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*Engineers • Consultants • Inspectors*

January 20, 2020

Mr. Tom Verstegen  
Remediation and Redevelopment Program  
Wisconsin Department of Natural Resources  
625 E. County Road Y, Suite 700  
Oshkosh, Wisconsin 54901

**RE: SITE INVESTIGATION WORK PLAN**  
Montello Lodge #141  
22 Main Street  
Montello, Wisconsin  
GEC Project Number: 2-0120-74  
BRRTS Number: 02-39-283764

Dear Mr. Verstegen:

Introduction

General Engineering Company (GEC) is pleased to submit this Site Investigation Work Plan for the initial site investigation activities at the Montello Lodge #141 (Site) located at 22 Main Street in the City of Montello, Marquette County, Wisconsin.

Responsible Party and Consultant

Site Name and Location: Montello Lodge  
22 Main Street  
City of Montello, Wisconsin 53949  
SW ¼ of the SW ¼ Section 9, Township 15 North, Range 10 East,  
Marquette County, Wisconsin  
A Site Location Map is shown in Figure 1, Appendix A.

Site Operations: The property is currently utilized for meetings by 3 to 5 people approximately 6 to 8 times per year and is otherwise vacant.

Portage • Black River Falls • La Crosse



Consulting Engineering • Structural Engineering • Building Design • Environmental Services • Building Inspection • GIS Services  
Grants & Funding Services • Land Surveying • Zoning Administration • Mechanical, Electrical, & Plumbing Services



Responsible Party: Montello Lodge #141  
c/o James Giese  
4845 Love Creek Avenue  
Plover, WI 54467

Consultant: General Engineering Company  
916 Silver Lake Drive  
Portage, WI 53901  
Phone: (608) 742-2169

Project Manager: Lynn Bradley  
General Engineering Company  
916 Silver Lake Drive  
Portage, WI 53901  
Phone: (608) 742-2169  
[lbradley@generalengineering.net](mailto:lbradley@generalengineering.net)

### Authorization

Authorization to prepare this Site Investigation Work Plan was provided by Mr. James Giese and Keith Wohlfert, members of the Masonic Temple.

### Site Features

The Site is a rectangular shaped parcel (Parcel ID 251-00209-0000), estimated to be approximately 0.1-acres in size. The Site is located in a predominantly commercial area near the center of the City of Montello, approximately 200 feet south of the intersection of Main and West Montello Streets.

The Site is currently developed with a commercial building with a stone foundation and a dirt floor below the main wooden floor. A small crawl space separates the main floor and dirt floor. The building was reportedly constructed in 1908 by the Freemasonry organization as a meeting place to conduct business. The lodge is referred to as the Montello Lodge #141. It is understood that the property remains vacant almost all year, with the exception of meetings held once a month approximately 6 to 8 times per year. It is also understood that in the past the upper level was used for meetings while the main level was leased to different businesses, one which was a dry-cleaning business that operated from approximately 1959 to 1989.

The Site is relatively flat and is almost entirely covered by impermeable materials (building and asphalt/concrete) except for a small gravel and grass area behind the building (east side). The property is bound to the north by commercial buildings, a residential property and East Montello Street, to the south by a commercial property, residential homes and South Main Street, to the east by commercial and residential properties, and to the west by Main Street, across which are commercial properties followed by the Fox River.

## Background

The Wisconsin Department of Natural Resources (WDNR) first learned of contamination on the Site during investigative activities associated with a petroleum release on a leaking underground storage tank (LUST) case on the adjacent property to the south/southeast. The LUST case was located at 32 Main Street and was referred to as Freitag & Sons Site #2 (BRRTS #03-39-002478). The case was closed by the WDNR in October 2002; however, the identification of chlorinated volatile organic compounds (CVOCs) during groundwater monitoring performed for that case indicated further investigation was needed to identify the source of the non-petroleum contamination. Subsequent review of the history of the Site reportedly identified a former laundromat and dry-cleaning business that operated at the Site from 1959 to 1989.

