

**MAY 24, 2022**

## **SOIL VAPOR SAMPLING WORK PLAN**

**FORMER KLINKE CLEANERS – FOX RUN  
2346 WEST ST. PAUL AVENUE  
WAUKESHA, WISCONSIN**

**BRRTS #: 02-68-535535 / FID #: 268188910**

**ENDPOINT PROJECT NO. 525-008-005**

**BRRTS No. 02-68-535535**

PREPARED FOR:

**Fox Run 3, LLC**  
C/O: VJS DEVELOPMENT GROUP  
W233N2847 ROUNDY CIRCLE WEST  
PEWAUKEE, WI 53072

PREPARED BY:

***Endpoint Solutions***

6871 South Lover's Lane  
Franklin, Wisconsin 53132  
(414) 427-1200

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**MAY 24, 2022**

Prepared By:



Robert A. Cigale, P.G.  
Principal Geologist

May 24, 2022

Date

Reviewed By:



Kirk L. Kapfhammer, P.G.  
Principal Geologist

May 24, 2022

Date

**Endpoint Solutions**

## TABLE OF CONTENTS

Certification .....	ii
1.0 General Information.....	1
1.1 Site Name and Address .....	1
1.2 Locational Information .....	1
1.3 Site Owner / Responsible Party .....	1
1.4 Environmental Consultant .....	1
1.5 Site Topography.....	2
2.0 Background.....	3
2.1 Site History.....	3
2.2 Redevelopment Plan .....	3
3.0 Background.....	4
3.1 Sample Coverage and Frequency.....	4
4.0 Work Plan.....	5

### **FIGURES**

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<b>B.1.A</b>	LOCATION MAP
<b>B.1.B</b>	DETAILED SITE MAP
<b>B.1.C</b>	PROPOSED SITE PLAN
<b>B.3.D.2</b>	PROPOSED SUB-SLAB VAPOR SAMPLE LOCATIONS

## CERTIFICATION

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### HYDROGEOLOGIST

I, Robert A. Cigale, 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.

  
\_\_\_\_\_  
Signature

332  
P.G. number

May 24, 2022  
Date



## **1.0 GENERAL INFORMATION**

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The purpose of this document is to propose a soil vapor sampling program at the Former Klinke Cleaners – Fox Run site located at 2346 West St. Paul Avenue in the City of Waukesha, Waukesha County, Wisconsin (the “Site” or “subject property”). The location of the Site is depicted on **Figure B.1.a –Location Map**. The bounds of the subject property are depicted on **Figure B.1.b – Detailed Site Map**.

### **1.1 SITE NAME AND ADDRESS**

Klinke Cleaners – Fox Run  
2346 West St. Paul Avenue  
Waukesha, Wisconsin

BRRTS #: 02-68-535535  
FID #: 268188910

### **1.2 LOCATIONAL INFORMATION**

The Former Klinke Cleaners site is located on a parcel identified with Tax Key WAKC1328999001 totaling approximately 11.6-acres. The Site is the former location of four (4) separate structures including: a commercial strip mall (2306 to 2350 West St. Paul Avenue) where Klinke Cleaners was formerly located in the 2346 West St. Paul Avenue tenant space (2346 tenant space), a Sentry grocery store (2304 West St. Paul Avenue), an occupied Chase Bank branch (2302 West St. Paul Avenue) and a vacant former Denny’s restaurant (2300 West St. Paul Avenue). As part of the redevelopment process, the strip mall, Denny’s restaurant and Sentry grocery store were demolished. An unimproved 1.7815-acre parcel adjoins the aforementioned parcel to the west. The Site is located in the Southeast ¼ of the Southeast ¼ of Section 8, Township 6 North, Range 19 East. WTM coordinates for the approximate center of the Site are 661,073 / 281,170.

### **1.3 SITE OWNER / RESPONSIBLE PARTY**

Fox Run 3, LLC  
c/o VJS Development Group  
W233N2847 Roundy Circle West  
Pewaukee, WI 53072  
Contact: Ms. Bailey Copeland  
Phone: 262-893-1720  
Email: bcopeland@vjsdevelopment.com

### **1.4 ENVIRONMENTAL CONSULTANT**

Endpoint Solutions Corp. (Endpoint)  
6871 South Lovers Lane  
Franklin, WI 53132  
Contact: Mr. Robert Cigale  
Phone: 414-858-1202  
Email: bob@endpointcorporation.com

## 1.5 SITE TOPOGRAPHY

The Site is relatively flat and is situated at an elevation of approximately 802 feet above mean sea level (ft amsl). The surface topography in the vicinity of the Site slopes gently to the east. The nearest surface water body is the Fox River located approximately 500 feet to the east. Based upon groundwater flow data previously collected on the Site and topographic map interpretation, the direction of shallow groundwater flow beneath the subject property is primarily to the northeast.

