Scope of Work
Interim Remedial Measure No. 2
Underground Storage Tank Removal
Admiral Cleaners Site (No. 401075)

City of Watervliet
Albany County, New York

Prepared for

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau E
625 Broadway
Albany, New York 12233-7017

Prepared by

EA Engineering, P.C. and Its Affiliate
EA Science and Technology
269 W. Jefferson Street
Syracuse, New York 13020
(315) 431-4610

October 2020
Version: FINAL
EA Project No. 16025.04

This page intentionally left blank

Interim Remedial Measure No. 2
Scope of Work – UST Removal
Admiral Cleaners Site (No. 401075)

City of Watervliet
Albany County, New York

Prepared for

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau E
625 Broadway
Albany, New York 12233-7017

Prepared by

EA Engineering, P.C. and Its Affiliate
EA Science and Technology
269 W. Jefferson Street
Syracuse, New York 13020
(315) 431-4610

19 October 2020

Donald Conan, P.E., P.G.
Vice President, EA Engineering, P.C.

19 October 2020

Christopher Schroer
Project Manager, EA Science and Technology

October 2020
Version: FINAL
EA Project No. 16025.04

This page intentionally left blank

TABLE OF CONTENTS

Page

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
Chazen	Chazen Companies
COVID-19	Coronavirus-2019
DER	Division of Environmental Remediation
EA	EA Engineering, P.C. and its affiliate EA Science and Technology
EIT	Engineer-in-Training
ft	Foot (feet)
IDW	Investigative-derived waste
in.	Inch(es)
IRM	Interim remedial measure
NAPL	Non-aqueous phase liquid
No.	Number
NYSDEC	New York State Department of Environmental Protection
PCE	Tetrachloroethene
P.E.	Professional Engineer
P.G.	Professional Geologist
PID	
ppm	Part(s) per million
SOW	Scope of Work
UST	Underground storage tank

This page left intentionally blank

1. INTRODUCTION

EA Engineering, P.C. and its affiliate EA Science and Technology (EA) was tasked by the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment Numbers (No.) D007624-38 and continued under D009806-04 to plan and oversee an Interim Remedial Measures (IRM) at the Admiral Cleaners Site (No. 401075) in the City of Watervliet, Albany County, New York (**Figure 1**). The IRM is being implemented to address the probable source area and facilitate the remedial investigation and feasibility study process.

The IRM is being conducted in two phases. IRM No. 1, completed in May 2020, included the demolition of the onsite structure, which was determined to be a hazard to public safety and removal was necessary to complete remedial investigation activities and IRM No. 2. The Scope of Work (SOW) for IRM No. 2 includes closure/removal of an underground storage tank (UST) and removal of impacted soil adjacent to the UST. A Construction Completion Report was prepared for IRM No. 1 (EA 2020).

This document provides a SOW, site drawings, and health and safety requirements to complete IRM No. 2.

1.1 SITE DESCRIPTION

The site is a rectangular shaped parcel totaling 0.11 acre located at 617 19th Street, Watervliet, Albany County, New York (**Figures 1 and 2**), between 6th Avenue and 7th Avenue. The parcel has approximately 50 feet (ft) of frontage on 19th Street and a depth of approximately 100 ft. The site formerly contained a vacant brick and concrete block commercial building with its slab-on-grade. An emergency structural assessment conducted by a structural engineer contracted by the City of Watervliet in February 2019 led the City to consider the building a hazard to public safety and recommend it for demolition. The onsite Admiral Cleaners building was razed in May 2020 (EA 2020). The building slab remains and covers approximately 75 percent of the parcel, and a small grassy area is located north of the slab. The site is in an urban area with mixed commercial and residential use. The site is bordered by an unoccupied residential building to the west, an alleyway and mixed-use building containing a commercial day care and residences to the east, and residences to the north (**Figure 2**).

1.2 SITE HISTORY

The building was constructed in 1950 and was used as a dry-cleaning facility until 2013. During its operation, the facility used tetrachloroethene (PCE) as a cleaning solvent. In 2007, NYSDEC executed a Consent Order, requiring the facility to obtain required owner/manager and operator dry-cleaning certifications. In November 2008, a third-party inspection indicated that the PCE concentration in the facility's dry-cleaning machine was 845 parts per million (ppm), approximately three times the limit of 300 ppm published in 6 New York Codes Rules and Regulations 232.6(a)(6). NYSDEC performed a follow-up inspection in February 2009, discovering that the facility had failed to comply with the 2007 Consent Order and had not performed the mandatory remedy within the required timeframe following the 2008 inspection. NYSDEC also found evidence of improper disposal of PCE-contaminated wastes (NYSDEC

2009). Another Consent Order was executed in April 2009 to address the violations noted in the 2009 inspection. Dry-cleaning operations ceased in 2013 due to continued violations of environmental regulations. In addition, in 2013, NYSDEC opened a Spill Record at the site after observing improperly stored hazardous waste during an inspection. NYSDEC subsequently removed hazardous waste (e.g., drums containing spent chemicals) from the facility and the spill was closed in 2013.

The site was then operated as a dry-cleaning drop shop, where garments were brought in and sent to be dry cleaned at another local facility until 2017. The Chazen Companies (Chazen) performed a limited subsurface investigation at the site in April 2016 as part of a potential real estate transaction (Chazen 2016). The investigation identified petroleum-related volatile organic compounds and chlorinated volatile organic compounds in soil, groundwater, and sub-slab soil vapor at the site. NYSDEC was provided the findings and the site was listed in the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites as a Class 2 site in August 2017 (NYSDEC 2017).

2. INTERIM REMEDIAL MEASURE DESIGN

2.1 DESIGN RATIONALE

During Phase I of the Remedial Investigation, a small UST was identified under the slab foundation of the onsite building (**Figure 2**). Non-aqueous phase liquid (NAPL) was observed in a soil boring completed near the UST, and subsequent laboratory analysis indicated that the NAPL was a petroleum product similar to heating oil mixed with some percentage of mineral solvent. The UST is a recognized environmental condition and a potential source of continued soil and groundwater contamination. The UST also represents an obstruction to performing subsurface intrusive work associated with future investigation and cleanup activities. Based on the above, EA recommended removal of the UST. EA proposes to limit the vertical extent of excavation to soils at or above the groundwater table for this IRM.

