

**NOTICE OF PUBLIC COMMENT PERIOD
(CORRECTED 11/26/13)
DRAFT ANALYSIS OF BROWNFIELD CLEANUP ALTERNATIVES
ENVIRONMENTAL RESPONSE ACTIONS
AT THE FORMER PUMPHOUSE ON THE PARCEL KNOWN AS
THE EAST MILL SITE, 1205 EAST ELM AVENUE
CITY OF MONROE, MICHIGAN**

PLEASE TAKE NOTICE that public comment on the Analysis of Brownfield Cleanup Alternatives (ABCA) for proposed environmental response actions at the former pumphouse on the parcel known as the East Mill Site, with the address 1205 East Elm Avenue, Monroe, Michigan will be received from Tuesday, November 26 until Monday December 30, 2013 by Mr. Dan Swallow, Director of Economic and Community Development for the City of Monroe at the following location:

120 East First Street
Monroe, MI 48161-2169
Phone: (734) 384-9134
E-mail: dan.swallow@monroemi.gov

Comments can be submitted in writing, by email, or verbally by prior appointment.

The environmental response actions on the property will be funded by a loan from the Downriver Community Conference Brownfield Consortium, U.S. Environmental Protection Agency Revolving Loan Fund Program in the amount of \$300,000.

Copies of the draft ABCA, current Work Plan and other project documents are available for public inspection and review at the project document repository located at the offices of the City of Monroe Clerk at the same address listed above. A copy of the draft ABCA will also be available for download at the City of Monroe website: <http://www.ci.monroe.mi.us>. Please note that all aspects of the ABCA are open for comment.

Further information may be obtained by contacting Mr. Swallow at the above noted number and addresses.

POSTING DATE: November 26, 2013 (City Hall and City Website)

NOTE: The previous Notice dated October 11, 2013, incorrectly referenced the funding source as U.S. EPA Brownfield American Reinvestment Recovery Act (ARRA) Revolving Loan Fund (RLF) Grant.

Port of Monroe
2929 East Front St., P.O. Box 585, Monroe, MI 48161
T (734) 241-6480, F (734) 241-2964

ANALYSIS FOR BROWNFIELD CLEANUP ALTERNATIVES

USEPA Brownfield Cleanup Revolving Loan Fund
Cooperative Agreement BF-00E93501-2
Pumphouse Property, 1205 East Elm Avenue, Monroe, Michigan

1.0 Introduction

This Analysis of Brownfield Cleanup Alternatives (ABCA) was prepared by AKT Peerless Environmental & Energy Services (AKT Peerless) for the City of Monroe Brownfield Redevelopment Authority (BRA) and Port of Monroe. The ABCA is a required element of the United States Environmental Protection Agency (USEPA) Brownfield Cleanup Revolving Loan Fund (RLF) Grant awarded to the Downriver Community Conference Brownfield Consortium (DCCBC) by the USEPA.

The DCCBC Grant was awarded for the cleanup of eligible properties in participating downriver communities. The property for which this loan is being requested is located at 1205 East Elm Avenue (Parcel Identification Number Parcel 59-01904-001-BR-11) in Monroe, Monroe County, Michigan (the subject property). The subject property is referred to as the “pumphouse parcel”.

In preparing the ABCA, the Monroe BRA and Port of Monroe considered environmental factors, various site characteristics, surrounding properties, land use restrictions, potential future uses, and cleanup goals.

2.0 Background

2.1 Site Description

The Project Site is located in of Section 4 in the City of Monroe, Township 6 and 7 South (T. 6/7S.), Range 9 East (R. 9E.), Monroe County, Michigan. The property comprises one parcel (Parcel 59-01904-001-BR-11) consisting of approximately 0.562 acres. The Port of Monroe is the current owner of the subject property, which is currently unoccupied.