## 2.0 BACKGROUND

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### 2.1 SITE HISTORY

The original development on the subject property consisted of a farmstead in the southeast corner of the subject property near the intersection of Sunset Drive and St. Paul Avenue. The remainder of the subject property appeared to have been utilized as a cultivated field. Based on a review of historical aerial photographs, the agricultural use of the subject property was observed from prior to 1941 through circa 1970. By 1980, the farmstead had been removed and the Site was developed with three (3) structures consisting of the Fox Run Shopping Center along the north portion of the Site, the Sentry store in the southwest corner of the Site and the former Denny's restaurant in the eastern portion of the Site, with the majority of the remaining area paved for use as parking around the buildings.

In September 2004, Drake Environmental, Inc. (Drake) conducted a limited Phase II Environmental Assessment (EA) of the Klinke Cleaners site. Soil analytical results indicated elevated concentrations of tetrachloroethene (PCE) and groundwater analytical results indicated elevated concentrations of PCE, trichloroethene (TCE), toluene, cis-1,2-dichloroethene, isopropylbenzene and methyl tert-butyl ether (MTBE). Based on the results from the initial Phase II EA performed by Drake, additional assessment was recommended and the WDNR was notified of the contamination on October 29, 2004. The resulting open Wisconsin Department of Natural Resources (WDNR) Environmental Repair Program (ERP) case (BRRTS #: 02-68-535535) discussed herein is the only documented release on the Site. No other previously reported discharges have been noted on the subject property.

Following numerous iterations of investigative activities performed between 2004 and 2021, the extent of the contamination in the soil was delineated to the degree that the WDNR approved the proposed redevelopment plans for the Site, including the management of residually contaminated soils excavated as part of the proposed redevelopment in an onsite location (WDNR Letter – April 5, 2021). At the time the Soil Management Plan was approved, the WDNR requested that groundwater continued to be monitored through the construction phase to determine whether changes to the Site due to the proposed redevelopment affected the groundwater regime.

### 2.2 REDEVELOPMENT PLAN

The Site redevelopment will include three (3) two (2) story apartment buildings with a single level of underground parking in each. A depiction of the proposed redevelopment of the Site is shown on **Figure B.1.c**. Two (2) of the apartment buildings are located directly to the south of the delineated area of soil and groundwater contamination associated with the former dry-cleaning operation.

### 3.0 BACKGROUND

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Based on laboratory analytical results of soil and groundwater collected from the Site during multiple phases of Site investigation activities, soil and groundwater containing elevated concentrations of PCE are located within 100 feet of the newly constructed 16-unit and 24-unit apartment buildings along Fox Run Boulevard. Per WDNR's *Guidance Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin* (RR-800) published January 2018, vapor sampling is recommended when a building is over or within 100 feet of CVOC-impacted soil and/or a building overlies groundwater with chlorinated volatile organic compounds (CVOCs) above Wisconsin Administrative Code (Wis. Admin. Code) Chapter NR140 enforcement standards (ES) at the water table.

Wis. Admin. Code Chapter NR 716.11(5)(g) requires sub-slab sampling in occupied buildings when investigation of soil, groundwater or soil gas indicates potential for vapor intrusion. Wis. Admin. Code Chapter NR 716.11(5)(h) requires indoor air sampling when it is necessary to determine the impact vapor intrusion currently has to an occupied building. Table 5B in RR800 recommends concurrent sub-slab and indoor air sampling be performed in a residential setting.

#### 3.1 SAMPLE COVERAGE AND FREQUENCY

In most cases, a vapor investigation will start and focus in buildings or areas of a building where the highest vapor concentrations are expected, and will step out depending upon results of the initial sampling. Table 5C in RR800 recommends approximately one (1) sub-slab vapor sample be collected per 2,000 square feet of building footprint. Typically, more than one (1) sampling round will be needed to demonstrate there is not a vapor risk.



