

DECISION DOCUMENT

Tecumseh Phase IA Business Park
Brownfield Cleanup Program
Lackawanna, Erie County
Site No. C915218
March 2021



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

Tecumseh Phase IA Business Park
Brownfield Cleanup Program
Lackawanna, Erie County
Site No. C915218
March 2021

Statement of Purpose and Basis

This document presents the remedy for the Tecumseh Phase IA Business Park 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 Tecumseh Phase IA Business Park site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design: A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and 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 gases and other emissions;
- 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;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; 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. Excavation followed by treatment or off-site disposal of soil exceeding at least one or more of the following criteria (Figure 3):

- Grossly contaminated material, as defined in 6 NYCRR Part 375-1.2(u);
- Soil containing total PAHs exceeding 500 ppm;
- Soil containing arsenic exceeding 118 ppm; and
- Soil containing cadmium, lead, and/or mercury exceeding the Industrial Soil Cleanup Objectives.

Approximately 1,400 cubic yards of contaminated soil will be removed from the site.

Backfill: On-site soil which does not exceed the above excavation criteria may be used below the cover system described in remedial element 4 to backfill the excavation to the extent that a sufficient volume of on-site soil is available and establish the designed grades at the site.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil or complete the backfilling of the excavation and establish the designed grades at the site.

The site will be re-graded to accommodate installation of a cover system as described in remedy element 4.

3. **Ex-Situ Biological Degradation:** On-site soil exceeding PAHs over 500 ppm and grossly contaminated soils impacted by weathered petroleum will be excavated and subject to on-site biological remediation to remove VOCs and SVOCs. Excavated soil will be placed on polyethylene sheeting in approximately one to two-foot lifts. Aerobic microbial activity in the soil will be stimulated through aeration and the addition of moisture as necessary. The microbial activity results in degradation of absorbed petroleum product constituents through microbial respiration. Approximately 200 cubic yards of soil south of the Power House No. 1 Building and 100 cubic yards of soil east of the former pumping house will be excavated, as shown on Figure 3. Excavation will continue until confirmation sampling documents total PAHs less than 500 ppm and field evidence of gross contamination has been removed.

Pre and post analytical samples will be taken to determine effectiveness of treatment in addition to evaluation of pre and post field evidence of impact. Any material that does not meet the treatment requirements for re-use on-site below the cover system described in remedial element 4 will be disposed of off-site.

4. **Cover System:** A site cover (Figure 4) will be required to allow for commercial use of the site in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface

parking areas, sidewalks, building foundations and building slabs.

5. **Basement Water Removal:** Standing water in the Power House No. 1 basement will be extracted, treated, and discharged to the Buffalo Sewer Authority under a permit. Based on current building conditions, safety concerns exist, limiting the ability for visual assessment of the basement. Subsequent to water removal, the basement will be backfilled to support the floor of the new building. New monitoring wells will be installed downgradient of Power House No. 1 and will be monitored to determine if there is any impact to groundwater from the basement.

6. **Concrete Removal:** concrete exceeding EPA spill cleanup guidance levels for PCBs in Power House No. 1 will be removed and disposed off-site in accordance with local, state, and federal regulations.

7. **Building Material Abatement:** Regulated building materials and wastes that have the capability of impacting environmental media such as asbestos containing material and fallen or deteriorated lead-based paint will be abated in accordance with local, state, and federal regulations.

8. **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 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 Erie County DOH; and
- require compliance with the Department approved Site Management Plan.

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

1. 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 remedial element 8
Engineering Controls: The soil cover discussed in remedial element 4.

This plan includes, but may not be limited to:

- o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- o descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- o a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in remedial element 4 will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)

- o provisions for the management and inspection of the identified engineering controls;
- o maintaining site access controls and Department notification; and
- o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

- o monitoring of groundwater to assess the performance and effectiveness of the remedy; and
- o a schedule of monitoring and frequency of submittals to the Department.

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.

