From: Aprea, Ciro <caprea@psands.com>
Sent: Friday, June 12, 2020 6:29 PM
To: Spellman, John (DEC)
Cc: Craig Tompkins (EOH) (ctompkins@edgeonhudson.com); Peter Chavkin; mkuen@edgeonhudson.com; Boyer, James; Szeman, Janos; Salinas, L. Miguel
Subject: Former GM Assembly Plant West Parcel Site #C360070 - June 12, 2020 Periodic Review Report
Attachments: Your file was uploaded successfully at NYSDEC FTS

Good afternoon John,

This email serves to confirm that PS&S submitted the June 12, 2020 Periodic Review Report for the Former GM Assembly Plant West Parcel Site, NYSDEC Site #C360070 through the provided NYSDEC FTS link. Attached you will find an email receipt of the uploaded zip folder, which includes the Periodic Review Report and associated Figures. Due to file size constraints, we are uploading the appendices separately. Thank you for your continued support on this project. If you have any questions or comments, please do not hesitate to call.

Best regards,

CJ Aprea
Scientist I

c: (914)-523-7959
caprea@psands.com

1 Larkin Plaza
2nd Floor, Yonkers, New York 10701

www.psands.com

2020 PERIODIC REVIEW REPORT

-FOR-

Former General Motors Assembly Plant
West Parcel Site

Sleepy Hollow, New York
NYSDEC Site No. C360070
BCA Index # C360070-12-10

Submitted by:

Lighthouse Landing Communities, LLC

2392 Morse Avenue
Irvine, California 92614

June 12, 2020

Prepared by:

One Larkin Plaza, 2nd Floor
Yonkers, New York 10701

I, Janos M. Szeman, certify that I am currently a New York State licensed Professional Engineer as defined at 6 NYCRR Part 375-1.2(aj) and paragraph 1.3(b)47 and that this Remedial Investigation Report was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Date: **12 June 2020** *Signature:* Janos M. Szeman

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF FIGURES

LIST OF TABLES (In Text)

LIST OF ACRONYMS

ACM	Asbestos-containing materials
Arcadis	Arcadis, US, Inc.
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BUD	Beneficial Use Determination
bgs	below ground surface
CAMP	Community Air Monitoring Plan
COPC	Constituents of Potential Concern
CY	Cubic Yards
Department	New York State Department of Environmental Conservation
DER-10	NYSDEC Technical Guidance for Site Investigation and Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
EE	Environmental Easement
ELAP	Environmental Laboratory Approval Program
EOH	Edge on Hudson
EPA	United States Environmental Protection Agency
EWP	Excavation Workplan
FER	Final Engineering Report
GCS	Grossly Contaminated Soils
GMC	General Motors Corporation
HASP	Health and Safety Plan
Hines	Hines Interests Limited Partnership
IC	Institutional Control
ICM	Interim Corrective Measures Project
IRM	Interim Remedial Measure
IWP	Investigation Work Plan
Lighthouse	Lighthouse Landing Communities, LLC
MBI	Marine Bulkheading, Inc.
MTA	Metro North Association
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health

NYSDOL	New York State Department of Labor
O&M	Operation and Maintenance
OMM	Operations and Maintenance Plan
PCBs	Polychlorinated Biphenyls
PLM	Polarized Light Microscopy
PM_{10}	Particulate Matter less than 10 Micron in Diameter
PPE	Personal Protective Equipment
PRR	Periodic Review Report
PS&S	Paulus, Sokolowski and Sartor Engineering, PC
RI	Remedial Investigation
RIR	Remedial Investigation Report
RWP	Remedial Work Plan
SCOs	Soil Cleanup Objectives
SF	Square Feet
SMP	Site Management Plan
SPDES	State Pollution Discharge Elimination System
SSDS	Sub-Slab Depressurization Systems
SVOCs	Semi-Volatile Organic Compounds
SWPPP	Stormwater Pollution Prevention Plan
Toll	Toll Brothers, Inc.
VISL	Vapor Intrusion Screening Levels
VOCs	Volatile Organic Compounds
WCDEF	Westchester County Department of Environmental Facilities
WCDOH	Westchester County Department of Health

EXECUTIVE SUMMARY

Paulus, Sokolowski and Sartor Engineering, PC, (PS&S) was retained by Lighthouse Landing Communities, LLC (Lighthouse) to prepare this 2020 Periodic Review Report (PRR) for the Former General Motors Assembly Plant West Parcel Site (hereinafter referred to as "the Site"). The Site is identified as the New York State Department of Environmental Conservation (NYSDEC) Site Number C360070 and was remediated in accordance with the Brownfield Cleanup Agreement (BCA) Index # C360070-12-10.

This PRR was developed in accordance with Section 6.3(b) of the NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation, dated May 3, 2010; the NYSDEC-approved Site Management Plan (SMP, attached as Appendix AG) prepared by Arcadis, US, Inc. (Arcadis), dated December 2013; and the NYSDEC Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal, dated March 17, 2020. As noted in the July 27, 2015 Site Management PRR Response Letter distributed by NYSDEC (refer to Appendix A), the Periodic Review frequency for the Site was temporarily extended for five years due to the on-going Brownfield Redevelopment Project construction at the Site. This PRR was prepared for the May 15, 2015 to May 15, 2020 reporting period (herein referred to as the "reporting period").

The purpose of this PRR is to document ongoing Site management activities associated with the Engineering and Institutional Controls (ECs/ICs) in place at the Site, and to certify that the ECs/ICs are being maintained in accordance with the SMP. This 2020 PRR includes the following key sections:

- A general Site overview;
- A summary of previously completed remedial investigations and interim remedial actions;
- Documentation and assessment of the Operation and Maintenance (O&M) Plan activities; and,
- Certification of ECs/ICs identified in the SMP.

Site management activities conducted in this PRR reporting period are summarized in the following Table 1[1].

Table 1: Media Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis	Completion Date
Cover Systems	Annual	None	None	April 15, 2016; April 14, 2017; April 13, 2018; April 11, 2019; April 17, 2020
Groundwater Monitoring Wells	Annual (commencing during or after Site development)	Groundwater	Metals, VOCs, and SVOCs	Refer to Section 5.3

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and the New York State Department of Health (NYSDOH).

[1] Table 1 was derived from Table 7 of the SMP.

The completed Institutional and Engineering Controls Certification Forms associated with this PRR submittal are provided as Appendix B. Additionally, observations made during the April 2016 through April 2020 annual PS&S visual observations are documented in the Annual Site-Wide Inspection Checklists (refer to Appendix L of the SMP), provided as Appendix C of this PRR.

As noted in the SMP and further detailed in Section 5.3 of this PRR, a groundwater monitoring well network existed at the Site prior to redevelopment. At the time of the SMP preparation, NYSDEC and the environmental consultant anticipated that any number of these monitoring wells may need to be repaired, replaced and possibly relocated to support the Brownfield Redevelopment Project as well as to provide access for post-development sampling. Due to interference with Site Brownfield Redevelopment Project, existing groundwater monitoring wells that were successfully located, were decommissioned for future replacement in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures". Groundwater Monitoring Well Decommissioning Logs are provided in Appendix D of this PRR.

Based upon review of IC/ECs at the Site and the PS&S visual observations conducted annually from April 2016 through April 2020 and in accordance with the procedures outlined in the SMP Monitoring Plan, PS&S finds the Site in compliance with the SMP IC/EC Plan and Monitoring Plan requirements. As presented in this PRR, the Site ICs/ECs are in place and functioning in accordance with the Environmental Easement (EE, attached as Appendix AG)). No corrective measures are proposed and no changes to the SMP are recommended at this time.

1.0 INTRODUCTION

PS&S was retained by Lighthouse to prepare this 2020 Periodic Review Report (PRR) for the Former General Motors Assembly Plant West Parcel Site (hereinafter referred to as "the Site"). The Site is identified as New York State Department of Environmental Conservation (NYSDEC) Site No. C360070, and was remediated in accordance with the Brownfield Cleanup Agreement (BCA) Index #C360070-12-10.

This 2020 PRR was prepared for the May 2015 to May 2020 reporting period. This 2020 PRR includes documentation and an assessment of the Site Management Plan (SMP) Monitoring Plan results, details on necessary Operation and Maintenance (O&M), and certification of engineering and institutional controls (ECs/ICs) identified in the SMP.

This PRR was developed in accordance with Section 6.3(b) of the NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation, dated May 3, 2010, in addition to the NYSDEC-approved Site Management Plan (SMP) prepared by Arcadis, dated December 2013.

2.0 SITE BACKGROUND

This section provides general information obtained from the SMP on the setting of the Site. Summarized below are previous land uses, historical operations performed at the Site, regional and local geology, and hydrogeology of the Site.

2.1 Site Setting and Description

The Site is located at 199 Beekman Avenue, in the Village of Sleepy Hollow, Westchester County, New York. The Site is identified on the Town of Mt. Pleasant Tax Map as Tax Section 115.10, Block 1, Lot 1 and Section 115.15, Block 1, Lot 1.

The Site is approximately 66.67 acres and is bounded by Kingsland Point Park to the north; River Street, Horan's Landing Park, Ichabod's Landing and various private and municipal properties to the south; the Metro North Hudson Line rail corridor and Hudson Street to the east; and the Hudson River to the west.

2.2 Geology and Hydrogeology

The Site is developed on historic fill of varying composition and thickness, ranging from approximately 1 to 25 feet beneath the existing cover system(s). As summarized from the SMP, the historic fill material consists of a variety of dredged materials, soils, ash, rubble, and other debris, as well as, filled barges, bulkheads and foundations.

The fill is reportedly underlain in areas by soft organic clay and peat deposits associated with the Hudson and Pocantico Rivers. In other areas, varved silt and clay underlies the fill. Beneath these deposits, a layer of compact granular till (silty sand with gravel and occasional cobbles and boulders) overlies the bedrock with a thickness ranging from 1 feet to more than 10 feet. The underlying bedrock is gneiss. The depth to bedrock is variable across the Site, ranging from less than 20 feet below ground surface (bgs) on the southern and eastern areas to greater than 100 feet bgs along the Hudson River.

The Site's shallow groundwater regime is tidally influenced. The direction of groundwater flow is generally southwest toward the Hudson River with local variations. The top of the shallow groundwater table was depicted in the SMP at approximately 1.5 feet to 6 feet bgs.

2.3 Land Use

Prior to commercial or industrial development, the Site was part of the Beekman Farm. In 1830, a brickyard was established on the southern part of the Site at the foot of Beekman Avenue, on the south side of the Pocantico Bay, which has since been filled. The brickyard closed in 1861. Between 1885 and 1913, industrial operations on the Site included:

- Rand Drill Company, manufacturing percussion rock drills (south side of parcel);
- Mobile Company of America, manufacturing steam-powered vehicles (north side

of parcel); and,

- Maxwell Briscoe Company, manufacturing gasoline powered automobiles, with operations including assembly buildings, machine shops, woodworking facilities and painting/varnishing operations, and a small foundry (north and south sides of parcel).

The Chevrolet Motor Company, which later became a division of General Motors Corporation (GMC), acquired the former Maxwell Briscoe Property and automobile manufacturing facility in 1914. Chevrolet and GMC assembled automobiles at the Site from 1914 until the assembly plant was closed in 1996, apart from a period during World War II when airplane wings and light military vehicles were assembled at the Site. Following facility closure in 1996, buildings and most above-grade structures were demolished and removed. Most of the concrete floor slabs and foundations were demolished with the exception of the Site Body and Chassis Plants concrete floor slabs and foundations which were not demolished and remain on the Site as part of the existing cover system, as further discussed in Section 4.1.2

The south parcel area of the Site, bounded by Beekman Avenue, Hudson Street and River Street, was developed as a parking lot on former residential land and is currently paved. A water storage tank and pump house, which supported the operating assembly plant facility north of Beekman Avenue, was also located on the south parcel area, but was removed after the assembly plant was demolished.

2.3.1 Anticipated Future Land Use

The Site is currently being redeveloped in accordance with the BCA; where, the anticipated future use of the Site is mixed commercial and restricted-residential development, with public open space, including public access to the waterfront. The proposed Site Development Plan is presented in the Findings Resolution adopted by the Village of Sleepy Hollow on July 24, 2007 and amended on January 25, 2011. The proposed Site Development Plan is also presented in the Special Permit and Concept Plan Approval adopted by the Village of Sleepy Hollow on June 7, 2011. This Plan is attached as Figure 2.

In accordance with the Site BCA, the intended future uses are restricted-residential/commercial development and open public space. Restricted uses, as defined in 6 NYCRR Part 375-1.8, include:

- "*Restricted-residential use*," which is the land use category which shall only be considered when there is common ownership or a single owner/managing entity of the site. Restricted-residential use shall, at a minimum, include restrictions which:
    - Prohibit any vegetable gardens on a site, although community vegetable gardens may be considered with Department approval.

- Prohibit single family housing.
- Includes active recreational uses, which are public uses with a reasonable potential for soil contact.

- "*Commercial use*," which is the land use category which shall only be considered for the primary purpose of buying, selling or trading of merchandise or services. Commercial use includes passive recreational uses, which are public uses with limited potential for soil contact.

In addition, "*restricted-residential use*" is a land use category that does not allow the Site to be used for planting fruit-bearing trees, raising livestock or producing animal products for human consumption.

"*Restricted use*" is a use with imposed restrictions, such as Environmental Easements, which as part of the remedy selected for the site, requires a site management plan and relies on institutional controls or engineering controls to manage exposure to contamination remaining at a site. Future residential use of the Site may include townhomes, condominiums, apartments, and hotels. Commercial use of the Site may include retail center development and operations. Beginning in 2018, Lighthouse has contracted with multiple real estate developers regarding the ongoing operation of parceling out the Site. Details regarding the property ownership and ownership transfers are explained below and presented on Figure 2.

Between March 23, 2018 and February 18, 2020, Toll Brothers, Inc. (Toll) acquired properties (herein referred to as E-block, J-block, and/or I-block), as shown on Figure 2. Toll began construction of condominiums and apartments in May 2019 and are scheduled to continue beyond this PRR period and this PRR submission.

In August 2019, Hines Interests Limited Partnership (Hines) acquired properties (herein referred to as F-block, as shown on Figure 2). Hines is currently scheduled to begin construction of apartments, condominiums, and a commercial retail building in 2020, and will continue beyond this 2020 PRR submission.

The remainder of properties are owned by Lighthouse Landing Communities, LLC at the time of this PRR submission. Property transfers that take place following the June 2020 PRR submission will be disclosed in their respective future PRR reporting periods.

3.0 CURRENT ENVIRONMENTAL CONDITIONS

Remedial Investigations following Site demolition determined that contamination at the Site is associated with historical fill and past operations at the Former GMC facility. The Site was remediated in accordance with the NYSDEC-approved Interim Remedial Measure (IRM) Work Plan (Arcadis, 2007) and the Remedial Work Plan (RWP) (Arcadis, 2012), consistent with the June 2012 Decision Document (NYSDEC, 2012).

Contamination remained in the subsurface below the existing cover system, which is hereafter referred to as "remaining contamination," after completion of the remedial work described in the RWP. The current environmental conditions are managed in accordance with the December 2013 SMP. ECs/ICs are installed/implemented at the Site to protect human health and the environment by controlling exposure to remaining contamination (defined in Section 3.1). Compliance with the EE and the SMP is required in perpetuity or until the EE is extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. The SMP defines proper implementation, management, and certification of these ECs/ICs.

3.1 Remaining Contamination

Soil remaining at the Site contains metals (arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver and zinc), pesticides, polychlorinated biphenyls (PCBs), volatile and semi-volatile organic compounds (VOCs and SVOCs) at levels exceeding unrestricted use soil cleanup objectives (SCOs). Lead remains the most widespread metal detected in soil samples from historical fill on the Site.

The contaminated soil remains at depth below the existing cover system and the final cover system. In addition, the historic fill thickness ranges from approximately 1 to 25 feet below the existing cover system. Prior to the Site redevelopment, the active utilities on the Site were the Site storm drains and a sanitary sewer main that is owned by Westchester County. Historical buildup of sediments was removed from those parts of the Site storm drain system that remained in operation following the assembly plant demolition, as summarized in the Final Engineering Report (FER) (Arcadis, 2014).

Exposure to remaining contamination at the Site is controlled by ECs/ICs summarized in Section 4.0 of this PRR.

4.0 ENGINEERING & INSTITUTIONAL CONTROLS PLAN COMPLIANCE REPORT

The Engineering and Institutional Control Plan and Compliance Report below provides a description of each EC/IC, its objective, and how performance of the EC and IC is evaluated. The IC/EC Certification is discussed in Section 4.3 and is included in Appendix B of this 2020 PRR.

4.1 Engineering Controls

A description of each EC, its objective, and how performance of the EC is evaluated is summarized in Sections 4.1.1 through 4.1.2.

4.1.1 Existing Cover System

An existing pre-development cover system, "Existing cover system" at the Site prevented exposure to remaining soil contamination. The existing cover system (refer to Figure 1) consists of the following engineering controls:

West Parcel Site, north of Beekman Avenue

- Bituminous pavement and concrete parking or roadway surfaces.
- Concrete slab-on-grade and slab above crawl space.
- Concrete millings as grading fill and temporary cover, pursuant to a Beneficial Use Determination (BUD), over certain IRM areas, demolished building footprints and former rail siding footprints.
- Concrete millings as temporary erosion cover over BUD sediments.
- Concrete millings in a managed stockpile on a concrete pad.
- Clean Item 4 stone backfill in certain IRM and pavement repair areas.
- Rip rap along the Hudson River shoreline.
- Vegetated soil strips along Beekman Avenue and the adjacent Ichabod's Landing townhouse community.

West Parcel Site, south of Beekman Avenue (a.k.a. South Parcel)

- Bituminous pavement parking surfaces.
- Vegetated strips on hillsides separating different parking levels within the property lines.
- Clean Item 4 stone backfill in pavement repair areas.

4.1.2 Final Cover System

The final cover system for the Site is described in the IRM Decision Document and in the final June 2012 Decision Document. The Site final cover system will consist of:

- A demarcation barrier consisting of a geotextile fabric or a structural surface (e.g., concrete or asphalt) was placed over soil material that does not comply with the applicable 6 NYCRR Part 375 SCOs for unrestricted use; or,
- A final barrier cap system throughout the Site consisting of either or a combination of:

- 2-foot-thick surface soil cover for landscaped or naturally vegetated areas. If necessary, based upon additional testing, sections of the soil cover system may be designed to minimize infiltration through unsaturated soil exhibiting the potential to leach lead to groundwater.
- Pavement (or similar hard surface) over non-vegetated areas.
- Permanent buildings or similar structures.
- Soils imported to the Site will comply with the requirements set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use; (i.e., the lower of restricted residential SCOs or protection of groundwater SCOs, as provided in Appendix 5 of DER-10 under "Restricted Residential Use"

The demarcation barrier with a 2-foot-thick surface cover, pavement, or permanent structures is collectively referred to hereafter as the 'final cover system.'

The final cover system is a permanent control and the quality and integrity of this system will be monitored and maintained at defined, regular intervals, in perpetuity.

4.2 Institutional Controls

A series of ICs is required by the RWP and the NYSDEC Decision Document as described in the SMP to:

1. Implement, maintain and monitor ECs systems;
2. Prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and
3. Limit the use and development of the Site to restricted residential uses, which includes commercial and recreational uses.

Adherence to these ICs on the Site is required by the EE and will be implemented under the SMP. These ICs include:

- Using the Site for Restricted Residential as described in 6 NYCRR Part 375-1.8 (g) (2) (ii), Commercial as described in 6 NCYRR Part 375-1.8(g) (2) (iii), and Industrial as described in 6 NYCRR Part 375-1.8(g) (2) (iv) [although land use is subject to local zoning laws];

- Maintaining and operating ECs as specified in the SMP;

- Inspecting ECs at a frequency and in a manner defined in the SMP;

- Groundwater use at the property only after treating water using methods determined by the NYSDOH or the Westchester County Department of Health (WCDOH) to render it safe for use as drinking water or for industrial purposes. The user must first notify and obtain written approval to do so from the NYSDEC;

- Conducting groundwater and other environmental or public health monitoring as defined in the SMP;

- Reporting data and information pertinent to Site Management for the Site at a frequency and in a manner defined in the SMP;

- Conducting future activities on the property that will disturb remaining contaminated material in accordance with the SMP;

- Assessing the performance and effectiveness of the remedy as defined in the SMP;

- Operating, maintaining, monitoring, observing, and reporting any mechanical or physical components of the remedy in accordance with the SMP;

- Providing Site access to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this EE;

- Evaluating the potential for vapor intrusion for any buildings developed anywhere on the Site other than the South Parcel area (south of Beekman Avenue) and monitoring or mitigating any potential impacts that are identified;

- Prohibiting vegetable gardens and farming on the property; and,

- Ensuring the Site owner or remedial party submits to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access the Site at any time to evaluate the continued maintenance of any and controls. This certification will be submitted annually, or an alternate period that NYSDEC may allow and will be made by an expert (i.e., Qualified Environmental Professional) that the NYSDEC finds acceptable.

  The EE specifies that the Site will not be used for Residential purposes as defined in 6 NYCRR 375--1.8(g)(2)(i), and the above-stated controls may not be discontinued without an amendment or extinguishment of the EE.

4.2.1 Excavation Work Plan (EWP)

The Site has been remediated for restricted residential use. Intrusive work conducted within this PRR reporting period was performed in compliance with the EWP (attached as Appendix AF). This work included intrusive activities that:

- Penetrated the soil cover system;
- Encountered or disturbed the remaining contamination; or,
- Modified or repaired the Site cover system.

Work conducted pursuant to the EWP was also conducted in accordance with the procedures defined in the Community Air Monitoring Plan (CAMP) and Health and Safety Plan (HASP) prepared for the Site (Attached as Appendices E and Y, respectively).

As documented in this PRR, Lighthouse was responsible for proper disposal of excavation dewater, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). As documented in this PRR and observed by PS&S, Lighthouse conducted Site redevelopment activities in a manner that did not interfere with, or otherwise impair or compromise, the ECs described in the SMP during this PRR reporting period.

4.2.2 Effluent Wastewater Discharge

Groundwater was routinely encountered during site development activities. The contractor implemented a dewatering system after encountering groundwater to remove liquids from the work area and allow for construction to proceed. Dewatering operations conducted at the Site are compliant with the fluids management program detailed in Section 12.0 of the SMP, and the active Wastewater Discharge permits issued by the Westchester County Department of Environmental Facilities (WCDEF) (permits attached in Appendix R). The initial Wastewater Discharge Permit was issued by the WCDEF on January 23, 2017. This Wastewater Discharge Permit has been renewed on a quarterly basis. PS&S has observed that the Site dewatering operations performed during this PRR reporting period were compliant with Permit No. 454-20.

4.2.3 CAMP Exceedances

Ambient air monitoring is implemented at the Site for total VOCs and particulate matter less than 10 micron in diameter (PM_{10}) during the intrusive activities listed in Section 1.3 of the SMP, in accordance with the CAMP (attached in Appendix E). Ambient air monitoring is also conducted whenever excavated material piles are exposed to wind and will continue until such material is under temporary

(polyethylene tarps) or interim (e.g., concrete millings or gravel) cover, or placed under the final cover system (e.g., soil cap, building or pavement).

The NYSDEC was notified if a maximum VOC or PM_{10} action level was exceeded during construction and redevelopment activities. During this PRR reporting period (May 2015 to May 2020), 19 ambient air exceedances were observed and recorded. Of the 19 exceedances, 3 exceedances were explicitly due to Metro North Association (MTA)-related activities. Excessive dust was generated on-Site by MTA vehicles driving through unpaved areas of the Site to access the MTA railroad. Following these 3 MTA-related CAMP exceedance events, the MTA point of contact and MTA drivers were contacted and requested to reduce speed and restrict traffic to stabilized roadways within the Site. Of the 19 exceedances, 16 exceedances were due to construction activities by the Site contractors. Immediately after a CAMP action level exceedance was observed, the Site contractors were notified by PS&S, intrusive Site work activities were halted, the source of elevated VOC and/or PM_{10} concentrations were identified, and corrective actions were implemented in accordance with the December 2013 CAMP. CAMP exceedance reports are provided in Appendix E.

4.2.4 Material Import

Approximately 335,567 cubic yards (CY) of fill material was imported to, stockpiled, and used within the final cover system during the May 2015 to May 2020 PRR reporting period. Source location documentation was submitted to NYSDEC for review and approval prior to import operations in accordance with Section 11.0 of the EWP. Approved material was then imported to the Site in accordance with Section 11.0 of the EWP. Source material import to the Site commenced in August 2016, continues through this PRR submission and is scheduled to continue beyond this PRR reporting period. Material import operations following the May 2015 to May 2020 reporting period will be disclosed in their respective annual PRRs.

The Contractor submitted source documentation to the Owner and Environmental Engineer/QEP for materials proposed for import to the Site. The required documentation was provided prior to mobilization of material import operations in compliance with the EWP. Documentation included, but was not limited to a source name, address, certifications, and analytical results. The Environmental Engineer (PS&S) submitted a summary of the proposed material documentation to NYSDEC for review and approval.

NYSDEC-approved Source materials imported to the Site were then screened by the Site QEP upon arrival to observe and document compliance with Site requirements. Source materials that did not comply with the qualitative

requirements for Site acceptance in the judgement of the QEP were considered Non-Conforming Material. When Source materials were determined to be Non-Conforming Material following delivery, the Source owner was contacted and notified to promptly arrange for removal of these materials. The Site QEP also monitored the quantity of material imported to the Site to confirm that specific the Source location did not exceed the import volume approved by NYSDEC.

Each truck and/or barge that was delivered to the Site and subsequently off-loaded contained NYSDEC approved, non-exempt material to the Site. Further, each imported fill material delivery truck or barge had an associated manifest signed by the Source owner, transporter, and Site recipient. In addition, each truck and/or barge that off-loaded approved, exempt material to the Site had an associated weight ticket signed by the transporter. Information documented within the material manifests includes, at a minimum:

- The Source location and address;
- Material type, analytical sample identification;
- Material quantity;
- Transporter information; and
- On-Site delivery location.

Manifests and weight tickets distributed by the Site Owner and completed by the respective parties are provided in Appendix F.

4.2.5 Historical Fill Reuse Evaluation

Site redevelopment activities included the construction of an overflow flood channel along the northern Site perimeter. Excavation extending to a depth of 6-feet bgs and generated approximately 11,000 CY of excess soils. PS&S characterized and evaluated the soil before excavation in compliance with the on-Site reuse of excavated materials criteria, as detailed in Section 10.0 of the EWP.

In compliance with the August 30, 2019 NYSDEC approval, source materials were observed during excavation for reuse within the final cover system. Material that did not achieve geotechnical engineering specifications for use within the final cover system were stockpiled for future reuse below the final cover system. Reuse of the approved material began on November 1, 2019 and is an ongoing effort at the time of this PRR submission.

4.2.6 Off-Site Disposal

<u>Grossly Contaminated Material</u>

During the May 2015 to May 2020 PRR reporting period, excavation and off-Site transportation and disposal of Grossly Contaminated Soils (GCS) occurred on-Site in accordance with Section 7.0 of the EWP and 6 NYCRR Part 375. GCS encountered during redevelopment operations were screened by the on-Site QEP, characterized for off-Site disposal, and then transported and disposed off-site at a suitable waste processing facility. Information regarding disposal operations conducted within this PRR reporting period is summarized in Table 3 below. On-Site locations of the encountered GCS during this PRR reporting period are depicted on Figure 3. Documentation relating to the GCS disposal events including the material waste profiles, generator authorization letters, non-hazardous and hazardous disposal manifests, non-hazardous and hazardous weight tickets are provided in Appendix G.

Table 3: Material Disposal Events

Date(s) Encountered	Date(s) of Disposal	Disposal Facility	Total Disposed (Tons)
2/7/2017	3/28/2017, 4/11/2017	Clean Earth of Carteret	296.32
2/9/2018, 3/27/2018	6/11/2018, 6/12/2019	Clean Earth of North Jersey, Inc.	724.35
7/31/2018	3/20/2019	Bayshore Soil Management, LLC	253.90
11/30/2018	3/22/2019, 3/25/2019-3/29/2019	Clean Earth of North Jersey, Inc.	1171.36
2/25/2019	4/29/2019	Bayshore Soil Management, LLC	362.94

Asbestos Abatement

Asbestos-containing materials (ACM) were encountered and subsequently abated during Site redevelopment operations. Asbestos abatement operations were conducted in accordance with the asbestos abatement permits issued by the Village of Sleepy Hollow and included in Appendix H, as well as applicable regulations, standards, and generally accepted environmental and safety practices including Federal OSHA (29 CFR 1926.58), EPA NESHAPS (40 CFR Part 61), and TSCA Title II AHERA/ASHARA (40 CFR Part 763) Asbestos Regulations and the New York State Department of Labor Industrial Code Rule 56.. Additional asbestos abatement documentation is also provided in Appendix H. Approximately 220 square feet (SF) of ACM were discovered within corrugated piping along the ground floor of an on-Site demolished building. On-Site locations where ACM were encountered are detailed in Figure 4. Bulk samples of the ACM were collected from the corrugated pipes and analyzed in accordance with the EPA "Method for the Determination of Asbestos in Bulk Building Materials" USEPA/ 600/R-93/116, July 1993, Polarized Light Microscopy (PLM) Bulk Asbestos Analysis by Environmental Laboratory Approval Program (ELAP) PLM Method

198.1 for NY friable samples or 198.6 for NOB samples. Corrugated pipe was disposed of in 2017 by a licensed asbestos abatement contractor in conformance with Section 56-5, Subpart 1(h) of the New York State Department of Labor (NYSDOL) Industrial Code Rule 56 Asbestos Regulations, provided as Appendix I. A corrugated pipe asbestos abatement permit from the Village of Sleepy Hollow was not required because the pipe was not encountered within a building on the Site.

Additional ACM were encountered within a vacant guard shack near the main Site entrance. Asbestos abatement within the guard shack was conducted from October 18, 2016 to October 20, 2016 under the guidance of NYSDOL. 420 SF of non-friable ACM were transported by Atlantic Carting, LLC, to Grand Central Landfill in Pen Argyl, PA for disposal.

ACM was also encountered within an on-Site Pedestrian Bridge connecting the Old GM West Parcel to the Old GM East Parcel. Approximately 5,000 SF of non-friable ACM was encountered along both sides of the bridge. Samples of ACM detected throughout the bridge were prepared and analyzed under the guidance of NYSDOL. Due to its location over four mainline tracks of the Metro-North Hudson Line, any work conducted on the structure was subject to the railroad's restrictions on working hours, flagging requirements, and reviews of contractor means and methods. The Site Pedestrian Bridge ACM was abated and then transported and disposed of off-site from December 18, 2018 to February 18, 2019. ACM disposal receipts and documentation are disclosed in Appendix H.

Recycled Construction and Debris

During the May 2015 through May 2020 PRR reporting period, miscellaneous materials regularly generated during a construction project were segregated and stored on-Site within roll-off containers for off-Site disposal. Disposal of construction debris began in August 2016 and is ongoing at the time of this PRR submission. Miscellaneous materials generated have been disposed of at Rubino Brothers Inc., Stamford, Connecticut, in accordance with an authentication letter provided in Appendix N. Receipts and disposal tickets for each disposal are provided in Appendix G.