## 4.0 WORK PLAN

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While the 16-unit building has an overall footprint of approximately 9,800 square feet and the 24-unit building has an overall footprint of approximately 1,4350 square feet, the eastern end of the 16-unit building and the western end of the 24-unit building fall within the general 100-foot distance from soils contaminated with CVOCs. Based on groundwater sample results, groundwater contaminated with CVOCs does not extend beneath the buildings. Therefore, it is our opinion the highest concentrations of CVOCs would be present in the eastern portion of the 16-unit building and the western portion of the 24-unit building. As such, we propose to install four (4) sub-slab vapor sample points within the eastern portion of the 16-unit building and three (3) sub-slab vapor sample points within the western portion of the 24-unit building. The proposed locations of the sub-slab vapor sample points are depicted on **Figure B.3.d.2**.

Samples will be collected from each of the sub-slab vapor sample points using standard sub-slab sampling procedures with the samples being analyzed for volatile organic compounds (VOCs) via Method TO-15. An indoor air sample will be collected concurrently to the sub-slab sampling from the east portion of the 16-unit building and the western portion of the 24-unit building. The indoor air samples will be collected using the 24-hour method and will be analyzed for VOCs via Method TO-15.

As the buildings both contain a single level of underground parking beneath the residential units, the underground parking level is separated from the residences via a fully sealed two (2) hour fire barrier. In addition, the underground parking level is ventilated via a separate system to prevent the accumulation of carbon monoxide and maintains a negative pressure relative to the overlying residential space to prevent migration of vapors from the parking level.

