The City of Muskegon Heights, Michigan

Industrial Park Strategy

Adopted August 28, 2023

Prepared by:









Strategic Plan

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A. Planning Process

This Industrial Park Plan is a collaborative planning project between the City of Muskegon Heights, Greater Muskegon Economic Development and the Planning Team of CIB Planning, Metro Consulting Associates and OHM Advisors. The result of this project will be an Industrial roadmap to assist with industrial development opportunities and marketing ideas to support attraction efforts for both new employers and developers. These actions can both strengthen and diversify industry within the city.

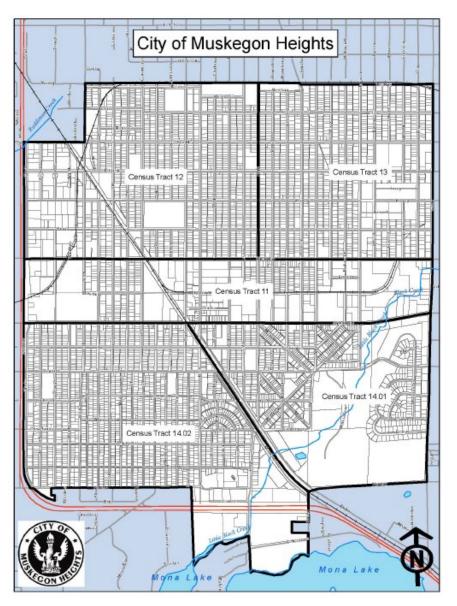
As part of the planning process, the planning team met with city staff, and other key stakeholders with a direct interest in industrial development for the City of Muskegon Heights. Additionally, as part of the planning process, CIB Planning reviewed several policy documents for the city including the Master Plan and the Zoning Ordinance. A market tour was also conducted. This information will help guide the development of the overall strategy, as well as provide critical input on the future industrial vision for the city.

B. Existing Conditions

Economic Conditions

The city of Muskegon Heights is located in west Michigan directly east of Lake Michigan and south of Muskegon, in Muskegon County. Muskegon County is bordered by Ottawa, Oceana and Newaygo Counties.

The city is ideally located along major transportation routes and is a great community for employment and has an exciting, progressive environment, providing a multitude of housing options for individuals and families looking for less urban yet walkable living alternatives.



The current population of the City of Muskegon Heights is 9,917 according to 2020 US Census with 59.3% of the current population within the working age group between 16 and 65 years of age. Of that percentage, 60.3% are active in the labor force, on pace with the State of Michigan labor participation rate of 60.9%.

Historically, the labor participation rate has been a good indicator of the strength or weakness within a local labor market. The higher the rate, the greater the availability of quality employment opportunities.

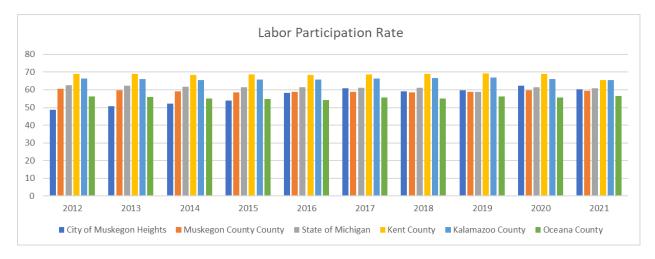


Figure 1: Labor Participation (2021 US Census)

It is noteworthy that the City of Muskegon Heights has seen a significant climb in labor participation of over 10% since 2012.

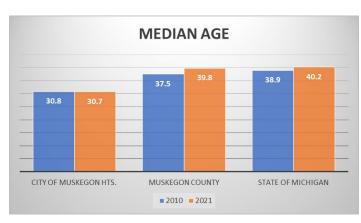


Figure 2: Median Age (2021 US Census)

Compared with Muskegon County as well as the State of Michigan, Muskegon Heights is a relatively young community with a median age of 30.8. When looking at the age clusters for the city, there is a large cluster of the population between 5-34 years old. This age group is the predominant demographic for the city and should be the next

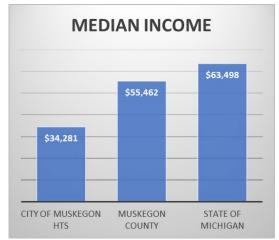
generation of the workforce within the city. As will be seen in Figure 5 on the next

page, the overall City unemployment rate is very low, so while labor participation appears to lower than the national and state average, the population that is participating in the workforce are employed at a high rate. It is important to note that the largest age cluster is 18-44, which is nearly 36% of the total City population. This shows that numerous residents within the city are of family age or have families. Of the 4,078 total households within the city, 66% are families.

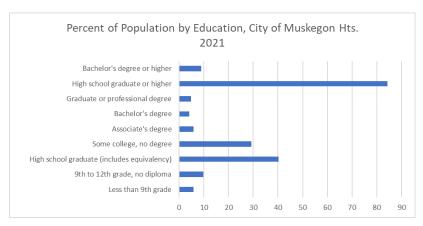
Income, Employment and Education

The median household income in the city is \$34,281 which is lower than both Muskegon County and the State of Michigan. When you look deeper into the income data, understanding that many of the available jobs within the City revolve around manufacturing, educational *Figure 3: Median Income (2021 US Census)*

services, healthcare professional and employment, it would make sense that the median income within the City should be slightly higher in general compared to the county and state, but it is also important to look at earnings relationship in to educational attainment and recognize that the City is lagging behind both the county and state when it comes to percentage of population with higher education degree attainment.



Looking at the educational attainment of the City, a good percentage of the population (85.2%) has completed high school and has some level of higher *Figure 4: Education Attainment (2019 US Census)* education. It is important

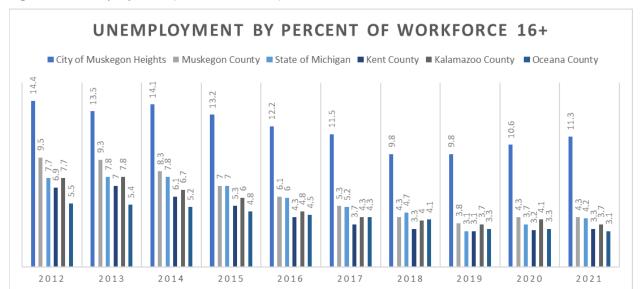


education. It is important to note that the city is less than the State of Michigan for the number of both bachelor's degree attainment and graduate degree attainment. It is a challenge in the current economic environment for companies to find skilled or qualified employees.

Improving the education system from the base (Pre-k through 12) will help to

ensure a stable and ready workforce for future generations of business growth and expansion within the city.

The State of Michigan and many of its communities have emerged from one of the most extensive economic recessions on record since the Great Depression. At its height, unemployment peaked at 7.8% across the state. Locally, *Figure 5: Unemployment (2019 US Census)* unemployment topped 14% in 2012 and



saw a drop through 2019 but has been ticking up through 2021, most likely because of the Covid-19 pandemic given the number of service and sales occupations.

Looking at the industry of the City, it primarily falls in the categories of manufacturing (926 workers), health care (524 workers), accommodation and food services (265), retail trade (541) and educational services (236). This is a strength of the city considering its ability to attract new businesses in manufacturing and healthcare related services.

It is important to note that while Figure 6 identifies the industries of employed workers in the city, it is not wholly indicative of the industries found within the city. Figure 7 looks at the occupation of full-time workers within the city and looks deeper into the specific occupational categories of employees in the city.

As noted above, there is a high number of service-related jobs in the City of Muskegon Heights, however, manufacturing is the single largest source of employment within the city. This is a strength for the community as it demonstrates a labor force versed in the production of goods. This will be beneficial for telling the story of Muskegon Heights to prospective companies looking to locate in the region.

Figure 6: Industry of Employed Workers (2021 US Census)

INDUSTRY OF EMPLOYED WORKERS (US Census 2021 Estimates)	
Civilian employed population 16 years and over	3487
Agriculture, forestry, fishing and hunting, and mining:	14
Agriculture, forestry, fishing and hunting	14
Mining, quarrying, and oil and gas extraction	0
Construction	97
Manufacturing	926
Wholesale trade	31
Retail trade	541
Transportation and warehousing, and utilities:	100
Transportation and warehousing	100
Utilities	0
Information	26
Finance and insurance, and real estate and rental and leasing:	21
Finance and insurance	12
Real estate and rental and leasing	9
Professional, scientific, and management, and administrative and waste management	339
Professional, scientific, and technical services	9
Management of companies and enterprises	0
Administrative and support and waste management services	330
Educational services, and health care and social assistance:	760
Educational services	236
Health care and social assistance	524
Arts, entertainment, and recreation, and accommodation and food services:	334
Arts, entertainment, and recreation	69
Accommodation and food services	265
Other services, except public administration	145
Public administration	153

OCCUPATION OF FULL-TIME EMPLOYED WORKERS (US Census 2021 Estimates)	
Full-time, year-round civilian employed population 16 years and over	1925
Management, business, science, and arts occupations:	366
Management, business, and financial occupations:	87
Management occupations	63
Business and financial operations occupations	24
Computer, engineering, and science occupations:	12
Computer and mathematical occupations	7
Architecture and engineering occupations	5
Life, physical, and social science occupations	C
Education, legal, community service, arts, and media occupations:	174
Community and social service occupations	41
Legal occupations	C
Educational instruction, and library occupations	121
Arts, design, entertainment, sports, and media occupations	12
Healthcare practitioners and technical occupations:	93
Health diagnosing and treating practitioners and other technical occupations	70
Health technologists and technicians	23
Service occupations:	353
Healthcare support occupations	109
Protective service occupations:	88
Firefighting and prevention, and other protective service workers including supervisors	36
Law enforcement workers including supervisors	52
Food preparation and serving related occupations	84
Building and grounds cleaning and maintenance occupations	39
Personal care and service occupations	33
Sales and office occupations:	318
Sales and related occupations	150
Office and administrative support occupations	168
Natural resources, construction, and maintenance occupations:	158
Farming, fishing, and forestry occupations	C
Construction and extraction occupations	113
Installation, maintenance, and repair occupations	45
Production, transportation, and material moving occupations:	730
Production occupations	481
Transportation occupations	105
Material moving occupations	144

Figure 7: Occupation of Full-Time Employed Workers (2021 US Census)

While data was not available specific to Muskegon Heights, we were able to identify the strongest manufacturing sectors within Muskegon County by employment.

Figure 8: Top Manufacturing Sectors in Muskegon County (2021 US Census)

Geographic Area Name	2017 NAICS code	Meaning of NAICS Code	Meaning of Legal form of organization code	Meaning of Employment size of establishments code	Year	Number of establishments	Annual payroll (\$1,000)	First-quarter payroll (\$1,000)	Number of employees
Muskegon County, Michigan	3315	Foundries	All establishments	All establishments	2021	21	207,571	46,757	2,634
Muskegon County, Michigan	3339	Other general purpose machinery manufacturing Machine shops; turned product; and	All establishments	All establishments	2021	9	52,378	11,863	878
Muskegon County, Michigan	3327	screw, nut, and bolt	All establishments	All establishments	2021	26	38,334	8,479	714
Muskegon County, Michigan	3261	Plastics product manufacturing	All establishments	All establishments	2021	10	30,853	7,836	700
Muskegon County, Michigan	3118	Bakeries and tortilla manufacturing	All establishments	All establishments	2021	7	21,415	5,448	636
Muskegon County, Michigan	3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	All establishments	All establishments	2021	3	30,919	7,060	566
Muskegon County, Michigan	3363	Motor vehicle parts manufacturing	All establishments	All establishments	2021	5	33,095	7,436	536
Muskegon County, Michigan	3335	Metalworking machinery manufacturing	All establishments	All establishments	2021	28	26,535	6,178	482
Muskegon County, Michigan	3372	Office furniture (including fixtures) manufacturing	All establishments	All establishments	2021	6	30,065	6,622	413
Muskegon County, Michigan	3328	Coating, engraving, heat treating, and allied activities	All establishments	All establishments	2021	10	21,055	5,292	365
Muskegon County, Michigan	3329	Other fabricated metal product manufacturing	All establishments	All establishments	2021	13	18,851	3,247	286
Muskegon County, Michigan	3251	Basic chemical manufacturing	All establishments	All establishments	2021	4	16,519	4,110	264

Based on the figure above, several of the top industries are in Muskegon Heights such as Quality Tool and Century Foundry which suffered a catastrophic fire earlier this year. Metal working, casting, tool and die and fabrication are key strengths of the Muskegon Heights workforce and are a strong selling point for future business attraction, especially for attracting tier II and III suppliers to industries in larger markets such as Grand Rapids, Kalamazoo, Lansing, Chicago and Indianapolis.

Worker Flow

It is also important to understand where workers are going and where they are coming from. Based on Census commute data, only 7 percent of Muskegon Heights residents are working in Muskegon Heights. Furthermore, the average commute time for a Muskegon Heights resident is 19 minutes suggesting that while most residents are working outside of Muskegon Heights, they are still working within Muskegon County. Conversely, looking at Muskegon County compared to Kent County, which is a large employment center, 23.9% of Muskegon County residents are leaving the county for employment whereas only 9.5% of Kent County residents are leaving the county for employment. It should be a priority goal for the city to locate new companies to capture more resident workers.

Looking through another lens at Ottawa (31.7%), Oceana (45%) and Newaygo (38.6%) Counties, a large percentage of residents in all three of those counties are leaving their respective counties for employment. Furthermore, the commute data suggests that most of those residents are commuting to Muskegon County based on average commute times. Given this, we believe that there is a strong labor-shed for Muskegon Heights to draw from as companies either look to grow and expand or locate new facilities in the East and West Industrial Parks in Muskegon Heights. The primary issue is a lack of quality, modern existing industrial square-footage not only in Muskegon Heights, but throughout Muskegon County.

Industrial Square Footage

As of June 2023, there are only 3 industrial buildings listed for sale in Muskegon Heights, two of which were built in the 1930's and offer less than 7,000 square-feet. Today's modern manufacturers generally require at least 40,000 square-feet with at least a 28-foot ceiling clearance. The city only has 2 industrial properties currently available for lease.

Likewise, there are only 5 industrial properties listed for lease and 6 for sale in all of Muskegon County. Given this and the amount of land available in Muskegon Heights, there is a good case to be made for new industrial square footage (up to 250,000 to 500,000 SF) to be built in the West Industrial Park where more vacant land is available for development. The largest issue to overcome with this will be the cost of construction per square foot compared with the potential lease or

purchase rate per square foot, where it is more than likely that a financial gap will exist. In this case, there are several financial tools available that are discussed in more detail later in this report.

SWOT Analysis

On January 17, 2023, the Muskegon Heights City Council along with the Planning Commission and the consulting team performed a SWOT analysis (strengths, weaknesses, opportunities, threats) to understand the community's assets and gain a clear understanding of how the community sees both the potential and limiting factors for the future development of the East and West Industrial Parks.

Strengths

Muskegon Heights has several amenities to offer both residents and businesses alike. The city is conveniently located at the crossroads of I-96 and 31 and has access to several markets including Grand Rapids, Kalamazoo, Ludington, Traverse City, Battle Creek, Lansing and Chicago. The city has a strong history of manufacturing and has seen the establishment of a strong fabrication and foundry cluster. Additionally, the city has access to major rail lines as well as a deep-water port in the City of Muskegon. The city is a pro-growth community that offers a full slate of business incentives to those companies that qualify. One of the best strengths for industrial growth in the East and West Industrial Parks is the availability of land for new industrial construction as well as a significant amount of excess water capacity. The city has also recently replaced lead service lines significantly improving the quality of water for residents and businesses alike.

Weaknesses

It is beneficial to identify community weaknesses as part of the larger effort for growth and improvement. Understanding Muskegon Heights weaknesses related to industrial development, lays a framework that will focus development efforts.

During the SWOT exercise, several challenges were discussed. Specifically, to the development of the East and West Industrial Parks is the overall lack of vision and foresight for the development or redevelopment of these areas. Additionally, it was felt that the two industrial parks lack significant delineation, wayfinding and promotion. Another challenge is the fact that the two parks are land-locked predominantly on all sides by existing residentially zoned neighborhoods.

Blight, poor roads and vacant properties have also been a challenge to the perception of the area which can be seen as a deterrent to new development without significant change and targeted code enforcement.

Muskegon Heights also faces a negative reputation (perceived) among residents and within the media, as well as no-growth attitudes from some of the longer established residents. There is also a perception that certain departments or leadership within the city have made new development and expansion of existing development cumbersome.

Opportunities

Weaknesses are opportunities in disguise. Muskegon Heights has opportunities to improve the infrastructure throughout the community as well as improve the roads in the industrial parks and expand the non-motorized pathway system to improve community walkability and bike-ability. Water capacity is a significant opportunity and can be a focal point for attracting new industries with high-water needs such as semiconductor/chip manufacturing, food processing and aquaculture. A strong manufacturing base in the community offers potential for expansion of existing industry as well as attraction of new industries.

Vacant properties offer the opportunity for new industrial building development and Brownfield Act 381 can support new development, site remediation or existing business expansion within the two industrial parks. The city may also want to consider establishing a Local Development Finance Authority to assist with long-term reinvestment into the industrial parks.

Workforce development should be a continued focus with an emphasis on skilled trades and partnerships with the schools and Muskegon Community College. Lastly, there is a great opportunity to re-brand the community as a great place to live, work, play and invest!

Threats

The threats that exist to the city are interwoven with the weaknesses stated above. If long-term, dedicated planning is not focused on finding solutions to the issues that exist, the threats to the area will continue and potentially compound into the future. The city should focus efforts on blight removal, school system improvement, housing deterioration prevention, commercial and industrial developer coordination, residential development amplification, and encouragement of trail access. Another significant threat is that city staff are overstretched and new revenue generation for the city is difficult.

Infrastructure

Metro Consulting Associates (MCA) evaluated the top ten industries in Muskegon County to determine what demand would be placed on the existing infrastructure if new businesses chose to be located within the west and east industrial parks. The top ten list was narrowed down to five based on the average annual payroll. The top five industries include Foundries, general-purpose machinery manufacturing, machine shops making products (screw, nut, and bolt), chemical manufacturing / plastic products, and Bakery and Tortilla Manufacturing.

If the Foundry industry expanded within either of the districts it would require expansion of the gas and electric infrastructure. New gas and electric furnaces will require additional capacity to be added. The technology in manufacturing is changing and is becoming heavily dependent on broadband. The use of robotics, artificial intelligence, data, and process automation requires an expanded broadband network. Also, digital manufacturing will affect the way employees engage with each other, the machinery, and customers. The much newer machine computer interfaces require data transfer at a much faster rate.

In addition to the data transfer, the broadband network must also support the workforce being remote. The broadband in both industrial parks is over 22 years old. The industry will be moving towards 6G in 2030. There is electric capacity in the distribution system. The electric distribution voltage is unknown, however, upgrading to 35 kV may be required. 15 kV is the most common.

New manufacturing machinery most likely will require more power. Several transformers may be required at proposed establishments to increase the power. The Bakery and tortilla manufacturing industry will also require broadband expansion. One of the key trends is the accelerating adoption of automation technologies in the production processes. These technologies allow companies to streamline their operations and improve product consistency while reducing production costs.

Another trend is the growing popularity of e-commerce platforms which has proven to be a game-changer for the industry. With the ability to showcase their most popular products online, customers are now able to purchase their favorite bakery items more conveniently than ever before. The existing water and sewer infrastructure is adequate. While the dry utilities would need to be expanded to support the manufacturing industry expansion, the wet utilities have adequate capacity.

Muskegon Heights is only filtering approximately 1.0 to 1.5 MGD of water daily. The water filtration plant has a capacity of 25 MGD.

One emerging industry that could be supported in both districts is urban agriculture and commercial cannabis distribution facilities. Cannabis Distribution facilities up to 30,000 sf will use approximately 14,000 gallons per day for irrigation and 5 MGD annually. Adding significant water users to the system would generate revenue, and the city has the capacity to do it. Commercial Cannabis Distribution facilities would require much power to support the lighting needed to grow plants. Approximately 80 watts of power are needed per sf, so a 30,000-sf facility would require 2.4 MW. In summary expansion, the dry utilities (gas, electric, broadband) will require significant upgrades, however the wet utilities (water & sewer) have capacity.

Existing Industrial Park Areas

East Industrial Park

Muskegon Heights' eastern industrial park is located south of E. Sherman Boulevard, north of E. Broadway Avenue, and east of Wood Street, covering a total area of 47.12 acres. Of this land area, 9.82 acres are occupied by existing industrial buildings.

Most parcels within the study area are currently zoned for industrial use. Two parcels are underutilized, three are zoned for commercial use, and one is zoned as residential property.

The main soil classification for the industrial park can be generalized as sand, consisting of the PlfabB, PlfabD, PlfadB, and URLs types. Approximately 5% of the soil type is classified as muck, located by the Little Black Creek, running through the southeast corner of this area. The complete breakdown and descriptions are shown below in Table 1. The NRCS Soils Map for the eastern industrial park is attached as Figure 1.

Map Unit Symbol	Map Unit Name	Percent of Area
KU	Kerston muck	5.5%
PlfabB	Plainfield sand, lake plain, 0 to 6 percent slopes	0.3%
PlfabD	Plainfield sand, lake plain, 6 to 18 percent slopes	14.3%
PlfadB	Plainfield-Urban land complex, 0 to 6 percent slopes	27.9%
URLs	Urban land, sandy	51.9%

Table 1. Eastern Industrial Park Soils Classification

West Industrial Park

Muskegon Heights' western industrial park is located south of W. Hackley Avenue, north of W. Broadway Avenue, east of Glade Street and west of 8th Street, covering a total area of approximately 81.13 acres. Of this land area, approximately 765,120 sf occupied by existing industrial buildings.

Approximately 60% of parcels within the area of study are currently zoned for industrial use and another 15% are vacant land. Approximately 22% of parcels are zoned for residential use. Two parcels are designated as underutilized, two are religious, and two are parks.

The soil classification for this industrial park is generalized as sand, consisting of PlfadB and URLs. The complete breakdown and descriptions are shown below in Table 2. The NRCS Soils Map for the western industrial park is attached as Figure 2.

Table 2.	Western	Industrial	Park Soils	Classification
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Map Unit Symbol	Map Unit Name	Percent of Area
PlfadB	Plainfield-Urban land complex, 0 to 6 percent slopes	59.6%
URLs	Urban land, sandy	40.4%

Existing Infrastructure

Water System

The existing water system in the eastern industrial park is composed of 6", 8", and 10" water mains, including a portion of 12" water main on E. Sherman Boulevard and a 14" main on E. Broadway Avenue. The 12" water main on E. Sherman and the 14" on E. Broadway provide the main pressure and flow to the industrial park. There are approximately 13 fire hydrants in the area. This is shown in the Industrial Park East Water and Sewer Map, Figure 3.

The existing water system in the Western industrial park is composed of 6", 8", and 10" water mains, including a 12" main and a 30" main on W. Sherman Boulevard. The 10" on Barney Avenue and a 6" on Park Street provide the main pressure and flow to the industrial park. There are approximately 20 fire hydrants in the area. This is shown in the Industrial Park West Water and Sewer Map, Figure 4.