03/31/2021

Date

Michael Cruden

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

Tecumseh Phase IA Business Park
Lackawanna, Erie County
Site No. C915218
March 2021

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 has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

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 repositories:

DECInfo Locator - Web Application
<https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C915218>

Lackawanna Public Library
Attn: Jennifer Hoffman
560 Ridge Road
Lackawanna, NY 14218
Phone: 716-823-0630

NYSDEC

Attn: Andrew Zwack
270 Michigan Avenue
Buffalo, NY 14203-2915
Phone: 716-851-7220

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 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

Location: The Tecumseh Phase IA Business Park site is approximately 9.8-acres located in an industrial area at 1951 Hamburg Turnpike in the City of Lackawanna, Erie County. The site is part of a larger property that included the former Bethlehem Steel Company. The site is west of Route 5 and the Tecumseh Phase I Business Park, southeast of the Gateway Metroport and east of the remaining Tecumseh Redevelopment, Inc. (former Bethlehem Steel) property and Lake Erie.

Site Features: The site is a flat, vacant parcel that contains three large existing structures, roadways, and remnant foundations of former steel manufacturing buildings. The site is approximately 33,150 feet long and 135 feet wide. It is vegetated with natural grasses, shrubs and poplar trees typical of a primary-shrub young forest ecosystem. The site is developed with three vacant buildings historically used for support operations in the steel making process. Areas within the site boundary contain portions of overhead coke oven gas lines. The site is bisected by both the North and South Water Return Trenches. The overhead coke oven gas lines and the North and South Return Water Trenches are currently managed as part of the Bethlehem Steel site (Site No. 915009) under the RCRA and State Superfund programs. Cleanup of the overhead coke oven gas lines and the North and South Return Water Trenches will be completed under a Consent Order.

Current Zoning and Land Use: The site is zoned medium industrial and is currently vacant. Surrounding parcels include a rail corridor, the Tecumseh Phase I Business Park, and the Gateway Metroport.

Past Use of the Site: The site was formerly part of Bethlehem Steel Company's steel making operations. Steel production at the Bethlehem Steel property was discontinued in 1983 and coke production was ended in 2001. Specific processes performed on or proximate to the parcel included locomotive repair in the blowing engine house, steam generation in Boiler House No. 3 and Steam Station No. 1, and electric power generation in Power House No. 1.

Site Geology and Hydrology: The site is mostly filled land with between two to eight feet of steel and iron-making slag and other fill material. Underlying the fill materials are lacustrine silts and clays. Native materials are encountered from about three to nine feet below ground surface (fbgs). Bedrock is Middle Devonian, consisting of Levanna shale and Stafford limestone of the Hamilton Group and Skaneateles Formation. Bedrock varies from about 24 feet deep to 45 feet deep.

Due to the porous nature of the slag/soil fill there is very little ponding of storm water, or surface runoff as most of the precipitation seeps into the highly permeable slag/soil fill. Ground water is present at approximately six feet below grade and flows west towards the Gateway Metroport ship canal and Lake Erie.

A site location map and site plan are attached as Figures 1 and 2 respectively.

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 Remedial Investigation (RI) 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 RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

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
- building material

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:

- | | |
|---------|--|
| arsenic | petroleum products |
| cadmium | polychlorinated biphenyls (PCB) |
| lead | polycyclic aromatic hydrocarbons (PAHS), |
| mercury | total |

The contaminant(s) of concern exceed the applicable SCGs for:

- soil
- groundwater
- building material

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 has been completed at this site based on conditions observed during the RI.

Railroad Realignment Hotspot Removal

An IRM was completed in 2013 across Tecumseh Business Parks I-III and IA in conformance with a Department approved IRM Work Plan. Soils visually impacted with a black tar-like material were discovered on the IA and I-5 site joining border during removal of a former footer foundation conducted in support of a realignment of the South Buffalo Railroad. Approximately 88 tons of impacted soil/fill from the IA site were excavated and transported for off-site disposal at a permitted facility. Excavation continued until visual tar was not encountered

The excavation was restored with placement of backfill meeting the soil cleanup objectives (SCOs) for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use and establishment of an active rail line. Cover installed as part of the IRM will be managed under the site-specific Site Management Plans for IA and I-5. These IRM activities are documented in the IRM Construction Completion Report dated January 2015.

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.

The RI sampled surface and subsurface soils, groundwater, and porous building surfaces. Based upon investigations conducted to date, the primary contaminants of concern (COCs) are metals, polycyclic aromatic hydrocarbons (PAHs), and weathered petroleum impacts in soil and to a lesser extent, polychlorinated biphenyls (PCBs) found on building surfaces.