4.2.7 Utilities Installation

Utility trenching installation operations began in August 2016 and are ongoing at the time of this PRR. In compliance with the EC's outlined in Section 2.2. of the SMP, a demarcation barrier consisting of a geotextile fabric was installed over soil or historical fill material that does not comply with the applicable 6 NYCRR Part 375 SCOs for unrestricted use. Supplemental geotextile fabric has been installed between the final cover system and historical fill, where the demarcation barrier

has been breached for underground utility installations. An interim demarcation survey is provided as Figure 7 of this PRR.

Approximate total lengths (in linear feet) of utilities installed are summarized in Table 2 below (refer to Figure 7 for a detailed Site Development Utility Plan). Annual Site Inspection Forms including additional utility information from 2016 to 2020 are provided in Appendix C of this PRR. Associated permits for utility installation operations are provided in Appendix J of this PRR.

Table 2: Utility Installation Quantities

Utility Type	Approx. Length Installed (ft.)
Electrical Conduit	3953.42
Gas Main	4591.69
Stormwater Sewer Piping	6511.66
Sanitary Sewer Piping	7187.96
Telecommunications Wiring	1584.41
Water Main	8071.25

4.2.8 Outfall Installation

On August 9, 2017, PS&S submitted a Storm System Outfall Pipe Construction Dewatering Request (herein referred to as "Outfall #1 Plan") to NYSDEC that was subsequently approved on August 10, 2017. The Outfall #1 Plan detailed the construction and installation of a Hudson River storm sewer outfall pipe (herein referred to as "Outfall #1") in the northwest perimeter of the Site. Following NYSDEC's approval, the Site contractor, AMEC, LLC., and sub-contractor Marine Bulkheading, Inc. (MBI) completed the temporary installation of a sheet pile cofferdam outside the northwestern Site boundary within the Hudson River. Hudson River water within the cofferdam work zone was pumped into an on-Site temporary sediment retention pond located within the footprint of a previously demolished building slab over crawl space. The location of the Outfall #1 work zone and dewatering sediment basin are detailed in the Outfall #1 Dewatering Plan (refer to Appendix S). During the construction and installation of Outfall #1, Hudson River turbidity within the work zone was monitored daily by the Contractor. No significant turbidity resulting from construction operations was observed within the Hudson River during the Outfall #1 construction and installation.

The Site contractor installed a medium-stone rip rap imported from a NYSDEC-approved source (refer to Appendix F) to stabilize the Hudson River shoreline following the successful completion of the Outfall #1 installation and subsequent removal of the temporary sheet piles.

On June 21, 2019 PS&S submitted a second Storm System Outfall Pipe Construction Dewatering Request (herein referred to as "Outfall #2 Plan) to NYSDEC, which was subsequently approved on June 24, 2019. The Outfall # 2 Plan detailed the construction and installation of a secondary Hudson River storm sewer outfall (herein referred to as "Outfall #2") in the southwest perimeter of the Site. Following NYSDEC's approval, AMEC and MBI completed the temporary installation of a sheet pile cofferdam outside the southwestern Site boundary within the Hudson River. Hudson River water within the cofferdam work zone was pumped into an on-Site undeveloped footprint of a proposed building slab downgradient from the work zone. The location of the Outfall #2 work zone and dewatering sediment basin are detailed in the Outfall #2 Dewatering Plan (refer to Appendix T). During the construction and installation of Outfall #2, Hudson River turbidity within the work zone was monitored daily by the Contractor. No significant turbidity resulting from construction operation was observed within the Hudson River during the Outfall #2 construction and installation.

Following the successful completion of the Outfall #2 installation and subsequent removal of the temporary sheet piles the contractor installed a medium-stone riprap imported from a NYSDEC-approved source (refer to Appendix F) to stabilize the Hudson River shoreline.

4.2.9 Concrete Demolition and Processing

A Case-Specific BUD No. 894-3-60 was granted by NYSDEC to GM on behalf of Arcadis on June 7, 2007. Designations associated with BUD No. 894-3-60 were transferred to Lighthouse Landing Venture, LLC (now Lighthouse Landing Communities, LLC) on behalf of GM. On June 14, 2007, NYSDEC issued BUD No. 894-3-60 "GM Former Assembly Plant, Sleepy Hollow." In accordance with the BUD, GM could reuse approximately 40,000 CY of concrete aggregate millings prepared from on-Site concrete slabs and related structures during the demolition of the former GM buildings. Following completion of the use of the concrete millings, GM agreed to submit a report with the final volume used under the BUD to NYSDEC. On February 27, 2015, PS&S submitted a request to NYSDEC that the BUD granted to GM be transferred to Lighthouse. In accordance with BUD No. 894-3-60, attached as Appendix K, the developer used approximately 18,450 CY of on-Site concrete millings as backfill within the existing cover system from November 2016, to December 2016. Following beneficial use of the remaining concrete millings on-Site, BUD No. 894-3-60 was closed, and the final volume used was reported to NYSDEC on February 28, 2017. The February 28, 2017 Concrete Millings BUD No. 894-3-60 Closure Form is provided as Appendix L, and the attached Figure 5 illustrates the use and distribution of the concrete millings at the Site.

Prior to redevelopment, the Site contained pre-existing concrete roads and parking areas. With an intended goal of on-Site reuse of approximately 175,000 CY the processed concrete, PS&S developed a Baseline Concrete Sampling Work Plan, which was submitted to NYSDEC on February 26, 2015. PS&S characterized concrete produced in accordance with the Baseline Concrete Sampling Work Plan. PS&S then submitted a Case-Specific BUD request on February 26, 2015. On March 10, 2015, NYSDEC issued BUD No. C360070-1. In accordance with BUD No. C360070-1, on-Site concrete slabs were crushed and used as backfill below the final cover system beginning on January 2017 and is ongoing at the time of this PRR. A Case-Specific BUD Annual Report was submitted each year detailing the quantities used during construction operations for the previous calendar year. Each report is disclosed in Appendix M of this PRR. A total of 122,164 CY of processed concrete were used as backfill below the final cover system for utility trenching and grading during this PRR reporting period. Use of the processed concrete will be an ongoing effort through the next reporting period.

PS&S also submitted two Generic BUD requests. The first request was submitted on March 4, 2019 for reuse of approximately 1,000 CY of existing asphalt pavement as subbase aggregate. The asphalt was stripped from its existing location and processed to a 2-inch minus gradation that complied with the end use requirements for a subbase. On April 7, 2017, NYSDEC issued BUD No. C360070 (attached as Appendix AA). The second request was submitted on December 11, 2017 for reuse of approximately 150 CY of concrete slabs generated from sidewalk and roadway of Beekman Avenue within the Site. On December 11, 2017, NYSDEC approved the request (attached as Appendix AB). PS&S also submitted a third request detailing the reuse of an additional 3500 CY of existing asphalt on March 2, 2020 for a subbase. NYSDEC approved the third request on April 29, 2020 (attached as Appendix AC).

4.2.10 Sediment and Erosion Control

Lighthouse developed a Stormwater Pollution Prevention Plan (SWPPP) in 2015 for the first phase of redevelopment activities (refer to Appendix O). This SWPPP (refer to Appendix P) was amended in August 2018 to reflect the second phase of redevelopment activities, with amendments reviewed and approved by the MS4 (Village of Sleepy Hollow). The SWPPP was prepared and maintained in compliance with the NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Storm Water Discharges from Construction Activity (Permit Number GP-0-15-002) (the Permit) for the redevelopment of the Site (West and South Parcels).

PS&S SWPPP observations began at the Site in 2016 and continue to be conducted in accordance with the Permit at a frequency of at least two Site SWPPP Inspections

every seven calendar days, for as long as greater than five acres of soil remain disturbed. These two routine SWPPP Inspections are separated by a minimum of two full calendar days. A copy of the SWPPP Inspection Reports generated during the reporting period can be found in Appendix Q.

4.2.11 Limited Groundwater and Soil Vapor Intrusion Investigation

A Soil Vapor Intrusion (SVI) evaluation was performed to determine whether any mitigation measures are necessary to address potential exposures to vapors. The evaluation was conducted where enclosed structures plan to be constructed on areas that contain remaining contamination and the potential for SVI. A work plan for the SVI evaluation was developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York," and submitted by Lighthouse to the NYSDEC and NYSDOH for approval. In accordance with the approved work plan, attached as Appendix X, four ground water monitoring wells were installed from April 12, 2017 to April 13, 2017. One round of groundwater samples were collected and analyzed from the Site wells within the study area. Groundwater sample results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Class GA, dated June 1998 (TOGS GA).

Subsequent to the results of the groundwater investigation, a soil vapor investigation was conducted. Eight soil vapor probes were installed on June 1, 2017 in accordance with October 2006 NYSDOH Guidance for Evaluation Soil Vapor Intrusion. Two rounds of soil vapor sampling from each soil vapor location were performed: one round on June 8, 2017 and another round on June 28, 2017. Methane concentrations and PID readings were also recorded at each of the soil vapor probe locations. Soil vapor sample results were compared to the EPA Vapor Intrusion Screening Levels (VISL) Default Residential Target Sub-Slab & Exterior Soil Gas Concentrations Criteria, Version 3.4, dated June 2015 (TSSGC). The August 25, 2017 SVI Results Report detailing the soil vapor investigation can be found in Appendix U.

An SVI mitigation system will be installed as an element of each building foundation in accordance with NYSDEC's response (refer to Appendix Z) to the August 25, 2017 SVI Results Report. The mitigation system for the slab-on-grade foundation design includes a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system. During this PRR reporting period, the SVI mitigation system installation began in 2019 with the construction of the first set of townhomes within the Phase I construction area. During this reporting period, SESI Consulting Engineers completed the SVI mitigation system installation for the buildings listed in their Interim Vapor

Intrusion Mitigation Installation Certification Letter, provided as Appendix V. Several buildings were excluded by NYSDEC and NYSDOH from the SVI mitigation system requirement based on a successful demonstration that there is no need for SVI mitigation within a specific sub-area of the site.

NYSDOH has determined that sub-slab soil vapor samples (or their equivalent as approved by NYSDOH) will be collected post-construction and prior to occupancy of slab-on-grade buildings, Post-construction sampling is summarized in the Vapor Intrusion Mitigation System Sampling and Testing Summary Letter, prepared by SESI Consulting Engineers and included as Appendix W. Preliminary (unvalidated) SVI sampling data for completed vapor mitigation systems were submitted to NYSDEC and NYSDOH for initial review and interpretation. SVI sampling data for future completed vapor mitigation systems will also be submitted for review. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. If the property is owned by a third party, validated SVI data will be transmitted to the property owner within 30 days of validation. If any indoor air test results exceed NYSDOH guidelines, relevant NYSDOH fact sheets will be provided to tenants and occupants of the property within 15 days of receipt of validated data.

SVI sampling results, evaluations, and follow-up actions from the subsequent reporting period will also be summarized in the next Periodic Review Report.

4.2.12 Final Grading and Landscaped Areas

At the time of this PRR, several parts of the Site have been brought to final grade and landscaped in accordance with the Site Development Plan (refer to Figure 2). The part of the site designated as "Village Green," bordering Ichabod's Landing, includes a pedestrian walkway, grassy park with various native shrubs and trees, concrete stairway leading to Road A, and a retaining wall. Also brought to final grade is the "Central Park" bordering Road C. Central park will include a grassy park with various native shrubs and trees, pedestrian walkway, and masonry wall. Within Phase I of the Site and surrounded by townhouses is a small grassy park area in which a bioretention pond was installed. Within the bioretention pond is native shrubbery mulch, and a large catch basin. Other parts of the Site are still in the process of being brought to final grade and will be presented in the next PRR submission.

4.3 Engineering and Institutional Control Compliance and Certification

An assessment and certification of the Site ECs/ICs detailed above is required as part of the PRR. As noted in Section 5.1, the Existing Cover System requires, at a minimum, an annual compliance certified by a Professional Engineer licensed to practice in New York State has prepared and signed the NYSDEC PRR IC/EC Certification Form, which was provided by NYSDEC as Appendix B within the Reminder Notice: Site Management PRR and IC/EC Certification Submittal Letter, dated March 17, 2020 (Reminder Notice Letter). A copy of the Reminder Notice and the completed IC/EC Certification Form is provided as Appendix B.

5.0 QUALITATIVE EXPOSURE ASSESSMENT

5.1 Introduction

This qualitative human health exposure assessment was performed to study the potential for human health exposure to Site-related constituents of potential concern (COPCs). This assessment used Site-specific information regarding current and foreseeable land uses, and available data for the Site to evaluate potential exposure to humans. This human health exposure characterizes the environmental setting of the Site and identifies COPCs and potentially complete exposure pathways.

5.2 Environmental Setting

Information about the Site's environmental setting is presented in Section 2.0 of the PRR.

5.3 Constituents of Potential Concern

Between 1996 and 2000, GMC undertook several environmental investigations at the Site to prepare for facility closure, including Phase I and Phase II Environmental Site Assessments, a Phase III Extent of Contamination Study, and a Sediment Quality Investigation in the Hudson River. In addition, an Interim Corrective Measures (ICM) Project was implemented to remediate residual petroleum and hydraulic fluids found in crawl spaces beneath the floor slabs of the former Chassis and Body Assembly Plants, and to remove two underground fuel storage tanks before these buildings were demolished.

Roseland/Sleepy Hollow, LLC (Roseland) conducted additional sampling of soil and groundwater in 2002. The findings of this investigation and the prior investigations conducted by GMC reported concentrations of metals, PAHs, and petroleum compounds that are generally typical of historically filled sites along the Hudson River, especially those dedicated to industrial uses. These findings were used to prepare the Site's Investigation Work Plan (IWP), which specified additional remedial investigations completed from 2003 to 2004.

Areas of potential concern can be grouped into the following three human health exposure assessment categories:

1. Site soils or historical fill containing metals, PAHs, and VOCs at levels above the 6 NYCRR Part 375 SCOs for restricted residential use guidance values;

2. Site groundwater contaminated with VOCs, SVOCs, and metals above NYSDEC Class GA Groundwater Standards for drinking-water supplies; and,

3. VOCs and methane observed in the Site soil gas.

Analytical data used in the human health exposure assessment evaluation include soil and groundwater data collected as part of the Due Diligence Investigation performed in 2002 and the Remedial Investigation (RI) conducted from 2003 to 2004. Samples were analyzed for VOCs, SVOCs, metals, and select samples for PCBs. Soil gas data from the RI for methane and VOCs were also evaluated. Analytical results for the RI, which are presented in Section 6 of the February 2, 2012 Remedial Investigation Report (RIR, attached as Appendix AE), are discussed below by potential human health exposure category.

5.3.1 Soils

Approximately 90 percent of the Site has been developed on fill, which generally consists of fine to coarse sands with lesser amounts of gravel, silt, and clay. Historical fill includes various coal cinders, dredged Hudson River sediments, and smaller segments of construction and demolition debris. Constituents detected in this fill include various inorganics (including lead) and PAHs that are typical of historically filled sites along the Hudson River. Lead and PAHs are found throughout the Site with reported concentrations that exceeded the 6 NYCRR Part 375 SCOs for restricted residential use guidance values. Chromium was also reported in soil and groundwater in a discrete area of the Site known as Potential Area of Concern (PAOC) 47, at levels above the 6 NYCRR Part 375 SCOs for restricted residential use. PAOC locations are provided in Drawing 2 of Appendix AE. As discussed further in Section 5.4, the Site soil exposure pathway has been managed by a Site wide engineering control cover system that was installed and will be maintained in accordance with the SMP.

5.3.2 Metals

Several metals were observed at the Site, but lead is the primary inorganic COPC in historical fill. Lead was reported at concentrations greater than the 6 NYCRR Part 375 SCOs for restricted residential use guidance value of 400 ppm in the pre-1960 historical fill areas (fill areas presented in Drawing One of Appendix AE). Atypical lead concentrations indicative of a possible concentrated source area are defined for this report as concentrations exceeding 10,000 ppm.

Concentrations of lead in fill from PAOC 7/Fill Areas H, F and G area ranged from non-detect to 167,000 ppm. Fill materials were encountered within PAOC 7 at pre-development 2003 RI depths between 12 feet bgs to 16 feet bgs. Reported concentrations of lead in this area ranged from 15.5 ppm to 9,990 ppm in soils less

than 1 foot below the crawl space ground surface. This crawl space has since been demolished and the Site grades have been significantly raised in this area. Lead reported concentrations exceeded the 10,000 ppm were detected sporadically at pre-development 2003 RI depths of 1 feet bgs to 12 feet bgs. The maximum value of 167,000 ppm was detected in the 2002 RI 1- to 2-foot interval.

The soils encountered near the former Maintenance Building Area (PAOC 29) also consist of historical fill that extended to a pre-development 2003 RI depth of 8 feet bgs. The highest lead levels measured in near-surface samples (less than 2 feet bgs) were sporadically greater than 6 NYCRR Part 375 SCOs for restricted residential use guidance value of 400 ppm (but reached a maximum of 25,000 ppm). Reported concentrations of lead reported in soil were also generally above the 6 NYCRR Part 375 SCOs for restricted residential use guidance value of 400 ppm at pre-development 2003 RI depths greater than 2 feet bgs, up to a maximum of 90,000 ppm (within the 3- to 8-foot depth range).

Chromium reported concentrations reported in soils (fill) from the PAOC 47 source area, ranged from 212 ppm to 3,750 ppm (Figure 13C), at pre-development 2003 RI depths between 3 feet to 5 feet below the existing concrete slab. The two offsite pre-development 2003 RI surface to 6-inch soil samples collected from an area within Kingsland Point Park (adjacent to PAOC 47) documented background levels in shallow soils above the water table at two temporary well locations; where, reported chromium concentrations of 32 ppm to 43.5 ppm were observed. The chromium concentrations in these two off-site Kingsland Point Park samples were less than the 6 NYCRR Part 375 SCOs for restricted residential use guidance value of 110 ppm.

As discussed further in Section 5.4, the Site soil exposure pathway has been managed by a Site wide engineering control cover system that was installed and will be maintained in accordance with the SMP.

5.3.3 SVOCs

The RI identified SVOCs at the Site consist of PAHs. Site fill contains PAHs from combustion products such as ash and slag, as well as localized historical petroleum spills. Individual PAH soil reported concentrations were above 6 NYCRR Part 375 SCOs for restricted residential use guidance values within PAOCs 2, 4, 6, 7, 17, 21, 34, 37, 39, and 43, and in the UST area. From previous investigations, pre-1960 fill generally contains PAHs above 6 NYCRR Part 375 SCOs for restricted residential use guidance values for individual compounds, the highest concentrations of SVOCs occur at PAOC 47 (maximum of 4,675 ppm total SVOCs), where evidence of residual oil was found within the fill at 7 to 13 ft bgs. Total carcinogenic PAHs

(a subset or the total SVOCS) ranged from non-detect to 1,853 ppm at this same depth interval in PAOC 47.

As discussed further in Section 5.4, the Site soil exposure pathway has been managed by a Site wide engineering control cover system that was installed and will be maintained in accordance with the SMP.

5.3.4 VOCs

No VOCs were detected during the 2002 RI in the Site soils sampled above the 6 NYCRR Part 375 SCOs for restricted residential use guidance values.

5.3.5 Recycled Concrete Millings

As discussed in Section 4.2.9 of this Report, recycled concrete millings were reused within the Site's existing cover system under BUD No. 894-360. A description of the material's analytical testing results is provided below.

Concrete millings in PAOCs 14, 15, and 32 were sampled (top foot of surface material) and analyzed for PAHs, metals, and PCBs. Individual PAHs were detected above 6 NYCRR Part 375 SCOs for restricted residential use values at concentrations ranging from 3.5 ppm to 31 ppm. Metals including iron, lead, and mercury, exceeded 6 NYCRR Part 375 SCOs for restricted residential use values. Lead was detected at a maximum concentration of 1,900 ppm in millings at PAOC 15, while remaining samples were less than the 400 ppm 6 NYCRR Part 375 SCOs for restricted residential use value. PCB Aroclors 1248 and 1260 were detected in six of the seven samples collected during the RI at maximum concentrations of 1.8 ppm and 2.6 ppm respectively. Total PCB concentrations ranged from non-detect to 4.4 ppm in the spread millings. Total PCB concentrations measured in samples previously collected from the millings pile at PAOC 31 ranged from 0.39 ppm to 1.69 ppm (EcolSciences, 2002). Overall, the concrete millings onsite generally contained PCBs near or slightly above the TAGM guidance value of 1 ppm for surface soil (unrestricted use), but samples were consistently below the TAGM guidance value of 1 ppm for the 2003 RI subsurface soil (i.e., beneath clean cover soil).

As discussed further in Section 5.4, the Site soil exposure pathway has been managed by a Site wide engineering control cover system that was installed and will be maintained in accordance with the SMP.

5.3.6 Groundwater

Site groundwater is influenced by underlying historic fill and individual PAOCs, which define the COPCs. Metals, SVOCs, and VOCs have been detected in the Site groundwater and are described below. These constituents have been compared to NYSDEC Class GA groundwater standards (for drinking-water supplies) in Tables 10 and 11 of Appendix AE. Comparison to these standards is considered conservative and not relevant to the groundwater exposure pathway considered in this human health assessment. In accordance with the established SMP and Environmental Easement (EE), Site groundwater use is prohibited without necessary water quality treatment, as described in the EE (Appendix AG). The only potential for human exposure to contaminants in Site groundwater would be by dermal contact with groundwater during construction. For this evaluation, data from unfiltered groundwater samples (which may include suspended solids) was used to evaluate this pathway.

5.3.7 Metals

Groundwater observed during the 2003 RI within the north to northwest part of the Site contained several metals that exceeded Class GA groundwater standards (for drinking-water supplies). These 2003 RI monitoring well sampling locations are provided in Drawing 3 of Appendix AE. Six monitoring wells (OW-10, OW-11, OW-20, OW-24, OW-25, and OW-26T). The 2003 RI Barium, chromium, iron, lead, manganese, and sodium reported concentrations exceeded the Class GA standards. Barium and chromium were detected at maximum reported concentrations of 6,560 and 554 micrograms per liter (µg/L), respectively. Lead was detected in monitoring wells OW-20 and OW-26T at concentrations of 81.7 µg/L and 88.1 µg/L.

Groundwater within the south to southwest part of the West Parcel, under portions of the former Body Plant and Chassis Plant areas were sampled from 11 monitoring wells (OW-6, 7, 8, 40, 42, 45, 46, 47, 49, 50, and 51). Class GA standards were exceeded for barium, iron, lead, manganese, and sodium. Barium and lead were detected at maximum concentrations of 5,040 and 116 µg/L.

Groundwater samples collected in the vicinity of the UST attenuation area showed that the Class GA standard was exceeded for iron, manganese, and sodium. Onsite groundwater in PAOC 47 exhibited chromium as high as 42,100 µg/L. Offsite groundwater monitoring at wells in the Kingsland Point Park (SI-47-B27 and SI-47-B28), near PAOC 47, contained chromium above the Class GA standard, at a maximum reported concentration of 466 µg/L.

5.3.8 SVOCs

PAHs were the primary COPC for groundwater. The 2003 RI samples collected within the former 10,000-gallon UST attenuation area at PAOCs 7, 21, 37, 39, 43, and 47, had concentrations of individual PAHs exceeding Class GA standards. The maximum detected PAH reported concentration was for phenanthrene at 140 µg/L.

5.3.9 VOCs

Site groundwater within the northern end of the West Parcel reported VOC concentrations above Class GA standards in OW-10, OW-22, OW-25, OW-26T, and temporary well SI-GWI-B11W. Benzene and other petroleum-derived VOCs were present in groundwater. Trace levels of petroleum-derived VOCs are also reported in the groundwater at PAOCs 7 and 37. In the PAOC 47 area, 16 monitoring wells (including boundary well OW-24), and two temporary wells located on the Kingsland Point Park, were sampled to delineate the extent of localized TCE contamination. TCE ranged from non-detect to 75 µg/L in onsite wells and non-detect to 16 µg/L in the Kingsland Point Park. The 1,1-dichloroethane reported concentration was also slightly above the Class GA standard in one onsite well, and cis-1,2-dichloroethene was slightly above the Class GA Standard in one offsite well at the Kingsland Point Park.

5.3.10 Soil Gas

Methane was confirmed in the RI soil gas studies in some areas of the Site over organic deposits (Figures 15A, 15B, and 17 of Appendix AE). Within the paved part of the East Parcel, reported methane concentrations in soil gas beneath the asphalt ranged from 70% to 100% within the extent of the former Village of Sleepy Hollow landfill. Migration of methane from the former Sleepy Hollow Village landfill toward the west appears to be following the groundwater flow path, until the soil gas is naturally released to the atmosphere. Methane was not detected beyond the edges of the asphalt pavement within the East Parcel (Figure 15A of Appendix AE). Lower levels of methane (up to 18%) were found beneath the asphalt in the northern corner of the West Parcel (Figure 17) where organic marsh soils underlie the fill.

VOCs were observed within several PAOCs found under the former Body and Chassis Plants of the West Parcel (Figure 18 of Appendix AE). Specifically, parts of PAOCs 7, 21, 37, 39, 43, 47, and the UST attenuation area were sampled based on presence of VOCs within the 2003 RI observed Site soil and groundwater. Representative samples were collected where future Site buildings were anticipated, based on the Draft Environmental Impact Statement (DEIS) for Lighthouse Landing Communities, LLC. Soil vapor data were collected from areas below the slab and from uncovered surface soil areas (including samples located

near current crawl spaces beneath the existing slab floor). Air samples were also measured in the former crawl spaces. Constituents detected in the former crawl space 2003 RI air samples were acetone, chloroform, carbon disulfide, and toluene. These same constituents were detected in the former crawl space soil vapor samples. In total, 27 volatile constituents were detected in the 2003 RI soil vapor. These constituents included Freon 11 and Freon 12, chlorinated solvents (i.e., TCE, 1,1- dichloroethene, tetrachloroethene), and aliphatic (i.e., xylenes, heptane) and aromatic hydrocarbons (i.e., toluene, naphthalene, benzene). The aliphatic and aromatic VOCs were generally reported in soil vapor data collected from PAOC 37 and PAOC 43 (within the proposed natural petroleum attenuation monitoring areas). Similarly, these petroleum-derived compounds were detected within the petroleum attenuation area associated with the former10,000-gallon No.6 fuel oil UST.

Chlorinated solvents, predominantly, TCE, were detected only within and around the area of PAOC 47. The TCE in soil gas corresponded to the TCE found within the groundwater and soil samples collected in the PAOC 47 area, exhibiting a larger footprint than would be indicated by the 2003 RI soil and groundwater data alone. VOCs from the soil gas phase were not detected in the crawl space atmosphere beneath the former Chassis and Body Plant slabs. The results of the soil vapor and crawl space air sampling, for the detected constituents, are presented on Figure 18 of Appendix AE.

5.4 Potential Exposure Points, Receptors, and Route of Exposure

An initial step in evaluating potential human exposure is identifying complete exposure pathways. In accordance with New York State Department of Health (NYSDOH) guidance for conducting a Qualitative Human Health Exposure Assessment (NYSDEC, 2002a and 2002b), for an exposure pathway to be complete, the following five elements must exist:

1. **A source of COPC;**
2. **The release and transport mechanisms of COPC;**
3. **A point of human exposure;**
4. **Routes of exposure where constituents from these media could be taken up by the human body; and,**
5. **A receptor population.**

As previously described, COPCs have been identified in historical fill, recycled concrete millings, soil vapor, and groundwater. Potential human exposure to the media could occur through ingestion, dermal contact, and/or inhalation of particulates or volatile organics released to the air. The Site is now occupied by several residential structures with occupants while construction occurs in unoccupied areas. Therefore, the most likely

current receptors are the general construction workers (e.g., individuals involved in maintenance activities, environmental samplers, land developers, DPW personal [who currently park their vehicles onsite]), and residents walking through active, restricted access construction activities.

Residents and their properties are fenced off from ongoing construction and undeveloped areas of the Site. Although the Site is fenced along the Site boundary there is potential for exposure of restricted construction access area trespassers.

The potential receptors are workers involved in excavation and construction activities (associated with redevelopment and infrastructure maintenance). Future residents, visitors, and commercial workers who may live, visit and/or work in the area, are currently and will need to be isolated from contaminated media encountered during excavation and construction activities.

As further discussed in this Report, excavation activities are performed in accordance with the SMP as well as dust and stormwater run-off are managed under the SMP and the current NYSDEC Stormwater Pollution Prevent Plan (SWPPP). In addition, the SMP Community Air Monitoring Plan (CAMP) has been and will continue to be operated during the Site construction and intrusive activities to monitor the potential exposure from airborne particulates (e.g., dust) and VOCs.

Potentially complete human exposure pathways for the Site are identified below.

5.4.1 Potential Direct Contact with Soils

Under the current "construction phase" land use, there is a potentially complete exposure pathway for construction workers exposed to constituents in soil and concrete millings while engaged in intrusive activities (e.g., removal of concrete slabs, utility work, and building construction). There is no potential for exposure of residents, visitors, and commercial workers to constituents in these media since impervious surfaces and other components of the final cover system (described in the Section 4.1.2) are used to isolate the existing fill materials from the public. Final soil cover, roadways, parking areas, and building slabs will continue to be integrated into the final cover system to prevent direct contact with any subsurface contamination. Any excavation that must occur within the existing cover system is conducted in accordance with the SMP EWP (refer to Appendix AF) to prevent completion of the human exposure pathway.

5.4.2 Potential Inhalation of Vapors and/or Particulates

Under the current "construction phase" land use, general workers, residents, and potential trespassers at the Site may be exposed to constituents through inhalation

of vapors and/or particulates (e.g., dust). There are now occupied residential buildings onsite, so there is concern for the potential migration of vapors to indoor air. However, as detailed in Section 4.2.11, vapor mitigation systems were installed as an element of each completed building foundation. The site is also actively monitored during construction activities in accordance with the CAMP (Appendix E) to prevent vapor and/or particulate inhalation.

An exposure pathway through inhalation of particulates and/or volatiles has been identified for the current construction workers engaged in intrusive activities of the millings and historical fill within the existing cover system, This potential inhalation exposure pathway is monitored and mitigated by the SMP CAMP ; where, the CAMP has been and will continue to monitor the construction air quality and identify any CAMP exceedances prior to any potential inhalation pathways. Therefore, the current construction activities are conducted with properly trained personnel, with personal protective equipment (PPE), and in accordance with the EWP, CAMP, and HASP (Appendices AF, E, and Y, respectively) to prevent completion of the exposure pathway.

5.4.3 Direct Contact with Groundwater

Groundwater occurs at various depths across the Site (generally 6 feet to 7 feet), and generally flows west/southwest toward the Hudson River. Reported, elevated concentrations of metals, SVOCs, and VOCs have been detected within various PAOC areas in site groundwater. As previously discussed, using groundwater on the Site as a potable water source is prohibited by the EE. Therefore, the exposure pathway is incomplete for potential exposure to constituents in groundwater through consumption.

Direct contact with groundwater that may be encountered during future deep excavation and construction activities could complete the exposure pathway. While this exposure pathway is complete, potential exposure through direct contact and potential inhalation of volatiles) of construction workers to constituents in groundwater is mitigated using properly trained personnel and personal protective equipment (PPE) in accordance with the SMP and the SMP EWP.

6.0 MONITORING PLAN COMPLIANCE REPORT

As described in the SMP, the Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and affected site media. This Monitoring Plan may only be revised with the approval of NYSDEC.

On-Site environmental monitoring devices, including but not limited to, groundwater monitoring wells and vapor mitigation systems, must be protected and replaced as necessary so the devices function in the manner specified in the SMP.

