Wheel site area indicated the following deficiencies that require corrective measures:

- There are some damaged tarps left on the Bank Street soil stockpile, and the silt fence along the stockpile is damaged. However, due to the dense vegetation covering the stockpile, only minimal soil runoff onto the adjacent Bank Street was noted. AKRF



recommended removing the remaining tarps and seeding any bare areas to provide permanent erosion control for the pile.

- There's a small area of damaged silt fence and damaged fabric on the construction fence along the North Site 1 northern perimeter. This silt fencing requires repair or replacement.
- The stormwater detention basin to the west of North Site 1 is overgrown, and the outlet has some debris (branches) on it. The inlet and the outlet of the basin must be cleared of obstructions and maintained in good condition.
- There is a small area (approximately 2 feet x10 feet) on the eastern side of North Site 1 where the gravel surface cover has worn away and underlying soil is exposed. The temporary gravel cover in this area must be replaced.
- There is also a small area (approximately 2 feet x3 feet) on the eastern side of North Site 1 where asphalt was removed to get rid of a bump and soil is exposed. Temporary gravel or an asphalt cover is required at this location.

The above corrective measures are anticipated to be addressed by the operator in August/September 2023. The two disturbed temporary cover areas are within the NY Wheel area that is surrounded by a chain-link fence with a locked gate and are thereby inaccessible to the public.

3.2 Institutional and Engineering Controls Certifications

The Institutional and Engineering Controls Certification Form (IC/EC Certification Form) has been completed for the entire VCA Site and is provided in Appendix A. However, based on the findings of the Site inspections and incomplete Site development construction activities on two parts of the Site, the Owner/Designated Representative (NYCEDC) and Professional Engineer (TRC) cannot certify the engineering controls for the following reasons:

- Corrective measures are required to repair damage/erosion to shoreline elements of the soil cover, concrete seawall/bulkhead, and stone rip-rap shoreline protection system for the Site.
- Construction activities have not been completed on the New York Wheel (North Site 1) Site area. As a result, the new engineering controls in this area including the site cover and indoor combustible gas monitoring system are not fully complete.

To support the filing of the IC/EC Certification form for the entire Site with this PRR, IC/EC Certification Forms were completed by the operators of both the North Site 1 and the South Site 2.

An IC/EC Certification Form was completed by NYCEDC and the consultant for North Site 1 (New York Wheel) Site development. A copy of the completed IC/EC certification form is

