

**Remedial Action Work Plan
Former Urban League of Rhode Island
246 Prairie Avenue
Providence, Rhode Island
RIDEM File No. SR-28-2086**

Providence Redevelopment Agency
Providence, Rhode Island

February 2024



317 Iron Horse Way
Suite 204
Providence, RI 02908



FUSS & O'NEILL

February 7, 2024

Ms. Rachel Simpson
Senior Environmental Scientist
Office of Land Revitalization & Sustainable Materials Management
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, RI 02908

RE: Remedial Action Work Plan
Former Urban League of Rhode Island
246 Prairie Avenue, Providence, Rhode Island
RIDEM File No. SR-28-2086

Dear Ms. Simpson:

The purpose of this letter is to present the enclosed *Remedial Action Work Plan (RAWP)* for the above-referenced site. Fuss & O'Neill, Inc. (Fuss & O'Neill) prepared this *RAWP* on behalf of the Providence Redevelopment Agency. A check for the Remedial Action Approval Application Fee of \$1,000 will be submitted under separate cover.

Please contact us if you require any additional information or if you have any questions regarding this *RAWP*.

Sincerely,

Brian E. Kortz, CPG, LSP, CNU-A
Vice President | Office Manager

/rlz

Attachments: Remedial Action Work Plan

C: Mr. Nicholas Cicchitelli, Providence Redevelopment Agency

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- A Conceptual Plans – Sub-Slab Vapor Mitigation System and Vapor Barrier
- B Soil Capping Details
- C Draft Environmental Land Usage Restriction
- D Draft Soil Management Plan

1 Introduction

The purpose of this document is to provide a Remedial Action Work Plan (RAWP) in accordance with *Section 1.10* of the Rhode Island Department of Environmental Management (RIDEM) *Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations; 250-RICR-140-30-1)*. This RAWP, prepared by Fuss & O'Neill, Inc. (Fuss & O'Neill) on behalf of RIDEM and the Providence Redevelopment Agency (PRA) as part of a Targeted Brownfields Assessment (TBA) details remedial actions that are planned for the property located at 246 Prairie Avenue, Providence, Rhode Island (hereafter, the "Site" or "subject site"). The planned remedial measures are to mitigate risk posed to future Site users and environmental receptors by Site characteristics and environmental media containing volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), and metals.

2 Background

2.1 Site Property Description

The Site consists of an approximately 4.64-acre irregular-shaped parcel located in a Heavy Commercial District (C-3) zone at 246 Prairie Avenue, Assessor's Plat 45, Lot 911, Providence, Rhode Island (Providence County). A 49,254-square foot structure is located in the center of the Site, and an approximately 95,000-square foot paved parking lot surface surrounds most of the building to the north, south, and east. A map consisting of a portion of a United States Geological Survey (USGS) topographic map showing the Site location is provided as *Figure 1*.

2.2 Site History

According to City records, early 1900's Sanborn Fire Insurance mapping, and aerial photographs, the Site was previously divided into several City parcels and was improved with numerous residential properties. In 1970, the current building on the Site was divided into several commercial businesses, including Kent Cleansers, a dry-cleaning facility, located in the central portion of the building. In September 2010, the lots were combined to form Lot 911. At the time of this report, the Site was occupied by the Urban League of Rhode Island, Inc. as an office building.

2.3 Previous Investigation Activities

Previous Site investigation activities were conducted between August 2020 and August 2023 and included the sampling and analysis of soil, groundwater, and soil gas at the Site. In March 2021, a leaking transformer and approximately seven cubic yards of soil containing transformer oil were removed from the Site by Rhode Island Energy (RI Energy). The following reports were submitted to the RIDEM for the Site.

- A Phase I Environmental Site Assessment (ESA) Report, prepared by ES&M and dated July 2021.

- A *Limited Subsurface Report*, prepared by Environmental Strategies & Management, Inc. (ES&M) and dated July 2021.
- A *Site Investigation Report*, prepared by Fuss and O'Neill and dated September 2022.
- A *Release Response Report*, prepared by Coneco Engineers and Scientists, Inc. (Coneco) and dated May 2021; and,
- A *SIR Addendum*, prepared by Fuss and O'Neill and dated August 2023.

Previous Site investigation activities were summarized in detail in the *SIR* and *SIR Addendum*. As discussed in the *SIR* and *SIR Addendum*, remedial activities are required for the following areas of the Site:

- The presence of arsenic in a soil sample collected from soil boring MW-1 from 0.5 to 2 feet below grade (fbg) at a concentration above the RIDEM Method 1 Residential and Industrial/Commercial Direct Exposure Criteria (R-DEC and I/C-DEC, respectively).
- The presence of SVOC in a soil sample collected from soil boring SB-01 at a depth of 0.5 to 2 fbg at concentrations above the applicable RIDEM R-DEC and/or I/C-DEC.
- The presence of trichloroethylene (TCE) and tetrachloroethylene (PCE) in soil vapor samples collected from beneath the existing building at concentrations above the Massachusetts Department of Environmental Protection's (MassDEP's) Commercial and/or Residential Sub Slab Soil Gas Screening Values (SSGSV). A portion of the Site building was formerly utilized as a dry cleaner.

Refer to *Figure 2* for the locations of the soil borings.

2.4 Conceptual Site Remedy

The preferred conceptual remedial approach for the Site was documented in the *SIR* and *SIR Addendum*. On August 15, 2023, RIDEM issued a *Program Letter* for the Site. The *Program Letter* acknowledged that Site investigation activities were now complete, and that public notification, review and comment was now required. On September 1, 2023, Fuss and O'Neill distributed the public notification documents, and RIDEM subsequently issued a *Remedial Decision Letter* on September 27, 2023, that approved the Site Investigation and conceptual remedial approach.

Specific plans for the redevelopment of the Site consist of the following:

- Demolition of the existing Site building, with the future construction of a new building.
- Site to be redeveloped into a hub for community organizations focused on advocacy, recreation, and social services.

The preferred conceptual remedial approach for the Site was documented in the August 2023 *SIR Addendum* by Fuss & O'Neill. The remedial approach included the following actions:

- Limited soil excavation and off-Site disposal of soil containing SVOC and/or arsenic. Additional delineation of soil containing SVOC and arsenic may be necessary to confirm the volume of soil to be excavated. Confirmatory sampling would be required to confirm the extents of the excavation.

- Should all jurisdictional soil not be excavated from the Site, encapsulation of Site soils by an engineered control will be implemented. For the soil containing SVOC, the engineered control would consist of a minimum of two feet of clean fill, one foot of clean fill over a geotextile fabric, and/or four inches of hardscape over six inches of clean fill.
- As outlined in *Section 1.13* of the *Remediation Regulations*, remedial options for arsenic-only releases are dependent on the reported concentration of arsenic in Site soil. The maximum reported concentration of arsenic in samples collected from the Site was 21.6 parts per million (ppm). Based on this concentration of arsenic, an engineered control would require six inches of clean soil with vegetation and/or mulch to mitigate erosion, four inches of clean soil over a layer of appropriate geotextile fabric, or four inches of gravel with a minimum of two inches of asphalt, concrete pavers, or concrete. However, to use the pre-approved limited capping specifications listed in *Section 1.13.3.C* of the *Remediation Regulations*, the area of soil containing arsenic will require delineation and confirmation that soil containing SVOC is not located in this area. The pre-approved capping specifications can only be used on areas of the site in which arsenic is the sole contaminant of concern.
- To mitigate the potential for intrusion of soil vapor containing VOC to indoor air, a spray-applied vapor barrier system, or equivalent, would be applied to the ground level of any existing or future habitable structure in areas where VOC have been identified in soil gas at concentrations exceeding the MassDEP Residential SSGSV limits.
- A sub-slab vapor mitigation system would be incorporated into the foundation design of any existing or future habitable structure in areas where VOC has been identified in soil gas at concentrations exceeding the MassDEP Residential SSGSV limits. The system would be passively or actively vented to mitigate intrusion of soil gas containing VOC to the building interior.
- Institutional controls in the form of an Environmental Land Usage Restriction (ELUR) would also be implemented. The ELUR would require that future uses of the Site be compatible with the vapor mitigation measures and would ensure the integrity of the engineered controls through inspection, maintenance, and reporting requirements.

This remedial strategy is compatible with the proposed redevelopment of the Site by PRA.

3 Remedial Action Work Plan

Fuss & O'Neill prepared this *RAWP* to address the requirements of *Section 1.10.1* of the *Remediation Regulations*. To facilitate RIDEM review of the *RAWP*, each of the following sections addresses a specific section of the *Remediation Regulations*, noting the relevant section in parentheses, where applicable.

3.1 Remedial Objectives (Section 1.10.2)

3.1.1 Groundwater Objectives

No VOC was detected in the groundwater samples collected from the Site at concentrations exceeding the RIDEM Method 1 GB Groundwater Objectives (GB-GO). No further actions regarding groundwater quality at the subject are warranted to achieve compliance with the RIDEM GB-GO.

3.1.2 Surface Water and Sediment Objectives

No surface waters or sediment are present on the subject site, and therefore, no objectives have been established.

3.1.3 Soil Objectives

The remedial objective for soil at the Site consists of additional delineation of soil containing SVOC and arsenic, the targeted removal and off-Site disposal of the soil, and confirmatory sampling to confirm the extents of excavation. As discussed in *Section 2.4* and in sub-sections below, soil capping may be implemented if the excavation of jurisdictional soil proves to be infeasible.

3.1.4 Air Objectives

The remedial objective for soil vapor/indoor air involves the installation of an active or passive sub-slab vapor mitigation system, combined with a spray-applied vapor barrier on the new building slab to mitigate the intrusion of soil vapors into occupied building spaces.

3.2 Proposed Remedy (Section 1.10.3)

Excavation activities will be limited to the excavation and grading activities necessary to remove and dispose of soil containing arsenic and SVOC and facilitate Site construction activities. The removal of soil with concentrations above RIDEM I/C DEC will mitigate direct contact exposure to arsenic and

SVOC by human and environmental receptors. As discussed, capping of impacted soils may be required if the excavation of all the arsenic and SVOC-impacted soils cannot be achieved.

The installation of a passive or active sub-slab vapor mitigation system (SSVS) will mitigate the inhalation pathway by collecting soil vapors beneath the building. A passive system utilizes the natural “stack effect” to collect soil vapors, while an active system utilizes in line fans or a skid mounted blower to create a zone of negative pressure beneath the slab.