2.2 Site History

The subject property was historically part of a larger 350-acre parcel known as the East Mill site. Part of the East Mill property occupies land that is the site of the Frenchtown settlement, founded in 1787. By 1812, as the United States moved toward war with Britain, Frenchtown became a strategic outpost. The first and second battles of the River Raisin, and the subsequent massacre of over 60 American prisoners, occurred on January 18, 22, and 23, 1813 in the area of the subject property. Over 400 American soldiers were killed in these battles. Frenchtown, which was abandoned during the War of 1812, began to be resettled in 1816 further west along the river. The new settlement grew into the City of Monroe and was named the county seat of Monroe County, Michigan Territory in 1817. The area of the subject

property became agricultural land after the War of 1812. Between 1850 and 1915, the subject property was part of the Michigan Nursery Company operated by Isreal Epley Ilgenfritz.

Mr. Ilgenfritz conveyed a portion of his land holdings to the River Raisin Paper Company in the early 20th Century. The River Raisin Paper Company built the first mill (West Mill) on the northwest corner of Dixie Highway and Elm Street in 1915. Between 1918 and 1920, the East Mill was constructed on the property south of Mason Run. Additional expansion occurred at the subject property as the company grew, and acquired the Monroe Corrugated Box Company in 1920.

The Union Camp Corporation purchased the River Raisin Paper Company in 1960. The subject property was operated by Union Camp until the mid-1980's, when it sold the company to the Monroe Paper Company, a partnership of the Jefferson Smurfit Corporation and an individual, Bob Mitchell. Jefferson Smurfit acquired full ownership of the subject property in 1991.

The subject property "the pumphouse parcel" was developed with a 13,334 square foot building that was formerly used as a filtration plant that supplied filtered river water to the paper mill from 1918 to the 1950s. After the pumphouse was no longer needed for production, the building was used for offices and for storage of equipment. The building is divided into three sections: (1) The eastern section of the building (34 by 125 feet) was formerly used for filtration. In the past, there were large filters formerly mounted to the floor on the ground level of the eastern section, but they have been removed; (2) The middle of the building (34 by 34 feet) was where the river water entered the pump house. Two pump pits with large pumps and piping remain in this section of the building; and (3) The western section of the building (34 by 131 feet) is newer than the other two sections. This end of the building has two stories that were formerly used as dormitories, laboratory, meter room, and later offices.

The East Mill operated on the subject property until approximately 1995. The vacant East Mill and adjoining properties were sold to Homrich, Inc. in 1997. The mill buildings were generally unused after 1995.

The Port of Monroe purchased the subject property in 2006. The subject property has been unused since. The property is currently vacant and unoccupied. The former filtering and testing equipment is gone but the pumps, piping, and pits remain.

2.3 Previous Environmental Investigations

Legacy Environmental, Inc. (Legacy) conducted due diligence investigations consisting of a Phase I Environmental Site Assessment (ESA) and a Phase II Subsurface Investigation of the subject property in December 2005. Legacy collected soil, sediment, and groundwater samples for laboratory analysis. Legacy also collected samples of various waste materials such as sediment and water from pits located inside the pumphouse.

Based on a comparison of Legacy's soil and groundwater results to current Michigan Department of Environmental Quality (MDEQ) Residential Cleanup Criteria (RCC), soil and groundwater impact was identified at the subject property above MDEQ criteria.

Copies of all reports are on file with the Port of Monroe and are available upon request.

2.4 Current Environmental Concerns

Based on the analytical results obtained during Legacy's 2005 subsurface investigation of the subject property, concentrations of arsenic were detected in soil above applicable Residential MDEQ Direct Contact (DC) Criteria. Concentrations of chromium and mercury were also detected in soil above applicable MDEQ Groundwater Surface Water Interface Protection (GSIP) Criteria. Contamination in excess of the MDEQ Residential DC Cleanup Criteria was identified in shallow soil beneath the east central portion of subject property. Contamination in excess of the MDEQ GSIP Cleanup Criteria was identified in shallow soil in the eastern and western portions of the subject property.

Based on these exceedances, the potential exists for potential future occupants of, and subsurface construction workers at, the subject property to come into contact with contaminants through exposure of impacted soil. Additionally, this site adjoins a river; consequently, there is a potential for impact soil to enter the River Raisin.

In addition to the soil contamination identified by Legacy, building components contain asbestos and other potential hazardous materials. The building has also been deemed dangerous, unsanitary, and unfit for human occupancy by the City of Monroe. Therefore, an ordered demolition of the building has been issued to protect the health and safety of the general public. Refer to Attachment B for a copy of this notice.

