

From: Wendy Shen <wshen@rouxinc.com>
Sent: Friday, May 22, 2020 5:50 PM
To: Spellman, John (DEC)
Cc: David Schroedel; davidbsmith1992@gmail.com; cwerle@rouxinc.com; agiaccio@villageofsleepyhollow.org
Subject: Sleepy Hollow East Parcel 2019-2020 Periodic Review Report
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John, see attached PRR for the East Parcel Site. Please let me know if you have any comments. Have a good weekend.

Regards,

Wendy Shen | Senior Engineer

209 Shafter Street, Islandia, New York 11749

Main: 631.232.2600 | Direct: 631.630.2331

Email: wshen@rouxinc.com | Website: www.rouxinc.com



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Periodic Review Report

Former General Motors Tarrytown
Assembly Plant- East Parcel
Sleepy Hollow, New York

May 22, 2020

Prepared for:

Village of Sleepy Hollow
28 Beekman Avenue
Sleepy Hollow, New York

Prepared by:

**Roux Environmental Engineering
and Geology, D.P.C.**
209 Shafter Street
Islandia, New York 11749

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Figure

1. Site Map

Appendix

- A. Change of Use Form
- B. Site Inspection Form

Executive Summary

The East Parcel of the Former General Motors Assembly Plant has been remediated as part of the compliance with the NYSDEC Brownfield Cleanup Program (BCP). The Village of Sleepy Hollow Local Development Corporation (VSH LDC) took title to the East Parcel on December 22, 2014.

This 28.29-acre Site was previously used for municipal refuse disposal in the 1920s. In 1960, it was acquired by General Motors and paved for use as a vehicle storage lot. Sampling during the Remedial Investigation documented soils that exceed the NYS Part 375 Restricted Residential Soil Cleanup Objectives (SCOs). Additionally, domestic refuse and organic debris from the Village landfill were identified. The only impacts detected in the groundwater were low level concentrations of several metals. No priority pollutant organic constituents were detected above groundwater quality standards. Soil vapor monitoring detected combustible levels of methane under a significant portion of the paved surface of the East Parcel. Chlorinated volatile organic compounds were also found widely across the Site.

The remedy that was selected for implementation at the Site includes maintenance of the existing cover system; execution of an Environmental Easement that restricts future land use and prevents exposure to remaining contamination, and development and implementation of a Site Management Plan (SMP) that includes plans for engineering controls (ECs), institutional controls (ICs), a monitoring plan and an operation and maintenance (O&M) Plan for use with soil vapor mitigations systems when the Site is developed and municipal building(s) are constructed.

On December 28, 2016, a narrow 1.354-acre parcel containing several railroad sidings on the extreme western edge of the East Parcel was sold to the Metro North Commuter Rail Road Corp. (Metro North). A Change of Use form (attached as Appendix A) was submitted to NYSDEC on March 1, 2017. A figure included in the Change of Use form shows the location of the transferred sidings. In a February 22, 2017 letter, NYSDEC confirmed that Metro North cannot be excluded from the East Parcel Site Management Plan; however, the Village of Sleepy Hollow is still responsible for certifying the cover over the entire Site including the sidings.

The planned redevelopment of the Site began in 2017; this included the implementation of a geotechnical boring program to collect the information needed to complete the design and the importation of fill material to raise the Site grade. To date, soil was imported from two sources (Durante Bros Construction Corp. and Maspeth Recycling, both from Queens, NY) from July 27, 2017 to November 9, 2017 and from November 2019 to March 2020. Soil importation is expected to resume in May 2020. To date, a total of 79,668 cubic yards (CY) of material meeting the 6 NYCRR Part 375-6.7(d) for Restricted Residential use (i.e., the lower of Restricted Residential SCOs or Protection of Groundwater Soil Cleanup Objectives (SCOs) was imported to the Site. All imported soil was sampled at a rate of approximately one (five-point) composite and one grab sample per 5,000 CY and submittal packages, detailing the sampling procedures, analytical results, and photo documentation, was sent to NYSDEC for approval prior to bringing the material on-Site.

