



April 1, 2019

New York State Department of Environmental Conservation
Division of Environmental Remediation
Hunters Point Plaza
47-40 21st Street
Long Island City, New York 11101-5401

Attn: Mr. Manfred Magloire

**RE: Second Site Management Periodic Review Report
DeWalt Service Center, 56-15 Queens Boulevard, Woodside, New York
Brownfield Cleanup Program Site Number C241129**

Dear Mr. Magloire:

On behalf of Black & Decker (U.S.) Inc., enclosed please find one copy of the *Second Site Management Periodic Review Report* for the above referenced property dated December 2018 and revised March 2019.

If you should have any questions concerning the enclosed report, please feel free to contact me at (860) 410-2904.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Kevin J. Bitjeman, L.E.P.
Senior Project Manager

CC: Kathryn Hinckley, Stanley Black & Decker
Dawn Hettrick, New York State Department of Public Health

Loureiro Engineering Associates, Inc.

100 Northwest Drive • Plainville, CT 06062 • 860.747.6181 • Fax 860.747.8822 • www.Loureiro.com
An Employee-Owned Company

DeWalt Service Center

QUEENS COUNTY, NEW YORK

Second Site Management Periodic Review Report

**DeWalt Service Center
56-15 Queens Boulevard
Woodside, New York**

NYSDEC Site Number: C241129

**December 2018
(Revised March 2019)**

Prepared for

**BLACK & DECKER (U.S.), INC.
1000 Stanley Drive
New Britain, Connecticut 06053**

Prepared by

**LOUREIRO NY, PC
100 Northwest Drive
Plainville, Connecticut 06062**

An Employee Owned Company

Comm. No. 07MD0.12

Table of Contents

| | Page |
|--|------------|
| 1. SITE OVERVIEW | 1-1 |
| 1.1 Summary of Remedial Investigation Findings | 1-1 |
| 1.2 Summary of Remediation Activities | 1-3 |
| 2. EVALUATION OF REMEDY PERFORMANCE AND EFFECTIVENESS | 2-1 |
| 3. IC/EC PLAN COMPLIANCE REPORT | 2-1 |
| 3.1 Composite cover system | 3-1 |
| 3.2 Offsite SSD Systems | 3-1 |
| 3.3 Environmental Easement | 3-1 |
| 4. MONITORING PLAN COMPLIANCE REPORT | 4-1 |
| 4.1 Composite Cover System Inspections | 4-1 |
| 4.2 DeWalt Facility Annual Indoor Air Sampling | 4-1 |
| 4.3 Offsite Soil Vapor Intrusion Investigations | 4-2 |
| 5. OPERATION & MAINTENANCE PLAN COMPLIANCE REPORT | 5-1 |
| 5.1 Residence at 43-22 57 th Street | 5-1 |
| 5.2 Multi-Family Residence at 43-31 57 th Street | 5-1 |
| 5.3 Residence at 43-26 57 th Street | 5-2 |
| 5.4 Multi-Family Residence at 43-29 57 th Street | 5-2 |
| 5.5 Multi-Family Residence at 43-30 57 th Street | 5-2 |
| 5.6 Church at 56-01 Queens Boulevard Street | 5-2 |
| 5.7 Multi-Family Residence 43-18 56 th Street | 5-2 |
| 6. OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS | 6-1 |

FIGURES

| | |
|------------|---|
| Figure 1-1 | Site Location Map |
| Figure 1-2 | Site Plan |
| Figure 3-1 | Composite Cover System |
| Figure 3-2 | Properties with Sub-Slab Depressurization Systems Installed |

TABLE

| | |
|-----------|--|
| Table 4-1 | Summary of VOCs Detected In Air Samples, 56-15 Queens Boulevard, December 7, 2017 |
| Table 4-2 | Summary of VOCs Detected In Air Samples, 56-15 Queens Boulevard, November 30, 2018 |

APPENDICES

| | |
|------------|---|
| Appendix A | Institutional and Engineering Controls Certification Form |
| Appendix B | Site Cover System Inspection Forms |
| Appendix C | Sub-Slab Depressurization System Operation, Maintenance & Monitoring Forms |
| Appendix D | Revised Sub-Slab Depressurization System As-Built Drawings, 43-31 57 th Street |

ACRONYMS

| | |
|--------|---|
| EC | Engineering Control |
| EPA | Environmental Protection Agency |
| IC | Institutional Control |
| IRM | Interim Remedial Measure |
| PCE | Tetrachloroethylene |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health |
| PRR | Periodic Report Review |
| QA/QC | Quality Assurance/Quality Control |
| RAO | Remedial Action Objective |
| RAWP | Remedial Action Work Plan |
| RI | Remedial Investigation |
| SCOs | Soil Cleanup Objectives |
| SMP | Site Management Plan |
| SVE | Soil Vapor Extraction |
| SSD | Sub-Slab Depressurization Systems |
| SVOC | Semivolatile Organic Compound |
| TCA | 1,1,1-Trichloroethane |
| TCE | Trichloroethylene |
| VOC | Volatile Organic Compound |

UNITS

| | |
|-------------------|----------------------------|
| $\mu\text{g/kg}$ | micrograms per kilogram |
| $\mu\text{g/m}^3$ | micrograms per cubic meter |

EXECUTIVE SUMMARY

This Periodic Review Report (PRR) has been prepared by Loureiro NY, PC on behalf of Black & Decker (U.S.), Inc. for the reporting period of November 17, 2017 to March 31, 2019. The purpose of this PRR is to document the effectiveness of the remedial program implemented for the Site (DeWalt Service Center, 56-15 Queens Boulevard, Woodside, New York), identify any areas of non-compliance, and determine if any changes to the Site Management Plan (SMP) are necessary. The SMP requires the use of institutional controls (ICs) and engineering controls (ECs) to address remaining soil contamination at the Site (Operable Unit 1). The SMP also includes ECs (sub-slab depressurization (SSD) systems) for seven offsite properties (Operable Unit 2) to mitigate the potential for intrusion of volatile organic compound (VOCs) into the overlying buildings.

Ongoing use of the Site remains consistent with the IC plan, which limits uses to restricted residential, commercial, and industrial. The EC for the Site is the composite cover system, consisting of the asphalt pavement and concrete building slab. The Site was inspected on November 30, 2018 and the composite cover system was observed to be intact and functioning in accordance with the EC plan objectives.

Annual inspection of the offsite ECs on November 29 and 30, 2018 indicated that only five of the seven SSD systems were functioning properly. Corrective measures were completed on February 13, 2019 to restore the remaining two SSD systems to full operation. All ECs implemented for the mitigation of offsite vapor intrusion hazards were in place and functioning properly at the end of the reporting period.

Media sampling and inspections performed for the Site during the current reporting period did not identify indoor air quality concerns, changes in Site use, or other conditions that would require modifications to the SMP. The remedies implemented for the Operable Units continue to be effective with respect to achieving the established cleanup goals. A completed *Institutional and Engineered controls Certification Form* is presented in Appendix A.

It is recommended that indoor air monitoring at the DeWalt Service Center be discontinued based on data indicating that there have been no exceedances of indoor air guideline values during eleven monitoring events conducted between May 2011 and November 2018. The primary source of VOC in soil vapor has been addressed through interim remedial measurement (IRMs) completed in 2010 and 2011. The data obtained since that time demonstrates that the potential for vapor intrusion at the Site has been sufficiently evaluated. No further indoor air monitoring is considered necessary to verify that the remedy is protective of human health under the existing commercial land use.

1. SITE OVERVIEW

Black & Decker (U.S.), Inc. entered into a Brownfield Cleanup Agreement with the New York State Department of Environmental Conservation (NYSDEC) on June 7, 2011, to investigate and remediate a 0.37-acre property located at 56-15 Queens Boulevard in Woodside, Queens County, New York (herein after referred to as “the Site”). The Site was remediated for restricted residential and commercial use and to continues to be operated as a DeWalt Service Center by Black & Decker (U.S.), Inc. This Periodic Review Report (PRR) has been prepared by Loureiro NY, PC on behalf of Black & Decker (U.S.), Inc. for the reporting period of November 17, 2017 to March 31, 2019.

The Site is located on the north side of Queens Boulevard, at the northwest corner of the intersection of Queens Boulevard and 57th Street. The Site is bounded to the east by 57th Street followed by an automobile repair facility at 56-07 Queens Boulevard, to the north by residential properties, to the west by a church building at 56-01 Queens Boulevard, and to the south by Queens Boulevard. An approximately 185-acre cemetery is located beyond Queens Boulevard further to the south. A Site Location Map is presented as Figure 1-1. A Site Plan showing the property boundaries and relevant topographic features is presented as Figure 1-2.

1.1 Summary of Remedial Investigation Findings

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the following reports prepared by Loureiro NY, PC:

- Site Investigation Report, July 24, 2008
- Remedial Investigation Report, April 2009
- Supplemental Remedial Investigation Report, April 21, 2015
- Off-Site Remedial Investigation Report, May 29, 2015

During investigations at the Site, an area of volatile organic compound (VOC), semivolatile organic compound (SVOC), and metals impacted soil was identified north of the building in the vicinity of a former drywell. The principal contaminants detected in this area were trichloroethylene (TCE), 1,1,1-trichloroethane (TCA) and associated degradation products. Prior to conducting Interim Remedial Measures (IRMs) in March 2010 and July 2011, TCE and TCA were detected in soils beneath the drywell at maximum concentrations of 9,700,000 micrograms per kilogram (µg/kg) and 1,400,000 µg/kg, respectively. Analytical results from soil borings installed during characterization of the release area indicate the release was limited both

horizontally and vertically within the glacial till. Excavation of the most heavily impacted soils was completed in March 2010. Thermally-enhanced soil vapor extraction (SVE) was conducted from August 2010 through July 2011 to address residual VOC impacted soil within the drywell release area.

