



2021 Periodic Review Report

**Former NL Industries Site
NYSDEC Site No. C915200**

Cascades Containerboard Packaging

September 29, 2021

GHD

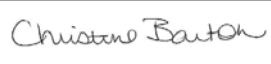
285 Delaware Avenue, Suite 500

Buffalo, New York 14202, United States

T +1 716 856 2142 | F +1 716 856 2160 | E info-northamerica@ghd.com | ghd.com

Printed date	9/29/2021 9:22:00 AM
Last saved date	September 29, 2021
File name	12560147-RPT-1-2021 Periodic Review Report.docx
Author	Christine Barton
Project manager	Christine Barton
Client name	Cascades Containerboard Packaging
Project name	Former NL Industries 2021 PRR and SMP Update
Document title	2021 Periodic Review Report Former NL Industries Site NYSDEC Site No. C915200
Revision version	Rev [00]
Project number	12560147

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4	0	Christine Barton	K. Galanti		C. Barton		9/29/21
[Status code]							
[Status code]							
[Status code]							
[Status code]							

© GHD 2021

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorized use of this document in any form whatsoever is prohibited.



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



Site Details		Box 1
Site No.	C915200	
Site Name Former NL Industries Foundry		
Site Address: 3241 Walden Avenue Zip Code: 14043		
City/Town: Cheektowaga		
County: Erie		
Site Acreage: 7.500		
Reporting Period: August 31, 2020 to August 31, 2021		
		YES NO
1. Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Box 2	
	YES NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs in place and functioning as designed?	<input checked="" type="checkbox"/> <input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 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.	
Signature of Owner, Remedial Party or Designated Representative	Date



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



Site Details		Box 1
Site No.	C915200	
Site Name Former NL Industries Foundry		
Site Address: 3241 Walden Avenue Zip Code: 14043		
City/Town: Cheektowaga		
County: Erie		
Site Acreage: 7.500		
Reporting Period: August 31, 2020 to August 31, 2021		
		YES NO
1. Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Box 2	
	YES NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs in place and functioning as designed?	<input checked="" type="checkbox"/> <input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 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.	
Signature of Owner, Remedial Party or Designated Representative	Date

Box 2A

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

☐☒

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)

☒☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C915200

Box 3**Description of Institutional Controls**ParcelOwnerInstitutional Control

104.09-5-1

Cascades, Inc.

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

[For details- see Section 5 in the Site Management Plan, dated October 16, 2009]

Environmental Easement is included in the FER in Appendix E. The Easement was recorded with the Erie County Clerk on 12/1/2009.

- (i) Prohibition of groundwater use.
- (ii) Restrictions on property use.
- (iii) Maintenance of cover on the containment cell.
- (iv) Maintenance of asphalt cover over trucking yard, eastern parking lot, and rail siding areas.
- (v) Maintenance of concrete cover in the building and apron areas.

Box 4**Description of Engineering Controls**ParcelEngineering Control

104.09-5-1

Cover System
Fencing/Access Control

Periodic Review Report (PRR) Certification Statements

1. 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 Engineering Control 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 complete.

YES NO

X

☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

- (a) The 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

X

☐

**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.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C915200

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.

I Richard J. Snyder at GHD Consulting Services, Inc.
print name 2055 Niagara Falls Blvd Niagara Falls, NY
print business address 14804

am certifying as Owner's Representative (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Richard J. Snyder
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

September 29, 2021
Date



EC CERTIFICATIONS

Box 7

Professional Engineer 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.