In February 2018, the LDC received Site Plan approval for the next phase of Site redevelopment. This included the relocation of existing utility lines and the ground improvement program to allow development of the new DPW facility. A Notification Letter was submitted to NYSDEC on July 20, 2018. The scope of work will include the installation of wick drains and additional soil importation for wick drainage material and general increase in grade. Ground intrusive operations began on November 1, 2018 and included:

- Relocation of stockpiled soils from one grid to another to clear away the area from the proposed sanitary sewer line alignment.
- Removal and stockpile of asphalt pavement;
- Drilling and installation of 18-inch diameter steel piles to a depth of approximately 77 feet below grade occurred between February and March 2019. A total of 140 piles have been installed.
- Utility relocation of the existing sewer and water lines occurred between November 2018 and September 2019. This included abandonment in place of existing and installation of new sanitary sewers and associated manholes;
- Water main replacement on the west side of the East Parcel began in March 2020 and will continue through May 2020. This includes the installation of a new 18-inch diameter water main as described in the email to NYSDEC on March 12, 2020.
- Community Air Monitoring was performed throughout all ground intrusive activities. Weekly reports were submitted to NYSDEC; and
- Soil importation for the purpose of grade increase resumed in November 2019 and continue through March 2020. It is expected to resume again in May 2020.

The ECs include the maintenance of the existing cover system, which is intact and functioning as required. Soil vapor intrusion mitigation (vapor barriers and installation of a sub-slab depressurization system (SSDS)) will not be required until the Site building development of the Site. ICs include land use and groundwater use restrictions and an Excavation Work Plan (EWP). All Site restrictions have been enforced and complied with during the reporting period.

The Monitoring Plan includes annual inspection and certification by a Qualified Environmental Professional of the cover system and the Site as a whole. The inspection of the cover system and the Site was conducted on May 18, 2020, and all aspects of the ECs and ICs were found to be active and in practice. A Site Inspection Form is included as Appendix B. Soil vapor monitoring will be required following site development.

The O&M Plan will become operational following construction of municipal buildings. Currently, the O&M Plan is inactive.

Annual submittal of PRRs is recommended for the foreseeable future while the East Parcel is being incorporated into the infrastructure of the VSH and development plans are being actively worked on.

1. Introduction

This Periodic Review Report (PRR) has been prepared, as required, as an element of the remedial program at the Former General Motors Assembly Plant, East Parcel Site (hereinafter referred to as the "Site") under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index #C360070-12-10, which was executed on December 31, 2010 and amended August 20, 2013. The Site was formally transferred from General Motors to the Village of Sleepy Hollow Local Development Corporation (VSH LDC) on December 22, 2014.

1.1 Site Background

The Site is located in the Village of Sleepy Hollow, County of Westchester, New York, and is identified in the BCA, Amendment 1 as Tax Section 115.11, Block 1, Lot 2 and Section 115.11, Block 1, Lot 85 on the Town of Mt. Pleasant Tax Map. The East Parcel Site (Site No. C360070B) contains approximately 28.29 acres of land, generally bounded by Sleepy Hollow's DeVries Park to the north; Philipsburg Manor, a restored early 18th century farm with public access, to the northeast; Continental Street gate to the east; residential properties, Sleepy Hollow's Senior Center and Barnhart Park to the east-southeast; Beekman Avenue to the south; and an active Metro-North rail corridor to the West (Figure 1).

1.2 Site History and Current Conditions

Most of the East Parcel Site was formerly an embayment of the Hudson River, at the former mouth of the Pocantico River. Historical fill material was initially placed in a north-south strip across the embayment during the 1840s to support the construction of a railway between New York City and Albany. By the early 1920s, local government had acquired the Site. The Village (formerly the Village of North Tarrytown) filled a portion of the East Parcel with municipal refuse during the 1920s. The Village continued to add soil fill on top of the municipal refuse and throughout the rest of the low-lying area of the parcel during subsequent decades to reclaim this area for use as school athletic fields.

General Motors Corporation (GMC) acquired the East Parcel from the Village in 1960 and added additional fill, consisting of dredged sands from the Hudson River, and finished the filled area with asphalt or concrete surfaces to reach the current grade throughout most of the parcel. GMC used the East Parcel for employee parking and temporary storage of newly assembled automobiles. The asphalt and concrete surfaces, as well as the vegetated soil and drainage ditches along the perimeter areas, are part of the existing cover system. Portions of the asphalt and concrete surfaces have been penetrated by vegetation.