As a result of the identified chlorinated contamination on the adjacent property, in September 2001, the WDNR utilized state funds to investigate the area behind the Montello Lodge, in an attempt to identify the source of the CVOCs. Environmental Compliance Consultants, Inc. (ECCI) installed four hydraulic probes (GP-1 to GP-4) near the back of the building (east side), and one hand auger boring (HA-1) in the soils of the crawl space below the location of the former dry-cleaning machine. Temporary wells were also installed at each location. The locations of the sampling points are shown on ECCI's map included in Figure 3 included in Appendix A..

The analytical results reported contaminant concentrations of tetrachloroethene (PCE) in all of the soil samples, from a depth of 2 to 4 feet below the ground surface (bgs) for the soil probes, and 0 to 1.5 feet and 2 to 4 feet bgs in the hand auger boring, at concentrations ranging from 37 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ) to 9,600  $\mu\text{g}/\text{kg}$ . The results also identified trichloroethene (TCE) at GP-4 and HA-1 (2-4 feet) at concentrations of 120  $\mu\text{g}/\text{kg}$  to 370  $\mu\text{g}/\text{kg}$ , respectively. A table of the soil analytical results is included in Appendix B.

The groundwater samples collected from several of the sampling points also identified high concentrations of cis 1,2 dichloroethene (cis 1,2 DCE), PCE, and TCE. Specifically, PCE was identified at each location at concentrations ranging from 3.7 micrograms per liter ( $\mu\text{g}/\text{L}$ ) to 2,800  $\mu\text{g}/\text{L}$ . TCE was detected at GP-1, GP-4, and HA-1 at concentrations ranging from 2.4  $\mu\text{g}/\text{L}$  to 3,200  $\mu\text{g}/\text{L}$ . Cis 1,2 DCE was detected at GP-1 and HA-1 at concentrations of 85  $\mu\text{g}/\text{L}$  and 1,400  $\mu\text{g}/\text{L}$ , respectively. A table of the groundwater analytical results is included in Appendix B.

As a result of the testing, a responsible party (RP) letter was issued to Montello Lodge on November 26, 2001. The site investigation activities have remained idle since that time. The WDNR issued a Notice of Noncompliance (NON) on March 12, 2019. GEC was subsequently retained to prepare this site investigation work plan.

## Potential Receptors

GEC will evaluate the location and construction of any potable wells that are within close proximity of the site pending the results of the initial site investigation activities and the likelihood that any nearby potable wells have been impacted. However, according to review of a Superfund Preliminary Assessment for the Site, prepared by the WDNR, dated February 15, 2019, the WDNR was able to locate 23 Well Constructors reports for historical wells within 3,000 feet of the Site, but none were observed within 500 feet of the site.

The Fox River is located approximately 180 feet west of the Site. GEC will evaluate whether the river appears to have been impacted by the CVOC release.

With regard to vapor, GEC will document the locations of the public utilities during the planned soil boring work to further evaluate whether utility corridors are a potential conduit for the identified contamination. GEC will also perform off-site reconnaissance of nearby properties during the initial drilling activities to evaluate potential future vapor testing locations and how those buildings may be evaluated for the presence of vapors. Ambient air samples are planned to be collected from the building on the Site during the initial investigative activities.

### Work Plan

Prior to commencing field work, public utilities will be cleared by Diggers Hotline. In addition, a private utility locator may be used to identify subsurface private utilities present in the vicinity of the proposed soil boring locations.

