Periodic Review Report

Tecumseh Phase III Business Park Site III-1 BCP Site C915199

2303 Hamburg Turnpike Lackawanna, New York

April 2020 0071-014-630

Prepared For:

Tecumseh Redevelopment Inc. Richfield, Ohio

Prepared By:





PERIODIC REVIEW REPORT

TECUMSEH PHASE III BUSINESS PARK SITE III- 1 (BCP SITE No. C915199)

2303 HAMBURG TURNPIKE LACKAWANNA, NEW YORK

April 2020 0071-014-630

Prepared for:

Tecumseh Redevelopment Inc.

Prepared By:



in association with



TurnKey Environmental Restoration, LLC Benchmark Environmental Engineering & Science, PLLC 2558 Hamburg Turnpike, Suite 300 Buffalo, NY 14218 (716)856-0599

PERIODIC REVIEW REPORT

Sites III- 1: C915199

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1.0 Introduction

TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering and Science, PLLC (Benchmark) has prepared this Periodic Review Report (PRR) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C915199, located at 2303 Hamburg Turnpike in the City of Lackawanna, Erie County, New York.

This PRR has been prepared for the Subject BCP Sites in accordance with NYSDEC DER-10 *Technical Guidance for Site Investigation and Remediation* (Ref 1). Institutional and Engineering Control (IC/EC) Certification Forms have been completed for the Sites and are included in Appendix A.

This PRR and the associated certifications have been completed on behalf of Tecumseh Redevelopment, Inc. to document post-remedial activities covered by the Site Management Plan (Ref. 2). The post remedial period covered by this PRR is: March 15, 2017 to March 15, 2020.

1.1 Site Background

In March of 2007 Tecumseh Redevelopment Inc. (Tecumseh) entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) to investigate and remediate an approximate 150-acre property located in Lackawanna, New York. The property, deemed the "Phase III Business Park Site" is located in the County of Erie, New York and encompasses tax parcel numbers 141.15-1-1, 141.15-1-2, and part of tax parcel number 141.11-1-50 per Erie County Tax Map records. The Phase III Business Park Site is bounded by Gateway Metroport Ship Canal and property owned by Gateway Trade Center to the north; the South Buffalo Railroad Company to the south; Phase II Business Park Site and the South Return Water Trench (SRWT) to the east; and other Tecumseh property to the west (see Figures 1 and 2). The 150-acre Phase III Business Park was originally deemed Brownfield Cleanup Program (BCP) Site No. C915199, but was subsequently subdivided into ten smaller parcels to facilitate remediation and redevelopment (see Figure 2). On August 20, 2012, the original BCA for Site C915199 was amended to cover the smaller Site III-1, with separate BCAs



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issued and executed for the remaining nine BCP Sites (i.e., Sites III-2 through III-10, having BCP Site Nos. C915199b through C915199j).

Site III-1 encompassing 14.62 acres was remediated as a Track 4 commercial use site in accordance with the NYSDEC approved Interim Remedial Measures (IRM) Work Plan dated September 2011 (Ref-4). The property is currently used as a lumber storage and distribution yard

1.2 Remedial History

1.2.1 Phase III Business Park

The approximate 150-acre Phase III Business Park was formerly part of the Bethlehem Steel Corporation (BSC) Lackawanna Works and housed several facilities used in BSC's) steel manufacturing processes. Specific processes and steel making facilities performed on or proximate to the subject BCP Sites included:

- Open Hearth Furnaces
- Basic Oxygen Furnace
- Mold Warming and Preparation
- Electrical Substations
- Wastewater Treatment

Remedial Investigation (RI) activities on the Phase III Business Park were initiated in August 2008, with additional activities undertaken in late 2009 through early 2010. Some supplemental investigation work was also completed in April 2012.

