

Analysis of Brownfield Cleanup Alternatives
22 Residential properties
located in the Flint Innovation Corridor
November, 2023



2213 Reid



1919 Zimmerman



1105 Durand



2101 Corunna



2209 Court



611 W Sixth



617 Carril



702 Hall



707 Atwood



710 Hall



710 Hazelton



914 Watson



1018 Grand Traverse



1108 Court



1113 Stockton



1120 Grand Traverse



1150 Ann Arbor



1210 Stockton



1226 Walker



915 Pershing



2012 Swayze



2201 Corunna

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1.0 INTRODUCTION

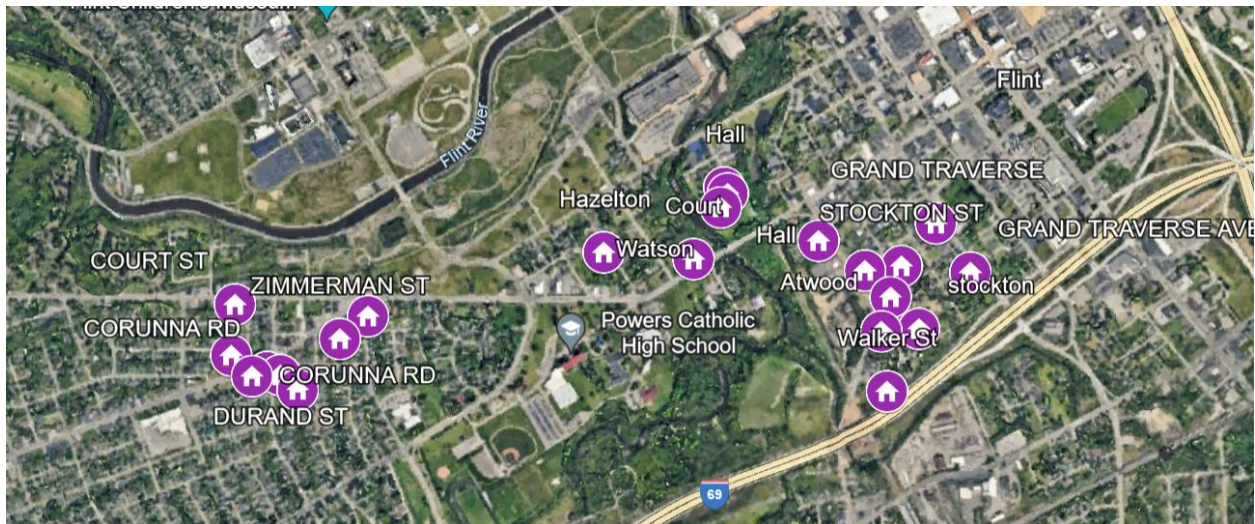
The Genesee County Land Bank Authority (GCLBA) received EPA Multipurpose Grant funding to assist with assessment and cleanup of specific contaminants on properties within the Innovation District in Flint, Michigan. GCLBA received the subject sites through involuntary transfer. GCLBA’s mission is to return formerly tax foreclosed properties to productive use with responsible owners. Since adding subject sites to its inventory, GCLBA has worked with environmental consultants on Asbestos and Hazardous Materials Survey. Conditions of the 22 properties include asbestos and other regulated materials. EPA grant funding is available to address hazardous materials such as asbestos and petroleum contamination. The Analysis of Brownfield Cleanup Alternatives (ABCA) is a required element of the United States Environmental Protection Agency (USEPA) USEPA Hazardous Substances Assessment Grant awarded to the GCLBA. In preparing the ABCA, the GCLBA considered environmental factors, various site characteristics, surrounding properties, land use restrictions, potential future uses, and cleanup goals.

2.0 BACKGROUND

The 22 residential properties are located in the Court/Corunna or Grand Traverse area in the City’s innovation corridor.

2.1 Site Location

The 22 sites are located in the City’s innovation corridor and are depicted on the map and list below. All locations are north of highway 69 in the City of Flint, in Genesee County, Michigan, (herein referred to as “the Sites”).