The Site is currently maintained in a restricted, limited-use condition with controlled access. The rail sidings, located along the west side of the Site, are active for occasional temporary storage of rail cars and general access to the tracks by Metro-North. On December 28, 2016, a narrow 1.354-acre parcel containing several railroad sidings on the extreme western edge of the East Parcel was sold to the Metro North Commuter Rail Road Corp. (Metro North). A Change of Use form (attached as Appendix A) was submitted to NYSDEC on March 1, 2017. A figure included in the Change of Use form shows the location of the transferred sidings. In a February 22, 2017 letter, NYSDEC confirmed that Metro North cannot be excluded from the East Parcel Site Management Plan; however, the Village of Sleepy Hollow is still responsible for certifying the cover over the entire Site, including the sidings.

The Village Department of Public Works (DPW) processes construction soil and yard wastes (leaves, grass and tree cuttings) for recycling on the paved area south of the Continental Street entrance under a license agreement with VSH LDC. These current uses are supported by an existing cover system, Site access controls consisting of fences and lockable gates, and terms of the Village's license agreement with VSH LDC. Other short-term license agreements are executed each year for event parking on the East Parcel under Village supervision.

The anticipated future uses of the Site are for a new municipal public works compound and recreational uses including sports fields and an outdoor amphitheater.

1.3 Nature and Extent of Contamination Soil

The historic fill on the East Parcel is comprised of municipal refuse on the east end, imported soil fill throughout the former Pocantico River bed and marsh prior to GMC ownership (pre-1960), and sediment dredged from the Hudson River to grade the area for parking lot construction by GMC in 1960. Domestic refuse, typically consisting of glass, coal ash, shells, ceramic material, metal debris, and decomposed organic material was found in subsurface samples from the former Village landfill area within the East Parcel.

Based on the data presented in the RI and supplemental soil investigation reports, metals found in the East Parcel Site fill at levels above Restricted Residential Soil Cleanup Objectives (SCOs) were arsenic, barium chromium, copper, lead manganese, and mercury. Fill materials containing lead and polycyclic aromatic hydrocarbons (PAHs) at levels above Restricted Residential SCOs are generally associated with the refuse layer in the former Village landfill area.

Groundwater

Groundwater samples collected from monitoring wells (observation wells) during the Site investigations on the East Parcel contained detectable concentrations of one or more Target Analyte List (TAL) metals, but no evidence of organic Target Compound List (TCL) or Priority Pollutant organic constituents in groundwater above NYS Class GA standards specified in 6NYCRR Part 703. Unfiltered groundwater samples contained low levels of arsenic, cadmium, chromium, and lead above the standards, whereas only dissolved arsenic was detected above the standards in filtered samples.

Soil Vapor

A soil gas survey performed at the East Parcel indicated high levels of methane (70% to 100% combustible gas) under the asphalt covering over and adjacent to the former Village landfill. Levels less than 1% to 70% were also prevalent under a significant portion of the paved area. Methane is primarily attributed to decomposition of historic municipal waste, with a possible contribution from decomposition of natural organic matter underlying the historic fill material. No combustible gas was detected in unpaved areas around the perimeter of the asphalt, with the exception of a small area near the junction of the Village and County sanitary sewers in the southwest corner of the low-lying area.

Volatile organic compounds (VOCs) were detected in soil vapor samples throughout the paved areas on the East Parcel. Trace levels of chlorinated VOCs and petroleum-derived VOCs in vapor were detected within the refuse area and beyond the refuse area, consistent with the extent of methane.

1.4 Summary of Remedial Actions

No actions to remove grossly contaminated soil were required for the East Parcel Site. A summary of the Remedial Actions performed at the Site is as follows:

- Maintenance of the existing cover system consisting of asphalt, concrete slabs, railroad sidings, and vegetated soil with limited controlled access to minimize human exposure to remaining contaminated soil/fill remaining at the Site.
- After redevelopment, the cover system will consist of:
 - a demarcation barrier over soil or historic fill material that does not meet 6 NYCRR Part 375 SCO's for Unrestricted Use.
 - a barrier cap system throughout the entire Site consisting of either/or a combination of surface soil cover for landscaped/naturally vegetated areas, pavement over non-vegetated areas, or permanent buildings.
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site.
- Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) IC/ECs, (2) monitoring, (3) provisions for implementing actions recommended to address potential exposures related to soil vapor intrusion, and reporting.

