



BROWNFIELD
ENVIRONMENTAL ENGINEERING

CCDD Material Certification

**Creston Safe Route to School
S. Main Street and S. Transit Street
Creston, IL 61068**



Date: December 22, 2020

BROWNFIELD PROJECT No. 155-001

Prepared for:

C.E.S., Inc.
700 W. Locust Street
Belvidere, IL 61008

Project Summary

Project Name & Address: Creston Safe Routes to School
S. Main Street and S. Transit Street
Creston, IL 61068

Brownfield Project No.: 155-001

Client: C.E.S., Inc.
700 W. Locust Street
Belvidere, IL 61008

Site Inspectors: Joshua Kunde, CEP-IT
Kassandra Arnold

Inspection & Sampling: December 17, 2020

Report Date: December 22, 2020

Report Attachments: Photo Log
Sample Location Map
IEPA Document Explorer Map
Laboratory Analytical Summary Table
First Environmental Laboratory Analytical & Accreditation Report
IEPA Form LPC-663

Executive Summary

The services of Brownfield Environmental Engineering Resources, LLC, an Illinois licensed Professional Engineering Design Firm, were retained by C.E.S., Inc. of Belvidere, IL to perform a Clean Construction Demolition Debris (CCDD) Uncontaminated Soil assessment for the proposed excavation and grading work for the installation of sidewalks in Creston, IL. The project location is along S. Main Street and S. Transit Street, Creston, IL 61068. The project involves site development work including grading, pavement installations and miscellaneous material removal, which will generate fill material consisting of excavated soil for the site referenced above.

The CCDD Site Assessment and associated material analysis were conducted in accordance with Illinois Environmental Protection Agency (IEPA) guidance regulations and the IL Admin. Code Title 35, Subtitle J CCDD, Part 1100. The specific sampling protocol was selected to represent site conditions and the suspected contaminants; as directed by the certifying licensed Professional Engineer who is responsible for certifying that the soil is uncontaminated.

Based on the observed site use, conditions and activities, soil screening procedures, and laboratory analytical test results, the excavated materials from the project area may be considered "Clean" for the purposes of CCDD regulations and disposal, excluding the area surrounding soil samples 85675-1, 85675-3, and 85675-4. Excavated material from stations 156+99 to 156+40 LT (CL Main Street) and from station 156+40 to 154+70 RT and LT (CL Main Street) are not eligible for CCDD disposal, this material shall be disposed of as non-special waste at a permitted landfill.

Potentially Impacted Property Assessment

To evaluate if the sites or adjacent sites for which historical or current use or contaminant migration from a proximate (nearby or adjoining) site increases the presence or potential presence of contamination, the Illinois Environmental Protection Agency's (IEPA's) Document Explorer website <http://external.epa.illinois.gov/DocumentExplorer/Home/About> was used as a reference. The website shows IEPA Agency records for air permits (construction and operating), National Pollution Discharge Elimination System (NPDES) water discharge permits, Leaking Underground Storage Tank (LUST), Site Remediation Program (SRP), and State Response Action technical documents by location.

The IEPA's Document Explorer website showed one (1) LUST site at the Creston Comm. Cons. School District, located at 202 West South Street, Creston, IL 60113. One (1) LUST event occurred on October 17th, 1998. The UST remained in the ground, but soil on top of the UST was removed, and the UST was pumped out as of February 2nd, 1990. The second LUST event occurred on August 2nd, 1990 due to a hole in the UST. This UST was removed in July 1990, and

contaminated soil was excavated on August 3rd, 1990. The IEPA stated that no further remediation appeared necessary and that the Village of Creston was released from any responsibility.

Additionally, the IEPA's Document Explorer website showed one (1) LUST site at the Dement Township, located at 405 Woodlawn Road, Creston, IL 60113. The release occurred on September 24th, 1998. A deed restriction was placed on the site on December 11th, 2003 prohibiting the use of groundwater beneath the site as a potable water supply. A No Further Remediation (NFR) Letter was then granted by the IEPA on October 25th, 2004 after documented groundwater monitoring and contaminated soil clean up. Due to the distance, this LUST site is not expected to impact the project location.

This evaluation of Potentially Impacted Properties takes into consideration the depth of excavation and scope of work to be completed on the proposed CCDD certification area. No records were available in the IEPA's Document Explorer for the areas in which excavation activities that would generate soils are located.

Site Assessment & Sampling

On December 17, 2020, Joshua Kunde and Cassandra Arnold performed a site reconnaissance assessment to confirm the absence or presence of recognized environmental concerns, soil staining, and potential sources of soil contamination. The site materials were screened with a Photo Ionization Detector (PID) and thirteen (13) soil samples were collected. Nine (9) soil samples were analyzed for Volatile Organic Compounds (VOCs), RCRA metals, Toxicity Characteristic Leaching Procedure (TCLP) metals, Polynuclear Aromatics (PNAs), and pH. Four (4) soil samples were analyzed for only pH. The soil samples were collected in laboratory provided containers, placed in a cooler with ice packs, and transported to First Environmental Laboratories, Inc. of Naperville, Illinois. Maps with the sample locations are attached to this report.

Laboratory Analysis

First Environmental Laboratories, Inc. analyzed the soil samples in strict compliance with the method 5035A/8260B for VOCs, RCRA metals, TCLP metals, pH, and PNAs. The laboratory analysis indicated that the one soil sample contained Lead above the IEPA Maximum Allowable Concentrations (MACs) Remediation Objectives.

Sample ID	Lead	Maximum Allowable Concentration
85675-1	160 mg/kg	107 mg/kg

The laboratory analysis indicated that the three soil samples contained Benzo(a)pyrene above the IEPA Maximum Allowable Concentrations (MACs) Remediation Objectives.

Sample ID	Benzo(a)pyrene	MAC Outside a Populated Area
85675-1	0.227 mg/kg	0.09 mg/kg
85675-3	0.322 mg/kg	0.09 mg/kg
85675-4	0.208 mg/kg	0.09 mg/kg

The laboratory analysis indicated that the one soil sample contained Mercury above the IEPA Maximum Allowable Concentrations (MACs) Remediation Objectives.

Sample ID	Mercury	Maximum Allowable Concentration
85675-1	4.03 mg/kg	0.89 mg/kg

A complete listing of laboratory analytical results compared to IEPA MACs is included as an attachment to this report.

Recommendations

Based on the observed site use, conditions and activities, soil screening procedures, and laboratory analytical test results, the excavated materials from the project may be considered “Clean” for the purposes of CCDD regulations and disposal, excluding the area surrounding soil samples 85675-1, 85675-3, and 85675-4. Excavated material from stations 156+99 to 156+40 LT (CL Main Street) and from station 156+40 to 154+70 RT and LT (CL Main Street) are not eligible for CCDD disposal, this material shall be disposed of as non-special waste at a permitted landfill.

This report has been prepared for the sole benefit of C.E.S., Inc. and the designated CCDD site recipient for this project and may not be relied upon by any other person or entity without the expressed written consent of Brownfield Environmental Engineering Resources, LLC. Brownfield Environmental Engineering Resources, LLC used professional judgment in gathering and presenting information as well as formulating opinions. Nevertheless, environmental assessments are inherently limited in the sense that information obtained is based on limited research and site investigation.

This assessment has been prepared in accordance with generally accepted environmental methodologies and contains all the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our original contract/proposal, and included in this report.



Thank you for choosing Brownfield Environmental Engineering Resources, LLC to be a part of the team for this project. Please contact us if you have any questions or need any additional information.

Sincerely,

Brownfield Environmental Engineering Resource, LLC

A handwritten signature in black ink that reads "Bradley A. Brown".