Surface Soil: A total of 15 samples were collected from 0 to 2 inches below ground surface (bgs) with 12 of the samples being analyzed for PCBs, eight for metals, four for target compound list (TCL) semi-volatile organic compounds (SVOCs), and one for TCL volatile organic compounds (VOCs). No PCBs or VOCs were detected above commercial soil cleanup objectives (CSCOs). Total PAHs were detected at 2,877 parts per million (ppm) exceeding the site-specific action limit (SSAL) of 500 ppm. The following metals were detected in at least one location exceeding CSCOs:

- arsenic up to 158 ppm (CSCO 16 ppm)
- barium up to 6,630 ppm (CSCO 400 ppm)

- cadmium up to 246 ppm (CSCO 9.3 ppm)
- lead up to 8,050 ppm (CSCO 1,000 ppm)
- manganese up to 17,300 ppm (10,000 ppm)
- mercury up to 320 ppm (CSCO 2.8 ppm)

Subsurface Soil: A total of 17 samples were collected from depths ranging from 0.5 to 7.5 feet bgs and analyzed for SVOCs, PCBs, and metals with six samples being analyzed for VOCs. No PCBs or VOCs were detected above CSCOs. Total PAHs were detected up to 1,837 ppm exceeding the SSAL of 500 ppm. The following metals were detected in at least on location exceeding CSCOs:

- arsenic up to 120 ppm (CSCO 16 ppm)
- lead up to 2,530 ppm (CSCO 1,000 ppm)
- mercury up to 30.5 ppm (CSCO 2.8 ppm)

Weathered petroleum and tar impacted soils were identified in an approximate 4,700 square feet area of a former aboveground storage tank south of the Power House No. 1 building ranging from 0.5 to 6 feet bgs.

Groundwater: Samples were collected from three on-site monitoring wells and three off-site upgradient wells, all of which were installed in the overburden material. Samples were analyzed for TCL VOCs, TCL SVOCs, PCBs, and select metals. Samples collected from a subset of the on-site wells were analyzed for per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. No VOCs, SVOCs, or PCBs were detected above groundwater quality standards (GWQS). 1,4-dioxane was not detected above the screening level of 1 part per billion (ppb). Cyanide was detected at 1,000 ppb exceeding the GWQS of 200 ppb at one on-site location. Manganese was detected up to 1,700 ppb and was found exceeding the GWQS of 300 ppb in all three on-site monitoring wells. Manganese was detected in surface soil at the north end of the site exceeding CSCOs and Protection of Groundwater SCOs but was not detected in the majority of surface and subsurface sampling results. The exceedances of manganese are likely attributed to the natural aquifer conditions. Lead was detected exceeding GWQS in an off-site upgradient monitoring well but was not detected in the on-site monitoring wells. The metals iron and sodium were detected exceeding GWQS, but are likely attributed to natural aquifer conditions, not the contamination at the site. Groundwater pH in two of the on-site monitoring wells was measured as low as 6.17, slightly outside of the acceptable range of 6.5 to 8.5.

The PFAS compounds PFOA and PFOS were detected above the guidance value of 10 parts per trillion (ppt). PFOA was detected at 17.3 at one location. PFOS was detected at 10.5 ppt in at one location. The slight exceedances of guidance values do not indicate the presence of a source of PFOA or PFOS contamination.

A single sample was collected from groundwater within the Power House No. 1 basement and analyzed for TCL VOCs, TCL SVOCs, TAL metals, and PCBs. No VOCs, or SVOCs were detected above GWQS. The metals arsenic (30 ppb, GWQS 25 ppb), cadmium (23 ppb, GWQS 5 ppb), chromium (71 ppb, GWQS 50 ppb), lead (2,300 ppb, GWQS 25 ppb), and mercury (67 ppb, GWQS 0.7 ppb) were detected exceeding GWQS. PCBs were detected at 14 ppb, exceeding

the GWQS of 0.09 ppb. The GWQS exceedances detected in the basement groundwater are not consistent with the groundwater sampling results from on-site monitoring wells and suggests sources of contamination are likely present within the Power House No. 1 basement.

Groundwater in the overburden generally flows west towards the Gateway Metroport Ship Canal and Lake Erie. The groundwater flow direction in conjunction with the narrow width of the site indicates that off-site transport is possible.

Building Surfaces: Building surfaces were sampled for PCBs after removal of electrical transformers and cleaning of dielectric fluid stained concrete. Wipe sample results ranging from 16.6 micrograms per 100 square centimeters (ug/100 cm²) to 74.8 ug/100 cm² were identified in an approximate 88 square foot area, exceeding the EPA PCB spill cleanup standards of 10 ug/100 cm².