2.2 DESIGN ASSUMPTIONS

The scope of this project is to remove the suspected heating oil UST and immediately adjacent soil exhibiting petroleum residue with material disposed of as F002 listed hazardous waste at an approved facility. Additional soil may be removed based on conditions encountered during the UST removal and with the approval of the NYSDEC Project Manager. The excavation depth in the vicinity of the UST is expected to be 5–7 ft below ground surface so the excavation bottom remains at or above the groundwater table. The UST is assumed to have a capacity of approximately 300 gallons and likely leaking based on the presence of NAPL in soil. No dewatering is expected as the depth of the excavation is limited by the groundwater table. However, during the removal, NAPL or groundwater exhibiting sheen will be removed using a vacuum truck and disposed at an approved facility.

The existing concrete slab foundation will be removed to facilitate excavation. The thickness of the concrete slab is approximately 6 inches (in.) across the proposed excavation area. Approximately 285 square ft of the concrete slab will be removed to access the UST and subsurface soil. In total, an estimated 10 tons of concrete will be transported offsite and disposed at an approved facility along with excavated material as F002 listed waste.

2.3 INTERIM REMEDIAL MEASURE NO. 2 DESCRIPTION

The Admiral Cleaners building was razed by Precision Environmental Services and Jackson Demolition in May 2020. The building structure was demolished to the concrete slab-on-grade foundation, utilities disconnected, and the site was fenced. The footprint of the former boiler room was also backfilled with crushed stone to match surrounding grade.

A UST of unconfirmed size, but estimated to be approximately 300 gallons, is located under the northern portion of the building slab. Further delineation efforts of the pre-design investigation performed in May and June 2020 show that impacted soil extends south from the UST (**Figure 3**). The IRM No. 2 remedial contractor is tasked with confirming the contents of the UST, removing and properly disposing of any remaining material in the UST, removing the slab to access the UST,

recycling and disposing of the UST, and removing impacted soil in the excavation area as depicted in **Figure 3**. Air monitoring will be conducted during intrusive activities at the site. The following is a description of the tasks associated with IRM No. 2.

2.3.1 Permitting Plan/Permits

The remedial contractor will be required to obtain any work permits needed including building permits at the municipal level. The approved remedial contractor shall provide NYSDEC and EA copies of any permits obtained for the execution of the work.

2.3.2 Building Slab Removal

The remedial contractor shall remove a portion of the building slab to gain access to the UST and subsurface soils. The anticipated extent of excavation for the UST and contaminated soil is depicted on **Figure 3**. Given the proximity and integrity of an adjacent structure to the west (621 19th Street), vibrations must be minimized. The slab shall be segmented using wet saw cutting and removed. An impact hammer shall not be used to break up the concrete slab. Concrete shall be disposed offsite as F002 listed waste at an approved facility. Following IRM No. 1, crusher-run stone was used to temporarily fill the below-grade footprint of the former boiler room. If this area is to be excavated based on observed subsurface conditions, the stone shall be excavated and stockpiled onsite for re-use as backfill material. Stockpiled material shall be placed on the remaining concrete slab and covered with polyethylene sheeting.

2.3.3 UST Removal

The remedial contractor shall properly close the UST in accordance with 40 Code of Federal Regulations (CFR) 280.70 and New York State guidance regarding permanent closure of petroleum storage tanks (NYSDEC 1987). Prior to disposal, the remedial contractor shall characterize the contents of the UST. All liquids/waste product and accumulated sludge remaining in the UST shall be removed and properly disposed, and all piping to the tank flushed. The UST shall be made safe and tank atmosphere checked to ensure petroleum vapors have been satisfactorily purged from the tank. Inerting the tank following liquid/waste removal will help mitigate risk of an explosive situation. The UST shall be cleaned and the tank along with any associated piping shall be removed from the subsurface and disposed offsite at an approved facility. The remedial contractor shall prepare a clean certification so the UST may be recycled and submit a UST closure report.

2.3.4 Soil Removal

The petroleum impacted subsurface soils exhibiting high photoionization detector measurements, strong odors, and/or visual staining adjacent to the UST shall be excavated, live-loaded, transported offsite, and disposed of as F002 listed hazardous waste at an approved facility. The remedial contractor shall remove impacted site soils in the area shown on **Figure 3**. Excavation depths will be determined in the field by EA and NYSDEC; however, are expected to range between 5 and 7 ft below ground surface. The depth of excavation should not extend below the

water table to avoid water accumulation in the excavation; however, additional soil may be removed at the direction of NYSDEC and EA. Cross-sections from previous investigations are provided in **Figures 4, 5, and 6**. Excavated material shall be transported offsite to an approved disposal facility. The remedial contractor should make provisions to prevent storm water run-in into the excavation. Additionally, the remedial contractor shall make provisions to have treatment agents and cover onsite to contain vapors, if determined necessary by the EA and NYSDEC.

The excavation footprint may be extended based on visual and olfactory evidence of impacted soil. The remedial contractor may be instructed by EA and NYSDEC to expand the excavation horizontally and/or vertically. The remedial contractor shall make provisions to have a vacuum truck onsite to removed impacted groundwater or construction water if excavation dewatering is required. Any water removed from the excavation shall be disposed offsite at an approved facility.

Prior to backfill, documentation samples shall be collected to document any remaining contamination in subsurface soil above the groundwater table. Samples will be collected from the excavation bottom and sidewalls. A minimum of one sample will be collected from each 30 linear ft of excavation sidewall and 900 square ft of excavation bottom in accordance with NYSDEC Division of Environmental Remediation (DER)-10 (NYSDEC 2010).

All work and excavations should be conducted in accordance with Occupational Safety and Health Administration specifications (29 CFR Part 1926) and be protective of adjacent structures (e.g., 621 19th Street building). It is not anticipated that personnel will be required to work within the excavation footprint; however, if personnel are to work within the excavation footprint, the remedial contractor shall follow specifications for sloping and benching outlined in 29 CFR Part 1926 Subpart P.

