

REMEDIAL ACTION MEMORANDUM

TO: United States Environmental Protection Agency Region 2

FROM: City of Rochester

DATE: June 6, 2022

RE: 24 & 32 York Street, Rochester, NY

Introduction

The City of Rochester (City) and LaBella Associates DPC (LaBella) have prepared this remedial action memorandum in accordance with the Cooperative Agreement between the USEPA and the City (Grant Number BF-96251020) for the properties located at 24 & 32 York Street in the City of Rochester, Monroe County, New York (the "Site"). New York State Department of Environmental Conservation (NYSDEC) Spill No.1901036 is assigned to the Site. LaBella completed an Analysis of Brownfields Cleanup Alternatives (ABCA) on behalf of the City for the Site. The ABCA was generated to evaluate alternatives for cleanup of petroleum impacts to soil, groundwater, and bedrock. It should be noted that Day Environmental, Inc. (DAY) prepared a draft ABCA dated November 25, 2019 which was provided to LaBella by the City for development of the Final ABCA and remedial action memorandum.

This memorandum includes the following:

1. Summary of the Site and its history;
2. Previous environmental investigations;
3. Summary of subsurface environmental impacts at the Site;
4. Standards, criteria, and guidelines (SCGs) to be used for the cleanup at the Site;
5. Summary of the remedial alternatives evaluated;
6. An explanation of the rationale for the recommended remedial alternative and how it will meet applicable regulatory requirements;
7. General project schedule; and
8. Signature of authorized City representative.

1. Site Description and History

The Site consists of two (2) tax parcels (120.42-2-70 and 120.42-2-71) which are currently vacant and owned by the City. The most recent former building was demolished in 2020 by the City. Historical uses of 24 York Street included a blacksmith shop and a wood working shop in at least 1892; a blacksmith shop, wagon shop, and painting and harness shop in at least 1912; an auto repair facility in at least 1924; a gasoline station (with at least eight underground tanks and at least six pump dispensers) from at least 1925 through at least 1954; an auto repair facility and blacksmith shop in at least 1929-30; a blacksmith shop in at least 1935 and 1950; an auto repair facility from at least 1941 to at least 1973; and an auto sales facility in at least 1978, and vacant



land and/or a parking lot from about 1981 to the present. Historical uses of 32 York Street included residential from at least 1888 to about 1935, a post office from about 1935 to at least 1997, and a church from about 2001 to 2020.

2. Previous Environmental Investigations

Previous environmental studies that have been completed for the Site and/or surrounding area as follows:

- A December 20, 2017 (revised January 3, 2018) Phase I Environmental Site Assessment (Phase I ESA) report completed by DAY for the 24 York Street parcel;
- A December 20, 2017 (revised January 3, 2018) Phase I ESA report completed by DAY for the 32 York Street parcel;
- A July 19, 2019 Preliminary Phase II Environmental Site Assessment (Preliminary Phase II ESA) report completed by DAY for the 24 York Street parcel;
- A July 19, 2019 Preliminary Phase II ESA report completed by DAY for the 32 York Street parcel;
- A July 2019 Pre-Development Phase II Environmental Site Assessment and Geotechnical Study Report completed by DAY for 15 adjoining/nearby City-owned parcels, including investigation work in the public right-of-ways of York Street and Ruby Place that bound the Site; and,
- A November 2019 Phase II ESA Report completed by DAY for the 24 and 32 York Street parcels.

3. Subsurface Impacts

Petroleum impacts are present in soil and groundwater at depths ranging from 0.5 feet below ground surface (bgs) to bedrock which is present generally between 8-10-ft bgs. Photoionization detector (PID) readings up to 1,067 parts per million (ppm), petroleum odors, and sheen were observed in the general location of the former pump islands, former underground storage tanks (USTs) and former automotive repair buildings. Petroleum-related volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were detected in soil at concentrations that exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs) and NYSDEC Commissioner Policy (CP)-51 Soil Cleanup Levels (SCLs). Petroleum-related VOCs were detected in groundwater above NYSDEC groundwater standards and guidance values. Light non-aqueous-phase liquid (LNAPL) was also encountered in several monitoring wells. The area of petroleum impacts is approximately 6,405square feet (sq. ft.) and generally corresponds to the former gasoline service station formerly located at 24 York Street. Fill material consisting of ash, coal, brick, concrete and/or cinders is present and analytical results of fill material indicate the presence of SVOCs and metals that exceed 6 NYCRR Part 375 Unrestricted Use, Restricted Residential Use, and/or Commercial Use Soil Cleanup Objectives (SCOs).