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, a Site reconnaissance will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

6.1 Site-Wide Inspection

A comprehensive, Site-wide Inspection was conducted by PS&S on April 17, 2020 to determine and document:

- Whether ECs continue to perform as designed,
- If these controls continue to be protective of human health and the environment,
- Compliance with requirements of the SMP and the EE,
- Achievement of remedial performance criteria,
- Sampling and analysis of appropriate media during monitoring events,
- If Site records are complete and up to date, and
- Changes, or needed changes, to the remedial or monitoring system.

Observations made during the April 17, 2020 PS&S Site reconnaissance are documented in the Annual Site-Wide Inspection Checklist (refer to Appendix B).

6.1.1 Cover System Monitoring Requirements

As part of the Site-wide cover system integrity assessment, the cover system was maintained and repaired, as necessary, to prevent public contact with historical fill or other soils that do not comply with the SCOs required for the soil cover system. The integrity of the cover system will continue to be monitored on an annual basis (unless a more frequent inspection is required by NYSDEC during periods of major

construction). In accordance with DER-10, the QEP certified that the final cover system remains effective as of the April 17, 2020 PS&S Site reconnaissance.

The April 2020 PS&S Site reconnaissance of the surface cover system included the assessment of the following cover system components and their respective integrity:

1. Hard surface cover for evidence of deep cracks, potholes, cuts, depressions and/or rutting exposing demarcation barriers and historical fill; and
2. Surface soil cover to identify any areas where there is evidence of:
   - Excessive settlement or erosion relative to the surrounding areas;
   - Excessive ponding of surface water that could damage the soil cover;
   - Exposed or damaged underlying demarcation barrier(s);
   - Animal burrows or invasive deep-rooted vegetation that could compromise the integrity of the cover system; and
   - Modifications to the surface cover system with respect to repairs or changes in cover system construction.

6.2 Groundwater Monitoring Requirements

Groundwater monitoring will be performed on an annual basis, commencing after Site development. At the time of this PRR reporting period, Site development has not been completed and groundwater monitoring was not required.

6.3 Groundwater Monitoring Program

As noted in the SMP, a groundwater monitoring well network existed at the Site prior to redevelopment. Several of these monitoring wells will need to be repaired, replaced and relocated to provide access for post-development sampling. Monitoring wells installed prior to redevelopment will be protected or replaced in kind during Site development, as practicable. During this PRR reporting period and as further discussed in Section 5.3.1, 8 existing groundwater monitoring wells were located and then decommissioned for future replacement in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures". NYSDEC approval of the Groundwater Monitoring Well Decommissioning Plan and subsequent Decommissioning Logs are provided in Appendix D of this PRR. Figure 6 displays the relocated groundwater monitoring wells replacing those decommissioned.

6.3.1 Groundwater Monitoring Well Decommissioning

PS&S submitted a groundwater monitoring well decommissioning work plan to NYSDEC due to monitoring well conflict with ongoing construction. As discussed with the NYSDEC Project Manager, an extensive effort was advanced to locate the

19 groundwater monitoring wells detailed in the SMP Monitoring Plan in compliance with the February 13, 2018 Site Management Plan Groundwater Monitoring Well Decommissioning notification. The Site contractor conducted exploratory excavation operations to locate the surface of the wells at the installation elevations disclosed in Appendix D. If the wells were not located at the approximate installation elevation during the exploratory excavation operations, the Site contractor excavated an additional 3 feet to 5 feet bgs.

Eight of the 19 groundwater monitoring wells detailed in the SMP Monitoring Plan were successfully located and decommissioned. Three of the 8 located wells were decommissioned on February 8, 2018 and were a part of the SVI intrusion evaluation detailed in Section 4.2.11 of this PRR. The remaining 5 wells were decommissioned on October 2, 2019 and were a part of the existing groundwater monitoring well network (refer to Figure 6). Groundwater monitoring wells were decommissioned in accordance with CP-43. Monitoring Well Field Inspection Logs and Well Decommissioning Records are provided in Appendix D.

6.3.2 Institutional and Engineering Control Effectiveness

Based on an evaluation of the Inspection/Monitoring Program results detailed above, PS&S concludes that the Site's implemented ICs/ECs remain effective in protecting public health and the environment from remaining contamination.

7.0 OPERATION AND MAINTENANCE (O&M) COMPLIANCE REPORT

In accordance with Section 4.0 of the SMP (Operation and Maintenance Plan), an operations and maintenance plan (OMM Plan) will be submitted if active sub-slab depressurization systems (SSDS) are required in buildings designed for occasional or continuous occupancy. No OMM Plan is currently applicable since no active SSDSs were installed on-Site.

8.0 CONCLUSIONS

This PRR was developed in accordance with Section 6.3(b) of the NYSDEC DER-10, *Technical Guidance for Site Investigation and Remediation,* dated May 3, 2010, and the Arcadis SMP finalized in December 2013.

PS&S finds the Site in compliance with the SMP IC/EC Plan and Monitoring Plan requirements (SMP O&M Plan not currently applicable) in accordance with the review of the IC/ECs at the Site, and a visual PS&S reconnaissance conducted on April 17, 2020. Construction activities continue at the Site in accordance with the SMP, CAMP, HASP, and SMP EWP. No corrective measures are proposed and no changes to the SMP PRR requirements are recommended at this time.

NOTES:

1. VILLAGE OF SLEEPY HOLLOW TAX MAP, SHEET 96, BLOCK 7793
2. PROPERTY KNOWN AS PORTION OF LOT 1.1, SHEET 115.10 (WEST PARCEL) LOT 1.1, SHEET 115.15 (SOUTH PARCEL) AS SHOWN ON THE TAX MAP OF THE VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY, STATE OF NEW YORK.
3. PER CONTRACTUAL AGREEMENT BETWEEN THE CLIENT AND CONTROL POINT ASSOCIATES, INC. A BOUNDARY SURVEY WAS NOT PERFORMED.
4. THE LOCATION OF UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN.
5. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS (KEYNET GPS) NETWORK CORRECTION.
6. PLANIMETRIC AND TOPOGRAPHIC FEATURES COMPILED BY CONTROL POINT ASSOCIATES, INC. UTILIZING PHOTOGRAMMETRIC METHODS FROM UAV PHOTOGRAPHY. UAV PHOTOGRAPHY PERFORMED BY CONTROL POINT ASSOCIATES, INC. ON MARCH 09, 2020 WITH A PHOTO SCALE OF 1.40 cm GSD. A GROUND SURVEY WAS NOT PERFORMED.
7. THIS DATA SET WAS PRODUCED TO MEET ASPRS POSITIONAL ACCURACY STANDARDS FOR DIGITAL GEOSPATIAL DATA (2014) FOR AN ACCURACY LEVEL THAT IS WITHIN FOUR TIMES GREATER THAN THE ERROR OF CONTROL.
8. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE PHOTOGRAPHY AND ARE SUBJECT TO FIELD VERIFICATION BY THE END USER.
9. AERIAL CONTROL PROVIDED BY CONTROL POINT ASSOCIATES, INC. UTILIZING GPS OBSERVATIONS ON MARCH 09, 2020. (SEE NOTE 1).

REFERENCES:

1. TAX MAP OF THE VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY, STATE OF NEW YORK.
2. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, LIGHTHOUSE LANDING, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10 (WEST PARCEL), LOT 1, SHEET 115.15 (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-18-14.
3. MAP ENTITLED "SUBDIVISION PLAT, EDGE ON HUDSON, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10, (WEST PARCEL), LOT 1, SHEET 115.15, (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, STATE OF NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, LAST REVISED APRIL 18, 2019.AS RECORDED IN MAP NO. 29263

LEGEND

- WHERE EXISTING CAP IS IN PLACE.
- WHERE EXISTING CAP IS DISTURBED/AREA OF ACTIVE CONSTRUCTION
- WHERE FINAL COVER SYSTEM IS INSTALLED

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

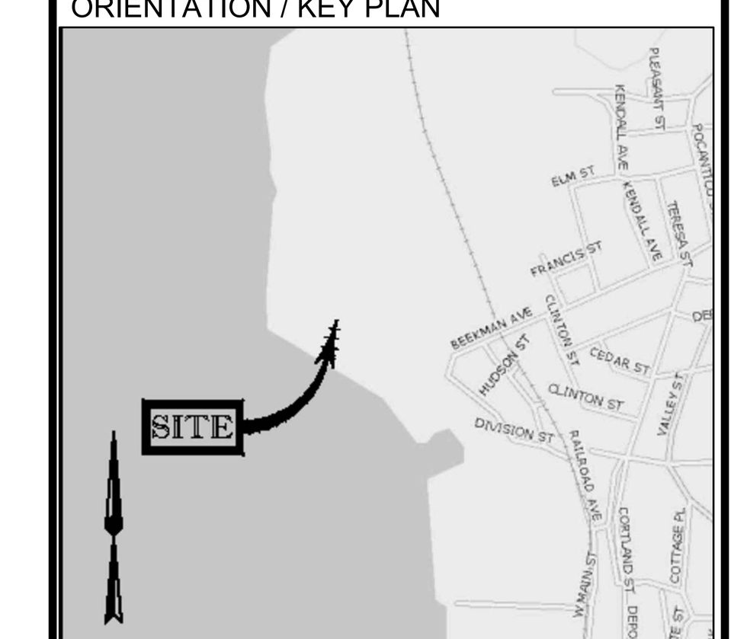
1 inch = 100 ft.

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN



CLIENT

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NJ 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC. OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION.

ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS.

THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN, CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

PROJECT

FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

SHEET TITLE

EXISTING COVER SYSTEM

PROJECT NO.: 05302.0001	DRAWN BY: RE
SCALE: 1	CHECKED BY: SMP
DATE: 05/26/2020	SHEET 1 OF 1

SHEET NO.

FIGURE 1

NOTES:

1. WESTCHESTER COUNTY INDEX MAP, SHEET 96, BLOCK 7793.
2. PROPERTY CURRENTLY KNOWN AS LOT 1, SHEET 115.10 (WEST PARCEL) & LOT 1, SHEET 115.15 (SOUTH PARCEL) AS SHOWN ON THE TAX MAP OF WESTCHESTER COUNTY, STATE OF NEW YORK.
3. AREAS SHEET 115.10:
   LOT 1 = 1,867,329 S.F. OR 42.868 AC.

   AREAS SHEET 115.15:
   LOT 1 = 72,941 S.F. OR 1.674 AC.
   PROPOSED LOT 1.100 = 5,398 S.F. OR 0.124 AC.
   PROPOSED LOT 1.101 = 181 S.F. OR 0.004 AC.
4. PROPOSED LOT GEOMETRY PER CAD FILE PROVIDED BY DIVNEY, TUNG, SCHWALBE LAST REVISED ON JANUARY 16, 2018.
5. THE PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW RECORDED AS CONTROL NUMBER 533192301.

REFERENCES:

1. THE TAX MAP OF WESTCHESTER COUNTY, STATE OF NEW YORK.
2. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, LIGHTHOUSE LANDING, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10 (WEST PARCEL), LOT 1, SHEET 115.15 (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-18-14.

LEGEND

TO BE CONVEYED TO THE VILLAGE OF SLEEPY HOLLOW

TO BE OFFERED FOR DEDICATION TO THE VILLAGE OF SLEEPY HOLLOW

HUDSON RIVER

APPROXIMATE MEAN HIGH WATER PER CONTROL NO. 531192301

APPROXIMATE LINE OF FUTURE SUBDIVISION, PER 6/7/11 SPECIAL PERMIT

FUTURE WATERFRONT OPEN-SPACE PARCEL

LIGHTHOUSE

SECTION 115.14
BLOCK 1
LOT 1
N/F REPUTED OWNER
MOON RIVER REALTY LLC

SECTION 115.10
BLOCK 1
LOT 1.10
AREA = 34,084 S.F.
OR 0.782 AC.
(NOT BUILDING LOT)

SECTION 115.10
BLOCK 1
LOT 1.1
N/F REPUTED OWNER
LIGHTHOUSE LANDING
COMMUNITIES, LLC
DEED 49230 PG. 692
AREA = 1,867,329 S.F. OR 42.868 AC.
(NOT BUILDING LOT)

WESTCHESTER COUNTY INDEX
SHEET 96, BLOCK 7793

For Phase 2-
Block F & H
(See page 2)

Block J

Block E

Block I

MAXWELL DRIVE

HORSEMANS BOULEVARD

LEGEND DRIVE

RIVER STREET

BEEKMAN AVENUE

HUDSON AVENUE

RAILROAD TRACKS

SECTION 115.06
BLOCK 1
LOT 1
N/F REPUTED OWNER
CONRAIL RAILROAD

SECTION 115.15
BLOCK 1
LOT 1
(SEE DETAIL)
(NOT BUILDING LOT)
(TO BE OFFERED FOR DEDICATION)

SECTION 115.15
BLOCK 1
LOT 1.100
(SEE DETAIL)
(NOT BUILDING LOT)
(TO BE OFFERED FOR DEDICATION)

SECTION 115.15
BLOCK 1
LOT 2
N/F REPUTED OWNER
LOUISE & JOSEPH BRACCHITTA

SECTION 115.15
BLOCK 1
LOT 3
N/F REPUTED OWNER
VILLAGE OF SLEEPY HOLLOW
(NOT BUILDING LOT)

SECTION 115.15
BLOCK 1
N/F REPUTED OWNER
LIGHTHOUSE LANDING
COMMUNITIES, LLC
DEED 49230 PG. 692
AREA = 72,941 S.F.
OR 1.674 AC.
(NOT BUILDING LOT)

SEWER EASEMENT AGREEMENT
LIBER 7232, PG. 421
LIBER 7455, PG. 773

APPROXIMATE LINE OF FUTURE SUBDIVISION, PER 6/7/11 SPECIAL PERMIT

FUTURE PUBLIC USE PARCEL

FUTURE ACCESS EASEMENT AREA

FUTURE WATERFRONT OPEN-SPACE PARCEL

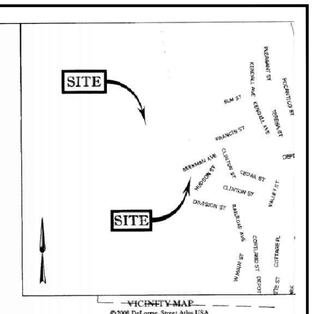
Lot 1.41 Closing #5 Toll Unit #E-2
Lot 1.42 Closing #9 Toll Unit #E-3
Lot 1.43 Closing #1 Toll Unit # E-1
Lot 1.44 Closing #1 Toll Unit #1-6
Lot 1.45 Closing #6 Toll Unit #46-51
Lot 1.46 Closing #TBD Toll Unit #40-45
Lot 1.47 Closing #TBD Toll Unit #27-32
Lot 1.48 Closing #5 Toll Park
Lot 1.49 Closing #5 Toll Unit #52-56
Lot 1.410 Closing #2 Toll Unit #62-66
Lot 1.411 Closing #4 Toll Unit #57-61
Lot 1.412 Closing #1 Toll Unit #7-11
Lot 1.413 Closing #2 Toll Unit #67-72
Lot 1.414 Closing TBD Toll Unit #27-32
Lot 1.415 Closing #TBD Toll Unit #22-26
Lot 1.416 Closing #7 Toll Unit #17-21
Lot 1.417 Closing #5 Toll Unit #12-16

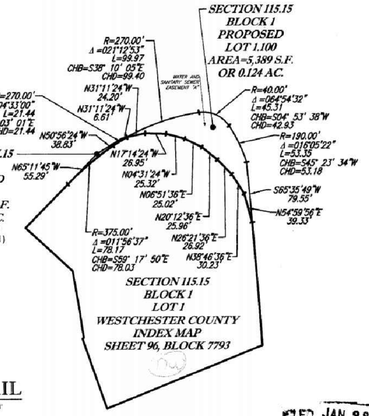
Closing #3

RECENT CLOSING 2-18-20

Phase 1

TO TOLL BROTHERS
Closing #1---- 03/23/18---J Block Lots 5.12 & Lot 5.13
-E block Lot 1.43
Closing #2---- 07/03/18---J Block Lots 1.59 and 1.510
Closing #3---- 08/16/18---I Block Lots 1.7, 1.8 & 1.9
Closing #4---- 04/25/19---J Block Lot 1.57
Closing #5---- 08/08/19---J Block Lots 1.54, 1.58 & 1.511
-E Block 1.41
Closing #6---11/08/19---J block Lot 1.53
Closing #7---02/18/20- J block Lot 1.58
Closing #8---TBD-05/08/20 tentative Lot 1.52
Closing #9---TBD-08/08/20 tentative Lot 1.51, 1.42
Closing #10---TBD-11/08/20-tentative-Lots 1.514 and 1.55





DETAIL
SCALE: 1"=80'

GRAPHIC SCALE
80 0 40 80 180 320
(IN FEET)
1 inch = 80 ft.

FILED JAN 28 2019
NUM. 49263
FEE PAID 20.00

REV. / ISSUE	DATE	DESCRIPTION
24		REVISE LOT LINES 1.41, 1.42 & 1.43
23		REVISE LOT LINES AND LOT ACREAGE
22		REVISE LOT LINES AND LOT ACREAGE
20		REVISE LOT ACREAGE AND LOT LETTERS
19		REVISE LOT NUMBERS AND ROAD NAMES
18		REVISE SUBDIVISION LOT LINE CONFIGURATION AND ADD 2 LOTS
17		REVISE CURVE DATA
16		PER CLIENT MARKUP
15		PER NOTES
14		PER ENGINEER COMMENTS
13		ADDED PROPOSED SANITARY LINE
12		REVISED LOT NUMBERS
11		ADDED PROPOSED BUILDING AND EASEMENTS
10		REVISED PROPOSED LOT LINES
9		REVISED WATER & SANITARY EASEMENTS
8		SEE SHEET 2OF 3 FOR PROPOSED LOT LINES
7		REVISED PER WCDOH COMMENTS
6		REVISED FUTURE EASEMENTS
5		REVISED FOR WCDOH SUBMISSION
4		REVISED PER CLIENT COMMENTS
3		REVISE TO ADD SIGNATURE BLOCKS
2		REVISE TO ADD FUTURE SUBDIVISION LINES
1		REVISE TO ADD LOT 1.0 AND EASEMENTS
No.		DESCRIPTION OF REVISION

BY	CHK'D	APPROVED	DATE
T.J.M	J.P.C.	G.J.S.	12-21-2018
T.J.M	J.P.C.	G.J.S.	09-28-2018
T.J.M	G.J.S.	G.J.S.	09-04-2018
T.J.M	G.J.S.	G.J.S.	08-06-2018
T.J.M	G.J.S.	G.J.S.	07-06-2018
T.J.M	G.J.S.	G.J.S.	06-15-2018
J.P.C.	G.J.S.	G.J.S.	03-20-2018
J.P.C.	G.J.S.	G.J.S.	01-16-2018
J.P.C.	G.J.S.	G.J.S.	12-18-2017
J.P.C.	G.J.S.	G.J.S.	12-11-2017
J.P.C.	G.J.S.	G.J.S.	9-28-2017
J.P.C.	G.J.S.	G.J.S.	9-17-2017
FIELD CREW	DRAWN	APPROVED	DATE
-	T.J.M	G.J.S.	5-1-2017
-	J.P.C.	G.J.S.	5-19-2017
-	J.P.C.	G.J.S.	5-19-2017
-	J.C.	G.J.S.	3-9-2017
-	J.P.C.	G.J.S.	10-20-2016
-	T.J.M.	G.J.S.	12-9-2016
-	J.P.C.	G.J.S.	9-20-2016
-	C.A.P.	G.J.S.	7-7-2016
-	C.A.P.	G.J.S.	5-24-2016
-	J.P.C.	J.C.W.	11-19-2015
-	A.R.	G.J.S.	8-3-2015
-	M.H.S.	G.J.S.	8-3-2015

FOR ADDITIONAL INFORMATION REQUIRED UNDER THE VILLAGE CODE, CHAPTER 425, SUBDIVISION OF LAND, SECTION 425-10, PRELIMINARY PLAT AND CHAPTER 425, SUBDIVISION OF LAND, SECTION 425-11, FINAL PLAT REFER TO EDGE ON HUDSON PHASE ONE SITE PLAN WESTCHESTER COUNTY DEPARTMENT OF HEALTH REALTY SUBDIVISION APPLICATION DRAWINGS PREPARED BY DIVNEY TUNG SCHWALBE LAST REVISED JULY 30, 2018.

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NEW JERSEY 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

CLIENT

PROJECT

FORMER GENERAL MOTORS
ASSEMBLY PLANT
WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

SHEET TITLE

PROPOSED SITE
DEVELOPMENT
PLAN

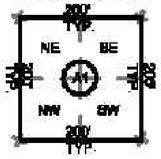
PROJECT NO.: 05302.0001
DATE: 05/27/2020
DRAWN BY: RE
CHECKED BY: SMP
SCALE: 1" = 80'
SHEET 2 OF 6

SHEET NO.
FIG 2

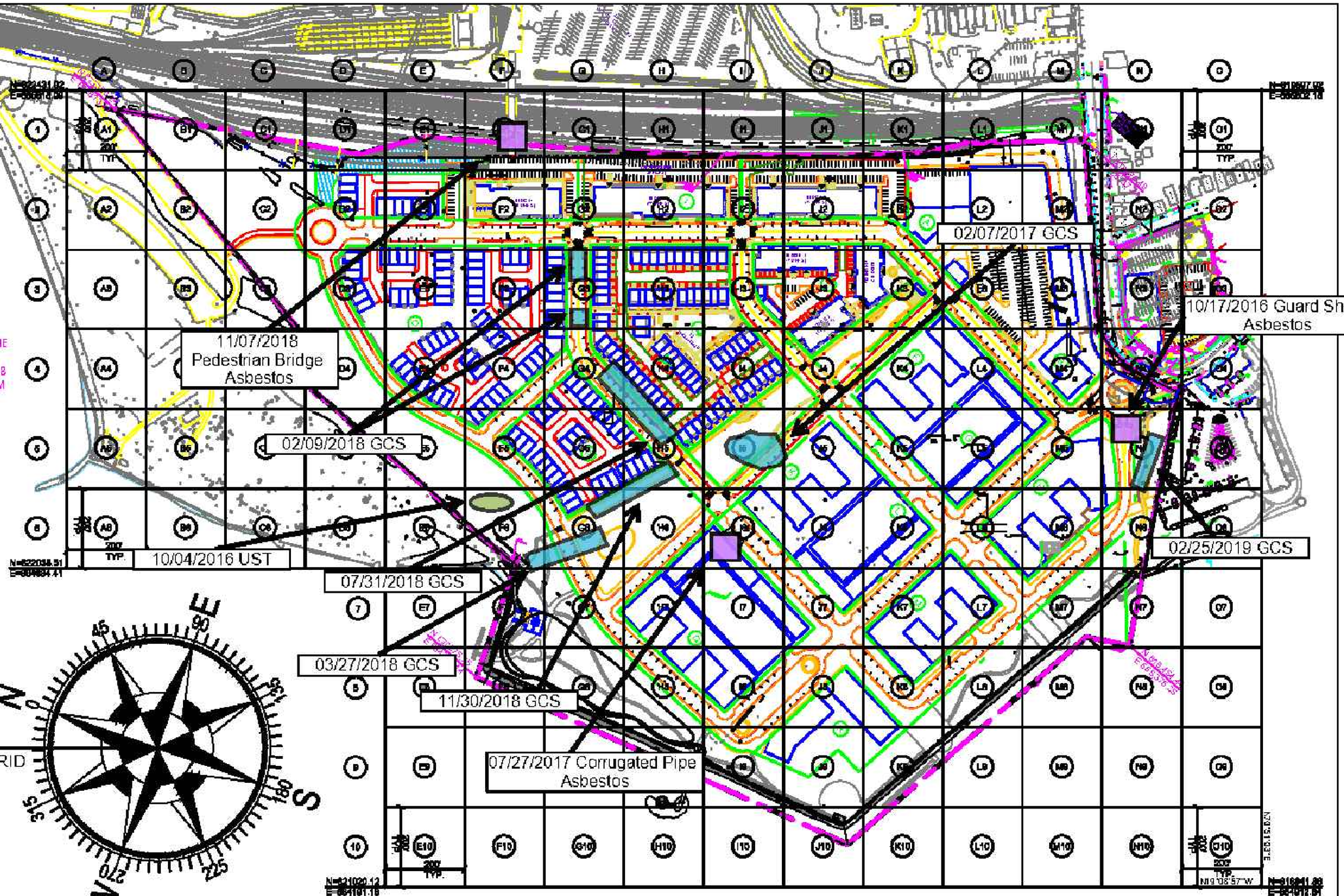
NOTE:

1. EXISTING SURVEY INFORMATION TAKEN FROM CONTROL POINT ASSOCIATES SURVEY DATED DECEMBER 31, 2014.
2. SURVEY PREPARED IN THE NYS PLANE COORDINATE SYSTEM (NAD 83).
3. SURVEY ELEVATIONS BASED ON 1988 NORTH AMERICAN VERTICAL DATUM (1988 NAVD).
4. GCS - "GROSS CONTAMINATED SOIL"

LEGEND



TYPICAL GRID



GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN

PAULUS, SOKOLOWSKI AND SARTOR, LLC.

67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NEW JERSEY 07059
PHONE: (732) 560-9700

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

CLIENT

PROJECT

FORMER GENERAL MOTORS ASSEMBLY PLANT
WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

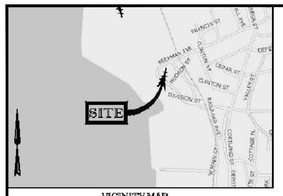
SHEET TITLE

PROPOSED SITE DEVELOPMENT PLAN

PROJECT NO.: 05302.0001
DATE: 05/27/2020
DRAWN BY: RE
CHECKED BY: SMP
SCALE: 1" = 100'
SHEET 3 OF 6

SHEET NO.

FIG 3



VICINITY MAP
©2005 DeLorme, Street Atlas USA

NEW YORK STATE PLANE (NAD 83)

LEGEND

TC 123.45	EXIST. TOP OF CURB ELEVATION
G 123.45	EXIST. GUTTER ELEVATION
W	APPROX. LOC. UNDERGROUND WATER LINE
G	APPROX. LOC. UNDERGROUND GAS LINE
E	APPROX. LOC. UNDERGROUND ELEC. LINE
T	APPROX. LOC. UNDERGROUND TEL. LINE
C	APPROX. LOC. UNDERGROUND CABLE LINE
D	APPROX. LOC. UNDERGROUND DRAINAGE LINE
S	APPROX. LOC. UNDERGROUND SAN. LINE
G	APPROX. LOC. UNDERGROUND GAS LINE
	CURB
	HYDRANT
	WATER VALVE
DMH	DRAINAGE/STORM MANHOLE
SMH	SANITARY/SEWER MANHOLE
TMH	TELEPHONE MANHOLE
EMH	ELECTRIC MANHOLE
MH	UNKNOWN MANHOLE
C/O	CLEAN OUT
D.C.	DEPRESSED CURB
E.O.C.	EDGE OF CONC.
E.O.P.	EDGE OF PAVEMENT
S.W.L.	SOLID WHITE LINE
S.Y.L.	SOLID YELLOW LINE
D.Y.L.	DOUBLE YELLOW LINE
D.W.Y.L.	DASHED YELLOW LINE
	4"x4" WOOD POST/ END OF LATERAL
	TO BE CONVEYED TO THE VILLAGE OF SLEEPY HOLLOW

REFERENCES:

1. THE TAX MAP OF WESTCHESTER COUNTY, STATE OF NEW YORK.
2. MAP ENTITLED "ALTA/ASCM LAND TITLE SURVEY, LIGHTHOUSE LANDING, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 1 1/5 10 (WEST PARCEL), LOT 1, SHEET 1 1/5 13 (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-15-14
3. MAP ENTITLED "EDGE ON HUDSON, SLEEPY HOLLOW, NY PHASE 1, LAYOUT PLAN " REVISION #8, DATED 11/20/18
4. DIMENSIONS PROVIDED BY CLIENT AS PER EMAIL DATED 12-13-2018.

NOTES:

1. THE PURPOSE OF THIS MAP IS TO ILLUSTRATE THE CORRECT CONDITIONS WITHIN ROAD FOUR AS OF 11/3/2019
2. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. NOT ONE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
3. THIS PLAN IS BASED ON INFORMATION PROVIDED, BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
4. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
5. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS).

PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS, ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.

THE STATE OF NEW YORK REQUIRES NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.
DIG SAFELY NEW YORK
(1-800-962-7962)

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NEW JERSEY 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

CLIENT

PROJECT

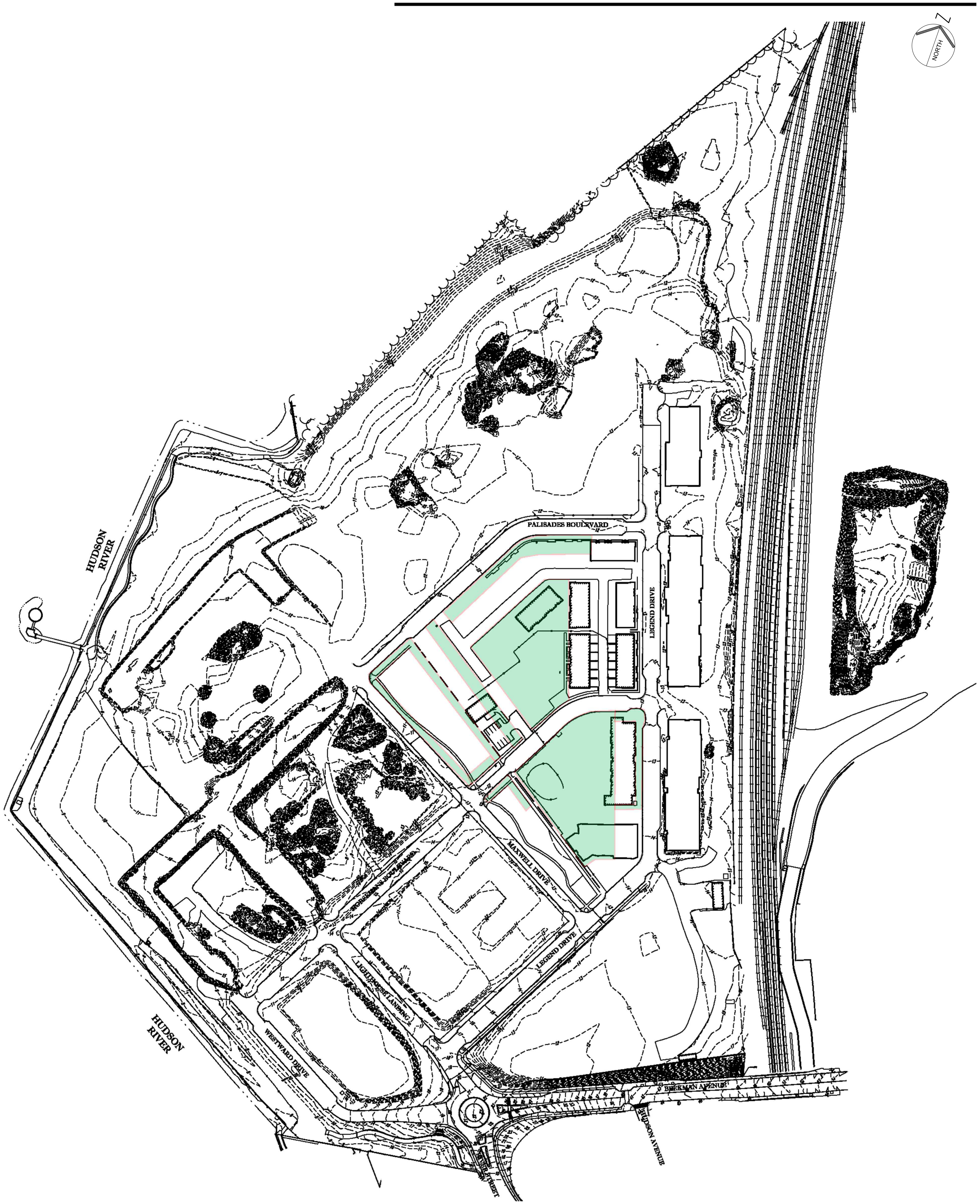
FORMER GENERAL MOTORS
ASSEMBLY PLANT
WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

SHEET TITLE

SITE DEVELOPMENT
UTILITY PLAN

PROJECT NO.:	05302.0001
DATE:	05/27/2020
DRAWN BY:	RE
CHECKED BY:	SMP
SCALE:	1" = 40'
SHEET	4 OF 6
SHEET NO.	FIG 4



NOTES:

1. VILLAGE OF SLEEPY HOLLOW TAX MAP, SHEET 96, BLOCK 7793
2. PROPERTY KNOWN AS PORTION OF LOT 1.1, SHEET 115.10 (WEST PARCEL) LOT 1.1, SHEET 115.15 (SOUTH PARCEL) AS SHOWN ON THE TAX MAP OF THE VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY, STATE OF NEW YORK.
3. PER CONTRACTUAL AGREEMENT BETWEEN THE CLIENT AND CONTROL POINT ASSOCIATES, INC. A BOUNDARY SURVEY WAS NOT PERFORMED.
4. THE LOCATION OF UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN.
5. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS (KEYNET GPS) NETWORK CORRECTION.
6. PLANIMETRIC AND TOPOGRAPHIC FEATURES COMPILED BY CONTROL POINT ASSOCIATES, INC. UTILIZING PHOTOGRAMMETRIC METHODS FROM UAV PHOTOGRAPHY. UAV PHOTOGRAPHY PERFORMED BY CONTROL POINT ASSOCIATES, INC. ON MARCH 09, 2020 WITH A PHOTO SCALE OF 1.40 cm GSD. A GROUND SURVEY WAS NOT PERFORMED.
7. THIS DATA SET WAS PRODUCED TO MEET ASPRS POSITIONAL ACCURACY STANDARDS FOR DIGITAL GEOSPATIAL DATA (2014) FOR AN ACCURACY LEVEL THAT IS WITHIN FOUR TIMES GREATER THAN THE ERROR OF CONTROL.
8. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE PHOTOGRAPHY AND ARE SUBJECT TO FIELD VERIFICATION BY THE END USER.
9. AERIAL CONTROL PROVIDED BY CONTROL POINT ASSOCIATES, INC. UTILIZING GPS OBSERVATIONS ON MARCH 09, 2020. (SEE NOTE 1).