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*.

The site is fenced, which restricts public access. However, persons who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. 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 the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into nearby 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. Environmental sampling indicates that there is no concern for potential exposures from soil vapor intrusion.

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.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

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

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation, Soil Treatment, and Cover System remedy.

The elements of the selected remedy, as shown in Figures 3 and 4, are as follows:

1. Remedial Design: A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

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- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
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8. **Imposition of an institutional control in the form of an environmental easement for the controlled property which will:**

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

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Engineering Controls: The soil cover discussed in remedial element 4.

This plan includes, but may not be limited to:

- o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- o descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- o a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in remedial element 4 will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
- o provisions for the management and inspection of the identified engineering controls;

- o maintaining site access controls and Department notification; and
 - o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
2. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- o monitoring of groundwater to assess the performance and effectiveness of the remedy; and
 - o a schedule of monitoring and frequency of submittals to the Department.



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 www.delorme.com



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SITE LOCATION AND VICINITY MAP
 REMEDIAL INVESTIGATION/ALTERNATIVES ANALYSIS REPORT

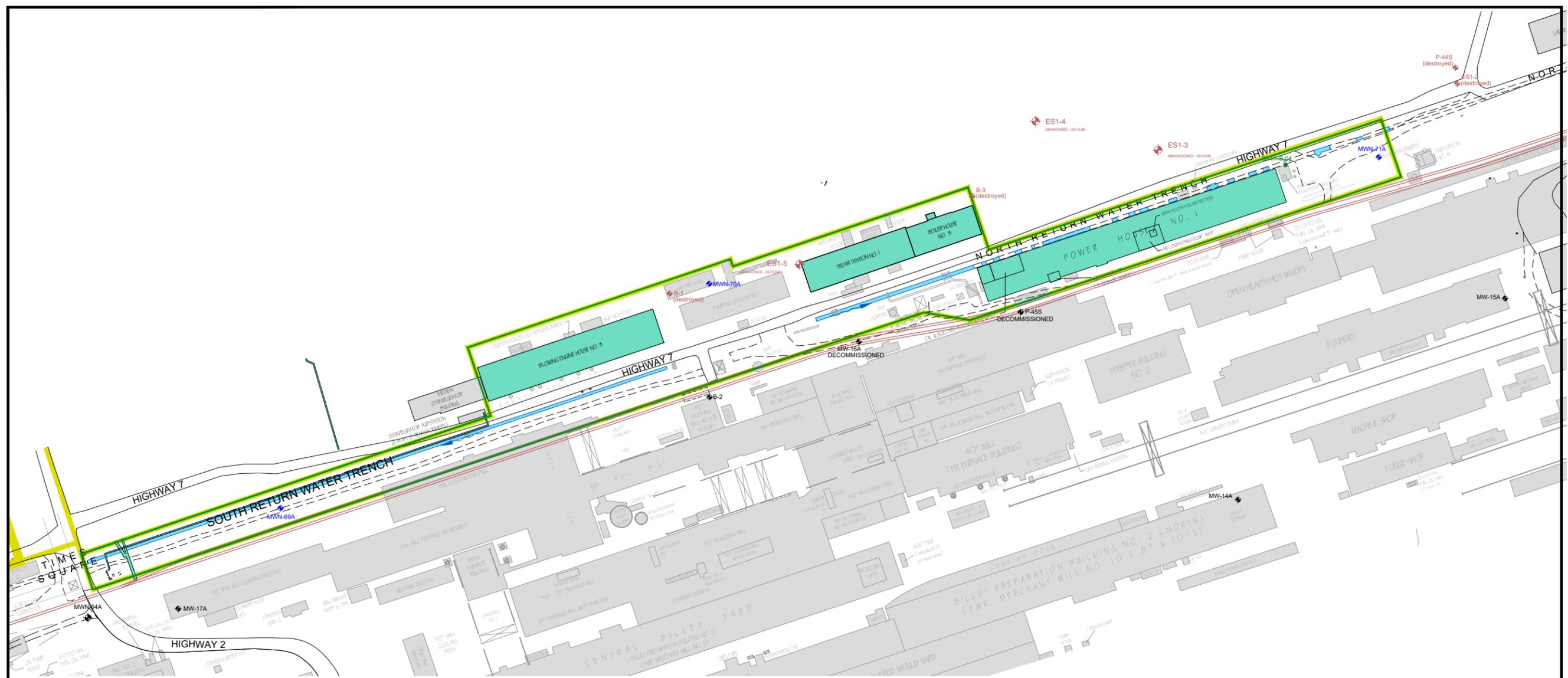
PHASE IA BUSINESS PARK AREA
 LACKAWANNA, NEW YORK

PREPARED FOR
 TECUMSEH REDEVELOPMENT INC.