4. Standards, Criteria, and Guidance (SCGs)

The SCGs for soil, groundwater and soil vapor to be used for this project are provided below.

Soil:

- Analytical laboratory results for soil will be compared to SCOs referenced in the 6 New York Codes, Rules and Regulations (NYCRR) NYSDEC document titled "Part 375, Environmental



Remediation Programs” dated December 14, 2006. Specific SCOs to be considered will include Unrestricted Use SCOs, Restricted Residential Use SCOs, Commercial Use SCOs, and Protection of Groundwater SCOs.

- Analytical laboratory results for soil will also be compared to SCLs referenced in the NYSDEC document titled “CP-51 / Soil Cleanup Guidance” dated October 21, 2010. SCLs to be considered are included in Table 2 and Table 3 of the referenced document.

Groundwater:

- Analytical laboratory results for groundwater will be compared to groundwater standards and guidance values referenced in the NYSDEC document titled “Division of Technical and Operational Guidance Series, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations” (TOGS 1.1.1) dated June 1998 as amended by April 2000 and June 2004 Addendums. Chapter 59 (Health and Sanitation), Article III (Nuisances and Sanitation) § 59-27 (Water Supply) of the current Charter and Code of the City of Rochester, New York implies that groundwater cannot be used as a source of potable water within the city limits.

Soil Vapor:

- There are currently no structures on the Site; therefore, no SCGs for soil vapor are applicable. If buildings are constructed in the future, a soil vapor intrusion evaluation may be completed to determine if a sub-slab depressurization system (SSDS) is warranted. Alternatively, a SSDS may be installed in lieu of testing. Future soil vapor intrusion evaluations will be completed in accordance with the “NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York” dated October 2006 and subsequent updates.

5. Remedial Alternatives

Three (3) remediation alternatives were evaluated following preliminary screening of applicable remedial methods and technologies. Alternatives were developed and evaluated in accordance with “NYSDEC’s Technical Guidance for Site Investigation and Remediation” (DER-10) dated May 2010.

Alternative #1 (No Action) is the “No Action” alternative, which presumes no cleanup or remediation, and no monitoring will be conducted at the Site.

Opinion of Probable Cost: \$0

Alternative #2 (Limited Source Removal) includes the excavation and off-Site disposal of petroleum-impacted soil and groundwater including limited excavation on City-owned adjacent 42 York Street, preparation of a NYSDEC Region 8 Soil and Groundwater Management Plan (SGMP) and flagging the Site in the City’s building information system (BIS) as institutional controls to ensure disturbed or displaced residual contamination are properly addressed, and five years of bi-annual post-excavation groundwater monitoring. (Refer to Figure B).

Opinion of Probable Cost: \$315,735.20

Alternative #3 (Comprehensive Source Removal and In-Situ Treatment) includes the excavation and off-Site disposal of petroleum-impacted soil, upper one-foot of fractured bedrock and groundwater including limited excavation on City-owned adjacent 42 York Street, the direct application of a bioremediation additive to the open excavation, the



installation of in-situ bioremediation delivery hardware in the excavation, a second application of chemical additive through the in-situ remediation delivery system, preparation of a NYSDEC Region 8 SGMP and flagging the Site in the City's BIS as environmental institutional controls to ensure disturbed or displaced residual contamination are properly addressed, and one year of bi-annual post-remediation groundwater monitoring followed by a second year of bi-annual groundwater monitoring if deemed necessary. (Refer to Figure C).
Opinion of Probable Cost: \$388,100.90

6. Recommended Remedial Alternative

Based on the extent of the impacted areas, the contaminants of concerns, and the affected media, the recommended remedial approach is **Alternative #3**. This alternative provides the most comprehensive cleanup; long-term effectiveness; and reduction on toxicity, mobility, and volume (mass) of contamination. This alternative also better prepares the Site for various future land uses, including multi-family residential and mixed use (commercial and multi-family residential).

