

# ACT 381 COMBINED BROWNFIELD PLAN

To Conduct MDEQ Environmental Activities and  
MSF Non-Environmental Activities

544 Detroit Street Redevelopment Project  
544 Detroit St., Ann Arbor, Michigan

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**PROJECT #** **8002B**

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**CITY APPROVAL**  
**COUNTY APPROVAL**  
**MDEQ APPROVAL**  
**MSF APPROVAL**

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- County Resolution

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- Project Pro Forma
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# ACT 381 COMBINED BROWNFIELD PLAN

544 Detroit Street Redevelopment Project

544 Detroit Street, Ann Arbor, Michigan 48104

## 1.0 Introduction

The Washtenaw County Brownfield Redevelopment Authority (the “Authority”) is submitting this Act 381 Combined Brownfield Plan (“Plan”) for the property located at 544 Detroit Street (the “Property”) in Ann Arbor, Michigan (the “City”). The Property is situated south of the intersection of Detroit Street and North Division Street. It consists of a single parcel that contains approximately 0.10 acres (Parcel ID Number 09-09-29-118-010). The Ann Arbor City Council approved a resolution concurring with the provisions of the Plan on June 3, 2013, and the Washtenaw County Board of Commissioners approved the Plan on July 10, 2013. Refer to Attachment A for copies of the resolutions.

The Project proposes to redevelop a vacant gasoline station property into a contemporary, 3-story mixed-use building. The redevelopment integrates design elements, environmental cleanup, and economic development to further goals of the City of Ann Arbor, Washtenaw County, the Michigan Department of Environmental Quality (MDEQ) and the Michigan Economic Development Corporation (MEDC). It will result in: (1) the community and municipal benefits of increased property taxes on the Property; (2) due care activities that will address the contamination on the Property, reducing the threat to human health and the environment; and (3) a substantial improvement to the appearance and aesthetics of the Property which will assist in increasing the property values of the neighboring community. The overall redevelopment of this site (the “Project”) will include demolition of the existing blighted structure, remediation, and redevelopment of a new ~4,600 square foot 3-story building.

The Project is seeking tax increment financing (TIF) incentives. Construction is expected to begin in summer of 2013, starting with site and building demolition to be followed by site preparation and construction.

Based on the current site conditions, certain activities are necessary to prepare the Property for redevelopment. The following sections present site background information, current Property conditions, the proposed environmental, non-environmental, and local only activities, and the costs associated with the proposed activities. In addition, the following sections summarize the proposed Michigan Strategic Fund (MSF) eligible activities, the proposed MDEQ eligible activities, and the costs associated with these proposed activities.

## 1.1 Proposed Redevelopment and Future Use

The Property contained an operating gasoline station from the 1930s until 1981. It has been vacant since then. The single building on the Property (an old gasoline station mart) is dilapidated and covered with graffiti. Contamination for the previous use as a gasoline station is present in soil and groundwater, especially at the northern tip of the Property, toward the Huron River. The building will be demolished for the Project, and contaminated soil will be excavated and removed as is feasible from the Property.

The proposed redevelopment is a 3-story, flatiron-style, commercial and residential building with an approximately 1,600 square foot footprint. The first floor will consist of office space and covered parking. The second and third floors will each be a single condominium. Each story will have a steel balcony

featuring metal work created by a local artist. Construction will be in brick, with limestone parapets and sills. A paved area with one parking spot will be located on the southern side of the property, and landscaped areas will be placed along the perimeter.

**1.2 Eligible Property Information**

The following sections provide details on Property ownership and use.

**1.2.1 Description of Eligible Property; Basis of Eligibility**

The Property is located at 544 Detroit Street in the City of Ann Arbor, Michigan. It is situated south of the intersection of Detroit Street and North Division Street. It consists of a single parcel that contains approximately 0.10 acres (Parcel ID Number 09-09-29-118-010).

Please refer to the Brownfield Plan located in Attachment A for the Property legal description. Refer to Figure 1 for a Scaled Property Location Map and Figure 2 for an Eligible Property Boundary Map/Plat Map. Photographs are included in Figure 6, Site Plans in Figure 7, and Elevations in Figure 8.

The Property is considered “eligible property” as defined by Act 381, Section 2 because: (a) the Property was previously utilized for a commercial property (gasoline station); (b) it is located within the City of Ann Arbor, a qualified local governmental unit, or “Core Community” under Act 381; and (c) the property is determined to be a “facility.” Please refer to Figures 3-5 and Attachment D, Supplemental Materials for the relevant supporting documentation. Also refer to Section 1.6, Summary of Environmental Study Documents.

**1.2.2 Current Ownership**

Ownership information for the parcels comprising the Property is summarized in the following table.

**Table 1-A Eligible Property Information**

Parcel Owner	Parcel Address	Tax ID Number
Jack Richard Epstein	544 Detroit Street	09-09-29-118-010

The contact information for the current owner is:

Jack Epstein  
 194 Halpine Rd., Apt. 2402  
 Rockville, MD 20852

**1.2.3 Proposed Future Ownership**

The contact information for 544 Detroit Street LLC is:

Dan Williams  
 471 Rock Creek Dr.  
 Ann Arbor, MI 48104  
 Phone: (734) 945-3603

#### **1.2.4 Delinquent Taxes, Interest, and Penalties**

No delinquent taxes, interest, or penalties are known to exist for the property.

#### **1.2.5 Existing and Proposed Future Zoning For Each Eligible Property**

The Property is zoned Local Business District (C1). Future zoning is expected to be the same.

### **1.3 Historical & Previous Use and Ownership of Each Eligible Property**

The Property consisted of a residential development from at least 1888 through the late 1920s or early 1930s, when the site was re-developed as a gasoline filling station and automotive service operation. This gasoline filling station and auto service center remained until 1959, when the Property was re-developed with a new Clark gasoline filling station. The Clark gasoline filling station remained on the Property until 1981, when the Property was vacated. Jack Epstein purchased the Property in September 1984. The underground storage tanks (USTs) were reportedly removed from the Property in September 1987. The Property is currently vacant.

### **1.4 Current Use of Each Eligible Property**

The Property currently contains a vacant, dilapidated gasoline station building. Exterior portions of the Property include crumbling paved areas, overgrown with vegetation. The Property is not currently used for any significant or obvious purpose.

### **1.5 Summary of Liability**

544 Detroit Street LLC has completed a Baseline Environmental Assessment (BEA) and is not a liable party. The developer is unaware of any viable liable parties associated with the Property.

### **1.6 Summary of Environmental Study Documents**

Under Part 201, a "Facility" "means any area, place, or property where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has been released, deposited, disposed of, or otherwise comes to be located." M.C.L. § 324.20101(1) (s). A "Release" "includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of a hazardous substance into the environment, or the abandonment or discarding of barrels, containers, and other closed receptacles containing a hazardous substance." M.C.L. § 324.20101(1) (mm).

#### **1.6.1 Environmental Investigations**

The environmental investigations completed on the Property are summarized following.

- Report of a Phase I and Phase II Environmental Site Assessment, prepared in November 2010 by Canopus Environmental Group, Inc. (CEG) on behalf of The Flint Group
- Phase I/II ESA Addendum, prepared in December 2010 by CEG on behalf of The Flint Group
- Phase II ESA, conducted on March 19, 2013 by AKT Peerless

Summaries of the reports and activities relevant to site conditions are provided in the following sections.

### 1.6.1.1 CEG's Phase I and Phase II ESAs and Phase I/II Addendum (November and December 2010)

During the course of the Phase I ESA, CEG evaluated the Property for the potential presence of the following RECs and/or other specific environmental conditions.

- According to CEG, Sanborn Fire Insurance Rate Map information identified the presence of three underground storage tanks (USTs) on the north portion of the Property. These USTs were apparently associated with the "Filling Station", which occupied the site circa 1931 -1968.
- According to CEG, the former Clark station UST system was removed from the site circa 1988 under the supervision of Flying Dutchman Management Co. of Ann Arbor, Michigan. However, CEG was unable to locate any documentary evidence to suggest the three "Filling Station" USTs have been removed from the site.

Based on observed site conditions (i.e. presence of a former Clark station building) as well as verbal and documentary information confirming the former presence of USTs at the Property, CEG recommended that a limited Phase II ESA be conducted at the Property. The Phase II ESA was conducted specifically to confirm that the Clark Station UST system was removed from the site and no residual soil or groundwater contamination is present at the site, or if so, that such contamination does not represent a significant threat to human health, safety or the environment. The scope of work for the Phase II ESA consisted of the following:

- Conducting an electromagnetic survey of the property in an effort to identify any existing UST system components (i.e. tanks, subsurface piping) or other suspect subsurface structures representing an environmental threat to the Property.
- Collecting soil and/or groundwater samples within the footprint of the former UST system/excavation to assess the potential for the presence of residual petroleum-based contamination.
- Analyzing selected soil and/or groundwater samples for the possible presence of certain volatile organic compounds (VOCs) and lead, which may be associated with leaded and/or unleaded gasoline believed to have been stored/sold at the subject site.

CEG conducted Phase II ESA field activities (e.g. electromagnetic survey, drilling and soil sampling) in September, 2010. CEG used a magnetometer to scan the entire property on an approximately 10-foot grid north to south and east to west. CEG *did not* note any magnetometer readings clearly indicative of the presence of significant subsurface metallic objects during the site survey.

CEG conducted Phase II ESA field activities (e.g. drilling and soil sampling) on September 13, 2010. A total of four Geoprobe® soil borings (i.e. Soil Borings SB1 through SB4) were drilled to a maximum depth of 16.0 feet below the ground surface (bgs) at field-selected locations across the site. Laboratory analysis of selected soil samples submitted for analysis indicated the *absence* of elevated (e.g. above NREPA Part 201 Residential Criteria) levels of VOCs or lead in soils present within the footprint of the former Clark Station UST basin. However, *elevated* levels of VOCs were identified in one soil boring drilled proximal to the suspect "Filling Station" USTs (Soil Boring SB3). Additionally, the Geoprobe® sampling device encountered refusal (i.e. an obstruction impeding deeper drilling/sampling) at 3.5-feet bgs in Soil Boring SB3.

In summary, it was the opinion of CEG that the former Clark Station UST was removed from the Property, and soils located within the footprint of the UST basin *did not* exhibit evidence of the presence of residual petroleum-based contamination. However, the presence of petroleum-based contamination and



Geoprobe® sampling equipment refusal at 3.5-feet bgs in Soil Boring SB3 suggested that one or more of the “Filling Station” USTs may remain in-situ at the Property.

CEG recommended that The Flint Group take additional steps to verify the presence or absence of the three “Filling Station” USTs, and if their presence is verified, conduct all activities required to close the site under NREPA Part 211 and 213 underground storage tank regulations.

CEG retained Excavators Inc. of Pinckney, Michigan to provide equipment and operators necessary to conduct UST exploratory excavation work at the Property. Exploratory/excavating activities were conducted at the site under CEG supervision on December 8, 2010. The concrete surface overlying suspected historic UST locations was segmented, removed and stockpiled for subsequent removal from the site.

As excavation activities progressed, it became apparent that no USTs were present in the exploration area. Moist clay soils, river cobbles and boulders were encountered throughout the excavated area. Significant visual and olfactory evidence of petroleum-impacted soils was apparent throughout the excavation area.

When complete, the excavated area measured approximately 15 feet long by 15 feet wide, with an average depth of six feet and a maximum of depth of eight feet below the ground surface (bgs). Petroleum impact soils were present from approximately one foot below surface grade to the bottom of the excavated area. Groundwater was not encountered during the investigation.

CEG used historic documentation to identify the approximate location potentially extant USTs at the site. CEG determined that historic USTs depicted on the Sanborn Maps were not present at the depicted location. The occurrence of significantly disturbed and mixed clay soil, cobbles and boulders within the excavated area suggest the area was excavated and backfilled at least once prior to CEG’s exploratory investigation. Gasoline-related VOCs detected in soil samples collected from the site are consistent with a release(s) of petroleum-based compounds, perhaps from UST system components (i.e. surface product dispensers, subsurface product supply lines and/or underground product storage tanks). Occurrences of petroleum-based compounds in site soils appear to be consistent with historic use of the site as a gasoline service station.

#### **1.6.1.2 AKT Peerless’ March 2013 Phase II ESA**

On December 4, 2012, AKT Peerless advanced ten soil borings at the Property. AKT Peerless used hydraulic drive/direct-push (Geoprobe®) sampling techniques and followed the drilling procedures outlined in ASTM publication D 6282-98 “Standard Guide for Direct Push Soil Sampling for Environmental Site Characterizations.” AKT Peerless collected continuous soil samples from the soil borings in two-foot intervals to the maximum depth explored of 16-feet below ground surface (bgs). AKT Peerless personnel inspected, field-screened, and logged the samples collected at each soil boring location. Refer to Figure 3 for a site map with soil boring locations.

AKT Peerless encountered groundwater in three of the ten soil borings advanced at the Property. AKT Peerless installed a temporary groundwater monitor well at two of the three locations. A one-inch PVC riser with a five-foot screen was utilized for each temporary groundwater monitor well. Groundwater sampling was conducted using low-flow sampling methodologies described in the April 1996 United States Environmental Protection Agency (U.S. EPA) document Groundwater Issue titled “Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures.” Refer to Figure 3 for a site map with temporary monitor well locations.

AKT Peerless submitted 17 soil samples and two groundwater samples for laboratory analyses. The laboratory analyzed the samples for: (1) VOCs in accordance with USEPA Methods 5035/ 8260B and lead in accordance with USEPA Method 6020A.

During AKT Peerless' soil boring activities completed at the Property, the geology encountered generally consisted of a sand formation beginning just below the ground surface that extends to depths ranging from two feet to approximately seven feet bgs with laterally discontinuous layers and seams of silt. This formation is underlain by a clay formation with laterally discontinuous layers and seams of silt and sand that extends to the maximum investigated of 16 feet bgs.

AKT Peerless collected soil samples for the purpose of determining if the Property meets the definition of a *facility*. Analytical results were compared with Michigan Department of Environmental Quality (MDEQ) Generic Residential Cleanup Criteria (GRCC) provided in MDEQ Remediation Division's Operational Memorandum No. 1, Tables 1 and 2.

AKT Peerless 17 soil samples for laboratory analysis. The results of the laboratory analyses of the soil samples are summarized in the table below:

**Table 1-B Summary of Soil Analytical Results**

Soil Boring Location & Depth	Parameter	MDEQ GRCC Exceeded						
		DWP	GSIP	GCP	SVIAI	VSIC	PSI	DC
AKT-1 (9-10')	n-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	sec-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	2-Methylnaphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	Naphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	n-Propylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	1,2,4-Trimethylbenzene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	1,3,5-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
AKT-1 (14-15')	n-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	sec-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	Ethylbenzene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	2-Methylnaphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	n-Propylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	1,2,4-Trimethylbenzene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
AKT-2 (5-6')	n-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	sec-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	Ethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
	Isopropyl benzene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	2-Methylnaphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-

Soil Boring Location & Depth	Parameter	MDEQ GRCC Exceeded						
		DWP	GSIP	GCP	SVIAI	VSIC	PSI	DC
	Naphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	n-Propylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	1,2,4-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>
	1,3,5-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
	Xylenes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>
AKT-2 (14-16')	VOCs & Lead	-	-	-	-	-	-	-
AKT-3 (10-12')	n-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	Ethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
	2-Methylnaphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	Naphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	n-Propylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	1,2,4-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
	1,3,5-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
	Xylenes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
AKT-3 (14-15')	VOCs & Lead	-	-	-	-	-	-	-
AKT-4 (4-6')	n-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	sec-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	Ethylbenzene (I)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
	Isopropyl benzene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	2-Methylnaphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	Naphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	n-Propylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	1,2,4-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>
	1,3,5-Trimethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
	Xylenes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-

Soil Boring Location & Depth	Parameter	MDEQ GRCC Exceeded						
		DWP	GSIP	GCP	SVIAI	VSIC	PSI	DC
AKT 4 (14-15')	VOCs & Lead	-	-	-	-	-	-	-
AKT-5 (10-12')	VOCs & Lead	-	-	-	-	-	-	-
AKT-5 (14-15')	VOCs & Lead	-	-	-	-	-	-	-
AKT-6 (7-8')	VOCs & Lead	-	-	-	-	-	-	-
AKT-6 (10-12')	VOCs & Lead	-	-	-	-	-	-	-
AKT-7 (7-8')	VOCs & Lead	-	-	-	-	-	-	-
AKT-8 (12-13')	VOCs & Lead	-	-	-	-	-	-	-
AKT-8 (14-15')	VOCs & Lead	-	-	-	-	-	-	-
AKT-10 (6-8')	n-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	sec-Butylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
	Ethylbenzene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	-	-	-
	2-Methylnaphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	Naphthalene	-	<input checked="" type="checkbox"/>	-	-	-	-	-
	n-Propylbenzene	<input checked="" type="checkbox"/>	-	-	-	-	-	-
AKT-10 (14-16')	Xylenes	-	<input checked="" type="checkbox"/>	-	-	-	-	-
AKT-10 (14-16')	VOCs & Lead	-	-	-	-	-	-	-

\*- Sample identification: AKT-# indicates soil boring and (#-#) indicates sample depth in feet.

DWP – Drinking Water Protection Criteria

GSIP – Groundwater Surface Water Interface Protection Criteria

GCP – Groundwater Contact Protection Criteria

SVIAI – Soil Volatilization to Indoor Air Inhalation Criteria

VSIC – Volatile Soil Inhalation Criteria

PSI – Particulate Soil Inhalation Criteria

DC – Direct Contact Criteria

Refer to **Figure 4** for a site map with soil analytical results exceeding MDEQ GRCC.

AKT Peerless submitted two groundwater samples for laboratory analysis of VOCs. The results of the laboratory analyses of the groundwater samples are summarized in the table below:

**Table 1-C Summary of Groundwater Analytical Results**

Well Location & Screened Depth	Parameter	MDEQ GRCC Exceeded			
		DW	GSI	GVIAI	GC
AKT-1W (8-13')	Ethylbenzene	-	☑	-	-
	Isopropyl benzene	-	☑	-	-
	2-Methylnaphthalene	-	☑	-	-
	n-Propylbenzene	☑	-	-	-
AKT-8W (6-11')	VOCs	-	-	-	-

\*- Sample identification: AKT-# indicates soil boring and (#-#) indicates screened interval in feet.

DW – Drinking Water

GSI – Groundwater Surface Water Interface Criteria

GVIAI – Groundwater Volatilization to Indoor Air Inhalation Criteria

GC – Groundwater Contact Criteria

Refer to **Figure 5** for a site map with groundwater analytical results exceeding MDEQ criteria.

Based upon on a review of AKT Peerless’ soil and groundwater sample laboratory analytical results in conjunction with MDEQ, Public Act 451, Part 201 Cleanup Criteria and Screening Levels guidance document, AKT Peerless concluded that the soil at the Property contains petroleum hydrocarbons at concentrations that exceed the MDEQ Part 201 GRCC for soil. In addition, groundwater at the Property contains petroleum hydrocarbons at concentrations that exceed the MDEQ Part 201 GRCC for groundwater. Therefore, the Property is a *facility*, as defined in Part 201 of the NREPA, Michigan Public Act (PA) 451, 1994, as amended. Refer to **Figure 3** for a site map depicting the soil boring location

**1.6.2 Summary of Current Known Conditions**

As demonstrated in the preceding, the Property has been thoroughly investigated to determine the soil and groundwater quality that currently exists at the Property. The existing site conditions have created increased costs for the Project. Excavation, dewatering, soil transportation and disposal, groundwater activities, and vapor mitigation activities must be carefully managed during the redevelopment as a result of the Brownfield conditions.

**1.7 Summary of Environmental/Brownfield Conditions**

As demonstrated in Section 1.6.1, the Property is a facility, and significant soil contamination is present on its northern end. Refer to Figures 4 and 5 for soil and groundwater analytical results that exceed MDEQ Part 201 GRCC.

**1.8 Summary of Functionally Obsolete, Blighted, and/or Adjacent and Contiguous Conditions**

**1.8.1 Functionally Obsolete**

The Property is a facility and has not been designated as functionally obsolete.

### **1.8.2 Blighted**

The Property is a facility and a blight determination has not been requested at this time.

### **1.8.3 Adjacent and Contiguous**

The Property consists of a single parcel which is a facility.

## **1.9 Summary of Historic Qualities**

The Property is located within a historic district. However, the building currently on site is devoid of historic qualities.

## **2.0 Description of Costs & Scope of Work**

### **2.1 MDEQ Eligible Activities**

The Property will be prepared to make it suitable for development. Appropriate BEA activities (Phase I ESA, Phase II ESA, and Baseline Environmental Assessment (BEA) that have been completed as Act 381 eligible activities), and due care activities and additional response activities will be performed to prevent exposure to materials hazardous to human health, safety, and the environment. The Developer desires to be reimbursed for the costs of eligible activities. Tax increment revenue generated by the Property will be captured and used to reimburse the cost of the eligible activities completed on the Property, as authorized by Act 381, as amended and pursuant to the terms of a Reimbursement Agreement (refer to Appendix C) with the Authority. Refer to Table 1 for a detailed description of the Eligible Activities for the Project and Table 2 for tax increment financing information.