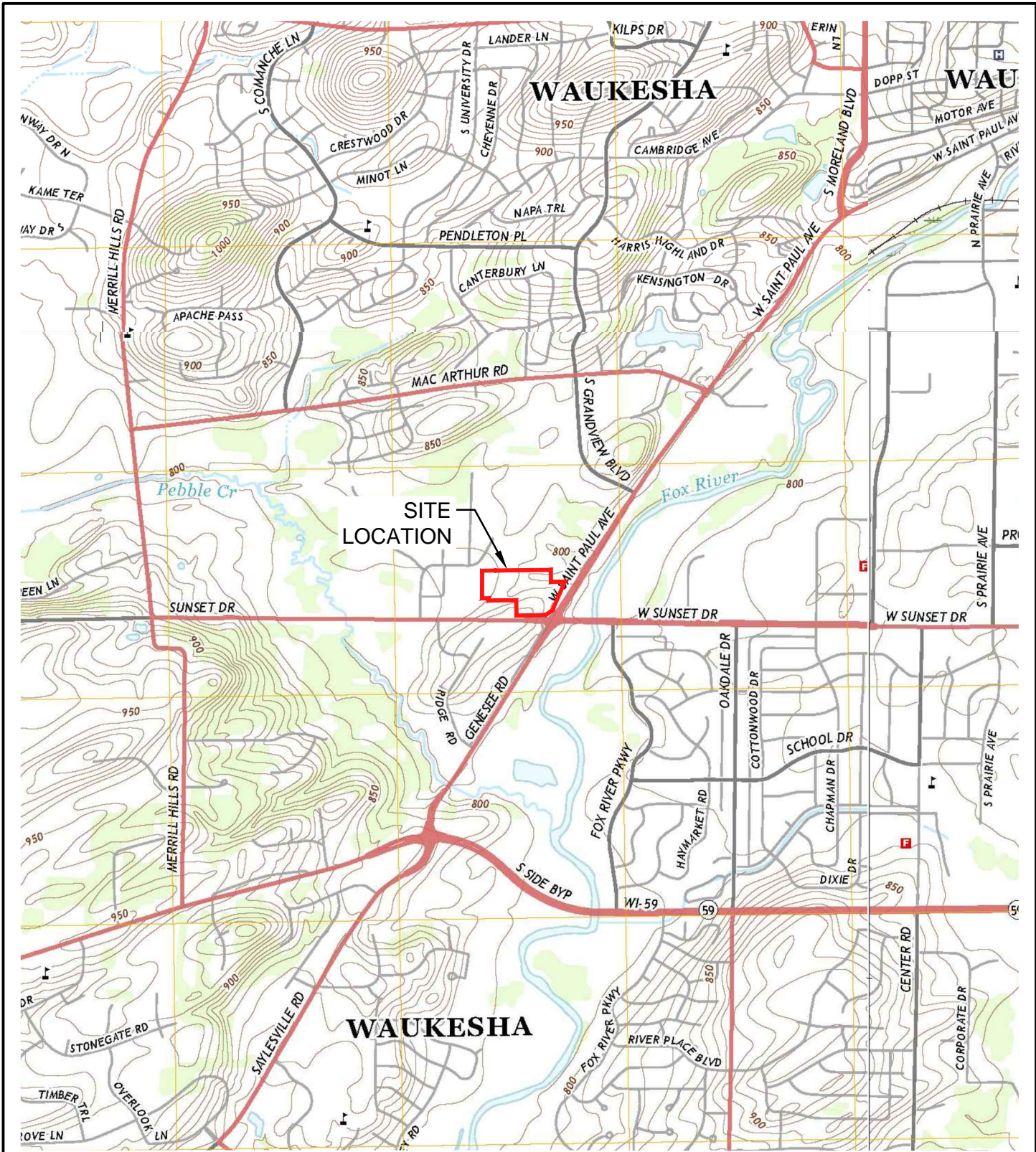
## **FIGURES**

FIGURE B.1.A LOCATION MAP

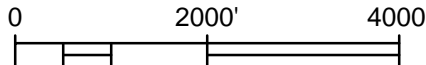
FIGURE B.1.B DETAILED SITE MAP

FIGURE B.1.C PROPOSED SITE PLAN

B.3.D.2 PROPOSED SUB-SLAB VAPOR SAMPLE LOCATIONS