Sewer System and Surface Runoff

The storm sewer network in the eastern industrial park is composed of 8", 10", 12", 21", 27", 48", and 54" gravity sewers. The eastern industrial park discharges to the Little Black Creek, Mona Lake downstream, and ultimately to Lake Michigan. It is assumed the 54" provides some type of flood attenuation (in pipe storage) for the Little Black Creek within the pipe. The areas adjacent to this pipe do not appear to be large enough to create the runoff required for a pipe of this diameter. The sanitary sewer in the park is composed of 8" and 10" gravity mains which outlet to a 10" in E. Sherman and connect to the Hoyt Street interceptor.

The storm sewer network in the western industrial park is composed of 10", 12", 18", 21", and 48" gravity mains, including a 60" main running down W. Hackley Avenue. The 60" pipe connects to the 96" sewer running under N. Seaway Drive (Business 31) discharging to Ruddiman Creek, Ruddiman Lagoon downstream, and ultimately to Lake Michigan. The sanitary sewer is composed of 8", 10", and 12" gravity mains which discharge into the pump station at Temple Street and W. Sherman. The 6" force main connects to a 12" gravity sewer in W. Sherman that ultimately connects to the Hoyt Street interceptor.

Electric Network

The electric network throughout the City of Muskegon Heights is provided by Consumer's Energy.

The eastern industrial park contains a three-phase distribution line on E. Sherman Boulevard, between Jarman Street and S. Getty Street, a distribution line on Manahan Avenue, west of Jarman Street, and a distribution line on E. Broadway Avenue, between Jarman Street and S. Getty Street. This is shown in Figure 5.

The western industrial park contains many three-phase distribution lines throughout the area, including W. Barney Avenue, W. Hovey Avenue, W. Hume Avenue, W. Manahan Avenue, and Temple Street. This is shown in Figure 6.

Gas Network

The gas network throughout the City of Muskegon Heights is provided by DTE Energy.

The eastern industrial park contains 2" and 4" gas mains. Most of the network is located at the northern end of the industrial park, between E. Sherman Boulevard and E. Manahan Avenue. This is shown in Figure 5.

The western industrial park contains 2", 3", 4", 6", and 12" gas main. The 12" lines run down Park Street and W. Sherman Street. The existing network spans the majority of this area. This is shown in Figure 6.

Telecommunication Network

The existing wireless communication for both the east and the west industrial parks is composed of 3G. 3G networks were released in 2001 and have been phased out by many carriers.

Transportation

The east study area has two major collector streets, E. Sherman Boulevard, and E. Broadway Avenue, with an Average Annual Daily Traffic (AADT) of 12,394 and 6,404, respectively. Jarman Street is classified as a secondary collector, with an AADT of 951. From the east, there are three ways to travel to the east industrial park. There are no known logistic transportation route limitations located along the way.

Route limitations could include but are not limited to road width, bridge heights, turn radii, non-at-grade intersections, etc.

From the East

96W to 31N; 31N to E. Sherman Boulevard; turn left and head west toward the site.

96W to Seaway Drive; NB on S. Getty Street to E. Broadway Avenue; turn left and head west toward the site.

96W to Seaway Drive; exit Airline Highway; turn left and head northwest on Airline Highway; NB on S. Getty Street to E. Broadway Avenue; turn left and head west toward the site.

From the North

31S to E. Sherman Boulevard; turn right and head west toward site.

Potential existing intersection obstructions to be evaluated:

SE corner of E. Sherman Boulevard & Jarman Street – fence & poles

SW corner of E. Sherman Boulevard & Jarman Street – poles

NE corner of E. Broadway Avenue & Jarman Street - pole & guy wires

NW corner of E. Broadway Avenue & Jarman Street – fence

NE corner of E. Broadway Avenue & Wood Street – poles & fence

The west study area has three major collector streets, W. Hackley Avenue, W. Sherman Boulevard, and W. Broadway Avenue, with AADTs of 4,186, 12,394, and 3,918, respectively. W. Barney Avenue, W. Hovey Avenue, W. Hume Avenue, Park Street, and 9th Street are all classified as secondary collectors. There are no known logistic transportation route limitations located along the way. Route limitations could include but are not limited to road width, bridge heights, turn radii, non-at-grade intersections, etc.

From the East

96W to Seaway Drive to W. Sherman Boulevard; turn right and head east toward site.

96W to Seaway Drive to W Hackley Avenue; turn right and head east toward site.

96W to Seaway Drive; NB on S. Getty Street to E. Broadway Avenue; turn left and head west toward the site.

From the South

Head south on Seaway Drive to northbound Seaway Drive cross over; turn right on W. Sherman Boulevard; and head east toward site.

Head south on Seaway Drive to northbound Seaway Drive cross over; turn right on W Hackley Avenue; and head east toward the site.

Potential existing intersection obstructions to be evaluated:

NE corner of W. Hackley Avenue & Park Street – power poles

SW corner of W. Hackley Avenue & Park Street – fire hydrant

NW corner of W. Barney Avenue & Park Street – RR spur

SW corner of W. Barney Avenue & Park Street – poles

SE corner of W. Barney Avenue & Park Street – RR spur

NE & NW corner of W. Hovey Avenue & Park Street – trucks and parking in the row

SE corner of W. Hovey Avenue & Park Street – buildings and poles

SW corner of W. Hovey Avenue & Park Street – buildings

NE corner of W. Sherman Boulevard & Park Street - hydrant

SE corner of W. Sherman Boulevard & Park Street – poles & guy wires

SW corner of W. Sherman Boulevard & Park Street – fence

NW corner of W. Sherman Boulevard & Park Street – poles & guy wires

NE corner of W. Broadway Avenue & Temple Street – fence & poles

SE corner of W. Broadway Avenue & Temple Street – building parking

SW corner of W. Broadway Avenue & Temple Street - buildings & poles

NW corner of W. Broadway Avenue & Temple Street – fence

NE corner of W. Broadway Avenue & 9th Street – buildings

NW corner of W. Broadway Avenue & 9th Street – poles & guy wires

Potential Areas for Redevelopment

East Industrial Park

MCA has identified eight (8) zones for potential industrial development, spanning a total land area of 17.395 acres. Industrial district zoning allows a maximum lot coverage of 85% of the parcel area. Using this metric, it is assumed that the building area on each parcel will be approximately 55% of its total area. Therefore, the eastern district has the potential for 9.567 acres of new industrial use development.

West Industrial Park

MCA has identified 24 zones for potential industrial development, spanning a total land area of 44.619 acres. Using the industrial zoning standards mentioned above, it is assumed that the building area on each parcel will be approximately 55% of its total area. Therefore, the western district has the potential for 24.541 acres of new industrial use development.

Recommended Infrastructure Upgrades

Water System

It is recommended that all 6" diameter water main be upsized to at least 8" diameter for added capacity where a significant amount of development is proposed. Additionally, ensure all existing large diameter pipes are in quality condition.

The east industrial park requires further updates. The existing 6" water main that will be upgraded to an 8" water main running down Manz Street will need to be relocated to Wood Street to avoid running through the 2642 McIlwraith parcel. The existing 6" water main on E. Sherman Boulevard will be upgraded to a 12" water main for added capacity. The existing 10" water main running down Jarman Street will be upgraded to a 12" water main to connect the pressure and flow from E. Sherman Boulevard to E. Broadway Avenue.

Alternatively, a 500,000-gallon water tower could be installed in the industrial park to ensure fire flow capacity and pressure can be achieved with added industrial square footage. The west industrial park will also need further updates. The 6" water main on Temple Street, between W. Barney Avenue and W. Sherman Boulevard, will be upgraded to a 10" water main. The 6" water main on W. Hovey Avenue, between Temple Street and Park Street, will be upgraded to an 8" water main. The 6" water main on Park Street, between W. Hovey Avenue and W. Sherman Boulevard, will be upgraded to an 8" water main and then a 12" water main between W. Sherman Boulevard and W. Broadway Avenue.

Without having a working water model to calculate pressure and flow with the proposed increased demand, all upgrade recommendations are subject to change. Once modeled, Engineers will better understand which areas in each industrial park to target for water main updates.

Sewer System

The sanitary sewer system is expansive enough to support potential development. The east industrial park flows north to E. Sherman and the west industrial park flows northwest to outlet into Ruddiman Creek. Storm sewer systems in both industrial parks would need to be upgraded to accommodate the increase of developed impervious surfaces.

In addition to storm sewer upgrades, each site will need to be able to store a certain volume of stormwater. Tables 3 and 4 below break down the total storage volume for each proposed development. The Muskegon County Stormwater Calculator was used in these calculations.

Property Address	Parcel Area (Acres)	Impervious Area (Acres)	Pervious Area (Acres)	Storage Volume (CF)
601 E. Sherman Boulevard	3.038	1.671	1.367	37,207
2708 Jarman Street	1.086	0.597	0.489	13,300
2736 McIlwraith Street	1.410	0.776	0.635	17,266

Table 3. East Industrial Park Storage Volumes

560 E. Broadway Avenue	1.459	0.802	0.656	17,869
541 E. Sherman Boulevard	0.538	0.296	0.242	6,602
2740 Wood Street	8.001	4.400	3.600	97,996
2740 McIlwraith Street	0.564	0.310	0.254	6,906
610 E. Broadway Avenue	1.299	0.715	0.585	15,894
Total:	17.395	9.567	7.828	213,040

Table 4. West Industrial Park Storage Volumes

Property Address	Parcel Area (Acres)	Impervious Area (Acres)	Pervious Area (Acres)	Storage Volume (CF)
2216 Lemuel Street	0.458	0.252	0.206	5,611
519 W. Hackley Avenue	0.458	0.252	0.206	5,610
2244 Temple Street	2.021	1.111	0.909	24,720
420 W. Barney Street	1.313	0.722	0.591	16,088
2344 Park Street	1.300	0.715	0.585	8,198
2325 Park Street	0.870	0.479	0.392	10,645
2300 Park Street	0.294	0.162	0.132	3,615
2320 Park Street	0.487	0.268	0.219	5,961
2312 Park Street	0.200	0.110	0.090	2,454

Total:	44.619	24.541	20.079	538,565
Avenue	2.062	1.134	0.928	25,230
460 & 420 W. Hume				
481 W. Sherman Boulevard	8.922	4.907	4.015	109,252
2305 Park Street	0.592	0.325	0.266	7,241
525 W. Hovey Avenue	1.128	0.620	0.507	13,808
511 W. Hovey Avenue	1.137	0.625	0.512	13,913
5050 W. Barney Avenue	1.380	0.759	0.621	16,835
2312 Temple Street	0.526	0.289	0.237	6,428
2225 Temple Street	0.607	0.334	0.273	7,442
540 W. Hovey Avenue	1.806	0.993	0.813	22,111
2220 Temple Street	0.670	0.369	0.302	8,204
350 W. Hovey Avenue	0.195	0.107	0.088	2,368
490 W. Sherman Boulevard	3.742	2.058	1.684	45,802
414 W. Broadway Avenue	13.875	7.631	6.244	169,938
2317 Park Street	0.226	0.124	0.102	2,784
400 W. Barney Avenue	0.352	0.194	0.158	4,307

The required storage volumes can be attained through a variety of methods, including, but not limited to, detention basins, retention basins, and underground storage.

Electric Network

The three-phase network should be expanded in the eastern industrial park to handle increased usage. With most of the proposed development being located on the south side of the eastern study area, the electric network should be broadened. The existing line on E. Broadway Avenue could be extended westward, or new lines could be installed going down Jarman Street or McIlwraith Street.

The western industrial park has an existing three-phase network that spans over most of the proposed development area. The network could be expanded near Park Street, north of W. Hovey Avenue, to accommodate the additional area.

The existing network should be updated to ensure it can handle the proposed added usage, such as adding additional transformers.

Gas Network

As a general standard, it is assumed that all 2" and 3" gas main in either industrial park will need to be upsized to 4" to accommodate increased development.

In addition to upgrading 1,100 lineal feet of 2" gas main, the existing gas network in the eastern industrial park will need 1,700 lineal feet of 4" gas main on E. Sherman Boulevard upsized to 6" in order to feed the potential development to the south. The gas main on Jarman Street will need to be extended southward approximately 525 lineal feet to supply any future development towards E. Broadway Avenue.

The western industrial park will need to upgrade 2,400 lineal feet of 2" gas main and 1,525 lineal feet of 3" gas main.

Telecommunication Network

As technology continues to evolve, optimal telecommunications performance is desired and often expected. Network security, server maintenance, hardware and software maintenance/purchasing, and internet service are a few items that companies maintain and expand. When it comes to Muskegon Heights, any new business or company expanding its operations in the city may request higher network service speeds between 250 Mbps and 1000 Mbps.* The standard level of speed companies operate at will increase to an average of 750 Mbps.

Xfinity, one of the area's largest private Internet Service Providers (ISP), offers options up to 6 Gbps. The ISP will have to be chosen based on the availability of ISPs in that area. If possible, having multiple carriers run fiber is recommended as it allows businesses to select their preferred provider and allows additional businesses to enter the sector.

Depending on the company's structure, corporate or noncorporate, a warehouse would generally request at least 1 Gbps but up to 5 Gbps of data which can only be accomplished via a dedicated fiber run. The difference between a corporate structure and a noncorporate structure is the number of devices utilizing the company's network. A standard corporate structure could have 20 or more devices on the network, requiring more broadband reaching up to 5 Gbps. For a noncorporate structure, it will be less than 15 devices utilizing the network, requiring a minimum of 500 Mbps.

Cellular service should be accounted for at each industrial parcel. It is recommended that 5G should be a minimum to accommodate the industrial parks. A single cellular provider is acceptable and would be selected based on the providers in the area.

*Note: 1000 mbps = 1 Gbps

Transportation

The transportation infrastructure must be improved to increase access to the proposed development areas. Key connector roads such as E. Sherman Boulevard and E. Broadway Avenue in the eastern industrial park and W. Hackley Avenue, W. Hovey Avenue, W. Sherman Boulevard, and W. Broadway Avenue in the western industrial park. These roads are in poor condition and take precedence for road improvements.

Intersection improvements are needed in existing areas that currently do not allow for industrial traffic. These intersections may have guy wires, telephone poles, fire hydrants, parking lots, or buildings close enough to the Right of Way to be of concern for truck traffic. For further improvement in traffic flows throughout the eastern industrial park, roundabouts may be added at the key intersections below.

- E. Broadway Avenue and Jarman Street
- E. Broadway Avenue and Wood Stree

C. Financial Tools

It is evident that there is a shortage of quality industrial building products in the existing market. Fewer than 10 buildings are available across Muskegon County, and many are outdated and not up to modern manufacturing needs and standards.

Understanding that, it is important for the City of Muskegon Heights to understand the wide range of financial tools and incentives available to assist with the expansion of existing buildings within the east and west districts as well.

The following strategies could help to assist with closing the financing gap:

 PA 198 Industrial Facilities Exemption – Industrial property tax abatements provide incentives for eligible businesses to make new investments in Michigan. These abatements encourage Michigan manufacturers to build new plants, expand existing plants, renovate aging plants, or add new machinery and equipment. High technology operations are also available for the abatement. Depending on the scope and type of project, real property taxes can be abated up to 50% for a period not to exceed 12 years for new construction. Further, the 6-mil SET may be abated up to 100% with approval from the MEDC.

In the case of rehabilitation, the current assessed value of the property prior to improvement is frozen. This results in a 100% exemption from property tax on the value of the improvements.

A PA 198 Exemption can be initiated by eligible applicants and requires approval from the City Council and the State of Michigan.

2. Opportunity Zones - Opportunity Zones are a new concept recently enacted in the 2017 Tax Cuts and Jobs Act. The program is designed to incentivize patient capital investments in low-income communities nationwide that have been cut off from capital and experienced a lack of business growth. There are three types of tax incentives that relate to the treatment of capital gains, each of the incentives are connected to the longevity of an investor's stake in a qualified Opportunity Fund that provides the most upside to those who hold their investment for 10 years or more.

Preliminary information indicates an Opportunity Fund can be utilized as a primary investment in a variety of activities. Funds can be used to create new businesses, new commercial or residential real estate or infrastructure. Opportunity Funds can be used to invest in existing businesses if it doubles the investment basis over 30 months.

The incentive can also be combined with other incentives such as New Market Tax Credits (NMTC), Low-Income Housing Tax Credit (LIHTC) and historic rehabilitation tax credit, adding a valuable tool for economic and community development. State and local governments should also consider creating and targeting other resources, especially job training, that will play an important role in leveraging investments. Local activity will show that opportunities exist.

3. New Market Tax Credits - Historically, low-income communities experience a lack of investment, as evidenced by vacant commercial properties, outdated manufacturing facilities, and inadequate access to education and healthcare service providers. The New Market Tax Credit Program (NMTC Program) aims to break this cycle of disinvestment by attracting the private investment necessary to reinvigorate struggling local economies.

The NMTC Program attracts private capital into low-income communities by permitting individual and corporate investors to receive a tax credit against their federal income tax in exchange for making equity investments in specialized financial intermediaries called Community Development Entities (CDEs). The credit totals 39 percent of the original investment amount and is claimed over a period of seven years.

4. Obsolete Property Rehabilitation Credit - The Obsolete Property Rehabilitation Act (OPRA), Public Act 146 of 2000, provides for a tax incentive to encourage the redevelopment of obsolete buildings. A new exemption will not be granted after December 31, 2026, but an exemption then in effect will continue until the certificate expires.

The tax incentive is designed to assist in the redevelopment of older buildings in which a facility is contaminated, blighted or functionally obsolete. The goal is to rehabilitate older buildings into vibrant commercial and mixed-use projects. 5. Brownfield Redevelopment Authority - Once created, a BRA reviews proposal for the redevelopment of eligible property and determines what financial incentives are necessary to assist the redevelopment. The authority prepares a plan that identifies the brownfield projects. Each project section of the plan includes the description of the eligible property, the eligible activities, the TIF approach to be taken and other issues related to the subject parcels.

The authority then recommends to the governing body of the municipality (city or village council, township board or county commission) that the decision-making body holds a public hearing regarding the plan and subsequently acts to approve with modifications or deny the plan. The authority would recommend revisions to the plan as new projects are submitted or revisions are requested on existing plan projects.

6. Municipal/Non-profit Public Private Partnerships – This opportunity would allow a municipality or non-profit agency the ability to partner with a forprofit builder to develop new spec industrial facilities within the East and West Industrial Parks. By partnering, it is possible for the developers/builders to get land at a lower cost, thereby reducing total construction costs.

In theory, the municipality/non-profit could hold the land, reducing holding costs and taxes while the project is under construction. The P3 could also be instrumental with infrastructure development on the property and eventually recuperate initial costs upon final sale of property.

7. Commercial Rehabilitation Act – The Commercial Rehabilitation Act, Act 210 of 2005 encourages the rehabilitation of commercial property by abating the property taxes generated from new investment for a period of up to 10 years. As defined, commercial property is a qualified facility that includes a building or group of contiguous buildings of commercial property that is 15 years or older, of which the primary purpose is the operation of a commercial business enterprise or multifamily residential use.

A qualified facility may also include vacant property or other commercial property which, within the immediately preceding 15 years, was commercial property. Types of commercial business enterprises include office, engineering, research and development, warehousing, parts distribution, retail sales, and other commercial activities. American Rescue Plan Act – Under the new American Rescue Plan Act, \$350 billion is coming to state and local governments—more than twice the amount of CARES Act funding. Michigan is projected to receive approximately \$10.3 billion, \$4.4 billion for local governments, \$5.6 billion for the State of Michigan, and another \$250 million for capital improvement projects.

The entire American Rescue Plan represents \$1.9 trillion of funding, including money for vaccines and COVID-19 testing, K–12 schools, higher education, transportation, childcare, as well as rental and mortgage assistance.

 Business Development Program – The MiBDP is an incentive program available from the Michigan Strategic Fund, in cooperation with the MEDC. The program is designed to provide grants, loans or other economic assistance to businesses for highly competitive projects in Michigan that create jobs and/or provide investment.

Muskegon Heights would utilize this program in partnership with Greater Muskegon Economic Development and the MEDC through their business retention/attraction strategy. This tool can work great for companies looking to expand or relocate within the city and are adding new and retaining existing jobs.

10. Michigan Transportation Economic Development Fund - The mission of the Transportation Economic Development Fund (TEDF) is to enhance the ability of the state to compete in an international economy, to serve as a catalyst for economic growth of the state, and to improve the quality of life in the state. The funds are available to state, county, and city Road agencies for immediate highway needs relating to a variety of economic development issues.

Similar to the Business Development Program identified above, this is a great tool to help communities improve transportation routes supported by large economic development projects.

11. Distressed Area Recompete Pilot Program (Recompete Pilot Program) - On June 12, 2023, EDA released a fact sheet and Recompete Eligibility Mapping Tool to prepare applicants for the upcoming Recompete Pilot Program funding opportunities. EDA will release its detailed notice of funding opportunity (NOFO) for the program in the coming weeks. Ensure you are registered to receive EDA's electronic communications to stay informed about updates to the Recompete Pilot program.

The Recompete Pilot Program is an economic development initiative that will provide grant funding to distressed communities across the country to create, and connect workers to, good jobs and support long-term comprehensive economic development by helping to reduce the high, prime-age (25 to 54 years of age) employment gap.

The program employs EDA's place-based approach to economic development and seeks to address the unique challenges of an individual community or region.

The Recompete Pilot Program was enacted as part of the CHIPS and Science Act of 2022 (as the Distressed Area Recompete Pilot Program). Congress appropriated EDA \$200 million – of the \$1 billion authorized for the program – as part of the FY 2023 Omnibus Appropriations Bill.

This new authority allows EDA to:

- target persistently economically distressed areas to support long-term, comprehensive and sustainable economic development and job creation/placement; and
- award grants to support development or implementation of an eligible recipient's Recompete Plan.

Muskegon County is an eligible entity for the Recompete Pilot Program.

12. U.S. EPA Site Assessment Grants - Assessment Grants provide funding for a grant recipient to inventory, characterize, assess, conduct a range of planning activities, develop site-specific cleanup plans, and conduct community engagement related to brownfield sites.

Muskegon County was awarded \$500,000 in 2022 in a four-year program to provide site assessment support and this program could be very beneficial for industrial park development and redevelopment within the east and west districts.

D. Regulatory Environment

Another barrier to new development is the local, state, and federal regulatory environment is having on the bottom-line cost of new construction. The regulatory environment consists of local building permits, inspection fees, development review fees, sanitary and storm-sewer connection fees, water connection fees, state inspection fees, energy efficiency requirements and other costs associated with construction.

It is recommended that the City of Muskegon Heights review internal development review processes as well as costs associated with reviewing proposed developments and permitting related fees. This report is not speculating that the city is currently overcharging for fees but is suggesting that a rate study should be completed to see if the city is comparable in costs to similar communities and if there are any areas where efficiencies in process can be accommodated.

E. Implementation Strategy

There are a number of opportunities to invest and support new growth within the East and West Industrial Parks. It will be important to prioritize those capital improvements to ensure the most benefit is realized not only in new taxable value, but also in job growth, wage growth, business retention and expansion and finally business attraction.

Land Banked Property

There are several properties throughout the City of Muskegon Heights currently held by either the Land Bank for Muskegon County or the Michigan Land Bank Authority. These properties can both be a liability and an asset to the City of Muskegon Heights.

When properties are held by a Land Bank, they are not income generating for the City of Muskegon Heights as they are not required by statute to pay residential property tax. Essentially, the more properties in the Land Bank, the less revenue to the City. Secondly, many of these properties tend to be vacant and blighted and in need of demolition. The City should work with its Land Bank partners to identify a priority demolition plan and access ARPA recovery funds to implement demolition efforts across the City as soon as possible to stabilize blighted areas which can also help reduce crimes committed on these vacant properties.