Approximately 1,370 tons of petroleum-impacted soil and approximately 474 tons of petroleum-impacted bedrock will be removed and disposed of off-Site at an appropriate regulated landfill facility. Infiltrating petroleum-impacted groundwater and storm water will be pumped into frac tanks and an estimated 40,000 gallons of water will be collected and discharged to a POTW under a Specialty Short Term Discharge permit.

Post-excavation soil samples will be collected to evaluate the effectiveness of the soil removal phase of the cleanup project. Prior to backfilling, up to 1,000 pounds of Regenesis ORC-Advanced (or similar product) will be placed in the excavation to enhance bioremediation of residual petroleum impacts. In addition, a delivery system (e.g., porous backfill, perforated horizontal or vertical subsurface piping connected to vertical solid riser piping) will be installed within the excavation prior to backfilling to assist in future remediation of residual impact within groundwater, if deemed necessary. The remainder of the excavation will be backfilled with Site soils deemed reusable based on acceptable laboratory testing results, and also with clean imported select geotechnical fill (e.g., crushed stone, Bank Run, etc.) that meets NYSDEC requirements set forth in DER-10 for importation of clean backfill.

Four (4) monitoring wells will be installed within the excavation for groundwater monitoring purposes. Groundwater monitoring will be completed quarterly for one (1) year. A Soil and Groundwater Management Plan (SGMP) will be developed to manage remaining fill material and residual petroleum impacts during future subsurface work. The SGMP will also require future buildings are evaluated for soil vapor intrusion or an SSDS is installed. In addition, the City will flag the Site in the Building Information System (BIS) to ensure the SGMP is implemented for applicable new building permits and related Site activities that have the potential to disturb remaining contamination.

Refer to attached Figure C for a summary of the selected alternative. A comprehensive analysis of all considered alternatives can be found in the final ABCA.



7. Schedule

Remedial construction is anticipated to begin in late August 2022 after the development of a citizen participation plan and community outreach program, as well as the development of a corrective action plan (CAP). A separate memorandum will be submitted to the USEPA in May 2022 summarizing the CAP prior to the initiation of remedial construction.

8. Signature of City of Rochester Representative

The following individual is an authorized representative of the City of Rochester as the USEPA Cooperative Agreement Recipient.

Signature: Anne E Spaulding

Printed Name: Anne E Spaulding

Title: Manager of Environmental Quality

Date: 6/7/2022

Attached:

Figure A - Project Locus Map

Figure B - Approximate Area of Petroleum Impact with Alternative #2 Removal Area

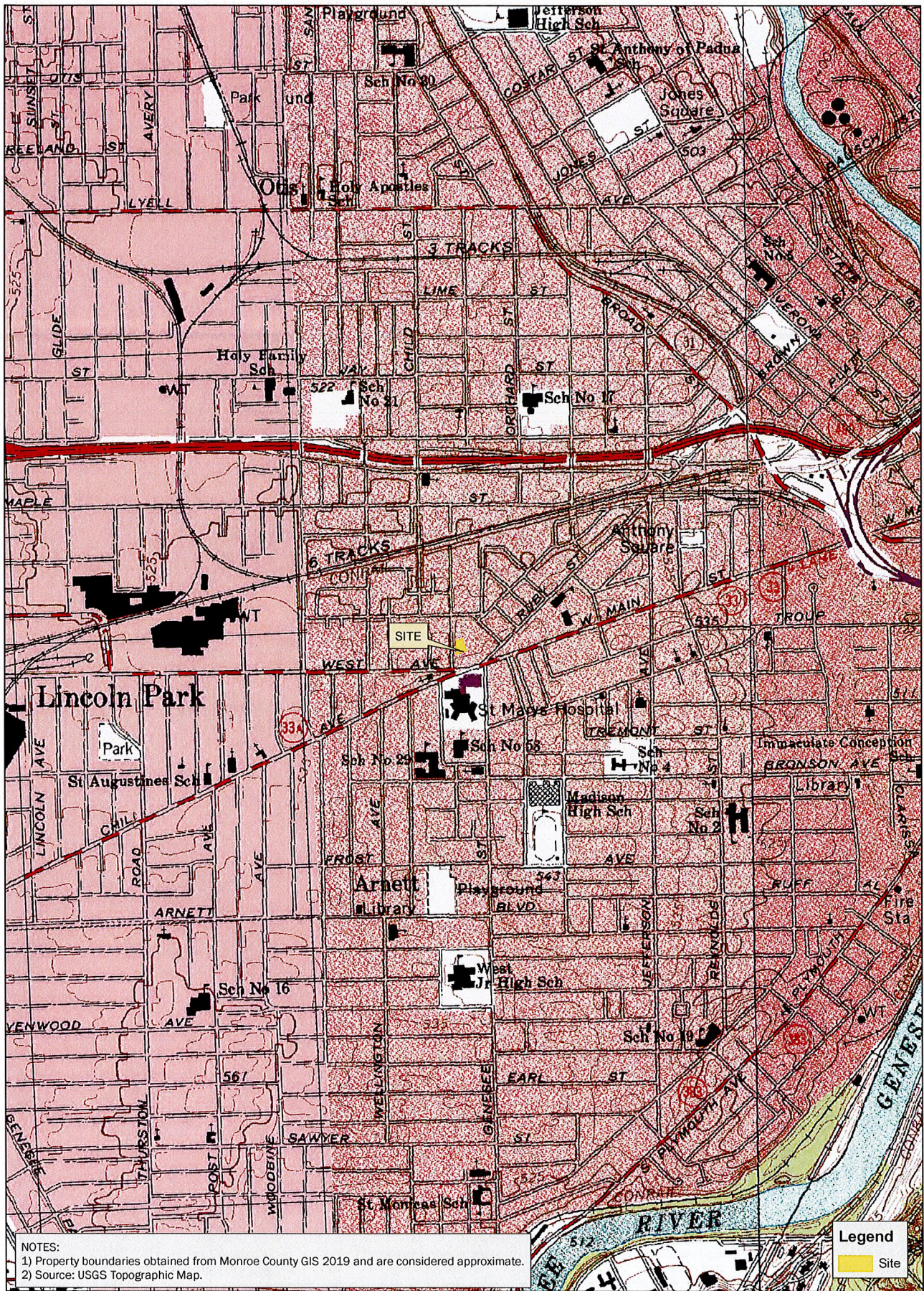
Figure C - Approximate Area of Petroleum Impact with Alternative #3 Removal Area & In-Situ Treatment Area