The purpose of the proposed initial site investigation activities will be to further evaluate the horizontal and vertical extent of CVOC affected soils and groundwater on the subject site. Additionally, due to limited accessibility on the Site, and the presence of CVOC groundwater contamination extending beyond the Site onto the southern adjoining property and into the Main Street right-of-way (ROW) (identified during the investigation activities performed for the Freitag & Sons Site #2 prior to 2002), GEC is also planning to perform investigation activities on off-site properties. Dependent upon the findings of this study, and upon completion of a vapor assessment, it may be possible to request case closure. However, if this initial phase is not sufficient in determining the extent of the affected zones, it may be necessary to perform additional exploratory work including deeper monitoring wells (piezometers) to further evaluate the vertical extent of groundwater contamination, shallow groundwater monitoring wells to further evaluate the horizontal extent of groundwater contamination, or soil sampling to further evaluate the extent of soil contamination. Additionally, further vapor testing of off-site properties will likely be required.

The field exploration for this initial phase will include the advancement of seven (7) soil borings to depths of approximately 15 feet bgs, all of which will be converted to monitoring wells. One monitoring wells will be performed on site, and six will be performed on off-site properties. The approximate locations of the planned soil borings/monitoring wells are shown on the Proposed Soil Borings and Monitoring Wells Map in Appendix A.

The soil borings will be advanced with a track/truck mounted geoprobe unit. Soil samples will be collected utilizing direct push sampling with 5-foot plastic sleeves advanced into undisturbed soils to the termination depth of the probes. Subsequent to the completion of the soil sampling activities, hollow stem augers (8-inch) will be utilized to auger to the planned monitoring well depths. Soil samples will be screened in the field utilizing visual and olfactory observations and with a MiniRae Lite Photo Ionization Detector with a 10.6 lamp. Soil cuttings generated during the drilling activities will be place into 55-gallon drums and remain on site until proper disposal can be arranged

Selected soil samples will be collected and submitted for laboratory analysis of volatile organic compounds (VOCs). Sample locations will be adjusted as appropriate, to best aid in evaluating the vertical extent of the affected zone.

Monitoring wells will be constructed to depths of 15 feet bgs. The monitoring well construction will consist of 0.010 machine slotted Polyvinyl Chloride (PVC) casing and screen. The screened PVC casing will be placed at or near the bottom of the boring, with a solid PVC riser extend from the screened section to a few inches below the ground surface. A sand filter pack will be placed from the bottom of the borehole to about 2 feet above the screened section. A bentonite seal will extend from the filter pack to about 1 foot below the ground surface. The wells will be covered with flush-

mounted traffic bearing well heads surrounded by a concrete pad.

New wells will be developed by alternately surging and purging with a pump. The wells will be pumped until dry, or until they produce relatively sediment-free water. The development water will be placed into drums until after receipt of the testing results of the wells. Well development tools will be cleaned with a detergent solution and potable water followed with multiple rinses of distilled water prior to development of each well.

Water samples for laboratory analysis will be obtained from each well utilizing a single use disposable polyethylene bailer. Groundwater samples obtained from each of the monitoring wells will be submitted for analytical testing for the presence VOCs.

Groundwater elevations and the top of casing elevation at each monitoring well will be established using conventional surveying techniques. The monitoring wells will be referenced to Mean Sea Level (MSL). Static groundwater levels within the wells will be measured to the nearest 0.01 feet, prior to obtaining the samples for analysis.

The installation of the monitoring wells, and the sample collection and analysis will be performed in general accordance with the guidelines and codes utilized by the WDNR (NR 141 Wisconsin Administrative Code). The samples for chemical analysis will be properly collected and preserved in containers provided by the laboratory. The samples will be placed on ice and standard chain-of-custody procedures will be utilized.

A preliminary vapor assessment will also be performed within the building on the Site. Two summa canisters will be placed within the lower level of the building (dirt floor) near the former dry-cleaning machine (near HA-1) and at the west end of the building. The samples will be collected over a 1-hour period and analyzed for the presence of CVOCs.

Following the completion of the field activities and receipt of the analytical results, a report will be prepared in general accordance with standards set forth by the WDNR. The report will include recommendations for any additional soil sampling, monitoring wells or vapor testing which appears to be necessary.

General


It is anticipated that the borings and vapor testing will be performed in February or March of 2020. If you have any questions, please contact GEC at (608) 742-2169.