#### **2.1.1 Baseline Environmental Assessment Activities**

A Phase I ESA, Phase II ESA, and BEA have been completed for the Property.

#### **2.1.2 Due Care**

Due Care Plans for construction activities (Environmental Construction Management Plan) and operation of the Property following construction (Post-Construction Due Care Plan), will be completed.

To demonstrate compliance with Section 20107a (“Due Care”), minimum “response activity plans,” which may be necessary during site use and ownership, will be outlined. The proposed response activities are related to: (1) mitigation of exposure to soil and groundwater whose contaminant concentrations exceed MDEQ’s RCC; and (2) proper management of impacted soil and groundwater during construction activities whose contaminant concentrations exceed MDEQ’s RCC.

The “Due Care” Plans will be completed in accordance with Part 201 of the NREPA, 1994 PA 451, as amended, and MDEQ Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7a Compliance Analyses, effective March 11, 1999, as amended. The Due Care Plans will evaluate the potential exposure risks associated with soil and groundwater contamination at the Property in light of the nature of the proposed development construction activities and occupancy of the developed property. A detailed breakdown of the costs associated with this task is provided later in this section.

### 2.1.2.1 Soil Remediation Activities

AKT Peerless has conducted several investigations that detected VOCs in soil and groundwater at concentrations that exceed MDEQ's Part 201 RCC. VOCs detected in soil and/or groundwater at the Property during past investigations include:

n-Butylbenzene	Sec-Butylbenzene
2-Methylnaphthalene	Naphthalene
n-Propylbenzene	1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene	Ethylbenzene
Isopropyl Benzene	Xylenes

544 Detroit Street LLC intends to construct the Property as a mixed use development. Therefore, 544 Detroit Street LLC plans to implement the following actions to remediate or otherwise mitigate environmental risks associated with the impacted soil.

Soil contamination, likely from past gasoline station use, is present on the northern portion of the Property. Contamination exceeding MDEQ GRCC was encountered as deep as 14-16 feet bgs on the northern tip of the Property (AKT-1) and further south as deep as 10-12 feet bgs (AKT-3). Refer to Attachment D for a copy of the Phase II ESA showing analytical results and boring logs. Refer also to Figure 4 of this Plan for the Site Map With Soil Analytical Results Above MDEQ GRCC.

It is the policy of the City of Ann Arbor that contaminated sites should be remediated to the level for carcinogens that represents an excess upper bound lifetime cancer risk to an individual of  $10^{-6}$ . Soils on the Property are heavily contaminated, and extensive removal represents a significant reduction in risk to human health and improvement to the environment. The contamination zone abuts utility corridors on three sides, which present a transport risk for the contamination.

Complete removal of impacted soils, however, may not be possible. First, sheet piles are not feasible for the Project. Based on preliminary estimates from contractors, is unlikely that the Project budget could remain financially viable if they were to be used. Moreover, noise and vibration regulations will prevent use of traditional sheet piling. Second, utility corridors (including a fiber optic line) abut the contamination zone on three sides (west, north, and east). Soil contamination appears to extend off-site to the west, north, and east. Total excavation of contaminated soil, in the absence of an engineering control like sheet piles, is impossible without damaging the utilities. As a result, the operational goal for the soil remediation is to remove as much of the contaminated soil from the Property as is possible (and feasible) without jeopardizing the integrity of the utilities on the west, north, and east. Based on this approach, it is estimated that Project could remove up to 1,411 tons of contaminated soil from the Property. Not only will the soil removal contemplated in this Plan address due care on the Property, but it will also help protect human health around the Property by reducing the impact to utility corridors and groundwater.

Any excavated soil must be removed from the Property and disposed of at a Type II landfill because insufficient space is available on the parcel development plan that can accommodate the soil within acceptable areas and within land balancing constraints.

Please refer to Table 1, MDEQ and MSF Eligible Activity Costs, for specific line item costs for the due care activities, and to Figure 4 for the locations of contaminated soil. In addition, refer to Section 2.1.2.3 for specific cost comparisons for soil management between a Brownfield and greenfield location.

**2.1.2.2 Dewatering of Excavations**

During site work for the Phase II ESA in December 2012, AKT Peerless observed groundwater in only three borings (from 8-10 feet bgs), which indicates perched pockets.

Because of the perched nature of groundwater at the Property, an estimate for groundwater production during excavation is difficult. However, contaminated groundwater would require additional management to properly dispose. In the event that this becomes necessary, a City discharge permit to the municipal sanitary sewer will be secured. Treatment of the produced contaminated groundwater, if necessary, would consist of utilizing an oxidation chemical precipitation/coagulation with filtration and final polishing with carbon absorption. Samples would be collected from water initially pumped from the site and post treatment as specified by the discharge permit. If changes are required to this approach, appropriate measures will be taken.

**2.1.2.3 Brownfield/Greenfield Costs**

The requested reimbursement for due care activities in this Plan is for the increased cost in performing the eligible activities due to the Brownfield conditions on the Property. The table below summarizes the cost differential for soil management activities for this Project. It should be noted that a specific landfill for soil disposal has not been selected for the Project; as a result, the excavation, transportation, and disposal costs were estimated based on current market rates with several licensed contractors.

**Table 2-A Brownfield/Greenfield Costs**

Task	Brownfield Quantity	Greenfield Quantity	Units	Unit Cost	Total Cost	Greenfield Cost	Eligible Brownfield Cost
Contaminated Soil							
Excavation	1,411	484	TONS	\$15.00	\$21,165	\$7,260	\$13,905
Transport	1,411	484	TONS	\$10.00	\$14,110	\$0*	\$14,110
Disposal	1,411	484	TONS	\$20.00	\$28,220	\$0*	\$28,220
Backfill	975	0	TONS	\$25.00	\$24,385	\$0**	\$24,385

\*It is assumed that clean soil excavated on a Greenfield site could be sold. As a result, there would be no cost incurred for transportation and disposal.

\*\*Excavated soil would be used to backfill around the foundations and basement walls, so no import would be necessary.

The other costs in the Due Care section (due care plan, health and safety plan, sheeting & shoring/bracing, dewatering, excavation oversight & sampling, laboratory analysis/confirmation sampling, summary report, and project management) are 100% due to the Brownfield conditions.



Please refer to Tables 1 in the attachments for further details of the cost calculation for excavation, transportation, and disposal of contaminated soil.

#### **2.1.2.4 Health and Safety Plan**

A site-specific Health and Safety Plan (HASP) will be completed for redevelopment activities at the Property by each of the subsurface contractors and others that can come into contact with potentially contaminated media during the performance of their work activities. The HASPs will comply with appropriate guidelines including the following:

- Michigan Occupational Safety and Health Act;
- Section 111(c)(6) of CERCLA;
- Occupational Safety and Health Administration (OSHA) requirements 29 Code of Federal Regulations (CFR) 1910 and 1926;
- Standard Operating Safety Guide Manual (revised November 1984) by the Office of Emergency and Remedial Response; and
- Occupation Safety and Health guidance manual for Hazardous Waste Site Activities (National Institute for Occupational Health and Safety [NIOSH]/OSHA/USCG/ United States Environmental Protection Agency [U.S. EPA], Department of Health and Human Services [DHHS] Publication No. 85-115, October 1985).

The HASPs will include the following elements:

- Authorized personnel and definition of responsibilities;
- Proposed activities;
- Personal protective equipment;
- Decontamination procedures;
- Work zone restrictions and delineations;
- Personal protection upgrade/downgrade action limits;
- Emergency information and telephone numbers;
- Incident documentation procedures; and
- Contingency plans.

Oversight will be conducted to ensure due care issues are addressed while eligible activities and construction activities are being completed. The following activities (at a minimum) will be documented:

- The type, location, quantities, etc., of materials removed from the site and disposed at the landfill or other appropriately licensed disposal operation.
- The final disposition and location of any contaminated media that can be managed on-site in accordance with due care requirements.
- Monitoring for unanticipated materials and/or materials previously not identified, including collection of samples for additional waste characterization.
- The type, location, materials and construction of vapor mitigation systems installed at the site to prevent future potential vapor intrusion exposures.

The Contractor Site Safety Officer will document and enforce HASP issues with workers at the Site, including:

- Verification of on-site worker training and current certifications.

- Conducting site-specific HASP training for workers entering the site.
- Monitoring construction activities to ensure the HASP is being followed, including use of Personal Protective Equipment (PPE), decontamination of equipment, site security, etc.

A Construction Summary Report (CSR) will be prepared and submitted to the MDEQ-RD at the completion of development activities. The CSR will summarize the due care issues addressed during the construction activities and will include such items as photographic documentation, disposal manifests, fill material load tickets, utility abandonment logs (if any), site plans, etc. to verify that the development construction activities were conducted in accordance with approved plans.

### **2.1.3 Additional Response Activities**

Additional response activities to be conducted at the eligible property include designing, obtaining MDEQ approval for, and constructing a vapor mitigation system. Please refer to Table 1, MDEQ and MSF Eligible Activity Costs, for specific line item costs for the additional response activities.

#### **2.1.3.1 Vapor Mitigation**

The recent Phase II ESA on the Property shows significant soil and groundwater contamination onsite. Moreover, it appears that soil contamination extends past the Property boundary to the west, north, and east, adjacent to the planned building. As a result, regardless of how much impacted soil can be removed during site preparation, there will be a threat of vapor intrusion issues. Therefore, 544 Detroit Street LLC intends to install a vapor mitigation system. 544 Detroit Street LLC will work with MDEQ to develop an appropriate remedy. Potential systems include a vapor barrier and or a passive venting system.

### **2.1.4 Interest**

The Project is requesting MDEQ approval for interest on unreimbursed environmental eligible activities. Refer to Attachment D for a copy of the MEDC-provided workbook showing the interest calculation.

### **2.1.5 Develop/Prepare Combined Brownfield Plan**

AKT Peerless has prepared a Combined Brownfield Plan for the Property in accordance with all applicable MDEQ and MSF guidance.

## **2.2 MSF Eligible Activities**

The non-environmental eligible activities will include infrastructure improvements, combined Brownfield plan preparation, demolition, asbestos survey and abatement, and site preparation activities. A summary of the eligible activities and the estimated cost of each eligible activity intended to be reimbursed with Tax Increment Revenues from the Property are provided in the attached Table 1. Additional, detailed breakouts of the non-environmental activities being requested for MSF approval are described following:

### **2.2.1 Infrastructure Improvements**

Except for the portion of the building that is a parking structure, all Infrastructure improvements proposed will be publicly owned, maintained and operated, will support the project, and will serve others and/or the public. Please see Section 4.2.2 for unit costs.

- Road Repair—replacement of brick pavers on Detroit Street.
- Curbs, Gutters, and Approaches—replacement along Detroit Street.
- Sidewalks—replacement, where necessary, along Detroit Street and North Division Street.

- Multistory Parking Structure—the planned building is a 3-story structure with four parking spots located within the structure on the first floor. The estimate included in Table 1 for the parking structure consists of the hard construction costs due to the parking portion of the building.

### **2.2.2 Demolition and Asbestos/Lead Paint Survey and Abatement**

Demolition consists of site and building demolition. Site demolition will include surface concrete, old utilities, and building foundations. Site demolition does not include unstable material that is referenced below in Site Preparation. Building demolition includes a demolition survey, the actual demolition of the building on the Property, fill, compaction, and rough grading to balance the site where the building was located.

As appropriate, lead paint and asbestos-containing materials will be abated prior to demolition. This activity includes a survey. All asbestos removal will be performed in accordance to OSHA Class I asbestos removal requirements as found in 29 CFR 1926.1101. In addition, air monitoring will be performed to comply with OSHA requirements.

### **2.2.3 Site Preparation**

Site preparation activities will include the following:

- Temporary Fencing—Chain link construction fencing with locking gates to secure the Property during construction.
- Temporary Traffic Control—the Property is small, and it will be difficult to accommodate all of the vehicles and equipment during the site preparation period. As a result, traffic control measures are anticipated.
- Excavation for Unstable Material—Excavation, transportation, and disposal of non-indigenous material that is an impediment to redevelopment.
- Clearing and Grubbing—Removal of surface vegetation (e.g., trees and shrubs) is required in advance of site grading. Removal of organic matter including vegetative cover and topsoil within the limits of the proposed work and removal of the material to a depth which is sufficient to permit the construction of the buildings, roads, and utilities.
- Retaining Wall—Construction of a retaining wall is necessary on the south side of the Property due to the slope of the site. The retaining wall will substantially reduce the amount of grading on the site and will increase utilization of the Property.

### **2.2.4 Develop/Prepare Combined Brownfield Plan**

AKT Peerless has prepared a Combined Brownfield Plan for the Property in accordance with all applicable MDEQ and MSF guidance.

## **2.3 Local Only Eligible Activities**

### **2.3.1 Develop/Prepare Combined Brownfield Plan**

AKT Peerless has prepared a Combined Brownfield Plan for the Property in accordance with all applicable MDEQ and MSF guidance. The \$6,000 local only cost is the difference between the actual cost (\$26,000) and the MDEQ/MSF maximum support (\$20,000).

### **2.3.2 Infrastructure Improvements**

The City of Ann Arbor will require the Project to fund two residential combined sewer disconnects.

### **3.0 Tax Increment Revenue Analysis**

This section presents certain statutory requirements for capture and use of tax increment revenues in this Combined Brownfield Plan.

#### **3.1 Estimate of Captured Taxable Value and Tax Increment Revenues; Impact of Tax Increment Financing on Taxing Jurisdictions**

This Plan anticipates the capture of tax increment revenues to reimburse the Developer for the costs of eligible activities under this Plan in accordance with the Reimbursement Agreement. A table of estimated tax increment revenues to be captured is attached to this Plan as Table 2. Tax increment revenue capture is expected to begin in 2014.

The total estimated cost of the eligible activities and other costs (including administrative fees, contingency, interest, and LSRRF deposits) to be reimbursed through the capture of tax increment revenue is projected to be \$698,773. The estimated effective initial taxable value for this Plan is \$50,800, and is based on land and real property tax only. Redevelopment of the Property is expected to initially generate incremental taxable value in 2014 with the first significant increase in taxable value of approximately \$649,200 beginning in 2014.

It is estimated that the Authority will capture the 2014 through 2041 tax increment revenues to reimburse the cost of the eligible activities, pay Authority administrative fees, reimburse interest, and deposit into the LSRRF.

The captured incremental taxable value and associated tax increment revenue will be based on the actual increased taxable value from all taxable improvements on the Property and the actual millage rates levied by the various taxing jurisdictions during each year of the plan are shown in Attachment C, Table 2. The actual tax increment captured will be based on taxable value set through the property assessment process by the local unit of government and equalized by the City and the millage rates set each year by the taxing jurisdictions.

#### **3.2 Method of Financing and Description of Advances Made by the Municipality**

Eligible activities are to be financed by the Developer. The Authority will reimburse the Developer for the cost of approved eligible activities, but only from tax increment revenues generated from the Property as available, and subject to the Reimbursement Agreement.

#### **3.3 Maximum Amount of Note or Bonded Indebtedness**

All reimbursements authorized under this Plan shall be governed by the Reimbursement Agreement. The Authority shall not incur any note or bonded indebtedness to finance the purposes of this Plan. The inclusion of eligible activities and estimates of costs to be reimbursed in this Plan is intended to authorize the Authority to fund such reimbursements and does not obligate the Authority or the County to fund any reimbursement or to enter into the Reimbursement Agreement providing for the reimbursement of any costs for which tax increment revenues may be captured under this Plan, or which are permitted to be reimbursed under this Plan. The amount and source of any tax increment revenues that will be used for purposes authorized by this Plan, and the terms and conditions for such use and upon any reimbursement of the expenses permitted by the Plan, will be provided solely under the Reimbursement Agreement contemplated by this Plan.

### **3.4 Duration of Brownfield Plan**

In no event shall the duration of the Plan exceed 35 years following the date of the resolution approving the Plan, nor shall the duration of the tax capture exceed the lesser of the period authorized under subsection (4) and (5) of Section 13 of Act 381 or 30 years. Further, in no event shall the beginning date of the capture of tax increment revenues be later than five years after the date of the resolution approving the Plan. It is projected that the Plan's duration will be 25 years: 18 years to reimburse eligible activities with local revenues with an additional four years of local capture for the Local Site Remediation Revolving Fund (LSRRF); and 20 years to reimburse eligible activities with school tax revenues, with an additional five years of school tax capture for the LSRRF.

### **3.5 Local Site Remediation Revolving Fund**

The Authority has established a Local Site Remediation Revolving Fund (LSRRF). The Authority will capture incremental local and state school taxes to fund the LSRRF, to the extent allowed by law. The rate and schedule of incremental tax capture for the LSRRF will be determined on a case-by-case basis. Considerations may include, but not be limited to the following: total capture duration, total annual capture, project economic factors, level of existing LSRRF funding, projected need for LSRRF funds, and amount of school tax capture available in accordance with Act 381.

The amount of tax increment revenue authorized for capture and deposit in the LSRRF is estimated at \$156,355. It is projected that local revenues will be deposited into the LSRRF in Years 18-22 of the Plan, and school tax revenues will be deposited into the LSRRF in Years 20-25.

### **3.6 Effective Date of Inclusion in Brownfield Plan**

The Property will become a part of this Plan on the date this Plan is approved by the WCBRA. The date of tax capture shall commence during the year construction begins or the immediate following year—as increment revenue becomes available, but the beginning date of tax capture shall not exceed five years beyond the date of the governing body resolution approving the Plan.

### **3.7 Displacement/Relocation of Individuals on Eligible Property**

There are no persons or businesses residing on the Eligible Property, and no occupied residences will be acquired or cleared; therefore there will be no displacement or relocation of persons or businesses under this Plan.

## **4.0 Information Required By Section 15(15) of the Statute for Non-Environmental Activities**

MSF shall consider the following criteria to the extent reasonably applicable to the eligible activities proposed as part of this Plan.

### **4.1 Sufficiency of Individual Activities to Complete Eligible Activities**

- Combined Brownfield Plan Preparation—The combined Brownfield plan has been completed in accordance with Act 381.
- Infrastructure Improvements—Infrastructure improvements are sufficient to complete the Project since they will result in improvements that will directly benefit the property and public generally.

- Demolition/Lead and Asbestos Survey and Abatement—Demolition and lead and asbestos survey and abatement activities are sufficient to complete the eligible activities because they will fully abate lead paint and asbestos containing materials on the Property and completely remove existing development from the Property.
- Site Preparation—Completion of site preparation activities—as well as demolition and lead and asbestos abatement—are sufficient to complete the eligible activities because they will prepare the site for planned development activities (i.e., new construction).

#### **4.2 Necessity of Individual Activities to Complete Eligible Activities**

- Combined Brownfield Plan Preparation—Approval of the Plan is necessary to make the development financially feasible.
- Infrastructure Improvements—All infrastructure improvements proposed will support the project, and will also benefit others and/or the public. The Project will greatly increase the population density and infrastructure use onsite. Consequently, the road improvements, curbs and gutters, sidewalks, and parking structure are necessary activities for successful redevelopment.
- Demolition/Lead and Asbestos Survey and Abatement—The current building on the Property needs to be demolished to accommodate the new development. Asbestos and lead paint abatement activities are required to complete building demolition activities in accordance with state and federal regulations. Together, the site demolition and building demolition will sufficiently complete demolition on the Property.
- Site Preparation—Due to existing Brownfield conditions on the Property, completion of the site preparation activities—as well as demolition and lead and asbestos abatement—are necessary to prepare the site for planned development activities (i.e., new construction).

#### **4.3 Reasonableness of Costs**

The estimates for the individual activities are based on preliminary competitive bids. The estimates are market-rate and are thus presumed to be reasonable. Refer to Attachment D for a copy of the Project pro forma showing financial viability.

#### **4.4 Public Benefit**

This development will increase urban density with its two new residences. It will also provide new commercial office space in Ann Arbor, responding to the demand for the highest quality commercial space that exists in the neighborhood. In addition, it will boost usage of the City's public transportation system. Bus stops are located near the Property on both Detroit Street and North Division Street. Ann Arbor's Amtrak station is within walking distance. The Property's proximity to downtown Ann Arbor will promote a walkable community.

The positive visual and aesthetic impact of this Project to the public will be significant. The Property, which has been vacant for over 30 years, will be transformed into a productive and viable, development. The redevelopment will remove blight, bringing new investment and stabilization to the neighborhood. The Project can expect to synergize with the existing mixed-use retail and residential development nearby.

