



Dow Sustainability Fellowship Program Project 2013

CLEARED FOR DEVELOPMENT?

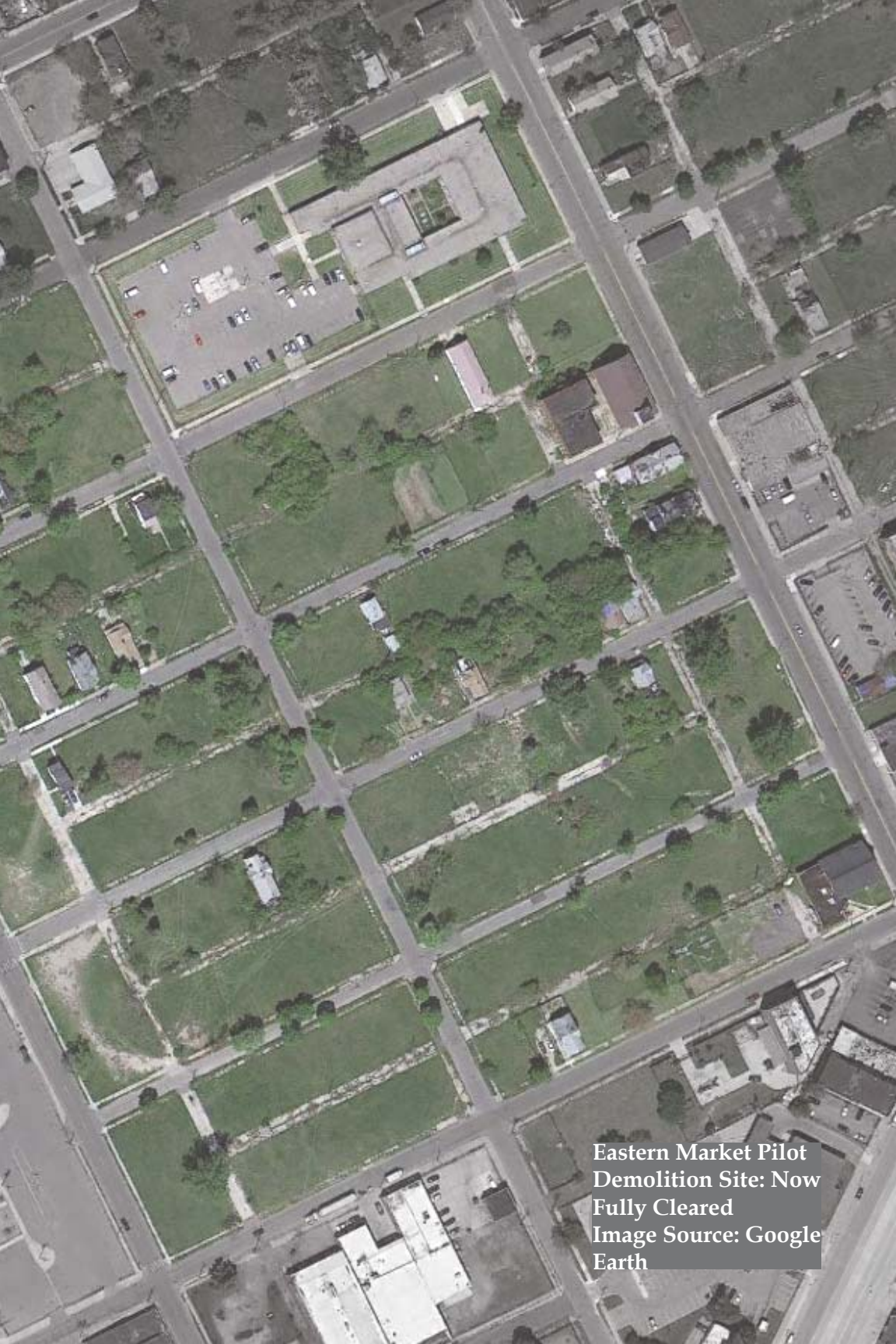
*Phase I Environmental Assessment and
Precedent Proposals*

*Claire KANG
Katherine KNAPP
Nolan SANDBERG
Julia STUEBING*

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Eastern Market Pilot
Demolition Site: Now
Fully Cleared
Image Source: Google
Earth

ACKNOWLEDGMENTS

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We thank the following individuals for their time, knowledge, and kindness:

Dan Carmody, Eastern Market Corporation; Gary Corsi, People's Restaurant Equipment Company, Inc.; Charles Cross, Detroit-Mercy University; Rick Foster, Professor at Michigan State University; Nancy Garvin, Detroit Edison Public School Academy; Frank Germack, Germack Pistacio Co.; Eric Grosinger, Kaps Wholesale; Jessica Kanalos, Detroit Economic Growth Corporation; Kit McCullough, University of Michigan; Jim Pellerito, Pellerito Foods, Inc.; Virginia Stanard, Detroit-Mercy University; and Gary Wozniak, RecoveryPark.

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Looking Toward
Downtown

Image Source:
<http://blog.thedetroithub.com/2013/02/15/fighting-blight-in-your-pjs-can-detroits-vacant-structures-be-crowdfunded-away/>





Image Source:
http://www.mlive.com/news/detroit/index.ssf/2013/02/detroit_blight_authority_cuts.html



Abstract

This report seeks to understand the multi-dimensional nature of sustainability. We focus specifically on the environmental, social, and economic dimensions involved in redeveloping a 10-block Detroit neighborhood.

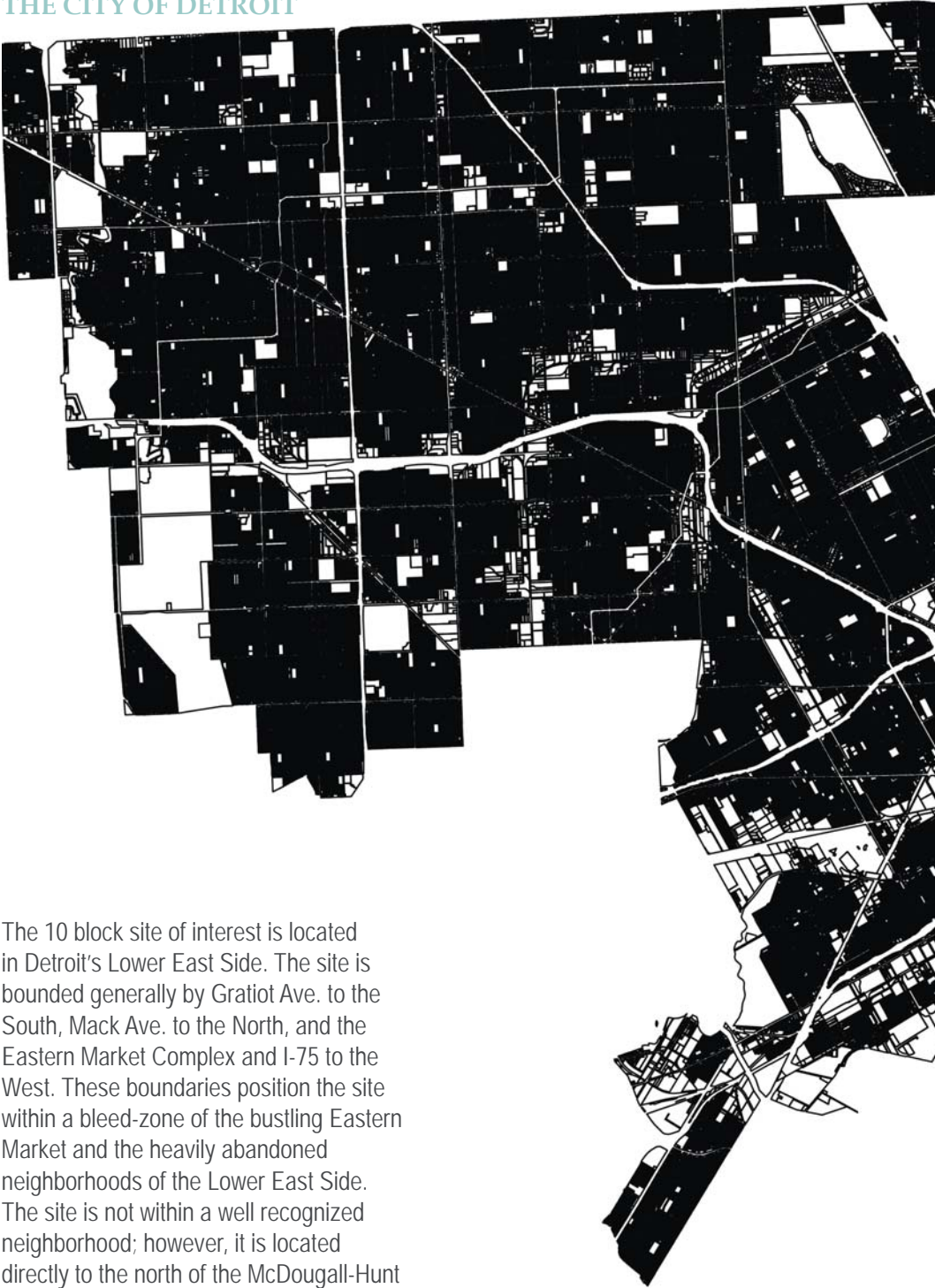
We created this book in an effort to build relationships with and among stakeholders and academics, and contribute to the dialogue about sustainable development in Detroit. By thinking critically and mindfully about sustainability and its implications for the future, we hope to apply our cross-disciplinary knowledge to developing solutions in Michigan.

Our research has three parts: first, we explored the background and interests of stakeholders in the development of the property; second, we conducted a Phase I Environmental Site Assessment simulation; and third, we examined existing development proposals and analyzed the extent to which these proposals meet the interests of stakeholders and benefit human health and the environment.

Contexts and Interviews

Detroit Blight Authority
Stakeholder Interests
Development Challenges
Brownfield Opportunity
Detroit Future City Plan

POSITION OF SITE WITHIN THE CITY OF DETROIT



The 10 block site of interest is located in Detroit's Lower East Side. The site is bounded generally by Gratiot Ave. to the South, Mack Ave. to the North, and the Eastern Market Complex and I-75 to the West. These boundaries position the site within a bleed-zone of the bustling Eastern Market and the heavily abandoned neighborhoods of the Lower East Side. The site is not within a well recognized neighborhood; however, it is located directly to the north of the McDougall-Hunt neighborhood.



10 Block Site of Interest Map
City of Detroit

Claire KANG Katherine KNAPP Nolan SANDBERG Julia STUEBING

DETROIT BLIGHT AUTHORITY

In February 2013, the Detroit Blight Authority razed eight residential structures and two non-residential structures, which were church buildings. The Detroit Blight Authority decided to focus on blight because of public safety, including the risk of fires in abandoned areas. According to Brian Farkas, the areas in which they've worked have seen significant decreased crime. The Detroit Blight Authority first found out who had legal title to the land, and then had neighbors sign a right of entry. In addition to razing structural blight such as abandoned houses and churches, the Blight Authority cleared non-structural blight, such as brush. Said Mr. Farkas, "if you can't see between blocks, then its prime for illegal dumping."

The Blight Authority, which has marketed itself as being cheaper and better for development than past efforts to clear blight, clusters its activity in order to bring down the marginal cost of all of its activities. It had initially considered cutting costs by not removing basements. However, after learning that the practice

was not commonly used, the Detroit Blight Authority ultimately removed the basements as well. The areas where the home foundations once stood are now filled with soil. "The last thing we want to do is create an environmental hazard that's going to come back and bite us and our partners." The Detroit Blight Authority's partners include, Office of the Mayor of Detroit, The Kresge Foundation, DTE Energy, Honigman Miller Schwartz and Cohn LLP, PWC, American Waste & Recycling, and Michigan Caterpillar.¹ "We're not looking to cut corners," said Mr. Farkas.

When asked about his long-term goal for the land, Mr. Farkas explained, "our goal is to keep our heads down, and stay in our lane." The Detroit Blight Authority aims to "eliminate blight in the shortest amount of time, at lowest cost possible, without endangering public health or public safety." "It's up to the people in the neighborhood as to the long term use of the land," said Mr. Farkas; "they have a stake in it."

STAKEHOLDER INTERESTS

Stakeholders, glad to see blight cleared from the site, have identified three major interests with respect to development of the newly cleared ten-block area: bringing people into the neighborhood, assurance that the area will be kept up, and infrastructure. Certain business owners also identified specific needs for parking or access for commercial vehicles.