Sincerely,

**GENERAL ENGINEERING COMPANY**



Brian Youngwirth  
Environmental Project Manager



Lynn M. Bradley  
Environmental Project Manager

Attachments:

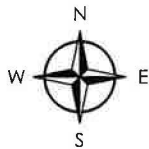
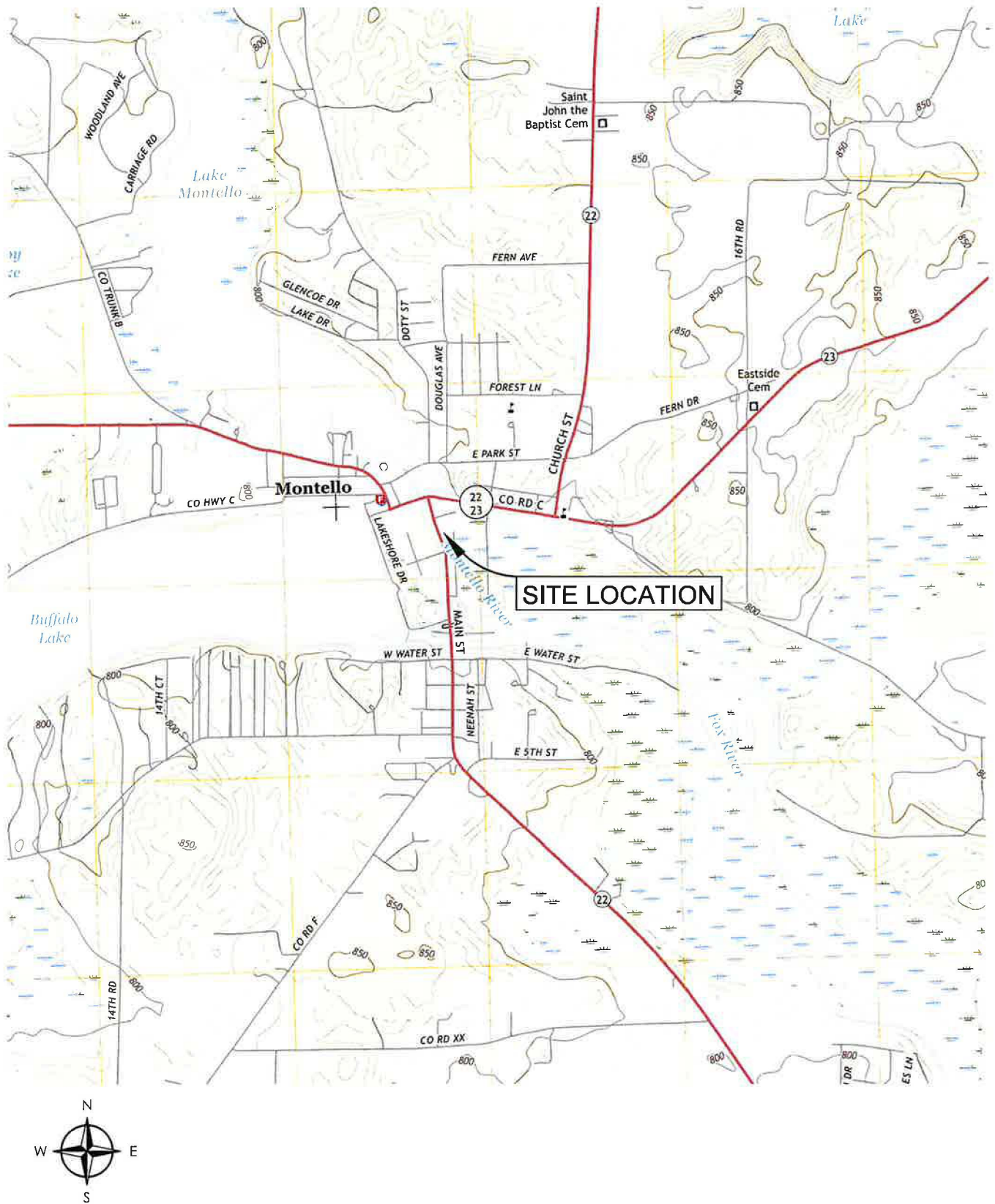
Appendix A: Figures