REFERENCES:

1. TAX MAP OF THE VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY, STATE OF NEW YORK.
2. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, LIGHTHOUSE LANDING, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10 (WEST PARCEL), LOT 1, SHEET 115.15 (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-18-14.
3. MAP ENTITLED "SUBDIVISION PLAT, EDGE ON HUDSON, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10, (WEST PARCEL), LOT 1, SHEET 115.15, (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, STATE OF NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, LAST REVISED APRIL 18, 2019.AS RECORDED IN MAP NO. 29263

LEGEND

AREA BACKFILLED WITH CONCRETE MILLINGS

GRAPHIC SCALE

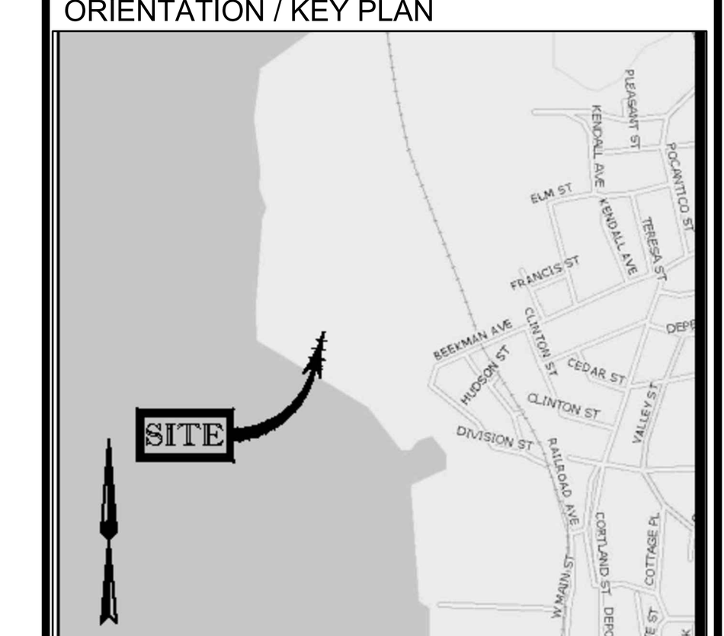
(IN FEET)
1 inch = 100

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN



CLIENT

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NJ 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

PROJECT

FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

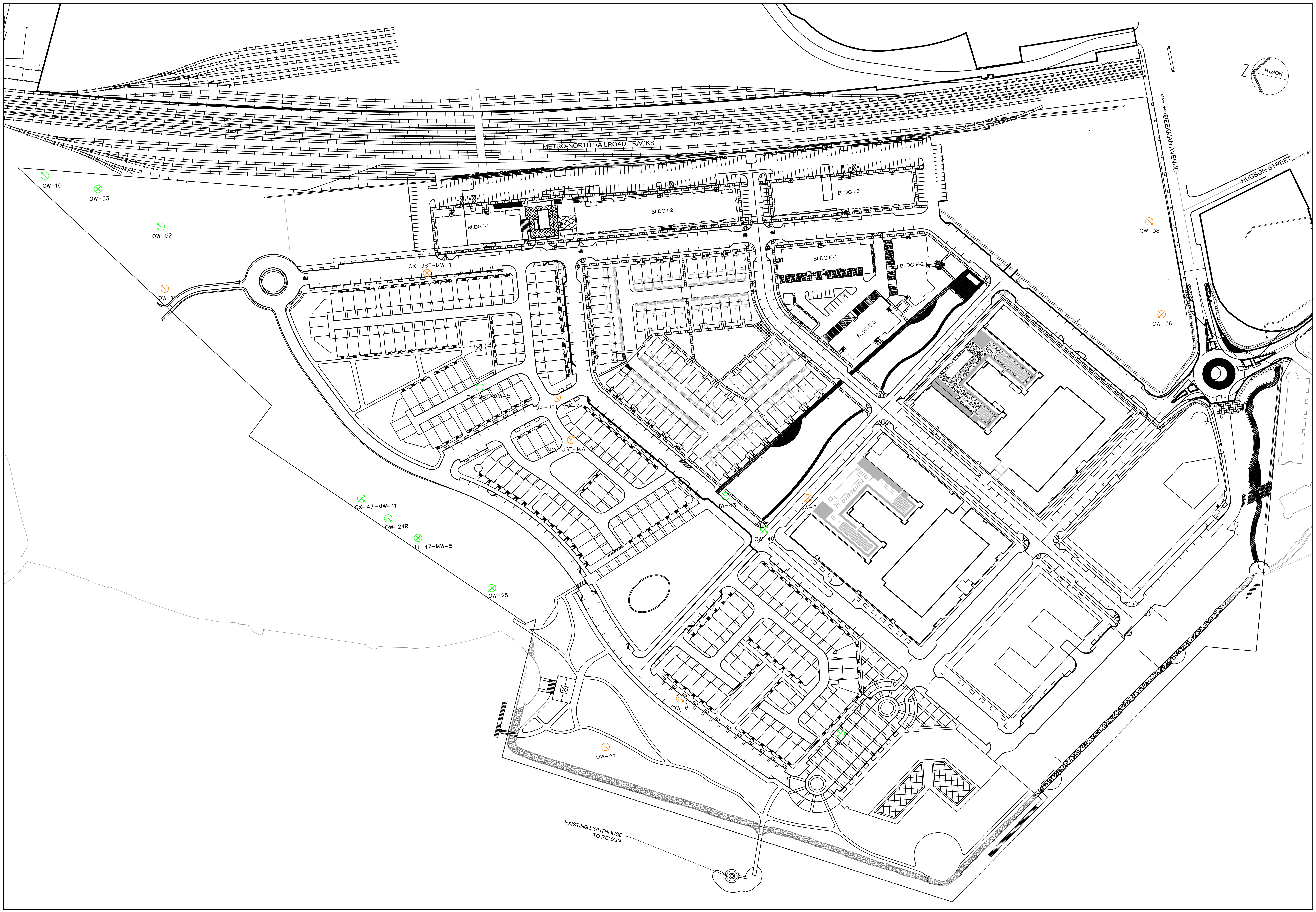
NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

SHEET TITLE

CONCRETE MILLING REUSE

PROJECT NO.:	05302.0001	DRAWN BY:	RE
SCALE:	1" = 100'	CHECKED BY:	SMP
DATE:	05/27/2020	SHEET	5 OF 6
SHEET NO.			

FIG 5



LEGEND

- NEW PROPOSED WELL IN SAME LOCATION
- RELOCATED WELL

SOURCE NOTES

1. BASE MAP PROVIDED BY DIVNEY, TUNG, SCHWALBE DRAWING NO. BD-1.0, TITLED "PHASE 3 AND 4 BASIS OF DESIGN", DATED 10/31/2019.
2. MONITORING WELL LOCATIONS PROVIDED BY ARCADIS DRAWING TITLED "GROUNDWATER MONITORING WELL NETWORK".

GRAPHIC SCALE

80 0 40 80 160

(IN FEET)
1 inch = 80 ft.

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN

PROJECT LOCATION

CLIENT

EDGE-ON-HUDSON
RESIDENCES BY TOLL BROTHERS

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NJ 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

PROJECT

EDGE ON HUDSON

SLEEPY HOLLOW, WESTCHESTER COUNTY, NY

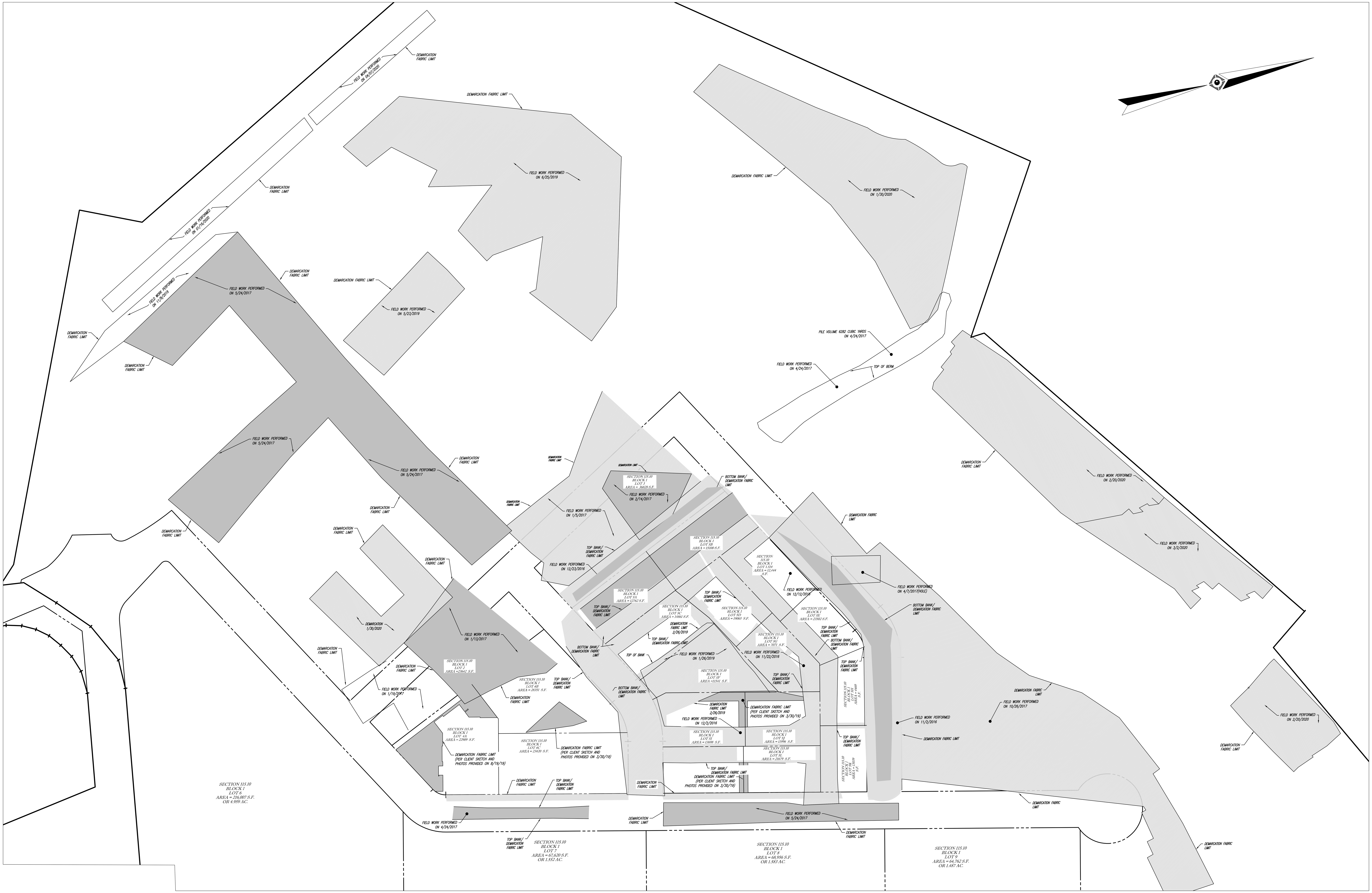
SHEET TITLE

GROUNDWATER MONITORING WELL LOCATIONS

PROJECT NO.:	05302.0002	DRAWN BY:	SL/PD
SCALE:	80	CHECKED BY:	JB
DATE:	01/03/2020	SHEET 1 OF 1	

SHEET NO.

FIG-06



FIELD DATE	
-	

FIELD BOOK NO. -

FIELD BOOK PG. -

FIELD CREW: K.O./R.W.

DRAWN: T.J.M. A.L.D.

DEMARCATION SKETCH

EDGE ON HUDSON

WEST & SOUTH PARCELS OF BEEKMAN AVENUE,
VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT
WESTCHESTER COUNTY, STATE OF NEW YORK

CONTROL POINT ASSOCIATES, INC. PC.
30 INDEPENDENCE BOULEVARD, SUITE 100
WARREN, NJ 07059
908.668.0099 - 908.668.9595 FAX
WWW.CPASURVEY.COM

CHALFONT, PA 215.712.9800
MT. LAUREL, NJ 609.857.2099
MANHATTAN, NY 646.780.0411
LONG ISLAND, NY 631.580.2645
SOUTHBOROUGH, MA 508.948.3000
BOSTON, MA 800.668.1819
ALBANY, NY 518.217.510

REVIEWED:	APPROVED:	DATE	SCALE	FILE NO.	DWG. NO.
G.P.	J.D.S.	04-08-2020	1"=30'	01-140120	1 OF 1

JAMES D. SENS DATE
NEW YORK PROFESSIONAL LAND SURVEYOR #050846-1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau C
625 Broadway, 11th Floor, Albany, NY 12233-7014
P: (518) 402-9662 | F: (518) 402-9679
www.dec.ny.gov

July 27, 2015

Lighthouse Landing Venture, LLC
Bruce Cook
2392 Morse Avenue
Irvine, CA 92614

Re: Site Management (SM) Periodic Review Report (PRR) Response Letter
Former General Motors North Tarrytown West Parcel, Sleepy Hollow
Westchester County, Site No.: C360070

Dear Mr. Cook:

The New York State Department of Environmental Conservation (Department) has reviewed your Periodic Review Report (PRR) and IC/EC Certification for the following period: March 28, 2014 to May 15, 2015.

The Department hereby accepts the PRR and associated Certification. Due to the upcoming redevelopment at the site the frequency of Periodic Review for this site has temporarily been pushed out for five years, your next PRR is due in May 2020. You will receive a reminder letter and updated certification form prior to the due date.

If you have any questions, or need additional forms, please contact me at (518) 402-9662 or e-mail: jamie.verrigni@dec.ny.gov.

Sincerely,

Jamie Verrigni, P.E.
Project Manager
Remedial Bureau C
Division of Environmental Remediation

ec: Jamie Verrigni
Amen Omorogbe
Maureen Schuck – NYSDOH
Bruce Cook – Lighthouse Landing Venture, LLC – bcook@ArgentManagementLLC.com
Peter Johnson – Argent Management LLC - PJohnson@argentmanagementllc.com
Hal Newell – PS&S - hnewell@psands.com

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

4/10/2020

Bruce Cook
Lighthouse Landing Venture, LLC
2392 Morse Avenue
Irvine, CA 92614

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Former General Motors North Tarrytown West Parcel
Site No.: C360070
Site Address: 199 Beekman Ave
Sleepy Hollow, NY 10591

Dear Bruce Cook:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **June 14, 2020**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Qualified Environmental Professional (QEP). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

https://www.dec.ny.gov/chemical/62440.html

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

https://fts.dec.state.ny.us/fts/

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact John Spellman, the Project Manager, at 518-402-9686 or john.spellman@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation
Division of Environmental Remediation, BURC
625 Broadway
Albany, NY 12233-7014

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

Lighthouse Landing GP Investors LLC
Lighthouse Landing Communities LLC
SHC Land Company LLC
LLV Properties LLC
HHM Properties LLC
LL Parcel A, LLC
LL Parcel B, LLC
LL Parcel C, LLC
LL Parcel E, LLC
LL Parcel F, LLC
LL Parcel G, LLC
LL Parcel H, LLC
LL Parcel I, LLC
LL Parcel K, LLC
LL Parcel L, LLC
LL Parcel M, LLC
LL Parcel R, LLC
Stephan Z. Elieff
Jonathan D. Stein
General motors llc

ec: w/ enclosures
John Spellman, Project Manager

Amen M. Omorogbe, Section Chief
Dan Bendell, Hazardous Waste Remediation Supervisor, Region 3

Arcadis U.S. Inc. - Raymond Kapp - raymond.kapp@arcadis-us.com
PS&S Engineering, Inc. - L. Miguel Salinas - lsalinas@psands.com

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7)**:**

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C360070**

Site Name Former General Motors North Tarrytown West Parcel

Site Address: 199 Beekman Ave Zip Code: 10591
City/Town: Sleepy Hollow
County: Westchester
Site Acreage: 66.672

Reporting Period: May 15, 2015 to May 15, 2020

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	X	☐
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	X	☐
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	X	☐

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	X

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☐	X

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C360070 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
115.10-1-1	Lighthouse Landing Venture, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

- Final cover system over entire site.
- Groundwater use prohibited.
- Use must be maintained as restricted residential, commercial, or industrial.
- Compliance with a site management plan
- Monitoring of groundwater and soil vapor including a provision for implementing actions recommended to address exposures related to soil vapor intrusion.
- Periodic Certification of ICs and ECs.

115.15-1-1	Lighthouse Landing Venture, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

- Final cover system over entire site.
- Groundwater use prohibited.
- Use must be maintained as restricted residential, commercial, or industrial.
- Compliance with a site management plan
- Monitoring of groundwater and soil vapor including a provision for implementing actions recommended to address exposures related to soil vapor intrusion.
- Periodic Certification of ICs and ECs.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
115.10-1-1	Cover System

A demarcation barrier over soil or historic fill material that does not meet 6 NYCRR Part 375 SCOs for unrestricted use, a final barrier cap system, and mitigation measures to address potential intrusion of methane and volatile organic vapors into future overlying buildings.

115.15-1-1	Cover System

Parcel	Engineering Control
A demarcation barrier over soil or historic fill material that does not meet 6 NYCRR Part 375 SCOs for unrestricted use, a final barrier cap system, and mitigation measures to address potential intrusion of methane and volatile organic vapors into future overlying buildings.	

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

5-11-20
Date

IC CERTIFICATIONS
SITE NO. C360070

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 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.

I Nick Pappas at Lighthouse Landing Venture, LLC,
print name print business address

am certifying as Property Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

N Pappas 6-11-20
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 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.

I Janos M. Szeman (print name) at Paulus, Sokolowski and Sartor Engineering, PC, One Larkin Plaza, Second Floor, Yonkers, NY 10701 (print business address),

am certifying as a Qualified Environmental Professional for the Property Owner. (Owner or Remedial Party)

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date
		12 June 2020

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC Review Start Date: April 15, 2016

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 15, 2016

VISUAL ON-SITE INSPECTION

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC Inspection Start Date: April 15, 2016

1. Weather
   Sunny, clear, high 50's (°F), 6mph winds to the southeast

2. List other individuals and their company/agency that were present during the visual on-site inspection.
   Hal Newell – PS&S Engineering

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☑ No
   ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.)

10. Inspection Completed: April 15, 2016

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Review Start Date: April 14, 2017

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 14, 2017

VISUAL ON-SITE INSPECTION

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Inspection Start Date: April 14, 2017

1. Weather
   Sunny, clear, low 50's (°F), 5 mph winds to the south.

2. List other individuals and their company/agency that were present during the visual on-site inspection.
   Laura Grose – PS&S Engineering

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☐ No
   ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.
   Guard shack (only remaining building structure) demolition. Asbestos survey and abatement was complete prior to demolition.
   No utility work or new building construction has occurred.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Regrading of site conditions for future Phase I development area required relocation of existing hirtoric fill on-site to areas beneath the future final cover system. Material disposal off-site included disposal of grossly contaminated soils encountered during historic fill intrusive activities, removal of a former undocumented approximately 6,000 UST, and disposal of miscellaneous steel C&D (e.g., rebar) processed during concrete slab demolition (disposal quantities and associated documentation will be attached within the 2020 PRR).

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Importation of clean fill cover materials ongoing. Soil erosion controls observed in place in accordance with the SWPPP to maintain erosion of disturbed cap areas. Fill materials are being used for site regrading and/or surcharge within the Phase I redevelopment area. Fill materials are also being stockpiled for future use within the Phase III redevelopment area. A sketch of the cover system current conditions (as of April 2017) is attached. Material import manifests will be provided as an attachment within the 2020 PRR.

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - [ ] No
   - [x] Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Existing concrete slab (existing cover system component) demolition, crushing, and stockpiling for future use on-site in accordance with the NYSDEC approved BUD.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.) **- A sketch of the cover system current conditions (as of April 2017) is attached. In addition, record of construction drawings detailing final cover system construction conditions will be prepared in 2020 for the 2020 PRR submission.**
10. Inspection Completed: April 14, 2017

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Laura Grose – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Review Start Date: April 13, 2018

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 13, 2018

VISUAL ON-SITE INSPECTION

Conducted By: Laura Grose – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Inspection Start Date: April 13, 2018

1. Weather
   Sunny, clear, low 80's (°F), 7 mph winds to the south.

2. List other individuals and their company/agency that were present during the visual on-site inspection.
   Scott Caporizzo - PS&S Engineering

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☐ No
   ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.
   Utility trenching and infrastructure installation in Phase I redevelopment area ongoing. No new building construction has occurred.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Regrading / utility trenching within Phase I redevelopment area and regrading within the Phase II and Phase III redevelopment area required relocating existing hirtoric fill on-site to areas beneath the future final cover system. Material disposal off-site included disposal of corrugated piping containing asbestos and disposal of miscellaneous steel C&D (e.g., rebar) processed during concrete slab demolition (disposal quantities and associated documentation will be attached within the 2020 PRR).

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - ☑ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Importation of clean fill cover materials ongoing. Soil erosion controls observed in place in accordance with the SWPPP to maintain erosion of disturbed cap areas. Fill materials are being used for site regrading, surcharge, and/or utility trench backfill within the Phase I redevelopment area. Fill materials are also being used for regrading and surcharge in Phase II and Phase III redevelopment area. Materials also stockpiled for future use within the Phase III redevelopment area. A sketch of the cover system current conditions (as of April 2018) is attached. Material import manifests will be provided as an attachment within the 2020 PRR.

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Existing concrete slab (existing cover system component) demolition, crushing, and stockpiling for future use on-site in accordance with the NYSDEC approved BUD. Existing asphalt pavement (existing cover system component) demolition, processing, and reuse in accordance with NYSDEC approved BUD. Asphalt pavement public roadway construction (final cover system component) in Phase I redevelopment area. A sketch of the cover system current conditions (as of April 2018) is attached.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - ☑ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.) **- A sketch of the cover system current conditions (as of April 2018) is attached. In addition, record of construction drawings detailing final cover system construction conditions will be prepared in 2020 for the 2020 PRR submission.**
10. Inspection Completed: April 13, 2018

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Review Start Date: April 11, 2019

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 13, 2019

VISUAL ON-SITE INSPECTION

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Inspection Start Date: April 11, 2019

1. Weather
   Partly sunny, high 50s (°F), 4 mph winds to the northwest.

2. List other individuals and their company/agency that were present during the visual on-site inspection.
   Laura Grose - PS&S Engineering
   CJ Aprea - PS&S Engineering

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☐ No
   ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.
   Utility trenching and infrastructure installation in Phase I and Phase II redevelopment area ongoing. Building foundation (final cover system component) construction within Phase I redevelopment area began in October 2018 (Toll Brothers). A sketch of the cover system current conditions (as of April 2019) is attached.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Regrading / utility trenching within Phase I and Phase II redevelopment area and regrading within Phase III and Phase IV redevelopment area required relocating existing historic fill on-site to areas beneath the future final cover system. Material disposal off-site included disposal of grossly contaminated soils encountered during historic fill intrusive activities and disposal of miscellaneous steel C&D (e.g., rebar) processed during concrete slab demolition (disposal quantities and associated documentation will be attached within the 2020 PRR).

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - ☑ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Importation of clean fill cover materials ongoing. Soil erosion controls observed in place in accordance with the SWPPP to maintain erosion of disturbed cap areas. Fill materials are being used for site regrading, surcharge, and/or utility trench backfill within the Phase I redevelopment area. Fill materials are also being used for regrading and surcharge in Phase II and Phase III redevelopment area. Materials also stockpiled for future use within the Phase III redevelopment area. A sketch of the cover system current conditions (as of April 2019) is attached. Material import manifests will be provided as an attachment within the 2020 PRR.

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Existing concrete slab (existing cover system component) demolition, crushing, and stockpiling for future use on-site in accordance with the NYSDEC approved BUD. Existing asphalt pavement (existing cover system component) demolition, processing, and reuse in accordance with NYSDEC approved BUD. Asphalt pavement private driveway and public roadway construction (final cover system component) in Phase I redevelopment area. A sketch of the cover system current conditions (as of April 2019) is attached.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Hudson River storm sewer outfall construction in accordance with NYSDEC Excavation & Fill in Navigable Waters Permit and Water Quality Certification Permit (documentation attached).

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.) **- A sketch of the cover system current conditions (as of April 2019) is attached. In addition, record of construction drawings detailing final cover system construction conditions will be prepared in 2020 for the 2020 PRR submission.**
10. Inspection Completed: April 11, 2019

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Ciro Aprea – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Review Start Date: April 17, 2020

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 17, 2020

VISUAL ON-SITE INSPECTION

Conducted By: Ciro Aprea – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC Inspection Start Date: April 17, 2020

1. Weather
   Mostly cloudy, 50°F

2. List other individuals and their company/agency that were present during the visual on-site inspection.

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☐ No
   ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.
   Utility trenching and infrastructure installation in Phase I and Phase II redevelopment areas are ongoing. Building foundation (final cover system component) construction within Phase I redevelopment area has several units completed and moved into (Toll Brothers). A sketch of the cover system current conditions, as of April 2020, is attached.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Regrading / utility trenching within Phase I and Phase II redevelopment areas and regrading within Phase III, IV, and V redevelopment areas required relocating existing historic fill on-site to areas beneath the future final cover system. Material disposal off-site included disposal of grossly contaminated soils encountered during historic fill intrusive activities and disposal of miscellaneous steel C&D (e.g., rebar) processed during concrete slab demolition (disposal quantities and associated documentation is provided within the 2020 PRR). Approximately 11,000 cubic yards of NYSDEC-approved historic material excavated for a flood channel within Phase III redevelopment area. Material was approved for reuse within final cover system.

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - ☑ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Import of clean fill cover materials ongoing. Soil erosion control measures observed in place in accordance with the SWPPP to maintain erosion of disturbed cap areas (SWPPP Inspection Reports from 2016 to 2020 are provided within the 2020 PRR).

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Existing concrete slab (existing cover system component) demolition, crushing, and stockpiling for future reuse on-site in accordance with the NYSDEC approved BUD #C360070-1. Existing asphalt pavement (existing cover system component), demolition, processing, and reuse in accordance with NYSDEC approved BUD #C360070. Asphalt pavement private driveway and public roadway construction (final cover system component) in Phase I and II redevelopment areas. A sketch of the cover system current conditions (as of April 2020) is attached.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - ☐ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Hudson River storm sewer outfall construction in accordance with NYSDEC Excavation & Fill in Navigable Waters Permit and Water Quality Certification Permit (documentation attached for).

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.)

10. Inspection Completed: April 17, 2020

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

2020 PERIODIC REVIEW REPORT

-FOR-

Former General Motors Assembly Plant
West Parcel Site

Sleepy Hollow, New York
NYSDEC Site No. C360070
BCA Index # C360070-12-10

Submitted by:

Lighthouse Landing Communities, LLC

2392 Morse Avenue
Irvine, California 92614

June 12, 2020

Prepared by:

One Larkin Plaza, 2nd Floor
Yonkers, New York 10701

I, Janos M. Szeman, certify that I am currently a New York State licensed Professional Engineer as defined at 6 NYCRR Part 375-1.2(aj) and paragraph 1.3(b)47 and that this Remedial Investigation Report was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Date: **12 June 2020** *Signature:* Janos M. Szeman

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF FIGURES

LIST OF TABLES (In Text)

LIST OF ACRONYMS

ACM	Asbestos-containing materials
Arcadis	Arcadis, US, Inc.
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BUD	Beneficial Use Determination
bgs	below ground surface
CAMP	Community Air Monitoring Plan
COPC	Constituents of Potential Concern
CY	Cubic Yards
Department	New York State Department of Environmental Conservation
DER-10	NYSDEC Technical Guidance for Site Investigation and Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
EE	Environmental Easement
ELAP	Environmental Laboratory Approval Program
EOH	Edge on Hudson
EPA	United States Environmental Protection Agency
EWP	Excavation Workplan
FER	Final Engineering Report
GCS	Grossly Contaminated Soils
GMC	General Motors Corporation
HASP	Health and Safety Plan
Hines	Hines Interests Limited Partnership
IC	Institutional Control
ICM	Interim Corrective Measures Project
IRM	Interim Remedial Measure
IWP	Investigation Work Plan
Lighthouse	Lighthouse Landing Communities, LLC
MBI	Marine Bulkheading, Inc.
MTA	Metro North Association
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health

NYSDOL	New York State Department of Labor
O&M	Operation and Maintenance
OMM	Operations and Maintenance Plan
PCBs	Polychlorinated Biphenyls
PLM	Polarized Light Microscopy
PM_{10}	Particulate Matter less than 10 Micron in Diameter
PPE	Personal Protective Equipment
PRR	Periodic Review Report
PS&S	Paulus, Sokolowski and Sartor Engineering, PC
RI	Remedial Investigation
RIR	Remedial Investigation Report
RWP	Remedial Work Plan
SCOs	Soil Cleanup Objectives
SF	Square Feet
SMP	Site Management Plan
SPDES	State Pollution Discharge Elimination System
SSDS	Sub-Slab Depressurization Systems
SVOCs	Semi-Volatile Organic Compounds
SWPPP	Stormwater Pollution Prevention Plan
Toll	Toll Brothers, Inc.
VISL	Vapor Intrusion Screening Levels
VOCs	Volatile Organic Compounds
WCDEF	Westchester County Department of Environmental Facilities
WCDOH	Westchester County Department of Health

EXECUTIVE SUMMARY

Paulus, Sokolowski and Sartor Engineering, PC, (PS&S) was retained by Lighthouse Landing Communities, LLC (Lighthouse) to prepare this 2020 Periodic Review Report (PRR) for the Former General Motors Assembly Plant West Parcel Site (hereinafter referred to as "the Site"). The Site is identified as the New York State Department of Environmental Conservation (NYSDEC) Site Number C360070 and was remediated in accordance with the Brownfield Cleanup Agreement (BCA) Index # C360070-12-10.