3.0 Proposed Cleanup Objectives

The Port of Monroe acquired the subject property in 2006 and is in the initial stages of the planned transfer of the subject property to the National Parks Service. The property north of East Elm Avenue was recently designated as America's newest National Battlefield Park and the only National Battlefield Park dedicated to the telling the story of the War of 1812. Over the past 21 years, the community has worked diligently to remediate contaminated lands and restore the old paper mill area. To date, over \$3.7 million has been expended to demolish, remove, and remediate the old paper mill site.

The Monroe BRA in consultation with the Port of Monroe is coordinating the remediation of the site. This cleanup will ultimately lead to the partial demolition of the pumphouse property. Upon remediation of the subject property, the National Parks Service will take ownership of the property. Upon taking ownership of the property, the land will be restored utilizing a Softbank restoration including a natural riverbank habitat. It is planned that approximately 1,200 feet of River Raisin shoreline (including the subject property) will be transformed from its current disturbed state to a naturalized shoreline utilizing best management practices for restoring near shore and riparian habitats. A conservation easement benefiting the National Parks Service will be placed on the property to ensure the protection of the restored river bank.

Given the site conditions, the nature of the hazardous substances on-site and the potential exposure pathways that could occur under the proposed future use scenario, actual or threatened releases of hazardous substances at the property, if not addressed by implementing a response action proposed below, may present an imminent and substantial endangerment to public health, welfare, or the environment.

3.1 Potential Cleanup Alternatives

The Monroe BRA and Port of Monroe considered different options to perform cleanup activities at the property. These options included the following:

Option No. 1 - No Action

A “no action” alternative would be the lowest cost. However, the “no action” option does not reduce the threat of exposure with identified contaminants and hazards. In addition, the “no action” option does not allow for the future redevelopment of the subject property. The “no action” option is not recommended as it is not compatible with the goals of reducing the environmental threats to human health and the environment and future redevelopment of the subject property.

Effectiveness: The “no action” option is not protective of public health, the community or workers at the site. The “no action” option does not reduce the threat of exposure with identified contaminants and hazards. Further, the “no action” option is not protective of the environment.

Implementability: Aspects of this option are easily implemented for example, the site is accessible for field equipment and field personnel. However, this option is not technically feasible because: (1) the monitoring is not likely to demonstrate site improvement, (2) this option cannot adapt to changes in the environmental condition of the site, and (3) this option would not contribute to remedial performance.

Cost: Annual operations and maintenance costs are estimated to be \$10,000 to \$15,000.

Option No. 2 – Partial Building Demolition and Protective Barrier

Option No. 2’s remedial activities at the site will include the environmental cleanup of the building interior and grounds (asbestos abatement, removal of mercury impacted sediments, waste water, and building components), the removal of the superstructure and basement concrete, except for pump pits and street side wall to 2 feet below grade, the clay backfilling of the pump pits, backfilling of the building excavation to the ground surface, the installation of a direct contact soil barrier across the site, and seeding/mulching the site. The remedial activities will be detailed in a Part 20107a Compliance Analysis (Documentation of Due Care Compliance). Approximately \$445,000 from the RLF grant will be applied to this project.

Effectiveness: Partial building demolition will remove contaminated building components and will address safety concerns at the site. The protective barrier is protective of public health, the community or workers at the site. This option will reduce the threat of exposure through direct contact with surface soil (dermal exposure) and reduce the occurrence of contaminated soil erosion. In addition, this alternative has multiple advantages over the Option No. 3 including: (1) no off-site disposal or disposition of contaminated soil is anticipated, (2) it does not create potential off-site safety concerns associated with transportation of the waste materials, and (3) the option is a more cost effective method to meet the cleanup objectives.

Implementability: Aspects of this option are easily implemented for example (1) the option is technically feasible, (2) the site is accessible for field equipment and field personnel, (3) an ordered demolition has been issued by the City of Monroe, and (4) protective barriers have been demonstrated to meet performance requirements to prevent human exposure and contamination migration.

Cost: The costs for the partial building demolition and protective barrier alternative are estimated to be \$445,000. The loan will fund the total cost.