- Figure 1 – Site Location Map
- Proposed Soil Borings and Monitoring Wells
- Figure 3 – ECCI Test Locations Map

Appendix B Site Soil and Groundwater Tables from on-site sampling

c: Montello Lodge #141, c/o Keith Wohlfert and James Giese

**APPENDIX A  
FIGURES**



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**SITE LOCATION MAP**  
**MONTELLO LODGE #141**

**22 S. MAIN ST.**  
**CITY OF MONTELLO**  
**MARQUETTE COUNTY, WI**

**GEC**

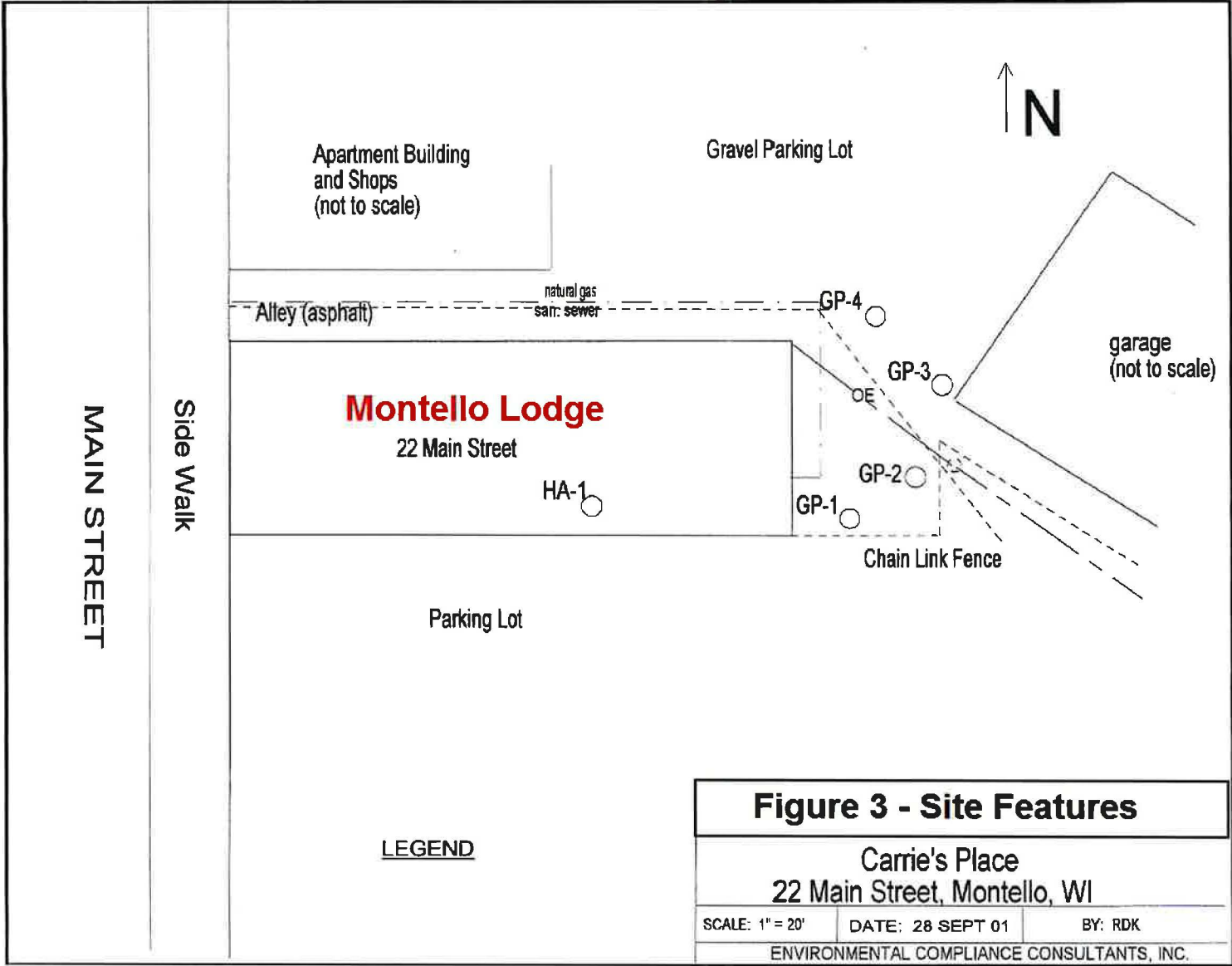
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REVIEWED BY	KSP
ISSUE DATE	JAN 2020
GEC FILE NO.	2-0120-74
SHEET NO.	