This PRR was developed in accordance with Section 6.3(b) of the NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation, dated May 3, 2010; the NYSDEC-approved Site Management Plan (SMP, attached as Appendix AG) prepared by Arcadis, US, Inc. (Arcadis), dated December 2013; and the NYSDEC Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal, dated March 17, 2020. As noted in the July 27, 2015 Site Management PRR Response Letter distributed by NYSDEC (refer to Appendix A), the Periodic Review frequency for the Site was temporarily extended for five years due to the on-going Brownfield Redevelopment Project construction at the Site. This PRR was prepared for the May 15, 2015 to May 15, 2020 reporting period (herein referred to as the "reporting period").

The purpose of this PRR is to document ongoing Site management activities associated with the Engineering and Institutional Controls (ECs/ICs) in place at the Site, and to certify that the ECs/ICs are being maintained in accordance with the SMP. This 2020 PRR includes the following key sections:

- A general Site overview;
- A summary of previously completed remedial investigations and interim remedial actions;
- Documentation and assessment of the Operation and Maintenance (O&M) Plan activities; and,
- Certification of ECs/ICs identified in the SMP.

Site management activities conducted in this PRR reporting period are summarized in the following Table 1[1].

Table 1: Media Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis	Completion Date
Cover Systems	Annual	None	None	April 15, 2016; April 14, 2017; April 13, 2018; April 11, 2019; April 17, 2020
Groundwater Monitoring Wells	Annual (commencing during or after Site development)	Groundwater	Metals, VOCs, and SVOCs	Refer to Section 5.3

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and the New York State Department of Health (NYSDOH).

[1] Table 1 was derived from Table 7 of the SMP.

The completed Institutional and Engineering Controls Certification Forms associated with this PRR submittal are provided as Appendix B. Additionally, observations made during the April 2016 through April 2020 annual PS&S visual observations are documented in the Annual Site-Wide Inspection Checklists (refer to Appendix L of the SMP), provided as Appendix C of this PRR.

As noted in the SMP and further detailed in Section 5.3 of this PRR, a groundwater monitoring well network existed at the Site prior to redevelopment. At the time of the SMP preparation, NYSDEC and the environmental consultant anticipated that any number of these monitoring wells may need to be repaired, replaced and possibly relocated to support the Brownfield Redevelopment Project as well as to provide access for post-development sampling. Due to interference with Site Brownfield Redevelopment Project, existing groundwater monitoring wells that were successfully located, were decommissioned for future replacement in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures". Groundwater Monitoring Well Decommissioning Logs are provided in Appendix D of this PRR.

Based upon review of IC/ECs at the Site and the PS&S visual observations conducted annually from April 2016 through April 2020 and in accordance with the procedures outlined in the SMP Monitoring Plan, PS&S finds the Site in compliance with the SMP IC/EC Plan and Monitoring Plan requirements. As presented in this PRR, the Site ICs/ECs are in place and functioning in accordance with the Environmental Easement (EE, attached as Appendix AG)). No corrective measures are proposed and no changes to the SMP are recommended at this time.

1.0 INTRODUCTION

PS&S was retained by Lighthouse to prepare this 2020 Periodic Review Report (PRR) for the Former General Motors Assembly Plant West Parcel Site (hereinafter referred to as "the Site"). The Site is identified as New York State Department of Environmental Conservation (NYSDEC) Site No. C360070, and was remediated in accordance with the Brownfield Cleanup Agreement (BCA) Index #C360070-12-10.

This 2020 PRR was prepared for the May 2015 to May 2020 reporting period. This 2020 PRR includes documentation and an assessment of the Site Management Plan (SMP) Monitoring Plan results, details on necessary Operation and Maintenance (O&M), and certification of engineering and institutional controls (ECs/ICs) identified in the SMP.

This PRR was developed in accordance with Section 6.3(b) of the NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation, dated May 3, 2010, in addition to the NYSDEC-approved Site Management Plan (SMP) prepared by Arcadis, dated December 2013.

2.0 SITE BACKGROUND

This section provides general information obtained from the SMP on the setting of the Site. Summarized below are previous land uses, historical operations performed at the Site, regional and local geology, and hydrogeology of the Site.

2.1 Site Setting and Description

The Site is located at 199 Beekman Avenue, in the Village of Sleepy Hollow, Westchester County, New York. The Site is identified on the Town of Mt. Pleasant Tax Map as Tax Section 115.10, Block 1, Lot 1 and Section 115.15, Block 1, Lot 1.

The Site is approximately 66.67 acres and is bounded by Kingsland Point Park to the north; River Street, Horan's Landing Park, Ichabod's Landing and various private and municipal properties to the south; the Metro North Hudson Line rail corridor and Hudson Street to the east; and the Hudson River to the west.

2.2 Geology and Hydrogeology

The Site is developed on historic fill of varying composition and thickness, ranging from approximately 1 to 25 feet beneath the existing cover system(s). As summarized from the SMP, the historic fill material consists of a variety of dredged materials, soils, ash, rubble, and other debris, as well as, filled barges, bulkheads and foundations.

The fill is reportedly underlain in areas by soft organic clay and peat deposits associated with the Hudson and Pocantico Rivers. In other areas, varved silt and clay underlies the fill. Beneath these deposits, a layer of compact granular till (silty sand with gravel and occasional cobbles and boulders) overlies the bedrock with a thickness ranging from 1 feet to more than 10 feet. The underlying bedrock is gneiss. The depth to bedrock is variable across the Site, ranging from less than 20 feet below ground surface (bgs) on the southern and eastern areas to greater than 100 feet bgs along the Hudson River.

The Site's shallow groundwater regime is tidally influenced. The direction of groundwater flow is generally southwest toward the Hudson River with local variations. The top of the shallow groundwater table was depicted in the SMP at approximately 1.5 feet to 6 feet bgs.

2.3 Land Use

Prior to commercial or industrial development, the Site was part of the Beekman Farm. In 1830, a brickyard was established on the southern part of the Site at the foot of Beekman Avenue, on the south side of the Pocantico Bay, which has since been filled. The brickyard closed in 1861. Between 1885 and 1913, industrial operations on the Site included:

- Rand Drill Company, manufacturing percussion rock drills (south side of parcel);
- Mobile Company of America, manufacturing steam-powered vehicles (north side

of parcel); and,

- Maxwell Briscoe Company, manufacturing gasoline powered automobiles, with operations including assembly buildings, machine shops, woodworking facilities and painting/varnishing operations, and a small foundry (north and south sides of parcel).

The Chevrolet Motor Company, which later became a division of General Motors Corporation (GMC), acquired the former Maxwell Briscoe Property and automobile manufacturing facility in 1914. Chevrolet and GMC assembled automobiles at the Site from 1914 until the assembly plant was closed in 1996, apart from a period during World War II when airplane wings and light military vehicles were assembled at the Site. Following facility closure in 1996, buildings and most above-grade structures were demolished and removed. Most of the concrete floor slabs and foundations were demolished with the exception of the Site Body and Chassis Plants concrete floor slabs and foundations which were not demolished and remain on the Site as part of the existing cover system, as further discussed in Section 4.1.2

The south parcel area of the Site, bounded by Beekman Avenue, Hudson Street and River Street, was developed as a parking lot on former residential land and is currently paved. A water storage tank and pump house, which supported the operating assembly plant facility north of Beekman Avenue, was also located on the south parcel area, but was removed after the assembly plant was demolished.

2.3.1 Anticipated Future Land Use

The Site is currently being redeveloped in accordance with the BCA; where, the anticipated future use of the Site is mixed commercial and restricted-residential development, with public open space, including public access to the waterfront. The proposed Site Development Plan is presented in the Findings Resolution adopted by the Village of Sleepy Hollow on July 24, 2007 and amended on January 25, 2011. The proposed Site Development Plan is also presented in the Special Permit and Concept Plan Approval adopted by the Village of Sleepy Hollow on June 7, 2011. This Plan is attached as Figure 2.

In accordance with the Site BCA, the intended future uses are restricted-residential/commercial development and open public space. Restricted uses, as defined in 6 NYCRR Part 375-1.8, include:

- "*Restricted-residential use*," which is the land use category which shall only be considered when there is common ownership or a single owner/managing entity of the site. Restricted-residential use shall, at a minimum, include restrictions which:
    - Prohibit any vegetable gardens on a site, although community vegetable gardens may be considered with Department approval.

- Prohibit single family housing.
- Includes active recreational uses, which are public uses with a reasonable potential for soil contact.

- "*Commercial use*," which is the land use category which shall only be considered for the primary purpose of buying, selling or trading of merchandise or services. Commercial use includes passive recreational uses, which are public uses with limited potential for soil contact.

In addition, "*restricted-residential use*" is a land use category that does not allow the Site to be used for planting fruit-bearing trees, raising livestock or producing animal products for human consumption.

"*Restricted use*" is a use with imposed restrictions, such as Environmental Easements, which as part of the remedy selected for the site, requires a site management plan and relies on institutional controls or engineering controls to manage exposure to contamination remaining at a site. Future residential use of the Site may include townhomes, condominiums, apartments, and hotels. Commercial use of the Site may include retail center development and operations. Beginning in 2018, Lighthouse has contracted with multiple real estate developers regarding the ongoing operation of parceling out the Site. Details regarding the property ownership and ownership transfers are explained below and presented on Figure 2.

Between March 23, 2018 and February 18, 2020, Toll Brothers, Inc. (Toll) acquired properties (herein referred to as E-block, J-block, and/or I-block), as shown on Figure 2. Toll began construction of condominiums and apartments in May 2019 and are scheduled to continue beyond this PRR period and this PRR submission.

In August 2019, Hines Interests Limited Partnership (Hines) acquired properties (herein referred to as F-block, as shown on Figure 2). Hines is currently scheduled to begin construction of apartments, condominiums, and a commercial retail building in 2020, and will continue beyond this 2020 PRR submission.

The remainder of properties are owned by Lighthouse Landing Communities, LLC at the time of this PRR submission. Property transfers that take place following the June 2020 PRR submission will be disclosed in their respective future PRR reporting periods.

3.0 CURRENT ENVIRONMENTAL CONDITIONS

Remedial Investigations following Site demolition determined that contamination at the Site is associated with historical fill and past operations at the Former GMC facility. The Site was remediated in accordance with the NYSDEC-approved Interim Remedial Measure (IRM) Work Plan (Arcadis, 2007) and the Remedial Work Plan (RWP) (Arcadis, 2012), consistent with the June 2012 Decision Document (NYSDEC, 2012).

Contamination remained in the subsurface below the existing cover system, which is hereafter referred to as "remaining contamination," after completion of the remedial work described in the RWP. The current environmental conditions are managed in accordance with the December 2013 SMP. ECs/ICs are installed/implemented at the Site to protect human health and the environment by controlling exposure to remaining contamination (defined in Section 3.1). Compliance with the EE and the SMP is required in perpetuity or until the EE is extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. The SMP defines proper implementation, management, and certification of these ECs/ICs.

3.1 Remaining Contamination

Soil remaining at the Site contains metals (arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver and zinc), pesticides, polychlorinated biphenyls (PCBs), volatile and semi-volatile organic compounds (VOCs and SVOCs) at levels exceeding unrestricted use soil cleanup objectives (SCOs). Lead remains the most widespread metal detected in soil samples from historical fill on the Site.

The contaminated soil remains at depth below the existing cover system and the final cover system. In addition, the historic fill thickness ranges from approximately 1 to 25 feet below the existing cover system. Prior to the Site redevelopment, the active utilities on the Site were the Site storm drains and a sanitary sewer main that is owned by Westchester County. Historical buildup of sediments was removed from those parts of the Site storm drain system that remained in operation following the assembly plant demolition, as summarized in the Final Engineering Report (FER) (Arcadis, 2014).

Exposure to remaining contamination at the Site is controlled by ECs/ICs summarized in Section 4.0 of this PRR.

4.0 ENGINEERING & INSTITUTIONAL CONTROLS PLAN COMPLIANCE REPORT

The Engineering and Institutional Control Plan and Compliance Report below provides a description of each EC/IC, its objective, and how performance of the EC and IC is evaluated. The IC/EC Certification is discussed in Section 4.3 and is included in Appendix B of this 2020 PRR.

4.1 Engineering Controls

A description of each EC, its objective, and how performance of the EC is evaluated is summarized in Sections 4.1.1 through 4.1.2.

4.1.1 Existing Cover System

An existing pre-development cover system, "Existing cover system" at the Site prevented exposure to remaining soil contamination. The existing cover system (refer to Figure 1) consists of the following engineering controls:

West Parcel Site, north of Beekman Avenue

- Bituminous pavement and concrete parking or roadway surfaces.
- Concrete slab-on-grade and slab above crawl space.
- Concrete millings as grading fill and temporary cover, pursuant to a Beneficial Use Determination (BUD), over certain IRM areas, demolished building footprints and former rail siding footprints.
- Concrete millings as temporary erosion cover over BUD sediments.
- Concrete millings in a managed stockpile on a concrete pad.
- Clean Item 4 stone backfill in certain IRM and pavement repair areas.
- Rip rap along the Hudson River shoreline.
- Vegetated soil strips along Beekman Avenue and the adjacent Ichabod's Landing townhouse community.

West Parcel Site, south of Beekman Avenue (a.k.a. South Parcel)

- Bituminous pavement parking surfaces.
- Vegetated strips on hillsides separating different parking levels within the property lines.
- Clean Item 4 stone backfill in pavement repair areas.

4.1.2 Final Cover System

The final cover system for the Site is described in the IRM Decision Document and in the final June 2012 Decision Document. The Site final cover system will consist of:

- A demarcation barrier consisting of a geotextile fabric or a structural surface (e.g., concrete or asphalt) was placed over soil material that does not comply with the applicable 6 NYCRR Part 375 SCOs for unrestricted use; or,
- A final barrier cap system throughout the Site consisting of either or a combination of:

- 2-foot-thick surface soil cover for landscaped or naturally vegetated areas. If necessary, based upon additional testing, sections of the soil cover system may be designed to minimize infiltration through unsaturated soil exhibiting the potential to leach lead to groundwater.
- Pavement (or similar hard surface) over non-vegetated areas.
- Permanent buildings or similar structures.
- Soils imported to the Site will comply with the requirements set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use; (i.e., the lower of restricted residential SCOs or protection of groundwater SCOs, as provided in Appendix 5 of DER-10 under "Restricted Residential Use"

The demarcation barrier with a 2-foot-thick surface cover, pavement, or permanent structures is collectively referred to hereafter as the 'final cover system.'

The final cover system is a permanent control and the quality and integrity of this system will be monitored and maintained at defined, regular intervals, in perpetuity.

4.2 Institutional Controls

A series of ICs is required by the RWP and the NYSDEC Decision Document as described in the SMP to:

1. Implement, maintain and monitor ECs systems;
2. Prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and
3. Limit the use and development of the Site to restricted residential uses, which includes commercial and recreational uses.

Adherence to these ICs on the Site is required by the EE and will be implemented under the SMP. These ICs include:

- Using the Site for Restricted Residential as described in 6 NYCRR Part 375-1.8 (g) (2) (ii), Commercial as described in 6 NCYRR Part 375-1.8(g) (2) (iii), and Industrial as described in 6 NYCRR Part 375-1.8(g) (2) (iv) [although land use is subject to local zoning laws];

- Maintaining and operating ECs as specified in the SMP;

- Inspecting ECs at a frequency and in a manner defined in the SMP;

- Groundwater use at the property only after treating water using methods determined by the NYSDOH or the Westchester County Department of Health (WCDOH) to render it safe for use as drinking water or for industrial purposes. The user must first notify and obtain written approval to do so from the NYSDEC;

- Conducting groundwater and other environmental or public health monitoring as defined in the SMP;

- Reporting data and information pertinent to Site Management for the Site at a frequency and in a manner defined in the SMP;

- Conducting future activities on the property that will disturb remaining contaminated material in accordance with the SMP;

- Assessing the performance and effectiveness of the remedy as defined in the SMP;

- Operating, maintaining, monitoring, observing, and reporting any mechanical or physical components of the remedy in accordance with the SMP;

- Providing Site access to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this EE;

- Evaluating the potential for vapor intrusion for any buildings developed anywhere on the Site other than the South Parcel area (south of Beekman Avenue) and monitoring or mitigating any potential impacts that are identified;

- Prohibiting vegetable gardens and farming on the property; and,

- Ensuring the Site owner or remedial party submits to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access the Site at any time to evaluate the continued maintenance of any and controls. This certification will be submitted annually, or an alternate period that NYSDEC may allow and will be made by an expert (i.e., Qualified Environmental Professional) that the NYSDEC finds acceptable.

  The EE specifies that the Site will not be used for Residential purposes as defined in 6 NYCRR 375--1.8(g)(2)(i), and the above-stated controls may not be discontinued without an amendment or extinguishment of the EE.

4.2.1 Excavation Work Plan (EWP)

The Site has been remediated for restricted residential use. Intrusive work conducted within this PRR reporting period was performed in compliance with the EWP (attached as Appendix AF). This work included intrusive activities that:

- Penetrated the soil cover system;
- Encountered or disturbed the remaining contamination; or,
- Modified or repaired the Site cover system.

Work conducted pursuant to the EWP was also conducted in accordance with the procedures defined in the Community Air Monitoring Plan (CAMP) and Health and Safety Plan (HASP) prepared for the Site (Attached as Appendices E and Y, respectively).

As documented in this PRR, Lighthouse was responsible for proper disposal of excavation dewater, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). As documented in this PRR and observed by PS&S, Lighthouse conducted Site redevelopment activities in a manner that did not interfere with, or otherwise impair or compromise, the ECs described in the SMP during this PRR reporting period.

4.2.2 Effluent Wastewater Discharge

Groundwater was routinely encountered during site development activities. The contractor implemented a dewatering system after encountering groundwater to remove liquids from the work area and allow for construction to proceed. Dewatering operations conducted at the Site are compliant with the fluids management program detailed in Section 12.0 of the SMP, and the active Wastewater Discharge permits issued by the Westchester County Department of Environmental Facilities (WCDEF) (permits attached in Appendix R). The initial Wastewater Discharge Permit was issued by the WCDEF on January 23, 2017. This Wastewater Discharge Permit has been renewed on a quarterly basis. PS&S has observed that the Site dewatering operations performed during this PRR reporting period were compliant with Permit No. 454-20.

4.2.3 CAMP Exceedances

Ambient air monitoring is implemented at the Site for total VOCs and particulate matter less than 10 micron in diameter (PM_{10}) during the intrusive activities listed in Section 1.3 of the SMP, in accordance with the CAMP (attached in Appendix E). Ambient air monitoring is also conducted whenever excavated material piles are exposed to wind and will continue until such material is under temporary

(polyethylene tarps) or interim (e.g., concrete millings or gravel) cover, or placed under the final cover system (e.g., soil cap, building or pavement).

The NYSDEC was notified if a maximum VOC or PM_{10} action level was exceeded during construction and redevelopment activities. During this PRR reporting period (May 2015 to May 2020), 19 ambient air exceedances were observed and recorded. Of the 19 exceedances, 3 exceedances were explicitly due to Metro North Association (MTA)-related activities. Excessive dust was generated on-Site by MTA vehicles driving through unpaved areas of the Site to access the MTA railroad. Following these 3 MTA-related CAMP exceedance events, the MTA point of contact and MTA drivers were contacted and requested to reduce speed and restrict traffic to stabilized roadways within the Site. Of the 19 exceedances, 16 exceedances were due to construction activities by the Site contractors. Immediately after a CAMP action level exceedance was observed, the Site contractors were notified by PS&S, intrusive Site work activities were halted, the source of elevated VOC and/or PM_{10} concentrations were identified, and corrective actions were implemented in accordance with the December 2013 CAMP. CAMP exceedance reports are provided in Appendix E.

4.2.4 Material Import

Approximately 335,567 cubic yards (CY) of fill material was imported to, stockpiled, and used within the final cover system during the May 2015 to May 2020 PRR reporting period. Source location documentation was submitted to NYSDEC for review and approval prior to import operations in accordance with Section 11.0 of the EWP. Approved material was then imported to the Site in accordance with Section 11.0 of the EWP. Source material import to the Site commenced in August 2016, continues through this PRR submission and is scheduled to continue beyond this PRR reporting period. Material import operations following the May 2015 to May 2020 reporting period will be disclosed in their respective annual PRRs.

The Contractor submitted source documentation to the Owner and Environmental Engineer/QEP for materials proposed for import to the Site. The required documentation was provided prior to mobilization of material import operations in compliance with the EWP. Documentation included, but was not limited to a source name, address, certifications, and analytical results. The Environmental Engineer (PS&S) submitted a summary of the proposed material documentation to NYSDEC for review and approval.

NYSDEC-approved Source materials imported to the Site were then screened by the Site QEP upon arrival to observe and document compliance with Site requirements. Source materials that did not comply with the qualitative

requirements for Site acceptance in the judgement of the QEP were considered Non-Conforming Material. When Source materials were determined to be Non-Conforming Material following delivery, the Source owner was contacted and notified to promptly arrange for removal of these materials. The Site QEP also monitored the quantity of material imported to the Site to confirm that specific the Source location did not exceed the import volume approved by NYSDEC.

Each truck and/or barge that was delivered to the Site and subsequently off-loaded contained NYSDEC approved, non-exempt material to the Site. Further, each imported fill material delivery truck or barge had an associated manifest signed by the Source owner, transporter, and Site recipient. In addition, each truck and/or barge that off-loaded approved, exempt material to the Site had an associated weight ticket signed by the transporter. Information documented within the material manifests includes, at a minimum:

- The Source location and address;
- Material type, analytical sample identification;
- Material quantity;
- Transporter information; and
- On-Site delivery location.

Manifests and weight tickets distributed by the Site Owner and completed by the respective parties are provided in Appendix F.

4.2.5 Historical Fill Reuse Evaluation

Site redevelopment activities included the construction of an overflow flood channel along the northern Site perimeter. Excavation extending to a depth of 6-feet bgs and generated approximately 11,000 CY of excess soils. PS&S characterized and evaluated the soil before excavation in compliance with the on-Site reuse of excavated materials criteria, as detailed in Section 10.0 of the EWP.

In compliance with the August 30, 2019 NYSDEC approval, source materials were observed during excavation for reuse within the final cover system. Material that did not achieve geotechnical engineering specifications for use within the final cover system were stockpiled for future reuse below the final cover system. Reuse of the approved material began on November 1, 2019 and is an ongoing effort at the time of this PRR submission.

4.2.6 Off-Site Disposal

<u>Grossly Contaminated Material</u>

During the May 2015 to May 2020 PRR reporting period, excavation and off-Site transportation and disposal of Grossly Contaminated Soils (GCS) occurred on-Site in accordance with Section 7.0 of the EWP and 6 NYCRR Part 375. GCS encountered during redevelopment operations were screened by the on-Site QEP, characterized for off-Site disposal, and then transported and disposed off-site at a suitable waste processing facility. Information regarding disposal operations conducted within this PRR reporting period is summarized in Table 3 below. On-Site locations of the encountered GCS during this PRR reporting period are depicted on Figure 3. Documentation relating to the GCS disposal events including the material waste profiles, generator authorization letters, non-hazardous and hazardous disposal manifests, non-hazardous and hazardous weight tickets are provided in Appendix G.

Table 3: Material Disposal Events

Date(s) Encountered	Date(s) of Disposal	Disposal Facility	Total Disposed (Tons)
2/7/2017	3/28/2017, 4/11/2017	Clean Earth of Carteret	296.32
2/9/2018, 3/27/2018	6/11/2018, 6/12/2019	Clean Earth of North Jersey, Inc.	724.35
7/31/2018	3/20/2019	Bayshore Soil Management, LLC	253.90
11/30/2018	3/22/2019, 3/25/2019-3/29/2019	Clean Earth of North Jersey, Inc.	1171.36
2/25/2019	4/29/2019	Bayshore Soil Management, LLC	362.94

Asbestos Abatement

Asbestos-containing materials (ACM) were encountered and subsequently abated during Site redevelopment operations. Asbestos abatement operations were conducted in accordance with the asbestos abatement permits issued by the Village of Sleepy Hollow and included in Appendix H, as well as applicable regulations, standards, and generally accepted environmental and safety practices including Federal OSHA (29 CFR 1926.58), EPA NESHAPS (40 CFR Part 61), and TSCA Title II AHERA/ASHARA (40 CFR Part 763) Asbestos Regulations and the New York State Department of Labor Industrial Code Rule 56.. Additional asbestos abatement documentation is also provided in Appendix H. Approximately 220 square feet (SF) of ACM were discovered within corrugated piping along the ground floor of an on-Site demolished building. On-Site locations where ACM were encountered are detailed in Figure 4. Bulk samples of the ACM were collected from the corrugated pipes and analyzed in accordance with the EPA "Method for the Determination of Asbestos in Bulk Building Materials" USEPA/ 600/R-93/116, July 1993, Polarized Light Microscopy (PLM) Bulk Asbestos Analysis by Environmental Laboratory Approval Program (ELAP) PLM Method

198.1 for NY friable samples or 198.6 for NOB samples. Corrugated pipe was disposed of in 2017 by a licensed asbestos abatement contractor in conformance with Section 56-5, Subpart 1(h) of the New York State Department of Labor (NYSDOL) Industrial Code Rule 56 Asbestos Regulations, provided as Appendix I. A corrugated pipe asbestos abatement permit from the Village of Sleepy Hollow was not required because the pipe was not encountered within a building on the Site.

Additional ACM were encountered within a vacant guard shack near the main Site entrance. Asbestos abatement within the guard shack was conducted from October 18, 2016 to October 20, 2016 under the guidance of NYSDOL. 420 SF of non-friable ACM were transported by Atlantic Carting, LLC, to Grand Central Landfill in Pen Argyl, PA for disposal.

ACM was also encountered within an on-Site Pedestrian Bridge connecting the Old GM West Parcel to the Old GM East Parcel. Approximately 5,000 SF of non-friable ACM was encountered along both sides of the bridge. Samples of ACM detected throughout the bridge were prepared and analyzed under the guidance of NYSDOL. Due to its location over four mainline tracks of the Metro-North Hudson Line, any work conducted on the structure was subject to the railroad's restrictions on working hours, flagging requirements, and reviews of contractor means and methods. The Site Pedestrian Bridge ACM was abated and then transported and disposed of off-site from December 18, 2018 to February 18, 2019. ACM disposal receipts and documentation are disclosed in Appendix H.

Recycled Construction and Debris

During the May 2015 through May 2020 PRR reporting period, miscellaneous materials regularly generated during a construction project were segregated and stored on-Site within roll-off containers for off-Site disposal. Disposal of construction debris began in August 2016 and is ongoing at the time of this PRR submission. Miscellaneous materials generated have been disposed of at Rubino Brothers Inc., Stamford, Connecticut, in accordance with an authentication letter provided in Appendix N. Receipts and disposal tickets for each disposal are provided in Appendix G.

4.2.7 Utilities Installation

Utility trenching installation operations began in August 2016 and are ongoing at the time of this PRR. In compliance with the EC's outlined in Section 2.2. of the SMP, a demarcation barrier consisting of a geotextile fabric was installed over soil or historical fill material that does not comply with the applicable 6 NYCRR Part 375 SCOs for unrestricted use. Supplemental geotextile fabric has been installed between the final cover system and historical fill, where the demarcation barrier

has been breached for underground utility installations. An interim demarcation survey is provided as Figure 7 of this PRR.

Approximate total lengths (in linear feet) of utilities installed are summarized in Table 2 below (refer to Figure 7 for a detailed Site Development Utility Plan). Annual Site Inspection Forms including additional utility information from 2016 to 2020 are provided in Appendix C of this PRR. Associated permits for utility installation operations are provided in Appendix J of this PRR.

Table 2: Utility Installation Quantities

Utility Type	Approx. Length Installed (ft.)
Electrical Conduit	3953.42
Gas Main	4591.69
Stormwater Sewer Piping	6511.66
Sanitary Sewer Piping	7187.96
Telecommunications Wiring	1584.41
Water Main	8071.25

4.2.8 Outfall Installation

On August 9, 2017, PS&S submitted a Storm System Outfall Pipe Construction Dewatering Request (herein referred to as "Outfall #1 Plan") to NYSDEC that was subsequently approved on August 10, 2017. The Outfall #1 Plan detailed the construction and installation of a Hudson River storm sewer outfall pipe (herein referred to as "Outfall #1") in the northwest perimeter of the Site. Following NYSDEC's approval, the Site contractor, AMEC, LLC., and sub-contractor Marine Bulkheading, Inc. (MBI) completed the temporary installation of a sheet pile cofferdam outside the northwestern Site boundary within the Hudson River. Hudson River water within the cofferdam work zone was pumped into an on-Site temporary sediment retention pond located within the footprint of a previously demolished building slab over crawl space. The location of the Outfall #1 work zone and dewatering sediment basin are detailed in the Outfall #1 Dewatering Plan (refer to Appendix S). During the construction and installation of Outfall #1, Hudson River turbidity within the work zone was monitored daily by the Contractor. No significant turbidity resulting from construction operations was observed within the Hudson River during the Outfall #1 construction and installation.

The Site contractor installed a medium-stone rip rap imported from a NYSDEC-approved source (refer to Appendix F) to stabilize the Hudson River shoreline following the successful completion of the Outfall #1 installation and subsequent removal of the temporary sheet piles.

On June 21, 2019 PS&S submitted a second Storm System Outfall Pipe Construction Dewatering Request (herein referred to as "Outfall #2 Plan) to NYSDEC, which was subsequently approved on June 24, 2019. The Outfall # 2 Plan detailed the construction and installation of a secondary Hudson River storm sewer outfall (herein referred to as "Outfall #2") in the southwest perimeter of the Site. Following NYSDEC's approval, AMEC and MBI completed the temporary installation of a sheet pile cofferdam outside the southwestern Site boundary within the Hudson River. Hudson River water within the cofferdam work zone was pumped into an on-Site undeveloped footprint of a proposed building slab downgradient from the work zone. The location of the Outfall #2 work zone and dewatering sediment basin are detailed in the Outfall #2 Dewatering Plan (refer to Appendix T). During the construction and installation of Outfall #2, Hudson River turbidity within the work zone was monitored daily by the Contractor. No significant turbidity resulting from construction operation was observed within the Hudson River during the Outfall #2 construction and installation.

Following the successful completion of the Outfall #2 installation and subsequent removal of the temporary sheet piles the contractor installed a medium-stone riprap imported from a NYSDEC-approved source (refer to Appendix F) to stabilize the Hudson River shoreline.