In addition, the Project involves environmental cleanup activities. Soils on the Property are heavily contaminated, and extensive removal represents a significant reduction in risk to human health and

improvement to the environment. It is estimated that Project could remove up to 1,411 tons of contaminated soil from the Property. Not only will the soil removal contemplated in this Plan address due care on the Property, but it will also help protect human health around the Property by reducing the impact to utility corridors and groundwater.

#### **4.5 Reuse of Vacant Buildings and Redevelopment of Blighted Property**

This Project consists of redevelopment of blighted property. The building on the Property is unusable and will be demolished.

The new development will create a three-story mixed use development on land formerly characterized by blight. The Project will integrate various transportation options focusing on walkability, biking, and the use of public transit. The design of the buildings, including the materials, scale, and orientation is historically sensitive and will complement existing structures.

#### **4.6 Job Creation**

Four new jobs are anticipated to be created by the commercial portion of the project at an hourly wage of \$15-\$35. Based on the average for all positions, the average annual salary will be \$50,000.

#### **4.7 Unemployment Status**

According to the Michigan Labor Market Information system, the City of Ann Arbor unemployment rate was 5.4% in March 2013. Comparatively, the March 2013 unemployment rate was 5.1% in Washtenaw County, 8.8% in the State of Michigan, and 7.6% in the United States.

#### **4.8 Contamination Alleviation**

The Property will be prepared to make it suitable for development, and appropriate due care and additional response activities will be performed to prevent exposure to materials hazardous to human health, safety, and the environment. Environmental conditions on the Property are discussed in detail in Section 1.6. Remedial activities are discussed in detail in Section 2.1.2.1.

#### **4.9 Private Sector Contribution**

544 Detroit Street LLC will be financing all Eligible Activities as private contribution to this Project. Private developer capital investment is estimated at approximately \$1.4 million in improvements to land, buildings and personal and real property.

#### **4.10 Cost Gap Comparison**

No alternative Greenfield site was considered for the Project. Refer to Table 1 for information related to Brownfield costs.

#### **4.11 Brownfield Creation**

This Project will not create a new Brownfield site.

#### **4.12 Project Financial Data**

The Project cannot proceed without the incentives contemplated for this redevelopment. The Developer anticipates making an investment of approximately \$1.5 million in real and personal property improvements on the Property (including land cost). The Developer will finance all Eligible Activities under this Plan related to improvements on the Property. A Project pro forma for the private investment is included in Attachment D.

#### **4.13 Incentives**

The total estimated cost of the eligible activities to be reimbursed through the capture of tax increment revenues is provided in Table 1. The Developer anticipates making an investment of approximately \$1.5 million in real property improvements on the Property (including land cost). Redevelopment of the Property is expected to subsequently generate increases in taxable value and result in incremental taxable value in 2014. The Developer will finance all Eligible Activities under this Plan related to improvements on the Property. Refer to Table 1 for additional detail on these activities.

#### **4.14 Additional Information**

None.

### **5.0 Schedule of Activities**

The following subsections present the proposed schedule to complete the Project and the associated costs.

#### **5.1 Schedule**

Project activities will commence in the summer of 2013 following the City of Ann Arbor, Washtenaw County Board of Commissioners, MDEQ, and MSF approvals. Completion of the Project is anticipated to be within approximately one year.

#### **5.2 Estimated Costs**

The estimated costs to complete the eligible activities including all labor, equipment, subcontractors, and materials under this Plan are provided below and, in more detail, in the attached Table 1. Actual interest associated with the eligible activities not to exceed 5% to address the true cost of conducting the eligible activities associated with the development of this site is also included.

##### **5.2.1 Summary of Eligible Activities and Description of Costs**

###### **5.2.1.1 Total Cost**

The total estimated cost for the activities to be funded with tax increment revenue under this Plan is \$698,773. Individual costs associated with these activities are provided in the table below. See Table 1 for further details. A 15% contingency factor has been included to accommodate for unexpected conditions that may be encountered during the redevelopment.



**Table 5-A Total Costs to Be Funded with Tax Increment Revenue**

Eligible Activity	Total Estimated Cost
BEA Environmental Assessment Activities	\$17,770
Due Care Activities	\$174,620
Additional Response Activities	\$32,000
Preparation of Combined Brownfield Plan	\$26,000
Infrastructure Improvements	\$70,350
Site Preparation	\$25,050
<b>Subtotal</b>	<b>\$366,289</b>
Contingency (A 15% contingency factor has been included to accommodate unexpected conditions that may be encountered during redevelopment—does not include BEA activities and Combined Brownfield Plan preparation)	\$48,378
BRA Administrative Fees	\$57,102
Interest on Environmental Activities	\$70,648
LSRRF	\$156,355
<b>Total Costs to Be Funded by TIF</b>	<b>\$698,773</b>

**5.2.1.2 Description of MDEQ Eligible Activities Costs**

The estimated cost for the activities plus contingency and interest described in this section is \$336,031. The Developer desires to be reimbursed for the costs of eligible activities. Individual costs associated with these activities are provided in the table below. See Table 1 for further details.

**Table 4-B MDEQ Eligible Activities**

Eligible Activity	Total Estimated Cost
BEA Environmental Assessment Activities	\$17,770

Eligible Activity	Total Estimated Cost
Due Care Activities	
Due Care Plan	\$3,500
Health & Safety Plan	\$3,000
Sheeting & Shoring/Bracing	\$40,000
Soil Excavation, Transportation, and Disposal	
Excavation	\$13,905
Transportation	\$14,110
Disposal	\$28,220
Backfill	\$24,385
Dewatering	\$12,000
Excavation Oversight and Sampling	\$17,000
Laboratory Analysis/Confirmation Sampling	\$4,500
Summary Report	\$5,000
Project Management	\$9,000
Additional Response Activities	
Vapor Mitigation	\$32,000
<b>Subtotal</b>	<b>\$224,390</b>
Contingency (A 15% contingency factor has been included to accommodate unexpected conditions that may be encountered during redevelopment. Does not include BEA Activities)	\$30,993
Preparation of Combined Brownfield Plan	\$10,000
Interest	\$70,648

Eligible Activity	Total Estimated Cost
<b>Total MDEQ Eligible Activities</b>	<b>\$336,031</b>

**5.2.1.3 Description of MSF Eligible Activity Costs**

The estimated cost for the activities plus contingency and interest described in this section is \$164,165. A more detailed description of the costs associated with these activities is provided in the following table. For additional support documentation, please refer to Table 1 in the attachments.

**Table 4-C MSF Eligible Activities**

Eligible Activity	Estimated Cost
Infrastructure Improvements	
Road Repair (pavers)	\$8,050
Curbs, Gutters, and Approaches	\$3,150
Sidewalks	\$4,650
Portion of Multi-Story Building for Parking Structure	\$32,500
Abatement and Demolition	
Site Demolition	\$5,500
Abatement & Building Demolition	\$15,000
Site Preparation	
Temporary Fencing	\$2,500
Temporary Traffic Control	\$2,200
Excavation for Unstable Material	\$7,500
Clearing & Grubbing	\$4,350

Eligible Activity	Estimated Cost
Retaining Walls	\$8,500
<b>Subtotal</b>	<b>\$93,900</b>
Contingency (A 15% contingency factor has been included to accommodate unexpected conditions that may be encountered during redevelopment)	\$14,085
Combined Brownfield Plan	\$10,000
<b>Total MSF Eligible Activities</b>	<b>\$117,985</b>

The total costs of the Non-Environmental Eligible Activities under this Work Plan are provided in Table 1. The Developer anticipates making an investment of approximately \$1.5 million in real and personal property improvements on the Property (including land cost).

**5.2.1.4 Description of Local Only Eligible Activity Costs**

The estimated cost for the activities plus contingency described in this section is \$31,300. The Developer desires to be reimbursed for the costs of eligible activities. Individual costs associated with these activities are provided in the table below. See Table 1 for further details.

**Table 4-D Local Only Eligible Activities**

Eligible Activity	Total Estimated Cost
Residential Combined Sewer Disconnects	\$22,000
<b>Subtotal</b>	<b>\$22,000</b>
Contingency (A 15% contingency factor has been included to accommodate unexpected conditions that may be encountered during redevelopment.)	\$3,300
Preparation of Combined Brownfield Plan	\$6,000
<b>Total Local Only Eligible Activities</b>	<b>\$31,300</b>

**5.2.2 Sources and Uses of Incentives and Funds**

The Developer anticipates investment of approximately \$1.5 million in real property improvements on the Property including acquisition of the land. Redevelopment of the Property is expected to subsequently generate increases in taxable value and result in incremental taxable value beginning in 2014. The initial taxable value for the Plan will be the Property’s taxable value at the time of Plan approval by the county board of commissioners, in accordance with Act 381. Tax increment revenue will be utilized to reimburse the cost of eligible activities. Table 2 provides an estimate of tax increment revenue. The Developer will finance all eligible activities under this Plan related to improvements on the Property.

**6.0 Limitations**

The taxable value on real property is estimated to increase at a rate of 1% each year (refer to Table 2).

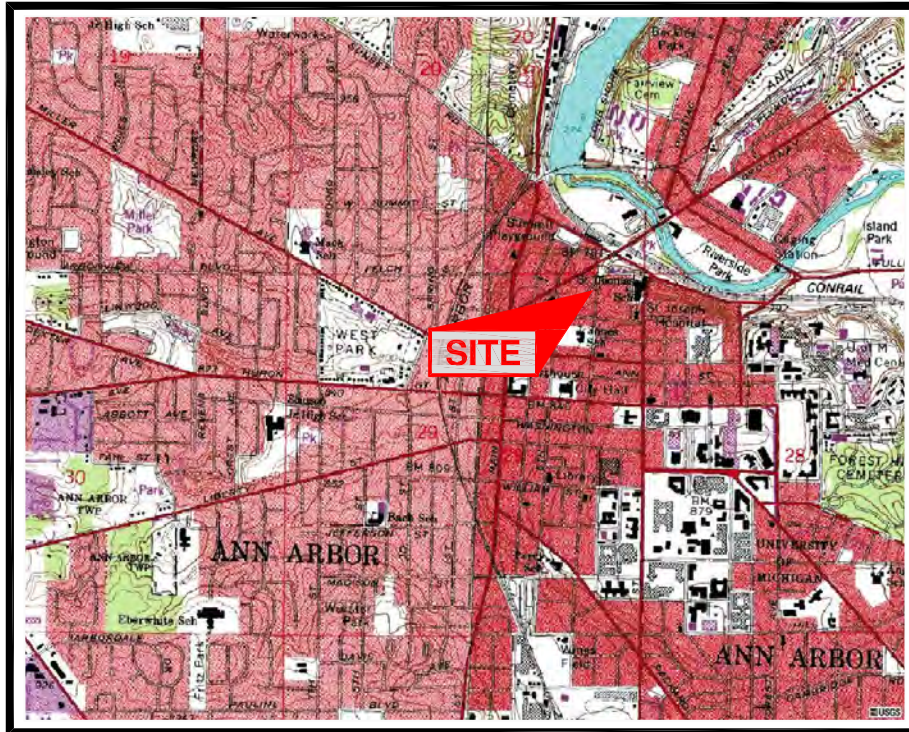
The incremental tax revenue estimates for the proposed development could vary from this estimate affecting the time period it takes to reimburse the eligible activities. The cost estimates included within this Combined Brownfield Plan are just that—estimates—and the actual costs incurred may vary depending on site conditions. If in fact the eligible activity costs exceed the estimated amount for reimbursement, the Developer and the Authority may submit an amended Combined Brownfield Plan and Act 381 Work Plan.

All reimbursements authorized under this Plan shall be governed by the Reimbursement Agreement. The inclusion of eligible activities and estimates of costs to be reimbursed in this Plan are intended to authorize the Authority to fund such reimbursements and does not obligate the Authority or the County to fund any reimbursement or to enter into the Reimbursement Agreement providing for the reimbursement of any costs for which tax increment revenues may be captured under this Plan, or which

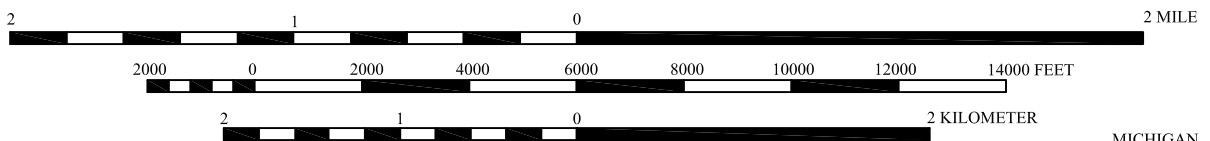
are permitted to be reimbursed under this Plan. The amount and source of any tax increment revenues that will be used for purposes authorized by this Plan, and the terms and conditions for such use and upon any reimbursement of the expenses permitted by the Plan, will be provided solely under the Reimbursement Agreement contemplated by this Plan.

## Figures

*ANN ARBOR WEST QUADRANGLE*  
 MICHIGAN - WASHTENAW COUNTY  
 7.5 MINUTE SERIES (TOPOGRAPHIC)



T.2 S. - R.6 E.



CONTOUR INTERVAL 5 FEET  
 DATUM IS MEAN SEA LEVEL

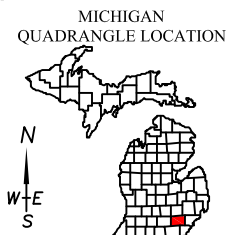


IMAGE TAKEN FROM 1965 U.S.G.S. TOPOGRAPHIC MAP  
 PHOTOREVISED 1983

**AKTPEERLESS**

ILLINOIS                      MICHIGAN                      OHIO  
 www.aktpeerless.com

*SCALED PROPERTY LOCATION MAP*

544 DETROIT STREET  
 ANN ARBOR, MICHIGAN  
 PROJECT NUMBER : 8002F-4-25

DRAWN BY:    JWb  
 DATE:            5/6/2013

FIGURE 1





**AKTPEERLESS**

ILLINOIS

MICHIGAN  
www.aktpeerless.com

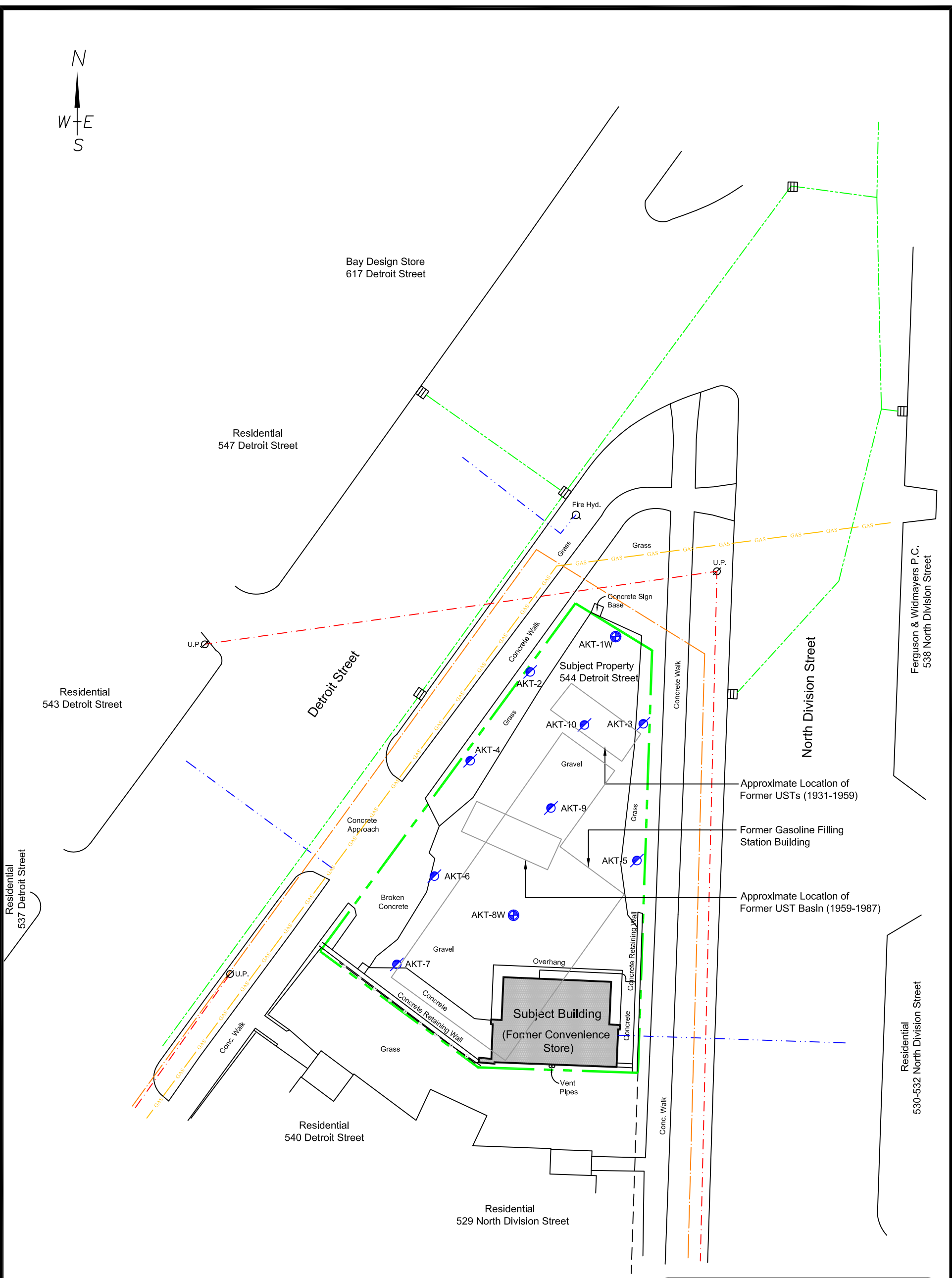
OHIO

*ELIGIBLE PROPERTY BOUNDARY MAP*

544 DETROIT STREET  
ANN ARBOR, MICHIGAN  
PROJECT NUMBER : 8002F-4-25

DRAWN BY: JWB  
DATE: 5/6/2013

FIGURE 2



**LEGEND**

	= PROPERTY LINE
	= AKT PEERLESS SOIL BORING
	= AKT PEERLESS TEMP. MONITORING WELL
	= GAS LINE
	= WATER LINE
	= STORM LINE
	= UNDERGROUND ELECTRIC LINE
	= UNDERGROUND FIBER OPTIC
	= CATCH BASIN

**AKTPEERLESS**  
 ILLINOIS      MICHIGAN      OHIO  
 www.aktpeerless.com

*SITE MAP WITH SOIL BORINGS, TEMPORARY MONITORING WELLS  
 AND UTILITY LOCATIONS*  
 544 DETROIT STREET  
 ANN ARBOR, MICHIGAN  
 PROJECT NUMBER : 8002F-2-20

DRAWN BY: JWB  
 DATE: 12/18/2012

0 10 20  
 SCALE: 1" = 20' ±

Figure 3

AKT-1 9-10'	
12/4/2012	
n-Butylbenzene	6,300 ug/kg
sec-Butylbenzene	2,200 ug/kg
2-Methylnaphthalene	11,000 ug/kg
Naphthalene	1,400 ug/kg
n-Propylbenzene	9,200 ug/kg
1,2,4 Trimethylbenzene	680 ug/kg
1,3,5 Trimethylbenzene	3,000 ug/kg

AKT-4 4-6'	
12/4/2012	
n-Butylbenzene	27,000 ug/kg
sec-Butylbenzene	4,700 ug/kg
Ethylbenzene	10,000 ug/kg
Isopropyl benzene	3,900 ug/kg
2-Methylnaphthalene	39,000 ug/kg
Naphthalene	33,000 ug/kg
n-Propylbenzene	22,000 ug/kg
1,2,4 Trimethylbenzene	200,000 ug/kg
1,3,5 Trimethylbenzene	64,000 ug/kg
Xylenes	54,000 ug/kg

AKT-1 14-15'	
12/4/2012	
n-Butylbenzene	7,600 ug/kg
sec-Butylbenzene	5,300 ug/kg
Ethylbenzene	580 ug/kg
2-Methylnaphthalene	6,700 ug/kg
n-Propylbenzene	6,800 ug/kg
1,2,4 Trimethylbenzene	630 ug/kg

AKT-10 6-8'	
12/4/2012	
n-Butylbenzene	7,800 ug/kg
sec-Butylbenzene	2,400 ug/kg
Ethylbenzene	3,800 ug/kg
2-Methylnaphthalene	10,000 ug/kg
Naphthalene	3,900 ug/kg
n-Propylbenzene	9,300 ug/kg
Xylenes	1,400 ug/kg

AKT-2 5-6'	
12/4/2012	
n-Butylbenzene	17,000 ug/kg
sec-Butylbenzene	2,600 ug/kg
Ethylbenzene	48,000 ug/kg
Isopropyl benzene	3,900 ug/kg
2-Methylnaphthalene	21,000 ug/kg
Naphthalene	19,000 ug/kg
n-Propylbenzene	24,000 ug/kg
1,2,4 Trimethylbenzene	150,000 ug/kg
1,3,5 Trimethylbenzene	48,000 ug/kg
Xylenes	210,000 ug/kg