I Richard J. Snyder at G+D Consulting Services, Inc
print name 2055 Niagara Falls Blvd Niagara Falls, NY
print business address 14304

am certifying as a Professional Engineer for the Owner (Remedial Party)

Richard J. Snyder
Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification



September 29, 2021
Date

Table of Contents

1.	Introduction	1
1.1	Scope and limitations	1
2.	Engineering and Institutional Controls	2
2.1	Engineering Controls (ECs)	2
2.2	Institutional Controls (ICs)	2
3.	Inspections and Maintenance Activities	3
3.1	Asphalt-Only Cover System	3
3.1.1	Trucking Yard	4
3.1.2	Parking Lot	4
3.1.3	Former Rail Siding	4
3.2	Building and Apron Cover System	4
3.3	GCL and Asphalt Cover System	4
3.4	GCL and Soil Cover System	4
3.5	Retention Pond	5
3.6	Fencing	5
3.7	Vegetative Cover	5
4.	Groundwater Monitoring	5
5.	Conclusions and Recommendations	5
6.	Certification	6

Figure index

Figure 1.1 Site Location Map

Figure 2.1 Site Layout

Figure 2.2 Location of Engineering Control Systems

Appendices

Appendix A Site Inspection Form

Appendix B Photographs

1. Introduction

The former NL Industries facility (Site) is located at 3241 Walden Avenue in Depew, New York (Figure 1.1). The property and facility are currently owned and operated by Cascades Containerboard Packaging, a Division of Cascades Canada, ULC (Cascades). Remediation of the Site was completed in 2008 under the oversight of the New York State Department of Environmental Conservation (NYSDEC) in accordance with Brownfield Clean-up Agreement (BCA) Index #B9-0554-98-12, Site #C915200. A Site Management Plan (SMP) was developed upon completion of the remedial construction to ensure implementation and management of the institutional controls (ICs) and engineering controls (ECs) in place at the Site. This Periodic Review Report (PRR) is being prepared to certify that Site management activities are being conducted in accordance with the SMP.

The final remedial alternative for the Site, as described in the SMP dated October 2009, included the following components:

1. Excavation of impacted soils from the western section of the Site and consolidation within a containment cell constructed within the central portion of the Site.
2. Capping of the containment cell with imported clean fill, geo-synthetic clay liner (GCL), and soil/vegetative or asphalt cover.
3. Construction of a GCL and soil cover system on all non-paved areas of the containment cell (i.e., side slopes).
4. Construction of a GCL and asphalt cover system on all paved areas of the containment cell.
5. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to remaining impacted materials for the central and eastern portions of the Site.
6. Development and implementation of a SMP for long-term management of the ECs/ICs at the Site.

The SMP, designed to serve as a work plan for Site monitoring and maintenance, was prepared and approved by the NYSDEC in October 2009. The SMP was updated in 2021 to document new Site ownership and contact information.

This report presents the results of the Site inspection conducted in August 2021 and recordkeeping conducted through August 2021. The report is organized as follows:

- Section 1 – Introduction: The background and brief remedial history of the Site.
- Section 2 – Engineering and Institutional Controls: The ECs/ICs for this Site are described.
- Section 3 – Inspections and Maintenance Activities: Activities performed during the current reporting period and their results.
- Section 4 – Groundwater Monitoring: Discussion of groundwater monitoring data and analytical results generated from the current monitoring period.
- Section 5 – Conclusions and Recommendations: Conclusions and recommendations based upon the data and results of the current monitoring period.

1.1 Scope and limitations

This report: has been prepared by GHD for Cascades Containerboard Packaging and may only be used and relied on by Cascades Containerboard Packaging for the purpose agreed between GHD and Cascades Containerboard Packaging as set out in Section 1.0 of this report.

GHD otherwise disclaims responsibility to any person other than Cascades Containerboard Packaging arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) 5.0 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

2. Engineering and Institutional Controls

Engineering controls are required to protect human health and the environment because impacted fill is still present below various structures at the Site. Figure 2.1 shows the Site layout, and Figure 2.2 shows the various EC systems in place at the Site.