2.3.5 Investigative Derived Waste Disposal

Investigative derived waste (IDW) was generated during the pre-design investigation activities completed in May and June 2020. The IDW waste consists of two partial drums of soil from soil sampling performed at the site and one partial drum of groundwater water and decontamination water. The remedial contractor shall empty and dispose of solid material with the excavated soil; empty and dispose of aqueous IDW with contents removed from the UST and any site dewatering; and recycle the metal drums.

2.3.6 Site Restoration

Prior to backfilling, the remedial contractor shall place a reducing agent in the open excavation. The material to be emplaced will be procured and supplied by EA. The remedial contractor then shall install a demarcation layer on the excavation sidewalls and bottom. If the excavation is dry, the remedial contractor shall backfill the excavated areas to within 4 in. of final grades with certified clean common fill. Should water be present in the bottom of the excavation, 1-in. washed stone originating from a virgin source shall be placed in the excavation and extend 1 ft above the water level. Common fill will then be utilized to backfill the remaining annular space to within 4 in. of final grades. The final 4 in. shall be covered with concrete to match existing grades.

Concrete shall also be installed as cover on the footprint of the former boiler room (backfilled with crusher run during IRM No. 1). Concrete utilized shall meet the requirements of New York State Department of Transportation Section 608 and have a compressive strength not less than 3,000 pressure per square inch.

Backfill material shall be confirmed clean in accordance with NYSDEC DER-10 (NYSDEC 2010) and sampled for emerging contaminants (NYSDEC 2020). Certifications shall be provided to EA and NYSDEC for review and approval prior to placement.

2.3.7 Site Survey

The remedial contractor shall be responsible for procuring a NYS licensed surveyor to survey the extent of excavation and location/elevation of confirmation samples prior to backfilling.

2.4 ROLES AND RESPONSIBILITIES

A description of the roles and responsibilities for the IRM is included in the following sections.

2.4.1 New York State Department of Environmental Conservation

The NYSDEC is responsible for the administration of the IRM and coordination with EA. They will receive and review daily reports from EA's onsite construction inspector, coordinating review and changes to the design/SOW with all parties, and coordinate access to the remedial site and adjacent properties.

2.4.2 EA Engineering, P.C. and its affiliate EA Science and Technology

EA will review plans, specifications, and submittals from the remedial contractor. EA will also host regular progress/pre-construction meetings and provide minutes to NYSDEC and the remedial contractor for review and concurrence. Additionally, EA will provide dedicated full-time onsite construction management, inspection, and engineering during the IRM, reporting to the NYSDEC Project Manager. As part of the onsite construction management, EA will complete routine structural monitoring of adjacent buildings and conduct air and dust monitoring in accordance with the Community Air Monitoring Plan (EA 2019).

2.4.3 Remedial Contractor

IRM No. 2 implementation will be completed by the remedial contractor, under a standby callout contract to NYSDEC. The remedial contractor shall complete the following activities under this SOW:

- Development of an Excavation Work Plan presenting Means and Methods, Transportation and Disposal Plan, Health and Safety Plan, Erosion and Sediment Control Plan, and Traffic Control Plan

- Permitting (Section 2.3.1 provides detail regarding permitting)
- Sanitation and health and safety measures to prevent spread of COVID-19
- Slab demolition, soil excavation, and offsite disposal of materials
- UST closure, removal, and offsite disposal
- Survey of final excavation limits and documentation sampling locations
- Site restoration
- Decontamination of all equipment and vehicles prior to leaving site.

2.5 TENTATIVE PROJECT SCHEDULE

The tentative schedule to complete the following work is as follows:

- The remedial contractor will complete a brief work plan and health and safety plan for the further investigation of tank contents to be submitted to EA and NYSDEC in mid-October 2020.
- Further investigation of UST and sampling of UST contents is anticipated to be performed before the end of October 2020. It is also anticipated that samples will be submitted to the laboratory with an expedited turn-around-time so that results are returned to the remedial contractor, EA and NYSDEC by the beginning of November.
- Following receipt of analytical results of the tank contents, the remedial contractor will submit the work plan and all other required submittals described in this SOW by mid-November 2020.
- Following review and approval of the remedial contractor's work plan and submittals, mobilization for the removal of the UST and surrounding soil is anticipated for the end of November 2020 through beginning of December 2020.

This page left intentionally blank

3. PROJECT CONTACTS

The following personnel identified in **Table 1** have been identified for this project to fulfill requirements, roles, and responsibilities listed in Section 2.4.

Table 1 Project Roles and Contact Information

Name	Project Role	Company	Telephone	Email
Joshua Haugh	Site Project Manager	NYSDEC-Region 4 (Rotterdam)	Office: (518) 357-2008 Cell: (315) 569-8308	joshua.haugh@dec.ny.gov
Paul LaBoissiere	Building Department	City of Watervliet	Office: (518) 270-3800 Extension 126	plaboissiere@watervliet.com
Kristin Kulow	Environmental and Exposure Evaluation	New York State Department of Health	Office: (607) 432-3911	beei@health.ny.gov
Lisa Ramundo	Commissioner, Department of Public Works	Albany County	Office: (518) 765-2055	dpw@albanycounty.com
Donald Conan, P.E., P.G.	EA Program Manager	EA Engineering, P.C.	Office: (315) 565-6551 Cell: (315) 877-7403	dconan@eaest.com
Frank DeSantis, Jr.	EA Deputy Program Manager	EA Science and Technology	Office: (315) 565-6554 Cell: (315) 395-7689	fdesantis@eaest.com
Christopher Schroer	EA Project Manager	EA Science and Technology	Office: (315) 565-6565 Cell: (315) 569-8308	cschroer@eaest.com
Emily Cummings, EIT	EA IRM Engineer	EA Science and Technology	Office: (315) 565-6553 Cell: (860) 309-3837	ecummings@eaest.com
Michael Wright	IRM EA Construction Inspector	EA Science and Technology	Cell: (315) 694-2436	mwright@eaest.com
To be determined	Construction Manager	Remedial Contractor	To be determined	To be determined

This page left intentionally blank

4. REFERENCES

The Chazen Companies (Chazen). 2016. *Re: Limited Subsurface Sampling Report, Former Dry Cleaner Property, 617 19th Street, City of Watervliet, Albany County, New York*. April.