The remedial activities required prior to redevelopment were completed at the Site in 2013, with the recording of the Environmental Easement and completion of the SMP.

2. Evaluation of Remedy Performance, Effectiveness, and Protectiveness

The East Parcel remedy included maintenance of the existing cover system, execution of an Environmental Easement restricting future land use, and development of a SMP. All components of the remedy have been implemented. Additional remedial components will become active (development of a final cover system, soil vapor monitoring beneath buildings, and SSDS O&M) when the Site is developed by VSH LDC. The remedy has been entirely effective in preventing contact with impacted soils beneath the cap and the easement has made inappropriate use of the Site impossible and has ensured future development will be protective of human health and the environment.

3. IC/EC Plan Compliance

Since remaining contaminated soil and groundwater and soil vapor exist beneath the Site, IC/ECs are required to protect human health and the environment. The ECs and ICs for the Site are listed below.

3.1 Engineering Controls

The following section describes the ECs implemented at the Site.

3.1.1 Cover System

Existing Cover System

Exposure to remaining contamination in soil/fill at the Site is prevented by an existing pre-development cover system over the Site. This cover system consists of the following:

- Bituminous pavement and concrete parking surfaces;
- Vegetated strips and hillsides between pavement and the property lines;
- Closed bituminous ramp and viaduct bridge;
- Vegetated open and closed drainage ditch system; and
- Rail sidings within gravel bedding with bituminous and concrete access strips.

The existing cover system will be maintained by the VSH LDC until the Site undergoes final redevelopment.

Final Cover System

A final cover system will be installed following development of the Site. The components of the final system include:

- A demarcation barrier consisting of a geotextile fabric or a structural surface (e.g., concrete or asphalt) over soil or historic fill material that does not meet 6 NYCRR Part 375 SCOs for Unrestricted Use (see Appendix E for SCOs); and
- A final barrier cap system throughout the entire Site consisting of either/or a combination of:
 - A 2-foot-thick soil cover for landscaped or naturally vegetated areas;
 - Pavement (or similar hard surfaces) over non-vegetated areas;
 - Permanent buildings or similar structures; and
 - Soils imported to the Site, which is on-going, will meet 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."

3.1.2 Mitigation of Soil Vapor Intrusion

To address soil vapor intrusion (SVI), the final Decision Document (NYSDEC 2012), specifies the ECs outlined in the IRM Decision Document (NYSDEC 2007). Collectively, the SVI remedy includes:

- Mitigation measures, as necessary, to address potential intrusion of volatile organic vapors and methane into future indoor air space.

- A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the Site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

Based on the planned development of a slab-on-grade foundation design, the mitigation system will include a vapor barrier and passive sub-slab depressurization system (SSDS) capable of being converted to an active system based on sampling (see Section 2.3.2 for design and approval requirements for SVI mitigation systems).

3.1.3 Status and Effectiveness of ECs

Cover System Status and Effectiveness

The existing cover system is intact and functioning as required. In late April/early May 2017 a geotechnical soil boring program was conducted. In addition, soil importation occurred from July 27, 2017 to November 9, 2017 and from November 2019 to March 2020. Soil importation is expected to resume again in May 2020. To date, a total of 79,668 cubic of soil has been brought to the Site.

In February 2018, the LDC received Site Plan approval for the next phase of Site redevelopment. This included the relocation of existing utility lines and the ground improvement program to allow development of the new DPW facility. A Notification Letter was submitted to NYSDEC on July 20, 2018. The scope of work will include the installation of wick drains and additional soil importation for wick drainage material and general increase in grade. Ground intrusive operations began on November 1, 2018 and included:

- Relocation of stockpiled soils from one grid to another to clear away the area from the proposed sanitary sewer line alignment.
- Removal and stockpile of asphalt pavement;
- Drilling and installation of 18-inch diameter steel piles to a depth of approximately 77 feet below grade occurred between February and March 2019. A total of 140 piles have been installed.
- Utility relocation of the existing sewer and water lines occurred between November 2018 and September 2019. This included abandonment in place of existing and installation of new sanitary sewers and associated manholes;
- Water main replacement on the west side of the East Parcel began in March 2020 and will continue through May 2020. This includes the installation of a new 18-inch diameter water main as described in the email to NYSDEC on March 12, 2020.
- Community Air Monitoring was performed throughout all ground intrusive activities. Weekly reports were submitted to NYSDEC; and
- Soil importation for the purpose of grade increase resumed in November 2019 and continue through March 2020. It is expected to resume again in May 2020.

