DECISION DOCUMENT

820 Linden Ave Site
Brownfield Cleanup Program
Pittsford, Monroe County
Site No. C828200
December 2020

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

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DECLARATION STATEMENT - DECISION DOCUMENT

820 Linden Ave Site
Brownfield Cleanup Program
Pittsford, Monroe County
Site No. C828200
December 2020

Statement of Purpose and Basis

This document presents the remedy for the 820 Linden Ave Site site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 820 Linden Ave Site site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore, No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

12/22/2020
Date

Michael Cruden
Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

820 Linden Ave Site
Pittsford, Monroe County
Site No. C828200
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SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the selected remedy. A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This DD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Pittsford Community Library
24 State Street
Pittsford, NY 14534
Phone: 585-248-6275

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Site Location:
The site is located in a suburban setting at 820 Linden Avenue, Pittsford, near the crossing of Linden Avenue and Route 441. The site is approximately 1.8 miles south west of Irondequoit Creek and approximately 2.5 miles south east of Allen Creek. It is also located approximately 4.8 miles from Cobbs Hill Reservoir.

Site Features:
Approximately 65% of the site is covered by buildings or pavement. The site is currently improved with an approximately 108,400 square foot slab-on-grade building. Two optics manufacturing companies occupy the building: JML Optical Industries (JML) occupies the 70,200 square foot southern portion of the building, and Newport Corporation (Newport) occupies the approximately 40,000 square foot northern portion of the building. A paved parking lot is located on the eastern side of the building and grass covered areas surround the building and parking lot.

Current Zoning and Land Use:
The site is zoned for Light Industrial and is currently used by two optics manufacturing companies; JML and Newport. Both portions of the facility include production areas, as well as office space, various labs and testing areas, clean rooms, coating/plating rooms, chemical and waste storage rooms, satellite waste accumulation areas, maintenance areas, and shipping areas. Adjoining properties include commercial and light industrial properties to the east, west, and south. The parcel adjacent to the east of the Property, 860 Linden Avenue, is the former location of Jarl's Extrusions, a New York State Superfund site (Site No. 828005). The nearest residential area to the site is Woodland Estates which is located approximately 1.9 miles southwest on West Commercial Street.

Past Use of the Site:
Historical records indicate that the manufacturing building has been occupied by optical industry businesses since the permitted construction of the southern section of building in 1954. A 1995

report listed environmental concerns related to the prior discharge of hazardous materials/waste, including the contaminants of concern - acetone and TCE, into three septic systems from 1968-1975 during Bausch and Lomb's ownership and operation. A pile of broken asphalt and concrete pieces was observed in the northeast corner of the parking lot. In April 2018, Ridgecrest Associates entered into the Brownfield Cleanup Program after an environmental site assessment was conducted which indicated VOC contamination in the groundwater at the site.

Site Geology and Hydrogeology:
The site is located between elevations 410 and 430 feet above mean sea level. The site is generally flat with less than 20 feet of natural topographic relief. Surface water infiltrates the ground surface or flows overland towards storm drains in the parking lots and streets adjacent to the property. Shallow soils on the site are fine sand and fine sandy loam. These sands were encountered to depths of at least 72 feet below ground surface. Native overburden soils beneath the sand layer generally consist of silt and clay. Overburden deposits exhibit a variable thickness up to 164 ft. The bedrock underlying the overburden soils is the Lockport Dolomite. Based on the remedial investigation, local shallow groundwater at the site flows towards Irondequoit Creek to the north and the depth to groundwater is approximately 56 to 64 feet below grade at the property. Regional flow of the groundwater in bedrock underlying the overburden is generally north towards Irondequoit Bay and Lake Ontario.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the Remedial Investigation (RI) Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Participant. The Applicant has an obligation to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

However, the Department has determined that this site does not pose a significant threat to public health or the environment.

12/22/2020

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- indoor air
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized

below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

acetone	methylene chloride
benzo(a)pyrene	tetrachloroethene (PCE)
mercury	dichloroethene (1,1-)
trichloroethene (TCE)	dichloroethene (cis-1,2-)
benzo(b)fluoranthene	

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Sub-Slab Depressurization System

In December 2018, a sub-slab depressurization system (SSDS) was constructed in a portion of the southern tenant space footprint to address chlorinated volatile organic compounds (CVOC) in sub-slab soil vapor and to mitigate potential soil vapor intrusion (SVI). After the SSDS was installed, SVI sampling was conducted in March 2019, which resulted in the need to expand coverage of the SSDS into the majority of the southern tenant space. The construction of the expansion began in December 2019 and was completed in January 2020. Post construction indoor air samples were collected which met the NYSDOH guidance criteria, indicating the system is effectively addressing soil vapor intrusion. These results are documented in the November 2020 Construction Completion Report (CCR).