This is only successful though when there is a plan for redevelopment of these vacant properties. Through the Land Bank Act, Land Banks have access to certain economic development tools that can be lucrative to potential investors and developers. The City should work with the State Land Bank Authority to consolidate the vacant parcels in the industrial parks (if any) and issue a Developer Request for Qualifications to solicit a pool of qualified developers that have the capacity to start building on these vacant parcels immediately using Tax Increment Financing to assist with closing the financial gaps between construction and sale or lease of the final industrial units.

Tools to Support Industrial Growth

As indicated within the economic conditions analysis above, there are several areas that could present an opportunity for new Industrial growth within the City of Muskegon Heights. This includes a mix of both existing structures and vacant properties identified in both the East and West Industrial Parks. The following programs are intended to assist the city with the redevelopment of these sites as well as assist with support for redevelopment, new and existing businesses and attraction to these spaces.

Project Specific Tax Capture (LDFA)

Recognizing that the cost of industrial development is higher than it is for undeveloped sites, the City may, at its own discretion, commit project-specific future tax increment capture back to private projects for a specified period of time. The goal is to provide funding to close the "gap" that prevents the project from becoming a reality due to financial feasibility. For example, if the pro-forma for a project indicates that it cannot generate enough income to cover the cost of construction and a reasonable rate of return for a developer/investor, future tax increment can be committed to that development to make is feasible. It can also be used as a tool to attract companies and businesses to the township to create new employment opportunities within the LDFA District.

For the City to use this option, the City will need to establish an LDFA Development Plan to include "Gap Funding" as an eligible expense and utilization of captured funds from the LDFA.

Public-Private Partnerships

Public-Private Partnerships can exist in several different formats but may present one of the best opportunities for redevelopment of industrial spaces within the City of Muskegon Heights.

This opportunity would allow a municipality or non-profit agency the ability to partner with a for-profit builder to develop new industrial, Flex or campus options within the city. By partnering, it is possible for the developers/builders to get land at a lower cost, thereby reducing total construction costs.

In theory, the municipality/non-profit could hold the land, reducing holding costs and taxes while the project is under construction. The P3 could also be instrumental with infrastructure development on the property and eventually recuperate initial costs upon final sale or redevelopment of property.

Business Retention/Attraction

Upon completion of this strategy, it will be important to engage fully with the Greater Muskegon Economic Development as well as the Michigan Economic Development Corporation to implement a business attraction strategy that works

for the community based on the outcome of the Master Plan, land available for growth and target sectors the city is looking to attract. While Muskegon Heights may not be looking to land large employers in the community, a strong business attraction strategy can also work to land retail and office-based tenants for existing spaces within the community.

Greater Muskegon Economic Development as well as MEDC can provide support to Muskegon Heights and can be a useful partner for assisting with attracting new industrial and office users to the community. Utilization of their broker networks as well as hosting local familiarization tours within the community can work to attract new investors and tenants that strengthen and diversify the economic fabric of the community.

Small Business Support – MEDC/GMED/SBA/PTAC/SCORE

There are several support agencies positioned to support local entrepreneurs and should all be included in discussions and strategies to identify entrepreneurs and home-based businesses throughout the city and "garden" them to foster new economic growth in the city.

The following programs are ideal for this strategy.

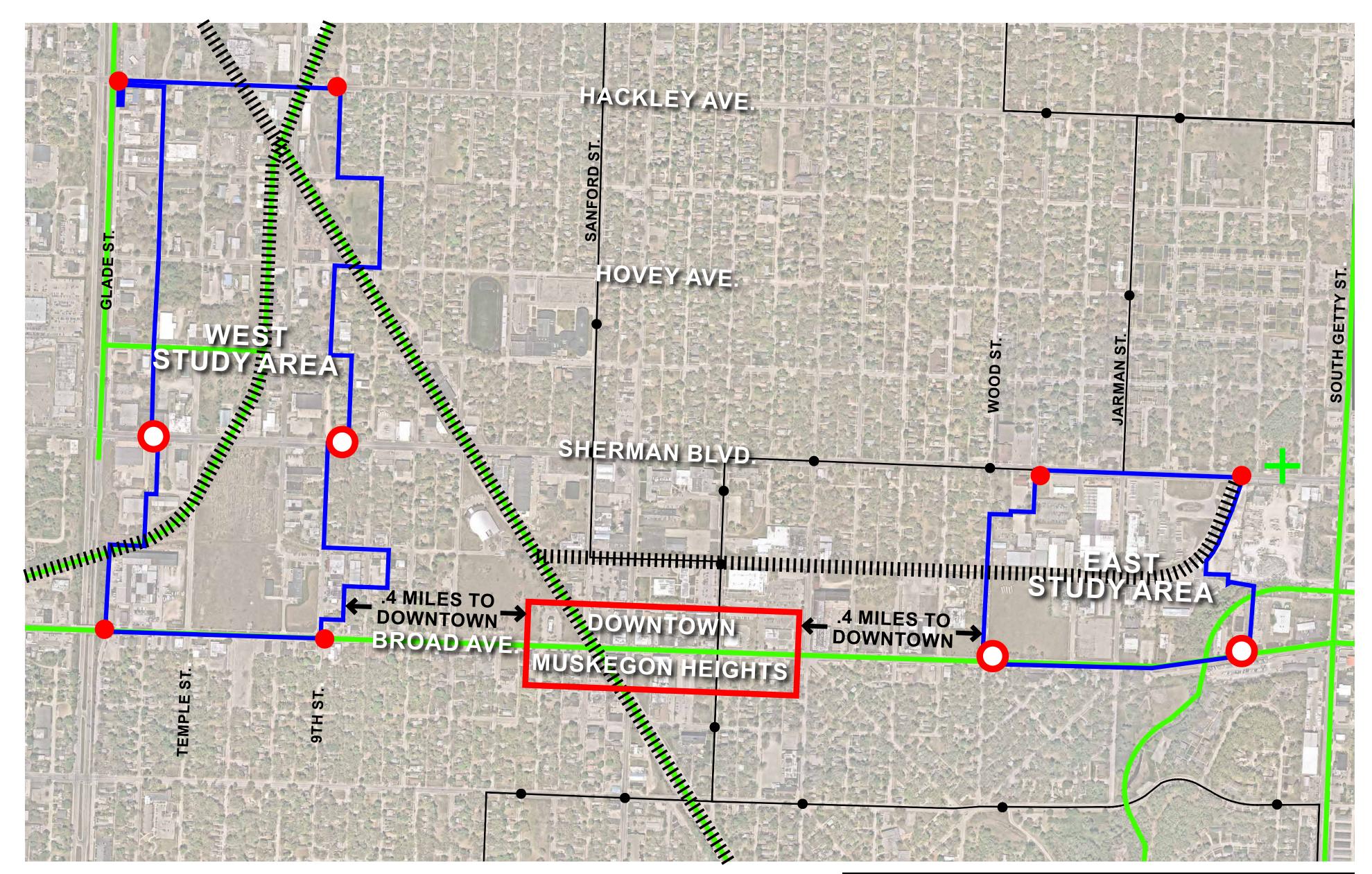
- Procurement Technical Assistance Center ((231) 722-7700) The mission of PTAC is to enhance national defense and economic development in the State of Michigan by assisting Michigan businesses in obtaining and performing on federal, state and local government contracts. PTAC is a great resource for small businesses looking to provide services to all levels of government.
- SCORE ((231) 722-3751) SCORE Muskegon is part of a national non-profit, "Mentors to America's Small Business" which provides free and confidential business advice and mentoring tailored to meet the needs of small businesses in the Muskegon area. Support areas include accounting, finance, marketing, management and business plan preparation.
- Muskegon Innovation HUB (616) 331-6900) The Muskegon Innovation HUB provides several entrepreneurial support services from incubation to co-working spaces to funding support. The Muskegon Innovation Hub Business Incubator helps transform emerging entrepreneurs into successful companies. Entrepreneurs will gain invaluable connections to game-changing resources and mentorship to help them navigate the path to market.

- Michigan Small Business Development Center The MISBDC is a premier business development and entrepreneurial support agency. They offer a wide range of services from business planning to counseling to market research. MISBDC is a branch of the U.S. Small Business Administration. <u>https://michigansbdc.org/</u>.
- SBA The U.S. Small Business Administration can provide funding assistance through micro loans for growing and expanding small businesses looking to locate within Downtown Lansing. <u>https://www.sba.gov/</u>
- Greater Muskegon Economic Development GMED's focus is to leverage public and private investment to accelerate business growth and the creation of high-quality employment opportunities in Muskegon County.

GMED is uniquely positioned to help local businesses meet their economic objectives.

- Advise as to business expansion assistance
- Assist with site location and planning
- Coordinate economic development incentives and grant opportunities
- o Assist with infrastructure development
- Provide project financing assistance
- o Offer Brownfield redevelopment support
- o Serve as a liaison between business and state and local government
- Assist with access to a number of workforce training programs

F. Design Plan



INDUSTRIAL PARK STUDY AREA

PROPOSED GREENWAY (CONCEPTUAL MUSKEGON GREENWAYS PLAN)

- **EXISTING BUS STOP**
- POTENTIAL PRIMARY GATEWAY
- POTENTIAL SECONDARY GATEWAY
- **IIIIIII** ACTIVE RAILROAD
 - EXISTING CITY GATEWAY SIGNAGE

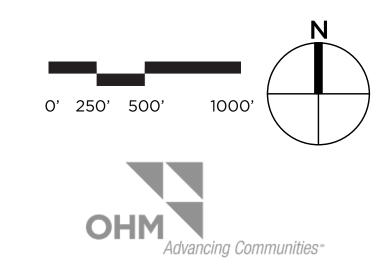


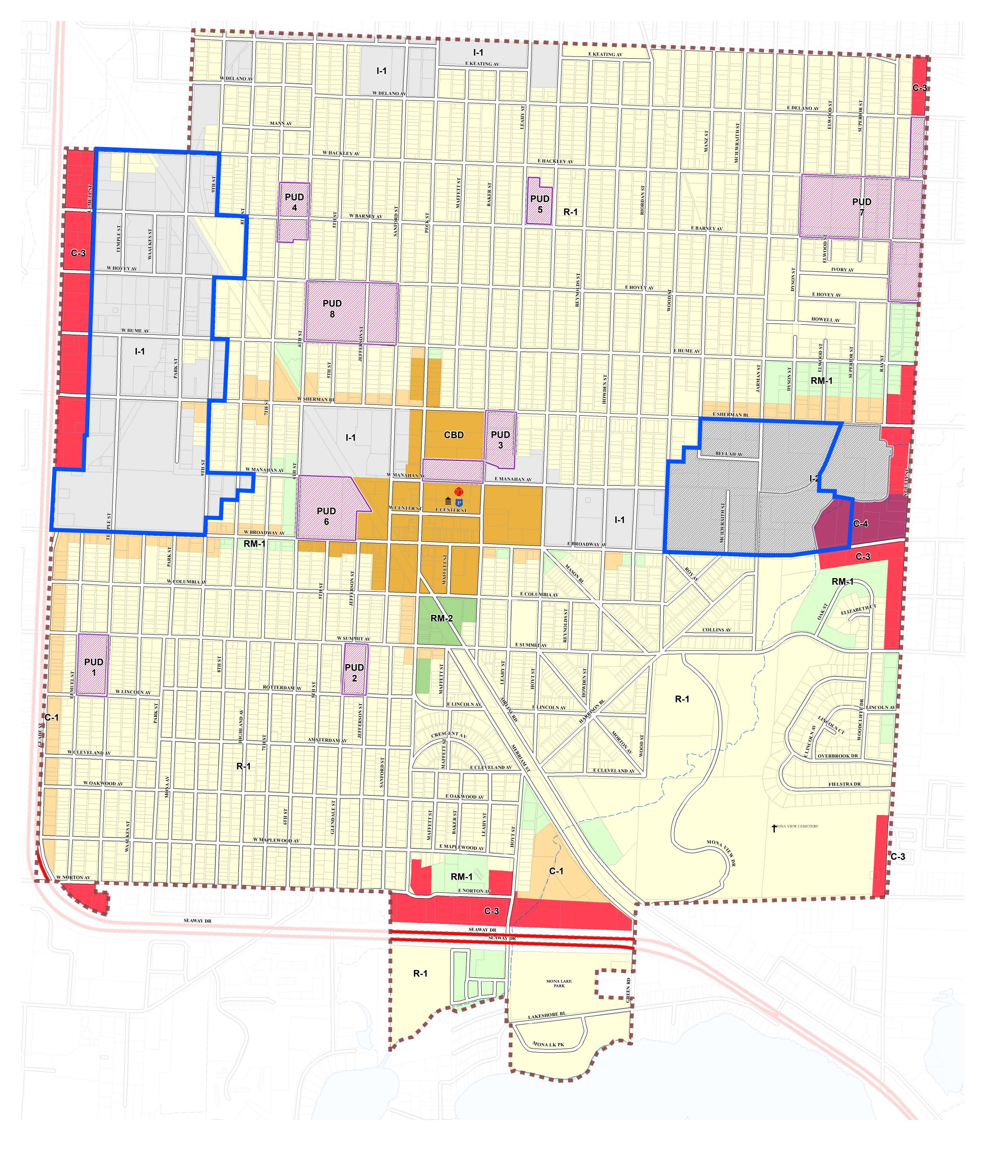
TAKEAWAYS

- 1. There are no existing bus stops within the study areas. **Consider relocating or modifying bus routes to provide** access to industrial uses.
- 2. Improve pedestrian ways between existing bus stops and district properties. Coordinate with MATS and adjacent communities to provide appropriate access improvements.
- 3. Approximately 0.4 miles between downtown Muskegon Heights and study areas. Consider streetscape improvements along Sherman Blvd. and Broad Ave. to strengthen connections to downtown.
- 4. Explore opportunities for industrial park identity signage, wayfinding, and branding elements in addition to the existing Muskegon Heights gateway signage.
- 5. Future greenway connections along railroad corridors and Broadway Avenue have been proposed to strengthen multimodel connectivity between downtown Muskegon Heights and the surrounding region. Consider strategies to incorporate pedestrian and bicycle infrastructure in study areas.

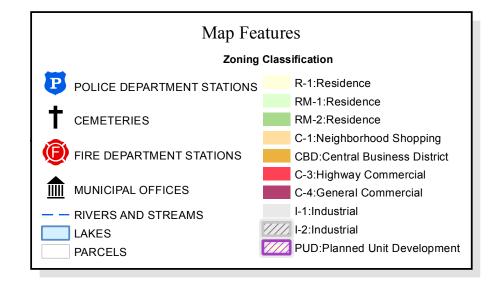
AREA CONNECTIONS / GATEWAYS

INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI





MUSKEGON COUNTY Map created by Muskegon County Mapping & GIS Muskegon County Equalization 173 E. Apple Ave, Suite 201 Muskegon, MI 49442 P: 231-724-6386 F: 231-724-1129 www.muskegoncountygis.com Map Data: Mapping & GIS Projection: State Plane NAD 1983 Michigan South Zone, International Feet





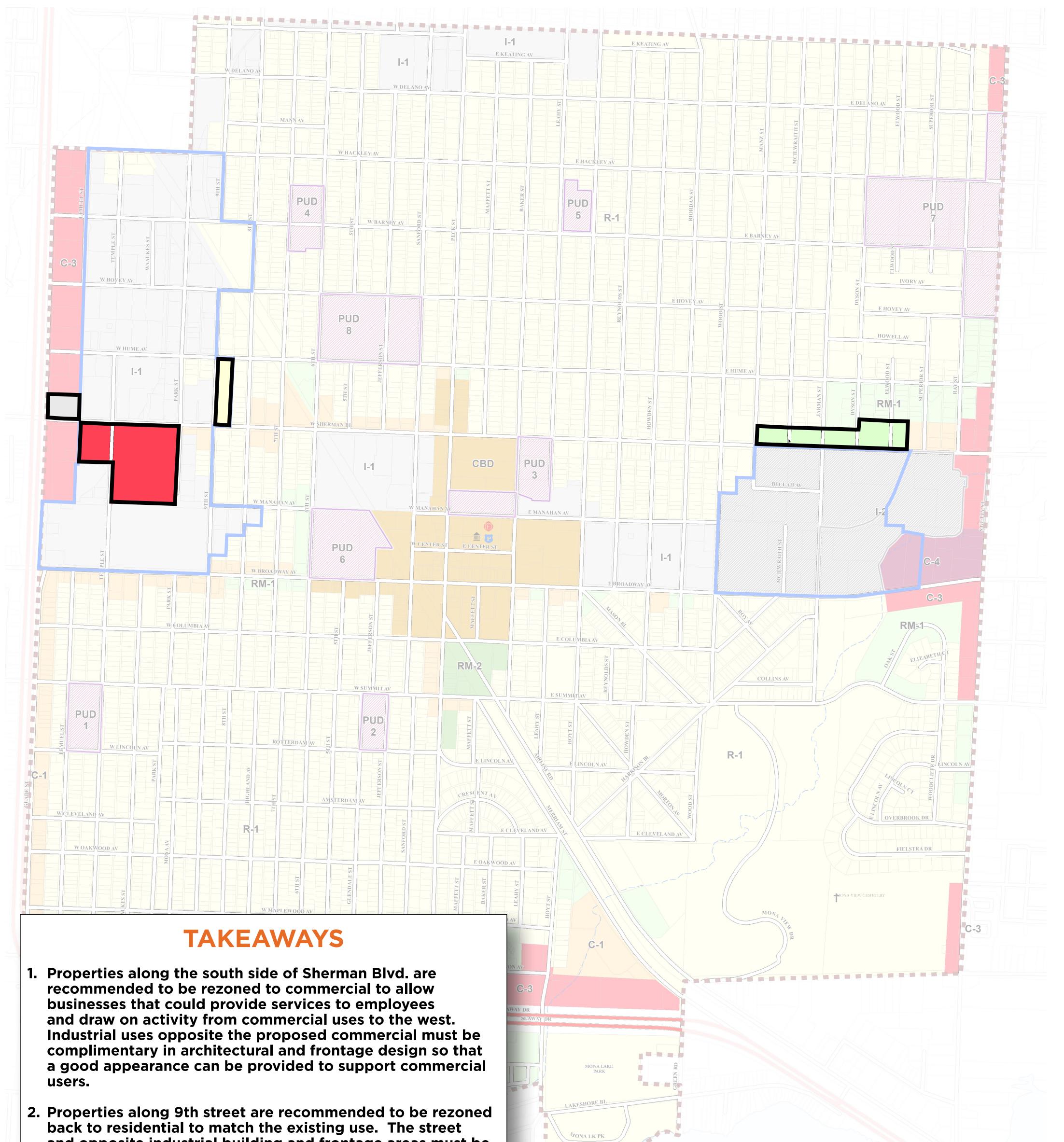
ZONING MAP CITY OF MUSKEGON HEIGHTS Adopted on October 8, 2012 and became Effective on October 19, 2012

MUSKEGON COUNTY, MICHIGAN

EXISTING ZONING

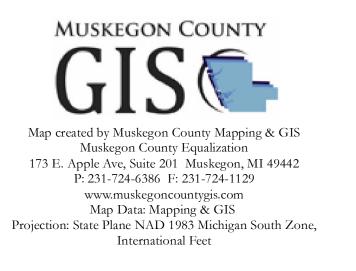
INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

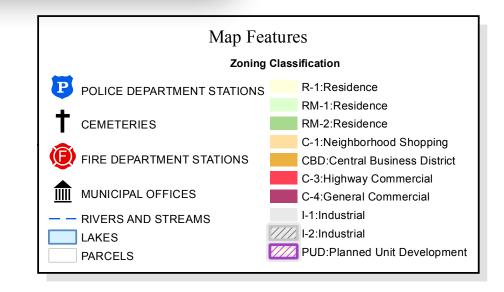


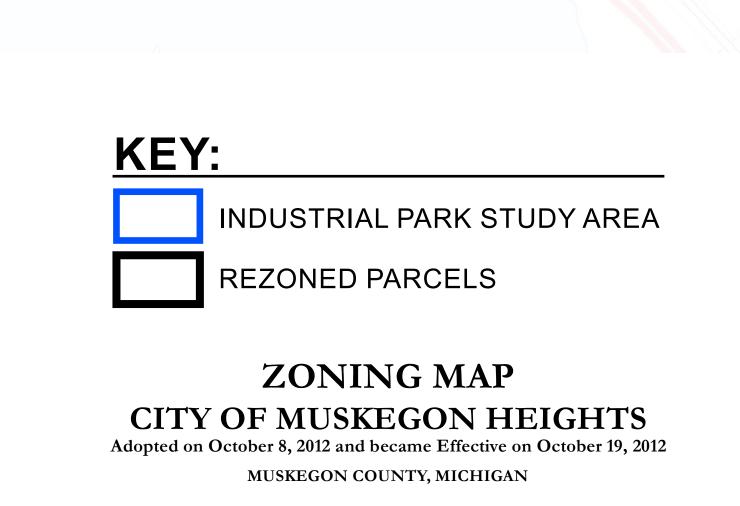


and opposite industrial building and frontage areas must be designed to be sensitive to the residential uses.

3. Properties on the north side of Sherman Blvd. are recommended to be rezoned to RM-1 for apartment use. The street and opposite industrial building and frontage areas must be designed to be sensitive to the residential uses



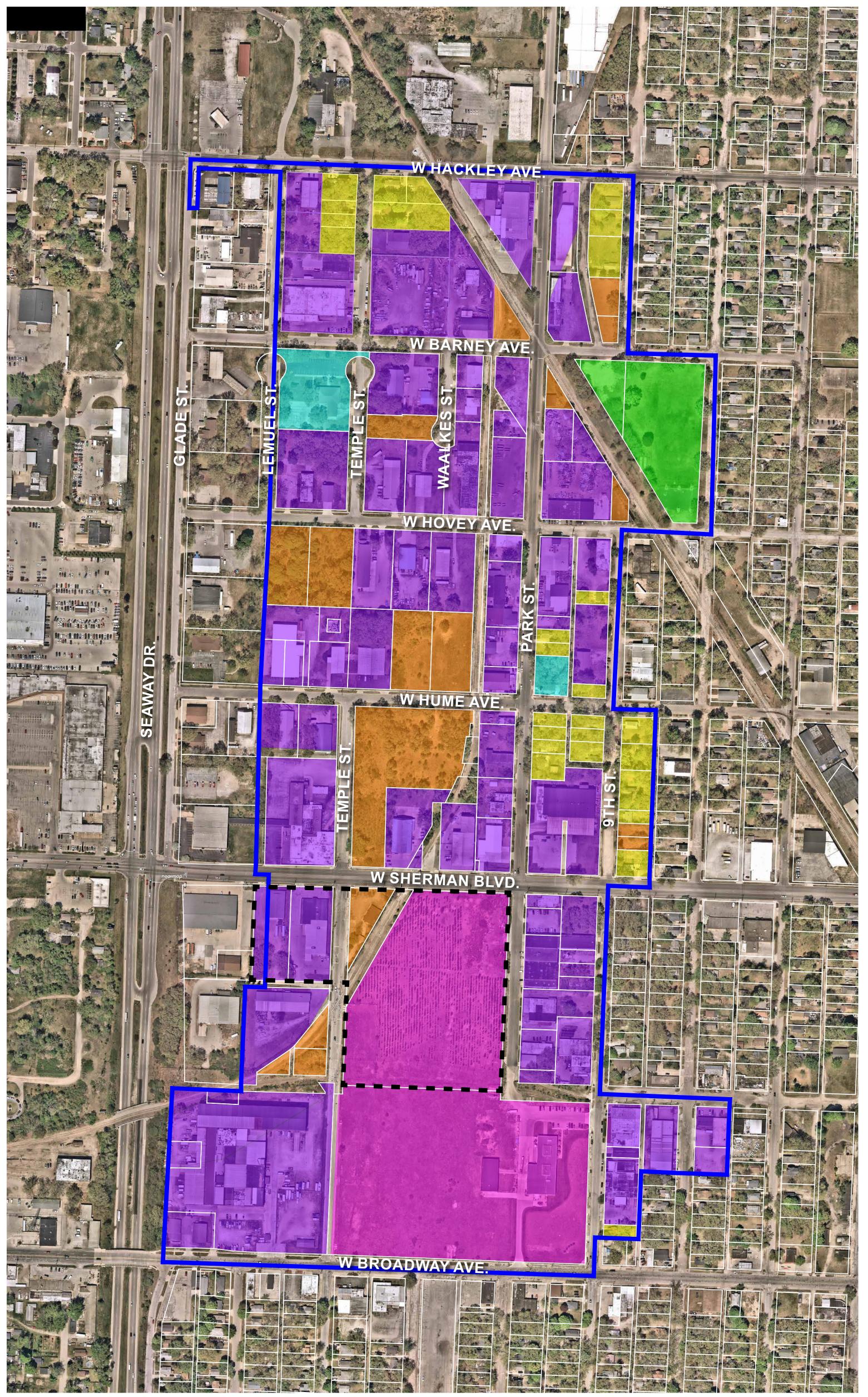






INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI







TAKEAWAYS

1. Prioritize development of vacant and underutilized properties.

Emphasize pedestrian and bike connectivity to the park at Barney and 9th St. Encourage workforce use through coordinated wellness programs between district businesses and parks department. Consider development of additional greenspace within the district to support workforce wellness.

