

**From:** Bartholomew, Craig O CIV USARMY USAG (USA)  
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**Sent:** Tuesday, April 28, 2020 7:39 AM  
**To:** Zeichert, Timothy A - DNR  
**Cc:** Friedl, Brent A CIV USARMY USAG (USA); Herzog Blumer, Susan R CIV  
USARMY IMCOM (USA)  
**Subject:** Fort McCoy Water Main Issue (UNCLASSIFIED)  
**Attachments:** Water Main Route from Ski Hill to WWTP Map.pdf; MAP CLF2-CLF3 Areal  
Photo.pdf; Area North of CLF2.pdf; Incinerator Ash Characterization.pdf;  
Actual Water Main Route South of WWTP.pdf

CLASSIFICATION: UNCLASSIFIED

Tim,

The general route of the water main we discussed the other day is shown on the attached map (Water Main Route from Ski Hill to WWTP). Last Thursday I went out to walk the trench over the Grit Area & Closed Landfill 3 (CLF3; BRRTS No. 02-42-279983). The contractor was in the process of backfilling the trench along the north side of Treatment Drive (formerly Buckley Court), just north of Closed Landfill 2 (CLF2; BRRTS No. 02-42-279977; see Area North of CLF2 and Map of CLF2-CLF3 Aerial Photo). As shown on the attached map (Area North of CLF2), hand auger borings were advanced along the fence-line in 2010. Incinerator ash was observed in those hand auger borings. At that time it was believed that the CLF2 waste (which is incinerator ash) might extend beneath the roadway. However, an investigation conducted during 2011 showed that any ash that extended south of the hand auger borings was removed when the ditch was installed along the roadway many years ago. The ash north of the road, between the fence and the creek in this area, contained two locations where transite was visible, and Mae requested that the area be capped with 2 feet of soil. In 2011 Fort McCoy capped the ash north of the fence with 2 feet of sand, added topsoil, and planted grass (see Map CLF2-CLF3 Aerial Photo).

The 2009/2010 investigation included excavation and removal of incinerator ash that was located just east of this area, just north of the current Fort McCoy Recycling Center, where the incinerators were formerly located. The area north of CLF2 was discovered during this work and had not been included in the contract for the work. Therefore, it was not excavated. Analytical samples collected during the 2009/2010 work showed that the ash contained metals and pesticides (see attached Incinerator Ash Characterization). The only parameter that exceeded the USEPA Regional Screen Levels was dieldrin. The main reason that Mae requested that this area be capped was due to the observed transite.

On Thursday, the contractor excavation ran right along the fence line north of the roadway. The north edge of the excavation (1-2 feet wide) contained incinerator ash mixed with soil from just below ground surface to a depth of

1-2 feet. No transite was observed. I realize this section will also need to be sampled. As the incinerator ash has a different composition than the Grit Area & CLF3 waste, the sampling parameters will be a bit different at this location. I assume the parameter list for this area will at least need to include RCRA metals, and pesticides. I can send you the reports for this area if you don't have them digitally.