In addition to the SSVS, the installation of a vapor barrier will provide another layer of protection by minimizing the intrusion of subsurface vapors into the occupied building.

Refer to *Appendix A* for conceptual plans for the SSVS and the vapor barrier. The SSVS and vapor intrusion barrier construction is discussed in detail in *Section 3.9.1* of this *RAWP*. Please note that the final plans for the SSVS and vapor barrier are contingent upon the design of any new Site buildings.

As the design of the Site redevelopment progresses from permitting to final Construction Documents, changes may be incorporated that may alter the remedial strategies. However, the overall objective of the remedies, as discussed herein, will remain. A copy of the final Construction Documents for the redevelopment of the Site will be provided to RIDEM under separate cover. The final remedial design will also be provided to RIDEM in a *Remedial Action Closure Report (RACR)* at the completion of the project.

An integral part of the remediation strategy will be the implementation of an ELUR at the Site. The implementation of an ELUR will require that future uses of the Site be compatible with the implemented remedial strategies at the Site. If capping of impacted soils is conducted, an associated Post-Remediation Soil Management Plan (SMP) will be prepared for the Site. Procedures to be followed subsequent to the completion of construction activities at the Site will be documented in the Post-Remediation SMP. Drafts of the ELURs and Post-Remediation SMP are included in *Appendix C* and *C*, respectively, and will also be submitted for RIDEM review at the completion of the remedial activities documented herein.

3.3 Remediation of Impacted Groundwater (Section 1.10.4)

Active remediation of groundwater beneath the Site is not included as part of the remedial approach, as exceedances of applicable RIDEM GB-GO were not documented in samples collected from on-Site monitoring wells.

3.4 Limited Design Investigation (Section 1.10.5)

No additional design investigations were conducted or needed beyond those documented in the reports discussed in *Section 2.3* above.

3.5 Points of Compliance (Section 1.10.6)

3.5.1 Targeted Soil Excavation

Prior to the soil excavation, a series of shallow soil borings in the vicinity of soil borings MW-1 and SB-01 may be conducted to refine the extent of soil containing arsenic and SVOC prior to excavation. The borings will be advanced in a grid pattern at twenty-five-foot intervals. Borings will be advanced to depths of approximately five fbg, and two soil samples will be collected from each boring to refine the vertical and horizontal extent of the impact. Refer to *Figure 3* for the proposed boring configuration and approximate excavation area. Please note that the final boring configuration and excavation area will be contingent on laboratory analytical results of soil samples.

The soil borings will be used to fully delineate the excavation extent and to serve as confirmation that the residual concentrations of SVOC and arsenic are below the RIDEM R-DEC and/or I/C DEC. No post-excavation soil samples from the base and sidewalls of the excavation areas are proposed.

If laboratory analytical results of samples collected from the soil borings indicate that the extent of soils with concentrations of arsenic and/or SVOCs above the RIDEM R-DEC and/or I/C-DEC is greater than anticipated, then the feasibility of the targeted soil excavation will be re-evaluated. If it is determined that a targeted soil excavation is not feasible, soil capping will be implemented in its place. Refer to *Section 3.9* for details about potential soil capping.

3.5.2 Clean Soil

One of the remedial objectives is to mitigate the potential for direct exposure to soil containing oil and/or hazardous materials (OHM) at concentrations exceeding the RIDEM R-DEC and/or I/C-DEC. To ensure that this remedial objective is met, imported fill materials which are used at the Site must meet the definition of Clean Soil as documented in the RIDEM *Remediation Regulations* or be categorically Clean Soil in accordance with applicable regulations, as discussed below. For the purposes of this project, Clean Soil is defined as follows:

- Imported soil that meets the definition of Clean Soil as documented in the RIDEM *Remediation Regulations*, as further discussed in *Section 3.5.2.1* below.
- Compost that meets the requirements for Class “A” compost in accordance with RIDEM *Solid Waste Regulation No. 8*, October 2005. Rule 8.8.03 of this regulation allows for unrestricted use of compost classified as Class “A.”
- New or recycled asphalt, new concrete, waste concrete (un-painted with no steel reinforcing), or stone.
- Any combination of two or more of the materials listed above that, prior to being combined, meets the requirements for Clean Soil, as defined above.

3.5.2.1 Imported Fill Material

To evaluate compliance with the R-DEC, and thus consistency with the Clean Soil definition prior to importation, samples of Clean Soil to be used for backfilling of excavated areas and/or the construction of a cap will be collected at a minimum frequency of one sample per 2,000 cubic yards to be imported, per source of material. Prior to importation to the Site, each sample will be submitted for laboratory analysis for:

- VOC by USEPA Method 8260/5035
- SVOC by USEPA Method 8270
- Total Petroleum Hydrocarbons (TPH) by USEPA Method 8100
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082
- Priority Pollutant 13 Metals (PP13 Metals – antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc) by USEPA Method 6010/7471

The analytical results for the imported soil samples will be reviewed by an Environmental Professional to confirm compliance with the RIDEM R-DEC prior to importation. Soil represented by samples that do not comply with RIDEM R-DEC, based on laboratory analytical results, will be rejected for importation to the Site.

3.6 Remediation Schedule (Section 1.10.7)

Targeted excavation and the installation of engineered controls on the Site will be performed concurrently with other redevelopment activities, including the demolition of the existing Site building and future building construction. Consequently, the schedule of remediation implementation will be contingent upon the overall construction schedule. Once finalized, the construction schedule will be submitted to RIDEM under separate cover when a schedule has been established for the Site.

3.7 Contractors and Consultants (Section 1.10.8)

At this time, an Environmental Professional and remedial contractor(s) have not been selected for the Site. It is likely that separate contractors/consultants will be needed for the final design /installation of the SSVS and the vapor intrusion barrier. Contact information for remedial contractors will be provided to RIDEM under separate cover before the start of remedial activities.

3.8 Site Plan (Section 1.10.9)

A Site Plan showing the current conditions at the Site, including soil, groundwater, and soil vapor sampling locations, is provided as *Figure 2*.

3.9 Design Standards and Technical Specifications (Section 1.10.10)

3.9.1 Active/Passive Sub Slab Vapor Mitigation System/Vapor Intrusion Barrier

An active or passive SSVS beneath new buildings is proposed for the Site. The system will be constructed with perforated PVC pipe in a bed of crushed stone beneath the foundation and will be designed to collect accumulated VOC vapors from beneath the slab, prior to entry into the building, and vent the vapors to ambient air.

The sub-slab network will consist of four-inch High Density Polyethylene (HDPE) perforated pipe laterals and six-inch diameter solid HDPE pipe headers. The HDPE pipe will be corrugated exterior and smooth finish interior pipe bedded in a minimum six-inch layer of one-half-inch to one-inch diameter coarse aggregate (i.e., meeting standards for ASTM #5 coarse aggregate).

Conceptual plans for an SSVS system are included in *Appendix A*. Note that this design has not been finalized, as the Site redevelopment plans have not been finalized. Once the plans have been finalized, the final design will be submitted to RIDEM.

The proposed vapor intrusion barrier will consist of a Liquid Boot® or a similar product. Liquid Boot® is a seamless, spray-applied water-based membrane that contains no VOC and is installed below existing slabs. The Liquid Boot® system consists of a subgrade layer of crushed stone and a fabric base layer. The Liquid Boot® is then sprayed on the base layer, which is capped with a layer of geotextile protection course, and finally with the new structural slab. The Liquid Boot® will also be applied to sub-grade vertical walls, penetrations, and other irregular surfaces.

Conceptual plans for a vapor intrusion barrier are included in *Appendix A*. Note that this design has not been finalized, as the Site redevelopment plans have not been finalized. Once the plans have been finalized, the final design will be submitted to RIDEM.

3.9.2 Remediation Cap

If implemented, the remediation cap at the Site will be constructed in accordance with federal, state, and local regulations, the specifications detailed herein and in *Appendix A*, and the final Construction Documents to be prepared for the Site remediation and redevelopment and provided to RIDEM under separate cover. In particular, the specific design standards and technical specifications are discussed below. Compliance with this RAWP will be documented in the RACR prepared after Site remediation activities are complete.

The various remediation cap types to mitigate the potential for direct exposure to the soil are depicted on the *Soil Capping Details* in *Appendix B* and further described below. These cap types are considered the minimum requirements for capping in accordance with the *Remediation Regulations*, and the civil

engineering plans for the redevelopment of the Site may specify additional requirements to meet the needs of the redevelopment.

- **Landscaped Cap:** The cap types that will be used at landscaped areas within the Site boundary will consist of either two feet of imported Clean Soil overlying existing soil, or a minimum of 12 inches of imported Clean Soil, overlying geotextile fabric, overlying existing soil.
- **Hardscape Cap:** The cap type that will be constructed at hardscaped areas within the Site boundary will consist of a minimum of four inches of bituminous asphalt or concrete overlying a minimum of six inches of structural sub-base fill or pulverized existing pavement, overlying existing soil. Existing gravel base beneath the existing asphalt surface may also be utilized as the structural sub-base fill of the hardscaped cap if it meets the thickness and physical requirements of the re-paved areas.
- **Existing Asphalt Cap:** Existing asphalt pavement at portions of the Site may remain and not be further developed as part of the redevelopment project. The existing asphalt surface will serve as part of the cap in those areas. Pavement that is to remain as part of the cap shall be in good condition, and significant cracks shall be repaired.
- **Arsenic-Only Cap:** *Section 1.13.3.C* of the *Remediation Regulations* outlines remedial options for arsenic-only releases. Based on the concentration of arsenic at soil boring MW-1 at the Site, an engineered control will require six inches of clean soil with vegetation and/or mulch to mitigate erosion, four inches of clean soil over a layer of appropriate geotextile fabric, or four inches of gravel with a minimum of two inches of asphalt, concrete pavers, or concrete. However, to use these pre-approved limited capping specifications, the area of soil containing arsenic will require delineation and confirmation that soil containing SVOC is not located in this area. These pre-approved capping specifications can only be used on areas of the site in which arsenic is the sole contaminant of concern.

Clean Soil imported to the Site will be subject to applicable civil and structural requirements for the project as well as the sampling and approval requirements discussed in *Section 3.5.2*. Remediation cap details of the various cap types to be installed at the Site are provided herein as *Soil Capping Details* in *Appendix B*.