2. Encourage commercial users that provide goods and services to district employees.

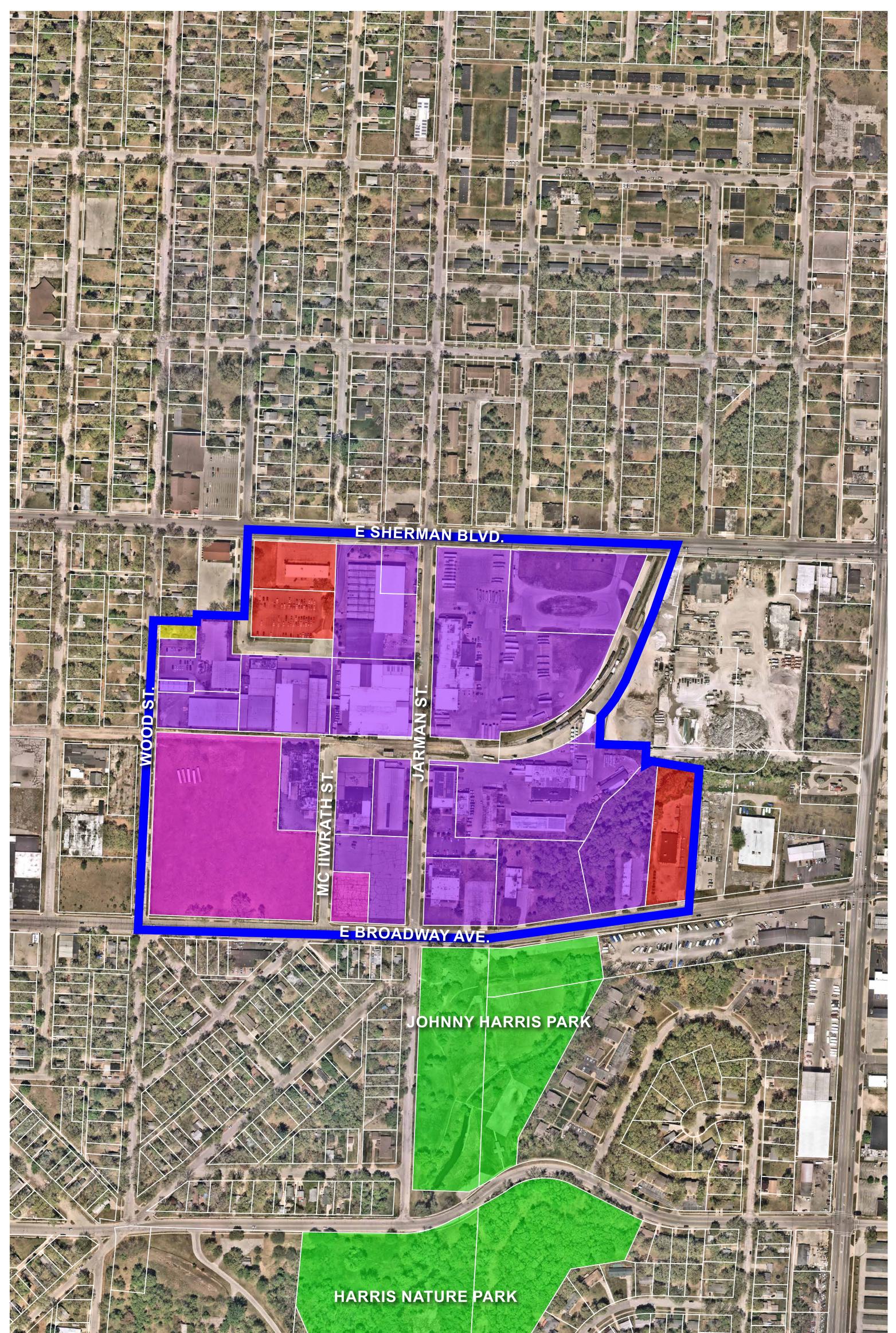


INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

OHM Advancing Communities*

400'

0' 100' 200'





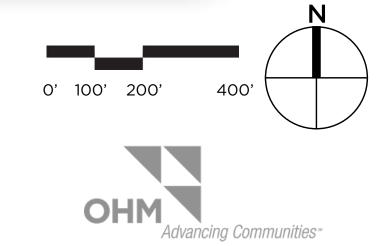


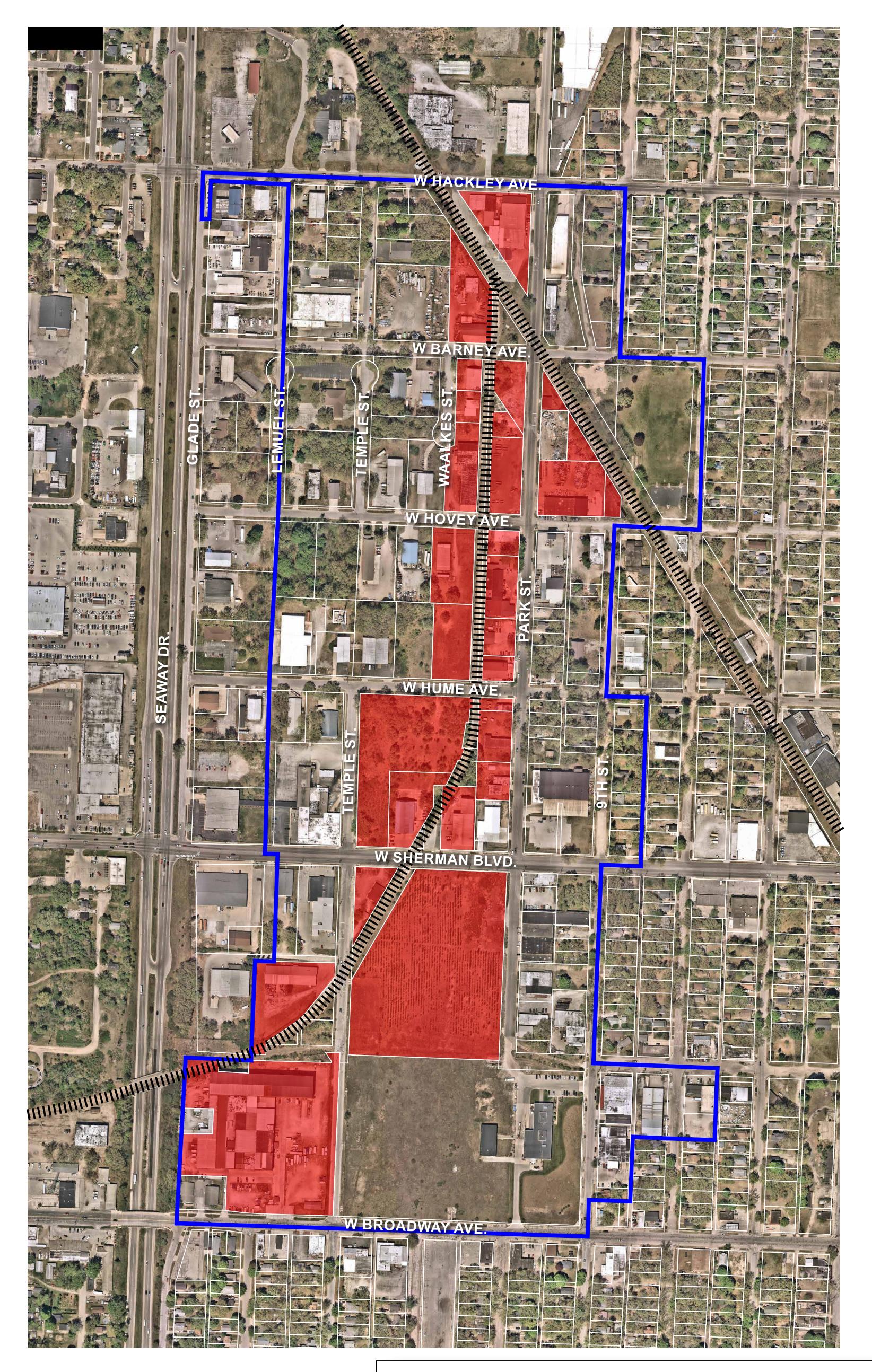
TAKEAWAYS

- **1. Prioritize development of vacant and underutilized** properties.
- 2. Emphasize pedestrian and bike connectivity to the adjacent south [park]. Encourage workforce use through coordinated wellness programs between district businesses and parks department.
- 3. Encourage commercial users that provide goods and services to district employees.

EXISTING LAND USE: EAST STUDY AREA

INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI





INDUSTRIAL PARK STUDY ARE

PARCELS WITH RAIL ACCESS

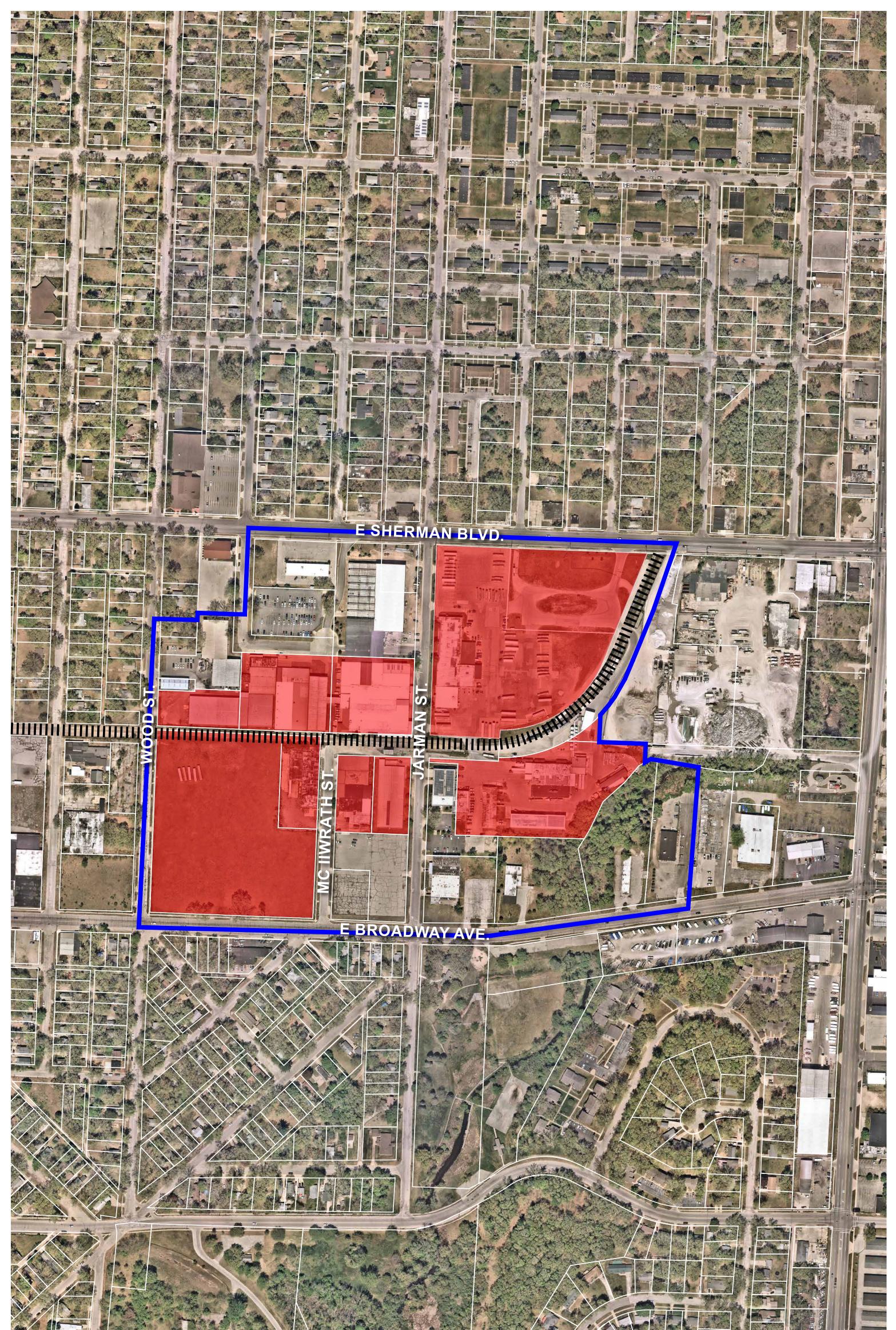
IIIIIII ACTIVE RAILROAD

TAKEAWAYS

- 1. Leverage properties with railroad access to attract industrial users.
- 2. Explore how a potential greenway along the railroad integrates with industrial opperations.

RAIL ACCESS: WEST STUDY AREA

INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI







INDUSTRIAL PARK STUDY AREA

PARCELS WITH RAIL ACCESS

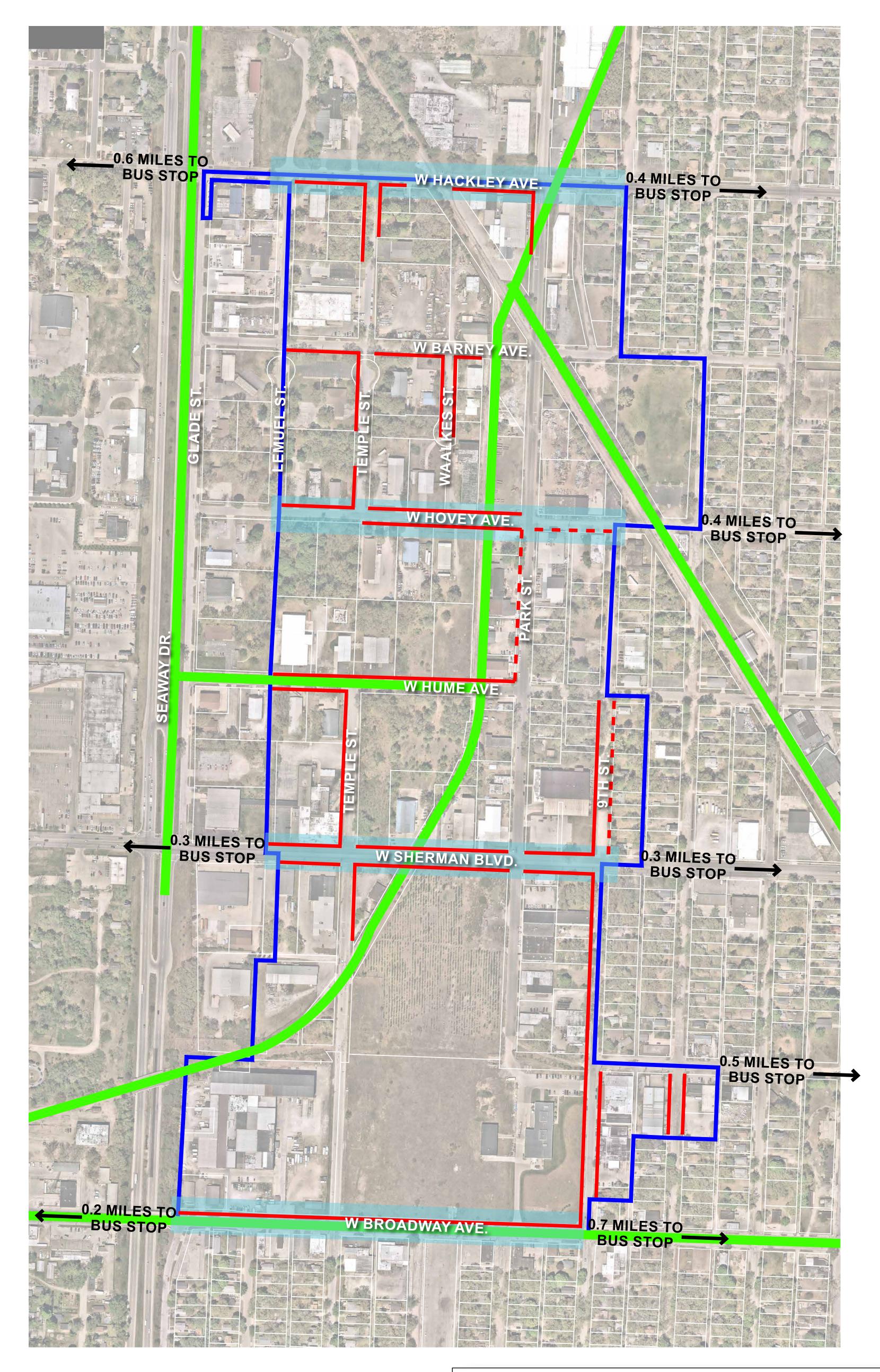
IIIIIII ACTIVE RAILROAD

TAKEAWAYS

1. Leverage properties with railroad access to attract industrial users.

RAIL ACCESS: EAST STUDY AREA

INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI



INDUSTRIAL PARK STUDY AREA

PROPOSED GREENWAY (CONCEPTUAL MUSKEGON GREENWAYS PLAN)

BUS STOP

PRIORITY IMPROVEMENT AREA

TAKEAWAYS

- 1. Prioritize sidewalk improvements along primary roadways.
- 2. Consider improving sidewalks between study area and nearest bus stops as needed. Coordinate with MATS and adjacent communities.
- **3.** Link pedestrian walks to the proposed greenways for regional connectivity.

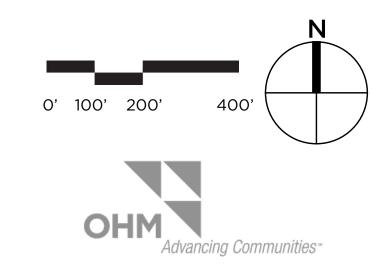


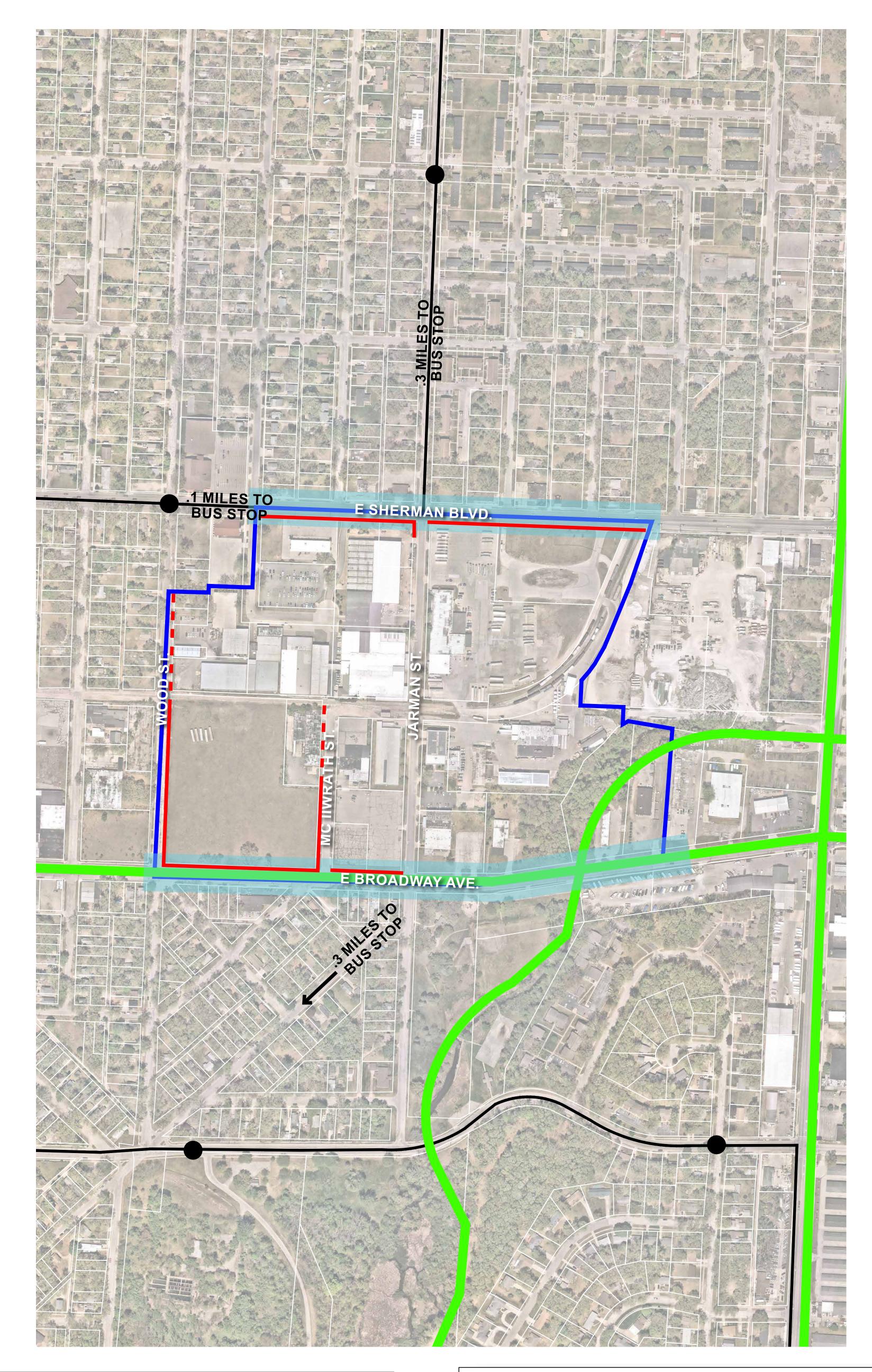




PEDESTRIAN ACCESS: WEST STUDY AREA

INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI





INDUSTRIAL PARK STUDY AREA

PROPOSED GREENWAY (CONCEPTUAL MUSKEGON GREENWAYS PLAN)

BUS STOP

PRIORITY IMPROVEMENT AREA

TAKEAWAYS

- **1. Prioritize sidewalk improvements along primary roadways.**
- 2. Consider improving sidewalks between study area and nearest bus stops as needed. Coordinate with MATS and adjacent communities.
- **3.** Link pedestrian walks to the proposed greenways for regional connectivity.