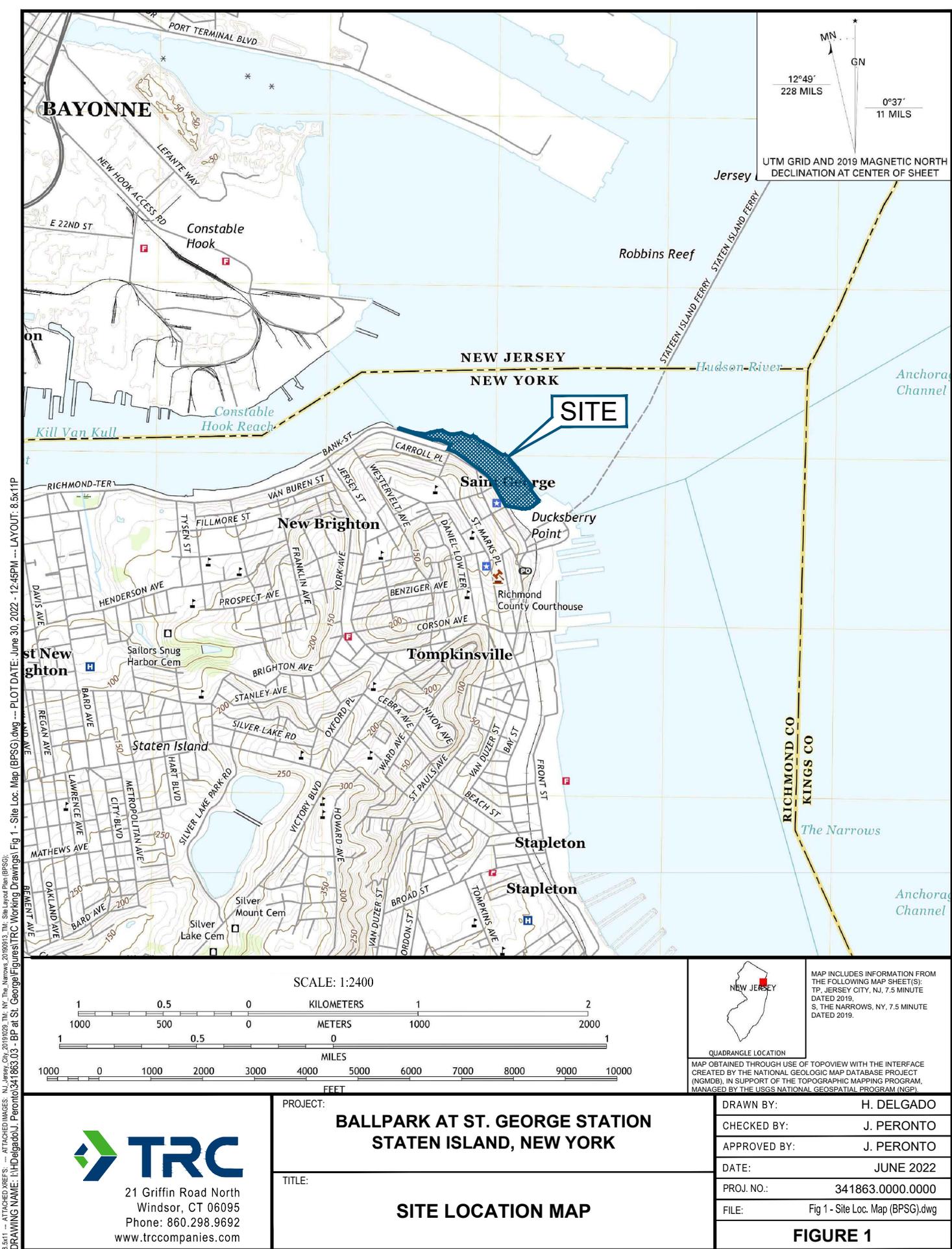


provided in Appendix L of the New York Wheel PRR provided as Appendix E to this report. A copy of this completed IC/EC form is also provided in Appendix A. Since the construction of the engineering controls, including the site cover and indoor gas monitoring system, is not complete, they could not certify that the required engineering controls are in place.

For South Site 2, an IC/EC Certification Form was completed by the developer and consultant for the South Site 2 (Empire Outlets) Site development. A copy of the completed certification form is provided in with the Empire Outlets documentation in Appendix F of this report. A copy of this completed IC/EC form is also provided in Appendix A.

The institutional controls for the Site remain in place and are in the form of a deed restriction known as a Declaration of Covenants and Restrictions recorded on September 14, 2005 with the Office of the Richmond County Clerk, Staten Island, New York. As a result of the site redevelopment activities, NYCEDC submitted a request to modify the deed restriction to specifically allow use of the property for commercial and/or industrial uses (versus the existing deed restriction language that prohibits use for any purpose other than as a sports stadium, public parking lot, and water-front esplanade). On January 5, 2022, NYSDEC issued a letter to NYCEDC approving this change of use restrictions. A copy of the letter is provided in Appendix H. A filing for the revised deed restriction incorporating the revised land use restriction language in the NYSDEC letter is being prepared by the NYC Law Department for NYCEDC for submittal to NYSDEC for review and approval. Since the VCA Site area has been broken into several new tax lots (20, 22, and part of 15) since the original deed restriction, NYSDEC has requested NYCEDC to provide a current property survey with a metes and bounds description of the VCA Site for the revised deed restriction. NYCEDC is in the process of completing an updated metes and bounds survey for the VCA Site area. Following NYSDEC's review of the updated property survey and incorporation of the survey in the revised approved deed restriction, it will be submitted by the NYC Law Department to the Richmond County Clerk's Office for recording.