Minimal VOC impacts were identified within the building foot-print. TCE in samples collected below the concrete slab ranged in concentration from 1.3 J $\mu\text{g/kg}$ to 890 $\mu\text{g/kg}$. The “J” analytical qualifier indicates that the concentration was estimated by the laboratory. TCE concentrations up to 5,000 micrograms per cubic meter ($\mu\text{g/m}^3$) were detected in soil vapor below the slab prior to conducting IRMs for the drywell release area.

TCE, TCA, and other chlorinated compounds were detected in soil vapor throughout the Site, including the DeWalt building foot-print. The highest concentrations were detected in the vicinity of the former drywell prior to the completion of IRMs. Soil vapor samples from this area contained TCE and TCA at maximum concentrations of 371,000 $\mu\text{g/m}^3$ and 125,000 $\mu\text{g/m}^3$, respectively. During the two most recent soil vapor monitoring events conducted in the northern portion of the Site after remediation of the release area, TCE and TCA were detected in soil vapor samples at maximum concentrations of 230 $\mu\text{g/m}^3$ and 150 $\mu\text{g/m}^3$, respectively.

The concentrations of TCE and TCA in soil vapor samples collected beneath the DeWalt building were reduced by IRMs for the dry well release area. The average concentration of TCE in sub-slab soil vapor during six sampling events conducted after the completion of IRMs ranged from 89.4 $\mu\text{g/m}^3$ to 201.5 $\mu\text{g/m}^3$. The average concentration of TCE in samples of indoor air ranged from below laboratory reporting limits to 0.62 $\mu\text{g/m}^3$.

Chlorinated VOCs were detected in off-site soil vapor samples collected to the east, west and north of the Site along 56th Street, 57th Street, and 43rd Avenue. The highest concentrations of TCE (210 $\mu\text{g/m}^3$) and TCA (55 $\mu\text{g/m}^3$) were detected approximately 200 feet northwest of the Site near 56th Street. Concentrations of both compounds were one or more orders of magnitude lower in samples collected further south on 56th Street, in closer proximity to the Site.

Off-site soil vapor intrusion assessments were performed concurrently with the RI at fifteen properties within the surrounding area. Concentrations of TCE, tetrachloroethylene (PCE), and/or TCA at eight properties exceeded New York State Department of Health (NYSDOH) guidance values and/or matrices for vapor mitigation. Engineering controls have been installed at seven properties in accordance with NYSDEC and NYSDOH approved work plans. The owner of one off-site property for which an engineering control was offered by NYSDEC and NYSDOH did not grant access for installation of the system.

Groundwater data from monitoring wells at the Site indicate that there has been limited impact to groundwater quality from on-site releases. TCE and TCA were detected in groundwater samples at maximum concentrations of 110 micrograms per liter (µg/l) and 112 E µg/l, respectively. The “E” qualifier indicates the reported value exceeded the calibration curve of the analytical instrument. Several SVOCs including benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, naphthalene, and pyrene were also detected in groundwater samples, but at individual concentrations less than 10 µg/l. Groundwater monitoring activities at the Site were discontinued at completion of the RI. Based on the results of the RI, the following Remedial Action Objectives (RAOs) were identified for this Site.

Groundwater RAOs

RAOs for Public Health Protection

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

Soil RAOs

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor RAOs

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

1.2 Summary of Remediation Activities

The Site was remediated in accordance with the NYSDEC-approved Remedial Action Work Plan (RAWP) dated November 2009 (under Spill No. 0811202) and Final RAWP dated June 2015 (under the Brownfield Cleanup Program). A Track 4 cleanup was implemented for the Site

that included IRMs to address the most heavily impacted soils. The IRMs for the Site included excavation of approximately 187 tons of soil and operation of a thermally enhanced SVE system within the primary source area. The source removal IRMs were completed during March 2010 through July 2011. IRMs completed for contamination emanating from the Site included the installation of vapor mitigation controls at seven offsite properties between April 2011 and February 2018.

After completion of the remedial work, some contamination was left in the subsurface at the Site and is hereafter referred to as “remaining contamination.” An Environmental Easement to restrict land use and prevent future exposure to remaining contamination was executed by NYSDEC on March 29, 2016 and filed with the Queens County Clerk on June 6, 2016.

The SMP was prepared for management of remaining contamination at the Site until the Environmental Easement is extinguished in accordance with Environmental Conservation Law Article 71, Title 36. The remaining contamination beneath the Site will continue to be addressed through use of the Environmental Easement, maintenance of the existing composite cover system, and operation of the offsite vapor mitigation controls. The following are the components of the approved remedy:

1. Maintenance of the existing composite cover system (DeWalt building and surrounding asphalt pavement) to prevent human exposure to remaining contamination at the Site;
2. Compliance with the Environmental Easement to restrict land use and prevent future exposure to remaining contamination at the Site;
3. Continued use of vapor mitigation systems at seven off-site properties to mitigate vapor intrusion hazards;
4. Use of the approved SMP for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: 1) Institutional and Engineering Controls (ICs/ECs), 2) monitoring, 3) operation and maintenance, and 4) reporting; and
5. Annual certification of the Institutional and Engineering Controls listed above.

2. EVALUATION OF REMEDY PERFORMANCE AND EFFECTIVENESS

An evaluation of the remedy performance and effectiveness was performed for the reporting period of November 17, 2017 to March 31, 2019. The evaluation was intended to document the effectiveness of the remedial program, identify any areas of non-compliance, and determine if any changes to the SMP are necessary. Inspections performed during the reporting period indicate that the composite cover system for the Site was intact and no maintenance or repairs were required. The use of the Site was unchanged and continues to comply with land use restrictions presented in the Environmental Easement. Results of indoor air monitoring performed within the Site building during the reporting period were below indoor air guideline values established by NYSDOH.

Sub-slab depressurization (SSD) systems have been installed at seven offsite properties in response to soil vapor and/or indoor air analytical results indicating the potential for intrusion of vapor into the overlying buildings. In accordance with the *Generic Workplan – Sub-Slab Depressurization System Installation* dated April 6, 2011, the effectiveness of each system with respect to maintaining a negative pressure environment beneath each building was demonstrated through sub-slab vacuum measurements recorded at the completion of construction activities. Construction Completion Reports documenting the installation and post-construction vacuum testing have been submitted to NYSDEC and NYSDOH for each of the seven properties.

Annual inspections performed on November 30, 2018 confirmed that five of the seven systems were functioning properly. Corrective measures for two SSD system (43-26 57th Street and 43-31 57th Street) were completed on February 13, 2019 and are described in Section 5.0.

3. IC/EC PLAN COMPLIANCE REPORT

Residual soil contamination remains at the Site, with metals and VOCs present in isolated areas at concentrations exceeding the Track 1 Unrestricted Use and Track 4 Restricted-Residential Use Soil Cleanup Objectives. ECs/ICs have been implemented to protect human health and the environment and are described in the sections below. Long-term management of these EC/ICs and residual contamination is performed in accordance with the SMP. Soil vapor contamination has also been detected beneath the Site and surrounding area for which ECs have been implemented to mitigate vapor intrusion hazards.

3.1 Composite cover system

Exposure to remaining contamination in soil/fill at the Site is prevented by a composite cover system previously in place over the Site prior to remediation activities. This cover system is comprised of an approximately 6-inch thick building slab, asphalt pavement, and concrete-covered sidewalks. Figure 3-1 shows the location of each cover type at the Site. An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in Appendix D of the SMP.

3.2 Offsite SSD Systems

Since contaminated soil vapor remains beneath nearby properties, ECs are required to protect human health and the environment. Of the properties which have granted access for soil vapor intrusion sampling, SSD systems have been recommended by NYSDEC and NYSDOH for eight off-site properties. SSD systems were installed for six of those properties between March 2011 and July 2014. One additional system was installed in February 2018. The SSD systems were installed in accordance with the document entitled *Generic Workplan – Sub-Slab Depressurization System Installation* dated April 6, 2011. The owner of one off-site property for which an SSD system was offered by NYSDEC and NYSDOH did not grant access for installation of the system. The locations of offsite properties where SSD systems have been installed are shown on Figure 3-2.

3.3 Environmental Easement

The site remedy required that an environmental easement be placed on the property to 1) implement, maintain and monitor the ECs; 2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, 3) limit the use and development of the Site to restricted residential and commercial uses only.

The environmental easement for the Site was executed by NYSDEC on March 29, 2016, and filed with the Queens County Clerk on June 6, 2016. The County Recording Identifier number for this filing is 2016000190240. A copy of the easement and proof of filing is provided in Appendix A of the SMP.

4. MONITORING PLAN COMPLIANCE REPORT

The Site Monitoring Plan outlined in Section 3.0 of the SMP describes the measures for evaluating performance and effectiveness of the remedy. An overview of the monitoring plan requirements and a summary of the monitoring activities completed during the reporting period is provided below.

