Remedial Action Work Plan

351 Franklin Street Site
NYSDEC BCP #C905047
Olean, New York

November 2023

Prepared for:

351 Franklin Street LLC
1 Blue Bird Square
Olean, NY 14760

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
2558 Hamburg Turnpike, Suite 300
Buffalo, New York 14218

2283.0002Y.110/CV

Table of Contents

Figures

Appendices

Certification

I, Thomas H. Forbes certify that I am currently a NYS registered Professional Engineer and that this Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Thomas H. Forbes, P.E. — 9-25-23

NYS Professional Engineer #70950-1 — Date — Signature

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

1. Introduction

Roux Environmental Engineering and Geology, DPC (Roux) (formerly Benchmark Civil/Environmental Engineering & Geology, PLLC (Benchmark), in association with TurnKey Environmental Restoration, LLC (TurnKey)), Roux, has prepared this Remedial Action Work Plan (RAWP) on behalf of 351 Franklin Street LLC (351 Franklin) to present the proposed scope of work and implementation procedures for completion of remedial activities at the 351 Franklin Street Site, Brownfield Cleanup Program (BCP) Site C905047, located at 351 Franklin Street, Olean, New York (Site).

The remedial activities will be completed by 351 Franklin and their designated remedial contractors and subcontractors, with oversight provided by Roux. The work will be completed in accordance with 6NYCRR Part 375 and New York State Department of Environmental Conservation (NYSDEC) DER-10 guidelines. The Brownfield Cleanup Agreement was amended in August 2023 to remove PSF of WNY, LLC as an Applicant. 351 Franklin Street LLC remains as the Applicant.

1.1 Background and History

The Site consists of one 6.36-acre parcel addressed at 351 Franklin Street (Tax ID No. 94.040-1-29.1), City of Olean, Cattaraugus County, New York (see Figures 1 and 2). The Site is located at the southeastern corner of Franklin Street and Johnson Street in a highly developed commercial and industrial area of the City of Olean. The Site is currently developed with two commercial structures surrounded by paved parking areas, access roads, and vegetated areas. The westernmost structure (Building 1) is occupied by First Transit, Inc. and the easternmost structure (Building 2) is vacant. Building 1 will remain and Building 2 will be demolished prior to remediation. The structures will be surrounded by asphalt driveways and parking areas, gravel, and greenspace.

The Site and properties immediately surrounding the area of the Site were primarily used as a petroleum refining facility between 1876 and approximately 1954, with portions of the surrounding area used as a fertilizer facility between 1965 and 1984. The Site area was formerly part of the SOCONY-Vacuum Oil Company, Inc. (SOCONY-Vacuum) refinery until 1954. Through acquisitions and mergers, SOCONY-Vacuum became ExxonMobil Corporation.

Numerous spill records associated with the Site are included in the NYDEC Spill database (9201686, 0811100, and 1300859). Spill 1300859 referred to as “Offsite Scott Rotary Seal BCP Site” was determined to be associated with abandoned refinery pipes extending from the adjacent Scott Rotary Seals BCP site and the NYSDEC ordered on-Site pipes to be located, excavated, and cleaned, and that all materials be disposed of properly. Remedial activities were completed at the Site between 2012 and 2017 to remove some of the refinery piping and grossly contaminated media (GCM) previously identified at the Site.

1.2 Summary of Environmental Conditions

Roux completed and submitted to the NYSDEC a Remedial Investigation/Alternatives Analysis (RI/AA) Report, revised July 2022. The Decision Document was issued on July 15, 2022. The RI/AA report included a detailed review of previous studies completed by others. The RI was completed in accordance with the approved RI Work Plan dated January 2021.

The purpose of the RI was to define the nature and extent of contamination on the BCP Site, and to collect data of sufficient quantity and quality to perform the remedial alternatives evaluation. The RI was

completed across the BCP Site to supplement previous environmental data and to delineate or identify areas requiring remediation. On-site field activities included soil boring advancement; test pit/text trench excavations; surface and subsurface soil/fill sampling; monitoring well installation; groundwater quality sample collection; soil vapor sample collection; and a soil vapor intrusion investigation.

Based on the data and analyses obtained during the RI and historic investigations by others, the following environmental conditions exist at the Site:

1.2.1 Geology

- The overburden is generally described as fill consisting of black/dark brown fine sand, silt, and gravel with brick, metal, wood, concrete, coal, cinders, and ash from ground surface or under a layer of topsoil, gravel, or asphalt to depths between 1 and 17 fbgs. The fill is underlain by layer of gray/brown well to poorly graded sand with silt and gravel, well graded sand, and clayey sand. Clay layers were observed at some locations between 2 and 8 fbgs and between 18 and 30 fbgs.
- Bedrock was not encountered at the Site during historic investigations or the RI. According to the Comprehensive RI/AA Report prepared for the proximate Olean Redevelopment Parcels 1, 2, and 3, depth to bedrock is estimated at 220 to 260 fbgs in the area.

1.2.2 Hydrogeology

Based on the findings of the RI, monitoring well water elevations ranged from 1,413.6 ft (MW-2) to 1,416.9 (MW-3) in July 2021 and from 1,411.2 ft (MW-2) to 1,414.9 ft (MW-3) in October 2021. Water level elevations measured during the PDI ranged from 1,411.7 ft (MW-3) to 1,414.9 ft (MW-3) in June 2022, similar to elevations observed during the RI. Overburden groundwater at the Site generally flows toward the northwest in the western portion of the Site and toward the southeast in the eastern portion of the Site. Based on our knowledge of groundwater from several Sites located upgradient and downgradient of the Site including 350 Franklin Street (C905046), Scott Rotary Seals (C905036), and Olean Redevelopment BCP Sites 1, 2, and 3 (C905031, C905032, and C905033, respectively), regional groundwater generally flows toward the south. The localized groundwater flow in the eastern portion of the subject Site is consistent with this observation. However, localized flow in the western portion of the Site flows northwest toward 350 Franklin Street, due to an apparent groundwater divide in the vicinity of MW-3 and MW-6. This observation is consistent with localized groundwater flow in the eastern portion of 350 Franklin Street, where groundwater also flows toward the northwest, which is inconsistent with the southerly flow in the remaining area of that site.

1.2.3 Contamination

1.2.3.1 Surface Soil/Fill

Surface soil/fill across the Site is impacted by arsenic and SVOCs. Arsenic was detected exceeding its 6 NYCRR Part 375 Commercial Soil Cleanup Objectives (CSCO) at five locations and semi-volatile organic compounds (SVOCs) were detected exceeding their respective CSCOs at three locations. The prevalence of arsenic and SVOC exceedances over their respective CSCOs, along with additional exceedances of volatile organic compounds (VOCs), metals, and total polychlorinated biphenyls (PCBs) over their respective Unrestricted SCOs (USCOs) indicates that the surface soil/fill at the Site would not be suitable for use as cover material.

Pesticides, herbicides, and 1,4-dioxane were not detected above their respective USCOs and per- and polyfluoroalkyl substances (PFAS) were not detected above NYSDEC guidance levels.

1.2.3.2 Subsurface Soil/Fill

Petroleum odors and elevated photoionization detector (PID) readings were detected at all test pit, test trench, and borehole locations. Maximum PID readings ranged from 4.4 ppm at MW-1 (13 fbgs) to 1,121 ppm at MW-2 (19 fbgs). Grossly contaminated media (GCM), defined as soils exhibiting the presence of mobile petroleum product, was identified in the soil at seven test pits, three test trenches, ten soil borings, and one soil boring that was converted into a monitoring well at depths generally between 5 and 26 feet below ground surface (fbgs). Visual observations at these locations included black/brown staining, mobile petroleum product on soil, and mobile petroleum product on groundwater at some locations.

Arsenic was detected exceeding its CSCO at one subsurface soil/fill location. VOCs, SVOCs, pesticides, herbicides, PCBs, and 1,4-dioxane were not detected above Part 375 CSCOs and PFAS were not detected above NYSDEC guidance values.

1.2.3.3 Underground Piping

Previous investigations and remedial activities completed at the Site identified piping located in the subsurface across the Site. Approximately 4,935 linear feet of piping was excavated, cleaned, and properly disposed. Piping remaining at the Site due to physical obstructions such as buildings and/or underground utilities were abandoned in place. Abandoned piping was cleaned and plugged with grout or concrete.

1.2.3.4 Groundwater

VOCs, SVOCs, pesticides, and metals were detected exceeding TOGS 1.1.1 Groundwater Quality Standards/Guidance Values (GWQS/GV) at some locations. Metals exceeding GWQS/GV were generally naturally occurring, with the exception of total arsenic, total copper, and total lead. Dissolved arsenic, copper, and lead were not detected exceeding GWQS/GV at any sample location.

Light non-aqueous phase liquid (LNAPL) was detected at three monitoring well locations (MW-3, MW-6, and MW-7) during sampling completed on March 3 to 4, 2021 and October 18, 2021. All three well locations are proximate to areas where GCM was identified in the subsurface soil/fill.

1.2.3.5 Soil Vapor Intrusion

Analytical results in comparison to the New York State Department of Health (NYSDOH) Decision Matrices indicate that no further action (NFA) is required within Building 1 at the 351 Franklin Street Site. However, several VOCs not included in the matrices were observed at elevated concentrations in the sub-slab and indoor samples. To address this, detected VOCs were assessed against several criteria. The first criteria were established in a paper titled “Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes” published by the NYSDOH and revised November 14, 2005. Sub-slab and indoor air data collected at the Site was compared to the 90th percentile concentrations presented in the paper. The outdoor air sample contained low concentrations of VOCs below the 90th percentile values.

The majority of the sub-slab and indoor air VOC concentrations were below the indoor 90th percentile values with the following exceptions. Slight and/or estimated detections of 1,2-dichlorotetrafluoroethane, m&p-xylene, n-butylbenzene, n-propylbenzene, sec-butylbenzene, and trichloroethene (TCE) were observed exceeding the 90th percentile values. Due to the infrequent and relatively low concentrations of these detections, they are not considered contaminants of potential concern (COPCs) in the sub-slab. Acetone and n-heptane were detected exceeding their respective 90th percentile value at several locations

However, the concentration of acetone and n-heptane was greater at the indoor samples than the sub-slab samples indicating these parameters are not COPCs in the sub-slab.

1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, cyclohexane, n-hexane, methyl isobutyl ketone, and toluene were detected exceeding their respective 90th percentile values in subslab samples and were detected at lower concentrations in indoor samples. To further evaluate the risk posed by these parameters, the indoor air concentrations were compared to the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) criteria for air contaminants. The PEL values for cyclohexane, methyl isobutyl ketone, n-hexane, and toluene, are all significantly higher than the concentrations observed in the subslab and indoor air samples. Therefore, these parameters are not considered COPCs in the sub-slab. There is no PEL value for 1,2,4-Trimethylbenzene or 1,3,5-Trimethylbenzene. However, neither of these contaminants were COPCs in the soil or groundwater based on extensive remedial investigation and remedial actions completed at the Site, therefore they are not considered COPCs in the sub-slab.

1.2.3.6 Soil Vapor

Thirty-eight VOCs were detected in the soil vapor samples collected across the Site. The VOCs detected in exterior soil vapor samples were assessed against the outdoor air 90th percentile criteria as discussed in Section 1.2.3.4. Several VOCs exceeded the outdoor 90th percentile concentrations at one or more soil vapor locations including acetone, chloroform, cyclohexane, m&p xylenes, methyl isobutyl ketone, methyl ethyl ketone, n-heptane, n-hexane, and toluene. None of these contaminants were identified as COPCs in the soil and groundwater, suggesting the elevated concentrations do not originate from on-Site soil and/or groundwater. Surrounding properties include industrial use facilities and were formerly used for the same/similar purposes as the subject Site. Therefore, these results may indicate that there is an on-site contribution to soil vapor contamination, however it is also possible that these compounds are sourced off-Site.

1.2.3.7 Contamination Summary/Areas of Concern

Six distinct areas of concern (AOCs) were identified and designated as GCM Area 1 through GCM Area 6, as shown on Figure 3 and further described below:

- GCM Area 1: GCM was identified on soil/fill at 15 investigation locations including TP-6, TP-9, TP-10, TP-11, TP-12, TP-13, TP-14, SB-10, SB-11, SB-12, SB-13, SB-15, SB-16, SB-17, and MW-6, at depths ranging from 5 to 26 fbgs. Sheen, but not GCM was identified on gravel at SB-14 (12 fbgs). “Heavy oil” was identified at SB-10. Maximum detected PID measurements ranged from 231.4 ppm at SB-10 to 827 ppm at TP-5. Petroleum odors were identified at all investigation locations.
- GCM Area 2: GCM was identified on soil/fill at one investigation location, TT-9, from 8 to 8.5 fbgs. Maximum detected PID measurements ranged from 265.9 ppm at SB-8 to 608 ppm at TT-9. Petroleum odors were identified at all investigation locations.
- GCM Area 3: GCM was identified on soil/fill at one investigation location, TT-8, from 8 to 10 fbgs. GCM was also noted on groundwater at TT-8 and SB-5 from 18 to 19 fbgs. Maximum detected PID measurements ranged from 294.7 ppm at SB-6 to 806 ppm at TT-8. Petroleum odors were identified at all investigation locations.
- GCM Area 4: GCM was identified on soil/fill at two investigation locations, TT-6 and SB-3, at depths ranging from 8 to 19.5 fbgs. A sheen on groundwater was identified at at SB-3 and SB-4.

Maximum detected PID measurements ranged from 98 ppm at SB-4 to 415.2 ppm at SB-3. Petroleum odors were identified at all investigation locations.

- GCM Area 5: GCM was identified at TP-305, TP-306, TP-307, and TP-308 during a previous investigation. An excavation was completed to remediate this area to 8 fbgs. Although no contamination remained vertically, GCM was noted remaining laterally from 4 to 8 fbgs. Additional excavation activities will be completed to address remaining GCM in this area.
- GCM Area 6: GCM was identified on soil/fill at one investigation location, SB-1, from 14 to 18 fbgs. The maximum detected PID measurement at SB-1 was 393.3. Petroleum odors were identified at SB-1.

1.3 Primary Constituents of Concern (COCs)

Based on the historic use of the Site as well as the results of the historic and RI investigations, the COCs are presented below:

Surface Soil/Fill: SVOCs and arsenic

Subsurface Soil/Fill: GCM, SVOCs and arsenic

Light Non-Aqueous Phase Liquid (LNAPL)

1.4 Site Specific Action Levels (SSALs)

Site-specific action levels (SSALs) were developed for the Site. These SSALs will be applicable to soil/fill that greatly exceeds Restricted-Commercial SCOs, has the potential to impact groundwater, or otherwise represents an unacceptable risk to public health or the environment in the context of reasonably anticipated future use and a Track 4 cleanup and therefore require removal, treatment or solidification. These SSALs were developed based on the planned removal of potential source areas, including areas that have a greater potential for contaminant migration, and the feasibility of achieving the SSALs based on the nine factors outlined in 6NYCRR Part 375-1.8(f). The SSALs only apply to a Track 4 cleanup with a cover system to be installed over all areas with remaining soil/fill concentrations above CSCOs, a Site Management Plan (SMP), and Environmental Easement. The following SSALs were developed and used to designate soil/fill AOCs requiring remediation:

- GCM (defined as soils exhibiting the presence of mobile petroleum product)

1.5 Remedial Action Objectives

The remedial actions for the 351 Franklin Street Site must satisfy Remedial Action Objectives (RAOs), as outlined in the July 2022 Decision Document. RAOs are site-specific statements that convey the goals for minimizing substantial risks to public health and the environment. RAOs have been defined for the Site as follows:

Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil Vapor RAOs

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

1.6 Project Organization and Responsibilities

The remedial actions will be completed by remedial construction specialty contractors under contract to 351 Franklin and/or Roux. The certifying professional engineer will monitor the activities to verify that the work is performed in accordance with the Brownfield Cleanup Agreement (BCA), the approved RAWP, 6NYCRR Part 375, and NYSDEC DER-10 guidance.

2. Pre-Remediation/Preparation Tasks

The following tasks were or will be completed in preparation of remedial action activities.

2.1 Pre-Design Investigation

A Pre-Design Investigation (PDI) was completed to further define the horizontal and vertical extents of GCM at the Site, per correspondence with the NYSDEC on March 25, 2022. The PDI was completed in accordance with NYSDEC DER-10 guidelines, the approved January 2021 RI Work Plan protocols, and the approved June 20, 2022 Pre-Design Investigation Work Plan (PDI WP).

2.1.1 PDI Approach

The PDI was completed to supplement the RI and consisted of the following activities:

1. Installation of monitoring wells at several locations to further delineate the horizontal extents of GCM on groundwater across the Site:
    - New wells MW-10 through MW-14 were installed to supplement data collected during the RI. The new wells were installed proximate to RI locations TP-1, TT-5, TP-16, TT-11, and SB-5/TT-8. Mobile petroleum product was previously identified at the groundwater interface only at these RI locations with the exception of TT-8, where GCM was also identified in the soil from 8-10 fbgs, approximately ten feet above the water table.
    - The new and existing monitoring wells were developed and gauged to assess whether additional action must be completed during the RA based on the measured thickness of LNAPL in each well.
2. Soil borings were advanced to further identify the horizontal and vertical extents of GCM:
    - LNAPL was observed in MW-3, however no GCM was identified on soil or groundwater during soil boring advancement at this location. An additional soil boring (SB-18) was advanced in the area between TT-6 and MW-3 to confirm the southern extent of GCM Area 4 is properly defined.
    - The full vertical extent of GCM at SB-11 was not identified during the RI; the depth of GCM at this location is at least 24 fbgs, however the boring did not extend to clean soil. An additional soil boring (SB-19) was advanced proximate to SB-11 to define the vertical extent of GCM in this location.

2.1.2 PDI Results

Results of the PDI are discussed below. PDI investigation locations are included on Figure 3. Soil boring and well completion logs are included in Appendix A.

MW-10 – Petroleum odors and elevated PID readings up to 747 ppm were identified from 14 to 30 fbgs. GCM was identified on gravel and groundwater from 18 to 24 fbgs. Groundwater was encountered at 16 fbgs. As observed at TP-1, GCM was only identified below the water table, and was not observed in the 4 to 8 ft range identified in the nearby GCM Area 5. LNAPL did not accumulate in MW-10 and no excavation is planned. Groundwater and LNAPL monitoring will be completed at this location.

MW-11 – Petroleum odors and elevated PID readings up to 322.6 ppm were identified from 18 to 30 fbgs. GCM was not encountered at this location. Groundwater and LNAPL monitoring will be completed at MW-11, however no additional excavation will be required at this location.

MW-12 – Petroleum odors and elevated PID readings up to 449 ppm were identified from 7.2 to 28 fbgs. GCM was not encountered at this location. Groundwater and LNAPL monitoring will be completed at MW-12, however no additional excavation will be required at this location.

MW-13 – Petroleum odors and elevated PID readings up to 310 ppm were identified from 9.8 to 30 fbgs. GCM was not encountered at this location. Groundwater and LNAPL monitoring will be completed at MW-13, however no additional excavation will be required at this location.

MW-14 – Petroleum odors and elevated PID readings up to 368.6 ppm were identified from 16.7 to 34 fbgs. GCM was identified on groundwater during boring installation at 18 fbgs; however, no LNAPL accumulated in MW-14. Groundwater and LNAPL monitoring will be completed at MW-14, however no additional excavation will be required at this location.

SB-18 – Petroleum odors and elevated PID readings up to 76.5 ppm were identified from 11.5 to 30 fbgs. GCM was identified on groundwater at 18 fbgs. Groundwater and LNAPL monitoring will continue at MW-3, however the results of this soil boring confirm that the extents of GCM area 4 are properly defined.

SB-19 – Petroleum odors and elevated PID readings up to 470 ppm were identified from 4.1 to 31 fbgs. GCM was identified on gravel from 14 to 22 fbgs. Groundwater was encountered at 18 fbgs. GCM on gravel/soil is within the same range as nearby SB-11 (GCM was identified from 10 to 12 fbgs and from 21 to 24 fbgs). Additionally, the vertical extent of GCM was identified in this location at 22 fbgs. Due to the amount of GCM identified at this location, the horizontal extent of GCM Area 1 was extended to ensure that all impacted material will be removed and/or treated.

Water Level and LNAPL Monitoring – Water level and LNAPL monitoring was completed at all well locations, including monitoring wells completed during the PDI and RI. Monitoring results are included in the table below:

Monitoring Location	Water Level (fbTOR)	Product Level (fbTOR)	Product Thickness (ft)
MW-1	19.75	NP	NA
MW-2	15.48	NP	NA
MW-3	18.54	18.13	0.41
MW-4	16.98	NP	NA
MW-5	19.67	NP	NA
MW-6	21.11	20.7	0.41
MW-7	21.91	21.69	0.22
MW-8	22.65	NP	NA
MW-9	20.10	NP	NA
MW-10	15.97	NP	NA
MW-11	20.81	NP	NA
MW-12	16.74	NP	NA
MW-13	25.3	NP	NA
MW-14	25.6	NP	NA

LNAPL was observed at three monitoring well locations, MW-3, MW-6, and MW-7, consistent with previous gauging conducted during the RI. Product thickness ranged from 0.22 ft at MW-7 to 0.41 ft at MW-3 and MW-6.

2.2 Bench-Scale Solidification Assessment

Bench-scale soil/fill treatability testing will be completed to evaluate the percentage by weight of Portland cement/Slag cement (or similar soil amendment) that will be needed to solidify GCM-impacted soil/fill. Soil will be collected from GCM Area 1, proximate to MW-6, which exhibited the greatest amount of GCM and will provide the best measure of effective soil solidification. Bench-scale testing will analyze the addition of soil amendment to the impacted soil/fill at varying concentrations by weight to determine the effectiveness of each in solidifying the material. It is expected that approximately 5 to 7% of Portland cement/Slag cement by weight will be needed to solidify the material, based on previous experience with GCM-impacted soil/fill in the immediate area of this Site.

2.3 Building 2 Demolition

Building 2 is located overlying GCM-impacted soil and will therefore need to be demolished prior to the start of remedial activities. Building materials will be recycled and concrete slabs will be visually inspected and recycled/disposed based on their physical appearance. A copy of the demolition permit is obtained from the City of Olean is provided in Appendix D.

2.4 Pre-Construction Activities

2.4.1 Clearing, Grubbing, Grading

Prior to implementation of the remedial activities, vegetation, shrubs, and trees will be grubbed and cleared from the work area. Vegetation will be processed on-Site and will either be reused on-Site or transported off-site for disposal/re-use.

2.4.2 Erosion and Sedimentation Control

A Master Erosion Control Plan (MECP) for the Site is included in Appendix B. Erosion control measures (i.e., silt sock, hay bales, silt fence) will be put in place to ensure no potentially contaminated stormwater is discharged from the Site.

Asphalt paved roadways/areas exist on-Site; however, haul roads may be installed, as necessary, to allow truck access for remedial activities.

2.4.3 Utility Clearance

Prior to intrusive activities, Dig Safely New York (Call 811) will be contacted by the site contractor at a minimum of three (3) business days in advance of the work and informed of the intent to perform excavation work at the Site.

2.5 Health and Safety Plan Development

A Health and Safety Plan (HASP) has been prepared and it will be enforced by the remediation contractor in accordance with the requirements of 29 CFR 1910.120. The Roux HASP covers on-site remedial activities. Roux will be responsible for site control and for the health and safety of its authorized site workers. Roux's HASP is provided in Appendix C. If a remediation contractor other than Roux is used, they will be required to develop a HASP at least as stringent as Roux's HASP.

2.5.1 Dust Monitoring and Controls

A Community Air Monitoring Plan (CAMP), provided in Attachment C of Appendix C (HASP), will be implemented during intrusive activities. If community air monitoring indicates the need for dust suppression, the contractor will apply a water spray across the excavation and surrounding areas, and on-site haul roads as necessary to mitigate airborne dust formation and migration. Potable water will either be obtained from a public hydrant, provided by an off-site water service or provided via a water truck with water from an off-site source. Other dust suppression techniques that may be used to supplement the water spray include:

- Hauling materials in properly tarped containers or vehicles.
- Restricting vehicle speeds on-Site.
- Hydro-seeding of final grades.

An Odor Control Plan has been added to the CAMP and is also provided in Section 3.8 of this work plan.

2.5.2 Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 part-per-million, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 micrograms per cubic meter, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 micrograms per cubic meter or less at the monitoring point.
- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

2.6 Groundwater Monitoring

All on-site wells will be gauged monthly prior to the start of remedial work to assess groundwater levels and product thickness at each well. Based on the thickness of LNAPL detected in each well during the RI and PDI, the following actions will be taken:

- If LNAPL thickness was identified as greater than or equal to one foot, the well will be gauged for three consecutive months during remedial action. If greater than one foot of LNAPL is identified at these locations for all three consecutive months, the material will be designated as GCM, and physical removal (excavation and ISS) will be completed as a part of remedial action. If not, the location will be identified as a potential source and monitored. Locations identified as a potential source will be subject to semi-annual monitoring and/or reduction measures (if LNAPL thickness if observed between 1 inch and 1 foot) including: passive or active capture, transmissivity testing, and/or long-term monitoring until LNAPL is not present during two consecutive semi-annual monitoring events.
- If LNAPL thickness was identified as less than one foot (MW-3, MW-6, and MW-7), the location will be identified as a potential source and monitored. Locations identified as a potential source will be subject to semi-annual monitoring and/or reduction measures (if LNAPL thickness if observed between 1 inch and 1 foot) including: passive or active capture, transmissivity testing, and/or long-term monitoring until LNAPL is not present during two consecutive semi-annual monitoring events. Note that MW-6 is located within GCM Area 1 and will be removed during remedial excavation activities.
- If no LNAPL was identified on groundwater (MW-1, MW-2, MW-4, MW-5, and MW-8 through MW-14), no further action will be taken. Some of these wells may be decommissioned during or after remedial activities, and some will remain on site for use in long-term monitoring, which will be further discussed in the SMP.

2.7 Waste Characterization

Waste Management landfill in Chaffee, New York has been selected as the permitted commercial landfill for soil disposal. Waste characterization samples will be collected from the GCM excavation areas in accordance with landfill analytical disposal requirements. Pre-characterization of the soil/fill will allow for direct loading and off-site transportation at the time of the impacted soil/fill excavation. Based on the results of the waste characterization sampling, impacted soil will be managed according to all federal, state and local waste disposal regulations.

2.8 Imported Backfill/Cover Soil Characterization

Imported soil/fill material utilized for backfill or cover soil will be subject to characterization requirements in accordance with DER-10 Table 5.4(e)10, or as otherwise approved by NYSDEC prior to import to the Site. Imported soil will also be sampled for PFAS and 1,4-dioxane per the Department's Guidelines for Sampling and Analysis of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs. Characterization testing will be performed by an independent, NYSDOH Environmental Laboratory Approval Program (ELAP) approved laboratory. An equivalent Category B deliverables package will be furnished with the data to allow data evaluation and preparation of a Data Usability Summary Report (DUSR) by an independent, third-party data validation expert. Quality Assurance (QA) samples will be collected to support the data evaluation. The QA samples will include a minimum of one matrix spike, one matrix spike duplicate, and one blind duplicate per 20 verification samples. Each individual source of backfill or cover soil material will require approval prior to import

3. Remedial Action Activities

The NYSDEC will be notified at least 5 business days in advance of any planned remedial activities. Remedial work will be performed in accordance with this work plan and will be documented by an experienced Roux professional, which will generally include:

- Excavation and reuse of the top one foot of SVOC- and arsenic-impacted soil under the cover system, and disposal of excess material;
- Excavation of non-GCM-impacted soil/fill that resides over the GCM and staging of the material on-site for reuse as backfill under the cover system;
- Excavation and disposal of GCM-impacted soil/fill to meet SSALs and completion of in-situ solidification (ISS) as needed to address GCM-impacted soil/fill, followed by backfill and site grading;
- Removal and recycling of piping encountered during GCM excavation activities ;
- Management of impacted groundwater and stormwater during remedial activities;
- Placement of a cover system across the entire Site;
- Reevaluation of SVI; and
- Monitoring of groundwater level and LNAPL.

Additional details relative to each remedial activity is provided below:

3.1 SVOC- and Arsenic-Impacted Soil

The remedial contractor will excavate the top one foot of SVOC- and arsenic-impacted soil across the entire Site, with the exception of areas that are and will continue to be covered with hardscape (Figure 4). This will allow for the subsequent placement of a one-foot soil or gravel cover system in non-hardscaped areas while maintaining approximate original site grades.

The material will be used as backfill under the cover system and any excess material will be disposed off-Site at a commercial landfill. Estimated quantity of SVOC- and arsenic-impacted soil in the top one foot is 8,600 CY.

Soil stockpiles will be continuously encircled with silt socks. Stockpiles will be kept covered with polyethylene sheeting. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

3.2 Remedial Areas of Concern (AOCs)

Six distinct AOCs were identified during the RI, designated as GCM Area 1 through GCM Area 6, as discussed in Section 1.2.3.7. Each AOC will be excavated and backfilled, and ISS will be completed as needed, Remedial excavations are discussed in detail below. Quality assurance/quality control (QA/QC) testing requirements are discussed in Section 3.4.

3.2.1 GCM Area 1

- The remedial contractor will excavate non-impacted soil/fill that resides over the GCM, to on average approximately 5 ft; staging that soil/fill on-site. Staged material will be reused as backfill within the GCM excavation area after removal and treatment of the underlying GCM. NYSDEC-approved imported material will be placed above the on-site backfill material to final grades. The estimated quantity of non-impacted soil/fill is approximately 30,500 CY.
- Stockpiled soil/fill will be secured with proper erosion controls to minimize runoff and dust generation. Soil stockpiles will be continuously encircled with silt socks. Stockpiles will be kept covered with polyethylene sheeting. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.
- The remedial contractor will excavate the GCM soil/fill area as shown on Figure 3 to approximately 2 feet above the water table. Approximately 10,300 CY (16,480 tons) of GCM-impacted soil/fill will be removed from the approximate 48,000 SF area. These soils will be removed for off-Site disposal at Waste Management Landfill in Chaffee, New York. The depth of the excavation bottom will be recorded prior to the start of ISS activities.
- ISS will be completed from 2 ft above the water table to nominally 2 ft below the water table or deeper as needed (i.e., at SB-10, where GCM was identified to 26 fbgs, at SB-12 where GCM was identified to 23.5 fbgs, etc.) to reach the required depth to address all GCM impacts. During ISS of known areas where deeper ISS is needed (approximate 20 ft by 20 ft), if GCM is observed along any side walls, indicating a greater horizontal extent of GCM than expected, ISS will be continued in that direction until no further GCM is observed. ISS will be completed by mechanically mixing soils with Portland cement/Slag cement (or a similar amendment) using an excavator bucket as necessary to adequately homogenize the cement material within the GCM-impacted soil interval. Solidified soil samples will be collected to confirm that physical performance requirements for ISS are met. Core samples will be collected after curing for up to 28 days and will be tested for minimum unconfined compressive strength, maximum permeability, free liquids, mixing uniformity, and mixing depth.
- Post-excavation soil samples will be collected from the excavation at a frequency of one per 30-feet along perimeter sidewalls and analyzed for TCL VOCs + TICs and TCL SVOCs + TICs. The depth of the sidewall samples will be recorded.
- Samples will also be inspected for the presence of GCM, along with PID, visual, and olfactory impacts. Criteria for completion of GCM excavations includes no remaining evidence of GCM. The visual observations and PID readings will be recorded and included in the FER.
- If GCM is present beyond the anticipated perimeter or depth, the remedial contractor will excavate, transport and dispose, or treat via ISS, additional soils at the direction of Roux. Further, if additional GCM is identified outside of the proposed excavation/ISS extents then NYSDEC must be notified and presented with plans for addressing this additional GCM.
- Following excavation and treatment, the remedial contractor will backfill the area with on-Site soil and/or imported backfill material.
- Final excavation limits will be surveyed with a handheld Trimble GeoXH GPS unit and excavation depths will be manually measured in the field. Horizontal limits and locations of final remedial excavations will be presented on the Site Map in the FER.

3.2.2 GCM Area 2

- The remedial contractor will excavate non-impacted soil/fill that resides over the GCM, to approximately 8 ft; staging that soil/fill on-site. Staged material will be reused as backfill within the GCM excavation area after removal of the underlying GCM. NYSDEC-approved imported

material will be placed above the on-site backfill material to final grades. The estimated quantity of non-impacted soil/fill is approximately 480 CY.

- Stockpiled soil/fill will be secured with proper erosion controls to minimize runoff and dust generation. Soil stockpiles will be continuously encircled with silt socks. Stockpiles will be kept covered with polyethylene sheeting. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.
- The remedial contractor will excavate the GCM soil/fill area as shown on Figure 3 to approximately 9 ft. Approximately 70 CY (112 tons) of GCM-impacted soil/fill will be removed from the 1,900 SF area. These soils will be removed for off-Site disposal at Waste Management Landfill in Chaffee, New York.
- Post-excavation soil samples will be collected from each excavation at a frequency of up to one per 900 square feet at the bottom of the excavation and up to one per 30-feet along perimeter sidewalls and analyzed for TCL VOCs + TICs and TCL SVOCs + TICs. The depth of the bottom and sidewall samples will be recorded.
- Samples will also be inspected for the presence of GCM, along with PID, visual, and olfactory impacts. Criteria for completion of GCM excavations includes no remaining evidence of GCM. The visual observations and PID readings will be recorded and included in the FER.
- If GCM is present beyond the anticipated perimeter or depth, the remedial contractor will excavate, transport, and dispose additional soils at the direction of Roux. Further, if additional GCM is identified outside of the proposed excavation/ISS extents then NYSDEC must be notified and presented with plans for addressing this additional GCM.
- Following excavation, the remedial contractor will backfill the area with on-Site soil and/or imported backfill material.
- Final excavation limits will be surveyed with a handheld Trimble GeoXH GPS unit and excavation depths will be manually measured in the field. Horizontal limits and locations of final remedial excavations will be presented on the Site Map in the FER.

3.2.3 GCM Area 3

- The remedial contractor will excavate non-impacted soil/fill that resides over the GCM, to approximately 8 ft; staging that soil/fill on-site. Staged material will be reused as backfill within the GCM excavation area after removal of the underlying GCM. NYSDEC-approved imported material will be placed above the on-site backfill material to final grades. The estimated quantity of non-impacted soil/fill is approximately 470 CY.
- Stockpiled soil/fill will be secured with proper erosion controls to minimize runoff and dust generation. Soil stockpiles will be continuously encircled with silt socks. Stockpiles will be kept covered with polyethylene sheeting. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.
- The remedial contractor will excavate the GCM soil/fill area as shown on Figure 3 to approximately 10 ft. Approximately 130 CY (208 tons) of GCM-impacted soil/fill will be removed from the 1,800 SF area. These soils will be removed for off-Site disposal at Waste Management Landfill in Chaffee, New York.
- Post-excavation soil samples will be collected from each excavation at a frequency of up to one per 900 square feet at the bottom of the excavation and up to one per 30-feet along perimeter

sidewalls and analyzed for TCL VOCs + TICs and TCL SVOCs + TICs. The depth of the bottom and sidewall samples will be recorded.

- Samples will also be inspected for the presence of GCM, along with PID, visual, and olfactory impacts. Criteria for completion of GCM excavations includes no remaining evidence of GCM. The visual observations and PID readings will be recorded and included in the FER.
- If GCM is present beyond the anticipated perimeter or depth, the remedial contractor will excavate, transport, and dispose additional soils at the direction of Roux. Further, if additional GCM is identified outside of the proposed excavation/ISS extents then NYSDEC must be notified and presented with plans for addressing this additional GCM.
- Following excavation, the remedial contractor will backfill the area with on-Site soil and/or imported backfill material.
- Final excavation limits will be surveyed with a handheld Trimble GeoXH GPS unit and excavation depths will be manually measured in the field. Horizontal limits and locations of final remedial excavations will be presented on the Site Map in the FER.

3.2.4 GCM Area 4

- The remedial contractor will excavate non-impacted soil/fill that resides over the GCM, to approximately 5 ft; staging that soil/fill on-site. Staged material will be reused as backfill within the GCM excavation area after removal of the underlying GCM. NYSDEC-approved imported material will be placed above the on-site backfill material to final grades. The estimated quantity of non-impacted soil/fill is approximately 270 CY.
- Stockpiled soil/fill will be secured with proper erosion controls to minimize runoff and dust generation. Soil stockpiles will be continuously encircled with silt socks. Stockpiles will be kept covered with polyethylene sheeting. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.
- The remedial contractor will excavate the GCM soil/fill area as shown on Figure 3 to approximately 2 feet above the water table. Approximately 900 CY (1,440 tons) of GCM-impacted soil/fill will be removed from the 1,800 SF area. These soils will be removed for off-Site disposal at Waste Management Landfill in Chaffee, New York. The depth of the excavation bottom will be recorded prior to the start of ISS activities.
- ISS will be completed from 2 ft above the water table to nominally 2 ft below the water table or deeper as needed (i.e. at SB-3, where GCM was identified to 24 fbgs) to reach the required depth to address all GCM impacts. During ISS of known areas where deeper ISS is needed (approximate 20 ft by 20 ft), if GCM is observed along any side walls, indicating a greater horizontal extent of GCM than expected, ISS will be continued in that direction until no further GCM is observed. ISS will be completed by mechanically mixing soils with Portland cement/Slag cement (or a similar reagent) using an excavator bucket as necessary to adequately homogenize the cement material within the GCM-impacted soil interval.
- Solidified soil samples will be collected to confirm that physical performance requirements for ISS are met. Core samples will be collected after curing for up to 28 days and will be tested for minimum unconfined compressive strength, maximum permeability, free liquids, mixing uniformity, and mixing depth.
- Post-excavation soil samples will be collected from the excavation at a frequency up to one per 30-feet along perimeter sidewalls and analyzed for TCL VOCs + TICs and TCL SVOCs + TICs. The depth of the sidewall samples will be recorded.