Bringing people into the area is a major interest. "Gratiot is supposed to be the gateway to downtown," said Gary Corsi, owner of People's Restaurant Equipment Company, which is approaching its 100th birthday. ² "You could pretty much find anything you want on Gratiot, when things were good," said Mr. Corsi. ³ But the area has been deteriorating. A lot of businesses left. Ideas mentioned by business owners include a housing development or introducing big box stores, similar to the way that Meijer moved in at 8 Mile Road and Woodward Avenue. "If more people would come down here, then a lot of business would come back," said Mr. Corsi. Frank Germack, owner of Germack Pistacio Co., which began in 1924, agreed: first and foremost, the area needs to be used. ⁴

Unanimously, stakeholders want the site that was cleared to be kept up. Several business owners stated that the neighborhood is relatively safe and that they have not experienced security issues. At the same time, however, people agree that clearing the brush would make the area safer. In particular, business

owners mentioned keeping out high weeds. "That's a chance for people to throw garbage, throw tires away," ⁵ said Mr. Corsi. Therefore, maintenance is needed. Specific ideas that accomplish this end, in addition to the proposals already mentioned, include an athletic complex for Detroit Edison Public School Academy, farming, and livestock grazing. To realize its dream for a new "gateway to the Eastern Market," Detroit Edison Public School Academy has been working with the Eastern Market Corporation, the City of Detroit, and community partners, including Greening of Detroit and RecoveryPark. ⁶ Plans for athletic and outdoor education complexes are included later in this Report. RecoveryPark had been interested in expanding its farm plans to the area, however it is no longer pursuing that option because the area is so sought-after. No specific proposals for livestock were mentioned.

Infrastructure was another commonly mentioned interest. Improved lighting, sidewalk repairs, and trash pick up were mentioned. Jim Pellerito, owner of Pellerito Foods, Inc. noted that while there is lighting in the Eastern Market area, the surrounding blocks lack sufficient streetlight. ⁷ "That's been a complaint all along," said Mr. Pellerito. Frank Germack, of Germack Pistacio Company described getting quality service and data lines into the area as "a tricky time," and that better service would be helpful. ⁸

DEVELOPMENT CHALLENGES

Obtaining title, communicating among stakeholders, and funding are challenges to development of the area cleared by the Detroit Blight Authority. In order to develop the property, a developer will need to obtain title to the entire area. However, parties have encountered difficulty in finding out who has title to each of the lots. Communication and combating misinformation is also a challenge in the development process. Therefore, education is needed. A developer may benefit by educating the stakeholders about proposals in order to gain its support and meet its interests. Finally,

funding will be needed for any developer that goes forward with the project.

Detroit Edison Public School Academy has already obtained a \$250,000 grant in order to begin exploring a plan to build athletic fields.⁹ Many stakeholders have expressed concern that the City of Detroit may lack the capacity to support development with infrastructure improvements, due to its lack of funds and preoccupation with the current bankruptcy proceedings.

ALIGNING ECONOMIC AND ENVIRONMENTAL INTERESTS

Environmental sustainability is being studied in great detail by academics around the state. Dr. Rick Foster, Co-Director of MetroFood at Michigan State University, set out a framework of three elements that can be used to talk about land use in Detroit: food production, energy production, and a return to nature through the creation of green spaces.¹⁰

"I also think of green spaces in an economic sense," said Dr. Foster. Regarding green spaces, Dr. Foster cited a goal of creating a scarcity of homes to increase home value, which is one way to increase family wealth.

BROWNFIELD OPPORTUNITY

A developer of the property may benefit from the Brownfield Redevelopment Program administered by the Detroit Economic Growth Corporation. Under Public Act 381 of 1996, developers of contaminated, blighted, or functionally obsolete properties in Detroit may be eligible for Tax Increment Financing reimbursement for environmental and non-environmental activities. To qualify for the program,

The property must be a facility as defined by Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) and is

*property for which eligible activities are identified under a brownfield plan that was used or is currently used for commercial, industrial, public, or residential purposes, including personal property located on the property, to the extent included in the brownfield plan and includes parcels that are adjacent or contiguous to that property if the development of those parcels is estimated to increase the captured taxable value of that property.*¹¹

A complete definition of eligible property can be found in Section 2(n) of Act 381 at: [http://www.legislature.mi.gov/\(S\(dgdxog55wekinm55wdxnpa2c\)\)/mileg.aspx?page=getObject&objectName=mc1-125-2652](http://www.legislature.mi.gov/(S(dgdxog55wekinm55wdxnpa2c))/mileg.aspx?page=getObject&objectName=mc1-125-2652).

UNAVAILABLE PARTIES

Team Personnel attempted to reach City Personnel, St. Paul African Methodist Episcopal Church, and residents, but they were unavailable.

Communication is key to the success of any endeavor. The unavailability of these parties presents a challenge to any development plan going forward.

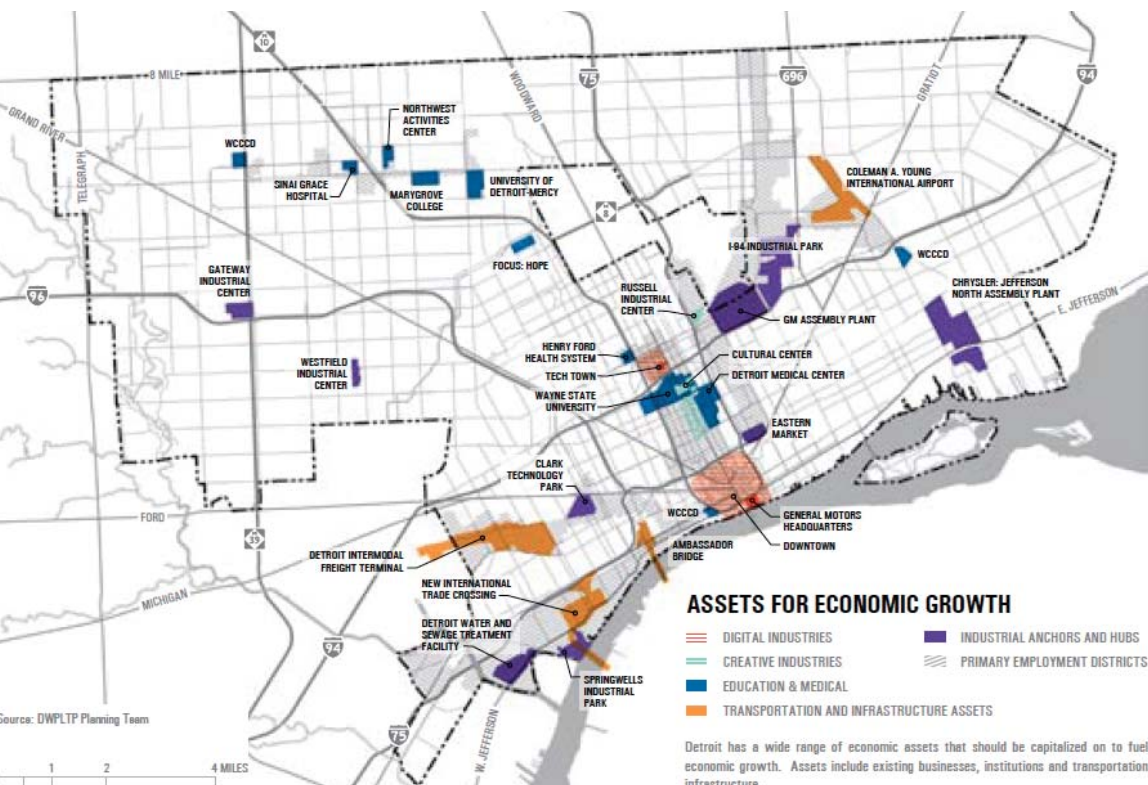
DETROIT FUTURE CITY PLAN

The Detroit Future City Plan is a landmark plan in its scope of issues considered and its production of a long-term vision for the City of Detroit. The Plan sets forth ambitious visions and goals for the City of Detroit, especially when taking into consideration the context of the current city. It is in the midst of the City's Chapter 9 bankruptcy filing that the visions for the future Detroit seem ever more groundbreaking. And while the Plan may not be implemented tomorrow, it is valuable in showing the goals and visions that the community has for their future. For this project the Plan was extremely beneficial in that it showed what environmental, social, and economic concerns should be analyzed when planning for the future of the study area.

Within the Detroit Future City Plan the areas of City Systems, Economic Growth, Land Use, Neighborhoods, and Public Land are considered.¹² This study looked

into the implications of each of these sections for the 10 block site of interest. In doing so, it became clear that the site's future is not clearly determined within the Plan. Situated in an interesting bleed zone of the Eastern Market anchor and the heavily abandoned lower-east side neighborhoods, the site, without creative and determined advocacy and planning, could easily miss the redevelopment and reinvestment opportunities present in the Eastern Market anchor. The City Systems section of the Detroit Future City Plan best exemplifies this finding.¹³

This study will assist in determining the future of the site within the context of the Detroit Future City Plan, as it will assist in determining the development potential of the site. By beginning the Phase I Environmental Assessment, recording the history of the area, and beginning the visioning process the site's potential can emerge.¹²



Economic Asset Map Detroit Future City Plan¹⁴

DETROIT FUTURE CITY PLAN : CITY SYSTEMS

The City Systems chapter of the Detroit Future City Plan lays out a design for Detroit to transform its landscape into the backbone for a 21st Century Infrastructure. The Plan sees strategic reinvestment in Detroit's infrastructure as essential to not only meet the needs of current citizens, but also to promote growth in Detroit

Within this chapter, the site is included in an area set for Renewal and Maintenance, within a 20-year strategic approach. The "Renew and Maintain" designation is set for,

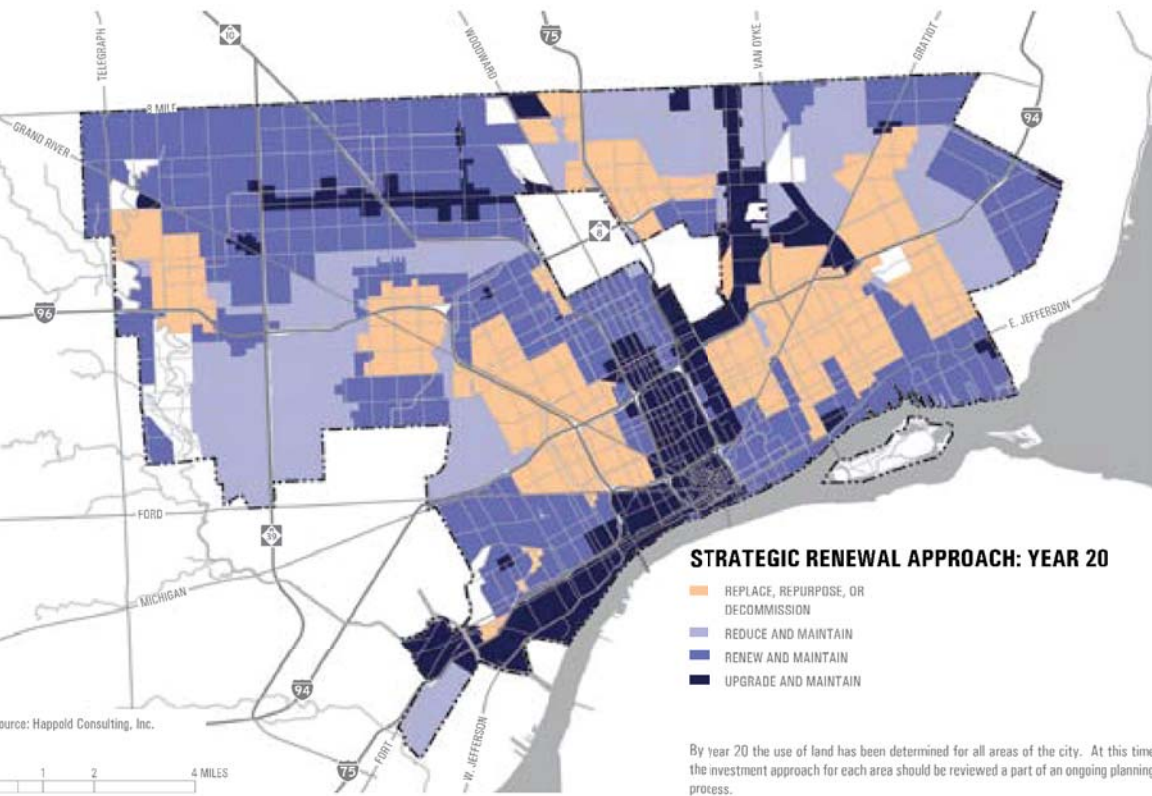
Service Level: Core service level at the same or better quality.