SVI Status and Effectiveness

This remedy cannot be implemented until VSH LDC moves ahead with the design and construction of a municipal public works building. To date, therefore, this EC has not been implemented and its effectiveness cannot be evaluated.

3.2 Institutional Controls

A series of Institutional Controls is required by the Remedial Work Plan (RWP) and Decision Document to: (1) implement, maintain, and monitor EC 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 (including public works) and recreational uses. Adherence to these Institutional Controls on the Site is required by the Environmental Easement and will be implemented under the SMP. These Institutional Controls, as listed in the Environmental Easement, are as follows.

- The Controlled Property may be used for: Restricted Residential, as described in 6 NYCRR Part 375-1.8 (g) (2) (ii); Commercial, as described in 6 NYCRR 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].
- All Engineering Controls must be operated and maintained as specified in this SMP.
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- The use of groundwater underlying the property is prohibited without the necessary water quality treatment, as determined by the NYSDOH or the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from NYSDEC.
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP [there is no requirement for groundwater monitoring at this Site].
- Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in this SMP.
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP.
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.
- Access to the Site must be provided 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 Environmental Easement.

The Environmental Easement specifies that the Controlled Property shall 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 Environmental Easement.

The Site has a series of Institutional Controls in the form of Site restrictions. Site restrictions that apply to the Controlled Property are:

- The property may only be used for restricted residential, commercial, and industrial uses (subject to local zoning laws) provided the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC.
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP, as stated in the Environmental Easement.
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use, as stated in the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed on the Site, and any potential impacts that are identified must be monitored or mitigated (see Section 2.3.2).

- Vegetable gardens and farming on the property are prohibited.
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property 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 such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert the NYSDEC finds acceptable.

3.2.1 Excavation Work Plan

The Site has been remediated for restricted residential use. Any future intrusive work that will penetrate the soil cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the cover system will be performed in compliance with the EWP that is included in the SMP as Appendix A. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site.

VHS LDC and all parties performing subsurface work at the Site are responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, 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). VHS LDC is responsible for conducting Site development activities in a manner that will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

3.2.2 Status and Effectiveness of ICs

The Environmental Easement has been executed and recorded. The only Site activities since transfer of the property to VHS LDC has been: (1) the installation of four light poles, (2) the implementation of a geotechnical soil boring program, (3) the importation of fill, (4) the relocation of existing utility lines, (5) the replacement of a water main and (6) the installation of wick drains. These activities were planned in full compliance with the EWP. The required EWP notification submission was reviewed and approved by NYSDEC. All other provisions of the ICs including Site restrictions have been implemented and adhered to by VHS LDC.

4. Site Monitoring Plan Compliance Report

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 all affected Site media identified below. The Site Monitoring Plan includes the following components:

4.1 Cover System Monitoring

The cover system will be inspected, maintained, and repaired as necessary to prevent public contact with historical fill or other soils that do not meet the SCOs required for the soil cover system. The cover system will be inspected annually. In accordance with DER-10, certification that a soil cover or site cap remains effective by inspection can be provided by a qualified environmental professional, while an engineering evaluation of settlement measurements for a composite cap (e.g., soil with synthetic liner) to determine whether a liner may be breached would require a professional engineer's certification.

The inspection of the surface cover system will typically include inspection of the following:

- Hard surface cover for evidence of deep cracks, potholes, cuts, depressions and/or rutting exposing demarcation barriers and historic fill.
- 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); and
 - Animal burrows or invasive deep-rooted vegetation that could compromise the integrity of the cover system.
- Modifications to the surface cover system with respect to repairs or changes in cover system construction.