2.1 Engineering Controls (ECs)

The purpose of the EC systems is to eliminate the potential for human contact with fill material, prevent percolation of precipitation through the impacted fill and eliminate the potential for contaminated runoff from the Site. The EC systems in place at the Site consist of the following:

- **Asphalt Only:** The trucking yard within the eastern section of the Site was paved in 2004 and is covered by 4.5 inches of sub-base material and 6 inches of asphalt (4.5 inches binder coat and 1.5 inches top coat). The eastern parking lot was historically paved with asphalt for employee parking and was repaved in August 2011. In addition, the area identified as the “rail siding area” was paved with 6 inches of asphalt (4 inches binder coat and 2 inches top coat) in August 2008.
- **Building and Apron Concrete:** The concrete floor of the existing building and exterior concrete pads/aprons are believed to be a minimum of 6 inches in thickness.
- **GCL and Soil:** All non-paved areas (side slopes) of the containment cell are covered by approximately 12 inches of clean soil underlain by a GCL covering with a 6-inch sand layer between the GCL and impacted fill. All exposed environmentally clean soil/fill has been hydro seeded as an erosion control methodology.
- **GCL and Asphalt:** All paved areas of the central section containment cell are covered by 6 inches of asphalt (4 inches binder coat and 2 inches top coat) underlain by 12 inches of clean fill, followed by a GCL covering with a 6-inch sand layer between the GCL and the impacted fill.

2.2 Institutional Controls (ICs)

The purpose of the ICs is to:

- Implement, maintain, and monitor the ECs.
- Prevent future exposure to remaining on-Site contamination by controlling disturbance of the subsurface contamination.
- Limit the use and development of portions of the Site to industrial uses only.

The ICs that have been established for the Site must be:

- In compliance with the Environmental Easement and the SMP by the Grantor (currently Cascades Containerboard Packaging, a Division of Cascades Canada, ULC) and the Grantor’s successors and assigns.
- Operated and maintained, as specified in the SMP.
- Inspected at a frequency and in a manner defined in the SMP.

Data and information pertinent to management of the Site must be reported at the frequency and in a manner defined in the SMP.

Adherence to the ICs is required by the Environmental Easement. The ICs may not be discontinued without an amendment to or extinguishment of the Environmental Easement. In addition, the Site has a series of ICs in the form of site restrictions, as required by the Environmental Easement. Restrictions that apply to the Site are:

- The central and eastern portions of the property may only be used for commercial/industrial purposes provided that the long-term ECs/ICs included in the SMP are employed.
- The central and eastern portions of the property may not be used for a higher level of use, such as unrestricted or restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC.
- All future activities on the property that will disturb remaining impacted material must be conducted in accordance with the SMP.
- The Site owner or remedial party will submit to the NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP.
- The groundwater beneath the central and eastern sections of the property may not be used for potable or non-potable purposes.

3. Inspections and Maintenance Activities

A comprehensive Site-wide inspection is required to be conducted annually, as specified in the SMP. The intent of the annual inspection is to determine whether:

- The ECs continue to perform as designed.
- The ECs continue to be protective of human health and the environment.
- The Site is operated and maintained in compliance with the SMP and Environmental Easement.
- The remedial performance criteria have been achieved.
- Sampling and analysis of appropriate media were conducted.
- Site records are complete and current.
- Changes to the remedial systems or monitoring are needed.

The inspection was performed by GHD personnel in accordance with the requirements of the SMP.

The annual comprehensive Site inspection was conducted on August 27, 2021. The following sections discuss the findings of the 2021 inspection. The completed Site Inspection Form is provided as Appendix A.

3.1 Asphalt-Only Cover System

The three areas of asphalt-only cover consist of the Trucking Yard (west of the main building), Parking Lot (east of the main building), and Former Rail Siding (south of the main building), as shown on Figure 2.2. The areas of asphalt-only cover were visually inspected for cracks and deterioration.

