Initial Site Screening (ISS)

CON12-15
DOC# 35274

Site Name: Lead - US Cellular Tower Site #394388

Project Manager: Matt Culp Date: 1/18/2019

☒ **3931 - Phase II Assessment Review – Brownfield Funded**
Phase II submitted as part of standard real estate development, pre-purchase agreement, or other due diligence, not a part of a community grant project, or

☐ **3837 - Phase II Assessment – Brownfield Grant Funded**
Phase II submitted as part of an EPA grant funded community-wide or targeted assessment project – see Mel Pins if questions on this determination, or

☐ **3321 - Phase II Assessment Review – CERCLA Pre-Remedial Funded**
Phase II submitted that is not part of a real estate transaction

Location: (Decimal Degree format)

Latitude: 42.6740 Longitude: 91.9202 **County:** Fayette

USGS Quadrant: Oelwein

Site Size: 1,654 square feet. **Site Dimension:** ☐ Acres ☒ Square Feet ☐ Feet ☐ Square Miles ☐ Miles

Site Alias Name(s): None

Congressional District: Iowa 2nd

Grant Recipient Name: NA

Grant Recipient Address: NA

Grant Recipient Phone: NA **Grant Recipient Email:** NA

Current Owner(s): Mr. Doug Bryan, Premier Real Estate, LLC

Current Owner Address: 101 County Line Rd E. Oelwein, IA 50662

If different from current owner:

Responsible Party Name(s): same

Responsible Party Address: same

Site Street Address or Tier, Range, Section & Subsections (if street address is unknown)

301 5th Ave SW, Oelwein, Iowa

Directions to site: From Des Moines travel north on interstate 35 to highway 3 (AKA 60th Street) and turn east. Travel east on highway 3 to Oelwein. Entering Oelwein from the north travel south on North Frederick Avenue and turn west on 4th Street SW. Turn right of 5th Ave. SW. The site is on the right.

Summarize the site history (past usages, past ownerships, wastes, known or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, land applications, SW burial, etc.)

Site History:

A Phase I historical site use summary report was not provided. The site is located in Oelwein, Iowa just west of a major railroad switching and maintenance facility that is also known as **contaminated site #653 - Union Pacific Railroad** that is the subject of ongoing remediation under the Iowa Land Recycling Program. The site is also located next to a commercial building that once housed a filter manufacturing business that is a known **contaminated site #553 -the Donaldson Company** that was deferred in 2006 from further assessment under the CERCLA Pre-remedial program. The Site is located near a small creek along the eastern boundary and is grass covered and currently has no structure(s) on it (See Figure 1 Topographic Map and Potential Sources and Receptors Map).

Recognized Environmental Conditions:

No on-site RECs were identified.

Off-Site REC:

- The adjacent creek bed to the east of site has been relocated twice. Type and origin of fill material is unknown.

- The railroad property (Con Site) located to the east has undergone extensive remediation including over excavation, pump and treat systems and vapor extraction. Fuel oil, diesel, solvents, sludge and various containers of chemicals have been identified or removed from the railroad property. Three, one-million gallon ASTs that contained diesel fuel were also removed from the railroad property.

Briefly describe the site assessment that was conducted (number of borings, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)

One soil boring (SB-1)/temporary monitoring well (TM-1) was installed approximately at the location of the proposed monopole telecommunication tower to a depth of 19 feet to facilitate the collection of one soil and one groundwater sample. The soil was field screened or organic vapors with a Photo=ionization detector (PID). One soil sample was collected based on the highest PID reading, or at the soil/water interface if no organic vapors were detected. One temporary groundwater monitoring well was constructed near the base of the proposed monopole tower.

The soil and groundwater samples were tested for volatile organics (Method 8260C), semi volatile organics (Method 8270D), diesel and waste oil (Iowa Method OA-2) and metals by EPA Method 6010D and C and for mercury by EPA Method 7471B .

Summarize the findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values to known criteria such as statewide standards, MCLs, water quality standards, background levels or other benchmarks used to determine site priority.

Soil Findings

Analytical results in soil were compared to Chapter 135 Tier 1 Target Levels for Leaking Underground Storage Tanks and the Statewide Standards (SWS) of the Iowa Land Recycling Program. No concentrations exceeded the standards and results are summarized in Table 1.