The cover system inspection will be made part of the Site-wide Inspection described in Section 5.3.

4.2 Soil Vapor Intrusion Monitoring

There are no requirements for SVI monitoring prior to re-development. However, NYSDEC or NYSDOH will determine the need for an SVI monitoring plan following review of the SVI evaluations described in Section 2.3.2, as well as any SVI mitigation plans prepared by the Owner or Remedial party. If a monitoring plan is required, it will be incorporated into the SMP by the Owner and/or Remedial Party.

Any required SVI monitoring will be performed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York."

4.3 Site-Wide Inspections

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;

- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted include, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the SMP; and
- Confirm that Site records are up to date.

4.4 Summary of Monitoring Completed During the Reporting Period

The cover system and Site-wide monitoring was conducted as required on May 18, 2020. No soil vapor monitoring was required during the reporting period.

4.5 Monitoring Deficiencies

There were no monitoring deficiencies during the monitoring period.

4.6 Conclusion and Recommendations

The cover system has been properly maintained during the reporting period and an annual cover and Site-wide inspection was conducted on May 18, 2020. No soil vapor monitoring was required because the planned Site building development of the Site has not taken place.

The primary recommendation is to continue required monitoring and inspection in compliance with the SMP. Site redevelopment is anticipated to continue during the coming year consistent with the Site plan approval received by the LDC in February 2018. This will include the following activities:

- Importation of wick drain drainage material;
- Installation of wick drains; and
- Importation of fill for increase in grade elevation.

Soil vapor monitoring will not be needed during the upcoming monitoring period.

5. Operation and Maintenance Plan Compliance Report

NYSDEC and NYSDOH may require an active SSDS in Site buildings designed for occasional or continuous occupancy. If such systems are to be operated, an operations and maintenance plan (O&M Plan) will be required. If no buildings rely on an active SSDS, or any other mechanical system to protect human health or the environment, an O&M plan will not be included in this SMP.

An O&M Plan is not required at this time because the Site's buildings have not been redeveloped and therefore no buildings currently exist.

6. PRR Conclusions and Recommendations

6.1 Compliance with the SMP

During the reporting period, there has been full compliance with all components of the SMP. This includes the EC/IC Plan, the main provisions of which include maintenance of the cover system (EC) and execution and recording of the Environmental Easement and adherence with the Site restrictions (IC). Compliance with the Monitoring Plan required annual inspection with cover system and the Site in general. These inspections were conducted on May 18, 2020. Vapor intrusion monitoring will be required once the Site is developed and a municipal storage building is constructed. The O&M Plan is currently inactive but will become operational when a sub-slab depressurization system (SSDS) is installed beneath any building constructed on Site.

6.2 Performance and Effectiveness with the Remedy

The East Parcel remedy included maintenance of the existing cover system, execution of an Environmental Easement restricting future land use, and development of a SMP. All components of the remedy have been implemented. Soil importation as part of the final cover system occurred between July and November 2017, November 2019 and March 2020 and will resume in May 2020. Additional remedial components will become active (soil vapor monitoring beneath buildings, and SSDS O&M) when the Site is developed by VSH LDC. The remedy has been entirely effective in preventing contact with impacted soils beneath the cap and the easement has made inappropriate use of the Site impossible and has ensured future development will be protective of human health and the environment.