SITE  
LOCATION



## LOCATION MAP

KLINKE CLEANERS - FOX RUN  
2346 W. ST. PAUL AVENUE  
WAUKESHA, WISCONSIN 53188

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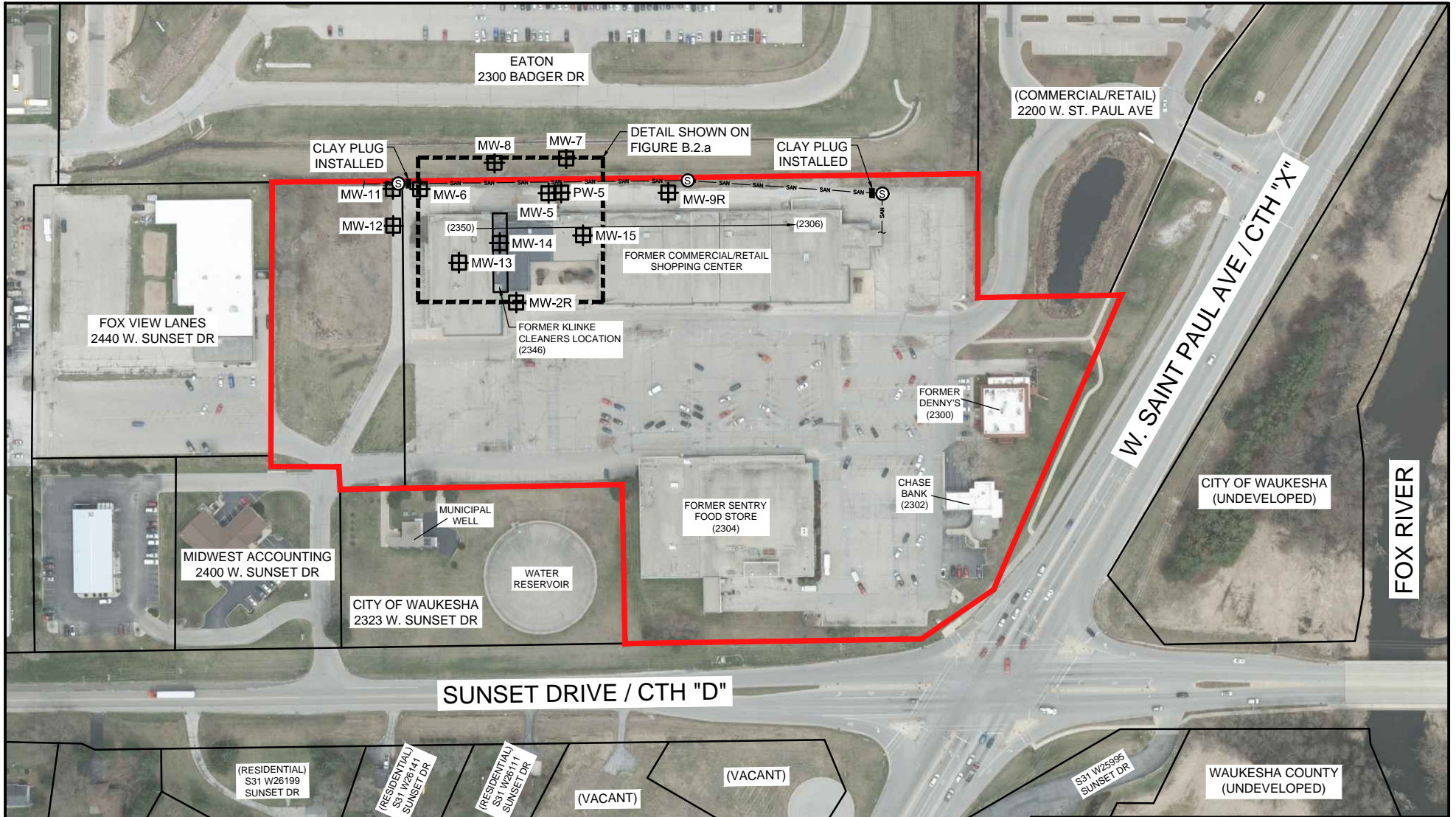
DRAWN BY: NWD DATE: 10/06/2020