Table 1 Analytical Results of Soil Samples

Compound	SB-1 (mg/kg)	Chapter 135 Tier 1 Target Levels for Leaking Underground Storage Tanks (mg/kg)	Iowa Statewide Standards for Contamination in Soil (mg/kg)
4, 6-Dinitro -2-Methy-phenol	0.832	Not Applicable	No Standard
Diesel	238	3,800	28,000
TEH waste oil	261	3,800	9,400
Barium	60.7	Not Applicable	15,000
Chromium	15.7	Not Applicable	210
Lead	63.7	Not Applicable	400
Mercury	0.0355	Not Applicable	23

Note: 4, 6-Dinitro -2-Methy-phenol was used primarily for insect control.

Groundwater Findings:

Analytical results for groundwater were compared to Chapter 135 Tier 1 Target Levels for Leaking Underground Storage Tanks and the SWS of the Iowa Land Recycling Program. Chromium and Lead concentrations exceeded the SWS. The origin of these metals is unknown although they could be related to past activities at both the railroad yard and at the Donaldson facility. The results are summarized in Table 2.

Table 2: Analytical Results of Groundwater Samples

Compound	TW-1 (mg/L)	Chapter 135 Tier 1 Target Levels for Leaking Underground Storage Tanks (mg/L)	Iowa Statewide Standards for Contamination in Protected Groundwater (mg/L)
Waste Oil	332	400	730
TEH diesel	470	1,200	2,200
Barium	0.694	Not Applicable	10.0
Chromium	**0.106**	Not Applicable	0.10
Lead	**0.579**	Not Applicable	0.015

Concentrations in yellow highlight exceed screening standards

Identify on-site or off-site potential and actual targets (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.

The immediate surrounding area is developed as commercial and industrial use that transitions to residential to the west and south. There are no on-site potential or actual preceptors. Off-site potential receptors including public well(s) located to the south and other private wells, however many are reported as plugged and/or abandoned. The urban creek that runs by the site is a potential receptor but is already impacted by other known sources of contamination like the railroad site (See Potential Sources and Receptors Map).

Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.
Priority 3

Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.

A risk calculation for exposure to indoor air was not conducted by DNR because the contaminants detected in groundwater are not volatile.

Site recommended for:

- [x] No further action under CERCLA Pre-Remedial
- [ ] Additional investigation under state program (activity code 2824)
- [ ] Additional investigation under CERCLA (Extended Site Screening)
- [ ] Transfer to LUST/UST

Form Reviewed: Amii Davidson **Date Reviewed:** 1-18-19

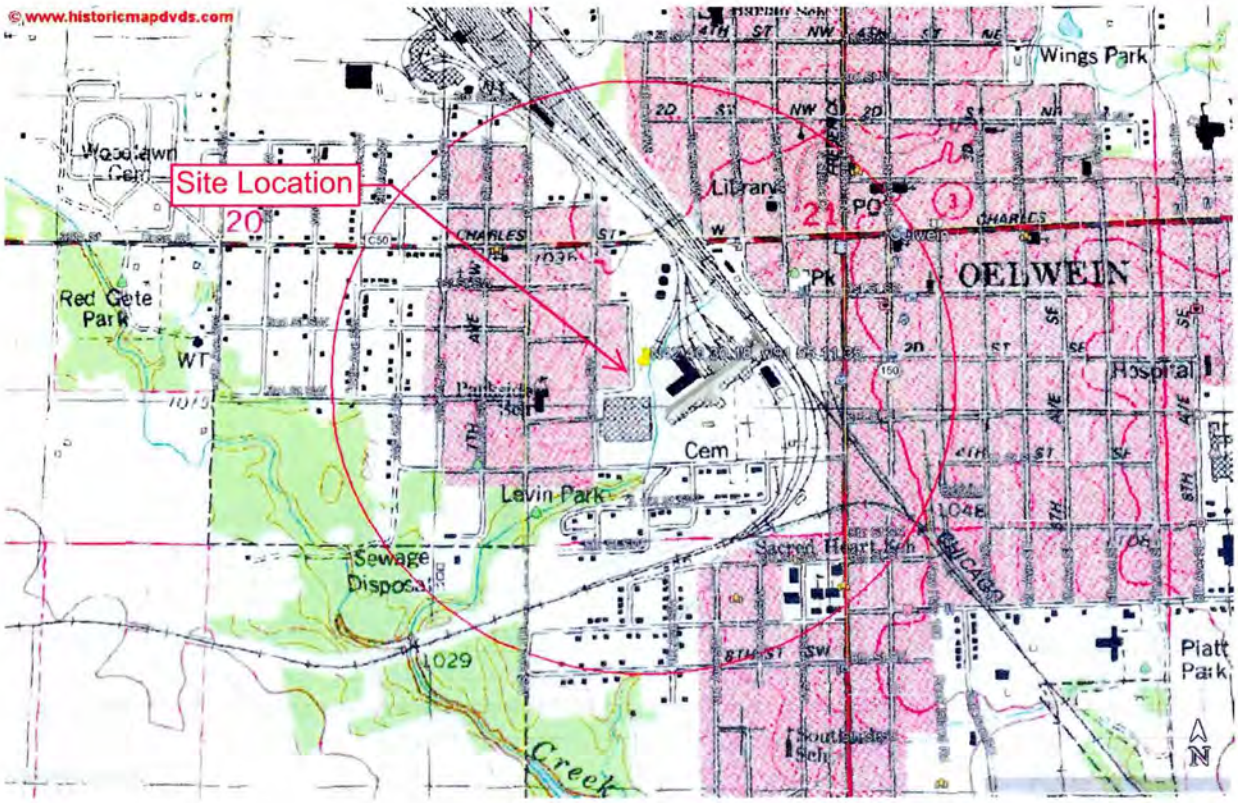

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FIGURE 1 TOPOGRAPHIC MAP

U.S. CELLULAR

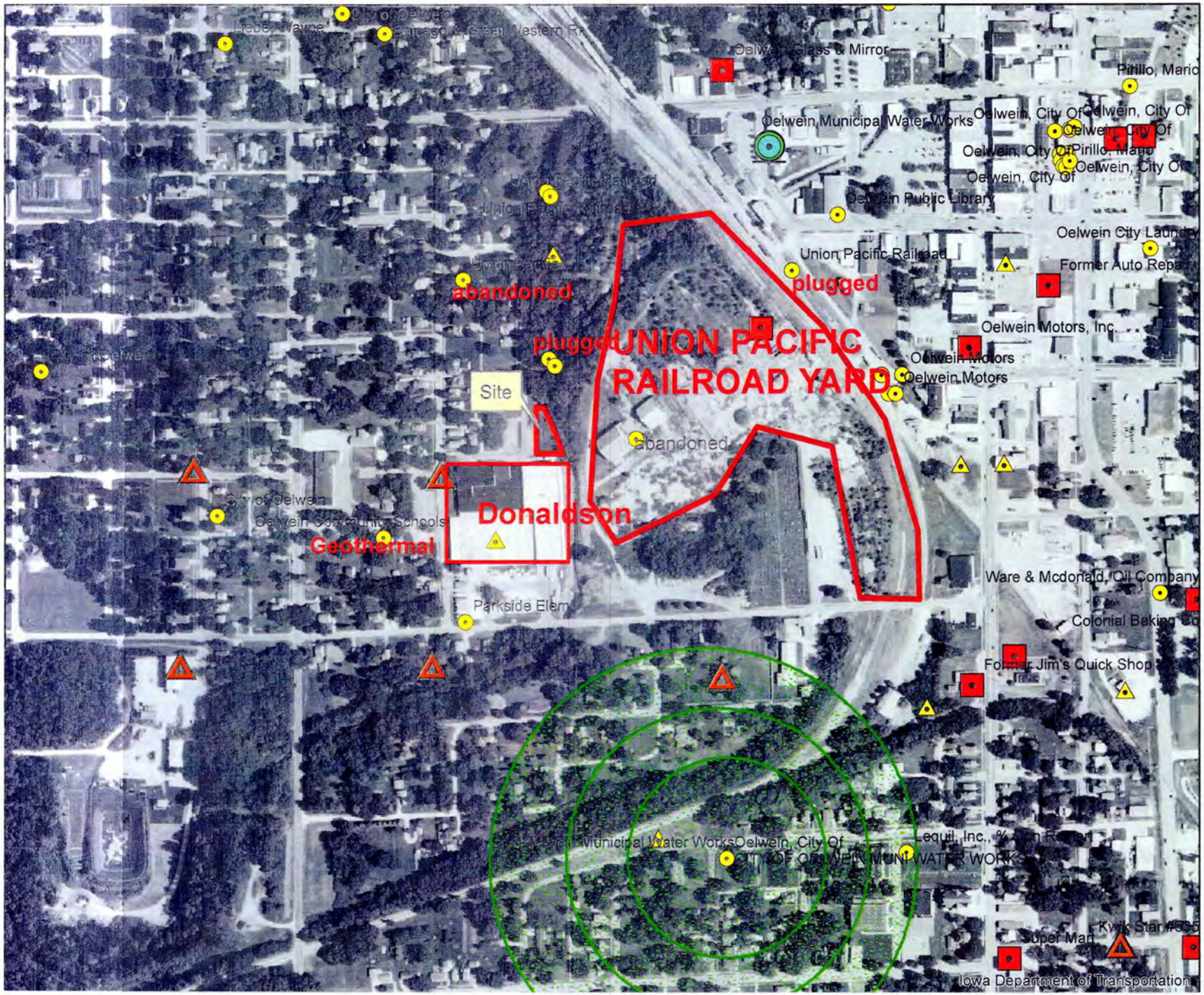
OELWEIN DT SITE #394388/GSS PROJECT W18383

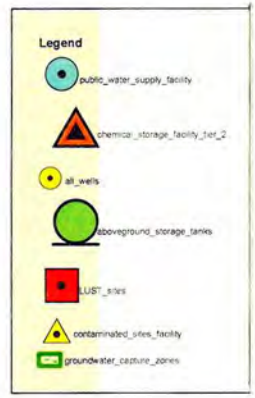
OELWEIN, IA 1981

SECTION: 21, TOWNSHIP: 91N, RANGE: 9W

N

Potential Sources and Receptors Map
US Cellular Tower site#394388 Oelwein, Iowa





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Soil Boring Log And Monitoring Well Construction Diagram for:

GSS Project #: W18383	Facility Name: Oelwein	Boring/Well Location: TW-1
Well Contractor Name:		Drilling Method**: Direct Push
Well Contractor Registration Number:		Boring Depth (ft) x Diameter (in): 19' X 2.25
Logged by: B Wade		Ground Surface Elevation (ASL):
Start Date: 11/19/18	Finish Date: 11/19/18	Top of Casing Elevation (ASL):

Depth (feet)	Well Construction Details	Sample No.	Sample Type*	PID / FID PPM	USCS	Sample Descriptions: soil, color, classification, observation Example: Silty clay, dark gray, hard, moist, strong odor
0	Ground Surface					Grass 0-0.4
1						.4-.6 small band
2						of Crush limestone
3						.6-4.0 CL Brown
4						firm some sand mix
5						4.0-6.0 CL Same as
6	10 ft. of 1" riser					above
7						6.0-11.0 CL gray, streaked
8						with brown, small stone
9						at 7.5
10						11.0-16.0 CL Dark Black
11						odor at 15.0 Sandy clay
12						16-17 Sandy Clay soft
13						
14						17-19 CL Hard Brown
15	10 ft. of 0.002" screen	X	Soil			clay till consistics
16						
17						Could not Penetrate
18						after 19.0 ft
19	TD 19'					
~~20~~						
~~21~~						Ground water infiltration
~~22~~						very slow
~~23~~						
~~24~~						
~~25~~						

*Sample Types:	** Drilling Method Options:	Symbols to Use:
Split Spoon (SS) Continuous Core (CC)	Rotary Auger, Push Probe, Hand Auger, Air drilling, Hollow Stem Auger, Other (Describe)	v – Static Water Level s – sample collected

Observation Date:	11/19/18				
Time:	12:07				
Static Water Level (ASL):	16.69				