- Samples will also be inspected for the presence of GCM, along with PID, visual, and olfactory impacts. Criteria for completion of GCM excavations includes no remaining evidence of GCM. The visual observations and PID readings will be recorded and included in the FER.
- If GCM is present beyond the anticipated perimeter or depth, the remedial contractor will excavate, transport, and dispose, or treat via ISS, additional soils at the direction of Roux. Further, if additional GCM is identified outside of the proposed excavation/ISS extents then NYSDEC must be notified and presented with plans for addressing this additional GCM.
- Following excavation and treatment, the remedial contractor will backfill the area with on-Site soil and/or imported backfill material.
- Final excavation limits will be surveyed with a handheld Trimble GeoXH GPS unit and excavation depths will be manually measured in the field. Horizontal limits and locations of final remedial excavations will be presented on the Site Map in the FER.

3.2.5 GCM Area 5

- The remedial contractor will excavate non-impacted soil/fill that resides over the GCM, to approximately 4 ft; staging that soil/fill on-site. Staged material will be reused as backfill within the GCM excavation area after removal of the underlying GCM. NYSDEC-approved imported material will be placed above the on-site backfill material to final grades. The estimated quantity of non-impacted soil/fill is approximately 370 CY.
- Stockpiled soil/fill will be secured with proper erosion controls to minimize runoff and dust generation. Soil stockpiles will be continuously encircled with silt socks. Stockpiles will be kept covered with polyethylene sheeting. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.
- The remedial contractor will excavate the GCM soil/fill area as shown on Figure 3 to approximately 8 ft. Approximately 490 CY (784 tons) of GCM-impacted soil/fill will be removed from the 3,300 SF area. These soils will be removed for off-Site disposal at Waste Management Landfill in Chaffee, New York.
- Post-excavation soil samples will be collected from each excavation at a frequency of up to one per 900 square feet at the bottom of the excavation and up to one per 30-feet along perimeter sidewalls and analyzed for TCL VOCs + TICs and TCL SVOCs + TICs. The depth of the bottom and sidewall samples will be recorded.
- Samples will also be inspected for the presence of GCM, along with PID, visual, and olfactory impacts. Criteria for completion of GCM excavations includes no remaining evidence of GCM. The visual observations and PID readings will be recorded and included in the FER.
- If GCM is present beyond the anticipated perimeter or depth, the remedial contractor will excavate, transport, and dispose additional soils at the direction of Roux. Further, if additional GCM is identified outside of the proposed excavation/ISS extents then NYSDEC must be notified and presented with plans for addressing this additional GCM.
- Following excavation, the remedial contractor will backfill the area with on-Site soil and/or imported backfill material.
- Final excavation limits will be surveyed with a handheld Trimble GeoXH GPS unit and excavation depths will be manually measured in the field. Horizontal limits and locations of final remedial excavations will be presented on the Site Map in the FER

3.2.6 GCM Area 6

- The remedial contractor will excavate non-impacted soil/fill that resides over the GCM, to approximately 14 ft; staging that soil/fill on-site. Staged material will be reused as backfill within the GCM excavation area after removal of the underlying GCM. NYSDEC-approved imported material will be placed above the on-site backfill material to final grades. The estimated quantity of non-impacted soil/fill is approximately 580 CY.
- Stockpiled soil/fill will be secured with proper erosion controls to minimize runoff and dust generation. Soil stockpiles will be continuously encircled with silt socks. Stockpiles will be kept covered with polyethylene sheeting. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.
- The remedial contractor will excavate the GCM soil/fill area as shown on Figure 3 to approximately 18 ft. Approximately 180 CY (288 tons) of GCM-impacted soil/fill will be removed from the 1,200 SF area. These soils will be removed for off-Site disposal at Waste Management Landfill in Chaffee, New York.
- Post-excavation soil samples will be collected from each excavation at a frequency of up to one per 900 square feet at the bottom of the excavation and up to one per 30-feet along perimeter sidewalls and analyzed for TCL VOCs + TICs and TCL SVOCs + TICs. The depth of the bottom and sidewall samples will be recorded.
- Samples will also be inspected for the presence of GCM, along with PID, visual, and olfactory impacts. Criteria for completion of GCM excavations includes no remaining evidence of GCM. The visual observations and PID readings will be recorded and included in the FER.
- If GCM is present beyond the anticipated perimeter or depth, the remedial contractor will excavate, transport, and dispose additional soils at the direction of Roux. Further, if additional GCM is identified outside of the proposed excavation/ISS extents then NYSDEC must be notified and presented with plans for addressing this additional GCM.
- Following excavation, the remedial contractor will backfill the area with on-Site soil and/or imported backfill material.
- Final excavation limits will be surveyed with a handheld Trimble GeoXH GPS unit and excavation depths will be manually measured in the field. Horizontal limits and locations of final remedial excavations will be presented on the Site Map in the FER

3.3 Subsurface Piping

The remedial contractor will excavate any subsurface piping encountered during GCM excavations. If piping extends beyond the extent of the impacted soil excavation, piping will be traced and removed until the piping terminus or a property boundary is encountered. Pipe contents will be extracted and drummed prior to recycling/disposal off-site. Removed piping will be cleaned of residue and transported off-site to a designated recycling or disposal facility. Piping extending beyond the property line will be cut, capped, and located by GPS.

3.4 Post- Excavation Sampling QA/QC

An equivalent Category B deliverables package will be furnished with the data to allow data evaluation and preparation of a DUSR by an independent, third-party data validation expert. Expedited turnaround times may be requested for the analytical results to minimize the time that the excavation(s) remains open. QA samples will be collected to support the verification sample data evaluation. The QA samples

will include a minimum of one matrix spike, one matrix spike duplicate, and one blind duplicate per 20 verification samples. Dedicated equipment will be used to avoid the need for equipment blanks.

3.5 ISS Performance Verification QA/QC

After the completion of ISS mixing activities, the solidified soil will be allowed to cure for up to 28 days. After the mixture has cured, core samples will be collected from the solidified soil and post-treatment tests will be completed to ensure that the solidified soil meets ISS performance requirements. One core sample will be collected for every 5,000 square feet of the treatment area, but no less than two cores will be collected from each treatment area (AOC). Coring activities may be completed while wet. Sample cores analyzed prior to the 28-day curing period that pass performance requirements will be deemed acceptable. Cores should be biased toward areas with the greatest extent of GCM and should be extended to at least one foot below the extent of solidified soils. If less than 60% of the core is recovered, a new core will need to be collected at that location. The location may be abandoned if two cores are collected with less than 60% recovery.

Required testing and performance requirements are summarized in the table below.

Test	Test Value
Min. Unconfined Compressive Strength (UCS), ASTM D1633	Minimum of 50 psi
Max. Permeability, ASTM D5084 (at 10 psi confining pressure)	1x10-6 cm/sec
Free Liquids	No Free Liquids
Mixing Uniformity	Material thoroughly and uniformly mixed vertically and horizontally within each cell
Mixing Depth	As shown on Drawings

Core samples will also be visually inspected for visible NAPL, non-mechanical induced cracking, and to determine the percent of the core recovered. In addition, NAPL coating on drilling tools and NAPL in the drill water (if water-based drilling is utilized) should be noted. If any performance requirements are not met, or any visual signs of NAPL are observed, the NYSDEC will be notified to discuss whether corrective action is required. Quality assurance cores will be stored in core boxes and be available for inspection until completion of remedial action or a specific area of ISS treatment.

The following documentation will be included in the FER:

- Figure showing coring locations
- Photographs of each core collected from the solidified soil
- Description of the drilling method
- Field coring logs

3.6 Excavation Backfill

Following NYSDEC concurrence that the remedial excavation/treatment is complete, the excavation will be backfilled with approved backfill material in accordance with DER-10.

Backfill material may consist of the following materials:

- Gravel, rock, or stone, consisting of virgin material, from a permitted mine or quarry may be imported, without chemical testing, if it meets the requirements of DER-10, or as otherwise approved by NYSDEC.
- Recycled concrete or brick from a NYSDEC-registered construction and demolition debris processing facility may be imported, without chemical testing, if it meets the requirements of DER-10, or as otherwise approved by NYSDEC.
- Imported soil/fill originating from known off-site sources having no evidence of disposal or releases of hazardous substances, hazardous, toxic or radioactive wastes, or petroleum, and which meets the chemical criteria for Commercial Use Sites in DER-10, Appendix 5. No off-site materials meeting the definition of a solid waste as defined in 6NYCRR, Part 360-1.2(a) shall be used as backfill.
- Re-use of on-site soil/fill, including excavated overburden soil/fill removed to access GCM. Any debris within the on-site soil/fill will be removed off-Site and disposed of appropriately.

Imported soil/fill material will be subject to characterization requirements in accordance with DER-10 Table 5.4(e)10, or as otherwise approved by NYSDEC prior to import to the Site. Characterization testing will be performed by an independent, NYSDOH ELAP-approved laboratory. An equivalent Category B deliverables package will be furnished with the data to allow data evaluation and preparation of a Data Usability Summary Report by an independent, third-party data validation expert. QA samples will be collected to support the data evaluation. The QA samples will include a minimum of one matrix spike, one matrix spike duplicate, and one blind duplicate per 20 verification samples.

An import request for 15,000 cubic yards of 2-inch minus bank run gravel from Portville-Obi Stone LLC has been included in Appendix E.

3.7 Groundwater Management

Water removed from excavations and surface water run-in to excavations during the impacted soil removal will be handled on-site prior to discharge to the municipal sewer. In general, water removed from excavations will be stored/settled in a portable storage tank, and if deemed necessary, will be pumped through a bag or cartridge filter prior to treatment using granular activated carbon (GAC). Following completion of excavation work, settled solids remaining in the tank and spent filter bags will be disposed of off-site.

If the accumulated waters require treatment, the spent GAC will be characterized and regenerated off-site, or disposed at a permitted disposal facility in accordance with applicable federal and state regulations. The storage tank will be decontaminated via pressure washing. Roux or the Site owner will coordinate with the municipal sanitary sewer authority to obtain any necessary temporary sewer discharge permits.The temporary discharge permit will be provided to NYSDEC prior to the discharge of any water related to the remedial actions to the municipal sewer. NYSDEC will be copied on any monitoring reports (if any) related to this permit.

3.8 Odor Management Plan

During intrusive remedial activities, the excavation of GCM and/or ISS activities may result in nuisance odors that require mitigation. Odor control measures may be implemented during intrusive activities, if needed, to address nuisance odors, including:

- Minimizing size and duration of open excavations;
- Minimizing size and duration of temporary soil/fill stockpiles, if any;
- Covering temporary soil/fill stockpiles, if any, with plastic sheeting;
- Placing tarps over open excavation faces when active excavation of that face is not being completed;
- Application of a commercially available odor control product on active excavation faces and/or stockpiled soil/fill;
- Application of commercially available odor masking product on the active excavation faces and/or upwind of the nuisance area;
- If odor mitigation measures noted above do not effectively mitigate nuisance odors, the excavation(s) may be backfilled and excavation work protocols reassessed.

This Plan is intended to supplement vapor and particulate monitoring that will be implemented at the Site in accordance with the Community Air Monitoring Plan (see Section 4.1). As part of this Odor Management Plan, odor assessments will be completed approximately every two hours during active remedial activities. Roux personnel will document the odor assessments on Inspector's Daily Reports and, when odor mitigation concerns require mitigation, problem identification and corrective measures reports as necessary. These project documentation forms are provided in Appendix F.

3.9 Cover System

A cover system will be installed across the Site to prevent direct contact with underlying soil. The planned cover system includes vegetated soil cover, gravel, and hardscaped (building, asphalt, concrete) areas. Soils imported for use as cover will be subject to analysis per DER-10 and NYSDEC approval. Existing asphalt and concrete areas are present at the Site surrounding Building 1. Areas of the existing asphalt/concrete to remain will be inspected and repaired as necessary to ensure they properly function as a part of the Site-wide cover system. A planned cover system layout is provided on Figure 5. Where soil cover system transitions to hardscape, and/or at the limits of the BCP property, the cover will be keyed-in as necessary to achieve the minimum 12-inches of approved backfill material.

3.10 Active Sub-Slab Depressurization System

Based on the SVI results from the RI in Building 1, an ASD system may be required within future buildings. Therefore, SVI will be reevaluated at a later date in accordance with the Site Management Plan.

4. Remedial Activities Support Documents

4.1 Health and Safety Protocols

Roux has prepared a HASP for use by our employees in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120. The HASP, provided in Appendix C, includes the following site-specific information:

- A hazard assessment.
- Training requirements.
- Definition of exclusion, contaminant reduction, and other work zones.
- Monitoring procedures for Site operations.
- Safety procedures.
- Personal protective clothing and equipment requirements for various field operations.
- Disposal and decontamination procedures.

The HASP also includes a contingency plan that addresses potential site-specific emergencies, and a Community Air Monitoring Plan as described above.

Health and safety activities will be monitored throughout the remedial field activities. A member of the field team will be designated to serve as the Site Safety and Health Officer (SSHO). The SSHO will report directly to the Project Manager and the Corporate Health and Safety Coordinator. The HASP will be subject to revision as necessary, based on new information that is discovered during the field investigation and/or remedial activities.

4.1.1 Community Air Monitoring

Real-time community air monitoring will be performed during remedial activities at the Site. A Community Air Monitoring Plan is included with Benchmark-TurnKey's HASP. Particulate and VOC monitoring will be performed along the downwind perimeter of the work area during subgrade excavation, grading, soil/fill handling and ISS activities in accordance with this plan. The CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC. Accordingly, it follows procedures and practices outlined under DER-10 Appendix 1A (NYSDOH's Generic Community Air Monitoring Plan) and Appendix 1B (Fugitive Dust and Particulate Monitoring).

An Odor Control Plan has been added to the CAMP and is also provided in Section 3.8 of this work plan.

4.1.2 Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 part-per-million, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 micrograms per cubic meter, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 micrograms per cubic meter or less at the monitoring point.
- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

4.2 Citizen Participation Activities and Fact Sheets

NYSDEC will coordinate and lead community relations throughout the course of the project with support from Roux as requested. A Citizen Participation (CP) Plan has previously been prepared as a separate document and submitted to the NYSDEC. A copy of the approved CP Plan was placed at the designated document repository.

The NYSDEC, with input from Roux, 351 Franklin will issue project-related fact sheets to keep the public informed of BCP activities.

5. Reporting and Schedule

Roux environmental professionals will be on-site full-time during all remedial activities to monitor and document: construction stake-out; record drawings; daily reports of remediation activities; community air monitoring results; post-excavation/treatment sampling and analysis; and progress photographs and sketches.

Written weekly progress reports will be completed commencing the week following the start of remedial action activities and provided to NYSDEC weekly. Weekly reports will be maintained on-site and will include relevant remedial action items completed in the week prior. Full details and supporting documentation of the remedial activities will be included in the Final Engineering Report (FER).

Work will commence upon NYSDEC approval of the work plan, anticipated July 2023.

5.1 Remedial Activities Reporting

5.1.1 Construction Monitoring

A Roux scientist or engineer will be on-site on a full-time basis to document remedial activities. Such documentation will include, at minimum, daily reports of Remedial Action activities, community air monitoring results, photographs and sketches. CAMP summary tables will be provided to the NYSDOH project manager as requested. Both the Department and NYSDOH project managers will be notified of any CAMP exceedances that require corrective actions or shut down of work within one business day. CAMP monitoring will be summarized on the daily reports. Appendix F contains sample project documentation forms.

The completed reports will be available on-site and submitted to the NYSDEC as part of the FER. The NYSDEC will be promptly notified of problems requiring modifications to this Work Plan prior to proceeding or completion of the construction item.

Photo documentation of the remedial activities will be prepared by a field representative throughout the duration of the project as necessary to convey typical work activities, changed conditions, and/or special circumstances. If determined to be necessary, periodic on-site construction progress meetings will be held to which NYSDEC will receive an invitation.

5.2 Final Engineering Report

A FER will be prepared at the conclusion of remedial activities. The FER will include the following information and documentation, consistent with the NYSDEC's DER-10 Technical Guidance for Site Remediation:

- Introduction and background.
- Planimetric map showing the areas remediated, including significant site features.
- Map showing the lateral limits of any excavations and/or treatment areas. Vertical limits of each excavation/treatment area will be noted on this map.
- Tabular summaries of unit quantities including: volume of soil excavated and/or treated and disposition of excavated/treated soil; and, origin and volume of imported soil.

- Planimetric map showing location of all verification and other sampling locations with sample identification labels/codes.
- Tabular comparison of verification and other sample analytical results to SCOs and SSALs. An explanation shall be provided for any results exceeding acceptance criteria.
- Documentation on the disposition of impacted soil removed.
- Documentation of the cover system, including survey elevations.
- Copies of daily inspection reports and, if applicable, problem identification and corrective measure reports.
- Photo documentation of remedial activities.
- Text describing the remedial activities performed; a description of any deviations from the Work Plan and associated corrective measures taken; and other pertinent information necessary to document that the Site activities were carried out in accordance with this Work Plan.

In addition, 351 Franklin will subcontract for third-party data review of post-excavation verification data by a qualified, independent data validation expert. Specifically, a DUSR will be prepared, with appropriate data qualifiers added to the results. The DUSR format will follow the NYSDEC's September 1997 DUSR guidelines and draft DER-10 guidance. The DUSR and any necessary qualifications to the data will be appended to the FER.

5.3 Site Management Plan

For any BCP site not cleaned up to NYSDEC Part 375 USCOs, preparation of a SMP that describes site-specific Institutional Controls and/or Engineering Controls (IC/EC) is a required component of the final remedy. Therefore, as part of the final remedy, a SMP will be prepared. Consistent with NYSDEC BCP requirements, the SMP will include the following components.

Institutional Controls and Engineering Controls Plan (IC/EC Plan) that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls

Imposition of an institutional control in the form of an Environmental Easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for commercial use or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or Cattaraugus County DOH; and,
- require compliance with the Department approved Site Management Plan.

Engineering Controls

ISS will be implemented to solidify soil that is below the water table and not readily excavated. The treatment zone will extend from the top of the groundwater table, at approximately 13 to 20 feet below

grade, to the terminal depth of grossly contaminated material. ISS is a process that binds the soil particles in place creating a low permeability mass. The contaminated soil will be mixed in place together with solidifying agents (typically Portland cement) or other binding agents using an excavator or augers. The soil and binding agents are mixed to produce a solidified mass resulting in a low permeability monolith. The resulting solid matrix reduces or eliminates mobility of contamination and reduces or eliminates the matrix as a source of groundwater contamination.

Where soil cover is required over the ISS treatment area, the remedial design will strive to maximize the cover thickness to be at least four feet, except in areas where design grades or access restriction prevent this thickness of soil cover. The soil cover may not be less than one foot in thickness. In all ISS treatment areas, the upper one foot of the soil cover must be soil meeting the SCOs for commercial use, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. For areas where solidified material underlies the cover, the solidified material itself will serve as the demarcation layer due to the nature of the material.

Groundwater monitoring will be required around the solidified areas to confirm that the treatment has sufficiently addressed the source areas. Additional ISS or source removal may be required if the treatment is not effective removing the source of groundwater contamination.

A site cover will be required to allow for commercial use of the site in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs. Where a soil cover is to be used it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

This IC/EC plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision for evaluation of the potential for soil vapor intrusion in Building 1, including provision for implementing actions recommended to address exposures related to soil vapor intrusion, if the use of the building change from its current use as a vehicle maintenance facility;
- a provision that should a building foundation, building slab, or other hardscape be removed in the future, a cover system will be placed in any areas where the upper one foot of exposed surface soil exceeds the applicable SCOs;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and,

- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department; and,
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

6. References

Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. *Pre-Design Investigation Work Plan, 351 Franklin Street Site, Olean, New York, BCP Site No. C905047*. June 2022.

Benchmark Civil/Environmental Engineering & Geology, PLLC in association with TurnKey Environmental Restoration, LLC. *Remedial Investigation/Alternatives Analysis Report, 351 Franklin Street Site, BCP Site No. C905047, Olean, New York*. Revised July 2022.

Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC. *Remedial Investigation Work Plan, 351 Franklin Street Site, Olean, New York*. Revised January 2021.

New York State Department of Environmental Conservation. *351 Franklin Street Site, Brownfield Cleanup Program, Olean, Cattaraugus County, Site No. C905047*. July 2022.

New York State Department of Environmental Conservation. *6 NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 and 375-6.* Effective December 14, 2006.

New York State Department of Environmental Conservation. *CP-43 Monitoring Well Decommissioning Policy*. November 2009.

New York State Department of Environmental Conservation. *DER-10 Technical Guidance for Site Investigation and Remediation.* May 2010.

New York State Department of Environmental Conservation. *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs*. November 2022.

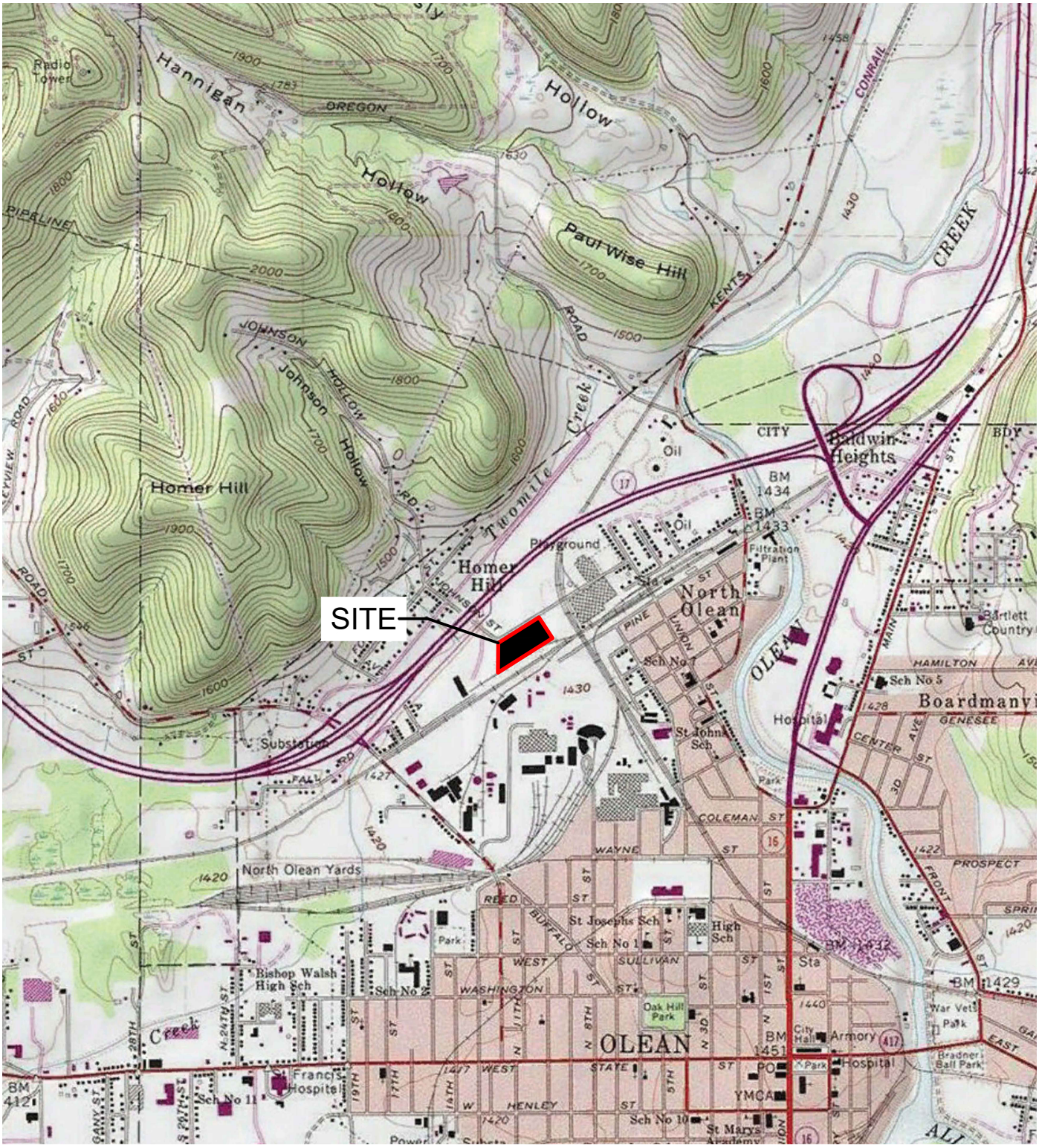
New York State Department of Environmental Conservation. *Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes*. November 2005.

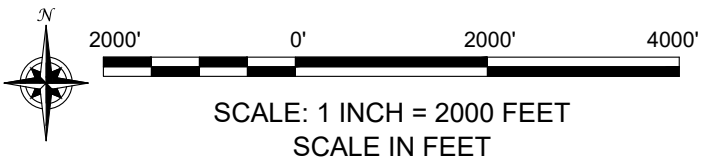
New York State Department of Health. *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. October 2006.

United States Environmental Protection Agency. *Radon Prevention in the Design and Construction of Schools and Other Large Buildings, Third Printing with Addendum*. June 1994.

FIGURES

1. Site Vicinity and Location Map
2. Site Plan (Aerial)
3. Remedial Activities – GCM Removal Areas and In-Situ Solidification (ISS) Areas
4. Proposed Area of Removal of Top Foot of Soil
5. Planned Site Cover System





SCALE: 1 INCH = 2000 FEET
SCALE IN FEET
(approximate)

Title:

SITE LOCATION AND VICINITY MAP

REMEDIAL ACTION WORK PLAN

351 FRANKLIN STREET SITE

BCP SITE NO. C905047
OLEAN, NEW YORK

Prepared for:

351 FRANKLIN STREET LLC & PSF OF WNY, LLC

ROUX

Compiled by: RFL	Date: SEPTEMBER 2023	FIGURE
Prepared by: RFL	Scale: AS SHOWN	1
Project Mgr: MAL	Project: 0510-023-001	
File: FIGURE 1 - SITE LOCATION AND VICINITY MAP.DWG		

F:\CAD\TURNKEY\351 FRANKLIN STREET, LLC\RAW\FIGURE 1 - SITE LOCATION AND VICINITY MAP.DWG

N

100' 0' 100' 200'

SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

LEGEND:

BCP SITE BOUNDARY

PARCEL BOUNDARY

NOTE:
1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE SEPTEMBER 2023.

Title:

SITE PLAN AERIAL

REMEDIAL ACTION WORK PLAN

351 FRANKLIN STREET SITE

BCP SITE NO. C905047
OLEAN, NEW YORK

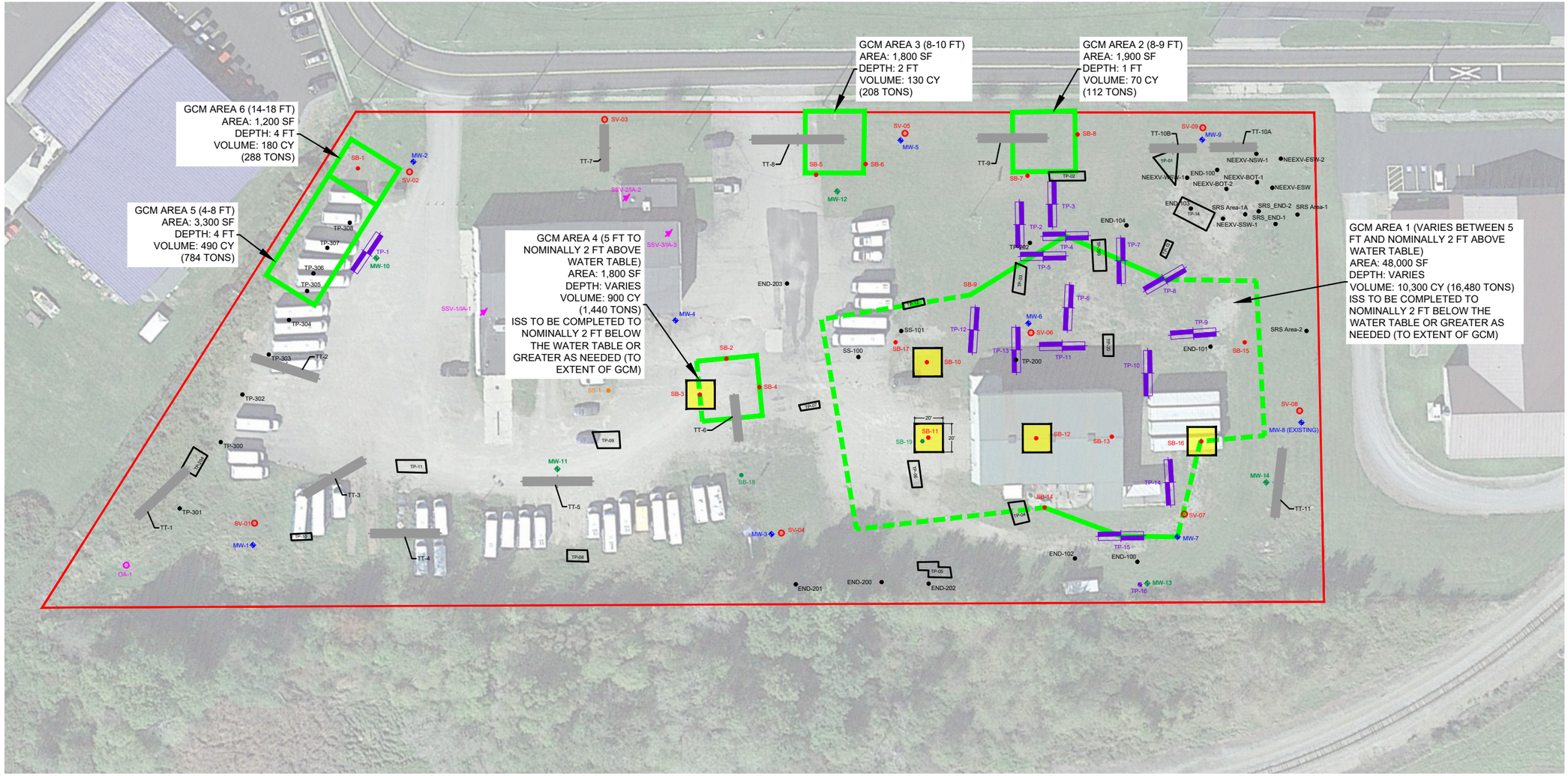
Prepared for:

351 FRANKLIN STREET LLC & PSF OF WNY, LLC

ROUX

Compiled by: RFL	Date: SEPTEMBER 2023	FIGURE
Prepared by: RFL	Scale: AS SHOWN	2
Project Mgr: MAL	Project: 0510-023-001	
File: FIGURE 2 - SITE PLAN (AERIAL).DWG		

F:\CAD\TURNKEY\351 FRANKLIN STREET, LLC\RAWP\FIGURE 2 - SITE PLAN (AERIAL).DWG



LEGEND:

	BCP SITE BOUNDARY
SRS Area-1 ●	PREVIOUS SAMPLE LOCATIONS (BY ROUX, 2015)
END-100 ●	PREVIOUS SAMPLE LOCATION (BY ROUX, 2016)
TP-01	PREVIOUS SHALLOW TEST PIT (BY ROUX, 2016)
TP-302 ●	PREVIOUS SAMPLE LOCATION (BY ROUX, 2017)
SS-005 ●	PREVIOUS SAMPLE LOCATION (BY ROUX, 2017)
TP-1	RI TEST PIT
TT-1	RI TEST TRENCH
MW-1	RI MONITORING WELL/SOIL BORING/SHALLOW SURFACE SAMPLE
SS-1 ●	RI SHALLOW SURFACE SAMPLE
SB-1 ●	RI ADDITIONAL SOIL BORING
SV-01	RI SOIL VAPOR SAMPLE
SSV-1/IA-1	RI SUBSLAB SOIL VAPOR/INDOOR AIR SAMPLE
OA-1	RI OUTDOOR AIR SAMPLE
	PROPOSED EXCAVATION EXTENT.
	PROPOSED EXCAVATION EXTENT (APPROXIMATE, SEE NOTE 2).
MW-1	PDI MONITORING WELL/SOIL BORING
SB-1 ●	PDI SOIL BORING
	APPROX DIMENSIONS 20'X20' DEEP ISS AREA (GREATER THAN 2 FT BELOW THE WATER TABLE):

LOCATION	DEPTH TO BOTTOM OF GCM (FBGS)
SB-3	24
SB-10	26
SB-11	24
SB-12	23.5
SB-16	22

NOTES:
1. GCM = GROSSLY CONTAMINATED MEDIA
2. DOTTED LINE INDICATES ESTIMATED EDGE THAT MAY BE EXTENDED IF ADDITIONAL GCM IS IDENTIFIED.
3. PDI = PRE-DESIGN INVESTIGATION
4. ISS = IN-SITU STABILIZATION

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)

Title:
REMEDIAL ACTIVITIES - GCM REMOVAL AREAS AND IN-SITU STABILIZATION (ISS) AREAS
REMEDIAL ACTION WORK PLAN
351 FRANKLIN STREET SITE
BCP SITE NO. C905047
OLEAN, NEW YORK

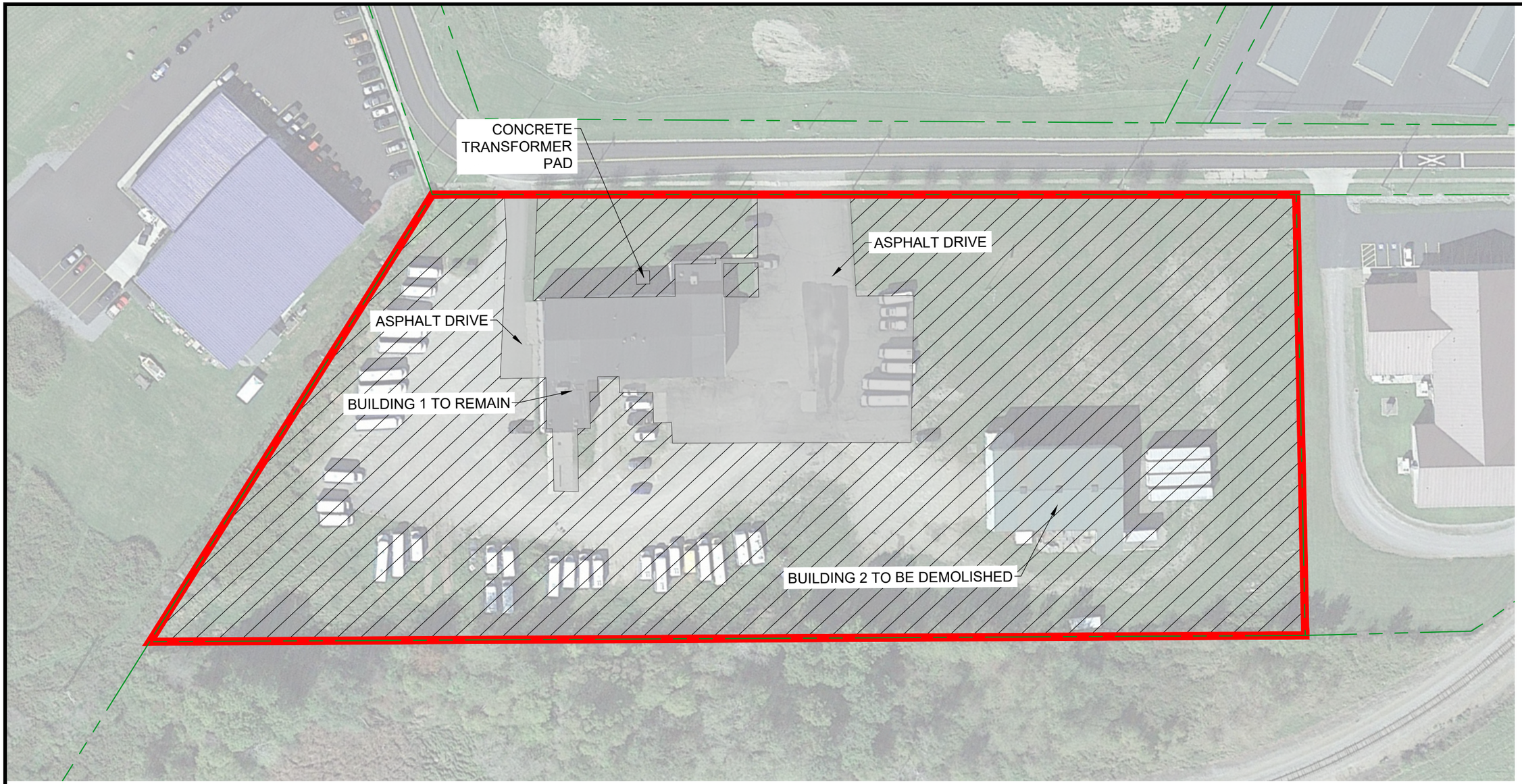
Prepared for:
351 FRANKLIN STREET LLC & PSF OF WNY, LLC

ROUX

Compiled by: RFL	Date: SEPTEMBER 2023
Prepared by: RFL	Scale: AS SHOWN
Project Mgr: MAL	Project: 0510-023-001
File: FIGURE 3 - REMEDIAL ACTIVITIES.DWG	

FIGURE 3

F:\CAD\TURNKEY\351 FRANKLIN STREET, LLC\RAWP\FIGURE 3 - REMEDIAL ACTIVITIES.DWG



N

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)

LEGEND:

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- AREA OF ONE-FOOT CUT
- HARDSCAPE AREA TO REMAIN

Title:

PROPOSED AREA OF REMOVAL OF TOP FOOT OF SOIL

REMEDIAL ACTION WORK PLAN

351 FRANKLIN STREET SITE

BCP SITE NO. C905047
OLEAN, NEW YORK

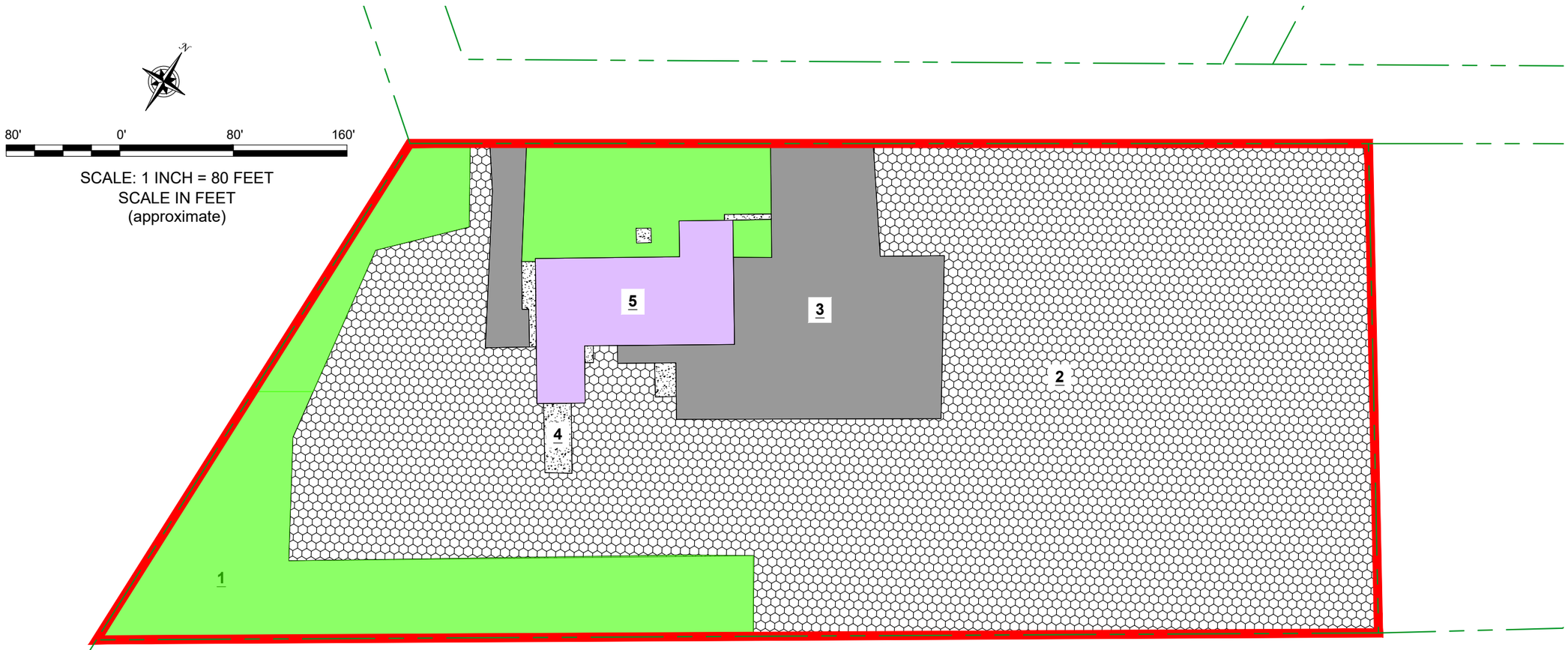
Prepared for:

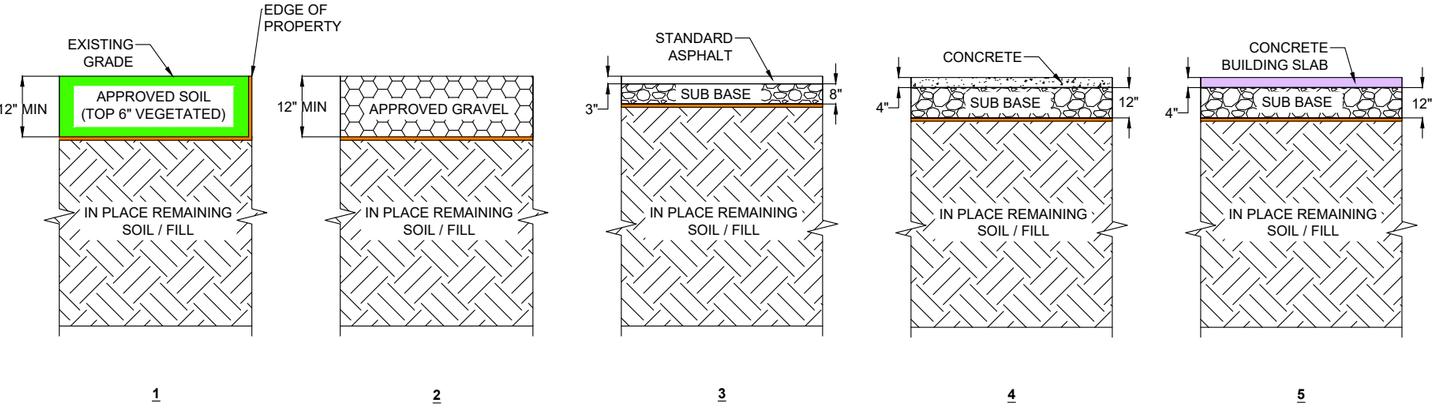
351 FRANKLIN STREET LLC & PSF OF WNY, LLC

ROUX

Compiled by: RFL	Date: SEPTEMBER 2023	FIGURE
Prepared by: RFL	Scale: AS SHOWN	4
Project Mgr: MAL	Project: 0510-023-001	
File: FIGURE 4 - PROPOSED AREA OF REMOVAL OF TOP FOOT OF SOIL.DWG		

F:\CAD\TURNKEY\351 FRANKLIN STREET, LLC\RAWP\FIGURE 4 - PROPOSED AREA OF REMOVAL OF TOP FOOT OF SOIL.DWG





LEGEND:

- BCP SITE BOUNDARY
- PARCEL BOUNDARY
- STANDARD DUTY ASPHALT
- GREEN SPACE
- GRAVEL COVER
- BUILDING
- CONCRETE
- DEMARCATION LAYER

Title:

PLANNED SITE COVER SYSTEM

REMEDIAL ACTION WORK PLAN
351 FRANKLIN STREET SITE
BCP SITE NO. C905047
OLEAN, NEW YORK

Prepared for:
351 FRANKLIN STREET LLC & PSF OF WNY, LLC

ROUX

Compiled by: RFL	Date: SEPTEMBER 2023
Prepared by: RFL	Scale: AS SHOWN
Project Mgr: MAL	Project: 0510-023-001
File: FIGURE 5 - PLANNED SITE COVER SYSTEM.DWG	

FIGURE 5

F:\CAD\TURNKEY\351 FRANKLIN STREET, LLC\RAWP\FIGURE 5 - PLANNED SITE COVER SYSTEM.DWG

APPENDICES

A. Historic, RI, and PDI Field Logs and Well Completion Details
B. Master Erosion Control Plan
C. Health and Safety Plan
D. Demolition Permit
E. Import Request
F. Project Documentation Forms
G. Electronic Copy

APPENDIX A

Historic, RI, and PDI Field Logs and Well Completion Details

Project No: T0510-019-001

Borehole Number: MW-1

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
-1.0									
	502.3 / 0.0	Ground Surface							
	501.8 / 0.5	***Topsoil*** Dark brown, moist, mostly fine sand with organics, few fine gravel.l	1	9	0.9		0.0		
		Poorly Graded Fine Sand Brown, moist, mostly fine sand, with little fine gravel and few silt, medium dense.	2	7	0.7		1.0		
4.0	498.3 / 4.0								
	497.3 / 5.0	***Sandy Lean Clay*** Reddish Brown, moist, mostly clay, some fine sand, little fine gravel, stiff.	3	20	1.0		1.9		
		Poorly Graded Sand with Gravel Brown, moist, mostly fine sand, little fine gravel, few silt, slight petroleum odor at 12.0 fbgs.	4	11	0.9		3.5		
9.0			5	50 / 2	0.6		4.0		
			6	50 / 4	0				
			7	50 / 2	13		4.4		
14.0	488.3 / 14.0								
		Poorly Graded Gravel Reddish brown, wet (14.0 fbgs, perched), mostly fine gravel, few find sand, trace silt. loose, petroleum odor.	8	17	1.2		0.8		
	486.8 / 15.5								
	486.3 / 16.0	***Poorly graded Find Sand*** Black, wet, mostly fine sand, few fine gravel, few silt, petroleum odor	9	50 / 4	0.7		0.0		
		Poorly graded Fine Sand with Gravel Grey/brown, moist, mostly fine sand, little fine gravel, slight petroleum odor.		50			1.0		

Well Completion Details: Concrete; Protective Casing; 2" PVC Riser; Cemnt/Bentonite grout; Bentonite chips; 00N Silica Sand; 15 ft. 2" PVC Screen, 0.010" slot screen (26.5 to 11.5 ft)

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/2/ 21 - 2/3/21

Hole Size: 8 1/4-inch
Stick-up: 2.38 ft.
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-1

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

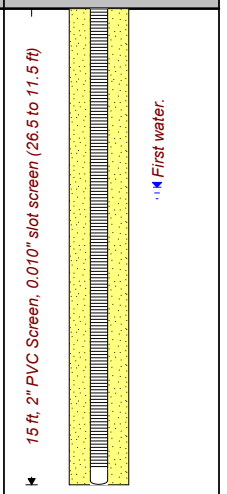
Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 12.5 / 25)	Lab Sample	Well Completion Details or Remarks
	482.3 / 20.0	As above, grey, wet (21.5 fbgs).	10	5	0.5		0.0, 1.6		
			11	50 / 4	0.3		1.0		
	480.3 / 22.0	***Silty Sand*** Grey/brown, wet, mostly fine sand with some silt, few fine gravel.	12	84	0.6		1.4		
23.0		Auger refusal at 26.5 fbgs.	13	50 / 2	0.5		1.7		
			14	50 / 5	0.5		1.0		
28.0	474.3 / 28.0	End of Borehole							
33.0									
38.0									



Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/2/ 21 - 2/3/21

Hole Size: 8 1/4-inch
Stick-up: 2.38 ft.
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-2

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 1000 / 2000)	Lab Sample	Well Completion Details or Remarks
0.0	500.5 / 0.0	Ground Surface							
		Topsoil with Fill Dark brown/black, moist, mostly silt, some fine sand, few fine gravel, yellow brick.	1	24	0.8		0.0		
	498.5 / 2.0	***Silty Sand*** Brown, moist, mostly fine sand, little silt, few fine gravel, medium dense.	2	13	0.6		1.1		
5.0			3	8	0.2		1.7		
	494.5 / 6.0	***Poorly Graded Sand with Silt and Gravel*** Brown, moist, mostly fine sand, little fine gravel, few silt, medium dense.	4	19	1.0		2.2		
			5	45	0.8		4.3		
10.0			6	40	1.2		4.4		
	488.0 / 12.5	***Poorly Graded Sand with Gravel*** Brown, moist, mostly fine sand, some fine gravel, trace silt.	7	83	1.2		5.0		
	486.5 / 14.0	***Poorly Graded Sand with Silt*** Grey, moist, mostly fine sand, little silt, few fine gravel, petroleum like odor.	8	76	1.4		619.3		
15.0	484.5 / 16.0	As above, wet (17.5 fbgs).	9	32	1.2		948.6		
	482.5 / 18.0	As above.	10	25	1.0		1121		
20.0	480.5 / 20.0						439		

Well Completion Details: Concrete; Road box; 2" PVC Riser; Cemnt/Bentonite grout; Bentonite chips; 00N Silica Sand; 10 ft., 2" PVC Screen, 0.010" slot (27 to 12 ft); First water.

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/3/21 - 2/5/21

Hole Size: 8 1/4-inch
Stick-up: Flushmount
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-2

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 1000 / 2000)	Lab Sample	Well Completion Details or Remarks
		As above, sheen on water.	11	22	1.0		1121; 778.3		
	478.5 22.0	***Poorly Graded Sand*** Black, wet, mostly fine sand, few silt, trace fine gravel, petroleum odor, sheen on water.	12	10	1.3		949.4		
25.0			13	18	1.2		1023		
	474.5 26.0	***Lean Clay with Sand*** Grey brown, moslty clay, few fine sand, medium plasticity, slight petroleum odor.	14	15	1.0		439		
	472.5 28.0	End of boring 28 fbgs. End of Borehole							
30.0									
35.0									
40.0									

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/3/21 - 2/5/21

Hole Size: 8 1/4-inch
Stick-up: Flushmount
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-3

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
-2.0									
	503.9	Ground Surface							
	0.0	***Topsoil*** Dark brown, moist, mostly fine sand with organics, few fine gravel. had auger refusal at 1.7 fbgs, due to 6 or 8-inch steel pipe.	1	8	0.5		0.0		
	501.9 2.0	***Silt with Sand and Fill*** Brown, moist, mostly silt, some sand, trace clay, with wood debris, petroleum odor.	2	4	0.8		137		
3.0	499.9 4.0	***Poorly Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, few silt, medium dense.	3	15	0.6		12.6		
			4	21	1.2		8.9		
	496.4 7.5	As above, grey, petroleum odor.							
8.0			5	20	1.3		149.1		
			6	10	1.1		251.6		
13.0			7	8	0.3		174.1		
			8	26	1.2		265		
			9	5 / 50 / 5	0.8		176.6 / 31.4		
18.0	485.9 18.0								

Well Completion Details: Concrete; Protective Casing; Cemnt/Bentonite grout; 2" PVC Riser; Bentonite chips; 15 ft, 2" PVC Screen, 0.010" slot screen (23.5 to 8.5 ft); First water.

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/1/ 21 - 2/2/21

Hole Size: 8 1/4-inch
Stick-up: 2.02 ft
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-3

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

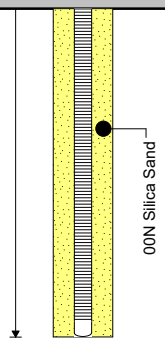
Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
		As above, wet (18.0 fbgs).	10	23 50 5	0.8		176.6 115.7		
	483.9 20.0	***Silty Sand with Gravel*** Grey, wet, mostly silt, some fine sand, trace few fine grave, trace clay, hard.	11	27 32 50 4	1.0		79.5		
22.0	481.9 22.0	As above. Auger refusal at 23.5 fbgs.	12	50 5	0.5		31.4		
	479.9 24.0	End of Borehole							
27.0									
32.0									
37.0									



Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/1/ 21 - 2/2/21

Hole Size: 8 1/4-inch
Stick-up: 2.02 ft
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-4

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	502.0 / 0.0	Ground Surface							
	0.0	***Asphalt***							
		Parking lot sub-base Brown, moist, mostly fine sand, little fine gravel, trace silt, hard.	1	56	0.3		0.0		
	500.0 / 2.0	***Poorly Graded Sand with Silt and Gravel*** Brown, moist, mostly fine sand, few silt, few fine gravel, trace clay.	2	7	1.0		2.9		
	498.0 / 4.0	***Poorly Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, few silt, medium dense.	3	16	1.6		1.7		
5.0			4	16	1.3		2.2		
	493.0 / 9.0	As above, grey, slight petroleum odor.	5	24	0.7		3.3		
10.0	492.0 / 10.0	Brown, moist, mostly fine sand, trace silt, trace fine gravel, dense, petroleum odor.	6	6	0.4		2.4		
			7	23	0.8		13.9		
15.0			8	39	1.0		217		
			9	48	1.1		271.3		
	484.0 / 18.0	As above, wet (18.0 fbgs), sheen.	10	43	1.2		318.2		
20.0							58.2		

Concrete
Road box
2" PVC Riser
Cemnt/Bentonite grout
Bentonite chips
15 ft, 2" PVC Screen, 0.010" slot (29 to 14 ft)
First water.

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/8/21

Hole Size: 8 1/4-inch
Stick-up: Flushmount
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-4

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

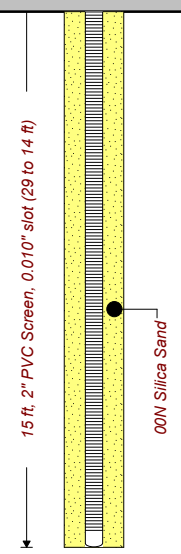
Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
	481.0 / 21.0	***Clayey Sand*** Grey, wet, mostly fine sand, little clay, little fine gravel, hard, sheen, petroleum odor.	11	10, 14, 50, 4	1.1		318.2, 285.4		
	480.0 / 22.0	***Sandy Lean Clay*** Brown, grey, wet, mostly clay, some fine sand, trace fine gravel, very stiff.	12	15, 24, 50, 4	1.0		98.1		
25.0		End of boring 30.0 fbgs.	13	64	1.2		121.1		
			14	39	1.4		340.8		
			15	66	1.0		58.2		
30.0	472.0 / 30.0	End of Borehole							
35.0									
40.0									



Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/8/21

Hole Size: 8 1/4-inch
Stick-up: Flushmount
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-5

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

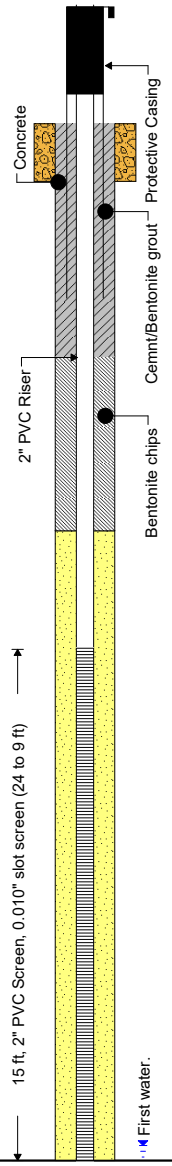
Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
-2.0	504.6 / 0.0	Ground Surface							
	504.1 / 0.5	***Topsoil*** Dark brown, moist, mostly fine sand with organics, few fine gravel.	1	15	1.1		0.0		
		Silty Sand Brown, moist, mostly fine sand, little silt, few fine gravel, medium dense.	2	15	0.5		1.7		
3.0			3	17	1.4		4.5		
			4	25	1.3		4.2		
8.0	496.6 / 8.0	***Poorly Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, trace silt, dense.	5	21	1.5		6		
			6	28	1.3		2.1		
13.0			7	67	1.5		6.5		
			8	50	1.1		14		
	489.1 / 15.5	As above, grey, petroleum odor, wet (17.5 fbgs).	9	51	1.3		112 / 418		



Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/1/ 21

Hole Size: 8 1/4-inch
Stick-up: 2.02 ft
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-5

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
	486.6 / 18.0	As above.	10	67	1.4		112; 254.6		
	484.6 / 20.0	As above, sheen.	11	34	1.4		582		
22.0	482.6 / 22.0	As above.							
		End of borehole 24 fbgs.	12	81	1.1		418		00N Silica Sand
	480.6 / 24.0	End of Borehole							
27.0									
32.0									
37.0									

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 2/1/ 21

Hole Size: 8 1/4-inch
Stick-up: 2.02 ft
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-6

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

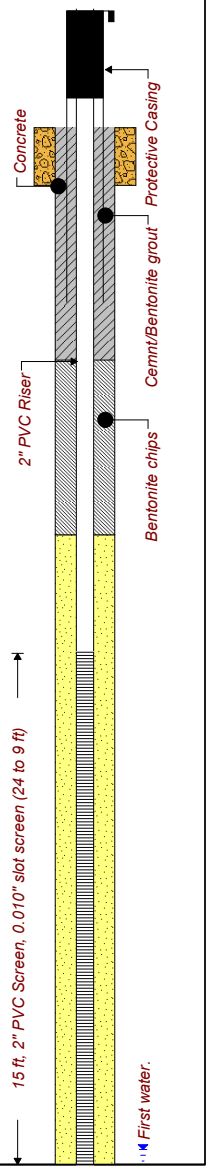
Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
-2.0									
	504.6 / 0.0	Ground Surface							
	504.1 / 0.5	***Topsoil with Fill*** Dark brown, moist, mostly fine sand with organics, few fine gravel, orange brick	1	22	0.9		0.6		
		Fill Black, fines with orange brick, petroleum odor.	2	26	1.3		33.3		
3.0									
	500.6 / 4.0	***Poorly Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, trace silt, dense to medium dense, slight petroleum odor.	3	23	1.3		4.5		
			4	12	1.1		7.6		
8.0									
	496.1 / 8.5	As above, grey, petroleum odor.	5	13	1.0		69.3		
			6	8	0.5		375.1		
			7	5	0.7		424		
13.0									
	490.6 / 14.0	As above, mobile petroleum product at 14.0 fbgs,	8	3	0.6		312		
	488.6 / 16.0	As above wet at 17.0 fbgs.	9	11	0.8		355 64.7		



Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 1/29/21

Hole Size: 8 1/4-inch
Stick-up: 2.52 ft
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-6

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
	486.6								
	18.0	***Clayey Sand with Gravel*** Grey, wet, mostly fine sand and clay, little fine gravel, petroleum odor.	10	8 5 50 1	1.0		386.6		
	484.6								
	20.0	***Poorly Graded Sand with Gravel.*** Grey, wet, mostly fine sand, little fine gravel, petroleum odor, sheen.	11	48 45 50 5	1.1		202.8		
22.0		End of Boring 24.0 fbgs.	12	24	0.6		64.7		
	480.6								
	24.0	End of Borehole							
27.0									
32.0									
37.0									

PID VOCs: 355 ppm

Well Completion Details or Remarks: 00N Silica Sand

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 1/29/21

Hole Size: 8 1/4-inch
Stick-up: 2.52 ft
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-7

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

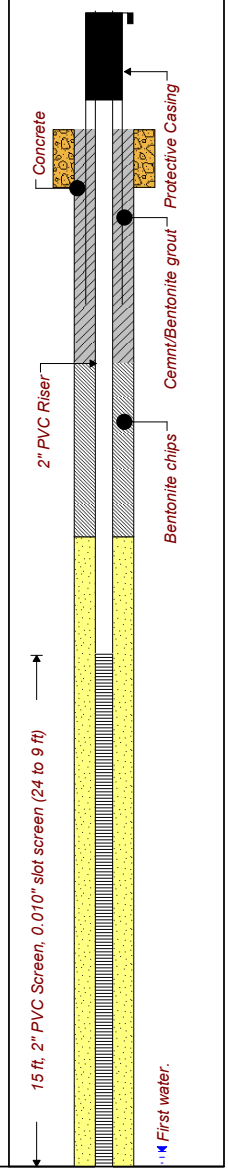
Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
-2.0									
	504.6 / 0.0	Ground Surface							
	504.1 / 0.5	***Topsoil with Fill*** Dark brown, moist, mostly fine sand with organics, few fine gravel, orange brick	1	26	1.2		0.0		
		Fill Black, fines with orange brick and wood.	2	23	2.0		0.0		
3.0	501.6 / 3.0	***Poorly Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, trace silt, dense to medium dense.	3	16	1.5		0.0		
			4	56	1.3		0.0		
8.0			5	34	1.3		0.0		
			6	76	1.3		0.0		
	492.6 / 12.0	As above, slight petroleum odor.	7	33	1.1		2.8		
13.0	490.6 / 14.0	As above, grey, petroleum odor.	8	42	1.5		218		
	488.6 / 16.0	As above wet at 17.5 fbgs.	9	39	1.2		127, 228		



Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 1/29/21

Hole Size: 8 1/4-inch
Stick-up: 2.52 ft
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-7

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
	485.6 19.0	***Sandy Lean Clay*** Brown, moist, mostly clay, some fine sand, stiff, petroleum odor.	10	36	1.0		127, 102		
	485.1 19.5								
	484.6 20.0	***Poorly Graded Sand with Gravel*** Grey, wet, mostly fine sand, little fine gravel, trace silt, dense, petroleum odor.	11	51	17		102		
	483.6 21.0								
22.0	482.6 22.0	***Silt with Sand*** Brown, wet, mostly silt, some fine sand, few fine gravel, dense, petroleum odor.	12	80	1.3		228		
	480.6 24.0	***Poorly Graded Sand with Gravel*** Grey, wet, mostly fine sand, little fine gravel, trace silt, dense, petroleum odor. As above, with brown. End of boring 24.0 fbgs. End of Borehole							00N Silica Sand
27.0									
32.0									
37.0									

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 1/29/21

Hole Size: 8 1/4-inch
Stick-up: 2.52 ft
Datum:

Sheet: 2 of 2

Project No: 0189-001-105

Borehole Number: MW-8

Project: 301 Franklin Street Site

A.K.A.:

Client: Scott Rotary Seals

Logged By: BMG

Site Location: 301 Franklin Street

Checked By: BCH

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
	0.0 / 0.0	Ground Surface							
1.0		***Fill*** Brown, moist, bricks with some non-plastic fines, dense	S-1	NA	.7		1.7		
			S-2	NA	.6		0.2		
6.0	-7.0 / 7.0		S-3	NA	0.8		2.4		
		Fill Reddish brown, moist, medium sand with few rounded gravel and few brick, dense	S-4	NA	0.8		0.0		
			S-5	NA	0.9		0.9		
11.0			S-6	NA	0.2		19.2		
	-14.0 / 14.0		S-7	NA	0.8		10.4		
		Well Graded Sand with Gravel Brown, moist, fine sand with some fine to coarse rounded gravel few non-plastic fines, dense	S-8	NA	0.8		2.2		
16.0	-17.5 / 17.5		S-9	NA	0.7		290.0		
		Well Graded Sand with Gravel Gray, moist to wet (21.5'), fine to coarse sand with some fine to coarse rounded gravel, dense, strong odor	S-10	NA	0.6		535.0	Sampled 19-21'	
21.0			S-11	NA	0.4		148.0		
			S-12	NA	0.7		655.0		
26.0			S-13	NA	1.3		860.0		
	-28.0 / 28.0		S-14	NA	1.2		297.0		
		End of Borehole							
31.0									

PID VOCs: 0 – 500 – 1000 ppm

Well Completion Details: Concrete; Protective Casing; 2" PVC Riser; 00N Silica Sand; Bentonite chips; 2" PVC Screen, 0.010" slot; 00N Silica Sand

Drilled By: Parratt Wolf Inc
Drill Rig Type: IR300
Drill Method: Hollow stem auger/split spoon
Comments:
Drill Date(s): 1-11-11

Hole Size: 9"
Stick-up: 2.93'
Datum: NA

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: MW-9

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

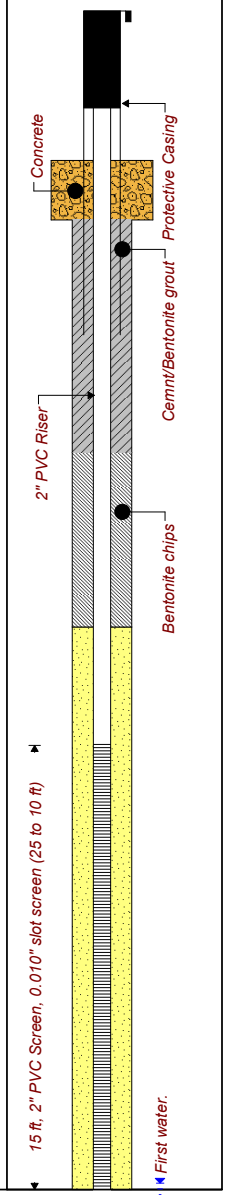
Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
-2.0	505.3	Ground Surface							
	0.0 504.8 0.5	***Topsoil with Fill*** Dark brown, moist, mostly fine sand with organics, few fine gravel, orange brick	1	30	1.1		0.0		
		Fill Black/brown, mostly fines with fine sand, with brick, gravel, and wood, medium dense, slight petroleum odor.	2	25	0.3		0.0		
3.0			3	8	0.8		1.2		
	498.8 6.5	***Poorly Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, trace silt, dense.	4	20	0.6		2.4		
8.0	497.3 8.0	***Poorly Graded Sand*** Brown, moist, mostly fine sand, few silt, trace fine gravel,	5	20	0.8		17.9		
			6	6	0.9		2.7		
13.0			7	6	1.0		3.0		
	490.3 15.0	***Poorly Graded Sand with Gravel*** Brown, mostly fine Sand, little fine gravel, few silt, medium dense.	8	12	0.7		0.0		
	489.3 16.0	As above, grey, petroleum odor.	9	39	0.1		21.9 58.2		



Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 1/29/21

Hole Size: 8 1/4-inch
Stick-up: 2.52 ft
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-9

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
	487.3 / 18.0	As above, wet 19.0 fbgs.					21.9		First water.
			10	37	1.3		271.4		
	485.3 / 20.0	As above, sheen, dense to hard.							
			11	19	1.1		258		
		End of boring 26 fbgs.							
22.0			12	60	1.2		170.7		
			13	19 / 17 / 50 / 4	0.5		58.2		15 ft, 2" PVC Screen, 0.010" slot screen (25 to 10 ft)
	479.3 / 26.0	End of Borehole							00N Silica Sand
27.0									
32.0									
37.0									

Drilled By: Natures Way,
Drill Rig Type: CME 550
Drill Method: 4 1/4 inch HSA
Comments:
Drill Date(s): 1/29/21

Hole Size: 8 1/4-inch
Stick-up: 2.52 ft
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-10

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

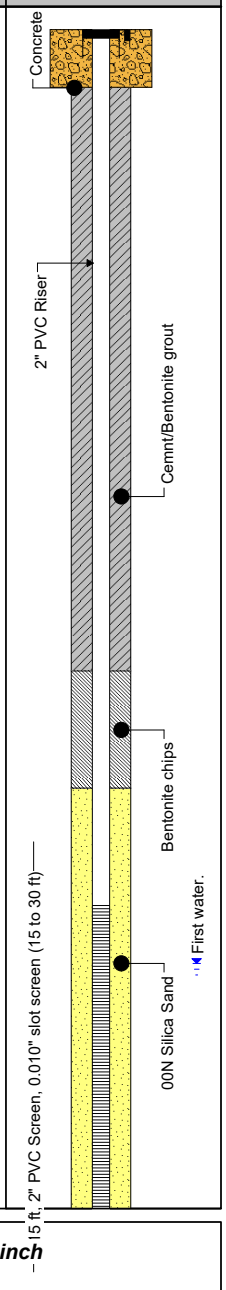
Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface					0 500 1000		
	0.0	***Gravel*** Tan, dry, mostly gravel with some sand.	1	29	1		0.0		
	1.4	***Fill*** Brown/black, dry, mostly sand and gravel with cinders and brick.							
	2.0	***Fine Sand and Gravel*** Tan, dry, mostly fine sand and gravel.	2	16	0.8		2.8		
	3.0	***Fill*** Brown/black, moist, mostly sand and gravel with brick and cinders, no odor.							
	4.0	***Sandy Lean Clay*** Black/grey, moist, mostly clay with silt and sand, petroleum odor.	3	26	0.7		1.0		
5.0		***Poorly Graded Sand with Gravel*** Light brown, moist, mostly fine to medium sand with silt and gravel, no odor.	4	13	1		0.0		
			5	17	0.6		0.7		
10.0			6	13	0.7		0.0		
			7	35.5	1		9.8		
	14.0	***Poorly Graded Sand with Gravel*** Black/grey, moist, mostly fine to medium sand with silt and gravel, petroleum odor. Wet at 16 ft, sheen on groundwater. Mobile petroleum product on gravel from 18 to 24 fbgs. Strong petroleum odor.	8	35	1		547.0		
15.0			9	32	0.5		6.2		
			10	24	1.2		452.0 379.1		
20.0									



Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments: Mobile petroleum product on gravel from 18 to 24 ft
Drill Date(s): 6/23/22-6/24/22

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-10

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
25.0	25.3	***Fine Sand*** Black/grey, wet, mostly fine sand, petroleum odor.	11	28	1		379.1, 160.2		15 ft, 2" PVC Screen, 0.010" slot screen (15 to 30 ft)
	26.4	***Poorly Graded Sand with Gravel*** Black/grey, wet, mostly fine to medium sand with silt and gravel, petroleum odor, sheen on groundwater.	12	22	1		379.0		
	27.6	***Sandy Lean Clay*** Tan/grey, moist, mostly clay with some sand, slight petroleum odor.	13	46	1.5		586.0		
30.0	30.0	End of Borehole	14	31	1.6		747.0		
			15	14	1		46.6		
35.0									
40.0									

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments: Mobile petroleum product on gravel from 18 to 24 ft
Drill Date(s): 6/23/22-6/24/22

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-11

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0		Ground Surface							
	0.0	***Gravel*** Tan, dry, mostly gravel with some sand.	1	25	1.1		0.0		
	1.3	***Fill*** Brown/black,moist, mostly clay with some sand and gravel, with cinders.	2	11	1.2		0.0		
	3.3	***Poorly Graded Sand with Gravel*** Light brown, moist, mostly fine to medium sand with silt and gravel, no odor.	3	13	1.3		0.0		
5.0			4	6	1.2		0.0		
			5	10	0.9		0.0		
10.0			6	8	0.8		0.0		
			7	20	0.7		0.0		
15.0			8	45	1.2		0.0		
			9	41	1.2		0.0		
	18.0	***Sandy Lean Clay*** Blue/grey, moist, mostly clay with sand and gravel, slight petroleum odor.	10	72	1.1		9.5 160.2		
20.0	20.0								

Concrete
2" PVC Riser
Cemnt/Bentonite grout
Bentonite chips
00N Silica Sand
15 ft. 2" PVC Screen, 0.010" slot screen (15 to 30 ft)

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments:
Drill Date(s): 6/22/2022

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-11

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
		Poorly Graded Sand with Gravel Black/grey, moist, mostly fine to medium sand with silt and gravel, petroleum odor. Wet at 22 ft.	11	43	1.4		160.2, 235.5		
			12	40	1		322.6		
			13	25	0.4		30.2		
25.0	25.0	***Sandy Lean Clay*** Reddish brown/grey, moist, clay with sand and gravel, slight petroleum odor.							
	26.8	***Poorly Graded Sand with Gravel*** Black/brown, wet, mostly fine to medium sand with silt and gravel, petroleum odor.	14	36	1.55		149.6, 16.0		
30.0	30.0	End of Borehole							
35.0			15	28	1				
40.0									

Well Completion Details: *15 ft, 2" PVC Screen, 0.010" slot screen (15 to 30 ft)*; *First water.*

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments:
Drill Date(s): 6/22/2022

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-12

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

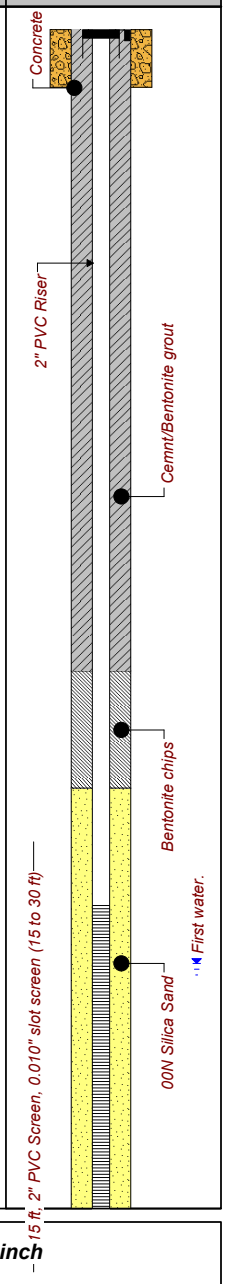
Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface					0 250 500		
	0.0	***Topsoil*** Dark brown, moist, mostly sand with organics.	1	16	1.2		0.0		
	0.5	***Poorly Graded Sand with Gravel*** Light brown, moist, mostly fine to medium sand with silt and gravel.							
	1.7	***Fill*** Dark brown, moist, mostly clay with sand and gravel, with brick.	2	5	0.8		0.0		
		Poorly Graded Sand with Gravel Light brown, moist, mostly fine to medium sand with silt and gravel, no odor.	3	17	0.4		0.0		
5.0			4	14	1.2		118.0		
	7.2	***Fine Sand*** Dark brown, moist, mostly fine sand, petroleum odor.							
	8.0	***Poorly Graded Sand with Gravel*** Black/grey, moist, mostly fine to medium sand with silt and gravel, petroleum odor.	5	24	1.9		201.0		
10.0		***Fine Sand*** Black/grey, moist, mostly fine sand with silt and gravel, petroleum odor.	6	35	0.4		53.1		
	12.4	***Poorly Graded Sand with Gravel*** Black/brown/grey, moist, mostly fine to medium sand with silt and gravel, petroleum odor. Wet at 16 ft.	7	41	1		101.0		
15.0			8	55	1.2		383.0		
			9	55	1.2		106.0		
			10	40	1.3		77.7		
20.0							125.0		



Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments:
Drill Date(s): 6/23/2022

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-12

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
			11	50 / 2	1.1		125.0, 267.0		
			12	85	1.1		140.6		
25.0	23.3	***Sandy Lean Clay*** Blue/grey/brown, wet, mostly clay with sand and gravel, petroleum odor.	13	76	1.3		326.0		
			14	24	0.6		449.0		
	28.0		15	40	0				
30.0	30.0	End of Borehole							
35.0									
40.0									

15 ft, 2" PVC Screen, 0.010" slot screen (15 to 30 ft)

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments:
Drill Date(s): 6/23/2022