Actions: Fully maintain and renew at current level or upgrade if required

Outcomes: Visible neighborhood with same or increased capacity¹⁵

Directly the east of the site of interest though, the land is recommended to undergo Replace, Repurpose or Decommission. Under this recommendation the city systems, such as water, sewer and transportation systems will be removed or used for another purpose.¹⁶

It is within this precipice for investment that the site is located. If the site is found to be economically, socially and environmentally positioned for redevelopment, then it can easily be included within the investments targeted for the East Market zone. If the site is not well positioned economically, socially, and environmentally, then it could be pulled into the Lower East Side Neighborhood zone. While neither zone is "good" or "bad", they do envision drastically different futures for the site.



STRATEGIC RENEWAL APPROACHES SUMMARY				
UPGRADE AND MAINTAIN	RENEW AND MAINTAIN	REDUCE AND MAINTAIN	MAINTAIN ONLY	REPLACE, REPURPOSE, OR DECOMMISSION
<ul style="list-style-type: none"> Service Level: Improved service level maintained at better quality Actions: Fully maintain and undertake renewal or upgrade as required Outcomes: Improved neighborhood with increase capacity and resilience 	<ul style="list-style-type: none"> Service Level: Core service level at the same or better quality Actions: Fully maintain and renew at current level or upgrade if required Outcomes: Viable neighborhood with same or increased capacity 	<ul style="list-style-type: none"> Service Level: Core service level but for a smaller number of residents as they will likely not regain their original number of residents in the future Actions: Maintain and undertake scheduled renewal at lower capacity Outcomes: Area continues as viable neighborhood with lower capacity 	<ul style="list-style-type: none"> Service Level: Basic service level but quality declining over time Actions: Planned maintenance extending current systems life Outcomes: By 20 year horizon, systems are either renewed at full or reduced capacity 	<ul style="list-style-type: none"> Service Level: Basic service level but quality declining over time Actions: Planned maintenance to extend current systems life Outcomes: Area transitions from current use in 20-25 years. Systems eventually retired.

20 Year Strategic Renewal Approach Map ¹⁶

CHAPTER NOTES

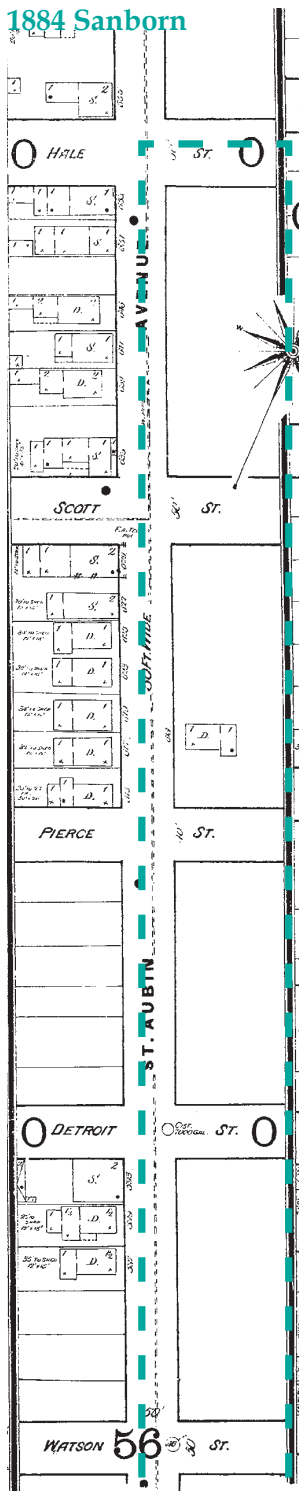
- 1 *Learn More*, Detroit Blight Authority, <http://www.blightauthority.com/> (last visited Nov. 24, 2013).
- 2 Telephone interview with Gari Corsi, owner of People's Restaurant Equipment Company, Inc. (Oct. 11, 2013).
- 3 Ibid.
- 4 Telephone interview with Frank Germack, owner of Germack Pistacio Co. (Oct. 17, 2013).
- 5 Telephone interview with Gari Corsi, owner of People's Restaurant Equipment Company, Inc.
- 6 Telephone interview with Nancy Garvin, Director of School and Community Partnerships at Detroit Edison Public School Academy (Nov. 25, 2013).
- 7 Telephone interview with James Pellerito, of Pellerito Foods, Inc. (Oct. 10, 2013).
- 8 Telephone interview with Frank Germack, owner of Germack Pistacio Co. (Oct. 17, 2013).
- 9 Telephone interview with Nancy Garvin, Director of School and Community Partnerships at Detroit Edison Public School Academy (Nov. 25, 2013).
- 10 Telephone interview with Dr. Rick Foster, Co-Director of Metro Food, Michigan State University (Sep. 5, 2013).
- 11 Michigan DEQ, Frequently Asked Questions of the Department of Environmental Quality about the Brownfield Redevelopment Financing Act 1996 PA 381, as amended (Jan. 4, 2013) at 2-3.
- 12 Detroit Works Project. *Detroit Future City Plan* (Detroit, MI: City of Detroit, 2012), <http://detroitworksproject.com/the-framework/>.
- 13 Detroit Works Project. *Detroit Future City Plan: City Systems* (Detroit, MI: City of Detroit, 2012), http://detroitworksproject.com/wp-content/uploads/2013/01/DFC_Plan_City-Systems.pdf.
- 14 Detroit Works Project. *Detroit Future City Plan: City Systems* (Detroit, MI: City of Detroit, 2012). Pg. 158-9, http://detroitworksproject.com/wp-content/uploads/2013/01/DFC_Plan_City-Systems.pdf.
- 15 Detroit Works Project. *Detroit Future City Plan* (Detroit, MI: City of Detroit, 2012). Pg. 38, <http://detroitworksproject.com/the-framework/>.
- 16 Ibid. Pg. 175.

Records Review

Section 8.3 Historial use information through survey of aerial photographs, fire insurance maps, property tax files, recorded land title records and zoning records

SECTION 8.3.4.2 SURVEY OF FIRE INSURANCE MAPS

1884 Sanborn



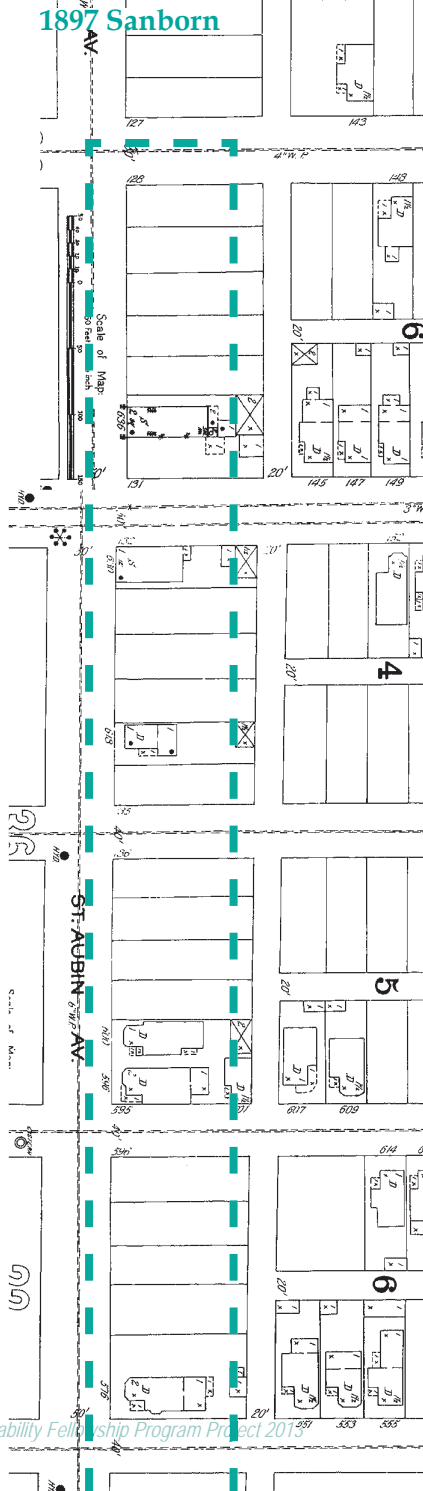
The first Sanborn map on the 10 block neighborhood exists partially from the 1884 version (left).

The area bound by an elongated rectangle in dash line on the 1884 Sanborn map indicates the area pertinent to our site of interest. The same area is indicated on the Sanborn map from 1897 (right), and in this version, the full scope of our site was surveyed.

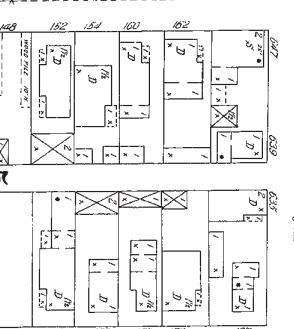
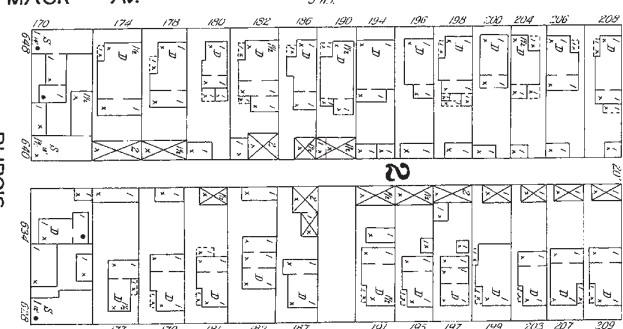
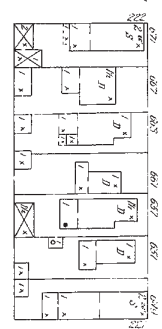
The map from 1897 shows the land use before the full-scale industrialization process took over most of Detroit. Within our site, a basket factory and a cigar factory are indicated as industrial land uses.