PROJECT NO.: 0071-010-350

DATE: JULY 2011

DRAFTED BY: BCH



LEGEND:

- TECUMSEH PROPERTY BOUNDARY
- PHASE IA BPA PROPERTY BOUNDARY (see Note 1)
- EXISTING ON-SITE BUILDING / STRUCTURE
- CONCRETE, FOUNDATION, RUINS, ETC. (shape & size varies)
- EXISTING OFF-SITE BUILDING / STRUCTURE
- DEMOLISHED BUILDING AND HISTORICAL FEATURE (see Notes 2 & 3)
- UTILITY POLE
- EXISTING OFF-SITE MONITORING WELL
- DECOMMISSIONED OFF-SITE PIEZOMETER
- PHASE IA BPA MONITORING WELL (3)
- ABANDONED MONITORING WELL

NOTES:

1. The north and south return water trenches are excluded from the Phase IA BPA site.
2. Building locations are based on historical surveys and maps, all locations should be considered approximate.
3. All buildings known to exist on site since 1944 are shown, some buildings were expanded or demolished following 1944, maximum building extents are shown.



SCALE: 1 INCH = 500 FEET
SCALE IN FEET
(approximate)

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635



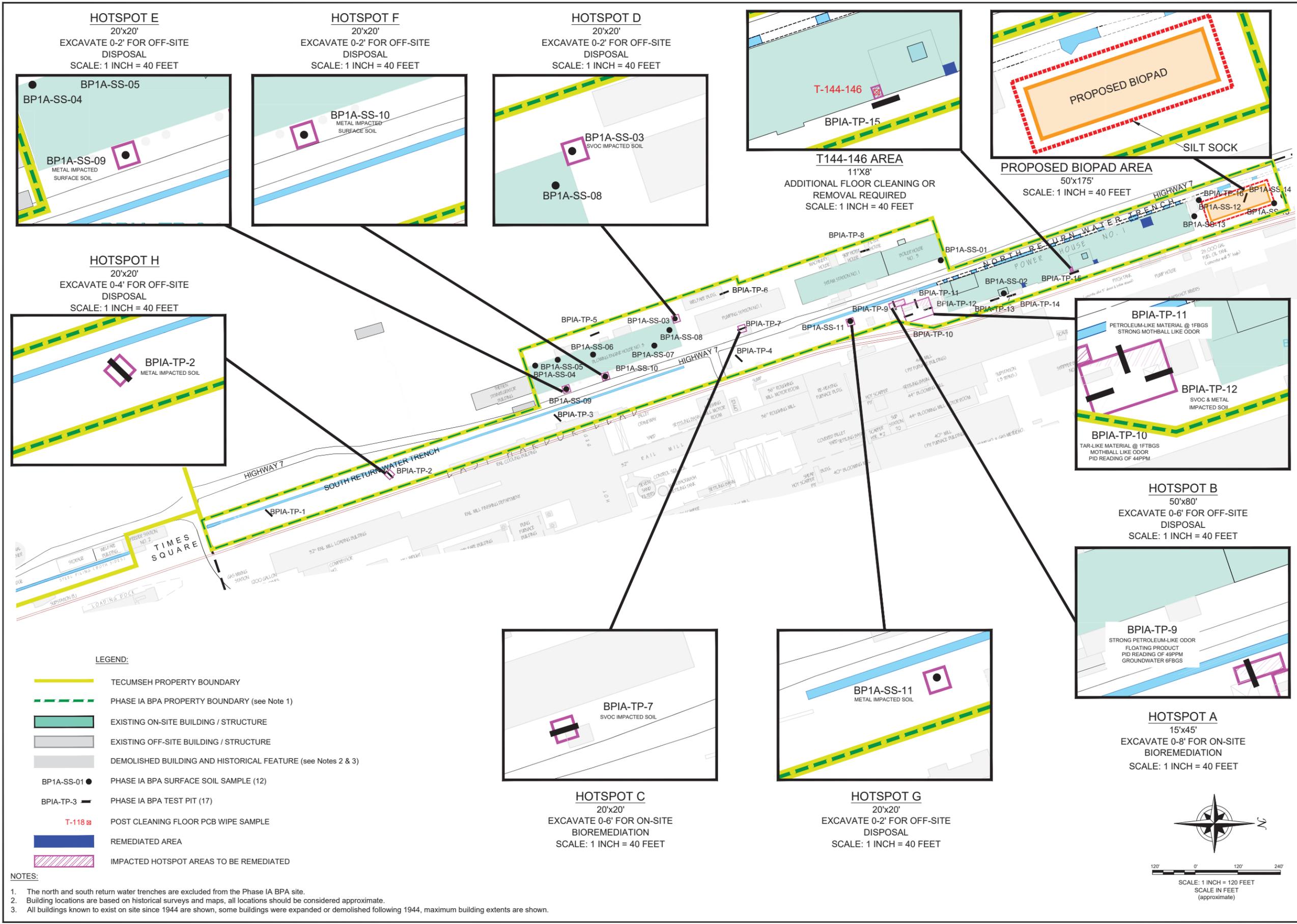
JOB NO.: 0071-010-350

SITE PLAN
REMEDIAL INVESTIGATION ALTERNATIVES ANALYSIS REPORT
PHASE IA BUSINESS PARK AREA
LACKAWANNA, NEW YORK

PREPARED FOR
TECUMSEH REDEVELOPMENT INC.

FIGURE 2

EC0207 (10/14) Remedial Action Work Plan for Phase IA BPA Remediation at Times Square, Lacksawanna, New York. Prepared by TurnKey Environmental, LLC.