The RI identified several Constituents of Concern (COCs) that were generally present across widespread areas of the Phase III Business Park site, primarily in site soils and to a lesser extent in groundwater. These included polyaromatic hydrocarbons (PAHs), arsenic, lead, and mercury. Isolated areas of petroleum impact were also encountered. The Remedial Investigation/Alternatives Analysis (RI/AA) Report (Ref. 3) recommended remediation of "hotspot" slag/fill (characterized by more pronounced levels of COCs) and isolated groundwater/saturated soil impacts (affecting only select sites in the Phase III

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Business Park), with cover placement recommended as the final remedial measure under a Track 4 Cleanup approach. Additional requirements included development and adherence to a Site Management Plan (SMP) and filing of an Environmental Easement to restrict use of the Phase III Business Park property to commercial and industrial applications and to place other limitations on post-redevelopment activities.

1.2.2 Site III- 1

Investigative activities specific to Site III-1 were performed in August 2008 and included the completion of eight test pits (identified as BP3-TP-61, BP3-TP-62, BP3-TP-63, BP3-TP-64, BP3-TP-65, BP3-TP-66, BP3-TP-79, and BP3-TP-80) and the installation of two monitoring wells (identified as MWS-30A and MWS-33A). Soil and groundwater samples were collected as detailed in the Work Plan.

The nature and extent of metals contamination at the Site is consistent with the former site use as a steel manufacturing facility. Fill soil exceeds unrestricted and residential use site cleanup objectives (SCOs). When compared to the commercial SCOs, arsenic and mercury are found to exceed the SCOs. Arsenic was found ranging from 6.3 ppm to 25.7 ppm exceeding the commercial SCO of 16 ppm in 6 of 7 of the samples. Mercury was found from 0.029 ppm to 4.8 ppm exceeding the commercial SCO of 2.8 ppm in only one sample. The only SVOCs exceeding commercial SCOs were benzo(a)pyrene from 0.055 ppm to 2.8 ppm with a SCO of 1 ppm and dibenzo(a,h)anthracene from 0.16 ppm to 0.6 ppm exceeding the SCO of 0.56 ppm.

Groundwater sampling for SVOCs, VOCs and metals indicated that groundwater at the site does not exceed groundwater quality standards (GwQS). However, the pH of groundwater slightly exceeds GwQS. Site groundwater is not used at the site and is restricted from use for either potable or non-potable purposes without treatment by an environmental easement.

1.2.3 Site III-1 -IRM Activities

Site III-1 was remediated in October and November 2011 in accordance with the remedy selected by the NYSDEC in the IRM Work Plan dated September 2011.

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The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

- 1. Construction of a new rail spur into the Site consisting of one foot of stone ballast and rail ties to prevent human exposure to remaining contaminated soil/fill remaining at the Site.
- 2. Construction and maintenance of a cover system consisting of one foot of Beneficial Use Determination (BUD)-approved slag material (NYSDEC BUD #555-9-15) in areas outside of the newly-constructed rail spur to prevent human exposure to remaining contaminated soil/fill remaining at the Site (see Figure 3).
- 3. Execution and recording of an Environmental Easement to restrict land use, disallow use of untreated groundwater, and prevent future exposure to any contamination remaining at the Site.
- 4. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.
- 5. Periodic certification of the institutional and engineering controls listed above.

1.3 Compliance

At the time of the Site inspection (February 24, 2020), the Site was fully compliant with the NYSDEC- approved SMP (Ref 2).

1.4 Recommendations

Based on observations recorded during the annual inspection and IC/EC certification, no modifications are recommended at this time. However, based upon the record of conformance with SMP requirements Tecumseh requests that the annual PRR reporting frequency be reduced to triennial reporting.



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2.0 SITE OVERVIEW

All of the remediated properties within the Phase III Business Park are subject to a comprehensive, site-wide SMP which identifies requirements for monitoring and maintenance of engineering and institutional controls and procedures for post-remedial excavation and related activities. Specific requirements affecting individual Sites within Phase III Business Park are included as appendices to the comprehensive plan. The SMP is updated as additional Sites within the Phase III Business Park are remediated.

3.0 REMEDY PERFORMANCE

A post-remedial site inspection involving a walk-over of the Sites covered by this PRR was performed to visually observe and document the use of the Site for commercial/industrial use, confirm absence of site groundwater use, inspect the cover system integrity, and verify conformance with other requirements under the SMP. As further described in Section 4.3, the site inspection completed during this reporting period indicates that the controls are in-place and functioning as intended in accordance with the SMP.

The completed IC/EC Certification forms and site photographs are included in Appendices A and B, respectively.