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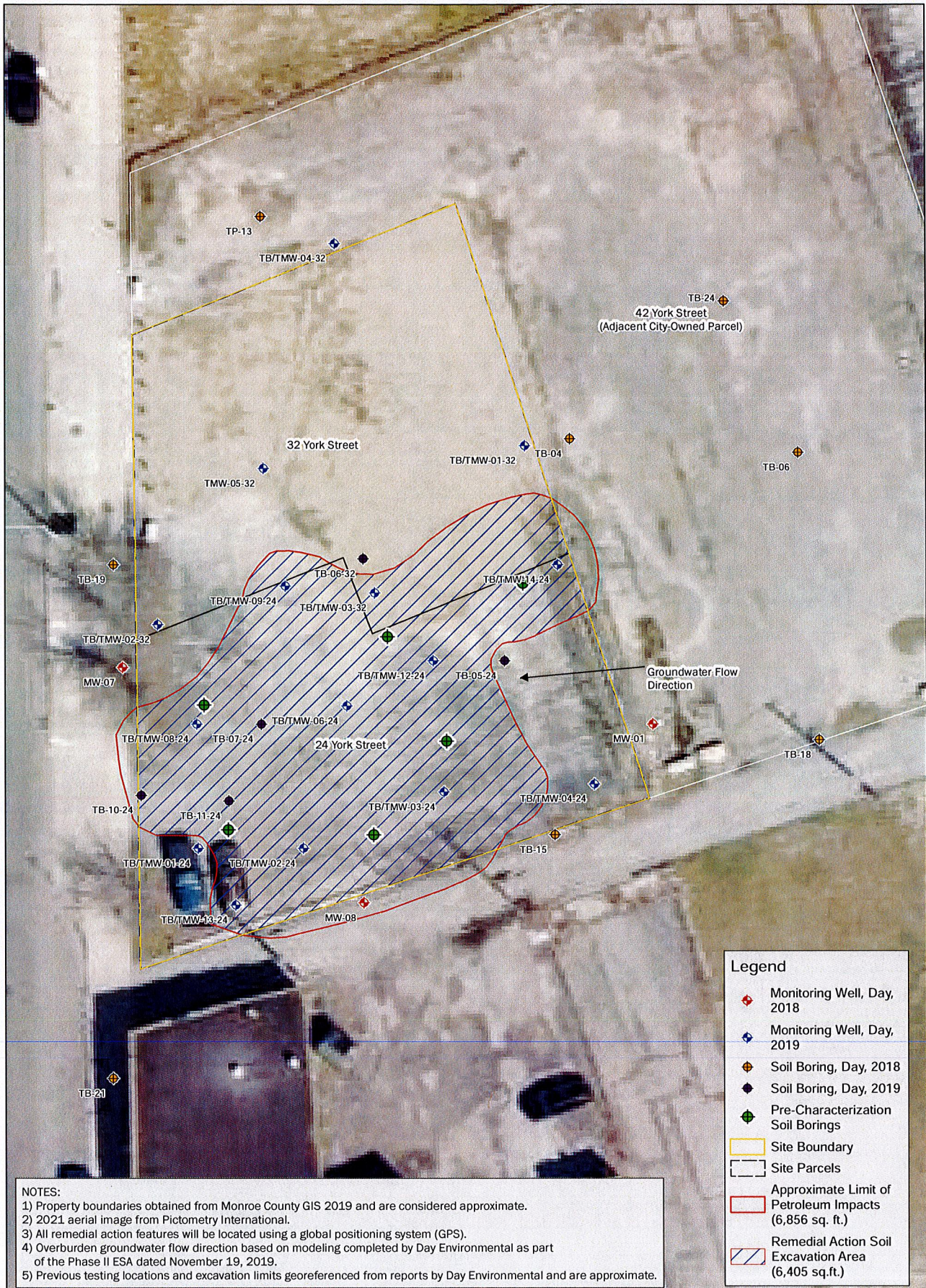


FIGURES





PROJECT #/DRAWING #/ DATE [2220406] [FIGURE A] 1/19/2022	DRAWING NAME: PROJECT LOCUS MAP	CLIENT: CITY OF ROCHESTER PROJECT: ABCA 24 & 32 YORK STREET ROCHESTER, NY	
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PROJECT #/DRAWING #/ DATE