- Environmentally Hazardous Land Use
- Building with Public Program

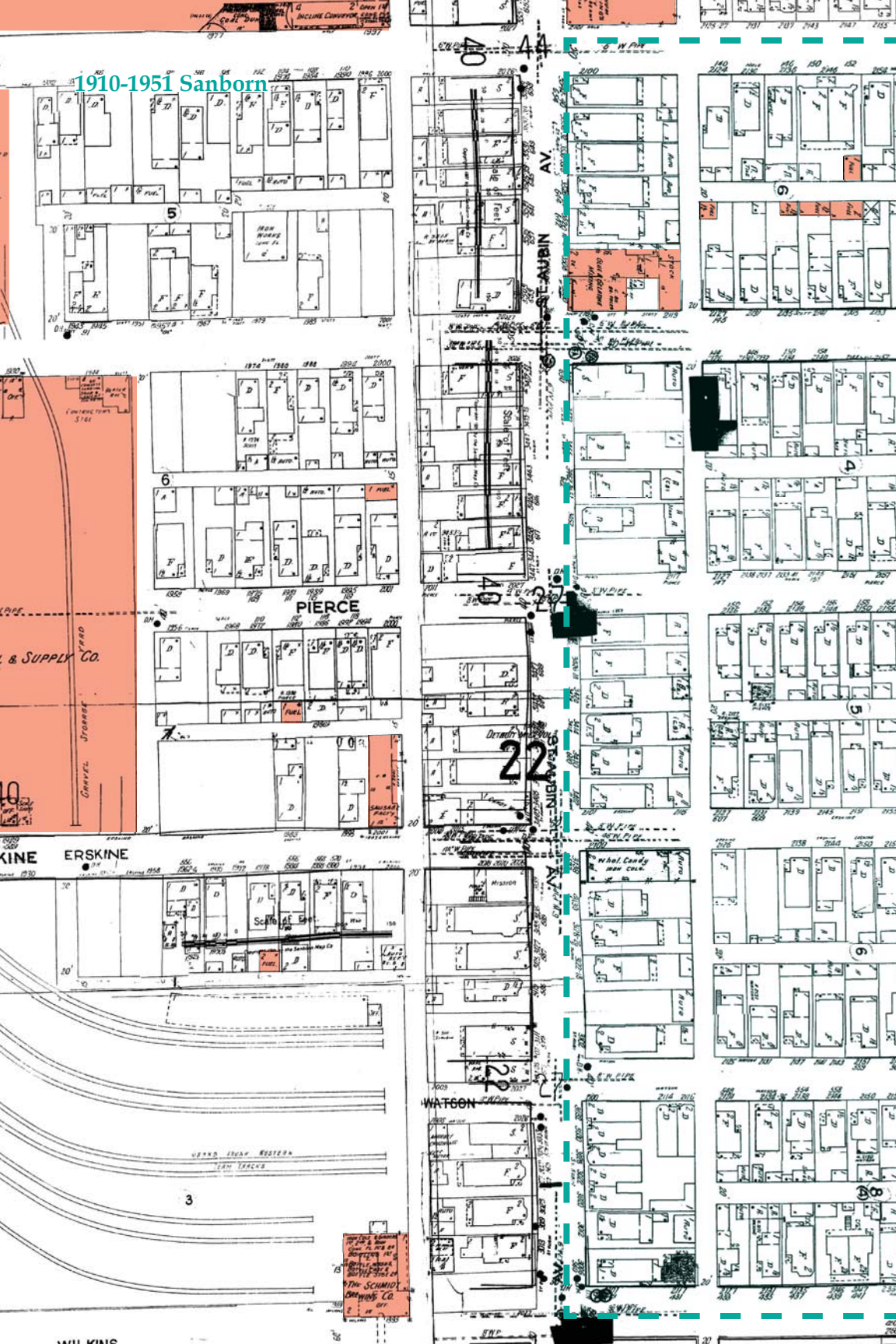
1897 Sanborn



CHENE 6th St



1910-1951 Sanborn



WATSON

Договор

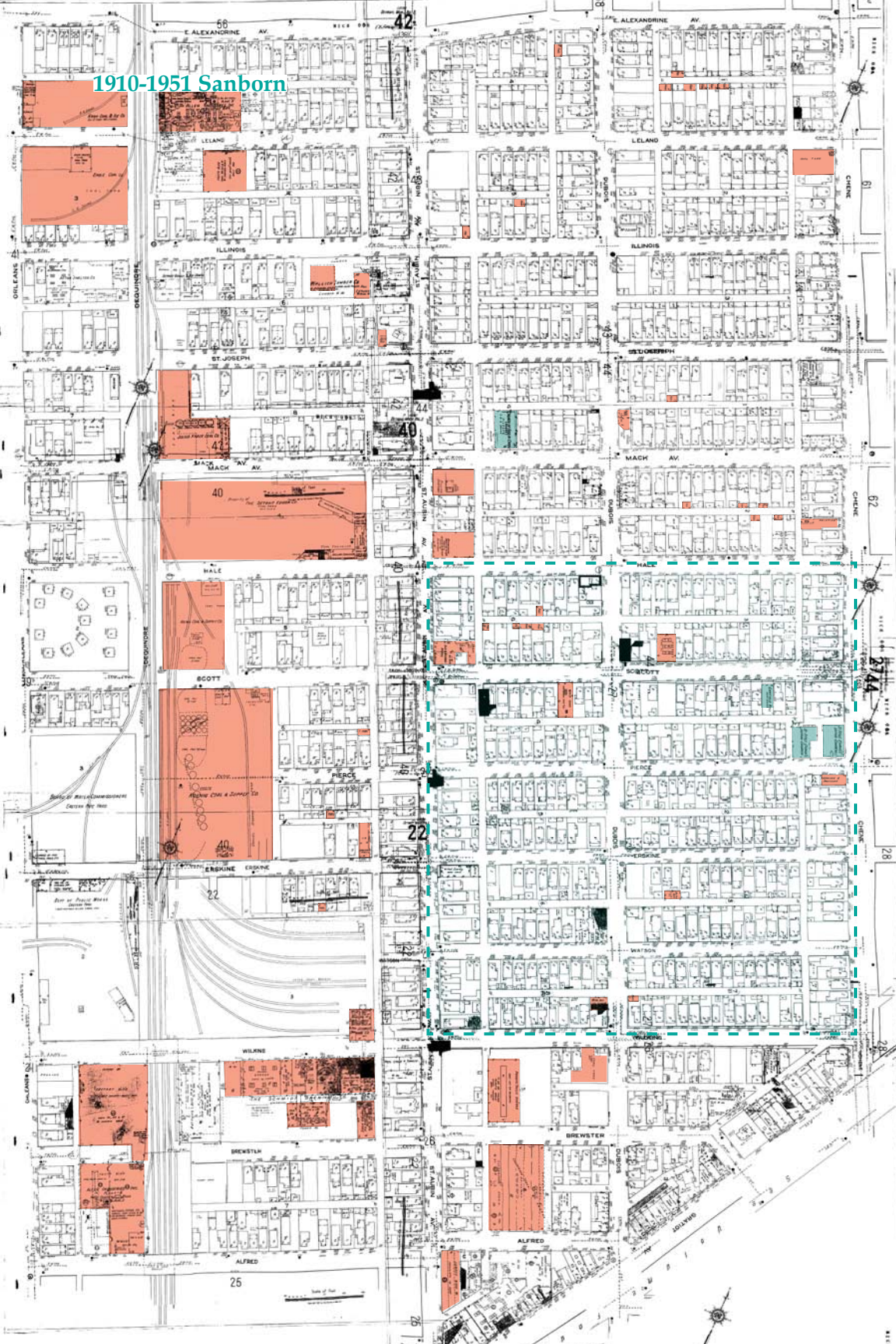
SECTION 8. 3. 3
LAND USES OF
SURROUNDING
AREAS

According to the most recent Sanborn map from 1951, numerous coal yards were located along the railways on Dequindre. These coal storage yards present a high possibility of Total Petroleum Hydrocarbon (TPH) and Polycyclic Aromatic Hydrocarbon (PAH) contamination in the soil and the groundwater, which is a Recognized Environmental Condition.

Our site was mainly used as a residential area, and St. Aubin Avenue and Wilkins Street were the thresholds dividing the industrial land use and the residential land use. However, within the residential blocks on our site, there were several auto repair shops and fuel storage spaces, which are Recognized Environmental Conditions.

- Environmentally Hazardous Land Use
- Building with Public Program

1910-1951 Sanborn



SECTION 8.3.4.1

SURVEY OF AERIAL PHOTOGRAPHS

Through the survey of aerial photos from 1949 to 2013, the rise and fall of the given site has been observed. The density of houses in the neighborhood is closely related to the development and decline of rail way transportation nearby. The Grand Trunk Western Railway tracks are visible in the aerial photos from 1949 to 1961, and from the aerial photo of 1999, the tracks are obliterated from the surface.

The current location of the Detroit Edison Public School Academy is where the termination points of the Grand Trunk Western Team tracks were located, thus one of the highly contaminated areas in the neighborhood through several years of industrial operation. The City Recycling Inc. on St. Aubin Street and Mack Avenue is located on the former coal yard of Julius Knack Coal Company.

As the industry along the rail way continued to decline, a drastic change in the residential blocks began. In the aerial photo of 1999, more than 50% of existing houses was demolished. By 2010, almost the entire neighborhood disappeared from the map.







1999









SECTION 8.3.4.3
PROPERTY TAX
FILES

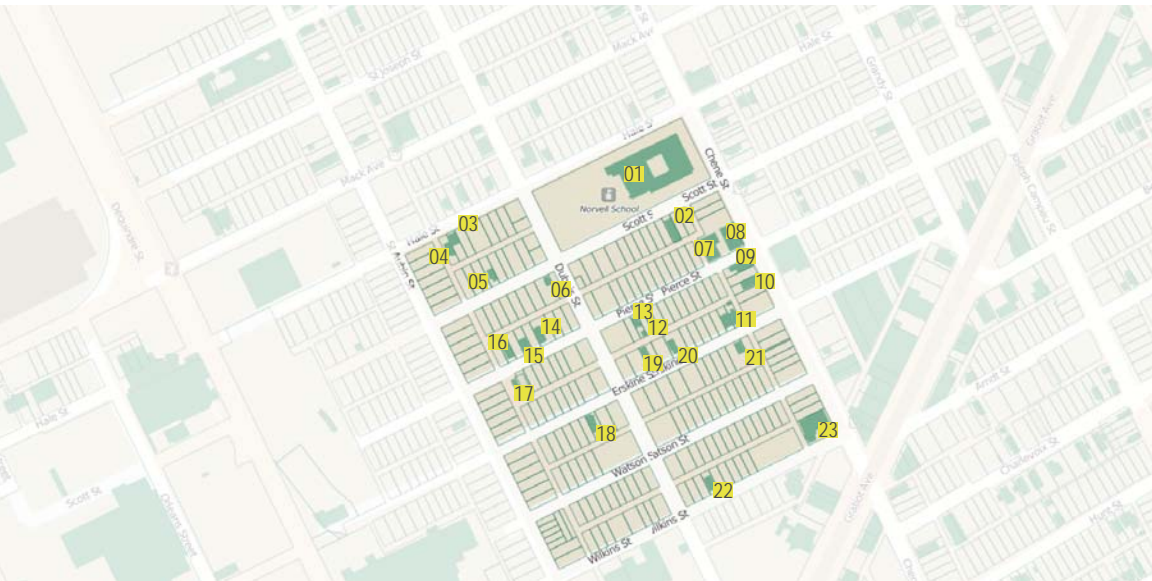
- \$1-\$1000
- \$1000-\$5000
- \$5000-\$15000



Property Tax Assessments¹

SECTION 8. 3. 4. 4
RECORDED LAND
TITLE RECORDS

- 01 3501 Chene, Detroit Water & Sewerage Department
- 02 2266 Scott, Free Indeed Ministries Church Intl
- 03 2130 Hale, Davis, Louise
- 04 2124 Hale, Prince-Searcy, M D
- 05 2141 Scott, Fisher, James
- 06 2174 Scott, Ringo, Lee W
- 07 3465 Chene, Universal Hagars Spiritual Church
- 08 3465 Chene, Universal Hagars Spiritual Church
- 09 3435 Chene, Mi Land Bank Fast Track Auth
- 10 3421 Chene, Talerico, William P
- 11 2285 Erskine, Rogers, William



- 12 2224 Pierce, Johnson, Morris (Estate Of)
- 13 2224 Pierce, Johnson, Morris (Estate Of)
- 14 2157 Pierce, Reese, Bessie
- 15 2145 Pierce, Wilkerson, Bertha
- 16 2133 Pierce, Hill, Nelson
- 17 2126 Pierce, 2126 Pierce Llc
- 18 2154 Erskine, City Of Detroit-P&Dd
- 19 2229 Erskine, Taxpayer
- 20 2241 Erskine, Bimini Properties Ii Inc
- 21 2280 Erskine Gates, Roger T
- 22 2217 Wilkins, Holston, Mattie M & Alveroy, &
- 23 3011 Chene, Pitman Memorial Coci

Ownership Information¹

SECTION 8.3.4.8
ZONING / LAND
USE RECORDS



Zoning Map with Site of Interest
Highlighted²

When considering the possibilities for the area of study it is helpful to look at the existing zoning set in place. While the zoning is flexible through spot re-zoning, the existing zoning is valuable in expressing the designed and approved visions of the community.

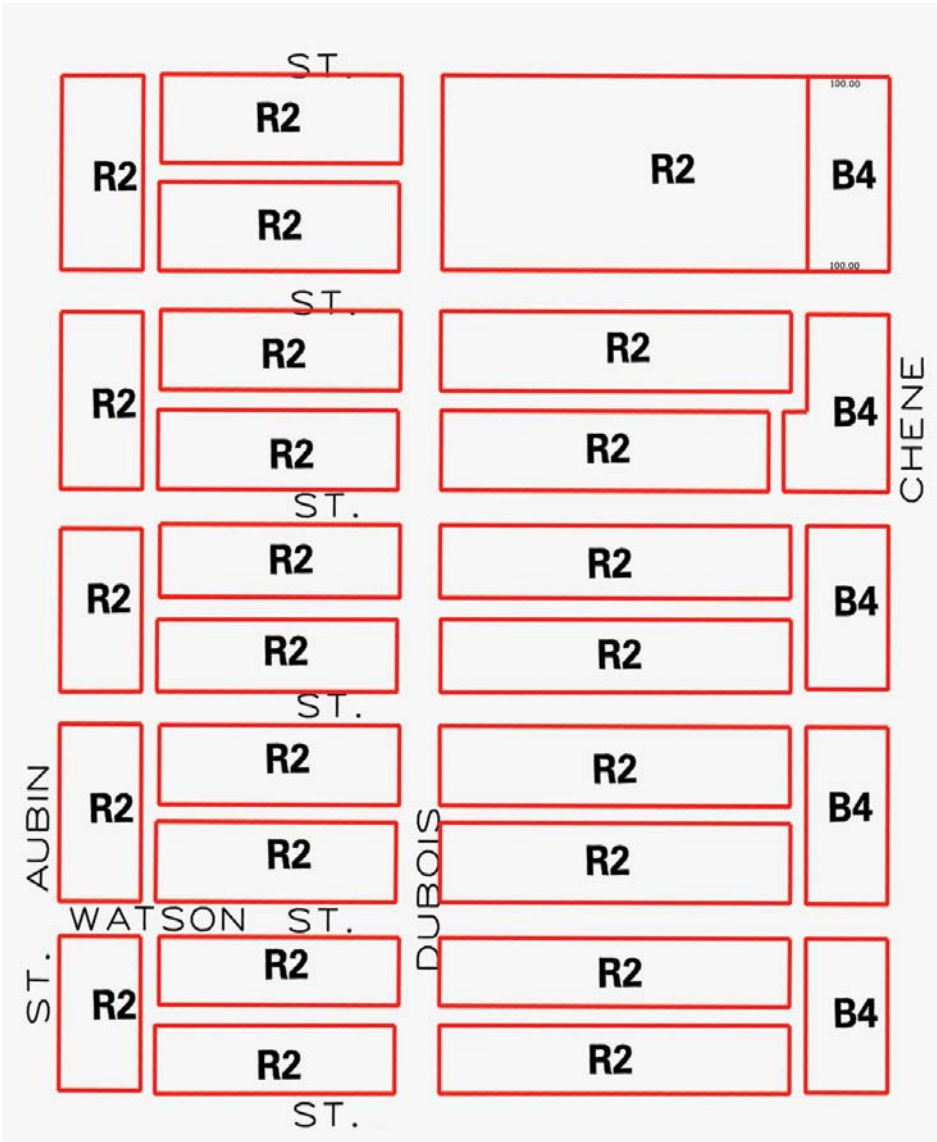
Through design and regulation by the City of Detroit's planning staff and the Planning Commission, the master plan and coinciding zoning ordinances assisted our research in determining the current vision for the area of study. It is then in comparing the detailed zoning ordinance to the wider-vision Detroit Future City Plan that the team was able to understand the existing and future visions and goals for the area of study.