4.1 Composite Cover System Inspections

The composite cover system is inspected annually in accordance with Section 3.4 of the SMP. Inspections were performed during the reporting period on December 7, 2017 and November 30, 2018. The concrete slab for the Site building was noted to be in good condition. The asphalt pavement was observed to be intact with no visible exposure of the underlying soils. Completed inspection forms for the composite cover system are presented in Appendix B.

4.2 DeWalt Facility Annual Indoor Air Sampling

Indoor air monitoring at the Site is performed on an annual basis during the winter heating season in accordance with the media monitoring program outlined in Section 3.3 of the approved SMP. Three indoor air samples and one background ambient air sample are collected during each monitoring event. The samples are collected over an 8-hour period using 6-liter Summa® canisters equipped with flow regulators. Two indoor air sampling events were completed during the reporting period and are discussed below.

December 7, 2017

Annual indoor air monitoring for the 2017 to 2018 winter heating season was conducted by Loureiro on December 7, 2017. Three indoor air samples (IA-5615QB-1, IA-5615QB-2 and IA-5615QB-5) and one outdoor air sample (OA-5615QB) were collected pursuant to the Remedial Action Work Plan for the Site dated June 2015 and the SMP dated August 2015. Air samples were submitted to Eurofins Air Toxics, Inc. of Folsom, California for analysis of VOCs by Environmental Protection Agency (EPA) Method TO-15. Results of the December 2017 indoor air sampling were provided to NYSDEC and NYSDOH in the *Annual Indoor Air Monitoring Report, DeWalt Service Center, 56-15 Queens Boulevard, Woodside, New York* dated January 12, 2018. A summary of VOCs detected in air samples on December 7, 2017 is provided in Table 4-1.

TCE was detected in indoor air samples IA-5615QB-1 and IA-5615QB-2 at concentrations of 0.37 $\mu\text{g}/\text{m}^3$ and 0.29 $\mu\text{g}/\text{m}^3$, respectively. TCE was not detected in indoor air sample

IA-5615QB-5 or outdoor air sample OA-5615QB-1. The reported concentrations of TCE were below the indoor air guideline value of $2 \mu\text{g}/\text{m}^3$ established by the NYSDOH. All samples analyzed for PCE and TCA were below laboratory reporting limits.

November 30, 2018

Indoor air sampling for the 2018 to 2019 winter heating season was conducted by Loureiro on November 30, 2018. Three indoor air samples (IA-5615QB-1, IA-5615QB-2 and IA-5615QB-5) and one outdoor air sample (OA-5615QB) were collected pursuant to the SMP dated August 2015. One field duplicate sample was collected at location IA-5615QB-1. Air samples were submitted to Eurofins Air Toxics, Inc. of Folsom, California for analysis of VOCs by EPA Method TO-15. Results of the December 2018 to 2019 indoor air sampling were provided to NYSDEC and NYSDOH in the *Annual Indoor Air Monitoring Report, DeWalt Service Center, 56-15 Queens Boulevard, Woodside, New York* dated February 22, 2019. A summary of VOCs detected in air samples on November 30, 2018 is provided in Table 4-2.

TCE was detected in indoor air samples IA-5615QB-1 and IA-5615QB-2 at concentrations of 0.39 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and $0.35 \mu\text{g}/\text{m}^3$, respectively. TCE was not detected in outdoor air sample OA-5615QB-1 or indoor air sample IA-5615QB-5. PCE was detected in indoor air samples IA-5615QB-1, IA-5615QB-2, and IA-5615QB-5 at concentrations of $0.57 \mu\text{g}/\text{m}^3$, $0.57 \mu\text{g}/\text{m}^3$, and $1.3 \mu\text{g}/\text{m}^3$, respectively. PCE was also detected in outdoor air sample OA-5615QB-1 at a concentration of $0.64 \mu\text{g}/\text{m}^3$. All samples analyzed for TCA were below laboratory reporting limits.

The reported concentrations of TCE and PCE were below the indoor air guideline values ($2 \mu\text{g}/\text{m}^3$ and $30 \mu\text{g}/\text{m}^3$, respectively) established by the New York State Department of Public Health.

4.3 Offsite Soil Vapor Intrusion Investigations

No offsite soil vapor intrusion assessments were performed during the reporting period.

5. OPERATION & MAINTENANCE PLAN COMPLIANCE REPORT

Routine inspection, maintenance, and monitoring of the offsite SSD systems is performed annually in accordance with Section 4 of the SMP. Maintenance and monitoring protocols for the SSD systems were developed in accordance with the *New York State Department of Health (NYSDOH) Guidance for Evaluation Soil Vapor Intrusion in the State of New York* dated October 2006 and include the following:

- Visual inspection of the SSD system, including the fan, piping, manometer, and labeling;
- Identification and repair of any leaks; and
- Inspection of the exhaust to verify that no air intakes have been located nearby.

Inspections performed for the current reporting period are summarized below. Copies of the SSD annual inspection forms are presented in Appendix C.

5.1 Residence at 43-22 57th Street

The SSD system at 43-22 57th Street was inspected on November 29, 2018. The manometer located on the vacuum pipe indicated that the system was adequately pressurized. Seals observed at piping penetration points were noted to be in good condition. All pipe joints were noted to be tightly sealed. The exterior fan was on and functioning properly. The exhaust pipe was in good condition and was not obstructed. No new air intakes were identified in the vicinity of the exhaust pipe.

5.2 Multi-Family Residence at 43-31 57th Street

The SSD system at 43-31 57th Street was deactivated in early 2017 by the property owner during removal of the basement floor. A new poured concrete slab was installed in the fall 2018. On February 13, 2019, sub-slab vacuum points were re-installed beneath the slab by Loureiro and connected to the existing above grade SSD piping. The SSD fan was also replaced and power to the system was restored by a licensed electrician. As-built drawings presented in the *Sub-Slab Depressurization System Construction Completion Report* dated July 2014 have been revised to reflect the completed repairs and are presented in Appendix D.

5.3 Residence at 43-26 57th Street

The SSD system at 43-26 57th Street was inspected on November 29, 2018. The manometer located on the vacuum pipe was obstructed by moving boxes and could not be inspected. Seals observed at piping penetration points were noted to be in good condition. All pipe joints were noted to be tightly sealed. The exterior fan was not functioning at the time of the inspection and was replaced on February 13, 2019.

5.4 Multi-Family Residence at 43-29 57th Street

The SSD System at 43-29 57th Street was inspected on November 29, 2018. The manometer located on the vacuum pipe indicated that the system was adequately pressurized. Seals observed at piping penetration points were noted to be in good condition. All pipe joints were noted to be tightly sealed. The exterior fan was on and functioning properly. The exhaust pipe was in good condition and was not obstructed. No new air intakes were identified in the vicinity of the exhaust pipe.

5.5 Multi-Family Residence at 43-30 57th Street

The SSD system at 43-30 57th Street was inspected on November 30, 2018. The manometer for this SSD is located within an area leased as tenant space and was not accessible by the property owner. The exterior fan was observed to be in operation and functioning properly. All visible pipe joints were noted to be tightly sealed. The exhaust pipe was observed to be in good condition and was not obstructed. No new air intakes were identified in the vicinity of the exhaust pipe.

5.6 Church at 56-01 Queens Boulevard Street

The church located at 56-01 Queens Boulevard contains three separate SSD systems. An inspection of the SSD was scheduled in advance for November 30, 2018; however, the site contact was not available to provide access to the building interior. The exterior fans were inspected and found to be functioning properly. The exhaust pipes were in good condition and were not obstructed. No new air intakes were identified in the vicinity of the SSD system exhaust pipes.

5.7 Multi-Family Residence 43-18 56th Street

The SSD system at 43-18 56th Street was inspected on November 30, 2018. The manometer located on the vacuum pipe indicated that the system was adequately pressurized. Seals observed at piping penetration points were noted to be in good condition. All pipe joints were

noted to be tightly sealed. The exterior fan was on and functioning properly. The exhaust pipe was in good condition and was not obstructed. No new air intakes were identified in the vicinity of the exhaust pipe.

6. OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

An evaluation of the remedy performance and effectiveness was performed for the reporting period of November 17, 2017 to March 31, 2019. Ongoing use of the Site remains consistent with the IC plan. The composite cover system at the Site remains in-tact and functioning in accordance with the EC plan objectives.

Annual Inspections performed on November 29 and 30, 2018 indicated that only five of the seven SSD systems were functioning properly. Corrective measures were completed on February 13, 2019 to restore the remaining two systems to full operation. All ECs implemented for the mitigation of offsite vapor intrusion hazards were in place and functioning properly at the end of the reporting period on March 31, 2019.

Media sampling and inspections performed for during the current reporting period did not identify indoor air quality concerns, changes in land use, or other conditions that would require modifications to the SMP. The remedy implemented for the Operable Units continues to be effective with respect to achieving the established cleanup goals.

It is recommended that indoor air monitoring at the DeWalt Service Center be discontinued based on data indicating that there have been no exceedances of indoor air guideline values during eleven monitoring events conducted between May 2011 and November 2018. The primary source of VOC in soil vapor has been addressed through IRMs completed in 2010 and 2011. The data obtained since that time demonstrates that the potential for vapor intrusion the Site has been sufficiently evaluated. No further indoor air monitoring is considered necessary to verify that the remedy is protective of human health under the existing commercial land use.