EA Engineering, P.C. and its affiliate EA Science and Technology (EA). 2019. *Community Air Monitoring Plan; Admiral Cleaners Site (401075).* July.

———. 2020. *DRAFT IRM No. 1 Construction Completion Report.* 23 July.

New York State Department of Environmental Protection (NYSDEC). 1987. *Memorandum: Permanent Closures of Petroleum Storage Tanks*. January.

———. 2009. *Order on Consent File No. R4-2009-0219-25*. April.

———. 2010. *DER-10 Technical Guidance for Site Investigation and Remediation.* May.

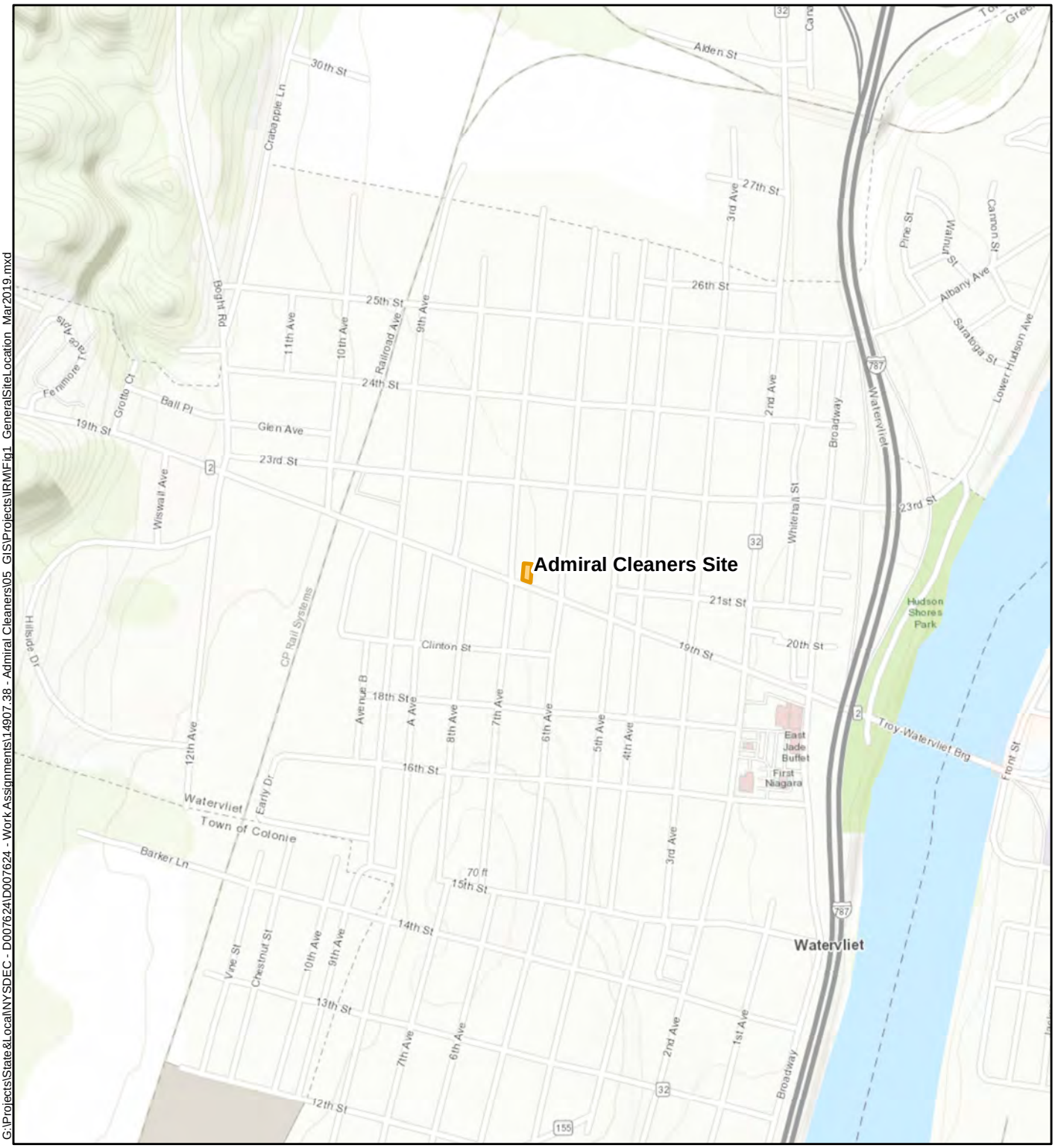
———. 2017. *Inactive Hazardous Waste Disposal Site Classification Notice. Site Name: Admiral Cleaners. Site No. 401075.* August.

———. 2020. *Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Program.* January.

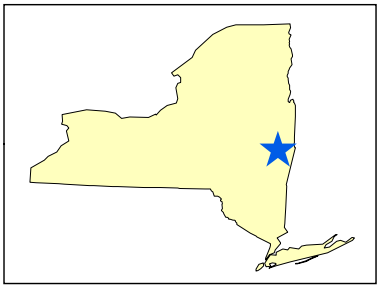
This page left intentionally blank

Figures

This page left intentionally blank



G:\Projects\State&Local\NYSDEC - D007624\D007624 - Work Assignments\14907.38 - Admiral Cleaners\05 GIS\Projects\IRMFig1 GeneralSiteLocation Mar2019.mxd