At areas of the Site to be landscaped with a one-foot cap, geotextile fabric will be applied to the existing ground surface. Imported Clean Soil material will then be applied across the capping area and compacted until the appropriate thickness is achieved. The thickness requirements referenced in the above cap type descriptions will apply to the final compacted cap layers. Asphalt, concrete, or screened loam to support vegetation in landscaped areas will then be added and compacted to complete the cap thickness. Grass, trees, and other plantings will be planted concurrent with or just after construction of the landscaped cap. Coordination with the project landscape architect will be conducted to select plant types and sizes to facilitate planting in a manner which minimizes disturbance of existing soil beneath the cap. Plantings may warrant the removal of portions of the underlying geotextile fabric to accommodate root balls and future root growth.

Areas improved with a one-foot landscape cap will require the installation of geotextile fabric to be placed within the cap thickness and beneath imported Clean Soil material. The geotextile fabric will be certified by the manufacturer to meet the puncture strength (i.e., 120 pounds) requirements documented in *Section 1.13* of the RIDEM *Remediation Regulations*. An Environmental Professional will perform routine inspections of capping activities to confirm and document that the cap is installed in accordance with the specifications described herein. These inspections will include confirmation that geotextile fabric is placed throughout the one-foot landscaped capped areas.

3.10 Set-Up Plan (Section 1.10.11)

Prior to remedy implementation, appropriate measures will be taken to manage and minimize the potential for migration of hazardous materials through surface run-off or air-borne dust. This will be achieved by the installation of erosion controls, wetting soil, or other appropriate measures, as necessary. Material staging areas, including the locations of stockpiled or containerized contaminated media, will be designated at the Site. These areas will be secured and protected from runoff with appropriate best management practices including use of polyethylene sheeting and perimeter erosion controls, as appropriate.

Existing pavement may be demolished, pulverized, and screened. Depending on structural requirements, the pulverized existing pavement may be re-used on-Site as structural fill beneath paved surfaces or as general fill beneath other capped surfaces for grading purposes as needed.

3.11 Effluent Disposal (Section 1.10.12)

Excavated soil containing arsenic and SVOC will be disposed off-Site at an appropriately licensed receiving facility or capped beneath an appropriate cap type. The soil slated for off-Site disposal will be stockpiled at a designated staging area that has been selected and secured to limit unauthorized access to the materials. Unless live-loading can be performed, soil will be placed on and covered with a minimum of six-millimeter polyethylene/plastic sheeting during the entire duration of its staging and secured with appropriate controls to limit the loss of the cover and protect against stormwater and/or wind erosion (hay bales, silt fencing, rocks, etc.). A daily inspection of the stockpile shall be made to ensure that required controls are adequate and are maintained. Repairs to controls will be made as needed.

Disposal characterization sampling of excavated material will be conducted for the analytical parameters and frequency specified by the selected receiving facility. The transportation and disposal of soil from the Site is subject to the review and approval of an Environmental Professional to certify compliance with this document and to ensure compliance with RIDEM's anti-degradation guidance.

Upon receipt of the laboratory analytical results and approval from the Environmental Professional and the disposal facility, soil will be transported off-Site under appropriate waste shipping documentation (i.e., manifest, Material shipping record, bill of lading) and disposed in accordance with local, state, and federal regulations as well as the receiving facility's acceptance criteria.

Copies of shipping documentation for regulated material removed from the Site will be included in the RACR.

3.12 Contingency Plan (Section 1.10.13)

3.12.1 Health and Safety

Contractors and workers performing soil management activities at the remediation Site will be required to comply with Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements in accordance with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120 and 1926.65, to the extent that those regulations apply to the work they are performing. Procedures for management of contact with soil at the Site will be detailed in Site-specific Health and Safety Plans (HASPs), prepared in accordance with OSHA 29 CFR 1910.120 and 1926.65.

Applicable Site-specific information, including the above-mentioned reports and the *RAWP* documented herein, will be made available to contractors performing remedial activities at the Site. These documents will allow the contractors to develop their Site-specific HASPs.

3.12.2 Emergency Response

The remedial actions proposed for the Site are not expected to result in the collection and storage of liquid hazardous materials which could result in a sudden release incident at the Site. However, in order to address potential unforeseen environmental incidents during construction, emergency response planning was conducted.

The primary contingency plan manager at the Site will be Mr. Nicholas Cicchitelli of PRA. Mr. Cicchitelli will act as the primary contact for any emergencies or unexpected incidents encountered during remediation implementation. Any unexpected incidents will be managed both to protect the health and safety of on-Site workers as well as the public. Furthermore, unexpected incidents will be managed in accordance with applicable local, state, and federal regulations. The Environmental Professional will assist Mr. Cicchitelli as necessary in the evaluation of unexpected incidents and associated response actions relative to potentially applicable regulations. The contact information for Mr. Cicchitelli and the local emergency services includes the following:

Nicholas Cicchitelli:	401-680-8418
Providence Fire Department:	401-243-6060 or 911
Providence Police Department:	401-272-3121 or 911

3.13 Remediation Operating Log (Section 1.10.14)

During Site preparation, soil excavation, and disposal, the Environmental Professional will conduct routine Site visits to confirm and document that the remediation is conducted in accordance with the specifications described herein. The results of this remediation monitoring will be provided to RIDEM in monthly status reports submitted via e-mail.

Records of Site preparation, remediation, and restoration activities will be maintained in an Operating Log during remedial activities. The Operating Log will document the implementation of the remedial actions and remedial oversight. Additionally, instances of the implementation of the Contingency Plan or Health and Safety Plan, as discussed below, will also be recorded in the Operating Log.

3.14 Site Security Procedures (Section 1.10.15)

During remediation activities, the Site will be left in a secure and stable condition following each workday. Temporary or permanent fencing and signage will be utilized to restrict unauthorized access to the construction zone during remedial activities.

Heavy equipment utilized for excavation will remain on-Site during remediation activities. However, heavy equipment that has become contaminated due to remedial activities will be decontaminated within the limits of the remediation area to the extent feasible, prior to removal from the Site. Equipment decontamination procedures will be specified in the HASP developed by the remedial contractors and will consist of cleaning contaminated equipment to remove adhered soil or sediment. If decontamination of equipment must be conducted outside of the specific area of on-going remediation, the decontamination will be conducted on an impermeable liner, and the rinse water will be collected. The rinse water will be containerized, characterized, and disposed off-Site at an appropriately licensed receiving facility within 90 days of the decontamination activities.

3.15 Shut-Down, Closure, and Post-Closure Requirements (Section 1.10.16)

Upon completion of remedial activities described above and establishment of vegetation in landscaped areas, heavy machinery and other equipment will be removed from the Site. Any erosion control barriers will be left on-Site until stabilization of the Site is deemed complete by the Environmental Professional. Once stabilization is considered complete, the erosion control measures will be removed from the Site.

The Environmental Professional will submit an RACR to RIDEM certifying that the remediation was completed in accordance with the specifications and requirements detailed herein. The RACR will include description of excavation and off-Site disposal, a depiction of the final restoration limits, and

analytical data for imported Clean Soil samples. If necessary, substantial variances from this *RAWP* that occurred during remedial implementation will be documented in the RACR.

3.16 Institutional Controls and Notices (Section 1.10.17)

Upon completion of remedial activities and submission of the RACR to RIDEM, a RIDEM-approved ELUR will be recorded on the deed to the Site property. The primary objective of the ELUR will be to restrict certain activities at the Site and to ensure that the engineered controls are maintained and remain compliant with RIDEM requirements.

Requirements for annual inspections and reporting will also be specified in the ELUR. These measures will record the condition of the engineered controls and outline necessary repairs. These measures will also ensure that other terms of the ELUR, such as prohibition of the use of groundwater beneath the Site as potable water, are adhered to. Documentation of the inspections will be submitted to RIDEM on an annual basis, in accordance with the requirements of the ELUR.

As discussed, capping of impacted soils may be required if the excavation of all the arsenic and SVOC-impacted soils cannot be achieved. If soil capping is conducted, then any disturbances of on-Site soil must be conducted in accordance with the Post-Remediation SMP, which will be attached to the ELUR. The Post-Construction SMP will define the procedures necessary for management of on-Site soil and identifies the steps required if disturbance of the on-Site soil is necessary in the future.

Draft versions of the ELUR and Post-Remediation SMP are provided in *Appendix C and D*, respectively. Upon project completion, revised drafts will be prepared and submitted to RIDEM for review and approval, prior to filing.

3.17 Compliance Determination (Section 1.10.18)

Once Site remedial activities have been completed, the following procedures will be taken to demonstrate that the remedial objectives for the Site have been met:

- A RACR documenting the Site remedial activities will be submitted to the RIDEM for review.
- The final ELUR and Post-Construction SMP (if required) will be filed with the Land Evidence Records for the City of Providence and recorded on the Site deed.
- A stamped/certified copy of this filing will be forwarded to RIDEM within 15 days of being recorded; and,
- Completion of an Annual Compliance Evaluation Form for the ELUR, and submittal of same to RIDEM.



FUSS & O'NEILL

4 Certifications (Section 1.10.19)

I hereby certify the accuracy of the information contained in the above referenced report to the best of my knowledge.

Signature of Consultant
Brian E. Kortz, CPG, LSP, CNU-A
Fuss & O'Neill, Inc.

Vice President
Title

2/7/2024
Date

I hereby certify that the report is a complete and accurate representation of the contaminated site and the release and contains all available facts surrounding the release to the best of my knowledge.

