



**CITY OF MADISON HEIGHTS**

**CITY HALL - EXECUTIVE CONFERENCE ROOM, 300 W. 13 MILE RD.**

**JOINT DDA & BRA MEETING AGENDA**

**APRIL 16, 2024 AT 8:00 AM**

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**CALL TO ORDER**

**ROLL CALL**

**ADDITIONS/DELETIONS**

**APPROVAL OF MINUTES**

- [1.](#) Brownfield Redevelopment Authority Meeting Minutes of January 10, 2023
- [2.](#) BRA-DDA Joint Meeting Minutes of February 20, 2024

**MEETING OPEN TO THE PUBLIC**

**UNFINISHED BUSINESS**

- [3.](#) 11 Mile Streetscape Plan
- [4.](#) Election of Secretary

**REPORTS**

- [5.](#) Finance Report
- [6.](#) Update on Ongoing Projects

**NEW BUSINESS**

**COMMITTEE REPORTS**

**TRAINING & EVENT OPPORTUNITIES**

**ADJOURNMENT**

NOTICE: Persons with disabilities needing accommodations for effective participation through electronic means in this meeting should contact the City Clerk at (248) 583-0826 or by email: [clerks@madison-heights.org](mailto:clerks@madison-heights.org) at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.

Special Brownfield Redevelopment Authority Meeting  
Madison Heights, Michigan  
January 10, 2023

A Special Brownfield Redevelopment Authority Meeting was held on Tuesday, January 10, 2023 at 8:00 AM at City Hall - Executive Conference Room, 300 W. 13 Mile Rd.

PRESENT

Rickey Busler  
Ruth Charlebois  
Gordon Davignon  
Yousif Jarbo  
Joseph Keys  
Joe Marando  
Melissa Marsh  
Lenea Renshaw  
Michael Sheppard  
Michael Van Buren

ABSENT

Roslyn Grafstein  
Anthony Mancini

OTHERS PRESENT

Community and Economic Development Director Giles Tucker  
City Clerk Cheryl Rottmann

**BRA-23-01. Excuse Members.**

Motion made by Charlebois, Seconded by Jarbo, to excuse Members Grafstein and Mancini from today's meeting.

Voting Yea: Busler, Charlebois, Davignon, Jarbo, Keys, Marando, Marsh, Renshaw, Sheppard, Van Buren

Motion carried.

**BRA-23-02. Brownfield Redevelopment Authority Meeting Minutes 7-19-22.**

Motion made by Marsh, Seconded by Sheppard, to approve the minutes of July 19, 2022 Brownfield Redevelopment Authority, as printed.

Voting Yea: Busler, Charlebois, Davignon, Jarbo, Keys, Marando, Marsh, Renshaw, Sheppard, Van Buren

Motion carried.

**MEETING OPEN TO THE PUBLIC:**

There were no members of the public wishing to speak.

**BRA-23-03. Brownfield Reimbursement Request #2 Madison Center Owner LLC.**

CED Director Tucker stated that the approved Brownfield Plan for the redevelopment located at 29101-29501 John R Rd included a total of \$2,388,549 in reimbursable costs, which included a 15% contingency. On July 19, 2022, the MHBRA board approved a reimbursement request from Madison Center Owner LLC for \$2,086,645.88 leaving \$291,353.12 remaining for reimbursement.

Mr. Tucker stated that PM Environmental has submitted a 2nd request on behalf of Madison Center Owner LLC for the remaining \$291,353.12 in funds for reimbursement as approved within the Brownfield Plan. The request includes a total of \$312,426.90 in eligible demolition activities in preparation for their anchor tenant for the strip portion of the project. Their request also included signed and notarized Applications for Payment, Statements from Madison Center Owners contractor and signed Partial Conditional Waivers. If accepted, Madison Center Owners LLC will reach the maximum reimbursement as outlined in the Brownfield Plan.