0 250 500 1,000
Feet

N

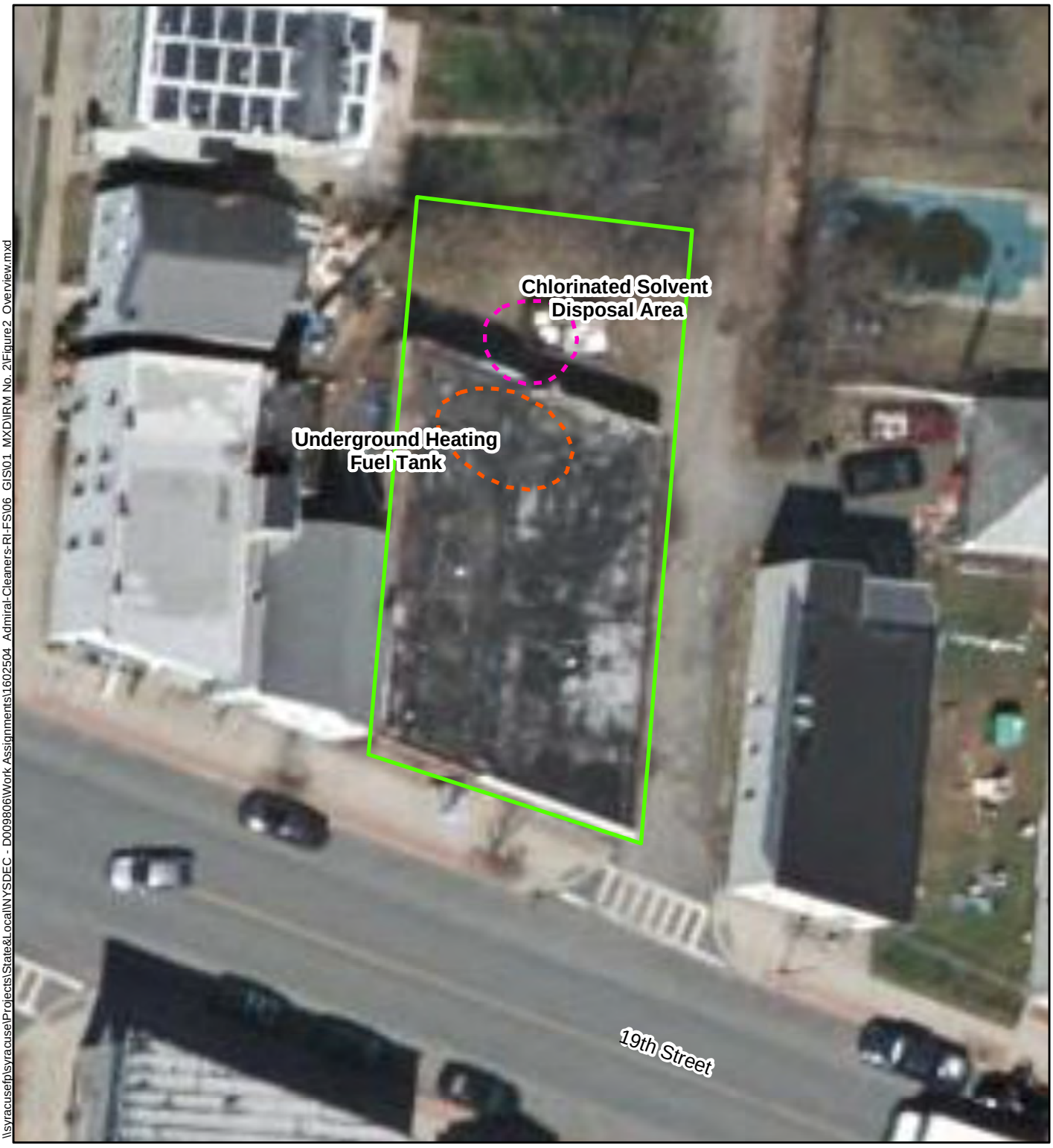
Legend

- Site Location
- Admiral Cleaners Site Boundary

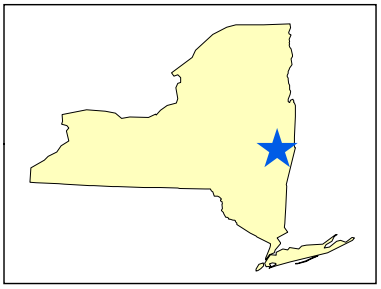
Figure 1
General Site Location
Admiral Cleaners
Watervliet, Albany County, NY

Map Date: 3/12/2019
Projection: NAD 1983 State Plane New York East FIPS 3101 Feet

NEW YORK Department of Environmental Conservation



\\syracusefp\syracuse\Projects\State&Local\NYSDEC - D009806\Work Assignments\1602504 Admiral-Cleaners-RI-FS\06 GIS\01 MXD\IRM No. 2\Figure2 Overview.mxd



0 7.5 15 30
Feet

Legend

- Admiral Cleaners Site Boundary
- Anticipated PCE Excavation Area Following RI Phases I&II
- Anticipated UST Excavation Area Following RI Phases I&II

Figure 2
Site Layout and Areas of Concern

Admiral Cleaners
Watervliet, Albany County, NY

Map Date: 7/27/2020
Projection: NAD 1983 State Plane New York East FIPS 3101 Feet

N

Note:
PCE = Tetrachloroethene
RI = Remedial Investigation
UST = Underground Storage Tank

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

GENERAL CONSTRUCTION NOTES:

1. THE FOLLOWING DRAWINGS OUTLINE THE SITE PLAN, EXISTING CONDITIONS, AND PROPOSED RESTORATION FOR THE REMOVAL OF THE UNDERGROUND STORAGE TANK (UST) AND SURROUNDING IMPACTED SOIL.
2. THIS DRAWING IS ISSUED AS A COMPONENT OF THE INTERIM REMEDIAL MEASURE NO. 2 SCOPE OF WORK – UST REMOVAL FOR THE ADMIRAL CLEANERS SITE (NO. 401075)
3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
4. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO PERFORM THE WORK AS SHOWN ON THE DRAWING AND AS DESCRIBED IN THE SCOPE OF WORK.
5. IT IS DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK THAT WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO COMPLETE SUCH WORK.
6. APPROXIMATE LOCATIONS OF UNDERGROUND UTILITY ARE INCLUDED FOR REFERENCE. SERVICE FOR ACTIVE UTILITIES WAS DISCONTINUED / DISCONNECTED DURING IRM NO. 1 – BUILDING DEMOLITION. CONTRACTOR IS STILL RESPONSIBLE FOR DETERMINING LOCATION OF UNDERGROUND UTILITIES AND ENSURING PROTECTION OF ANY ACTIVE UTILITIES PRESENT WITHIN THE WORK AREA.
7. SUSPECTED LOCATION OF UST NEAR SOIL BORING LOCATION SB–02. NON–AQUEOUS PHASE LIQUID OBSERVED IN SUBSURFACE SOIL FROM BORING LOCATION SB–06.
8. CONTRACTOR SHALL CHARACTERIZE CONTENTS OF UST PRIOR TO DISPOSAL AND SHALL PROPERLY CLOSE THE UST IN ACCORDANCE WITH 40 CODE OF FEDERAL REGULATIONS (CFR) 280.70 AND NEW YORK STATE GUIDANCE REGARDING PERMANENT CLOSURE OF PETROLEUM STORAGE TANKS (NYSDEC 1987).
9. CONTRACTOR SHALL AVOID GENERATING VIBRATIONS IN THE PERFORMANCE OF WORK TO PREVENT IMPACT TO ADJACENT PROPERTY AND 621 19TH STREET.

GENERAL SAFETY AND SECURITY STANDARDS FOR CONSTRUCTION:

1. ALL ONSITE EQUIPMENT AND MATERIALS SHALL BE STORED IN A SAFE AND SECURE MANNER.
2. FENCES AND GATES AROUND THE SITE SHALL BE MAINTAINED. GATES SHALL ALWAYS BE LOCKED UNLESS A WORKER IS IN ATTENDANCE TO PREVENT AUTHORIZED ENTRY.
3. ANY EXCAVATED MATERIAL STOCKPILED ONSITE SHALL BE PROTECTED FROM ELEMENTS AND UNAUTHORIZED CONTACT BY HUMANS AND WILDLIFE.
4. ALL WORK AND EXCAVATIONS SHOULD BE CONDUCTED IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION SPECIFICATIONS (29 CFR PART 1926) AND BE PROTECTIVE OF ADJACENT STRUCTURES (E.G., 621 19TH STREET BUILDING).

SITE RESTORATION NOTES

1. COLLECT DOCUMENTATION SAMPLE PRIOR TO BACKFILLING EXCAVATION.
2. CONTRACTOR SHALL PLACE A REDUCING AGENT IN THE OPEN EXCAVATION PRIOR TO BACKFILLING. REDUCING AGENT WILL BE PROCURED AND SUPPLIED BY EA.
3. DEMARCATION LAYER SHALL BE INSTALLED ON EXCAVATION BOTTOM AND SIDEWALLS.
4. THE EXCAVATION SHALL BE BACKFILLED AS SPECIFIED IN THE SCOPE OF WORK.

SURVEY NOTES:

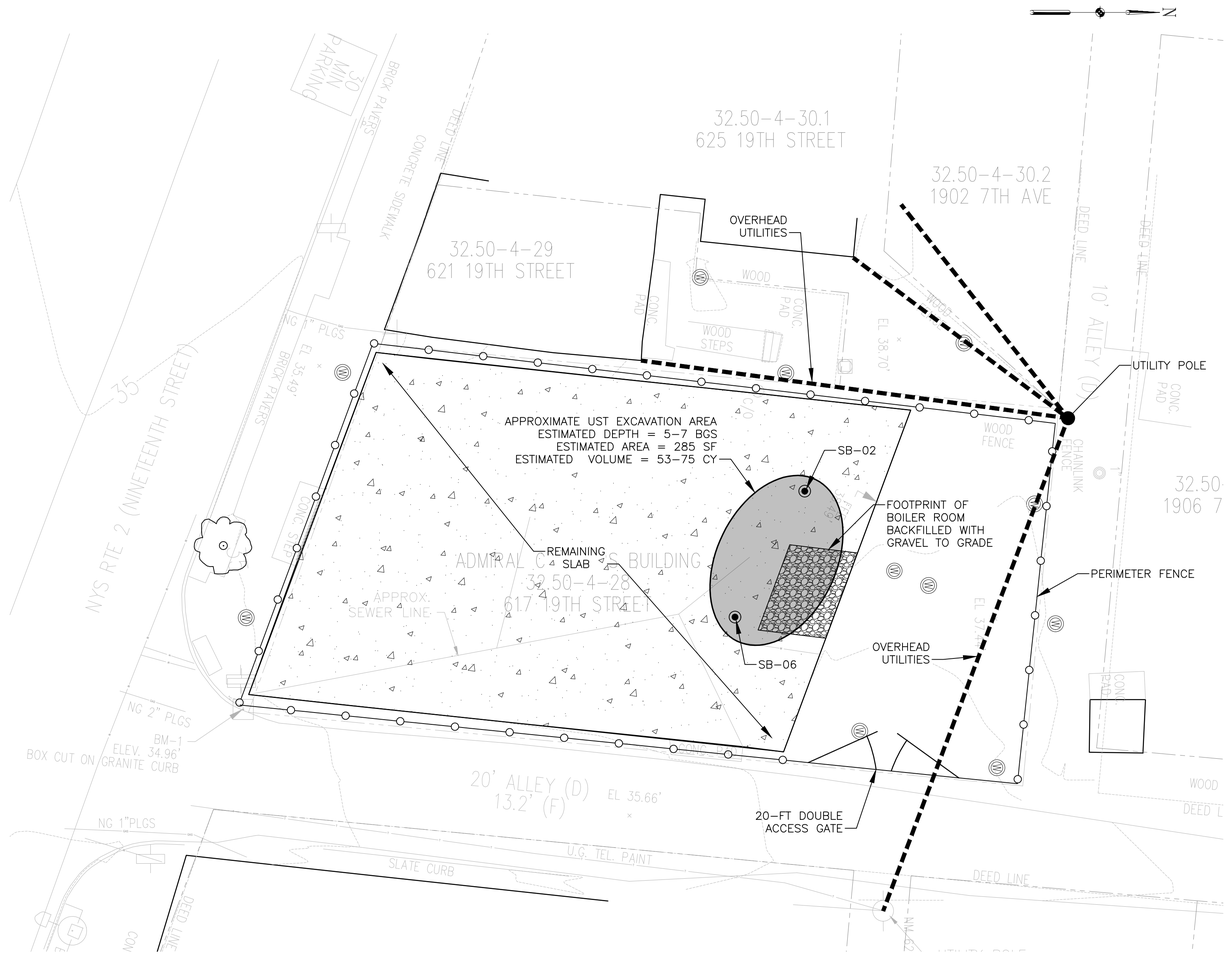
1. HORIZONTAL DATUM IS REFERENCED TO NAD83(2011)–NYSPCS, EAST ZONE.
2. VERTICAL DATUM IS REFERENCED TO NAVD88, ESTABLISHED BY STATIC GPS METHODS FROM NYS CORS NETWORK.
3. PROJECT UNITS ARE U.S. SURVEY FEET.
4. APPROXIMATELY 5" OF SNOW/ICE COVER WHEN THE FIELD WORK WAS CONDUCTED
5. UTILITIES SHOWN HEREON ARE BASED ON VISIBLE EVIDENCE ONLY. ALL UNDERGROUND UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. THERE IS NO GUARANTEE THAT ALL EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA ARE SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK. BEFORE COMMENCING WORK, CONTACT "DIG SAFELY NE.O.W. YORK" AT 1–800–962–7962 AND PROVIDE 72 HOURS NOTICE. ALL UTILITY INFORMATION SHOWN HEREON IS BASED UPON FILED MARKING AND VISIBLE FEATURES PRESENT AT THE TIME OF SURVEY. NO UTILITY RESEARCH WAS PERFORMED BY THE SURVEYOR.
6. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE, AND IS SUBJECT TO ANY EASEMENTS OR ENCUMBRANCES OF RECORD.
7. DIMENSIONS ALONG BOUNDARY/PROPERTY LINES REPRESENTS FIELD MEASUREMENTS
8. BEARINGS SHOWN AND UTILIZED HEREON ARE RELATIVE TO GRID NORTH AS REFERENCED TO THE NY STATE PLANE COORDINATE SYSTEM, EAST ZONE. TRUE NORTH AT THE 74° 30' 00" MERIDIAN OF WEST LONGITUDE.