3.1.1 Trucking Yard

The asphalt surface in the trucking yard is exhibiting clusters of cracking. No asphalt is currently missing; however, the severity of cracking warrants more significant action than crack sealing. Maintenance or repair of the asphalt surface (i.e., resurfacing) is needed to prevent further deterioration. Work will be completed as part of the 2021/2022 maintenance. Photos of the trucking yard are provided in Appendix B.

3.1.2 Parking Lot

The Parking Lot was repaved in 2011 and is generally free of cracks and deterioration. Photos of the pavement are provided in Appendix B.

3.1.3 Former Rail Siding

The asphalt cover on the Former Rail Siding was generally free of cracks and deterioration and appeared in good condition. Photos of the pavement are provided in Appendix B.

No corrective action is necessary for any portion of the asphalt-only cover system at this time.

3.2 Building and Apron Cover System

The building floor slab and apron concrete were visually inspected for cracks and deterioration. Significant cracks and areas of missing surface were observed on the concrete apron; however, these cracks do not penetrate the full thickness of the apron slab and do not currently impact the effectiveness of the cover. Photos of the concrete are provided in Appendix B.

The tipping floor dock (center) and back dock (south) aprons require significant repairs or replacement to prevent potential exposure to underlying contaminated soil. The work will be completed as part of the Site maintenance for the 2021/2022 reporting period.

3.3 GCL and Asphalt Cover System

The GCL and asphalt cover system was visually inspected as part of the annual comprehensive Site inspection. No areas of subsidence or exposed GCL were observed. Minor surface indentations caused by tractor-trailer supports were noted in the asphalt, consistent with past years. The indentations were approximately 0.25 to 0.5 inch in depth, but do not affect the integrity of the cap. Photos of the GCL and asphalt cover are provided in Appendix B.

No corrective action is necessary for the GCL and asphalt cover system at this time.

3.4 GCL and Soil Cover System

The GCL and soil cover system was visually inspected as part of the annual comprehensive Site inspection. No areas of subsidence, erosion, or exposed GCL were observed. At the time of the inspection, the grass was approximately 1 to 2 inches in length and was regularly maintained throughout the year. Some bare spots were observed on the western slope of the containment cell. They appeared to be the result of cutting the grass too short and the hot, dry weather in the weeks leading up to the inspection. Photos of the GCL and soil cover are provided in Appendix B.

Vegetation must be re-established over the bare spots on the western slope by placing topsoil and grass seed followed by care and maintenance until the vegetative cover is re-established.

3.5 Retention Pond

The retention pond was inspected as part of the annual comprehensive Site inspection. Approximately 12 inches of standing water was present in the pond. Significant plant growth is present within the pond, primarily invasive phragmites. Some individual and small clusters of phragmites were observed growing outside the stone perimeter of the pond. No other debris was observed, and the outlet pipes were open. No evidence of erosion was observed along the banks of the pond. Photos of the retention pond are provided in Appendix B.

Annual cutting of the phragmites around the interior and exterior perimeter of the pond will be added to the annual maintenance schedule to prevent further migration out of the pond.

3.6 Fencing

The fencing was inspected as part of the annual comprehensive Site inspection. The fencing appeared in good condition. The fence north of the Site along Walden Avenue was constructed with braided wire rather than a top support pole. At the time of the inspection, the wire provided sufficient support for the fence. Photos of the fencing are provided in Appendix B.

No corrective action is necessary with regard to Site fencing at this time.

3.7 Vegetative Cover

The vegetative cover was inspected as part of the annual comprehensive Site inspection. No areas of distressed vegetation, invasive species, or woody growth were observed. Some bare spots were observed on the western slope of the containment cell. They appeared to be the result of cutting the grass too short and the hot, dry weather in the weeks leading up to the inspection. Photos of the vegetative cover are provided in Appendix B.

Vegetation must be re-established over the bare spots by placing topsoil and grass seed followed by care and maintenance until the vegetative cover is re-established.