TABLES

TABLE 4-1
SUMMARY OF VOCs DETECTED IN AIR SAMPLES
December 7, 2017
56-15 Queens Boulevard, Woodside, New York



| Constituent | Location ID | Indoor Air - Showroom (IA-5615QB-1) | Indoor Air - Inventory Area (IA-5615QB-2) | Indoor Air-Training Room (IA-5615QB-5) | Outdoor Air Sample (OA-5615QB-1) |
|---------------------------------------|-------------------|--|---|--|-------------------------------------|
| | Sample ID | 1356722 | 1356723 | 1356724 | 1356725 |
| | Sample Date | 12/7/2017 | 12/7/2017 | 12/7/2017 | 12/7/2017 |
| | Laboratory | Eurofins-Air Toxics | Eurofins-Air Toxics | Eurofins-Air Toxics | Eurofins-Air Toxics |
| | Lab. Number | 1712188-01A | 1712188-02A | 1712188-03A | 1712188-04A |
| 1,2,4-Trimethylbenzene | µg/m ³ | 5.1 | 6.5 | 4 | <0.75 |
| 1,3,5-Trimethylbenzene | µg/m ³ | 1.5 | 1.9 | 11 | <0.75 |
| Benzene | µg/m ³ | 1.7 | 2.2 | 1.9 | 0.72 |
| Cyclohexane | µg/m ³ | 0.97 | 1.8 | 1.4 | <0.53 |
| Dichlorodifluoromethane | µg/m ³ | 2 | 2 | 1.9 | 2 |
| Ethanol | µg/m ³ | 67 | 66 | 28 | 7.7 |
| Ethylbenzene | µg/m ³ | 0.91 | 1.7 | 1.2 | <0.66 |
| Toluene | µg/m ³ | 7.2 | 11 | 8.5 | 3.2 |
| Trichlorofluoromethane | µg/m ³ | 1 | 1 | 1.1 | 1.2 |
| Xylenes,m- & p- | µg/m ³ | 3.9 | 5.6 | 4.4 | 0.94 |
| n-Hexane | µg/m ³ | 3.5 | 6.5 | 4.7 | 2.2 |
| o-Xylene | µg/m ³ | 1.8 | 2.5 | 1.7 | <0.66 |
| Carbon Tetrachloride | µg/m ³ | 0.4 | 0.39 | 0.39 | 0.39 |
| Trichloroethylene | µg/m ³ | 0.37 | 0.29 | <0.17 | <0.16 |
| 1,4-Dioxane | µg/m ³ | <0.57 | <0.57 | <0.58 | <0.55 |
| Tetrachloroethylene | µg/m ³ | <0.54 | <0.54 | <0.55 | <0.52 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | µg/m ³ | <0.61 | <0.60 | <0.62 | <0.59 |
| Methylene Chloride | µg/m ³ | <1.1 | <1.1 | <1.1 | <1.1 |
| 1,1,1-Trichloroethane | µg/m ³ | <0.43 | <0.43 | <0.44 | <0.42 |
| 1,1-Dichloroethane | µg/m ³ | <0.64 | <0.64 | <0.65 | <0.62 |
| Chloroform | µg/m ³ | <0.78 | <0.77 | <0.79 | <0.75 |
| cis-1,2-Dichloroethylene | µg/m ³ | <0.63 | <0.63 | <0.64 | <0.61 |

Notes:

VOCs = Volatile organic compounds

µg/m³ = Micrograms per cubic meter of air

TABLE 4-2
SUMMARY OF VOCs DETECTED IN AIR SAMPLES
November 30, 2018
56-15 Queens Boulevard, Woodside, New York



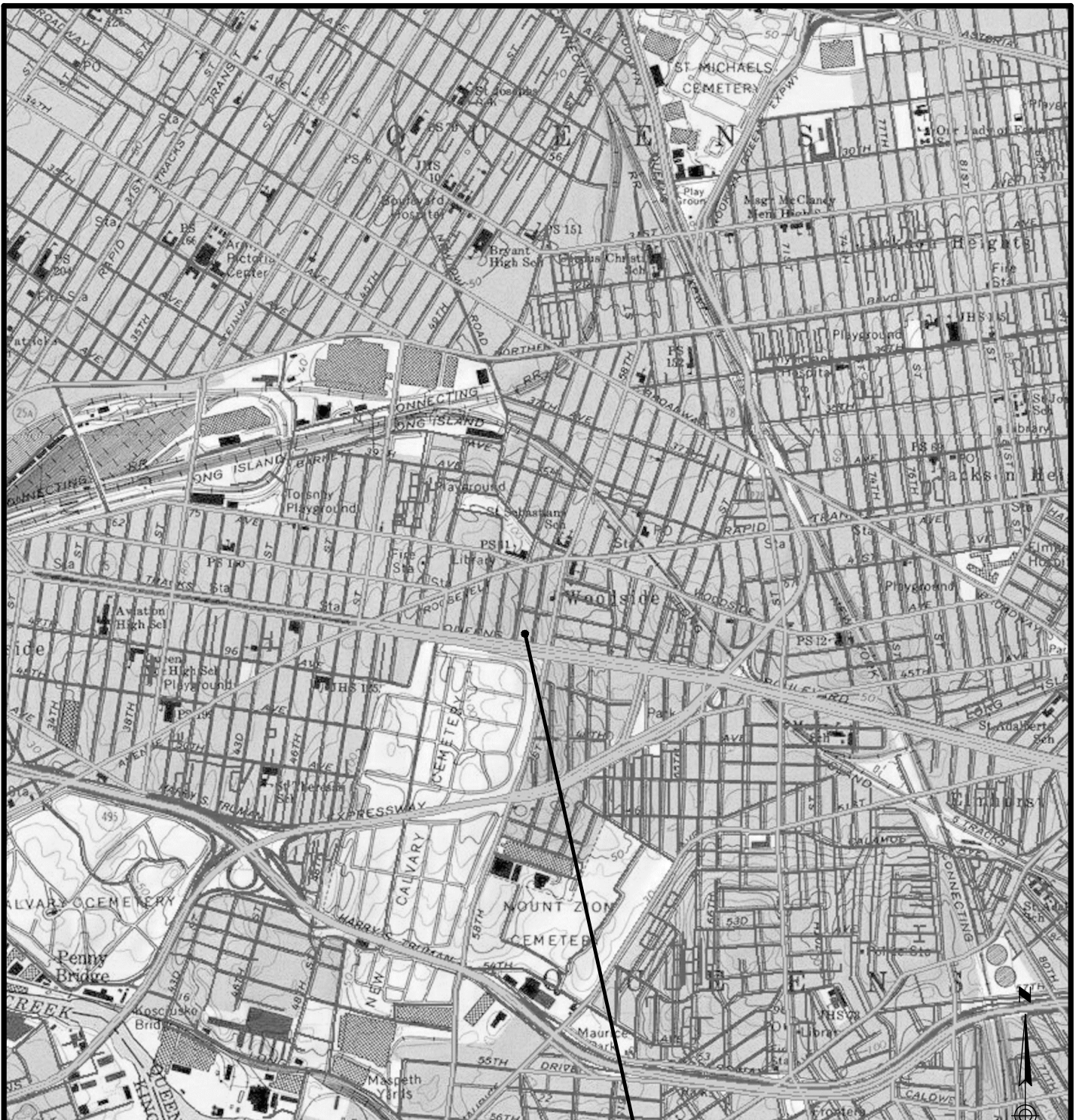
| Constituent | Location ID | Indoor Air - Showroom (IA-5615QB-1) | Indoor Air - Showroom (IA-5615QB-1 Duplicate) | Indoor Air - Inventory Area (IA-5615QB-2) | Indoor Air-Training Room (IA-5615QB-5) | Outdoor Air Sample (OA-5615QB-1) |
|---------------------------------------|-------------------|--|--|---|--|-------------------------------------|
| | Sample ID | 1356726 | 1356727 | 1356731 | 1356729 | 1356730 |
| | Sample Date | 11/30/2018 | 11/30/2018 | 11/30/2018 | 11/30/2018 | 11/30/2018 |
| | Laboratory | Eurofins-Air Toxics | Eurofins-Air Toxics | Eurofins-Air Toxics | Eurofins-Air Toxics | Eurofins-Air Toxics |
| | Lab. Number | 1812013-01A | 1812013-02A | 1812013-05A | 1812013-03A | 1812013-04A |
| 1,2,4-Trimethylbenzene | µg/m ³ | 3.2 | 3.3 | 3.3 | 2.5 | <0.76 |
| 1,3,5-Trimethylbenzene | µg/m ³ | 0.93 | 1.1 | 1.1 | <0.76 | <0.76 |
| Benzene | µg/m ³ | 1.8 | 1.8 | 2.2 | 2.5 | 1.4 |
| Cyclohexane | µg/m ³ | 0.64 | 0.65 | 0.79 | 0.87 | <0.53 |
| Dichlorodifluoromethane | µg/m ³ | <4.0 | <3.8 | <3.5 | <3.8 | <3.8 |
| Ethanol | µg/m ³ | 58 | 61 | 79 | 39 | 24 |
| Ethylbenzene | µg/m ³ | 0.71 | 0.88 | 0.95 | 1.1 | <0.67 |
| Toluene | µg/m ³ | 5.2 | 4.7 | 7 | 6.5 | 3.2 |
| Trichlorofluoromethane | µg/m ³ | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Xylenes,m- & p- | µg/m ³ | 2.6 | 2.6 | 3.7 | 3.1 | 1.1 |
| n-Hexane | µg/m ³ | 2 | 2 | 2 | 2.8 | 0.94 |
| o-Xylene | µg/m ³ | 1 | 1.1 | 1.5 | 1.4 | <0.67 |
| Carbon Tetrachloride | µg/m ³ | 0.42 | 0.42 | 0.51 | 0.45 | 0.51 |
| Trichloroethylene | µg/m ³ | 0.39 | 0.39 | 0.35 | <0.16 | <0.17 |
| 1,4-Dioxane | µg/m ³ | <0.58 | <0.56 | <0.51 | <0.55 | <0.56 |
| Tetrachloroethylene | µg/m ³ | <0.55 | 0.57 | 0.57 | 1.3 | 0.64 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | µg/m ³ | <0.44 | <0.42 | <0.38 | <0.42 | <0.42 |
| Methylene Chloride | µg/m ³ | <1.1 | 1.1 | 1.2 | 1.2 | <1.1 |
| 1,1,1-Trichloroethane | µg/m ³ | <0.44 | <0.42 | <0.38 | <0.42 | <0.42 |
| 1,1-Dichloroethane | µg/m ³ | <0.65 | <0.63 | <0.57 | <0.62 | <0.63 |
| Chloroform | µg/m ³ | <0.79 | <0.76 | <0.69 | <0.75 | <0.76 |
| cis-1,2-Dichloroethylene | µg/m ³ | <0.64 | <0.62 | <0.56 | <0.61 | <0.61 |