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-13

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

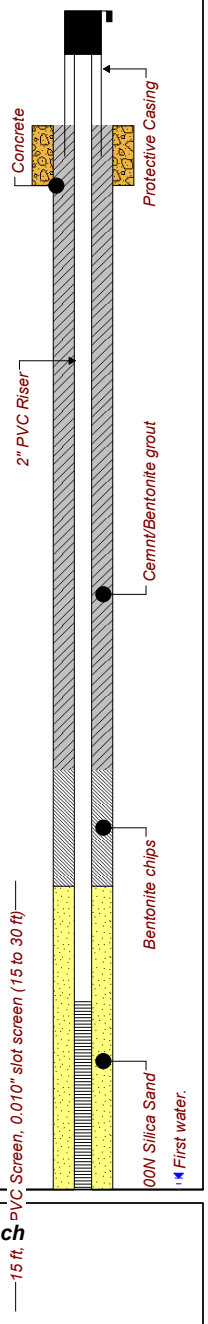
Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm	Lab Sample	Well Completion Details or Remarks
-2.0							0 250 500		
		Ground Surface							
	0.0	***Topsoil*** Dark brown, moist, mostly silt and sand with organics and gravel.	1	11	1.4		0.0		
		Fill Brown/black, moist, mostly sand and clay with gravel, with cinders and brick.	2	5	0.8		0.0		
3.0			3	5	0.9		0.0		
	4.7	***Poorly Graded Sand with Gravel*** Light brown, moist, mostly fine to medium sand with silt and gravel, no odor.	4	15	0.8		0.0		
8.0			5	24	0.8		11.2		
	9.8	***Poorly Graded Sand with Gravel*** Grey/black, moist, mostly fine to medium sand with silt and gravel, petroleum odor. Wet at 18 ft.	6	22	1		214.0		
13.0			7	35	1.1		208.0		
			8	20	0.8		199.0		
			9	37	1.1		288.0		
18.0							299.0		



Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments:
Drill Date(s): 6/27/2022

Hole Size: 8 1/4-inch
Stick-up:
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-13

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
			10	37	1		299.0, 310.0		
	21.0	***Sandy Lean Clay*** Reddish brown/grey, wet, mostly clay with sand and gravel, slight petroleum odor.	11	38	1		54.1		
	22.0	***Poorly Graded Sand with Gravel*** Grey/black, wet, mostly fine to medium sand with silt and gravel, petroleum odor.							
23.0			12	57	0.8		133.0		
			13	31	1.1		279.0		
			14	38	1.5		261.0		
28.0			15	31	1.2		259.0		
	30.0	End of Borehole							
33.0									
38.0									

15 ft. 2" PVC Screen, 0.010" slot screen (15 to 30 ft)

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments:
Drill Date(s): 6/27/2022

Hole Size: 8 1/4-inch
Stick-up:
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: MW-14

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

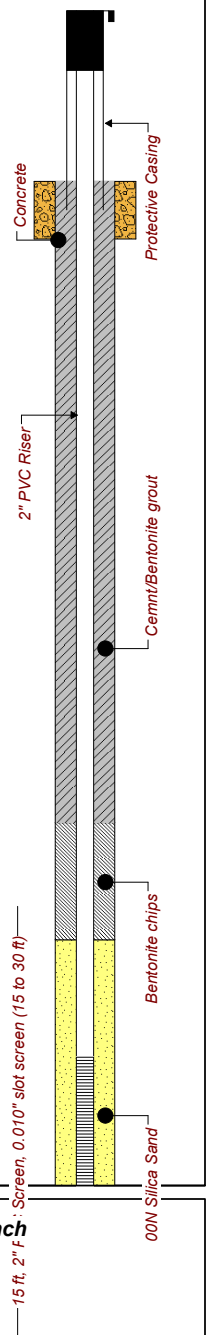
Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
-3.0		Ground Surface							
	0.0	***Topsoil*** Dark brown, moist, mostly fine sand with organics.							
	0.6	***Brick Fill*** Brick	1	36	1		0.0		
	1.5	***Fill*** Tan, dry, mostly medium to coarse sand with some fine sand and gravel, with cinders, brick.	2	50 / 2	0.2		0.0		
2.0			3	24	1.2		0.0		
	5.3	***Poorly Graded Sand with Gravel*** Light brown, moist, mostly fine to medium sand with silt and gravel, no odor.	4	14	0.9		0.0		
7.0			5	19	1		0.0		
			6	11	1.1		0.0		
12.0			7	11	1.1		0.0		
			8	26	1.2		0.0		
							251.0		
17.0	16.7		9	47	1.1				



Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments: Mobile petroleum product on groundwater
Drill Date(s): 6/21/2022

Hole Size: 8 1/4-inch
Stick-up: 2.92 ft
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: MW-14

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
		Poorly Graded Sand with Gravel Black/grey, moist, mostly fine to medium sand with silt and gravel, strong petroleum odor. Wet at 18 ft. Mobile petroleum product on groundwater.	9	47			251.0		First water.
			10	38	1.2		368.6		
			11	25	1.2		221.0		
22.0	22.3	***Sandy Lean Clay*** Reddish brown, wet, mostly clay with sand, some gravel, little silt, petroleum odor.	12	32	1.6		215.0		
	23.1	***Poorly Graded Sand*** Black/grey, wet, mostly fine to medium sand, little gravel, strong petroleum odor.							
	24.5	***Fine Sand*** Black/grey, wet, mostly fine sand and gravel, slight petroleum odor.	13	39	1.2		98.4		
	26.0	***Poorly Graded Sand with Gravel*** Black/grey, wet, mostly fine to medium sand with gravel and silt, petroleum odor.	14	37	1.2		183.0		
27.0			15	26	1.2		118.8		
			16	24	1		159.7		
32.0			17	27	1		135.0		
	34.0	End of Borehole							
37.0									

15 ft. 2" PVC Screen, 0.010" slot screen (15 to 30 ft)

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments: Mobile petroleum product on groundwater
Drill Date(s): 6/21/2022

Hole Size: 8 1/4-inch
Stick-up: 2.92 ft
Datum:

Sheet: 2 of 2

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TP-1

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Broken Asphalt parking lot and Subbase*** Asphalt and gravel subbase.				
	-1.0					
	1.0	***Fill*** Dark brown/black, mostly fine sand, some silt, with brick and wood debris.		0.0		
	-4.0			40.4		
	4.0	***Silt with Sand*** Grey/brown, mostly silt, with some fine sand, trace clay, slight petroleum odor.				
5.0	-5.5			152.2		
	5.5	***Well Graded Sand with Gravel*** Grey/brown, mostly medium to fine sand, little fine gravel, trace silt.		53.1		
10.0						
				30.2		
15.0						
	-17.5			705		First Water.
	17.5					
	-18.0	As above, wet (18.0 fbgs), strong petroleum odor, sheen and mobile petroleum product on ground water.				
	18.0	End of Test Pit				
20.0						

PID VOCs: 0 – 1000 – 2000 ppm

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/19/21
Comments:

Length: 18 feet
Width: 4 feet
Depth: 18 feet

Depth to Water: 18 fbgs.
Visual Impacts: Mobile Petroleum Product on Groundwater.
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 ***Test Pit I.D.:*** TP-2

Project: 351 Franklin Street, Site ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Dark Brown/black, mostly fine sand, few silt, with brick, concrete.		0.0		
	-3.5					
	3.5	***Clayey Sand*** Brown, mostly fine sand, little clay, few fine gravel, dense.		0.0		
5.0	-6.0					
	6.0	***Well Graded Sand*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, no odor.		0.0		
	-8.5					
	8.5	As above, grey, strong petroleum odor.		0.0		
10.0				165		
	-12.5					
	12.5	***Well Graded Sand with Gravel*** Grey, moist, mostly medium to fine sand, little fine gravel, medium dense, petroleum odor.		218		
15.0						
	-19.0					
	19.0	***Sandy Lean Clay with Gravel*** Grey/brown, mostly clay, some fine sand, little fine gravel, stiff, slight petroleum odor.		4.1		
20.0	-22.0			287		
	22.0	End of Test Pit				

Excavated By: Benson Construction ***Length: 18 feet*** ***Depth to Water: None observed.***

Excavator Type: ***Width: 4 feet*** ***Visual Impacts:***

Excavation Date(s): 2/11/21 ***Depth: 22 feet*** ***Olfactory Observations: Petroleum odor.***

Comments:

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 ***Test Pit I.D.:*** TP-3

Project: 351 Franklin Street, Site ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Dark Brown/black, mostly fine sand, few silt, with brick, concrete, old phone line 6-inch below ground surface, east side of test pit.		0.0		
	-4.0 / 4.0	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, no odor.		0.0		
5.0				0.0		
				0.0		
10.0	-11.0 / 11.0	As above, grey, strong petroleum odor.		276		
15.0	-17.0 / 17.0	As above, wet (19 fbgs).		216		First Water.
20.0	-20.0 / 20.0	***Sandy Lean Clay with Gravel*** Grey/brown, mostly clay, some fine sand, little fine sand, stiff, slight petroleum odor.		94		
	-21.0 / 21.0	End of Test Pit				

Excavated By: Benson Construction ***Length: 18 feet*** ***Depth to Water: 19 fbgs.***

Excavator Type: ***Width: 6 feet*** ***Visual Impacts:***

Excavation Date(s): 2/10/21 ***Depth: 21 feet*** ***Olfactory Observations: Petroleum odor.***

Comments:

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TP-4

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Dark Brown/black, mostly fine sand, few silt, with brick, concrete, same phone line observed in TP-3.		0.0		
5.0	-5.0 / 5.0	***Poorly Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, no odor.		0.0		
	-9.5 / 9.5	As above, grey, strong petroleum odor.		0.0, 432, 362		
15.0	-17.0 / 17.0	As above, wet (18 fbgs), mobile petroleum product and sheen on groundwater.		269		*First Water.*
	-19.0 / 19.0	End of Test Pit				
20.0						

PID VOCs: 0 | 100 | 300 | 500 ppm

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/11/21
Comments:

Length: 18 feet
Width: 6 feet
Depth: 19 feet

Depth to Water: 18 fbgs
Visual Impacts: Mobile petroleum product on groundwater.
Olfactory Observations: Petroleum odor.

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TP-5

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Dark Brown/black, mostly fine sand, few silt, with brick, concrete, small cable line southwest corner of test pit, less than 1 fbgs.		0.0		
	-4.0 / 4.0	6-inch clay tile pipe (4 fbgs).		0.0		
5.0	-5.0 / 5.0	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, no odor.		0.0		
	-8.0 / 8.0	10-inch clay tile pipe (8 fbgs).				
10.0	-10.0 / 10.0	As above, grey, strong petroleum odor, perched water (10 fbgs).		327		
	-12.0 / 12.0	As above, no perched water or clay tile piping.				
15.0				827		
	-17.0 / 17.0	As above, wet (19 fbgs), mobile petroleum product and sheen on ground water.		527		*First Water.*
20.0	-20.5 / 20.5	End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/11/21
Comments:

Length: 18 feet
Width: 6 feet
Depth: 19 feet

Depth to Water: 18 fbgs.
Visual Impacts: Mobile petroleum product on groundwater.
Olfactory Observations: Petroleum odor.

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0510-019-001

Project: 351 Franklin Street, Site

Client: 351 Franklin LLC & PSFof WNY, LLC

Site Location: Olean NY

Test Pit I.D.: TP-6

Logged By: TAB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fine sand and silt, with brick and metal debris.		0.0		
5.0	-5.0 / 5.0	Wood with mobile petroleum product (5 fbgs) at south end of test pit.		149		
	-6.0 / 6.0	As above, no mobile petroleum product.				
	-9.0 / 9.0	***Well Graded Sand with Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, no odor.		250		
10.0	-11.0 / 11.0	***Well Graded Sand*** Dark grey/black, mostly medium to fine sand, trace silt, medium dense.		219		
	-13.0 / 13.0	As above, mobile petroleum product (13 fbgs).				
15.0	-15.0 / 15.0	***Well Graded Sand with Gravel*** As above 9 to 11 feet, with mobile petroleum product.		510		
	-16.5 / 16.5	As above, wet (19.5 fbgs), mobile petroleum product and sheen on groundwater.		318		*First water*
20.0	-22.0 / 22.0	End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/12/21
Comments:

Length: 18 feet
Width: 4 feet
Depth: 22 feet

Depth to Water: 19.5 fbgs.
Visual Impacts: Mobile petroleum product (5 & 13 fbgs).
Olfactory Observations: Petroleum odor.

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TP-7

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Dark Brown/black, mostly fine sand and silt, with brick cinders, ash, wood, concrete.		0.0		
5.0				0.0		
	-7.5 7.5	***Well Graded Sand and Gravel*** Grey, moist, mostly fine to medium sand, little fine gravel, trace silt, strong petroleum odor.		200		
10.0				350		
	-14.0 14.0	As above.		500		
15.0				350		
	-18.5 18.5	As above, wet (18 fbgs), mobile petroleum product and sheen on groundwater.		450		*First Water.*
20.0				500		
	-21.0 21.0	End of Test Pit				

PID VOCs: ppm, 0 | 100 | 300 | 500

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/10/21
Comments:

Length: 18 feet
Width: 4 feet
Depth: 20 feet

Depth to Water: 18 fbgs.
Visual Impacts: Mobile petroleum product on groundwater.
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TP-8

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Re-worked sand and gravel with Fill materials*** Dark brown/black, mostly fine to medium sand, some silt, little fine gravel, with brick, concrete cinders and ash.		0.0 0.0 0.0 0.0 0.0 0.0		
	-17.0 17.0	***Well Graded Sand and Gravel*** Grey, moist, mostly fine to medium sand, little fine gravel, trace silt, strong petroleum odor.		257		*First Water.*
	-18.5 18.5	As above, wet (18.5 fbgs), mobile petroleum product and sheen on groundwater.		348		
20.0	-20.0 20.0	End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/10/21
Comments:

Length: 18 feet
Width: 4 feet
Depth: 20 feet

Depth to Water: 18.5 fbgs
Visual Impacts: Mobile petroleum product on Groundwater.
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TP-9

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black/Dark brown, moist, mostly fines, with brick concrete and metal debris.		0.0		
5.0	-5.0 / 5.0	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed.		0.0		
	-8.5 / 8.5	As above, grey, strong petroleum odor, wet, mobile petroleum product (8.5 fbgs).		0.0		
10.0	-9.5 / 9.5	As above, brown to grey, strong petroleum odor, no mobile petroleum product.		227		
	-13.0 / 13.0	As above, mobile petroleum product on gravel (13 fbgs).		115		
15.0				257		
	-18.0 / 18.0	As above, wet (18.5 fbgs), mobile petroleum product and sheen on groundwater.				*First Water.*
	-19.0 / 19.0	End of Test Pit		324		
20.0						

PID VOCs: 0 | 100 | 300 | 500 ppm

Excavated By: Benson Construction | ***Length: 18 feet*** | ***Depth to Water: 18.5 fbgs***

Excavator Type: | ***Width: 4 feet*** | ***Visual Impacts: Mobile petroleum product (8.5 & 13.0 fbgs).***

Excavation Date(s): 2/10/21 | ***Depth: 19 feet*** | ***Olfactory Observations: Petroleum odor.***

Comments: Mobile petroleum product on groundwater

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TP-10

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Gravel Driveway*** Brown, mostly fine sand, little fine gravel, very dense.				
	-1.0 / 1.0	***Fill*** Black/Dark brown, moist, mostly fines, with brick concrete and metal debris, 4-inch pipe running east west 5.5 feet from south end of test pit.		0.0		
5.0	-5.0 / 5.0	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed.		0.0		
10.0				0.0		
15.0	-15.0 / 15.0	As above, grey, strong petroleum odor.		377		
	-17.0 / 17.0	As above, mobile petroleum product on gravel (17 fbgs).		185		*First Water.*
20.0	-20.0 / 20.0	As above, wet (18 fbgs), sheen and mobile petroleum product on water.				
	-21.0 / 21.0	End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/10/21
Comments:

Length: 18 feet
Width: 4 feet
Depth: 21 feet

Depth to Water: 18 feet
Visual Impacts: Mobile petroleum product (17 fbgs).
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001

Project: 351 Franklin Street, Site

Client: 351 Franklin LLC & PSFof WNY, LLC

Site Location: Olean NY

Test Pit I.D.: TP-11

Logged By: TAB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fine sand and fines, with brick, metal and wood debris, brick foundation south side of test pit.		0.0		
5.0						
	-7.0 7.0	***Well Graded Sand with Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, strong petroleum odor, mobile petroleum product (10 fbgs).		120		
10.0	-10.0 10.0	As above.				
				394		
15.0						
	-17.0 17.0	As above, wet (19 fbgs).		160		
20.0	-20.0 20.0	***Sandy Lean Clay with Gravel*** Brown, grey, mostly clay, some fine sand, little fine gravel. slight petroleum odor.		593		
	-21.0 21.0	End of Test Pit		2.6		

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/12/21
Comments:

Length: 17 feet
Width: 8 feet
Depth: 21 feet

Depth to Water: 19 fbgs
Visual Impacts: Mobile Petroleum Product (10 fbgs).
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 ***Test Pit I.D.:*** TP-12

Project: 351 Franklin Street, Site ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs ppm	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fine sand and fines, with brick, concrete metal and wood debris.		0.0		
5.0						
	-8.5 / 8.5	***Poorly Graded Sand*** Grey/black, moist, mostly fine to medium sand, trace silt, strong petroleum odor.		106.8		
10.0				218		
	-11.0 / 11.0	***Well Graded Sand with Gravel*** Grey/black, moist, mostly, medium to fine sand, little fine gravel, trace silt, strong petroleum odor.		265		
15.0						
	-16.0 / 16.0	As above, mobile petroleum product on gravel (16 fbgs)		325		
	-18.0 / 18.0	As above, wet (19 fbgs).		225		
20.0	-20.0 / 20.0	End of Test Pit				

Excavated By: Benson Construction ***Length: 22 feet*** ***Depth to Water: 19 feet***

Excavator Type: ***Width: 6.5 feet*** ***Visual Impacts: Mobile Petroleum Product (16 fbgs)***

Excavation Date(s): 2/15/21 ***Depth: 20 feet*** ***Olfactory Observations: Petroleum odor.***

Comments:

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 ***Test Pit I.D.:*** TP-13

Project: 351 Franklin Street, Site ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fine sand and fines, with brick, metal, and wood debris, tar like material at 2 feet at south end of test pit, brick foundation at northeast corner of test pit, with 4 to 6-inch steel piping (4 to 5 fbgs).		0.0		
5.0	-5.5					
	5.5	***Well Graded Sand with Gravel*** grey/black, moist, mostly fine to medium sand, little fine gravel, trace silt, strong petroleum odor, foundation wall to 8 fbgs. As above, mobile petroleum product (7 fbgs).		228		
	-7.0					
	7.0					
10.0				646		
				585		
	-13.0					
	13.0	***Poorly Graded Sand*** Grey, dark grey, mostly fine sand, trace silt, strong petroleum odor, mobile petroleum product.				
15.0	-15.5					
	15.5	***Well Graded Sand with Gravel*** As above, 5.5 to 7.0, wet (19 fbgs), mobile petroleum product on groundwater.				
				586		
	-19.0					
	19.0	As above.				
20.0	-20.0					
	20.0	End of Test Pit				

Excavated By: Benson Construction ***Length: 20 feet*** ***Depth to Water: 19 feet***

Excavator Type: ***Width: 6.5 feet*** ***Visual Impacts: Mobile Petroleum Product (7 fbgs).***

Excavation Date(s): 2/12/21 ***Depth: 20.5 feet*** ***Olfactory Observations: Petroleum odor.***

Comments:

TEST PIT EXCAVATION LOG

Project No: T0510-019-001

Project: 351 Franklin Street, Site

Client: 351 Franklin LLC & PSFof WNY, LLC

Site Location: Olean NY

Test Pit I.D.: TP-14

Logged By: TAB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black/Dark brown, moist, mostly fines, with brick, concrete, and metal debris.				
	-3.0 / 3.0	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed.				
5.0						
	-7.5 / 7.5	As above, grey, strong petroleum odor.		49.0		
10.0						
	-13.5 / 13.5	As above, mobile petroleum product on gravel (13.5 fbgs).		209		
15.0						
	-16.5 / 16.5	As above, wet (18 fbgs), sheen and mobile petroleum product on ground water.		293		*First Water.*
	-19.0 / 19.0	End of Test Pit				
20.0						

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/9/21
Comments:

Length: 20 feet
Width: 4 feet
Depth: 19 feet

Depth to Water: 18 feet
Visual Impacts: Mobile petroleum pruduct (13.5 fbgs).
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TP-15

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Gravel Driveway*** Brown, mostly fine sand, little fine gravel, very dense.				
	-1.0 1.0	***Fill*** Black/Dark brown, moist, mostly fines, with brick, concrete, and metal debris.		0.0		
	-3.5 3.5	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed.		0.0		
5.0						
10.0						
	-13.5 13.5	As above, grey, strong petroleum odor.		54.4 290 440		
15.0						
	-17.0 17.0	As above, wet (18 fbgs), sheen with mobile petroleum product on ground water.				*First Water.*
	-19.0 19.0	End of Test Pit				
20.0						

PID VOCs: 0 | 100 | 300 | 500 ppm

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/9/21
Comments:

Length: 19 feet
Width: 4 feet
Depth: 19 feet

Depth to Water: 18 fbgs
Visual Impacts: Mobile petroleum product on groundwater.
Olfactory Observations: Petroleum odor.

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: TP-16

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OR WNY LLC

Logged By: TAB

Site Location: Olean NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	504.6 / 0.0	Ground Surface							
		Fill Black, fines with orange brick and wood.	1	na	2		0.3		
	501.6 / 3.0	***Well Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, trace silt, dense to medium dense.							
5.0	499.6 / 5.0	As above, slight petroleum odor.	2	na	2.25		24		
10.0	494.6 / 10.0	As above.	3	na	2		154		
	492.1 / 12.5	As above, grey, petroleum odor.							
15.0	489.6 / 15.0	As above.	4	na	2		274.5		▼ First water.
	486.6 / 18.0	As above, wet (19.5 fbgs), mobile petroleum product on groundwater.							
		end of boring 20 fbgs.							
20.0	484.6 / 20.0	End of Borehole							

Drilled By: Natures Way,
Drill Rig Type: Geoprobe 66DT
Drill Method: Duel tube, direct push.
Comments:
Drill Date(s): 1/29/21

Hole Size: 3-inch
Stick-up:
Datum:

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TT-1

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black/Dark brown, moist, mostly fines, some fine sand, little fine gravel, brick and metal.		0.0		
	-3.0 / 3.0	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed.		0.0		
5.0				0.0		
10.0				0.0		
15.0				0.0		
	-18.0 / 18.0	***Sandy Lean Clay*** Grey, moist, mostly clay, some fine sand, few fine gravels, stiff, petroleum odor.		115		
				126		
20.0	-20.0 / 20.0	As above, wet at 20.5 fbgs.		494		*First Water.*
				319		
	-22.5 / 22.5	End of Test Pit		297		

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/18/21
Comments:

Length: 37 feet
Width: 10 feet
Depth: 22.5 feet

Depth to Water: 20.5 fbgs.
Visual Impacts: Sheen on Groundwater.
Olfactory Observations: Petroleum odor.

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 ***Test Pit I.D.:*** TT-2

Project: 351 Franklin Street, Site ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fine sand, some fine silt, little fine gravel, brick and wood debris		15.4		
	-3.0 / 3.0	***Well Graded Sand with Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed,		0.0		
5.0	-7.0 / 7.0	***Well Graded Gravel with Clay*** Brown, mostly gravel mixed with clay, some fine sand, stiff,				
	-8.0 / 8.0	***Well Graded Sand*** Brown, mostly fine to medium sand, trace silt, loose.		0.0		
	-9.5 / 9.5	***Well Graded Sand With Gravel.*** As 3 to 7 feet above.				
10.0						
15.0				102		
	-17.0 / 17.0	As above, wet at 19 feet, grey, petroleum odor, sheen on groundwater.		344		First Water.
				202		
20.0	-20.0 / 20.0	End of Test Pit				

Excavated By: Benson Construction ***Length: 35 feet*** ***Depth to Water: 19 fbgs***
Excavator Type: ***Width: 4 feet*** ***Visual Impacts: Sheen on groundwater.***
Excavation Date(s): 2/18/21 ***Depth: 20 feet*** ***Olfactory Observations: Petroleum odor.***
Comments:

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: T0510-019-001

Project: 351 Franklin Street, Site

Client: 351 Franklin LLC & PSFof WNY, LLC

Site Location: Olean NY

Test Pit I.D.: TT-3

Logged By: TAB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fines, some fine sand, little fine gravel, brick.				
	-1.0 1.0	***Well Graded Sand with Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed, 6-inch wood with metal wrapped pipe (3 fbgs), located 6 feet from north end of test trench.		0.0		
5.0				0.0		
	-7.0 7.0	***Well Graded Sand*** Brown, mostly fine to medium sand, trace silt, loose.				
	-8.0 8.0	***Well Graded Sand With Gravel.*** As 1 to 7 feet above.				
10.0				0.0		
15.0				0.0		
	-16.5 16.5	As above, wet 18 fbgs, grey, petroleum odor, sheen on groundwater.		151		*First Water.*
	-19.0 19.0	***Sandy Lean Clay with Gravel.*** Grey/brown, moist, mostly clay, some fine sand, few fine gravel, slight petroleum odor.		62.3		
20.0	-21.0 21.0	End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/18/21
Comments:

Length: 35 feet
Width: 10 feet
Depth: 20 feet

Depth to Water: 18 fbgs
Visual Impacts: Sheen on groundwater.
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001
Project: 351 Franklin Street, Site
Client: 351 Franklin LLC & PSFof WNY, LLC
Site Location: Olean NY

Test Pit I.D.: TT-4
Logged By: TAB
Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black/Dark brown, moist, mostly fines, some fine sand, little fine gravel, brick and metal.		0.0		
	-3.0 / 3.0	***Well Graded Sand with Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed.				
	-4.0 / 4.0	***Well Graded Gravel with Clay and Sand*** Brown, moist, mostly gravel, some clay, little fine sand,				
5.0	-5.5 / 5.5	***Well Graded Sand*** Brown, mostly fine to medium sand, trace silt, loose.		0.0		
	-7.5 / 7.5	***Well Graded Sand With Gravel.*** As 3 to 4 feet above.		0.0		
10.0						
	-14.5 / 14.5	As above, grey/brown, slight petroleum odor.		2.2		
15.0				22		
	-18.0 / 18.0	***Sandy Lean Clay with Gravel.*** Grey/brown, wet at 20 feet, mostly clay, some fine sand, few fine gravel, slight petroleum odor, sheen on groundwater.				*First Water.*
20.0	-21.0 / 21.0	End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/18/21
Comments:

Length: 35 feet
Width: 10 feet
Depth: 21 feet

Depth to Water: 20 fbgs
Visual Impacts: Sheen on Groundwater.
Olfactory Observations: Slight Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001
Project: 351 Franklin Street, Site
Client: 351 Franklin LLC & PSFof WNY, LLC
Site Location: Olean NY

Test Pit I.D.: TT-5
Logged By: TAB
Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Gravel Parking Lot*** Brown, moist, mostly fine sand and gravel, hard.				
	-1.0 / 1.0	***Fill*** Dark brown/black, moist, mostly fines with some fine sand, with brick and concrete.		0.0		
	-2.0 / 2.0	***Well Graded Gravel with Clay and sand*** Brown, moist, mostly gravel, some clay, some fine sand, stiff.				
	-4.0 / 4.0	***Well Graded Sand*** Brown, mostly fine to medium sand, trace silt, loose, gravel (4-8 fbgs) at west end of test trench.		0.0		
5.0						
				0.0		
10.0						
	-12.0 / 12.0	***Well Graded Sand With Gravel.*** Brown, moist, mostly medium to fine sand, little fine gravel, trace silt, medium dense.				
15.0				76		
	-17.0 / 17.0	As above, grey, wet 19 fbgs, petroleum odor, mobile petroleum product on groundwater.		105		*First Water.*
20.0	-20.0 / 20.0	***Sandy Lean Claywith gravel*** Brown, moist, mostly clay, some fine sand, little fine gravel, stiff, no odor.		7.1		
	-21.5 / 21.5	End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/17/21
Comments:

Length: 35 feet
Width: 4 feet
Depth: 21.5 feet

Depth to Water: 19 feet
Visual Impacts: Mobile petroleum product on groundwater.
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001

Project: 351 Franklin Street, Site

Client: 351 Franklin LLC & PSFof WNY, LLC

Site Location: Olean NY

Test Pit I.D.: TT-6

Logged By: TAB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Gravel Parking Lot*** Brown, moist, mostly fine sand and gravel, hard.				
	-2.0 / 2.0	***Fill*** Dark brown/black, moist, mostly fines with some fine sand, with brick and concrete.		0.0		
	-3.0 / 3.0	***Well Graded Sand With Clay*** Brown, moist, mostly medium to fine sand, little clay, few fine gravel, stiff.				
5.0	-5.0 / 5.0	***Well graded Sand with Gravel.*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense.		0.0		
10.0						
	-12.5 / 12.5	As above, grey, petroleum odor.		74.2		
15.0	-15.0 / 15.0	***Sandy Lean Clay with gravel*** Brown/grey, moist, mostly clay, some fine sand, little fine gravel, stiff, petroleum odor, mobile petroleum product (15 fbgs).		206		
				316		
	-19.5 / 19.5	***Sandy Lean Clay.*** Brown, moist, mostly clay, some fine sand, few fine gravel, no odor.		0.0		
20.0	-22.0 / 22.0	End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/17/21
Comments:

Length: 30 feet
Width: 4 feet
Depth: 22 feet

Depth to Water: None observed.
Visual Impacts: mobile petroleum product (15 fbgs).
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TT-7

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black/Dark brown, moist, mostly fines, some fine sand, little fine gravel, brick.		0.0		
	-3.0 / 3.0	***Sandy Lean Clay*** Brown, moist, mostly clay, some sand, few fine gravel, stiff.		0.0		
	-4.5 / 4.5	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed.		0.0		
5.0				0.0		
10.0				0.0		
15.0				214		
	-16.0 / 16.0	As above, grey, strong petroleum odor.				
	-18.0 / 18.0	As above, black wet (19 fbgs), sheen on groundwater.		448		*First Water.*
	-19.5 / 19.5	End of Test Pit				
20.0						

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/19/21
Comments:

Length: 20 feet
Width: 4 feet
Depth: 19 feet

Depth to Water: 19 fbgs
Visual Impacts: Sheen on Groundwater.
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TT-8

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Asphalt***				
		Fill Brown/grey, loose gravel parking lot sub-base.		0.0		
	-3.0 3.0	***Sandy Lean Clay*** Grey, moist, mostly clay, some fine sand, stiff, petroleum odor, 6 inch pipe (4 fbgs) 15 feet from west end of test trench.		56.2		
5.0						
	-8.0 8.0	***Well Graded Gravel*** Grey/brown, east end of test trench, mostly gravel, few silt, with mobile petroleum product (8 fbgs), starts 37-feet from west end of test trench.		52.6		
10.0	-10.0 10.0	***Well Graded Sand and Gravel*** Grey,, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed, petroleum odor, no mobile petroleum product.		104		
				391		
				261		
15.0				685		
				356		
	-18.0 18.0	As above, wet 19 fbgs, mobile petroleum product on ground water.		806		*First Water.*
20.0	-20.5 20.5	End of Test Pit				

Excavated By: Benson Construction | ***Length: 50 feet*** | ***Depth to Water: 19 fbgs***

Excavator Type: | ***Width: 8 feet*** | ***Visual Impacts: Mobile petroleum product (8 fbgs).***

Excavation Date(s): 2/22/21 | ***Depth: 20.5 feet*** | ***Olfactory Observations: Petroleum odor.***

Comments: Mobile petroleum on gravel 8 to 10 feet.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 ***Test Pit I.D.:*** TT-9

Project: 351 Franklin Street, Site ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm, 0 – 1000 – 2000)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Black, moist, mostly fines, some fine sand, little fine gravel, large concrete block, metal debris, two 2-inch pipes heading south 2.5 fbgs.		0.0		
	-3.5 / 3.5	***Well Graded Gravel with Clay and Sand*** Brown, moist, mostly gravel, some clay, little fine sand, soft.		0.0		
5.0	-5.0 / 5.0	***Well Graded Sand and Gravel*** Brown, moist, mostly fine to medium sand, little fine gravel, trace silt, medium dense, loose when disturbed.				
	-8.0 / 8.0	***Well Graded Gravel with Sand*** Grey, moist, mostly gravel, some fine sand, trace silt, mobile petroleum product on gravel (8 fbgs).		265		
	-8.5 / 8.5	***Well Graded Sand with Gravel*** As above 5 to 8 feet, grey, strong petroleum odor, no mobile petroleum product.		168		
10.0						
				608		
15.0						
				356		
	-17.0 / 17.0	As above,dark grey/ black, wet at 19.0 fbgs, sheen and mobile petroleum product on groundwater.				*First Water.*
				154		
	-19.5 / 19.5	End of Test Pit				
20.0						

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/15/21
Comments:

Length: 20 feet
Width: 8 feet
Depth: 19.5 feet

Depth to Water: 19 fbgs
Visual Impacts: Mobile petroleum product (8 fbgs).
Olfactory Observations: Petroleum odor.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TT-10a

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Dark brown, moist, mostly fines, some fine sand, little fine gravel, large concrete block. Two 4-inch pipes (3 fbgs) heading north south, one 10-inch pipe (7.5 fbgs) all pipes approximately 11-feet from west end of test pit.		0.0		
5.0				0.0		
	-7.0 7.0	***Sandy Lean Clay*** Grey, moist, mostly clay, some fine sand, few fine gravel, petroleum odor.		70.4		
	-8.0 8.0	***Well Graded Sand with Gravel*** Grey, moist, mostly gravel, some fine sand, trace silt, medium dense, petroleum odor, due to side wall collapse and proximity MW-9, continued TT-10 approximately 20-feet to the west.		69.5		
10.0						
	-11.0 11.0	End of Test Pit				

Excavated By: Benson Construction | ***Length: 25 feet*** | ***Depth to Water: None observed.***

Excavator Type: | ***Width: 9 feet*** | ***Visual Impacts:***

Excavation Date(s): 2/11/21 | ***Depth: 11 feet*** | ***Olfactory Observations: Petroleum odor.***

Comments:

TEST PIT EXCAVATION LOG

Project No: T0510-019-001

Project: 351 Franklin Street, Site

Client: 351 Franklin LLC & PSFof WNY, LLC

Site Location: Olean NY

Test Pit I.D.: TT-10b

Logged By: TAB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Dark brown, moist, mostly fines, some fine sand, little fine gravel, large concrete block. 4-inch plastic sewer pipe 9-feet from west end of test pit 5 fbgs.		0.0		
	-4.5 / 4.5	***Well Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, trace silt, medium dense, loose when disturbed, 12-inch pipe (9 fbgs) running north south approximately 19-feet from east end of test pit.		0.0		
5.0				0.0		
	-9.0 / 9.0	***Well Graded Sand*** brown, moist, mostly fine and medium sand, loose.		0.0		
10.0						
15.0						
	-17.0 / 17.0	***Well Graded Sand with Gravel*** Grey, moist, mostly fine sand, little fine gravel, medium dense, petroleum odor.		195		
	-18.0 / 18.0	End of Test Pit				
20.0						

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/11/21

Length: 32 feet
Width: 8 feet
Depth: 10 feet

Depth to Water: none obseverd.
Visual Impacts:
Olfactory Observations: Petroleum odor.

Comments: Due to soil conditions test pit was not advanced father than 18 feet.

TEST PIT EXCAVATION LOG

Project No: T0510-019-001 | ***Test Pit I.D.:*** TT-11

Project: 351 Franklin Street, Site | ***Logged By:*** TAB

Client: 351 Franklin LLC & PSFof WNY, LLC | ***Checked By:***

Site Location: Olean NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Fill*** Dark brown, moist, mostly fines, some fine sand, little fine gravel, large concrete block and foundation, brick.		0.0		
	-4.0 / 4.0	***Well Graded Sand with Gravel*** Brown, moist, mostly fine sand, little fine gravel, trace silt, medium dense, loose when disturbed.		0.0		
5.0				0.0		
				0.0		
10.0						
15.0						
	-17.0 / 17.0	As above, grey, petroleum odor.		209		
20.0	-20.0 / 20.0	As above, wet (21 fbgs), mobile petroleum product on groundwater.		389		*First water.*
	-22.0 / 22.0	***Sandy Lean Clay.***		6.2		
	-23.0 / 23.0	Brown, moist, mostly, clay, some fine sand, few fine gravel, still, slight petroleum odor.				
		End of Test Pit				

Excavated By: Benson Construction
Excavator Type:
Excavation Date(s): 2/9/21
Comments:

Length: 34 feet
Width: 6 feet
Depth: 23 feet

Depth to Water: 21 fbgs
Visual Impacts: Mobile petroleum product on groundwater.
Olfactory Observations: Petroleum odor.