Bradley A. Brown, P.E. - Principal

Professional Engineering License No. 062.049676

Expiration Date: November 30, 2021



85675-1

85675-2

85675-4

85675-3

Main Street

Depot Street

85675-5

85675-6

Depot Street

85675-11

85675-10

South Street



85675-7

85675-8

85675-9

85675-12

85675-13

Transit Street

South Street

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
SAFE ROUTES TO SCHOOL PROJECT
TRANSIT STREET & MAIN STREET
SIDEWALK IMPROVEMENTS**

VILLAGE OF CRESTON
OGLE COUNTY

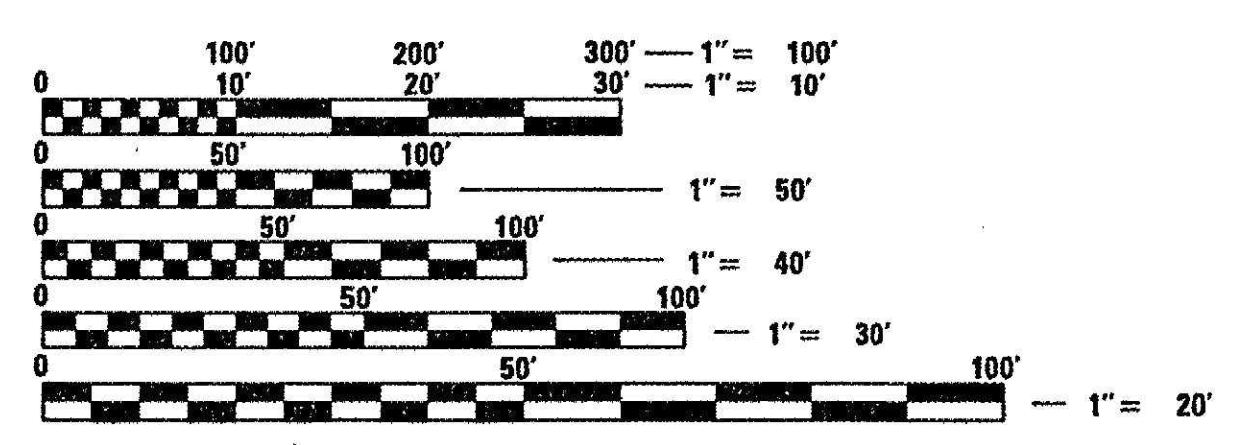
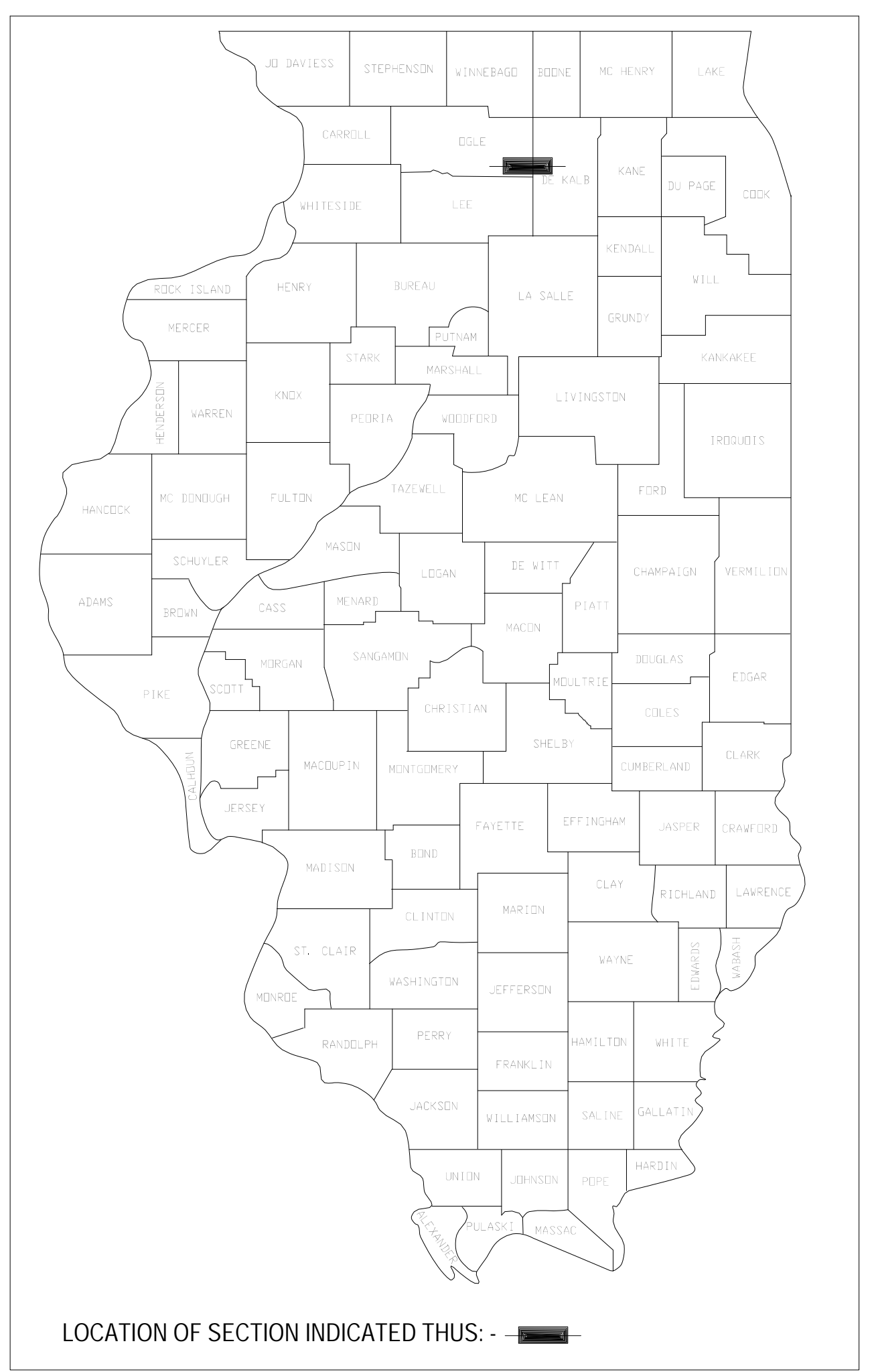
SECTION: 12-00008-00-SW
PROJECT NO: SCBY (614)
MAIN STREET (MS 6050)
TRANSIT STREET (MS 6020)
JOB NO. C-92-143-12
CONTRACT NO. 85675

INDEX OF SHEETS

- Sheet #1 Cover Sheet/Title Sheet & Utility Contacts
- Sheet #2 Legend, Quantities & Typical Sections
- Sheet #3 Schedule of Quantities
- Sheet #4-5 Existing Conditions & Removal Plan
- Sheet #6-9 Plan & Profiles
- Sheet #10-12 ADA Detail
- Sheet #13-14 Grading & Storm Water Pollution Prevention Plan
- Sheet #15-16 Storm Water Pollution Prevention Document
- Sheet #17 Details
- Sheet #18-19 Cross-Sections

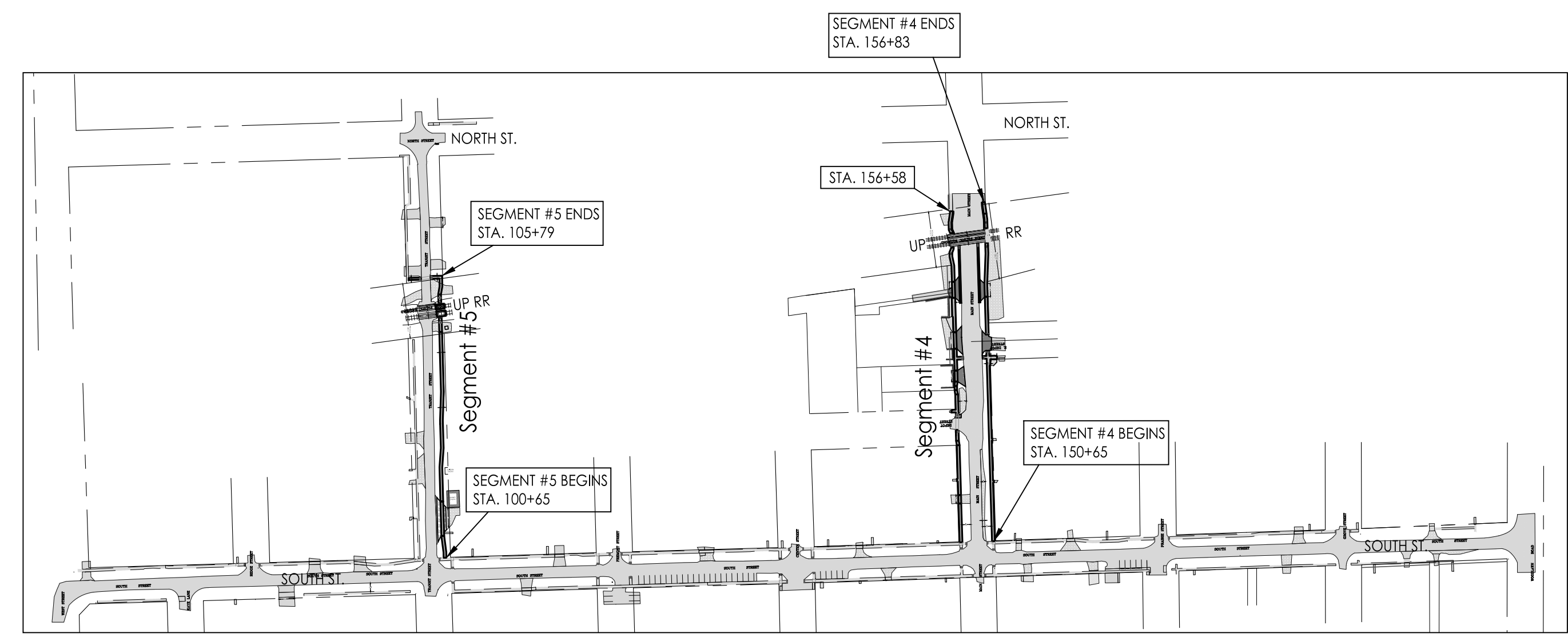
HIGHWAY STANDARDS

- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 424001-11 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
- 424016-05 MID-BLOCK CURB RAMPS FOR SIDEWALKS
- 606001-07 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
- 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701801-06 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
- 701901-08 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720006-04 SIGN PANEL ERECTION DETAILS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)



SCALES FOR PLAN & PROFILES 11x17 SHEET	SCALES FOR PLAN & PROFILES 22X34 SHEET
1" = 40' HORIZ.	1" = 40' HORIZ.
1" = 8' VERT.	1" = 8' VERT.