Option No. 3 – Complete Building Demolition and Soil Removal

A complete building demolition and impacted soil/groundwater removal action is an option; however, is not recommended based on the cost associated with this activity.

Effectiveness: The excavation option would be protective of public health, the community or workers at the site. Also, this option would reduce the threat of exposure through direct contact with surface soil (dermal exposure). This approach would permanently mitigate the existing environmental threats posed by the site and would not involve the use of engineering controls or other techniques requiring continuing operations and maintenance to prevent exposures. However, this alternative has multiple drawbacks over the other alternatives including: (1) it creates potential off-site safety concerns associated with transportation of the waste materials, (2) it uses landfill capacity, (3), it adds unnecessary stress to the transportation system, and (4) it requires the importation of significantly more replacement fill than Option No. 2.

Implementability: Aspects of this option are easily implemented. For example, the site is accessible for field equipment and field personnel. However, additional health and safety concerns will need to be addressed. These concerns include the following: (1) open excavations will need to be properly maintained and barricaded, (2) there will be an increase in traffic through a residential neighborhood, and (3) trucks would be transporting contaminated material through the residential neighborhood.

Cost: The costs for a complete building demolition and to excavate, load, haul and dispose contaminated material are estimated to be \$650,000 and \$750,000.

3.1 Recommended Cleanup Alternative

Option No. 2 (capping) is recommended for implementation at the subject property. Option No. 2 is easily implemented, will mitigate risks to human health and the environment, and is a cost effective alternative to support the intended future use of the property.

It has been determined that Option No. 1 will not mitigate the threats to human health and the environment that are known to exist on the subject property and will not facilitate or meet project goals. Although Option No. 3 would mitigate the threats to human health and the environment at the subject property and would provide a long term cleanup response, this option is not recommended as it is not a cost effective alternative to support the intended future use of the property.

4.0 Conclusion

The Remedial Alternatives were evaluated based on effectiveness, implement ability, the cost of the alternative, the potential future use of the property, and the proposed rehabilitation plan.

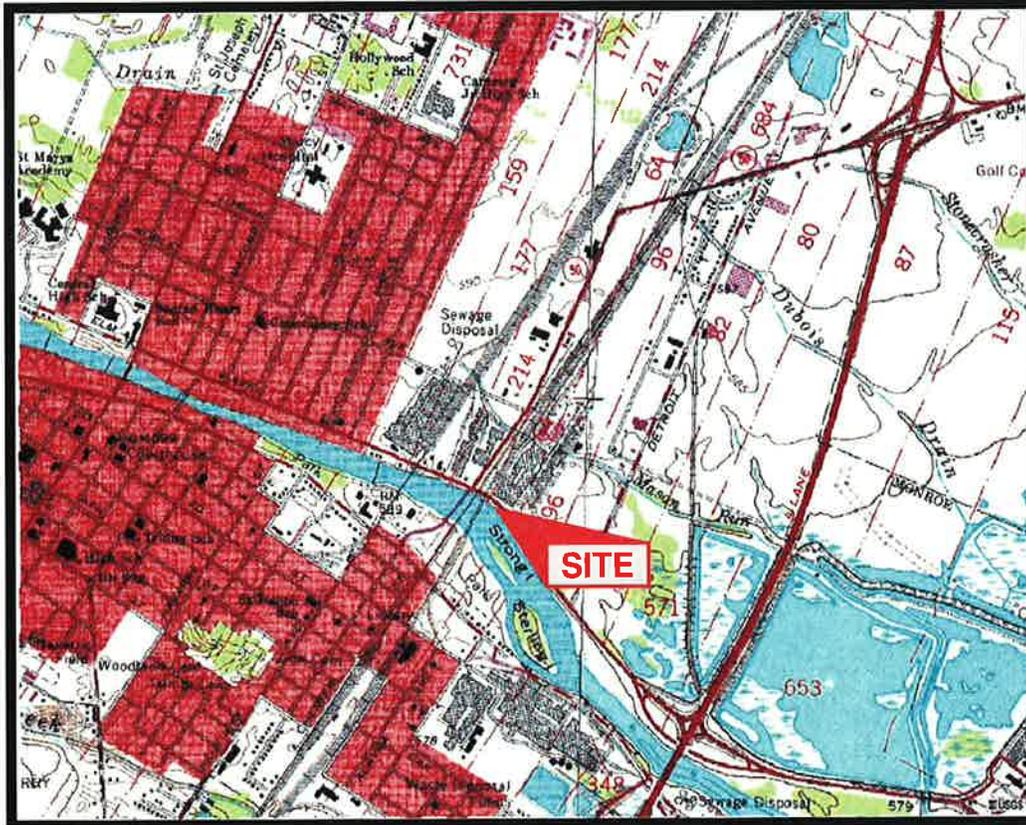
The No Action alternative (Option No.1) will not mitigate the threats to human health and the environment that are known to exist on the subject property and will not facilitate or meet project goals. The Monroe BRA and Port of Monroe have recommended not proceeding with Option No.1.