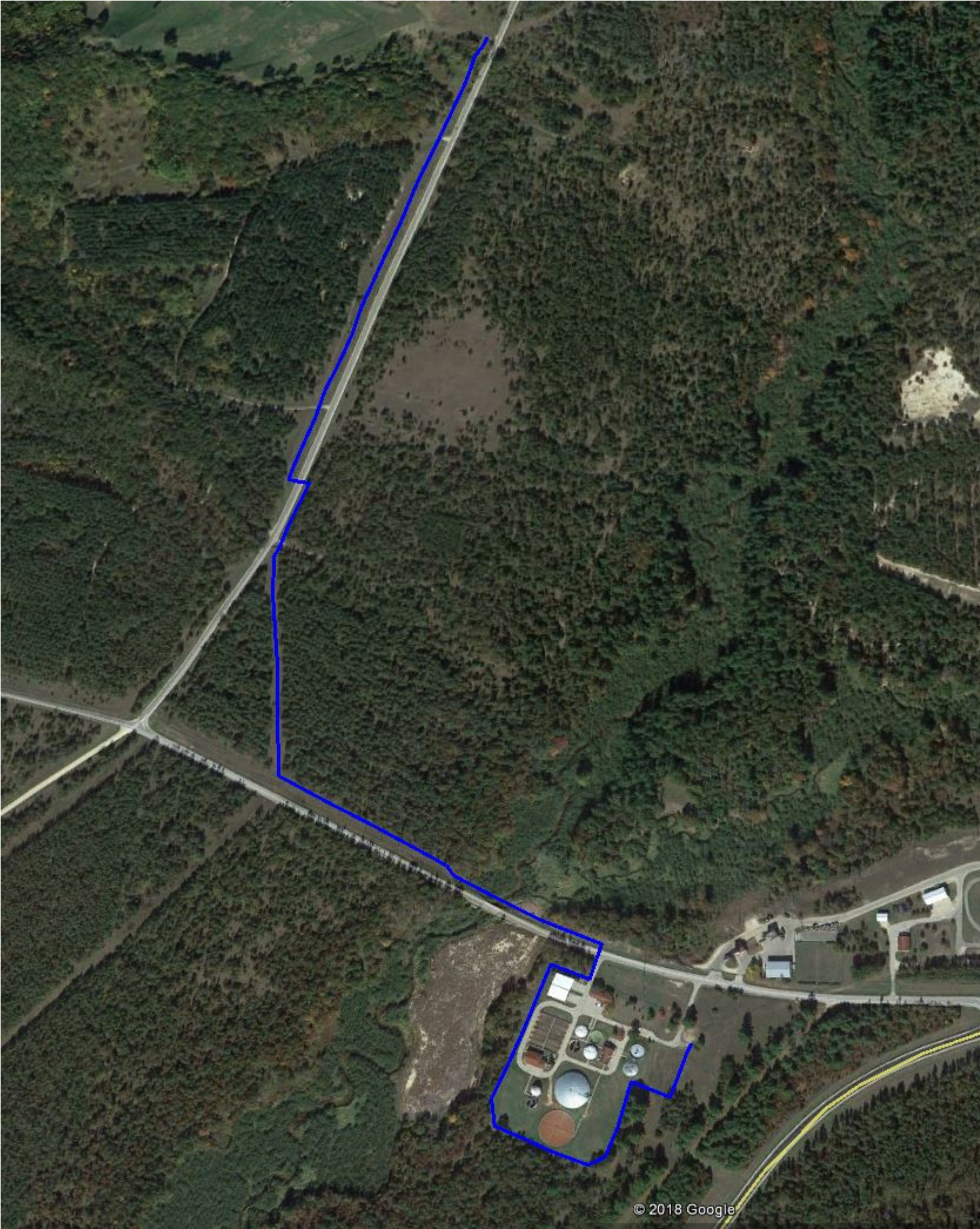
On Thursday I walked around the Grit Area and the south side of the WWTP by CLF3. The water main goes down the east side of the fence through the Grit Area, then turns west and continues through the east fence line about 15 feet north of the south fence line (see attached Actual Water Main Route South of WWTP). The main then runs along the north side of the south fence line, then turns north before reaching the west fence line and stays inside the fence until it reaches the north fence line. Therefore, the area of CLF3 that may have been disturbed is pretty small.