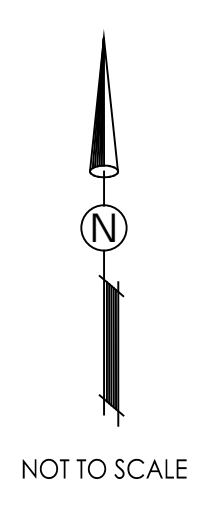
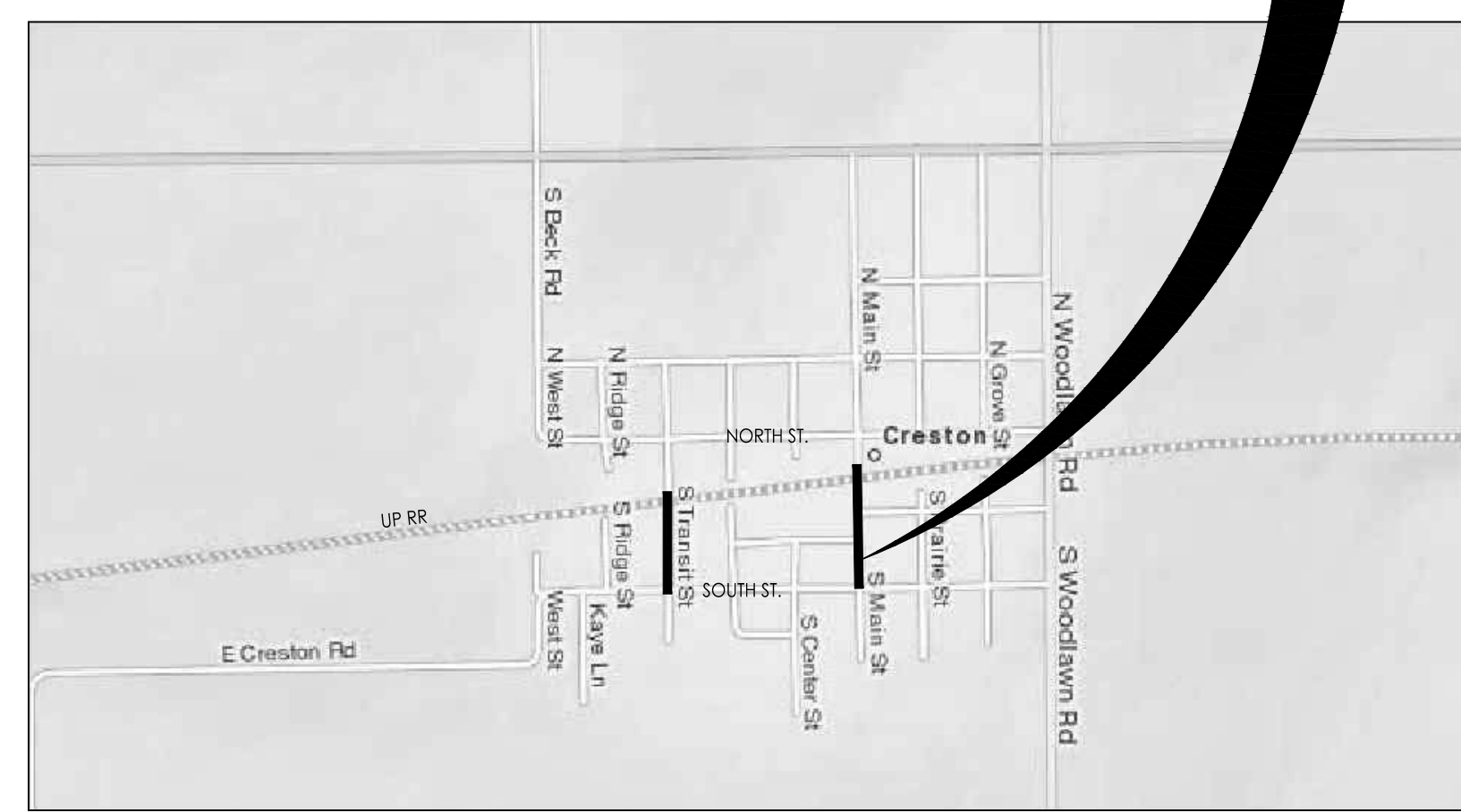
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZE PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.



VILLAGE OF CRESTON, ILLINOIS

GROSS LENGTH.....1725' OR 0.33 MILES
NET LENGTH.....1644' OR 0.31 MILES

LOCATION MAP



CONTROL POINTS				
Point #	Elevation	Northing	Easting	Description
1	912.45	1918858.48	2623670.18	CP BOLT
2	911.82	1918897.67	2624114.52	CP 2
3	902.50	1919705.09	2623642.45	CP 3
4	911.20	1918874.66	2622326.09	CP 4

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED September 22, 2020

Donald W. Williams
VILLAGE PRESIDENT VILLAGE OF CRESTON

PASSED _____ 20 _____

DISTRICT 2 ENGINEER OF LOCAL ROADS

RELEASED FOR BID
BASED ON LIMITED
REVIEW _____ 20 _____

DEPUTY DIRECTOR OF HIGHWAYS REGION 2 ENGINEER

PRINTED: Monday, November 09, 2020

CONTACT:
J.U.L.I.E.
DIAL: 811
PRIOR TO ANY CONSTRUCTION



UTILITY CONTACTS:
FRONTIER COMMUNICATIONS
DEB PETERSON
(815) 895-1524
ROCHELLE MUNICIPAL UTILITIES
CATHY COOPER
333 LINCOLN HIGHWAY
ROCHELLE, IL 61068
(815) 562-4155

SEAL COVERS SHEETS 1-19

KEVIN C. BUNGE, PE
EXPIRES 11/30/2021

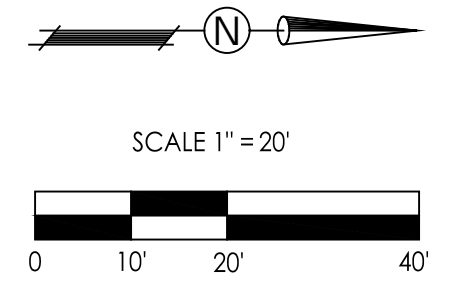
DATE 11/9/2020

PLANS PREPARED BY:

C.E.S. INC.
700 W. LOCUST ST.
BELVIDERE, IL 61008
PHONE: (815) 547-8435
FAX: (815) 544-0421
ILLINOIS DESIGN FIRM NO.: 184-001260