4. Groundwater Monitoring

The 2016 PRR included a recommendation to reduce the frequency of groundwater monitoring from annual to triennial. The NYSDEC agreed with the recommendation in a letter to Cascades, Inc., dated October 18, 2016. Groundwater monitoring was completed in 2019 and was not required for the current reporting period. The next groundwater sampling event will be in 2022.

5. Conclusions and Recommendations

The annual inspection and monitoring activities performed during this reporting period found that:

- The asphalt only cover system is generally in good condition but needs routine maintenance.
- Areas of the concrete apron cover system where significant wear and cracking were observed must be repaired or replaced as part of routine maintenance during the 2021/2022 reporting period.
- The GCL and soil and GCL and asphalt cover systems are generally in good condition with no deficiencies noted.
- Topsoil and vegetation must be re-established on the bare spots on the western slope of the containment cell to prevent erosion.
- Perimeter fencing is in good condition.

- Some phragmites were observed growing outside of the stone banks of the retention pond. The annual mowing/cutting of the phragmites around the interior and exterior perimeter of the pond will be incorporated into the annual maintenance activities to prevent further migration.

Although significant concrete repair/replacement is necessary to maintain the integrity of the concrete aprons, the aprons are currently preventing human exposure to any underlying contaminated soil. The presence of the phragmites does not appear to be impeding the function of the retention pond. Based on these observations, it is concluded that the remedial action continues to be effective.

6. Certification

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction.
- Except as indicated in this report, the institutional controls and/or engineering controls employed at this Site are unchanged from the date the control was put in place or last approved by the Department.
- Nothing has occurred that would impair the ability of the control to protect the public health and environment.
- Nothing has occurred that would constitute a violation or failure to comply with the SMP for this control.
- 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.
- Use of the Site is compliant with the environmental easement.
- The engineering control systems are performing as designed and are effective.
- 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.
- The information presented in this report is accurate and complete.

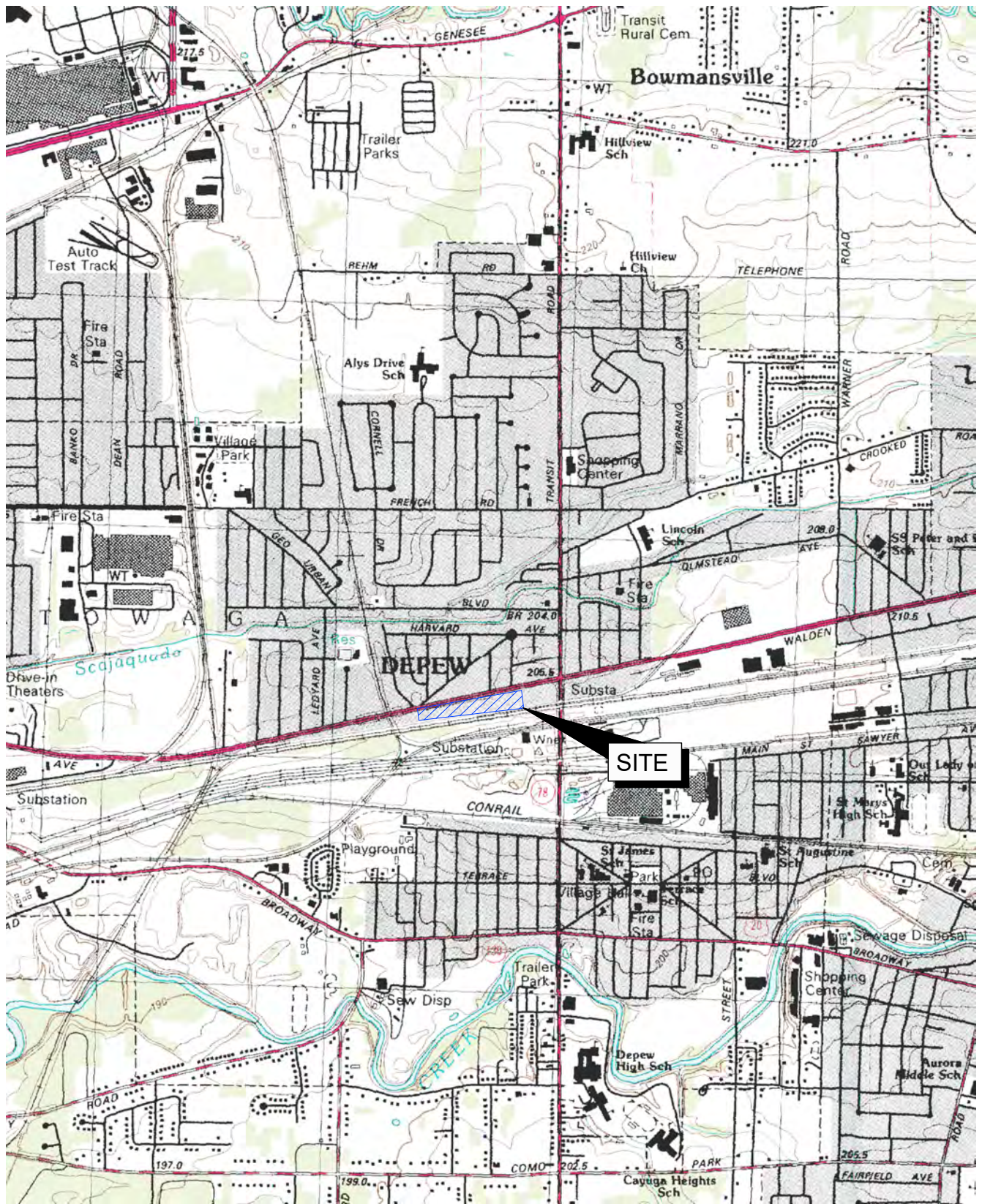
Richard J. Snyder, P.E.
GHD Consulting Services, Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, New York 14302