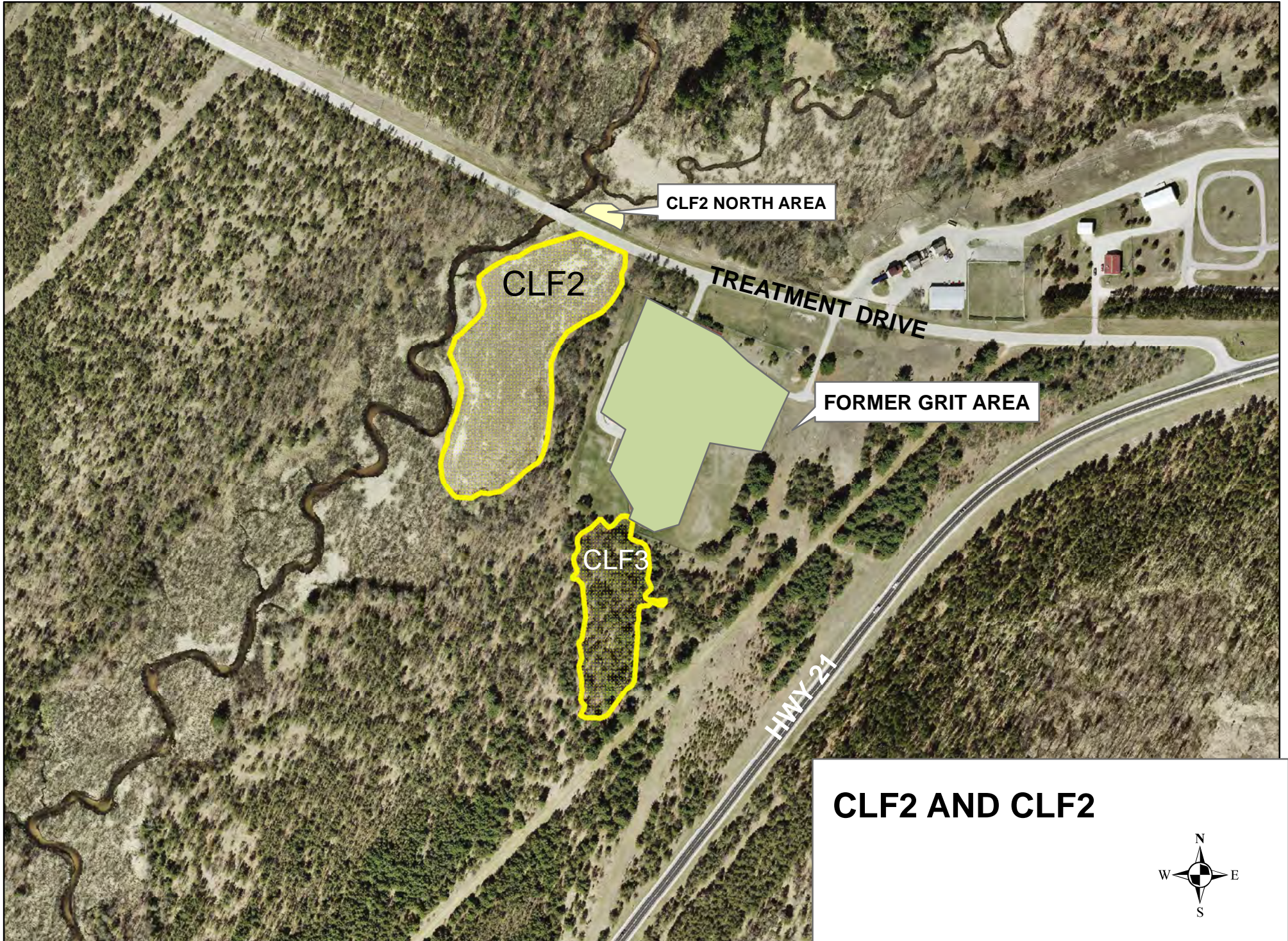
As we discussed, please let me know what analytical parameters you would like to see in each of these 3 areas, and what sample spacing you would like to see along the trench. The plan will be to use a hand shovel and collect composite samples from zero to 2 feet deep along the trench line in each of these 3 areas. Let me know if you have any questions or require additional information. Thanks for all your help.

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Directorate of Public Works  
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CLASSIFICATION: UNCLASSIFIED