4.2.9 Concrete Demolition and Processing

A Case-Specific BUD No. 894-3-60 was granted by NYSDEC to GM on behalf of Arcadis on June 7, 2007. Designations associated with BUD No. 894-3-60 were transferred to Lighthouse Landing Venture, LLC (now Lighthouse Landing Communities, LLC) on behalf of GM. On June 14, 2007, NYSDEC issued BUD No. 894-3-60 "GM Former Assembly Plant, Sleepy Hollow." In accordance with the BUD, GM could reuse approximately 40,000 CY of concrete aggregate millings prepared from on-Site concrete slabs and related structures during the demolition of the former GM buildings. Following completion of the use of the concrete millings, GM agreed to submit a report with the final volume used under the BUD to NYSDEC. On February 27, 2015, PS&S submitted a request to NYSDEC that the BUD granted to GM be transferred to Lighthouse. In accordance with BUD No. 894-3-60, attached as Appendix K, the developer used approximately 18,450 CY of on-Site concrete millings as backfill within the existing cover system from November 2016, to December 2016. Following beneficial use of the remaining concrete millings on-Site, BUD No. 894-3-60 was closed, and the final volume used was reported to NYSDEC on February 28, 2017. The February 28, 2017 Concrete Millings BUD No. 894-3-60 Closure Form is provided as Appendix L, and the attached Figure 5 illustrates the use and distribution of the concrete millings at the Site.

Prior to redevelopment, the Site contained pre-existing concrete roads and parking areas. With an intended goal of on-Site reuse of approximately 175,000 CY the processed concrete, PS&S developed a Baseline Concrete Sampling Work Plan, which was submitted to NYSDEC on February 26, 2015. PS&S characterized concrete produced in accordance with the Baseline Concrete Sampling Work Plan. PS&S then submitted a Case-Specific BUD request on February 26, 2015. On March 10, 2015, NYSDEC issued BUD No. C360070-1. In accordance with BUD No. C360070-1, on-Site concrete slabs were crushed and used as backfill below the final cover system beginning on January 2017 and is ongoing at the time of this PRR. A Case-Specific BUD Annual Report was submitted each year detailing the quantities used during construction operations for the previous calendar year. Each report is disclosed in Appendix M of this PRR. A total of 122,164 CY of processed concrete were used as backfill below the final cover system for utility trenching and grading during this PRR reporting period. Use of the processed concrete will be an ongoing effort through the next reporting period.

PS&S also submitted two Generic BUD requests. The first request was submitted on March 4, 2019 for reuse of approximately 1,000 CY of existing asphalt pavement as subbase aggregate. The asphalt was stripped from its existing location and processed to a 2-inch minus gradation that complied with the end use requirements for a subbase. On April 7, 2017, NYSDEC issued BUD No. C360070 (attached as Appendix AA). The second request was submitted on December 11, 2017 for reuse of approximately 150 CY of concrete slabs generated from sidewalk and roadway of Beekman Avenue within the Site. On December 11, 2017, NYSDEC approved the request (attached as Appendix AB). PS&S also submitted a third request detailing the reuse of an additional 3500 CY of existing asphalt on March 2, 2020 for a subbase. NYSDEC approved the third request on April 29, 2020 (attached as Appendix AC).

4.2.10 Sediment and Erosion Control

Lighthouse developed a Stormwater Pollution Prevention Plan (SWPPP) in 2015 for the first phase of redevelopment activities (refer to Appendix O). This SWPPP (refer to Appendix P) was amended in August 2018 to reflect the second phase of redevelopment activities, with amendments reviewed and approved by the MS4 (Village of Sleepy Hollow). The SWPPP was prepared and maintained in compliance with the NYSDEC State Pollution Discharge Elimination System (SPDES) General Permit for Storm Water Discharges from Construction Activity (Permit Number GP-0-15-002) (the Permit) for the redevelopment of the Site (West and South Parcels).

PS&S SWPPP observations began at the Site in 2016 and continue to be conducted in accordance with the Permit at a frequency of at least two Site SWPPP Inspections

every seven calendar days, for as long as greater than five acres of soil remain disturbed. These two routine SWPPP Inspections are separated by a minimum of two full calendar days. A copy of the SWPPP Inspection Reports generated during the reporting period can be found in Appendix Q.

4.2.11 Limited Groundwater and Soil Vapor Intrusion Investigation

A Soil Vapor Intrusion (SVI) evaluation was performed to determine whether any mitigation measures are necessary to address potential exposures to vapors. The evaluation was conducted where enclosed structures plan to be constructed on areas that contain remaining contamination and the potential for SVI. A work plan for the SVI evaluation was developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York," and submitted by Lighthouse to the NYSDEC and NYSDOH for approval. In accordance with the approved work plan, attached as Appendix X, four ground water monitoring wells were installed from April 12, 2017 to April 13, 2017. One round of groundwater samples were collected and analyzed from the Site wells within the study area. Groundwater sample results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Class GA, dated June 1998 (TOGS GA).

Subsequent to the results of the groundwater investigation, a soil vapor investigation was conducted. Eight soil vapor probes were installed on June 1, 2017 in accordance with October 2006 NYSDOH Guidance for Evaluation Soil Vapor Intrusion. Two rounds of soil vapor sampling from each soil vapor location were performed: one round on June 8, 2017 and another round on June 28, 2017. Methane concentrations and PID readings were also recorded at each of the soil vapor probe locations. Soil vapor sample results were compared to the EPA Vapor Intrusion Screening Levels (VISL) Default Residential Target Sub-Slab & Exterior Soil Gas Concentrations Criteria, Version 3.4, dated June 2015 (TSSGC). The August 25, 2017 SVI Results Report detailing the soil vapor investigation can be found in Appendix U.

An SVI mitigation system will be installed as an element of each building foundation in accordance with NYSDEC's response (refer to Appendix Z) to the August 25, 2017 SVI Results Report. The mitigation system for the slab-on-grade foundation design includes a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system. During this PRR reporting period, the SVI mitigation system installation began in 2019 with the construction of the first set of townhomes within the Phase I construction area. During this reporting period, SESI Consulting Engineers completed the SVI mitigation system installation for the buildings listed in their Interim Vapor

Intrusion Mitigation Installation Certification Letter, provided as Appendix V. Several buildings were excluded by NYSDEC and NYSDOH from the SVI mitigation system requirement based on a successful demonstration that there is no need for SVI mitigation within a specific sub-area of the site.

NYSDOH has determined that sub-slab soil vapor samples (or their equivalent as approved by NYSDOH) will be collected post-construction and prior to occupancy of slab-on-grade buildings, Post-construction sampling is summarized in the Vapor Intrusion Mitigation System Sampling and Testing Summary Letter, prepared by SESI Consulting Engineers and included as Appendix W. Preliminary (unvalidated) SVI sampling data for completed vapor mitigation systems were submitted to NYSDEC and NYSDOH for initial review and interpretation. SVI sampling data for future completed vapor mitigation systems will also be submitted for review. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. If the property is owned by a third party, validated SVI data will be transmitted to the property owner within 30 days of validation. If any indoor air test results exceed NYSDOH guidelines, relevant NYSDOH fact sheets will be provided to tenants and occupants of the property within 15 days of receipt of validated data.

SVI sampling results, evaluations, and follow-up actions from the subsequent reporting period will also be summarized in the next Periodic Review Report.

4.2.12 Final Grading and Landscaped Areas

At the time of this PRR, several parts of the Site have been brought to final grade and landscaped in accordance with the Site Development Plan (refer to Figure 2). The part of the site designated as "Village Green," bordering Ichabod's Landing, includes a pedestrian walkway, grassy park with various native shrubs and trees, concrete stairway leading to Road A, and a retaining wall. Also brought to final grade is the "Central Park" bordering Road C. Central park will include a grassy park with various native shrubs and trees, pedestrian walkway, and masonry wall. Within Phase I of the Site and surrounded by townhouses is a small grassy park area in which a bioretention pond was installed. Within the bioretention pond is native shrubbery mulch, and a large catch basin. Other parts of the Site are still in the process of being brought to final grade and will be presented in the next PRR submission.

4.3 Engineering and Institutional Control Compliance and Certification

An assessment and certification of the Site ECs/ICs detailed above is required as part of the PRR. As noted in Section 5.1, the Existing Cover System requires, at a minimum, an annual compliance certified by a Professional Engineer licensed to practice in New York State has prepared and signed the NYSDEC PRR IC/EC Certification Form, which was provided by NYSDEC as Appendix B within the Reminder Notice: Site Management PRR and IC/EC Certification Submittal Letter, dated March 17, 2020 (Reminder Notice Letter). A copy of the Reminder Notice and the completed IC/EC Certification Form is provided as Appendix B.

5.0 QUALITATIVE EXPOSURE ASSESSMENT

5.1 Introduction

This qualitative human health exposure assessment was performed to study the potential for human health exposure to Site-related constituents of potential concern (COPCs). This assessment used Site-specific information regarding current and foreseeable land uses, and available data for the Site to evaluate potential exposure to humans. This human health exposure characterizes the environmental setting of the Site and identifies COPCs and potentially complete exposure pathways.

5.2 Environmental Setting

Information about the Site's environmental setting is presented in Section 2.0 of the PRR.

5.3 Constituents of Potential Concern

Between 1996 and 2000, GMC undertook several environmental investigations at the Site to prepare for facility closure, including Phase I and Phase II Environmental Site Assessments, a Phase III Extent of Contamination Study, and a Sediment Quality Investigation in the Hudson River. In addition, an Interim Corrective Measures (ICM) Project was implemented to remediate residual petroleum and hydraulic fluids found in crawl spaces beneath the floor slabs of the former Chassis and Body Assembly Plants, and to remove two underground fuel storage tanks before these buildings were demolished.

Roseland/Sleepy Hollow, LLC (Roseland) conducted additional sampling of soil and groundwater in 2002. The findings of this investigation and the prior investigations conducted by GMC reported concentrations of metals, PAHs, and petroleum compounds that are generally typical of historically filled sites along the Hudson River, especially those dedicated to industrial uses. These findings were used to prepare the Site's Investigation Work Plan (IWP), which specified additional remedial investigations completed from 2003 to 2004.

Areas of potential concern can be grouped into the following three human health exposure assessment categories:

1. Site soils or historical fill containing metals, PAHs, and VOCs at levels above the 6 NYCRR Part 375 SCOs for restricted residential use guidance values;

2. Site groundwater contaminated with VOCs, SVOCs, and metals above NYSDEC Class GA Groundwater Standards for drinking-water supplies; and,

3. VOCs and methane observed in the Site soil gas.

Analytical data used in the human health exposure assessment evaluation include soil and groundwater data collected as part of the Due Diligence Investigation performed in 2002 and the Remedial Investigation (RI) conducted from 2003 to 2004. Samples were analyzed for VOCs, SVOCs, metals, and select samples for PCBs. Soil gas data from the RI for methane and VOCs were also evaluated. Analytical results for the RI, which are presented in Section 6 of the February 2, 2012 Remedial Investigation Report (RIR, attached as Appendix AE), are discussed below by potential human health exposure category.

5.3.1 Soils

Approximately 90 percent of the Site has been developed on fill, which generally consists of fine to coarse sands with lesser amounts of gravel, silt, and clay. Historical fill includes various coal cinders, dredged Hudson River sediments, and smaller segments of construction and demolition debris. Constituents detected in this fill include various inorganics (including lead) and PAHs that are typical of historically filled sites along the Hudson River. Lead and PAHs are found throughout the Site with reported concentrations that exceeded the 6 NYCRR Part 375 SCOs for restricted residential use guidance values. Chromium was also reported in soil and groundwater in a discrete area of the Site known as Potential Area of Concern (PAOC) 47, at levels above the 6 NYCRR Part 375 SCOs for restricted residential use. PAOC locations are provided in Drawing 2 of Appendix AE. As discussed further in Section 5.4, the Site soil exposure pathway has been managed by a Site wide engineering control cover system that was installed and will be maintained in accordance with the SMP.

5.3.2 Metals

Several metals were observed at the Site, but lead is the primary inorganic COPC in historical fill. Lead was reported at concentrations greater than the 6 NYCRR Part 375 SCOs for restricted residential use guidance value of 400 ppm in the pre-1960 historical fill areas (fill areas presented in Drawing One of Appendix AE). Atypical lead concentrations indicative of a possible concentrated source area are defined for this report as concentrations exceeding 10,000 ppm.

Concentrations of lead in fill from PAOC 7/Fill Areas H, F and G area ranged from non-detect to 167,000 ppm. Fill materials were encountered within PAOC 7 at pre-development 2003 RI depths between 12 feet bgs to 16 feet bgs. Reported concentrations of lead in this area ranged from 15.5 ppm to 9,990 ppm in soils less

than 1 foot below the crawl space ground surface. This crawl space has since been demolished and the Site grades have been significantly raised in this area. Lead reported concentrations exceeded the 10,000 ppm were detected sporadically at pre-development 2003 RI depths of 1 feet bgs to 12 feet bgs. The maximum value of 167,000 ppm was detected in the 2002 RI 1- to 2-foot interval.

The soils encountered near the former Maintenance Building Area (PAOC 29) also consist of historical fill that extended to a pre-development 2003 RI depth of 8 feet bgs. The highest lead levels measured in near-surface samples (less than 2 feet bgs) were sporadically greater than 6 NYCRR Part 375 SCOs for restricted residential use guidance value of 400 ppm (but reached a maximum of 25,000 ppm). Reported concentrations of lead reported in soil were also generally above the 6 NYCRR Part 375 SCOs for restricted residential use guidance value of 400 ppm at pre-development 2003 RI depths greater than 2 feet bgs, up to a maximum of 90,000 ppm (within the 3- to 8-foot depth range).

Chromium reported concentrations reported in soils (fill) from the PAOC 47 source area, ranged from 212 ppm to 3,750 ppm (Figure 13C), at pre-development 2003 RI depths between 3 feet to 5 feet below the existing concrete slab. The two offsite pre-development 2003 RI surface to 6-inch soil samples collected from an area within Kingsland Point Park (adjacent to PAOC 47) documented background levels in shallow soils above the water table at two temporary well locations; where, reported chromium concentrations of 32 ppm to 43.5 ppm were observed. The chromium concentrations in these two off-site Kingsland Point Park samples were less than the 6 NYCRR Part 375 SCOs for restricted residential use guidance value of 110 ppm.

As discussed further in Section 5.4, the Site soil exposure pathway has been managed by a Site wide engineering control cover system that was installed and will be maintained in accordance with the SMP.

5.3.3 SVOCs

The RI identified SVOCs at the Site consist of PAHs. Site fill contains PAHs from combustion products such as ash and slag, as well as localized historical petroleum spills. Individual PAH soil reported concentrations were above 6 NYCRR Part 375 SCOs for restricted residential use guidance values within PAOCs 2, 4, 6, 7, 17, 21, 34, 37, 39, and 43, and in the UST area. From previous investigations, pre-1960 fill generally contains PAHs above 6 NYCRR Part 375 SCOs for restricted residential use guidance values for individual compounds, the highest concentrations of SVOCs occur at PAOC 47 (maximum of 4,675 ppm total SVOCs), where evidence of residual oil was found within the fill at 7 to 13 ft bgs. Total carcinogenic PAHs

(a subset or the total SVOCS) ranged from non-detect to 1,853 ppm at this same depth interval in PAOC 47.

As discussed further in Section 5.4, the Site soil exposure pathway has been managed by a Site wide engineering control cover system that was installed and will be maintained in accordance with the SMP.

5.3.4 VOCs

No VOCs were detected during the 2002 RI in the Site soils sampled above the 6 NYCRR Part 375 SCOs for restricted residential use guidance values.

5.3.5 Recycled Concrete Millings

As discussed in Section 4.2.9 of this Report, recycled concrete millings were reused within the Site's existing cover system under BUD No. 894-360. A description of the material's analytical testing results is provided below.

Concrete millings in PAOCs 14, 15, and 32 were sampled (top foot of surface material) and analyzed for PAHs, metals, and PCBs. Individual PAHs were detected above 6 NYCRR Part 375 SCOs for restricted residential use values at concentrations ranging from 3.5 ppm to 31 ppm. Metals including iron, lead, and mercury, exceeded 6 NYCRR Part 375 SCOs for restricted residential use values. Lead was detected at a maximum concentration of 1,900 ppm in millings at PAOC 15, while remaining samples were less than the 400 ppm 6 NYCRR Part 375 SCOs for restricted residential use value. PCB Aroclors 1248 and 1260 were detected in six of the seven samples collected during the RI at maximum concentrations of 1.8 ppm and 2.6 ppm respectively. Total PCB concentrations ranged from non-detect to 4.4 ppm in the spread millings. Total PCB concentrations measured in samples previously collected from the millings pile at PAOC 31 ranged from 0.39 ppm to 1.69 ppm (EcolSciences, 2002). Overall, the concrete millings onsite generally contained PCBs near or slightly above the TAGM guidance value of 1 ppm for surface soil (unrestricted use), but samples were consistently below the TAGM guidance value of 1 ppm for the 2003 RI subsurface soil (i.e., beneath clean cover soil).

As discussed further in Section 5.4, the Site soil exposure pathway has been managed by a Site wide engineering control cover system that was installed and will be maintained in accordance with the SMP.

5.3.6 Groundwater

Site groundwater is influenced by underlying historic fill and individual PAOCs, which define the COPCs. Metals, SVOCs, and VOCs have been detected in the Site groundwater and are described below. These constituents have been compared to NYSDEC Class GA groundwater standards (for drinking-water supplies) in Tables 10 and 11 of Appendix AE. Comparison to these standards is considered conservative and not relevant to the groundwater exposure pathway considered in this human health assessment. In accordance with the established SMP and Environmental Easement (EE), Site groundwater use is prohibited without necessary water quality treatment, as described in the EE (Appendix AG). The only potential for human exposure to contaminants in Site groundwater would be by dermal contact with groundwater during construction. For this evaluation, data from unfiltered groundwater samples (which may include suspended solids) was used to evaluate this pathway.

5.3.7 Metals

Groundwater observed during the 2003 RI within the north to northwest part of the Site contained several metals that exceeded Class GA groundwater standards (for drinking-water supplies). These 2003 RI monitoring well sampling locations are provided in Drawing 3 of Appendix AE. Six monitoring wells (OW-10, OW-11, OW-20, OW-24, OW-25, and OW-26T). The 2003 RI Barium, chromium, iron, lead, manganese, and sodium reported concentrations exceeded the Class GA standards. Barium and chromium were detected at maximum reported concentrations of 6,560 and 554 micrograms per liter (µg/L), respectively. Lead was detected in monitoring wells OW-20 and OW-26T at concentrations of 81.7 µg/L and 88.1 µg/L.

Groundwater within the south to southwest part of the West Parcel, under portions of the former Body Plant and Chassis Plant areas were sampled from 11 monitoring wells (OW-6, 7, 8, 40, 42, 45, 46, 47, 49, 50, and 51). Class GA standards were exceeded for barium, iron, lead, manganese, and sodium. Barium and lead were detected at maximum concentrations of 5,040 and 116 µg/L.

Groundwater samples collected in the vicinity of the UST attenuation area showed that the Class GA standard was exceeded for iron, manganese, and sodium. Onsite groundwater in PAOC 47 exhibited chromium as high as 42,100 µg/L. Offsite groundwater monitoring at wells in the Kingsland Point Park (SI-47-B27 and SI-47-B28), near PAOC 47, contained chromium above the Class GA standard, at a maximum reported concentration of 466 µg/L.

5.3.8 SVOCs

PAHs were the primary COPC for groundwater. The 2003 RI samples collected within the former 10,000-gallon UST attenuation area at PAOCs 7, 21, 37, 39, 43, and 47, had concentrations of individual PAHs exceeding Class GA standards. The maximum detected PAH reported concentration was for phenanthrene at 140 µg/L.

5.3.9 VOCs

Site groundwater within the northern end of the West Parcel reported VOC concentrations above Class GA standards in OW-10, OW-22, OW-25, OW-26T, and temporary well SI-GWI-B11W. Benzene and other petroleum-derived VOCs were present in groundwater. Trace levels of petroleum-derived VOCs are also reported in the groundwater at PAOCs 7 and 37. In the PAOC 47 area, 16 monitoring wells (including boundary well OW-24), and two temporary wells located on the Kingsland Point Park, were sampled to delineate the extent of localized TCE contamination. TCE ranged from non-detect to 75 µg/L in onsite wells and non-detect to 16 µg/L in the Kingsland Point Park. The 1,1-dichloroethane reported concentration was also slightly above the Class GA standard in one onsite well, and cis-1,2-dichloroethene was slightly above the Class GA Standard in one offsite well at the Kingsland Point Park.

5.3.10 Soil Gas

Methane was confirmed in the RI soil gas studies in some areas of the Site over organic deposits (Figures 15A, 15B, and 17 of Appendix AE). Within the paved part of the East Parcel, reported methane concentrations in soil gas beneath the asphalt ranged from 70% to 100% within the extent of the former Village of Sleepy Hollow landfill. Migration of methane from the former Sleepy Hollow Village landfill toward the west appears to be following the groundwater flow path, until the soil gas is naturally released to the atmosphere. Methane was not detected beyond the edges of the asphalt pavement within the East Parcel (Figure 15A of Appendix AE). Lower levels of methane (up to 18%) were found beneath the asphalt in the northern corner of the West Parcel (Figure 17) where organic marsh soils underlie the fill.

VOCs were observed within several PAOCs found under the former Body and Chassis Plants of the West Parcel (Figure 18 of Appendix AE). Specifically, parts of PAOCs 7, 21, 37, 39, 43, 47, and the UST attenuation area were sampled based on presence of VOCs within the 2003 RI observed Site soil and groundwater. Representative samples were collected where future Site buildings were anticipated, based on the Draft Environmental Impact Statement (DEIS) for Lighthouse Landing Communities, LLC. Soil vapor data were collected from areas below the slab and from uncovered surface soil areas (including samples located

near current crawl spaces beneath the existing slab floor). Air samples were also measured in the former crawl spaces. Constituents detected in the former crawl space 2003 RI air samples were acetone, chloroform, carbon disulfide, and toluene. These same constituents were detected in the former crawl space soil vapor samples. In total, 27 volatile constituents were detected in the 2003 RI soil vapor. These constituents included Freon 11 and Freon 12, chlorinated solvents (i.e., TCE, 1,1- dichloroethene, tetrachloroethene), and aliphatic (i.e., xylenes, heptane) and aromatic hydrocarbons (i.e., toluene, naphthalene, benzene). The aliphatic and aromatic VOCs were generally reported in soil vapor data collected from PAOC 37 and PAOC 43 (within the proposed natural petroleum attenuation monitoring areas). Similarly, these petroleum-derived compounds were detected within the petroleum attenuation area associated with the former10,000-gallon No.6 fuel oil UST.

Chlorinated solvents, predominantly, TCE, were detected only within and around the area of PAOC 47. The TCE in soil gas corresponded to the TCE found within the groundwater and soil samples collected in the PAOC 47 area, exhibiting a larger footprint than would be indicated by the 2003 RI soil and groundwater data alone. VOCs from the soil gas phase were not detected in the crawl space atmosphere beneath the former Chassis and Body Plant slabs. The results of the soil vapor and crawl space air sampling, for the detected constituents, are presented on Figure 18 of Appendix AE.

5.4 Potential Exposure Points, Receptors, and Route of Exposure

An initial step in evaluating potential human exposure is identifying complete exposure pathways. In accordance with New York State Department of Health (NYSDOH) guidance for conducting a Qualitative Human Health Exposure Assessment (NYSDEC, 2002a and 2002b), for an exposure pathway to be complete, the following five elements must exist:

1. **A source of COPC;**
2. **The release and transport mechanisms of COPC;**
3. **A point of human exposure;**
4. **Routes of exposure where constituents from these media could be taken up by the human body; and,**
5. **A receptor population.**

As previously described, COPCs have been identified in historical fill, recycled concrete millings, soil vapor, and groundwater. Potential human exposure to the media could occur through ingestion, dermal contact, and/or inhalation of particulates or volatile organics released to the air. The Site is now occupied by several residential structures with occupants while construction occurs in unoccupied areas. Therefore, the most likely

current receptors are the general construction workers (e.g., individuals involved in maintenance activities, environmental samplers, land developers, DPW personal [who currently park their vehicles onsite]), and residents walking through active, restricted access construction activities.

Residents and their properties are fenced off from ongoing construction and undeveloped areas of the Site. Although the Site is fenced along the Site boundary there is potential for exposure of restricted construction access area trespassers.

The potential receptors are workers involved in excavation and construction activities (associated with redevelopment and infrastructure maintenance). Future residents, visitors, and commercial workers who may live, visit and/or work in the area, are currently and will need to be isolated from contaminated media encountered during excavation and construction activities.

As further discussed in this Report, excavation activities are performed in accordance with the SMP as well as dust and stormwater run-off are managed under the SMP and the current NYSDEC Stormwater Pollution Prevent Plan (SWPPP). In addition, the SMP Community Air Monitoring Plan (CAMP) has been and will continue to be operated during the Site construction and intrusive activities to monitor the potential exposure from airborne particulates (e.g., dust) and VOCs.

Potentially complete human exposure pathways for the Site are identified below.

5.4.1 Potential Direct Contact with Soils

Under the current "construction phase" land use, there is a potentially complete exposure pathway for construction workers exposed to constituents in soil and concrete millings while engaged in intrusive activities (e.g., removal of concrete slabs, utility work, and building construction). There is no potential for exposure of residents, visitors, and commercial workers to constituents in these media since impervious surfaces and other components of the final cover system (described in the Section 4.1.2) are used to isolate the existing fill materials from the public. Final soil cover, roadways, parking areas, and building slabs will continue to be integrated into the final cover system to prevent direct contact with any subsurface contamination. Any excavation that must occur within the existing cover system is conducted in accordance with the SMP EWP (refer to Appendix AF) to prevent completion of the human exposure pathway.

5.4.2 Potential Inhalation of Vapors and/or Particulates

Under the current "construction phase" land use, general workers, residents, and potential trespassers at the Site may be exposed to constituents through inhalation

of vapors and/or particulates (e.g., dust). There are now occupied residential buildings onsite, so there is concern for the potential migration of vapors to indoor air. However, as detailed in Section 4.2.11, vapor mitigation systems were installed as an element of each completed building foundation. The site is also actively monitored during construction activities in accordance with the CAMP (Appendix E) to prevent vapor and/or particulate inhalation.

An exposure pathway through inhalation of particulates and/or volatiles has been identified for the current construction workers engaged in intrusive activities of the millings and historical fill within the existing cover system, This potential inhalation exposure pathway is monitored and mitigated by the SMP CAMP ; where, the CAMP has been and will continue to monitor the construction air quality and identify any CAMP exceedances prior to any potential inhalation pathways. Therefore, the current construction activities are conducted with properly trained personnel, with personal protective equipment (PPE), and in accordance with the EWP, CAMP, and HASP (Appendices AF, E, and Y, respectively) to prevent completion of the exposure pathway.

5.4.3 Direct Contact with Groundwater

Groundwater occurs at various depths across the Site (generally 6 feet to 7 feet), and generally flows west/southwest toward the Hudson River. Reported, elevated concentrations of metals, SVOCs, and VOCs have been detected within various PAOC areas in site groundwater. As previously discussed, using groundwater on the Site as a potable water source is prohibited by the EE. Therefore, the exposure pathway is incomplete for potential exposure to constituents in groundwater through consumption.

Direct contact with groundwater that may be encountered during future deep excavation and construction activities could complete the exposure pathway. While this exposure pathway is complete, potential exposure through direct contact and potential inhalation of volatiles) of construction workers to constituents in groundwater is mitigated using properly trained personnel and personal protective equipment (PPE) in accordance with the SMP and the SMP EWP.

6.0 MONITORING PLAN COMPLIANCE REPORT

As described in the SMP, the Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and affected site media. This Monitoring Plan may only be revised with the approval of NYSDEC.

On-Site environmental monitoring devices, including but not limited to, groundwater monitoring wells and vapor mitigation systems, must be protected and replaced as necessary so the devices function in the manner specified in the SMP.

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, a Site reconnaissance will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a qualified environmental professional as determined by NYSDEC.

6.1 Site-Wide Inspection

A comprehensive, Site-wide Inspection was conducted by PS&S on April 17, 2020 to determine and document:

- Whether ECs continue to perform as designed,
- If these controls continue to be protective of human health and the environment,
- Compliance with requirements of the SMP and the EE,
- Achievement of remedial performance criteria,
- Sampling and analysis of appropriate media during monitoring events,
- If Site records are complete and up to date, and
- Changes, or needed changes, to the remedial or monitoring system.

Observations made during the April 17, 2020 PS&S Site reconnaissance are documented in the Annual Site-Wide Inspection Checklist (refer to Appendix B).

6.1.1 Cover System Monitoring Requirements

As part of the Site-wide cover system integrity assessment, the cover system was maintained and repaired, as necessary, to prevent public contact with historical fill or other soils that do not comply with the SCOs required for the soil cover system. The integrity of the cover system will continue to be monitored on an annual basis (unless a more frequent inspection is required by NYSDEC during periods of major

construction). In accordance with DER-10, the QEP certified that the final cover system remains effective as of the April 17, 2020 PS&S Site reconnaissance.

The April 2020 PS&S Site reconnaissance of the surface cover system included the assessment of the following cover system components and their respective integrity:

1. Hard surface cover for evidence of deep cracks, potholes, cuts, depressions and/or rutting exposing demarcation barriers and historical fill; and
2. Surface soil cover to identify any areas where there is evidence of:
   - Excessive settlement or erosion relative to the surrounding areas;
   - Excessive ponding of surface water that could damage the soil cover;
   - Exposed or damaged underlying demarcation barrier(s);
   - Animal burrows or invasive deep-rooted vegetation that could compromise the integrity of the cover system; and
   - Modifications to the surface cover system with respect to repairs or changes in cover system construction.

6.2 Groundwater Monitoring Requirements

Groundwater monitoring will be performed on an annual basis, commencing after Site development. At the time of this PRR reporting period, Site development has not been completed and groundwater monitoring was not required.

6.3 Groundwater Monitoring Program

As noted in the SMP, a groundwater monitoring well network existed at the Site prior to redevelopment. Several of these monitoring wells will need to be repaired, replaced and relocated to provide access for post-development sampling. Monitoring wells installed prior to redevelopment will be protected or replaced in kind during Site development, as practicable. During this PRR reporting period and as further discussed in Section 5.3.1, 8 existing groundwater monitoring wells were located and then decommissioned for future replacement in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures". NYSDEC approval of the Groundwater Monitoring Well Decommissioning Plan and subsequent Decommissioning Logs are provided in Appendix D of this PRR. Figure 6 displays the relocated groundwater monitoring wells replacing those decommissioned.

6.3.1 Groundwater Monitoring Well Decommissioning

PS&S submitted a groundwater monitoring well decommissioning work plan to NYSDEC due to monitoring well conflict with ongoing construction. As discussed with the NYSDEC Project Manager, an extensive effort was advanced to locate the

19 groundwater monitoring wells detailed in the SMP Monitoring Plan in compliance with the February 13, 2018 Site Management Plan Groundwater Monitoring Well Decommissioning notification. The Site contractor conducted exploratory excavation operations to locate the surface of the wells at the installation elevations disclosed in Appendix D. If the wells were not located at the approximate installation elevation during the exploratory excavation operations, the Site contractor excavated an additional 3 feet to 5 feet bgs.

Eight of the 19 groundwater monitoring wells detailed in the SMP Monitoring Plan were successfully located and decommissioned. Three of the 8 located wells were decommissioned on February 8, 2018 and were a part of the SVI intrusion evaluation detailed in Section 4.2.11 of this PRR. The remaining 5 wells were decommissioned on October 2, 2019 and were a part of the existing groundwater monitoring well network (refer to Figure 6). Groundwater monitoring wells were decommissioned in accordance with CP-43. Monitoring Well Field Inspection Logs and Well Decommissioning Records are provided in Appendix D.