The Complete Building Demolition and Soil Removal alternative (Option No. 3) would mitigate the threats to human health and the environment at the subject property and would provide a long term cleanup response. However, the Monroe BRA and Port of Monroe have recommended not proceeding with Option No.3 as it is not a cost effective alternative to support the intended future use of the property.

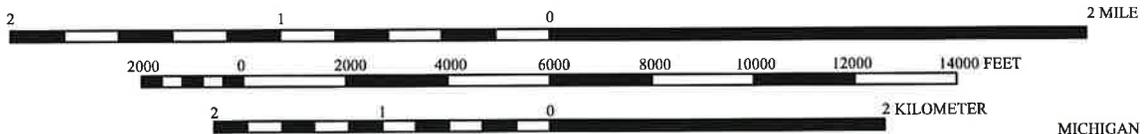
The Partial Building Demolition and Protective Barrier alternative (Option No. 2) is easily implemented, will mitigate risks to human health and the environment, and is a cost effective alternative to support the intended future use of the property. The Monroe BRA and Port of Monroe have recommended proceeding with Option No. 2.

Attachment A
Figures

MONROE QUADRANGLE
 MICHIGAN - MONROE COUNTY
 7.5 MINUTE SERIES (TOPOGRAPHIC)



T.7 S. - R.9 E.