CLF2 NORTH AREA

CLF2

TREATMENT DRIVE

FORMER GRIT AREA

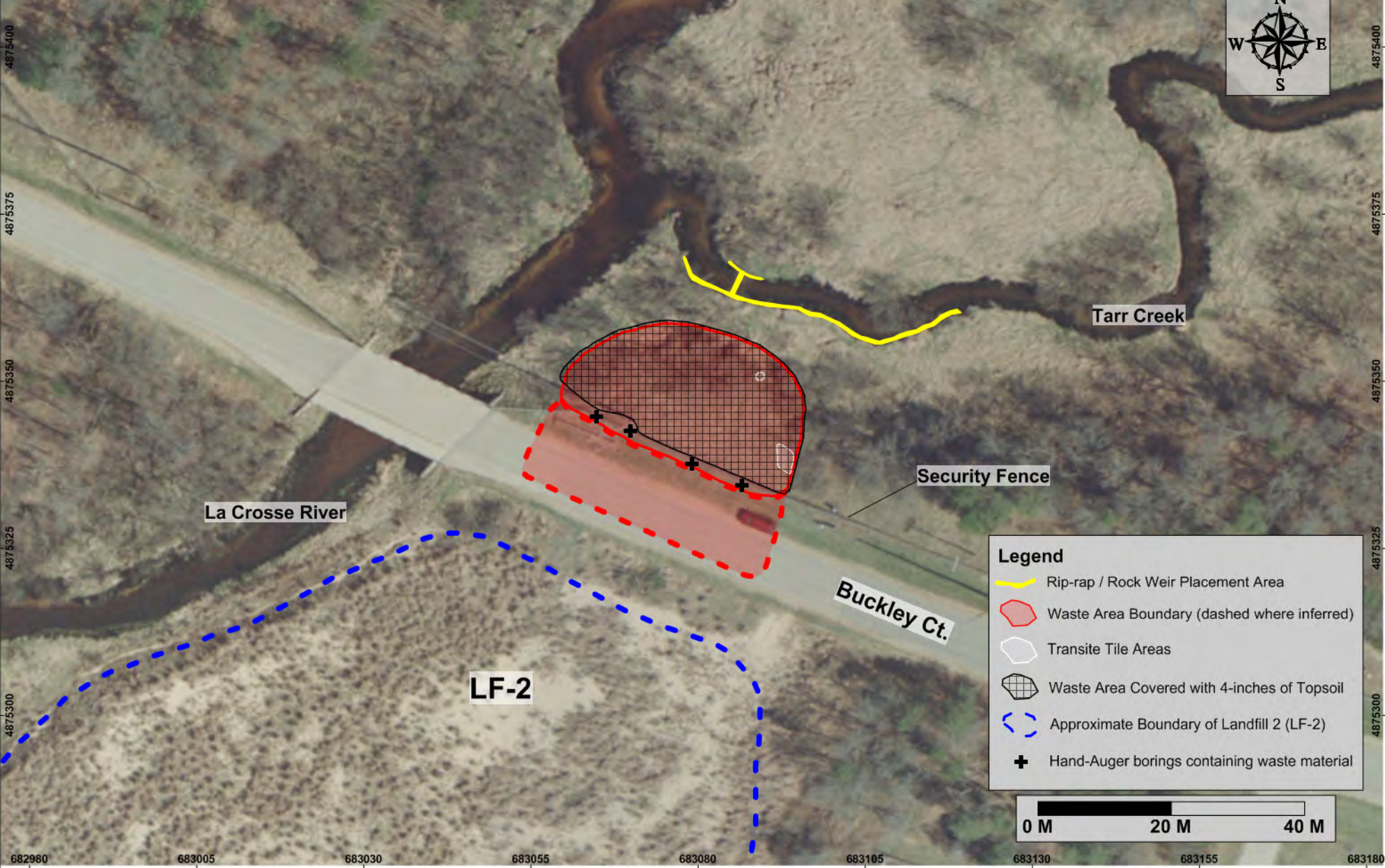
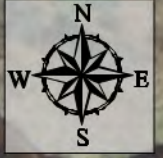
CLF3

HWY 24

# CLF2 AND CLF2

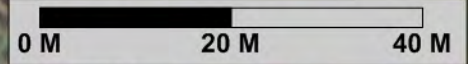


Note: Projection - World Geodetic System (WGS) 1984, Universal Transverse Mercator (UTM) Zone 15 North (meters).



**Legend**

- Rip-rap / Rock Weir Placement Area
- Waste Area Boundary (dashed where inferred)
- Transite Tile Areas
- Waste Area Covered with 4-inches of Topsoil
- Approximate Boundary of Landfill 2 (LF-2)
- Hand-Auger borings containing waste material



**Site B Features**

PROJECT NO. 8090016	SCALE 1" = 20M	DATE 7/30/10	DRAWN BY: dtm
			DRAWING NO: Fig. 3

Corrective Action Implementation Report  
Remedial Action - Ash Excavation  
Fort McCoy  
Sparta, Wisconsin

Figure 3

Table 3-1  
Waste Characterization Analytical Results (September 2009 and May 2010)  
Remedial Action - Ash Excavation, Closure Report  
Fort McCoy, Wisconsin  
NationView Proj. No.: 8090016