LEGEND

- CONCRETE SLAB TO REMAIN
- PERIMETER FENCE
- PATH OF NEW OVERHEAD UTILITIES
- GRAVEL BACKFILL
- SOIL BORING LOCATION
- FFE 524.52 — FIRST FLOOR ELEVATION
- EL 524.52 — SPOT ELEVATION
- VAULT
- MON. WELL
- LIGHT POLE
- UTILITY POLE
- SEWER CLEANOUT
- WATER VALVE
- POST
- DEED LINE
- PROPERTY LINE
- X 4" — SLAB THICKNESS MEASUREMENT LOCATION

ABBREVIATIONS

BM	BENCH MARK
CONC.	CONCRETE
(D)	DEED
E.P.	EDGE OF PAVEMENT
EL	ELEVATION
(F)	FIELD MEASUREMENT
FFE	FINISHED FLOOR ELEVATION
FT	FEET
IN	INCH
L.	LIBER
NG	NATURAL GAS
P.	PAGE



UST REMOVAL AREA

10 5 0 10 20

GRAPHIC SCALE IN FEET

Department of Environmental Conservation

NEW YORK STATE OF OPPORTUNITY

NO.	DATE	DESCRIPTION
		REVISIONS

UST REMOVAL AREA

ADMIRAL CLEANERS SITE
NYS REGISTRY NO. 401075
617 19TH STREET
WATERVLIET, NEW YORK

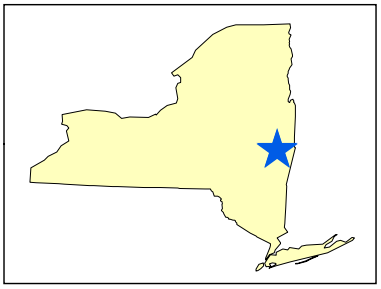
PREPARED BY:
EA ENGINEERING, P.C.
AND ITS AFFILIATE
EA SCIENCE AND
TECHNOLOGY

CARRS#	
EA #	14907.38
DESIGN #	
FILE	1490738–Planset.dwg
DRAWN BY	DPA
DATE	SEPTEMBER 2020
SCALE	AS SHOWN
SS	

FIGURE 3

This page intentionally left blank

G:\Projects\State&Local\NYSDEC - D009806\Work Assignments\1602504 Admiral-Cleaners-RI-FS\06 GIS\01 MXD\IRM No. 2\SOW\Fig04 CrossSection Locations Planview.mxd



0 15 30
Feet

N

Legend

- Admiral Cleaners Site Boundary
- Phase II Monitoring Well Locations
- Phase I Monitoring Well Locations
- Phase I Soil Boring Locations
- Phase II Surface Soil Locations

Figure 4
Cross Sections Transect Locations

IRM No. 2 Scope of Work
Admiral Cleaners
Watervliet, Albany County, NY

Map Date: 8/17/2020
Projection: NAD 1983 State Plane New York East FIPS 3101 Feet

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

EA

This page intentionally left blank

A (South)

A' (North)

Former Location of Admiral Cleaners Building

19th Street

MW-17 | SB-12 | MW-06/SB-14 | PDI-SB-12 | PDI-SB-10 | PDI-SB-09 | PDI-SB-03 | SB-06 | PDI-SB-14 | SS-01-PH2 | MW-07R | MW-07/SB-05 | SS-06-PH2 | PDI-SB-19 | MW-10

Elevation (Feet Above Mean Sea Level)

20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

0 25 50 75 100 125 150 175

Distance (Feet)