Motion made by Marsh, Seconded by Sheppard, to Brownfield Request Number 2 for Madison Center Owners LLC in the amount of \$291,353.12 for 29101-29501 John R.

Voting Yea: Busler, Charlebois, Davignon, Jarbo, Keys, Marando, Marsh, Renshaw, Sheppard, Van Buren

Motion carried.

**BRA-23-04. BRA Meeting Dates 2023.**

Motion made by Jarbo, Seconded by Keys, to approve the following 2023 Brownfield Redevelopment meeting dates:

April 11, 2023  
September 14, 2023

Voting Yea: Busler, Charlebois, Davignon, Jarbo, Keys, Marando, Marsh, Renshaw, Sheppard, Van Buren

Motion carried.

**ADJOURNMENT**

There being no further business, Chair Van Buren adjourned the meeting at 8:16 a.m.

Joint BRA/DDA Meeting  
Madison Heights, Michigan  
February 20, 2024

A Joint BRA/DDA Meeting was held on Tuesday, February 20, 2024 at 8:00 AM at City Hall - Executive Conference Room, 300 W. 13 Mile Rd.

PRESENT

Member Rickey Busler  
Member Gordon Davignon  
Mayor Roslyn Grafstein  
Vice-Chair Yousif Jarbo  
Member Joseph Keys  
Member Melissa Marsh  
Member Michael Sheppard  
Chair Michael Van Buren

ABSENT

Member Joe Marando  
Member Lenea Renshaw

OTHERS PRESENT

Community and Economic Development Director Giles Tucker  
Deputy City Manager/City Clerk Cheryl Rottmann

**BRA/DDA 24-4. Excuse Members.**

Motion to excuse Members Marando and Renshaw from today's joint BRA/DDA meeting.

Motion made by Member Busler, Seconded by Member Sheppard.

Voting Yea: Member Busler, Member Davignon, Mayor Grafstein, Vice-Chair Jarbo, Member Keys, Member Marsh, Member Sheppard, Chair Van Buren

Motion carried.

**BRA/DDA 24-5. January 16th 2024 BRA-DDA Joint Meeting Minutes.**

Motion to approve the Joint BRA-DDA Meeting Minutes of January 16, 2024, as printed.

Motion made by Member Sheppard, Seconded by Mayor Grafstein.

Voting Yea: Member Busler, Member Davignon, Mayor Grafstein, Vice-Chair Jarbo, Member Keys, Member Marsh, Member Sheppard, Chair Van Buren

Motion carried.

**MEETING OPEN TO THE PUBLIC:**

There were no members of the public wishing to speak.

**BRA/DDA 24-6. Brownfield Reimbursement Request for 30031 Dequindre Rd - Request #2.**

Motion to approve the second Brownfield Reimbursement Request to Hudson-Madison LLC for 30031 Dequindre Road, in the amount of \$220,820.41.

Motion made by Member Sheppard, Seconded by Member Busler.

Voting Yea: Member Busler, Member Davignon, Mayor Grafstein, Vice-Chair Jarbo, Member Keys, Member Marsh, Member Sheppard, Chair Van Buren

Motion carried.

**BRA/DDA 24-7. Update on the Façade Grant Guidelines & Application Revisions.**

Director Tucker gave an update on the changes to the Façade and Sign Grant guidelines and applications to the board, including streamlining the application, revisions to the grant limits, qualifications of applicants, changes to eligible activities, and changes to the approval process.

Motion to adopt the Façade and Sign Grant Applications and Guidelines as presented.

Motion made by Member Sheppard, Seconded by Member Keys.

Voting Yea: Member Busler, Member Davignon, Mayor Grafstein, Vice-Chair Jarbo, Member Keys, Member Marsh, Member Sheppard, Chair Van Buren

Motion carried.