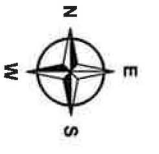
**FIGURE 1**



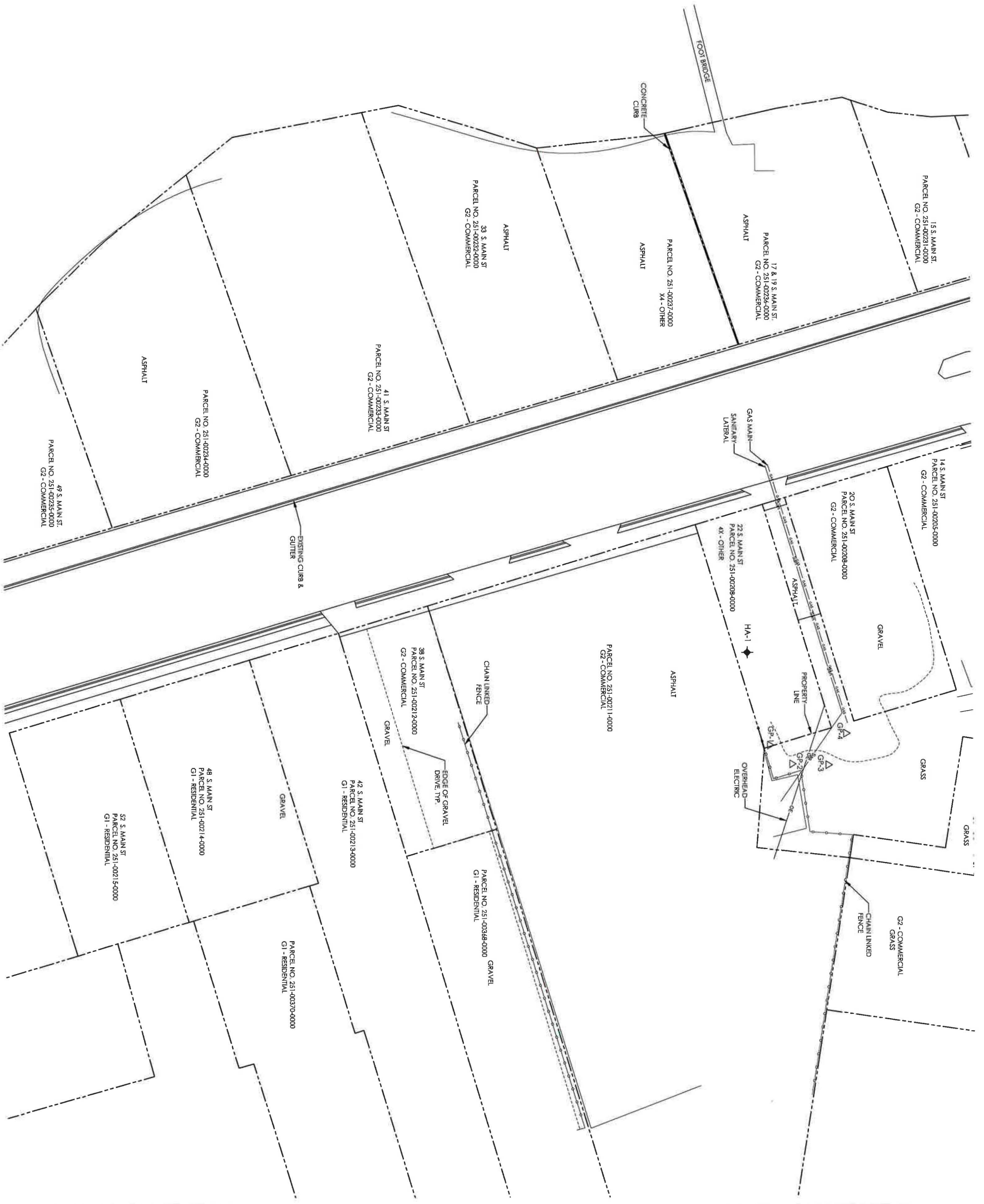
Figure 3 – Site Features

Montello Lodge





0 40'  
SCALE: 1" = 40'



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 REVIEWED BY: LMB  
 ISSUE DATE: AUG 2019  