AKT-3 10-12'	
12/4/2012	
n-Butylbenzene	5,500 ug/kg
Ethylbenzene	8,500 ug/kg
2-Methylnaphthalene	5,100 ug/kg
Naphthalene	3,500 ug/kg
n-Propylbenzene	6,900 ug/kg
1,2,4 Trimethylbenzene	19,000 ug/kg
1,3,5 Trimethylbenzene	5,300 ug/kg
Xylenes	10,000 ug/kg

Bay Design Store  
617 Detroit Street

Residential  
547 Detroit Street

Residential  
543 Detroit Street

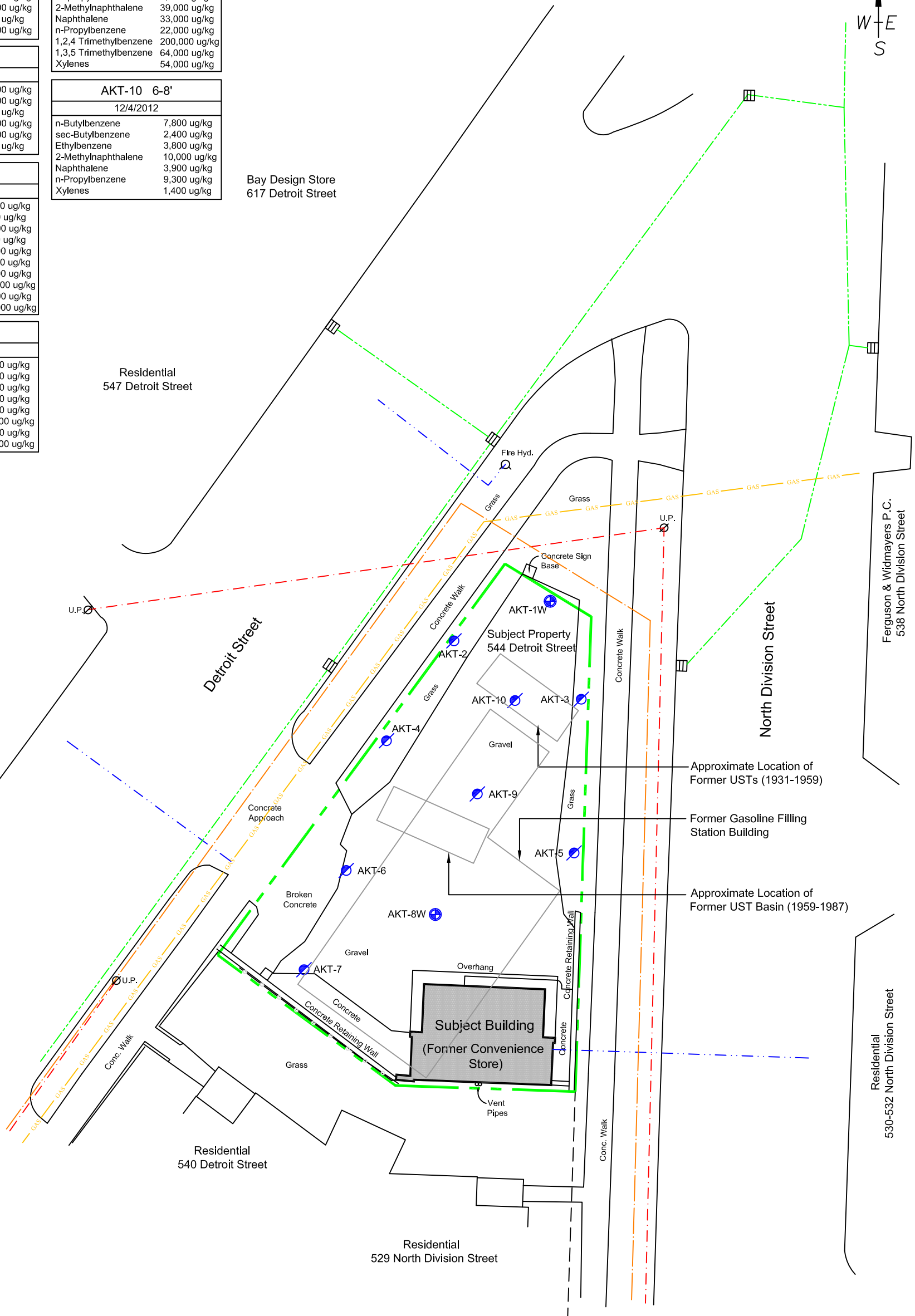
Residential  
537 Detroit Street

Residential  
540 Detroit Street

Residential  
529 North Division Street

Residential  
530-532 North Division Street

Ferguson & Widmayers P.C.  
538 North Division Street



LEGEND	
	= PROPERTY LINE
	= AKT PEERLESS SOIL BORING
	= AKT PEERLESS TEMP. MONITORING WELL
	= GAS LINE
	= WATER LINE
	= STORM LINE
	= UNDERGROUND ELECTRIC LINE
	= UNDERGROUND FIBER OPTIC
	= CATCH BASIN



ILLINOIS MICHIGAN OHIO  
www.aktpeerless.com

SITE MAP WITH SOIL ANALYTICAL RESULTS  
ABOVE MDEQ GRCC

544 DETROIT STREET  
ANN ARBOR, MICHIGAN  
PROJECT NUMBER : 8002F-2-20

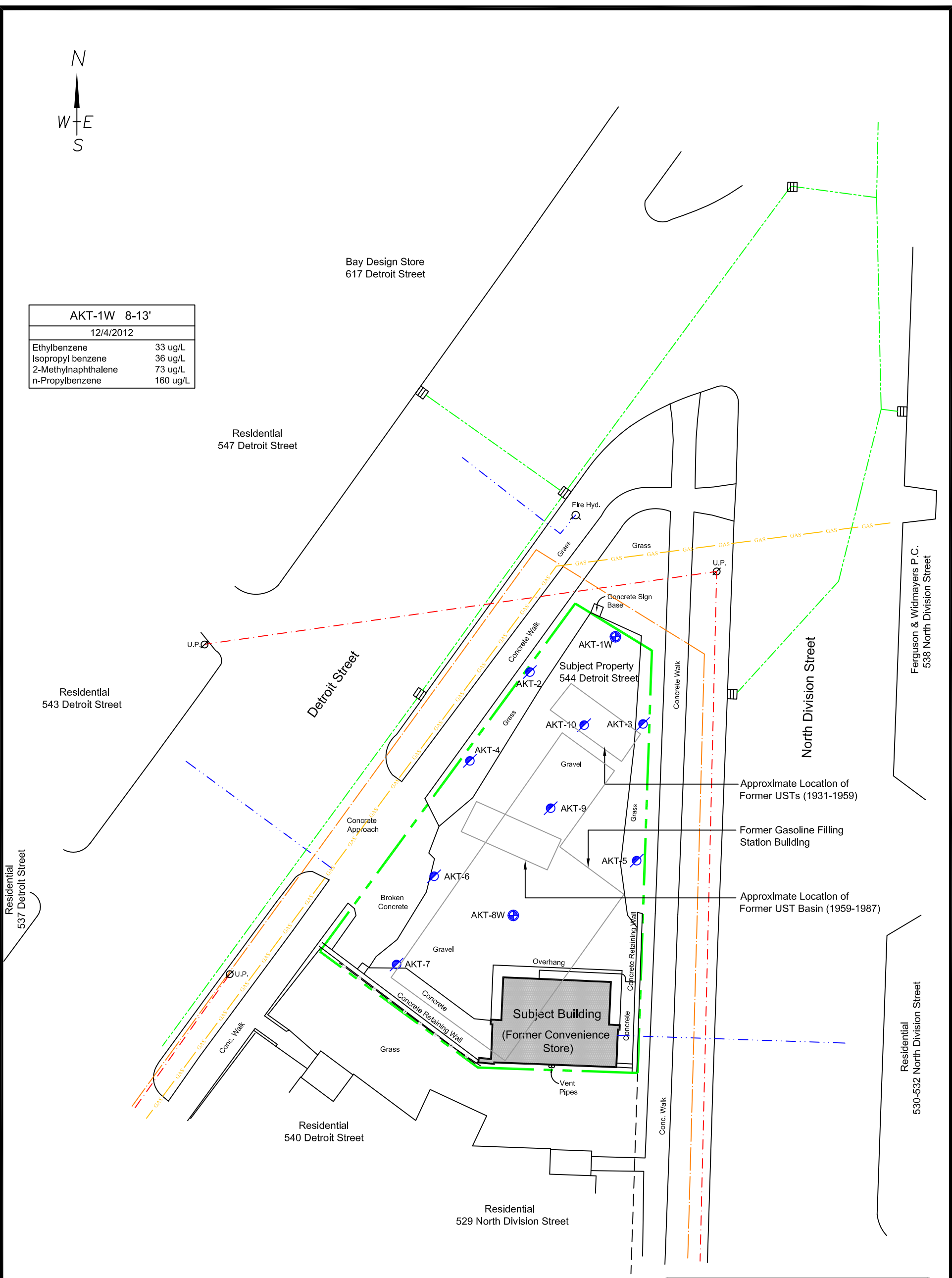
DRAWN BY: JWB  
DATE: 12/18/2012

0 10 20  
SCALE: 1" = 20' ±0

Figure 4



AKT-1W 8-13'	
12/4/2012	
Ethylbenzene	33 ug/L
Isopropyl benzene	36 ug/L
2-Methylnaphthalene	73 ug/L
n-Propylbenzene	160 ug/L



LEGEND	
	= PROPERTY LINE
	= AKT PEERLESS SOIL BORING
	= AKT PEERLESS TEMP. MONITORING WELL
	= GAS LINE
	= WATER LINE
	= STORM LINE
	= UNDERGROUND ELECTRIC LINE
	= UNDERGROUND FIBER OPTIC
	= CATCH BASIN



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**SITE MAP WITH GROUNDWATER ANALYTICAL RESULTS  
 ABOVE MDEQ GRCC**

544 DETROIT STREET  
 ANN ARBOR, MICHIGAN  
 PROJECT NUMBER : 8002F-2-20

DRAWN BY: JWB  
 DATE: 12/18/2012

0      10      20  
 SCALE: 1" = 20' ±0

Figure 5



*PHOTOGRAPH NO. 1: SUBJECT PROPERTY  
NORTHERN PORTION OF THE SUBJECT BUILDING*



*PHOTOGRAPH NO. 2: SUBJECT PROPERTY  
NORTHERN PORTION OF THE SUBJECT PROPERTY*

**AKTPEERLESS**  
environmental & energy services

PROPERTY PHOTOGRAPHS

544 DETROIT STREET  
ANN ARBOR, MICHIGAN

TAKEN BY: JDF  
DATE: 12/06/2012

PROJECT NUMBER: 8002F-1-17



*PHOTOGRAPH NO. 3: SUBJECT PROPERTY  
SOUTHERN PORTION OF THE SUBJECT BUILDING (VENT PIPES ALONG WALL)*



*PHOTOGRAPH NO. 4: ADJOINING PROPERTY  
WESTERN ADJOINING PROPERTIES*

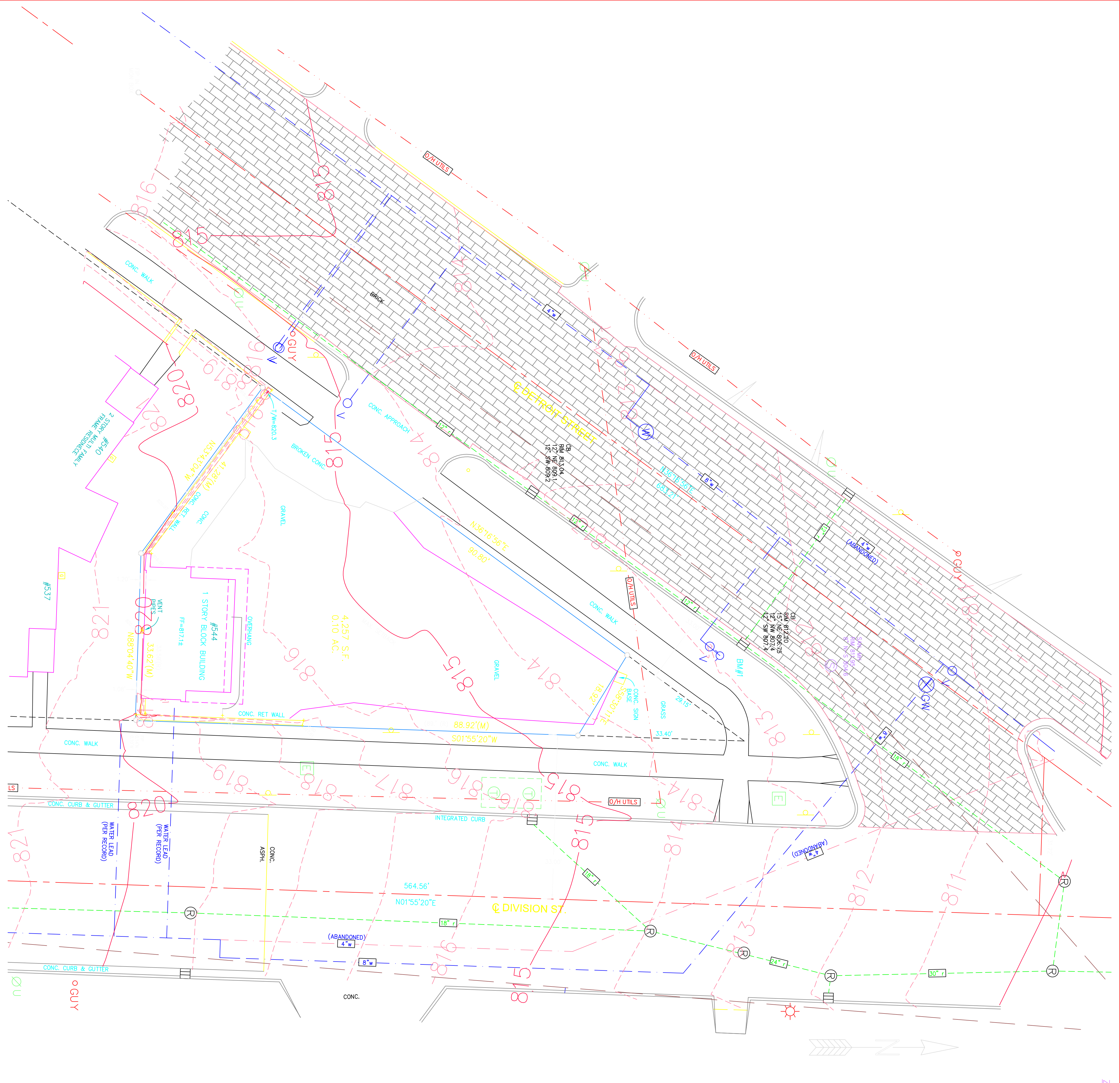
**AKTPEERLESS**  
environmental & energy services

PROPERTY PHOTOGRAPHS

544 DETROIT STREET  
ANN ARBOR, MICHIGAN

TAKEN BY: JDF  
DATE: 12/06/2012

PROJECT NUMBER: 8002F-1-17



**ZONING REGULATIONS:**

Zoning District	Maximum Usable Floor Area in Percentage of Lot Area	Front <sup>(1)</sup>		Side	Yard	Maximum Height	Minimum Gross Lot Size
		Minimum	Maximum	Minimum	Maximum		
S-43 Local Business	100%	10' <sup>(2)</sup>		None, except 30 feet where abutting residentially zoned land <sup>(1)</sup>		None, except 30 feet where abutting residentially zoned land <sup>(1)</sup>	In Feet In Stories Area in Width in Sq. Ft. 3 2,000 20

<sup>(1)</sup>Also see additional regulations in Section 5-146 of Chapter 59 and Section 5-602 of Chapter 62.  
<sup>(2)</sup>For new freestanding buildings constructed or site planned after January 16, 2011, otherwise none. Maximum setbacks shall apply to at least one lot line for new freestanding buildings constructed or site planned after January 16, 2011, on parcels with more than one front lot line.  
 Plus one foot of additional setback for each foot of building height above 30 feet when abutting residentially zoned land.

**LEGAL DESCRIPTION:**  
 LOT 127, "ASSESSOR'S PLAT NO. 29," BEING A REPEAT OF BLOCKS 3 AND 4 NORTH, RANGES 4, 5 AND 6 EAST, ON THE PLAT OF THE VILLAGE OF ANN ARBOR, IN THE CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 9 OF PLATS, PAGE 20, WASHTENAW COUNTY RECORDS.

**TREE LEGEND:**

- AP APPLE
- AS ASPEN
- B BIRCH
- BB BURNING BUSH
- BC BIRCH
- CA CASHA APPLE
- CA CA
- CA CHERRY
- CA CONIFER
- CA CORNUS
- CA COTONWOOD
- CA CRAB APPLE
- CA CYPRUS
- CA DOGWOOD
- CA HICKORY
- CA HICKORY TREE
- CA LINDEN
- CA MADRONE
- CA MAHOGANY
- CA PINE
- CA PINUS
- CA SASSAPARILLA
- CA Sycamore
- CA WALNUT
- CA WILLOW

**BENCHMARKS:**  
 BM#1 - ABOVE ON FIRE HYDRANT ON E. SIDE DETROIT STREET SOUTH OF DIVISION STREET  
 ELEVATION = 815.46 NAVD 88

**SITE INFORMATION:**  
 ADDRESS: 544 DETROIT ST.  
 ANN ARBOR, MI 48105  
 ZONING: C1 - LOCAL BUSINESS

**LEGAL DESCRIPTION:**  
 LOT 127, "ASSESSOR'S PLAT NO. 29," BEING A REPEAT OF BLOCKS 3 AND 4 NORTH, RANGES 4, 5 AND 6 EAST, ON THE PLAT OF THE VILLAGE OF ANN ARBOR, IN THE CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 9 OF PLATS, PAGE 20, WASHTENAW COUNTY RECORDS.

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THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

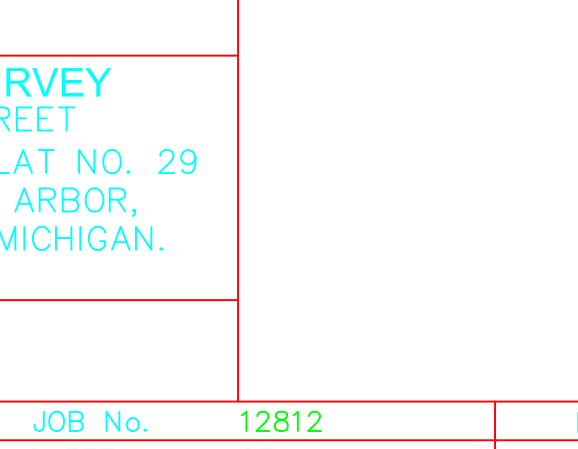
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- FOUND IRON PIPE
- FOUND IRON ROD
- SET IRON PIPE
- SET MAG NAIL
- FOUND MAG NAIL
- CONTROL POINT
- MEASURED DIMENSION
- RECORDED DIMENSION
- SURFACE FLOW

- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- BEEHIVE CATCH BASIN
- CURB CATCH BASIN
- STORM MANHOLE
- CULVERT / END SECTION
- SANITARY MANHOLE
- LIGHT POLE
- UTILITY POLE
- TELEPHONE RISER
- GAS MAIN RISER

- ELECTRIC LINE
- GAS MAIN
- WATER MAIN
- STORM LINE
- SANITARY LINE
- CABLE TV LINE
- PHONE LINE
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE FENCE

- CLIENT: DAN WILLIAMS
- TOPOGRAPHIC SURVEY
- #544 DETROIT STREET
- LOT 127, ASSESSOR'S PLAT NO. 29
- IN THE CITY OF ANN ARBOR,
- WASHTENAW COUNTY, MICHIGAN.