N

Notes:
PCE = Tetrachloroethylene
SCO = Soil Cleanup Objective

C:\Users\jdrummond\Documents\ArcGIS\Projects\Admiral Cleaners\Admiral Cleaners.aprx

VICINITY MAP

Legend

Groundwater Surface (Sept. 2018)

Soil Type/Lithology

- Topsoil
- Sand - Poorly sorted (Till)
- Clay
- Weathered Bedrock
- Competent Bedrock

Analytical Results (PCE)

- Less Than Unrestricted SCO
- Greater Than Unrestricted SCO
- Greater Than Residential SCO
- Greater Than Commercial SCO

PID Readings

- <10 ppm
- 10-50 ppm
- 50-100 ppm
- 100-500 ppm
- 500-1000 ppm
- >1000 ppm

Well and Boring Indicators

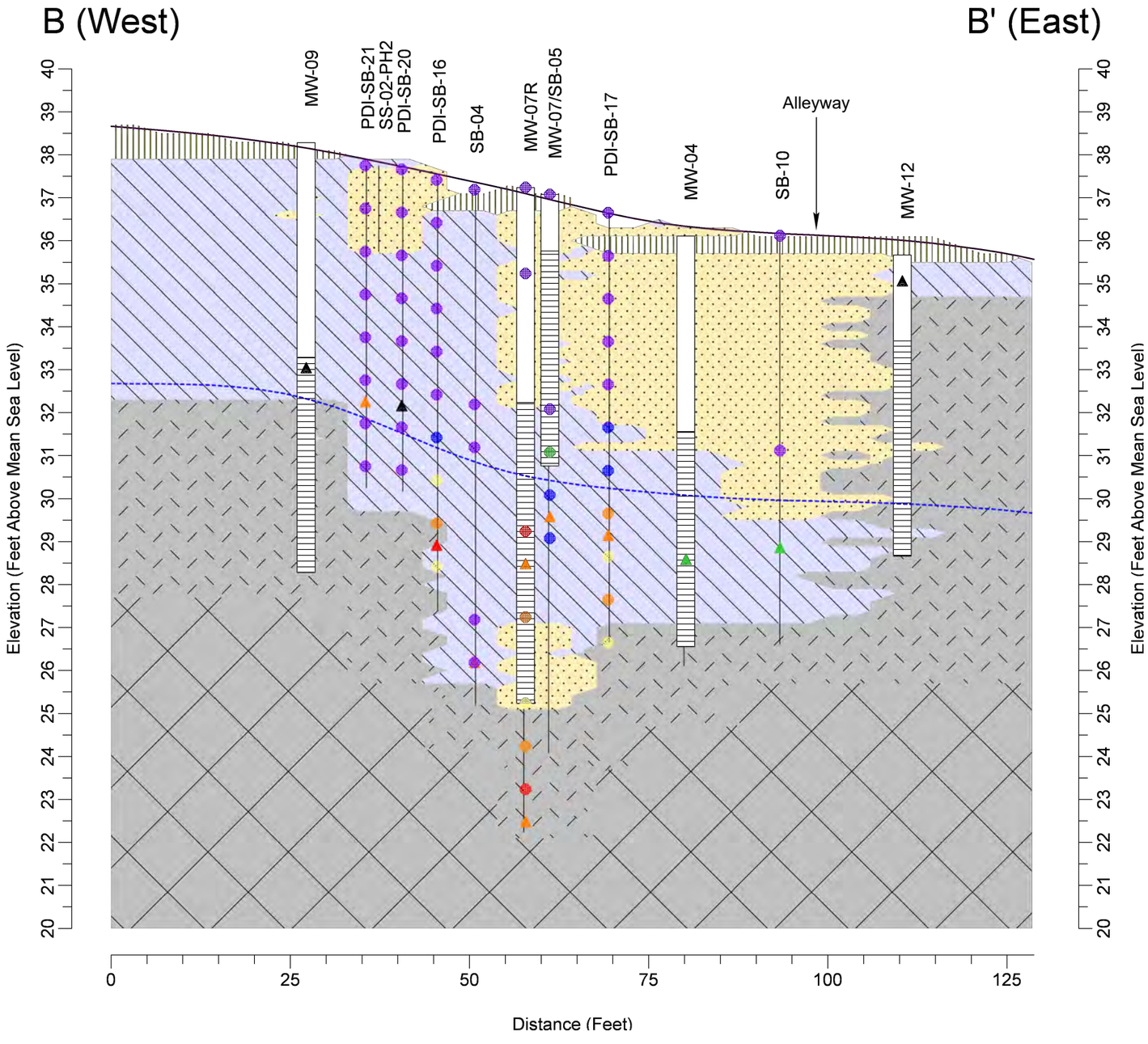
- Soil Boring Interval
- Well Riser Interval
- Well Screen Interval

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

Figure 5
Pre-Design Investigation
North-South Cross-Section
Admiral Cleaners
Watervliet, NY

Aerial: ESRI, 2011
Map Date: 9/29/2020

This page intentionally left blank



Notes:
PCE = Tetrachloroethylene
SCO = Soil Cleanup Objective
ppm = parts per million

VICINITY MAP

Legend

Groundwater Surface (Sept. 2018)

Soil Type/Lithology

- Topsoil
- Sand - Poorly Sorted (Till)
- Clay
- Weathered Bedrock
- Competent Bedrock

Analytical Results (PCE)

- Less Than Unrestricted SCO
- Greater Than Unrestricted SCO
- Greater Than Residential SCO
- Greater Than Commercial SCO

PID Readings

- < 10 ppm
- 10-50 ppm
- 50-100 ppm
- 100-500 ppm
- 500-1000 ppm
- >1000 ppm

Well and Boring Indicators

- Soil Boring Interval
- Well Riser Interval
- Well Screen Interval

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Figure 6
Pre-Design Investigation
East-West Cross-Section
Admiral Cleaners
Watervliet, NY

Aerial: ESRI, 2011
Map Date: 7/22/2020

C:\Users\jdrummond\Documents\ArcGIS\Projects\Admiral Cleaners\Admiral Cleaners.aprx

This page intentionally left blank