FIGURES



BAYONNE

**NEW JERSEY
NEW YORK**

SITE

St. George

New Brighton

Ducksberry Point

Tompkinsville

St. New Brighton

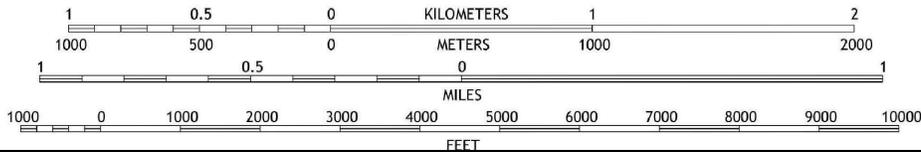
Staten Island

Stapleton

Stapleton

**RICHMOND CO
KINGS CO**

SCALE: 1:2400



MAP INCLUDES INFORMATION FROM THE FOLLOWING MAP SHEET(S):
TP, JERSEY CITY, NJ, 7.5 MINUTE DATED 2019,
S, THE NARROWS, NY, 7.5 MINUTE DATED 2019.

QUADRANGLE LOCATION
MAP OBTAINED THROUGH USE OF TOPOVIEW WITH THE INTERFACE CREATED BY THE NATIONAL GEOLOGIC MAP DATABASE PROJECT (NGMDB), IN SUPPORT OF THE TOPOGRAPHIC MAPPING PROGRAM, MANAGED BY THE USGS NATIONAL GEOSPATIAL PROGRAM (NGP).

TRC
21 Griffin Road North
Windsor, CT 06095
Phone: 860.298.9692
www.trccompanies.com

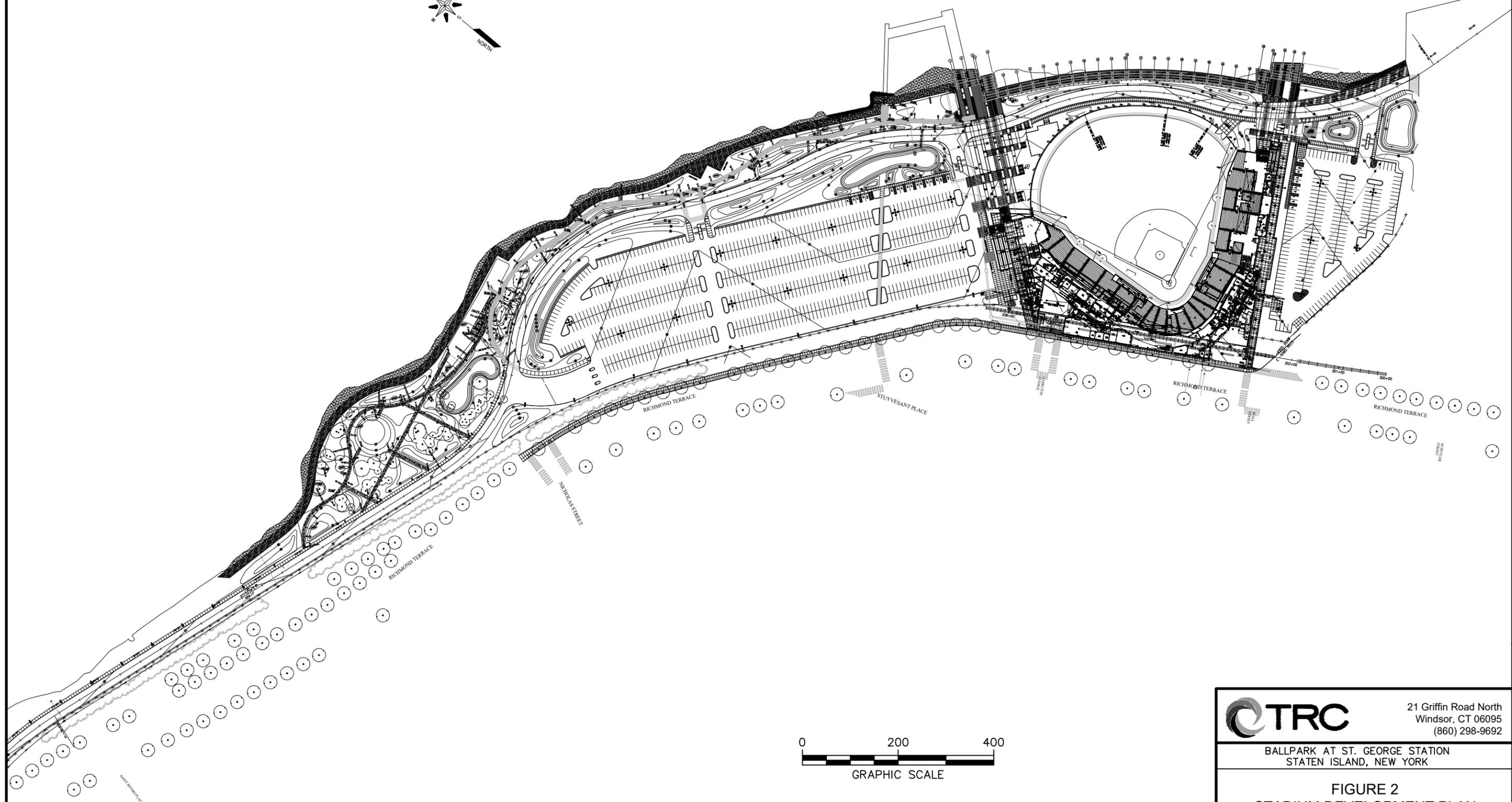
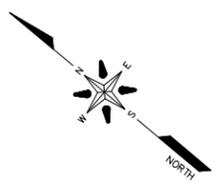
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STATEN ISLAND, NEW YORK**