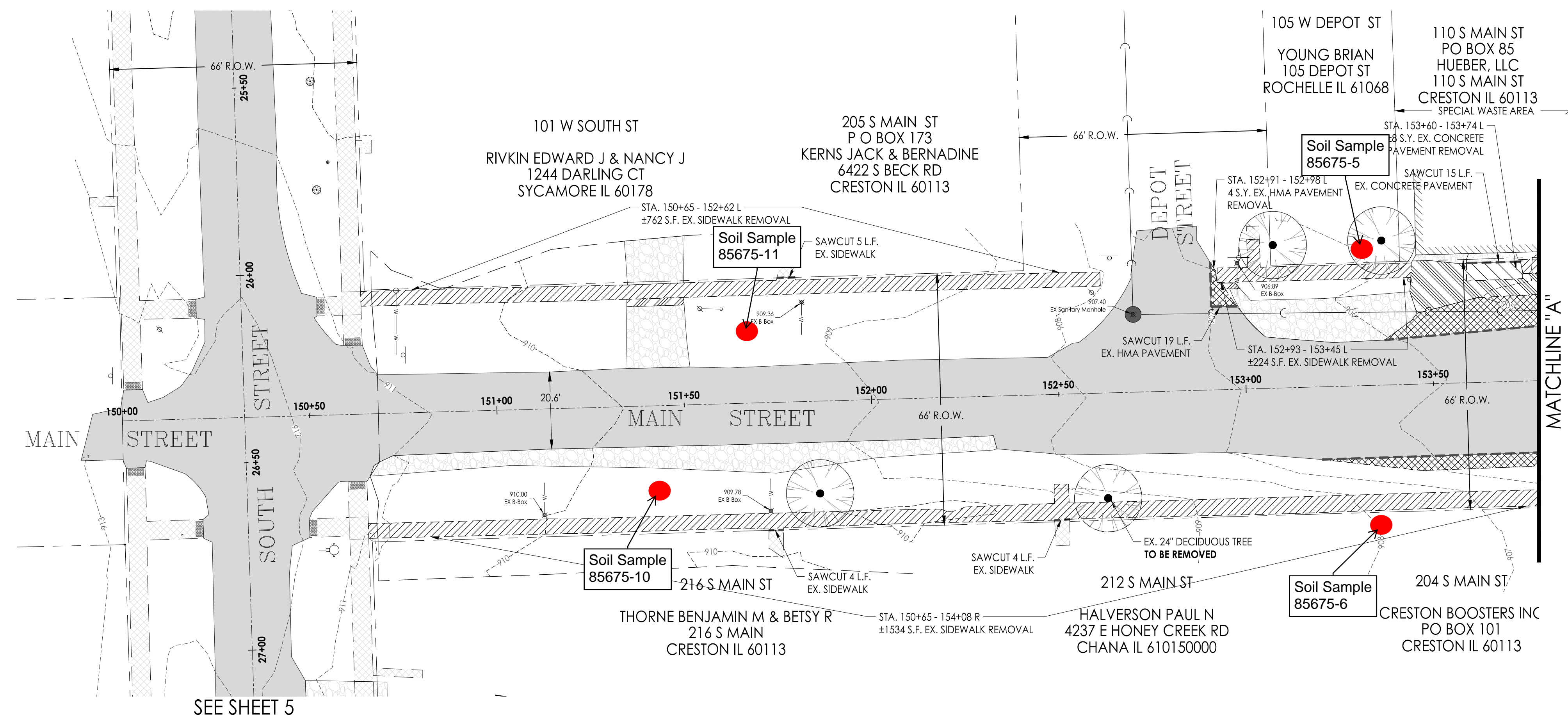
C.E.S. JOB #3207

3/15/19 REVISED PER IDOT (LETTER DATED 9-19-18)
5/3/19 REVISED PER IDOT (LETTER DATED 3-29-19)
11/4/19 REVISED PER IDOT (2020 STANDARDS)
9/28/20 REVISED PER REDUCED SCOPE
11/2/20 REVISED PER IDOT (E-MAIL 10-20-20)

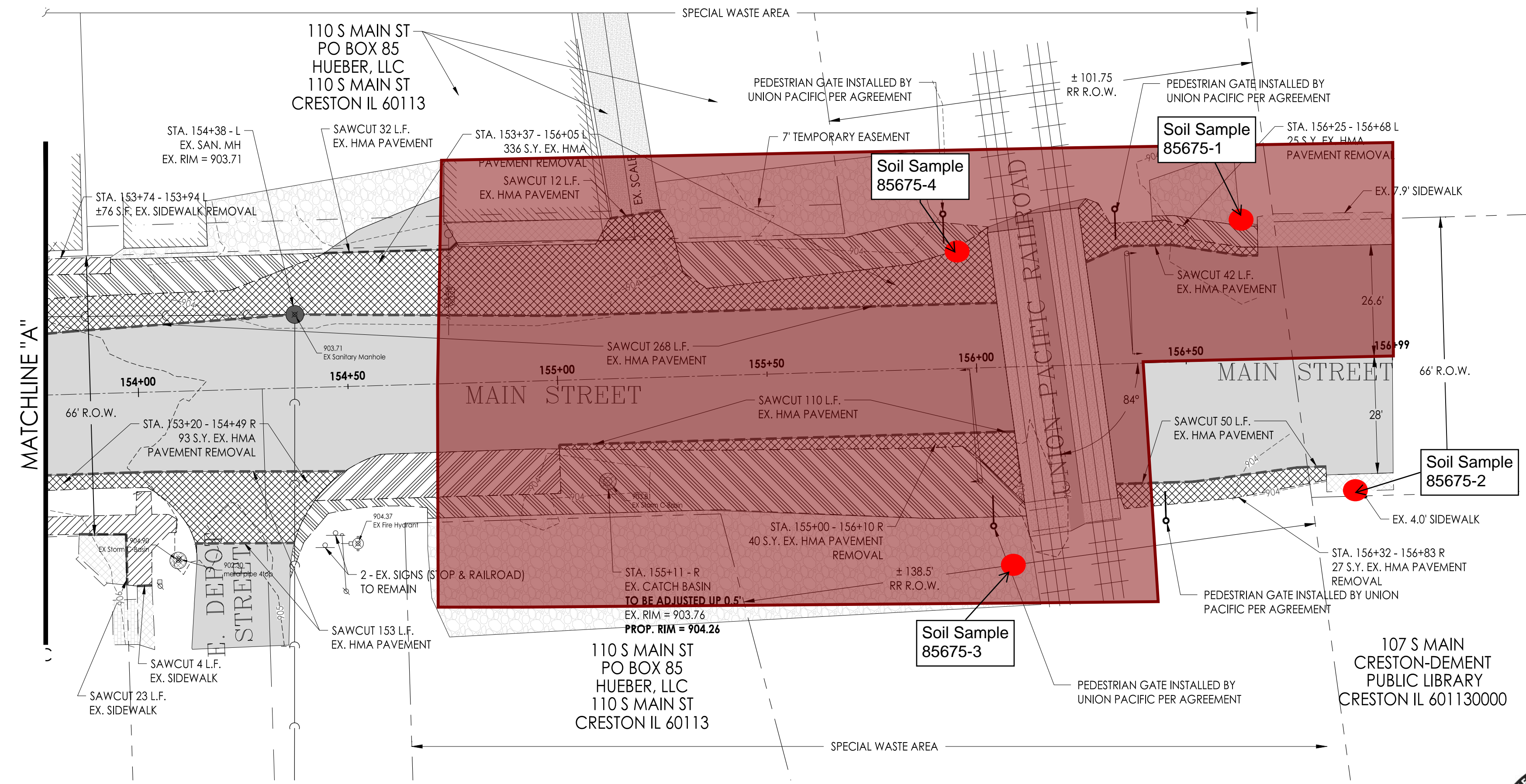


Legend

- Soil Sample Location
- Non-CCDD Eligible Material



SEE SHEET 5



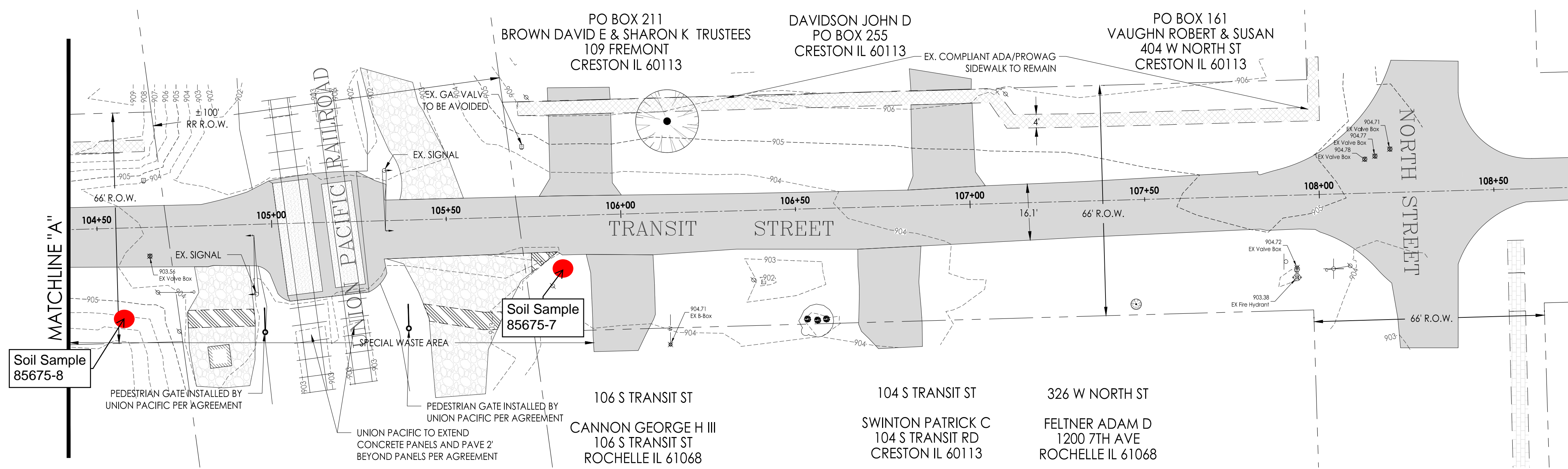
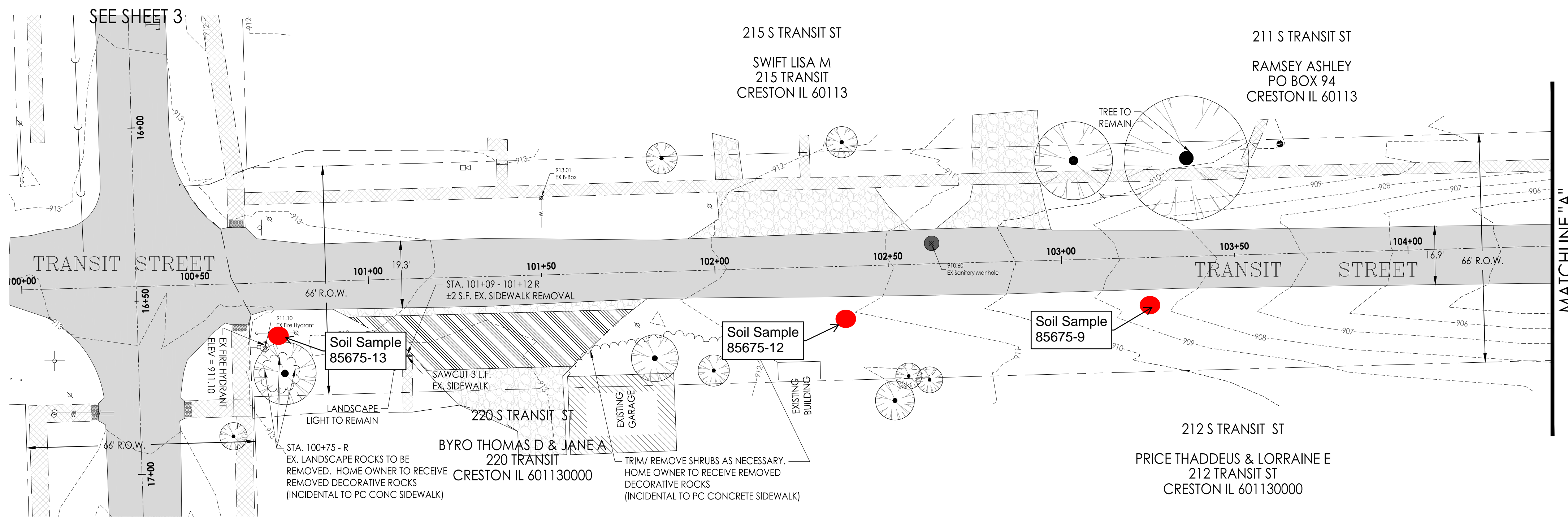
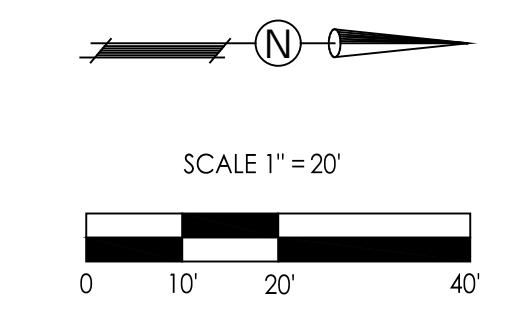
VILLAGE TO NOTIFY OWNERS OF TREES AND SHRUBS TO BE REMOVED OR TRIMMED. ALL TREES AND SHRUBS DESIGNATED TO BE REMOVED ARE WITHIN THE VILLAGE ROW.