Signature: _____

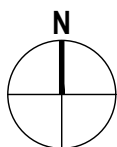


September 29, 2021

Figures



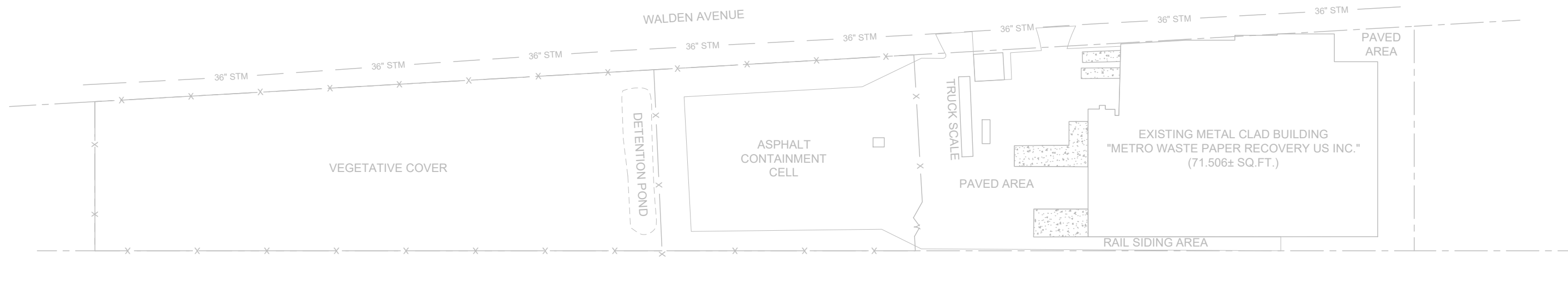
SOURCE : USGS QUADRANGLE MAP:
LANCASTER, NEW YORK



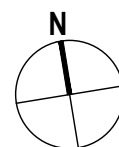
FORMER N.L. INDUSTRIES SITE REMEDIATION
3241 WALDEN AVENUE
DEPEW, NEW YORK
SITE LOCATION MAP