 GEO FILE NO: 2-0518-258  
 SHEET NO:  
**FIGURE 2**

**LEGEND**

	PROPERTY LINE
	GEOPROBE (BY OTHERS)
	HAND AUGER (BY OTHERS)

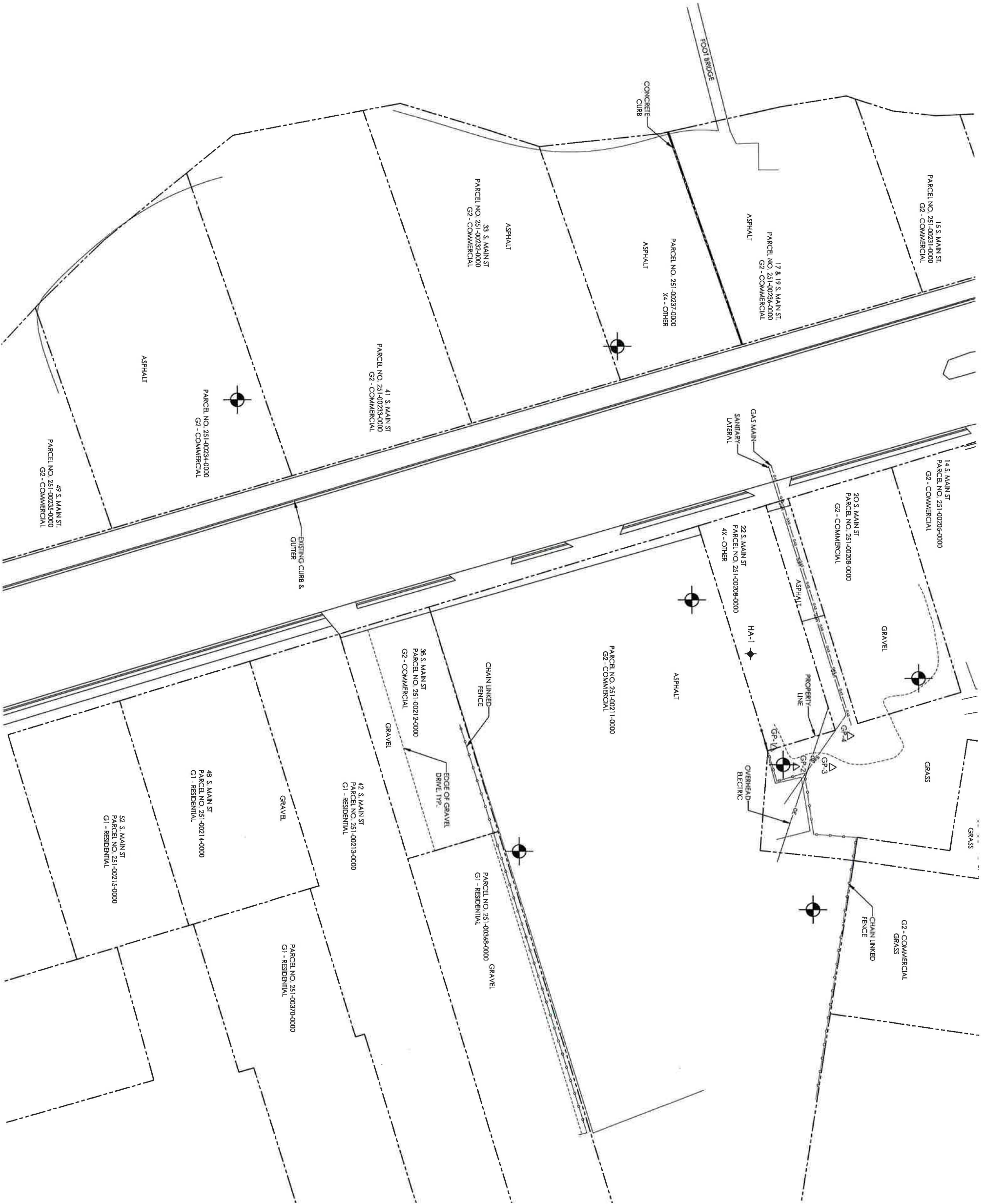
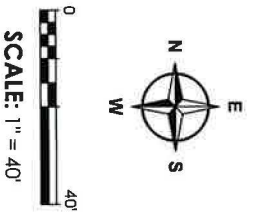
**SITE PLAN**  
**MOTELLO LODGE #141**