Notes:

VOCs = Volatile organic compounds

µg/m³ = Micrograms per cubic meter of air

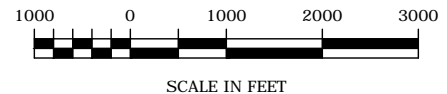
FIGURES



MAP REFERENCE :

PORTION OF 7.5 MINUTE SERIES MAP FOR THE
BROOKLYN, NY QUADRANGLE. TAKEN FROM
TOPOI® CD VERSION 4.2.6 . © 2006 NGHT, INC.
© 2006 TELE ATLAS NORTH AMERICA, INC.

SITE LOCATION



Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
Phone: 860-747-6181 • Fax: 860-747-8822
An Employee Owned Company • www.Loureiro.com

©Loureiro Engineering Associates, Inc.
All rights reserved 2017

SITE LOCATION MAP

SITE MANAGEMENT PERIODIC REVIEW REPORT

DEWALT SERVICE CENTER - 56-15 QUEENS BOULEVARD, WOODSIDE, NEW YORK (BLOCK 1329, LOT 1)

PREPARED FOR:

STANLEY BLACK & DECKER

1000 STANLEY DRIVE, NEW BRITAIN, CONNECTICUT 06053

SCALE

1" = 2000'

COMM. NO.

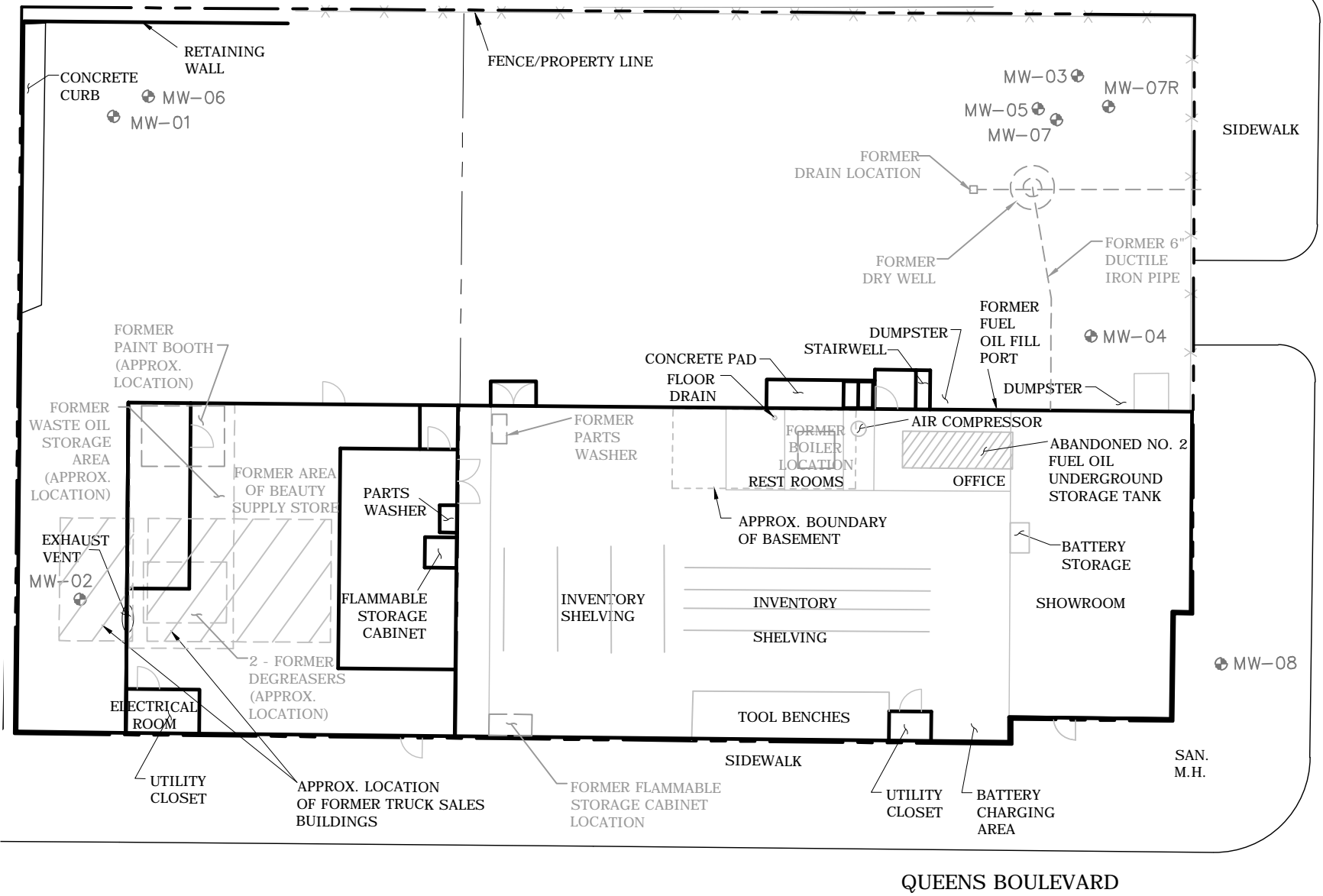
07MD012.004

DATE

12/13/2017

**FIGURE
1-1**

MAP REFERENCES: "PROPOSED ONE STORY BUILDING FOR THE BLACK & DECKER MFG. CO., FOUNDATION PLOT PLAN", MILES A GORDON ARCHITECT, 1/5/54. AND "PROPERTY AT WOODSIDE, COUNTY OF QUEENS", BECKER & GIRARD, SURVEYED 7/13/54.



LEGEND

- PROPERTY LINE
- BUILDING/STRUCTURE
- FORMER BUILDING/EQUIPMENT
- FENCE
- MONITORING WELL LOCATION (ABANDONED)



Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
Phone: 860-747-6181 • Fax: 860-747-8822
An Employee Owned Company • www.Loureiro.com
©Loureiro Engineering Associates, Inc.
All rights reserved 2017