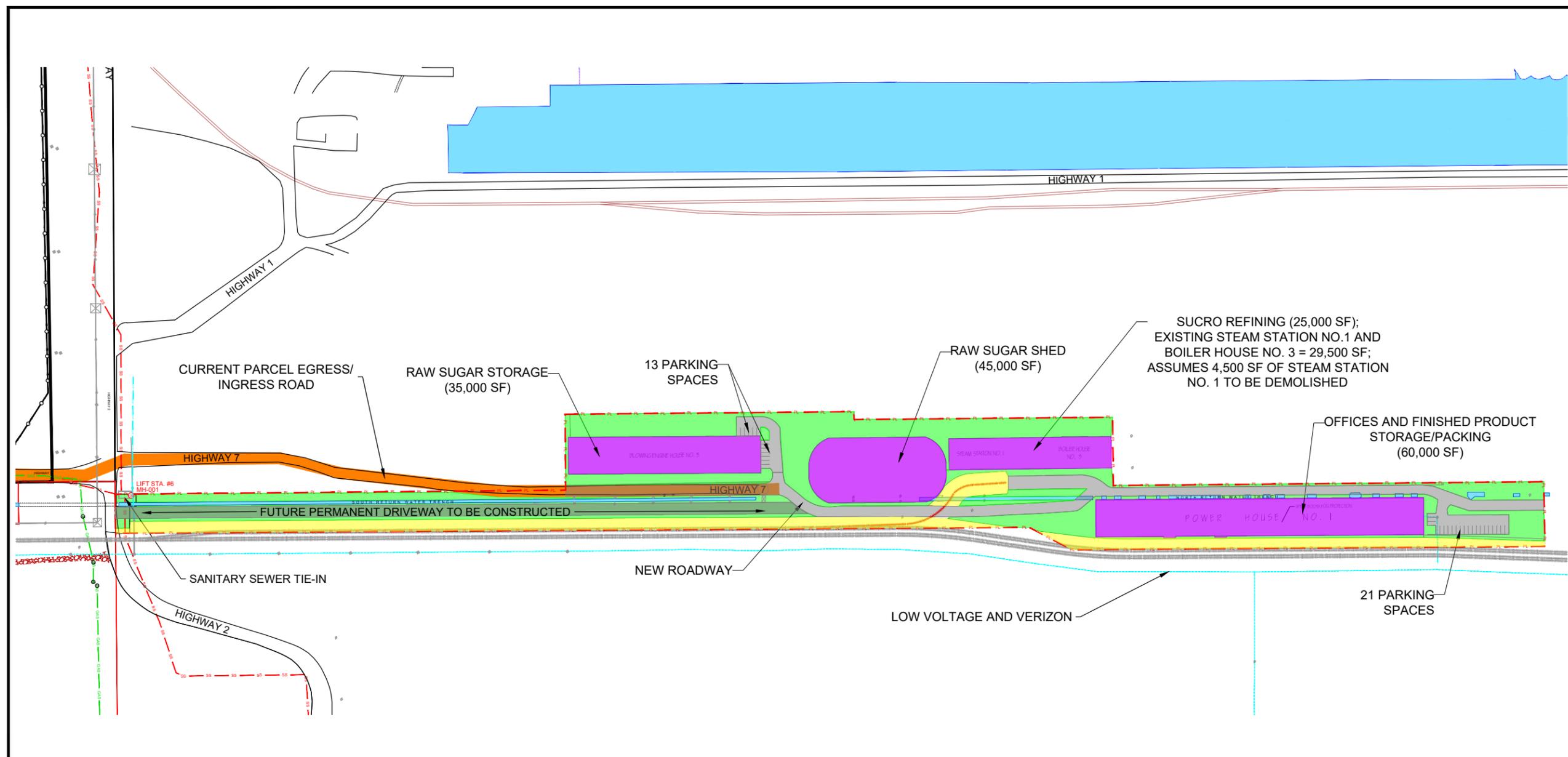


2556 HAMBURG TURNPIKE
 SUITE 300
 LACKAWANNA, NY 14218
 (716) 836-0635
 JOB NO.: 0071-020-400

NO.	BY	DATE	REMARKS

EXTENT OF IMPACTS AND PLANNED REMEDIAL MEASURES
 REMEDIAL ACTION WORK PLAN
 PHASE IA BUSINESS PARK
 BCP SITE NO. CR15218
 LACKAWANNA, NEW YORK
 PREPARED FOR
 TECUMSEH REDEVELOPMENT INC.

FIGURE 3



SUCRO REFINING (25,000 SF);
EXISTING STEAM STATION NO.1 AND
BOILER HOUSE NO. 3 = 29,500 SF;
ASSUMES 4,500 SF OF STEAM STATION
NO. 1 TO BE DEMOLISHED

OFFICES AND FINISHED PRODUCT
STORAGE/PACKING
(60,000 SF)

RAW SUGAR SHED
(45,000 SF)

RAW SUGAR STORAGE
(35,000 SF)

13 PARKING
SPACES

21 PARKING
SPACES

CURRENT PARCEL EGRESS/
INGRESS ROAD

HIGHWAY 7

FUTURE PERMANENT DRIVEWAY TO BE CONSTRUCTED

SANITARY SEWER TIE-IN

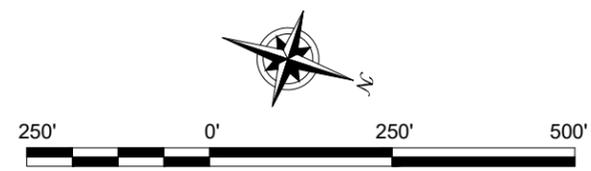
HIGHWAY 2

NEW ROADWAY

LOW VOLTAGE AND VERIZON

LEGEND:

- BOUNDARY BCP SITE PARCEL IA
- SUCRO BUILDINGS
- PLANNED GREENSPACE
- NATURAL GAS (NATIONAL FUEL) EXISTING GAS LINE
- SANITARY SEWER PIPE
- ELECTRIC (LOW VOLTAGE)
- EXISTING RAILROAD
- NEW PRIVATE RAILROAD SPUR
- LIFT STA. #6
- SANITARY SEWER LIFT STATION
- BOX TOWER FOR OVERHEAD POWER
- CURRENT SITE EGRESS/INGRESS TO BE REPLACED BY FUTURE PERMANENT DRIVEWAY (TO BE CONSTRUCTED)
- APPROVED RAILROAD BALLAST AND TIES COVER (MIN. 1')
- ASPHALT PAVEMENT



SCALE: 1 INCH = 250 FEET
SCALE IN FEET
(approximate)

PROPOSED SITE PLAN
APPLICATION FOR SITE PLAN APPROVAL:

PHASE IA BUSINESS PARK
BCP SITE NO. C915218
LACKAWANNA, NEW YORK
PREPARED FOR
SUCRO REAL ESTATE NY, LLC

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0555-020-003

FIGURE 4

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