- SCALE 1 INCH = 10 FEET
- JOB No. 12812
- SHEET 1 OF 1
- DATE: 7-31-2012
- REVISION: -



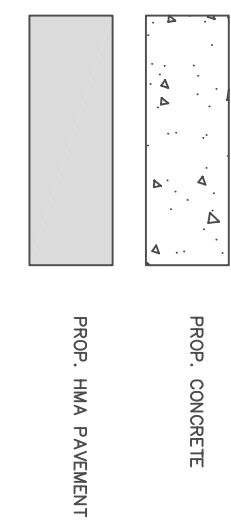
**Arbor Land Consultants, Inc.**  
 Professional Land Surveyors  
 2936 Madrone Ct.  
 Ann Arbor, MI 48103  
 Tel 1-734-669-2960  
 Fax 1-734-669-2961

**LEGEND**

- SECTION CORNER
- FOUND IRON PIPE
- FOUND IRON ROD
- SET IRON PIPE
- SET IRON ROD
- FOUND MAN HOLE
- SET MAN HOLE
- CONTROL POINT
- MEASURED DIMENSION
- RECORDED DIMENSION
- SURFACE FLOW
- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- BENTHIC CATCH BASIN
- STORM CATCH BASIN
- STORM MANHOLE
- CULVERT / END SECTION
- SANITARY MANHOLE
- LIGHT POLE
- UTILITY POLE
- TELEPHONE POLE
- GAS MAIN RESER



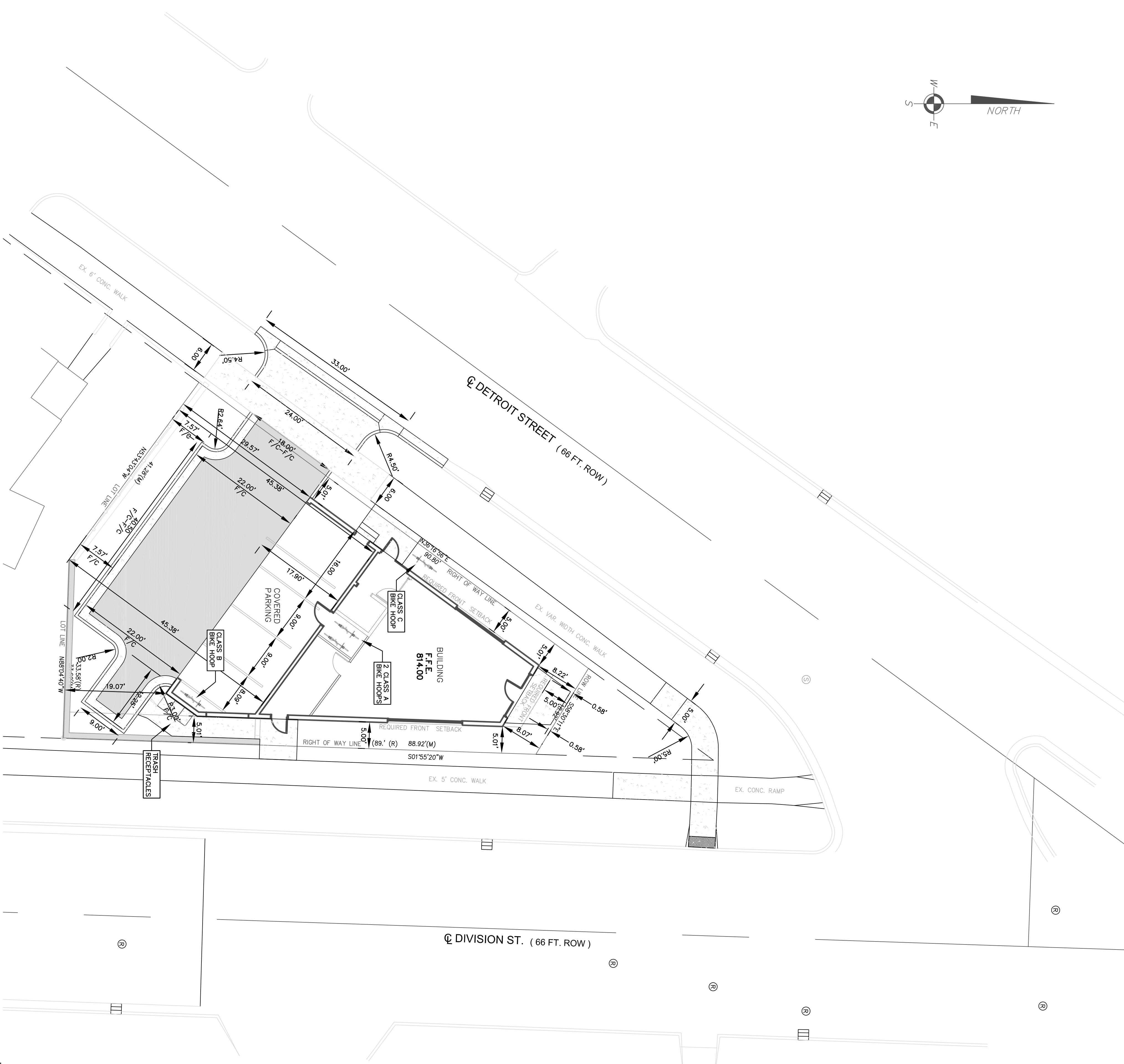
- EX. ELECTRIC LINE
- EX. GAS MAIN
- EX. WATER MAIN
- EX. STORM LINE
- EX. SANITARY LINE
- EX. CABLE TV LINE
- EX. PHONE LINE
- EX. CHAIN LINK FENCE
- EX. WOOD FENCE
- EX. BARBED WIRE FENCE
- EX. EXISTING CONTOUR
- PROPOSED STORM SEWER
- PROPOSED CONTOUR
- PROPOSED MANHOLE
- PROPOSED CATCH BASIN/INLET
- PROPOSED END SECTION W/ INLET
- INLET REBAR
- PROPOSED SLIT FENCE
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED CHECK DAM



- EX. TOP OF WALL
- PROPOSED BOTTOM OF WALL ELEVATION
- EX. TOP OF CURB
- PROPOSED TOP OF WALL ELEVATION
- EX. ELEVATION OF PROPOSED TOP OF WALL
- EX. ELEVATION OF PROPOSED TOP OF WALL
- EX. SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EX. ELEVATION OF PROPOSED SPOT
- PROPOSED EXISTING RM ELEVATION
- PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- PROPOSED LOW POINT ELEVATION
- PROPOSED SLOPE
- DIMENSION
- RADIUS DIMENSION
- FACE OF CURB DIMENSION

- NOTES:**
1. SIDEWALKS SHALL MEET ALL REQUIREMENTS AND STANDARDS SET FORTH IN THE MICHIGAN BUILDING CODE.
  2. DETECTABLE WARNING 24" DEEP EXTENDING THE WIDTH OF THE RAMP ARE TO BE PLACED AT THE CURB AND VERGES OF ALL SIDEWALKS AND PROPOSED GRADES PRIOR TO THE START OF CONSTRUCTION.
  3. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED GRADES PRIOR TO THE START OF CONSTRUCTION.
  4. ALL EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH THE STATE OF MICHIGAN EROSION AND SEDIMENTATION CONTROL ACT NO. 347.
  5. ALL PROPOSED GRADES ARE TO MEET EXISTING GRADES.
  6. EXISTING GRADES SHALL INSURE POSITIVE DRAINAGE TO ALL STORM STRUCTURES AND CURB OPENINGS. ANY AREA WHICH APPEARS TO HAVE THE POTENTIAL FOR PONDING WATER SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO ANY CONSTRUCTION. ANY AREAS WHICH APPEAR TO HAVE PONDING WATER AFTER PAVING WILL BE REMOVED AND CORRECTED AT THE CONTRACTOR'S EXPENSE.
  7. CONTRACTOR TO ESTABLISH PERMANENT BENCH MARK PRIOR TO START OF CONSTRUCTION.

**NOTE:**  
 PER CHAPTER 49, SECTION 4.58 OF THE CITY CODE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND MAINTENANCE OF THE LAND ADJACENT TO AND ABUTTING THE SAME. PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND MAINTENANCE OF THE LAND ADJACENT TO AND ABUTTING THE SAME.



PERIMETER ENGINEERING LLC  
 11245 BOYCE ROAD  
 CHELSEA, MI 48118  
 734-216-9941

Notice:  
 Construction site safety is the sole responsibility of the CONTRACTOR, neither the owner nor the engineer shall be expected to assume any responsibility for safety of the work, of persons engaged in the work, of any nearby structures, or of any other persons.

CLIENT	MAVEN DEVELOPMENT
SECTION 29	TOWN 2 SOUTH, RANGE 6 EAST
	LOT 27 ASSESSOR'S PLAT NO.29
	CITY OF ANN ARBOR
	544 DETROIT STREET
	SITE PLAN
	LAYOUT PLAN

DATE	OCTOBER 29, 2012
SCALE	0 5 10 1"=10'
DR.	GFD CH. K.K.
P.M.	
BOOK	
FILE NO.	
SHEET NO.	SP-03

**811**  
 Know what's below.  
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 THE PERIMETER ENGINEERING LLC IS AN EQUAL OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER. WE DO NOT DISCRIMINATE ON THE BASIS OF RACE, GENDER, RELIGION, NATIONAL ORIGIN, ANCESTRY, COLOR, SEX, OR AGE. WE DO NOT DISCRIMINATE ON THE BASIS OF SEXUAL ORIENTATION OR GENDER IDENTIFICATION. WE DO NOT DISCRIMINATE ON THE BASIS OF MARITAL STATUS. WE DO NOT DISCRIMINATE ON THE BASIS OF PREGNANT STATUS. WE DO NOT DISCRIMINATE ON THE BASIS OF FAMILY STATUS. WE DO NOT DISCRIMINATE ON THE BASIS OF DISABILITY. WE DO NOT DISCRIMINATE ON THE BASIS OF GENETIC INFORMATION. WE DO NOT DISCRIMINATE ON THE BASIS OF MILITARY SERVICE. WE DO NOT DISCRIMINATE ON THE BASIS OF VETERAN STATUS. WE DO NOT DISCRIMINATE ON THE BASIS OF PROTECTED CHARACTERISTICS. WE DO NOT DISCRIMINATE ON THE BASIS OF PROTECTED CHARACTERISTICS.



**LEGEND**

- SECTION CORNER
- ROUND IRON PIPE
- ROUND IRON ROD
- SET IRON PIPE
- SMALL SET IRON PIPE
- SMALL ROUND IRON PIPE
- CONTROL POINT
- RECORDED DIMENSION
- UNRECORDED DIMENSION
- SURFACE FLOW
- WATER MANHOLE
- WATER HYDRANT
- GATE VALVE
- BEHIND CATCH BASIN
- CURB CATCH BASIN
- STORM MANHOLE
- CULVERT / END SECTION
- SANITARY MANHOLE
- LIGHT POLE
- UTILITY POLE
- TELEPHONE RISER
- GAS MAIN RISER

- EX. ELECTRIC LINE
- EX. GAS MAIN
- EX. WATER MAIN
- EX. STORM LINE
- EX. SANITARY LINE
- EX. CABLE TV LINE
- EX. PHONE LINE
- EX. CHAIN LINK FENCE
- EX. WOOD FENCE
- EX. BARBED WIRE FENCE
- EX. EXISTING CONTOUR
- PROPOSED STORM SEWER
- PROPOSED CONTOUR
- PROPOSED MANHOLE
- PROPOSED CATCH BASIN/INLET
- PROPOSED END SECTION W/ BRAP
- INLET FEEDER
- PROPOSED SILT FENCE
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED CHECK DAM
- PROPOSED CONCRETE
- PROPOSED PAVEMENT

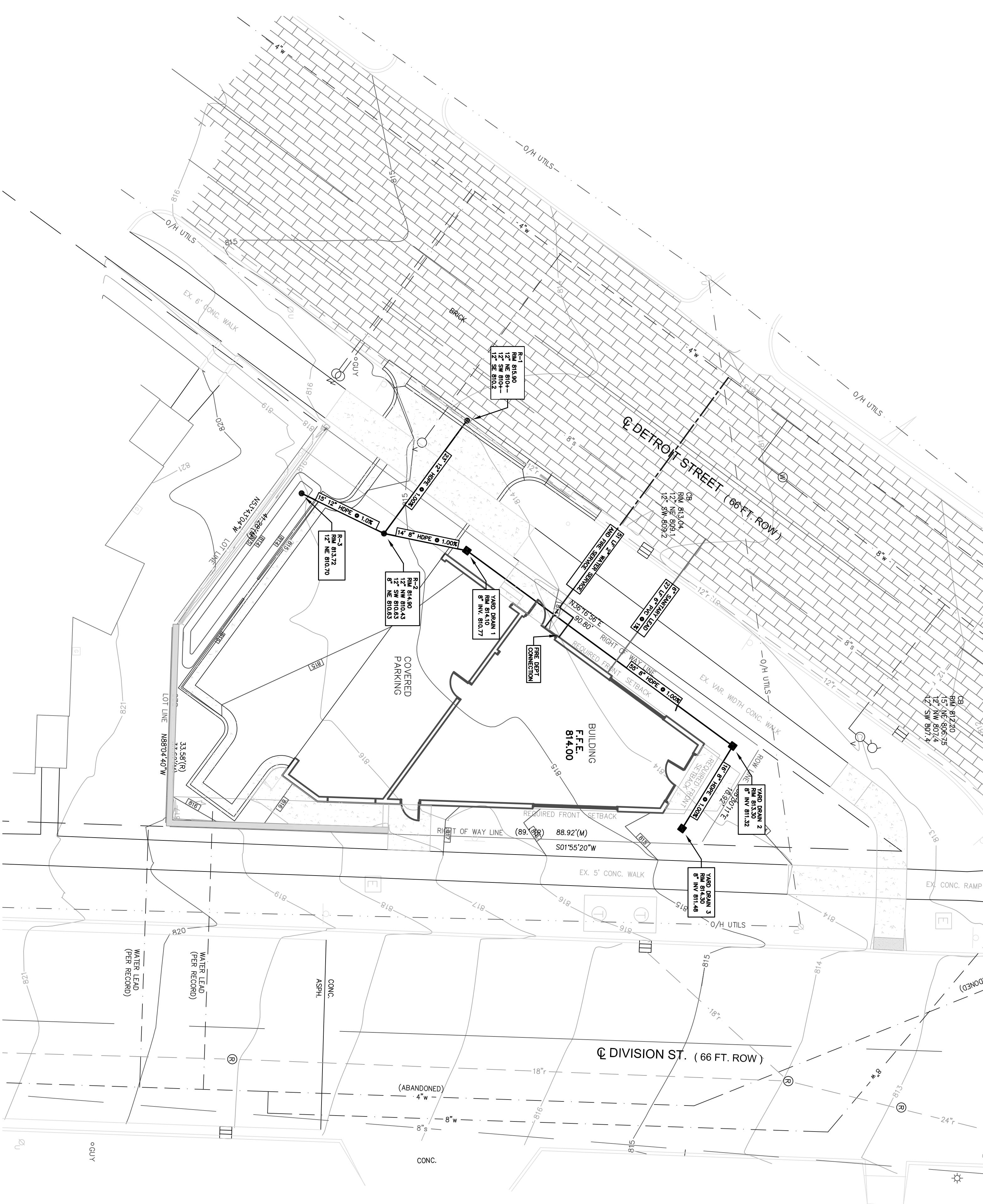
- 1/2" EXISTING TOP OF WALL ELEVATION
- 1/2" EXISTING TOP OF CURB ELEVATION
- 1/2" EXISTING ELEVATION OF FINISH GRADE
- 1/2" EXISTING SPOT ELEVATION
- 1/2" EXISTING SLOPE
- PROPOSED BOTTOM OF WALL ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED TOP OF FINISH GRADE
- PROPOSED SPOT ELEVATION
- PROPOSED SLOPE
- PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED FINISHED GRADE ELEVATION
- PROPOSED FINISH OF METAL ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED FINISHED GRADE ELEVATION
- PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED FINISH OF METAL ELEVATION
- PROPOSED LOW POINT ELEVATION
- PROPOSED SLOPE
- DIMENSION
- RAISED DIMENSION
- FACE OF CURB DIMENSION

- NOTES**
1. SIDEWALKS SHALL MEET ALL REQUIREMENTS AND GUIDELINES SET FORTH IN THE ADA STANDARDS FOR ACCESSIBLE DESIGN AND MICHIGAN BUILDING CODE.
  2. DETECTABLE WARNING 24" DEEP EXTENDING 24" FROM THE CURB AND 24" FROM THE INTERSECTION SIDEWALK RAMP SHALL BE PLACED AT INTERSECTION AND PROPOSED GRADES PRIOR TO THE START OF CONSTRUCTION.
  3. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED GRADES PRIOR TO THE START OF CONSTRUCTION.
  4. CONFIRMANCE WITH STATE OF MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL ACT NO. 347.
  5. ALL PROPOSED GRADES ARE TO MEET CITY CODE.
  6. CONTRACTOR SHALL INSURE POSITIVE DRAINAGE TO ALL STORM STRUCTURES AND CURB OPENINGS. ANY AREA WHICH APPEARS TO HAVE THE POTENTIAL FOR PONDING OPERATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. ANY AREA WHICH APPEARS TO HAVE WATER AFTER PAVING WILL BE REMOVED AND CORRECTED AT THE CONTRACTOR'S EXPENSE.
  7. CONTRACTOR SHALL ESTABLISH PERMANENT CONSTRUCTION.

**NOTE:**  
PER CHAPTER 49, SECTION 4-58 OF THE CITY CODE, ALL SIDEWALKS ARE TO BE KEPT OPEN AND MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION AND ABANDONMENT OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE. ALL EXISTING SIDEWALKS IN NEED OF REPAIR MUST BE REPAIRED IN ACCORDANCE WITH CITY STANDARDS.

**FOOTING DRAIN DISCONNECT CALCULATIONS**

Existing Units	1
Design Dry Weather Flow Rate	300 gpd/unit
Peak Flow Factor	4
System Recovery Factor	0%
Footing Drain Flow	4 gpm/home
Dry Weather Flow	300 gpd
Peak Flow	1,200 gpd
Proposed	
Residential Units	2
Design Dry Weather Flow Rate	275 gpd/unit
Office Design Dry Weather Flow Rate	857 gpd
Peak Flow Factor	0.06 gpd/sf
System Recovery Factor	4
Footing Drain Flow	4 gpm/home
Dry Weather Flow	801 gpd
Peak Flow	2,887 gpd
Footing Drains to Disconnect	0



**811**  
Know what's below.  
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THE PERIMETER ENGINEERING LLC SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF ANN ARBOR AND THE STATE OF MICHIGAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF ANN ARBOR AND THE STATE OF MICHIGAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF ANN ARBOR AND THE STATE OF MICHIGAN.

<p>DATE: OCTOBER 29, 2012</p> <p>SCALE: 0 5 10 1"=10'</p> <p>DR. GFD CH. K.K.</p> <p>BOOK</p> <p>SHEET NO.</p> <p>SP-04</p>	<p>CLIENT: MAVEN DEVELOPMENT</p> <p>544 DETROIT STREET SITE PLAN</p> <p>UTILITY PLAN</p>	<p>SECTION 29</p> <p>TOWN 2 SOUTH, RANGE 6 EAST</p> <p>LOT 27 ASSESSOR'S PLAT NO.29</p> <p>CITY OF ANN ARBOR</p>	<p>Notice: Construction site safety is the sole responsibility of the CONTRACTOR, neither the owner nor the engineer shall be expected to assume any responsibility for safety of the work, of persons engaged in the work, of any nearby structures, or of any other persons.</p>		<p>PERIMETER ENGINEERING LLC 11245 BOYCE ROAD CHELSEA, MI 48118 734-216-9941</p>
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**STORM WATER DETENTION CALCULATIONS**

OVERALL DETENTION	1.172 ft	0.64 acres	C - 0.850
Inflow	Area = 1.401 st	0.03 acres	C - 0.950
Outflow	Area = 1.197 st	0.03 acres	C - 0.300
Pond	Area = 0 st	0.00 acres	C - 1.000
Total	Area = 4.250 st	0.10 acres	C - 0.775

Release Rate	0.150 cfs/ac
Q <sub>0</sub> =	0.015 cfs
Q <sub>1</sub> =	0.183 cfs/ac-hp
T =	286.0 min
V <sub>100</sub> =	19322 cfs-hp
V <sub>50</sub> =	618 st
V <sub>10</sub> =	137 st
V <sub>5</sub> =	50 st

Elevation	Area (st)	Volume (cf)	Volume (cf)
814	139	69.5	69.5
819	0	0	0
861	813.71	0	0

No detention is required as the site is less than 5,000 st



**LEGEND**

Section Corner	Water Manhole
Prop. Round Iron Pipe	Prop. Hydrant
Prop. Round Iron Rod	Prop. Gate Valve
Prop. Set Iron Pipe	Prop. Storm Catch Basin
Prop. Set Manhole	Prop. Storm Manhole
Prop. Round Manhole	Prop. Control Point
Prop. Manhole	Prop. Weir Dimension
Prop. Manhole	Prop. Record Dimension
Prop. Manhole	Prop. Telephone Meter
Prop. Manhole	Prop. Gas Main Meter
Prop. Manhole	Prop. Sewer Section
Prop. Manhole	Prop. Light Pole
Prop. Manhole	Prop. Utility Pole
Prop. Manhole	Prop. Fire Hydrant
Prop. Manhole	Prop. Fire Alarm
Prop. Manhole	Prop. Fire Alarm

- NOTES**
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  7. CONTRACTOR SHALL ESTABLISH PERMANENT CONSTRUCTION MARKERS PRIOR TO START OF CONSTRUCTION.