Client Sample Identification:	Soil Cleanup Standards	FT MCCOY EAST			PROFILE-EAST			FT MCCOY WEST			PROFILE-WEST		
Lab Sample Identification:	Wisconsin Industrial <sup>1</sup>	F67955-2			F73893-1			F67955-1			F73893-2		
Date Sampled:		9/11/2009			5/21/2010			9/11/2009			5/21/2010		
Analyte (Method)		Result	LQ	CQ	Result	LQ	CQ	Result	LQ	CQ	Result	LQ	CQ
<b>Volatile Organic Compounds (8260B)</b>	<b>mg/kg</b>	<b>µg/kg</b>			<b>µg/kg</b>			<b>µg/kg</b>			<b>µg/kg</b>		
All VOCs	N/A	NA			ND			NA			ND		
<b>Pesticides (8081A) and Herbicides (8151A)</b>	<b>mg/kg</b>	<b>µg/kg</b>			<b>µg/kg</b>			<b>µg/kg</b>			<b>µg/kg</b>		
Dieldrin	0.11 <sup>2</sup>	NA			0.94	J		NA			1.5	J	
Pentachlorophenol	9.0 <sup>2</sup>	NA			8.7	J		NA			8.0	J	
4,4'-DDE	5.1 <sup>2</sup>	NA			0.89	J		NA			4.1	J	
4,4'-DDT	7.0 <sup>2</sup>	NA			0.86	U		NA			3.9	J	J
<b>PCBs (8082)</b>	<b>mg/kg</b>	<b>µg/kg</b>			<b>µg/kg</b>			<b>µg/kg</b>			<b>µg/kg</b>		
All PCBs	N/A	NA			ND			NA			ND		
<b>TCLP Metals Analysis (1311/6010B/7470A)</b>	<b>mg/L</b>	<b>mg/L</b>			<b>mg/L</b>			<b>mg/L</b>			<b>mg/L</b>		
Barium	NV <sup>3</sup>	0.43	J		NA			0.36	J		NA		
Cadmium	NV <sup>3</sup>	0.0035	J		NA			0.0028	J		NA		
Copper	NV <sup>3</sup>	0.0079	J		NA			0.0094	J		NA		
Lead	NV <sup>3</sup>	0.017	J		NA			0.028	J		NA		
Nickel	NV <sup>3</sup>	0.0041	J		NA			0.0081	J		NA		
Zinc	NV <sup>3</sup>	0.48			NA			0.79			NA		
<b>General Chemistry (2450B)</b>	<b>%</b>	<b>%</b>			<b>%</b>			<b>%</b>			<b>%</b>		
Solids, Percent	NV	NA			76.6			NA			69.3		

**Notes:**

PCB = Polychlorinated Biphenyls  
TCLP = Toxicity Characteristic Leaching Procedure  
µg/kg = micrograms per kilogram  
mg/kg = milligrams per kilogram  
mg/L = milligrams per liter  
NV = No Value  
% = percent  
NA = Not Analyzed  
ND = Not Detected  
N/A = Not Applicable  
LQ = Laboratory Qualifiers  
CQ = Validating Chemist Qualifiers

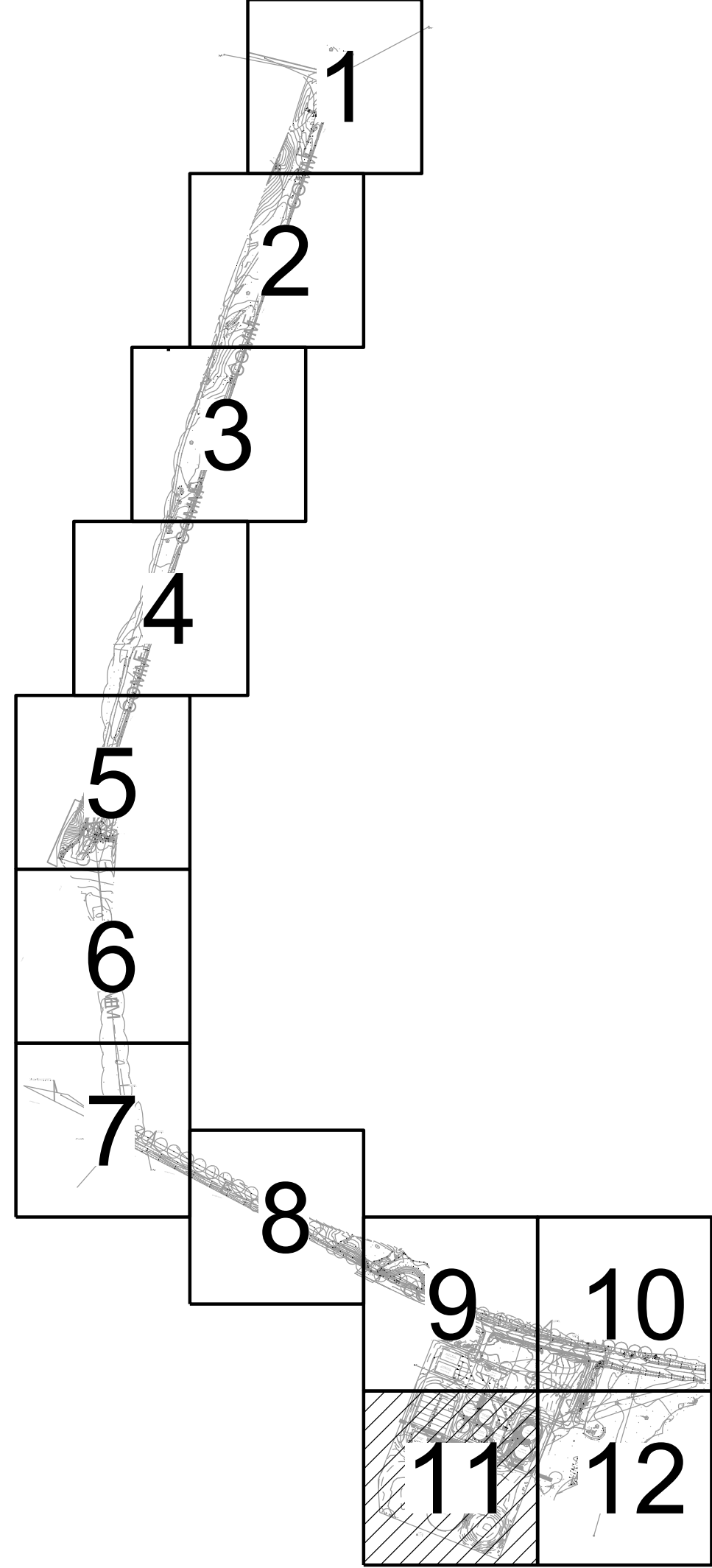
<sup>1</sup>Wisconsin Department of Natural Resources (WDNR), September 2007. Chapter NR 720 Soil Cleanup Standards, Table 2 - Industrial.