	REMOVE SIDEWALK (PAID UNDER SIDEWALK REMOVAL)		REMOVE CONCRETE DRIVEWAY (PAID UNDER PAVEMENT REMOVAL)		REMOVE HMA PAVEMENT (PAID UNDER PAVEMENT REMOVAL)		REMOVE AGGREGATE DRIVEWAY (INCIDENTAL TO CONCRETE SIDEWALK)
	EXISTING CONCRETE SIDEWALK		EXISTING CONCRETE DRIVEWAY		EXISTING HMA PAVEMENT		EXISTING AGGREGATE DRIVEWAY



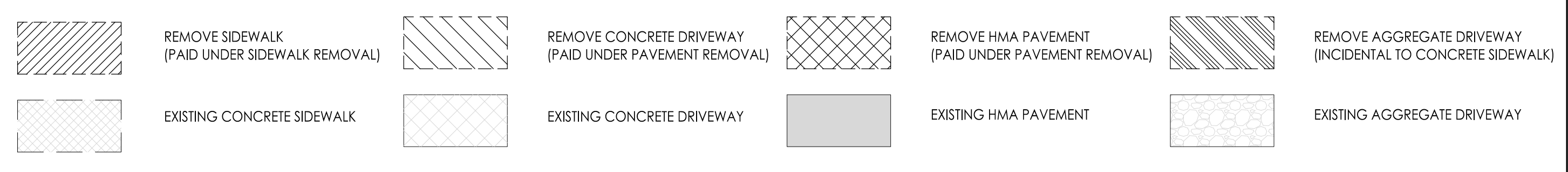
700 WEST LOCUST ST., BELVIDERE, ILLINOIS 61008
 PHONE: (815) 547-8435, FAX: (815) 544-0421
 ILLINOIS DESIGN FIRM NO. 184-001260

PRINTED: Monday, November 09, 2020		
Date	Revision	By
3/15/19	REVISED PER IDOT (LETTER DATED 9-19-18)	JAB
5/3/19	REVISED PER IDOT (LETTER DATED 3-29-19)	JAB
9/28/20	REVISED PER REDUCED SCOPE	JAB
11/2/20	REVISED PER IDOT (E-MAIL 10-20-20)	JAB
Safe Routes to School Segment #4 Main Street Existing Conditions & Removal Plan		
CHECKED BY: KCB DATE: 7/23/2018	DRAWN BY: JAB DATE: 7/23/2018	Sheet 4 of 19



CRESTON ELEMENTARY SCHOOL

UNITED METHODIST CHURCH



VILLAGE TO NOTIFY OWNERS OF TREES AND SHRUBS TO BE REMOVED OR TRIMMED. ALL TREES AND SHRUBS DESIGNATED TO BE REMOVED ARE WITHIN THE VILLAGE ROW.

700 WEST LOCUST ST., BELVIDERE, ILLINOIS 61008
 PHONE: (815) 547-8435, FAX: (815) 544-0421
 ILLINOIS DESIGN FIRM NO. 184-001260

PRINTED: Monday, November 09, 2020		
Date	Revision	By
3/15/19	REVISED PER IDOT (LETTER DATED 9-19-18)	JAB
5/3/19	REVISED PER IDOT (LETTER DATED 3-29-19)	JAB
9/28/20	REVISED PER REDUCED SCOPE	JAB
11/2/20	REVISED PER IDOT (E-MAIL 10-20-20)	JAB
Safe Routes to School Segment #5 Transit Street Existing Conditions & Removal Plan		
CHECKED BY: KCB DATE: 7/23/2018	DRAWN BY: JAB DATE: 7/23/2018	Sheet 5 of 19



645 Third Street, Suite 250, Beloit, WI 53511
 (608) 856-5434 | (815) 713-9165 | www.brownfieldusa.com

IEPA Document Explorer

LOCATION:	S. Transit St. and S. Main St., Creston, IL
CLIENT:	C.E.S., Inc.
PROJECT:	Creston Safe Routes to School
DATE:	December 18 th , 2020