REVIEWED BY: RAC PROJECT NO: 525-008-006

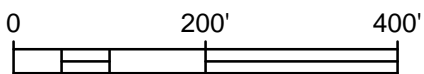
B.1.a

P:\V5 - 525\008 - Fox Run\CAD\008-006\FIG B.1.a\_525-008-006 Location Map.dwg

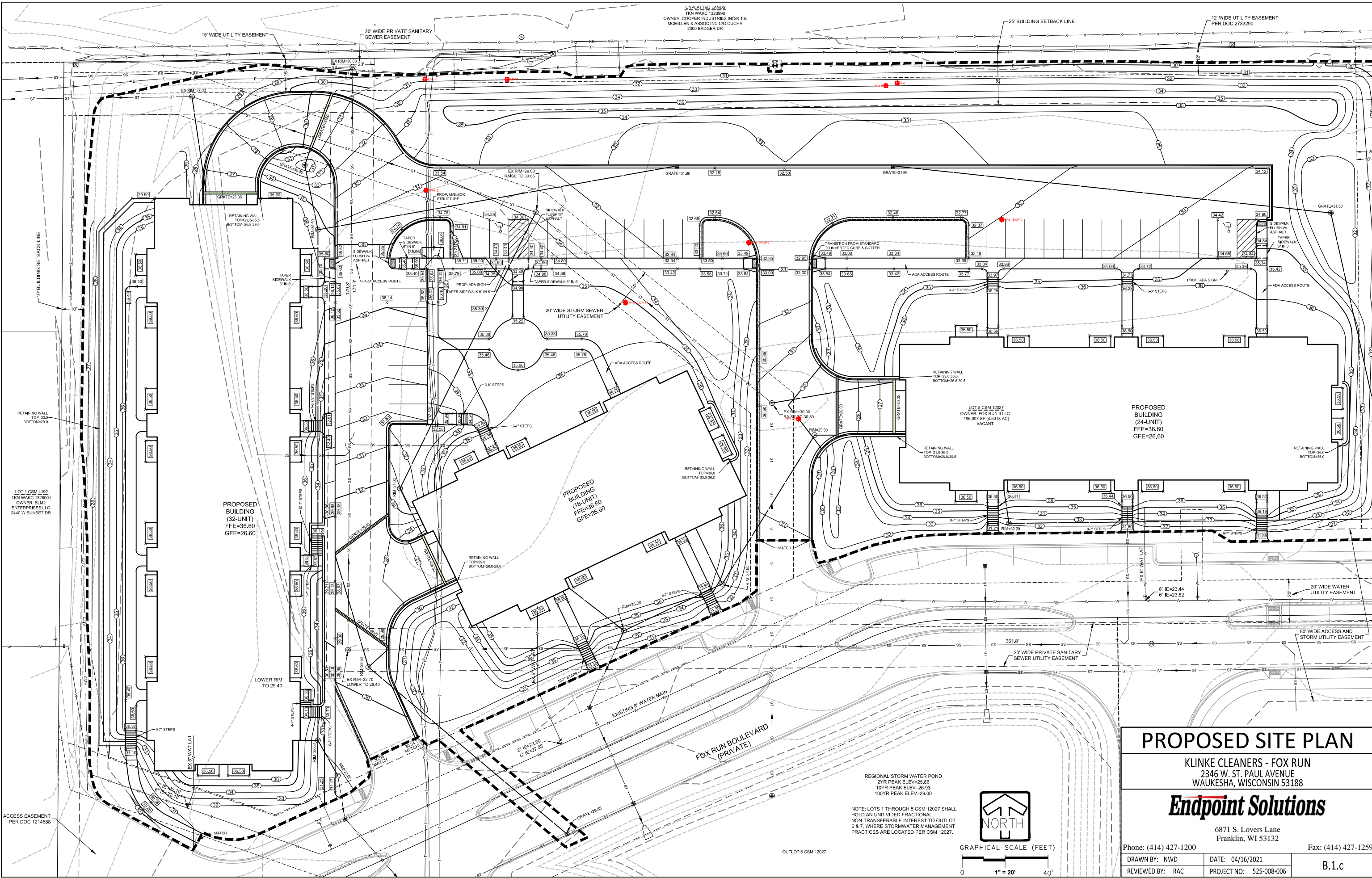
SOURCE: USGS



	SUBJECT PROPERTY
	SANITARY SEWER
	SANITARY SEWER MANHOLE
	MONITORING WELL LOCATION
(2304) -	ADDRESS ON W. ST. PAUL AVENUE



<b>DETAILED SITE MAP</b>		
KLINKE CLEANERS - FOX RUN 2346 W. ST. PAUL AVENUE WAUKESHA, WISCONSIN 53188		
<b>Endpoint Solutions</b>		
6871 S. Lovers Lane Franklin, WI 53132		
Phone: (414) 427-1200		Fax: (414) 427-1259
DRAWN BY: NWD	DATE: 10/06/2020	<b>B.1.b</b>
REVIEWED BY: RAC	PROJECT NO: 525-008-006	



P:\VIS - 525\008 - Fox Run\CAD\008-006\FIG B.1.c\_525-008-006 Proposed Site Plan.dwg

SOURCE: PINNACLE ENGINEERING GROUP GRADING PLAN REVISED 11-18-20

UNPLATTED LANDS  
 TKN WAKC 1328988  
 OWNER: COOPER INDUSTRIES INC/RT E  
 MCMLLEN & ASSOC INC C/O DUCHA  
 2300 BADGER DR

LOT 1 CSM 4192  
 TKN WAKC 1328001  
 OWNER: BLM2  
 ENTERPRISES LLC  
 2440 W SUNSET DR

PROPOSED BUILDING  
 (32-UNIT)  
 FFE=36.60  
 GFE=26.60

PROPOSED BUILDING  
 (16-UNIT)  
 FFE=36.60  
 GFE=26.60

LOT 5 CSM 12027  
 OWNER: FOX RUN 3 LLC  
 196.097 SF (4.5018 AC)  
 VACANT

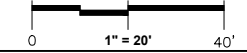
PROPOSED BUILDING  
 (24-UNIT)  
 FFE=36.60  
 GFE=26.60

REGIONAL STORM WATER POND  
 2YR PEAK ELEV=25.86  
 10YR PEAK ELEV=26.93  
 100YR PEAK ELEV=29.00

NOTE: LOTS 1 THROUGH 5 CSM 12027 SHALL HOLD AN UNDIVIDED FRACTIONAL, NON-TRANSFERABLE INTEREST TO OUTLOT 6 & 7, WHERE STORMWATER MANAGEMENT PRACTICES ARE LOCATED PER CSM 12027.



GRAPHICAL SCALE (FEET)



# PROPOSED SITE PLAN

KLINKE CLEANERS - FOX RUN  
 2346 W. ST. PAUL AVENUE  
 WAUKESHA, WISCONSIN 53188

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DATE: 04/16/2021

REVIEWED BY: RAC

PROJECT NO: 525-008-006

B.1.c

OUTLOT 6 CSM 12027

P:\VJS - 525\008 - Fox Run\CAD\008-006\FIG B.3.d.2\_525-008-006 Proposed Sub-Slab Vapor Locations.dwg



**—** SUBJECT PROPERTY

**—** APPROXIMATE LOCATION OF PROPOSED BUILDING (PER VJS MASTER PLAN REVISED 11/18/2020)

**- - -** BUILDING PERIMETER AND DEMISING WALL

**⊕** MONITORING WELL LOCATION

**▲** PROPOSED SUB-SLAB VAPOR SAMPLING LOCATIONS

**NOTE: ALL SAMPLE LOCATIONS ARE SHOWN APPROXIMATE**

**PROPOSED SUB-SLAB VAPOR SAMPLE LOCATIONS**

KLINKE CLEANERS - FOX RUN  
2346 W. ST. PAUL AVENUE  
WAUKESHA, WISCONSIN 53188

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DRAWN BY: NWD	DATE: 05/17/2022	B.3.d.2
REVIEWED BY: RAC	PROJECT NO: 525-008-006	

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