Signature of Performing Party
Providence Redevelopment Agency

Dir. of Real Estate
Title

2/6/24
Date

Nicholas Cicchitelli
Print Name

5 Limitations of Work Product

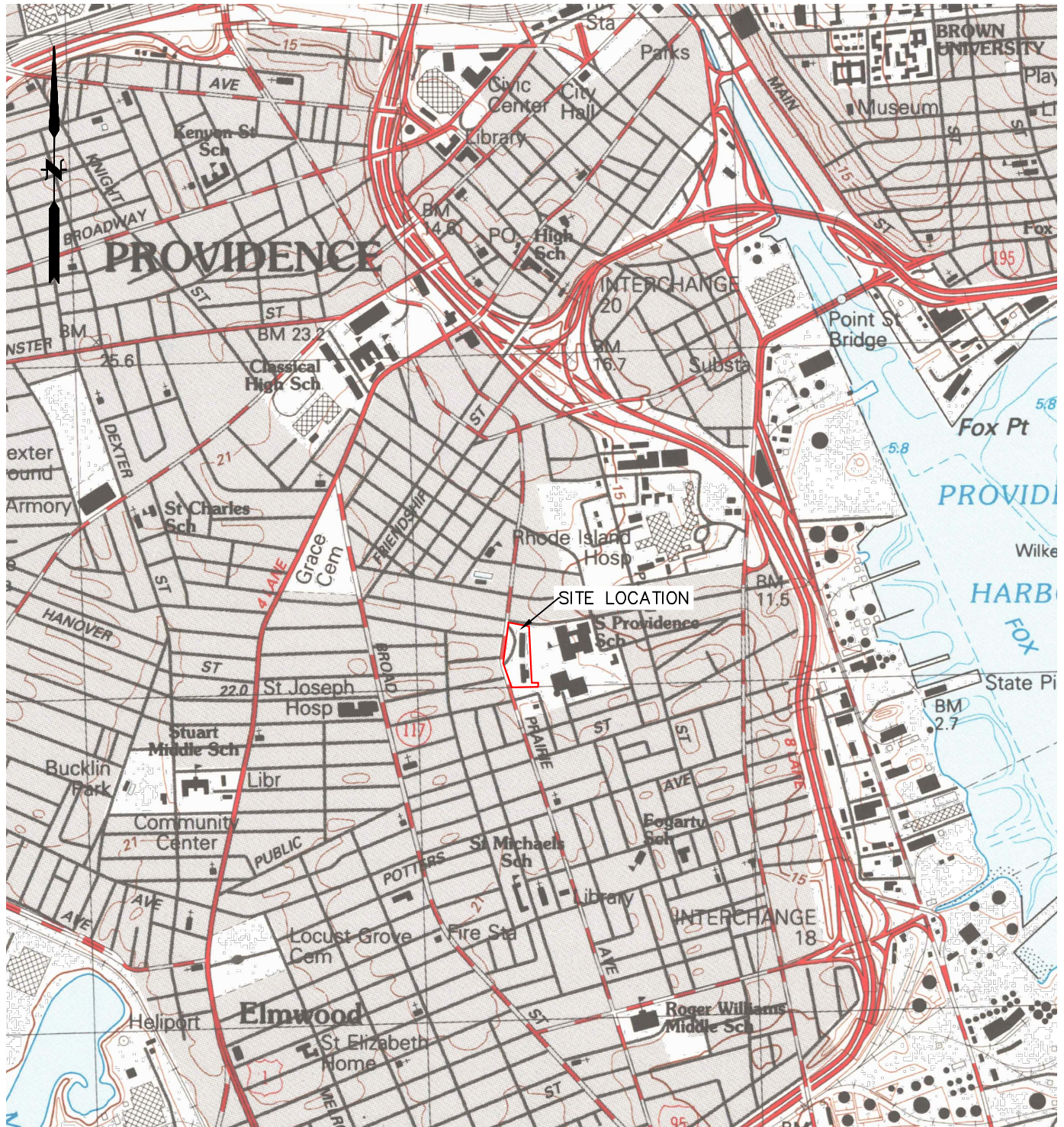
This document was prepared for the use of the Providence Redevelopment Agency, the only intended beneficiaries of our work. Those who may use or rely upon the report and the services (hereafter “work product”) performed by Fuss & O'Neill, Inc. and/or its subsidiaries or independent professional associates, subconsultants and subcontractors (collectively the “Consultant”) expressly accept the work product upon the following specific conditions.

1. Consultant represents that it prepared the work product in accordance with the professional and industry standards prevailing at the time such services were rendered.
2. The work product may contain information that is time sensitive. The work product was prepared by Consultant subject to the particular scope limitations, budgetary and time constraints and business objectives of the Client which are detailed therein or in the contract between Consultant and Client. Changes in use, tenants, work practices, storage, Federal, state, or local laws, rules or regulations may affect the work product.
3. The observations described and upon which the work product was based were made under the conditions stated therein. Any conclusions presented in the work product were based solely upon the services described therein, and not on scientific or engineering tasks or procedures beyond the scope of described services.
4. In preparing its work product, Consultant may have relied on certain information provided by state and local officials and information and representations made by other parties referenced therein, and on information contained in the files of state and/or local agencies made available at the time of the project. To the extent that such files which may affect the conclusions of the work product are missing, incomplete, inaccurate or not provided, Consultant is not responsible. Although there may have been some degree of overlap in the information provided by these various sources, Consultant did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this project. Consultant assumes no responsibility or liability to discover or determine any defects in such information which could result in failure to identify contamination or other defects in, at or near the Site. Unless specifically stated in the work product, Consultant assumes no responsibility or liability for the accuracy of drawings and reports obtained, received or reviewed.
5. If the purpose of this project was to assess the physical characteristics of the subject Site with respect to the presence in the environment of hazardous substances, waste or petroleum and chemical products and wastes as defined in the work product, unless otherwise noted, no specific attempt was made to check the compliance of present or past owners or operators of the subject Site with Federal, state, or local laws and regulations, environmental or otherwise.
6. If water level readings have been made, these observations were made at the times and under the conditions stated in the report. However, it must be noted that fluctuations in water levels may

occur due to variations in rainfall, passage of time and other factors and such fluctuations may affect the conclusions and recommendations presented herein.

7. Except as noted in the work product, no quantitative laboratory testing was performed as part of the project. Where such analyses have been conducted by an outside laboratory, Consultant has relied upon the data provided and, unless otherwise described in the work product, has not conducted an independent evaluation of the reliability of these tests.
8. If the conclusions and recommendations contained in the work product are based, in part, upon various types of chemical data, then the conclusions and recommendations are contingent upon the validity of such data. This data (if obtained) has been reviewed and interpretations made by the Consultant. If indicated in the work product, some of these data may be preliminary or screening-level data and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time and other factors.
9. Chemical analyses may have been performed for specific parameters during the course of this project, as described in the work product. However, it should be noted that additional chemical constituents not included in the analyses conducted for the project may be present in soil, groundwater, surface water, sediments or building materials at the subject Site.
10. Ownership and property interests of all documents, including reports, electronic media, drawings, and specifications, prepared or furnished by Consultant pursuant to this project are subject to the terms and conditions specified in the contract between the Consultant and Client, whether or not the project is completed.
11. Unless otherwise specifically noted in the work product or a requirement of the contract between the Consultant and Client, any reuse, modification or disbursement of documents to third parties will be at the sole risk of the third party and without liability or legal exposure to Consultant.
12. In the event that any questions arise with respect to the scope or meaning of Consultant's work product, immediately contact Consultant for clarification, explanation or to update the work product. In addition, Consultant has the right to verify, at the party's expense, the accuracy of the information contained in the work product, as deemed necessary by Consultant, based upon the passage of time or other material change in conditions since conducting the work.
13. Any use of or reliance on the work product shall constitute acceptance of the terms hereof.

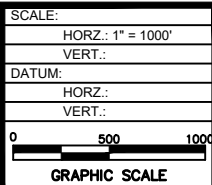
Figures



MAP REFERENCE:

THIS MAP WAS PREPARED FROM THE FOLLOWING
7.5 x15 MINUTE USGS TOPOGRAPHIC QUADRANGLES:
PROVIDENCE, RI (1987).

SOURCE: RHODE ISLAND GEOGRAPHIC INFORMATION SYSTEM (RIGIS).



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401.861.3070
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CITY OF PROVIDENCE

SITE LOCATION MAP

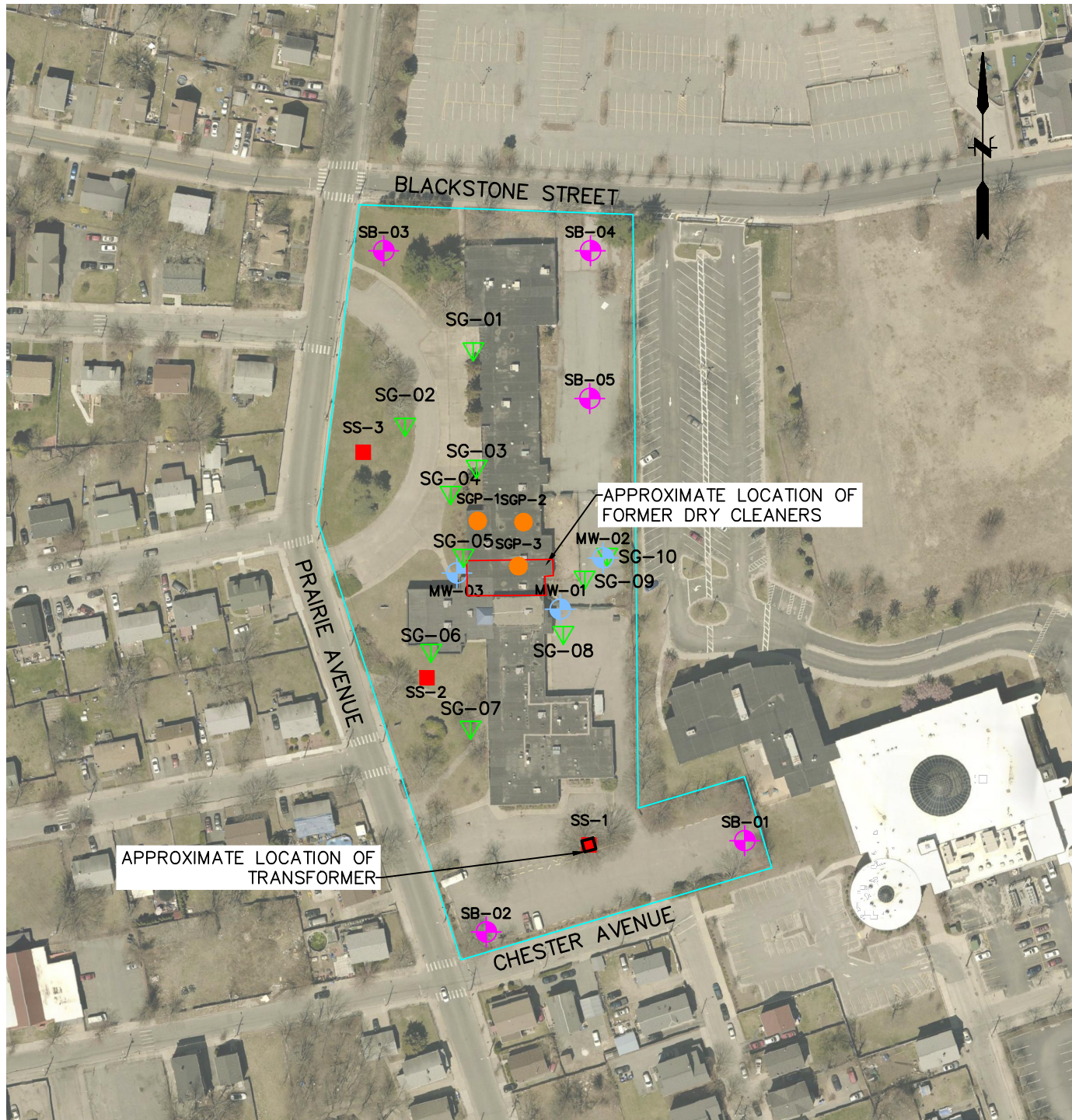
246 PRAIRIE AVENUE

PROVIDENCE

RHODE ISLAND

PROJ. No.: 20151007.A30
DATE: AUGUST 2023

FIGURE 1



LEGEND

- SITE BOUNDARY
- ⬇ JUNE 2022 SOIL BORING/MONITORING WELL
- ⬇ JUNE 2023 SOIL BORING
- ⬇ JUNE/JULY 2022 SOIL GAS SAMPLE
- SGP-X SEPTEMBER 2020 SOIL GAS SAMPLE
- SS-X SEPTEMBER 2020 SOIL SAMPLE