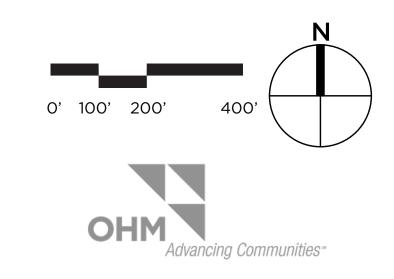


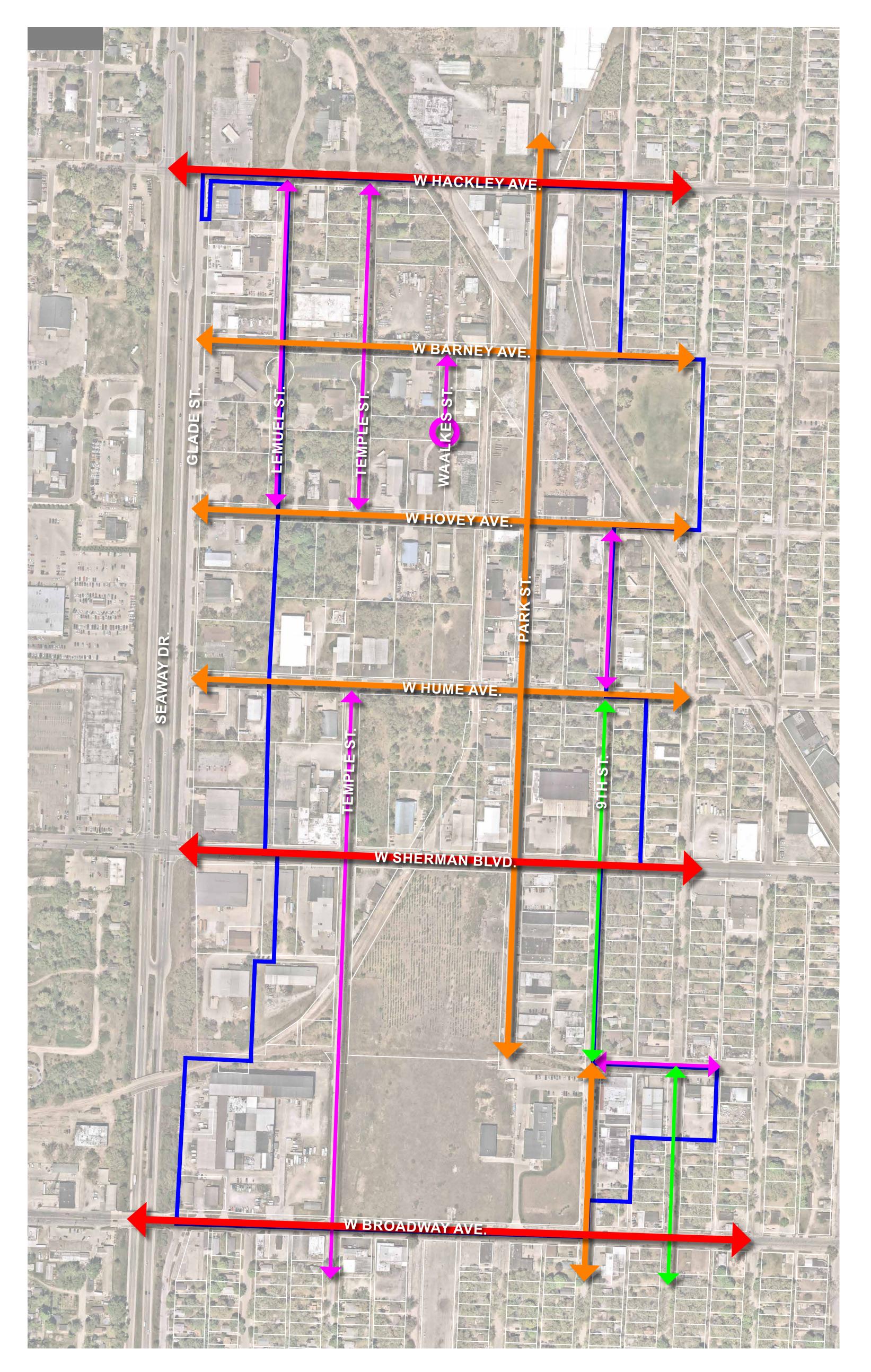




PEDESTRIAN ACCESS: EAST STUDY AREA

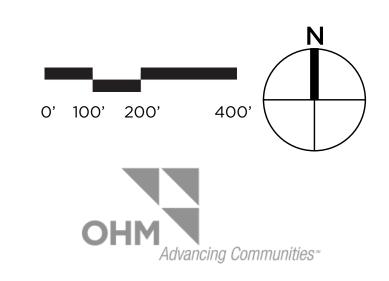
INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

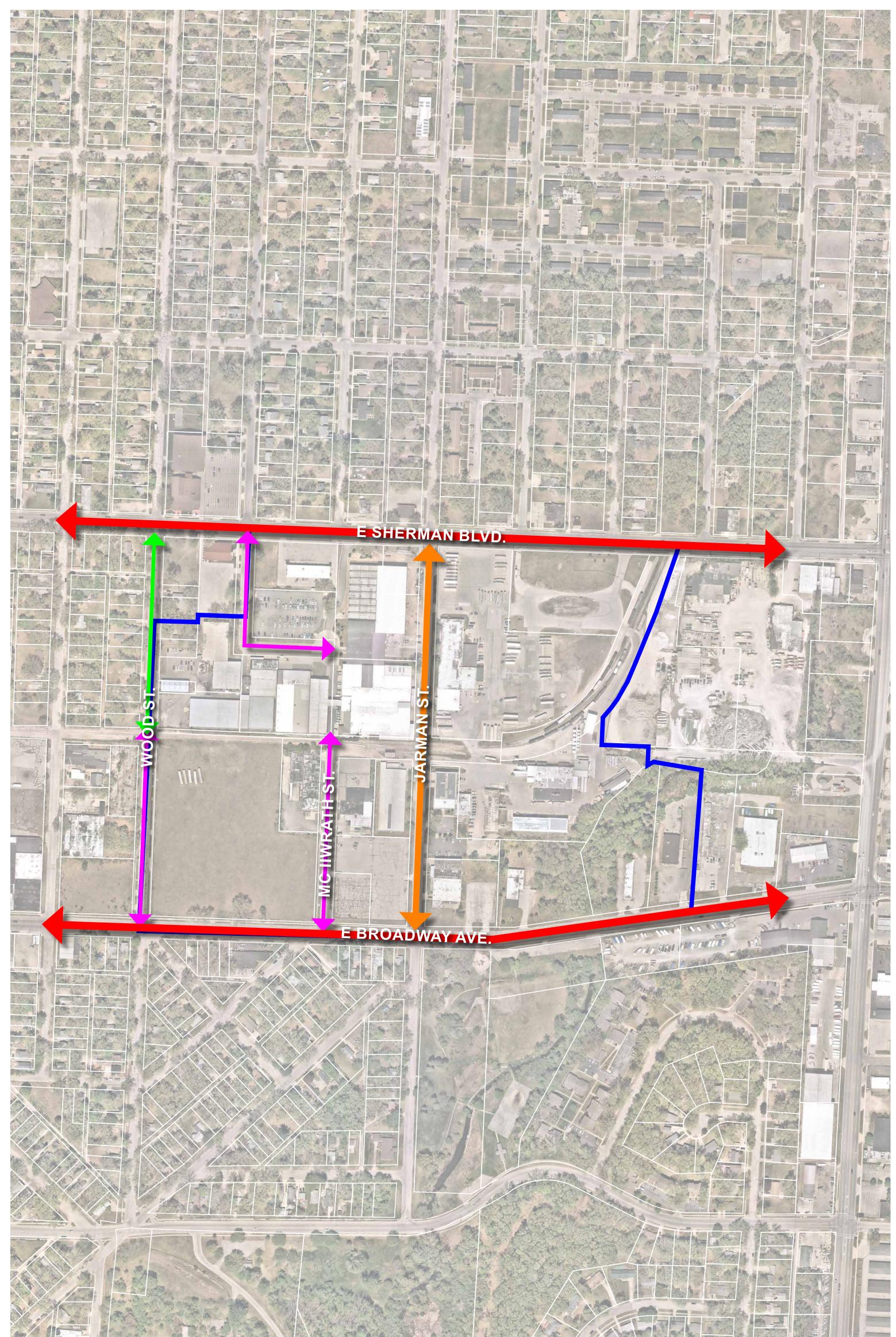




KEY: INDUSTRIAL PARK STUDY AREA COLLECTOR STREET SECONDARY STREET MINOR LOCAL ACCESS RESIDENTIAL INTERFACE

STREET HIERARCHY_WEST STUDY AREA INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

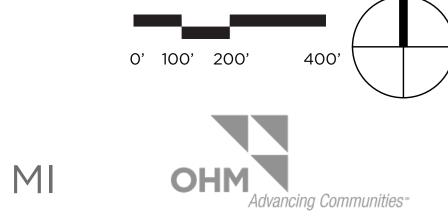














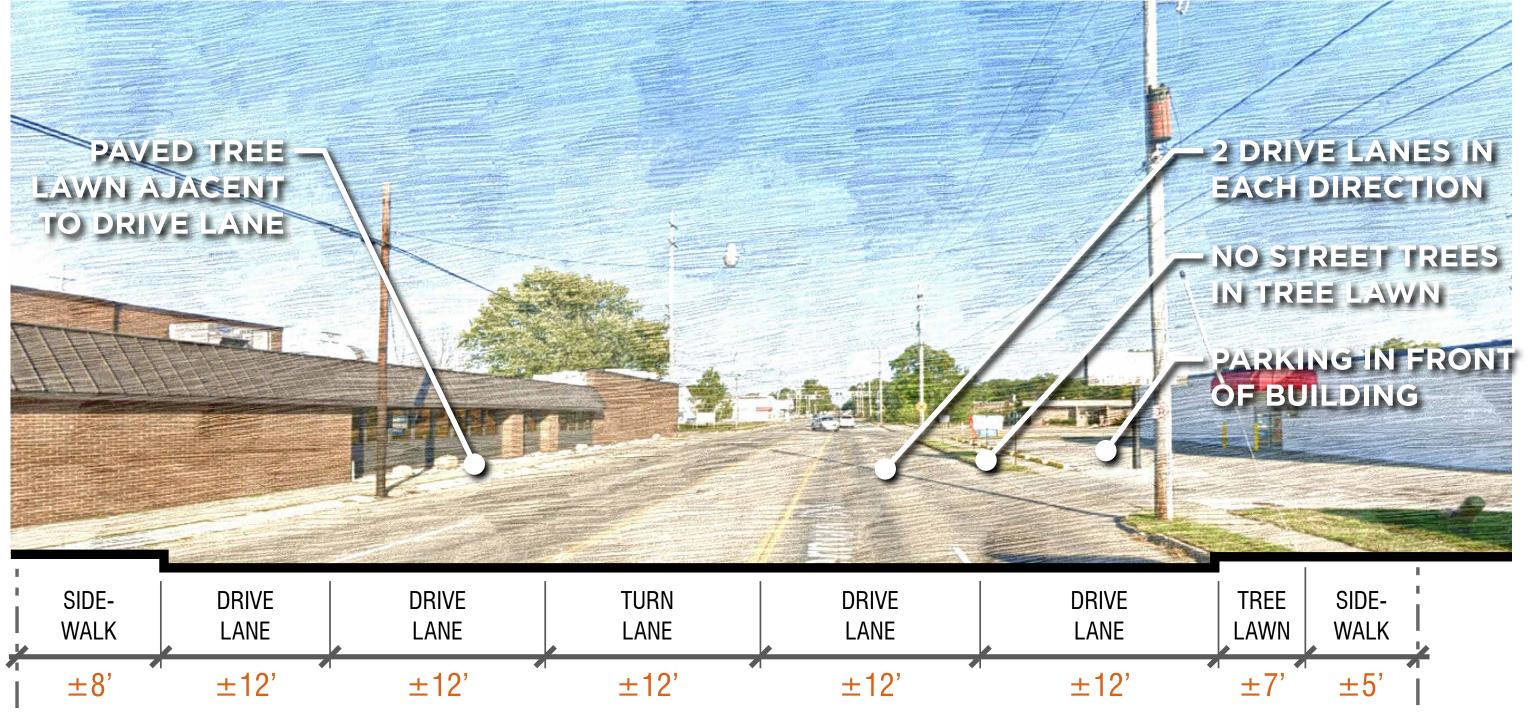


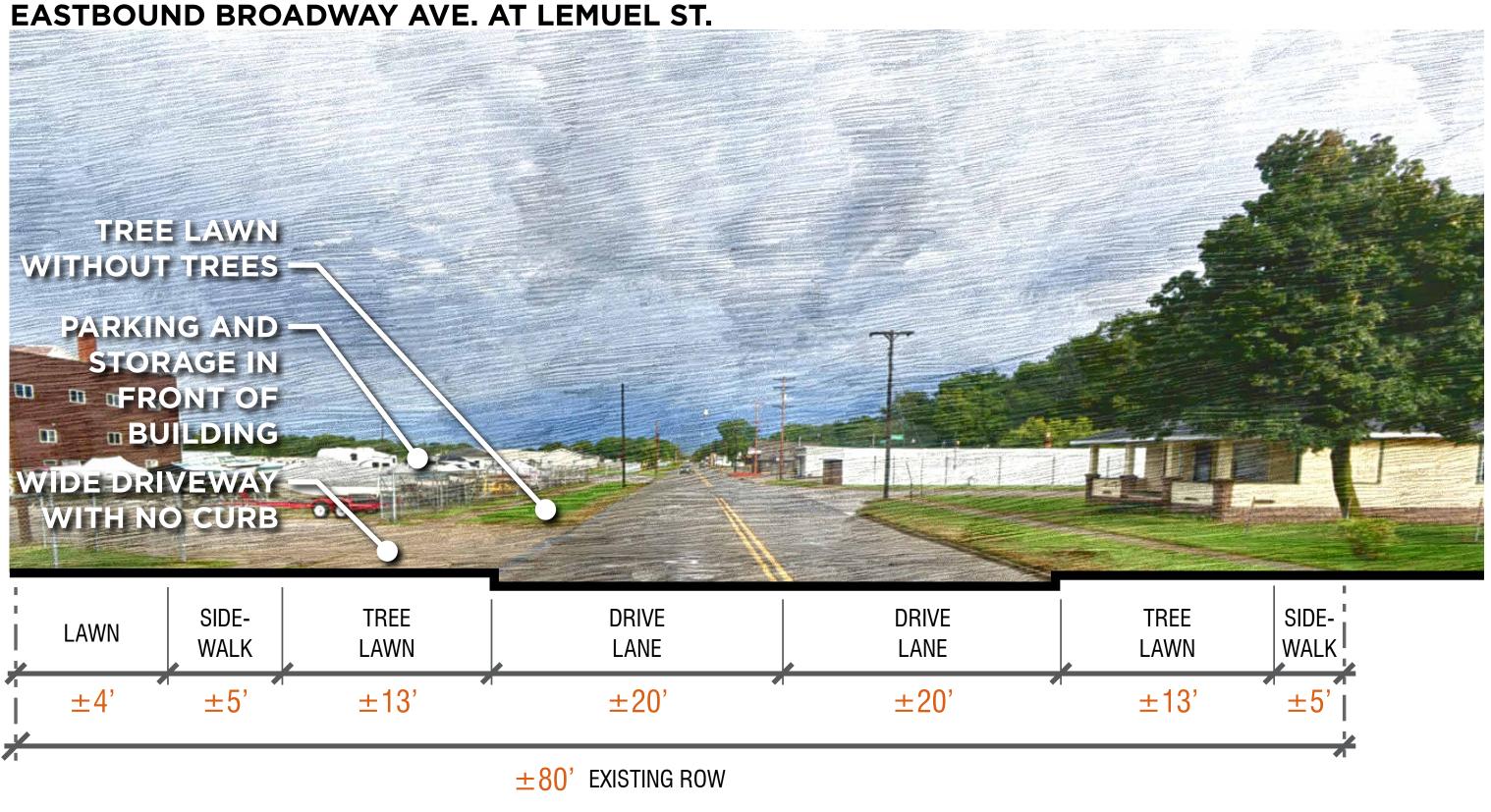












COLLECTOR STREET INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

06/30/2023

 $\pm 80'$ EXISTING ROW

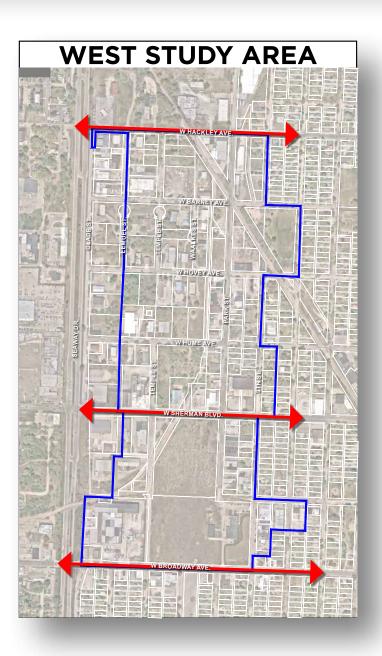
TYPICAL STREET SECTIONS

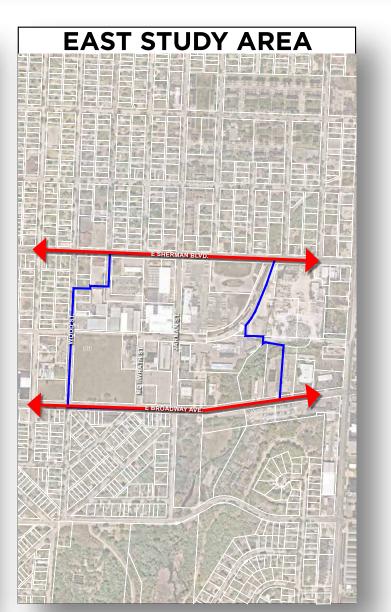
EASTBOUND SHERMAN BLVD. AT TEMPLE ST.

TAKEAWAYS (ROW IMPROVMENTS)

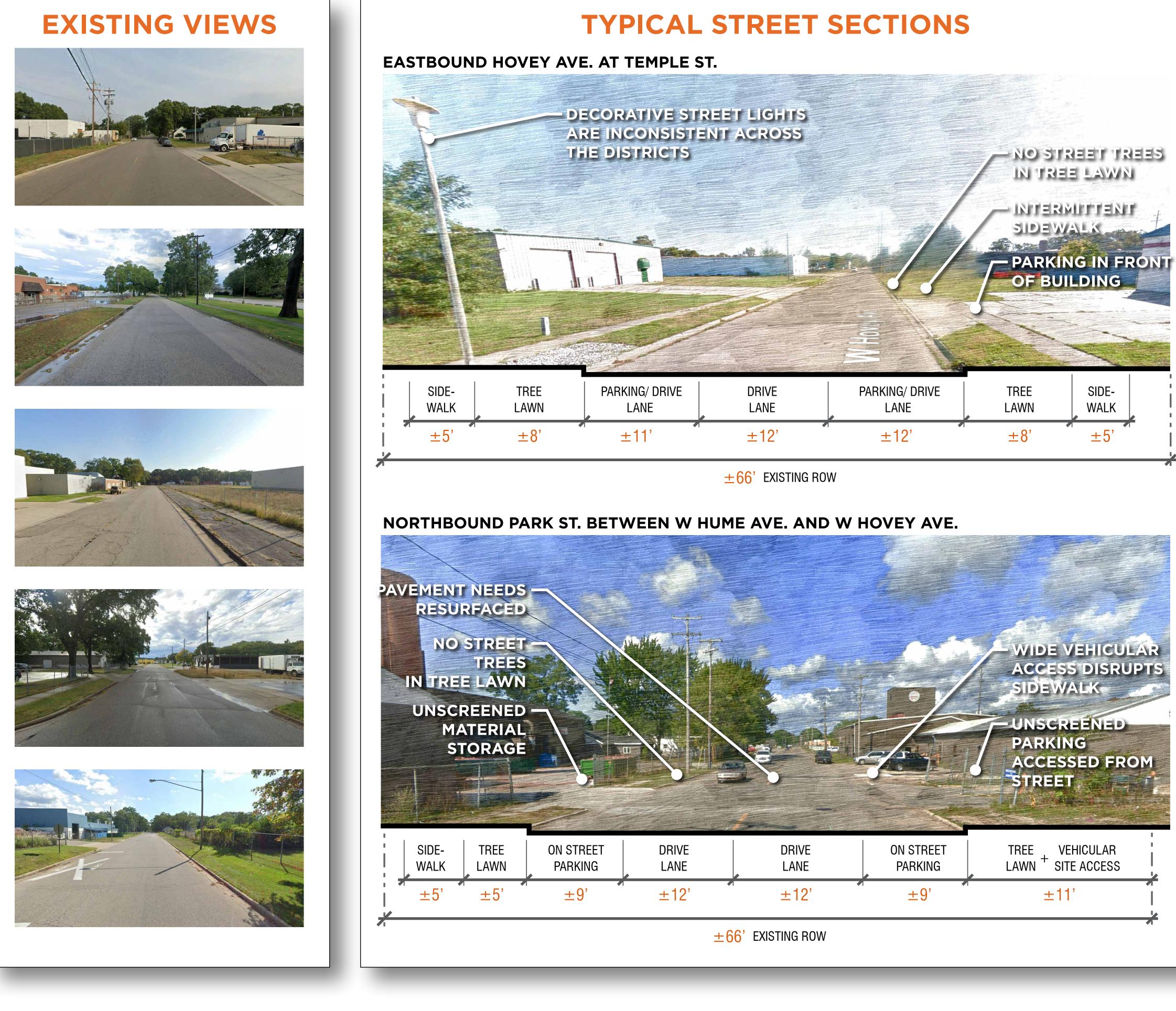
- **Evaluate need for 5 vehicular lanes and consider road-diet** and improvement to pedestrian and bicycle infrastructure and streetscape as a gateway thoroughfare into Downtown.
- 2. Consider Broadway Ave. for On-Street Greenway similar to the Joe Louis Greenway in Detroit.
- **3. Strengthen pedestrian crossings at intersections.**
- 4. Introduce decorative street lighting on poles to improve visibility, promote safety, and as a district branding tool.
- 5. Plant street trees in tree lawns at regular intervals. Restore neglected tree lawns when possible to complete the street tree network.
- 6. Repair/replace sidewalks as needed.

- **1. Reduce curb cut quantities and width on collector streets.**
- 2. Configure buildings to locate the office and customer areas at the street frontage, with pedestrian doorways and windows facing the street.
- 3. Parking and material storage should be located to side or rear of buildings. Screen all parking from street.
- 4. Do not permit overhead doors fronting on collector streets.