6.3 Future PRR Submittals

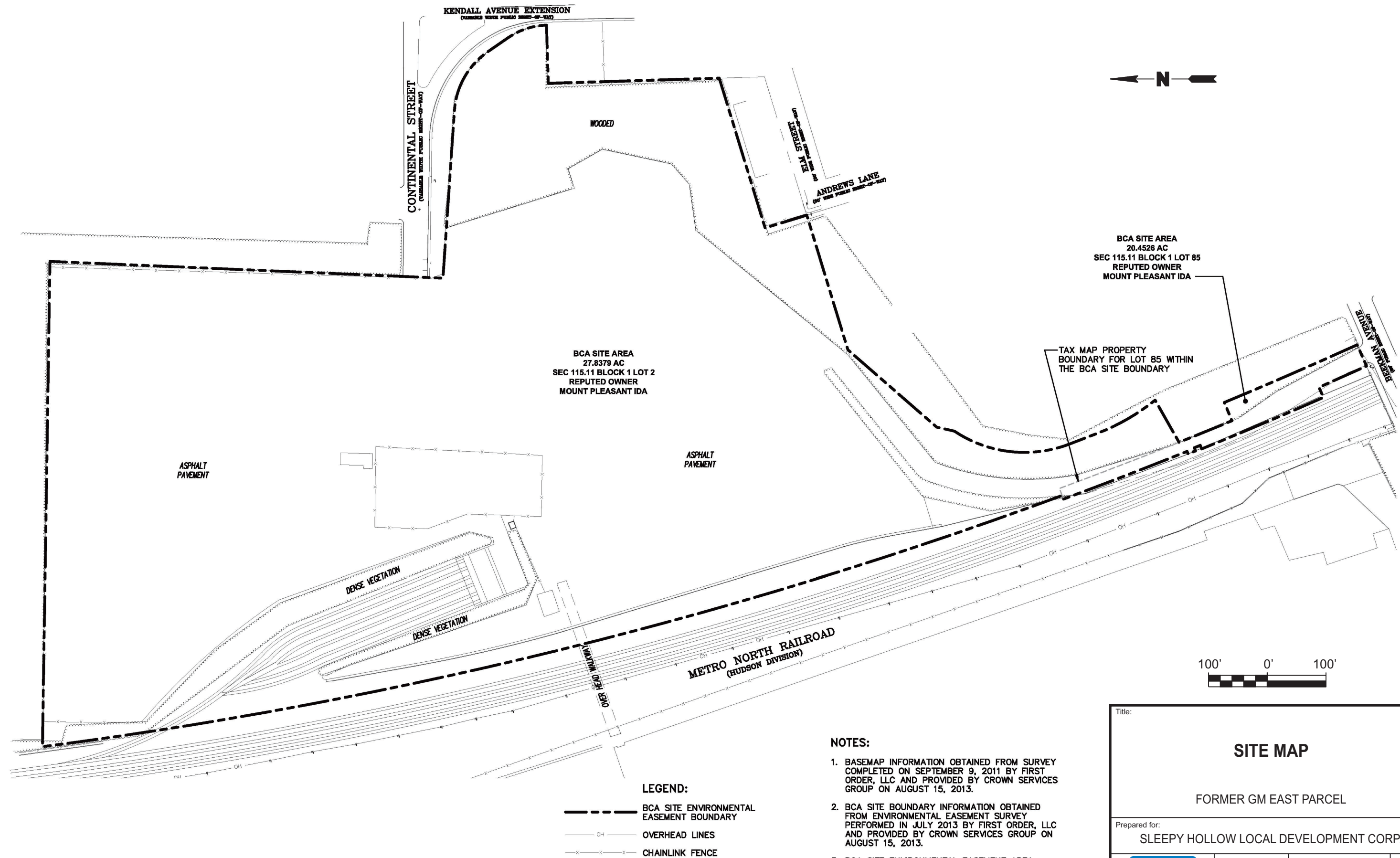
PRR submittals are currently scheduled for submittal on an annual basis. This frequency is appropriate for the foreseeable future, while the Site is being assimilated into the infrastructure of the Village of Sleepy Hollow and plans for its use are being actively developed.

Periodic Review Report
Former General Motors Tarrytown Assembly Plant, East Parcel

FIGURE

1. Site Map

1274Y0001Y103\1274.0001Y103.02.CDR



Title:			
SITE MAP			
FORMER GM EAST PARCEL			
Prepared for:			
SLEEPY HOLLOW LOCAL DEVELOPMENT CORP.			
ROUX ROUX ASSOCIATES, INC. Environmental Consulting & Management	Compiled by: C.W.	Date: 31MAR20	FIGURE 1
	Prepared by: G.M.	Scale: AS SHOWN	
	Project Mgr.: C.W.	Project No.: 1274.0001Y003	
	File: 1274.0001Y103.02.CDR		

Periodic Review Report
General Motors Tarrytown Assembly Plant

APPENDIX A

Change of Use Form



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



Site No. **C360070B**

Site Details

Box 1

Site Name **Former General Motors North Tarrytown East Parcel**

Site Address: 60 Continental Street Zip Code: 10591
City/Town: Sleepy Hollow
County: Westchester
Site Acreage: 28.3