**REPORTS:**

**Finance Report**

Director Tucker noted there have not been a lot of changes to the Financial Report since the last meeting except for payments to Nowak and Fraus for the 11 Mile Streetscape Project. He also noted that year-to-date revenues are up from properties becoming uncapped due to new ownership.

**MHHP Chamber of Commerce Q4 Report**

MHHP Chamber Director Linda Williams provided the membership with a MHHP Quarterly Report. She reviewed revenues, memberships, special events and their budget activities. Some of the upcoming programs include the State of the Cities and the Green Crawl. Ms. Williams stated that they are working on spring programming as well.

In response to City Manager Marsh's question, Ms. Williams stated that there is a \$7,680 shortfall in MHHP revenues from the projected amount. The MHHP is working to compensate for the shortfall and has applied for a \$5,000 grant from the CAB to help cover the cost of workshops and the podcast. She noted that Hazel Park has also committed to increasing their commitment by \$3,000. Further, their goal is to increase membership by 10 and raise the membership total to 140.

**BRA/DDA 24-8. DDA Board Appointments.**

Motion to recommend that the Mayor re-appoint members Keys and Sheppard to the DDA board.

Motion made by Member Busler, Seconded by Member Davignon.

Voting Yea: Member Busler, Member Davignon, Mayor Grafstein, Vice-Chair Jarbo, Member Keys, Member Marsh, Member Sheppard, Chair Van Buren

Motion carried.

**BRA/DDA 24-9. DDA Board Appointments.**

Motion to recommend that the Mayor appoint Maria Ujkic to the DDA board.

Motion made by Vice-Chair Jarbo, Seconded by Member Keys.

Voting Yea: Member Busler, Member Davignon, Mayor Grafstein, Vice-Chair Jarbo, Member Keys, Member Marsh, Member Sheppard, Chair Van Buren

Motion carried.

**11 Mile Rd Streetscape Plan Progress**

Director Tucker stated that he has met with SEMCOG to discuss the application process for the TAP grant. The target is now to apply for the grant in June. He stated the discussion included the topics of multimodal paths, site amenities, closing curb cuts and onstreet parking and how that will help create multimodal pathways. MKSK and Nowak and Fraus are going to present an estimate of costs for the grant process to move forward.

**ROUND ROBIN:**

In response to Chair Van Buren's question, City Manager Marsh stated that the new utility poles at 11 Mile and John R are part of an upgrade by DTE.

Mr. Busler thanked Joe Keys for his assistance with his car. May 10th is the Senior Prom at the Active Adult Center from 4 p.m. to 7 p.m. and they are looking for gift card sponsorship and invited all to attend. August 12th is the City Recreation Golf Outing. He requested coffee and donuts/bagels for future meetings.

Mr. Jarbo asked that the Design Committee look into potential areas where special events can be held such as a bourbon tasting.

City Manager Marsh stated that the Design Committee will be meeting to discuss the City's entry signs in the DDA.

**ADJOURNMENT:**

Having no further business, Chair Van Buren adjourned the meeting at 9:17 a.m.

## Downtown Development Authority of City of Madison Heights

### Memorandum

**Date:** April 12, 2024

**To:** Downtown Development Authority Board Members

**From:** Giles Tucker, Community Development Director

**Subject:** 11 Mile Streetscape Plan & Optional Additional Costs

### 11 Mile Rd Streetscape Plan & Next Steps

Following conversations held with SEMCOG and MDOT in February, staff learned in March that although our TAP grant application was “moderately competitive”, costs associated with closing curb cuts, adding on-street parking, and expanding sidewalks to 8ft would not be eligible costs covered by a TAP Grant. Around this time, our consultants provided us with a completed draft Plan including estimate construction costs. Seeing these costs and understanding that many larger items would not be covered by the TAP grant, staff sought to find ways to better align the project with TAP funding.