MAP REFERENCES AND NOTES

THIS MAP WAS PREPARED FROM RIGIS COLOR ORTHO IMAGERY (2019)
 SOURCE: THE RHODE ISLAND GEOGRAPHIC INFORMATION SYSTEM (RIGIS)
 SITE FEATURES ARE APPROXIMATE
 SEPTEMBER 2020 SAMPLING LOCATIONS BASED ON A DRAWING TITLED
 "SITE MAP" PREPARED BY ES&M.

SCALE:	
HORZ.: 1" = 150'	
VERT.:	
DATUM:	
HORZ.:	
VERT.:	
0 75 150	
GRAPHIC SCALE	



FUSS & O'NEILL

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 413.452.0445
 www.fando.com

CITY OF PROVIDENCE

SITE PLAN

246 PRAIRIE AVENUE

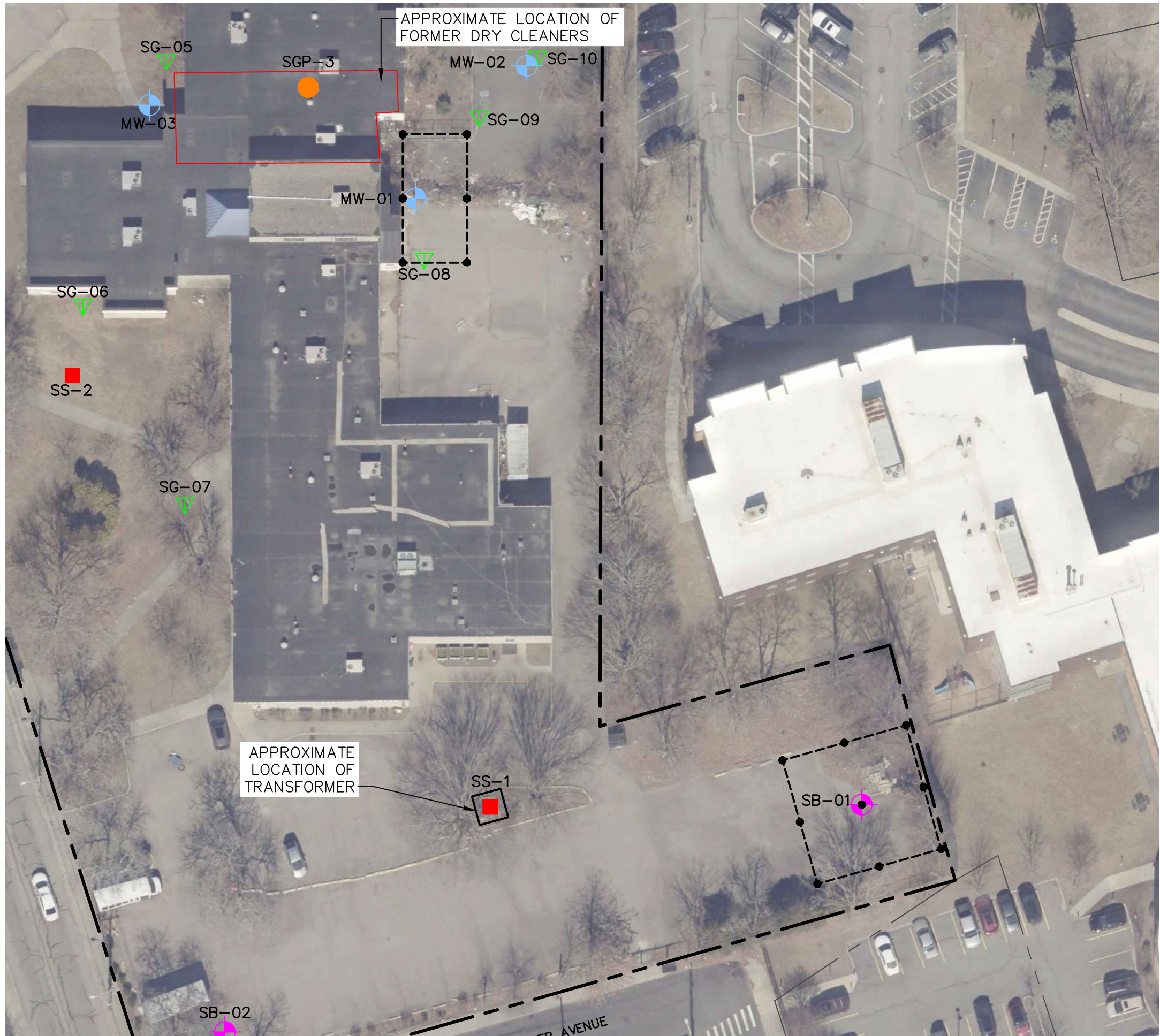
PROVIDENCE

RHODE ISLAND

PROJ. No.: 20151007.U10
 DATE: AUGUST 2023

FIGURE 2

File: J:\DWG\GP20151007\U10\Environmental\Plan\20151007\U10_STP01.dwg Layout: FIGURE 3 Plotted: 2023-12-08 8:04 AM Saved: 2023-12-08 8:03 AM User: Slrons
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 STB/CTB: FO.STB
MS VIEW: LAYER STATE:



LEGEND

- SITE BOUNDARY
- APPROXIMATE PROPOSAL EXCAVATION AREA
- PROPOSED SOIL BORINGS: 25' INTERVALS
- JUNE 2022 SOIL BORING/MONITORING WELL
- JUNE 2023 SOIL BORING
- ▽ JUNE/JULY 2022 SOIL GAS SAMPLE
- SGP-X ● SEPTEMBER 2020 SOIL GAS SAMPLE
- SS-X ■ SEPTEMBER 2020 SOIL SAMPLE

MAP REFERENCES AND NOTES

- THIS MAP WAS PREPARED FROM RIGIS COLOR ORTHO IMAGERY (2023).
SOURCE: THE RHODE ISLAND GEOGRAPHIC INFORMATION SYSTEM (RIGIS)
- SITE FEATURES ARE APPROXIMATE
- SEPTEMBER 2020 SAMPLING LOCATIONS BASED ON A DRAWING TITLED "SITE MAP" PREPARED BY ES&M.

SCALE:	HORIZ.: 1" = 40'
	VERT.: -
DATUM:	HORIZ.: -
	VERT.: -
	0 20 40'
	GRAPHIC SCALE

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PROVIDENCE REDEVELOPMENT AGENCY

LIMITED SOIL EXCAVATION DETAIL

FORMER URBAN LEAGUE - 246 PRAIRIE AVENUE

PROVIDENCE

RHODE ISLAND

PROJ. No.: 20151007.U10
DATE: NOVEMBER 2023

FIGURE 3

Appendix A

Conceptual Plans – Sub Slab Vapor Mitigation System and Vapor Barrier

PERFORATED SCHEDULE 40 PVC PIPE. SIZE AS INDICATED ON PIPING LAYOUT. PIPE MAY REQUIRE ADDITIONAL EXCAVATION. PIPE CROWN SHALL NOT BE PLACED IN A WAY THAT WOULD EXTEND INTO THE CONCRETE FLOOR SLAB OR THE GEOTEXTILE

NEW CONCRETE FLOOR SLAB

LIQUID BOOT VAPOR BARRIER

1" MIN.

1" MIN.

36" MIN.

36" MIN.