CONTOUR INTERVAL 5 FEET
 DATUM IS MEAN SEA LEVEL



IMAGE TAKEN FROM 1967 U.S.G.S. TOPOGRAPHIC MAP
 PHOTOREVISED 1973

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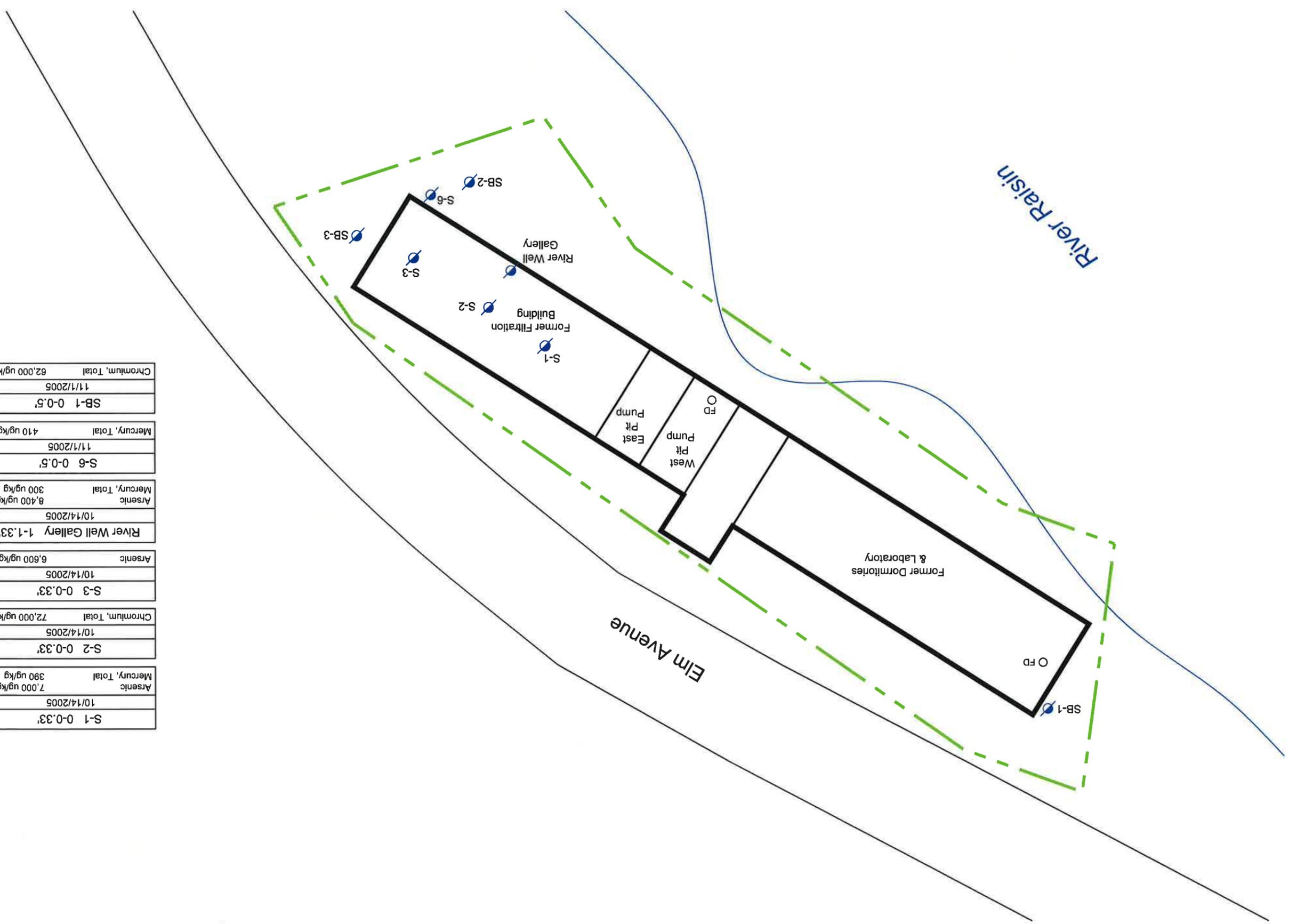
TOPOGRAPHIC LOCATION MAP

1205 EAST ELM AVENUE
 MONROE, MICHIGAN
 PROJECT NUMBER : 1983F10-2-25

DRAWN BY: JWB
 DATE: 9/27/2013

FIGURE 1

River Raisin



Chromium, Total	62,000 ug/kg
11/1/2005	
SB-1 0-0.5'	
Mercury, Total	410 ug/kg
11/1/2005	
S-6 0-0.5'	
Arsenic, Total	8,400 ug/kg
10/14/2005	
River Well Gallery 1-1.33'	300 ug/kg
Arsenic	6,600 ug/kg
10/14/2005	
S-3 0-0.33'	
Chromium, Total	72,000 ug/kg
10/14/2005	
S-2 0-0.33'	
Arsenic, Total	7,000 ug/kg
10/14/2005	
S-1 0-0.33'	390 ug/kg