6.3.2 Institutional and Engineering Control Effectiveness

Based on an evaluation of the Inspection/Monitoring Program results detailed above, PS&S concludes that the Site's implemented ICs/ECs remain effective in protecting public health and the environment from remaining contamination.

7.0 OPERATION AND MAINTENANCE (O&M) COMPLIANCE REPORT

In accordance with Section 4.0 of the SMP (Operation and Maintenance Plan), an operations and maintenance plan (OMM Plan) will be submitted if active sub-slab depressurization systems (SSDS) are required in buildings designed for occasional or continuous occupancy. No OMM Plan is currently applicable since no active SSDSs were installed on-Site.

8.0 CONCLUSIONS

This PRR was developed in accordance with Section 6.3(b) of the NYSDEC DER-10, *Technical Guidance for Site Investigation and Remediation,* dated May 3, 2010, and the Arcadis SMP finalized in December 2013.

PS&S finds the Site in compliance with the SMP IC/EC Plan and Monitoring Plan requirements (SMP O&M Plan not currently applicable) in accordance with the review of the IC/ECs at the Site, and a visual PS&S reconnaissance conducted on April 17, 2020. Construction activities continue at the Site in accordance with the SMP, CAMP, HASP, and SMP EWP. No corrective measures are proposed and no changes to the SMP PRR requirements are recommended at this time.

REV. / ISSUE	DATE	DESCRIPTION

NOTES:

1. VILLAGE OF SLEEPY HOLLOW TAX MAP, SHEET 96, BLOCK 7793
2. PROPERTY KNOWN AS PORTION OF LOT 1.1, SHEET 115.10 (WEST PARCEL) LOT 1.1, SHEET 115.15 (SOUTH PARCEL) AS SHOWN ON THE TAX MAP OF THE VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY, STATE OF NEW YORK.
3. PER CONTRACTUAL AGREEMENT BETWEEN THE CLIENT AND CONTROL POINT ASSOCIATES, INC. A BOUNDARY SURVEY WAS NOT PERFORMED.
4. THE LOCATION OF UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN.
5. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS (KEYNET GPS) NETWORK CORRECTION.
6. PLANIMETRIC AND TOPOGRAPHIC FEATURES COMPILED BY CONTROL POINT ASSOCIATES, INC. UTILIZING PHOTOGRAMMETRIC METHODS FROM UAV PHOTOGRAPHY. UAV PHOTOGRAPHY PERFORMED BY CONTROL POINT ASSOCIATES, INC. ON MARCH 09, 2020 WITH A PHOTO SCALE OF 1.40 cm GSD. A GROUND SURVEY WAS NOT PERFORMED.
7. THIS DATA SET WAS PRODUCED TO MEET ASPRS POSITIONAL ACCURACY STANDARDS FOR DIGITAL GEOSPATIAL DATA (2014) FOR AN ACCURACY LEVEL THAT IS WITHIN FOUR TIMES GREATER THAN THE ERROR OF CONTROL.
8. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE PHOTOGRAPHY AND ARE SUBJECT TO FIELD VERIFICATION BY THE END USER.
9. AERIAL CONTROL PROVIDED BY CONTROL POINT ASSOCIATES, INC. UTILIZING GPS OBSERVATIONS ON MARCH 09, 2020. (SEE NOTE 1).

REFERENCES:

1. TAX MAP OF THE VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY, STATE OF NEW YORK.
2. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, LIGHTHOUSE LANDING, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10 (WEST PARCEL), LOT 1, SHEET 115.15 (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-18-14.
3. MAP ENTITLED "SUBDIVISION PLAT, EDGE ON HUDSON, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10, (WEST PARCEL), LOT 1, SHEET 115.15, (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, STATE OF NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, LAST REVISED APRIL 18, 2019.AS RECORDED IN MAP NO. 29263

LEGEND

- WHERE EXISTING CAP IS IN PLACE.
- WHERE EXISTING CAP IS DISTURBED/AREA OF ACTIVE CONSTRUCTION
- WHERE FINAL COVER SYSTEM IS INSTALLED

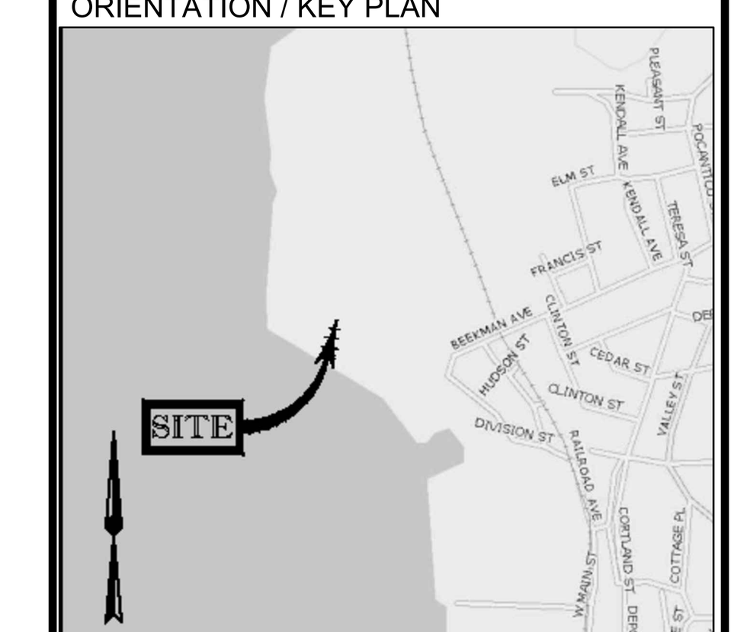
GRAPHIC SCALE

(IN FEET)
1 inch = 100

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN



CLIENT

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NJ 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

PROJECT

FORMER GENERAL MOTORS
ASSEMBLY PLANT
WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

SHEET TITLE

EXISTING
COVER SYSTEM

PROJECT NO.: 05302.0001	DRAWN BY: RE
SCALE: 1	CHECKED BY: SMP
DATE: 05/26/2020	SHEET 1 OF 1

SHEET NO.
FIGURE 1

NOTES:

1. WESTCHESTER COUNTY INDEX MAP, SHEET 96, BLOCK 7793.
2. PROPERTY CURRENTLY KNOWN AS LOT 1, SHEET 115.10 (WEST PARCEL) & LOT 1, SHEET 115.15 (SOUTH PARCEL) AS SHOWN ON THE TAX MAP OF WESTCHESTER COUNTY, STATE OF NEW YORK.
3. AREAS SHEET 115.10:
   LOT 1 = 1,867,329 S.F. OR 42.868 AC.

   AREAS SHEET 115.15:
   LOT 1 = 72,941 S.F. OR 1.674 AC.
   PROPOSED LOT 1.100 = 5,398 S.F. OR 0.124 AC.
   PROPOSED LOT 1.101 = 181 S.F. OR 0.004 AC.
4. PROPOSED LOT GEOMETRY PER CAD FILE PROVIDED BY DIVNEY, TUNG, SCHWALBE LAST REVISED ON JANUARY 16, 2018.
5. THE PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW RECORDED AS CONTROL NUMBER 533192301.

REFERENCES:

1. THE TAX MAP OF WESTCHESTER COUNTY, STATE OF NEW YORK.
2. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, LIGHTHOUSE LANDING, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10 (WEST PARCEL), LOT 1, SHEET 115.15 (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-18-14.

LEGEND

TO BE CONVEYED TO THE VILLAGE OF SLEEPY HOLLOW

TO BE OFFERED FOR DEDICATION TO THE VILLAGE OF SLEEPY HOLLOW

HUDSON RIVER

APPROXIMATE MEAN HIGH WATER PER CONTROL NO. 531192301

APPROXIMATE LINE OF FUTURE SUBDIVISION, PER 6/7/11 SPECIAL PERMIT

FUTURE WATERFRONT OPEN-SPACE PARCEL

LIGHTHOUSE

SECTION 115.14
BLOCK 1
LOT 1
N/F REPUTED OWNER
MOON RIVER REALTY LLC

SECTION 115.10
BLOCK 1
LOT 1.10
AREA = 34,084 S.F.
OR 0.782 AC.
(NOT BUILDING LOT)

SECTION 115.10
BLOCK 1
LOT 1.1
N/F REPUTED OWNER
LIGHTHOUSE LANDING
COMMUNITIES, LLC
DEED 49230 PG. 692
AREA = 1,867,329 S.F. OR 42.868 AC.
(NOT BUILDING LOT)

WESTCHESTER COUNTY INDEX
SHEET 96, BLOCK 7793

For Phase 2-
Block F & H
(See page 2)

Block J

Block E

Block I

MAXWELL DRIVE

HORSEMANS BOULEVARD

LEGEND DRIVE

RIVER STREET

BEEKMAN AVENUE

HUDSON AVENUE

RAILROAD TRACKS

SECTION 115.06
BLOCK 1
LOT 1
N/F REPUTED OWNER
CONRAIL RAILROAD

SECTION 115.15
BLOCK 1
LOT 1
(SEE DETAIL)
(NOT BUILDING LOT)
(TO BE OFFERED FOR DEDICATION)

SECTION 115.15
BLOCK 1
LOT 1.100
(SEE DETAIL)
(NOT BUILDING LOT)
(TO BE OFFERED FOR DEDICATION)

SECTION 115.15
BLOCK 1
LOT 2
N/F REPUTED OWNER
LOUISE & JOSEPH BRACCHITTA

SECTION 115.15
BLOCK 1
LOT 3
N/F REPUTED OWNER
VILLAGE OF SLEEPY HOLLOW
(NOT BUILDING LOT)

SECTION 115.15
BLOCK 1
N/F REPUTED OWNER
LIGHTHOUSE LANDING
COMMUNITIES, LLC
DEED 49230 PG. 692
AREA = 72,941 S.F.
OR 1.674 AC.
(NOT BUILDING LOT)

SEWER EASEMENT AGREEMENT
LIBER 7232, PG. 421
LIBER 7455, PG. 773

APPROXIMATE LINE OF FUTURE SUBDIVISION, PER 6/7/11 SPECIAL PERMIT

FUTURE PUBLIC USE PARCEL

FUTURE ACCESS EASEMENT AREA

FUTURE WATERFRONT OPEN-SPACE PARCEL

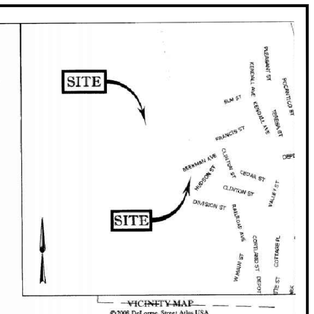
Lot 1.41 Closing #5 Toll Unit #E-2
Lot 1.42 Closing #9 Toll Unit #E-3
Lot 1.43 Closing #1 Toll Unit # E-1
Lot 1.44 Closing #1 Toll Unit #1-6
Lot 1.45 Closing #6 Toll Unit #46-51
Lot 1.46 Closing #TBD Toll Unit #40-45
Lot 1.47 Closing #TBD Toll Unit #27-32
Lot 1.48 Closing #5 Toll Park
Lot 1.49 Closing #5 Toll Unit #52-56
Lot 1.410 Closing #2 Toll Unit #62-66
Lot 1.411 Closing #4 Toll Unit #57-61
Lot 1.412 Closing #1 Toll Unit #7-11
Lot 1.413 Closing #2 Toll Unit #67-72
Lot 1.414 Closing TBD Toll Unit #27-32
Lot 1.415 Closing #TBD Toll Unit #22-26
Lot 1.416 Closing #7 Toll Unit #17-21
Lot 1.417 Closing #5 Toll Unit #12-16

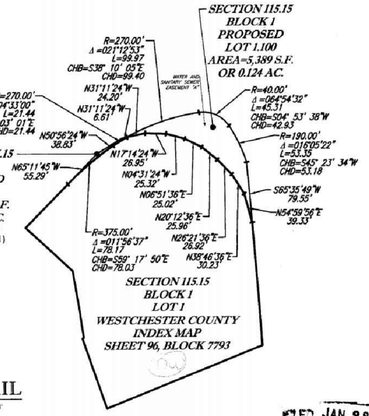
Closing #3

RECENT CLOSING 2-18-20

Phase 1

TO TOLL BROTHERS
Closing #1---- 03/23/18---J Block Lots 5.12 & Lot 5.13
-E block Lot 1.43
Closing #2---- 07/03/18---J Block Lots 1.59 and 1.510
Closing #3---- 08/16/18---I Block Lots 1.7, 1.8 & 1.9
Closing #4---- 04/25/19---J Block Lot 1.57
Closing #5---- 08/08/19---J Block Lots 1.54, 1.58 & 1.511
-E Block 1.41
Closing #6---11/08/19---J block Lot 1.53
Closing #7---02/18/20- J block Lot 1.58
Closing #8---TBD-05/08/20 tentative Lot 1.52
Closing #9---TBD-08/08/20 tentative Lot 1.51, 1.42
Closing #10---TBD-11/08/20-tentative-Lots 1.514 and 1.55





DETAIL
SCALE: 1"=80'

GRAPHIC SCALE
80 0 40 80 180 320
(IN FEET)
1 inch = 80 ft.

FILED JAN 28 2019
NUM. 49263
FEE PAID 20.00

REV. / ISSUE	DATE	DESCRIPTION
24		REVISE LOT LINES 1.41, 1.42 & 1.43
23		REVISE LOT LINES AND LOT ACREAGE
22		REVISE LOT LINES AND LOT ACREAGE
20		REVISE LOT ACREAGE AND LOT LETTERS
19		REVISE LOT NUMBERS AND ROAD NAMES
18		REVISE SUBDIVISION LOT LINE CONFIGURATION AND ADD 2 LOTS
17		REVISE CURVE DATA
16		PER CLIENT MARKUP
15		PER NOTES
14		PER ENGINEER COMMENTS
13		ADDED PROPOSED SANITARY LINE
12		REVISED LOT NUMBERS
11		ADDED PROPOSED BUILDING AND EASEMENTS
10		REVISED PROPOSED LOT LINES
9		REVISED WATER & SANITARY EASEMENTS
8		SEE SHEET 2OF 3 FOR PROPOSED LOT LINES
7		REVISED PER WCDOH COMMENTS
6		REVISED FUTURE EASEMENTS
5		REVISED FOR WCDOH SUBMISSION
4		REVISED PER CLIENT COMMENTS
3		REVISE TO ADD SIGNATURE BLOCKS
2		REVISE TO ADD FUTURE SUBDIVISION LINES
1		REVISE TO ADD LOT 1.0 AND EASEMENTS
No.		DESCRIPTION OF REVISION

BY	CHK'D	APPROVED	DATE
T.J.M	J.P.C.	G.J.S.	12-21-2018
T.J.M	J.P.C.	G.J.S.	09-28-2018
T.J.M	G.J.S.	G.J.S.	09-04-2018
T.J.M	G.J.S.	G.J.S.	08-06-2018
T.J.M	G.J.S.	G.J.S.	07-06-2018
T.J.M	G.J.S.	G.J.S.	06-15-2018
J.P.C.	G.J.S.	G.J.S.	03-20-2018
J.P.C.	G.J.S.	G.J.S.	01-16-2018
J.P.C.	G.J.S.	G.J.S.	12-18-2017
J.P.C.	G.J.S.	G.J.S.	12-11-2017
J.P.C.	G.J.S.	G.J.S.	9-28-2017
J.P.C.	G.J.S.	G.J.S.	9-17-2017
FIELD CREW	DRAWN	APPROVED	DATE
-	T.J.M	G.J.S.	5-1-2017
-	J.P.C.	G.J.S.	5-19-2017
-	J.P.C.	G.J.S.	5-19-2017
-	J.C.	G.J.S.	3-9-2017
-	J.P.C.	G.J.S.	10-20-2016
-	T.J.M.	G.J.S.	12-9-2016
-	J.P.C.	G.J.S.	9-20-2016
-	C.A.P.	G.J.S.	7-7-2016
-	C.A.P.	G.J.S.	5-24-2016
-	J.P.C.	J.C.W.	11-19-2015
-	A.R.	G.J.S.	8-3-2015
-	M.H.S.	G.J.S.	8-3-2015

FOR ADDITIONAL INFORMATION REQUIRED UNDER THE VILLAGE CODE, CHAPTER 425, SUBDIVISION OF LAND, SECTION 425-10, PRELIMINARY PLAT AND CHAPTER 425, SUBDIVISION OF LAND, SECTION 425-11, FINAL PLAT REFER TO EDGE ON HUDSON PHASE ONE SITE PLAN WESTCHESTER COUNTY DEPARTMENT OF HEALTH REALTY SUBDIVISION APPLICATION DRAWINGS PREPARED BY DIVNEY TUNG SCHWALBE LAST REVISED JULY 30, 2018.

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NEW JERSEY 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

CLIENT

PROJECT

FORMER GENERAL MOTORS
ASSEMBLY PLANT
WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

SHEET TITLE

PROPOSED SITE
DEVELOPMENT
PLAN

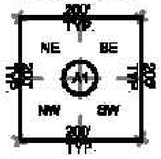
PROJECT NO.: 05302.0001
DATE: 05/27/2020
DRAWN BY: RE
CHECKED BY: SMP
SCALE: 1" = 80'
SHEET 2 OF 6

SHEET NO.
FIG 2

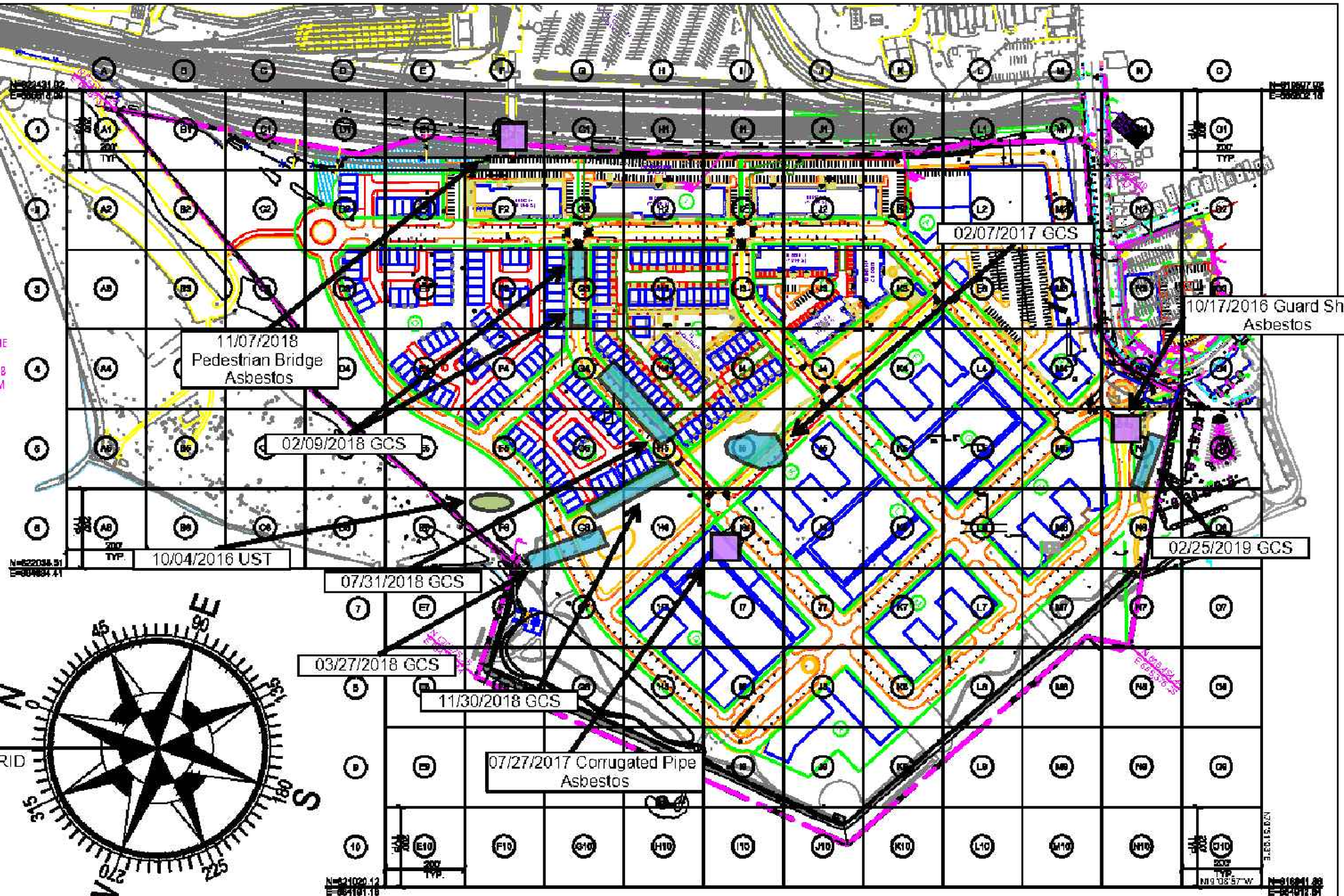
NOTE:

1. EXISTING SURVEY INFORMATION TAKEN FROM CONTROL POINT ASSOCIATES SURVEY DATED DECEMBER 31, 2014.
2. SURVEY PREPARED IN THE NYS PLANE COORDINATE SYSTEM (NAD 83).
3. SURVEY ELEVATIONS BASED ON 1988 NORTH AMERICAN VERTICAL DATUM (1988 NAVD).
4. GCS - "GROSS CONTAMINATED SOIL"

LEGEND



TYPICAL GRID



GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN

PAULUS, SOKOLOWSKI AND SARTOR, LLC.

67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NEW JERSEY 07059
PHONE: (732) 560-9700

CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

CLIENT

PROJECT

FORMER GENERAL MOTORS ASSEMBLY PLANT
WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

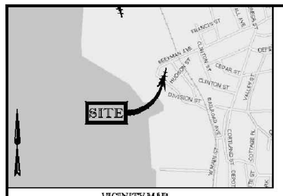
SHEET TITLE

PROPOSED SITE DEVELOPMENT PLAN

PROJECT NO.: 05302.0001
DATE: 05/27/2020
DRAWN BY: RE
CHECKED BY: SMP
SCALE: 1" = 100'
SHEET 3 OF 6

SHEET NO.

FIG 3



VICINITY MAP
©2005 DeLorme, Street Atlas USA

NEW YORK STATE PLANE (NAD 83)

LEGEND

TC 123.45	EXIST. TOP OF CURB ELEVATION
G 123.45	EXIST. GUTTER ELEVATION
W	APPROX. LOC. UNDERGROUND WATER LINE
G	APPROX. LOC. UNDERGROUND GAS LINE
E	APPROX. LOC. UNDERGROUND ELEC. LINE
T	APPROX. LOC. UNDERGROUND TEL. LINE
C	APPROX. LOC. UNDERGROUND CABLE LINE
D	APPROX. LOC. UNDERGROUND DRAINAGE LINE
S	APPROX. LOC. UNDERGROUND SAN. LINE
G	APPROX. LOC. UNDERGROUND GAS LINE
	CURB
	HYDRANT
	WATER VALVE
DMH	DRAINAGE/STORM MANHOLE
SMH	SANITARY/SEWER MANHOLE
TMH	TELEPHONE MANHOLE
EMH	ELECTRIC MANHOLE
MH	UNKNOWN MANHOLE
C/O	CLEAN OUT
D.C.	DEPRESSED CURB
E.O.C.	EDGE OF CONC.
E.O.P.	EDGE OF PAVEMENT
S.W.L.	SOLID WHITE LINE
S.Y.L.	SOLID YELLOW LINE
D.Y.L.	DOUBLE YELLOW LINE
D.W.Y.L.	DASHED YELLOW LINE
	4"x4" WOOD POST/ END OF LATERAL
	TO BE CONVEYED TO THE VILLAGE OF SLEEPY HOLLOW

REFERENCES:

1. THE TAX MAP OF WESTCHESTER COUNTY, STATE OF NEW YORK.
2. MAP ENTITLED "ALTA/ASCM LAND TITLE SURVEY, LIGHTHOUSE LANDING, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 1 1/5 10 (WEST PARCEL), LOT 1, SHEET 1 1/5 13 (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-15-14
3. MAP ENTITLED "EDGE ON HUDSON, SLEEPY HOLLOW, NY PHASE 1, LAYOUT PLAN " REVISION #8, DATED 11/20/18
4. DIMENSIONS PROVIDED BY CLIENT AS PER EMAIL DATED 12-13-2018.

NOTES:

1. THE PURPOSE OF THIS MAP IS TO ILLUSTRATE THE CORRECT CONDITIONS WITHIN ROAD FOUR AS OF 11/3/2019
2. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. NOT ONE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
3. THIS PLAN IS BASED ON INFORMATION PROVIDED, BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
4. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
5. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS).

PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS, ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.

THE STATE OF NEW YORK REQUIRES NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.
DIG SAFELY NEW YORK
(1-800-962-7962)

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NEW JERSEY 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

CLIENT

PROJECT

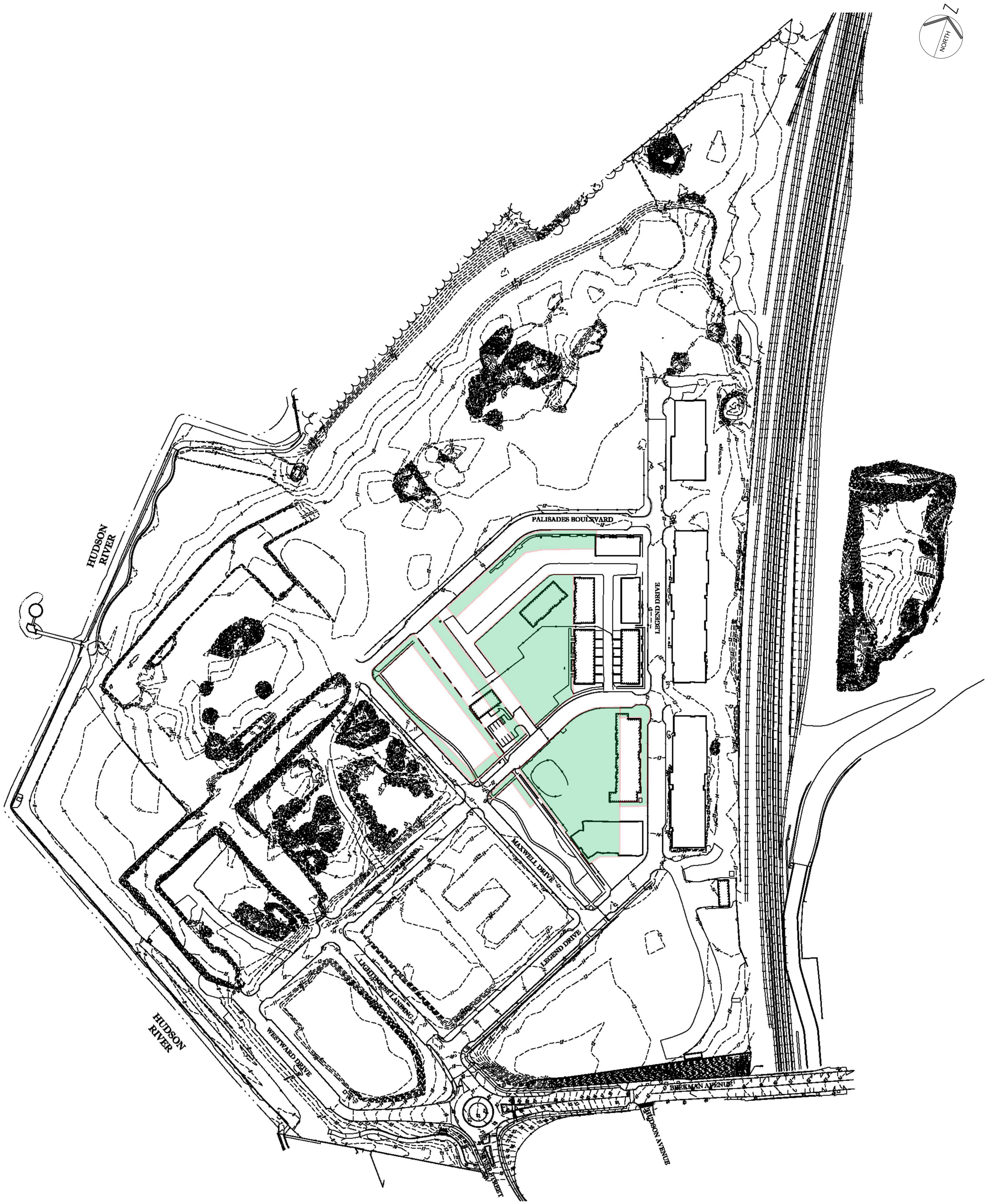
FORMER GENERAL MOTORS
ASSEMBLY PLANT
WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

SHEET TITLE

SITE DEVELOPMENT
UTILITY PLAN

PROJECT NO.:	05302.0001
DATE:	05/27/2020
DRAWN BY:	RE
CHECKED BY:	SMP
SCALE:	1" = 40'
SHEET	4 OF 6
SHEET NO.	FIG 4



NOTES:

1. VILLAGE OF SLEEPY HOLLOW TAX MAP, SHEET 96, BLOCK 7793
2. PROPERTY KNOWN AS PORTION OF LOT 1.1, SHEET 115.10 (WEST PARCEL) LOT 1.1, SHEET 115.15 (SOUTH PARCEL) AS SHOWN ON THE TAX MAP OF THE VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY, STATE OF NEW YORK.
3. PER CONTRACTUAL AGREEMENT BETWEEN THE CLIENT AND CONTROL POINT ASSOCIATES, INC. A BOUNDARY SURVEY WAS NOT PERFORMED.
4. THE LOCATION OF UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN.
5. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS (KEYNET GPS) NETWORK CORRECTION.
6. PLANIMETRIC AND TOPOGRAPHIC FEATURES COMPILED BY CONTROL POINT ASSOCIATES, INC. UTILIZING PHOTOGRAMMETRIC METHODS FROM UAV PHOTOGRAPHY. UAV PHOTOGRAPHY PERFORMED BY CONTROL POINT ASSOCIATES, INC. ON MARCH 09, 2020 WITH A PHOTO SCALE OF 1.40 cm GSD. A GROUND SURVEY WAS NOT PERFORMED.
7. THIS DATA SET WAS PRODUCED TO MEET ASPRS POSITIONAL ACCURACY STANDARDS FOR DIGITAL GEOSPATIAL DATA (2014) FOR AN ACCURACY LEVEL THAT IS WITHIN FOUR TIMES GREATER THAN THE ERROR OF CONTROL.
8. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE PHOTOGRAPHY AND ARE SUBJECT TO FIELD VERIFICATION BY THE END USER.
9. AERIAL CONTROL PROVIDED BY CONTROL POINT ASSOCIATES, INC. UTILIZING GPS OBSERVATIONS ON MARCH 09, 2020. (SEE NOTE 1).