Reporting Period: April 15, 2019 to April 14, 2020

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| 1. Is the information above correct? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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 | <input type="checkbox"/> |

Box 2

- | | YES | NO |
|---|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below?
Restricted-Residential, Commercial, and Industrial | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all ICs/ECs in place and functioning as designed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**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?	<input type="checkbox"/> <input checked="" type="checkbox"/>
<p>If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.</p>		
9.	Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	<input checked="" type="checkbox"/> <input type="checkbox"/>
<p>If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.</p>		

SITE NO. C360070B		Box 3
Description of Institutional Controls		
<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
115.11-1-2	Sleepy Hollow Local Development Corp	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
<ul style="list-style-type: none"> • 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 soil vapor including a provision for implementing actions recommended to address exposures related to soil vapor intrusion. • Periodic Certification of ICs and ECs. 		
115.11-1-85	Sleepy Hollow Local Development Corp	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
<ul style="list-style-type: none"> • 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 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		
<u>Parcel</u>	<u>Engineering Control</u>	
115.11-1-2	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.		
115.11-1-85	Cover System	
A demarcation barrier over soil or historic fill material that does not meet 6 NYCRR Part 375 SCOs for		

Parcel

Engineering Control

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 complete.

YES NO

☒ ☐

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

☒ ☐

**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

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.

CRAIG WERLE
print name

ROUX, 209 SHAFTER ST, ISLANDIA, NY 11749_
print business address

am certifying as a Qualified Environmental Professional for the VILLAGE OF SLEEPY HOLLOW LDC
(Owner or Remedial Party)



Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification

Stamp
(Required for PE)

5/22/20

Date

IC CERTIFICATIONS
SITE NO. C360070B

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 ANTHONY GIACCIO at 28 BEEKMAN AVE, SLEEPY HOLLOW, NY 10591,
print name print business address

am certifying as CHIEF EXECUTIVE OFFICER (Owner or Remedial Party)

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

Anthony Giaccio
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

5/21/20
Date

Periodic Review Report
General Motors Tarrytown Assembly Plant

APPENDIX B

Site Inspection Form

**FORMER GENERAL MOTORS TARRYTOWN ASSEMBLY PLANT-
EAST PARCEL, SLEEPY HOLLOW, NEW YORK**

GENERAL INFORMATION

Date:	5/18/2020	Inspector:	Jacqueline Carames under the supervision of Craig Werle (QEP)
Weather:	Cloudy	Signature:	<i>Jacqueline Carames</i>
Temperature:	63°F	Company:	Roux Associates
Season (circle one): Winter <u>Spring</u> Summer Fall			

SITE INSPECTION LOG SHEET*

Evidence of Change in Site Use	Yes <u>No</u>	Description of New/Additional Site Use	
Evidence of Site-Wide Disturbance(s)	Yes <u>No</u>	Description of Disturbance(s)	
Evidence of Site-Wide Excavation	<u>Yes</u> No	Description of Excavation	6 ft wide backfilled trench across site associated with relocation of municipal sewer line (completed in Sept 2019). Backfilled excavation in Grids E3/D3 for municipal water main relocation. 6 inch augered holes across site and removal of top 6 inches of topsoil along the eastern perimeter of the Site related to wick drain installation.
Evidence of Cover System Disturbance(s)	<u>Yes</u> No	Description of Disturbance(s)	6 ft wide opening in asphalt associated w/ trench for municipal sewer line relocation. Opening in asphalt in Grids E3/D3 associated with relocation of municipal water main. 6 inch augered holes through asphalt across site associated with vertical wick drain installation.
Evidence of Cover System Excavation to Monolith	Yes <u>No</u>	Description of Excavation	
Evidence of Building Construction	Yes <u>No</u>	Description of Building Construction	
Comments:	Sewer line relocation, water main relocation, and wick drain installation is part of the site redevelopment plan. The project has been done in compliance with the SMP including CAMP monitoring and submission of daily construction reports. Maps of the sewer line trench, water main excavation, and wick drain work have been previously submitted to NYSDEC.		

* If answering Yes, attach map showing locations and any other information as required.