4.0 SITE MANAGEMENT PLAN

A site-wide SMP was prepared for the Phase III Business Park and approved by the Department in December 2013. Parcel-specific SMP requirements for Site III-1 were added by Addenda in July 2015 and are presented in SMP appendix H1. Key components of the SMP are described below.

4.1 Engineering and Institutional Control (IC/EC) Plan

Since remaining contaminated soil/fill and groundwater exists beneath the Phase III Business Park, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. The Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs on the Sites within the Phase III Business Park.

4.1.1 Institutional Controls

The following institutional controls apply to all Sites within the Phase III Business Park:

- The use and development of the property is restricted to commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- Groundwater cannot be used as a source of potable or process water, without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or County DOH;
- All Sites must comply with the Department approved Site Management Plan; and
- The remedial party or site owner must complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3.)

4.1.2 Engineering Controls

Engineering controls covering Sites within the Phase III Business Park include:

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 Cover System – The cover system, including demarcation layer, railroad ballast, and BUD-approved slag (NYSDEC BUD # 555-9-15) must be maintained in compliance with the SMP.

At the time of the site inspection, the Sites covered by this PRR were fully compliant with all engineering and institutional control requirements.

4.2 Excavation Work Plan

An Excavation Work Plan (EWP) was included in the approved-SMP for the Phase III Business Park. The Excavation Work Plan provides guidelines for the management of soil and fill material during any future intrusive actives. Any intrusive work that will penetrate the cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system, must be performed in compliance with the EWP and must also be conducted in accordance with a site-specific Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) meeting the minimum requirements of the sample HASP and CAMP included with the SMP.

4.2.1 Activities Subject to EWP During Reporting Period

No intrusive activities requiring management of on-Site soil or fill material; placement of backfill materials or disturbance of the cover system occurred at the Site during the reporting period covered by this PRR.

4.3 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines requirements for certifying and attesting that the institutional controls and engineering controls employed on the Sites are unchanged from the original design and/or previous certification. The Annual Certification includes a Site Inspection and completion of the NYSDEC's IC/EC Certification Form. The Site inspection is intended to verify that the IC/ECs:

• Are in place and effective.

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- Are performing as designed.
- That nothing has occurred that would impair the ability of the controls to protect the public health and environment.
- That nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls.
- Access is available to the Site to evaluate continued maintenance of such controls.

Inspection of Site III-1 was conducted by Mr. Thomas Forbes, P.E. of TurnKey-Benchmark on February 24, 2020. Mr. Forbes is a licensed and registered NY State Professional Engineer and meets the requirements of a Qualified Environmental Professional (QEP) per 6NYCRR Part 375.12. No observable indication of intrusive activities was noted during the Site inspection.

The completed Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Forms are included in Appendix A. A PRR photo log is included in Appendix B.

4.4 Operation, Monitoring and Maintenance Plan

The remedy for Sites III-1 does not rely on any mechanical systems such as sub-slab depressurization or soil vapor extraction, to protect public health and the environment. Therefore, an Operation and Maintenance Plan is not required.



5.0 GROUNDWATER MONITORING

There are no post-remedial groundwater monitoring requirements for Site III-1 per the NYSDEC-approved SMP.



6.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations are as follows:

- At the time of the Site inspection, Site III- 1 was in compliance with the SMP.
- Based upon the record of conformance with SMP requirements, Tecumseh requests that the annual PRR reporting frequency be reduced to triennial reporting with annual inspections.

No other modifications are recommended for the Site at this time.



7.0 DECLARATION/LIMITATION

This report has been prepared for the exclusive use of Tecumseh Redevelopment Inc. The contents of this report are limited to information available at the time of the site inspection. The findings herein may be relied upon only at the discretion of Tecumseh Redevelopment Inc. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC and Benchmark Environmental Engineering and Science, PLLC.