LEGEND
 = PROPERTY LINE
 = LEGACY'S 2005 SAMPLE LOCATIONS

SITE MAP WITH SOIL ANALYTICAL RESULTS
 EXCEEDING MDEQ RESIDENTIAL CRITERIA

1205 EAST ELM AVENUE
 MONROE, MICHIGAN
 PROJECT NUMBER: 1983F10-2-25

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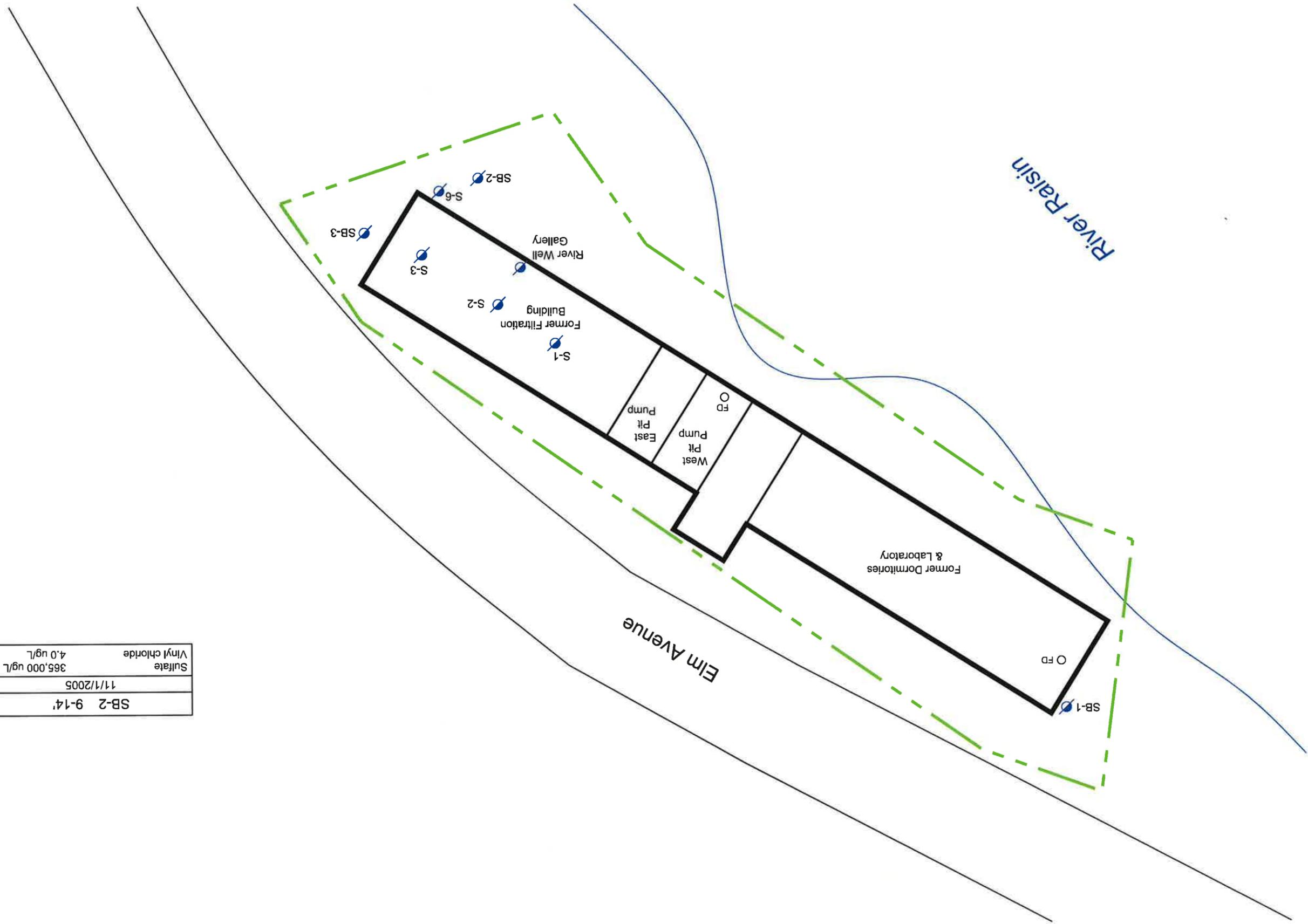
www.aktpeerless.com

DRAWN BY: JWB
 DATE: 9/27/2013

SCALE: 1" = 30'-0"

FIGURE 2

River Raisin



SB-2 9-14'	11/1/2005	Sulfate	365,000 ug/L
		Vinyl chloride	4.0 ug/L



LEGEND
 --- = PROPERTY LINE
 ● = LEGACY'S 2005 SAMPLE LOCATIONS

DRAWN BY: JWB
 DATE: 9/27/2013
 SCALE: 1" = 30'-0"
 FIGURE 3

SITE MAP WITH GROUNDWATER ANALYTICAL RESULTS EXCEEDING MDEQ RESIDENTIAL CRITERIA
 1205 EAST ELM AVENUE
 MONROE, MICHIGAN
 PROJECT NUMBER : 1983F10-2-25

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Attachment B
Ordered Demolition Notice