| | |
|-----------|-------------|
| SCALE | 1" = 20' |
| COMM. NO. | 07MD012.004 |
| DATE | 12/13/2017 |

SITE PLAN

SITE MANAGEMENT PERIODIC REVIEW REPORT

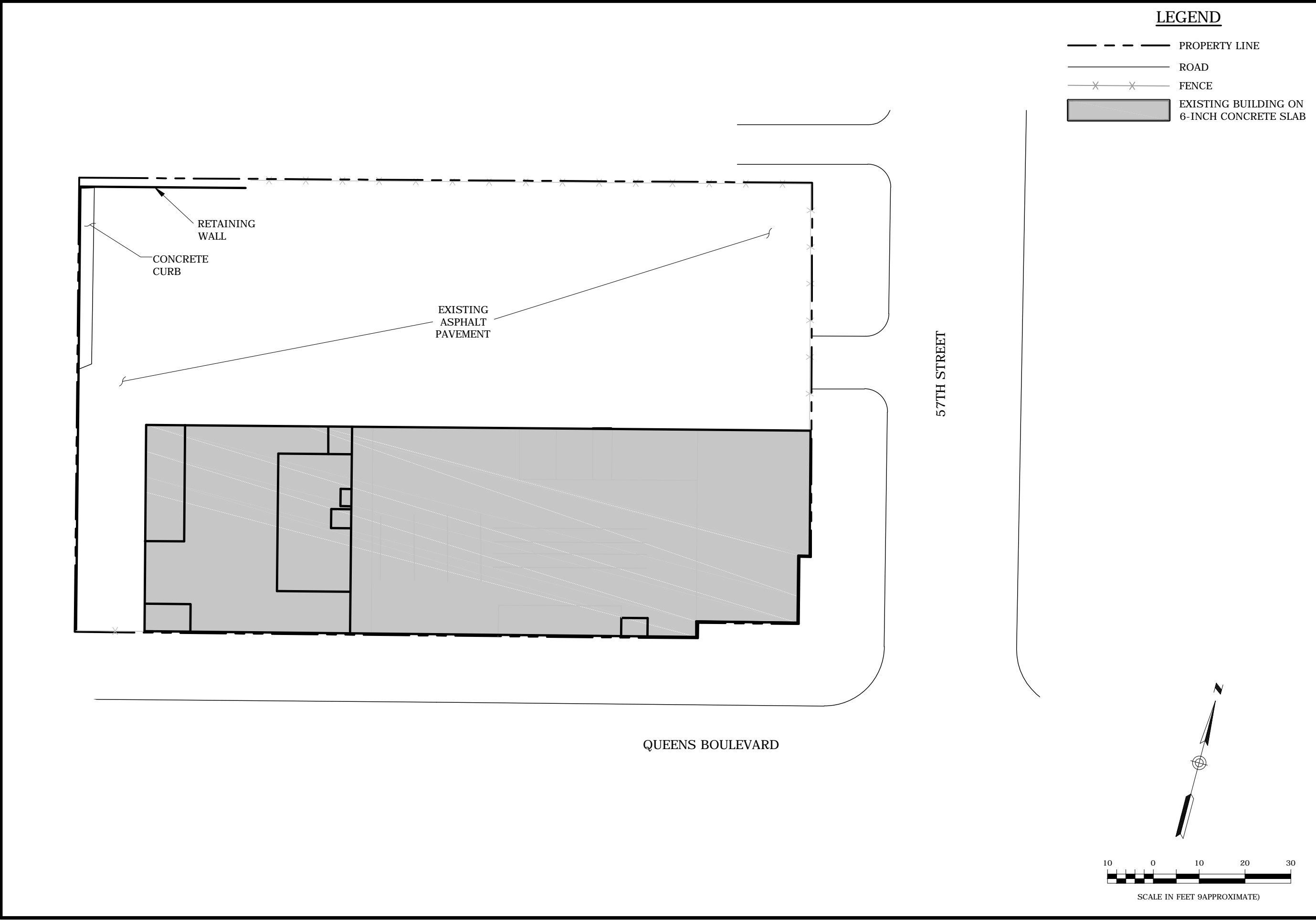
DEWALT SERVICE CENTER - 56-15 QUEENS BOULEVARD, WOODSIDE, NEW YORK (BLOCK 1329, LOT 1)

PREPARED FOR:

STANLEY BLACK & DECKER

1000 STANLEY DRIVE, NEW BRITAIN, CONNECTICUT 06053

FIGURE 1-2



| | | |
|-------------------------------|--------------------------|---|
| COMPOSITE COVER SYSTEM | SCALE 1" = 20' | Loureiro Engineering • Construction • EHS • Energy Waste • Facility Services • Laboratory |
| | COMM. NO. 07MD012.004 | Loureiro Engineering Associates, Inc. 100 Northwest Drive • Plainville, Connecticut 06062 Phone: 860-747-6181 • Fax: 860-747-8822 An Employee Owned Company • www.Loureiro.com |
| | DATE 12/13/2017 | ©Loureiro Engineering Associates, Inc. All rights reserved 2017 |

| |
|--|
| SITE MANAGEMENT PERIODIC REVIEW REPORT |
| DEWALT SERVICE CENTER - 56-15 QUEENS BOULEVARD, WOODSIDE, NEW YORK (BLOCK 1329, LOT 1) |
| PREPARED FOR: STANLEY BLACK & DECKER |
| 1000 STANLEY DRIVE, NEW BRITAIN, CONNECTICUT 06053 |

FIGURE 3-1

APPENDIX A

Institutional and Engineering Controls Certification Form



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



| Site No. | C241129 | Site Details | Box 1 |
|--|--|--------------|--|
| Site Name DeWalt Service Center | | | |
| Site Address: 56-15 Queens Boulevard Zip Code: 11377 | | | |
| City/Town: Woodside | | | |
| County: Queens | | | |
| Site Acreage: 0.367 | | | |
| Reporting Period: August 16, 2016 to March 31, 2019 | | | |
| | | | YES NO |
| 1. | Is the information above correct? | | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| If NO, include handwritten above or on a separate sheet. | | | |
| 2. | Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 3. | Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 4. | Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. | | | |
| 5. | Is the site currently undergoing development? | | <input type="checkbox"/> <input checked="" type="checkbox"/> |

| | | | Box 2 |
|----|--|--|--|
| | | | YES NO |
| 6. | Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial | | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 7. | Are all ICs/ECs in place and functioning as designed? | | <input checked="" type="checkbox"/> <input type="checkbox"/> |

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

YES NO

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

☐ ☒

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

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

☒ ☐

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

SITE NO. C241129**Box 3****Description of Institutional Controls**

| | | | | |
|--|--|--|-----------------------------------|--|
| <u>Parcel</u> 1329-0001 | <u>Owner</u> Black & Decker (U.S.) Inc. | <u>Institutional Control</u> Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan | | |
| <p>-The property may only be used for restricted residential, commercial and industrial use provided that the long-term ECs and ICs included in the SMP are employed.</p> <p>-The property may not be used for a higher level of use, such as residential or unrestricted use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;</p> <p>-All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;</p> <p>-The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;</p> <p>-The potential for vapor intrusion must be evaluated for any buildings developed at the Site, and any potential impacts that are identified must be monitored or mitigated;</p> <p>-Vegetable gardens and farming on the property are prohibited;</p> <p>-The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.</p> <p>Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;</p> <p>-All engineering controls (ECs) must be operated and maintained as specified in the SMP;</p> <p>-All ECs on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.</p> <p>-Indoor air monitoring must be performed as defined in the SMP;</p> <p>-Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP; and</p> <p>-Institutional controls (ICs) identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.</p> | | | | |
| <div>Box 4</div> <div>Description of Engineering Controls</div> <table><tr><td><u>Parcel</u> 1329-0001</td><td><u>Engineering Control</u> Vapor Mitigation Cover System</td></tr></table> <p>For Operable Unit 1 (on-site) the only engineering control is the site-wide composite cover system, consisting of the concrete building slab and the asphalt pavement.</p> <p>For OU-2 (off-site), the engineering controls are sub-slab depressurization systems for vapor mitigation installed at off-site properties as described in the SMP and construction completion reports. The SSD systems will be operated, monitored and maintained per the SMP.</p> | | | <u>Parcel</u> 1329-0001 | <u>Engineering Control</u> Vapor Mitigation Cover System |
| <u>Parcel</u> 1329-0001 | <u>Engineering Control</u> Vapor Mitigation Cover System | | | |

Periodic Review Report (PRR) Certification Statements

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

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

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

YES NO

☒ ☐

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

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

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

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

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

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

YES NO

☒ ☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C241129

Box 6

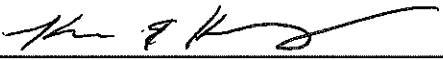
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Kathryn E. Hinckley at Black & Decker (U.S.) Inc., 700 Stanley Drive,
New Britain, CT 06053
print name print business address

am certifying as Owner (Owner or Remedial Party)

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


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

4/1/2019
Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Kevin J. Bitjeman, LEP at Loureiro NY PC, 100 Northwest Drive, Plainville, CT 06062
print name print business address

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



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

Stamp
(Required for PE)



Date

APPENDIX B

Site Cover System Inspection Forms

Site Inspection Checklist

56-15 Queens Blvd.
Woodside, New York

Loureiro
Engineering • Construction • EHS • Energy • Waste

Date of inspection

11/30/18

Field Personnel

Keith Volkert

| Inspection Item | GOOD | FAIR | POOR | Comments |
|---|------|------|------|--|
| Asphalt/Concrete Pavement | ✓ | | | |
| Concrete Building Slab | ✓ | | | |
| Permanent Monitoring Points (MWs, vapor points) | ✓ | | | N/A Monitoring points have been properly abandoned |
| Catch Basins | | | | N/A |

| | Yes | No | Comments |
|--|-----|----|----------|
| Changes to Site Use/Operations | | ✓ | |
| Changes to Building | | ✓ | |
| Additional Buildings Constructed ¹ | | ✓ | |
| On-Going Subsurface Work ¹ | | ✓ | |
| Evidence of Subsurface Work Performed Since Last Inspection ¹ | | ✓ | |

¹ If yes, indicate if SMP/EWP is/was followed.

PHOTOGRAPHS

| Item | Yes | No | Comments |
|---|-----|----|----------|
| Asphalt/Concrete Pavement | ✓ | | |
| Concrete Building Slab | ✓ | | |
| Permanent Monitoring Points (MWs, vapor points) | ✓ | | N/A |
| Catch Basins | | | N/A |
| Other | | | |

Notes/Comments

There has been no changes to parking lot and building since last inspection.