BROWNFIELD ENVIRONMENTAL ENGINEERING															Maximum Allowable Concentration	MAC within a MSA County	MAC within a non-MSA county	MAC within a populated area in a MSA excluding Chicago	MAC within a populated area in a non-MSA county	MAC outside a populated area	
155-001	85675-1	85675-2	85675-3	85675-4	85675-5	85675-6	85675-7	85675-8	85675-9	85675-10	85675-11	85675-12	85675-13								
Date of Sample Collection:	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020	12/17/2020							
Time of Sample Collection:	9:55 AM	10:15 AM	1:18 PM	1:01 PM	11:00 AM	11:10 AM	11:49 AM	11:56 AM	12:06 PM	11:21 AM	11:30 AM	12:12 PM	12:17 PM								
First Environmental Lab. Numbers:	20-7147-001	20-7147-002	20-7147-003	20-7147-004	20-7147-005	20-7147-006	20-7147-007	20-7147-008	20-7147-009	20-7147-010	20-7147-011	20-7147-012	20-7147-013								
Contaminants of Concern:																					
Volatile Organic Compounds (5035A/8260B)																					
Date Analyzed:	Units	RDL	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020							
Acetone	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2					25		
Benzene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.03		
Bromodichloromethane	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.6		
Bromoforn	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.8		
Bromomethane	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					0.2		
2-Butanone (MEK)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					17		
Carbon disulfide	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					9		
Carbon tetrachloride	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.07		
Chlorobenzene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					1		
Chlorodibromomethane	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.4		
Chloroform	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.3		
1,1-Dichloroethane	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					23		
1,2-Dichloroethane	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.02		
1,1-Dichloroethene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.06		
cis-1,2-Dichloroethene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.4		
trans-1,2-Dichloroethene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.7		
1,2-Dichloropropane	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.03		
cis-1,3-Dichloropropene	mg/kg	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004					0.005		
trans-1,3-Dichloropropene	mg/kg	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004					0.005		
Ethylbenzene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					13		
Methyl-tert-butylether (MTBE)	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.32		
Methylene chloride	mg/kg	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02					0.02		
Styrene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					4		
Tetrachloroethene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.06		
Toluene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					12		
1,1,1-Trichloroethane	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					2		
1,1,2-Trichloroethane	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.02		
Trichloroethene	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.06		
Vinyl acetate	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					10		
Vinyl chloride	mg/kg	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					0.01		
Xylene, Total	mg/kg	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					5.6		
Polynuclear Aromatic Hydrocarbons (8270C)																					
Date Analyzed:	Units	RDL	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020	12/21/2020							
Acenaphthene	mg/kg	0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					570		
Acenaphthylene	mg/kg	0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					85		
Anthracene	mg/kg	0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					12000		
Benzo(a)anthracene	mg/kg	0.33	0.338	<0.33	0.398	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					1.8	0.9	0.9
Benzo(a)pyrene	mg/kg	0.09	0.227	<0.09	0.322	0.208	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09					2.1	0.98	0.09
Benzo(b)fluoranthene	mg/kg	0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					2.1	0.9	0.9
Benzo(k)fluoranthene	mg/kg	0.33	<0.33	<0.33	0.387	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					9		
Benzo(ghi)perylene	mg/kg	0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					2300		
Chrysene	mg/kg	0.33	0.355	<0.33	0.39	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					88		
Dibenzo(a,h)anthracene	mg/kg	0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09					0.42	0.15	0.09
Fluoranthene	mg/kg	0.33	0.671	<0.33	0.698	0.347	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					3100		
Fluorene	mg/kg	0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					560		
Indeno(1,2,3-cd)pyrene	mg/kg	0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					1.6	0.9	0.9
Naphthalene	mg/kg	0.33	1.19	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					1.8		
Phenanthrene	mg/kg	0.33	1.77	<0.33	0.512	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					210		
Pyrene	mg/kg	0.33	0.633	<0.33	0.663	0.364	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33					2300		
Total Metals (6010C)																					
Date Analyzed:	Units	RDL	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020	12/18/2020							
Arsenic	mg/kg	1	10.1	6.7	3.8	3.3	4.7	5.9	7.3	4.7	8.6								13	11.3	
Barium	mg/kg	0.5	74.3	173	69.6	59.3	152	110	124	75.7	123								1500		
Cadmium	mg/kg	0.5	2.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5								5.2		
Chromium	mg/kg	0.5	9.3	15.7	8.4	13.3	14.2	17.8	17.6	12.6	20.8								21		
Lead	mg/kg	0.5	160	87.7	59.6	49.7	44	3													



December 22, 2020

Mr. Josh Kunde

BROWNFIELD ENVIRONMENTAL ENGINEERING

645 Third Street

Suite 250

Beloit, WI 53511

Project ID: 155-001

First Environmental File ID: 20-7147

Date Received: December 17, 2020

Dear Mr. Josh Kunde:

The above referenced project was analyzed as directed on the enclosed chain of custody record.

All Quality Control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference. Our accreditation number is 100292 and our current certificate is number 1002922020-6: effective 06/24/2020 through 02/28/2021.

I thank you for the opportunity to be of service to you and look forward to working with you again in the future. Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (630) 778-1200.

Sincerely,

Joy Geraci

Project Manager



Case Narrative

BROWNFIELD ENVIRONMENTAL ENGINEERING

Lab File ID: **20-7147**

Project ID: **155-001**

Date Received: **December 17, 2020**

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

The results in this report apply to the samples in the following table:

Laboratory Sample ID	Client Sample Identifier	Date/Time Collected
20-7147-001	85675-1	12/17/2020 9:55
20-7147-002	85675-2	12/17/2020 10:15
20-7147-003	85675-3	12/17/2020 13:18
20-7147-004	85675-4	12/17/2020 13:01
20-7147-005	85675-5	12/17/2020 11:00
20-7147-006	85675-6	12/17/2020 11:10
20-7147-007	85675-7	12/17/2020 11:49
20-7147-008	85675-8	12/17/2020 11:56
20-7147-009	85675-9	12/17/2020 12:06
20-7147-010	85675-10	12/17/2020 11:21
20-7147-011	85675-11	12/17/2020 11:30
20-7147-012	85675-12	12/17/2020 12:12
20-7147-013	85675-13	12/17/2020 12:17

Sample Batch Comments:

Sample acceptance criteria were met.

Method Comments

Lab Number	Sample ID	Comments:
20-7147-004	85675-4	<i>Volatile Organic Compounds</i> Surrogate recovery outside control limits; low bias due to matrix interference.



Case Narrative

BROWNFIELD ENVIRONMENTAL ENGINEERING

Lab File ID: **20-7147**

Project ID: **155-001**

Date Received: **December 17, 2020**

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

The following is a definition of flags that may be used in this report:

Flag	Description	Flag	Description
A	Method holding time is 15 minutes from collection. Lab analysis was performed as soon as possible.		
B	Analyte was found in the method blank.	L	LCS recovery outside control limits.
<	Analyte not detected at or above the reporting limit.	M	MS recovery outside control limits; LCS acceptable.
C	Sample received in an improper container for this test.	P	Chemical preservation pH adjusted in lab.
D	Surrogates diluted out; recovery not available.	Q	Result was determined by a GC/MS database search.
E	Estimated result; concentration exceeds calibration range.	S	Analysis was subcontracted to another laboratory.
G	Surrogate recovery outside control limits.	T	Result is less than three times the MDL value.
H	Analysis or extraction holding time exceeded.	W	Reporting limit elevated due to sample matrix.
J	Estimated result; concentration is less than routine RL but greater than MDL.	N	Analyte is not part of our NELAC accreditation or accreditation may not be available for this parameter.
RL	Routine Reporting Limit (Lowest amount that can be detected when routine weights/volumes are used without dilution.)	ND	Analyte was not detected using a library search routine; No calibration standard was analyzed.



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-1
Sample No: 20-7147-001

Date Collected: 12/17/20
Time Collected: 9:55
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	77.61		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-1
Sample No: 20-7147-001

Date Collected: 12/17/20
Time Collected: 9:55
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	338	330	ug/kg	
Benzo(a)pyrene	227	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	355	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	671	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	1,190	330	ug/kg	
Phenanthrene	1,770	330	ug/kg	
Pyrene	633	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	10.1	1.0	mg/kg	
Barium	74.3	0.5	mg/kg	
Cadmium	2.7	0.5	mg/kg	
Chromium	9.3	0.5	mg/kg	
Lead	160	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	0.39	0.05	mg/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	9:55
Sample ID:	85675-1	Date Received:	12/17/20
Sample No:	20-7147-001	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2 Analysis Date: 12/18/20 8:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.06		Units	
TCLP Extraction Analysis Date: 12/17/20	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 12/18/20	Method: 6010C	Preparation Method 3010A Preparation Date: 12/18/20		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	0.005	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311 Analysis Date: 12/18/20	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-2
Sample No: 20-7147-002

Date Collected: 12/17/20
Time Collected: 10:15
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	77.53		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	10:15
Sample ID:	85675-2	Date Received:	12/17/20
Sample No:	20-7147-002	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	< 330	330	ug/kg	
Benzo(a)pyrene	< 90	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	< 330	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	6.7	1.0	mg/kg	
Barium	173	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Chromium	15.7	0.5	mg/kg	
Lead	87.7	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	< 0.05	0.05	mg/kg	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING **Date Collected:** 12/17/20
Project ID: 155-001 **Time Collected:** 10:15
Sample ID: 85675-2 **Date Received:** 12/17/20
Sample No: 20-7147-002 **Date Reported:** 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2 Method: 9045D 2004				
Analysis Date: 12/18/20 8:45				
pH @ 25°C, 1:2	8.08		Units	
TCLP Extraction Method: 1311				
Analysis Date: 12/17/20				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 12/18/20 Preparation Date: 12/18/20				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	0.014	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 12/18/20				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-3
Sample No: 20-7147-003

Date Collected: 12/17/20
Time Collected: 13:18
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	91.09		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-3
Sample No: 20-7147-003

Date Collected: 12/17/20
Time Collected: 13:18
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	398	330	ug/kg	
Benzo(a)pyrene	322	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	387	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	390	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	698	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	< 330	330	ug/kg	
Phenanthrene	512	330	ug/kg	
Pyrene	663	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	3.8	1.0	mg/kg	
Barium	69.6	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Chromium	8.4	0.5	mg/kg	
Lead	59.6	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	4.03	0.05	mg/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	13:18
Sample ID:	85675-3	Date Received:	12/17/20
Sample No:	20-7147-003	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2	Method: 9045D 2004			
Analysis Date: 12/18/20 8:45				
pH @ 25°C, 1:2	8.78		Units	
TCLP Extraction	Method: 1311			
Analysis Date: 12/17/20				
TCLP Extraction	Complete			
TCLP Metals Method 1311	Method: 6010C	Preparation Method 3010A		
Analysis Date: 12/18/20		Preparation Date: 12/18/20		
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	0.008	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311	Method: 7470A			
Analysis Date: 12/18/20				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-4
Sample No: 20-7147-004