Project No: T0510-019-001

Borehole Number: SB-1

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Topsoil and Granular Fill*** Black, mostly granular material and angular gravel, some fine sand and silt, some organics, loose, no odor.	1	13	0.67		0.0		
	-2.3 2.3	***Sandy Lean Clay*** Brown, mostly medium plastic fines, some fine sand, medium density, no odor.	2	10	0.83		0.0		
	-4.0 4.0	***Silty Sand*** Brown, mostly fine sand and silt, faint odor.	3	29	0.83		0.3		
5.0	-6.0 6.0	Some broken rock fragments and angular gravel from 6-8 fbgs	4	18	1.08		2.4		
			5	23	1		3.8		
10.0	-11.0 11.0	***Poorly Graded Sand with Silt and Gravel*** Grey, mostly fine sand and rounded gravel, some silt, some brown fine sand throughout, loose, strong odors.	6	34	1		9.7		
			7	42	1.25		322.6		
	-14.0 14.0	Brown staining and mobile petroleum product on rock at 14 fbgs.	8	61	0.75		375.4		
15.0	-17.0 17.0	Same as above. Wet at 17 fbgs.	9	28	1		313.5		
			10	20	1.17		387.7		
20.0			11	14	1		363.3		
	-22.0 22.0	Same as above. Black from 20-22 fbgs.	12	21	0.25		393.3		
	-24.0 24.0	End of Borehole							

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-2

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Sandy Fill with Silt and Gravel*** Brown, mostly fine sand, some silt, some angular gravel, some rounded pea gravel, no odor.	1	20	0.83		0.0		
	-2.0 / 2.0	***Gravel with Poorly Graded Sand*** Brown and grey, mostly rounded pea gravel, some fine sand, trace silt, no odor.	2	10	1.08		0.0		
5.0			3	7	0.92		0.0		
	-5.5 / 5.5	Hard, possibly concrete, stopped sample at 5.5 fbgs. Advanced auger to 6 fbgs.							
			4	3	1		0.0		
			5	3	0.67		0.0		
10.0			6	5	0.83		0.0		
			7	50 / 0	0		NA		
	-13.5 / 13.5	***Poorly Graded Sand with Silt and Gravel*** Brown to grey, mostly fine sand and silt, some broken rock fragments, odors.	8	61	1.33		56.5		
15.0							216.3		
			9	50 / 1	0		NA		
	-17.0 / 17.0	Auger refusal at 18 fbgs.							
	-18.0 / 18.0	End of Borehole							

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-3

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***							
		Sand and Silty Fill with Gravel Brown, mostly fine sand and silt, some rounded gravel, some broken rock fragments, some red brick, loose, no odor.	1	64	1.17		0.0		
			2	32	0.83		0.0		
5.0	-5.5		3	15	1		0.0		
	5.5	***Poorly Graded Sand and Silt*** Grey, mostly fine sand and silt, some rounded gravel, strong odors starting at 6 fbgs.	4	10	1.25		412.2		
	-8.0 8.0	Mobile petroleum product on rounded gravel starting at 8 fbgs.	5	12	1.08		415.2		
10.0	-10.8 10.8	Mobile petroleum product and some red sand at 10.8 fbgs.	6	47	1		313.9		
			7	51	1.33		354.5		
15.0	-16.0 16.0		8	58 / 50 / 3	0.92		181.0		*Observed Water Level*
		Clayey Sand Light brown, mostly fine sand, some medium plastic fines, dense, faint odor.	9	55	1.42		9.8		
	-18.0 18.0	Wet at 18 fbgs. Sheen on rock at 18 fbgs. Mobile petroleum product and sheen on water.	10	43	1.33		138.4		
20.0			11	50	1		197.1		
			12	27 / 50 / 5	0.42		109.4		
	-24.0 24.0	End of Borehole							

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-4

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface							
		Asphalt and Subbase							
		Sand and Silty Fill with Gravel Brown, mostly fine sand and silt, some rounded gravel, some broken rock fragments, some red brick, loose, no odor.	1	38	0.92		0.0		
	-2.7 / 2.7	***Poorly Graded Sand and Silt*** Black to grey, mostly fine sand and silt, odors.	2	23	1		28.2		
5.0	-5.0 / 5.0	***Poorly Graded Sand and Silt with Gravel*** Black, mostly fine sand and silt, some rounded gravel, brown staining and sheen on gravel, odors.	3	15	1		54.3		
			4	14	1		82.1		
			5	20	1.25		75.3		
10.0			6	75	1.17		55.1		
			7	37 / 50 / 5	0.67		61.1		
15.0	-15.0 / 15.0	***Poorly Graded Sand and Silt*** Grey to brown, mostly fine and silt, loose, medium density, odors.	8	69	0.92		57.0		
			9	50 / 5	0		NA		
	-18.0 / 18.0	Wet at 18 fbgs.							
			10	38 / 50 / 4	1.17		98.0		
20.0			11	74 / 50 / 5	0		NA		
			12	45	1.5		74.3		
	-23.5 / 23.5	***Sandy Lean Clay*** Grey to brown, mostly medium plastic fines, some fine sand, high density, sheen on sleeve, odors.							
25.0		End of Borehole							

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-5

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Sand and Silty Fill*** Brown, mostly fine sand and silt, some organics, some some coal, loose, no odor.	1	11	1		0.0		
	-2.4 / 2.4	***Sandy Lean Clay*** Light brown, mostly medium plastic fines, some fine sand, soft, medium density, no odor.	2	9	1.25		3.1		
	-4.0 / 4.0	***Poorly Graded Sand with Silt and Gravel*** Light brown, mostly fine sand and silt, some rounded gravel, loose, faint odor.	3	23	1		4.1		
5.0	-7.0 / 7.0	***Poorly Graded Sand and Gravel*** Grey, mostly fine sand, loose, strong odors. Wet lens from 7-8 fbgs.	4	16	0.92		4.1		
			5	16	1		137.3		
10.0			6	22	0.75		261.5		
	-13.0 / 13.0	Light brown sand lens from 13-14 fbgs.	7	52	1.08		290.8		
15.0			8	72	0.58		204.3		
			9	65	0.83		381.5		
	-18.0 / 18.0	Wet at 18 fbgs. Mobile petroleum product from 18-19 fbgs.	10	56	1.25		385.2		
20.0			11	52	1		293.4		
	-22.0 / 22.0	Sheen on water from 22-24 fbgs.	12	42	1		148.7		
	-24.0 / 24.0	End of Borehole							
25.0									

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-6

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Sand and Silty Fill*** Brown, mostly fine sand and silt, some organics, some red brick, loose, no odor.	1	20	0.75		0.0		
	-2.0 / 2.0	***Granular Fill*** Black, mostly granular material, trace fine sand, loose, no odor.	2	6	1.58		0.0		
		Sandy Lean Clay Brown, mostly medium plastic fines and fine sand, some rounded gravel, medium density, no odor.	3	23	1.42		0.0		
5.0			4	44	0		0.0		
	-8.5 / 8.5	***Poorly Graded Sand and Silt with Gravel*** Grey, mostly fine sand and silt, some rounded gravel, loose, strong odors.	5	19	1		126.3		
10.0			6	48	1		190.8		
			7	66	1.33		190.8		
15.0			8	71	1.42		86.7		
			9	55	1.33		151.5		
	-18.0 / 18.0	***Well Graded Sand with Gravel*** Dark grey, wet at 18 fbgs, mostly medium grain sand, some fine sand, some large gravel, strong odors.	10	57	1.33		187.6		
20.0			11	60	0.92		294.7		
			12	43	1.25		294.7		
	-24.0 / 24.0	End of Borehole							

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-7

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Sand and Silty Fill*** Dark to light brown, mostly fine sand and silt, some organics, some black granulars, some rounded gravel, trace coal, loose, no odor.	1	20	1.25		0.0		
	-2.0 / 2.0	Lens of brown clay from 2-2.3 fbgs.	2	10	1		0.0		
5.0			3	10	1.33		0.0		
			4	19	1.08		0.0		
	-8.3 / 8.3	***Sand with Gravel*** Grey, mostly medium grain and fine sand, some rounded gravel, loose, strong odors.	5	12	1		275.8		
10.0			6	14	1		451.1		
			7	44	1		451.1		
15.0			8	51	1.08		451.1		
			9	74	1.08		475.5		Observed Water Level
	-18.0 / 18.0	Wet at 18 fbgs.							
	-19.3 / 19.3	Auger refusal at 19.3 fbgs.	10	68	1		391.2		
20.0	-20.0 / 20.0	End of Borehole							

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-8

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm, 0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface							
	0.0 / 0.0	***Poorly Graded Fine Sand and Silty Fill*** Brown, mostly fine sand and silt, some organics, some some red brick, some cinders, some rounded gravel, loose, no odor.	1	24	0.75		0.0		
			2	12	1		0.0		
5.0			3	12	0.42		0.0		
	-6.0 / 6.0	***Poorly Graded Fine Sand and Silt with Gravel*** Brown, mostly fine sand and silt, some medium grain sand, some rounded gravel, dense, no odor.	4	27	0.58		0.0		
			5	17	1.08		0.0		
10.0			6	22	1.08		0.0		
			7	68	1.25		0.0		
15.0			8	65	1.17		0.0		
	-17.0 / 17.0	***Rock and Sand*** Grey, wet, mostly broken rock fragments, some medium grain and fine sand, loose, strong odor.	9	18 / 50 / 4	0.42		13.3		Observed Water Level
			10	52	0.25		13.3		
20.0			11	21	0.92		29.2		
			12	45	0.92		265.9		
	-24.0 / 24.0	End of Borehole							

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-9

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Poorly Graded Sand and Silty Fill*** Dark brown, mostly fine sand and silt, some sub-angular and rounded gravel, loose, no odor.	1	20	1		0.0		
			2	15	1		0.0		
5.0			3	14	0.42		0.0		
	-6.0 6.0	Wet lens from 6-8 fbgs.	4	6	0.83		0.0		
			5	4	0.25		0.0		
10.0	-10.0 10.0	Some wood from 10-12 fbgs, faint odor.	6	10	0.67		3.7		
			7	4	0.42		11.3		
15.0			8	8	0.33		205.2		
	-16.0 16.0	***Poorly Graded Sand with Gravel*** Black, mostly fine sand, some silt, some rounded gravel, loose, strong odors.	9	80	1.5		354.7		Observed Water Level
	-18.0 18.0	***Gravel with Sand*** Grey, wet at 18 fbgs, mostly rounded gravel, some fine sand, trace silt, loose, strong odor.	10	69	0.67		354.7		
20.0		Mobile petroleum product on water at 18 fbgs.	11	37	0.42		203.1		
	-22.3 22.3	***Clayey Sand*** Brown, mostly fine sand, some medium plastic fines, medium density, odors.	12	31	0.75		18.0		
	-24.0 24.0	End of Borehole							

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-10

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Poorly Graded Sand and Silty Fill with Gravel*** Brown to reddish brown, mostly fine sand and silt, some organics, some red brick, some rounded gravel, some broken rock fragments, some black granulars, loose, no odor.	1	22	1.5		0.0		
			2	16	0.92		0.0		
5.0			3	34	1.58		0.0		
	-6.0								
	6.0	No gravel from 6-10 fbgs.	4	19	1.83		0.0		
			5	21	1.5		0.0		
10.0			6	24	1.5		8.1		
	-12.0								
	12.0	***Poorly Graded Sand with Silt and Gravel*** Grey, mostly fine sand, some silt, some sub-angular and rounded gravel, loose, medium density, strong odors.	7	14	0.67		8.8		
	-14.0								
	14.0								
15.0		Heavy oil (mobile petroleum product) on gravel and sleeve from 14-26 fbgs.	8	44	0.92		101.2		
	-16.0								
	16.0	Wet at 16 fbgs.	9	44	1.42		202.8		
			10	78	1.33		145.1		
20.0			11	50/4	0.33		111.9		
			12	41	0.08		172.1		
	-24.0								
	24.0	***Sandy Lean Clay*** Grey and brown, mostly medium plastic fines and fine sand, medium density, odors.	13	50/4	0.33		49.5		
25.0	-26.0								
	26.0	***Poorly Graded Fine Sand with Silt and Gravel*** Grey, mostly fine sand, some silt, some rounded gravel, strong odors.	14	49	1.33		231.4		
			15	62	1		221.8		
	-30.0								
30.0	30.0	End of Borehole							

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-11

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Poorly Graded Sand and Silty Fill with Gravel*** Brown and black, mostly fine sand and silt, some black fine sand, some red brick, some coal, some gravel, no odor.	1	27	1.33		0.0		
			2	15	1		0.0		
5.0			3	10	0.83		49.5		
	-6.0 6.0	***Granular Fill*** Black, mostly granular material, some gravel, brown staining and mobile petroleum product on gravel, loose, strong odors.	4	8	0.67		215.2		
	-9.0 9.0	***Well Graded Sand*** Grey to brown, mostly fine and medium grain sand, some silt, some rounded gravel, loose, strong odors.	5	21	1		354.4		
10.0	-10.0 10.0	Mobile petroleum product, brown staining and sheen on soil from 10-12 fbgs.	6	55	1.5		313.5		
			7	15	1.17		289.2		
	-14.0 14.0	Some black sands from 14-16 fbgs.	8	53, 50, 5	0.83		212.2		
15.0			9	50, 4	0.08		202.8		Obsevred Water Level
	-17.0 17.0	Wet at 17.5 fbgs.							
	-18.0 18.0	***Clayey Sand*** Grey and brown, mostly fine sand, some medium plastic fines, medium density, oily, strong odors.	10	64	0.92		175.8		
20.0	-20.0 20.0	***Well Graded Sand*** Brown, mostly medium and fine grain sand, loose, strong odors.	11	82	0.92		163.7		
	-21.0 21.0	***Poorly Graded Sand with Gravel*** Grey to brown, mostly fine sand, trace silt, some rounded gravel, some broken rock fragments, mobile petroleum product on rocks, strong odors.	12	56	1.08		234.2		
	-24.0 24.0	End of Borehole							

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-12

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Poorly Graded Sand and Silty Fill with Gravel*** Black and tan, mostly fine sand and silt, trace red brick, trace coal, some rounded gravel, some concrete, loose, no odor.	1	17	0.75		0.0		
	-2.7 / 2.7	***Sandy Lean Clay*** Reddish brown, mostly medium plastic fines, some fine sand, medium density, no odor.	2	33	1.08		0.0		
	-4.0 / 4.0	***Poorly Graded Sand and Silt with Gravel*** Brown to light brown, mostly fine sand and silt, some rounded gravel, loose, no odor.	3	24	1.25		10.1		
5.0			4	38	1.33		7.2		
			5	37	1.08		3.4		
10.0			6	50	1.08		3.4		
			7	50	1		3.1		
15.0			8	50 / 2	0		NA		
	-16.0 / 16.0	***Poorly Graded Sand and Silt with Gravel*** Grey, mostly fine sand and silt, some rounded gravel, loose, strong odors, mobile petroleum product on gravel.	9	58	0.92		333.7		
	-18.0 / 18.0	Wet at 18 fbgs.	10	79	1.08		411.1		
20.0			11	81	1.17		388.3		
			12	62	0.92		262.1		
	-23.5 / 23.5	***Lean Clay*** Grey and brown, mostly medium plastic fines, some fine sand, trace oil on sleeve, strong odors.							
25.0		End of Borehole							

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-13

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm, 0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Clayey Sand Fill with Gravel*** Black, mostly fine sand, trace medium plastic fines, some red brick, some coal, some angular gravel and broken rock fragments, no odor.	1	20	0.75		0.0		
			2	33	0.92		0.0		
5.0	-5.0		3	14	1.08		12.5		
	5.0	***Sandy Lean Clay*** Dark grey, mostly medium plastic fines, trace fine sand, some broken gravel, loose, faint odor.	4	28	0		NA		
	-8.5								
	8.5	***Well Graded Sand and Granular Fill*** Black and brown, mostly granular material and medium grain sand, some fine sand, some rounded gravel, strong odors, mobile petroleum product.	5	20	1.25		57.7		
10.0	-11.0								
	11.0	Grey lenses from 10.8-12 fbgs and 12.5-14 fbgs	6	26	0.83		61.7		
			7	30	0.58		148.9		
	-14.0								
	14.0	Mobile petroleum product on gravel from 14-16 fbgs.	8	63	1		207.4		
15.0			9	53, 50, 2	0.75		NA		
	-18.0								
	18.0	Wet at 18 fbgs.	10	50, 4	0		NA		
	-20.0								
20.0	20.0	Black from 20-23.5 fbgs.	11	78	1		200.5		
			12	50	0.92		373.4		
	-23.5								
	23.5	***Sandy Lean Clay*** Grey, mostly medium plastic fines, some fine sand, high density, strong odors.							
25.0		End of Borehole							

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-14

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Poorly Graded Sand and Silt Fill*** Black, mostly fine sand and silt, some red brick, some coal, loose, no odor.	1	15	0.5		0.0		
	-2.4 / 2.4	***Sandy Lean Clay*** Reddish brown, mostly medium plastic fines, some fine sand, medium density, no odor.	2	5	1.08		0.0		
	-4.5 / 4.5	***Poorly Graded Sand and Silt with Gravel*** Brown, mostly fine sand and silt, some rounded gravel, and broken rock fragments, loose, no odor.	3	10	1.25		0.0		
5.0			4	48 / 50 / 4	0.92		0.0		
			5	75 / 6	0.5		0.0		
10.0			6	45 / 50 / 4	0.67		0.0		
	-12.0 / 12.0	***Poorly Graded Sand and Silt with Gravel*** Black and grey, mostly fine sand and silt, some rounded gravel, strong odors, sheen on gravel.	7	50	1.42		46.1		
	-14.0 / 14.0	Broken rock fragment from 14-16 fbgs.	8	58	1.33		149.8		
15.0	-16.0 / 16.0	Brown staining on gravel and rock from 16-18 fbgs. Wet at 16.5 fbgs.	9	59	1.25		289.5		
			10	22	1		158.0		
20.0	-21.0 / 21.0	***Clayey Sand*** Brown and grey, mostly fine sand, some medium plastic fines, high density, strong odors.	11	22	1		56.3		
			12	53	1		97.1		
	-24.0 / 24.0	End of Borehole							*Observed Water Level*

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-15

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm, 0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Poorly Graded Sand and Silt Fill*** Dark brown, mostly fine sand, some silt, some red brick, some coal, trace rounded gravel, no odor.	1	18	1.17		0.0		
	-2.0 2.0	Tan sand lens from 2-3 fbgs.	2	23	1.33		0.0		
5.0			3	7	0.92		0.0		
	-6.0 6.0	Some red brick and wood from 6-8 fbgs.	4	8	0.5		0.0		
	-8.0 8.0	***Poorly Graded Sand and Silt*** Brown, mostly fine sand and silt, some rounded gravel and broken rock fragments throughout, odors starting at 12 fbgs.	5	14	0.92		0.0		
10.0			6	34	1.08		31.0		
			7	29	1.25		78.3		
	-14.0 14.0	Mobile petroleum product on gravel and rock from 14-16 fbgs, strong odors.	8	27	1.33		193.7		
15.0			9	29	1		193.7		
	-18.0 18.0	Wet at 18 fbgs.	10	40	0		NA		
20.0	-20.0 20.0	***Poorly Graded Sand with Clay*** Grey, mostly fine sand, trace medium plastic fines, high density, strong odors.	11	35	1.42		284.7		
			12	43 50 1	0.5		245.9		
	-24.0 24.0	End of Borehole							

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-16

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Poorly Graded Sand Fill with Silt and Gravel*** Dark brown and grey, mostly fine sand, some silt and gravel, some red brick, some coal, loose, no odor.	1	35	1.17		0.0		
	-3.0 / 3.0	***Poorly Graded Sand and Silt with Rock*** Reddish brown, mostly fine sand and silt, some broken rock fragments, loose, no odor.	2	13	1.25		0.0		
5.0			3	16	0.92		0.0		
			4	22	1.17		0.0		
			5	13	0.67		0.0		
10.0	-10.0 / 10.0	Brown from 10-11 fbgs.	6	43	0.67		0.7		
	-12.0 / 12.0	Some grey from 12-16 fbgs.	7	42	1.33		85.5		
15.0			8	50	1.17		85.5		
	-16.0 / 16.0	***Poorly Graded Sand with Silt and Gravel*** Black and dark grey, mostly fine sand, some medium grain sand, some silt, some rounded gravel and broken rock fragments, loose, strong odors.	9	49	1.33		390.1		
	-18.0 / 18.0	Wet at 18 fbgs. Oil (mobile petroleum product) from 18-22 fbgs.	10	47	0.83		371.9		
20.0			11	56	1		263.5		
	-22.0 / 22.0	***Poorly Graded Sand with Clay*** Grey, mostly fine sand, some medium plastic fines, high density, strong odors.	12	40	1		154.9		
	-24.0 / 24.0	End of Borehole							

Observed Water Level

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-17

Project: 351 Franklin Street Site

A.K.A.:

Client: 351 Franklin Street LLC and PSF of WNY, LLC

Logged By: CMS

Site Location: 351 Franklin Street, Olean, NY

Checked By: MAL

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 250 / 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Clayey Sand*** Black, mostly fine sand, some medium plastic fines, some red brick, medium density, no odor.	1	24	1.42		0.0		
	-2.5 / 2.5	***Sandy Lean Clay*** Grey and brown, mostly medium plastic fines, some fine sand, some rounded and angular gravel, medium density, odors.	2	13	1.33		0.0		
5.0			3	19	1.33		153.3		
	-6.0 / 6.0	Heavy oil (mobile petroleum product) on soil at 6 fbgs.	4	15	1.17		241.5		
	-8.0 / 8.0	***Well Graded Sand*** Dark brown and grey, mostly medium and fine grained sand, loose, strong odors.	5	7	0.58		217.6		
10.0	-10.0 / 10.0	Some rounded gravel, heavy oil (mobile petroleum product) on gravel at 10 fbgs	6	15	0.75		178.8		
			7	9	1		158.6		
	-14.0 / 14.0	***Rock Fragments*** Grey, mostly broken rock fragments, some fine sand and silt, strong odors.	8	18	1		195.6		
15.0	-16.0 / 16.0	***Poorly Graded Sand and Gravel*** Dark grey, mostly fine sand and rounded gravel, some broken rock fragments, loose, some brown staining and mobile petroleum product, strong odors.	9	35	1		232.8		Observed Water Level
	-18.0 / 18.0	Wet at 18 fbgs.	10	38	1.33		215.9		
20.0			11	42	1		225.3		
	-22.0 / 22.0	End of Borehole							

Drilled By: NW
Drill Rig Type: B-51
Drill Method: Auger and split spoon
Comments:
Drill Date(s): 3/17/21-3/24/21

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0510-019-001

Borehole Number: SB-18

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (ftbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm	Lab Sample	Well Completion Details or Remarks
0.0		Ground Surface					0 50 100		
	0.0	***Topsoil*** Dark brown, moist, mostly sand and silt with organics..	1	21	1.5		0.0		
	1.6	***Gravel*** Tan, dry, mostly gravel with some sand.							
		Fill Brown/black, moist, mostly sand and clay with gravel, with cinders, ash, and brick.	2	8	1.4		0.0		
		Sandy Lean Clay Reddish brown/grey, moist, mostly clay with sand and some gravel, no odor.							
	4.5		3	8	1.1		0.0		
5.0		***Poorly Graded Sand with Gravel*** Light brown, moist, mostly fine to medium sand with silt and gravel, no odor.	4	10	1		0.0		
			5	14	0.8		0.0		
10.0			6	12	1.1		7.1		
	11.5	***Poorly Graded Sand with Gravel*** Black/grey, moist, mostly fine to medium sand with silt and gravel, petroleum odor. Wet at 18 ft. Mobile petroleum product on groundwater.	7	14	0.75		76.5		
15.0			8	29	1.1		72.3		
			9	43	1.4		25.1		
			10	63	1.1		49.0		
20.0							30.4		

▼ First water.

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments: Mobile petroleum product on groundwater
Drill Date(s): 6/27/2022 - 6/28/2022

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: SB-18

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (ftbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
			11	50 / 2	0.6		30.4, 11.7		
			12	52	0.5		7.7		
25.0	24.0	***Sandy Lean Clay*** Grey/reddish brown, wet, mostly clay with sand and gravel, slight petroleum odor.	13	23	0.8		3.6		
			14	35	0.4		5.3		
	28.0	***Poorly Graded Sand with Gravel*** Grey/black, wet, mostly fine to medium sand with silt and gravel, petroleum odor.	15	30	1.4		33.6		
30.0	30.0	End of Borehole							
35.0									
40.0									

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments: Mobile petroleum product on groundwater
Drill Date(s): 6/27/2022 - 6/28/2022

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 2 of 2

Project No: T0510-019-001

Borehole Number: SB-19

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	Ground Surface								
	0.0	***Gravel*** Tan, dry, mostly gravel with some sand.	1	45	1.4		3.5		
	1.0	***Fill*** Brown/black, dry, mostly sand and gravel with clay, with brick, cinders.							
	2.0	***Brick Fill*** Brick	2	14	0.9		1.5		
	2.7	***Fill*** Brown/black, moist, mostly sand and gravel with clay, with brick, cinders.							
5.0	4.1	***Poorly Graded Sand with Gravel*** Black/grey, moist, mostly fine to medium sand with silt and gravel, petroleum odor. Wet at 18 ft. Mobile petroleum product on gravel from 14 to 20.5 ft.	3	7	0.8		44.5		
			4	15	0.9		38.4		
			5	16	0.5		32.2		
10.0			6	16	0.9		58.4		
			7	15	0.9		68.1		
			8	52	1.1		104.1		
15.0			9	36	1.1		315.0		
			10	43	1.3		257.0		
20.0							161.4		

First water.

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments: Mobile petroleum product on gravel from 14 to 22 ft
Drill Date(s): 6/24/2022

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 1 of 2

Project No: T0510-019-001

Borehole Number: SB-19

Project: 351 Franklin Street Site.

A.K.A.:

Client: 351 Franklin LLC & PSF OF WNY, LLC

Logged By: CNK

Site Location: Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
	20.5	***Sandy Lean Clay*** Grey, wet, mostly clay with some sand, slight petroleum odor.	11	54	0.9		161.4, 18.0		
	22.0	***Fine Sand*** Black/grey, wet, fine sand with gravel and silt, petroleum odor. Mobile petroleum product.	12	22	1.6		4.7		
		Sandy Lean Clay Reddish brown/grey, wet, mostly clay with some sand, little gravel, slight petroleum odor.							
25.0	25.0	***Poorly Graded Sand with Gravel*** Black/grey, wet, mostly fine to medium sand with silt and gravel, petroleum odor.	13	42	1		470.0		
			14	49	1		442.0		
			15	33	1.2		305.0		
30.0	29.7	***Fine Sand*** Black, wet, mostly fine sand, some gravel, petroleum odor.	16	41	1.3		315.0		
		Poorly Graded Sand with Gravel Black/grey, wet, mostly fine to medium sand with silt and gravel, petroleum odor.							
	32.0	End of Borehole							
35.0									
40.0									

Drilled By: Earth Dimensions
Drill Rig Type: Diedrich D-120
Drill Method: HSA
Comments: Mobile petroleum product on gravel from 14 to 22 ft
Drill Date(s): 6/24/2022

Hole Size: 8 1/4-inch
Stick-up: N/A
Datum:

Sheet: 2 of 2

APPENDIX B

Master Erosion Control Plan

Master Erosion Control Plan

351 Franklin Street Site
NYSDEC BCP #C905047
Olean, New York

October 2023

Prepared for:

351 Franklin Street LLC
1 Blue Bird Square
Olean, NY 14760

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
2558 Hamburg Turnpike, Suite 300
Buffalo, New York 14218

2283.0002Y.110/CV

Table of Contents

Attachments

1. INTRODUCTION

1.1 Background

The BCP property, addressed at 351 Franklin Street (Tax ID No. 94.040-1-29.1) is situated in a commercial and industrial zoned area of the City of Olean, Cattaraugus County, New York and consists of one 6.36-acre parcel. The Site is currently developed with two commercial structures surrounded by paved parking areas, access roads, and vegetated areas. The westernmost structure (Building 1) is occupied by First Transit, Inc. and the easternmost structure (Building 2) is vacant.

The Site and properties immediately surrounding the area of the Site were primarily used as a petroleum refining facility between 1876 and approximately 1954, with portions of the surrounding area used as a fertilizer facility between 1965 and 1984. The Site area was formerly part of the SOCONY-Vacuum Oil Company, Inc. (SOCONY-Vacuum) refinery until 1954. Through acquisitions and mergers, SOCONY-Vacuum became ExxonMobil Corporation. The Site is presently used as a garage operation.

Numerous spill records associated with the Site are included in the NYDEC Spill database (9201686, 0811100, and 1300859). Spill 1300859 referred to as “Offsite Scott Rotary Seal BCP Site” was determined to be associated with abandoned refinery pipes extending from the adjacent Scott Rotary Seals BCP site and the NYSDEC ordered on-Site pipes to be located, excavated, and cleaned, and that all materials be disposed of properly. Remedial activities were completed at the Site between 2012 and 2017 to remove some of the refinery piping and grossly contaminated media (GCM) previously identified at the Site.

1.2 Purpose and Scope

This Master Erosion Control Plan (MECP) was prepared to provide guidance during remedial action activities since erosion control will be a critical component of preventing the potential migration of contaminants off-site during excavation activities.

2. POTENTIAL EROSION AND SEDIMENT CONTROL CONCERNS

Potential areas and items of concern during remedial action activities may include the following:

- Remediated areas or off-site properties adjacent to unremediated parcels need protection so they do not become impacted by Site operations.
- Runoff from soil stockpiles, if any, will require erosion controls.
- Surface slopes need to be minimized as much as practical to control sediment transfer.
- Soil/fill excavated will require proper handling and disposal.

3. EROSION AND SEDIMENT CONTROL MEASURES

3.1 Background

Standard soil conservation practices need to be incorporated into remedial activities to mitigate soil erosion damage, off-site sediment migration, and water pollution from erosion. These practices combine vegetative and structural measures, many of which will be permanent in nature and become part of the completed project (i.e., grading). Other measures will be temporary and serve only during the construction stage. Selected erosion and sediment control measures will meet the following criteria:

- Incorporate temporary and permanent erosion control measures.
- Remove sediment from sediment-laden storm water before it leaves the Site.

3.2 Temporary Measures

Temporary erosion and sedimentation control measures and facilities will be used during construction. These temporary measures will be installed and maintained until they are either no longer needed or until such time as permanent measures are installed and become effective. Erosion and sediment controls shall be installed in accordance with the standards and specifications presented in Attachment B-1. At a minimum, the following temporary measures will be used:

- Silt fencing, tubular silt socks
- Cautious placement, compaction and grading of stockpiles

3.2.1 Silt Fencing

Remedial activities may result in surface water flow to drainage ditches and adjacent properties. Silt fencing or tubular silt socks will be the primary sediment control measure used in these areas. Prior to extensive soil excavation or grading activities, silt fences or silt socks will be installed along the perimeter of all construction areas. The orientation of the fencing will be adjusted as necessary as the work proceeds to accommodate changing site conditions.

If necessary, intermediate fencing/socks will be used upgradient of the perimeter fencing/socks to help lower surface water runoff velocities and reduce the volume of sediment to perimeter fencing/socks. Stockpiles will also be surrounded with silt fencing/socks.

As sediment collects, the silt fences/socks will be cleaned as necessary to maintain their integrity. Removed sediment will be used elsewhere on-site as general fill. Sediment to be used as backfill on the site will comply with import and/or reuse criteria. All perimeter silt fences/socks will remain in place until construction activities in an area are completed and vegetative cover has been established.

3.2.2 Cautious Placement of Stockpiles

Excavation activities may produce stockpiles of soil and subgrade soil/fill materials. Careful placement and construction of stockpiles will be required to control erosion. Stockpiles will be placed no closer than 50 feet from storm water inlets and parcel boundaries. Additionally, stockpiles will be graded and compacted as necessary for positive surface water runoff and dust control. Stockpiles will be secured with proper erosion controls to minimize runoff and dust generation.

Soil stockpiles will be continuously encircled with silt socks. Stockpiles will be kept covered with polyethylene sheeting. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

3.3 Permanent Control Measures during Site Redevelopment

Permanent erosion and sedimentation control measures and structures will be installed as soon as practical during construction for long-term erosion protection. Examples of permanent erosion control measures could include:

- Minimizing the potential contact with, and migration of, subsurface soil/fill through the placement of crushed stone in areas not covered with structures, roads, parking areas, sidewalks, etc.
- Planting and maintaining vegetation.
- Limiting runoff flow velocities to the extent practical.

4. CONSTRUCTION MANAGEMENT PRACTICES

4.1 General

The following general construction practices should be evaluated for erosion and sedimentation control purposes during remedial activities:

- Clearing and grading only as much area as is necessary to accommodate the construction needs to minimize disturbance of areas subject to erosion (i.e., phasing the work).
- Covering exposed or disturbed areas of the Site as quickly as practical.
- Installing erosion and sediment control measures before disturbing the Site subgrade.
- Eliminating both on-site and off-site tracking of soil by vehicles by using routine entry/exit routes. When on-site and off-site tracking of soil is evident, use of a truck wash station will be evaluated.

4.2 Monitoring, Inspection and Maintenance

All erosion and sedimentation controls described in this Plan will be inspected by a qualified representative of the Site Owner within 24 hours of a heavy rainfall event (defined as more than 0.5 inches of precipitation in a 24-hour period) and repaired or modified as necessary to effectively control erosion or turbidity problems. Inspections should include areas under construction, stockpile areas, erosion control devices (i.e., silt fences, silt socks, storm drain inlet protection, etc.) and locations where vehicles enter and leave the site. Routine inspections of the entire Site should also be made on a weekly basis during development.

If inspections indicate problems, corrective measures should be implemented within 24 hours. A report summarizing the scope of the inspection, name of the inspector, date, observations made, and a description of the corrective actions taken should be completed. Attachment B-2 includes the Inspection and Maintenance Report Form.

4.2.1 Implementation

Erosion controls and features shall, at all times, be properly constructed, operated, and maintained in accordance with regulatory requirements and good engineering and construction practices. Erosion control measures and activities will be conducted in accordance with currently accepted Best Management Practices (BMPs).

Erosion control monitoring, inspection, and maintenance are an integral part of Site storm water and erosion control. The key elements of the monitoring effort include the following:

- Site inspections and maintenance
- BMPs monitoring
- Recordkeeping
- Review and modifications
- Certification of compliance

4.2.2 Site Inspections and Maintenance Practices

The temporary erosion control features will be maintained until no longer needed or permanent erosion control methods are installed. Site inspections are required every seven days or within 24 hours of a rainfall of 0.5 inches or greater. All disturbed areas, areas for material storage, locations where vehicles enter or exit the site, and all of the erosion and sediment controls identified as part of this Plan must be inspected. Controls must be in good operating condition until the affected area they protect has been completely stabilized and the construction activity is complete. If a repair is necessary, it must be completed within 24-hours of receipt of a report or notice, if practical. Inspection for specific erosion and sediment controls will include the following:

- Silt fence/silt socks will be inspected to determine the following:
  1) Depth
  2) Condition of fabric
  3) That the fabric is attached to the posts
  4) That the fence posts are firmly in the ground
- The silt fences/silt socks will be inspected weekly and within 24 hours of a 0.5 inch or greater storm event.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and other potential erosion control problems.
- The Contractor shall designate individual(s) that will be responsible for erosion control, maintenance, and repair activities. The designated individual will also be responsible for inspecting the site and filling out the inspection and maintenance report.
- Personnel selected for inspection and maintenance responsibilities will receive training as directed by the Engineer. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used on-site in good working order.

The individual inspecting the Site must record any damages or deficiencies on the Inspection and Maintenance Report Form in Attachment B-2. This form can be used to request maintenance and repair and to document inspection and maintenance activities. Damages or deficiencies must be corrected as soon as possible after the inspection. Any changes that may be required to correct deficiencies in this Plan should also be made as soon as possible, but in no case later than seven days after the inspection.

4.2.3 Recordkeeping

A copy of the MECP and inspection and maintenance records will be included in the weekly reports to NYSDEC and must be kept at the Site from the time construction activities begins until the Site is stabilized. These documents will be made available upon request to regulatory agency representatives or members of the public.

4.2.4 Modifications to the Storm Water Management and Erosion Control Plan

During the course of construction, unanticipated changes may occur that affect this MECP such as schedule changes, phasing changes, staging area modifications, off-site drainage impacts, and repeated failures of designed controls. Any changes to the activities and controls identified in this Plan must be documented and the Plan revised accordingly. Certification of revisions to this plan shall be included at the end of the document.

ATTACHMENTS

B-1 Erosion Control Details

B-2 Inspection and Maintenance Report Form

ATTACHMENT B-1

Erosion Control Details

FINAL

New York State Standards and Specifications for Erosion and Sediment Control

November 2016

NEW YORK STATE OF OPPORTUNITY
Department of Environmental Conservation

STANDARD AND SPECIFICATIONS FOR SILT FENCE

Definition & Scope

A **temporary** barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil by temporarily ponding the sediment laden runoff allowing settling to occur. The maximum period of use is limited by the ultraviolet stability of the fabric (approximately one year).

Conditions Where Practice Applies

A silt fence may be used subject to the following conditions:

1. Maximum allowable slope length and fence length will not exceed the limits shown in the Design Criteria for the specific type of silt fence used ; and
2. Maximum ponding depth of 1.5 feet behind the fence; and
3. Erosion would occur in the form of sheet erosion; and
4. There is no concentration of water flowing to the barrier; and
5. Soil conditions allow for proper keying of fabric, or other anchorage, to prevent blowouts.

Design Criteria

1. Design computations are not required for installations of 1 month or less. Longer installation periods should be designed for expected runoff.
2. All silt fences shall be placed as close to the disturbed area as possible, but at least 10 feet from the toe of a slope steeper than 3H:1V, to allow for maintenance and roll down. The area beyond the fence must be undisturbed or stabilized.
3. The type of silt fence specified for each location on the plan shall not exceed the maximum slope length and maximum fence length requirements shown in the following table:

		Slope Length/Fence Length (ft.)		
Slope	Steepness	Standard	Reinforced	Super
<2%	< 50:1	300/1500	N/A	N/A
2-10%	50:1 to 10:1	125/1000	250/2000	300/2500
10-20%	10:1 to 5:1	100/750	150/1000	200/1000
20-33%	5:1 to 3:1	60/500	80/750	100/1000
33-50%	3:1 to 2:1	40/250	70/350	100/500
>50%	> 2:1	20/125	30/175	50/250

Standard Silt Fence (SF) is fabric rolls stapled to wooden stakes driven 16 inches in the ground.
Reinforced Silt Fence (RSF) is fabric placed against welded wire fabric with anchored steel posts driven 16 inches in the ground.
Super Silt Fence (SSF) is fabric placed against chain link fence as support backing with posts driven 3 feet in the ground.

4. Silt fence shall be removed as soon as the disturbed area has achieved final stabilization.

The silt fence shall be installed in accordance with the appropriate details. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent sediment bypass. Butt joints are not acceptable. A detail of the silt fence shall be shown on the plan. See Figure 5.30 on page 5.56 for Reinforced Silt Fence as an example of details to be provided.

Criteria for Silt Fence Materials

1. Silt Fence Fabric: The fabric shall meet the following specifications unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval shall not constitute statewide acceptance.