2201 Corunna Rd.	710 Hazelton	1113 Stockton St.
2101 Corunna Rd.	1108 W Court	1018 S Grand Traverse Ave.
2012 Swayze St.	914 Watson	1150 Ann Arbor St
2213 Reid St.	710 Hall	1226 Walker St
1105 Durand St.	702 Hall	1210 Stockton St.
2209 W Court St.	707 Atwood	1120 S Grand Traverse Ave.
915 Pershing St.	617 Carrill	611 W Sixth St.
		1919 Zimmerman St.

2.2 Site Ownership

GCLBA is the sole owner of the Property. The Property was acquired involuntarily through tax reversion.

2.3 Previous Site Uses

The sites were all previously residential uses.

3.0 SITE ASSESSMENT FINDINGS

The following subsections provide a summary of previous environmental investigations, areas of known contamination, an evaluation of exposure pathways, and an evaluation of known or potential exposures at the Subject Property.

3.1 Asbestos-Containing Materials

Asbestos-Containing Materials (ACMs)– an Asbestos & Hazardous Materials Survey (Hazardous Materials Survey) was completed for each of the sites on Jun 7, 2022 by The Mannik and Smith Group, Inc. as a part of the pre-demolition evaluation.

The following table presents a summary of the materials supporting asbestos greater than 1%, based on the results of the Polarized Light Microscopy (PLM) analyses for asbestos as well as any other regulated materials found on site.

Number	Dir	Street	Asbestos Survey	Other regulated materials	Notes
2201		Corunna Rd.	Friable and non-friable asbestos present	Tires and televisions	
2101		Corunna Rd.	Friable and non-friable asbestos present	Tires, television, ballast, paint, refrigerator, stove, fire extinguisher, and CFL	
2012		Swayze St.	Friable and non-friable asbestos present	Thermostat	
2213		Reid St.	Friable and non-friable asbestos present	Tires, thermostat, smoke detector	
1105		Durand St.	Friable and non-friable asbestos present	Tires and paint cans	
2209	W	Court St.	Friable and non-friable asbestos present	Paint cans and CFL	
915		Pershing St.	Friable and non-friable asbestos present	Paint Cans, fluorescent bulbs, propane and thermostat	
1919		Zimmerman St.	Friable and non-friable asbestos present	Tires, television, ballast, and CFL	
710		Hazelton	Likely - building collapsed so unable to fully test	Paint bucket, fluorescent bulb	collapsed building
1108	W	Court	Friable and non-friable asbestos present	Tires, fluorescent bulb, thermostat, and oven	
914		Watson	Likely - building partially collapsed so unable to fully test	Smoke detector, fluorescent tube lights and bulb	partially collapsed building
710		Hall	non-friable asbestos present	none	

702		Hall	non-friable asbestos present	none	House burned, garage standing
707		Atwood	Friable and non-friable asbestos present	Tires, ballast	
617		Carrill	Friable and non-friable asbestos present	Tires, smoke detector, thermostat, microwave, and ballast	
1113		Stockton St.	Likely - building collapsed so unable to fully test	Tires	Fire damage & collapsed building
1018	S	Grand Traverse Ave.	Friable and non-friable asbestos present	none	
1150		Ann Arbor St	Likely - building collapsed so unable to fully test	none	collapsed building
1226		Walker St	Friable and non-friable asbestos present	none	Fire and structural damage
1210		Stockton St.	Friable and non-friable asbestos present	CFL, smoke detector, stove, refrigerator	
1120	S	Grand Traverse Ave.	Friable and non-friable asbestos present	smoke detector	
611	W	Sixth St.	Friable and non-friable asbestos present	CFL, smoke detector, stove, refrigerator, ballast	

Hazardous materials identified on the site will be disposed of in accordance with applicable regulations. Any unknown containers present on the site need to be verified through testing followed by proper disposal in accordance with applicable regulations.

4.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

The United States Occupational Safety and Health Administration (OSHA) and the United States Environmental Protection Agency (USEPA) both have regulations that are applicable to this project. The OSHA Construction Industry Standard (29 CFR 1926.1101) covers employees engaged in demolition and construction activities likely to involve asbestos exposure. In Michigan, the Michigan Occupational Safety and Health Administration (MIOSHA) Asbestos Program enforces the federal standards. The EPA regulates asbestos application, removal, and disposal of ACMs, under the National Emission Standards for Hazardous Air Pollutants (NESHAP). The asbestos NESHAP protects the public and environment by minimizing the release of asbestos fibers during renovation and demolition activities. In Michigan the Air Quality Division (AQD) of the Michigan Department of Environment, Great Lakes and Energy (EGLE) has been delegated authority to implement the NESHAP program for asbestos. MIOSHA and EGLE are made aware of and provide oversight of asbestos removal projects by receiving and reviewing the “Notification of Intent to Renovate/Demolish” forms, which are required to be submitted a minimum of 10 working days prior to starting work. Other agencies promulgating regulations on asbestos include the Department of Transportation (DOT) – establishing regulations regarding the transport of asbestos. All

cleanup work proposed at the property will comply with the above regulations and notification requirements. The proposed cleanup project will comply with all other applicable local, state, and federal regulations not specifically mentioned.