**NOTE:**  
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<p>PERIMETER ENGINEERING LLC 11245 BOYCE ROAD CHELSEA, MI 48118 734-216-9941</p>	<p><b>CLIENT</b></p> <p>MAVEN DEVELOPMENT</p> <p><b>544 DETROIT STREET SITE PLAN</b></p> <p><b>GRADING PLAN</b></p>	<p><b>SECTION 29</b></p> <p>TOWN 2 SOUTH, RANGE 6 EAST</p> <p>LOT 27 ASSESSOR'S PLAT NO.29</p> <p>CITY OF ANN ARBOR</p>	<p>Notice: Construction site safety is the sole responsibility of the CONTRACTOR, neither the owner nor the engineer shall be expected to assume any responsibility for safety of the work, of persons engaged in the work, of any nearby structures, or of any other persons.</p>
	<p>DATE: OCTOBER 29, 2012</p> <p>SCALE: 0 5 10 1"=10'</p> <p>DR: GFD CH, K.K.</p> <p>BOOK: _____</p> <p>SHEET NO. SP-05</p>	<p>PERMITTING</p> <p>_____</p>	<p><b>PERIMETER</b></p>
	<p>Know what's below. Call before you dig.</p> <p>811</p> <p>THE MICHIGAN PUBLIC UTILITIES SERVICE (MPUS) IS A NON-PROFIT CORPORATION THAT OPERATES THE MICHIGAN COMMONWEALTH INFORMATION SYSTEM (MCIS). MCIS IS A WEB-BASED PLATFORM THAT PROVIDES A CENTRALIZED SOURCE OF INFORMATION ON MICHIGAN'S PUBLIC UTILITIES. MCIS IS AVAILABLE 24 HOURS A DAY, 7 DAYS A WEEK. VISIT US AT WWW.MICHIGAN811.COM. FOR MORE INFORMATION, CALL 1-800-487-8111.</p>	<p>PERMITTING</p> <p>_____</p>	



**NEW MATERIAL DESCRIPTION:**

PARAPET  
brick

PARAPET COPING  
4" mtl coping with color to match limesone sills

CORNICE  
brick three stretcher courses corbeled 1"

WINDOW LINTLES  
8" brick soldier course

WINDOW SILLS  
5-3/8" limestone

BASE RUSTICATION  
brick course recessed 3/4" every 10 th course

CANOPIES  
8" x 1-1/2" steel channel perimeter rail with wood porch ceiling on soffit and epdm roofing membrane

BALCONIES  
columns: 5" x 3/8" steel plate welded to 2" steel pipe with 8"x 3/8" diam top and btm bearing plates.

roof structure: 8" x 1-1/2" steel channel perimeter with wood porch ceiling

railings: 1/2" x 2" stl bars spaced 4" apart. See detail page A10 for guard details.

**WINDOW SCHEDULE**

Mark	Type	Unit Size*	Notes
(DH 1)	Double hung	36 x 72	
(FS 1)	Fixed sash	106 x 132	fixed 30 lite glazing above mtl spandrel panels
(FS 2)	Fixed sash	106 x 82	fixed x lite glazing
(FS 3)	Fixed sash	44 x 48	fixed 9 lite glazing

**WINDOW NOTES:**

Windows shall be wood with alum or vinyl cladding. Glazing shall be double glazed low e. Cladding shall be dark standard color. Screens shall be supplied with all windows.

Windows shall be supplied with 2" brick moulding

\* window size may vary (+-2")

**DOOR SCHEDULE**

Mark	Type	Unit Size	Notes
(D1)	Flush Mtl	36 x 84	Painted galv stl
(D2)	French dr+transom	96 x 108	Hinged alum clad patio w/24" 9 lite transom w/ 9 lite doors.
(D3)	Cased opening + transom	36 x 106	Steel frame with mtl transom lites
(D4)	French dr w / sidelite	72 x 106	French dr with sidelite + transom 9 lite door and sidelite with 3 lite transom sections
(D5)	French dr	32 X 90	9 lite

**DOOR NOTES:**

Doors except (D1) shall be wood clad  
Glazing shall be double glazed low e.

■ RUETER ASSOCIATES  
ARCHITECTS  
515 Fifth Street, Ann Arbor, Michigan 48103  
phone: (734) 769-0070, fax: (734) 769-0167

544 DETROIT STREET  
Ann Arbor MI

... 20, 2012

View from Northwest



View from Southwest

HDC SEPT.20 ,2012

544 DETROIT STREET  
Ann Arbor MI

■ RUETER ASSOCIATES  
ARCHITECTS  
515 Fifth Street, Ann Arbor, Michigan 48103  
phone: (734) 769-0070, fax: (734) 769-0167



ZONING BUILDING HEIGHT 852.0'

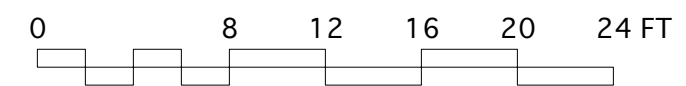
ROOF 847.0'

2ND FLOOR 836.0'

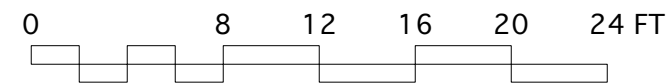
1ST FLOOR 825.0'

AVERAGE GRADE 817.0'

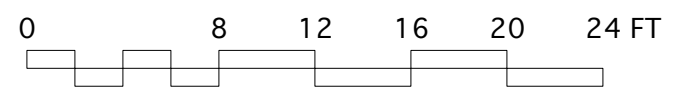
1ST FLOOR 814.0'



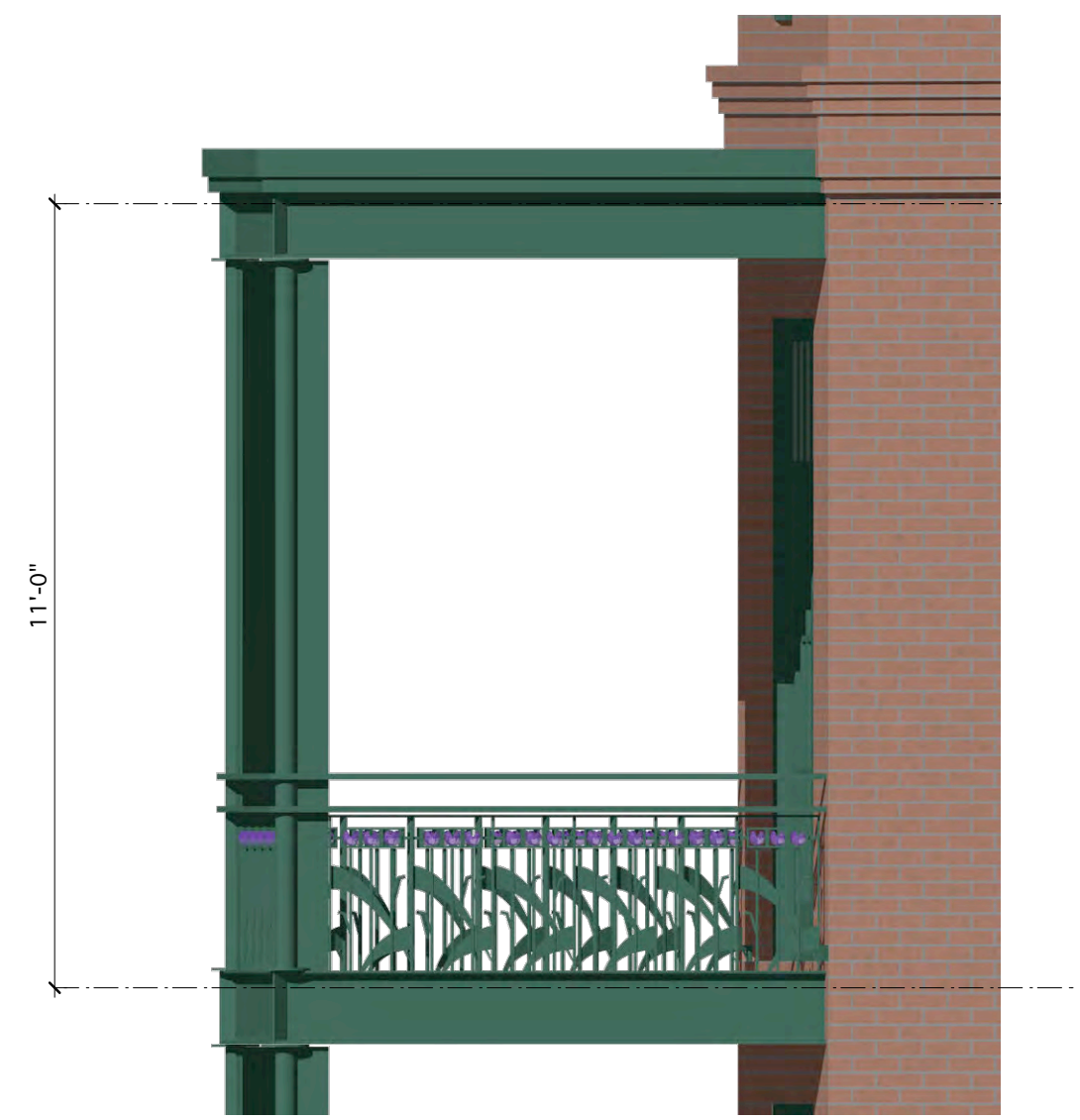
West Elevation



East Elevation

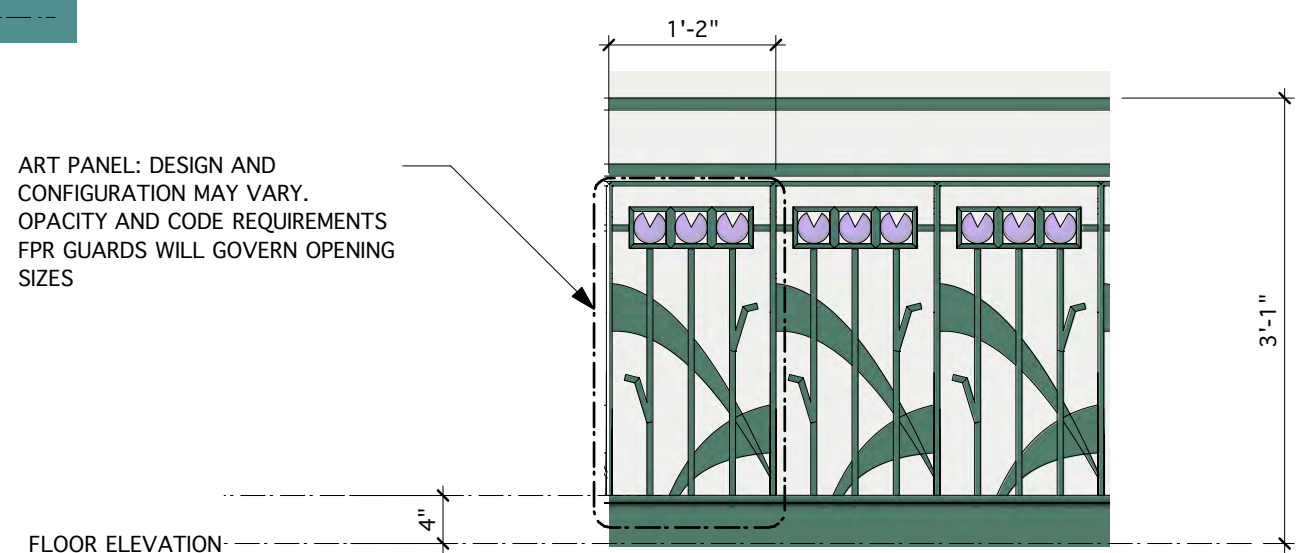


**South Elevation**  
Scale: 3/32" = 1' 0"



**Balcony Detail**  
Scale: 1/4" = 1' 0"

ART PANEL: DESIGN AND CONFIGURATION MAY VARY. OPACITY AND CODE REQUIREMENTS FOR GUARDS WILL GOVERN OPENING SIZES



**Guard Detail**  
Scale: 1/2" = 1' 0"

## Tables



Table 1- 544 Detroit Street Project - MSF and MDEQ Eligible Activities

Eligible Activities means 1 or more of the following: 1) Baseline environmental assessment activities (Phase I, Phase II, BEA), 2) Due Care Activities (Due Care Plan and its associated activities), 3) Additional response activities (activities beyond what is minimally required under the law), 4) Infrastructure improvements that directly benefit the property, 5) demolition of structures that is not a response activity (including interior demolition), 6) Lead or asbestos abatement (included assessment), 7) Site preparation that is not a response activity (removal of fill, site grading/grubbing, etc), 8) relocation of public buildings or operations for economic development purposes, 9) costs of preparing a brownfield plan or workplan, 9) costs of environmental insurance.

Item/Activity	Total Estimated Cost	No. of Units	Unit Type	Cost per Unit	School and Local MSF Act 381 Eligible Activities	School and Local MDEQ Act 381 Eligible Activities	Local Only Act 381 Eligible Activities	Comments
<b>BEA Environmental Assessment Activities - No prior MDEQ or MSF work plan approval necessary if costs are included in the Plan (even if incurred before Brownfield Plan approval)</b>								
Phase I/Phase II/BEA	\$ 17,770					\$ 17,770		
<b>Total BEA Activities</b>	<b>\$ 17,770</b>					<b>\$ 17,770</b>	<b>\$ -</b>	
<b>Due Care Activities</b>								
Due Care Plan	\$ 3,500	1	LSUM	\$ 3,500		\$ 3,500		
Health & Safety Plan	\$ 3,000	1	LSUM	\$ 3,000		\$ 3,000		
Sheeting & Shoring / Bracing	\$ 40,000	250	LF	\$ 160		\$ 40,000		
Soil Excavation, Transportation, and Disposal (incremental increase)						\$ -		
Excavation	\$ 13,905	927	TONS	\$ 15		\$ 13,905		
Transportation (includes tonnage for basement)	\$ 14,110	1,411	TONS	\$ 10		\$ 14,110		
Disposal (includes tonnage for basement)	\$ 28,220	1,411	TONS	\$ 20		\$ 28,220		
Backfill	\$ 24,385	975	TONS	\$ 25		\$ 24,385		
Dewatering	\$ 12,000	1	LSUM	\$ 12,000		\$ 12,000		
Excavation Oversight & Sampling	\$ 17,000	14	DAYS	\$ 1,250		\$ 17,000		
Laboratory Analysis/Confirmation Sampling	\$ 4,500	26	SAMPLES	\$ 175		\$ 4,500		
Summary Report	\$ 5,000	1	LSUM	\$ 5,000		\$ 5,000		
Project Management	\$ 9,000	1	LSUM	\$ 9,000		\$ 9,000		
<b>Total Due Care Activities</b>	<b>\$ 174,620</b>				<b>\$ -</b>	<b>\$ 174,620</b>	<b>\$ -</b>	
<b>Additional Response Activities</b>								
Vapor Barrier & Sub Slab Depressurization System	\$ 32,000	1	LSUM	\$ 32,000		\$ 32,000		
<b>Total Additional Response Activities</b>	<b>\$ 32,000</b>				<b>\$ -</b>	<b>\$ 32,000</b>	<b>\$ -</b>	
<b>Preparation of Combined Brownfield Plan</b>								
Combined Brownfield Plan	\$ 26,000	1	LSUM	\$ 26,000	\$ 10,000	\$ 10,000	\$ 6,000	
<b>Brownfield and Work Plan Preparation</b>	<b>\$ 26,000</b>				<b>\$ 10,000</b>	<b>\$ 10,000</b>	<b>\$ 6,000</b>	
<b>Infrastructure Improvements</b>								
Road Repair (pavers)	\$ 8,050	1	LSUM	\$ 8,050	\$ 8,050			
Curbs, Gutters, and Approaches	\$ 3,150	126	LF	\$ 25	\$ 3,150			
Sidewalks	\$ 4,650	186	LF	\$ 25	\$ 4,650			
Portion of Multi-Story Building for Parking Structure	\$ 32,500	1	LSUM	\$ 32,500	\$ 32,500			
Residential Sewer Disconnects (2 Units)	\$ 22,000	2	UNITS	\$ 11,000			\$ 22,000	
<b>Total Infrastructure Improvements</b>	<b>\$ 70,350</b>				<b>\$ 48,350</b>	<b>\$ -</b>	<b>\$ 22,000</b>	
<b>Abatement &amp; Demolition</b>								
Site Demolition	\$ 5,500	1	LSUM	\$ 5,500	\$ 5,500			
Abatement & Building Demolition	\$ 15,000	1	LSUM	\$ 15,000	\$ 15,000			
<b>Total Abatement &amp; Demolition</b>	<b>\$ 20,500</b>				<b>\$ 20,500</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Site Preparation</b>								
Temporary Fencing	\$ 2,500	300	LF	\$ 8	\$ 2,500			
Temporary Traffic Control	\$ 2,200	1	LSUM	\$ 2,200	\$ 2,200			
Excavation for Unstable Material	\$ 7,500	214	TONS	\$ 35	\$ 7,500			
Clearing & Grubbing	\$ 4,350	1	LSUM	\$ 4,350	\$ 4,350			
Retaining Walls	\$ 8,500	1	LSUM	\$ 8,500	\$ 8,500			
<b>Total Site Preparation</b>	<b>\$ 25,050</b>				<b>\$ 25,050</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Project Sub Totals</b>	<b>\$ 366,289</b>				<b>\$ 103,900</b>	<b>\$ 234,390</b>	<b>\$ 28,000</b>	
<b>15% Contingency on Eligible Activities</b>	<b>\$ 48,378</b>				<b>\$ 14,085</b>	<b>\$ 30,993</b>	<b>\$ 3,300</b>	
<b>Other Costs</b>								
BRA Administrative Fees	\$ 57,102						\$ 57,102	
Interest	\$ 70,648					\$ 70,648		
Local Site Remediation Revolving Fund	\$ 156,355					\$ 35,760	\$ 120,595	
<b>Total Cost of Eligible Activities to be Funded through TIF (includes WCBRA admin. fees and LSRRF)</b>	<b>\$ 698,773</b>				<b>\$ 117,985</b>	<b>\$ 371,790</b>	<b>\$ 208,997</b>	
Eligible activities will be reimbursed with local-only tax increment revenue if not approved by the State of Michigan for school tax reimbursement, except the vapor barriers, which will be reimbursed solely at the rate approved by MDEQ.								