Before diving into the grand plans outlined in the Detroit Future City Plan it is helpful to understand the existing visions for the site. The zoning of the site reflects the goals of a mixed-use area that is primarily low density residential.² The site is zoned primarily for R2, Two Family Residential District, with the parcels lining Chene Street zoned B4, General Business

District.³ The R2 zoning is designed for one or two family dwellings and their associated uses. The R2 zoning approves by-right for both single and two-families homes and family day care homes.⁴ The B4 zoning is for businesses and commercial uses along thoroughfares.⁵ The B4 zoning approves by-right a multitude of uses including residential, public-civic-institutional, retail-service-commercial, and industrial uses.

Within each of these districts is a variety of approved uses by-right and conditional uses. The uses by-right do not require approval by the Planning Commission and are supportive of the overall goals of the district. The conditional uses are typically accessory uses to the zoning district and do require a site plan review and approval by the Planning Commission.

The existing zoning ordinance reflects the community's desires to promote a mix of uses in the study area, with a primary focus on residential. Chene Street is called out though as a commercial corridor that can include a variety of uses.



Zoning Map for Site of Interest²

R2: TWO FAMILY RESIDENTIAL DISTRICT

Use By Right

By-right residential uses

- Single-family detached dwellings
- Two-family dwellings

By-right public, civic and Institutional uses

- Family day care home

By-right other uses

- Antennas
- Signs as provided for in Article VI
- Urban gardens as provided for in Article XII division 3 Subdivision⁶

Conditional Use

Conditional residential

- Multiple-family dwellings, no more than 8 dwellings units
- Town homes with no more than 8 town homes in a group
- Religious residential facilities
- School building adaptive reuses—residential

Conditional public, civic, and institutional uses

- Cemeteries, including those with mausoleums, crematories, or columbaria
- Neighborhood center, nonprofit
- Outdoor recreation facility
- Religious institution
- Residential-area utility facilities, public
- School building adaptive reuses – public civic, and institutional
- School, elementary, middle/junior high, or high

Conditional retail, service, and commercial uses

- Parking lots or parking areas for operable private passenger vehicles
- School building adaptive reuses – retail, service, and commercial

Conditional other uses

- Antennas
- Greenhouses
- Hoop house
- Railroad right-of-way, not including storage tracks, yards, or building
- Signs
- Urban farms⁷

B4: GENERAL BUSINESS DISTRICT

Use By Right

By-right residential uses:

- Boarding school and dormitory
- Child caring institution
- Convalescent, nursing, or rest home
- Lofts, inside the Central Business District
- Religious residential facilities
- Shelter for victims of domestic violence⁵

By-right public, civic, and institutional uses

- Adult day care center
- Armory
- Auditoriums, public
- Child care center
- Educational institution
- Fire or police station, post office, court house, and similar public building
- Governmental service agency
- Hospital or hospice
- Library
- Museum
- Neighborhood center, nonprofit
- Outdoor recreation facility
- Religious institution
- School, elementary, middle/ junior high, or high⁸

By-right retail, service, and commercial uses

- Animal-grooming shop
- Art gallery
- Assembly hall
- Automated Teller Machine not accessory to another use on the same zoning lot, which is stand alone, without drive-up or drive-through facilities
- Bake shop, retail
- Bank without drive-up or drive-through facilities
- Barber or beauty shop
- Brewpub or microbrewery or small distillery, inside the Central Business District
- Dry cleaning, laundry, or Laundromat
- Place to sell beer/ intoxicating liquor, inside the Central Business District
- Hotel, inside the Central Business District⁹

- Medical or dental clinic, physical therapy clinic, or massage therapy clinic
- Mortuary or funeral home
- Motor vehicles, new, salesroom or sales lot
- Motor vehicles, new, storage lot accessory to a salesroom or sales lot for new motor vehicles
- Nail salon
- Office, business or professional
- Parking lots or parking areas for operable private passenger vehicles
- Parking structure
- Pet shop
- Private club, lodge, or similar use
- Radio or television station
- Radio, television, or household appliance repair shop, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Recreation, indoor commercial and health club
- Recording studio or photo studio or video studio, no assembly hall
- Restaurant, carry-out or fast-food, where located in a multi-story building and integrated into a mixed use or multi-tenant development, and without drive-up or drive-through facilities
- Restaurant, standard without drive-up or drive-through facilities
- Retail sales and personal service in business and professional offices
- Retail sales and personal service in multiple-residential structures
- School or studio of dance, gymnastics, music, art, or cooking
- Shoe repair shop
- Stores of a generally recognized retail nature whose primary business is the sale of new merchandise with or without drive-up or drive-through facilities
- Veterinary clinic for small animals

B4: GENERAL BUSINESS DISTRICT CONTD.

Use By Right

By-right manufacturing and industrial uses

- Blueprinting shop
- Trade service, general

By-right other uses

- Antennas
- Farmers markets
- Greenhouse
- Hoop house
- Marinas
- Railroad right-of-way, not including storage tracks, yards, or buildings
- Signs
- Urban farms
- Urban garden¹⁰

Conditional Use

Conditional Residential Uses

- Emergency shelter, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Fraternity or sorority house
- Loft, outside the Central Business District
- Multiple-family dwelling
- Pre-release adjustment center, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Residential substance abuse service facility
- Residential use combined in structures with permitted commercial uses
- Rooming house
- Single-family detached dwelling¹¹
- Single-room-occupancy housing, nonprofit
- Town house
- Two-family dwelling

Conditional public, civic, and institutional uses

- Electric transformer station
- Gas regulator station
- Outdoor entertainment facility
- Power or heating plant with fuel storage on site
- Substance abuse service facility, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Stadium or sports arena
- Telephone exchange building
- Water works, reservoir, pumping station, or filtration plant

Conditional retail, service, and commercial use

- Amusement park
- Arcade
- Automated Teller Machine not accessory to another use on the same zoning lot, which is stand-alone, with drive-up or drive-through facilities
- Bank with drive-up or drive-through facilities
- Bed and breakfast inn
- Brewpub or microbrewery or small distillery, outside the Central Business District

B4: GENERAL BUSINESS DISTRICT CONTD.

- Cabaret, outside the Central Business District
- Customer service center with drive-up or drive-through facilities
- Dance hall, public, outside the Central Business District
- Employee recruitment center
- Establishment for the sale of beer or intoxicating liquor for consumption on the premises, outside the Central Business District
- Financial services center
- Firearms dealership
- Firearms target practice range, indoor
- Food stamp distribution center
- Go-cart track, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare¹²
- Golf course, miniature
- Hotel, outside the Central Business District
- Kennel, commercial
- Lodging house, public
- Motel
- Motor vehicle filling station
- Motor vehicles, used, salesroom or sales lot, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Motor vehicles, used, storage lot accessory to a salesroom or sales lot for used motor vehicles, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Motor vehicle services, major, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Motor vehicle services, minor
- Motor vehicle washing and steam cleaning, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Motorcycles, retail sales, rental or service
- Outdoor commercial recreation, not otherwise specified
- Parking lots or parking areas for operable private passenger vehicles, as restricted by Sec. 61-12-219(9)(e) of this Code
- Pawnshop, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Plasma donation center, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Pool or billiard hall
- Printing or engraving shops
- Public lodging house
- Rebound tumbling center, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Rental hall
- Restaurant, carry-out or fast-food, with or without drive-up or drive-through facilities, except such use shall be prohibited on any zoning lot abutting the Woodward Avenue Gateway Radial Thoroughfare where there is drive-up or drive-through facilities or where not located in a multi-story building having a mixed-use or multi-tenant development
- Restaurant, standard, with drive-up or drive-through facilities, except such use having drive-up or drive-through facilities shall not be permitted on any zoning lot abutting the Woodward Avenue Gateway Radial Thoroughfare¹³
- Secondhand stores and secondhand jewelry stores, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Specially designated distributor's (SDD) or specially designated merchant's (SDM) establishment
- Tattoo and/or piercing parlor, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Taxicab dispatch and/or storage, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Theater and concert café, excluding drive-in theaters
- Trailer coaches or boat sale or rental, open air display, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare

B4: GENERAL BUSINESS DISTRICT CONTD.

- Trailers, utility, or cement mixers, pneumatic-tired, sales, rental or service; moving truck/trailer rental lots
- Youth hostel/hostel

Conditional manufacturing and industrial uses

- Confection manufacture, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Dental products, surgical, or optical goods manufacture, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Food catering establishment
- Ice manufacture, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Jewelry manufacture, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Lithographing, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Research or testing laboratory
- Toiletries or cosmetic manufacturing, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Tool, die, and gauge manufacturing, small items, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Vending machine commissary, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare¹⁴
- Wearing apparel manufacturing, except such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare
- Wholesaling, warehousing, storage buildings, or public storage houses, except excluding Gratiot Avenue, such use shall not be permitted on any zoning lot abutting a designated Gateway Radial Thoroughfare

Conditional other uses

- Antennas
- Aquaculture
- Aquaponics
- Hydroponics
- Signs
- Telecommunications building, private¹⁵

CHAPTER NOTES

1 Why Don't We Own This, LOVELAND Technologies, (2013) <http://whydontweownthis.com/>.

2 City of Detroit, "Detroit City Code, Chapter 61," City of Detroit, April 16, 2013.

3 Ibid. Pg. 183-219.

4 Ibid. Pg. 183.

5 Ibid. Pg. 219.

6 Ibid. Pg. 184.

7 Ibid. Pg. 185.

8 Ibid. Pg. 220.

9 Ibid. Pg. 221.

10 Ibid. Pg. 222.

11 Ibid. Pg. 223.

12 Ibid. Pg. 224.

13 Ibid. Pg. 225.

14 Ibid. Pg. 226.

15 Ibid. Pg. 227.

Site Reconnaissance

Section 9.4 Past and current uses and conditions
visually and / or physically observed

PAST AND
CURRENT USES OF
THE PROPERTIES



PAST AND
CURRENT
USES OF THE
SURROUNDING
AREA



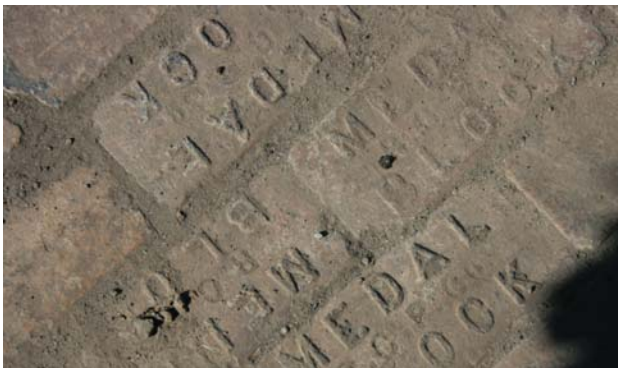
EXISTING
INFRASTRUCTURE



SIDEWALKS



ROADS





ILLEGAL DUMPING



CHURCHES



SITE INVENTORY

The team visited and inventoried the site in accordance to the Phase I requirements. While conducting the inventory, the team looked for possible clues to environmental conditions and potential concerns.

The site's "cleared" nature made it difficult to observe potential environmental clues, as they would have been removed during the

Blight Authority's clean-up of the site.

The inventory did shed light onto the general conditions of the site. Specifically, the recorded the inhabitation of homes as they appeared from the street, as well as the conditions of non-motorized infrastructure.