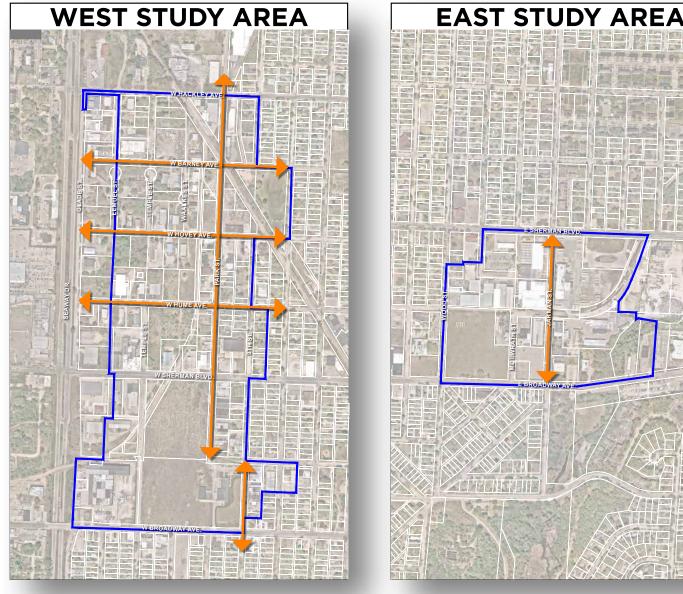
SECONDARY STREET INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

06/30/2023

TAKEAWAYS (ROW IMPROVMENTS)

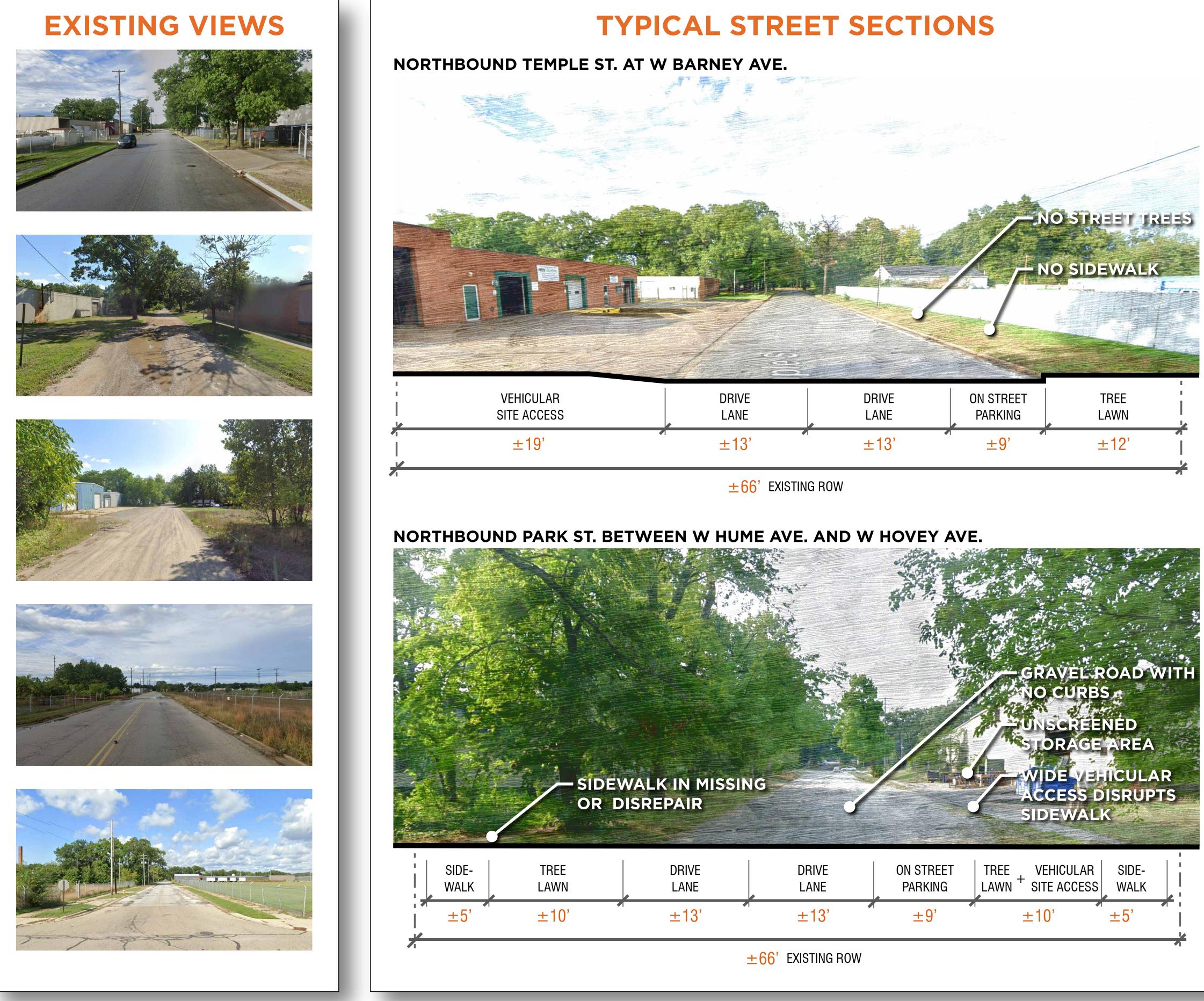
- **1. Introduce decorative street lighting on poles to improve** visibility, promote safety, and as a district branding tool.
- 2. Plant street trees in tree lawns at regular intervals. Restore neglected tree lawns when possible to complete the street tree network.
- **3. Complete missing segments of sidewalk.**
- 4. Resurface streets.

- 1. Consolidate vehicular site access into minimal, defined curb cuts.
- 2. Screen street-fronting parking, service, loading, and material storage areas from the street.









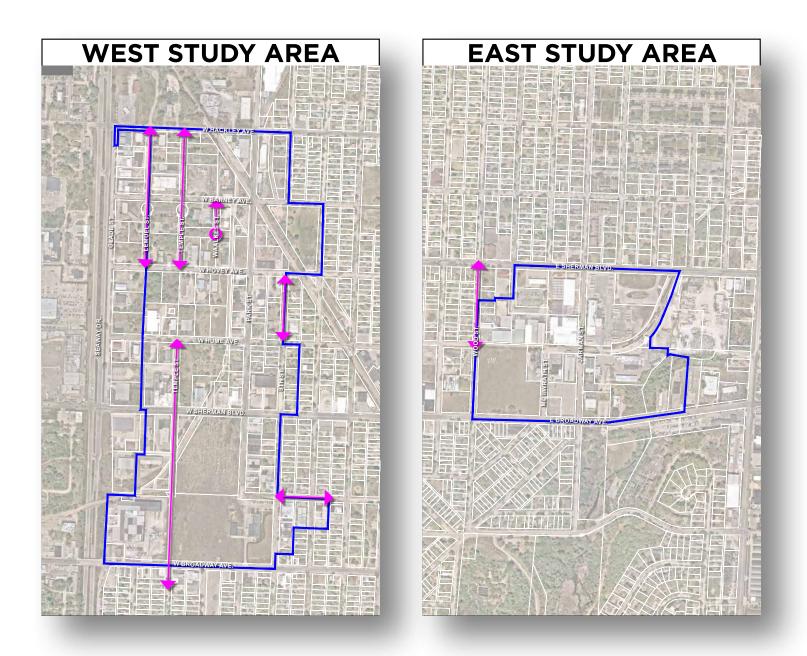
MINOR LOCAL ACCESS INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

06/30/2023

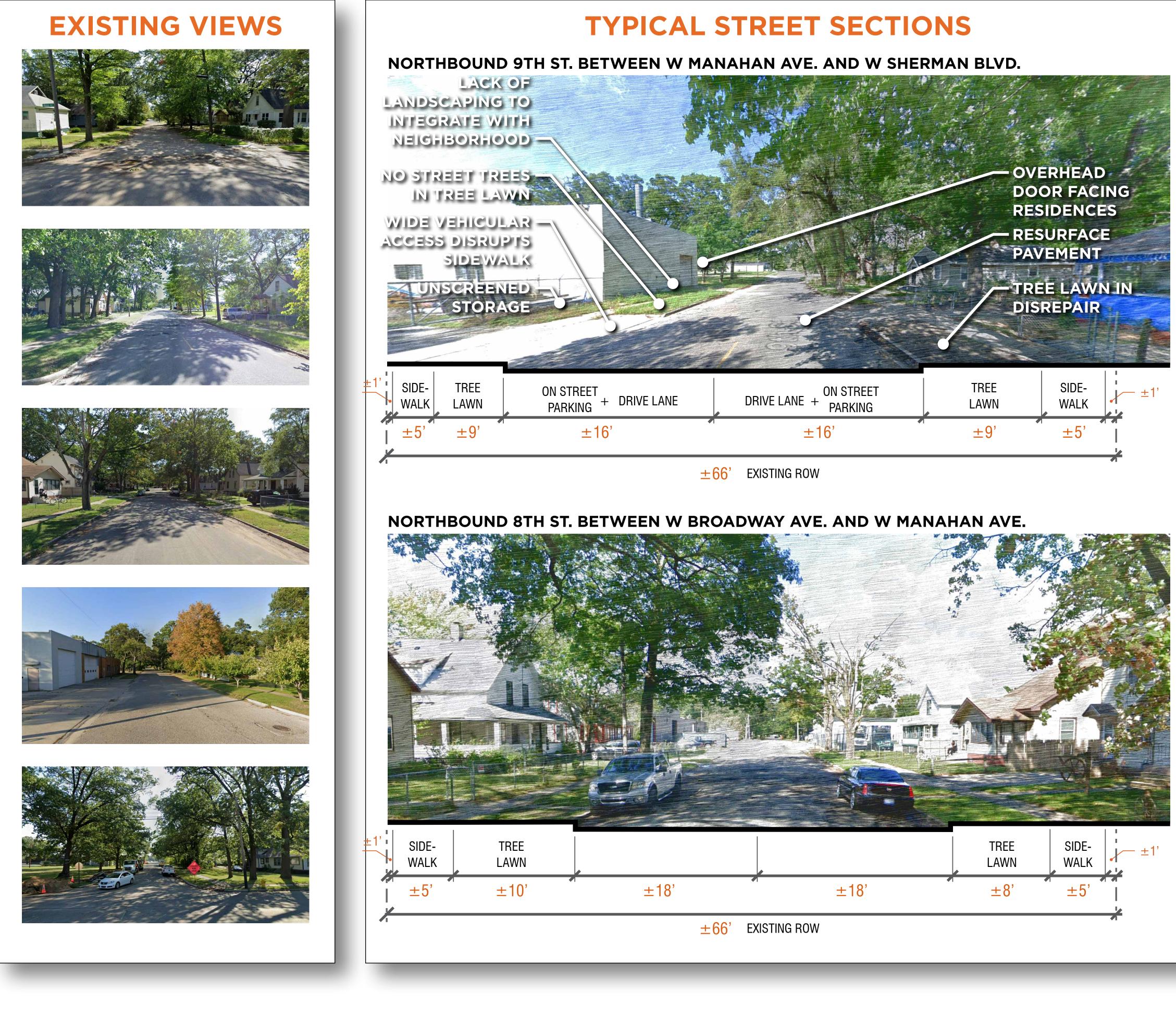
TAKEAWAYS (ROW IMPROVMENTS)

- 1. Pave and install curbs on gravel roads.
- 2. Introduce standard secondary street lighting on poles to improve visibility, promote safety.
- **3.** Plant street trees in tree lawns at regular intervals. Restore neglected tree lawns when possible to complete the street tree network.
- 4. Complete missing segments of sidewalk.

- 1. Consolidate vehicular site access into minimal defined curb cuts.
- 2. Screen street-fronting parking, service, loading, and material storage areas from the street.







RESIDENTIAL INTERFACE INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

06/30/2023

TAKEAWAYS (ROW IMPROVMENTS)

- **1. Introduce decorative, residential-scale and design street** lighting on poles to improve visibility, promote safety.
- 2. Plant street trees in tree lawns at regular intervals. Restore neglected tree lawns when possible to complete the street tree network.
- 3. Complete missing segments of sidewalk, and repair broken sidwalk.
- 4. Resurface streets.

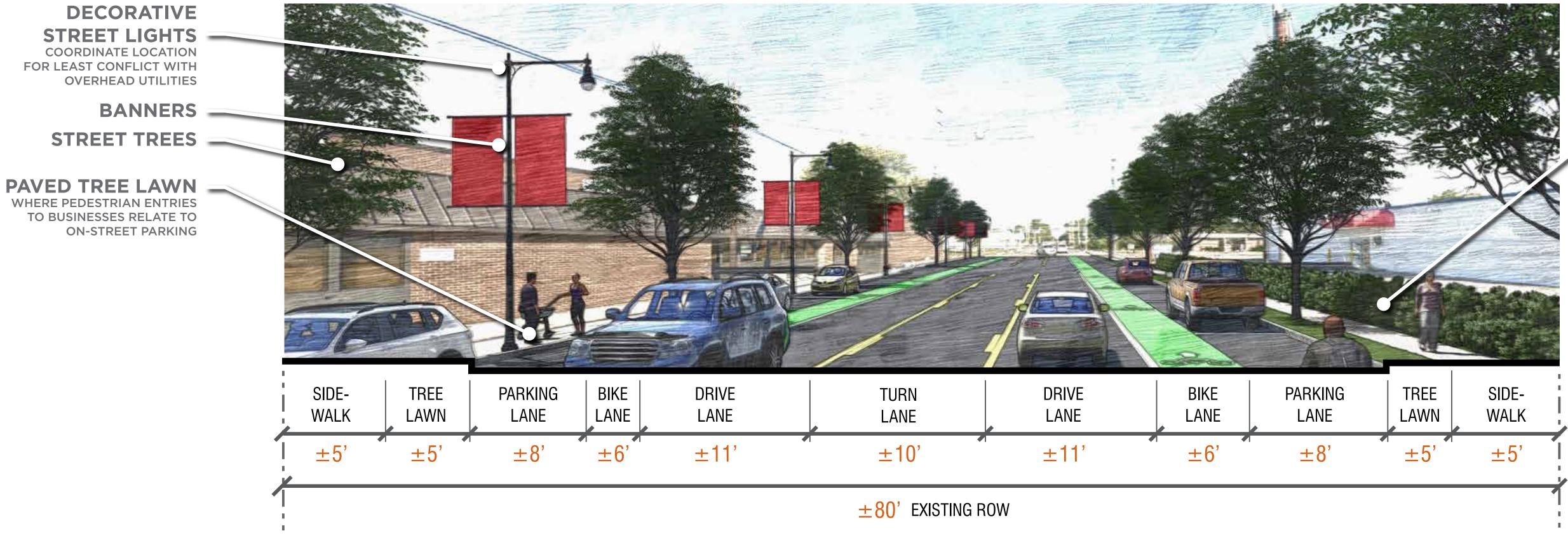
- 1. Consolidate vehicular site access into minimal, defined curb cuts.
- 2. Locate parking and service/ storage areas to the side or rear of the building and screen from view from the street.
- **3. Configure buildings to locate the office and customer** areas at the street frontage, with pedestrian doorways and windows facing the street.
- 4. Do not permit overhead doors fronting on neighborhood interface streets.







EASTBOUND SHERMAN BLVD. AT TEMPLE ST.

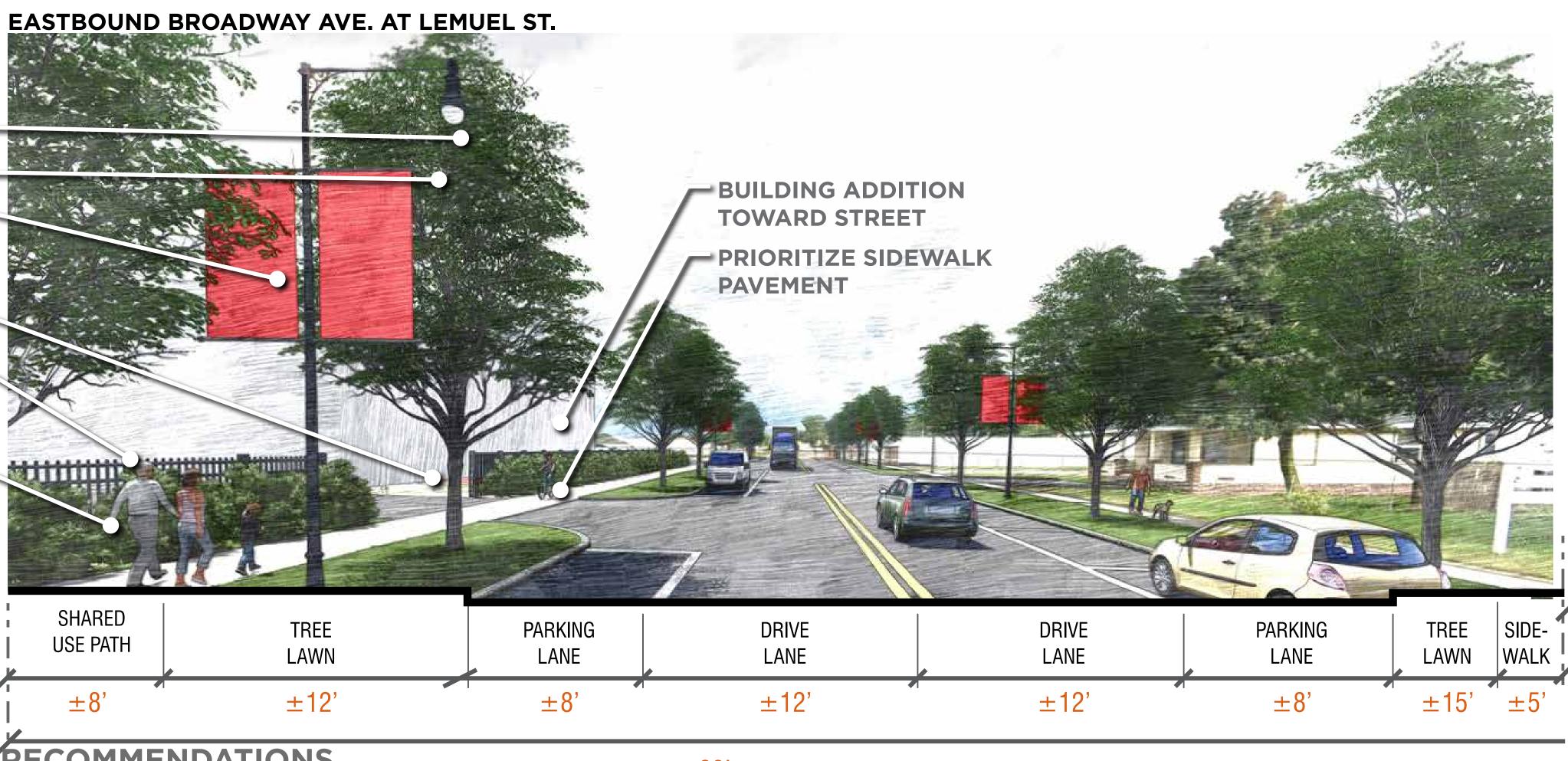


The state of the second states DECORATIVE STREET LIGHTS -STREET TREES BANNERS MINIMIZE DRIVEWAY WIDTH -DECORATIVE FENCE **EVERGREEN SHRUBS SCREEN EXISTING** STORAGE AREA -SHARED TREE USE PATH LAWN ±8' ±12'