5.0 CLEANUP OBJECTIVES

The 22 residential properties listed all include asbestos and/or other regulated materials that need to be abated or addressed as part of demolition. The project goal is to clean up the damaged asbestos, abate the remaining RACMs prior to demolition, remove connected utilities, demolish the buildings, remove remaining debris around the buildings and return to grade. This project will rid the area of public nuisances and green the neighborhoods.

5.1 Cleanup Alternatives

Three alternatives were considered for the Site which include:

- Alternative #1: No Action
- Alternative #2: Asbestos abatement and demolition
- Alternative #3: Asbestos abatement, structure rehabilitation and renovation

5.1.1 Alternative # 1 – No Action Alternative

Effectiveness – The No Action alternative is not effective in controlling or preventing the exposure of ACM contamination at the Sites.

Implementation – No Action is easy to implement since no actions will be conducted.

Cost - \$0, but a No Action alternative would leave the Sites in its existing condition, leaving it as a blight and a safety hazard for the community. Additionally, there will be costs to secure the building that will continue indefinitely.

Summary - The Sites would be left in the current dilapidated state. The ACMs would still pose a health risk to legal and illegal visitors entering the buildings. Transfer of the property to other parties would require notification of the presence of asbestos-containing materials, and controls would be necessary to manage exposure to those entering the buildings. Under the No Action Alternative, if the Sites remains unused for an extended period of time, the Sites will continue to deteriorate, creating an attractive nuisance and increasing the risk to those entering the buildings. It is additionally of note that vacant and abandoned buildings in Flint are often the target of arson. The No Action Alternative increases the risk of further fire damage to identified contaminants.

5.1.2 Alternative #2 – Asbestos abatement and demolition

Removal of ACMs is an effective method for preventing exposure to and stopping further deterioration and exacerbation.

Implementation - Removal and disposal of ACMs and building demolition are technically feasible and are common actions for reducing or eliminating the human health risks of exposure to hazardous building materials. Services and materials are readily available.

Cost – \$594,000

Summary - The ACM Remediation and Building Demolition alternative will properly manage the hazardous building materials and achieve the project goals of removing blight and hazards while protecting human health and environment.

Summary - The Hazard Mitigation alternative would leave some hazardous building materials and components in place and would pose a health risk as already damaged material continues to deteriorate or if targeted by arsonists.

5.1.3 Alternative #3 – Remediation of Asbestos Containing Materials, structural rehabilitation and remodel.

Effectiveness – Removal of ACMs is an effective method for preventing exposure to and stopping further deterioration and exacerbation. Structural rehabilitation and remodeling would remove blight and neighborhood hazards, although not provide greenspace.

Implementation - Removal and disposal of ACMs and structural rehabilitation and rehabilitation might not be feasible for all residential properties, in addition to the 6 properties that are partially or totally collapsed. The estimated costs are high. Funding is not available for rehabilitation, nor would sale of rehabilitated homes cover the costs. This options is difficult due to the condition of the properties, rehabilitation costs, and lack of funding.

Cost – \$2,700,000, not including any costs related to 6 partially or fully collapsed properties.

Summary - The ACM Remediation, structural rehabilitation and remodeling option is a less feasible option for = due to lack of funding, rehabilitation cost and time, and poor condition of the properties.

5.1.4 Recommended Cleanup Alternative

The recommended cleanup alternative is Alternative #2: Remediation of Asbestos Containing Materials and Demolition of Site Structures. Alternative #1: No Action cannot be recommended since it does not address Site risks or project objectives. Alternative #3: Abatement, structural rehabilitation and remodeling is cost prohibitive, and not feasible for all structures.

Figures

Sites Location Map

Sites location map