TITLE: **SITE LOCATION MAP**

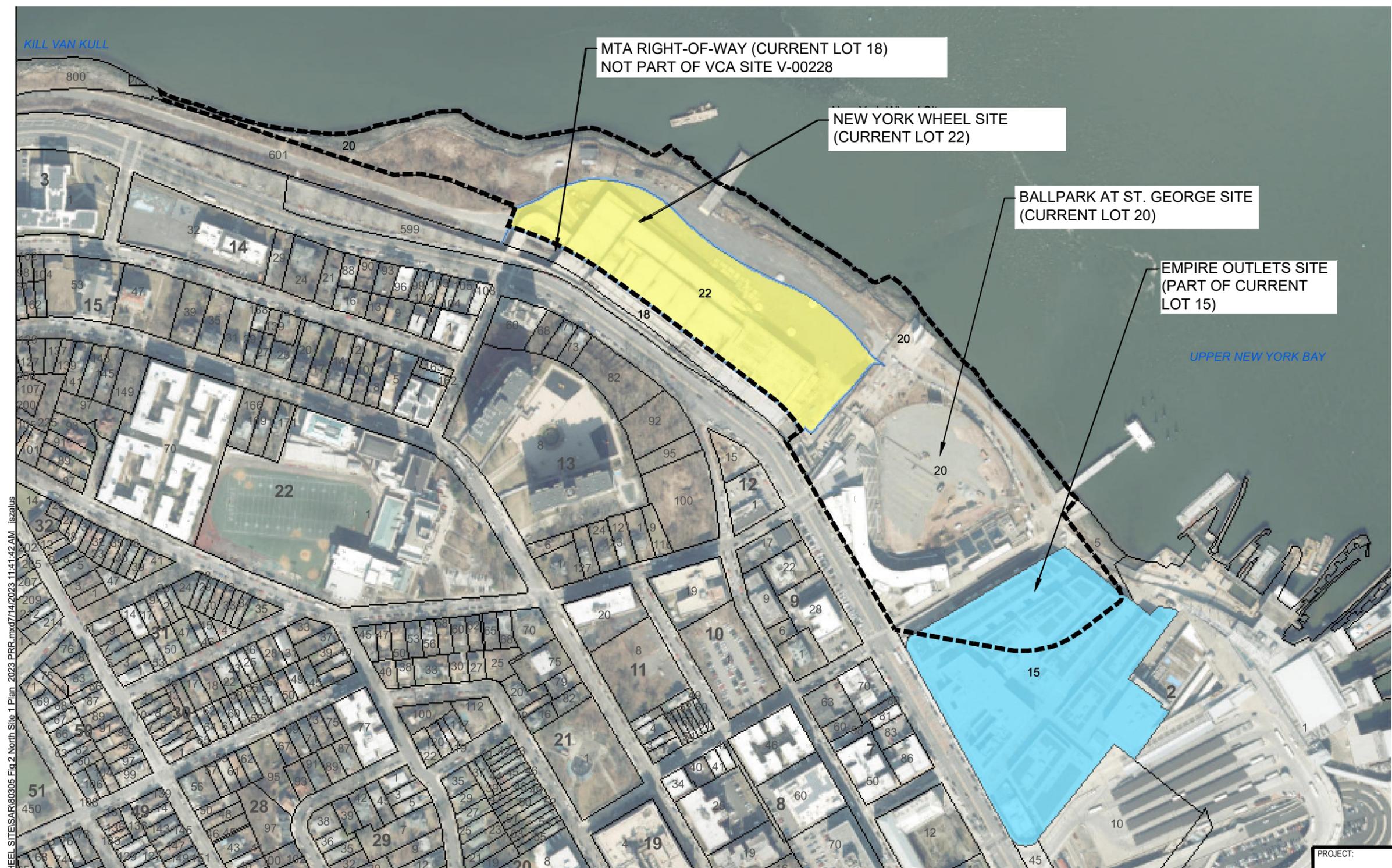
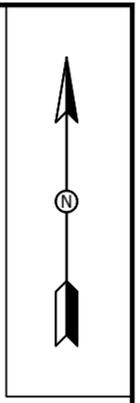
DRAWN BY: H. DELGADO
CHECKED BY: J. PERONTO
APPROVED BY: J. PERONTO
DATE: JUNE 2022
PROJ. NO.: 341863.0000.0000
FILE: Fig 1 - Site Loc. Map (BPSG).dwg