6" LAYER OF CRUSHED STONE OR SIMILAR

EXISTING SOIL OR FILL MATERIAL

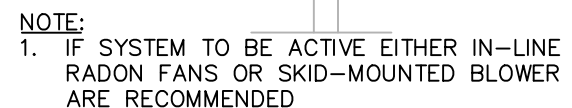
Ⓢ

TYPICAL SSDS CROSS SECTION AT PIPE LOCATION
NOT TO SCALE



NEW CONSTRUCTION GAS VENT DETAIL

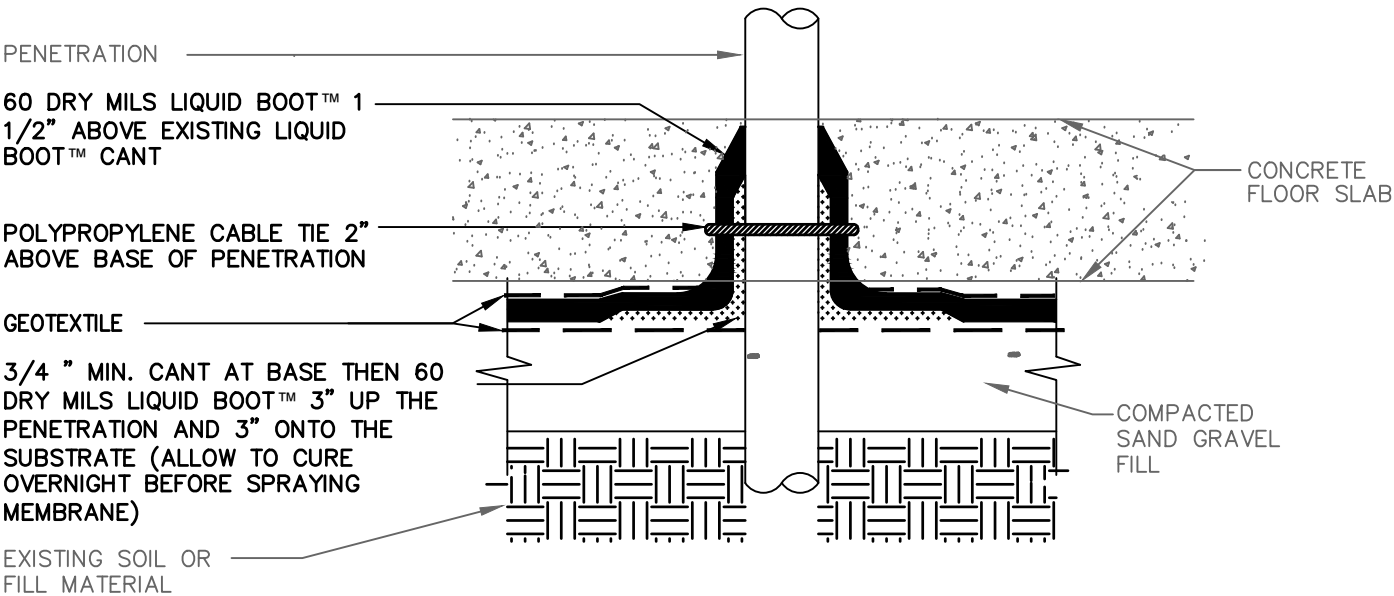
NOT TO SCALE



FLOOR ELEVATION DETAIL
NOT TO SCALE

APPX. A1

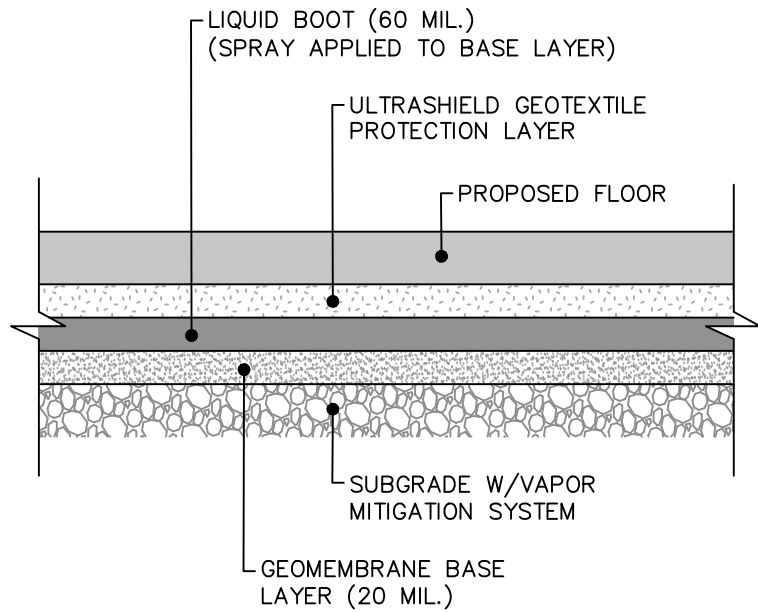
File: J:\DWG\GP20151007U10\Environmental\Plan\20151007U10_STP01.dwg Layout: FIGURE 2_A2 Plotter: 2023-12-08 8:04 AM Saved: 2023-12-08 8:03 AM User: Slions
MS VIEW: LAYER STATE: PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3 STB/CBT: FO STB



NOTE:
ALL PENETRATIONS SHALL BE CLEANED PER LIQUID BOOT™ MFG SPECIFICATIONS BEFORE LIQUID BOOT™ IS APPLIED.

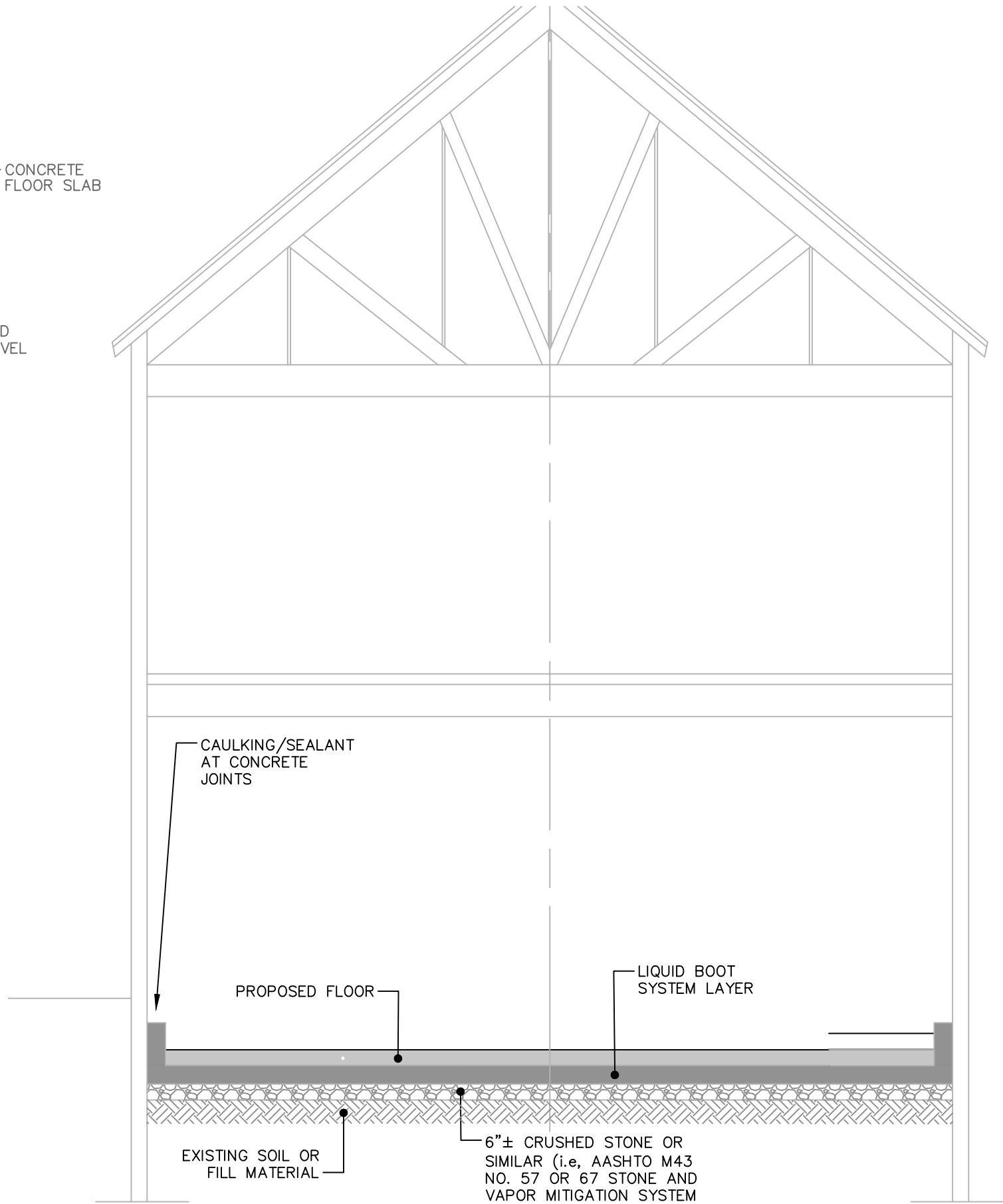
TYPICAL VERTICAL PIPE PENETRATION BOOT

NOT TO SCALE



LIQUID BOOT SYSTEM DETAIL

NOT TO SCALE



FLOOR ELEVATION DETAIL

NOT TO SCALE

SCALE:	HORZ.: 1" = 40'
	VERT.: -
DATUM:	HORZ.: -
	VERT.: -
	0 20 40'
	GRAPHIC SCALE



PROVIDENCE REDEVELOPMENT AGENCY
CONCEPTUAL PLAN - VAPOR BARRIER
FORMER URBAN LEAGUE - 246 PRAIRIE AVENUE
RHODE ISLAND

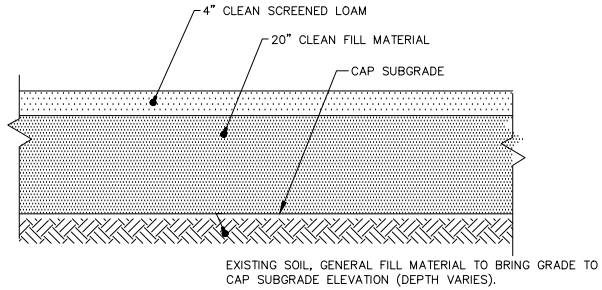
PROJ. No.: 20151007.U10
DATE: NOVEMBER 2023

APPX. A2

Appendix B

Soil Capping Details

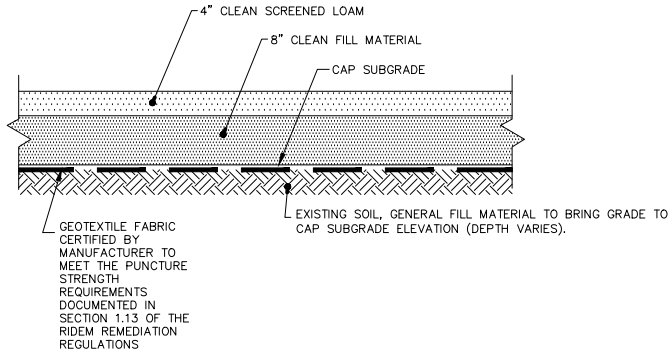
File: J:\DWG\GP2015\1007\U10\Environmental\Plan\20151007.U10_DET01.dwg Layout: FIGURE 4.B Plotted: 2024-02-07 2:15 PM Saved: 2024-02-07 11:40 AM User: CFlannery
PC3: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3 STB/CTB: FO STB
LAYER STATE:



NOTES:
CROSS SECTION AS SHOWN IS THE MINIMUM REMEDIATION CAP ALLOWED. CIVIL ENGINEERING PLANS TO SPECIFY MATERIAL REQUIREMENTS AND ADDITIONAL SECTION THICKNESS AS REQUIRED.

1 TYPICAL CAP SECTION AT LANDSCAPED AREAS (2-FOOT CAP)

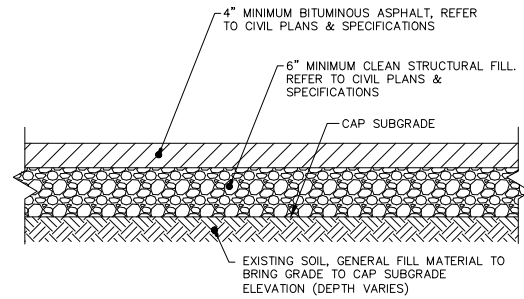
NOT TO SCALE



NOTES:
CROSS SECTION AS SHOWN IS THE MINIMUM REMEDIATION CAP ALLOWED. CIVIL ENGINEERING PLANS TO SPECIFY MATERIAL REQUIREMENTS AND ADDITIONAL OR MODIFIED SECTION THICKNESS AS REQUIRED.

