LETTER OF TRANSMITTAL

To: **Ms. Cindy Koepke**
c/o Ms. Wendy Weihemuller, Program Associate
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, Wisconsin 53711

From: **Timothy E. Wimmer, P.G.**
The Sigma Group, Inc.
1300 W. Canal Street
Milwaukee, WI 53233

Date: July 15, 2019
Site Name: Deluxe Pkwy Property
Address: 141 W. Woolcock Street
Jefferson, WI 53549
FID# 128057380
BRRTS # 02-28-578713

Please check the type(s) of documents you have enclosed. Submittals will be tracked and filed based on the information you provide. **Include the FID *and* BRRTS numbers which have been assigned to this site, and identify the intent of the document(s) you are submitting in order to speed processing.** Please attach any required fees to this checklist.

IS THIS RELEASE PECFA-ELIGIBLE?
☐ YES ☑ NO ☐ UNKNOWN AT THIS TIME

Type of Submittal:
☐ LUST ☑ ERP ☐ VPLE ☐ OTHER

CHECK	Agreements	FEE
	Tax assignment agreement - ss.75.106(2)(d) & 292.55	$700
	Tax cancellation agreement - ss. 75.106(2)(d) & 292.55	$700
	Negotiated agreements - s. 292.11(7)(d)2	$1,400
	Technical Assistance (s. 292.55)	
	NR 708 No Further Action Letter	$350
	NR 716 No Further Investigation	$700
	NR 716 Site Investigation Workplan	$700
	NR 716 Site Investigation Report	$1,050
	NR 720 Soil Cleanup Standards/Reports	$1,050
	NR 722 Remedial Action Options Report	$1,050
	NR 724 Remedial Design Report	$1,050
	NR 724 Operation and Maintenance Report	$425
	NR 724 Construction Documentation Reports	$350
	NR 724 Long-Term Monitoring Plan	$425
	NR 726 Case Closure Action	$1,050
	NR 506 Exemption for building on a historic waste site	$700
	VPLE Application	
	VPLE Phase I/II Assessments or Additional Reports	
X	Other Technical Assistance	$700
	Liability Clarification Letters	
	s. 292.13(3) Off-Site Exemption Letters	$700
	s. 292.55 Lease Letters - Single Properties	$700
	s. 292.55 Lease Letters - Multiple Properties	$1,400
	s. 292.55 General Liability Clarification Letters	$700
	s. 292.21(1)(c)1.d. Lender Assessments	$700
	Department Database Fees (ss. 292.12 and 292.	
	Sites with groundwater contamination that attains or exceeds ch. NR 140	$350
	Sites with soil contamination that attains or exceeds ch. 720 RCLs	$300
	Sites not otherwise addressed in this schedule, where the department imposes any other limitation or condition in accordance with s. 292.12(2)	$350
	Cases submitted for closure with monitoring wells not properly abandoned, without residual groundwater contamination	$350
	Modification or removal of a site or property from the database	$1,050
	Miscellaneous	
	Notification of Release	None
	Tank Closure/Site Assessment ***where release(s) have been detected*** *	None
	Other	
X	**Soil Management Plan**	

***** Closure reports for sites where no releases have been detected should be sent directly to "Clean Closures" c/o DNR Remediation and Redevelopment Program, P.O. Box 7921, Madison, WI 53707

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Notice: Use this form to request **a written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

"Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

"Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This from should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do not use this form if one of the following applies:

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: dnr.wi.gov/topic/Brownfields/Pubs.html.

Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf"

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name	First	MI	Organization/ Business Name		
Wehmeier	Ben		Jefferson County Highway Department		
Mailing Address			City	State	ZIP Code
311 S. Center Street			Jefferson	WI	53549
Phone # (include area code)	Fax # (include area code)		Email		
(920) 674-7150			benjaminw@jeffersoncountywi.gov		

The requester listed above: (select all that apply)

- ☒ Is currently the owner
- ☐ Is considering selling the Property
- ☐ Is renting or leasing the Property
- ☐ Is considering acquiring the Property
- ☐ Is a lender with a mortgagee interest in the Property
- ☐ Other. Explain the status of the Property with respect to the applicant:

Contact Information (to be contacted with questions about this request)

☒ Select if same as requester

Contact Last Name	First	MI	Organization/ Business Name		
Wehmeier	Ben		Jefferson County Highway Department		
Mailing Address			City	State	ZIP Code
311 S. Center Street			Jefferson	WI	53549
Phone # (include area code)	Fax # (include area code)		Email		
(920) 674-7150			benjaminw@jeffersoncountywi.gov		

Environmental Consultant (if applicable)

Contact Last Name	First	MI	Organization/ Business Name		
Wimmer	Timothy	E	The Sigma Group, Inc.		
Mailing Address			City	State	ZIP Code
1300 W. Canal Street			Milwaukee	WI	53233
Phone # (include area code)	Fax # (include area code)		Email		
(414) 643-4200	(414) 643-4210		twimmer@thesigmagroup.com		

Section 2. Property Information

Property Name			FID No. (if known)	
Public Park at Rock River Landing			128057380	
BRRTS No. (if known)		Parcel Identification Number		
02-28-578713		241-0614-0224-015, 241-0614-0231-(016/018/020/021)		
Street Address		City	State	ZIP Code
141 W. Woolcock Street		Jefferson	WI	53549
County	Municipality where the Property is located	Property is composed of:		Property Size Acres
Jefferson	◉ City ◯ Town ◯ Village of Jefferson	◯ Single tax parcel	◉ Multiple tax parcels	6

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

◉ No ◯ Yes

Date requested by: _____

Reason:

_____

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

◉ No. **Include the fee that is required for your request in Section 3, 4 or 5.**

◯ Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:
Section 3. Technical Assistance or Post-Closure Modifications;
Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: [**Numbers in brackets are for WI DNR Use]**

☐ No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of $350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.

☐ Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of $700.**

☐ Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of $1050.**

☐ Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of $1050.**

☐ Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of $1050.**

☐ Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of $1050.**

☐ Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of $350**

☐ Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of $425.**

☐ Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of $425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

☐ Schedule a Technical Assistance Meeting - **Include a fee of $700.**

☐ Hazardous Waste Determination - **Include a fee of $700.**

☒ Other Technical Assistance - **Include a fee of $700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

☐ Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of $1050, and:**

☐ Include a fee of $300 for sites with residual soil contamination; and

☐ Include a fee of $350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: dnr.wi.gov/topic/Brownfields/lgu.html#tabx4.

☐ Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

- **Include a fee of $700, and the information listed below:**

(1) Phase I and II Environmental Site Assessment Reports,
(2) a copy of the Property deed with the correct legal description.

☐ Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]

- **Include a fee of $700, and the information listed below:**

(1) Phase I and II Environmental Site Assessment Reports,
(2) a copy of the Property deed with the correct legal description.

☐ Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

- **Include a fee of $1400, and the information listed below:**

(1) a draft schedule for remediation; and,
(2) the name, mailing address, phone and email for each party to the agreement.

Section 6. Other Information Submitted

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

☐ Phase I Environmental Site Assessment Report - Date: _____

☐ Phase II Environmental Site Assessment Report - Date: _____

☐ Legal Description of Property (required for all liability requests and specialized agreements)

☒ Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

☒ Groundwater ☒ Soil ☐ Sediment ☐ Other medium - Describe: _____

Date of Collection: 02/06/2015

☐ A copy of the closure letter and submittal materials

☐ Draft tax cancellation agreement

☐ Draft agreement for assignment of tax foreclosure judgment

☒ Other report(s) or information - Describe: Soil Management Plan

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

◯ Yes - Date (if known): _____

◯ No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at: dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf.

Section 7. Certification by the Person who completed this form

☐ I am the person submitting this request (requester)

☒ I prepared this request for: Ben Wehmeier

Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

Signature	Date Signed: 07/15/2019
Title: Staff Engineer	Telephone Number (include area code): 414-643-4174

Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a DNR regional brownfields specialist with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf.

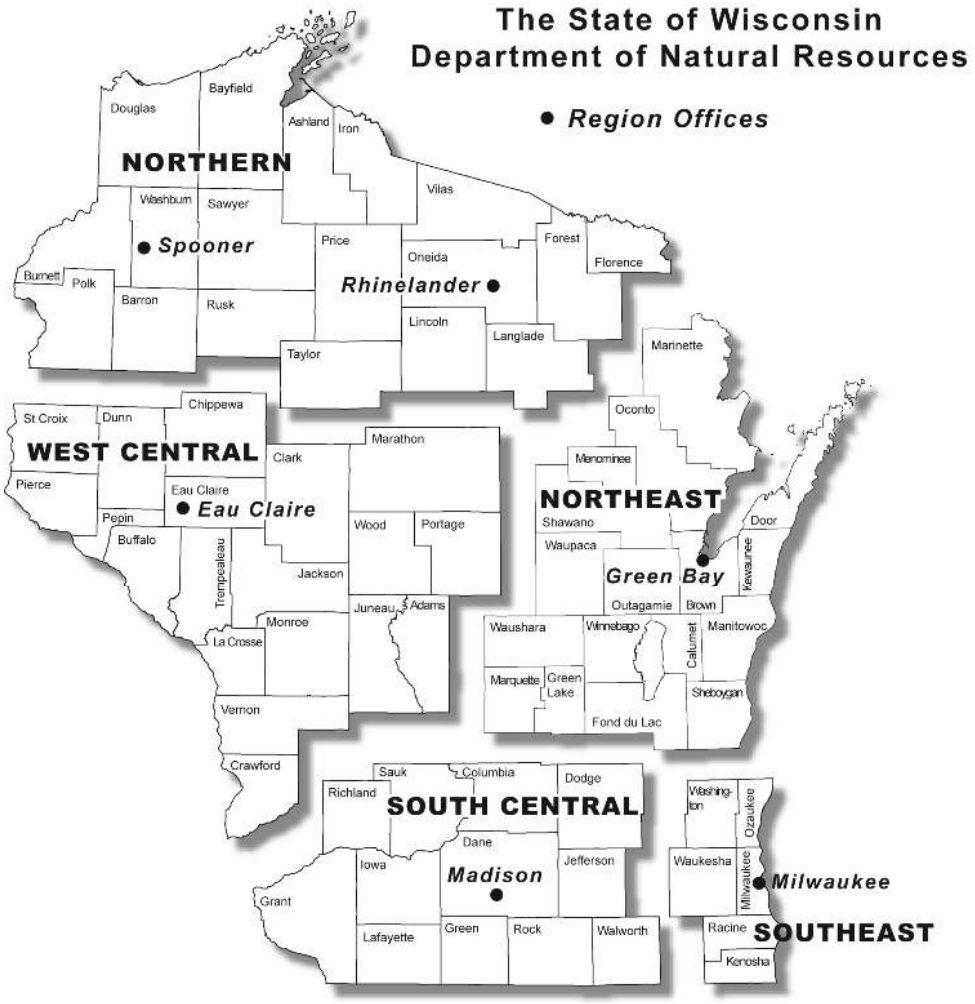
DNR NORTHERN REGION
Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION
Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION
Attn: RR Program Assistant
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI 53212

DNR WEST CENTRAL REGION
Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave.
Eau Claire WI 54702



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer	Comments		
Fee Enclosed? ◯ Yes ◯ No	Fee Amount $	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		

THE SIGMA GROUP
Single Source. Sound Solutions.

July 15, 2019

Project Reference #18154

Cindy Koepke, P.G.
Hydrogeologist, Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, Wisconsin 53711
(via email: cindy.koepke@wisconsin.gov)

Subject: **Soil Management Plan for Chloride Impacted Soil**
Proposed Public Park at Rock River Landing
141 West Woolcock Street, Jefferson, Wisconsin 53549
BRRTS #02-28-578713 FID #128057380

Dear Ms. Koepke:

The purpose of this submittal is to provide the Wisconsin Department of Natural Resources (WDNR) with a description of the proposed project activities and provide a detailed description of how chloride impacted soils will be managed at the proposed public park at Rock River Landing on the former western portion of the Jefferson County Department of Public Works site located in Jefferson, Wisconsin. The proposed development activities of the site will include the construction of a new street that will likely begin in the summer/fall of 2019 followed by the development of the park. Sigma has prepared the attached Soil Management Plan (SMP) for the proposed public park area specific to the Rock River Landing development plan. The SMP is based on Sigma's environmental site investigation report and case closure submittal from February 2019. In addition to earthwork activities, building foundations from previously razed buildings and surface pavement will also be removed as part of the park development activities.

Regarding the monitoring well abandonment concern, during the foundation, pavement and grading activities, Sigma will monitor and address any well that may need to be cut down or add additional bentonite as needed. Amended abandonment forms will be sent to the WDNR as needed.

We appreciate the WDNR's assistance in this matter. If there are any questions, please feel free to contact us at your convenience.

Sincerely,

THE SIGMA GROUP, INC.

Steven V. Kikkert, E.I.T.
Staff Engineer
skikkert@thesigmagroup.com

Adam J. Roder, P.E., P.G.
Senior Engineer
aroder@thesigmagroup.com

Timothy E. Wimmer, P.G.
Senior Project Manager
twimmer@thesigmagroup.com

Enclosures: *Soil Management Plan for the Proposed Public Park at Rock River Landing*

cc: Ben Wehmeier - Jefferson County (via email: benjaminw@jeffersoncountywi.gov)
Bill Kern - Jefferson County (via email: BillK@jeffersoncountywi.gov)
Wendy Weihemuller - WDNR (via email: wendy.weihemuller@wisconsin.gov)
WDNR RR Program Submittal Portal

SOIL MANAGEMENT PLAN FOR THE PROPOSED PUBLIC PARK AT ROCK RIVER LANDING 141 WEST WOOLCOCK STREET JEFFERSON, WISCONSIN 53549

BRRTS #02-28-578713
FID #128057380

PREPARED FOR:
MR. BEN WEHMEIER
JEFFERSON COUNTY HIGHWAY DEPARTMENT
311 SOUTH CENTER AVENUE
JEFFERSON, WI 53549

PREPARED BY:

THE SIGMA GROUP, INC.
1300 WEST CANAL STREET
MILWAUKEE, WISCONSIN 53233

PROJECT REFERENCE #18154

July 2019

Steven V. Kikkert, E.I.T.
Staff Engineer

Adam J. Roder, P.E., P.G.
Senior Engineer

Timothy E. Wimmer, P.G.
Senior Project Manager

SOIL MANAGEMENT PLAN FOR THE PROPOSED PUBLIC PARK AT ROCK RIVER LANDING 141 W. WOOLCOCK STREET, JEFFERSON, WISCONSIN BRRTS #02-28-578713 JULY 2019

INTRODUCTION

This Soil Management Plan (SMP) is based upon The Sigma Group, Inc.'s (Sigma's) environmental site investigation work completed at the former Jefferson County Highway Department Facility / proposed public park area located at 141 W. Woolcock Street, Jefferson, Wisconsin (the "Site") and the possible Rock River Landing development activities at the Site. The proposed public park area covers approximately 5.7 acres of land and expected improvements include the following:

- Several surface level parking lots with associated sidewalks;
- Multiple piers and a boat launch;
- A small public restroom building;
- A small playground area;
- Open green space areas; and
- Associated storm sewer, sanitary sewer, water, and/or electrical duct utility lines servicing the facilities.

A rendition of the proposed Rock River Landing overall development plan is shown on **Figure 1**. This SMP only applies to the public park area including the proposed N. Elizabeth Avenue extension west to the Rock River. Soil management work associated with the possible residential and commercial redevelopment work located to the east and south will be addressed in the future.

BACKGROUND

Analytical testing indicates that no volatile organic compounds (VOCs) were detected in any soil samples collected from the proposed park area of the Site. Soil impacted with polynuclear aromatic hydrocarbons (PAH) concentrations above protection of groundwater Residual Contaminant Levels (RCLs) is limited to one sample location (GP/TW-5) that lies beneath the southern end of a proposed public parking lot. When evaluated on a cumulative basis, the carcinogenic polynuclear aromatic hydrocarbons (cPAHs) present in soil collected from GP/TW-5 do not pose a direct contact concern to human health. Soil with varying levels of chloride, a result of historic road salt storage activities, have been observed in all soil boring locations completed within the park area of the Site. Investigation work completed from 2015 to 2018 indicate that chloride concentrations within Site groundwater have decreased, most likely due to infiltration-induced wash out toward the Rock River to the west. Soil analytical data are summarized on **Table 1** and in **Figure 2**. Groundwater analytical data are summarized on **Table 2**.

SCHEDULE

Construction activities will begin in mid-2019.

CONTACT INFORMATION

As of June 2019, project contact information is as follows:

Property Owner/Operator:

Jefferson County Highway Department
311 S. Center Street
Jefferson, WI 53549
Contact: Mr. Ben Wehmeier
Telephone: (920) 674-7150
Email: benjaminw@jeffersoncountywi.gov

Construction Manager:

raSmith
16745 W. Bluemound Road
Brookfield, WI 53005
Contact: Mr. Paul T. Arend
Telephone: (262) 317-3380
Email: Paul.Arend@rasmith.com

Environmental Consultant:

The Sigma Group, Inc.
1300 W. Canal Street
Milwaukee, WI 53233
Contact: Mr. Timothy E. Wimmer
Telephone: (414) 643-4200
Email: twimmer@thesigmagroup.com

Wisconsin Department of Natural Resources:

Wisconsin Department of Natural Resources
Remediation & Redevelopment Program
3911 Fish Hatchery Road
Fitchburg, WI 53711
Contact: Ms. Cindy Koepke
Telephone: (608) 275-3257
Email: cynthia.koepke@wisconsin.gov

GENERAL CONDITIONS

The Construction Manager and earthworks subcontractor shall prepare a site-specific Health & Safety Plan for their respective personnel prior to beginning site work. Sigma will prepare a site-specific Health & Safety Plan for its own personnel. The Construction Manager is responsible for making all site workers aware of the environmental conditions at the Site. Site workers engaged in the earthmoving and soil excavation activities within the impacted areas should be 40-hour OSHA trained. Truck drivers do not need to be 40-hour OSHA trained provided they do not exit their vehicles at the Site.

Prior to subsurface excavation activities, the Property Owner/Operator or its appropriate subcontractor will obtain all necessary City of Jefferson, Jefferson County, and/or State of Wisconsin permits relating to Site access, erosion control, and storm water management unless otherwise specified.

Silt fences, storm sewer inlet protection, and other erosion control measures will be implemented and maintained at the Site in accordance with the Erosion Control Plan (prepared by others). Erosion control measures shall be inspected by the construction manager and/or earthworks subcontractor in accordance with the Erosion Control Plan and permit.

SOIL MANAGEMENT

Soil conditions will be evaluated and managed in accordance with this SMP with the assistance of Sigma. Sigma will provide the Construction Manager with a copy of this SMP (who must in turn distribute to subcontractors that will be involved with subsurface work) and will provide on-site services as requested by the Property Owner/Operator, which may include observing and documenting the management of areas of known or unknown contamination, monitoring soil excavation areas, and/or providing on-call services as mentioned within this SMP.

Soil disturbance activities are expected to include: utility trenches; excavation and subgrade preparation in the areas of the parking lots, sidewalks, playground area, restroom building, piers, and boat launch; and general grading in green space areas.

Planned soil management tasks associated with the above activities are described below.

Excavation

- Non-impacted soil may be reused on-site and/or stockpiled for later reuse on-site, as needed in accordance with standard earthmoving protocols, erosion control plans / permits, and/or geotechnical / compaction project specifications. This soil is also known as "exempt" soil as defined in Wisconsin Department of Natural Resource (WDNR) publication RR-103[1]. This exempt soil lays outside of the identified soil impact areas shown on **Figure 2**.

- Impacted soil is to be managed as follows:

    - Any PAH impacted soil that is disturbed must remain or be reused beneath the parking lot area near GP/TW-5 and GP/MW-8.

    - Any chloride impacted soil that is disturbed from any part of the Site must be moved and reused beneath the proposed public parking lots and driveways within the same overall impacted soil area.

[1] *Exempt Soil Management: A Self-Implementing Option for Soil Excavated During a Response Action under Wis. Admin. Code chs. NR 700 through NR 750* by WDNR (dated November 2018)

- The exact volume of soil that is to be disturbed is unknown at this time but is expected to be minimal based on the proposed grading plans. Impacted soils that are not disturbed as part of the park redevelopment work can remain in place.

- Sigma plans to be on-site during impacted soil handling activities to observe any unusual subsurface conditions, monitor soil cut and fill areas, oversee the activities, and ensure proper execution of this SMP.

- The Construction Manager shall notify the Environmental Consultant at least 48 hours prior to the initiation of the activities listed above for coordination, oversight, and documentation of impacted soil management activities.

- Excess soil that cannot be reused on-site due to space constraints and/or geotechnical soil properties shall be transported to a licensed landfill. Estimated impacted soil locations are shown on **Figure 2**. Landfill profile paperwork will need to be secured with the selected landfill prior to hauling activities; Sigma can assist with this process when more project details are known.

- Stockpiling of impacted soil is permissible in accordance with the following:

    - Temporary on-site stockpiles of impacted soil shall follow the provisions of NR 718.05(3), generally including:
        - Soil volume is limited to less than 2,500 cubic yards;
        - Soil may be stockpiled for 15 days or less;
        - Soil must be stockpiled on-site within 1,000 feet of where it was excavated;
        - Soil must be placed on an impervious surface, such as concrete, asphalt, plastic sheeting, or geomembrane liner;
        - Soil stockpile must be covered with plastic sheeting (10-mil thick minimum) that is secured at the end of each workday to prevent water infiltration, dust, odors, and erosion.

    - If the requirements of temporary storage cannot be met, the general storage requirements of NR 718.05(2) must be followed (or an exemption to parts of NR 718.05(2) must be obtained from the WDNR) for on-site stockpiles:
        - Soil stockpile may not be located in a floodplain, within 100 feet of a wetland or critical habitat area, within 300 feet of any navigable water body, or within 100 feet of a water supply well;
        - Soil must be placed on an impervious surface, such as concrete, asphalt, plastic sheeting, or geomembrane liner;
        - Soil stockpile must be covered with plastic sheeting that is secured at the end of each workday to prevent water infiltration, dust, odors, and erosion;
        - Berms or other engineering controls must be constructed to prevent surface water contact with the soil;
        - Proper signage must be erected; and
        - Notify the WDNR if the stockpile is stored 90 days or more.

Engineered Barriers

Upon the completion of the public park development, all areas of identified soil impacts will be capped with clean material. Engineered barriers at the ground surface will limit precipitation infiltration into the subsurface. While we have not recommended that these engineered barriers be a condition for regulatory case closure, they are expected to help protect future land users and improve groundwater quality over time.

- Parking Lots and Sidewalks - Parking lots will be paved with asphalt and/or concrete surfaces. Sidewalks and curbs/gutters (if used) will be constructed with concrete. Asphalt pavement (minimum of 3 inches thick) and concrete pavement (minimum of 4 inches thick) will meet industry standards.

- Building Floor Slab – The new restroom building ground level floor slab will be constructed with concrete at a minimum thickness of 4 inches.

- Clean Soil Barriers - Landscaped green space areas, which will include park areas and parking lot islands, will be capped with clean soil. The clean soil barriers will be constructed with 4 inches of vegetated topsoil. Trees may be planted in green space areas but underlying native soil must be managed in accordance with this SMP.

Soil Unsuitable for Reuse On-Site

In the unexpected event that soil with obvious staining, odor, or other indications of gross contamination is exposed during construction, it will be considered unfit for reuse on-site, characterized, and managed / disposed of appropriately. Management will include segregating the grossly impacted soil from minimally impacted materials by temporarily stockpiling the soil on an impervious surface (asphalt, concrete, or plastic sheeting) and covering with plastic to prevent water infiltration, dust, odors, and erosion. Following additional characterization and approval for disposal, the unsuitable material will be transported to a licensed landfill.

If building debris or soil / fill material is encountered that may potentially contain asbestos containing materials (ACMs), work will be stopped in that area, the work area will be restricted with caution tape and/or signage, and the construction manager / earthworks contractor shall contact the Property Owner/Operator. The earthworks subcontractor may continue work in other locations if feasible. The Property Owner/Operator shall contact the Environmental Consultant to evaluate the building debris by a state-licensed Asbestos Inspector and manage disposal of the material at an appropriate landfill licensed to accept the material.

Although unexpected, unknown underground storage tanks (USTs) could be encountered during excavation activities. If a UST is discovered, work will be stopped in that area, access to the work area will be restricted with caution tape and/or signage, and the construction manager / earthworks contractor shall contact the Property Owner/Operator. The earthworks subcontractor may continue work in other locations if feasible. The Project Operator's Representative shall contact the environmental consultant to notify the appropriate authorities and coordinate with a licensed tank removal contractor to clean and remove the UST in accordance with current State of Wisconsin rules and regulations, including the completion of a Tank System Site Assessment. Waste materials generated

during the UST removal and cleaning process will be disposed of in accordance with local, state, and federal requirements. The UST closure process will be documented by the Environmental Consultant. The Environmental Consultant will coordinate any over-excavation services required of the tank removal contractor and the proper disposal of waste materials (e.g., tank sludge).

Generated Waste Materials

As part of the proposed Site redevelopment, existing surface covers including asphalt drives / parking lots and concrete floor slabs and foundations will be removed. Following Site redevelopment, none of the current surface covers will remain in place. The removed surface cover materials will be managed as follows:

- All removed asphalt will be milled and reused on-site as sub-grade material beneath the proposed road and parking lots.

- Removed concrete will be crushed and reused on-site as sub-grade material beneath the proposed road and parking lots if needed, disposed of off-site at a licensed waste disposal facility, or recycled off-site as a regulated facility.

IMPORTED FILL

Imported engineered fill needed as backfill for structural support beneath parking lots, sidewalks, and/or utilities shall originate from quarries that mine native granular soils. Clean, recycled concrete may also be acceptable if the material meets the structural / civil engineering project specifications. If recycled concrete is used, the source, quantity, and placement location at the Site should be documented in project records.

Prior to importing clean soil, including topsoil, the Construction Manager must provide the Property Owner/Operator with the borrow property location and history of that borrow source, including a list of property owners, historic and current property usage, a physical description of the soil, and general location / depth form which the soil will be excavated at least 45 days prior to import activities. The Property Owner/Operator may request that the Environmental Consultant to review information to help determine suitability of clean soil borrow source. The Property Owner/Operator and/or Environmental Consultant may request, at the Construction Manager's expense, laboratory testing of the soil for environmental parameters that could affect the regulatory case closure process. Soil shall not be imported until written approval is provided by the Property Owner/Operator and/or its designated representative.

WATER MANAGEMENT

Groundwater or storm water that accumulates in excavations may be discharged to the local sanitary sewer system in accordance with jurisdictional permitting requirements, pending approval from the local wastewater agency.

DISCLAIMER

This SMP only applies to the public park area including the proposed N. Elizabeth Avenue extension west to the Rock River. Other areas of the Rock River Landing are not included in this SMP. Additional soil testing and a separate Soil Management Plan(s) may be required for these additional areas.

Attachments

Table 1	Soil Analytical Results Table
Table 2	Groundwater Analytical Results Table
Figure 1	Site Plan Map
Figure 2	Soil Quality Map

Table 1
Soil Analytical Results Table (Page 1 of 2)
Former Jefferson County Highway Department Complex - 141 W. Woolcock Street, Jefferson, Wisconsin
Sigma Project No. 16820

Soil Sample Location:		GP-5	GP-6	Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]	Background Threshold Value [7]
Sample Depth (feet bgs):		2 - 4'	2 - 4'				
Sample Collection Date:		2/16/15	2/16/15				
Depth to Groundwater (feet bgs):		10	12				
Unsaturated/Smear Zone (U) or Saturated (S):		U	U				
PVOCs & Detected VOCs							
Benzene	mg/kg	<0.016	<0.016	0.0051	1.6	7.07	NS
Bromobenzene	mg/kg	<0.039	<0.039	NS	342	679	NS
Bromodichloromethane	mg/kg	<0.015	<0.015	0.0003	0.418	1.83	NS
Bromoform	mg/kg	<0.023	<0.023	0.0023	25.4	113	NS
tert-Butylbenzene	mg/kg	<0.035	<0.035	NS	183	183	NS
sec-Butylbenzene	mg/kg	<0.036	<0.036	NS	145	145	NS
n-Butylbenzene	mg/kg	<0.086	<0.086	NS	108	108	NS
Carbon tetrachloride	mg/kg	<0.021	<0.021	0.0039	0.916	4.03	NS
Chlorobenzene	mg/kg	<0.039	<0.039	NS	370	761	NS
Chloroethane	mg/kg	<0.045	<0.045	0.2266	NS	NS	NS
Chloroform	mg/kg	<0.026	<0.026	0.0033	0.454	1.98	NS
Chloromethane	mg/kg	<0.25	<0.25	0.0155	159	669	NS
2-Chlorotoluene	mg/kg	<0.029	<0.029	NS	907	907	NS
4-Chlorotoluene	mg/kg	<0.032	<0.032	NS	253	253	NS
1,2-Dibromo-3-chloropropane	mg/kg	<0.078	<0.078	0.0002	0.008	0.092	NS
Dibromochloromethane	mg/kg	<0.031	<0.031	0.032	8.28	38.9	NS
1,4-Dichlorobenzene	mg/kg	<0.03	<0.03	0.144	3.74	16.4	NS
1,3-Dichlorobenzene	mg/kg	<0.03	<0.03	1.1528	297	297	NS
1,2-Dichlorobenzene	mg/kg	<0.039	<0.039	1.168	376	376	NS
Dichlorodifluoromethane	mg/kg	<0.043	<0.043	3.0863	126	530	NS
1,2-Dichloroethane	mg/kg	<0.03	<0.03	0.0028	0.652	2.87	NS
1,1-Dichloroethane	mg/kg	<0.025	<0.025	0.4834	5.06	22.2	NS
1,1-Dichloroethene	mg/kg	<0.029	<0.029	0.005	320	1,190	NS
cis-1,2-Dichloroethene	mg/kg	<0.021	<0.021	0.0412	156	2,340	NS
trans-1,2-Dichloroethene	mg/kg	<0.024	<0.024	0.0626	1,560	1,850	NS
1,2-Dichloropropane	mg/kg	<0.025	<0.025	0.0033	3.4	15	NS
2,2-Dichloropropane	mg/kg	<0.1	<0.1	NS	191	191	NS
1,3-Dichloropropane	mg/kg	<0.031	<0.031	NS	1,490	1,490	NS
Di-isopropyl Ether	mg/kg	<0.012	<0.012	NS	2,260	2,260	NS
EDB (1,2-Dibromoethane)	mg/kg	<0.035	<0.035	0.0000282	0.05	0.221	NS
Ethylbenzene	mg/kg	<0.027	<0.027	1.57	8.02	35.4	NS
Hexachlorobutadiene	mg/kg	<0.11	<0.11	NS	1.63	7.19	NS
Isopropylbenzene	mg/kg	<0.037	<0.037	NS	NS	NS	NS
p-Isopropyltoluene	mg/kg	<0.056	<0.056	NS	162	162	NS
Methylene chloride	mg/kg	<0.22	<0.22	0.0026	61.8	1,150	NS
Methyl-tert-butyl-ether	mg/kg	<0.025	<0.025	0.027	63.8	282	NS
Naphthalene	mg/kg	0.37	<0.087	0.6582	5.52	24.1	NS
n-Propylbenzene	mg/kg	<0.035	<0.035	NS	264	264	NS
1,1,2,2-Tetrachloroethane	mg/kg	<0.013	<0.013	0.0002	0.81	3.6	NS
1,1,1,2-Tetrachloroethane	mg/kg	<0.029	<0.029	0.0534	2.78	12.3	NS
Tetrachloroethene (PCE)	mg/kg	<0.054	<0.054	0.0045	33	145	NS
Toluene	mg/kg	<0.031	<0.031	1.1072	818	818	NS
1,2,4-Trichlorobenzene	mg/kg	<0.085	<0.085	0.408	24	113	NS
1,2,3-Trichlorobenzene	mg/kg	<0.12	<0.12	NS	62.6	934	NS
1,1,1-Trichloroethane	mg/kg	<0.04	<0.04	0.1402	640	640	NS
1,1,2-Trichloroethane	mg/kg	<0.033	<0.033	0.0032	1.59	7.01	NS
Trichloroethene (TCE)	mg/kg	<0.042	<0.042	0.0036	1.3	8.41	NS
Trichlorofluoromethane	mg/kg	<0.06	<0.06	NS	1,230	1,230	NS
1,2,4-Trimethylbenzene	mg/kg	<0.078	<0.078	1.3787	219	219	NS
1,3,5-Trimethylbenzene	mg/kg	<0.089	<0.089		182	182	NS
Vinyl Chloride	mg/kg	<0.01	<0.01	0.0001	0.067	2.08	NS
Xylenes (total)	mg/kg	<0.099	<0.099	3.96	260	260	NS
PAHs							
Acenaphthene	mg/kg	<0.0201	<0.0201	NS	3,590	45,200	NS
Acenaphthylene	mg/kg	0.0221 J	<0.0198	NS	NS	NS	NS
Anthracene	mg/kg	0.036 J	<0.0171	196.9492	17,900	100,000	NS
Benzo(a)anthracene	mg/kg	0.14	<0.0191	NS	1.14	20.8	NS
Benzo(a)pyrene	mg/kg	[0.149]	<0.0143	0.47	0.115	2.11	NS
Benzo(b)fluoranthene	mg/kg	[0.152]	<0.019	0.4781	1.15	21.1	NS
Benzo(ghi)perylene	mg/kg	0.146	<0.02	NS	NS	NS	NS
Benzo(k)fluoranthene	mg/kg	0.048 J	<0.0174	NS	11.5	211	NS
Chrysene	mg/kg	**0.229**	<0.0192	0.1442	115	2,110	NS
Dibenzo(a,h)anthracene	mg/kg	0.0301 J	<0.0201	NS	0.115	2.11	NS
Fluoranthene	mg/kg	0.138	<0.0192	88.8778	2,390	30,100	NS
Fluorene	mg/kg	0.0194 J	<0.0184	14.8299	2,390	30,100	NS
Indeno(1,2,3-cd)pyrene	mg/kg	0.084	<0.0165	NS	1.15	21.1	NS
1-Methylnaphthalene	mg/kg	0.036 J	<0.0205	NS	17.6	72.7	NS
2-Methylnaphthalene	mg/kg	0.045 J	<0.0199	NS	239	3,010	NS
Naphthalene	mg/kg	0.0233 J	<0.0203	0.6582	5.52	24.1	NS
Phenanthrene	mg/kg	0.065	<0.0198	NS	NS	NS	NS
Pyrene	mg/kg	0.36	<0.0192	54.5455	1,790	22,600	NS
cPAH Cumulative DC RCL Analysis							
Cumulative DC RCL Risk Value		$4.2x10^{-6}$	$3.5x10^{-7}$	NS	$5.0x10^{-6}$	NS	NS
Cumulative DC RCL Exceeded (Y/N)?		N	N	-	-	-	-
Other Constituents							
Total Sodium	mg/kg	4800	1500	NS	NS	NS	NS
Total Chloride	mg/kg	5400	1300	NS	NS	NS	NS

Notes:
1. Unsaturated/smear zone versus satured soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, (2) soil moisture conditions recorded on soil boring logs, and/or (3) soil moisture contents reported on laboratory analytical reports.
2. Analytical units: mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
3. NA = not analyzed
4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater as presented on the WDNR's RCL Spreadsheet (dated June 2018) referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated January 2014
5. Non-Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at a non-industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated January 2014
6. Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at an industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated January 2014
7. NS = no standard established
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
9. Exceedances: **BOLD** = Concentration exceeds Groundwater Pathway RCL
[ ] = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)
{ } = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)

Table 1

Soil Analytical Results Table (Page 2 of 2)

Former Jefferson County Highway Department Complex - 141 W. Woolcock Street, Jefferson, Wisconsin

Sigma Project No. 16820

Soil Sample Location:		**GP/TW-5**	**GP/TW-6**	**GP/MW-8**		**GP/MW-9**		**GP/MW-10**		**GP/MW-11**		**GP/MW-12**		**GP/MW-13**		**Groundwater Pathway RCL [4]**	**Non-Industrial Direct Contact RCL [5]**	**Industrial Direct Contact RCL [6]**	**Background Threshold Value [7]**
Sample Depth (feet bgs):		2-4	2-4	2-4	5-7	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	2-4	5-7				
Sample Collection Date:		2/16/15	2/16/15	5/16/17		5/16/17		5/16/17		5/16/17		5/16/17		5/16/17					
Depth to Groundwater (feet bgs):		10	12	5	5	5	5	5	5	5	5	5	5	6	6				
Unsaturated/Smear Zone (U) or Saturated (S):		U	U	U	S	U	U	U	U	U	U	U	U	U	U				
Total Chloride	mg/kg	5400	1300	308	346	219	758	134	69.3	398	74.5	143	638	2460	2430	NS	NS	NS	NS

Notes:

1. Unsaturated/smear zone versus satured soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, or (2) soil moisture conditions recorded on soil boring logs during drilling.
2. Analytical units: mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
3. NA = not analyzed
4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater (dilution factor of 2) as presented on the WDNR's RCL Spreadsheet (dated June 2018) referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
5. Non-Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at a non-industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
6. Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at an industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
7. Background Threshold Value = Non-outlier trace element maximum levels in Wisconsin surface soils from USGS report "Distribution and Variation of Arsenic in Wisconsin Surface Soils, With Data on Other Trace Elements" (revised February 2013).
8. NS = no standard established
9. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
10. Exceedances: **BOLD** = Concentration exceeds Groundwater Pathway RCL
    [ ] = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)
    { } = Concentration exceeds Industrial Direct Contact RCL (any depth)

Table 2
Groundwater Analytical Results Table (Page 1 of 2)
Former Jefferson County Highway Department Complex - 141 W. Woolcock Street, Jefferson, Wisconsin
Sigma Project No. 16820

Well Location:		**TW-5**	**TW-6**	**NR 140 ES**	**NR 140 PAL**
Date:		2/17/15	2/17/15		
VOCs					
Benzene	µg/L	<0.44	<0.44	5	0.5
Bromobenzene	µg/L	<0.48	<0.48	NS	NS
Bromodichloromethane	µg/L	<0.46	<0.46	0.6	0.06
Bromoform	µg/L	<0.46	<0.46	4.4	0.44
tert-Butylbenzene	µg/L	<1.1	<1.1	NS	NS
sec-Butylbenzene	µg/L	<1.2	<1.2	NS	NS
n-Butylbenzene	µg/L	<1	<1	NS	NS
Carbon Tetrachloride	µg/L	<0.65	<0.65	5	0.5
Chlorobenzene	µg/L	<0.46	<0.46	NS	NS
Chloroethane	µg/L	<0.65	<0.65	400	80
Chloroform	µg/L	<0.43	<0.43	6	0.6
Chloromethane	µg/L	<1.9	<1.9	30	3
2-Chlorotoluene	µg/L	<0.4	<0.4	NS	NS
4-Chlorotoluene	µg/L	<0.63	<0.63	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	<1.4	<1.4	0.2	0.02
Dibromochloromethane	µg/L	<0.45	<0.45	60	6
1,4-Dichlorobenzene	µg/L	<0.49	<0.49	75	15
1,3-Dichlorobenzene	µg/L	<0.52	<0.52	600	120
1,2-Dichlorobenzene	µg/L	<0.46	<0.46	600	60
Dichlorodifluoromethane	µg/L	<0.87	<0.87	1,000	200
1,2-Dichloroethane	µg/L	<0.54	<0.54	5	0.5
1,1-Dichloroethane	µg/L	<1.1	<1.1	850	85
1,1-Dichloroethene	µg/L	<0.65	<0.65	7	0.7
cis-1,2-Dichloroethene	µg/L	<0.45	<0.45	70	7
trans-1,2-Dichloroethene	µg/L	<0.54	<0.54	100	20
1,2-Dichloropropane	µg/L	<0.43	<0.43	5	0.5
2,2-Dichloropropane	µg/L	<3.1	<3.1	NS	NS
1,3-Dichloropropane	µg/L	<0.42	<0.42	NS	NS
Di-isopropyl ether	µg/L	<0.44	<0.44	NS	NS
EDB (1,2-Dibromoethane)	µg/L	<0.63	<0.63	0.05	0.005
Ethylbenzene	µg/L	<0.71	<0.71	700	140
Hexachlorobutadiene	µg/L	<2.2	<2.2	NS	NS
Isopropylbenzene	µg/L	<0.82	<0.82	NS	NS
p-Isopropyltoluene	µg/L	<1.1	<1.1	NS	NS
Methylene Chloride	µg/L	<1.3	<1.3	5	0.5
Methyl-tert-butyl-ether	µg/L	<1.1	<1.1	60	12
Naphthalene	µg/L	<1.6	<1.6	100	10
n-Propylbenzene	µg/L	<0.77	<0.77	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	<0.52	<0.52	0.2	0.02
1,1,1,2-Tetrachloroethane	µg/L	<0.48	<0.48	70	7
Tetrachloroethene	µg/L	<0.74	<0.74	5	0.5
Toluene	µg/L	<0.44	<0.44	1,000	200
1,2,4-Trichlorobenzene	µg/L	<1.7	<1.7	70	14
1,2,3-Trichlorobenzene	µg/L	<2.7	<2.7	NS	NS
1,1,1-Trichloroethane	µg/L	<0.84	<0.84	200	40
1,1,2-Trichloroethane	µg/L	<0.48	<0.48	5	0.5
Trichloroethene (TCE)	µg/L	<0.47	<0.47	5	0.5
Trichlorofluoromethane	µg/L	<0.87	<0.87	3,490	698
1,2,4-Trimethylbenzene	µg/L	<1.6	<1.6	NS	NS
1,3,5-Trimethylbenzene	µg/L	<1.5	<1.5	NS	NS
Total Trimethylbenzene	µg/L	<3.1	<3.1	480	96
Vinyl Chloride	µg/L	<0.17	<0.17	0.2	0.02
Xylenes, Total	µg/L	<3.1	<3.1	2,000	400
PAHs					
Acenaphthene	µg/L	0.034 J	<0.02	NS	NS
Acenaphthylene	µg/L	0.022 J	<0.021	NS	NS
Anthracene	µg/L	0.036 J	<0.02	3,000	600
Benzo(a)anthracene	µg/L	0.066	0.027 J	NS	NS
Benzo(a)pyrene	µg/L	***0.046 J ****	<0.019	0.2	0.02
Benzo(b)fluoranthene	µg/L	***0.056 J ****	0.019 J	0.2	0.02
Benzo(ghi)perylene	µg/L	0.078	<0.024	NS	NS
Benzo(k)fluoranthene	µg/L	0.020 J	<0.018	NS	NS
Chrysene	µg/L	***0.059***	<0.017	0.2	0.02
Dibenzo(a,h)anthracene	µg/L	<0.025	<0.025	NS	NS
Fluoranthene	µg/L	0.096	0.025 J	400	80
Fluorene	µg/L	0.037 J	<0.017	400	80
Indeno(1,2,3-cd)pyrene	µg/L	0.035 J	<0.018	NS	NS
1-Methylnaphthalene	µg/L	0.178	<0.018	NS	NS
2-Methylnaphthalene	µg/L	0.146	<0.017	NS	NS
Naphthalene	µg/L	0.081	0.020 J	100	10
Phenanthrene	µg/L	0.094	0.019 J	NS	NS
Pyrene	µg/L	0.099	0.023 J	250	50
Other Constituents					
Dissolved Sodium	mg/L	1400	3800	NS	NS
Chloride	mg/L	**2680**	**8540**	250	125

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. **Public Welfare Groundwater Quality Standards used for Sodium and Chloride ES and PAL**
4. NS = no standard
5. mg/L = milligrams per liter (equivalent to parts per million, ppm)
6. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
7. NA = Not Analyzed
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
9. Exceedances:
   - **BOLD** = Concentration exceeds NR 140 ES
   - ***ITALICS*** = Concentration exceeds NR 140 PAL
   - * = NR 140.14(3)(c) - not considered a valid PAL exceedance

Table 2

Groundwater Analytical Results Table (Page 2 of 2)

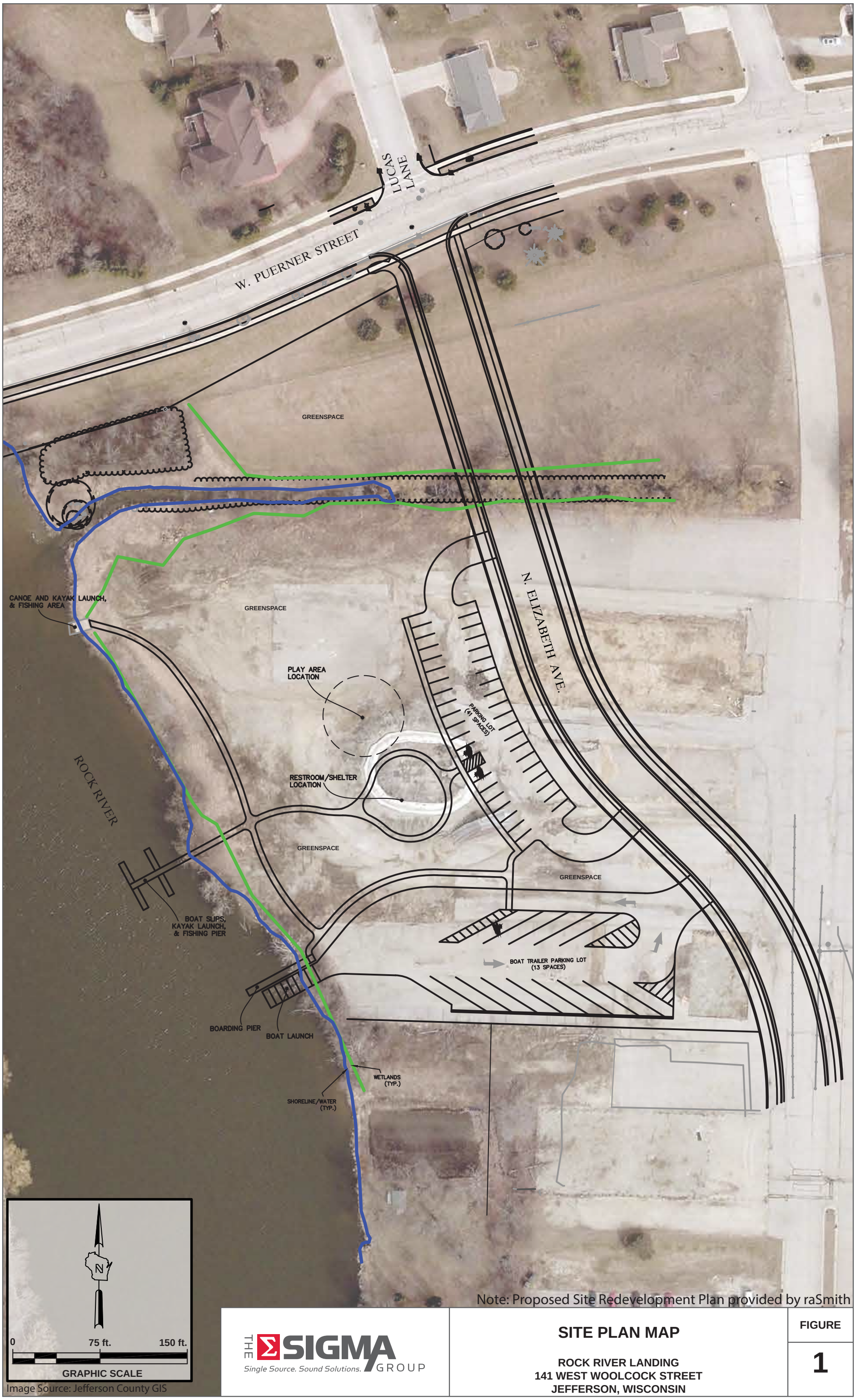
Former Jefferson County Highway Department Complex - 141 W. Woolcock Street, Jefferson, Wisconsin

Sigma Project No. 16820

Well Location:		**GP/TW-5**	**GP/TW-6**	**GP/MW-8**		**GP/MW-9**		**GP/MW-10**		**GP/MW-11**		**GP/MW-12**		**GP/MW-13**		**NR 140 ES**	**NR 140 PAL**
Date:		2/17/15	2/17/15	5/22/17	8/23/17	5/22/17	8/23/17	5/22/17	8/23/17	5/22/17	8/23/17	5/22/17	8/23/17	5/22/17	8/23/17		
Water Elevation* (feet MSL):		NA	NA	787.38	789.21	778.00	783.45	784.44	786.25	789.38	788.92	786.96	786.01	792.35	791.82		
Dissolved Iron	mg/l	NA	NA	**1.05**	***0.26***	<0.03	**2.24**	**1.84**	**11.2**	***0.22***	***0.26***	**3.16**	**2.2**	**34.9**	**42.2**	0.30	0.15
Dissolved Manganese	µg/l	NA	NA	**169**	**71.7**	**282**	**778**	**1550**	**1020**	**238**	**147**	**385**	**103**	**2210**	**1510**	50	25
Dissolved Sodium	mg/l	1400	3800	625	318	667	1270	342	160	12.4	10.9	262	29.3	9060	8840	NS	NS
Total Dissolved Soilds	mg/l	NA	NA	2764	1542	5412	7237	2084	1816	364	536	1028	570	20120	28535	NS	NS
Chloride	mg/l	**2680**	**8540**	**1422**	**630**	**3396**	**3737**	**1088**	**708**	62.6	26.1	**451**	86.6	**20179**	**18327**	250	125

Notes:

1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. **Public Welfare Groundwater Standards used for Iron, Manganese and Chloride ES and PAL**
4. NS = no standard
5. mg/L = milligrams per liter (equivalent to parts per million, ppm)
6. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
7. NA = Not Analyzed
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL



Note: Proposed Site Redevelopment Plan provided by raSmith

Image Source: Jefferson County GIS

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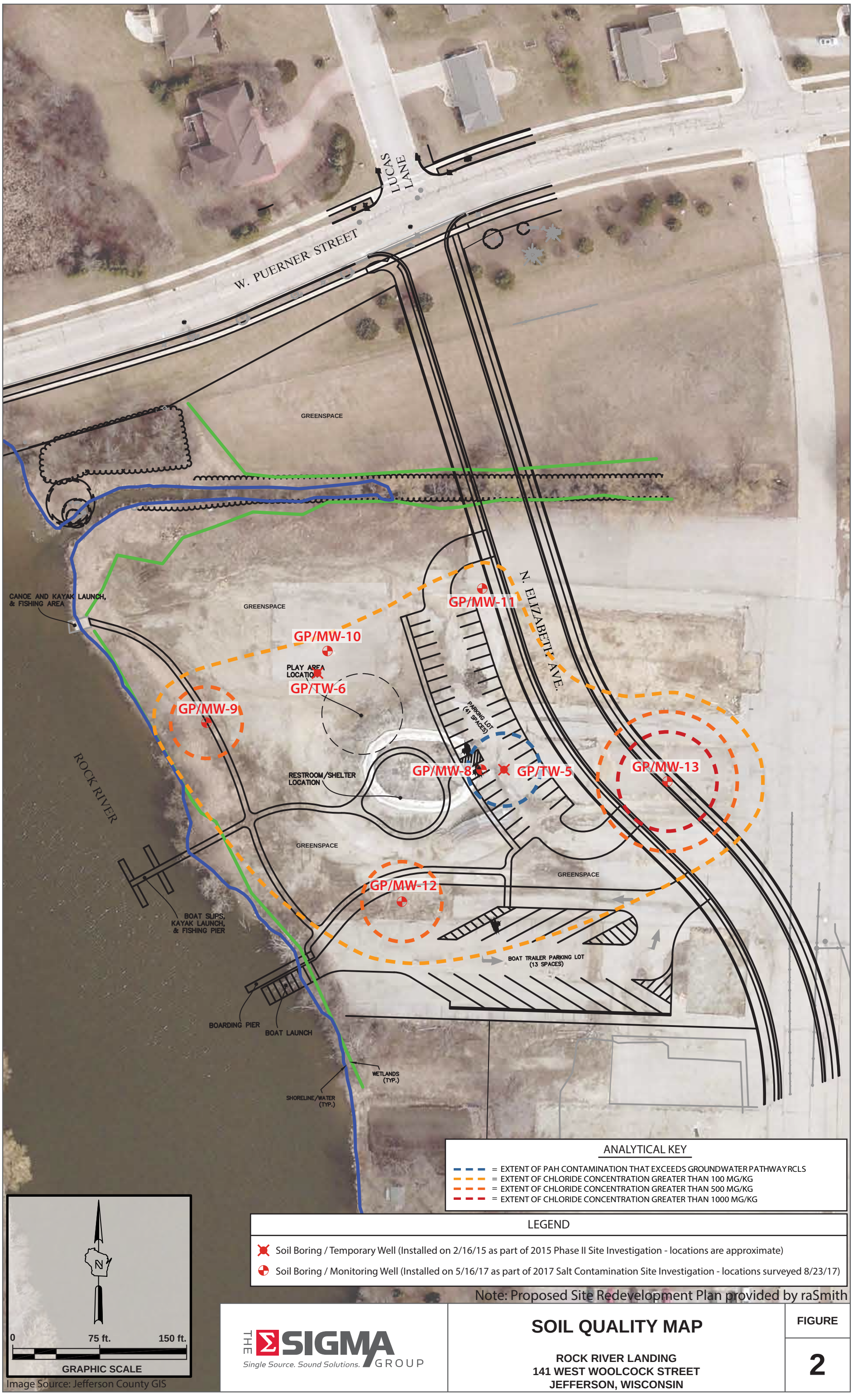
SITE PLAN MAP

ROCK RIVER LANDING
141 WEST WOOLCOCK STREET
JEFFERSON, WISCONSIN

FIGURE
1

Project : 18514 | Directory: CAD | Filename: 18514_Master Map_vertical 11x17.ai | Created By: SVK | Date: 06/24/2019



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SOIL QUALITY MAP

ROCK RIVER LANDING
141 WEST WOOLCOCK STREET
JEFFERSON, WISCONSIN

FIGURE
2

Date: 06/24/2019
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Filename: 18514_Master Map_vertical 11x17.ai
Directory: CAD
Project : 18514