Septic System Closure and Debris Removal

In June 2020, a debris pile containing polycyclic aromatic compounds (PAHs) was removed and disposed of off-site at High Acres Landfill. Two septic systems were also closed in-place. The septic systems were located outside the southeast and northwest areas of the on-site building. Part of the northwest septic system closure included excavation and removal of PAH contaminated debris discovered during the investigation of the septic system components. The black, tar-like material encountered in northwestern septic area was removed and disposed of off-site at High Acres Landfill. A septic system located on the southwestern side of the building on site was removed due to the presence of volatile organic compounds (VOCs) in the tank contents. Chlorinated VOCs were found inside the septic system located on the southwestern corner of the building. Concentrations of tetrachloroethene (PCE) ranged from 21 parts per billion (ppb) to 84

ppb in the liquid in the tank. Solids found in the septic tank had concentrations of polychlorinated biphenyls (PCBs) up to 5.2 parts per million (ppm) and PCE up to 80 ppm. The southwestern septic tanks and all components of the leach field were removed and disposed of at an off-site at High Acres Landfill. Confirmation samples were taken from the excavated area prior to backfilling which confirmed that the remaining soil met commercial soil cleanup objectives (SCOs). The excavated area was backfilled with material that met the commercial SCOs for the site. This is documented in the CCR approved November 2020.

Cover System

In July 2020, an engineered cover system was installed to addressed benzo(a)pyrene impacts to shallow surface soil on the berm along the eastern property line of the site. The cover system consisted of 12 inches of stone on top of a demarcation layer. Remaining concentrations of benzo(a)pyrene range from 2.3 ppm to 350 ppm beneath the cover system. This is documented in the CCR approved November 2020.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Soil, groundwater, and waste from inside former septic systems were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Based upon investigations conducted to date, the primary contaminants of concern for the site include polycyclic aromatic hydrocarbons (PAHs) (primarily benzo(a)pyrene), trichloroethene (TCE), tetrachloroethene (PCE), and acetone.

Soil - Benzo(a)pyrene is found in shallow soil along the eastern side of the property along the parking lot at concentrations ranging from 2.3 parts per million (ppm) up to 350 ppm, exceeding the commercial soil cleanup objectives (SCO) of 1 ppm. In an Interim Remedial Measure (IRM), a cover was placed over the contaminated soil along the eastern edge of the parking lot with a demarcation layer to eliminate exposure through contact. Acetone was found in soil throughout the site primarily from depths around 40 to 60 feet, just above the water table. Concentrations of acetone in the soil range from 0.05 ppm to 0.12 ppm. Acetone in soil exceeds the SCOs for the protection of groundwater (0.05 ppm) but does not exceed the commercial SCO of 500 ppm. Mercury is found in soils near the northwest septic system below ground surface at a concentration of 3.2 ppm, exceeding the site SCOs for intended commercial use of 2.8 ppm. Black tar-like debris was found near the distribution box of the northwest septic system with elevated levels of PAHs. The debris was removed in an IRM. Groundwater was not impacted in down gradient monitoring wells close to the contaminated southwestern and northwestern septic systems. Contamination from impacted soils is not migrating off-site.

Groundwater - Acetone and TCE and their associated degradation products are found in groundwater on the site. Acetone was found in the groundwater under the building at a depth of 45-60 ft below ground surface (bgs) with a concentration ranging from 100 parts per billion (ppb) to 1,100 ppb, exceeding the groundwater standard of 50 ppb. TCE ranging from 1.9 ppb to 17 ppb was found in the groundwater on the southeastern portion of the site exceeding the groundwater standard of 5 ppb. Data does not indicate any off-site impacts in groundwater related to this site.

For per- and polyfluoroalkyl substances (PFAS), perfluorooctanoic acid (PFOA) is reported at concentrations of up to 12 parts per trillion (ppt), exceeding the 10 ppt screening level for groundwater

1,4-Dioxane was not detected at concentrations exceeding the screening level of 1 (ppb) in groundwater.