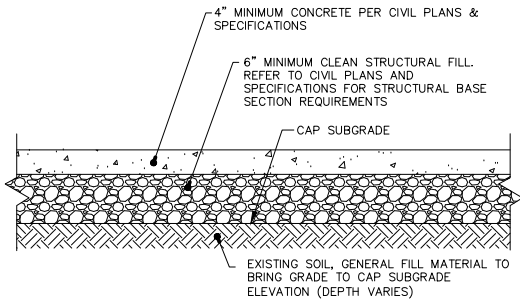
2 TYPICAL CAP SECTION AT ALTERNATIVE LANDSCAPED AREAS (1-FOOT CAP)

NOT TO SCALE



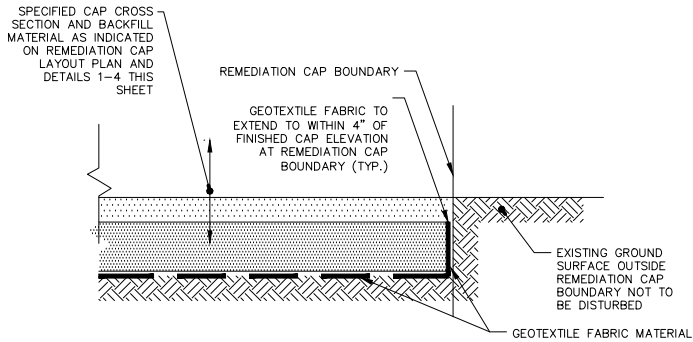
NOTES:
1. CROSS SECTION AS SHOWN IS THE MINIMUM REMEDIATION CAP ALLOWED. CIVIL ENGINEERING PLANS TO SPECIFY MATERIAL REQUIREMENTS AND ADDITIONAL OR MODIFIED SECTION THICKNESS AS REQUIRED.

3 TYPICAL CAP SECTION AT PAVED AREAS
NOT TO SCALE



NOTES:
1. CROSS SECTION AS SHOWN IS THE MINIMUM REMEDIATION CAP ALLOWED. CIVIL ENGINEERING PLANS TO SPECIFY MATERIAL REQUIREMENTS AND ADDITIONAL OR MODIFIED SECTION THICKNESS AS REQUIRED.

4 TYPICAL CAP SECTION AT CONCRETE AREAS
NOT TO SCALE



5 TYPICAL CAP SECTION TERMINATION AT REMEDIATION CAP BOUNDARY
NOT TO SCALE

CAP CONSTRUCTION NOTES:

- ALL REMEDIAL CAP MATERIALS SHALL BE APPROVED AND COMPLY WITH THE ANALYTICAL TESTING REQUIRED BY RIDEM.
- ALL FINISH GRADES FOR CAP SYSTEM SHALL BE AS SHOWN ON CIVIL PLANS AND SPECIFICATIONS WITH INDICATED CAP THICKNESSES AND GEOTEXTILE FABRIC OR MARKING MATERIAL AS SHOWN ON DETAILS 1-4 THIS SHEET.
- SECTION 1.13.3.C OF THE REMEDIATION REGULATIONS OUTLINES REMEDIAL OPTIONS FOR ARSENIC-ONLY RELEASES. BASED ON THE CONCENTRATION OF ARSENIC AT SOIL BORING MW-1 AT THE SITE, AN ENGINEERED CONTROL WILL REQUIRE SIX INCHES OF CLEAN SOIL WITH VEGETATION AND/OR MULCH TO MITIGATE EROSION, FOUR INCHES OF CLEAN SOIL OVER A LAYER OF APPROPRIATE GEOTEXTILE FABRIC, OR FOUR INCHES OF GRAVEL WITH A MINIMUM OF TWO INCHES OF ASPHALT, CONCRETE PAVERS, OR CONCRETE. HOWEVER, TO USE THESE PRE-APPROVED LIMITED CAPPING SPECIFICATIONS, THE AREA OF SOIL CONTAINING ARSENIC WILL REQUIRE DELINEATION AND CONFIRMATION THAT SOIL CONTAINING SVOC IS NOT LOCATED IN THIS AREA. THESE PRE-APPROVED CAPPING SPECIFICATIONS CAN ONLY BE USED ON AREAS OF THE SITE IN WHICH ARSENIC IS THE SOLE CONTAMINANT OF CONCERN.

SCALE:	HORZ.: 1" = 40'
	VERT.: -
DATUM:	
	HORZ.: -
	VERT.: -
	0 20' 40'
	GRAPHIC SCALE

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PROVIDENCE REDEVELOPMENT AGENCY

SOIL CAPPING DETAILS

FORMER URBAN LEAGUE - 246 PRAIRIE AVENUE

PROVIDENCE

PROJ. No.: 20151007.U10
DATE: NOVEMBER 2023

APPX. B

Appendix C

Draft Environmental Land Use Restriction

ENVIRONMENTAL LAND USAGE RESTRICTION

This Declaration of Environmental Land Usage Restriction ("Restriction") is made on this _____ day of _____, 20____ by the Providence Redevelopment Agency, and its successors and/or assigns (hereinafter, the "Grantor").

WITNESSETH:

WHEREAS, the Grantor, Providence Redevelopment Agency, is the Owner in fee simple of certain real property identified as Plat 45, Lot 911, 246 Prairie Avenue, Providence, Rhode Island (the "Property"), more particularly described in Exhibit A (Legal Description) which is attached hereto and made a part hereof;

WHEREAS, the Property (or portion thereof identified in the Class I survey which is attached hereto as Exhibit 2A and is made a part hereof) has been determined to contain soil which is contaminated with certain Hazardous Materials and/or petroleum in excess of applicable Residential and Industrial/Commercial Direct Exposure Criteria pursuant to the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases ("Remediation Regulations");

WHEREAS, the Grantor and the Rhode Island Department of Environmental Management ("Department") have determined that the environmental land use restrictions set forth below are consistent with the regulations adopted by the Department pursuant to R.I.G.L. § 23-19.14-1 and that this restriction shall be a Conservation Restriction pursuant to R.I.G.L. § 34-39-1 et. seq. and shall not be subject to the 30-year limitation provided in R.I.G.L. § 34-4-21;

WHEREAS, the Department's written approval of this Restriction is contained in the document entitled: Remedial Decision Letter issued pursuant to the Remediation Regulations;

WHEREAS, to prevent exposure to or migration of Hazardous Substances and to abate hazards to human health and/or the environment, and in accordance with the Remedial Decision Letter, the Grantor desires to impose certain restrictions upon the use, occupancy, and activities of and at the Property;

WHEREAS, the Grantor believes that this Restriction will effectively protect public health and the environment from such contamination; and

WHEREAS, the Grantor intends that such restrictions shall run with the land and be binding upon and enforceable against the Grantor and the Grantor's successors and assigns.

NOW, THEREFORE, Grantor agrees as follows:

A. Restrictions Applicable to the Property: In accordance with the Remedial Decision Letter, the use, occupancy and activity of and at the Property is restricted as follows:

- i. No residential use of the Property shall be permitted that is contrary to Department approvals and restrictions contained herein;
- ii. No groundwater at the Property shall be used as potable water;
- iii. No soil at the Property shall be disturbed in any manner without written permission of the Department's Office of Land Revitalization & Sustainable Materials Management, except as permitted in the Remedial Action Work Plan (RAWP) or Soil Management Plan (SMP), Exhibit B and attached hereto, approved by the Department in a written approval letter dated _____ (date);
- [iv. Humans engaged in activities at the Property shall not be exposed to soils containing Hazardous Materials and/or petroleum in concentrations exceeding the applicable Department approved Direct Exposure Criteria set forth in the Remediation Regulations;
- [v. The engineered controls at the Property described in the RAWP contained in Exhibit B attached hereto shall not be disturbed and shall be properly maintained to prevent humans engaged in industrial/commercial activity from being exposed to soils and/or soil vapor containing Hazardous Materials and/or petroleum in concentrations exceeding the applicable Department-approved Industrial/Commercial Direct Exposure Criteria in accordance with the Remediation Regulations; and

B. No action shall be taken, allowed, suffered, or omitted at the Property if such action or omission is reasonably likely to:

- i. Create a risk of migration of Hazardous Materials and/or petroleum;
- ii. Create a potential hazard to human health or the environment; or
- iii. Result in the disturbance of any engineering controls utilized at the Property, except as permitted in the Department-approved RAWP and/or SMP contained in Exhibit B.

C. Emergencies: In the event of any emergency which presents a significant risk to human health or to the environment, including but not limited to, maintenance and repair of utility lines or a response to emergencies such as fire or flood, the application of Paragraphs A (iii.-viii.) and B above may be suspended, provided such risk cannot be abated without suspending such Paragraphs and the Grantor complies with the following:

- i. Grantor shall notify the Department's Office of Land Revitalization & Sustainable Materials Management in writing of the emergency as soon as possible but no more than three (3) business days after Grantor's having learned of the emergency. (This does not remove Grantor's obligation to notify any other necessary state, local or federal agencies.);
- ii. Grantor shall limit both the extent and duration of the suspension to the minimum period reasonable and necessary to adequately respond to the emergency;

- iii. Grantor shall implement reasonable measures necessary to prevent actual, potential, present and future risk to human health and the environment resulting from such suspension;
- iv. Grantor shall communicate at the time of written notification to the Department its intention to conduct the Emergency Response Actions and provide a schedule to complete the Emergency Response Actions;
- v. Grantor shall continue to implement the Emergency Response Actions, on the schedule submitted to the Department, to ensure that the Property is remediated in accordance with the Remediation Regulations (or applicable variance) or restored to its condition prior to such emergency. Based upon information submitted to the Department at the time the ELUR was recorded pertaining to known environmental conditions at the Property, emergency maintenance and repair of utility lines shall only require restoration of the Property to its condition prior to the maintenance and repair of the utility lines; and
- vi. Grantor shall submit to the Department, within ten (10) days after the completion of the Emergency Response Action, a status report describing the emergency activities that have been completed.