COLLECTOR STREET RECOMMENDATIONS INDUSTRIAL PARK STRATEGY | MUSKEGON HEIGHTS, MI

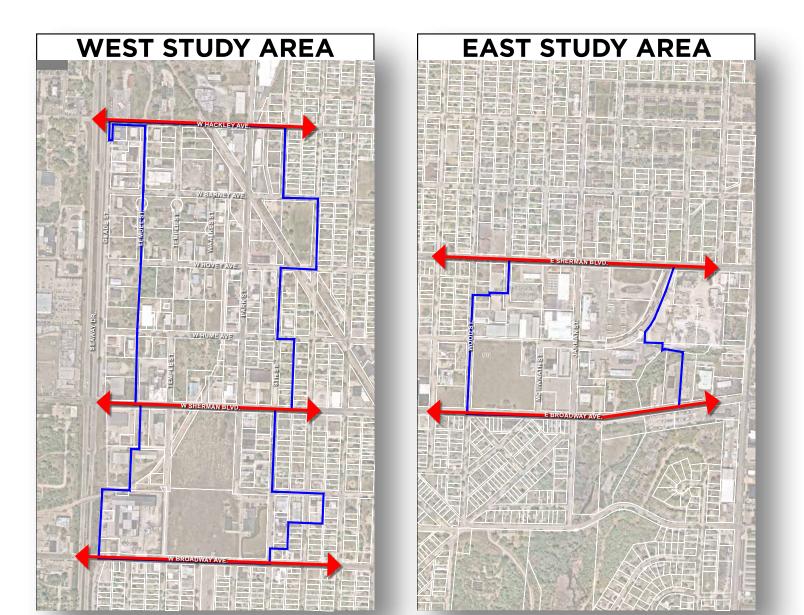
08/08/2023

DRIVE	TURN	DRIVE	BIKE	PARKING	TREE
LANE	LANE	LANE	LANE	LANE	LAW
±11'	±10'	±11'	±6'	±8'	±5



 ± 80 ' EXISTING ROW

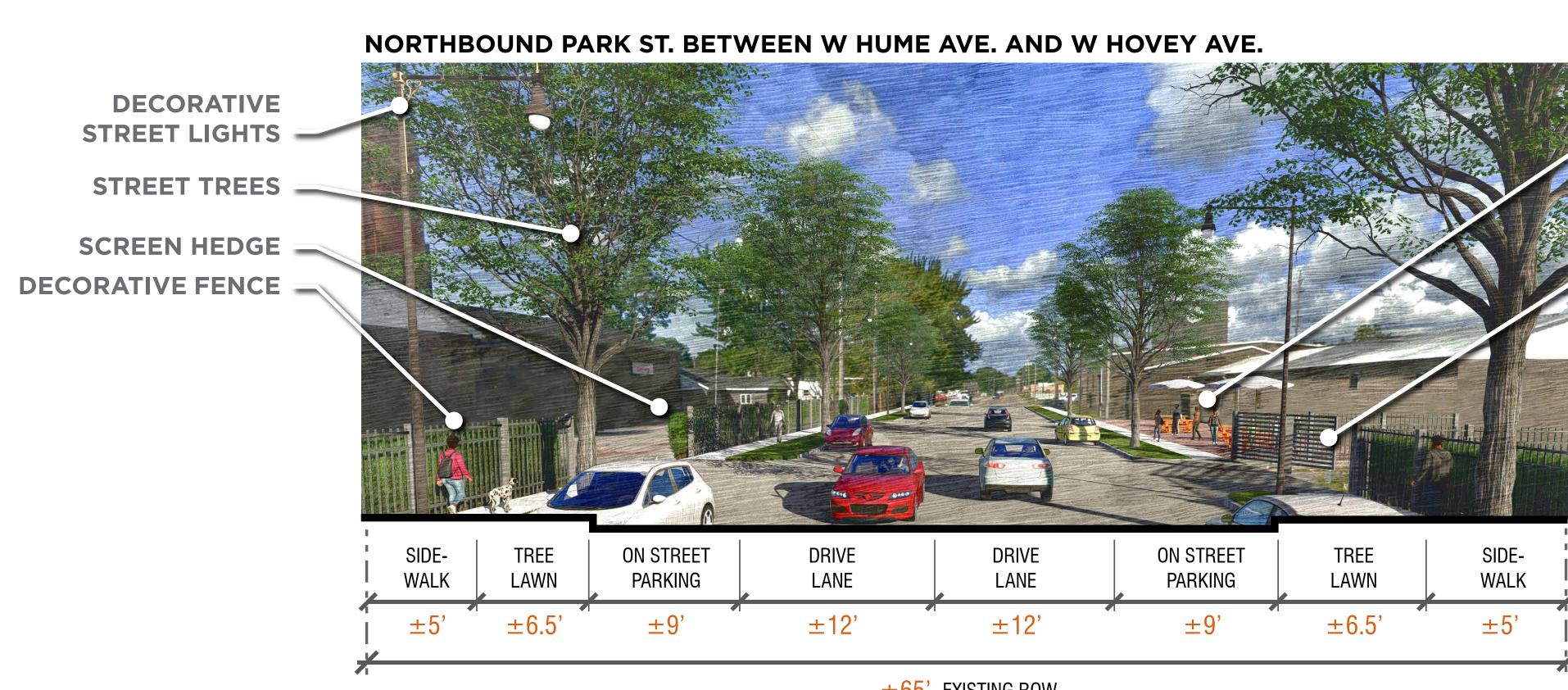
3' TALL EVERGEEN PARKING SCREEN HEDGE

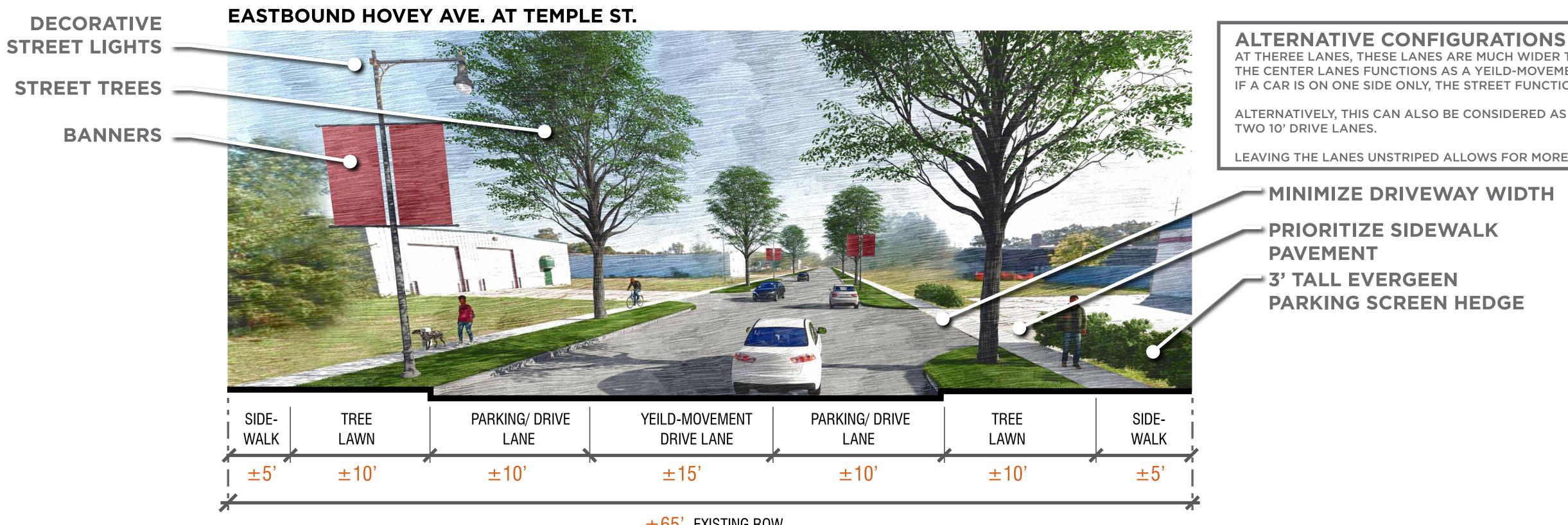




08/08/2023

SECONDARY STREET RECOMMENDATIONS INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI





 $\pm 65'$ EXISTING ROW

 $\pm 65'$ EXISTING ROW

CUSTOMER ENTRANCE PHASE OUT EXISTING AND DO NOT PERMIT NEW HEAD-IN PARKING DIRECTLY FROM STREET

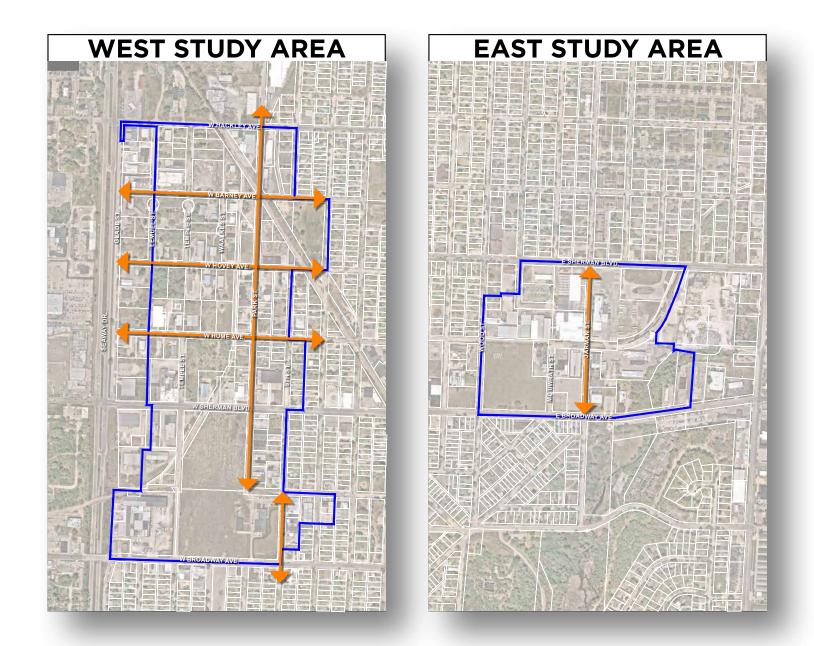
- EMPLOYEE PATIO OR

DECORATIVE GATE TO SCREEN LOADING AREA

ANES. THESE LANES ARE MUCH WIDER THAN NECCESSARY. WITH ON-STREET PARKING ON BOTH SIDES, THE CENTER LANES FUNCTIONS AS A YEILD-MOVEMENT CONDITION WHEN CARS ARE PARKED OPPOSITE ONE ANOTHER. IF A CAR IS ON ONE SIDE ONLY, THE STREET FUNCTIONS AS TWO DRIVE LANES.

ALTERNATIVELY, THIS CAN ALSO BE CONSIDERED AS FOUR LANES: NARROW PARKING LANES (7.5' EACH SIDE) WITH

LEAVING THE LANES UNSTRIPED ALLOWS FOR MORE FLEXIBILITY IN HOW THE STREET IS USED.



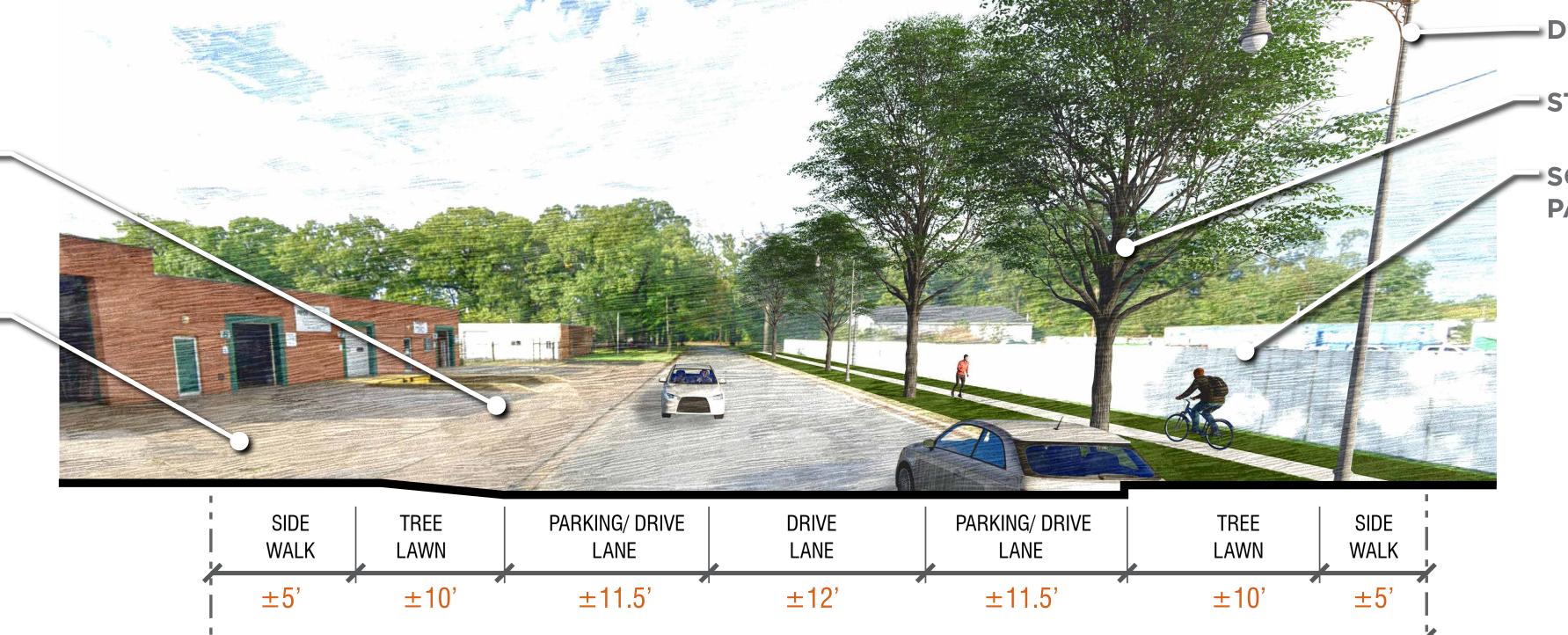
ROADWAY IMPROVEMENTS AND RIGHT-SIZING

THE WIDTH OF THE EXISTING STREETS DEDICATES MOST OF THE AREA TO VEHICLE USE. AS A MEANS OF IMPROVING THE APPEARANCE OF THE DISTRICTS, AND IMPROVING THE PEDESTRIAN SPACE, THE CURB-TO-CURB WIDTH SHOULD BE MINIMIZED TO ONLY WHAT IS NEEDED TO ACCOMODATE VEHICLE MOVEMENT.

WHEN STREETS ARE SCHEDULED FOR PAVING AND CURB REPLACEMENT, THE STREET WIDTHS SHOULD BE MODIFIED TO PROVIDE 8' PARKING LANES, AND 10-11' DRIVE LANES. THE REMAINING AREA SHOULD BE APPLIED TO THE TREE LAWN.



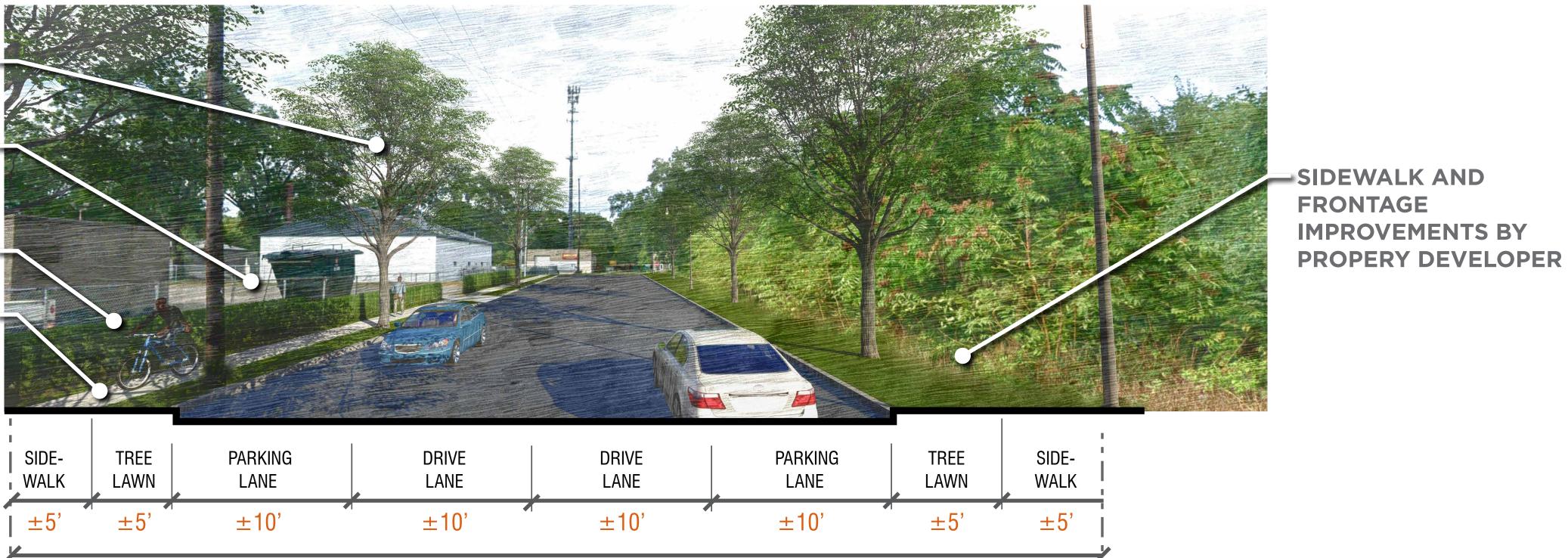
NORTHBOUND TEMPLE ST. AT W BARNEY AVE.



PRIORITIZE SIDEWALK PAVEMENT -MATERIAL, JOINTING, AND CROSS SLOPE; **REQUIRE APRONS AND DRIVEWAYS TO BREAK**

AT THE SIDEWALK. **USE MINOR STREETS FOR OVERHEAD DOORS AND** SERVICE AREAS.

NORTHBOUND TEMPLE ST. BETWEEN SHERMAN AND W HUME AVE.



STREET TREES

ELIMINATE BARBED WIRE FROM FENCE

SERVICE AREA EVERGREEN SCREEN HEDGE

COMPLETE SIDEWALK

 $\pm 65'$ EXISTING ROW

MINOR LOCAL ACCESS RECOMMENDATIONS INDUSTRIAL PARK STRATEGY MUSKEGON HEIGHTS, MI

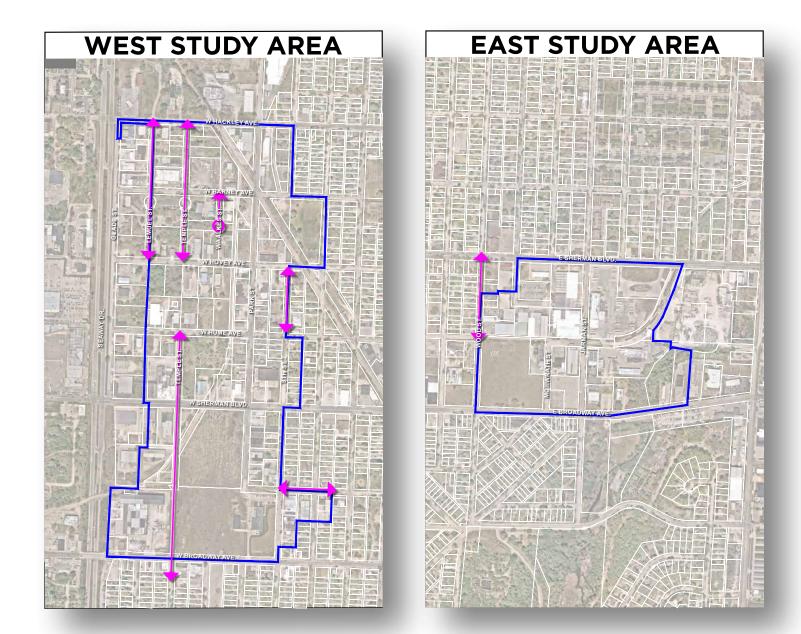
08/08/2023

 $\pm 65'$ EXISTING ROW

DECORATIVE LIGHT FIXTURES

- STREET TREES

-SCREEN SERVICE AREAS AND PARKING

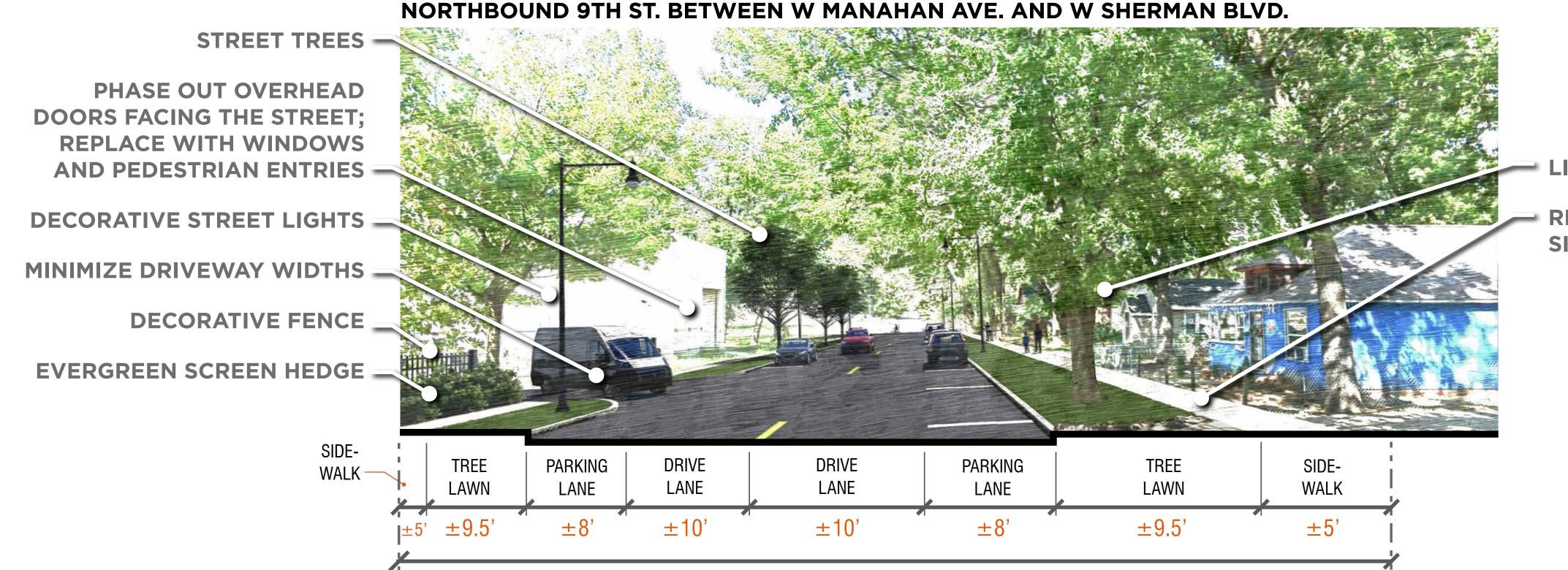


ROADWAY IMPROVEMENTS AND RIGHT-SIZING

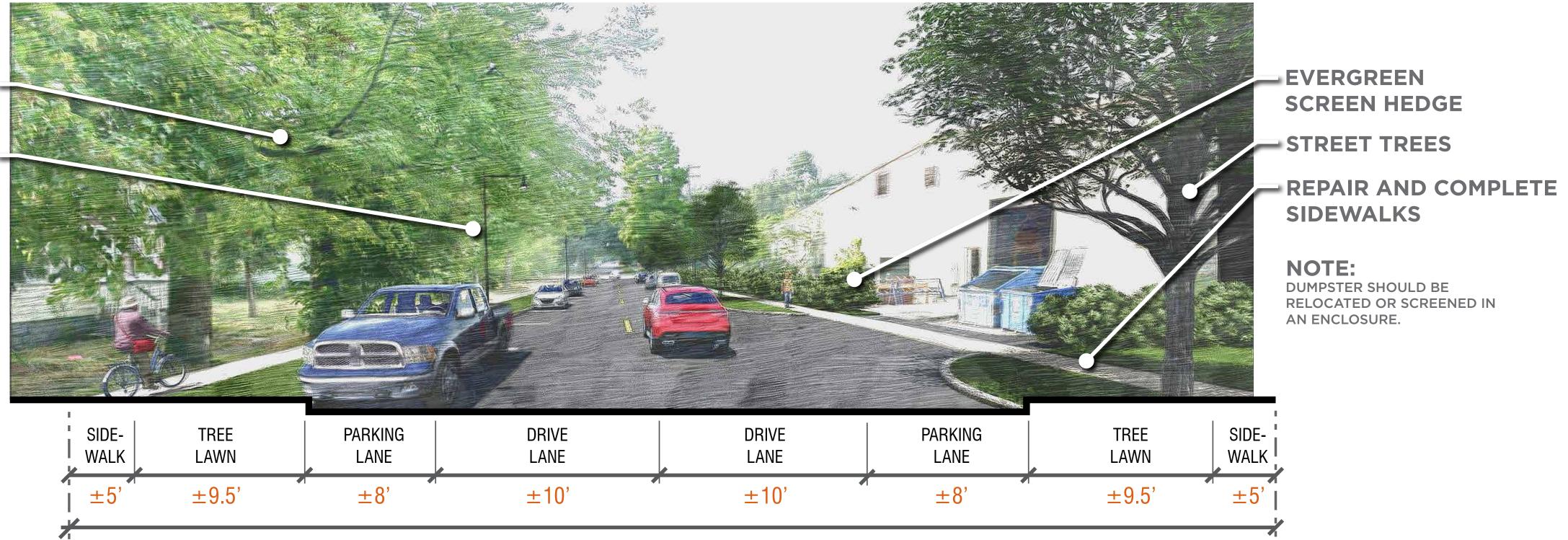
THE WIDTH OF THE EXISTING STREETS DEDICATES MOST OF THE AREA TO VEHICLE USE. AS A MEANS OF IMPROVING THE APPEARANCE OF THE DISTRICTS, AND IMPROVING THE PEDESTRIAN SPACE, THE CURB-TO-CURB WIDTH SHOULD BE MINIMIZED TO ONLY WHAT IS NEEDED TO ACCOMODATE VEHICLE MOVEMENT.

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NORTHBOUND PARK ST. BETWEEN W HUME AVE. AND W HOVEY AVE.