One of the ways that staff came up with was to simply change the walkways from two 8ft sidewalks to a 6ft sidewalk on the southside of 11 Mile and a 10ft multi-use path on the northside of 11 Mile. The Complete 11 Mile Streetscape Plan includes these two options in its illustrative plans, conceptual engineering, and construction cost estimates as “Option 1” and “Option 2”.

Another way to potentially reduce project costs and better align the project with TAP funding would be to reconsider a 3-lane configuration of the roadway. This approach was not considered much at the start of the project because of a reluctance by staff, the DDA and residents to “road diets”. However, there are potentially significant safety benefits and cost savings that may be realized if this option is reconsidered. To add a 3-lane configuration to the Streetscape plan, the DDA would need to approve an additional \$26,000 in costs, and doing so would push the TAP Grant submittal date to October 9<sup>th</sup>, opposed to June 19<sup>th</sup>. To aid the DDA in this important decision, staff has prepared a presentation that summarizes the plan as-is, and explains the pros and cons of adding the additional costs of a 3-lane configuration.

To progress this project, the DDA needs to decide whether to add-on the proposed additions to the plan, schedule open meetings with stakeholders, approve a design, and submit a TAP grant application by either June 19<sup>th</sup> or October 9<sup>th</sup>.

### Staff Recommendation

Staff recommends that the DDA Board take one of three motions:

1. **Motion 1:** Reject the proposal to include a 3-lane road configuration in the 11 Mile Streetscape Plan, recommend the engineering plans and costs for “Option 1” which includes an 8ft sidewalk

on both sides of 11 Mile Rd, and authorize staff to move forward with a stakeholder meeting open to the public in the evening of May 20<sup>th</sup> or May 21<sup>st</sup>.

2. **Motion 2:** Reject the proposal to include a 3-lane road configuration in the 11 Mile Streetscape Plan, recommend the engineering plans and costs for “Option 2” which includes an 6ft sidewalk on the southside of 11 Mile Rd and a 10ft multi-use pathway on the northside of 11Mile Rd, and authorize staff to move forward with a stakeholder meeting open to the public in the evening of May 20<sup>th</sup> or May 21<sup>st</sup>.
3. **Motion 3:** Approve the proposal to include a 3-lane road configuration in the 11 Mile Streetscape Plan for a cost not to exceed \$26,000 and reconsider a recommendation for the DDA Boards preferred configuration at the Regular DDA Meeting of June 18<sup>th</sup>.

**Attachments:**

1. 11 Mile Streetscape Presentation
2. Current 11 Mile Streetscape Plan
3. NFE Work Authorization ASR#1