Fabric Properties	Minimum Acceptable Value	Test Method
Grab Tensile Strength (lbs)	110	ASTM D 4632
Elongation at Failure (%)	20	ASTM D 4632
Mullen Burst Strength (PSI)	300	ASTM D 3786
Puncture Strength (lbs)	60	ASTM D 4833
Minimum Trapezoidal Tear Strength (lbs)	50	ASTM D 4533
Flow Through Rate (gal/ min/sf)	25	ASTM D 4491
Equivalent Opening Size	40-80	US Std Sieve ASTM D 4751
Minimum UV Residual (%)	70	ASTM D 4355

2. Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.5 square inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot. Posts for super silt fence shall be standard chain link fence posts.

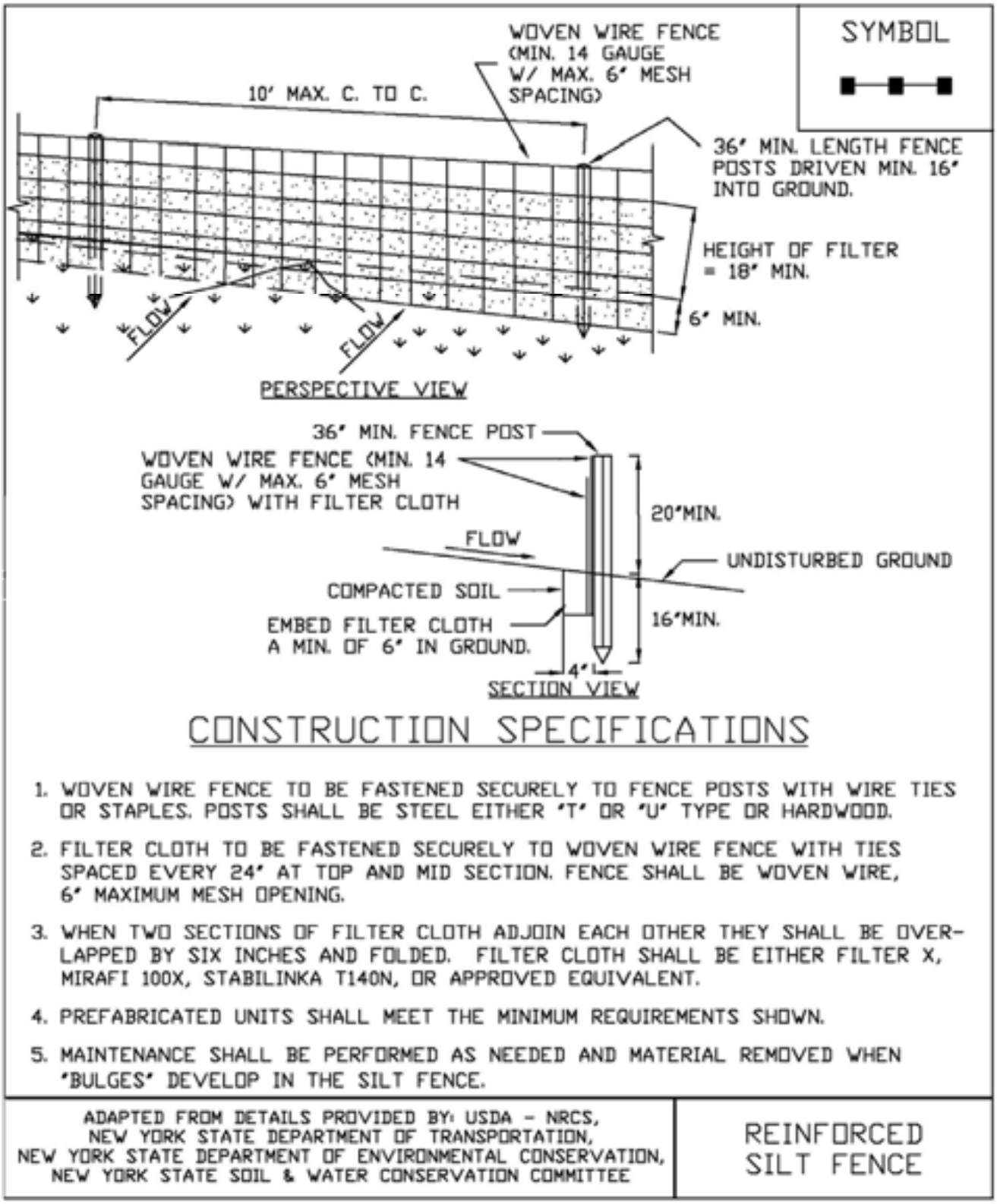
3. Wire Fence for reinforced silt fence: Wire fencing shall be a minimum 14 gage with a maximum 6 in. mesh opening, or as approved.

4. Prefabricated silt fence is acceptable as long as all material specifications are met.

Super Silt Fence

Reinforced Silt Fence

Figure 5.30
Reinforced Silt Fence



STANDARD AND SPECIFICATIONS FOR COMPOST FILTER SOCK

Definition & Scope

A **temporary** sediment control practice composed of a degradable geotextile mesh tube filled with compost filter media to filter sediment and other pollutants associated with construction activity to prevent their migration offsite.

Condition Where Practice Applies

Compost filter socks can be used in many construction site applications where erosion will occur in the form of sheet erosion and there is no concentration of water flowing to the sock. In areas with steep slopes and/or rocky terrain, soil conditions must be such that good continuous contact between the sock and the soil is maintained throughout its length. For use on impervious surfaces such as road pavement or parking areas, proper anchorage must be provided to prevent shifting of the sock or separation of the contact between the sock and the pavement. Compost filter socks are utilized both at the site perimeter as well as within the construction areas. These socks may be filled after placement by blowing compost into the tube pneumatically, or filled at a staging location and moved into its designed location.

Design Criteria

1. Compost filter socks will be placed on the contour with both terminal ends of the sock extended 8 feet upslope at a 45 degree angle to prevent bypass flow.

2. Diameters designed for use shall be 12" – 32" except that 8" diameter socks may be used for residential lots to control areas less than 0.25 acres.

3. The flat dimension of the sock shall be at least 1.5 times the nominal diameter.

4. The **Maximum Slope Length** (in feet) above a compost filter sock shall not exceed the following limits:

Dia. (in.)	Slope %						
	2	**5**	**10**	**20**	**25**	**33**	**50**
8	225*	200	100	50	20	—	—
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50
* Length in feet							

5. The compost infill shall be well decomposed (matured at least 3 months), weed-free, organic matter. It shall be aerobically composted, possess no objectionable odors, and contain less than 1%, by dry weight, of man-made foreign matter. The physical parameters of the compost shall meet the standards listed in Table 5.2 - Compost Standards Table. **Note: All biosolids compost produced in New York State (or approved for importation) must meet NYS DEC's 6 NYCRR Part 360 (Solid Waste Management Facilities) requirements. The Part 360 requirements are equal to or more stringent than 40 CFR Part 503 which ensure safe standards for pathogen reduction and heavy metals content. When using compost filter socks adjacent to surface water, the compost should have a low nutrient value.**

6. The compost filter sock fabric material shall meet the

7. Compost filter socks shall be anchored in earth with 2" x 2" wooden stakes driven 12" into the soil on 10 foot centers on the centerline of the sock. On uneven terrain, effective ground contact can be enhanced by the placement of a fillet of filter media on the disturbed area side of the compost sock.

8. All specific construction details and material specifications shall appear on the erosion and sediment control constructions drawings when compost filter socks are included in the plan.

Maintenance

1. Traffic shall not be permitted to cross filter socks.

2. Accumulated sediment shall be removed when it reaches half the above ground height of the sock and disposed of in accordance with the plan.

3. Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired in the manner required by the manufacturer or replaced within 24 hours of inspection notification.

4. Biodegradable filter socks shall be replaced after 6 months; photodegradable filter socks after 1 year. Polypropylene socks shall be replaced according to the manufacturer's recommendations.

5. Upon stabilization of the area contributory to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed in accordance with the stabilization plan. For removal the mesh can be cut and the compost spread as an additional mulch to act as a soil supplement.

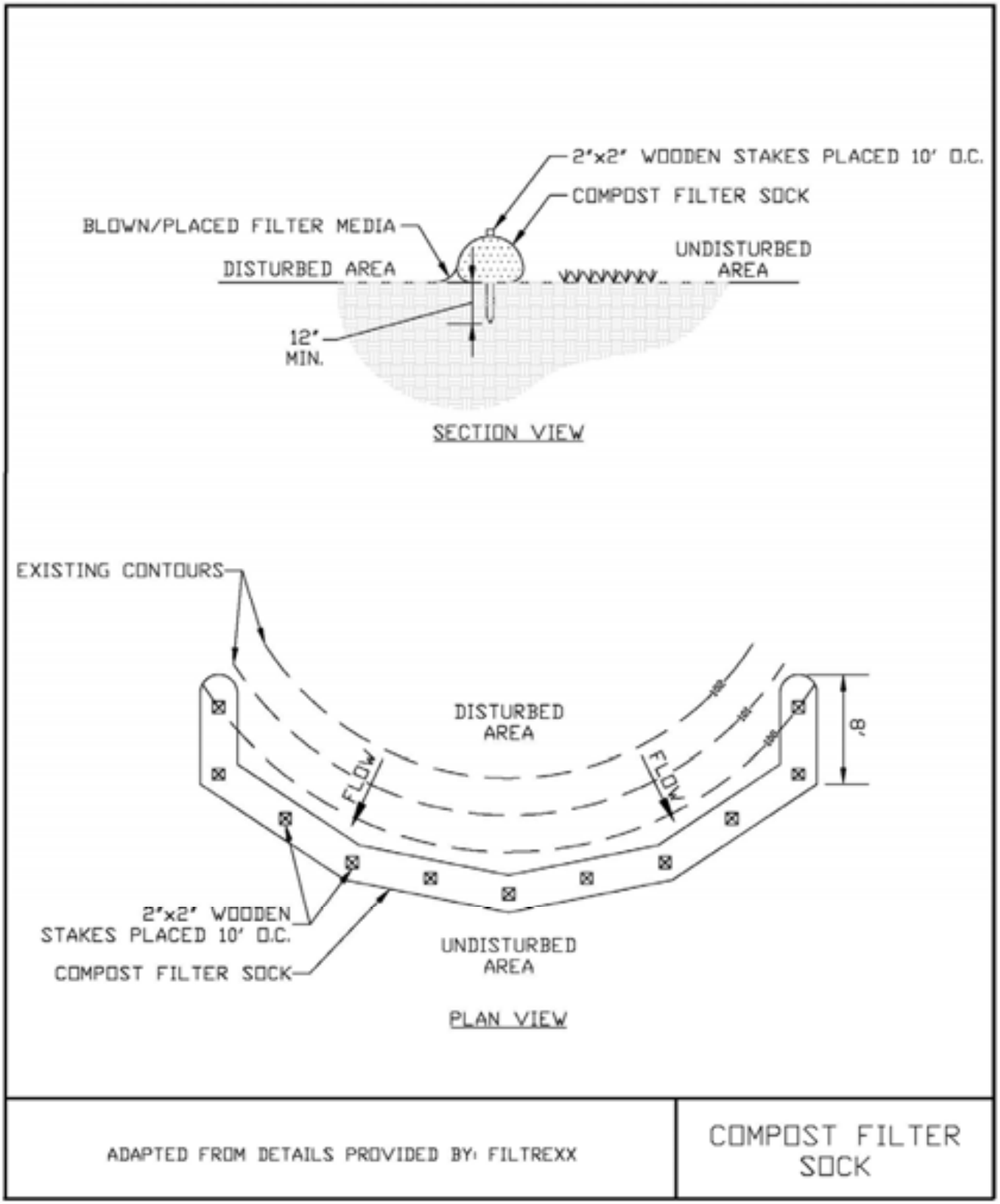
Table 5.1 - Compost Sock Fabric Minimum Specifications Table

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photodegradable	Photodegradable	Biodegradable	Photodegradable	Photodegradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years

Table 5.2 - Compost Standards Table

Organic matter content	25% - 100% (dry weight)
Organic portion	Fibrous and elongated
pH	6.0 – 8.0
Moisture content	30% - 60%
Particle size	100% passing a 1" screen and 10 - 50% passing a 3/8" screen
Soluble salt concentration	5.0 dS/m (mmhos/cm) maximum

Figure 5.2
Compost Filter Sock



ATTACHMENT B-2

Inspection and Maintenance Report Form

Inspection and Maintenance Report Form

To be completed every 7 days and within 24 hours of a rainfall event of 0.5 inches or more

Regular Inspector:_____Rainfall Event Inspector:_____Rainfall (inches):_____

Contractor Activities	OK	NO	N/A	Notes
Are construction onsite traffic routes, parking, and storage of equipment and supplies restricted to areas specifically designated for those uses?				
Are locations of temporary soil stock piles of construction materials in approved areas?				
Is there any evidence of spills and resulting cleanup procedures?				
General Erosion & Sediment Controls				
Are sediment and erosion BMPs installed in the proper location and according to the specifications set out in the SWM & ECP?				
Are all operational storm drain inlets protected from sediment inflow?				
Do any seeded or landscaped areas require maintenance, irrigation, fertilization, seeding or mulching?				
Is there any evidence that sediment is leaving the site?				
Is there any evidence of erosion or cut fill slopes?				
Perimeter Road Use				
Does much sediment get tracked on to the perimeter road?				
Is the gravel clean or is it filled with sediment?				
Does all traffic use the perimeter road to leave the site?				
Is maintenance or repair required for the perimeter road?				

_____ _____

Inspected by (Signature) Date

Inspection and Maintenance Report Form

To be completed every 7 days and within 24 hours of a rainfall event of 0.5 inches or more

Inspector:_____

STABILIZATION MEASURES					
Area	Date Since Last Disturbed	Date of Next Disturbance	Stabilized? Yes/No	Stabilized with	Condition

Stabilization Required: _____

_____

_____

_____

_____

_____

To be performed by: _____ On or before: _____

APPENDIX C

Health and Safety Plan

Health and Safety Plan

351 Franklin Street Site
NYSDEC BCP #C905047
Olean, New York

October 2023

Prepared for:

351 Franklin Street LLC
1 Blue Bird Square
Olean, NY 14760

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
2558 Hamburg Turnpike, Suite 300
Buffalo, New York 14218

2283.0002Y.110/CV

ACKNOWLEDGEMENT

Plan Reviewed by (initial):

Corporate Health and Safety Director:	Thomas H. Forbes, P.E.
Project Manager:	Michael Lesakowski
Designated Site Safety and Health Officer:	Paul W Werthman

Acknowledgement:

I acknowledge that I have reviewed the information contained in this site-specific Health and Safety Plan, and understand the hazards associated with performance of the field activities described herein. I agree to comply with the requirements of this plan.

NAME (PRINT)	SIGNATURE	DATE

Table of Contents

Tables

Figures

Appendices

1. INTRODUCTION

1.1 General

In accordance with OSHA requirements contained in 29 CFR 1910.120, this Health and Safety Plan (HASP) describes the specific health and safety practices and procedures to be employed by Roux Environmental Engineering and Geology, DPC (Roux) (formerly Benchmark Civil/Environmental Engineering & Geology, PLLC and TurnKey Environmental Restoration, LLC) employees during Remedial Action (RA) activities at the 351 Franklin Street Site (Site) located in the City of Olean, Cattaraugus County, New York. This HASP presents procedures for Roux employees who will be involved with RI field activities; it does not cover the activities of other contractors, subcontractors or other individuals on the Site. These firms will be required to develop and enforce their own HASPs as discussed in Section 2.0. Roux accepts no responsibility for the health and safety of contractor, subcontractor or other personnel.

This HASP presents information on known Site health and safety hazards using available historical information, and identifies the equipment, materials and procedures that will be used to eliminate or control these hazards. Environmental monitoring will be performed during the course of field activities to provide real-time data for on-going assessment of potential hazards.

1.2 Background

The Site will consist of one parcel totaling 6.26-acres, located in a highly developed commercial and industrial use area in the City of Olean, Cattaraugus County, New York (see Figures 1 and 2).

The Site is currently developed with two commercial structures surrounded by paved parking areas, access roads, and vegetated areas. The westernmost structure (Building 1) is occupied by First Transit, Inc. and the easternmost structure (Building 2) is vacant.

The Site was identified as having a history of petroleum refining operations as part of a greater facility from 1876 to 1954, corn and wheat storage from 1954 to 1964, and anhydrous ammonia operations/fertilizer plant until 1984.

Numerous spill records associated with the Site are included in the NYDEC Spill database (9201686, 0811100, and 1300859). Spill 1300859 referred to as “Offsite Scott Rotary Seal BCP Site” was determined to be associated with abandoned refinery pipes extending from the adjacent Scott Rotary Seals BCP site (C905036) and the NYSDEC ordered on-Site pipes to be located, excavated, and cleaned, and that all materials be disposed of properly. Interim Remedial Measure (IRM) activities have been completed between 2012 and 2017 to remove some of the refinery piping and grossly contaminated media (GCM).

1.3 Known and Suspected Environmental Conditions

Previous investigations including the Remedial Investigation (RI) have confirmed that the historic use of the Site as part of a petroleum refining operation has impacted the Site, which will require remediation prior to redevelopment. Previous investigation findings include:

Soil

Based on the historic and RI subsurface soil/fill findings, arsenic and semi-volatile organic compound (SVOC) impacted surface soil/fill exceeding 6 NYCRR Part 375 Commercial Soil Cleanup Objectives (CSCOs) was identified across the Site. Arsenic and SVOC-impacted soil/fill was also observed exceeding CSCOs in the subsurface at depths ranging from 2 to 20 fbgs. Petroleum odors and elevated photoionization detector (PID) readings were detected at all subsurface investigation locations, with the highest reading of 1,121 ppm at MW-2 (19 fbgs). Grossly contaminated media (GCM) was detected at seven (7) test pit locations, three (3) test trench locations, and fifteen (15) soil boring locations. GCM was detected in the subsurface within six (6) areas of concern (GCM Area 1 through GCM Area 6) at depths ranging between approximately 5 and 26 fbgs.

Groundwater

One volatile organic compound (VOC) was detected above its TOGS 1.1.1 Groundwater Quality Standards/Guidance Values (GWQS/GV) at MW-2, SVOCs were detected above GWQS and MW-2 and MW-6, and pesticides was detected above GWQS at MW-3 and MW-9. Several naturally occurring metals (total and dissolved magnesium, manganese, and sodium), were detected across the Site above their respective GWQS. Other metals including total arsenic, total copper, and total lead, were detected at MW-3 and MW-9 above GWQS. However, dissolved arsenic, copper, and lead were not detected exceeding GWQS at these locations, and groundwater collected from MW-3 and MW-9 was noted for having high turbidity during sampling. No polychlorinated biphenyls (PCBs), herbicides, 1,4-dioxane, or per- and polyfluoroalkyl substances (PFAS) were detected above their respective GWQS or NYSDEC action levels. Light non-aqueous phase liquid (LNAPL) was detected at MW-3, MW-6, and MW-7, indicating that there is likely an on-Site localized source of mobile GCM in the vicinity of these monitoring locations. Additional sampling for VOCs completed in October 2021 indicated elevated concentrations of VOCs above GWQS including isopropylbenzene, methylene chloride, n-butylbenzene, and n-propylbenzene at MW-2 and tert-butylbenzene at MW-5.

Soil Vapor Intrusion (SVI)

Analytical results in comparison to the New York State Department of Health (NYSDOH) Decision Matrices indicate that no monitoring or mitigation is required in Building 2. However, further assessment was completed due to elevated concentrations of parameters that are not included in the NYSDOH Decision Matrices. SVI results were compared to NYSDEC indoor air 90th percentile values and six (6) parameters were detected exceeding these values (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, cyclohexane, methyl isobutyl ketone, n-hexane, and toluene). These six (6) parameters were compared permissible exposure levels (PELs) and only 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were detected exceeding their respective limits. However, as neither parameter is identified as contaminants of potential concern (COPCs) in the soil or groundwater, it is unlikely that these elevated concentrations are sourced from the Site, and therefore they are not considered COPCs in the sub-slab. Therefore, no active sub-slab depressurization (ASD) system is required in Building 1 under its current use. If Building 1 changes use, an additional SVI investigation will be completed.

There is a potential for SVI in the planned new Building 2, due to the presence of petroleum-impacted soil and groundwater. Therefore, an ASD system will be installed in the building during construction and further testing will be completed after construction to determine whether the ASD system is needed to mitigate sub-slab vapor intrusion.

Soil Vapor

Elevated parameters identified in the soil vapor samples include acetone, chloroform, cyclohexane, m&p xylenes, methyl isobutyl ketone, methyl ethyl ketone, n-heptane, n-hexane, and toluene. None of these contaminants were identified as COPCs in the soil and groundwater. Surrounding properties include industrial use facilities and were formerly used for the same/similar purposes as the subject Site. Therefore, these results may indicate that there is an on-site contribution to soil vapor contamination, however it is also possible that these compounds are sourced off-Site and therefore are not COPCs in the soil vapor.

1.4 Parameters of Interest

Based on the previous investigations, constituents of potential concern (COPCs) in soil and, potentially groundwater, at the Site include:

- **Semivolatile Organic Compounds (SVOCs)** – SVOCs present at elevated concentrations may include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene.
- **Metals** – metals at elevated concentrations may include arsenic.
- **Grossly Contaminated Media** – GCM in the form mobile petroleum product as evidenced by heavy petroleum odors, black discoloration, heavy sheen, elevated PID readings, and/or viscous tar-like material or petroleum globules may be present.

1.5 Overview of RA Activities

Roux personnel will be on-site to observe and perform remedial activities. The field activities to be completed as part of the RA are described below.

Remedial Action Activities

1. Excavation and reuse of the top one foot of SVOC- and arsenic-impacted soil under the cover system, and disposal of excess material;
2. Excavation of non-GCM-impacted soil/fill that resides over the GCM and staging of the material on-site for reuse as backfill under the cover system;
3. Excavation and disposal of GCM-impacted soil/fill to meet site-specific action levels (SSALs) and completion of in-situ solidification (ISS) as needed to address GCM-impacted soil/fill at the water table, followed by backfill and site grading;
4. Removal and transferal of piping encountered during GCM excavation activities to a recycling facility and extraction and disposal of piping contents;
5. In-Situ Solidification of GCM-impacted soil/fill;

6. Management of impacted groundwater and stormwater during remedial activities;
7. Placement of a cover system across the entire Site;
8. Installation of an ASD system in the new Building 2 during construction and completion of SVI sampling; and
9. Monitoring of groundwater level and LNAPL.

2. ORGANIZATIONAL STRUCTURE

This section of the HASP describes the lines of authority, responsibility and communication as they pertain to health and safety functions at the Site. The purpose of this chapter is to identify the personnel who impact the development and implementation of the HASP and to describe their roles and responsibilities. This chapter also identifies other contractors and subcontractors involved in work operations and establish the lines of communications among them for health and safety matters. The organizational structure described in this chapter is consistent with the requirements of 29 CFR 1910.120(b)(2). This section will be reviewed by the Project Manager and updated as necessary to reflect the current organizational structure at this Site.

2.1 Roles and Responsibilities

All Roux personnel on the Site must comply with the minimum requirements of this HASP. The specific responsibilities and authority of management, safety and health, and other personnel on this Site are detailed in the following paragraphs.

2.1.1 Corporate Health and Safety Director

The Roux Corporate Health and Safety Director is ***Mr. Thomas H. Forbes, P.E.*** The Corporate Health and Safety Director responsible for developing and implementing the Health and Safety program and policies for Benchmark Environmental Engineering & Science, PLLC and TurnKey Environmental Restoration, LLC, and consulting with corporate management to ensure adequate resources are available to properly implement these programs and policies. The Corporate Health and Safety Director coordinates Roux's Health and Safety training and medical monitoring programs and assists project management and field staff in developing site-specific health and safety plans.

2.1.2 Project Manager

The Project Manager for this Site is ***Mr. Michael Lesakowski.*** The Project Manager has the responsibility and authority to direct all Roux work operations at the Site. The Project Manager coordinates safety and health functions with the Site Safety and Health Officer, and bears ultimate responsibility for proper implementation of this HASP. He may delegate authority to expedite and facilitate any application of the program, including modifications to the overall project approach as necessary to circumvent unsafe work conditions. Specific duties of the Project Manager include:

- Preparing and coordinating the Site work plan.
- Providing Roux workers with work assignments and overseeing their performance.
- Coordinating health and safety efforts with the Site Safety and Health Officer (SSHO).
- Reviewing the emergency response coordination plan to assure its effectiveness.
- Serving as the primary liaison with Site contractors and the property owner.

2.1.3 Site Safety and Health Officer

The SSHO for this Site is ***Mr. Paul W. Werthman***. The qualified alternate SSHO is ***Mr. Nathan Munley.*** The SSHO reports to the Project Manager. The SSHO is on-Site or readily accessible to the Site during all work operations and has the authority to halt Site work if unsafe conditions are detected. The specific responsibilities of the SSHO are:

- Managing the safety and health functions for Roux personnel on the Site.
- Serving as the point of contact for safety and health matters.
- Ensuring that Roux field personnel working on the Site have received proper training (per 29 CFR Part 1910.120(e)), that they have obtained medical clearance to wear respiratory protection (per 29 CFR Part 1910.134), and that they are properly trained in the selection, use and maintenance of personal protective equipment, including qualitative respirator fit testing.
- Performing or overseeing Site monitoring as required by the HASP.
- Assisting in the preparation and review of the HASP.
- Maintaining site-specific safety and health records as described in this HASP.
- Coordinating with the Project Manager, Site Workers, and Contractor's SSHO as necessary for safety and health efforts.

2.1.4 Site Workers

Site workers are responsible for complying with this HASP or a more stringent HASP, if appropriate (i.e., Contractor and Subcontractor's HASP); using proper PPE; reporting unsafe acts and conditions to the SSHO; and following the safety and health instructions of the Project Manager and SSHO.

2.1.5 Other Site Personnel

Other Site personnel who will have health and safety responsibilities will include the Excavation and/or Drilling Contractor, who will be responsible for developing, implementing and enforcing a Health and Safety Plan equally stringent or more stringent than Roux's HASP. Roux assumes no responsibility for the health and safety of anyone outside its direct employ. Each Contractor's HASP shall cover all non-Roux Site personnel. Each Contractor shall assign a SSHO who will coordinate with Roux's SSHO as necessary to ensure effective lines of communication and consistency between contingency plans.

In addition to Roux and Contractor personnel, other individuals who may have responsibilities in the work zone include subcontractors and governmental agencies performing Site inspection work (i.e., the New York State Department of Environmental Conservation). The Contractor shall be responsible for ensuring that these individuals have received OSHA-required training (29 CFR 1910.120(e)), including initial, refresher and site-specific training, and shall be responsible for the safety and health of these individuals while they are on-site.

3. HAZARD EVALUATION

Due to the presence of certain contaminants at the Site, the possibility exists that workers will be exposed to hazardous substances during field activities. The principal points of exposure would be through direct contact with and incidental ingestion of soil, and through the inhalation of contaminated particles or vapors. Other points of exposure may include direct contact with groundwater. In addition, the use of drilling and/or medium to large-sized construction equipment (e.g., excavator) will also present conditions for potential physical injury to workers. Further, since work will be performed outdoors, the potential exists for heat/cold stress to impact workers, especially those wearing protective equipment and clothing. Adherence to the medical evaluations, worker training relative to chemical hazards, safe work practices, proper personal protection, environmental monitoring, establishment of work zones and Site control, appropriate decontamination procedures and contingency planning outlined herein will reduce the potential for chemical exposures and physical injuries.

3.1 Chemical Hazards

As discussed in Section 1.3, SVOC and metals impacts have been identified at the Site. Table 1 lists exposure limits for airborne concentrations of the COPCs identified in Section 1.4 of this HASP. Brief descriptions of the toxicology of the prevalent COPCs and related health and safety guidance and criteria are provided below.

- **Polycyclic Aromatic Hydrocarbons (PAHs)** are formed as a result of the pyrolysis and incomplete combustion of organic matter such as fossil fuel. PAH aerosols formed during the combustion process disperse throughout the atmosphere, resulting in the deposition of PAH condensate in soil, water and on vegetation. In addition, several products formed from petroleum processing operations (e.g., roofing materials and asphalt) also contain elevated levels of PAHs. Hence, these compounds are widely dispersed in the environment. PAHs are characterized by a molecular structure containing three or more fused, unsaturated carbon rings. Seven of the PAHs are classified by USEPA as probable human carcinogens (USEPA Class B2). These are: benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; and dibenzo(a,h)anthracene. The primary route of exposure to PAHs is through incidental ingestion and inhalation of contaminated particulates. PAHs are characterized by an organic odor and exist as oily liquids in pure form. Acute exposure symptoms may include acne-type blemishes in areas of the skin exposed to sunlight.
- **Arsenic (CAS #7440-38-2)** is a naturally occurring element found throughout nature. Inhalation is a more important exposure route than ingestion. First phase exposure symptoms include nausea, vomiting, diarrhea and pain in the stomach. Prolonged contact is corrosive to the skin and mucus membranes. Arsenic is considered a Group A human carcinogen by the USEPA. Exposure via inhalation is associated with an increased risk of lung cancer. Exposure via the oral route is associated with an increased risk of skin cancer.

With respect to the anticipated RA activities discussed in Section 1.5, possible routes of exposure to the above-mentioned contaminants are presented in Table 2. The use of proper respiratory equipment, as outlined in Section 7.0 of this HASP, will minimize the potential for exposure to airborne contamination, if

deemed necessary. Exposure to contaminants through dermal and other routes will also be minimized through the use of protective clothing (Section 7.0), safe work practices (Section 6.0), and proper decontamination procedures (Section 12.0).

3.2 Physical Hazards

RI field activities at the 351 Franklin Street Site may present the following physical hazards:

- The potential for physical injury during heavy construction equipment use, such as backhoes, excavators and drilling equipment.
- The potential for heat/cold stress to employees during the summer/winter months (see Section 10.0).
- The potential for slip and fall injuries due to rough, uneven terrain and/or open excavations.

These hazards represent only some of the possible means of injury that may be present during RA operations and sampling activities at the Site. Since it is impossible to list all potential sources of injury, it shall be the responsibility of each individual to exercise proper care and caution during all phases of the work.

4. TRAINING

4.1 Site Workers

All personnel performing RA activities at the Site (such as, but not limited to, equipment operators, general laborers, and drillers) and who may be exposed to hazardous substances, health hazards, or safety hazards and their supervisors/managers responsible for the Site shall receive training in accordance with 29 CFR 1910.120(e) before they are permitted to engage in operations in the exclusion zone or contaminant reduction zone. This training includes an initial 40-hour Hazardous Waste Site Worker Protection Course, an 8-hour Annual Refresher Course subsequent to the initial 40-hour training, and 3 days of actual field experience under the direct supervision of a trained, experienced supervisor. Additional site-specific training shall also be provided by the SSHO prior to the start of field activities. A description of topics to be covered by this training is provided below.

4.1.1 Initial and Refresher Training

Initial and refresher training is conducted by a qualified instructor as specified under OSHA 29 CFR 1910.120(e)(5), and is specifically designed to meet the requirements of OSHA 29 CFR 1910.120(e)(3) and 1910.120(e)(8). The training covers, as a minimum, the following topics:

- OSHA HAZWOPER regulations.
- Site safety and hazard recognition, including chemical and physical hazards.
- Medical monitoring requirements.
- Air monitoring, permissible exposure limits, and respiratory protection level classifications.
- Appropriate use of personal protective equipment (PPE), including chemical compatibility and respiratory equipment selection and use.
- Work practices to minimize risk.
- Work zones and Site control.
- Safe use of engineering controls and equipment.
- Decontamination procedures.
- Emergency response and escape.
- Confined space entry procedures.
- Heat and cold stress monitoring.
- Elements of a Health and Safety Plan.
- Spill containment.

Initial training also incorporates workshops for PPE and respiratory equipment use (Levels A, B and C), and respirator fit testing. Records and certification received from the course instructor documenting each employee's successful completion of the training identified above are maintained on file at Roux's Buffalo,

NY office. Contractors and Subcontractors are required to provide similar documentation of training for all their personnel who will be involved in on-site work activities.

Any employee who has not been certified as having received health and safety training in conformance with 29 CFR 1910.120(e) is prohibited from working in the exclusion and contamination reduction zones, or to engage in any on-site work activities that may involve exposure to hazardous substances or wastes.

4.1.2 Site Training

Site workers are given a copy of the HASP and provided a site-specific briefing prior to the commencement of work to ensure that employees are familiar with the HASP and the information and requirements it contains. The Site briefing shall be provided by the SSHO prior to initiating field activities and shall include:

- Names of personnel and alternates responsible for Site safety and health.
- Safety, health and other hazards present on the Site.
- The site lay-out including work zones and places of refuge.
- The emergency communications system and emergency evacuation procedures.
- Use of PPE.
- Work practices by which the employee can minimize risks from hazards.
- Safe use of engineering controls and equipment on the site.
- Medical surveillance, including recognition of symptoms and signs of over-exposure as described in Chapter 5 of this HASP.
- Decontamination procedures as detailed in Chapter 12 of this HASP.
- The emergency response plan as detailed in Chapter 15 of this HASP.
- Confined space entry procedures, if required, as detailed in Chapter 13 of this HASP.
- The spill containment program as detailed in Chapter 9 of this HASP.
- Site control as detailed in Chapter 11 of this HASP.

Supplemental health and safety briefings will also be conducted by the SSHO on an as-needed basis during the course of the work. Supplemental briefings are provided as necessary to notify employees of any changes to this HASP as a result of information gathered during ongoing Site characterization and analysis. Conditions for which the SSHO may schedule additional briefings include, but are not limited to: a change in Site conditions (e.g., based on monitoring results); changes in the work schedule/plan; newly discovered hazards; and safety incidents occurring during Site work.

4.2 Supervisor Training

On-site safety and health personnel who are directly responsible for or who supervise the safety and health of workers engaged in hazardous waste operations (i.e., SSHO) shall receive, in addition to the

appropriate level of worker training described in Section 4.1, above, 8 additional hours of specialized supervisory training, in compliance with 29 CFR 1910.120(e)(4).

4.3 Emergency Response Training

Emergency response training is addressed in Attachment A of this HASP, Emergency Response Plan.

4.4 Site Visitors

Each Contractor's SSHO will provide a site-specific briefing to all Site visitors and other non- Roux personnel who enter the Site beyond the Site entry point. The site-specific briefing will provide information about Site hazards, the Site layout including work zones and places of refuge, the emergency communications system and emergency evacuation procedures, and other pertinent safety and health requirements as appropriate.

Site visitors will not be permitted to enter the exclusion zone or contaminant reduction zones unless they have received the level of training required for Site workers as described in Section 4.1.

5. MEDICAL MONITORING

Medical monitoring examinations are provided to Roux employees as stipulated under 29 CFR Part 1910.120(f). These exams include initial employment, annual and employment termination physicals for all Roux employees involved in hazardous waste site field operations. Post-exposure examinations are also provided for employees who may have been injured, received a health impairment, or developed signs or symptoms of over-exposure to hazardous substances or were accidentally exposed to substances at concentrations above the permissible exposure limits without necessary personal protective equipment. Such exams are performed as soon as possible following development of symptoms or the known exposure event.

Medical evaluations are performed by Health Works, an occupational health care provider under contract with Roux. Health Works is located in Seneca Square Plaza, 1900 Ridge Road, West Seneca, New York 14224. The facility can be reached at (716) 823-5050 to schedule routine appointments or post-exposure examinations.

Medical evaluations are conducted according to the Roux Medical Monitoring Program and include an evaluation of the workers' ability to use respiratory protective equipment. The examinations include:

- Occupational/medical history review.
- Physical exam, including vital sign measurement.
- Spirometry testing.
- Eyesight testing.
- Audio testing (minimum baseline and exit, annual for employees routinely exposed to greater than 85db).
- EKG (for employees >40 yrs age or as medical conditions dictate).
- Chest X-ray (baseline and exit, and every 5 years).
- Blood biochemistry (including blood count, white cell differential count, serum multiplastic screening).
- Medical certification of physical requirements (i.e., sight, musculoskeletal, cardiovascular) for safe job performance and to wear respiratory protection equipment.

The purpose of the medical evaluation is to determine an employee's fitness for duty on hazardous waste sites; and to establish baseline medical data. In conformance with OSHA regulations, Roux will maintain and preserve medical records for a period of 30 years following termination of employment. Employees are provided a copy of the physician's post-exam report, and have access to their medical records and analyses.

6. SAFE WORK PRACTICES

All Roux employees shall conform to the following safe work practices during all on-site work activities conducted within the exclusion and contamination reduction zones:

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth contact is strictly prohibited.
- The hands and face must be thoroughly washed upon leaving the work area and prior to engaging in any activity indicated above.
- Respiratory protective equipment and clothing must be worn by all personnel entering the Site as required by the HASP or as modified by the Site safety officer. Excessive facial hair (i.e., beards, long mustaches or sideburns) that interferes with the satisfactory respirator-to-face seal is prohibited.
- Contact with surfaces/materials either suspected or known to be contaminated will be avoided to minimize the potential for transfer to personnel, cross contamination and need for decontamination.
- Medicine and alcohol can synergize the effects of exposure to toxic chemicals. Due to possible contraindications, use of prescribed drugs should be reviewed with the Roux occupational physician. Alcoholic beverage and illegal drug intake are strictly forbidden during the workday.
- All personnel shall be familiar with standard operating safety procedures and additional instructions contained in this Health and Safety Plan.
- On-site personnel shall use the “buddy” system. No one may work alone (i.e., out of earshot or visual contact with other workers) in the exclusion zone.
- Personnel and equipment in the contaminated area shall be minimized, consistent with effective Site operations.
- All employees have the obligation to immediately report and if possible, correct unsafe work conditions.
- Use of contact lenses on-site will not be permitted. Spectacle kits for insertion into full-face respirators will be provided for Roux employees, as requested and required.