LIMB-UP EXISTING TREES DECORATIVE STREET LIGHTS



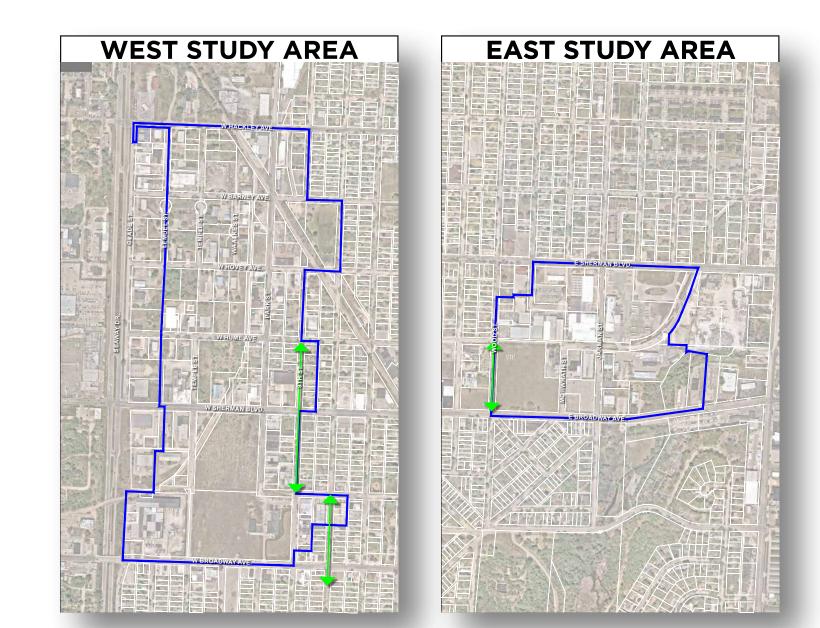
08/08/2023

 $\pm 65'$ EXISTING ROW

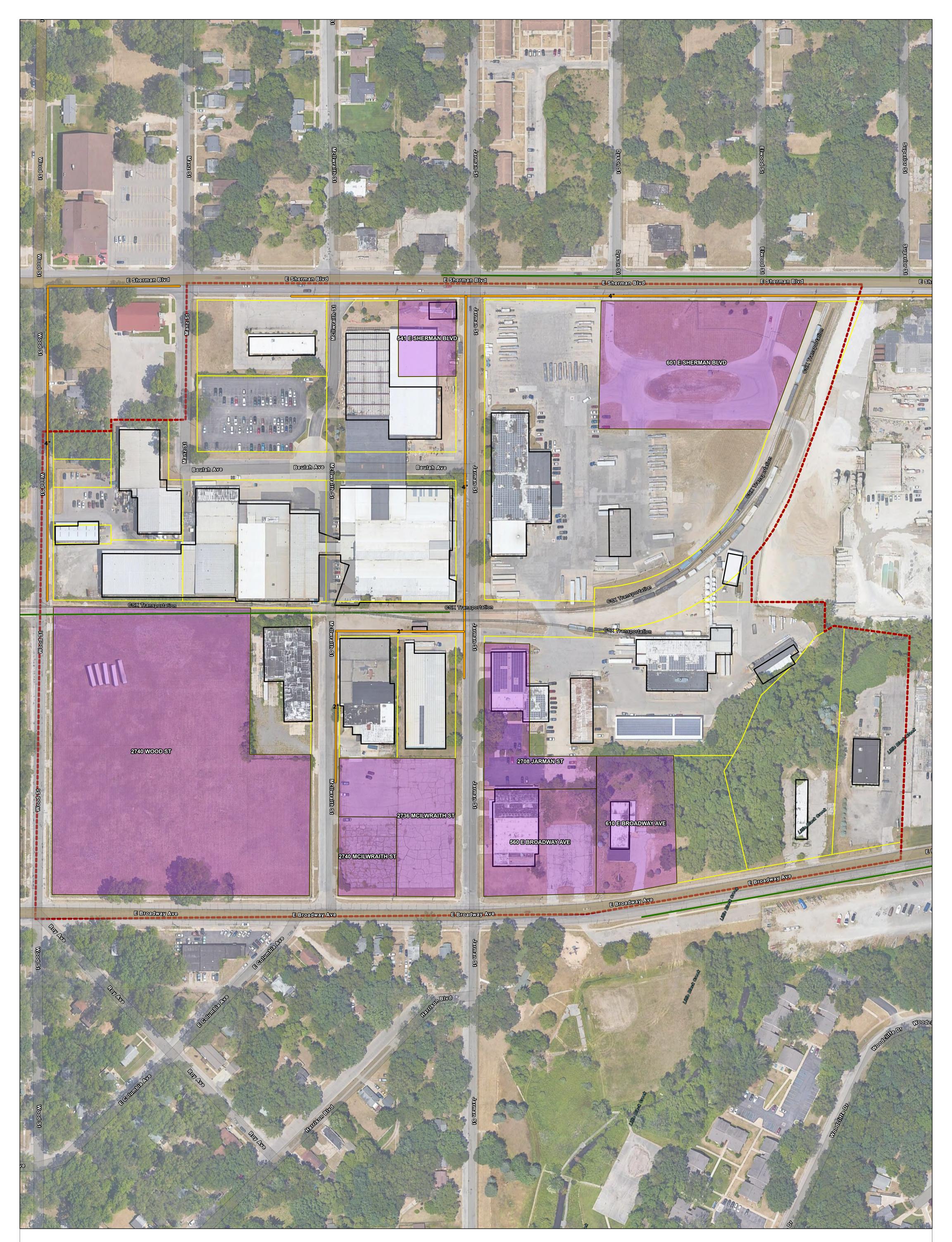
 $\pm 65'$ EXISTING ROW

LIMB-UP EXISTING TREES

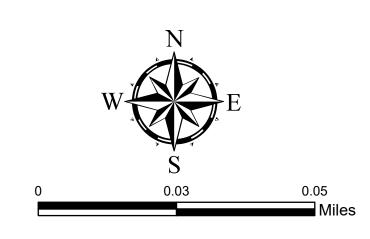
- REPAIR AND COMPLETE **SIDEWALKS**









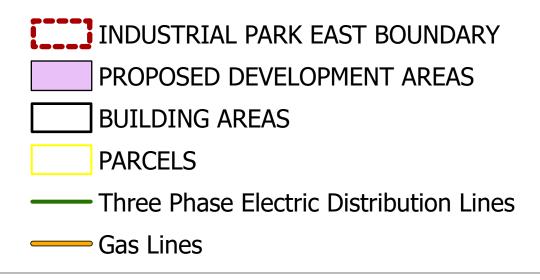


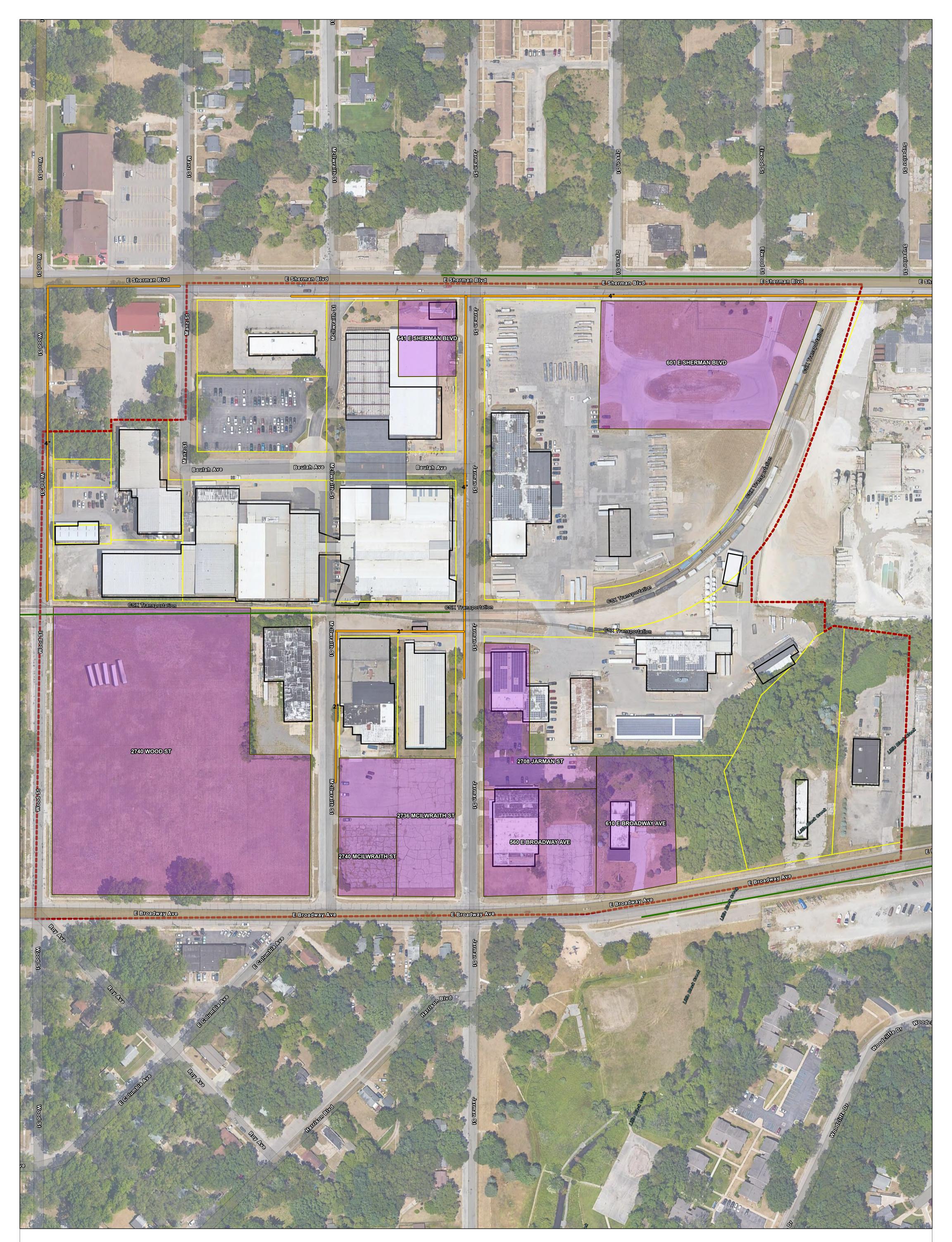
INDUSTRIAL PARK EAST GAS AND ELECTRIC

7/5/2023

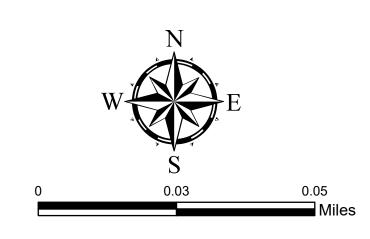


LEGEND







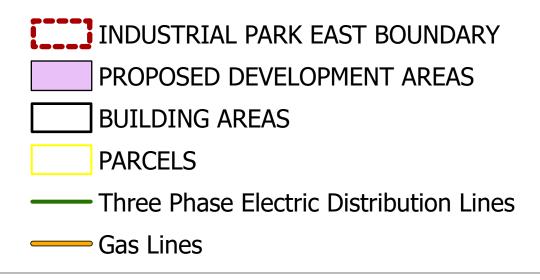


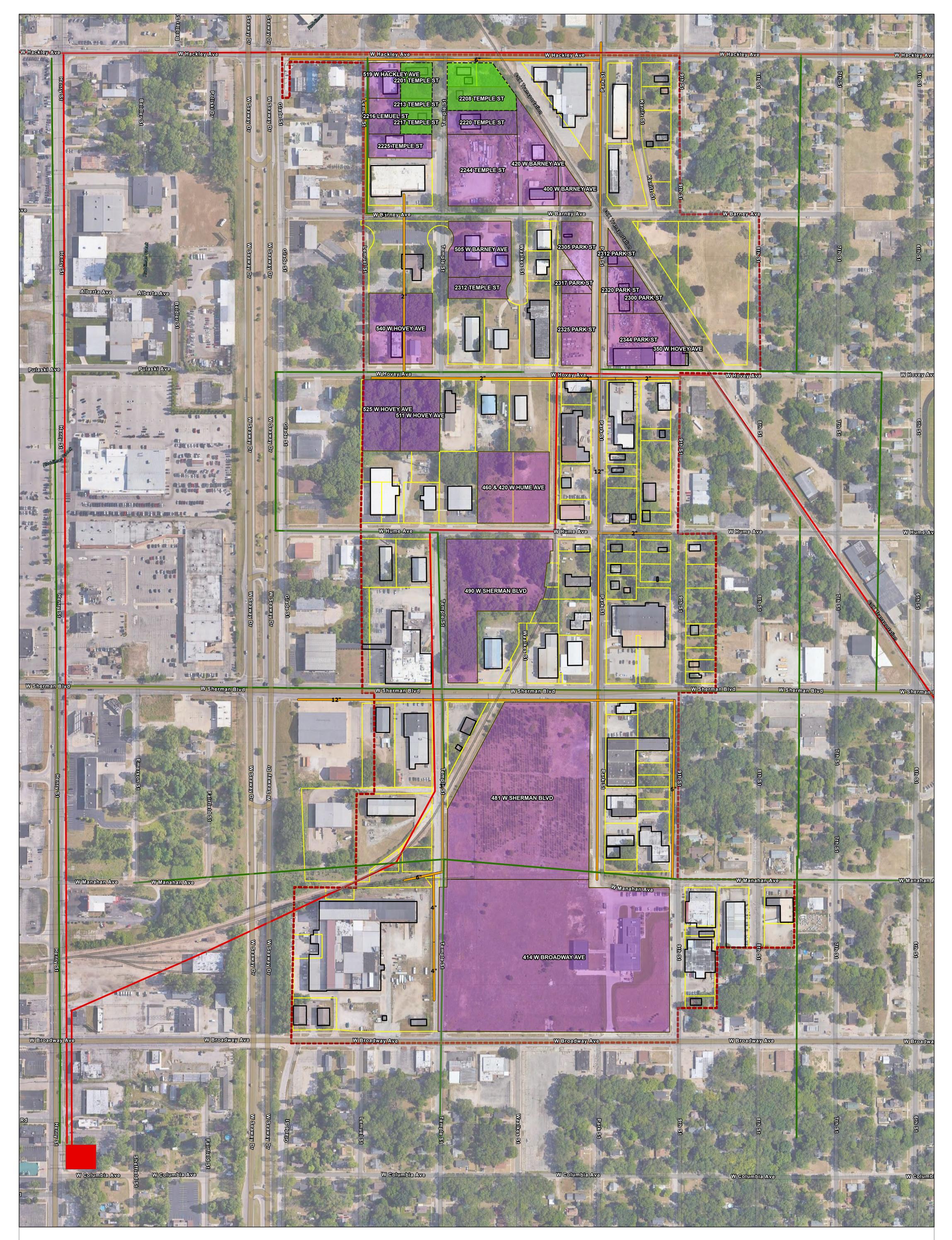
INDUSTRIAL PARK EAST GAS AND ELECTRIC

7/5/2023

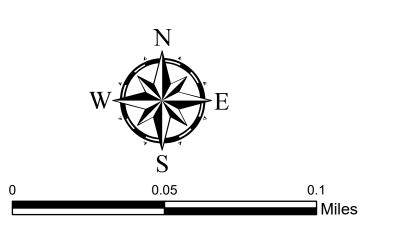


LEGEND





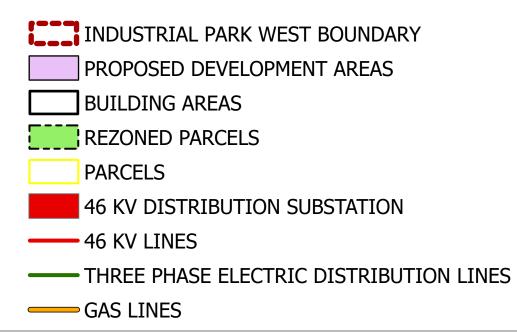


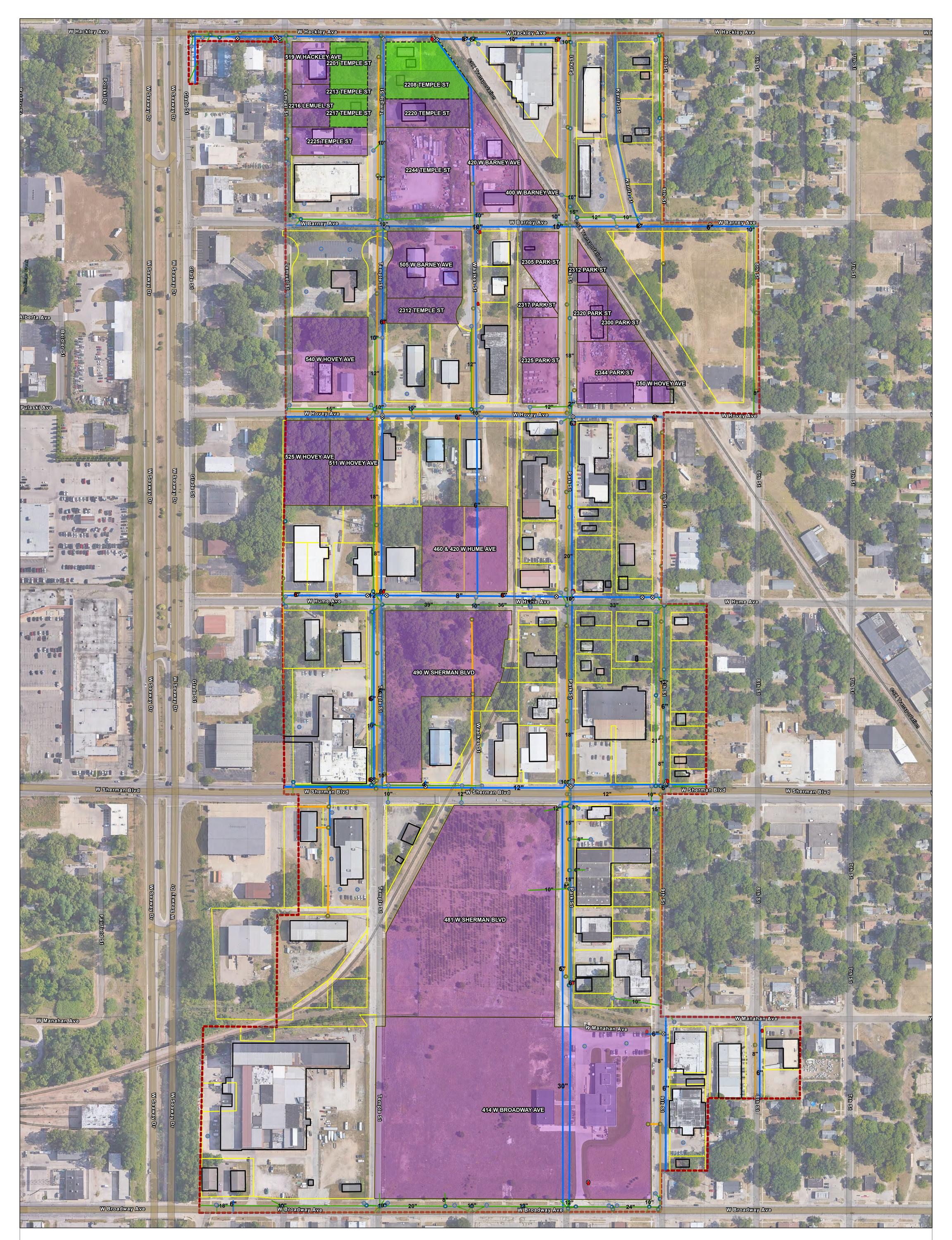


INDUSTRIAL PARK WEST GAS AND ELECTRIC

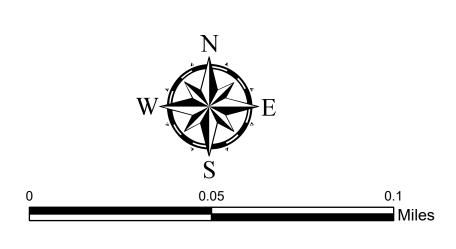
7/5/2023











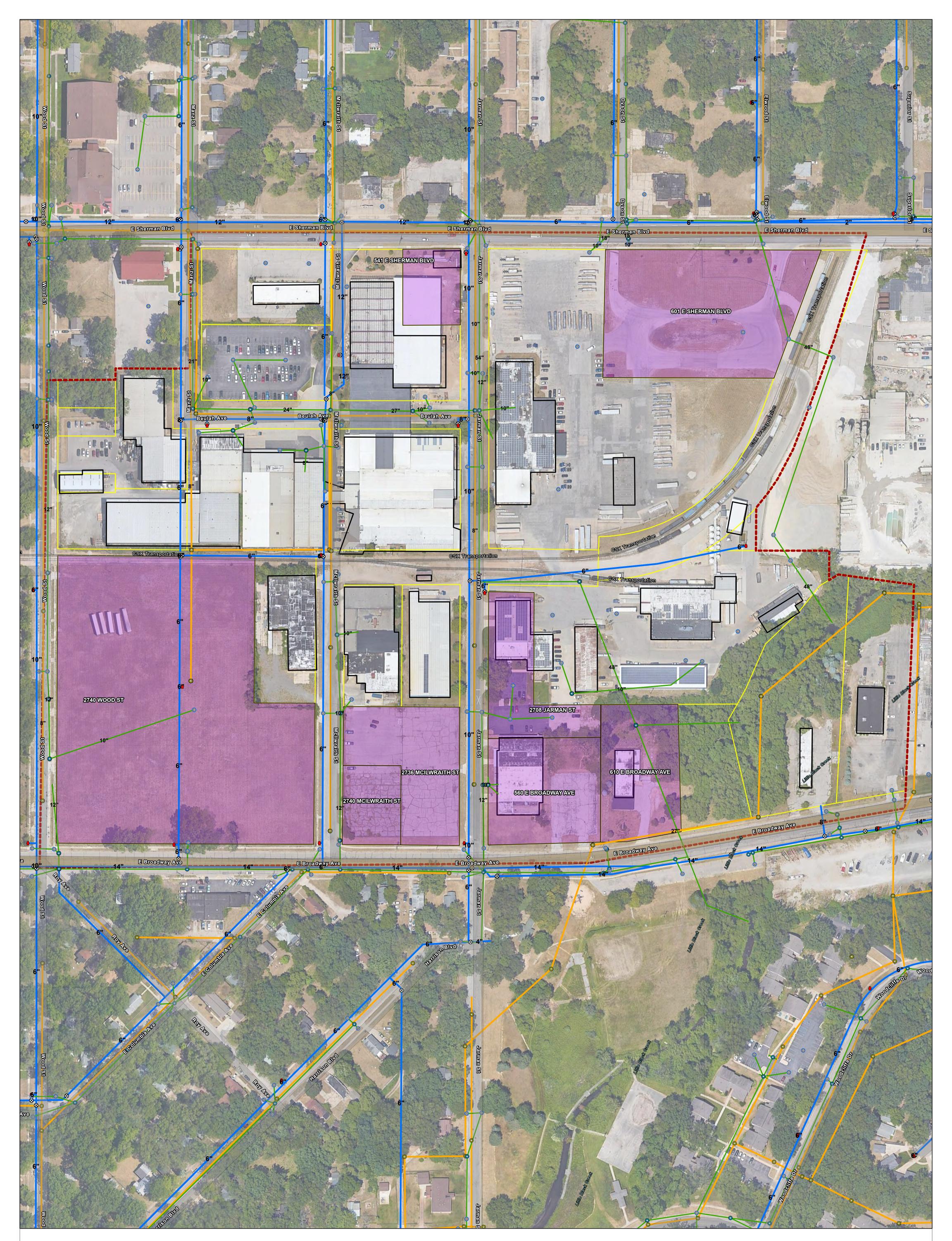
INDUSTRIAL PARK WEST WATER AND SEWER

7/5/2023

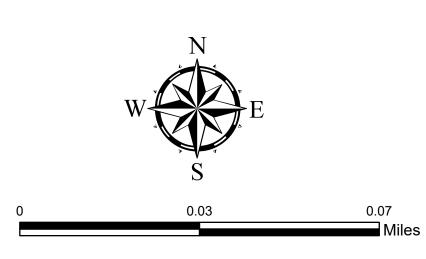


LEGEND









INDUSTRIAL PARK EAST WATER AND SEWER

7/10/2023



LEGEND

INDUSTRIAL PARK EAST BOUNDARY	STORM MANHOLE
PROPOSED DEVELOPMENT AREAS	SEWER MANHOLE
BUILDING AREAS	⊗ WATER MAIN VALVE
PARCELS	SEWER
CATCH BASIN	
 HYDRANT 	