FIGURE 1

6.5411 - ATTACHED XREFS: ... ATTACHED IMAGES: N:\Jersey_City_20191029_TMI_NY_The_Narrows_20190913_TMI_Site_Loc_Map (BPSG).dwg --- PLOT DATE: June 30, 2022 - 12:46PM --- LAYOUT: 8.5x11P
DRAWING NAME: I:\HDelgado\J_Peronto\341863.03 - BP at St. George\Figures\TRC Working Drawings\Fig 1 - Site Loc. Map (BPSG).dwg



	21 Griffin Road North Windsor, CT 06095 (860) 298-9692
	BALLPARK AT ST. GEORGE STATION STATEN ISLAND, NEW YORK
FIGURE 2 STADIUM DEVELOPMENT PLAN	
Date: 07/09/10	Project No. 113429-000310-00001

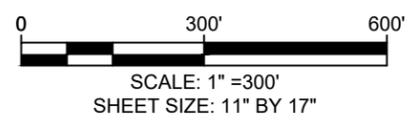


LEGEND:

- VCA SITE V-00228 (HISTORIC TAX BLOCK 2, LOT 20)
- NEW YORK WHEEL SITE (NORTH SITE 1)
- EMPIRE OUTLETS SITE (CURRENT LOT 15)
- LOT BOUNDARY AND TAX LOT NUMBER
- TAX BLOCK NUMBER