Soil Vapor and Indoor Air - VOCs were detected in sub-slab soil vapor at elevated concentrations of PCE up to 100 micrograms per cubic meter; and TCE up to 160 micrograms per cubic meter. TCE was detected at levels of 2.1 micrograms per cubic meter in the indoor air samples which slightly exceeds the NYSDOH air guideline concentration of 2 micrograms per cubic meter. Mitigation through installation of a vapor intrusion system was implemented as an IRM and will continue to operate under a Site Management Plan. Post mitigation indoor air samples did not exceed the NYSDOH air guideline values for TCE or PCE. Data does not indicate any off-site impacts in soil vapor related to this site.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

People may contact contaminants in soil if they dig below the surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. A subslab depressurization system has been installed in the southern tenant space to address the potential soil vapor intrusion. Environmental sampling indicates that soil vapor intrusion is not a concern offsite.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

Soil

RAOs for Public Health Protection

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

Soil Vapor

RAOs for Public Health Protection

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

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

Based on the results of the investigations at the site, the IRMs that have been performed, and the evaluation presented here, the Department is selecting No Further Action as the remedy for the site. This No Further Action remedy includes continued operation of the SSDS and the implementation of ICs/ECs as the remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

The remedy proposed is a Track 4: Restricted use with a site management remedy.

The proposed remedy is referred to as the No Further Action with Site Management remedy.

The elements of the proposed remedy are as follows:

1. Green Remediation

Green remediation principles and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows:

•Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;

•Reducing direct and indirect greenhouse gas and other emissions;

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•Increasing energy efficiency and minimizing use of non-renewable energy;

•Conserving and efficiently managing resources and materials;

•Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste; and

•Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Cover System

A site cover currently exists in areas not occupied by buildings and will be maintained to allow for commercial or industrial use of the site. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks or soil where the upper one foot of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for commercial or industrial use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3. Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 4 commercial cleanup at a minimum.

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

•require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

•allow the use and development of the controlled property for commercial or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

•restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and

•require compliance with the Department approved Site Management Plan.

4. Site Management Plan

A Site Management Plan is required, which includes the following:

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

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.
Engineering Controls: The soil cover discussed in Paragraph 2 and the sub-slab depressurization system completed as an IRM.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any future occupied buildings on the site or changes to existing buildings, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

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

c) An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:

- procedures for operating and maintaining the system(s); and
- compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