Signature

[Signature]

Site Inspection Checklist
56-15 Queens Blvd.
Woodside, New York



Date of inspection

12/7/17

Field Personnel

Keith Volkert

| Inspection Item | GOOD | FAIR | POOR | Comments |
|--|-------------------------------------|------|------|------------------|
| Asphalt/Concrete Pavement | <input checked="" type="checkbox"/> | | | |
| Concrete Building Slab | <input checked="" type="checkbox"/> | | | |
| Permanent Monitoring Points (MWs, vapor points) | <input checked="" type="checkbox"/> | | | |
| Catch Basins | | | | N/A none on site |

| | Yes | No | Comments |
|--|-------------------------------------|-------------------------------------|--------------------------------------|
| Changes to Site Use/Operations | | <input checked="" type="checkbox"/> | |
| Changes to Building | <input checked="" type="checkbox"/> | | Outside of Building has been painted |
| Additional Buildings Constructed ¹ | | <input checked="" type="checkbox"/> | |
| On-Going Subsurface Work ¹ | | <input checked="" type="checkbox"/> | |
| Evidence of Subsurface Work Performed Since Last Inspection ¹ | | <input checked="" type="checkbox"/> | |

¹ If yes, indicate if SMP/EWP is/was followed.

PHOTOGRAPHS

| Item | Yes | No | Comments |
|--|-----|-------------------------------------|----------|
| Asphalt/Concrete Pavement | | <input checked="" type="checkbox"/> | |
| Concrete Building Slab | | <input checked="" type="checkbox"/> | |
| Permanent Monitoring Points (MWs, vapor points) | | <input checked="" type="checkbox"/> | |
| Catch Basins | | <input checked="" type="checkbox"/> | |
| Other | | <input checked="" type="checkbox"/> | |

Notes/Comments

Photos of site were not taken due to the fact
the site has not change since last inspection.

APPENDIX C

Sub-Slab Depressurization System Operation, Maintenance & Monitoring Forms

Sub-Slab Depressurization System Operation, Maintenance & Monitoring Checklist

Woodside, New York

Date of inspection 11/30/18

Property Address 43-18 56th Street

Property Contact Name Flemming Morrison

VISUAL INSPECTION

SSD System On/Off on

| | GOOD | FAIR | POOR | Comments |
|-----------------------|------|------|------|----------|
| Manometer | | | | |
| Floor Seals | ✓ | | | |
| PVC Joints and Piping | ✓ | | | |
| SSD Labeling | ✓ | | | |
| Fan | ✓ | | | |
| Air Exhaust | ✓ | | | |

| | Yes | No | Comments |
|------------------------------|-----|----|----------|
| Air Intake Near Exhaust Pipe | | ✓ | |
| Leaks | | ✓ | |

PHOTOGRAPHS

| | Yes | No | Comments |
|-------------|-----|----|------------------------------------|
| Manometer | | | |
| PVC Joints | ✓ | | |
| Floor Seals | ✓ | | |
| Fans | | ✓ | Fan is located on roof of property |
| Other | | | |

Property Owner Problems, Question or Concerns

None

Summary of Repairs / Comments

None

Field Personnel Keith Volkert

Signature [Signature]

Sub-Slab Depressurization System Operation, Maintenance & Monitoring Checklist

Woodside, New York

Date of inspection

11/29/18

Property Address

43-22 57th Street

Property Contact Name

Schoyler Myjer

VISUAL INSPECTION

SSD System On/Off

on

| | GOOD | FAIR | POOR | Comments |
|-----------------------|-------------------------------------|------|------|----------|
| Manometer | <input checked="" type="checkbox"/> | | | |
| Floor Seals | <input checked="" type="checkbox"/> | | | |
| PVC Joints and Piping | <input checked="" type="checkbox"/> | | | |
| SSD Labeling | <input checked="" type="checkbox"/> | | | |
| Fan | <input checked="" type="checkbox"/> | | | |
| Air Exhaust | <input checked="" type="checkbox"/> | | | |

| | Yes | No | Comments |
|------------------------------|-----|-------------------------------------|----------|
| Air Intake Near Exhaust Pipe | | <input checked="" type="checkbox"/> | |
| Leaks | | <input checked="" type="checkbox"/> | |

PHOTOGRAPHS

| | Yes | No | Comments |
|-------------|-------------------------------------|----|----------|
| Manometer | <input checked="" type="checkbox"/> | | |
| PVC Joints | <input checked="" type="checkbox"/> | | |
| Floor Seals | <input checked="" type="checkbox"/> | | |
| Fans | <input checked="" type="checkbox"/> | | |
| Other | | | |

Property Owner Problems, Question or Concerns

N/A

Summary of Repairs / Comments

N/A

Field Personnel

Keith Volker

Signature

[Signature]

Sub-Slab Depressurization System Operation, Maintenance & Monitoring Checklist

Woodside, New York

Date of inspection

11/29/18

Property Address

43-26 57th Street

Property Contact Name

Mrs. Rado

VISUAL INSPECTION

SSD System On/Off

off

| | GOOD | FAIR | POOR | Comments |
|-----------------------|------|------|------|----------------------------------|
| Manometer | | | ✓ | unable to observed Manometer |
| Floor Seals | ✓ | | | |
| PVC Joints and Piping | ✓ | | | |
| SSD Labeling | ✓ | | | |
| Fan | | | ✓ | fan is in on position but not on |
| Air Exhaust | ✓ | | | |

| | Yes | No | Comments |
|------------------------------|-----|----|----------|
| Air Intake Near Exhaust Pipe | | ✓ | |
| Leaks | | ✓ | |

PHOTOGRAPHS

| | Yes | No | Comments |
|-------------|-----|----|----------|
| Manometer | | ✓ | |
| PVC Joints | ✓ | | |
| Floor Seals | ✓ | | |
| Fans | ✓ | | |
| Other | | | |

Property Owner Problems, Question or Concerns

None

Summary of Repairs / Comments

Power switch for fan is on but fan is not working.
Need to replace fan. Manometer is located in garage
unable to access due to homeowners belongings

Field Personnel

Keith Volker

Signature



Sub-Slab Depressurization System Operation, Maintenance & Monitoring Checklist

Woodside, New York

Date of inspection

11/29/18

Property Address

43-29 57th Street

Property Contact Name

Mrs. Radu

VISUAL INSPECTION

SSD System On/Off

on

| | GOOD | FAIR | POOR | Comments |
|-----------------------|-------------------------------------|------|------|----------|
| Manometer | <input checked="" type="checkbox"/> | | | |
| Floor Seals | <input checked="" type="checkbox"/> | | | |
| PVC Joints and Piping | <input checked="" type="checkbox"/> | | | |
| SSD Labeling | <input checked="" type="checkbox"/> | | | |
| Fan | <input checked="" type="checkbox"/> | | | |
| Air Exhaust | <input checked="" type="checkbox"/> | | | |

| | Yes | No | Comments |
|------------------------------|-----|-------------------------------------|----------|
| Air Intake Near Exhaust Pipe | | <input checked="" type="checkbox"/> | |
| Leaks | | <input checked="" type="checkbox"/> | |

PHOTOGRAPHS

| | Yes | No | Comments |
|-------------|-------------------------------------|----|----------|
| Manometer | <input checked="" type="checkbox"/> | | |
| PVC Joints | <input checked="" type="checkbox"/> | | |
| Floor Seals | <input checked="" type="checkbox"/> | | |
| Fans | <input checked="" type="checkbox"/> | | |
| Other | | | |

Property Owner Problems, Question or Concerns

None

Summary of Repairs / Comments

None

Field Personnel

Keith Volkert

Signature



Sub-Slab Depressurization System Operation, Maintenance & Monitoring Checklist

Woodside, New York

Date of inspection

11/30/18

Property Address

43-30 57th ST

Property Contact Name

Pang Lo

VISUAL INSPECTION

SSD System On/Off

on

| | GOOD | FAIR | POOR | Comments |
|-----------------------|------|------|------|-------------------------------------|
| Manometer | | ✓ | | unable to access manometer |
| Floor Seals | ✓ | | | |
| PVC Joints and Piping | ✓ | | | |
| SSD Labeling | | ✓ | | unable to access pipe with labeling |
| Fan | ✓ | | | |
| Air Exhaust | ✓ | | | |

| | Yes | No | Comments |
|------------------------------|-----|----|----------|
| Air Intake Near Exhaust Pipe | | ✓ | |
| Leaks | | ✓ | |

PHOTOGRAPHS

| | Yes | No | Comments |
|-------------|-----|----|----------------------------|
| Manometer | | ✓ | unable to access manometer |
| PVC Joints | ✓ | | |
| Floor Seals | ✓ | | |
| Fans | ✓ | | |
| Other | | | |

Property Owner Problems, Question or Concerns

Property manager did not have access to back apartment where manometer is due to tenant not home. System is believed to be working properly due to condition of fan on the exterior of property.

Summary of Repairs / Comments

Field Personnel

Keith Volkert

Signature

Sub-Slab Depressurization System Operation, Maintenance & Monitoring Checklist

Woodside, New York

Date of inspection

11/30/18

Property Address

56-01 Queens Blvd.

Property Contact Name

Juan Carlos

VISUAL INSPECTION

SSD System On/Off

ON

| | GOOD | FAIR | POOR | Comments |
|-----------------------|------|------|------|---------------------------------|
| Manometer | N/A | | | unable to gain access to inside |
| Floor Seals | | | | |
| PVC Joints and Piping | | | | |
| SSD Labeling | N/A | | | |
| Fan | ✓ | | | |
| Air Exhaust | ✓ | | | |

| | Yes | No | Comments |
|------------------------------|-----|----|----------|
| Air Intake Near Exhaust Pipe | | ✓ | |
| Leaks | | ✓ | |

PHOTOGRAPHS

| | Yes | No | Comments |
|-------------|-----|----|----------|
| Manometer | | ✓ | |
| PVC Joints | | ✓ | |
| Floor Seals | | ✓ | |
| Fans | ✓ | | |
| Other | | | |

Property Owner Problems, Question or Concerns


Summary of Repairs / Comments

unable to gain access to interior to observe Manometer, floor seals and PVC Joints and piping.