# 11 Mile Streetscape Plan Summary & Optional 3-Lane Configuration Addition

Summary of Plan & Optional 3-Lane Configuration  
Pros/Cons

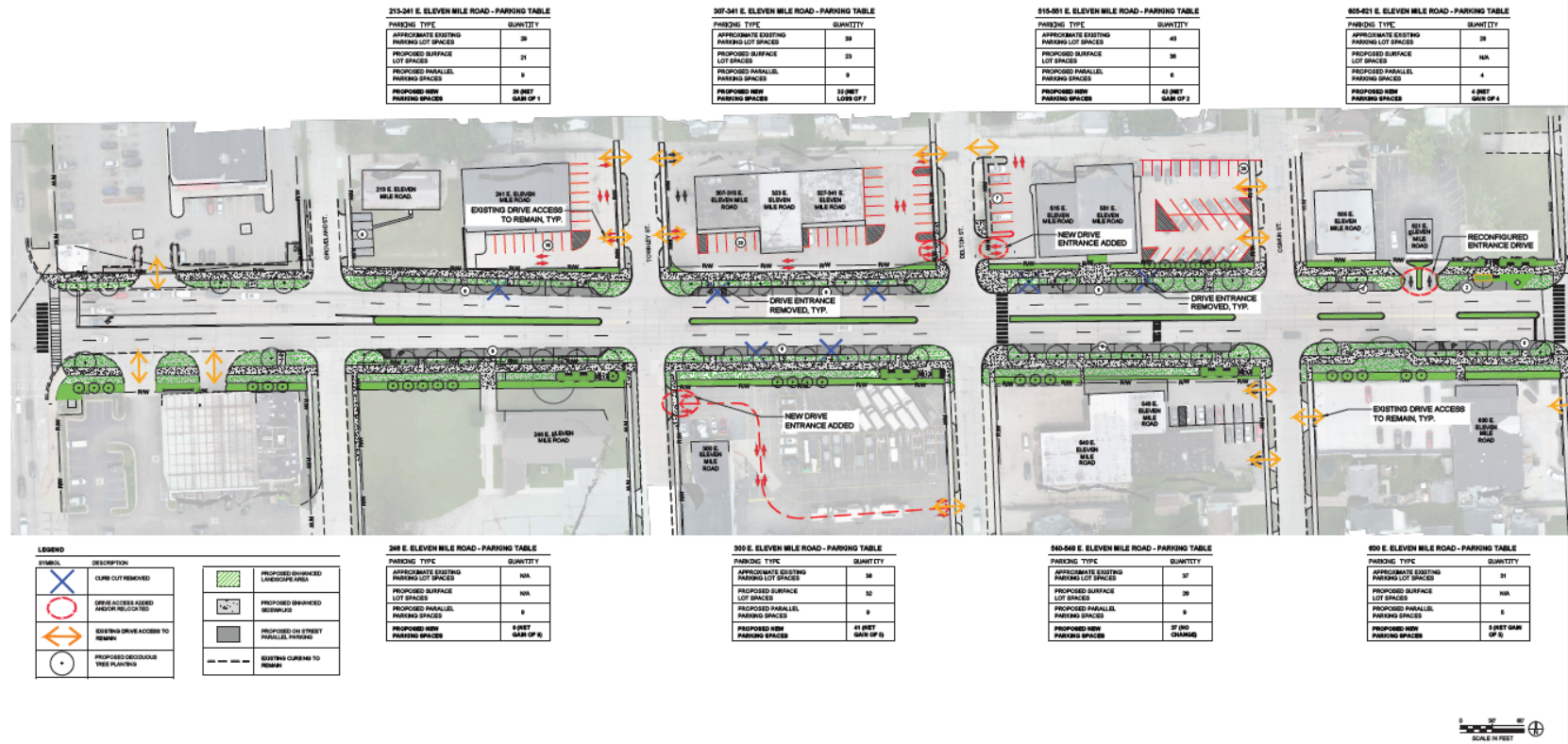
# Preferred 4-Lane Configuration

- Plan remains mostly the same since last presented in Winter 2023-2024.
- Plan includes existing bus stops and includes upgraded enclosures at the John R & 11 Miles stops.
- Adding on-street parking creates a net gain of approximately (22) spaces.
- Only block to lose spaces is 307-341 E 11Mile (net loss of 7).

Parking and access to adjacent businesses and property owners was a key issue during the design study. Within the focus area, the Design Team developed conceptual plans to illustrate how site access to adjacent parcels could be re-configured to allow for proposed right of way improvements. In some cases, closing curb cuts along 11 Mile were a proposed way of creating a more cohesive streetscape helping improve pedestrian safety.

The diagram below illustrates locations where curb cuts could be removed (shown with a blue "X") and how internal circulation could be adjust to accommodate the right of way improvements (shown in red).

As a result of adding the on-street parking there was a net gain of approximately 22 parking spaces within the focus area parking spaces



# Preferred 4-Lane Configuration

- Curb cuts, on-street parking, 8ft walkway not TAP eligible activities as presented.
- TAP Grant anticipated to cover HAWK crosswalk signal, and pedestrian amenities.
- A 10ft wide path that meets meet AASHTO standards on North 11 Mile is TAP Grant Eligible (Option 2).