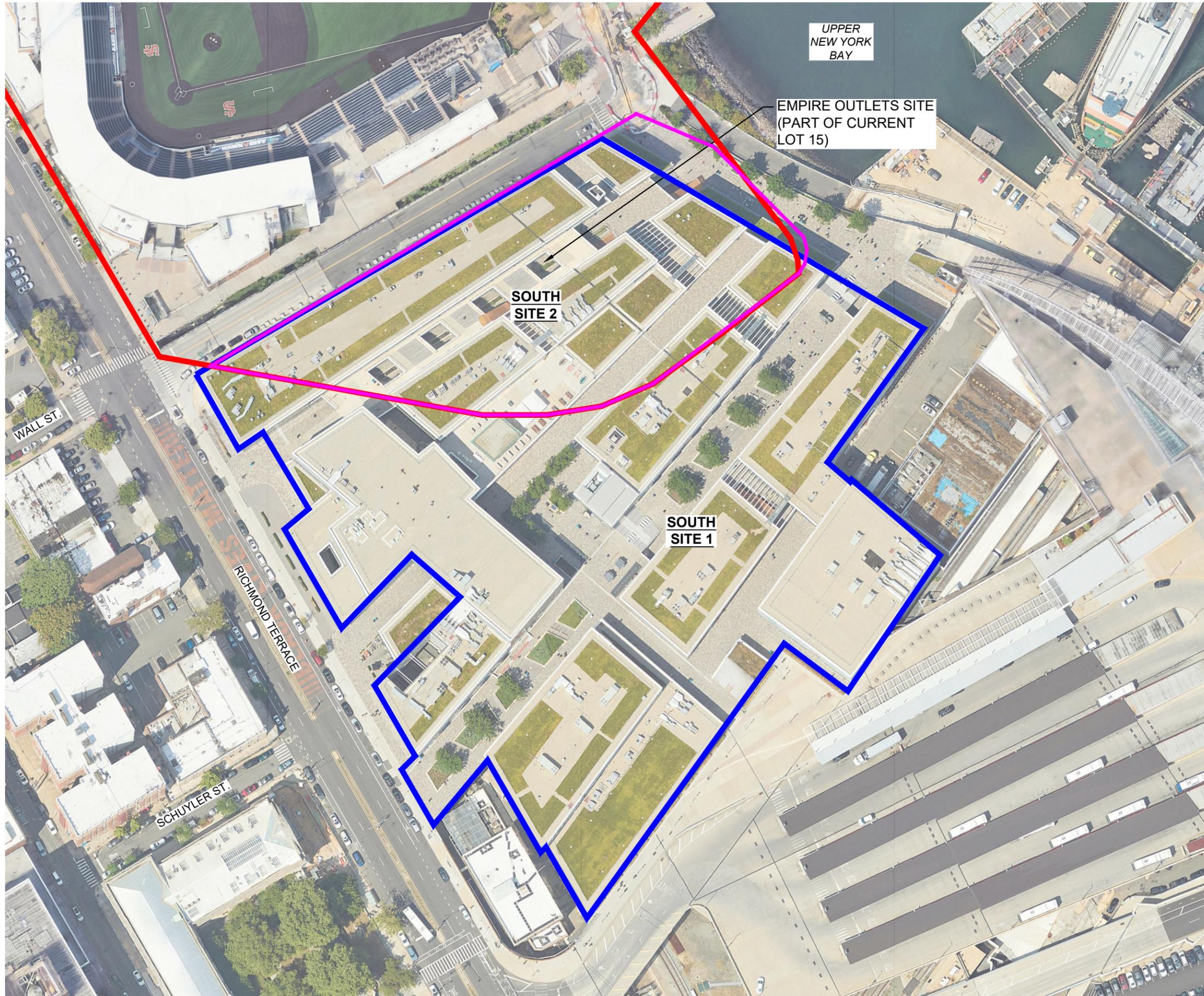
SOURCE ADAPTED FROM:

PREPARED BY AKRF, INC. ENVIRONMENTAL CONSULTANTS FOR PERIODIC REVIEW REPORT 2023, BALLPARK AT ST. GEORGE STADIUM - NORTH SITE 1 PLAN, NEW YORK WHEEL SITE, STATEN ISLAND, NEW YORK, NYSDEC VCP SITE NO V00228, JULY 14, 2023.



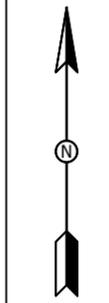
PROJECT:	
BALLPARK AT ST. GEORGE STATION STATEN ISLAND, NEW YORK	
TITLE:	
SITE LAYOUT PLAN	
DRAWN BY:	H. DELGADO
CHECKED BY:	J. PERONTO
APPROVED BY:	J. PERONTO
DATE:	JULY 2023
PROJ NO.:	341863.0000.0000
FIGURE 3	
21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trccompanies.com	
FILE NO.:	Fig 3 - Site Layout Plan (BPSG) R1.dwg