The recommended specific safety practices for working around the contractor’s equipment (e.g., backhoes, bulldozers, excavators, drill rigs etc.) are as follows:

- Although the Contractor and subcontractors are responsible for their equipment and safe operation of the Site, Roux personnel are also responsible for their own safety.
- Subsurface work will not be initiated without first clearing underground utility services.
- Heavy equipment should not be operated within 20 feet of overhead wires. This distance may be increased if windy conditions are anticipated or if lines carry high voltage. The Site should

also be sufficiently clear to ensure the project staff can move around the heavy machinery safely.

- Care should be taken to avoid overhead wires when moving heavy-equipment from location to location.
- Hard hats, safety boots and safety glasses should be worn at all times in the vicinity of heavy equipment. Hearing protection is also recommended.
- The work Site should be kept neat. This will prevent personnel from tripping and will allow for fast emergency exit from the Site.
- Proper lighting must be provided when working at night.
- Construction activities should be discontinued during an electrical storm or severe weather conditions.
- The presence of combustible gases should be checked before igniting any open flame.
- Personnel shall stand upwind of any construction operation when not immediately involved in sampling/logging/observing activities.
- Personnel will not approach the edge of an unsecured trench/excavation closer than 2 feet.

7. PERSONAL PROTECTIVE EQUIPMENT

7.1 Equipment Selection

PPE will be donned when work activities may result in exposure to physical or chemical hazards beyond acceptable limits, and when such exposure can be mitigated through appropriate PPE. The selection of PPE will be based on an evaluation of the performance characteristics of the PPE relative to the requirements and limitations of the Site, the task-specific conditions and duration, and the hazards and potential hazards identified at the Site.

Equipment designed to protect the body against contact with known or suspect chemical hazards are grouped into four categories according to the degree of protection afforded. These categories designated A through D consistent with United States Environmental Protection Agency (USEPA) Level of Protection designation, are:

- **Level A:** Should be selected when the highest level of respiratory, skin and eye protection is needed.
- **Level B:** Should be selected when the highest level of respiratory protection is needed, but a lesser level of skin protection is required. Level B protection is the minimum level recommended on initial Site entries until the hazards have been further defined by on-site studies. Level B (or Level A) is also necessary for oxygen-deficient atmospheres.
- **Level C:** Should be selected when the types of airborne substances are known, the concentrations have been measured and the criteria for using air-purifying respirators are met. In atmospheres where no airborne contaminants are present, Level C provides dermal protection only.
- **Level D:** Should not be worn on any Site with elevated respiratory or skin hazards. This is generally a work uniform providing minimal protection.

OSHA requires the use of certain PPE under conditions where an immediate danger to life and health (IDLH) may be present. Specifically, OSHA 29 CFR 1910.120(g)(3)(iii) requires use of a positive pressure self-contained breathing apparatus, or positive pressure air-line respirator equipped with an escape air supply when chemical exposure levels present a substantial possibility of immediate serious injury, illness or death, or impair the ability to escape. Similarly, OSHA 29 CFR 1910.120(g)(3)(iv) requires donning totally-encapsulating chemical protective suits (with a protection level equivalent to Level A protection) in conditions where skin absorption of a hazardous substance may result in a substantial possibility of immediate serious illness, injury or death, or impair the ability to escape.

In situations where the types of chemicals, concentrations, and possibilities of contact are unknown, the appropriate level of protection must be selected based on professional experience and judgment until the hazards can be further characterized. The individual components of clothing and equipment must be assembled into a full protective ensemble to protect the worker from site-specific hazards, while at the same time minimizing hazards and drawbacks of the personal protective gear itself. Ensemble components are detailed below for levels A/B, C, and D protection.

7.2 Protection Ensembles

7.2.1 Level A/B Protection Ensemble

Level A/B ensembles include similar respiratory protection, however Level A provides a higher degree of dermal protection than Level B. Use of Level A over Level B is determined by: comparing the concentrations of identified substances in the air with skin toxicity data, and assessing the effect of the substance (by its measured air concentrations or splash potential) on the small area of the head and neck unprotected by Level B clothing.

The recommended PPE for level A/B is:

- Pressure-demand, full-face piece self-contained breathing apparatus (MSHA/NIOSH approved) or pressure-demand supplied-air respirator with escape self-contained breathing apparatus (SCBA).
- Chemical-resistant clothing. For Level A, clothing consists of totally-encapsulating chemical resistant suit. Level B incorporates hooded one-or two-piece chemical splash suit.
- Inner and outer chemical resistant gloves.
- Chemical-resistant safety boots/shoes.
- Hardhat.

7.2.2 Level C Protection Ensemble

Level C protection is distinguished from Level B by the equipment used to protect the respiratory system, assuming the same type of chemical-resistant clothing is used. The main selection criterion for Level C is that conditions permit wearing an air-purifying device. The device (when required) must be an air-purifying respirator (MSHA/NIOSH approved) equipped with filter cartridges. Cartridges must be able to remove the substances encountered. Respiratory protection will be used only with proper fitting, training and the approval of a qualified individual. In addition, an air-purifying respirator can be used only if: oxygen content of the atmosphere is at least 19.5% in volume; substances are identified and concentrations measured; substances have adequate warning properties; the individual passes a qualitative fit-test for the mask; and an appropriate cartridge/canister is used, and its service limit concentration is not exceeded.

Recommended PPE for Level C conditions includes:

- Full-face piece, air-purifying respirator equipped with MSHA and NIOSH approved organic vapor/acid gas/dust/mist combination cartridges or as designated by the SSHO.
- Chemical-resistant clothing (hooded, one or two-piece chemical splash suit or disposable chemical-resistant one-piece suit).
- Inner and outer chemical-resistant gloves.
- Chemical-resistant safety boots/shoes.
- Hardhat.

An air-monitoring program is part of all response operations when atmospheric contamination is known or suspected. It is particularly important that the air be monitored thoroughly when personnel are wearing air-purifying respirators. Continual surveillance using direct-reading instruments is needed to detect any changes in air quality necessitating a higher level of respiratory protection.

7.2.3 Level D Protection Ensemble

As indicated above, Level D protection is primarily a work uniform. It can be worn in areas where only boots can be contaminated, where there are no inhalable toxic substances and where the atmospheric contains at least 19.5% oxygen.

Recommended PPE for Level D includes:

- Coveralls.
- Safety boots/shoes.
- Safety glasses or chemical splash goggles.
- Hardhat.
- Optional gloves; escape mask; face shield.

7.2.4 Recommended Level of Protection for Site Tasks

Based upon current information regarding both the contaminants suspected to be present at the Site and the various tasks that are included in the remedial activities, the minimum required levels of protection for these tasks shall be as identified in Table 3.

8. EXPOSURE MONITORING

8.1 General

Based on the results of historic sample analysis and the nature of the proposed work activities at the Site, the possibility exist that organic vapors and/or particulates may be released to the air during intrusive construction activities. Ambient breathing zone concentrations may at times, exceed the permissible exposure limits (PELs) established by OSHA for the individual compounds (see Table 1), in which case respiratory protection will be required. Respiratory and dermal protection may be modified (upgraded or downgraded) by the SSHO based upon real-time field monitoring data.

8.1.1 On-Site Work Zone Monitoring

Roux personnel will conduct routine, real-time air monitoring during all intrusive construction phases such as excavation, backfilling, drilling, etc. The work area will be monitored at regular intervals using a PID, combustible gas meter and a particulate meter. Observed values will be recorded and maintained as part of the permanent field record.

Additional air monitoring measurements may be made by Roux personnel to verify field conditions during subcontractor oversight activities. Monitoring instruments will be protected from surface contamination during use. Additional monitoring instruments may be added if the situations or conditions change. Monitoring instruments will be calibrated in accordance with manufacturer's instructions before use.

8.1.2 Off-Site Community Air Monitoring

In addition to on-site monitoring within the work zone(s), monitoring at the downwind portion of the Site perimeter will be conducted. This will provide a real-time method for determination of vapor and/or particulate releases to the surrounding community as a result of ground intrusive investigation work.

Ground intrusive activities are defined in the Generic Community Air Monitoring Plan and attached as Attachment C. Ground intrusive activities include soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells. Non-intrusive activities include the collection of soil and sediment samples or the collection of groundwater samples from existing wells. Continuous monitoring is required for ground intrusive activities and periodic monitoring is required for non-intrusive activities. Periodic monitoring consists of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring while bailing a well, and taking a reading prior to leaving a sampling location. This may be upgraded to continuous if the sampling location is in close proximity to individuals not involved in the Site activity (i.e., on a curb of a busy street). The action levels below will be used during periodic monitoring.

8.2 Monitoring Action Levels

8.2.1 On-Site Work Zone Action Levels

The PID, or other appropriate instrument(s), will be used by Roux personnel to monitor organic vapor concentrations as specified in this HASP. Combustible gas will be monitored with the “combustible gas” option on the combustible gas meter or other appropriate instrument(s). In addition, fugitive

dust/particulate concentrations will be monitored during major soil intrusion (viz., well/boring installation) using a real-time particulate monitor as specified in this plan. In the absence of such monitoring, appropriate respiratory protection for particulates shall be donned. Sustained readings obtained in the breathing zone may be interpreted (with regard to other Site conditions) as follows for Roux personnel:

- Total atmospheric concentrations of unidentified vapors or gases ranging from 0 to 1 ppm above background on the PID) - Continue operations under Level D.
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings from >1 ppm to 5 ppm above background on the PID (vapors not suspected of containing high levels of chemicals toxic to the skin) - Continue operations under Level C.
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings of >5 ppm to 50 ppm above background on the PID - Continue operations under Level B, re-evaluate and alter (if possible) construction methods to achieve lower vapor concentrations.
- Total atmospheric concentrations of unidentified vapors or gases above 50 ppm on the PID - Discontinue operations and exit the work zone immediately.

The particulate monitor will be used to monitor respirable dust concentrations during all intrusive activities and during handling of Site soil/fill. Action levels based on the instrument readings shall be as follows:

- Less than 50 mg/m^3 - Continue field operations.
- 50-150 mg/m^3 - Don dust/particulate mask or equivalent
- Greater than 150 mg/m^3 - Don dust/particulate mask or equivalent. Initiate engineering controls to reduce respirable dust concentration (viz., wetting of excavated soils or tools at discretion of Site Health and Safety Officer).

Readings from the field equipment will be recorded and documented on the appropriate Project Field Forms. All instruments will be calibrated before use on a daily basis and the procedure will be documented on the appropriate Project Field Forms.

8.2.2 Community Air Monitoring Action Levels

In addition to the action levels prescribed in Section 8.2.1 for Roux personnel on-site, the following criteria shall also be adhered to for the protection of downwind receptors consistent with NYSDOH requirements (Attachment C):

ORGANIC VAPOR PERIMETER MONITORING:

- If the sustained ambient air concentration of organic vapors at the downwind perimeter of the exclusion zone exceeds 5 ppm above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the sustained organic vapor decreases below 5 ppm over background, work activities can resume with continued monitoring.

- If the sustained ambient air concentration of organic vapors at the downwind perimeter of the exclusion zone are greater than 5 ppm over background but less than 25 ppm for the 15-minute average, activities can resume provided that: the organic vapor level 200 feet downwind of the working site or half the distance to the nearest off-site residential or commercial structure, whichever is less, but in no case less than 20 feet, is below 5 ppm over background; and more frequent intervals of monitoring, as directed by the Site Health and Safety Officer, are conducted.
- If the sustained organic vapor level is above 25 ppm at the perimeter of the exclusion zone for the 15-minute average, the Site Health and Safety Officer must be notified and work activities shut down. The Site Health and Safety Officer will determine when re-entry of the exclusion zone is possible and will implement downwind air monitoring to ensure vapor emissions do not impact the nearest off-site residential or commercial structure at levels exceeding those specified in the **Organic Vapor Contingency Monitoring Plan** below. All readings will be recorded and will be available for New York State Department of Environmental Conservation (DEC) and Department of Health (DOH) personnel to review.

ORGANIC VAPOR CONTINGENCY MONITORING PLAN:

- If the sustained organic vapor level is greater than 5 ppm over background 200 feet downwind from the work area or half the distance to the nearest off-site residential or commercial property, whichever is less, all work activities must be halted.
- If, following the cessation of the work activities or as the result of an emergency, sustained organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest off-site residential or commercial property from the work area, then the air quality must be monitored within 20 feet of the perimeter of the nearest off-site residential or commercial structure (20-foot zone).
- If efforts to abate the emission source are unsuccessful and if sustained organic vapor levels approach or exceed 5 ppm above background within the 20-foot zone for more than 30 minutes, or are sustained at levels greater than 10 ppm above background for longer than one minute, then the ***Major Vapor Emission Response Plan*** (see below) will automatically be placed into effect.

MAJOR VAPOR EMISSION RESPONSE PLAN:

Upon activation, the following activities will be undertaken:

1. All Emergency Response Contacts as listed in this Health and Safety Plan and the Emergency Response Plan (Attachment A) will be advised.
2. The local police authorities will immediately be contacted by the Site Health and Safety Officer and advised of the situation.
3. Frequent air monitoring will be conducted at 30-minute intervals within the 20-foot zone. If two sustained successive readings below action levels are measured, air monitoring may be halted or modified by the Site Health and Safety Officer.

The following personnel are to be notified in the listed sequence in the event that a Major Vapor Emission Plan is activated:

Responsible Person	Contact	Phone Number
SSHO	Police	911
SSHO	State Emergency Response Hotline	(800) 457-7362

Additional emergency numbers are listed in the Emergency Response Plan included as Attachment A.

EXPLOSIVE VAPORS:

- Sustained atmospheric concentrations of greater than 10% LEL in the work area - Initiate combustible gas monitoring at the downwind portion of the Site perimeter.
- Sustained atmospheric concentrations of greater than 10% LEL at the downwind Site perimeter – Halt work and contact local Fire Department.

AIRBORNE PARTICULATE COMMUNITY AIR MONITORING

Respirable (PM-10) particulate monitoring will be performed on a continuous basis at the upwind and downwind perimeter of the exclusion zone. The monitoring will be performed using real-time monitoring equipment capable of measuring PM-10 and integrating over a period of 15-minutes for comparison to the airborne particulate action levels. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. All readings will be recorded and will be available for NYSDEC and NYSDOH review. Readings will be interpreted as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m^3) greater than the background (upwind perimeter) reading for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression provided that the downwind PM-10 particulate levels do not exceed 150 ug/m^3 above the upwind level and that visible dust is not migrating from the work area.
- If, after implementation of dust suppression techniques downwind PM-10 levels are greater than 150 ug/m^3 above the upwind level, work activities must be stopped and dust suppression controls re-evaluated. Work can resume provided that supplemental dust suppression measures and/or other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m^3 of the upwind level and in preventing visible dust migration.

Pertinent emergency response information including the telephone number of the Fire Department is included in the Emergency Response Plan (Attachment A).

9. SPILL RELEASE/RESPONSE

This chapter of the HASP describes the potential for and procedures related to spills or releases of known or suspected petroleum and/or hazardous substances on the Site. The purpose of this Section of the HASP is to plan appropriate response, control, counter-measures and reporting, consistent with OSHA requirements in 29 CFR 1910.120(b)(4)(ii)(J) and (j)(1)(viii). The spill containment program addresses the following elements:

- Potential hazardous material spills and available controls.
- Initial notification and evaluation.
- Spill response.
- Post-spill evaluation.

9.1 Potential Spills and Available Controls

An evaluation was conducted to determine the potential for hazardous material and oil/petroleum spills at this Site. For the purpose of this evaluation, hazardous materials posing a significant spill potential are considered to be:

- CERCLA Hazardous Substances as identified in 40 CFR Part 302, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).
- Extremely Hazardous Substances as identified in 40 CFR Part 355, Appendix A, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).
- Hazardous Chemicals as defined under Section 311(e) of the Emergency Planning and Community Right-To-Know Act of 1986, where such chemicals are present or will be stored in excess of 10,000 lbs.
- Toxic Chemicals as defined in 40 CFR Part 372, where such chemicals are present or will be stored in excess of 10,000 lbs.
- Chemicals regulated under 6NYCRR Part 597, where such materials pose the potential for release in excess of their corresponding Reportable Quantity (RQ).

Oil/petroleum products are considered to pose a significant spill potential whenever the following situations occur:

- The potential for a “harmful quantity” of oil (including petroleum and non-petroleum-based fuels and lubricants) to reach navigable waters of the U.S. exists (40 CFR Part 112.4). Harmful quantities are considered by USEPA to be volumes that could form a visible sheen on the water or violate applicable water quality standards.

- The potential for any amount of petroleum to reach any waters of NY State, including groundwater, exists. Petroleum, as defined by NY State in 6NYCRR Part 612, is a petroleum-based heat source, energy source, or engine lubricant/maintenance fluid.
- The potential for any release, to soil or water, of petroleum from a bulk storage facility regulated under 6NYCRR Part 612. A regulated petroleum storage facility is defined by NY State as a site having stationary tank(s) and intra-facility piping, fixtures and related equipment with an aggregate storage volume of 1,100 gallons or greater.

The evaluation indicates that, based on Site history and decommissioning records, a hazardous material spill and/or a petroleum product spill is not likely to occur during RI efforts.

9.2 Initial Spill Notification and Evaluation

Any worker who discovers a hazardous substance or oil/petroleum spill will immediately notify the Project Manager and SSHO. The worker will, to the best of his/her ability, report the material involved, the location of the spill, the estimated quantity of material spilled, the direction/flow of the spill material, related fire/explosion incidents, if any, and any associated injuries. The Emergency Response Plan presented in Attachment A of this HASP will immediately be implemented if an emergency release has occurred.

Following initial report of a spill, the Project Manager will make an evaluation as to whether the release exceeds RQ levels. If an RQ level is exceeded, the Project Manager will notify the Site owner and NYSDEC at 1-800-457-7362 within 2 hours of spill discovery. The Project Manager will also determine what additional agencies (e.g., USEPA) are to be contacted regarding the release, and will follow-up with written reports as required by the applicable regulations.

9.3 Spill Response

For all spill situations, the following general response guidelines will apply:

- Only those personnel involved in overseeing or performing containment operations will be allowed within the spill area. If necessary, the area will be roped, ribboned, or otherwise blocked off to prevent unauthorized access.
- Appropriate PPE, as specified by the SSHO, will be donned before entering the spill area.
- Ignition points will be extinguished/removed if fire or explosion hazards exist.
- Surrounding reactive materials will be removed.
- Drains or drainage in the spill area will be blocked to prevent inflow of spilled materials or applied materials.

For minor spills, the Contractor will maintain a Spill Control and Containment Kit in the Field Office or other readily accessible storage location. The kit will consist of, at a minimum, a 50 lb. bag of “speedy dry” granular absorbent material, absorbent pads, shovels, empty 5-gallon pails and an empty open-top 55-gallon drum. Spilled materials will be absorbed, and shoveled into a 55-gallon drum for proper disposal (NYSDEC approval will be secured for on-site treatment of the impacted soils/absorbent

materials, if applicable). Impacted soils will be hand-excavated to the point that no visible signs of contamination remains, and will be drummed with the absorbent.

In the event of a major release or a release that threatens surface water, a spill response contractor will be called to the Site. The response contractor may use heavy equipment (e.g., excavator, backhoe, etc.) to berm the soils surrounding the spill Site or create diversion trenching to mitigate overland migration or release to navigable waters. Where feasible, pumps will be used to transfer free liquid to storage containers. Spill control/cleanup contractors in the Western New York area that may be contacted for assistance include:

- The Environmental Service Group of NY, Inc.: (716) 695-6720
- Environmental Products and Services, Inc.: (716) 447-4700
- Op-Tech: (716) 873-7680

9.4 Post-Spill Evaluation

If a reportable quantity of hazardous material or oil/petroleum is spilled as determined by the Project Manager, a written report will be prepared as indicated in Section 9.2. The report will identify the root cause of the spill, type and amount of material released, date/time of release, response actions, agencies notified and/or involved in cleanup, and procedures to be implemented to avoid repeat incidents. In addition, all re-useable spill cleanup and containment materials will be decontaminated, and spill kit supplies/disposable items will be replenished.

10. HEAT/COLD STRESS MONITORING

Since some of the work activities at the Site will be scheduled for both the summer and winter months, measures will be taken to minimize heat/cold stress to Roux employees. The Site Safety and Health Officer and/or his or her designee will be responsible for monitoring Roux field personnel for symptoms of heat/cold stress.

10.1 Heat Stress Monitoring

Personal protective equipment may place an employee at risk of developing heat stress, a common and potentially serious illnesses often encountered at construction, landfill, waste disposal, industrial or other unsheltered sites. The potential for heat stress is dependent on a number of factors, including environmental conditions, clothing, workload, physical conditioning and age. Personal protective equipment may severely reduce the body's normal ability to maintain temperature equilibrium (via evaporation and convection), and require increased energy expenditure due to its bulk and weight.

Proper training and preventive measures will mitigate the potential for serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat related illness. To avoid heat stress, the following steps should be taken:

- Adjust work schedules.
- Modify work/rest schedules according to monitoring requirements.
- Mandate work slowdowns as needed.
- Perform work during cooler hours of the day if possible or at night if adequate lighting can be provided.
- Provide shelter (air-conditioned, if possible) or shaded areas to protect personnel during rest periods.
- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat (i.e., eight fluid ounces must be ingested for approximately every 1 lb of weight lost). The normal thirst mechanism is not sensitive enough to ensure that enough water will be consumed to replace lost perspiration. When heavy sweating occurs, workers should be encouraged to drink more.
- Train workers to recognize the symptoms of heat related illness.

Heat-Related Illness - Symptoms:

- Heat rash may result from continuous exposure to heat or humid air.
- Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include: muscle spasms; pain in the hands, feet and abdomen.

- Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include: pale, cool, moist skin; heavy sweating; dizziness; nausea; fainting.
- Heat stroke is the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury and death occur. Competent medical help must be obtained. Signs and symptoms are: red, hot, usually dry skin; lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse; coma.

The monitoring of personnel wearing protective clothing should commence when the ambient temperature is 70 degrees Fahrenheit or above. For monitoring the body's recuperative ability to excess heat, one or more of the following techniques should be used as a screening mechanism.

- Heart rate may be measured by the radial pulse for 30 seconds as early as possible in the resting period. The rate at the beginning of the rest period should not exceed 100 beats per minute. If the rate is higher, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest periods stay the same, If the pulse rate is 100 beats per minute at the beginning of the nest rest period, the following work cycle should be further shortened by 33%.
- Body temperature may be measured orally with a clinical thermometer as early as possible in the resting period. Oral temperature at the beginning of the rest period should not exceed 99.6 degrees Fahrenheit. If it does, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest period remains the same. However, if the oral temperature exceeds 99.6 degrees Fahrenheit at the beginning of the next period, the work cycle may be further shortened by 33%. Oral temperature should be measured at the end of the rest period to make sure that it has dropped below 99.6 degrees Fahrenheit. No Roux employee will be permitted to continue wearing semi-permeable or impermeable garments when his/her oral temperature exceeds 100.6 degrees Fahrenheit.

10.2 Cold Stress Monitoring

Exposure to cold conditions may result in frostbite or hypothermia, each of which progresses in stages as shown below.

- **Frostbite** occurs when body tissue (usually on the extremities) begins to freeze. The three states of frostbite are:

  1) **Frost nip** - This is the first stage of the freezing process. It is characterized by a whitened area of skin, along with a slight burning or painful sensation. Treatment consists of removing the victim from the cold conditions, removal of boots and gloves, soaking the injured part in warm water (102 to 108 degrees Fahrenheit) and drinking a warm beverage. Do not rub skin to generate friction/ heat.

  2) **Superficial Frostbite** - This is the second stage of the freezing process. It is characterized by a whitish gray area of tissue, which will be firm to the touch but will yield little pain. The treatment is identical for Frost nip.

3) **Deep Frostbite** - In this final stage of the freezing process the affected tissue will be cold, numb and hard and will yield little to no pain. Treatment is identical to that for Frost nip.

- **Hypothermia** is a serious cold stress condition occurring when the body loses heat at a rate faster than it is produced. If untreated, hypothermia may be fatal. The stages of hypothermia may not be clearly defined or visible at first, but generally include:
  1) Shivering
  2) Apathy (i.e., a change to an indifferent or uncaring mood)
  3) Unconsciousness
  4) Bodily freezing

Employees exhibiting signs of hypothermia should be treated by medical professionals. Steps that can be taken while awaiting help include:

1) Remove the victim from the cold environment and remove wet or frozen clothing. (Do this carefully as frostbite may have started.)
2) Perform active re-warming with hot liquids for drinking (Note: do not give the victim any liquid containing alcohol or caffeine) and a warm water bath (102 to 108 degrees Fahrenheit).
3) Perform passive re-warming with a blanket or jacket wrapped around the victim.

In any potential cold stress situation, it is the responsibility of the Site Health and Safety Officer to encourage the following:

- Education of workers to recognize the symptoms of frostbite and hypothermia.
- Workers should dress warmly, with more layers of thin clothing as opposed to one thick layer.
- Personnel should remain active and keep moving.
- Personnel should be allowed to take shelter in a heated area, as necessary.
- Personnel should drink warm liquids (no caffeine or alcohol if hypothermia has set in).
- For monitoring the body's recuperation from excess cold, oral temperature recordings should occur:
  - At the Site Safety Technicians discretion when suspicion is based on changes in a worker's performance or mental status.
  - At a workers request.
  - As a screening measure, two times per shift, under unusually hazardous conditions (e.g., wind chill less than 20 degrees Fahrenheit or wind chill less than 30 degrees Fahrenheit with precipitation).
  - As a screening measure, whenever anyone worker on-site develops hypothermia.

Any person developing moderate hypothermia (a core body temperature of 92 degrees Fahrenheit) will not be allowed to return to work for 48 hours without the recommendation of a qualified medical doctor.

11. WORK ZONES AND SITE CONTROL

Work zones around the areas designated for construction activities will be established on a daily basis and communicated to all employees and other Site users by the SSHO. It shall be each Contractor's Site Safety and Health Officer's responsibility to ensure that all Site workers are aware of the work zone boundaries and to enforce proper procedures in each area. The zones will include:

- Exclusion Zone ("Hot Zone") - The area where contaminated materials may be exposed, excavated or handled and all areas where contaminated equipment or personnel may travel. Flagging tape will delineate the zone. All personnel entering the Exclusion Zone must wear the prescribed level of personal protective equipment identified in Section 7.
- Contamination Reduction Zone - The zone where decontamination of personnel and equipment takes place. Any potentially contaminated clothing, equipment and samples must remain in the Contamination Reduction Zone until decontaminated.
- Support Zone - The part of the site that is considered non-contaminated or "clean." Support equipment will be located in this zone, and personnel may wear normal work clothes within this zone.

In the absence of other task-specific work zone boundaries established by the SSHO, the following boundaries will apply to all investigation and construction activities involving disruption or handling of Site soils or groundwater:

- Exclusion Zone: 50-foot radius from the outer limit of the sampling/construction activity.
- Contaminant Reduction Zone: 100-foot radius from the outer limit of the sampling/construction activity.
- Support Zone: Areas outside the Contaminant Reduction Zone.

Access of non-essential personnel to the Exclusion and Contamination Reduction Zones will be strictly controlled by the SSHO. Only personnel who are essential to the completion of the task will be allowed access to these areas and only if they are wearing the prescribed level of protection. Entrance of all personnel must be approved by the SSHO.

The SSHO will maintain a Health and Safety Logbook containing the names of Roux workers and their level of protection. The zone boundaries may be changed by the SSHO as environmental conditions warrant, and to respond to the necessary changes in work locations on-site.

12. DECONTAMINATION

12.1 Decontamination for Roux Employees

The degree of decontamination required is a function of a particular task and the environment within which it occurs. The following decontamination procedure will remain flexible, thereby allowing the decontamination crew to respond appropriately to the changing environmental conditions that may arise at the Site. All Roux personnel on-site shall follow the procedure below, or the Contractor's procedure (if applicable), whichever is more stringent.

Station 1 - Equipment Drop: Deposit visibly contaminated (if any) re-useable equipment used in the contamination reduction and exclusion zones (tools, containers, monitoring instruments, radios, clipboards, etc.) on plastic sheeting.

Station 2 - Boots and Gloves Wash and Rinse: Scrub outer boots and outer gloves. Deposit tape and gloves in waste disposal container.

Station 3 - Tape, Outer Boot and Glove Removal: Remove tape, outer boots and gloves. Deposit tape and gloves in waste disposal container.

Station 4 - Canister or Mask Change: If worker leaves exclusive zone to change canister (or mask), this is the last step in the decontamination procedure. Worker's canister is exchanged, new outer gloves and boot cover donned, and worker returns to duty.

Station 5 - Outer Garment/Face Piece Removal: Protective suit removed and deposited in separate container provided by Contractor. Face piece or goggles are removed if used. Avoid touching face with fingers. Face piece and/or goggles deposited on plastic sheet. Hard hat removed and placed on plastic sheet.

Station 6 - Inner Glove Removal: Inner gloves are the last personal protective equipment to be removed. Avoid touching the outside of the gloves with bare fingers. Dispose of these gloves in waste disposal container.

Following PPE removal, personnel shall wash hands, face and forearms with absorbent wipes. If field activities proceed for duration of 6 consecutive months or longer, shower facilities will be provided for worker use in accordance with OSHA 29 CFR 1910.120(n).

12.2 Decontamination for Medical Emergencies

In the event of a minor, non-life threatening injury, personnel should follow the decontamination procedures as defined, and then administer first-aid.

In the event of a major injury or other serious medical concern (e.g., heat stroke), immediate first-aid is to be administered and the victim transported to the hospital in lieu of further decontamination efforts unless exposure to a Site contaminant would be considered "Immediately Dangerous to Life or Health."

12.3 Decontamination of Field Equipment

The Contractor in accordance with his approved Health and Safety Plan in the Contamination Reduction Zone will conduct decontamination of heavy equipment. As a minimum, this will include manually removing heavy soil contamination, followed by steam cleaning on an impermeable pad.

Roux personnel will conduct decontamination of all tools used for sample collection purposes. It is expected that all tools will be constructed of nonporous, nonabsorbent materials (i.e., metal), which will aid in the decontamination effort. Any tool or part of a tool made of porous, absorbent material (i.e., wood) will be placed into suitable containers and prepared for disposal.

Decontamination of bailers, split-spoons, spatula knives, and other tools used for environmental sampling and examination shall be as follows:

- Disassemble the equipment
- Water wash to remove all visible foreign matter.
- Wash with detergent.
- Rinse all parts with distilled-deionized water.
- Allow to air dry.
- Wrap all parts in aluminum foil or polyethylene.

13. CONFINED SPACE ENTRY

OSHA 29 CFR 1910.146 identifies a confined space as a space that is large enough and so configured that an employee can physically enter and do assigned work, has limited or restricted means for entry and exit, and is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, trenches, storage tanks, process vessels, pits, sewers, tunnels, underground utility vaults, pipelines, sumps, wells, and excavations.

Confined space entry by Roux employees is not anticipated to be necessary to complete the RI activities identified in Section 2.0. In the event that the scope of work changes or confined space entry appears necessary, the Project Manager will be consulted to determine if feasible engineering alternatives to confined space entry can be implemented. If confined space entry by Roux employees cannot be avoided through reasonable engineering measures, task-specific confined space entry procedures will be developed and a confined-space entry permit will be issued through Roux's corporate Health and Safety Director. Roux employees shall not enter a confined space without these procedures and permits in place.

14. FIRE PREVENTION AND PROTECTION

14.1 General Approach

Recommended practices and standards of the National Fire Protection Association (NFPA) and other applicable regulations will be followed in the development and application of Project Fire Protection Programs. When required by regulatory authorities, the project management will prepare and submit a Fire Protection Plan for the approval of the contracting officers, authorized representative or other designated official. Essential considerations for the Fire Protection Plan will include:

- Proper Site preparation and safe storage of combustible and flammable materials.
- Availability of coordination with private and public fire authorities.
- Adequate job-site fire protection and inspections for fire prevention.
- Adequate indoctrination and training of employees.

14.2 Equipment and Requirements

Fire extinguishers will be provided by each Contractor and are required on all heavy equipment and in each field trailer. Fire extinguishers will be inspected, serviced, and maintained in accordance with the manufacturer's instructions. As a minimum, all extinguishers shall be checked monthly and weighed semi-annually, and recharged if necessary. Recharge or replacement shall be mandatory immediately after each use.

14.3 Flammable and Combustible Substances

All storage, handling or use of flammable and combustible substances will be under the supervision of qualified persons. All tanks, containers and pumping equipment, whether portable or stationary, used for the storage and handling of flammable and combustible liquids, will meet the recommendations of the National Fire Protection Association.

14.4 Hot Work

If the scope of work necessitates welding or blowtorch operation, the hot work permit presented in Attachment B will be completed by the SSHO and reviewed/issued by the Project Manager.

15. EMERGENCY INFORMATION

In accordance with OSHA 29 CFR Part 1910, an Emergency Response Plan is attached to this HASP as Attachment A. The hospital route map is presented within Attachment A as Figure 1.

16. REFERENCES

New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation.* May 2010.

TABLES

TABLE 1
TOXICITY DATA FOR CONSTITUENTS OF POTENTIAL CONCERN
HEALTH AND SAFETY PLAN
351 FRANKLIN STREET SITE
OLEAN, NEW YORK

Parameter	Synonyms	CAS No.	Code	Concentration Limits [1]		
				PEL	TLV	IDLH
Semi-volatile Organic Compounds (SVOCs) [2] : mg/kg						
Benzo(a)anthracene	*none*	56-55-3	*none*	--	--	--
Benzo(a)pyrene	*none*	50-32-8	*none*	--	--	--
Benzo(b)fluoranthene	*none*	205-99-2	*none*	--	--	--
Dibenzo(a,h)anthracene	*none*	53-70-3	*none*	--	--	--
Indeno(1,2,3-cd)pyrene	*none*	193-39-5	*none*	--	--	--
Inorganic Compounds [2] : mg/kg						
Arsenic	*none*	7440-38-2	*Ca*	0.01	0.01	5

Notes:

1. Concentration limits as reported by NIOSH Pocket Guide to Chemical Hazards, February 2004 (NIOSH Publication No. 97-140, fourth printing with chages and updates.
2. " -- " = concentration limit not available; exposure should be minimized to the extent feasible through appropriate engineering controls & PPE.

Explanation:

Ca = NIOSH considers constituent to be a potential occupational carcinogen.
IDLH = Immediately Dangerous to Life or Health.
TLV = Threshold Limit Value, established by American Conference of Industrial Hygienists (ACGIH), equals the maximum exposure concentration allowable for 8 hours/day @ 40 hours/week. TLVs are the amounts of chemicals in the air that almost all healthy adult workers are predicted to be able to tolerate without adverse effects. There are three types.

TLV-TWA (TLV-Time-Weighted Average) which is averaged over the normal eight-hour day/forty-hour work week. (Most TLVs.)
TLV-C or Ceiling limits are the concentration that should not be exceeded during any part of the working exposure.
Unless the initials "STEL" or "C" appear in the Code column, the TLV value should be considered to be the eight-hour TLV-TWA.

PEL = Permissible Exposure Limit, established by OSHA, equals the maximium exposure conconcentration allowable for 8 hours/day @ 40 hours/week

TABLE 2
POTENTIAL ROUTES OF EXPOSURE TO THE CONSTITUENTS OF POTENTIAL CONCERN
HEALTH AND SAFETY PLAN
351 FRANKLIN STREET SITE
OLEAN, NEW YORK

Activity [1]	Direct Contact with Soil/Fill	Inhalation of Vapors or Dust	Direct Contact with Groundwater
Remedial Action Tasks			
1. Soil Excavation and Reuse/Disposal	x	x	
2. Piping Removal, Cleaning, and Disposal	x	x	
3. In-Situ Solidification	x	x	x
4. Verification Sampling	x	x	
5. Backfilling	x	x	
6. Groundwater and Stormwater Management	x		x
7. Cover System Placement	x	x	
8. ASD Installation and SVI Sampling	x	x	
9. Groundwater Monitoring			x

Notes:
1. Activity as described in Section 1.5 of the Health and Safety Plan.