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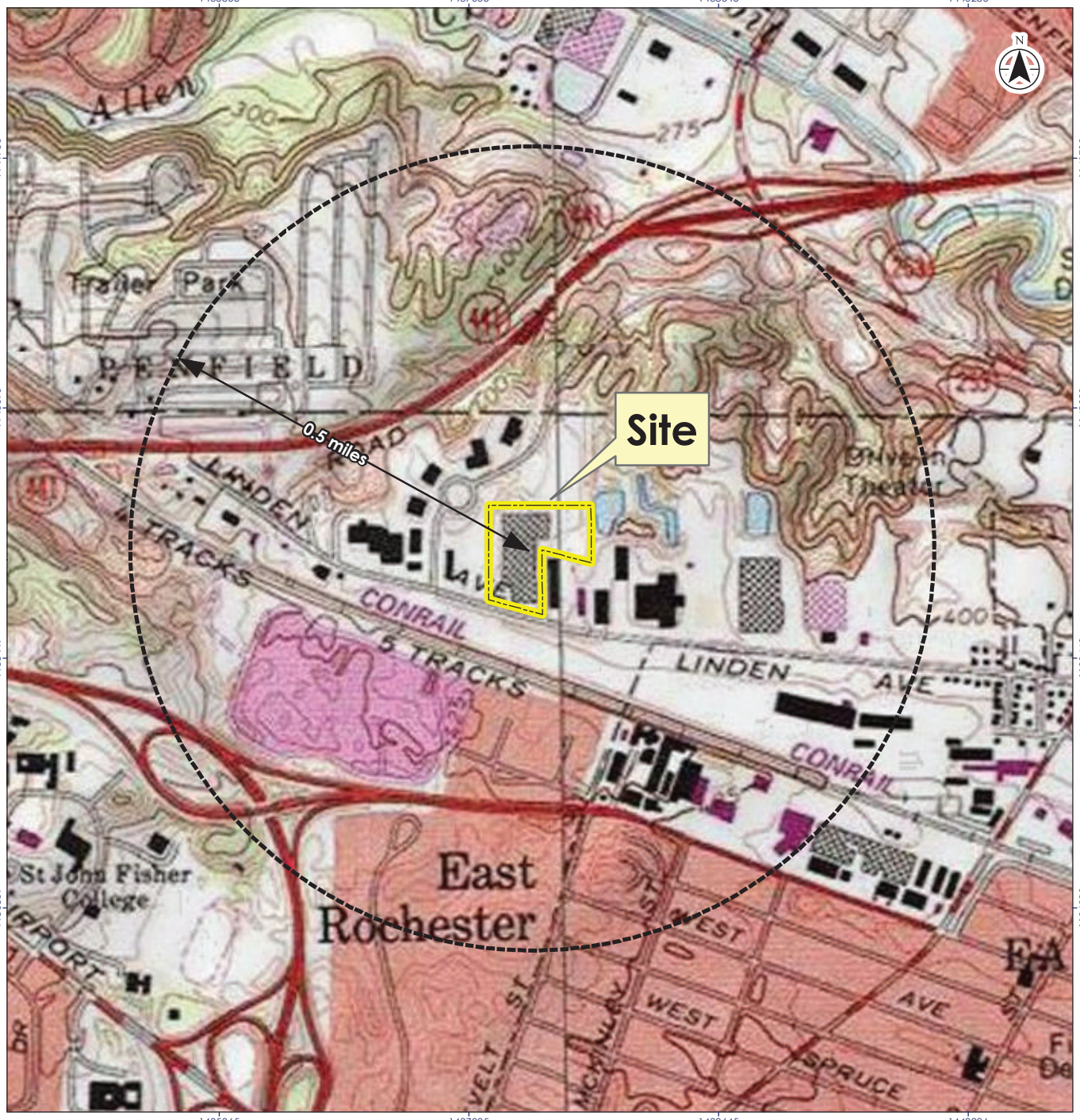

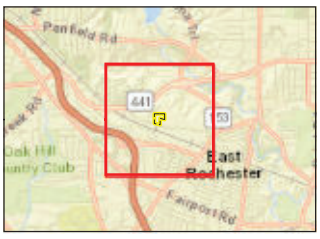

Legend

- Property Outline
- 1/2-mile buffer

0 400 800 1,200 Feet

1:12,000 (at original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. ArcGIS Basemaps: USA Topo Maps (main frame) and World Street Map (key map).

Stantec

Project Location
820 Linden Avenue
Pittsford, Monroe Co., NY

190500898
Prepared by LB on 2020-06-30
Technical Review by SRS on 2020-08-13
Independent Review by MPS/KI on 2020-08-13

Client/Project
820 Linden Ave Site
BCP Site #C828200
Alternatives Analysis Report

Figure No.
1

Title
Site Location Map

Stantec

Legend

- 2018 RI Composite Sample and 2020 SRI#2 Grab Sample Locations
- Approximate Edge of Pavement
- Approximate Location of Remedial Areas of Concern (see Note 4)
- Site Property Outline
- Building Outline
- JML Optical tenant space
- Newport tenant space
- Historical Building Usage
- Nearby Parcel Boundaries
- Jarl Extrusions Monitoring Well
- Storm Drain Outfall Locations

0 100 200 Feet

1:1,200 (At Original document size of 11x17)

Notes
1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Basemap sources: Orthoimagery (2015) downloaded from gis.ny.gov (Main Frame); ArcGIS World Street Map (Inset Frame).
3. Site building is occupied by two tenants: JML Optical in the southern building section and Newport Corporation in the northern building section. Both current tenants are optics manufacturing facilities.
4. RAOCs-1 through -4 were adressed via IRM#2 and RAOC-5 was addressed via IRM#4.

Project Location:
820 Linden Avenue
Pittsford, Monroe Co., NY

Prepared by LB on 2020-07-24
Technical Review by SRS on 2020-08-07
Independent Review by MPS/KI on 2020-08-10

190500898

Client/Project
820 Linden Ave Site
BCP Site #C828200
Construction Completion Report: IRM#2 and IRM#4

Figure No.
3

Title
Overview of RAOCs