CITY OF MONROE
BUILDING DEPARTMENT
120 East First Street
Monroe, Michigan 48161-2169
734-384-9186

09/12/2013

PORT OF MONROE
2929 E FRONT ST. PO BOX 585
MONROE, MI 48161

RECEIVED

SEP 16 2013

PORT OF MONROE

Re: 1205 E ELM AVE

Dear PORT OF MONROE:

NOTICE AND ORDER

Due to the present condition and the failure to repair the structure at 1205 E ELM AVE it has become so old, dilapidated and out of repair as to be dangerous, unsafe, unsanitary, or otherwise unfit for human habitation or occupancy, and such that it is unreasonable to repair that the structure be demolished and removed. (Section 110 of the 2009 International Property Maintenance Code).

ACTION TO BE TAKEN

It is, therefore, required that you shall secure the required demolition permit within 20 days of September 13, 2013 and demolition completed within 30 days of issuance. That should you fail to comply with this order within the time prescribed, I shall cause the structure to be demolished per the City of Monroe demolition specifications and the cost of such demolition and removal shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate. The cost shall also be the personal obligation of the property owner which may be collected by the use of any and all appropriate legal remedies.

Any person directly affected by a decision of the code official, the Building Official or a notice or order issued under this code shall have the right to appeal to the Construction Board of Appeals, provided that a written application for appeal is filed within 21 days after the day the decision, notice or order was served and with a filing fee of four hundred dollars (\$400.00). An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or the requirements of this code are adequately satisfied by other means or that the strict application of any requirement of this code would cause an undue hardship.

If you have any questions, please feel free to contact this office.

Sincerely,

Randy Harris
Building Inspector / City of Monroe

Copies: File
Dan Swallow / Economic & Community Development



DISCLAIMER: This map is neither a legally recorded map nor a survey and is not intended to be used as one. This map is a compilation of records, information and data located in various cities, county, state and federal offices and other sources regarding the area shown, and is to be used for reference purposes only. The City of Monroe does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and the City of Monroe does not represent that the GIS data can be used for navigational, tracking or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that the City shall not be liable for any damages, and expressly waives all claims, and agrees to defend, indemnify, and hold harmless the City from any and all claims brought by the User, its employees or agents, or third parties which arise out of the User's access or use of data provided.

1 inch = 47 feet
September 12, 2013
City of Monroe



Geographic Information System (GIS)
Engineering Department

COPY



CITY OF MONROE

Department of Building & Zoning

April 7, 2004

COPY

Mr. Roger Homrich
Homrich, Inc
200 Matlin Rd
Carleton, MI 48117

RE: 1220 E. Elm Ave. Parcel # 59-01904-000

This letter is to serve as written communication of my order, as Building Official for the City of Monroe, to knock down all vertical members and/or demolish all structures at the above location in order to protect the health and safety of the general public.

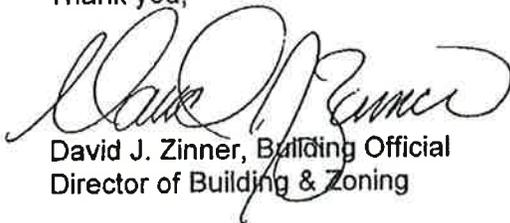
After my investigation of the conditions of this site due to the fire on this date, I find the structure hazardous to this community, an attractive nuisance to children, and an imminent danger of collapse. This is based on the evidence that full access to this structure by the public would be present and from the conditions that remain after the fire.

Under **Chapter 1420.02 AMENDMENTS** of the Codified Ordinance of the City of Monroe states:

Emergency situation; correction by Building, Zoning and Environmental Compliance Department. The Building, Zoning and Environmental Compliance Department may correct immediately all buildings and structures which fall within the definition of dangerous buildings delineated herein, without notice, when the violation(s) constitute an emergency situation and immediate action is required to protect the health and safety of the general public. The cost to the city of alleviating such an emergency situation shall be charged against the owner in the form of a tax lien against the property by the city.

If you have further questions, please contact our office.

Thank you,


David J. Zinner, Building Official
Director of Building & Zoning

RECEIVED

SEP 16 2003

PORT OF MONROE