REFERENCES:

1. TAX MAP OF THE VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY, STATE OF NEW YORK.
2. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, LIGHTHOUSE LANDING, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10 (WEST PARCEL), LOT 1, SHEET 115.15 (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED 12-18-14.
3. MAP ENTITLED "SUBDIVISION PLAT, EDGE ON HUDSON, WEST & SOUTH PARCELS OF BEEKMAN AVENUE, LOT 1, SHEET 115.10, (WEST PARCEL), LOT 1, SHEET 115.15, (SOUTH PARCEL), VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT, WESTCHESTER COUNTY, STATE OF NEW YORK" PREPARED BY CONTROL POINT ASSOCIATES, LAST REVISED APRIL 18, 2019.AS RECORDED IN MAP NO. 29263

LEGEND

AREA BACKFILLED WITH CONCRETE MILLINGS

GRAPHIC SCALE

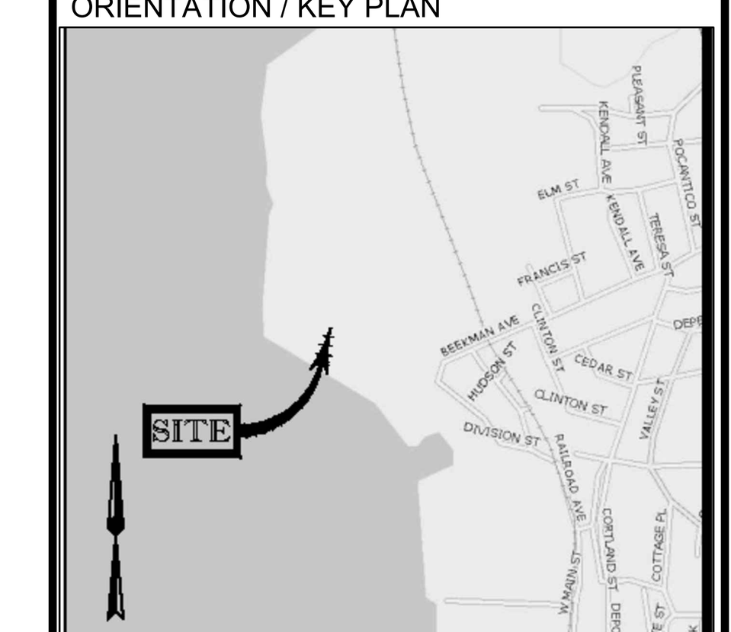
(IN FEET)
1 inch = 100 ft.

REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN



CLIENT

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NJ 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC. OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION.

ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS.

THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

THE COPYING AND/OR MODIFICATION OF THIS DOCUMENT OR ANY PORTION THEREOF WITHOUT THE WRITTEN PERMISSION OF PAULUS, SOKOLOWSKI AND SARTOR, LLC. IS PROHIBITED.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN, CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

PROJECT

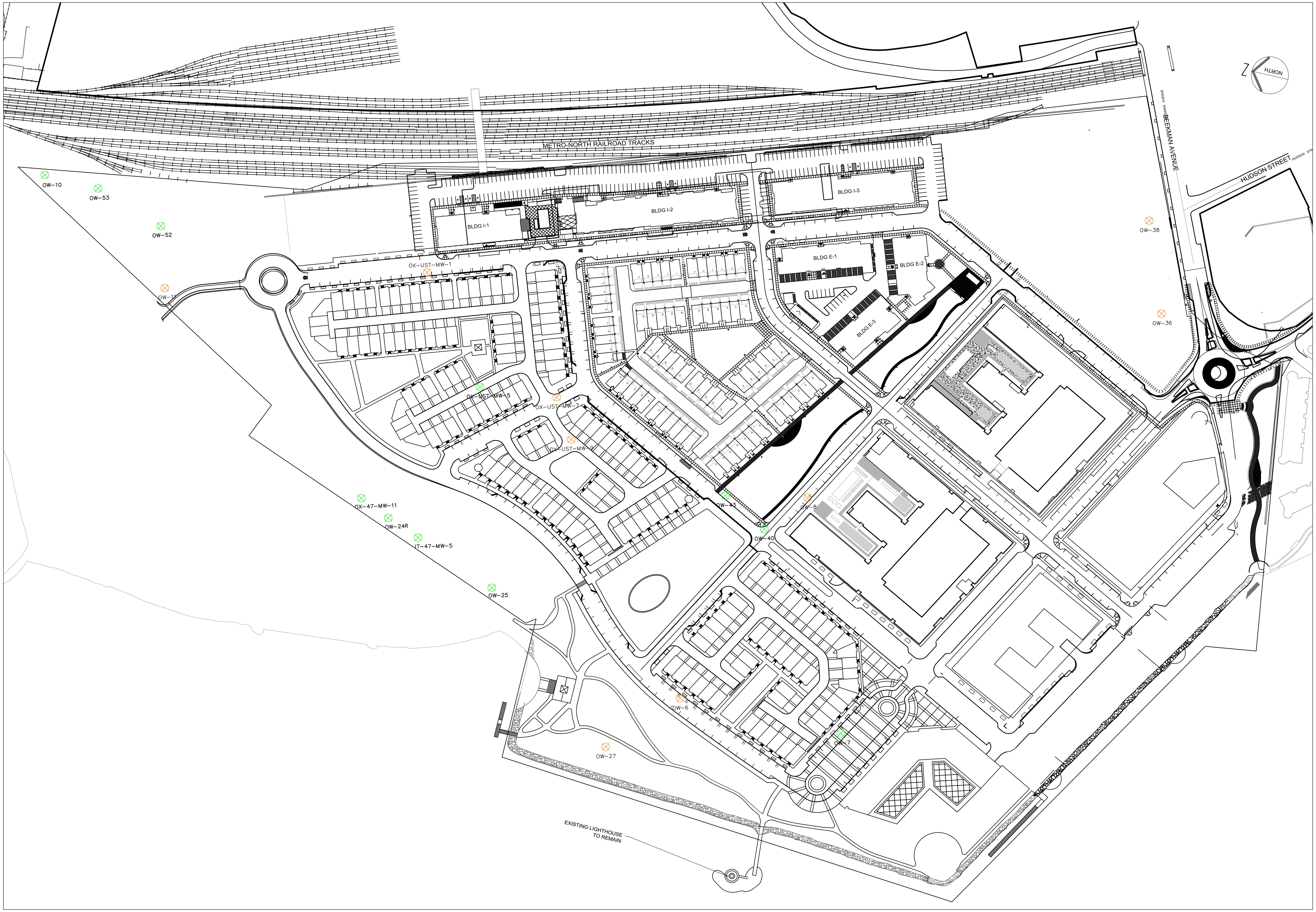
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

NYSDEC SITE No. C360070
SLEEPY HOLLOW, NEW YORK

SHEET TITLE

CONCRETE MILLING REUSE

PROJECT NO.: 05302.0001	DRAWN BY: RE
SCALE: 1" = 100'	CHECKED BY: SMP
DATE: 05/27/2020	SHEET 5 OF 6
SHEET NO.	FIG 5

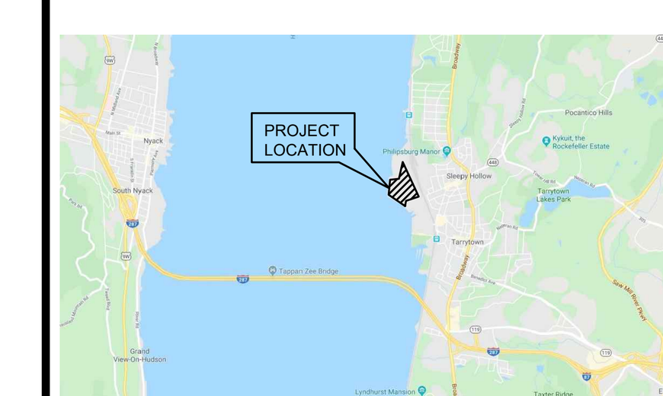


REV. / ISSUE	DATE	DESCRIPTION

CONSULTANT

CONSULTANT

ORIENTATION / KEY PLAN



CLIENT

EDGE-ON-HUDSON
RESIDENCES BY TOLL BROTHERS

PAULUS, SOKOLOWSKI AND SARTOR, LLC.
67A MOUNTAIN BLVD EXT.
P.O. BOX 4039
WARREN, NJ 07059
PHONE: (732) 560-9700
CERTIFICATE OF AUTHORIZATION NO. 24GA28032700

ALL DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY PAULUS, SOKOLOWSKI AND SARTOR, LLC. OF ANY CONFLICTS, ERRORS, AMBIGUITIES OR DISCREPANCIES IN THE CONTRACT DRAWINGS OR SPECIFICATIONS BEFORE PROCEEDING WITH CONSTRUCTION.

ALL DIMENSIONS SHALL BE AS NOTED IN WORDS OR NUMBERS ON THE CONTRACT DRAWINGS. DO NOT SCALE THE DRAWINGS TO DETERMINE DIMENSIONS.

THESE CONTRACT DRAWINGS CONTAIN DATA INTENDED SPECIFICALLY FOR THE NOTED PROJECT AND CLIENT. THEY ARE NOT INTENDED FOR USE ON EXTENSIONS OF THIS PROJECT OR FOR REUSE ON ANY OTHER PROJECT.

UNLESS THESE DRAWINGS ARE SPECIFICALLY DESIGNATED AS "CONSTRUCTION ISSUE", THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR IMPROVEMENTS DEPICTED HEREIN, CONTRACTORS SHALL NOTIFY THE DESIGN ENGINEER TO OBTAIN CONSTRUCTION DOCUMENTS.

PROJECT

EDGE ON HUDSON

SLEEPY HOLLOW, WESTCHESTER COUNTY, NY

SHEET TITLE

GROUNDWATER MONITORING WELL LOCATIONS

PROJECT NO.:	05302.0002	DRAWN BY:	SL/PD
SCALE:	80	CHECKED BY:	JB
DATE:	01/03/2020	SHEET 1 OF 1	
SHEET NO.	FIG-06		

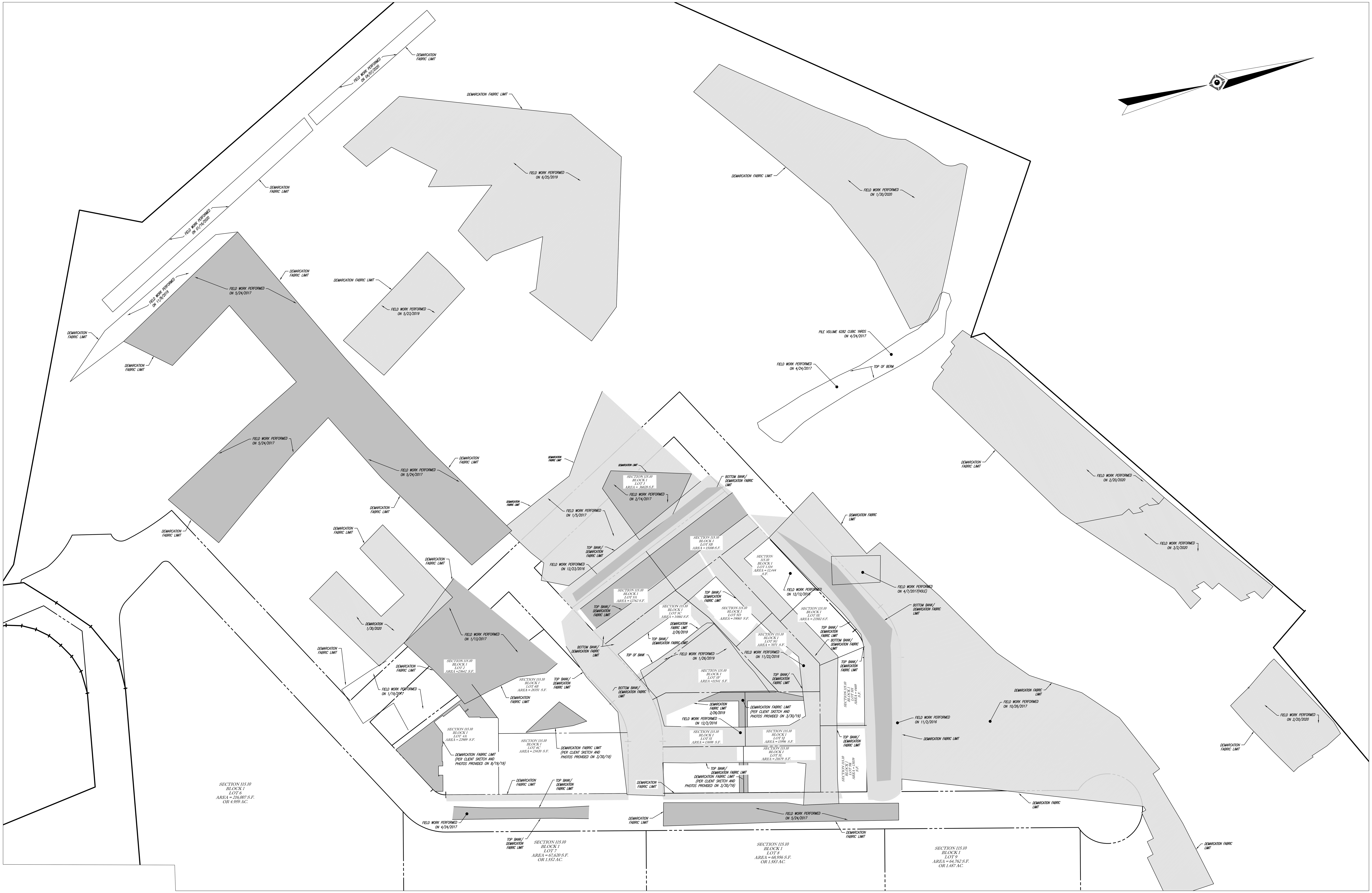
LEGEND

- NEW PROPOSED WELL IN SAME LOCATION
- RELOCATED WELL

SOURCE NOTES

1. BASE MAP PROVIDED BY DIVNEY, TUNG, SCHWALBE DRAWING NO. BD-1.0, TITLED "PHASE 3 AND 4 BASIS OF DESIGN", DATED 10/31/2019.
2. MONITORING WELL LOCATIONS PROVIDED BY ARCADIS DRAWING TITLED "GROUNDWATER MONITORING WELL NETWORK".

GRAPHIC SCALE
80 0 40 80 160
(IN FEET)
1 inch = 80 ft.



FIELD DATE	DEMARCATION SKETCH	UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
-		

DEMARCATION SKETCH

EDGE ON HUDSON

WEST & SOUTH PARCELS OF BEEKMAN AVENUE,
VILLAGE OF SLEEPY HOLLOW, TOWN OF MT. PLEASANT
WESTCHESTER COUNTY, STATE OF NEW YORK

FIELD DATE: -
FIELD BOOK NO.: -
FIELD BOOK PG.: -
FIELD CREW: K.O./R.W.
DRAWN: T.J.M. A.L.D.

CONTROL POINT
ASSOCIATES, INC. PC.
30 INDEPENDENCE BOULEVARD, SUITE 100
WARREN, NJ 07059
908.668.0099 - 908.668.9595 FAX
WWW.CPASURVEY.COM

CHALFONT, PA 215.712.9800
MT. LAUREL, NJ 609.857.2099
MANHATTAN, NY 646.780.0411
LONG ISLAND, NY 631.580.2645
SOUTHBOROUGH, MA 508.948.3000
BOSTON, MA 800.668.1819
ALBANY, NY 518.217.510

REVIEWED:	APPROVED:	DATE	SCALE	FILE NO.	DWG. NO.
G.P.	J.D.S.	04-08-2020	1"=30'	01-140120	1 OF 1

JAMES D. SENS DATE
NEW YORK PROFESSIONAL LAND SURVEYOR #050846-1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau C
625 Broadway, 11th Floor, Albany, NY 12233-7014
P: (518) 402-9662 | F: (518) 402-9679
www.dec.ny.gov

July 27, 2015

Lighthouse Landing Venture, LLC
Bruce Cook
2392 Morse Avenue
Irvine, CA 92614

Re: Site Management (SM) Periodic Review Report (PRR) Response Letter
Former General Motors North Tarrytown West Parcel, Sleepy Hollow
Westchester County, Site No.: C360070

Dear Mr. Cook:

The New York State Department of Environmental Conservation (Department) has reviewed your Periodic Review Report (PRR) and IC/EC Certification for the following period: March 28, 2014 to May 15, 2015.

The Department hereby accepts the PRR and associated Certification. Due to the upcoming redevelopment at the site the frequency of Periodic Review for this site has temporarily been pushed out for five years, your next PRR is due in May 2020. You will receive a reminder letter and updated certification form prior to the due date.

If you have any questions, or need additional forms, please contact me at (518) 402-9662 or e-mail: jamie.verrigni@dec.ny.gov.

Sincerely,

Jamie Verrigni, P.E.
Project Manager
Remedial Bureau C
Division of Environmental Remediation

ec: Jamie Verrigni
Amen Omorogbe
Maureen Schuck – NYSDOH
Bruce Cook – Lighthouse Landing Venture, LLC – bcook@ArgentManagementLLC.com
Peter Johnson – Argent Management LLC - PJohnson@argentmanagementllc.com
Hal Newell – PS&S - hnewell@psands.com

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

4/10/2020

Bruce Cook
Lighthouse Landing Venture, LLC
2392 Morse Avenue
Irvine, CA 92614

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Former General Motors North Tarrytown West Parcel
Site No.: C360070
Site Address: 199 Beekman Ave
Sleepy Hollow, NY 10591

Dear Bruce Cook:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **June 14, 2020**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Qualified Environmental Professional (QEP). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

https://www.dec.ny.gov/chemical/62440.html

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

https://fts.dec.state.ny.us/fts/

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact John Spellman, the Project Manager, at 518-402-9686 or john.spellman@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation
Division of Environmental Remediation, BURC
625 Broadway
Albany, NY 12233-7014

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

Lighthouse Landing GP Investors LLC
Lighthouse Landing Communities LLC
SHC Land Company LLC
LLV Properties LLC
HHM Properties LLC
LL Parcel A, LLC
LL Parcel B, LLC
LL Parcel C, LLC
LL Parcel E, LLC
LL Parcel F, LLC
LL Parcel G, LLC
LL Parcel H, LLC
LL Parcel I, LLC
LL Parcel K, LLC
LL Parcel L, LLC
LL Parcel M, LLC
LL Parcel R, LLC
Stephan Z. Elieff
Jonathan D. Stein
General motors llc

ec: w/ enclosures
John Spellman, Project Manager

Amen M. Omorogbe, Section Chief
Dan Bendell, Hazardous Waste Remediation Supervisor, Region 3

Arcadis U.S. Inc. - Raymond Kapp - raymond.kapp@arcadis-us.com
PS&S Engineering, Inc. - L. Miguel Salinas - lsalinas@psands.com

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7)**:**

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C360070**

Site Name Former General Motors North Tarrytown West Parcel

Site Address: 199 Beekman Ave Zip Code: 10591
City/Town: Sleepy Hollow
County: Westchester
Site Acreage: 66.672

Reporting Period: May 15, 2015 to May 15, 2020

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	X	☐
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	X	☐
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	X	☐

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	X

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☐	X

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C360070 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
115.10-1-1	Lighthouse Landing Venture, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

- Final cover system over entire site.
- Groundwater use prohibited.
- Use must be maintained as restricted residential, commercial, or industrial.
- Compliance with a site management plan
- Monitoring of groundwater and soil vapor including a provision for implementing actions recommended to address exposures related to soil vapor intrusion.
- Periodic Certification of ICs and ECs.

115.15-1-1	Lighthouse Landing Venture, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

- Final cover system over entire site.
- Groundwater use prohibited.
- Use must be maintained as restricted residential, commercial, or industrial.
- Compliance with a site management plan
- Monitoring of groundwater and soil vapor including a provision for implementing actions recommended to address exposures related to soil vapor intrusion.
- Periodic Certification of ICs and ECs.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
115.10-1-1	Cover System

A demarcation barrier over soil or historic fill material that does not meet 6 NYCRR Part 375 SCOs for unrestricted use, a final barrier cap system, and mitigation measures to address potential intrusion of methane and volatile organic vapors into future overlying buildings.

115.15-1-1	Cover System

Parcel	Engineering Control
A demarcation barrier over soil or historic fill material that does not meet 6 NYCRR Part 375 SCOs for unrestricted use, a final barrier cap system, and mitigation measures to address potential intrusion of methane and volatile organic vapors into future overlying buildings.	

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

5-11-20
Date

IC CERTIFICATIONS
SITE NO. C360070

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 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.

I Nick Pappas at Lighthouse Landing Venture, LLC,
print name print business address

am certifying as Property Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

N Pappas 6-11-20
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 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.

I Janos M. Szeman (print name) at Paulus, Sokolowski and Sartor Engineering, PC, One Larkin Plaza, Second Floor, Yonkers, NY 10701 (print business address),

am certifying as a Qualified Environmental Professional for the Property Owner. (Owner or Remedial Party)

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date
		12 June 2020

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC Review Start Date: April 15, 2016

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 15, 2016

VISUAL ON-SITE INSPECTION

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC Inspection Start Date: April 15, 2016

1. Weather
   Sunny, clear, high 50's (°F), 6mph winds to the southeast

2. List other individuals and their company/agency that were present during the visual on-site inspection.
   Hal Newell – PS&S Engineering

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☑ No
   ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.)

10. Inspection Completed: April 15, 2016

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Review Start Date: April 14, 2017

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 14, 2017

VISUAL ON-SITE INSPECTION

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Inspection Start Date: April 14, 2017

1. Weather
   Sunny, clear, low 50's (°F), 5 mph winds to the south.

2. List other individuals and their company/agency that were present during the visual on-site inspection.
   Laura Grose – PS&S Engineering

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☐ No
   ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.
   Guard shack (only remaining building structure) demolition. Asbestos survey and abatement was complete prior to demolition.
   No utility work or new building construction has occurred.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Regrading of site conditions for future Phase I development area required relocation of existing hirtoric fill on-site to areas beneath the future final cover system. Material disposal off-site included disposal of grossly contaminated soils encountered during historic fill intrusive activities, removal of a former undocumented approximately 6,000 UST, and disposal of miscellaneous steel C&D (e.g., rebar) processed during concrete slab demolition (disposal quantities and associated documentation will be attached within the 2020 PRR).

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Importation of clean fill cover materials ongoing. Soil erosion controls observed in place in accordance with the SWPPP to maintain erosion of disturbed cap areas. Fill materials are being used for site regrading and/or surcharge within the Phase I redevelopment area. Fill materials are also being stockpiled for future use within the Phase III redevelopment area. A sketch of the cover system current conditions (as of April 2017) is attached. Material import manifests will be provided as an attachment within the 2020 PRR.

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - [ ] No
   - [x] Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Existing concrete slab (existing cover system component) demolition, crushing, and stockpiling for future use on-site in accordance with the NYSDEC approved BUD.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - [x] No
   - [ ] Yes – If yes, describe below and show the location(s) of such activity on a plan.

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.) **- A sketch of the cover system current conditions (as of April 2017) is attached. In addition, record of construction drawings detailing final cover system construction conditions will be prepared in 2020 for the 2020 PRR submission.**
10. Inspection Completed: April 14, 2017

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Laura Grose – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Review Start Date: April 13, 2018

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 13, 2018

VISUAL ON-SITE INSPECTION

Conducted By: Laura Grose – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Inspection Start Date: April 13, 2018

1. Weather
   Sunny, clear, low 80's (°F), 7 mph winds to the south.

2. List other individuals and their company/agency that were present during the visual on-site inspection.
   Scott Caporizzo - PS&S Engineering

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☐ No
   ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.
   Utility trenching and infrastructure installation in Phase I redevelopment area ongoing. No new building construction has occurred.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Regrading / utility trenching within Phase I redevelopment area and regrading within the Phase II and Phase III redevelopment area required relocating existing hirtoric fill on-site to areas beneath the future final cover system. Material disposal off-site included disposal of corrugated piping containing asbestos and disposal of miscellaneous steel C&D (e.g., rebar) processed during concrete slab demolition (disposal quantities and associated documentation will be attached within the 2020 PRR).

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - ☑ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Importation of clean fill cover materials ongoing. Soil erosion controls observed in place in accordance with the SWPPP to maintain erosion of disturbed cap areas. Fill materials are being used for site regrading, surcharge, and/or utility trench backfill within the Phase I redevelopment area. Fill materials are also being used for regrading and surcharge in Phase II and Phase III redevelopment area. Materials also stockpiled for future use within the Phase III redevelopment area. A sketch of the cover system current conditions (as of April 2018) is attached. Material import manifests will be provided as an attachment within the 2020 PRR.

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Existing concrete slab (existing cover system component) demolition, crushing, and stockpiling for future use on-site in accordance with the NYSDEC approved BUD. Existing asphalt pavement (existing cover system component) demolition, processing, and reuse in accordance with NYSDEC approved BUD. Asphalt pavement public roadway construction (final cover system component) in Phase I redevelopment area. A sketch of the cover system current conditions (as of April 2018) is attached.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - ☑ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.) **- A sketch of the cover system current conditions (as of April 2018) is attached. In addition, record of construction drawings detailing final cover system construction conditions will be prepared in 2020 for the 2020 PRR submission.**
10. Inspection Completed: April 13, 2018

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Review Start Date: April 11, 2019

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 13, 2019

VISUAL ON-SITE INSPECTION

Conducted By: Scott Caporizzo – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Inspection Start Date: April 11, 2019

1. Weather
   Partly sunny, high 50s (°F), 4 mph winds to the northwest.

2. List other individuals and their company/agency that were present during the visual on-site inspection.
   Laura Grose - PS&S Engineering
   CJ Aprea - PS&S Engineering

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☐ No
   ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.
   Utility trenching and infrastructure installation in Phase I and Phase II redevelopment area ongoing. Building foundation (final cover system component) construction within Phase I redevelopment area began in October 2018 (Toll Brothers). A sketch of the cover system current conditions (as of April 2019) is attached.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Regrading / utility trenching within Phase I and Phase II redevelopment area and regrading within Phase III and Phase IV redevelopment area required relocating existing historic fill on-site to areas beneath the future final cover system. Material disposal off-site included disposal of grossly contaminated soils encountered during historic fill intrusive activities and disposal of miscellaneous steel C&D (e.g., rebar) processed during concrete slab demolition (disposal quantities and associated documentation will be attached within the 2020 PRR).

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - ☑ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Importation of clean fill cover materials ongoing. Soil erosion controls observed in place in accordance with the SWPPP to maintain erosion of disturbed cap areas. Fill materials are being used for site regrading, surcharge, and/or utility trench backfill within the Phase I redevelopment area. Fill materials are also being used for regrading and surcharge in Phase II and Phase III redevelopment area. Materials also stockpiled for future use within the Phase III redevelopment area. A sketch of the cover system current conditions (as of April 2019) is attached. Material import manifests will be provided as an attachment within the 2020 PRR.

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Existing concrete slab (existing cover system component) demolition, crushing, and stockpiling for future use on-site in accordance with the NYSDEC approved BUD. Existing asphalt pavement (existing cover system component) demolition, processing, and reuse in accordance with NYSDEC approved BUD. Asphalt pavement private driveway and public roadway construction (final cover system component) in Phase I redevelopment area. A sketch of the cover system current conditions (as of April 2019) is attached.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Hudson River storm sewer outfall construction in accordance with NYSDEC Excavation & Fill in Navigable Waters Permit and Water Quality Certification Permit (documentation attached).

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.) **- A sketch of the cover system current conditions (as of April 2019) is attached. In addition, record of construction drawings detailing final cover system construction conditions will be prepared in 2020 for the 2020 PRR submission.**
10. Inspection Completed: April 11, 2019

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

DOCUMENT REVIEW

Conducted By: Ciro Aprea – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC. Review Start Date: April 17, 2020

1. ☑ Check here to confirm that the Environmental Easement (EE) has been reviewed.

2. ☑ Check here to confirm that the Plan of Restricted Area (as revised if appropriate) has been reviewed.

3. ☑ Check here to confirm that the description of this property in the Final Engineering Report and the as-built survey drawings covering this property included in the Final Engineering Report (and any alternative plan proposed for the comparison described in Item 8 on next page) have been reviewed.

4. Are there any recorded amendments to or releases from the EE, and/or any known conditional exceptions under the EE and of which the reviewing party has a copy, and/or any other documents in the Owner's possession relevant to the EE or the use of the property?
   ☑ No
   ☐ Yes – If yes, review those items for background information purposes and list them below (along with the book and page reference in the Registry of Deeds where applicable). (Note that the document reviewer has no obligation to verify the accuracy or completeness of any of these documents, either as of the time they were prepared or as compared to the current conditions.)

5. Review Completed Date: April 17, 2020

VISUAL ON-SITE INSPECTION

Conducted By: Ciro Aprea – PS&S Engineering
Representing: Lighthouse Landing Communities, LLC Inspection Start Date: April 17, 2020

1. Weather
   Mostly cloudy, 50°F

2. List other individuals and their company/agency that were present during the visual on-site inspection.

3. Is there any visual evidence of activities and uses of the property since the last inspection that are potentially contrary to the restrictions of the EE?
   ☑ No
   ☐ Yes – If yes, describe below.

4. Is there any visual evidence of utility work or building construction, modification, addition, or demolition at the property since the last inspection?
   ☐ No
   ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.
   Utility trenching and infrastructure installation in Phase I and Phase II redevelopment areas are ongoing. Building foundation (final cover system component) construction within Phase I redevelopment area has several units completed and moved into (Toll Brothers). A sketch of the cover system current conditions, as of April 2020, is attached.

ANNUAL SITE-WIDE INSPECTION CHECKLIST
FORMER GENERAL MOTORS ASSEMBLY PLANT WEST PARCEL SITE

5. Is there any visual evidence of soil excavation at the property that generated more than 10 cubic yards of soil since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Regrading / utility trenching within Phase I and Phase II redevelopment areas and regrading within Phase III, IV, and V redevelopment areas required relocating existing historic fill on-site to areas beneath the future final cover system. Material disposal off-site included disposal of grossly contaminated soils encountered during historic fill intrusive activities and disposal of miscellaneous steel C&D (e.g., rebar) processed during concrete slab demolition (disposal quantities and associated documentation is provided within the 2020 PRR). Approximately 11,000 cubic yards of NYSDEC-approved historic material excavated for a flood channel within Phase III redevelopment area. Material was approved for reuse within final cover system.

6. Is there any visual evidence of significant soil erosion at the property since the last inspection, specifically in the soil cover or clean fill areas and/or the riverbank area?
   - ☑ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Import of clean fill cover materials ongoing. Soil erosion control measures observed in place in accordance with the SWPPP to maintain erosion of disturbed cap areas (SWPPP Inspection Reports from 2016 to 2020 are provided within the 2020 PRR).

7. Is there any visual evidence of significant pavement construction, disturbance, or excavations at the property since the last inspection?
   - ☐ No
   - ☑ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Existing concrete slab (existing cover system component) demolition, crushing, and stockpiling for future reuse on-site in accordance with the NYSDEC approved BUD #C360070-1. Existing asphalt pavement (existing cover system component), demolition, processing, and reuse in accordance with NYSDEC approved BUD #C360070. Asphalt pavement private driveway and public roadway construction (final cover system component) in Phase I and II redevelopment areas. A sketch of the cover system current conditions (as of April 2020) is attached.

8. Is there any visual evidence of significant disturbance to or movement of the riprap installed in the Riverbank Area?
   - ☐ No
   - ☐ Yes – If yes, describe below and show the location(s) of such activity on a plan.

   Hudson River storm sewer outfall construction in accordance with NYSDEC Excavation & Fill in Navigable Waters Permit and Water Quality Certification Permit (documentation attached for).

9. If any of the conditions listed in the response to Questions 4 through 9 appears likely to have significantly altered the surface grade of the property compared to the surface grade shown on the as-built drawings included in the Final Engineering Report (or an alternative, more recent plan proposed by the Owner), identify the approximate area/location(s) of such grade change on a plan and compare the new surface grade in such area(s) to the surface grade shown on the above listed drawing and/or plan. (If the Owner proposed use of an alternative plan for this comparison, include a copy of that plan and describe the rationale for its proposed use.)

10. Inspection Completed: April 17, 2020

**If necessary, attach additional pages for descriptions of any items observed related to the above questions.