Date Collected: 12/17/20
Time Collected: 13:01
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	93.56		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	13:01
Sample ID:	85675-4	Date Received:	12/17/20
Sample No:	20-7147-004	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	< 330	330	ug/kg	
Benzo(a)pyrene	208	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	347	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Pyrene	364	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	3.3	1.0	mg/kg	
Barium	59.3	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Chromium	13.3	0.5	mg/kg	
Lead	49.7	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.3	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	0.12	0.05	mg/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	13:01
Sample ID:	85675-4	Date Received:	12/17/20
Sample No:	20-7147-004	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2 Method: 9045D 2004				
Analysis Date: 12/18/20 8:45				
pH @ 25°C, 1:2	8.26		Units	
TCLP Extraction Method: 1311				
Analysis Date: 12/17/20				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 12/18/20 Preparation Date: 12/18/20				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	< 0.005	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 12/18/20				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-5
Sample No: 20-7147-005

Date Collected: 12/17/20
Time Collected: 11:00
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	77.06		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	11:00
Sample ID:	85675-5	Date Received:	12/17/20
Sample No:	20-7147-005	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	< 330	330	ug/kg	
Benzo(a)pyrene	< 90	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	< 330	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	4.7	1.0	mg/kg	
Barium	152	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Chromium	14.2	0.5	mg/kg	
Lead	44.0	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	0.12	0.05	mg/kg	



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Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	11:00
Sample ID:	85675-5	Date Received:	12/17/20
Sample No:	20-7147-005	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2 Method: 9045D 2004				
Analysis Date: 12/18/20 8:45				
pH @ 25°C, 1:2	8.05		Units	
TCLP Extraction Method: 1311				
Analysis Date: 12/17/20				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Method: 6010C Preparation Method 3010A				
Analysis Date: 12/18/20 Preparation Date: 12/18/20				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	< 0.005	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311 Method: 7470A				
Analysis Date: 12/18/20				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-6
Sample No: 20-7147-006

Date Collected: 12/17/20
Time Collected: 11:10
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	83.19		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-6
Sample No: 20-7147-006

Date Collected: 12/17/20
Time Collected: 11:10
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	< 330	330	ug/kg	
Benzo(a)pyrene	< 90	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	< 330	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	5.9	1.0	mg/kg	
Barium	110	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Chromium	17.8	0.5	mg/kg	
Lead	37.2	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.5	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	0.36	0.05	mg/kg	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-6
Sample No: 20-7147-006

Date Collected: 12/17/20
Time Collected: 11:10
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2 Analysis Date: 12/18/20 8:45 Method: 9045D 2004				
pH @ 25°C, 1:2	8.27		Units	
TCLP Extraction Analysis Date: 12/17/20 Method: 1311				
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 12/18/20 Method: 6010C			Preparation Method 3010A Preparation Date: 12/18/20	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	< 0.005	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311 Analysis Date: 12/18/20 Method: 7470A				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-7
Sample No: 20-7147-007

Date Collected: 12/17/20
Time Collected: 11:49
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	80.90		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-7
Sample No: 20-7147-007

Date Collected: 12/17/20
Time Collected: 11:49
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	< 330	330	ug/kg	
Benzo(a)pyrene	< 90	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	< 330	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	7.3	1.0	mg/kg	
Barium	124	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Chromium	17.6	0.5	mg/kg	
Lead	74.8	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.6	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	< 0.05	0.05	mg/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	11:49
Sample ID:	85675-7	Date Received:	12/17/20
Sample No:	20-7147-007	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2 Analysis Date: 12/18/20 8:45	Method: 9045D 2004			
pH @ 25°C, 1:2	8.24		Units	
TCLP Extraction Analysis Date: 12/17/20	Method: 1311			
TCLP Extraction	Complete			
TCLP Metals Method 1311 Analysis Date: 12/18/20	Method: 6010C		Preparation Method 3010A Preparation Date: 12/18/20	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	< 0.005	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311 Analysis Date: 12/18/20	Method: 7470A			
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-8
Sample No: 20-7147-008

Date Collected: 12/17/20
Time Collected: 11:56
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	87.24		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	11:56
Sample ID:	85675-8	Date Received:	12/17/20
Sample No:	20-7147-008	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	< 330	330	ug/kg	
Benzo(a)pyrene	< 90	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	< 330	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	4.7	1.0	mg/kg	
Barium	75.7	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Chromium	12.6	0.5	mg/kg	
Lead	10.0	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.4	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	< 0.05	0.05	mg/kg	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-8
Sample No: 20-7147-008

Date Collected: 12/17/20
Time Collected: 11:56
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2		Method: 9045D 2004		
Analysis Date: 12/18/20 8:45				
pH @ 25°C, 1:2	8.53		Units	
TCLP Extraction		Method: 1311		
Analysis Date: 12/17/20				
TCLP Extraction	Complete			
TCLP Metals Method 1311		Method: 6010C		Preparation Method 3010A
Analysis Date: 12/18/20				
Preparation Date: 12/18/20				
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	< 0.005	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311		Method: 7470A		
Analysis Date: 12/18/20				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-9
Sample No: 20-7147-009

Date Collected: 12/17/20
Time Collected: 12:06
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Solids, Total		Method: 2540G		
Analysis Date: 12/17/20				
Total Solids	78.71		%	
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Acetone	< 200	200	ug/kg	
Benzene	< 5.0	5.0	ug/kg	
Bromodichloromethane	< 5.0	5.0	ug/kg	
Bromoform	< 5.0	5.0	ug/kg	
Bromomethane	< 10.0	10.0	ug/kg	
2-Butanone (MEK)	< 100	100	ug/kg	
Carbon disulfide	< 5.0	5.0	ug/kg	
Carbon tetrachloride	< 5.0	5.0	ug/kg	
Chlorobenzene	< 5.0	5.0	ug/kg	
Chlorodibromomethane	< 5.0	5.0	ug/kg	
Chloroethane	< 10.0	10.0	ug/kg	
Chloroform	< 5.0	5.0	ug/kg	
Chloromethane	< 10.0	10.0	ug/kg	
1,1-Dichloroethane	< 5.0	5.0	ug/kg	
1,2-Dichloroethane	< 5.0	5.0	ug/kg	
1,1-Dichloroethene	< 5.0	5.0	ug/kg	
cis-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
trans-1,2-Dichloroethene	< 5.0	5.0	ug/kg	
1,2-Dichloropropane	< 5.0	5.0	ug/kg	
cis-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
trans-1,3-Dichloropropene	< 4.0	4.0	ug/kg	
Ethylbenzene	< 5.0	5.0	ug/kg	
2-Hexanone	< 10.0	10.0	ug/kg	
Methyl-tert-butylether (MTBE)	< 5.0	5.0	ug/kg	
4-Methyl-2-pentanone (MIBK)	< 10.0	10.0	ug/kg	
Methylene chloride	< 20.0	20.0	ug/kg	
Styrene	< 5.0	5.0	ug/kg	
1,1,2,2-Tetrachloroethane	< 5.0	5.0	ug/kg	
Tetrachloroethene	< 5.0	5.0	ug/kg	
Toluene	< 5.0	5.0	ug/kg	
1,1,1-Trichloroethane	< 5.0	5.0	ug/kg	
1,1,2-Trichloroethane	< 5.0	5.0	ug/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	12:06
Sample ID:	85675-9	Date Received:	12/17/20
Sample No:	20-7147-009	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
Volatile Organic Compounds		Method: 5035A/8260B		
Analysis Date: 12/21/20				
Trichloroethene	< 5.0	5.0	ug/kg	
Vinyl acetate	< 10.0	10.0	ug/kg	
Vinyl chloride	< 10.0	10.0	ug/kg	
Xylene, Total	< 5.0	5.0	ug/kg	
Polynuclear Aromatic Hydrocarbons		Method: 8270C		
Analysis Date: 12/21/20				
		Preparation Method 3546		
Preparation Date: 12/20/20				
Acenaphthene	< 330	330	ug/kg	
Acenaphthylene	< 330	330	ug/kg	
Anthracene	< 330	330	ug/kg	
Benzo(a)anthracene	< 330	330	ug/kg	
Benzo(a)pyrene	< 90	90	ug/kg	
Benzo(b)fluoranthene	< 330	330	ug/kg	
Benzo(k)fluoranthene	< 330	330	ug/kg	
Benzo(ghi)perylene	< 330	330	ug/kg	
Chrysene	< 330	330	ug/kg	
Dibenzo(a,h)anthracene	< 90	90	ug/kg	
Fluoranthene	< 330	330	ug/kg	
Fluorene	< 330	330	ug/kg	
Indeno(1,2,3-cd)pyrene	< 330	330	ug/kg	
Naphthalene	< 330	330	ug/kg	
Phenanthrene	< 330	330	ug/kg	
Pyrene	< 330	330	ug/kg	
Total Metals		Method: 6010C		
Analysis Date: 12/18/20				
		Preparation Method 3050B		
Preparation Date: 12/18/20				
Arsenic	8.6	1.0	mg/kg	
Barium	123	0.5	mg/kg	
Cadmium	< 0.5	0.5	mg/kg	
Chromium	20.8	0.5	mg/kg	
Lead	10.0	0.5	mg/kg	
Selenium	< 1.0	1.0	mg/kg	
Silver	0.8	0.2	mg/kg	
Total Mercury		Method: 7471B		
Analysis Date: 12/18/20				
Mercury	< 0.05	0.05	mg/kg	