Tax Increment Financing Estimates

Table 2  
544 Detroit Street Project  
Ann Arbor, Michigan

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Land and Real Property Taxable Value Estimate*		\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800
Comm. Tax Increment Value (increase of 2%)		\$ 700,000	\$ 714,000	\$ 728,280	\$ 742,846	\$ 757,703	\$ 772,857	\$ 788,314	\$ 804,080	\$ 820,162	\$ 836,362
Incremental Difference (New Taxes-Existing)		\$ 649,200	\$ 663,200	\$ 677,480	\$ 692,046	\$ 706,903	\$ 722,057	\$ 737,514	\$ 753,280	\$ 769,362	\$ 785,562
<b>School Taxes - Millage</b>											
School Operating	18.0000	\$ 2,337	\$ 2,388	\$ 2,439	\$ 2,491	\$ 2,545	\$ 2,599	\$ 2,655	\$ 2,712	\$ 2,770	\$ 2,828
SET	6.0000	\$ 3,895	\$ 3,979	\$ 4,065	\$ 4,152	\$ 4,241	\$ 4,332	\$ 4,425	\$ 4,520	\$ 4,616	\$ 4,714
<b>Total School Taxes -</b>	<b>24.0000</b>										
<b>Local Taxes - Millage</b>											
CITY OPERATING	6.1682	\$ 4,004	\$ 4,091	\$ 4,179	\$ 4,269	\$ 4,360	\$ 4,454	\$ 4,549	\$ 4,646	\$ 4,746	\$ 4,846
CITY BENEFITS	2.0560	\$ 1,335	\$ 1,364	\$ 1,393	\$ 1,423	\$ 1,453	\$ 1,485	\$ 1,516	\$ 1,549	\$ 1,582	\$ 1,615
CITY REFUSE	2.4670	\$ 1,602	\$ 1,636	\$ 1,671	\$ 1,707	\$ 1,744	\$ 1,781	\$ 1,819	\$ 1,858	\$ 1,898	\$ 1,938
CITY STREETS	2.1250	\$ 1,380	\$ 1,409	\$ 1,440	\$ 1,471	\$ 1,502	\$ 1,534	\$ 1,567	\$ 1,601	\$ 1,635	\$ 1,669
CITY PARKS MAINT	1.0969	\$ 712	\$ 727	\$ 743	\$ 759	\$ 775	\$ 792	\$ 809	\$ 826	\$ 844	\$ 861
CITY PARKS ACQ	0.4779	\$ 310	\$ 317	\$ 324	\$ 331	\$ 338	\$ 345	\$ 352	\$ 360	\$ 368	\$ 376
MASS TRANSIT	2.0560	\$ 1,335	\$ 1,364	\$ 1,393	\$ 1,423	\$ 1,453	\$ 1,485	\$ 1,516	\$ 1,549	\$ 1,582	\$ 1,615
PUBLIC LIBRARY	1.5500	\$ 1,006	\$ 1,028	\$ 1,050	\$ 1,073	\$ 1,096	\$ 1,119	\$ 1,143	\$ 1,168	\$ 1,193	\$ 1,218
WISD OPERATING	0.0984	\$ 64	\$ 65	\$ 67	\$ 68	\$ 70	\$ 71	\$ 73	\$ 74	\$ 76	\$ 77
WISD SPEC EDUC	3.8761	\$ 2,516	\$ 2,571	\$ 2,626	\$ 2,682	\$ 2,740	\$ 2,799	\$ 2,859	\$ 2,920	\$ 2,982	\$ 3,044
COMM COLLEGE	3.6376	\$ 2,362	\$ 2,412	\$ 2,464	\$ 2,517	\$ 2,571	\$ 2,627	\$ 2,683	\$ 2,740	\$ 2,799	\$ 2,858
WASH COUNTY OPER	4.5493	\$ 2,953	\$ 3,017	\$ 3,082	\$ 3,148	\$ 3,216	\$ 3,285	\$ 3,355	\$ 3,427	\$ 3,500	\$ 3,574
WASH COUNTY PARK	0.7129	\$ 463	\$ 473	\$ 483	\$ 493	\$ 504	\$ 515	\$ 526	\$ 537	\$ 548	\$ 559
ECS	0.2000	\$ 130	\$ 133	\$ 135	\$ 138	\$ 141	\$ 144	\$ 148	\$ 151	\$ 154	\$ 157
HCMA	0.2146	\$ 139	\$ 142	\$ 145	\$ 149	\$ 152	\$ 155	\$ 158	\$ 162	\$ 165	\$ 168
VET RELIEF	0.0286	\$ 19	\$ 19	\$ 19	\$ 19	\$ 20	\$ 20	\$ 21	\$ 21	\$ 22	\$ 22
AAPS SINKING	1.0000	\$ 649	\$ 663	\$ 677	\$ 692	\$ 707	\$ 722	\$ 738	\$ 753	\$ 769	\$ 784
ECON DEV	0.0600	\$ 39	\$ 40	\$ 41	\$ 42	\$ 42	\$ 43	\$ 44	\$ 45	\$ 46	\$ 47
<b>Total Local Taxes (capturable)</b>	<b>32.3745</b>										
<b>Debt Millages (not capturable)</b>											
AAPS DEBT	2.4500	\$ 1,591	\$ 1,625	\$ 1,660	\$ 1,696	\$ 1,732	\$ 1,769	\$ 1,807	\$ 1,846	\$ 1,885	\$ 1,924
CITY DEBT SERV	0.1250	\$ 81	\$ 83	\$ 85	\$ 87	\$ 88	\$ 90	\$ 92	\$ 94	\$ 96	\$ 98
<b>Total Debt Millages (not capturable)</b>	<b>2.5750</b>										
<b>Total Millages</b>	<b>58.9495</b>										
<b>Total Capturable Millages</b>	<b>56.3745</b>										
<b>Total School Yearly Incremental Taxes</b>		\$ 6,232	\$ 6,367	\$ 6,504	\$ 6,644	\$ 6,786	\$ 6,932	\$ 7,080	\$ 7,231	\$ 7,386	\$ 7,544
<b>Total Non-School Yearly Incremental Taxes</b>		\$ 21,018	\$ 21,471	\$ 21,933	\$ 22,405	\$ 22,886	\$ 23,376	\$ 23,877	\$ 24,387	\$ 24,908	\$ 25,438
<b>Annual Cumulative Tax Capture</b>		\$ 27,250	\$ 27,837	\$ 28,437	\$ 29,048	\$ 29,672	\$ 30,308	\$ 30,957	\$ 31,619	\$ 32,294	\$ 32,982
<b>Total Annual Cumulative Tax Capture</b>		\$ 27,250	\$ 55,087	\$ 83,524	\$ 112,572	\$ 142,244	\$ 172,552	\$ 203,509	\$ 235,128	\$ 267,421	\$ 300,403
<b>State Revolving Fund Deposits</b>		\$ 1,948	\$ 1,990	\$ 2,032	\$ 2,076	\$ 2,121	\$ 2,166	\$ 2,213	\$ 2,260	\$ 2,308	\$ 2,356
<b>Total School Yearly Incremental Taxes Available for Capture</b>		\$ 4,285	\$ 4,377	\$ 4,471	\$ 4,568	\$ 4,666	\$ 4,766	\$ 4,868	\$ 4,972	\$ 5,078	\$ 5,184
<b>Administrative Fee Captured by BRA</b>		\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596
<b>Total Local Yearly Incremental Taxes Available for Capture</b>		\$ 18,422	\$ 18,875	\$ 19,338	\$ 19,809	\$ 20,290	\$ 20,781	\$ 21,281	\$ 21,792	\$ 22,312	\$ 22,832
<b>Total Combined Yearly Incremental Taxes Available for Capture</b>		\$ 22,707	\$ 23,252	\$ 23,809	\$ 24,377	\$ 24,956	\$ 25,546	\$ 26,149	\$ 26,763	\$ 27,390	\$ 28,028
<b>MDEQ Environmental Expenses</b>											
School Taxes		\$ 4,285	\$ 4,377	\$ 4,471	\$ 4,568	\$ 4,666	\$ 4,766	\$ 4,868	\$ 4,972	\$ 5,078	\$ 5,184
Local Taxes		\$ 18,422	\$ 18,875	\$ 19,338	\$ 19,809	\$ 20,290	\$ 20,781	\$ 21,281	\$ 21,792	\$ 22,312	\$ 22,832
<b>Reimbursement</b>											
School Taxes		\$ 60,696	\$ 56,411	\$ 52,034	\$ 47,562	\$ 42,995	\$ 38,329	\$ 33,564	\$ 28,696	\$ 23,725	\$ 18,647
Local Taxes		\$ 204,687	\$ 186,265	\$ 167,390	\$ 148,052	\$ 128,243	\$ 107,953	\$ 87,172	\$ 65,891	\$ 44,100	\$ 21,787
<b>Unreimbursed Environmental Expenses</b>		\$ 265,382	\$ 242,676	\$ 219,423	\$ 195,614	\$ 171,238	\$ 146,282	\$ 120,736	\$ 94,587	\$ 67,824	\$ 40,434
<b>MEGA Non-Environmental Expenses</b>											
School Taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Local Taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Reimbursement</b>											
School Taxes		\$ 26,984	\$ 26,984	\$ 26,984	\$ 26,984	\$ 26,984	\$ 26,984	\$ 26,984	\$ 26,984	\$ 26,984	\$ 26,984
Local Taxes		\$ 91,001	\$ 91,001	\$ 91,001	\$ 91,001	\$ 91,001	\$ 91,001	\$ 91,001	\$ 91,001	\$ 91,001	\$ 91,001
<b>Unreimbursed Non-Environmental Expenses</b>		\$ 117,985	\$ 117,985	\$ 117,985	\$ 117,985	\$ 117,985	\$ 117,985	\$ 117,985	\$ 117,985	\$ 117,985	\$ 117,985
<b>Local-Only Expenses</b>											
Local Taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Unreimbursed Environmental Expenses</b>		\$ 31,300	\$ 31,300	\$ 31,300	\$ 31,300	\$ 31,300	\$ 31,300	\$ 31,300	\$ 31,300	\$ 31,300	\$ 31,300
<b>Interest</b>											
School Taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Local Taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Reimbursement</b>											
School Taxes		\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158
Local Taxes		\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490
<b>Unreimbursed Interest on Environmental Activities</b>		\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648
<b>Local Site Remediation Revolving Fund</b>											
School Taxes (capped at \$60,696, or five years)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Local Taxes (capped at \$204,687, or five years)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

\*The base value of the Property includes Land and Real Property only no personal property was included  
\*\* Non-Homestead



Tax Increment Financing Estimates

Table 2  
544 Detroit Street Project  
Ann Arbor, Michigan

		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Land and Real Property Taxable Value Estimate*		\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800
Comm. Tax Increment Value (increase of 2%)		\$ 836,565	\$ 853,296	\$ 870,362	\$ 887,769	\$ 905,525	\$ 923,635	\$ 942,108	\$ 960,950	\$ 980,169	\$ 999,772	\$ 1,019,768
Incremental Difference (New Taxes-Existing)		\$ 785,765	\$ 802,496	\$ 819,562	\$ 836,969	\$ 854,725	\$ 872,835	\$ 891,308	\$ 910,150	\$ 929,369	\$ 948,972	\$ 968,968
<b>School Taxes - Millage</b>												
School Operating	18.0000	\$ 2,829	\$ 2,889	\$ 2,950	\$ 3,013	\$ 3,077	\$ 3,142	\$ 3,209	\$ 3,277	\$ 3,346	\$ 3,416	\$ 3,488
SET	6.0000	\$ 4,715	\$ 4,815	\$ 4,917	\$ 5,022	\$ 5,128	\$ 5,237	\$ 5,348	\$ 5,461	\$ 5,576	\$ 5,694	\$ 5,814
<b>Total School Taxes -</b>	<b>24.0000</b>											
<b>Local Taxes - Millage</b>												
CITY OPERATING	6.1682	\$ 4,847	\$ 4,950	\$ 5,055	\$ 5,163	\$ 5,272	\$ 5,384	\$ 5,498	\$ 5,614	\$ 5,733	\$ 5,853	\$ 5,977
CITY BENEFITS	2.0560	\$ 1,616	\$ 1,650	\$ 1,685	\$ 1,721	\$ 1,757	\$ 1,795	\$ 1,833	\$ 1,871	\$ 1,911	\$ 1,951	\$ 1,992
CITY REFUSE	2.4670	\$ 1,938	\$ 1,980	\$ 2,022	\$ 2,065	\$ 2,109	\$ 2,153	\$ 2,199	\$ 2,245	\$ 2,293	\$ 2,341	\$ 2,390
CITY STREETS	2.1250	\$ 1,670	\$ 1,705	\$ 1,742	\$ 1,779	\$ 1,816	\$ 1,855	\$ 1,894	\$ 1,934	\$ 1,975	\$ 2,017	\$ 2,059
CITY PARKS MAINT	1.0969	\$ 862	\$ 880	\$ 899	\$ 918	\$ 938	\$ 957	\$ 978	\$ 998	\$ 1,019	\$ 1,041	\$ 1,063
CITY PARKS ACQ	0.4779	\$ 376	\$ 384	\$ 392	\$ 400	\$ 408	\$ 417	\$ 426	\$ 435	\$ 444	\$ 454	\$ 463
MASS TRANSIT	2.0560	\$ 1,616	\$ 1,650	\$ 1,685	\$ 1,721	\$ 1,757	\$ 1,795	\$ 1,833	\$ 1,871	\$ 1,911	\$ 1,951	\$ 1,992
PUBLIC LIBRARY	1.5500	\$ 1,218	\$ 1,244	\$ 1,270	\$ 1,297	\$ 1,325	\$ 1,353	\$ 1,382	\$ 1,411	\$ 1,441	\$ 1,471	\$ 1,502
WISD OPERATING	0.0984	\$ 77	\$ 79	\$ 81	\$ 82	\$ 84	\$ 86	\$ 88	\$ 90	\$ 91	\$ 93	\$ 95
WISD SPEC EDUC	3.8761	\$ 3,046	\$ 3,111	\$ 3,177	\$ 3,244	\$ 3,313	\$ 3,383	\$ 3,455	\$ 3,528	\$ 3,602	\$ 3,678	\$ 3,756
COMM COLLEGE	3.6376	\$ 2,858	\$ 2,919	\$ 2,981	\$ 3,045	\$ 3,109	\$ 3,175	\$ 3,242	\$ 3,311	\$ 3,381	\$ 3,452	\$ 3,525
WASH COUNTY OPER	4.5493	\$ 3,575	\$ 3,651	\$ 3,728	\$ 3,808	\$ 3,888	\$ 3,971	\$ 4,055	\$ 4,141	\$ 4,228	\$ 4,317	\$ 4,408
WASH COUNTY PARK	0.7129	\$ 560	\$ 572	\$ 584	\$ 597	\$ 609	\$ 622	\$ 635	\$ 649	\$ 663	\$ 677	\$ 691
ECS	0.2000	\$ 157	\$ 160	\$ 164	\$ 167	\$ 171	\$ 175	\$ 178	\$ 182	\$ 186	\$ 190	\$ 194
HCMA	0.2146	\$ 169	\$ 172	\$ 176	\$ 180	\$ 183	\$ 187	\$ 191	\$ 195	\$ 199	\$ 204	\$ 208
VET RELIEF	0.0286	\$ 22	\$ 23	\$ 23	\$ 24	\$ 24	\$ 25	\$ 25	\$ 26	\$ 27	\$ 27	\$ 28
AAPS SINKING	1.0000	\$ 786	\$ 802	\$ 820	\$ 837	\$ 855	\$ 873	\$ 891	\$ 910	\$ 929	\$ 949	\$ 969
ECON DEV	0.0600	\$ 47	\$ 48	\$ 49	\$ 50	\$ 51	\$ 52	\$ 53	\$ 55	\$ 56	\$ 57	\$ 58
<b>Total Local Taxes (capturable)</b>	<b>32.3745</b>											
<b>Debt Millages (not capturable)</b>												
AAPS DEBT	2.4500	\$ 1,925	\$ 1,966	\$ 2,008	\$ 2,051	\$ 2,094	\$ 2,138	\$ 2,184	\$ 2,230	\$ 2,277	\$ 2,325	\$ 2,374
CITY DEBT SERV	0.1250	\$ 98	\$ 100	\$ 102	\$ 105	\$ 107	\$ 109	\$ 111	\$ 114	\$ 116	\$ 119	\$ 121
<b>Total Debt Millages (not capturable)</b>	<b>2.5750</b>											
<b>Total Millages</b>	<b>58.9495</b>											
<b>Total Capturable Millages</b>	<b>56.3745</b>											
<b>Total School Yearly Incremental Taxes</b>		\$ 7,543	\$ 7,704	\$ 7,868	\$ 8,035	\$ 8,205	\$ 8,379	\$ 8,557	\$ 8,737	\$ 8,922	\$ 9,110	\$ 9,302
<b>Total Non-School Yearly Incremental Taxes</b>		\$ 25,439	\$ 25,980	\$ 26,533	\$ 27,096	\$ 27,671	\$ 28,258	\$ 28,856	\$ 29,466	\$ 30,088	\$ 30,723	\$ 31,370
<b>Annual Cumulative Tax Capture</b>		\$ 32,982	\$ 33,684	\$ 34,401	\$ 35,131	\$ 35,877	\$ 36,637	\$ 37,412	\$ 38,203	\$ 39,010	\$ 39,833	\$ 40,672
<b>Total Annual Cumulative Tax Capture</b>		\$ 300,403	\$ 334,088	\$ 368,488	\$ 403,620	\$ 439,496	\$ 476,133	\$ 513,545	\$ 551,748	\$ 590,758	\$ 630,591	\$ 671,263
<b>State Revolving Fund Deposits</b>		\$ 2,357	\$ 2,407	\$ 2,459	\$ 2,511	\$ 2,564	\$ 2,619	\$ 2,674	\$ 2,730	\$ 2,788	\$ 2,847	\$ 2,907
<b>Total School Yearly Incremental Taxes Available for Capture</b>		\$ 5,186	\$ 5,296	\$ 5,409	\$ 5,524	\$ 5,641	\$ 5,761	\$ 5,883	\$ 6,007	\$ 6,134	\$ 6,263	\$ 6,395
<b>Administrative Fee Captured by BRA</b>		\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596	\$ 2,596
<b>Total Local Yearly Incremental Taxes Available for Capture</b>		\$ 22,843	\$ 23,385	\$ 23,937	\$ 24,501	\$ 25,076	\$ 25,662	\$ 26,260	\$ 26,870	\$ 27,492	\$ 28,127	\$ 28,774
<b>Total Combined Yearly Incremental Taxes Available for Capture</b>		\$ 28,029	\$ 28,681	\$ 29,346	\$ 30,025	\$ 30,717	\$ 31,423	\$ 32,143	\$ 32,877	\$ 33,626	\$ 34,390	\$ 35,169
<b>MDEQ Environmental Expenses</b>												
School Taxes		\$ 5,186	\$ 5,296	\$ 5,409	\$ 5,524	\$ 5,641	\$ 5,761	\$ 5,883	\$ 6,007	\$ 6,134	\$ 6,263	\$ 6,395
Local Taxes		\$ 21,787	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Reimbursement</b>												
School Taxes		\$ 13,461	\$ 8,164	\$ 2,755	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Local Taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Unreimbursed Environmental Expenses</b>		\$ 13,461	\$ 8,164	\$ 2,755	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>MEGA Non-Environmental Expenses</b>												
School Taxes		\$ -	\$ -	\$ -	\$ 2,769	\$ 5,641	\$ 5,761	\$ 5,883	\$ 6,007	\$ 6,134	\$ 6,263	\$ 6,395
Local Taxes		\$ 1,056	\$ 23,385	\$ 23,937	\$ 24,501	\$ 25,076	\$ 25,662	\$ 26,260	\$ 26,870	\$ 27,492	\$ 28,127	\$ 28,774
<b>Reimbursement</b>												
School Taxes		\$ 26,984	\$ 26,984	\$ 26,984	\$ 24,216	\$ 18,574	\$ 12,814	\$ 6,931	\$ 924	\$ -	\$ -	\$ -
Local Taxes		\$ 89,945	\$ 66,560	\$ 42,623	\$ 18,122	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Unreimbursed Non-Environmental Expenses</b>		\$ 116,929	\$ 93,544	\$ 69,607	\$ 42,337	\$ 18,574	\$ 12,814	\$ 6,931	\$ 924	\$ -	\$ -	\$ -
<b>Local-Only Expenses</b>												
Local Taxes		\$ -	\$ -	\$ -	\$ -	\$ 6,954	\$ 24,346	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Unreimbursed Environmental Expenses</b>		\$ 31,300	\$ 31,300	\$ 31,300	\$ 31,300	\$ 24,346	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Interest</b>												
School Taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,210	\$ 6,263	\$ 4,685
Local Taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,316	\$ 26,260	\$ 26,870	\$ 44	\$ -	\$ -
<b>Reimbursement</b>												
School Taxes		\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 16,158	\$ 10,948	\$ 4,685	\$ -
Local Taxes		\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490	\$ 54,490	\$ 53,174	\$ 26,914	\$ 44	\$ -	\$ -	\$ -
<b>Unreimbursed Interest on Environmental Activities</b>		\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648	\$ 70,648	\$ 69,332	\$ 43,072	\$ 16,202	\$ 10,948	\$ 4,685	\$ -
<b>Local Site Remediation Revolving Fund</b>												
School Taxes (capped at \$60,696, or five years)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,710
Local Taxes (capped at \$204,687, or five years)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,449	\$ 28,127	\$ 28,774
<b>Total</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,449	\$ 28,127	\$ 30,485