Appeared Abandoned

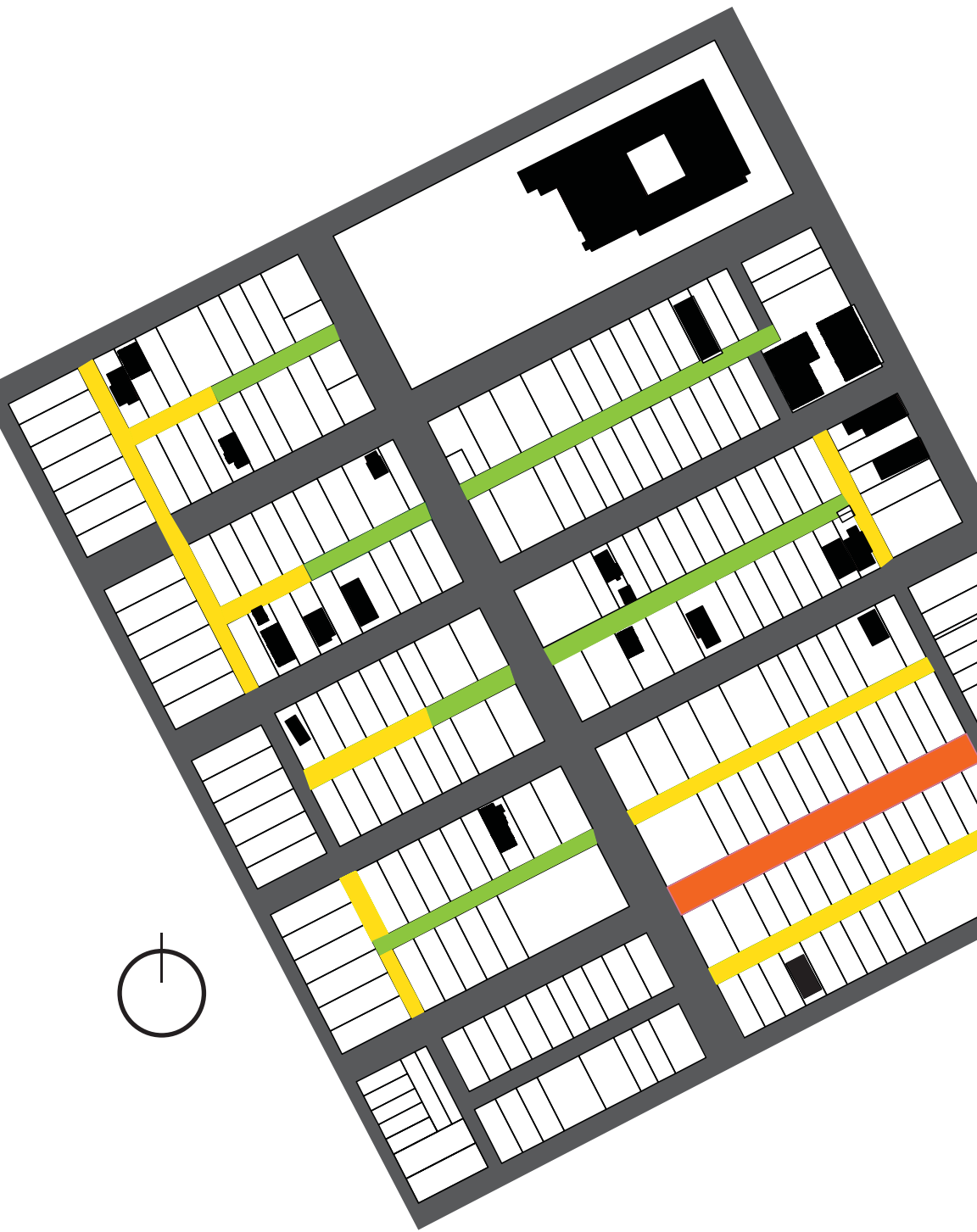
Appeared Occupied

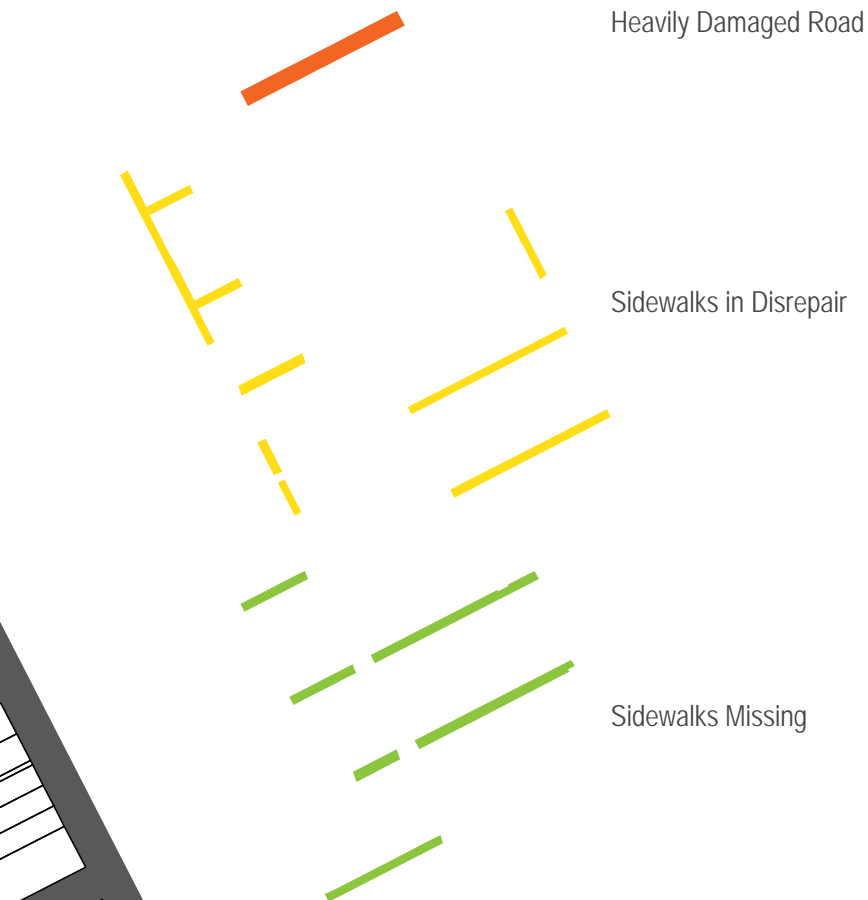
Building Missing





SITE INVENTORY





From the site visit, the team gained a heightened awareness to what exists on the site today, possible environmental concerns, and the quotidian experience of infrastructure in need of investment.

It should be noted that not all of the experiences from the site visit can be accurately displayed in diagrams. For example, in walking through the

site, multiple bicyclists and motorists waved and smiled to the team. While such experiences do not lend themselves to the Phase I assessment, they do encourage further exploration in the character and social investments in the area.

Engineering Controls

Engineering controls used for remediation
of contaminated soils

ENGINEERING CONTROLS

Engineering controls refer to physical modifications to the site to reduce or eliminate the potential for exposure to hazardous substances or petroleum products in the soil or ground water on the property (eg capping, slurry walls, point of use water treatment).

The majority of the 10-block area has been residential for as long as we were able to determine. Therefore we concentrated our research on the potential hazards for residential sites. The contaminant of largest concern for former residential properties is lead. The high presence of lead in residential properties is due to the prevalence lead based paint and leaded gasoline used in older cars. While we assumed that lead was the primary concern, testing of soil samples should be completed before any remediation takes place.

A common method for remediation of lead is phytoremediation. This is the process of uptake of chemical compounds by plants.

Research has shown that *Bassica juncea*, Indian Mustard, has good remediation properties for lead in residential soils. The variety that is commonly used is Southern Giant Curly Leaf. This is because it has a high production of biomass in a short growing season.

However, care must be taken when using Indian Mustard as a remediation agent in urban areas because the leaves can be used as food. There has been research

to indicate that using seed mustard, varieties that produce many flowers, but few greens, is a suitable alternative to leaf mustard due to its mitigation of desirability for food.¹

This is especially true when using a chelating agent such as Ethylenediaminetetraacetic acid (EDTA). Chelating agents are compounds added to the soil that allow metals such as lead to bind to water molecules allowing plant uptake. By adding electrodes and running electricity through the soil, lead uptake can be increased even more. It has been shown that the combination of EDTA and electric potential can increase lead accumulation two to four fold over the use of EDTA only.²

Using phytoremediation can produce uneven and expensive results. It can also take many years to produce acceptable conditions for agriculture or residential uses. Often a cheaper and quicker mitigation technique is capping and sealing the contaminated area to prevent migration of pollutants. Caps can also be used when the contamination is so extensive that it would cause a greater threat to remove than to leave. Caps can be made of synthetic fibers, heavy clays, or concrete. When properly maintained, caps can function properly for 50 to 100 years.³

CHAPTER NOTES

- 1 Ilana S. Goldowitz, and Joshua Goldowitz, "Phytoremediation of Lead-contaminated soil in the urban residential environment using seed mustard," *Contaminated Soils, Sediments, and Water*, 10 (2006): 271-276, 10.1007/0-387-28324-2_17 (accessed October 5, 2013).
- 2 Jae-Min Lim, Arthur L. Salido, and David J. Butcher, "Phytoremediation of lead using Indian mustard (*Brassica juncea*) with EDTA and electrodrugs," *Microchemical Journal*, 76, no. 3-9 (2004), 10.1016/j.microc.2003.10.002 (accessed October 5, 2013).
- 3 Michigan State University College of Engineering, "Technical Outreach Services for Communities." Last modified August 14, 2002. Accessed November 24, 2013. [http://www.egr.msu.edu/tosc/dutchboy/factsheets/What is capping.pdf](http://www.egr.msu.edu/tosc/dutchboy/factsheets/What%20is%20capping.pdf).

Report

A. RECORDS REVIEW

The Standard Environmental Record Sources and the Additional Environmental Records Sources provide detailed lists of federal, state, and local environmental standards which to measure the environmental safety of a site. In reviewing the list of Standard Environmental Record Sources along with the corresponding approximate minimum search distances, some environmental concerns arose; additionally, a more detailed review of the Standard Environmental Record Sources and the Additional Environmental Records Sources is recommended. This recommendation comes from local knowledge shared during the interview process, which suggests a history of industrial use on the site. Additionally, concerns were raised during the interview process that there may have been poor documentation of such historical industrial activities on the site.

Even though concerns were raised through review of the Standard Environmental Record Sources, future development should not be discounted, as the list of Standard Environmental Record Sources is extensive by nature. Additionally due to the history of the site and the local area, it was expected that brownfield sites were to be found within a half of a mile from the site. With this in mind, the review of the Federal NPL (Final National Priority List) within a mile of the site did come back negative. This find is encouraging in considering future redevelopment, as Federal NPL require a higher level of remediation than brownfield sites.

Moving forward it is recommended that a Phase Two Environment assessment be conducted to gain a better understanding of the potential environmental risks within the site and the surrounding areas.

B. SITE RECONNAISSANCE

i. Methodology and Limiting Conditions

There was one (1) site walkthrough conducted on the site property. Claire Kang, Katherine Knapp, Nolan Sandberg, and Julia Stuebing conducted the walkthrough on October 12, 2013. The outside was inspected. No indoor inspections were conducted.

ii. General Site Setting

The Property is located in Detroit, Michigan, and is bound by Hale Street to the northwest, Chene Street to the northeast, Wilkins Street to the southeast, and St. Aubin Street to the southwest. The property totals 29.7 acres of land including the public right of way and streets. Within the site there are 243 plots. In 2009, 141 of the plots were owned by the City of Detroit, one property by the Board of Education, and the State of Michigan Land Bank held five properties.¹

Site photographs display the property, and surrounding buildings and areas.

Site maps display the property and observations by the Team that conducted the walkthrough.

iii. Exterior Observations

1. Storage Tanks

No storage tanks were observed on the Property.

2. PolyChlorinated Biphenyls (PCBs)

No transformers were observed on the Property.

3. Municipal Solid Waste

No metal dumpsters were observed on the Property.

4. Hazardous Waste

There was no visually observed storage of hazardous waste on the Property.

5. Other Potential Environmental Conditions

Team personnel observed what appeared to be remnants of concrete and brick alleys or driveways in several blocks. Miscellaneous litter was observed on the property, such as cartons, furniture, and plastic bags.

iv. Interior observations

Houses within the 10-block area were not inspected on the inside, and no interior observations were made at this time both because of lack of access and also because of potential risk factors.