11x17 - ATTACHED REFS: baw, MAN, SERV, FELD, SHANAHAN - ATTACHED IMAGES: GEP0902020(BPSG), DRAWING NAME: I:\HDelgado\J.Peronto\341863.03 - BP at St. George\figures\TRC VDI Fig 3 - Site Layout Plan (BPSG) R1.dwg - PLOT DATE: July 17, 2023 - 5:17PM - LAYOUT: 11x17L
 HEEL SITE\SRV080305 Fig 2 North Site 1 Plan 2023 PRR.mxd\7/14/2023 11:41:42 AM iszalus



LEGEND:

- SOUTH SITE 2 PROJECT BOUNDARY
- BUILDING FOOTPRINT
- VCA BOUNDARY



SOURCE ADAPTED FROM:

PREPARED BY AKRF, INC. ENVIRONMENTAL CONSULTANTS FOR REPORT; BALLPARK AT ST. GEORGE STADIUM, RICHMOND COUNTY, NEW YORK SITE MANAGEMENT PLAN, NYSDEC SITE NUMBER: V00228, 09/2016 TITLED; FIGURE 2 SOUTH SITE 2 PLAN DATED 11/19/2014.

NOTES:

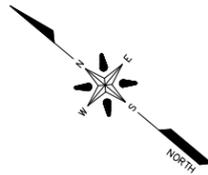
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
2. AERIAL BASE MAP SOURCED FROM GOOGLE EARTH PRO 2023 DATED JUNE 19, 2022.



SCALE: 1" = 100'
SHEET SIZE: 11" BY 17"

PROJECT:	
BALLPARK AT ST. GEORGE STATION STATEN ISLAND, NEW YORK	
TITLE:	
EMPIRE OUTLETS DEVELOPMENT (SOUTH SITE 2 AND SOUTH SITE 1) AERIAL PHOTO LOCATION	
DRAWN BY:	H. DELGADO
CHECKED BY:	J. PERONTO
APPROVED BY:	J. PERONTO
DATE:	JULY 2023
PROJ NO.:	341863.0000.0000
FIGURE 4	
21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trccompanies.com	
FILE NO.:	Fig 4 - Empire Outlets (South Sites 2 & 1) APL (BPSG) R1.dwg

11x17 -- ATTACHED REFS: bowi, MAN, SERV, FELD, StatenIsland -- ATTACHED IMAGES: Figure 4 - V00228, Ballpark at St. George Station, Figure 072616, Site Layout Plan (BPSG), DRAWING NAME: I:\NYC-FP\Shared\HDelgado\J_Peronto\341863.00 - BP at St. George\Figures\TRC WDI\Fig 4 - Empire Outlets (South Sites 2 & 1) APL (BPSG) R1.dwg -- PLOT DATE: July 17, 2023 - 8:17PM -- LAYOUT: 11X17L