		2034	2035	2036	2037	2038	
Land and Real Property Taxable Value Estimate*		\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	\$ 50,800	
Comm. Tax Increment Value (increase of 2%)		\$ 1,040,163	\$ 1,060,966	\$ 1,082,186	\$ 1,103,829	\$ 1,125,906	
Incremental Difference (New Taxes-Existing)		\$ 989,363	\$ 1,010,166	\$ 1,031,386	\$ 1,053,029	\$ 1,075,106	
<b>School Taxes - Millage</b>							
School Operating	18.0000	\$ 3,562	\$ 3,637	\$ 3,713	\$ 3,791	\$ 3,870	\$ 76,144
SET	6.0000	\$ 5,936	\$ 6,061	\$ 6,188	\$ 6,318	\$ 6,451	\$ 126,907
<b>Total School Taxes -</b>	<b>24.0000</b>						<b>\$ 203,052</b>
<b>Local Taxes - Millage</b>							
CITY OPERATING	6.1682	\$ 6,103	\$ 6,231	\$ 6,362	\$ 6,495	\$ 6,631	\$ 130,465
CITY BENEFITS	2.0560	\$ 2,034	\$ 2,077	\$ 2,121	\$ 2,165	\$ 2,210	\$ 43,487
CITY REFUSE	2.4670	\$ 2,441	\$ 2,492	\$ 2,544	\$ 2,598	\$ 2,652	\$ 52,180
CITY STREETS	2.1250	\$ 2,102	\$ 2,147	\$ 2,192	\$ 2,238	\$ 2,285	\$ 44,946
CITY PARKS MAINT	1.0969	\$ 1,085	\$ 1,108	\$ 1,131	\$ 1,155	\$ 1,179	\$ 23,201
CITY PARKS ACQ	0.4779	\$ 473	\$ 483	\$ 493	\$ 503	\$ 514	\$ 10,108
MASS TRANSIT	2.0560	\$ 2,034	\$ 2,077	\$ 2,121	\$ 2,165	\$ 2,210	\$ 43,487
PUBLIC LIBRARY	1.5500	\$ 1,534	\$ 1,566	\$ 1,599	\$ 1,632	\$ 1,666	\$ 32,784
WISD OPERATING	0.0984	\$ 97	\$ 99	\$ 101	\$ 104	\$ 106	\$ 2,081
WISD SPEC EDUC	3.8761	\$ 3,835	\$ 3,916	\$ 3,998	\$ 4,082	\$ 4,167	\$ 81,984
COMM COLLEGE	3.6376	\$ 3,599	\$ 3,675	\$ 3,752	\$ 3,831	\$ 3,911	\$ 76,940
WASH COUNTY OPER	4.5493	\$ 4,501	\$ 4,596	\$ 4,692	\$ 4,791	\$ 4,891	\$ 96,223
WASH COUNTY PARK	0.7129	\$ 705	\$ 720	\$ 735	\$ 751	\$ 766	\$ 15,079
ECS	0.2000	\$ 198	\$ 202	\$ 206	\$ 211	\$ 215	\$ 4,230
HCMA	0.2146	\$ 212	\$ 217	\$ 221	\$ 226	\$ 231	\$ 4,539
VET RELIEF	0.0286	\$ 28	\$ 29	\$ 29	\$ 30	\$ 31	\$ 605
AAPS SINKING	1.0000	\$ 989	\$ 1,010	\$ 1,031	\$ 1,053	\$ 1,075	\$ 21,151
ECON DEV	0.0600	\$ 59	\$ 61	\$ 62	\$ 63	\$ 65	\$ 1,269
<b>Total Local Taxes (capturable)</b>	<b>32.3745</b>						<b>\$ 684,760</b>
<b>Debt Millages (not capturable)</b>							
AAPS DEBT	2.4500	\$ 2,424	\$ 2,475	\$ 2,527	\$ 2,580	\$ 2,634	
CITY DEBT SERV	0.1250	\$ 124	\$ 126	\$ 129	\$ 132	\$ 134	
<b>Total Debt Millages (not capturable)</b>	<b>2.5750</b>						
<b>Total Millages</b>	<b>58.9495</b>						
<b>Total Capturable Millages</b>	<b>56.3745</b>						
<b>Total School Yearly Incremental Taxes</b>		\$ 9,498	\$ 9,698	\$ 9,901	\$ 10,109	\$ 10,321	\$ 203,052
<b>Total Non-School Yearly Incremental Taxes</b>		\$ 32,030	\$ 32,704	\$ 33,391	\$ 34,091	\$ 34,806	\$ 684,760
<b>Annual Cumulative Tax Capture</b>		\$ 41,528	\$ 42,401	\$ 43,292	\$ 44,200	\$ 45,127	\$ 887,811
<b>Total Annual Cumulative Tax Capture</b>		\$ 712,791	\$ 755,192	\$ 798,484	\$ 842,684	\$ 887,811	
<b>State Revolving Fund Deposits</b>		\$ 2,968	\$ 3,030	\$ 3,094	\$ 3,159	\$ 3,225	
<b>Total School Yearly Incremental Taxes Available for Capture</b>		\$ 6,530	\$ 6,667	\$ 6,807	\$ 6,950	\$ 7,096	
<b>Administrative Fee Captured by BRA</b>		\$ 2,596	\$ 2,596				\$ 57,102
<b>Total Local Yearly Incremental Taxes Available for Capture</b>		\$ 29,435	\$ 30,108	\$ 33,391	\$ 34,091	\$ 34,806	\$ 627,658
<b>Total Combined Yearly Incremental Taxes Available for Capture</b>		\$ 35,964	\$ 36,775	\$ 40,198	\$ 41,041	\$ 41,902	\$ 767,256
<b>MDEQ Environmental Expenses</b>							
School Taxes							\$ 60,696
Local Taxes							\$ 204,687
<b>Reimbursement</b>							
School Taxes							
Local Taxes							
<b>Unreimbursed Environmental Expenses</b>							\$ -
<b>MEGA Non-Environmental Expenses</b>							
School Taxes							\$ 26,984
Local Taxes							\$ 91,001
<b>Reimbursement</b>							
School Taxes							
Local Taxes							
<b>Unreimbursed Non-Environmental Expenses</b>							
<b>Local-Only Expenses</b>							
Local Taxes							\$ 31,300
<b>Unreimbursed Environmental Expenses</b>							
<b>Interest</b>							
School Taxes							\$ 16,158
Local Taxes							\$ 54,490
<b>Reimbursement</b>							
School Taxes							
Local Taxes							
<b>Unreimbursed Interest on Environmental Activities</b>							
<b>Local Site Remediation Revolving Fund</b>							
School Taxes (capped at \$60,696, or five years)		\$ 6,530	\$ 6,667	\$ 6,807	\$ 6,950	\$ 7,096	\$ 35,760
Local Taxes (capped at \$204,687, or five years)		\$ 29,435	\$ 6,811				\$ 120,595
<b>Total</b>		\$ 35,964	\$ 13,478	\$ 6,807	\$ 6,950	\$ 7,096	\$ 156,355



**Attachment A**  
**Eligible Property Legal Description**

**544 Detroit Street, Ann Arbor**

**Eligible Property Legal Description**

LOT 127 ASSESSORS PLAT NO 29

**Attachment B**  
**Resolution(s) Approving Combined Brownfield Plan**

**Attachment C**  
**Development Reimbursement Agreement**



**Attachment D**  
**Supplemental Materials**

Project Name	544 Detroit
Current Date	5/20/2014
MEGA Principle Eligible Activities Amount	
DEQ Principle Eligible Activities Amount	\$265,383
Interest %	5.00%
Number of years to pay off EA	9
1st year of tax capture (1/1/20XX)	1/1/2014
Is Interest Capped? Y/N	Y
If Yes, Interest Cap Amt, If No enter \$10,000,000	\$10,000,000

## Actual Allowed Interest Calculation MEGA & DEQ

544 Detroit 5/20/2014

MEGA EA Amount	DEQ EA Amount	Totals
\$0.00	\$265,383.00	\$265,383.00
0.00%	100.00%	100.00%

MEGA & DEQ Eligible Activity (EA) Amount	\$265,383.00
MEGA & DEQ Allowed Annual Interest Rate	5.00 %
Capture Period for MEGA & DEQ EA's with Interest (Total # of years)	9
Number of payments per year	1
Start date of Capture on MEGA and DEQ EAs	1/1/2014

In accordance to the ratio of MEGA vs DEQ EA's Calculated Allowed Interest		
MEGA Allowed Interest	DEQ Allowed Interest	Totals
\$0.00	\$70,647.80	\$70,647.80
MEGA & DEQ EA's and Interest Totals (A)		
MEGA EA's and Interest Total	DEQ EA's and Interest Total	Totals
\$0.00	\$336,030.80	\$336,030.80
TIF Summary		
Scheduled payment	\$ 37,336.76	NOTE: (A) Does not include BP/WP Prep for MEGA/DEQ or MEGA/DEQ Rvw Cost
Scheduled number of payments	9	
<b>MEGA &amp; DEQ Allowed Interest</b>	<b>\$ 70,647.80</b>	
Actual Allowed Interest (MEGA & DEQ or BRA Capped Interest, whichever is less)	<b>\$70,647.80</b>	

**Real Estate ROI Forecaster - Input Dashboard**

Property Name: **544 Detroit**

Property Address: **544 Detroit St.**  
**Ann Arbor, MI**

**CITY OF ANN ARBOR**  
Real Estate Return on Investment Analysis

**Property Purchase Costs**

Value

Market Value: **\$ 1,526,018.00** In Mortgage?

Purchase Price: **\$ 1,526,018.00** In Mortgage?

Other:

Total Cost: **\$ 1,526,018.00**

**Building & Furnishings Values**

Buildings as a % of Cost: **89.9%**

Building Cost: **\$ 1,173,968.00**

Furnishings & Fixtures:

**Rental Income**

Use Rent Roll Sheet?  Yes

Rent per Month: **\$ -**

Vacancy Rate: **5.0%**

1st Year Annual Rent: **\$ -**

**Purchase Cost Breakdown**

Cost

Land: **\$ 153,400.00**

Building: **\$ 725,000.00**

Tenant Improvements: **\$ 35,000.00**

Site Costs: **\$ 413,968.00**

Soft Costs: **\$ 154,650.00**

Leasing Commissions: **\$ 4,000.00**

Carrying Costs: **\$ 40,000.00**

Total Initial Expense: **\$ 1,526,018.00** In Mortgage?

Brownfield TIF: **\$ 414,667.00**

**Recurring Annual Expenses**

Cost

Utility Fees: **\$ 5,000.00**

Cleaning Fees: **\$ 1,200.00**

Association Fees:

Insurance Fees: **\$ 1,000.00**

Security Service Fees:

Maintenance Fees: **\$ 1,000.00**

Landscaping Fees: **\$ 1,000.00**

Mortgage Insurance:

Property Taxes: **\$ 5,900.00**

Other Expenses:

Management Fees: **\$ 1,250.00**

Total: **\$ 16,350.00**

Management Fee %:

1st Year Management Fee: **\$ -**

**Mortgage Structure**

Initial Cash Investment: **\$ 280,000.00**

Balance of Purchase: **\$ 1,246,018.00**

Fees Included in Mortgage:

Total to be Financed: **\$ 1,246,018.00**

Use Mortgage Builder Sheet?  Yes

Amount in 1st Mortgage: **\$ 1,246,018.00**

1st Mortgage Rate (fixed): **5.50%**

1st Mortgage Term (years): **20**

Additional Monthly Payment:

Principal & Interest:

Balance in 2nd Mortgage:

2nd Mortgage Rate (fixed):

2nd Mortgage Term (years):

Additional Monthly Payment:

Principal & Interest:

**Capital Improvements**

Cost In Mortgage?

Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	
Year 7	
Year 8	
Year 9	
Year 10	
Year 11	
Year 12	
Year 13	
Year 14	
Year 15	
Year 16	
Year 17	
Year 18	
Year 19	
Year 20	
Year 21	
Year 22	
Year 23	
Year 24	
Year 25	
Year 26	
Year 27	
Year 28	
Year 29	
Year 30	

**Unique Expenses**

Cost

Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	
Year 7	
Year 8	
Year 9	
Year 10	
Year 11	
Year 12	
Year 13	
Year 14	
Year 15	
Year 16	
Year 17	
Year 18	
Year 19	
Year 20	
Year 21	
Year 22	
Year 23	
Year 24	
Year 25	
Year 26	
Year 27	
Year 28	
Year 29	
Year 30	

**Economic & Tax Assumptions**

Growth Rates & Discount Rate

Annual Inflation Rate: **2.00%**

Annual Capital Growth Rate:

Annual Rental Growth Rate: **3.00%**

NPV Discount Rate:

Building Depreciation Rate: **2.56%**

Straight-Line Method:

Declining Balance Method:

Fixtures Depreciation Rate: **10.00%**

Straight-Line Method:

Declining Balance Method:

Income Tax Brackets

Upper End	Rate
Federal pass through est.	28.00%
MI est.	4.25%

**Sale of Property Options**

Sell Property?  Yes

Like-Kind Exchange?  No

Year of Sale - No Intentions: **Year 10** For Value Only

Sale Price: **\$ 462,586.82**

**\$ 462,586.82**

**Costs to Sell Property**

Cost

Commission Fees: **\$ 27,755.21**

Administration Fees: **\$ 3,469.40**

Title Fees: **\$ 1,156.47**

Other Expenses: **\$ 4,625.87**

Total Costs to Sell: **\$ 37,006.95**

**Capital Gain Tax Rate**

Capital Gain Tax Rate: **19.25%**

Depr. Recapture Tax Rate: **29.25%**

Name: **544 Detroit**  
 Address: **544 Detroit**  
**Ann Arbor, MI**

Purchase Price	\$ 1,526,018.00	Loan Terms	Fully Amortizing
Closing Costs		Mortgage Type	
Total Cost	\$ 1,526,018.00	Total Financed	\$ 1,246,018.00
Initial Expenses		1st Year Rental Income	\$ -
Recurring Annual Expenses		Annual Expense Inflation Rate	2.00%
Annual Management Fee		Annual Rent Growth Rate	3.00% Market rate at renewal
Initial Cash Investment	\$ 280,000.00	Annual Capital Growth Rate	

Property Equity	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Capital Appreciation										
Capital Improvements										
Equity	\$ 280,000.00									

Net Income From Operations	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Rental Income	\$ -	\$ 16,000.00	\$ 16,480.00	\$ 16,974.40	\$ 17,483.63	\$ 18,008.14	\$ 18,548.39	\$ 19,104.84	\$ 19,677.98	\$ 20,268.32
Operating Expenses		\$ 16,350.00	\$ 16,677.00	\$ 17,010.54	\$ 17,350.75	\$ 17,697.77	\$ 18,051.72	\$ 18,412.76	\$ 18,781.01	\$ 19,156.63
Building Depreciation Exp		\$ 4,905.65	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86
Debt Service		\$ 110,000.58	\$ -							
Less Principle Pymt in Debt Svc.		(\$37,700.38)	\$ -							
Total Expenses	\$ -	\$ 93,555.84	\$ 23,217.86	\$ 23,551.40	\$ 23,891.61	\$ 24,238.63	\$ 24,592.58	\$ 24,953.62	\$ 25,321.87	\$ 25,697.49
Income Before Tax	\$ -	\$ (77,555.84)	\$ (6,737.86)	\$ (6,577.00)	\$ (6,407.98)	\$ (6,230.49)	\$ (6,044.20)	\$ (5,848.78)	\$ (5,643.89)	\$ (5,429.17)
Income Tax			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Operating Income	\$ -	\$ (77,555.84)	\$ (6,737.86)	\$ (6,577.00)	\$ (6,407.98)	\$ (6,230.49)	\$ (6,044.20)	\$ (5,848.78)	\$ (5,643.89)	\$ (5,429.17)

Cash Flow	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Property Sale		\$ 1,350,000.00								
Loan Payoff		\$ 1,314,548.99								
Selling Costs		\$ 37,006.95								
Cap Gain Inc. Taxes										
Net Cash Inflow from Prop. Sales	\$ -	\$ (1,555.94)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvements										
Depreciation	\$ -	\$ 4,905.65	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86
Principal Payment - 1st Mtg	\$ -	\$ 37,700.38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Principal Payment - 2nd Mtg										
Total Mortgage Payments	\$ -	\$ 37,700.38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
After-Tax Cash Flow	\$ -	\$ (111,906.51)	\$ (197.00)	\$ (36.14)	\$ 132.88	\$ 310.38	\$ 496.66	\$ 692.08	\$ 896.97	\$ 1,111.69
Income Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Gain & Depr Recapt Tax										
Pre-Tax Cash Flow	\$ -	\$ (111,906.51)	\$ (197.00)	\$ (36.14)	\$ 132.88	\$ 310.38	\$ 496.66	\$ 692.08	\$ 896.97	\$ 1,111.69
<b>Initial Investment</b>										
Pre-Tax Cash-on-Cash Return	\$ (280,000.00)	\$ -	\$ (111,906.51)	\$ (197.00)	\$ (36.14)	\$ 132.88	\$ 310.38	\$ 496.66	\$ 692.08	\$ 896.97
After-Tax Cash-on-Cash Return	\$ (280,000.00)	\$ -	\$ (111,906.51)	\$ (197.00)	\$ (36.14)	\$ 132.88	\$ 310.38	\$ 496.66	\$ 692.08	\$ 896.97

Internal ROR-Pre-Tax Cash Flow	WITHOUT BROWNFIELD	0.79%
Internal ROR-After-Tax Cash Flow	WITHOUT BROWNFIELD	0.26%

TIF Balance	\$ 485,315.00	\$ 462,608.30	\$ 439,355.96	\$ 415,547.06	\$ 391,170.47	\$ 366,214.85	\$ 340,668.60	\$ 314,519.92	\$ 287,756.75	\$ 260,366.81
Expected TIF per annum		\$22,707	\$23,252	\$23,809	\$24,377	\$24,956	\$25,546	\$26,149	\$26,763	\$27,390

	Initial Investment	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Pre-Tax Cash-on-Cash Return	\$ (280,000.00)	\$ -	\$ (89,199.81)	\$ 23,055.34	\$ 23,772.76	\$ 24,509.47	\$ 25,266.00	\$ 26,042.91	\$ 26,840.76	\$ 27,660.14	\$ 28,501.63
After-Tax Cash-on-Cash Return	\$ (280,000.00)	\$ -	\$ (89,199.81)	\$ 23,055.34	\$ 23,772.76	\$ 24,509.47	\$ 25,266.00	\$ 26,042.91	\$ 26,840.76	\$ 27,660.14	\$ 28,501.63

Internal ROR-Pre-Tax Cash Flow	WITH BROWNFIELD	6.60%
Internal ROR-After-Tax Cash Flow	WITH BROWNFIELD	6.32%

ecaster - Investment Detail

11	12	13	14	15	16	17	18	19	20	21	22
\$ 20,876.37	\$ 21,502.66	\$ 22,147.74	\$ 22,812.17	\$ 23,496.54	\$ 24,201.44	\$ 24,927.48	\$ 25,675.30	\$ 26,445.56	\$ 27,238.93	\$ 28,056.10	
\$ 19,539.76	\$ 19,930.56	\$ 20,329.17	\$ 20,735.75	\$ 21,150.47	\$ 21,573.48	\$ 22,004.95	\$ 22,445.05	\$ 22,893.95	\$ 23,351.83	\$ 23,818.86	
\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	
\$ 26,080.63	\$ 26,471.42	\$ 26,870.03	\$ 27,276.61	\$ 27,691.33	\$ 28,114.34	\$ 28,545.81	\$ 28,985.91	\$ 29,434.81	\$ 29,892.69	\$ 30,359.72	
\$ (5,204.25)	\$ (4,968.76)	\$ (4,722.29)	\$ (4,464.44)	\$ (4,194.79)	\$ (3,912.90)	\$ (3,618.33)	\$ (3,310.60)	\$ (2,989.25)	\$ (2,653.76)	\$ (2,303.63)	
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
\$ (5,204.25)	\$ (4,968.76)	\$ (4,722.29)	\$ (4,464.44)	\$ (4,194.79)	\$ (3,912.90)	\$ (3,618.33)	\$ (3,310.60)	\$ (2,989.25)	\$ (2,653.76)	\$ (2,303.63)	
										\$ 462,586.82	
										\$ -	
										\$ 37,006.95	
										\$ 45,601.89	
										\$ 379,977.99	
\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ 6,540.86	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 1,336.61	\$ 1,572.10	\$ 1,818.57	\$ 2,076.42	\$ 2,346.07	\$ 2,627.96	\$ 2,922.53	\$ 3,230.26	\$ 3,551.61	\$ 3,887.10	\$ 384,215.23	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,601.89	\$ -
\$ 1,336.61	\$ 1,572.10	\$ 1,818.57	\$ 2,076.42	\$ 2,346.07	\$ 2,627.96	\$ 2,922.53	\$ 3,230.26	\$ 3,551.61	\$ 3,887.10	\$ 429,817.11	\$ -
\$ 1,336.61	\$ 1,572.10	\$ 1,818.57	\$ 2,076.42	\$ 2,346.07	\$ 2,627.96	\$ 2,922.53	\$ 3,230.26	\$ 3,551.61	\$ 3,887.10	\$ 429,817.11	\$ -
\$ 1,336.61	\$ 1,572.10	\$ 1,818.57	\$ 2,076.42	\$ 2,346.07	\$ 2,627.96	\$ 2,922.53	\$ 3,230.26	\$ 3,551.61	\$ 3,887.10	\$ 384,215.23	\$ -
\$ 232,337.57	\$ 203,656.23	\$ 174,309.76	\$ 144,284.84	\$ 113,567.92	\$ 82,145.16	\$ 50,002.42	\$ 17,125.33	\$ 10,947.82	\$ 4,684.60	\$ (0.31)	
\$28,029	\$28,681	\$29,346	\$30,025	\$30,717	\$31,423	\$32,143	\$32,877	\$6,178	\$6,263	\$4,685	
\$ 29,365.85	\$ 30,253.44	\$ 31,165.05	\$ 32,101.33	\$ 33,062.99	\$ 34,050.73	\$ 35,065.26	\$ 36,107.35	\$ 9,729.12	\$ 10,150.32	\$ 434,502.02	\$ -
\$ 29,365.85	\$ 30,253.44	\$ 31,165.05	\$ 32,101.33	\$ 33,062.99	\$ 34,050.73	\$ 35,065.26	\$ 36,107.35	\$ 9,729.12	\$ 10,150.32	\$ 388,900.14	\$ -