- D. Release of Restriction; Alterations of Subject Area:** The Grantor shall not make, or allow or suffer to be made, any alteration of any kind in, to, or about any portion of the Property inconsistent with this Restriction unless the Grantor has received the Department's prior written approval for such alteration. If the Department determines that the proposed alteration is significant, the Department may require the amendment of this Restriction. Alterations deemed insignificant by the Department will be approved via a letter from the Department. The Department shall not approve any such alteration and shall not release the Property from the provisions of this Restriction unless the Grantor demonstrates to the Department's satisfaction that Grantor has managed the Property in accordance with applicable regulations.
- E. Notice of Lessees and Other Holders of Interests in the Property:** The Grantor, or any future holder of any interest in the Property, shall cause any lease, grant, or other transfer of any interest in the Property to include a provision expressly requiring the lessee, grantee, or transferee to comply with this Restriction. The failure to include such provision shall not affect the validity or applicability of this Restriction to the Property.
- F. Enforceability:** If any court of competent jurisdiction determines that any provision of this Restriction is invalid or unenforceable, the Grantor shall notify the Department in writing within fourteen (14) days of such determination.
- G. Binding Effect:** All of the terms, covenants, and conditions of this Restriction shall run with the land and shall be binding on the Grantor, its successors and assigns, and each Owner and any other party entitled to control, possession or use of the Property during such period of Ownership or possession.

H. Inspection & Non-Compliance: It shall be the obligation of the Grantor, or any future holder of any interest in the Property, to provide for annual inspections of the Property for compliance with the ELUR in accordance with Department requirements.

A qualified environmental professional will, on behalf of the Grantor or future holder of any interest in the Property, evaluate the compliance status of the Property on an annual basis. Upon completion of the evaluation, the environmental professional will prepare and simultaneously submit to the Department and to the Grantor or future holder of any interest in the Property an evaluation report detailing the findings of the inspection, and noting any compliance violations at the Property. If the Property is determined to be out of compliance with the terms of the ELUR, the Grantor or future holder of any interest in the Property shall submit a corrective action plan in writing to the Department within ten (10) days of receipt of the evaluation report, indicating the plans to bring the Property into compliance with the ELUR, including, at a minimum, a schedule for implementation of the plan.

In the event of any violation of the terms of this Restriction, which remains uncured more than ninety (90) days after written notice of violation, all Department approvals and agreements relating to the Property may be voided at the sole discretion of the Department.

I. Terms Used Herein: The definitions of terms used herein shall be the same as the definitions contained in Section 3 (DEFINITIONS) of the Remediation Regulations.

IN WITNESS WHEREOF, the Grantor has hereunto set (his/her) hand and seal on the day and year set forth above.

Providence Redevelopment Agency

By: _____
Grantor (signature) _____ Grantor (typed name)

STATE OF RHODE ISLAND
COUNTY OF _____

In (CITY/TOWN), in said County and State, on the _____ day of _____, 20____, before me Personally appeared _____, to me known and known by me to be the party executing the foregoing instrument and (he/she) acknowledged said instrument by (him/her) executed to be (his/her) free act and deed.

Notary Public: _____

My Comm. Expires: _____

Appendix D

Draft Post-Remediation Soil Management Plan

Post Remediation Soil Management Plan
246 Prairie Avenue, Providence, Rhode Island, Plat 45, Lot 911

This Soil Management Plan (SMP) has been prepared to establish procedures that will be followed should future construction/maintenance activities at the 246 Prairie Avenue, Providence, Rhode Island property require the need to manage soils excavated from the subsurface or when existing site surfaces / Department approved engineered controls (asphalt, concrete, landscaping and/or foundations) are disturbed. The plan serves to supplement, and will be initiated by, the RIDEM notification requirement established by the Environmental Land Use Restriction (ELUR) for the property.

Background

The Property, located at 246 Prairie Avenue, Providence, Rhode Island, was formerly improved with numerous residential properties in the early 1900's. In 1970, the current building on the Site was divided into several commercial businesses, including Kent Cleansers, a dry-cleaning facility, located in the central portion of the building. In September 2010, the lots were combined to form Lot 911. The property was found to contain arsenic in soil and trichloroethylene and tetrachloroethylene in soil gas during site investigations performed at the property. More recently, the site has been occupied by the Urban League of Rhode Island, Inc. and used as an office building. The Department approved remedy included limited soil excavation and off-site disposal, encapsulation of site soils by one foot of clean fill overlying a geotextile fabric and four inches of hardscape overlying six inches of clean fill, and a sub-slab vapor mitigation system. The regulated site soils are covered with Department approved engineered controls, consisting of building foundations, asphalt pavement, and landscaping in order to prevent direct exposure to regulated soils and/or infiltration through soils which exceed the Department's Method 1 GB Leachability Criteria.

Applicable Area

This SMP and affiliated ELUR, which restricts the property to Industrial/Commercial use, pertains to the entire Property. See attached site figure.

Soil Management

The direct exposure pathway is the primary concern at the site. Individuals engaged in activities at the site may be exposed through incidental ingestion, dermal contact, or inhalation of vapors or entrained soil particles if proper precautions are not taken. Therefore, the following procedures will be followed to minimize the potential of exposure.

During site work, the appropriate precautions will be taken to restrict unauthorized access to the property.

During all site/earth work, dust suppression (e.g. watering, etc) techniques must be employed at all times. If it is anticipated due to the nature of the contaminants of concern that odors may be generated during site activities, air monitoring and means to control odors will be utilized, as appropriate (e.g. odor-suppressing foam, etc).

In the event that an unexpected observation or situation arises during site work, such activities will immediately stop. Workers will not attempt to handle the situation themselves but will contact the appropriate authority for further direction.

In the event that certain soils on site were not previously characterized, these soils are presumed to be regulated until such time that it is demonstrated to the Department, through sampling and laboratory analysis that they are not regulated. (For example, presumptive remedies or locations of previously inaccessible soil.)

If excess soil is generated / excavated from the Property, the soil is to remain on-site for analytical testing, to be performed by an environmental professional, in order to determine the appropriate disposal and/or management options. The soil must be placed on and covered with polyethylene/plastic sheeting during the entire duration of its staging and secured with appropriate controls to limit the loss of the cover and protect against storm-water and / or wind erosion (e.g. hay bales, silt fencing, rocks, etc).

Excavated soils will be staged and temporarily stored in a designated area of the property. Within reason, the storage location will be selected to limit the unauthorized access to the materials (e.g., away from public roadways/walkways). No regulated soil will be stockpiled on-site for greater than 60 days without prior Department approval.

In the event that stockpiled soils pose a risk or threat of leaching hazardous materials, a proper leak-proof container (e.g. drum or lined roll-off) or secondary containment will be utilized.

Soils excavated from the site may not be re-used as fill on residential property. Excavated fill material shall not be re-used as fill on commercial or industrial properties unless it meets the Department's Method 1 Residential Direct Exposure Criteria for all constituents listed in Table 1 of the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations). Copies of the laboratory analysis results shall be maintained by the site owner and included in the annual inspection report for the site, or the closure report if applicable. In the event that the soil does not meet any of these criteria, the material must be properly managed and disposed of off site at a licensed facility.

Site soils, which are to be disposed of off-site, must be done so at a licensed facility in accordance with all local, state, and federal laws. Copies of the material shipping records associated with the disposal of the material shall be maintained by the site owner and included in the annual inspection report for the site.

Best soil management practices should be employed at all times and regulated soils should be segregated into separate piles (or cells or containers) as appropriate based upon the results of analytical testing, when multiple reuse options are planned (e.g. reuse on-site, reuse at a Department approved Industrial/Commercial property, or disposal at a Department approved licensed facility).

All non-disposable equipment used during the soil disturbance activities will be properly decontaminated as appropriate prior to removal from the site. All disposable equipment used during the soil disturbance activities will be properly containerized and disposed of following completion of the work. All vehicles utilized during the work shall be properly decontaminated as appropriate prior to leaving the site.

At the completion of site work, all exposed soils are required to be recapped with Department approved engineered controls (2 ft of clean fill or equivalent: building foundations, 4 inches of pavement/concrete underlain with 6 inches of clean fill, and/or 1 foot of clean fill underlain with a geotextile liner) consistent or better than the site surface conditions prior to the work that took place. These measures must also be consistent with the Department approved ELUR recorded on the property. Any clean fill material brought on site is required to meet the Department's Method 1 Residential Direct Exposure Criteria or be designated by an Environmental Professional as Non-Jurisdictional under the Remediation Regulations. The Annual Inspection Report for the site, or Closure Report if applicable, should include either analytical sampling results from the fill demonstrating compliance or alternatively include written certification by an Environmental Professional that the fill is not jurisdictional.

Groundwater Management

Not applicable to the site.

Worker Health and Safety

To ensure the health and safety of on-site workers, persons involved in the excavation and handling of the material on site are required to wear a minimum of Level D personal protection equipment, including gloves, work boots and eye protection. Workers are also required to wash their hands with soap and water prior to eating, drinking, smoking, or leaving the site.

Department Approval

In accordance with Section A iii of the ELUR, no soil at the property is to be disturbed in any manner without prior written permission of the Department's Office of Land Revitalization & Sustainable Materials Management, except for minor inspections, maintenance, and landscaping activities that do not disturb the contaminated soil at the Site. As part of the notification process, the site owner shall provide a brief written description of the anticipated site activity involving soil excavation. The notification should be submitted to the Department no later than 60 days prior to the proposed initiation of the start of site activities. The description shall include an estimate of the

volume of soil to be excavated, a list of the known and anticipated contaminants of concern, a site figure clearly identifying the proposed areas to be excavated/disturbed, the duration of the project and the proposed disposal location of the soil.

Following written Notification, the Department will determine the post closure reporting requirements. Significant disturbances of regulated soil will require submission of a Closure Report for Department review and approval documenting that the activities were performed in accordance with this SMP and the Department approved ELUR. Minor disturbances of regulated soil may be documented through the annual certification submitted in accordance with Section H (Inspection & Non-Compliance) of the Department approved ELUR. The Department will also make a determination regarding the necessity of performing Public Notice to abutting property owners/tenants concerning the proposed activities. Work associated with the Notification will not commence until written Department approval has been issued. Once Department approval has been issued, the Department will be notified a minimum of two (2) days prior to the start of activities at the site. Shall any significant alterations to the Department approved plan be necessary, a written description of the proposed deviation, will be submitted to the Department for review and approval prior to initiating such changes.