Analytical Report

Client:	BROWNFIELD ENVIRONMENTAL ENGINEERING	Date Collected:	12/17/20
Project ID:	155-001	Time Collected:	12:06
Sample ID:	85675-9	Date Received:	12/17/20
Sample No:	20-7147-009	Date Reported:	12/22/20

Results are reported on a dry weight basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2	Method: 9045D 2004			
Analysis Date: 12/18/20 8:45				
pH @ 25°C, 1:2	7.95		Units	
TCLP Extraction	Method: 1311			
Analysis Date: 12/17/20				
TCLP Extraction	Complete			
TCLP Metals Method 1311	Method: 6010C		Preparation Method 3010A	
Analysis Date: 12/18/20			Preparation Date: 12/18/20	
Arsenic	< 0.010	0.010	mg/L	
Barium	< 1.0	1.0	mg/L	
Cadmium	< 0.005	0.005	mg/L	
Chromium	< 0.005	0.005	mg/L	
Lead	< 0.005	0.005	mg/L	
Selenium	< 0.010	0.010	mg/L	
Silver	< 0.005	0.005	mg/L	
TCLP Mercury Method 1311	Method: 7470A			
Analysis Date: 12/18/20				
Mercury	< 0.0005	0.0005	mg/L	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-10
Sample No: 20-7147-010

Date Collected: 12/17/20
Time Collected: 11:21
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on an "as received" basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2				
Analysis Date: 12/18/20 8:45				
	Method: 9045D 2004			
pH @ 25°C, 1:2	8.15		Units	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-11
Sample No: 20-7147-011

Date Collected: 12/17/20
Time Collected: 11:30
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on an "as received" basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2				
Analysis Date: 12/18/20 8:45				
	Method: 9045D 2004			
pH @ 25°C, 1:2	8.09		Units	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-12
Sample No: 20-7147-012

Date Collected: 12/17/20
Time Collected: 12:12
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on an "as received" basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2				
Analysis Date: 12/18/20 8:45				
	Method: 9045D 2004			
pH @ 25°C, 1:2	8.27		Units	



Analytical Report

Client: BROWNFIELD ENVIRONMENTAL ENGINEERING
Project ID: 155-001
Sample ID: 85675-13
Sample No: 20-7147-013

Date Collected: 12/17/20
Time Collected: 12:17
Date Received: 12/17/20
Date Reported: 12/22/20

Results are reported on an "as received" basis.

Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2				
Analysis Date: 12/18/20 8:45				
	Method: 9045D 2004			
pH @ 25°C, 1:2	7.89		Units	



First Environmental Laboratories, Inc.

First Environmental Laboratories
 1600 Shore Road, Suite D
 Naperville, Illinois 60563
 Phone: (630) 778-1200 • Fax: (630) 778-1233
 E-mail: firstinfo@firstenv.com • www.firstenv.com
 IBCA Certification #100292

CHAIN OF CUSTODY RECORD

Company Name: Brownfield Environmental Engineering Resources
 Street Address: 645 Third Street, Suite 250
 City: Beloit State: WI Zip: 53511
 Phone: 608-856-5481 e-mail: JOHN@brownfieldsa.com
 Send Report To: JOHN KUNDE
 Sampled By: JOHN KUNDE

Project I.D.: 155-001

P.O. #:

Date/Time Taken	Sample Description	Matrix	Parameter(s)						Hold - Do Not Analyze	Comments	Lab I.D.
			PH	VOCs	PCOA Metals	PNA's	TCLP Metals				
12/17/20 0955	85675-1	S	X	X	X	X				001	
12/17/20 1015	85675-2	S	X	X	X	X				002	
12/17/20 1218	85675-3	S	X	X	X	X				003	
12/17/20 1301	85675-4	S	X	X	X	X				004	
12/17/20 1100	85675-5	S	X	X	X	X				005	
12/17/20 1110	85675-6	S	X	X	X	X				006	
12/17/20 1149	85675-7	S	X	X	X	X				004	
12/17/20 1151	85675-8	S	X	X	X	X				008	
12/17/20 1206	85675-9	S	X	X	X	X				009	
12/17/20 1121	85675-10	S	X	X	X	X				010	
12/17/20 1130	85675-11	S	X	X	X	X				011	
12/17/20 1212	85675-12	S	X	X	X	X				012	

FOR LAB USE ONLY:

LAB COURIER USE ONLY:

Cooler Temperature: 0-1-6°C Yes No 4 °C
 Received within 6 hrs. of collection: Yes No
 Ice Present: Yes No

Sample Refrigerated: Yes No
 Refrigerator Temperature: _____ °C

Program: TACO/SRP CCDD NPDES LUST SDWA

*Matrix Code Key: S-Soil SL-Sludge DW-Drinking Water
 WW-Wastewater GW-Groundwater WIFE-Wipe O-Other

Notes and Special Instructions:

RUSH - Need P&S HTS Tuesday 12/22/20

Relinquished By: Robert Arnold Date/Time: 12/17/20 1400 Received By: [Signature] Date/Time: 12/17/20 1340
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____



First Environmental Laboratories, Inc.

First Environmental Laboratories
1600 Shore Road, Suite D
Naperville, Illinois 60563
Phone: (630) 778-1200 • Fax: (630) 778-1233
E-mail: firstinfo@firstenv.com • www.firstenv.com
IEPA Certification #100292

CHAIN OF CUSTODY RECORD

Company Name: Brownheld Environmental Engineering Resources
Street Address: 6445 Third Street, Suite 250
City: Beloit State: WI Zip: 53571

Phone: 608-856-5434 e-mail: Josh@brownheldusa.com
Send Report To: Josh Kunde
Sampled By: Josh Kunde

Project I.D.: 155-001

P.O. #:

Date/Time Taken	Sample Description	Matrix	Parameter(s)	Hold-Do Not Analyze	Comments	Lab I.D.
12/17/20 1217	85675-13	S	PH VOCS PCRA METALS PNUAS TCLP METALS			20-7147 013

FOR LAB USE ONLY: LAB COURIER USE ONLY:

Cooler Temperature: 0.1-6°C Yes ___ No ___ °C Sample Refrigerated: Yes ___ No ___ °C Program: TACO/SRP PPCDD NPDES LUST SDWA
Received within 6 hrs. of collection: _____ °C Refrigerator Temperature: _____ °C
Ice Present: Yes ___ No ___

Notes and Special Instructions: PUSH NEED RESULTS TUESDAY 12/22/20

Matrix Code Key: S-Soil SL-Sludge DW-Drinking Water
WW-Wastewater GW-Groundwater WIPE-Wipe O-Other

Relinquished By: Wasserman and Date/Time: 12/17/20 1408 Received By: [Signature] Date/Time: 12/17/20 1340



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: Creston Safe Routes to School Office Phone Number, if available: _____

Physical Site Location (address, including number and street):

S. Main Street and S. Transit Street

City: Creston State: IL Zip Code: 61068

County: Ogle Township: Dement

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.92954 Longitude: - 88.96472

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

Google Earth

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

Approximate Start Date (mm/dd/yyyy): 1/15/2021 Approximate End Date (mm/dd/yyyy): _____

Estimated Volume of debris (cu. Yd.): 80

II. Owner/Operator Information for Source Site

Site Owner

Name: Village of Creston

Street Address: 110 N. Main Street

PO Box: 36

City: Creston State: IL

Zip Code: 60113 Phone: (815) 384-4140

Contact: Donald W. Williams

Email, if available: jwdw13@yahoo.com

Site Operator

Name: _____

Street Address: _____

PO Box: _____

City: _____ State: _____

Zip Code: _____ Phone: _____

Contact: _____

Email, if available: _____

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Uncontaminated Soil Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

The material sample locations were selected to represent major areas of excavation activities within the scope of work for the proposed project. The material samples were obtained from location most likely to exhibit the highest levels of contamination, if any. The sample location maps are included with this CCDD Certification.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

A total of thirteen (13) soil samples were collected within the proposed project limits. Nine (9) soil samples were analyzed for VOCs, RCRA metals, TCLP metals, PNAs, and pH. Four (4) soil samples were analyzed for pH. Field screening with a PID was performed at each sample location.


IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Bradley A. Brown, P.E. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Brownfield Environmental Engineering Resources
Street Address: 645 Third Street, Suite 250
City: Beloit State: WI Zip Code: 53511
Phone: (608) 856-5434

Bradley A. Brown, P.E.
Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

12/22/2020
Date:

