



REI

**CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING**

SITE INVESTIGATION WORK PLAN

**FONG FAMILY, LLC
360 & 372 GRAND AVENUE
WAUSAU, WI 54403
BRRTS #02-37-587441**

REI PROJECT #9640A



**COMPREHENSIVE
SERVICES WITH
PRACTICAL
SOLUTIONS**



SITE INVESTIGATION WORK PLAN

**FONG FAMILY, LLC
360 & 372 GRAND AVENUE
WAUSAU, WI 54403
BRRTS #02-37-587441**

REI PROJECT #9640A

PREPARED FOR:

**Fong Family, LLC.
Attn: Mr. John Rosemurgy
PO Box 1966
Wausau, WI 54402**

MAY 2021

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The recommendations contained in this report are based on the information obtained from our study of the site and were arrived at in accordance with accepted hydrogeologic and engineering practices at this time and location.

"I, Matthew C. Michalski, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



Hydrogeologist

5/5/2021

Date

"I, Brian J. Bailey, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



Scientist

5/5/2021

Date

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1.0 INTRODUCTION

On April 26, 2021, the WDNR issued a “Responsible Party” (RP) Letter for contamination identified at the Fong Family, LLC property located at 360 & 372 Grand Avenue, Wausau, WI. Contamination was identified above state standards in soil samples collected by REI Engineering, Inc. (REI) for limited Phase II Environmental Site Assessment (ESA) work completed in conjunction with Geotechnical Exploration conducted at the property by American Engineering Testing, Inc. (AET). Geotech borings were advanced at the subject property on March 23rd and April 2nd, 2021.

Based on findings in the Geotech Report prepared by AET (dated April 7, 2021), fill material was encountered in all four (4) borings advanced at the property ranging from 12 to 48 feet below land surface (bls). Fill thickness appears to increase across the property from east to west. The source of the fill material is unknown.

The WDNR issued RP letter requires the responsible party – Fong Family, LLC (Mr. John Rosemurgy) to conduct a site investigation to determine the degree and extent of the contamination identified by the soil samples. The RP letter also requires Fong Family, LLC to retain the services of a qualified consultant within 30 days (May 20, 2021) and submit a Site Investigation Work Plan (SIWP) within 60 days (June 19, 2021).

REI was retained by Fong Family, LLC to conduct the site investigation on May 3, 2021. This report serves to notify the WDNR a qualified consultant has been retained and summarize REI’s proposed scope of work to move this site towards the completion of the WDNR required NR716 site investigation.

2.0 BACKGROUND INFORMATION AND SCOPE OF WORK

2.1 Responsible Party

Fong Family, LLC
Attn: Mr. John Rosemurgy
PO Box 1966
Wausau, WI 54403

2.2 Environmental Consulting Firm

REI Engineering, Inc.
Attn: Mr. Brian J. Bailey
4080 North 20th Avenue
Wausau, Wisconsin 54401
Phone (715) 675-9784

2.3 Regulatory Contact

Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
Attn: Mr. Matt Thompson
West Central Regional Office
1300 W. Clairemont Avenue
Eau Claire, WI 54701

2.4 Site Name & Address

Fong Family, LLC
360 & 372 Grand Avenue
Wausau, WI 54403

Facility ID:

737254760

Parcel ID Number:

291-2907-362-0511

Public Land Survey System:

The Southeast Quarter (SE¼) of the Northwest Quarter (NW¼) of Section Thirty-six (36), Township Twenty-nine North (29N), Range Seven East (7E), Marathon County, Wisconsin.

WTM Coordinates:

Easting: 549,655

Northing: 497,874

Latitude & Longitude:

Latitude: 44° 57' 13.26" N

Longitude: 89° 37' 26.56" W

The site location is depicted in Figure 1.

2.5 Site Background

2.5.1 Current & Historic Land Use

The current and historic land use of the subject property will be investigated further as part of the ongoing site investigation.

2.5.2 Previous Releases/Investigations

No previous releases are known to be associated with the subject property.

2.6 Scope of Work

1. REI will coordinate a public utility locate a minimum of three (3) days in advance of any site work scheduled at the subject property.
2. REI will mobilize to the site with a hydraulic push soil boring subcontractor. Twelve (12) soil borings are proposed to be advanced across the subject property. Five (5) of the soil borings will be advanced to sixteen (16) feet bls in the eastern portion of the property and seven (7) soil borings will be advanced to fifty (50) feet bls in the central and western portion of the property. Continuous soil samples will be collected for field description and screening. REI will utilize a Photoionization Detector (PID) to field screen soil samples. Photographs of the boring locations will be taken for documentation purposes.

3. Up to three (3) soil samples will be collected from each soil boring. Soil samples will be collected from the following zones: one (1) sample will be collected within the zone of direct contact (0-4 feet bls), one (1) sample will be collected from the on-site fill materials at a depth greater than four (4) feet bls, and one (1) sample will be collected from underlying native materials. REI anticipates collection of up to thirty-six (36) soil samples for laboratory analysis.
4. Collected soil samples will be submitted to a state certified laboratory for analysis of Volatile Organic Compounds and Naphthalene (VOC+N), Arsenic, and Lead.
5. Based on Geotech soil boring B-4, groundwater was encountered at 46.7 feet bls. Based on this data, REI anticipates encountering groundwater in the seven (7) hydraulic push soil borings advanced to fifty (50) feet bls. REI will attempt to collect groundwater samples from all soil borings that intersect the local water table.
6. Collected groundwater samples will be submitted to a state certified laboratory for analysis of VOC+N, Dissolved Arsenic, and Dissolved Lead.
7. REI will prepare a detailed site map showing significant features, including the approximate property boundaries, hydraulic push soil boring locations, public utilities, etc.
8. If contamination is defined upon completion of the scope of services, REI will prepare a site investigation report (SIR) and submit the report to the WDNR project manager. This report is now required as part of the closure process.
9. If contamination is not defined and additional investigative work is required, REI will prepare an additional scope of services and communicate with the client for the extent of the work and proposed anticipated costs to complete the investigation.

2.7 Potential Impact to Receptors

REI will investigate and evaluate the potential impact to receptors during the site investigation. Specifically, REI will determine the locations of any potable wells, potential for contamination of other surface waters, and potential vapor intrusion into structures.

2.7.1 Potable Water Survey

The property is located within the City of Wausau and is serviced by municipal sewer and water services. The subject property is located in a developed portion of the city and private potable wells are not expected in the immediate vicinity. REI will conduct a review well construction records and contact local municipal water services to verify if any private potable wells or municipal wells are in the immediate vicinity of the subject property. This information will be included in the site investigation report.

2.7.2 Surface Waters

The nearest surface water, Lake Wausau (WBIC 1437500), and impoundment, is located approximately 1,100 feet west of the subject property.

2.7.3 Vapor Intrusion

REI will evaluate the potential for vapor intrusion based on criteria from WDNR Publication RR-800 *Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin*.

3.0 TOPOGRAPHICAL.

The site is located in the northeastern portion of the Central Wisconsin River Basin. Land surface elevation at the site is approximately $1,210 \pm 10$ feet above mean sea level (MSL) according to the U.S.G.S. Wausau East, Wisconsin 7.5-minute quadrangle map. The topography for the region consists of gently rolling till plain slightly modified by stream erosion. The area has many crystalline rock outcrops that project through the overlying glacial deposits. Surface water drainage is generally towards the Wisconsin River. Major streams generally have branching drainage patterns and there are fewer wetlands or natural lakes compared to outwash deposits to the south and northeast.

Site specific soil and geologic conditions, prominent topographic features, significant hydrologic features, and surface water drainage patterns will be documented during the site investigation.

4.0 METHODOLOGIES

4.1 Hydraulic Push Soil Borings

4.1.1 Soil Sampling

The Geoprobe unit hydraulically advances threaded, two-inch diameter, four-foot long, steel rod sections into the subsurface. A four-foot sampler, consisting of a drive shoe, a steel tube with a clean acetate liner, and a drive-head retractable piston, is attached to the leading Geoprobe rod. The sampler is driven down to the top of the interval to be sampled. The stop-pin is removed to release the drive head piston, which retracts as the sampler is advanced. When the sampler has been advanced four feet, the rods are retracted from the hole and the soil in the acetate liner is recovered. The acetate liner is split open, and the soil is visually and manually classified by the field geologist/technician in accordance with ASTM: D2488-84. Logs of the borings are filled out indicating the depth and identification of the various strata, water level information, and pertinent information regarding the method of maintaining and advancing the borings.

Soil samples recovered by the acetate liner will be divided into two portions. One portion will be prepared for laboratory analysis. The other portion will be placed into a clean one-quart plastic bag. A headspace analysis will then be conducted on this latter portion. See the section “Soil Headspace Analysis” for field screening procedures. Soil storage will be in WDOT approved 55-gallon drums. These drums will be kept on site until transportation and treatment can be approved and arranged.

4.1.2 Groundwater Sampling

Water samples will be collected via polyethylene tubing that is inserted into the Geoprobe boring. Groundwater is extracted through the polyethylene tubing using a peristaltic pump. If required, a groundwater profiler or 1-inch

PVC screen and casing may be utilized if borehole collapse limits groundwater sample collection. Retained samples are then placed into laboratory prepared containers and stored in an iced cooler.

4.2 Hollow Stem Auger Boring and NR141 Monitoring Well Installation (If Needed)

4.2.1 Soil Sampling

Soil sampling will be done in accordance with ASTM: D1586-84. Using this procedure, a two-inch OD, two-foot-long split barrel sampler is driven into the soil by a 140-pound weight falling 30 inches. After an initial set of six inches, the number of blows required to drive the sampler an additional 12 inches is known as the penetration resistance, or N value. The N value is an index of the relative density of cohesionless soils and the consistency of cohesive soils.

As the samples are obtained in the field, they will be visually and manually classified by the field geologist/technician in accordance with ASTM: D2488-84. Representative portions of the samples will be returned to the laboratory for further examination and for verification of the field classification. Logs of the borings will be filled out indicating the depth and identification of the various strata, the N value, water level information and pertinent information regarding the method of maintaining and advancing the borings.

Soil samples recovered by the split spoon will be divided into two portions. One portion will be prepared for laboratory analysis. The other portion will be placed into a clean one- quart plastic bag. A headspace analysis will then be conducted on this latter portion. Soil storage will be in WDOT approved 55-gallon drums. These drums will be kept on site until transportation and treatment can be approved and arranged.

4.2.2 Monitoring Well Installation

If required, monitoring wells will be installed in accordance with Wisconsin Administrative Code NR 141 regulations. The WDNR "Monitoring Well Construction Form 4400-113A" will be completed in accordance with ch. 144, 147, and 160 Wis Stats.

The water table monitoring wells consist of pipe joint threaded, two (2) inch by ten (10) feet long schedule 40 PVC screen (#10 slot) with two (2) inch schedule 40 PVC riser. The bottom of the screens will be placed five (5) to seven (7) feet below the water table. After the screen and riser pipe are set, a sand filter pack will be placed around the screen to a depth two (2) feet above the top of the screen, capped by two (2) feet of fine sand layer, covered with a bentonite seal, annular space seal and surface seal. A protective casing will enclose the PVC riser pipe and locking caps will be used to protect the integrity of the well.

4.2.3 Water Level

Groundwater level measurements will be obtained by using an electronic measuring device, which indicates when a probe is in contact with the water surface. The distance from the top of the well casing to the probe will be measured. All measurements will be reported to the nearest 0.01 foot.

4.2.4 Groundwater Investigation Methodology

If monitoring wells are included in the scope of work, they will be positioned so that hydrogeologic parameters can be evaluated for the site. The wells will be set to bisect the groundwater table to accommodate for seasonal fluctuations in groundwater levels.

4.2.5 Groundwater Sample Collection

Each of the groundwater monitoring wells will be sampled for analysis of VOC+N, Dissolved Arsenic, and Dissolved Lead. Before each sampling event, each well will be purged by removing at least four (4) well casing volumes of water with a disposable (polyethylene) bailer to ensure collection of a representative sample. If a well is purged dry, it will be allowed to recharge before being sampled. The wells will then be sampled with disposable (polyethylene) bailers. Bailers will be disposed of following sample collection at each well location. Samples will be taken from the middle section of the bailer and will be placed in laboratory prepared bottles. Samples will be labeled and stored in an iced cooler at approximately four (4) degrees Celsius. Samples will be accompanied by Chain of Custody records. All well

development and purge water will be containerized on site in 55-gallon, WDOT approved drums, until proper handling procedures are determined.

4.3 Headspace Analysis

The soils will be screened with a Mini-RAE photoionization detector (PID) equipped with a 10.6 eV lamp. The detector will be calibrated in instrument units for Total Organic Vapors using an isobutylene standard. The soil sample, sealed in a plastic bag, will be shaken vigorously to promote volatilization of the contaminant into the headspace of the bag. The sample will be allowed to rest for at least ten minutes and then shaken again before screening. When ambient temperatures are below 60 degrees F, soil samples are allowed to warm for a minimum of ten (10) minutes in a heated environment prior to headspace development. The Ziploc bag will be punctured with the PID probe and the resulting meter reading will be recorded.

4.4 Vapor Analysis

REI will investigate the potential for vapor intrusion at this site to determine if vapor intrusion sampling is necessary.

4.4.1 Interior Vapor Sample Collection (If Needed)

Interior sub-slab vapor samples are collected via the installation of a stainless-steel VAPOR PIN® (Part# VPIN0522SS). The probe will be installed following the manufacturer Standard Operating Procedure Installation and Extraction of the VAPOR PIN® (March 16, 2018) and Use of the VAPOR PIN® Drilling Guide and Secure Cover (March 16, 2018). After installation, the sub-slab vapors will be allowed to equilibrate prior to sampling by allowing the probe to “rest” for a period of one (1) to two (2) hours or by purging the sub-slab probe and screening the sub-slab vapors until field meter reading are stable.

Leak tests to verify the tightness of the sampling train and the sample probe are completed prior to sample collection. A helium shroud is utilized to verify the tightness of the sample probe and sampling train contained within the shroud. The helium shroud consists of a polyethylene box placed over the sample port. Sample tubing, consisting of quarter (1/4) inch outside diameter HDPE is connected to the sample port barbed fitting utilizing approximately two (2) inch

long pieces of LS15 silicon tubing and connected to the helium shroud internal sample train. Helium is introduced through a valve in the top of the helium shroud to a concentration of twenty (20) to fifty (50) percent by volume. A MiniRAE PID with internal pump is used to purge the sample line connected to the sample port with at least four (4) volumes of air removed from the tubing. The purge air is monitored for the presence of helium using an OxyCheq Expedition Helium Analyzer. Once the line is purged and the helium detector identified the seal is adequate the sample line is disconnected from the vacuum pump and connected to the sampling container. The sample train and vapor probe seal are considered sealed when helium concentrations in the purge air is less than five (5) percent of the shroud concentration.

Sub-slab vapor samples are collected utilizing a 6-Liter Summa canister, received from the laboratory with a vacuum, and a thirty (30) minute flow controller. The flow controller is connected to the sample line with a compression fitting to the quarter (1/4) inch HDPE. Once the flow controller is connected the initial vacuum is recorded and the sample canister draws vapor until the vacuum pressure decreased to two (2) to five (5) inches of mercury at which time it is disconnected flow controller to stop sample collection. Collected sub-slab vapor samples will be submitted to a state certified laboratory for analysis of VOC (EPA Method TO-15).

4.4.2 Exterior Soil Gas Sampling (If Needed)

Soil gas sampling points will be installed to depth using direct push technology. A bentonite surface seal will be placed around the probe rods and the sampling points will be fitted with new inert tubing. A minimum of two (2) air volumes will be purged and the samples will be collected by attaching the top end of the tubing to a Summa canister instrumented with a vacuum gauge. The initial vacuum reading will be noted, and the valve will be opened. The Summa canister valve will be closed after the vacuum pressure decreased to two (2) to five (5) inches of mercury. Soil gas sampling locations will be abandoned with bentonite after gas sampling is completed. Collected soil gas vapor samples will be submitted to a state certified laboratory for analysis of VOC (EPA Method TO-15).

4.5 Quality Assurance/Quality Control (QA/QC)

REI personnel will maintain strict adherence to established QA/QC procedures during sample collection and handling. EPA and/or WDNR standard accepted sample collection, transportation and storage protocols will be implemented prior to analysis of samples by a state certified laboratory. Sample containers will be properly preserved and stored prior to analysis. Dates of analysis, contingent upon the shelf life of the parameter of interest, will be noted. Field chain-of-custody (COC) documentation will be maintained for each sample. Internal laboratory QA/QC protocols will be adhered to in accordance applicable EPA documents.

4.5.1 Chain of Custody

Upon completion of a soil or groundwater sample, a chain of custody log will be initiated. The chain of custody record will include the following information: project name, work order number, shipped by, shipped to, sampling point, location, field ID number, date and time taken, sample type, number of containers, analysis required, sampler(s) signature(s), etc. The fewest number of people possible will handle the samples.

4.5.2 Decontamination

Decontamination of all field equipment will be performed to eliminate potential cross-mixing between discrete sampling points. Single use sample supplies will be disposed of after use. All sampling equipment will be decontaminated by washing with an Liquinox/deionized water solution and rinsing with deionized water. Wash water will be contained on-site in Wisconsin Department of Transportation (WDOT) approved 55-gallon drums pending proper disposal or treatment.

5.0 CHEMICAL ANALYSIS OF SOILS

Soil samples collected will be submitted to a state certified laboratory for analysis of appropriate parameters. Samples will be collected in laboratory prepared vials and jars, placed into an iced cooler and transported to a state certified laboratory. Laboratory analysis of the collected soil samples will be completed in accordance with

EPA and/or WDNR accepted methods. The soil samples from each boring will be analyzed according to one or more of the following methodologies:

| <u>EPA Method</u> | <u>Analytical Constituent</u> | <u>Method Detection Limit</u> |
|-------------------|--|-------------------------------|
| 8260 | Volatile Organic Compounds & Naphthalene | variable |
| 6020/200.8 | Metals | variable |

ug/kg = parts per billion (ppb)

mg/kg = parts per million (ppm)

6.0 CHEMICAL ANALYSIS OF GROUNDWATER

Groundwater samples will be collected from each monitoring well and will be sent to the laboratory for analysis of appropriate parameters. Samples will be collected in laboratory prepared vials and jars, placed into an iced cooler and transported to a state certified laboratory. Laboratory analysis of the collected groundwater samples will be completed in accordance with EPA and/or WDNR accepted methods. The groundwater samples from each boring will be analyzed according to one or more of the following methodologies:

| <u>EPA Method</u> | <u>Analytical Constituent</u> | <u>Method Detection Limit</u> |
|-------------------|--|-------------------------------|
| 8260 | Volatile Organic Compounds & Naphthalene | variable |
| 6020/200.8 | Metals | variable |

ug/L = ppb

mg/L = ppm

7.0 REPORTING

At the conclusion of the field investigation, REI will analyze the data collected and prepare a written report of the findings. Measurements that are taken in the field will be utilized to prepare a scaled map of the subject site. Laboratory reports for both soil and groundwater samples collected during the investigation will be utilized to determine the extent of contamination. All data will be summarized into data tables. All soil samples collected will be classified and logged on the Wisconsin Department of Natural Resources Soil Boring Log Information Form 4400-122. The report that

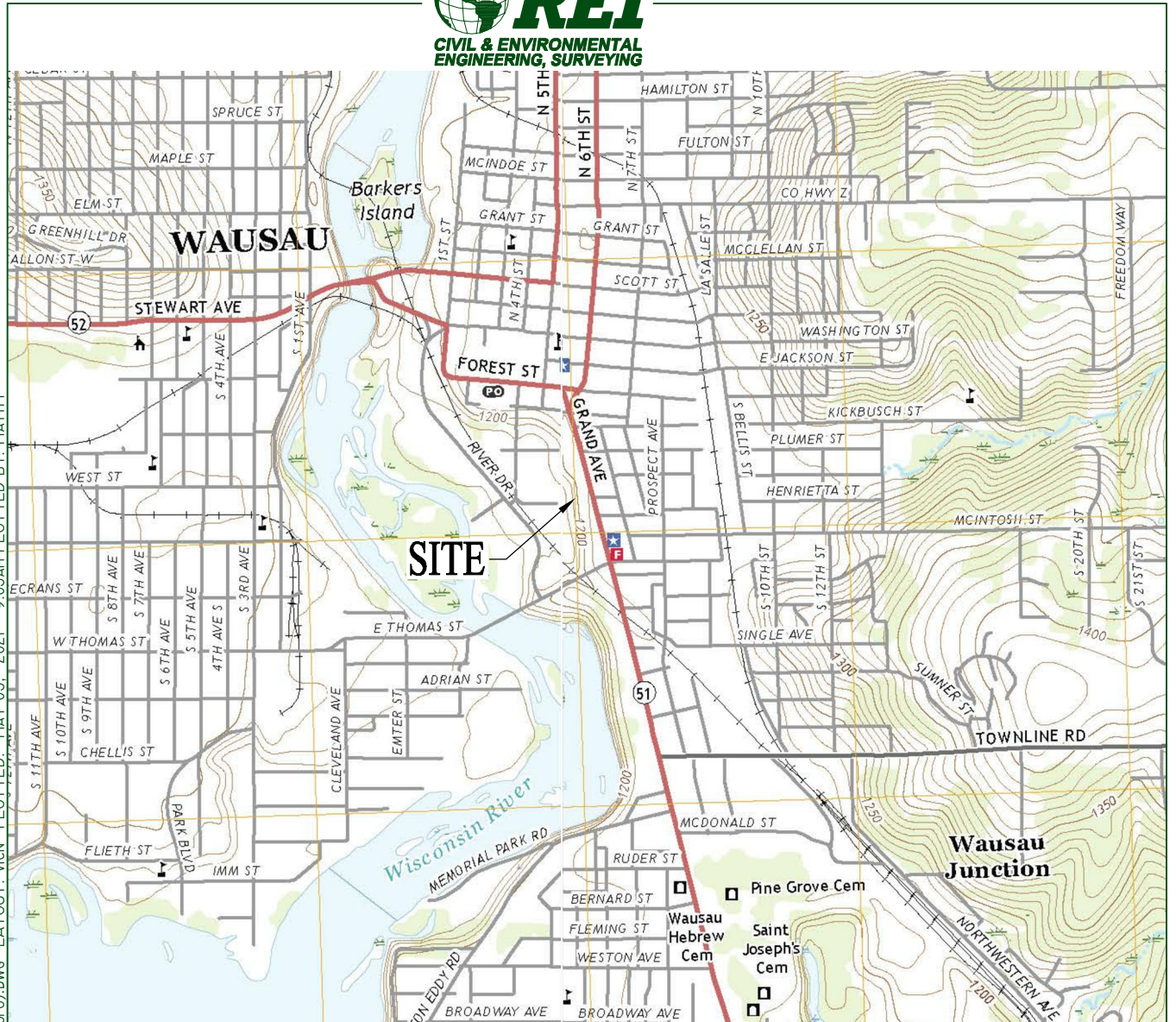
follows the investigative work will provide documentation of all work performed for the project and will include recommendations as to whether additional delineation of Volatile Organic Compounds and Naphthalene (VOC+N), Arsenic, and Lead will be required, or the contamination has sufficiently defined.

8.0 PROJECT SCHEDULE

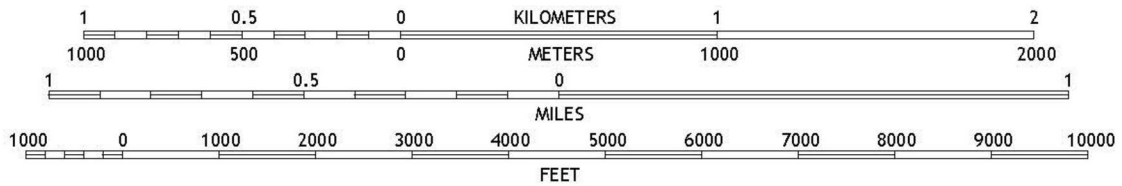
The Site Investigation will proceed according to the following schedule, but may be altered accordingly should additional work be required beyond the scope of work outlined in the Work Plan:

| TASK DESCRIPTION | Time in Weeks | | | | |
|--------------------------------|---------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| | | | | | |
| 1. Approval of Work Plan | * | | | | |
| 2. Field Work | | | | | |
| 3. Lab Analysis | | | | | |
| 4. Data Interpretation & Draft | | | | | |
| 5. Final Report | | | | | |

DRAWING FILE: P:\19600-9699\9640A - FONG FAMILY, LLC\DWG\9640A-Vicn(US Topo).DWG LAYOUT: VICN PLOTTED: MAY 05, 2021 - 9:05AM PLOTTED BY: MATTM



SCALE 1:24 000



CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988



WAUSAU EAST QUADRANGLE
WISCONSIN - MARATHON COUNTY
7.5-MINUTE SERIES



QUADRANGLE LOCATION

WAUSAU EAST, WI
2016

REI ENGINEERING, INC.

UTM GRID AND 2019 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

FONG FAMILY, LLC
360 & 372 GRAND AVENUE
WAUSAU, WI 54403



FIGURE 1 : LOCATION MAP

PROJECT NO.
9640A

DRAWN BY:
MCM

DATE:
5/4/2021