TABLE 3
REQUIRED LEVELS OF PROTECTION FOR RA TASTS
HEALTH AND SAFETY PLAN
351 FRANKLIN STREET SITE
OLEAN, NEW YORK

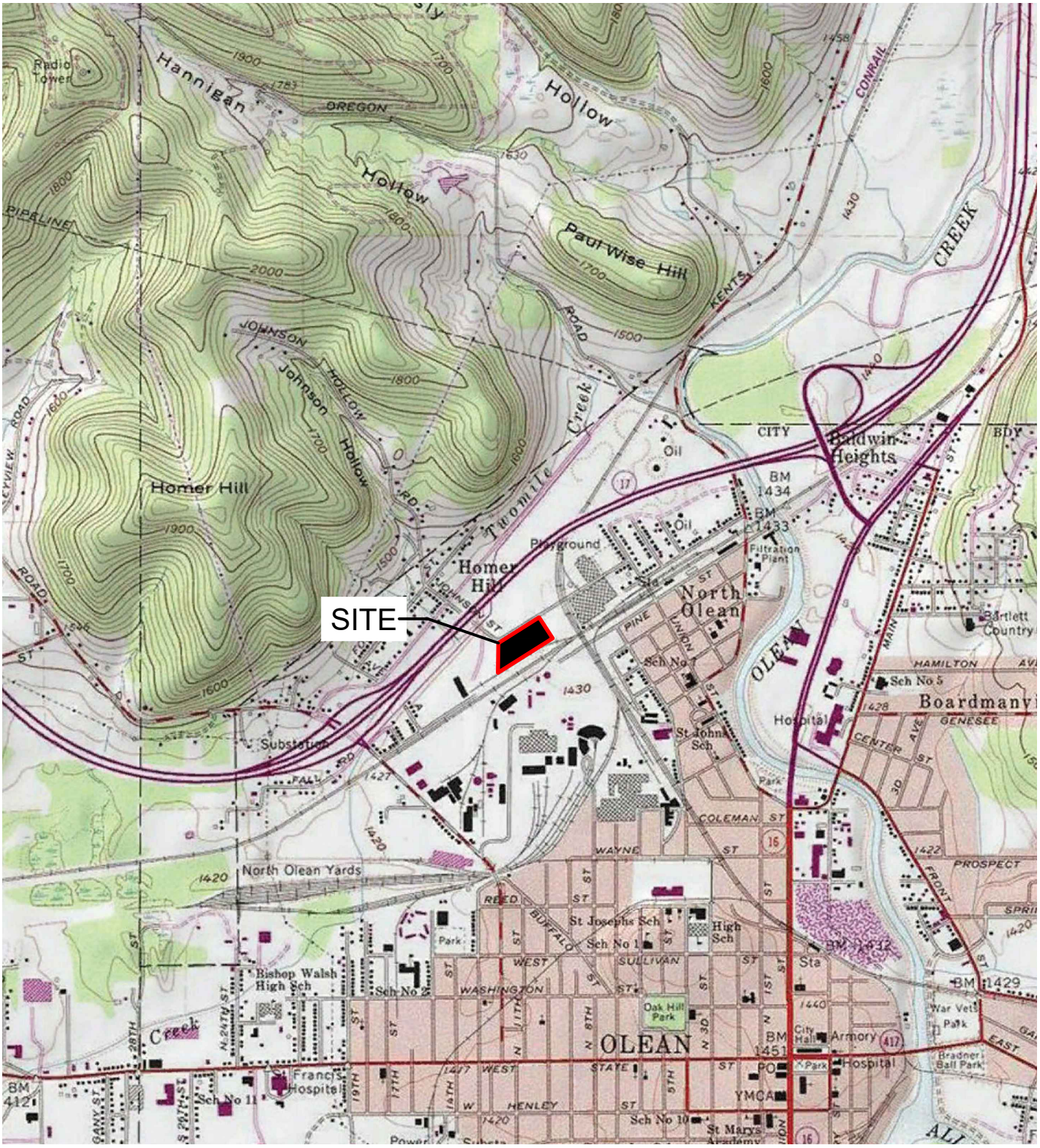
Activity	Respiratory Protection [1]	Clothing	Gloves [2]	Boots [2, 3]	Other Required PPE/Modifications [2, 4]
Remedial Action Tasks					
1. Soil Excavation and Reuse/Disposal	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
2. Piping Removal, Cleaning, and Disposal	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
3. In-Situ Solidification	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
4. Verification Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
5. Backfilling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
6. Groundwater and Stormwater Management	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
7. Cover System Placement	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
8. ASD Installation and SVI Sampling	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
9. Groundwater Monitoring	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	SGSS

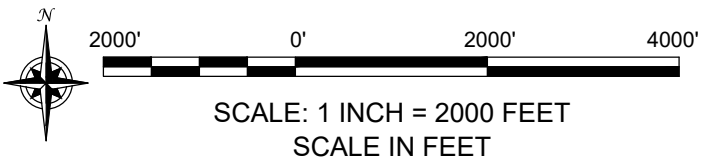
Notes:

1. Respiratory equipment shall conform to guidelines presented in Section 7.0 of this HASP. The Level C requirement is an air-purifying respirator equiped with organic compound/acid gas/dust cartridge.
2. HH = hardhat; L= Latex; L/N = latex inner glove, nitrile outer glove; N = Nitrile; S = Saranex; SG = safety glasses; SGSS = safety glasses with sideshields; STSS = steel toe safety shoes.
3. Latex outer boot (or approved overboot) required whenever contact with contaminated materials may occur. SSHO may downgrade to STSS (steel-toed safety shoes) if contact will be limited to cover/replacement soils.
4. Dust masks shall be donned as directed by the SSHO (site safety and health officer) or site safety technician whenever potentially contaminated airborne particulates (i.e., dust) are present in significant amounts in the breathing zone. Goggles may be substituted with safety glasses w/side-shields whenever contact with contaminated liquids is not anticipated.

FIGURES

1. Site Vicinity and Location Map
2. Site Plan (Aerial)





SCALE: 1 INCH = 2000 FEET
SCALE IN FEET
(approximate)

Title:

SITE LOCATION AND VICINITY MAP

HEALTH AND SAFETY PLAN

351 FRANKLIN STREET SITE

BCP SITE NO. C905047
OLEAN, NEW YORK

Prepared for:

351 FRANKLIN STREET LLC & PSF OF WNY, LLC

ROUX

Compiled by: RFL	Date: SEPTEMBER 2023	FIGURE
Prepared by: RFL	Scale: AS SHOWN	1
Project Mgr: MAL	Project: 0510-023-001	
File: FIGURE 1 - SITE LOCATION AND VICINITY MAP.DWG		

F:\CAD\TURNKEY\351 FRANKLIN STREET, LLC\RAW\PHASP\FIGURE 1 - SITE LOCATION AND VICINITY MAP.DWG

N

100' 0' 100' 200'

SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

LEGEND:

BCP SITE BOUNDARY

PARCEL BOUNDARY

NOTE:
1. AERIAL IMAGE FROM MICROSOFT BING MAPS USING AUTODESK AUTOCAD GEOLOCATION INTERFACE SEPTEMBER 2023.

Title:

SITE PLAN AERIAL
HEALTH AND SAFETY PLAN

351 FRANKLIN STREET SITE
BCP SITE NO. C905047
OLEAN, NEW YORK

Prepared for:
351 FRANKLIN STREET LLC & PSF OF WNY, LLC

ROUX

Compiled by: RFL	Date: SEPTEMBER 2023	FIGURE
Prepared by: RFL	Scale: AS SHOWN	2
Project Mgr: MAL	Project: 0510-023-001	
File: FIGURE 2 - SITE PLAN (AERIAL).DWG		

F:\CAD\TURNKEY\351 FRANKLIN STREET, LLC\RAWP\HASP\FIGURE 2 - SITE PLAN (AERIAL).DWG

APPENDICES

A. Emergency Response Plan
B. Hot Work Permit Form
C. Community Air Monitoring Plan

APPENDIX A

Emergency Response Plan

Emergency Response Plan

351 Franklin Street Site
NYSDEC BCP #C905047
Olean, New York

October 2023

Prepared for:

351 Franklin Street LLC
1 Blue Bird Square
Olean, NY 14760

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
2558 Hamburg Turnpike, Suite 300
Buffalo, New York 14218

2283.0002Y.110/CV

Table of Contents

Figures

1. General

This report presents the site-specific Emergency Response Plan (ERP) referenced in the Site Health and Safety Plan (HASP) prepared for Remedial Action (RA) activities at the 351 Franklin Street Site in Olean, New York. This attachment of the HASP describes potential emergencies that may occur at the Site; procedures for responding to those emergencies; roles and responsibilities during emergency response; and training all workers must receive in order to follow emergency procedures. This ERP also describes the provisions this Site has made to coordinate its emergency response planning with other contractors on-site and with off-site emergency response organizations.

This ERP is consistent with the requirements of 29 CFR 1910.120(l) and provides the following site-specific information:

- Pre-emergency planning.
- Personnel roles, lines of authority, and communication.
- Emergency recognition and prevention.
- Safe distances and places of refuge.
- Evacuation routes and procedures.
- Decontamination procedures.
- Emergency medical treatment and first aid.
- Emergency alerting and response procedures.
- Critique of response and follow-up.
- Emergency personal protective equipment (PPE) and equipment.

2. Pre-Emergency Planning

This Site has been evaluated for potential emergency occurrences, based on site hazards, the required work tasks, the site topography, and prevailing weather conditions. The results of that evaluation indicate the potential for the following site emergencies to occur at the locations indicated.

Type of Emergency:

1. Medical, due to physical injury

Source of Emergency:

1. Slip/trip/fall

Location of Source:

1. Non-specific

3. On-site Emergency Response Equipment

Emergency procedures may require specialized equipment to facilitate worker rescue, contamination control and reduction, or post-emergency clean up. Emergency response equipment available on the Site is listed below. The equipment inventory and storage locations are based on the potential emergencies described above. This equipment inventory is designed to meet on-site emergency response needs and any specialized equipment needs that off-site responders might require because of the hazards at this Site but not ordinarily stocked.

Any additional personal protective equipment (PPE) required and stocked for emergency response is also listed in below. During an emergency, the Emergency Response Coordinator (ERC) is responsible for specifying the level of PPE required for emergency response. At a minimum, PPE used by emergency responders will comply with Section 7.0, Personal Protective Equipment, of this HASP. Emergency response equipment is inspected at regular intervals and maintained in good working order. The equipment inventory is replenished as necessary to maintain response capabilities.

Emergency Equipment	Quantity	Location
First Aid Kit	1	Site Vehicle
Chemical Fire Extinguisher	2 (minimum)	All heavy equipment and Site Vehicle

Emergency PPE	Quantity	Location
Full-face respirator	1 for each worker	Site Vehicle
Chemical-resistant suits	4 (minimum)	Site Vehicle

4. Emergency Planning Maps

An area-specific map of the Site will be developed on a daily basis during performance of field activities. The map will be marked to identify critical on-site emergency planning information, including: emergency evacuation routes, a place of refuge, an assembly point, and the locations of key site emergency equipment. Site zone boundaries will be shown to alert responders to known areas of contamination. There are no major topographical features; however, the direction of prevailing winds/weather conditions that could affect emergency response planning are also marked on the map. The map will be posted at site-designated place of refuge and inside the Benchmark-TurnKey personnel field vehicle.

5. Emergency Contacts

The following identifies the emergency contacts for this ERP.

Emergency Telephone Numbers:

Project Manager: ***Michael Lesakowski***

Work: (716) 856-0599

Mobile: (716) 289-1072

Corporate Health and Safety Director: ***Thomas H. Forbes***

Work: (716) 856-0599

Mobile: (716) 864-1730

Site Safety and Health Officer (SSHO): ***Brock Greene***

Work: (716) 856-0635

Mobile: (716) 870-1165

Alternate SSHO: ***Nathan Munley***

Work: (716) 856-0635

Mobile: (716) 289-1072

OLEAN GENERAL HOSPITAL (ER):	(716) 373-2600
FIRE:	911
AMBULANCE:	911
PENN YAN POLICE:	911
STATE EMERGENCY RESPONSE HOTLINE:	(800) 457-7362
NATIONAL RESPONSE HOTLINE:	(800) 424-8802
NYSDOH:	(716) 847-4385
NYSDEC:	(716) 851-7220
NYSDEC 24-HOUR SPILL HOTLINE:	(800) 457-7252

The Site location is:

351 Franklin Street
Olean, New York 14760
Site Phone Number: Benchmark-TurnKey Staff Cell Phones to be used.

6. Emergency Alerting & Evacuation

Internal emergency communication systems are used to alert workers to danger, convey safety information, and maintain site control. Any effective system can be employed. Two-way radio headsets or field telephones are often used when work teams are far from the command post. Hand signals and air-horn blasts are also commonly used. Every system must have a backup. It shall be the responsibility of each contractor's Site Health and Safety Officer to ensure all personnel entering the site understand an adequate method of internal communication. Unless all personnel are otherwise informed, the following signals shall be used.

1. Emergency signals by portable air horn, siren, or whistle: two short blasts, personal injury; continuous blast, emergency requiring site excavation.
2. Visual signals: hand gripping throat, out of air/cannot breathe; hands on top of head, need assistance; thumbs up, affirmative/ everything is OK; thumbs down, no/negative; grip partner's wrist or waist, leave area immediately.

If evacuation notice is given, site workers leave the worksite with their respective buddies, if possible, by way of the nearest exit. Emergency decontamination procedures detailed in Section 12.0 of the HASP are followed to the extent practical without compromising the safety and health of site personnel. The evacuation routes and assembly area will be determined by conditions at the time of the evacuation based on wind direction, the location of the hazard source, and other factors as determined by rehearsals and inputs from emergency response organizations. Wind direction indicators are located so that workers can determine a safe up wind or cross wind evacuation route and assembly area if not informed by the emergency response coordinator at the time the evacuation alarm sounds. Since work conditions and work zones within the site may be changing on daily basis, it shall be the responsibility of the construction Site Health and Safety Officer to review evacuation routes and procedures as necessary and to inform all Benchmark-TurnKey workers of any changes.

Personnel exiting the site will gather at a designated assembly point. To determine that everyone has successfully exited the site, personnel will be accounted for at the assembly site. If any worker cannot be accounted for, notification is given to the SSHO (***Paul W. Werthman*** or ***Nathan Munley***) so that appropriate action can be initiated. Contractors and subcontractors on this site have coordinated their emergency response plans to ensure that these plans are compatible and that source(s) of potential emergencies are recognized, alarm systems are clearly understood, and evacuation routes are accessible to all personnel relying upon them.

7. Extreme Weather Conditions

In the event of adverse weather conditions, the Site Safety and Health Officer in conjunction with the Contractor's SSHO will determine if engineering operations can continue without sacrificing the health and safety of site personnel. Items to be considered prior to determining if work should continue include but are not limited to:

- Potential for heat/cold stress.
- Weather-related construction hazards (e.g., flooding or wet conditions producing undermining of structures or sheeting, high wind threats, etc).
- Limited visibility.
- Potential for electrical storms.
- Limited site access/egress (e.g., due to heavy snow)

8. Emergency Medical Treatment & First Aid

Personnel Exposure:

The following general guidelines will be employed in instances where health impacts threaten to occur acute exposure is realized:

- Skin Contact: Use copious amounts of soap and water. Wash/rinse affected area for at least 15 minutes. Decontaminate and provide medical attention. Eyewash stations will be provided on site. If necessary, transport to Olean General Hospital (Hospital).
- Inhalation: Move to fresh air and, if necessary, transport to Hospital.
- Ingestion: Decontaminate and transport to Hospital.

Personal Injury:

Minor first-aid will be applied on-site as deemed necessary. In the event of a life-threatening injury, the individual should be transported to Hospital via ambulance. The Site Health and Safety Officer will supply available chemical specific information to appropriate medical personnel as requested.

First aid kits will conform to Red Cross and other applicable good health standards, and shall consist of a weatherproof container with individually sealed packages for each type of item. First aid kits will be fully equipped before being sent out on each job and will be checked weekly by the SSHO to ensure that the expended items are replaced.

Directions to Buffalo General Hospital (see Figure 1):

The following directions describe the best route from the Site to Olean General Hospital:

- Travel northeast on Franklin Street toward North Union Street (0.3 miles)
- Turn right (southeast) onto North Union Street (0.8 miles)
- At the traffic circle, take the second exit onto Main Street (0.3 miles)
- Turn left (northwest) into Olean General Hospital – 515 Main Street, Olean, NY 14760 (1.4 miles total)

9. Emergency Response Critique & Record Keeping

Following an emergency, the SSHO and Project Manager shall review the effectiveness of this Emergency Response Plan (ERP) in addressing notification, control and evacuation requirements. Updates and modifications to this ERP shall be made accordingly. It shall be the responsibility of each contractor to establish and assure adequate records of the following:

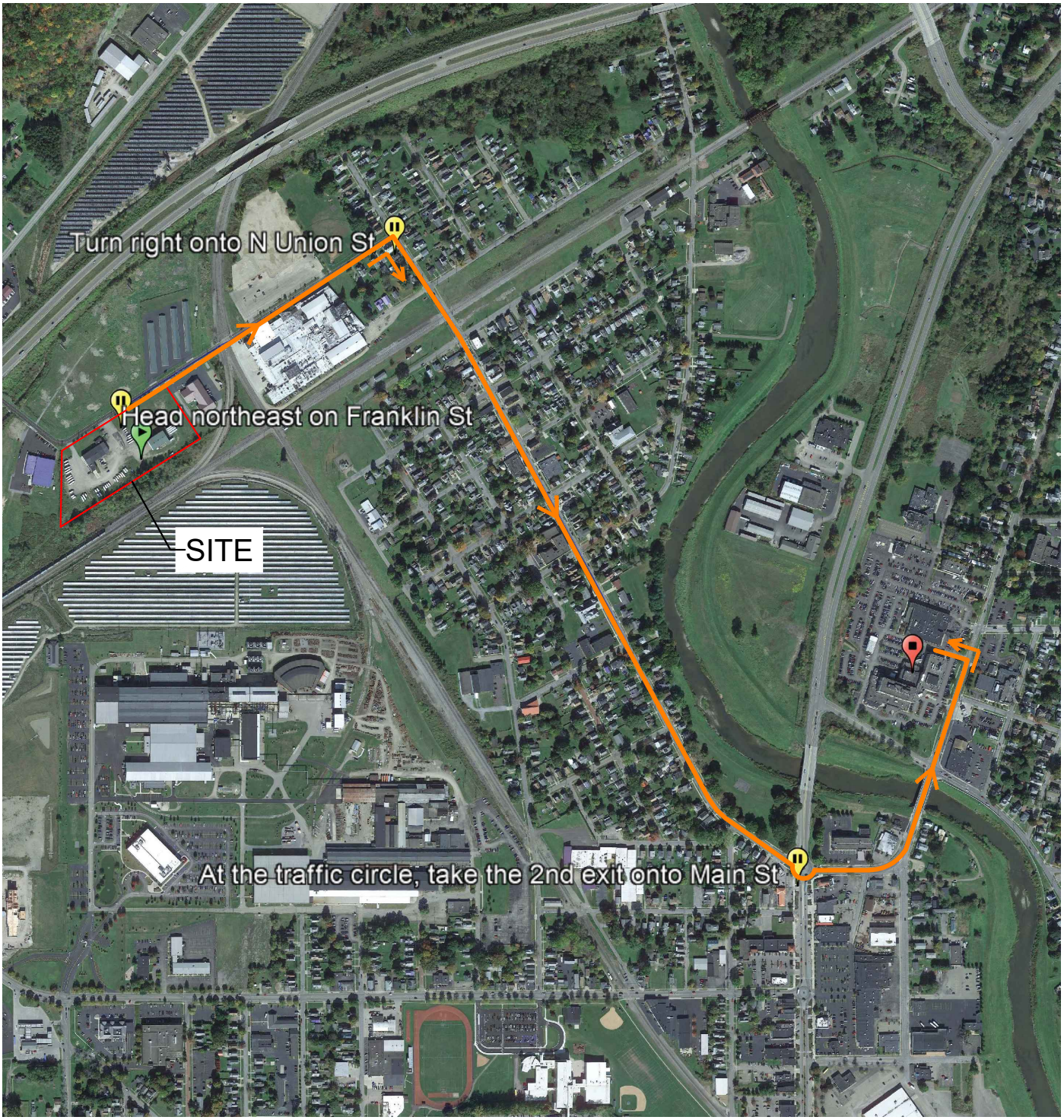
- Occupational injuries and illnesses.
- Accident investigations.
- Reports to insurance carrier or State compensation agencies.
- Reports required by the client.
- Records and reports required by local, state, federal and/or international agencies.
- Property or equipment damage.
- Third party injury or damage claims.
- Environmental testing logs.
- Explosive and hazardous substances inventories and records.
- Records of inspections and citations.
- Safety training.

10. Emergency Response Training

All persons who enter the worksite, including visitors, shall receive a site-specific briefing about anticipated emergency situations and the emergency procedures by the SSHO. Where this site relies on off-site organizations for emergency response, the training of personnel in those off-site organizations has been evaluated and is deemed adequate for response to this site.

FIGURE

1. Hospital Route Map



FROM SITE:

- TRAVEL NORTHEAST ON FRANKLIN STREET TOWARD NORTH UNION STREET (0.3 MILES)
- TURN RIGHT (SOUTHEAST) ONTO NORTH UNION STREET (0.8 MILES)
- AT THE TRAFFIC CIRCLE, TAKE THE SECOND EXIT ONTO MAIN STREET (0.3 MILES)
- TURN LEFT (NORTHWEST) INTO OLEAN GENERAL HOSPITAL - 515 MAIN STREET, OLEAN, NEW YORK 14760 (1.4 MILES TOTAL)

800' 0' 800' 1,600'

SCALE: 1 INCH = 800 FEET
SCALE IN FEET
(approximate)

Title:

HOSPITAL ROUTE MAP

EMERGENCY RESPONSE PLAN

351 FRANKLIN STREET SITE

BCP SITE NO. C905047
OLEAN, NEW YORK

Prepared for:

351 FRANKLIN STREET LLC & PSF OF WNY, LLC

ROUX

Compiled by: CMS	Date: SEPTEMBER 2023	FIGURE
Prepared by: CMS	Scale: AS SHOWN	
Project Mgr: MAL	Project: 0510-023-001	1
File: FIGURE 1 - HOSPITAL ROUTE MAP.DWG		

F:\CAD\TURNKEY\351 FRANKLIN STREET, LLC\RAW\PHASP\FIGURE 1 - HOSPITAL ROUTE MAP.DWG

APPENDIX B

Hot Work Permit Form

HOT WORK PERMIT

PART 1 - INFORMATION

Issue Date:	
Date Work to be Performed: Start:	Finish (permit terminated):
Performed By:	
Work Area:	
Object to be Worked On:	

PART 2 - APPROVAL

(for 1, 2 or 3: mark Yes, No or NA)*

Will working be on or in:	Finish (permit terminated):	
1. Metal partition, wall, ceiling covered by combustible material?	yes	no
2. Pipes, in contact with combustible material?	yes	no
3. Explosive area?	yes	no

* = If any of these conditions exist (marked "yes"), a permit will not be issued without being reviewed and approved by Thomas H. Forbes (Corporate Health and Safety Director). Required Signature below.

PART 3 - REQUIRED CONDITIONS**

(Check all conditions that must be met)

	PROTECTIVE ACTION		PROTECTIVE EQUIPMENT
	Specific Risk Assessment Required		Goggles/visor/welding screen
	Fire or spark barrier		Apron/fireproof clothing
	Cover hot surfaces		Welding gloves/gauntlets/other:
	Move movable fire hazards, specifically		Wellintons/Knee pads
	Erect screen on barrier		Ear protection: Ear muffs/Ear plugs
	Restrict Access		B.A.: SCBA/Long Breather
	Wet the ground		Respirator: Type:
	Ensure adequate ventilation		Cartridge:
	Provide adequate supports		Local Exhaust Ventilation
	Cover exposed drain/floor or wall cracks		Extinguisher/Fire blanket
	Fire watch (must remain on duty during duration of permit)		Personal flammable gas monitor
	Issue additional permit(s):		

Other precautions:

** Permit will not be issued until these conditions are met.

SIGNATURES

Orginating Employee:	Date:
Project Manager:	Date:
Part 2 Approval:	Date:

Prepared By: _____

APPENDIX C

Community Air Monitoring Plan

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

Odor Management Plan

During intrusive remedial activities, the excavation of Grossly Contaminated Media (GCM) and/or In-Situ Solidification (ISS) activities may result in nuisance odors that require mitigation. Odor control measures may be implemented during intrusive activities, if needed, to address nuisance odors, including:

- Minimizing size and duration of open excavations;
- Minimizing size and duration of temporary soil/fill stockpiles, if any;
- Covering temporary soil/fill stockpiles, if any, with plastic sheeting;
- Placing tarps over open excavation faces when active excavation of that face is not being completed;
- Application of a commercially available odor control product on active excavation faces and/or stockpiled soil/fill;
- Application of commercially available odor masking product on the active excavation faces and/or upwind of the nuisance area;
- If odor mitigation measures noted above do not effectively mitigate nuisance odors, the excavation(s) may be backfilled and excavation work protocols reassessed.

This Plan is intended to supplement vapor and particulate monitoring that will be implemented at the Site in accordance with the Community Air Monitoring Plan. As part of this Odor Management Plan, odor assessments will be completed approximately every two hours during active remedial activities. Roux personnel will document the odor assessments on Inspector's Daily Reports and, when odor mitigation concerns require mitigation, problem identification and corrective measures reports as necessary. These project documentation forms are provided in Appendix F of the Remedial Action Work Plan (RAWP).

Odor Management Plan

During intrusive remedial activities, the excavation of Grossly Contaminated Media (GCM) and/or In-Situ Solidification (ISS) activities may result in nuisance odors that require mitigation. Odor control measures may be implemented during intrusive activities, if needed, to address nuisance odors, including:

- Minimizing size and duration of open excavations;
- Minimizing size and duration of temporary soil/fill stockpiles, if any;
- Covering temporary soil/fill stockpiles, if any, with plastic sheeting;
- Placing tarps over open excavation faces when active excavation of that face is not being completed;
- Application of a commercially available odor control product on active excavation faces and/or stockpiled soil/fill;
- Application of commercially available odor masking product on the active excavation faces and/or upwind of the nuisance area;
- If odor mitigation measures noted above do not effectively mitigate nuisance odors, the excavation(s) may be backfilled and excavation work protocols reassessed.

This Plan is intended to supplement vapor and particulate monitoring that will be implemented at the Site in accordance with the Community Air Monitoring Plan. As part of this Odor Management Plan, odor assessments will be completed approximately every two hours during active remedial activities. Roux personnel will document the odor assessments on Inspector's Daily Reports and, when odor mitigation concerns require mitigation, problem identification and corrective measures reports as necessary. These project documentation forms are provided in Appendix F of the Remedial Action Work Plan (RAWP).

APPENDIX D

Demolition Permit

Permit # 2023035

Building

City of Olean
Dept. of Fire, buildings and E.S.
Code Enforcement Division
Olean Municipal Building, Rm. 212
101 E. State St.
Olean, New York 14760

716-376-5683
716-376-5707 (fax)

codes@cityofolean.org

Job Address: 351 Franklin
Tax ID: 94.040-1-29.1

Date Issued: 09/06/2023
Date Expires: 09/05/2024

Owner: 351 Franklin Street, LLC,
Address: 130 S Union St Ste 300
City, State, Zip: Olean, NY 14760

Contractor: Benson Construction & Development, LLC
Address: One Blue Bird Square
Phone:

Valuation: 0
Sq. Ft.: 0

Zoning:
Permit Total: $45.00

Application is Hereby Made For: Building

Description: Demo of 6200 sqft metal building Renew

Permit Conditions:
An electrical compliance certificate must be present at the time of final inspection by one of the third-party electrical inspection agencies. All plumbing inspections must be conducted by the City of Olean plumbing inspector prior to final inspection.

Applicant/Contractor MUST call Underground Facilities Protective Organization (UFPO) at least two days before staring excavation! 1-800-962-7962 or 811.

In consideration of granting of the permit hereby petitioned for, the above hereby agrees that he/she will comply with the terms thereof, the laws of the City of Olean and the State of New York; contact the Building Inspections office to schedule all mandatory field inspections; and that he/she will not use of permit the use of the structure or structure covered by this permit until a certificate of occupancy or certificate of compliance has been issued.

THIS PERMIT BECOMES NULL AND VOID IF WORK OR CONSTRUCTION AUTHORIZED IS NOT COMMENCED WITHIN 6 MONTHS, OR IF CONSTRUCTION OR WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF 6 MONTHS AT ANY TIME AFTER WORK IS STARTED.

I do certify that I have examined the forgoing application and it conforms to the applicable laws of the City of Olean.

Dennis A Cornell
Applicant Signature

09/06/2023
Date

Code Enforcement Officer

09/06/2023
Date

THIS APPROVED PERMIT MUST BE ON PREMISES DURING CONSTRUCTION
APPLICANT MUST CALL FOR INSPECTIONS AT (716) 376-5683 | 24 HOURS NOTICE REQUIRED

Import Request

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Commercial or Industrial Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? >1000

If greater than 1000 cubic yards will be imported, enter volume to be imported: 15,000

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? yes

Does it contain less than 10%, by weight, material that would pass a size 80 sieve? yes

Is this virgin material from a permitted mine or quarry? yes

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

No sampling required as the 2" Minus Bank Run gravel meets the exemption criteria (less than 10 percent passing No. 80 Sieve). See attached documentation with sieve analysis.

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

As previously indicated, no sampling required as the 2" Minus Run-of Crush Limestone meets the exemption criteria (less than 10 percent passing No. 80 Sieve). See attached documentation.

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Portville-Obi Stone LLC - No Relationship

Location where fill was obtained:

1393 Portville-Obi Road, Portville, NY 14770

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

NYSDEC permitted gravel/stone pit (permit no. 91065)

Provide a list of supporting documentation included with this request:

Letter and 3rd Rock, LLC sieve report for 2" Minus Bank Run gravel from Portville-Obi Stone LLC Portville Pit, Portville-Obi Road.

The information provided on this form is accurate and complete.

Mike Lesakowski Digitally signed by Mike Lesakowski Date: 2023.05.23 14:52:39 -04'00'

Signature

5/23/2023

Date

Michael A. Lesakowski

Print Name

Benchmark Civil/Environmental Engineering & Geology PLLC

Firm

PORTVILLE-OBI STONE LLC

Main Office	Portville Pit	Allegany Pit
130 South Union Street Olean, NY 14760	1393 Portville-Obi Road Portville, NY 14770	4581 Lower Birch Run Road Allegany, NY 14706

716-372-1893

May 23rd, 2023

351 Franklin Street Redevelopment, LLC
2558 Hamburg Turnpike
Buffalo, New York 14218

RE: 351 Franklin Street Remediation

All,

The 2" Minus material to be supplied for the referenced job above was screened at our Portville, NY facility. The material is produced from a virgin source, un-impacted by hazardous materials or contaminants. The material is free of organic matters including clay.

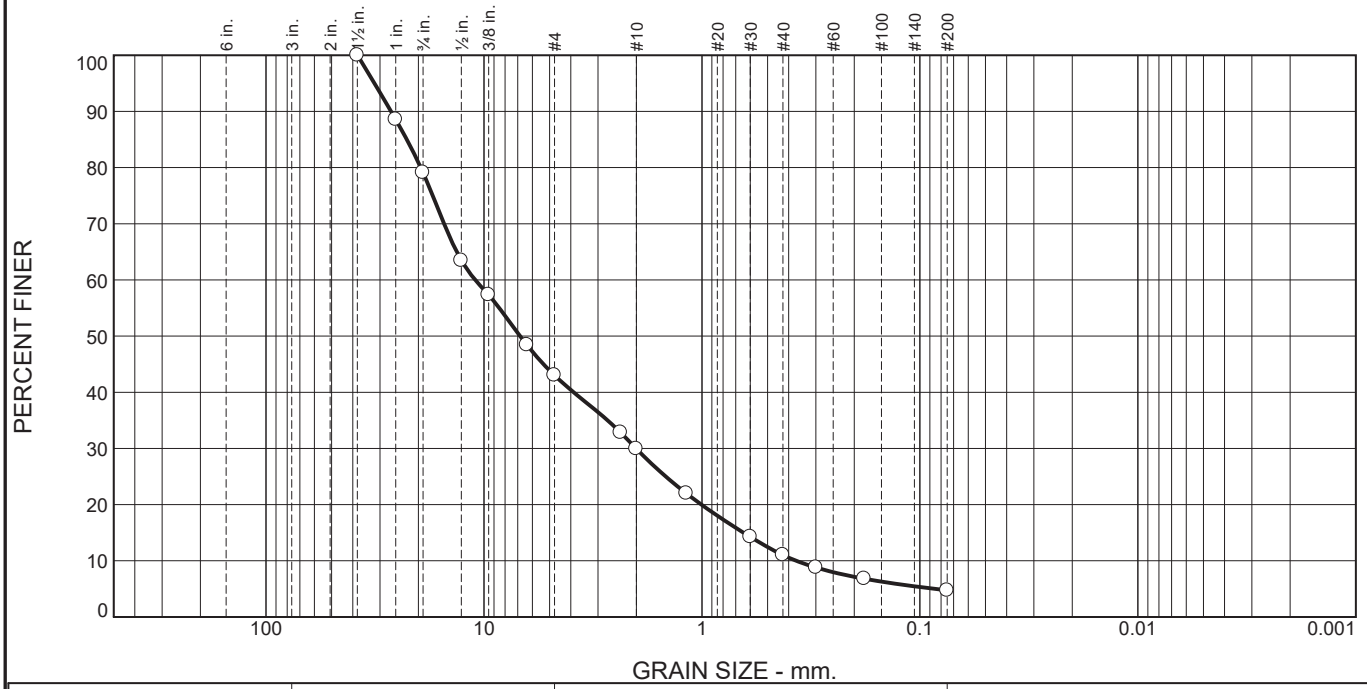
The Portville, NY quarry is a NYSDEC permitted site, with mining permit # 91065.

If any additional information is needed, please do not hesitate to contact me at my cell, 716-244-0999.

Sincerely,

R. Donald Benson
Principal Owner
Portville-Obi Stone, LLC

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	20.9	36.1	13.1	18.9	6.3	4.7	

TEST RESULTS (ASTM D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1.5"	100.0		
1	88.5		
.75	79.1		
.5	63.5		
.375	57.3		
.25	48.4		
#4	43.0		
#8	32.8		
#10	29.9		
#16	22.0		
#30	14.3		
#40	11.0		
#50	8.8		
#80	6.8		
#200	4.7		

* (no specification provided)

Material Description

ID#20-499

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= GP **AASHTO (M 145)=**

Coefficients

D_{90}= 26.6930 D_{85}= 22.5951 D_{60}= 10.9700
D_{50}= 6.8268 D_{30}= 2.0066 D_{15}= 0.6442
D_{10}= 0.3696 C_u= 29.68 C_c= 0.99

Remarks

F.M.=5.36

Date Received: 7/29/20 **Date Tested:** 8/10/20

Tested By: AA

Checked By: JMA

Title: LM

Source of Sample: Bank Run from gravel pit of Portville-Obi Stone, LLC **Date Sampled:** 7/28/20

Sample Number: DC SBR

3rd Rock, LLC

East Aurora, NY

Client: Portville -Obi Stone, LLC

Project: Oregon Road brownfield

Project No: 20-042 **Figure**

APPENDIX F

Project Documentation Forms

ROUX

DAILY LOG	DATE			
	NO.			
	SHEET		OF	

FIELD ACTIVITY DAILY LOG

PROJECT NAME:	PROJECT NO.
PROJECT LOCATION:	CLIENT:
FIELD ACTIVITY:	

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:

WEATHER CONDITIONS:	IMPORTANT TELEPHONE CALLS:
A.M.:	
P.M.:	

PERSONNEL ON SITE:

SIGNATURE DATE:

(CONTINUED)

ROUX

DAILY LOG	DATE			
	NO.			
	SHEET		OF	

FIELD ACTIVITY DAILY LOG

PROJECT NAME:	PROJECT NO.

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION

SIGNATURE DATE:

(CONTINUED)

ROUX

DAILY LOG	DATE			
	NO.			
	SHEET		OF	

FIELD ACTIVITY DAILY LOG

PROJECT NAME:	PROJECT NO.

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

TIME	DESCRIPTION

REFERENCED PROJECT FIELD FORMS:

☐ Aquifer Test Data Sheet	☐ Impacted Soil Excavation Log	☐ Soil Gas Survey Log
☐ Chain-of-Custody Form	☐ Impacted Soil Transportation Log	☐ Step-Drawdown Test Data Sheet
☐ Construction Sample Summary Log	☐ Monitoring Well Inspection Form	☐ Survey Elevation Log
☐ Corrective Measures Report	☐ Nuclear Densitometer Field Log	☐ Tailgate Safety Meeting Form
☐ Daily Drilling Report	☐ Photographic Log	☐ Test Pit Excavation Log
☐ Drilling Safety Checklist	☐ Pipe Leakage Testing Log	☐ Underground/Overhead Utility Checklist
☐ Equipment Calibration Log	☐ Post-Closure Field Inspection Report	☐ Variance Log
☐ Field Borehole Log	☐ Pressure Packer Testing Log	☐ Water Level Monitoring Record
☐ Field Borehole/Monitoring Well Installation Log	☐ Problem Identification Report	☐ Water Quality Field Collection Log
☐ Field Investigation Report	☐ Real-Time Air Monitoring Log	☐ Water Sample Collection Log
☐ Field Slug Test Log	☐ Record of Telecom Meeting	☐ Well Abandonment/Decomm. Log
☐ Groundwater Elevation Log	☐ Sample Summary Collection Log	☐ Well Completion Detail
☐ GW Well Development and Purge Log	☐ Sediment Sample Collection Log	☐
☐ Hot Work Permit	☐ Seep Sample Collection Log	☐
☐ IDW Container Log	☐ Seepage Meter Sample Collection Log	☐

SIGNATURE DATE:

DAILY LOG	DATE			
	REPORT NO.			
	PAGE		OF	

PROBLEM IDENTIFICATION REPORT

Date:

Project:

Job No:

Location:

CQA Monitor(s):

Client:

Contractor:

Contractor's Supervisor:

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:

Ambient Air Temp. - P.M.:

Wind Direction:

Wind Speed:

Precipitation:

Problem Description:

Problem Location (reference test location, sketch on back of form as appropriate):

Problem Causes:

Suggested Corrective Measures or Variances:

Linked to Corrective Measures Report No. *or Variance Log No.*

Approvals (initial):

CQA Engineer:

Project Manager:

Signed:

CQA Representative

DAILY LOG	DATE			
	REPORT NO.			
	PAGE		OF	

CORRECTIVE MEASURES REPORT

Date:

Project:

Job No:

Location:

CQA Monitor(s):

Client:

Contractor:

Contractor's Supervisor:

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:

Ambient Air Temp. - P.M.:

Wind Direction:

Wind Speed:

Precipitation:

Corrective Measures Undertaken (reference Problem Identification Report No.)

Retesing Location:

Suggested Method of Minimizing Re-Occurrence:

Approvals (initial):

CQA Engineer:

Project Manager:

Signed:

CQA Representative

APPENDIX G

Electronic Copy