## PREFERRED OPTION - SHARED USE PATH



A shared use path is typically wider than a traditional sidewalk and is designed to accommodate pedestrians and cyclists.



Lane markings and changes in material can be used to define various uses.



Providing thoughtful solutions for transit riders, pedestrians, scooters, and bicyclists can improve the mobility, access, and safety.

## PREFERRED OPTION - WITH SHARED USE PATH



### Preferred Option - With Shared Use Path

An alternate consideration of the preferred option included the addition of a 10' wide Shared Use Path along the north side of the study corridor.

A shared use path provides a travel area separate from motorized traffic for bicyclists, scooter users, pedestrians, skaters, wheelchair users, joggers, and other users.

Shared use paths can provide a low-stress experience for people using the network for transportation or recreation and are fully separated from vehicular traffic. Shared use paths differ from cycle tracks in that they can include pedestrians even if the primary anticipated users are cyclists and scooters.

*This option is shown as "Option 2" in Appendix A8- A11.*



# Why Should We Consider Including a 3-Lane Option to the Streetscape Plan?



**SAFETY**



**CONSTRUCTION COST SAVINGS**

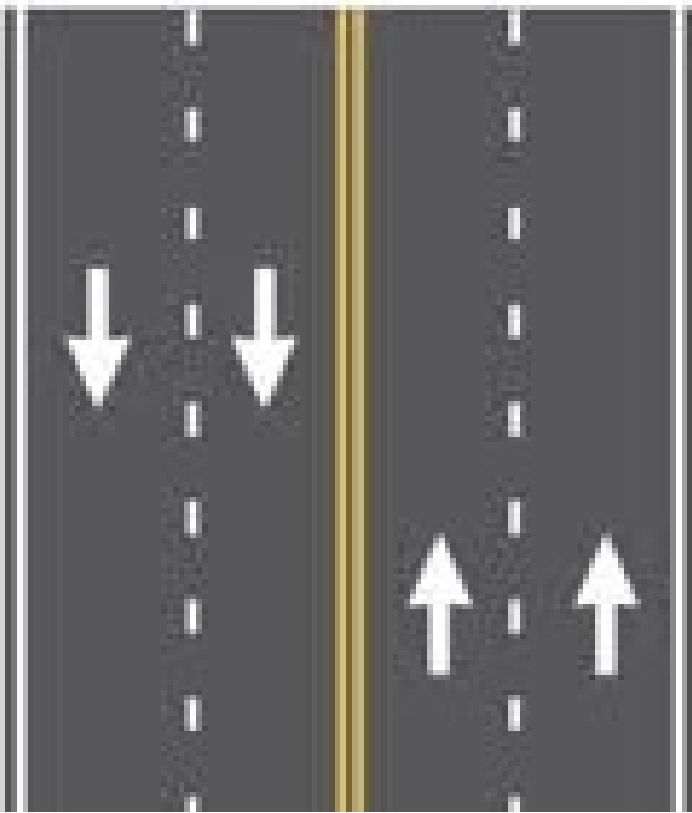


**BETTER ALIGNED WITH TAP GRANT FUNDING**

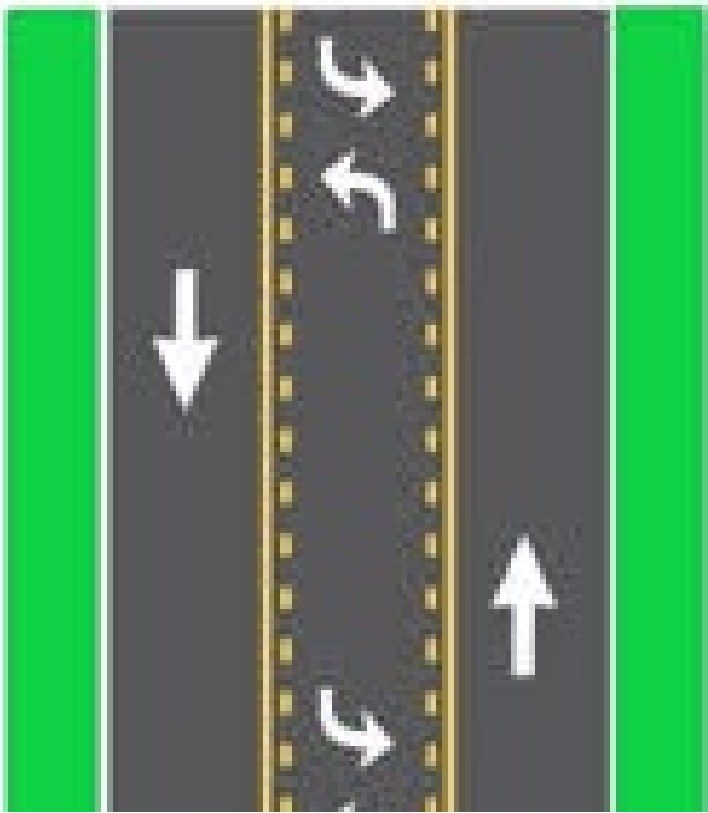
# 4-Lane v. 3-Lane Configuration Safety Benefits

- [https://www.tiktok.com/@streetcraft/video/7351076999500287278?\\_r=1&\\_t=8lAgWroVz2s](https://www.tiktok.com/@streetcraft/video/7351076999500287278?_r=1&_t=8lAgWroVz2s)