C. INTERVIEWS

i. Interview with Occupants

There are no occupants of the razed lots. Team personnel called one of the occupants but she was not available to speak with the team.

ii. Interview with Site Coordinator

Team Personnel spoke with Brian Farkas of the Detroit Blight Authority, which razed eight residential structures and two commercial structures (church buildings) in 2013. Mr. Farkas said that past use of the land included illegal dumping of materials such as tires, debris, mattresses, couches, and chairs that were located all over the area. Prior to the demolition, Mr. Farkas said that the Detroit Blight Authority cleared non-structural blight, including the illegally dumped materials and brush. He indicated that the high brush made the area a target for illegal dumping. Brush is currently growing back on the land.

After removing non-structural blight, the Detroit Blight Authority removed structural blight, meaning the eight residential structures and two commercial structures. Mr. Farkas said that the Detroit Blight Authority removed all of the debris from demolition and removed the basements as well. It filled the area with soil.

Mr. Farkas commented that the roads in the area are in decent condition. He said that the area is connected for gas, electric, water, and sewage.

iii. Interviews with Local Government Officials

Local Government Officials did not respond to inquiries by Team Personnel.

iv. Interviews with neighboring business owners.

Team Personnel spoke with Frank Germack, who is the President of Germack Pistacio Company, Inc., which has been located at 2517 Russell Street, Detroit since 2000. The Germack Pistacio Company, Inc. also owns several parcels on Wilkins Street and on Watkins Street. Mr. Germack said that the City razed some houses in the 10-block area over time—perhaps in 2002-2003. Those houses may have contained lead paint or asbestos.

Team Personnel spoke with Dan Carmody, the President of the Eastern Market Corporation. He said that, except for the strip along Gratiot Street and Mack Avenue, the area has been mostly residential property. He did not know of any environmental incidents on the site. Team Personnel spoke with Jim Pellerito, of Pellerito Foods, Inc., which is located at 2000 Mack Avenue, Detroit. 2000 Mack Avenue was formerly a gas station, and as a result of a suspected oil spill, Pellerito Foods, Inc. has completed a Phase I and a Phase II investigation.

Team Personnel spoke with Nancy Garvin, Director of School and Community Partnerships at Detroit Edison Public School Academy, which is located at 1903

Wilkins Street, Detroit. Previously, the area was a wholesale district, and the school was a tomato-ripening warehouse. When landscaping for the school began, building materials such as bricks were uncovered and carried away. The high school was previously Stroh's Original Hops. Brownfield testing was conducted and tax credits were obtained. In the course of the testing, some contamination was found at the back corner of the property, which was remediated. Prior to being a wholesale district, the area was a sheep farm, so the soil was in excellent condition. The former location of the Fredrick Douglass School may be of concern because it was stripped of its pipes and contained standing water.

Additional off the record comments made to Team Personnel suggest that types of businesses located in the area, though possibly not recorded on Sanborn Maps, may have included an incinerator, a brewery or bottling plant, and a truck repair garage.

D. FINDINGS

This Phase I Assessment found evidence of Recognized Environmental Conditions ("RECs") with respect to the subject property.

RECs are defined by ASTM Int'l E 1527-05 as:

*The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.*²

RECs observed include abandoned houses, brick and asphalt alleys or driveways, and litter.

Additional information is needed about practices during historic demolitions of structures on the property. If, for example, the houses may have contained asbestos and lead paint, the soil could be contaminated. The property is particularly at risk for contamination if the houses

were demolished and debris was left in the ground. If that is the case, then cleanup may be required.

More information needs to be found out from the City.

E. OPINIONS

Based on the Findings, the Team recommends that a Phase II Site Investigation be completed with soil borings, soil samplings, temporary monitoring wells and water sampling on the site property. The blighted houses should be torn down or contained so that they do not pose a risk to the property.

F. CONCLUSIONS

We have simulated a Phase I Environmental Site Assessment based on the scope and limitations of ASTM practice E 1527-05 of the area between St. Aubin St., Hale St., Chene St., and Wilkins St., Detroit, Michigan, the Property. This assessment has revealed evidence of Recognized Environmental Conditions ("RECs") in connection with the Property.

Any exceptions to, or deletions from, this practice are described in Section 11 of this report in connection with the Property.

As noted above, this report is a *simulation* of a Phase 1 Environmental Site Assessment done for educational purposes by students who are not Environmental Professionals. This report should *not* be relied on as a legal document or otherwise evidence of the status of the Property.

CHAPTER NOTES

- 1 *Properties within Study Area*. Detroit Residential Parcel Survey. Detroit: Data Driven Detroit. Using: *ArcGIS*. Version 10.1. Ann Arbor, MI: Dow Project Team, 2013.
- 2 ASTM E 1527-05 at 3.2.74 (emphasis in omitted).

Precedent Proposals

Array of existing proposals for
future development

LIQUID PLANNING DETROIT ¹

MAde studio (Maigret Arquero Design)

Sponsor:

- Graham Environmental Sustainability
Institute (\$39,925)

Client:

- Data Driven Detroit

Project Synopsis:

LIQUID PLANNING fosters the imaginative capacity of visions for Detroit's future urbanism by understanding the city through the lens of water. Whereas current debate is mired in circular reasoning-the solution to Detroit's overwhelming vacancy is less vacancy—our work positions the consideration of urban storm water management as a key tool for generative design strategies that encourage nested, scalar approaches and interdisciplinary collaboration.

The research brings together regional analyses of the systems of water infrastructure, and the physical, regulatory and cultural forces that shape Detroit's contemporary urban condition.



PROPOSED CUT 01: DEQUINDRE AT EDISON ACADEMY OBSERVATION DECK AND ACCESS RAMP

DETROIT BY DESIGN 2012 COMPETITION WINNING PROPOSAL ²

**Matthew Edward Getch + Maciej
Woroniecki**

Client:

- Detroit by Design 2012 competition

Awards:

- 2nd overall prize

- first prize for the People's Choice Award

Project Synopsis:

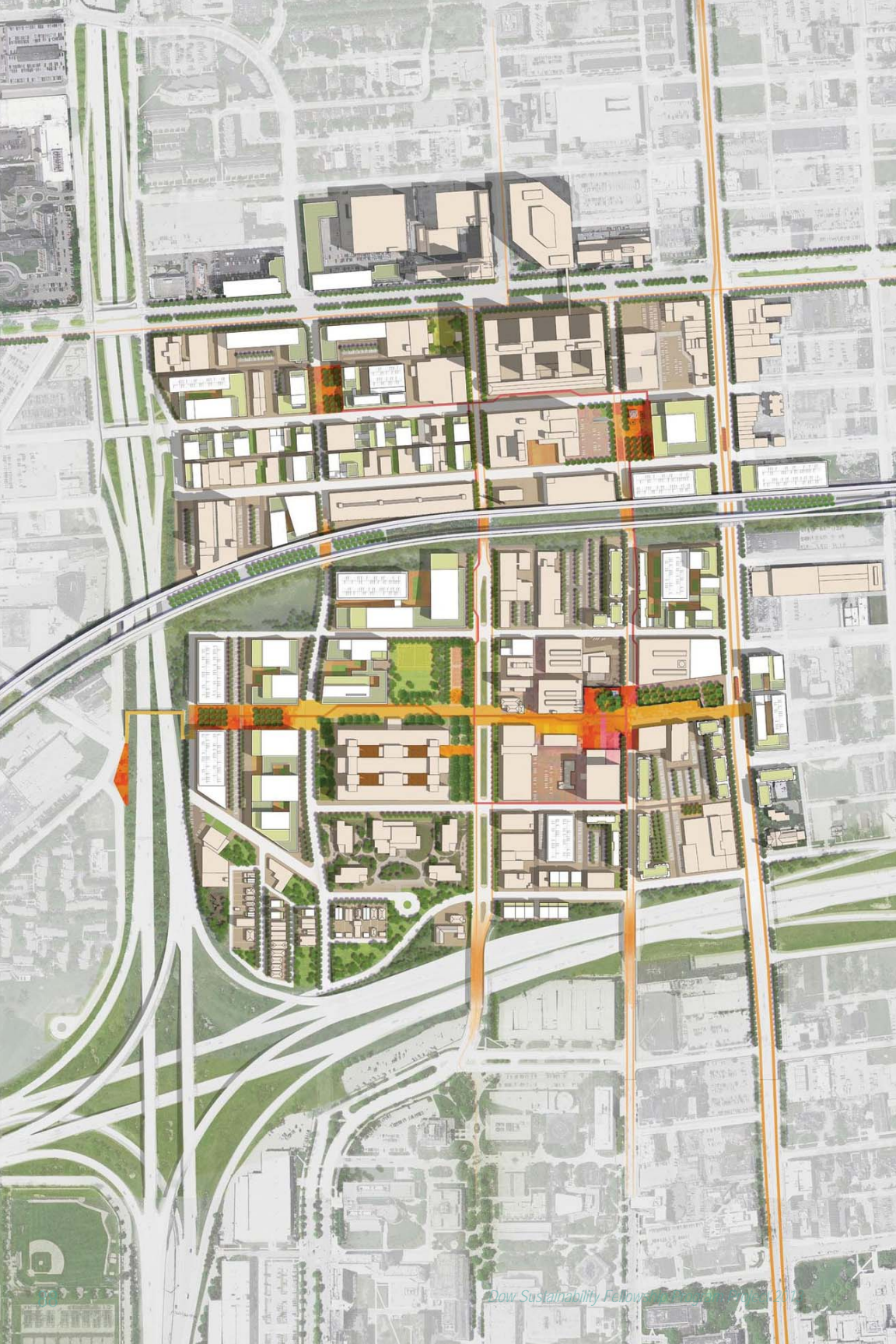
Located within the epicenter of Detroit, the Riverfront Linear Park finds itself in an ideal location between a variety of social and economic diverse neighborhoods, rich ecology and extensive urban program. With an established identity and strong existing form, the Riverfront was not viewed as a blank canvas, but as a work in progress. The large stands of existing forest and tree groves, established green spaces, pedestrian networks and existing circulation systems were constraints which needed to be respected and accounted for in a proposal of this size. With these constraints in mind, the team identified and made proposals to counteract the

urban issues which currently face the Detroit area:

- Derelict/unsightly properties and dwellings
- Neglected native habitat
- Severed parks and linear green networks
- Underutilized green spaces
- Under programmed public realm
- Restricted access and connection to the

It is the time for Detroit to reconnect and celebrate its colorful and rich history, to right it's wrongs by reversing the damage from heavy industry and disastrous pollution, and re-establish native wetlands, marshes, meadows and prairie habitats which have endured centuries of ecological neglect.





TECHTOWN DISTRICT PLAN ³

Sasaki Associates

Client:

- Midtown Detroit Inc.

Awards:

- 2013 SCUP Excellence in Planning Merit

Award

- 2013 BSLA Merit Award

Project Synopsis:

The TechTown District Plan by Sasaki Associates articulates an inspiring vision for the revitalization of the district. An emerging knowledge district in Midtown Detroit, this town is currently characterized by surface parking, vacant properties, and inward-facing, siloed hubs of activity. The architects' concept, however, aims to accelerate innovation, promote entrepreneurship, and build community around the generation of ideas in a vibrant, mixed-use setting.

Leveraging the potential of key institutional anchors within the district (Wayne State University, College for Creative Studies, and Henry Ford Health System), the plan creates an environment that fosters knowledge generation and innovation. The plan repurposes the historic building stock with uses that support innovation and create vibrancy, and also strengthens connections within Midtown Detroit and to surrounding neighborhoods.