Project No. 12560147
Report No. 001
Date SEP 2021

FIGURE 1.1



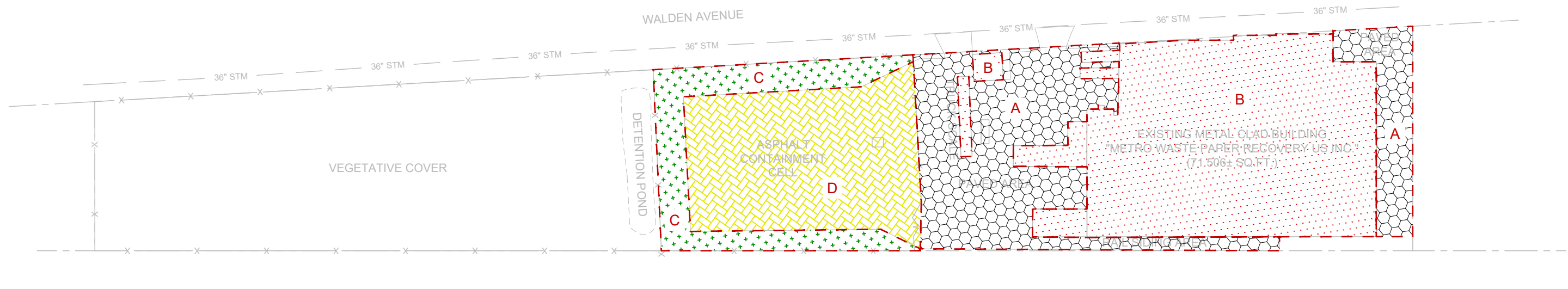
SOURCE: DRAWING FILE (MWL-126254-01.dwg)
FROM TIGHE & BOND
(MIDDLETOWN, CONNECTICUT)



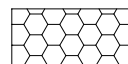
FORMER N.L. INDUSTRIES SITE REMEDIATION
3241 WALDEN AVENUE
DEPEW, NEW YORK
SITE LAYOUT

Project No. 12560147
Report No. 001
Date SEP 2021

FIGURE 2.1



LEGEND:



COVER SYSTEM A - ASPHALT ONLY



COVER SYSTEM B - BUILDING & APRON CONCRETE



COVER SYSTEM C - GEOSYNTHETIC CLAY LINER & SOIL



COVER SYSTEM D - GEOSYNTHETIC CLAY LINER, SOIL, & ASPHALT (CONTAINMENT CELL)

SOURCE: DRAWING FILE (MWL-126254-01.dwg)
FROM TIGHE & BOND
(MIDDLETOWN, CONNECTICUT)



FORMER N.L. INDUSTRIES SITE REMEDIATION
3241 WALDEN AVENUE
DEPEW, NEW YORK
**LOCATION OF ENGINEERING CONTROL
SYSTEMS**

Project No. **12560147**
Report No. **001**
Date **SEP 2021**

FIGURE 2.2

Appendix A

Site Inspection Form

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Page 1 of 5

Name of Inspector: Christine Barton
Date of Inspection: 8/27/2021

The purpose of this inspection is to monitor the overall integrity of the containment cell, the site wide paving and the building foundation. Please take photographs from all four sides of the containment cell cap, as well as the asphalt pavement and building foundation to document the existing conditions of the consolidated soil area, erosion control technologies in place, and the immediate surrounding area each week. Please fill out the following inspection items. If at any time impacted fill material has been exposed, please notify the Project Manager listed in the SMP immediately.

Monitoring Well Network

Condition of Monitoring Wells

	Good	Fair	Needs Repair	Details
MW-101	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>No sampling in 2021.</u>
MW-102	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Next monitoring event</u>
MW-103	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>is 2022.</u>
MW-104	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
MW-105	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
MW-106	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
MW-99-01	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>

Asphalt Only Cover System

Are there any obvious areas of damage to the asphalt in the trucking yard?