**22 S. MAIN ST.**  
**CITY OF MONTELLO**  
**MARQUETTE COUNTY, WI**

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LEGEND	
	PROPERTY LINE
	GEOPROBE (BY OTHERS)
	HAND AUGER (BY OTHERS)
	PROPOSED MONITORING WELL

**PROPOSED MONITORING WELL LOCATIONS**  
**MOTELLO LODGE #141**  
  
**22 S. MAIN ST.**  
**CITY OF MONTELLO**  
**MARQUETTE COUNTY, WI**

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**FIGURE 3**

**APPENDIX B  
TABLES**

# Table 1

## Soil Analytical Results

### Montello Lodge

<b>Soil Sample</b>	<b>Depth</b>	<b>Cis 1,2-dichloro ethene</b>	<b>trans 1,2-dichloro ethene</b>	<b>Tetrachloro ethene</b>	<b>Trichloro ethene</b>	<b>Vinyl Chloride</b>
GP1-2	2 to 4 ft	<25	<25	1100	<25	<25
GP2-2	2 to 4 ft	<25	<25	1600	<25	<25
GP3-2	2 to 4 ft	<25	<25	600	<25	<25
GP4-2	2 to 4 ft	<25	<25	9600	120	<25
HA1-1	0 to 1.5 ft	<25	<25	37	<25	<25
HA1-2	2 to 4 ft	<25	<25	180	370	<25

Concentrations in ug/kg.

## Table 2

### Groundwater Analytical Results

#### Montello Lodge

Well No	Cis 1,2-dichloro ethene	trans 1,2-dichloro ethene	Tetrachloro ethene	Trichloro ethene	Vinyl Chloride
PAL	7	20	0.5	0.5	0.02
ES	70	100	5	5	0.2
GP-1	85	<16	2800	45	<3.6
GP-2	<0.73	<0.79	32	<0.89	<0.18
GP-3	<0.73	<0.79	3.7	<0.89	<0.18
GP-4	1.3	<0.79	130	2.4	<0.18
HA-1	1400	22	1100	2700	<3.6
Dupl.	1100	20	1300	3200	<3.6
Trip	<0.73	<0.79	<0.57	<0.89	<0.18