Field Personnel

Keith Volkert

Signature



Sub-Slab Depressurization System Operation, Maintenance & Monitoring Checklist

Woodside, New York

Date of inspection

11/30/18

Property Address

43-31 57th Street

Property Contact Name

Jiang Liang

VISUAL INSPECTION

SSD System On/Off

off

| | GOOD | FAIR | POOR | Comments |
|-----------------------|------|------|------|-------------------------------|
| Manometer | | | ✓ | Manometer is level fan is off |
| Floor Seals | | | ✓ | Floor seals have been removed |
| PVC Joints and Piping | ✓ | | | |
| SSD Labeling | ✓ | | | |
| Fan | | | ✓ | Not working |
| Air Exhaust | ✓ | | | |

| | Yes | No | Comments |
|------------------------------|-----|----|----------|
| Air Intake Near Exhaust Pipe | | ✓ | |
| Leaks | | ✓ | |

PHOTOGRAPHS

| | Yes | No | Comments |
|-------------|-----|----|----------|
| Manometer | ✓ | | |
| PVC Joints | ✓ | | |
| Floor Seals | ✓ | | |
| Fans | ✓ | | |
| Other | | | |

Property Owner Problems, Question or Concerns

None

Summary of Repairs / Comments

New Concrete slab has been poured in basement. Suction points have been cut about 4" from slab. Fan is in on position but not working. Which leads to the manometer is level.

Field Personnel

Keith Volkert

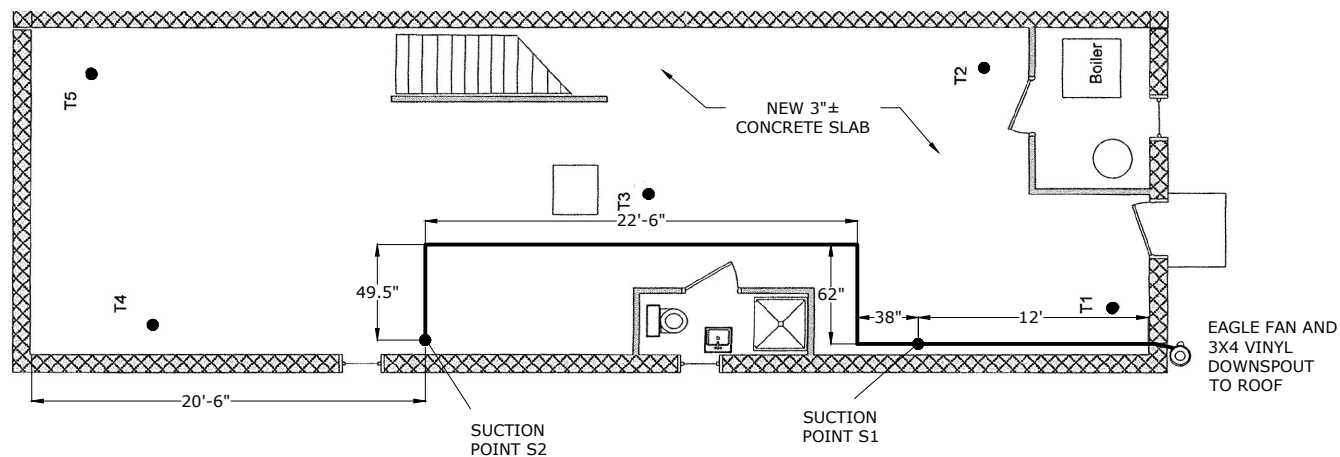
Signature



APPENDIX D

Revised Sub-Slab Depressurization System As-Built Drawings

43-31 57th Street



LEGEND

- BUILDING
- BUILDING INTERIOR
- 3" SCH-40 PVC PIPE
- S1 SUCTION POINT
- T1 DIAGNOSTIC TEST HOLE

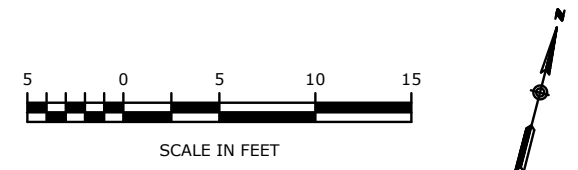


FIGURE 3-1

**PLAN VIEW
(REVISED SHOWING FEBRUARY 2019 REPAIRS)
43-31 57TH STREET, WOODSIDE, NEW YORK**

**SUB-SLAB DEPRESSURIZATION SYSTEM AS-BUILT
43-31 57TH STREET, WOODSIDE, NEW YORK**

PREPARED FOR:
BLACK AND DECKER (U.S.), INC.

SCALE
1" = 10'

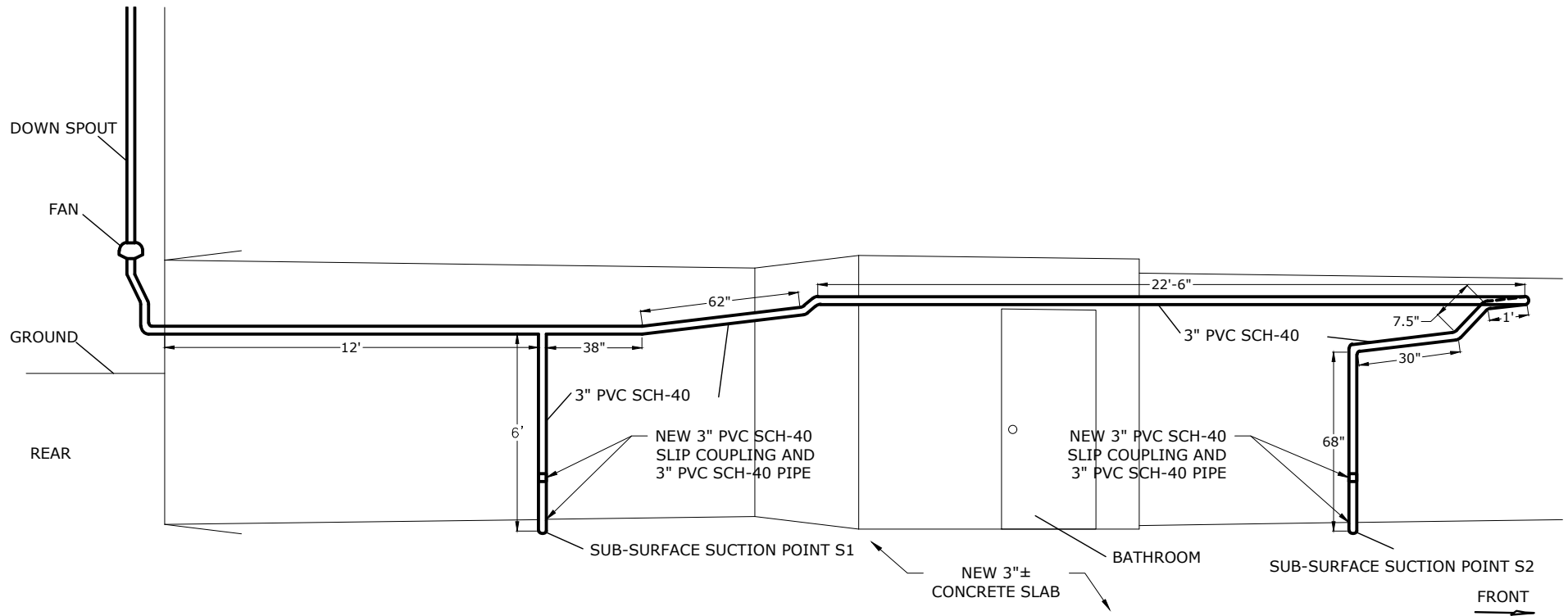
COMM. NO.
07MD012

DATE
03/12/2019

Loureiro
Engineering • Construction • EH&S • Energy
Waste • Facility Services • Laboratory

Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
Phone: 860-747-6181 • Fax: 860-747-8822
An Employee Owned Company • www.Loureiro.com

©Loureiro Engineering Associates, Inc.
All rights reserved 2019



INTERIOR BASEMENT
APPROXIMATE SCALE: 1" = 5'

FIGURE 3-2

**ELEVATION VIEW
(REVISED SHOWING FEBRUARY 2019 REPAIRS)
43-31 57TH STREET, WOODSIDE, NEW YORK**

**SUB-SLAB DEPRESSURIZATION SYSTEM AS-BUILT
43-31 57TH STREET, WOODSIDE, NEW YORK**

PREPARED FOR:
BLACK AND DECKER (U.S.), INC.

SCALE

1" = 10'

COMM. NO.

07MD012

DATE

03/12/2019

Loureiro
Engineering • Construction • EH&S • Energy
Waste • Facility Services • Laboratory

Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
Phone: 860-747-6181 • Fax: 860-747-8822
An Employee Owned Company • www.Loureiro.com

©Loureiro Engineering Associates, Inc.
All rights reserved 2019