YES ☐ NO ☒ If yes, please describe Surface cracks are
present with no significant deterioration
from 2020

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Page 2 of 5

Asphalt Only Cover System

Are there any obvious areas of damage to the asphalt in the parking lot?

YES ☐ NO ☒ If yes, please describe _____

Are there any obvious areas of damage to the asphalt in the former rail siding area?

YES ☐ NO ☒ If yes, please describe _____

Building and Apron Concrete Cover System

Are there any obvious areas of damage to the building's foundations?

YES ☐ NO ☒ If yes, please describe _____

Are there any obvious areas of damage to any concrete pads?

YES ☒ NO ☐ If yes, please describe ^{floor} The tipping dock and back dock aprons have significant cracks and wear with some spots missing surface concrete. Not full thickness. No waste or soil currently exposed.

GCL and Soil Cover System

Are there any signs of soil run-off or erosion on the sides of the containment cell?

YES ☒ NO ☐ If yes, please describe The grass appears to have been cut too short in some areas. Need to add top soil + seed.

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Page 3 of 5

GCL and Soil Cover System

Are there any areas of exposed GCL?

YES ☐ NO ☒ If yes, please describe _____

Has the grass appeared to have been mowed at a regular basis during the previous growing season?

YES ☒ NO ☐ If ~~yes~~, please describe _____

Are there any woody types plants growing within the this Cover System?

YES ☐ NO ☒ If yes, please describe _____

GCL and Asphalt Cover System

Are there any obvious areas of damage to the asphalt within this cover system?

YES ☐ NO ☒ If yes, please describe _____

Are there any obvious signs of cracking within this cover system?

YES ☐ NO ☒ If yes, please describe _____

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Page 4 of 5

Pond

Is there standing water in the retention pond?

YES ☒ NO ☐ If yes, approximately how much? ≈ 12 inches

Is there any debris within the retention pond?

YES ☐ NO ☒ If yes, please describe _____

Is the inlet and outlet of the retention pond free of debris?

YES ☒ NO ☐ If no, please describe _____

Is there any sign of erosion along the banks of the retention pond?

YES ☐ NO ☒ If yes, please describe _____

Vegetatives

Is there any sign of distress, disease or die off of the vegetatives associated with the cover systems?

YES ☐ NO ☒ If yes, please describe No distress. Just areas where grass was cut too short + hot dry weather damaged some patches. Phragmites - small cluster + individual plants observed outside Stone Pond banks.

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Page 5 of 5

Fencing

Is there signs of damage to the fencing around the retention pond or within the area of the environmental easement?

YES ☐ NO ☒ If yes, describe location and extent of damage

Is there signs of frost heaving within the supports of the fencing?

YES ☐ NO ☒ If yes, please describe

Is the chain link still attached to support poles at all locations around the retention pond or within the area of the environmental easement?

YES ☒ NO ☐ If no, please describe

Is there any sign of erosion along the banks of the retention pond?

YES ☐ NO ☒ If yes, please describe

Please describe any changes to the overall area since the last inspection

Appendix B

Photographs



Photo 1 – Parking lot looking west along north side of office.



Photo 2 – Parking lot looking south.



Photo 3 – Former rail siding looking east.



Photo 4 – Front Dock building apron concrete system (north end of building) looking northeast.



Photo 5 – Building Apron Concrete System (south end of building) looking east.



Photo 6 – Trucking Yard looking east.



Photo 7 – Example of asphalt cracking in Trucking Yard.



Photo 8 – Trucking Yard looking west.



Photo 9 – GCL and Soil Cover System looking west along north slope.



Photo 10 – GCL and Soil Cover System looking south along west slope.



Photo 11 – GCL and Soil Cover System looking east along south slope.



Photo 12 – Looking southwest at south slope and retention pond.



Photo 13 – GCL and Asphalt Cover System looking southwest across cap.