<sup>2</sup>USEPA Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites, Industrial Soil (December, 2009)

<sup>3</sup>No Value established for WDNR Industrial Soil Cleanup Standard (September, 2007) and USEPA RSLs (December, 2009).

**Qualifiers**

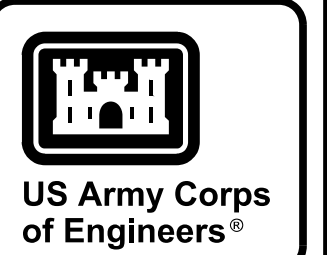
J = Estimated result. Result is between the method detection limit and the reporting limit.  
U = Undetected. Value set at the limit of detection



NORTH  
KEY PLAN  
SCALE: 1" = 500'

NORTH  
SCALE: 1" = 30'-0"

- GENERAL NOTES:
- 1) THE LOCATION OF EXISTING UTILITIES AND STRUCTURES IS SHOWN BASED ON SURVEY DATA.
  - 2) IF AN UNKNOWN UTILITY IS ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE BEFORE PROCEEDING.
  - 3) WATER LINE SHALL BE 8" HDPE DR11. ALL PIPE, VALVES, FITTINGS AND HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURERS' PUBLISHED DATA AND INSTRUCTIONS.
  - 4) WHERE FIRE HYDRANTS ARE ADJACENT TO ROADWAYS, THE HYDRANT SHALL BE INSTALLED A MINIMUM OF 10 FEET FROM THE EDGE OF THE SHOULDER. FIELD ADJUST TO AVOID CONFLICT WITH OTHER UTILITIES AND MAINTAIN A MINIMUM OF TEN FEET FROM THE EDGE OF THE SHOULDER.
  - 5) THE CONTRACTOR SHALL COORDINATE THE RELOCATION OF OVERHEAD POWER GUY LINES WITH XCEL ENERGY.
  - 6) THE CONTRACTOR MAY COMPLETELY REMOVE TREES WHICH PREVENT THE INSTALLATION OF THE NEW WATER LINE. IF TREE REMOVAL IS NECESSARY, NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE.



DATE	DESCRIPTION	MARK

DESIGNED BY: D. ERICKSON	ISSUE DATE: 09/05/2018
CHECKED BY: D. ERICKSON	SOLICITATION NO.:
SUBMITTED BY: W. DAVENPORT	CONTRACT NO.:
FILENAME: FM77CU11.dwg	FILE NUMBER: F845-10-01
SIZE:	ANSI/D:

U.S. ARMY CORPS OF ENGINEERS  
OMAHA DISTRICT  
1616 CAPITOL AVE  
OMAHA, NE 68102

UTILITY PLAN  
AREA 11

SHEET ID  
CU111