8.0 REFERENCES

- 1. 2013. New York State Department of Environmental Conservation. DER-10/Technical Guidance for Site Investigation and Remediation. May 3.
- 2. 2013. TurnKey Environmental Restoration, LLC. Site Management Plan for Tecumseh Phase III Business Park Appendix H-1 Site III-1. Revised July 2015.
- 3. 2012. TurnKey Environmental Restoration, LLC. Remedial Investigation/Alternatives Analysis Report for Phase III Business Park, Lackawanna, New York. Revised July 2012.
- 4. 2011. TurnKey Environmental Restoration, LLC and Benchmark Environmental Engineering & Science, PLLC. *Interim Remedial Measures (IRM) Work Plan, Lumber Yard Relocation Phase III Business Park, Lackawanna, New York, BCP Site No. C915199*. August 2011.
- 5. 2014. TurnKey Environmental Restoration, LLC and Benchmark Environmental Engineering & Science, PLLC. Final Engineering Report, Business Park Sub-parcel III-1, Lackawanna, New York, BCP Site C915199. July 2014.



FIGURES



FIGURE 1





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

PROJECT NO.: 0071-014-630

DATE: MARCH 2020

DRAFTED BY: CCB

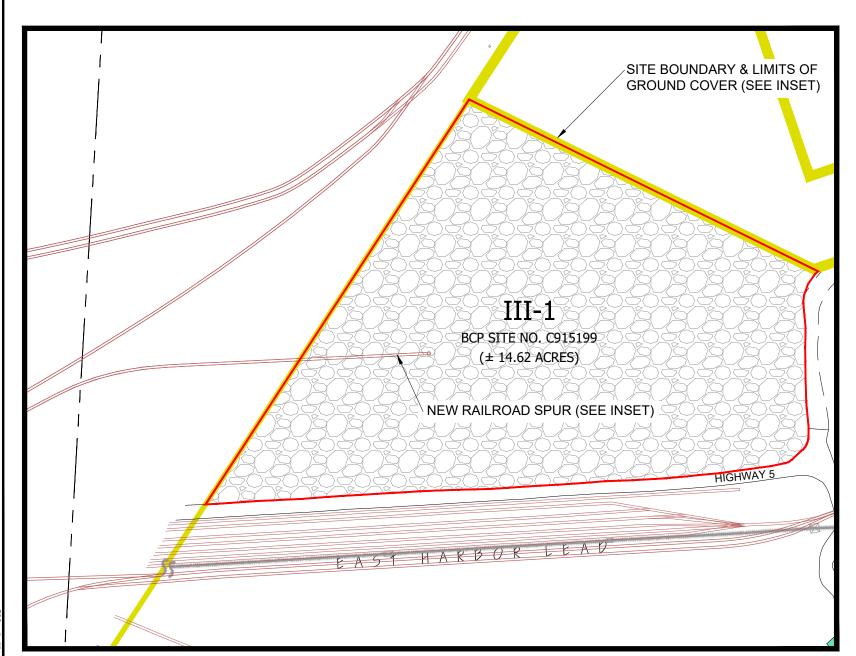
PERIODIC REVIEW REPORT

TECUMSEH PHASE III BUSINESS PARK SITE III-1 LACKAWANNA, NEW YORK PREPARED FOR

TECUMSEH REDEVELOPMENT INC.

DISCLAIMER

PROPERTY OF TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENVIRONMENTAL RESTORATION, LLC.



LEGEND:

TECUMSEH PROPERTY BOUNDARY

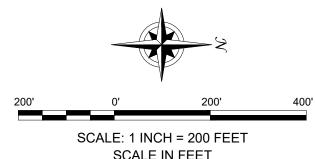
EXISTING RAILROAD TRACK

SITE III-1 BOUNDARY

1' BUD-APPROVED SLAG COVER OVER **DEMARCATION**

NOTES:

1. UTILITY LOCATIONS ARE BASED ON HISTORICAL SURVEYS AND MAPS, ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.



SCALE IN FEET (approximate)