2220406

FIGURE B

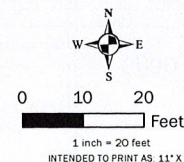
3/8/2022

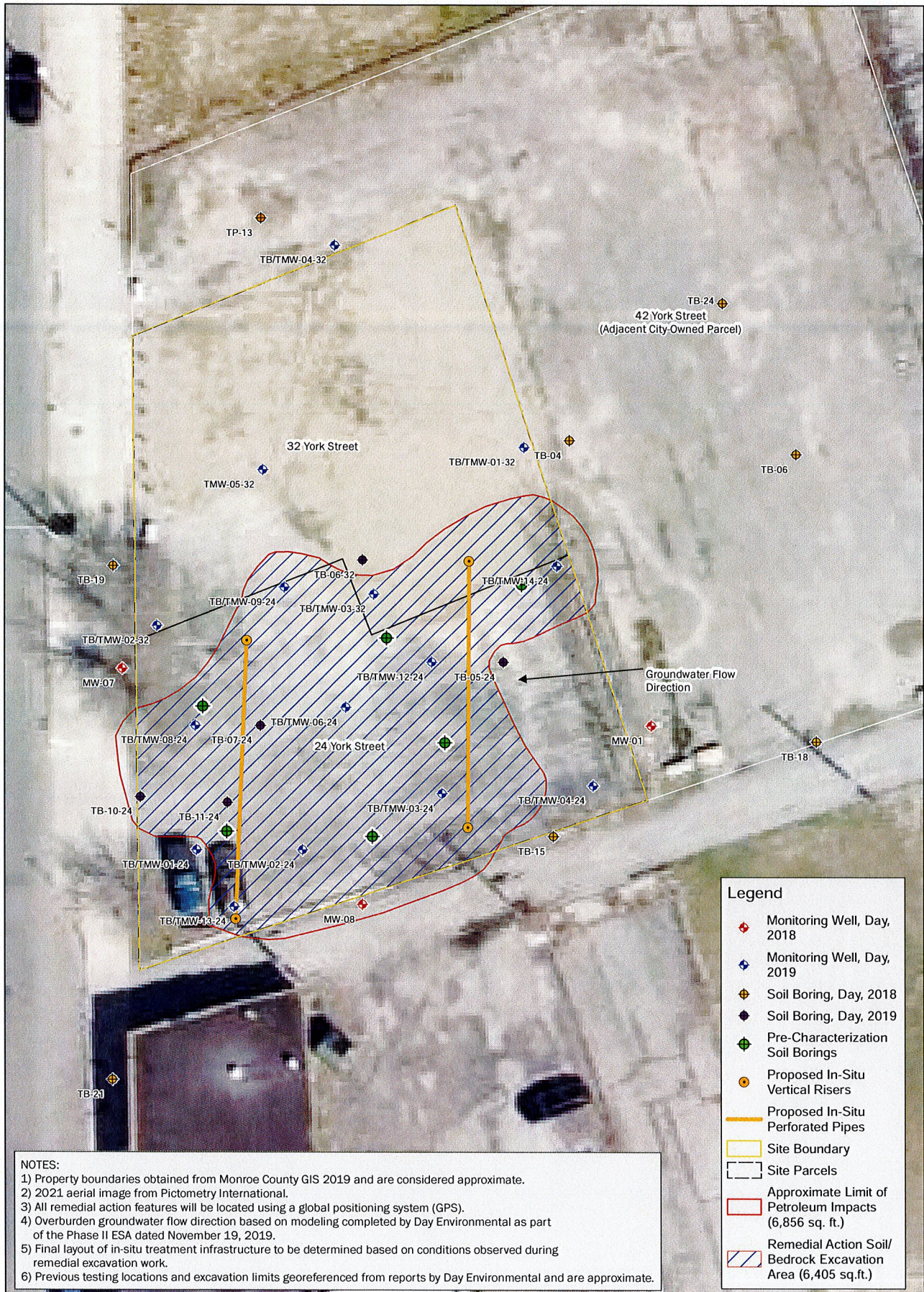
DRAWING NAME:

APPROXIMATE AREA OF
PETROLEUM IMPACT
WITH ALTERNATIVE #2
REMOVAL AREA

CLIENT:

CITY OF
ROCHESTER
PROJECT:
ABCA
24 & 32 YORK STREET
ROCHESTER, NY





- Legend**
- ◆ Monitoring Well, Day, 2018
 - ◆ Monitoring Well, Day, 2019
 - ◆ Soil Boring, Day, 2018
 - ◆ Soil Boring, Day, 2019
 - ◆ Pre-Characterization Soil Borings
 - Proposed In-Situ Vertical Risers
 - Proposed In-Situ Perforated Pipes
 - Site Boundary
 - - - Site Parcels
 - Approximate Limit of Petroleum Impacts (6,856 sq. ft.)
 - ▨ Remedial Action Soil/Bedrock Excavation Area (6,405 sq.ft.)

NOTES:

- 1) Property boundaries obtained from Monroe County GIS 2019 and are considered approximate.
- 2) 2021 aerial image from Pictometry International.
- 3) All remedial action features will be located using a global positioning system (GPS).
- 4) Overburden groundwater flow direction based on modeling completed by Day Environmental as part of the Phase II ESA dated November 19, 2019.
- 5) Final layout of in-situ treatment infrastructure to be determined based on conditions observed during remedial excavation work.
- 6) Previous testing locations and excavation limits georeferenced from reports by Day Environmental and are approximate.

PROJECT #/DRAWING #/ DATE

2220406

FIGURE C

3/8/2022

DRAWING NAME:

APPROXIMATE AREA OF PETROLEUM IMPACT WITH ALTERNATIVE #3 REMOVAL AREA & IN-SITU TREATMENT AREA

CLIENT:

CITY OF ROCHESTER

PROJECT:

ABCA

24 & 32 YORK STREET

ROCHESTER, NY