SD-6 COORDINATES

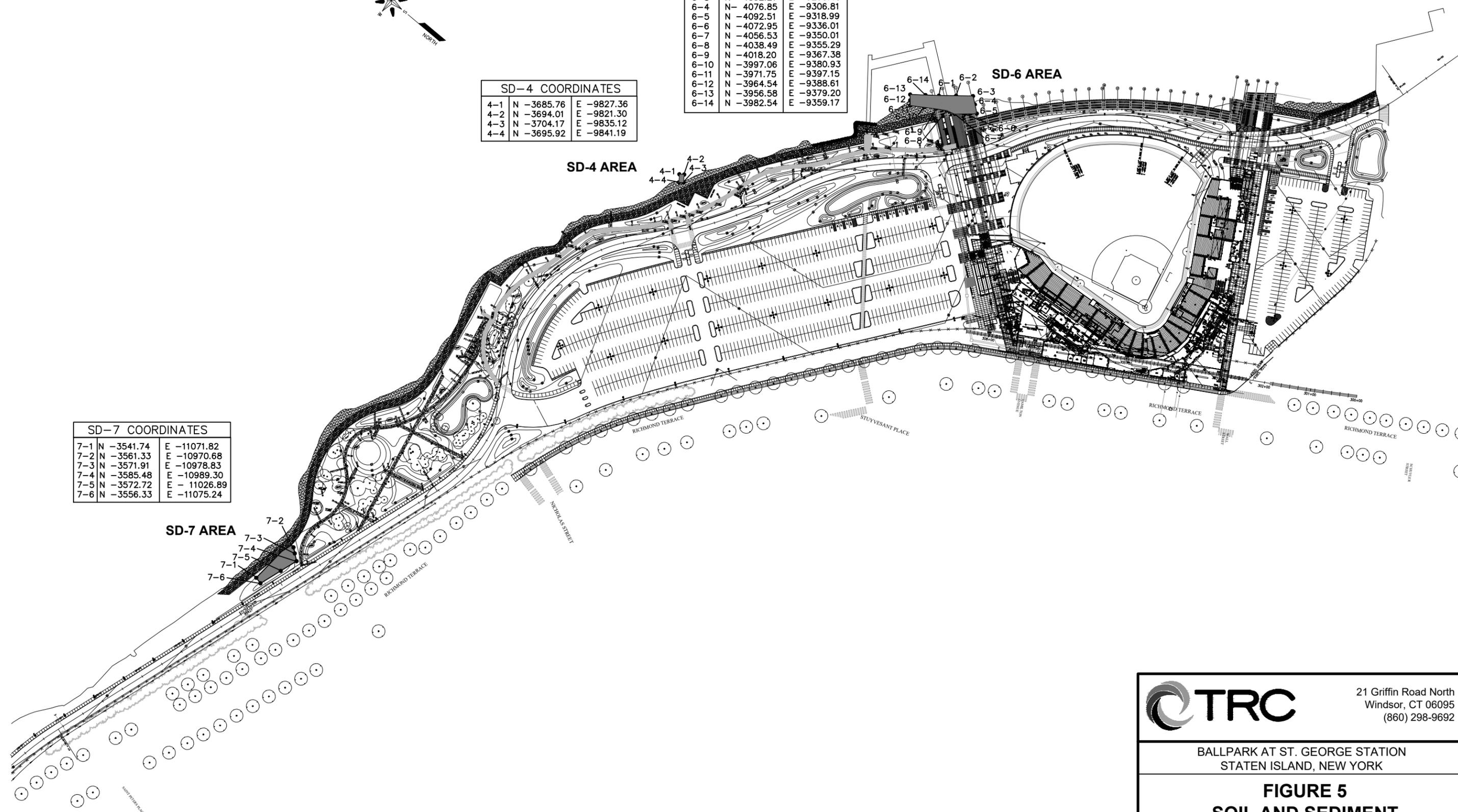
6-1	N -4005.36	E -9341.57
6-2	N -4033.81	E -9318.54
6-3	N -4062.21	E -9295.43
6-4	N -4076.85	E -9306.81
6-5	N -4092.51	E -9318.99
6-6	N -4072.95	E -9336.01
6-7	N -4056.53	E -9350.01
6-8	N -4038.49	E -9355.29
6-9	N -4018.20	E -9367.38
6-10	N -3997.06	E -9380.93
6-11	N -3971.75	E -9397.15
6-12	N -3964.54	E -9388.61
6-13	N -3956.58	E -9379.20
6-14	N -3982.54	E -9359.17

SD-4 COORDINATES

4-1	N -3685.76	E -9827.36
4-2	N -3694.01	E -9821.30
4-3	N -3704.17	E -9835.12
4-4	N -3695.92	E -9841.19

SD-7 COORDINATES

7-1	N -3541.74	E -11071.82
7-2	N -3561.33	E -10970.68
7-3	N -3571.91	E -10978.83
7-4	N -3585.48	E -10989.30
7-5	N -3572.72	E -11026.89
7-6	N -3556.33	E -11075.24



	21 Griffin Road North Windsor, CT 06095 (860) 298-9692
	BALLPARK AT ST. GEORGE STATION STATEN ISLAND, NEW YORK
FIGURE 5 SOIL AND SEDIMENT REMOVAL LOCATIONS	
Date: 04/25/13	Project No. 177603-000050-000000