**ARTIST
RENDERING OF
CENTRAL POND**

THE BLOODY RUN CREEK GREENWAY REDEVELOPMENT PROJECT: POND CONFLUENCE ⁴

Detroit Collaborative Design Center

Partners:

- The Kresge Foundation
- McCormack Baron Salazar
- NTH Consultants, Ltd.
- Adi Shamir
- The Mannik & Smith Group, Inc.
- Urban Resource Alliance
- Zachary & Associates, Inc.
- Wladek Fuchs

Project Synopsis:

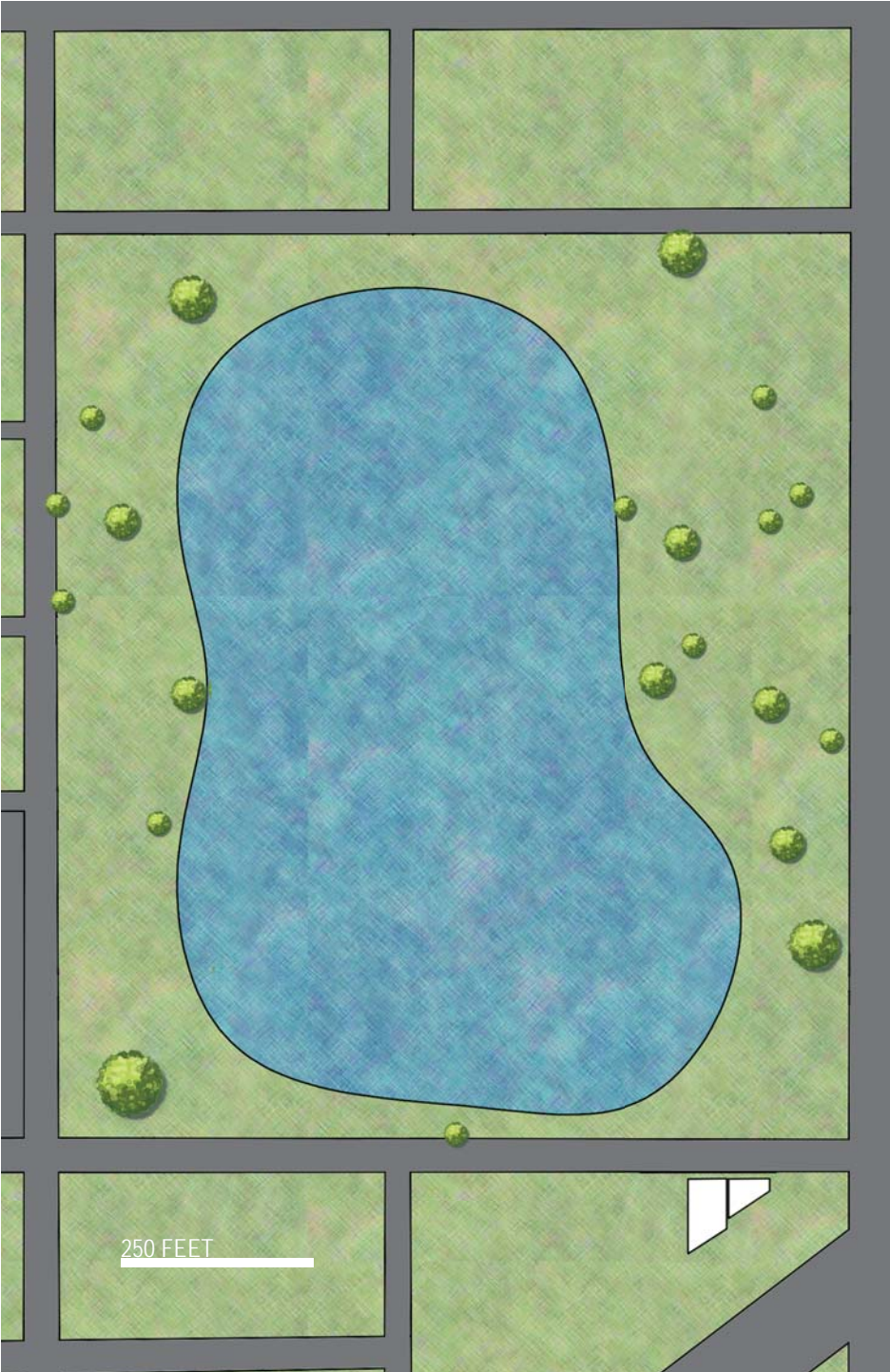
The Bloody Run Creek Greenway Redevelopment Project plan called for 3500 acres of redevelopment throughout the area to address stormwater management and leverage private development in many areas including renewable energy, food production, housing, and retail, as well as historic preservation. The first pass of this plan included the daylighting of the Bloody Run Creek with the confluence of the two legs of the creek creating a central pond which is situated right on top of our site.

This pond would a central detention basin for the entire area, but also serve as a gathering space for events and activities. Surrounding the pond would be sustainable community housing with a walkable center near Gratiot. There were large tracts of photovoltaics and wind turbines to power the development. After testing, it was determined that the creek was too contaminated to unearth, and a second plan developed by Mannik & Smith which called for 725 acres. Instead of daylighting the creek, the plan recalls the creek by recycling stormwater runoff into a stream system. This would be a seasonal water system and the water would be directed along manmade canals to the same central pond, where it would be pumped back to the beginning. The pumps would be run by the renewable energy systems, and when urban agriculture is establish, irrigation water could be diverted to these areas.

EXISTING
LANDSCAPE



PROPOSED POND



RECOVERYPARK PLAN 5: GREENHOUSES

Mannik & Smith Group

Project Synopsis:

By removing the residential portions of the plan, the RecoveryPark plan was able to secure greater support. There is no fear of displacement. This plan, managed by Mannik & Smith focuses on 32 acres of land directly north of our site. Agriculture is emphasized with the addition of aquaculture (fish farming). It is a plan for food production, but still fulfills the water management goals of previous plans. In exchange for the public easements of the corridor between Chene and St. Aubin streets, RecoveryPark would create detention ponds on each block. These ponds would be fed by stormwater runoff through slight regrading of the surrounding area. Surrounding the ponds would be a series of greenhouses which could be connected to irrigation water drawn from

the ponds. With this manner, over two million gallons of water can be diverted by the cities stormwater system. In addition to the greenhouses, aquaculture tanks would be built to farm over five million pounds of fish annually. Food processing facilities would be set up for every 100 acres of land developed in the this way, and the Chene Ferry market building would be redeveloped and reopened to sell the produce and fish.



ARTIST
RENDERING OF
GREENHOUSES

PROPOSED
GREENHOUSES



THE CITY'S PLAN:
SOCCER FIELDS

Project Synopsis:

Within each of these plans, our site fulfills a different and successively smaller function. First, in the Bloody Run Creek Greenway Redevelopment plan, our site served as the primary location for stormwater detention in a central pond. The size of the redevelopment was reduced, but the pond stayed on as the endpoint of recirculating seasonal stormwater system. Within RecoveryPark plan, our site was initially included and envisioned as part of the series of greenhouses. However, due to its proximity to the

Edison Public School Academy, the city of Detroit has decided that this site would make an excellent location for sports fields. Because of this, RecoveryPark has restricted its plan by removing this area and everything south. It is now envisioned as a series of well-maintained sports fields adjacent to the school.



ARTIST
RENDERING OF
SOCCER FIELDS



CLAYTOWN CONNECTIONS ⁶

Detroit Collaborative Design Center

Partners:

- Community Foundation for Southeast Michigan
- Michigan Trails and Greenway Alliance
- Bridging Communities, Inc

Project Synopsis:

The Claytown Greenway project incorporates low cost, place making strategies along with long-term streetscape alterations for the Claytown neighborhood in Southwest Detroit. The overall goal of the project is to create a strong sense of place in the neighborhood through encourage non-motorized transportation. The project incorporates a phased approach and is designed in alignment to other active plans in the Southwest Detroit Community.



THE ALLEY PROJECT (TAP) ⁷

Detroit Collaborative Design Center

Partners:

- Young Nation

Project Synopsis:

Taking advantage of the available land and spaces in the Southwest Detroit neighborhood, the TAP project creates a space for creativity and learning. The TAP project is composed of two vacant lots, a neighborhood alley, and a studio garage. Working with Young Nation and the neighbors, the DCDC created and implemented a master plan to turn a once abandoned place into a safe space for the local youth to focus on art and culture in their own terms.



WOODWARD / 6-8 MILE REVITALIZATION PLAN ⁸

New kiosks
along park

New dedicated
light rail lane

New crosswalk
over bioswale

New public
transit platforms

Detroit Collaborative Design Center





Partners:
- Woodward Avenue Action Association

Project Synopsis:
The Woodward/6-8 Mile Revitalization Plan puts forth a vision of Woodward a major transportation and social connection to the inner City. Along the 2-mile stretch, street design, way finding, and historical renovation recommendations are provided. Primarily, the Plan aims to invest in a historic gateway to the City through green and gray infrastructure. Some of the Plan's recommendations include street trees, bike lanes, enhanced public transit, wind collectors, bioswales and kiosks. The Plan is a project of an 18-month collaborative effort collaboration between the DCDC and the Woodward Avenue Action Association.

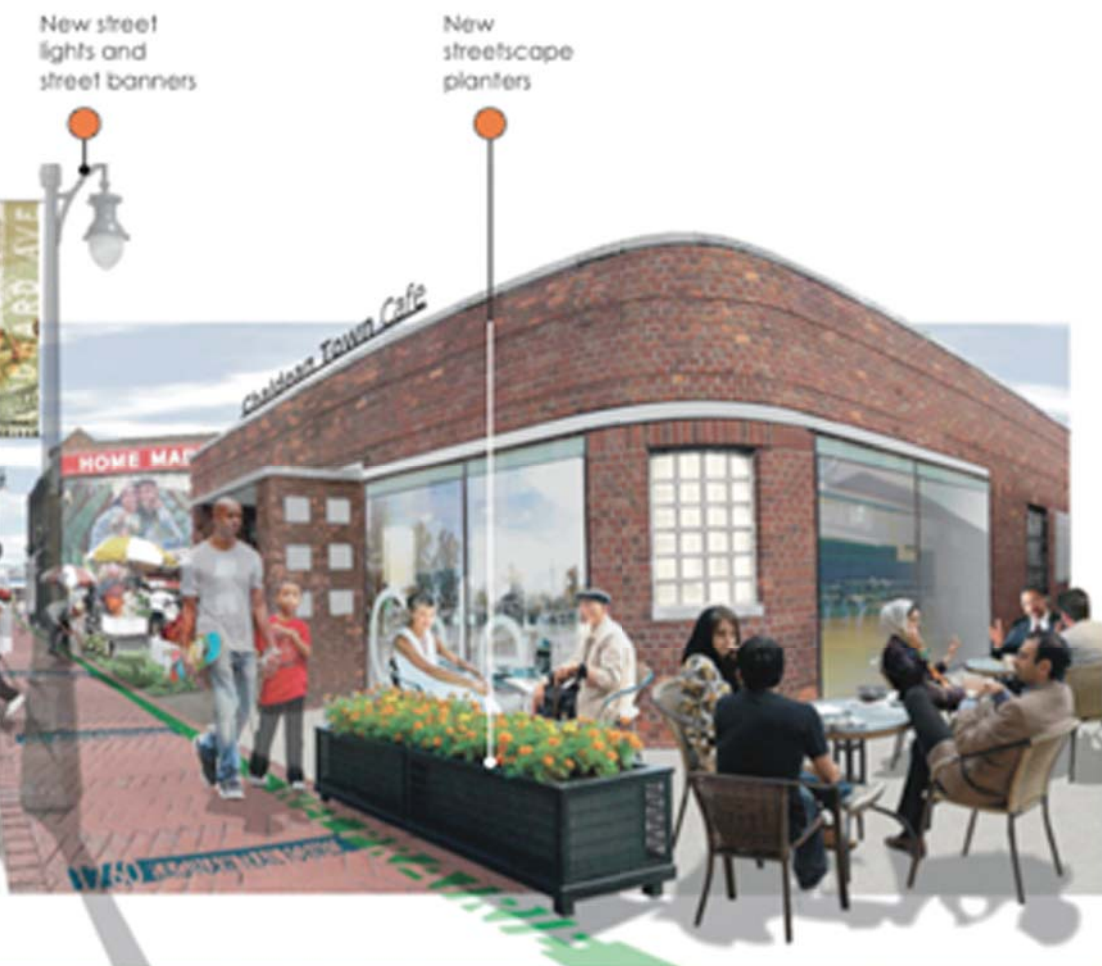


Option B

Project Principles

-  **Green Infrastructure**
Celebrating natural systems and the concept of an urban sustainable corridor
-  **Social**
Engaging the context and the diversity of the neighborhoods
-  **Integration**
Integrating the opposing park and commercial sides of the corridor
-  **History**
Revealing and making tangible the layers of history along the corridor

Detail



Detail 4



CHAPTER NOTES

- 1 MADE studio. "LIQUID PLANNING" 2013. Web. Accessed 19 Nov 2013. <<http://www.made-studio.org/liquid-planning-detroit>>.
- 2 Alison Furuto. "Detroit by Design 2012 Competition Winning Proposal / Matthew Edward Getch + Maciej Woroniecki" 24 Jan 2013. *ArchDaily*. Web. Accessed 01 Nov 2013. <<http://www.archdaily.com/?p=322414>>.
- 3 Alison Furuto. "TechTown District Plan / Sasaki Associates" 23 Apr 2013. *ArchDaily*. Accessed 01 Dec 2013. <<http://www.archdaily.com/?p=362518>>.
- 4 Detroit Collaborative Design Center. "Bloody Run Creek Greenway Redevelopment Project" *DCDC: Projects: Neighborhood Catalysts*. University of Detroit Mercy: School of Architecture. 2011. Web. Accessed 22 Nov 2013. <<http://www.dcdc-udm.org/projects/strategies/bloodyrun>>.
- 5 RecoveryPark. "RecoveryPark" 2013. Web. Accessed 22 Nov 2013. <<http://recoverypark.org/mission>>.
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