FIGURE 3

COVER SYSTEM SITE-WIDE

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JOB NO.: 0071-014-630

APPENDIX A

INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORMS





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



Si	te No.	C915199	Site Details	Box 1
		e Site III-1 Tecumseh Phas	en III Business Bark	
Ci		ess: 2303 Hamburg Turnpike ı: Lackawanna rie	e Zip Code: 14218	
Sit	te Acrea	age: 14.620		
Re	eporting	Period: March 15, 2017 to N	March 15, 2020	
				YES NO
1.	Is the	information above correct?		
	If NO,	include handwritten above o	or on a separate sheet.	
2.		ome or all of the site property ap amendment during this Re	y been sold, subdivided, merged, eporting Period?	or undergone a
3.		nere been any change of use SNYCRR 375-1.11(d))?	at the site during this Reporting	Period
4.		any federal, state, and/or loc at the property during this Re	al permits (e.g., building, discharge porting Period?	ge) been issued
			ns 2 thru 4, include documentate eviously submitted with this ce	
5.	Is the	site currently undergoing dev	velopment?	
				Box 2
				YES NO
6.		current site use consistent w nercial and Industrial	rith the use(s) listed below?	
7.	Are all	I ICs/ECs in place and function	oning as designed?	
			R QUESTION 6 OR 7 IS NO, sign HE REST OF THIS FORM. Other	
Α (Correcti	ive Measures Work Plan mus	st be submitted along with this fo	orm to address these issues.
Sig	inature o	of Owner, Remedial Party or D	Designated Representative	Date

			Box 2A
Assessment regarding offsite colling of the colling	ed that assumptions made in the Quentamination are no longer valid? ion 8, include documentation or expreviously submitted with this cellitative Exposure Assessment still values assment must be certified every five youn 9, the Periodic Review Report in Assessment based on the new as	vidence rtification form. alid? years) must include an	YES NO
SITE NO. C915199			Вох 3
Description of Institutional Corparcel 141.11-1-50 Institutional Control Description: Adherence to Site Management Plane Restriction to commercial re-use Prohibition of groundwater use Allowance for Departmental access Requires a Periodic Review and Report	eh Redevelopment Inc.	Institutional Control Ground Water Use Soil Management P Landuse Restriction Site Management P IC/EC Plan O&M Plan	Restriction Plan Plan Plan
Description of Engineering Con Parcel 141.11-1-50 Engineering Control Description: Beneficial Use Determination (Slag) con	Engineering Control Cover System		Box 4

В	ОХ	5	

	Periodic Review Report (PRR) Certification Statements
	I certify by checking "YES" below that:
	 a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
	 b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.
	YES NO
¥6	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:
	(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
	(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
	(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
	(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
	(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.
	YES NO
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.
A	Corrective Measures Work Plan must be submitted along with this form to address these issues.
	ignature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS SITE NO. C915199

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

Keith A. Nagel print name		1ecumseh Redevelop 4020 Kinross Lakes P	ment, Inc. arkway, Richfield, OH 44286
		print business add	SS ,
am certifying as	Owner		(Owner or Remedial Party)
for the Site named in t	he Site Details Sectio	n of this form.	
Signature of Owner, R Rendering Certification		signated Representative	7/3/20 Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

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

TurnKey Environmental Restoration, LLC 2558 Hamburg Turnpike, Buffalo, NY 14218 print name print business address

am certifying as a Qualified Environmental Professional for the Owner

(Owner or Remedial Party)

Con 1

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

APPENDIX B

PHOTO LOG





PHOTOGRAPHIC LOG

Client Name: Site Location: Project No.:

Tecumseh Redevelopment Inc. Business Park III-1 Lackawanna, NY T0071-014-630

Photo No. Date

1 02/24/20

Direction Photo Taken:

South

Description:

Cover system and railroad tracks.



Photo No. Date
2 02/24/20

Direction Photo Taken:

North

Description:

Existing site conditions and cover system.





PHOTOGRAPHIC LOG

Client Name: Site Location: Project No.:

T0071-014-630 Tecumseh Redevelopment Inc. Business Park III-1 Lackawanna, NY

Photo No. **Date** 3

02/24/20

Direction Photo Taken:

West

Description:

Existing site conditions and cover system.



Photo No. Date 4 02/24/20

Direction Photo Taken:

South

Description:

Asphalt roadway and railroad tracks.





PHOTOGRAPHIC LOG

Client Name: Site Location: Project No.: Tecumseh Redevelopment Inc. T0071-014-630 Business Park III-1 Lackawanna, NY

Photo No. Date 5 02/24/20

Direction Photo Taken:

North

Description:

Cover system and railroad tracks.