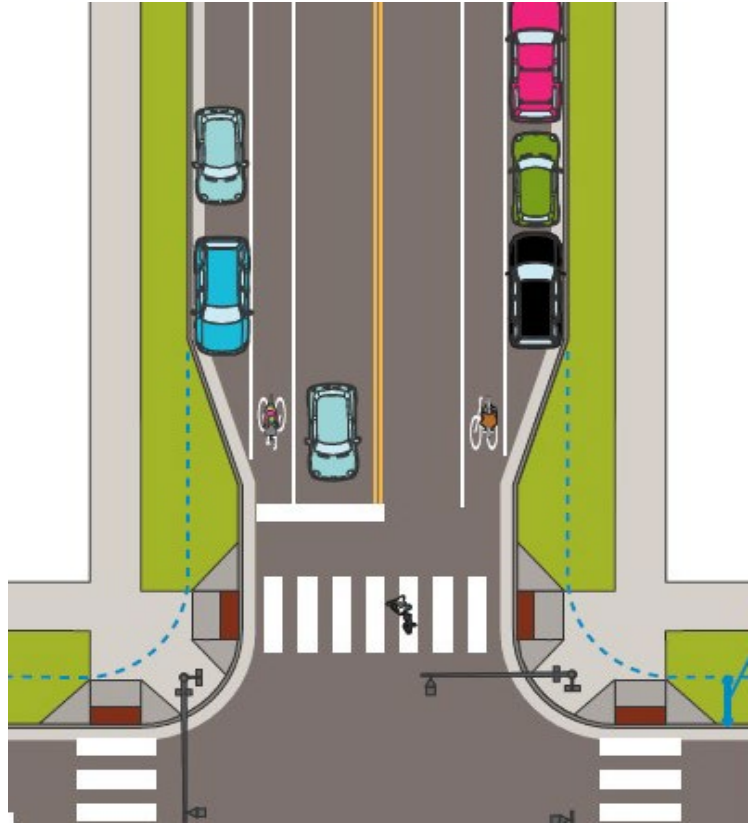
# Shorter Distances = Pedestrian Safety



4 lanes of traffic to cross; longer distance



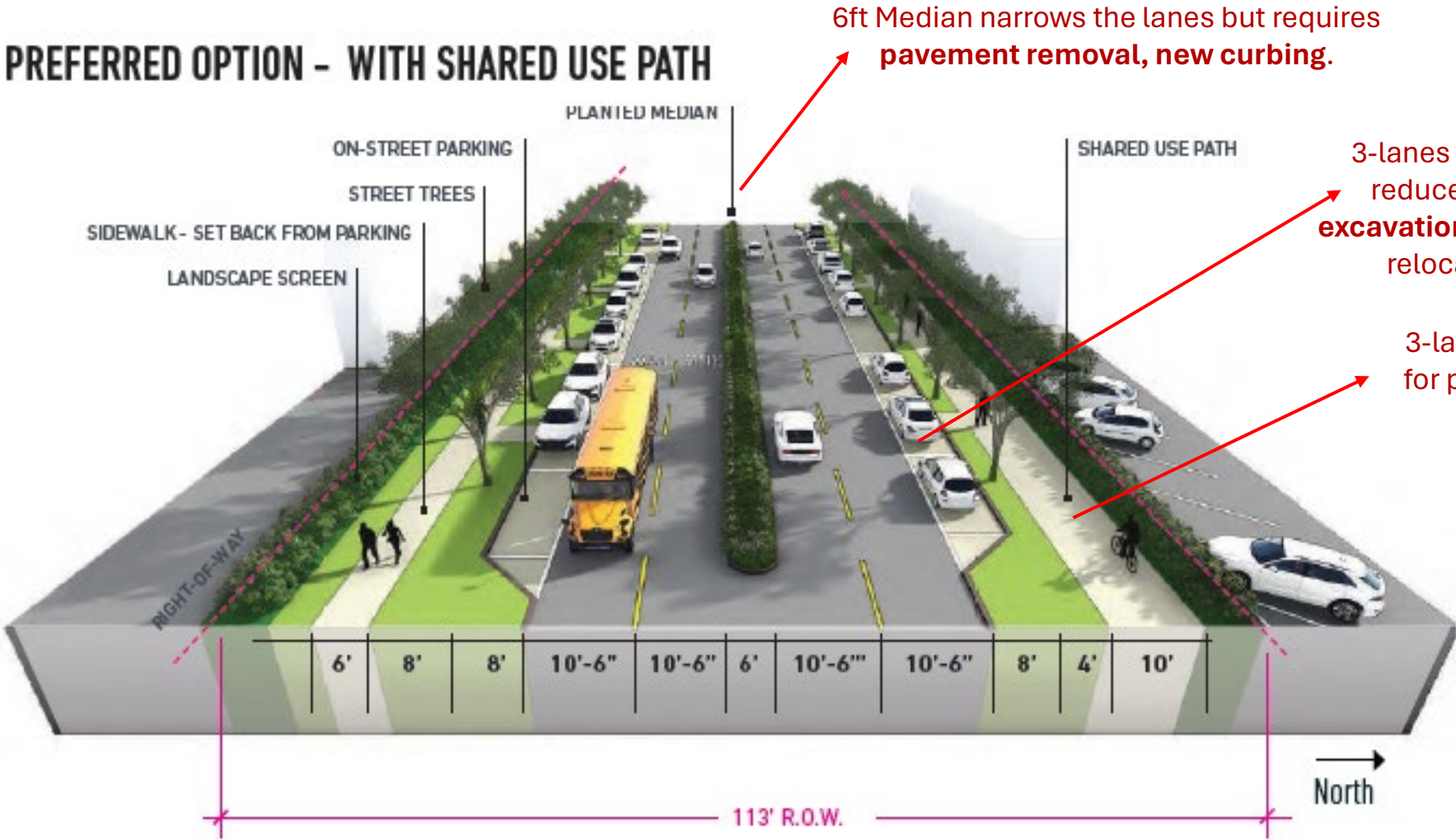
3 lanes to cross; shorter distance



With bump out curb extension the distances are even shorter, and curbing to do so is TAP eligible

# 3-Lane Areas for Potential Cost Savings

## PREFERRED OPTION - WITH SHARED USE PATH



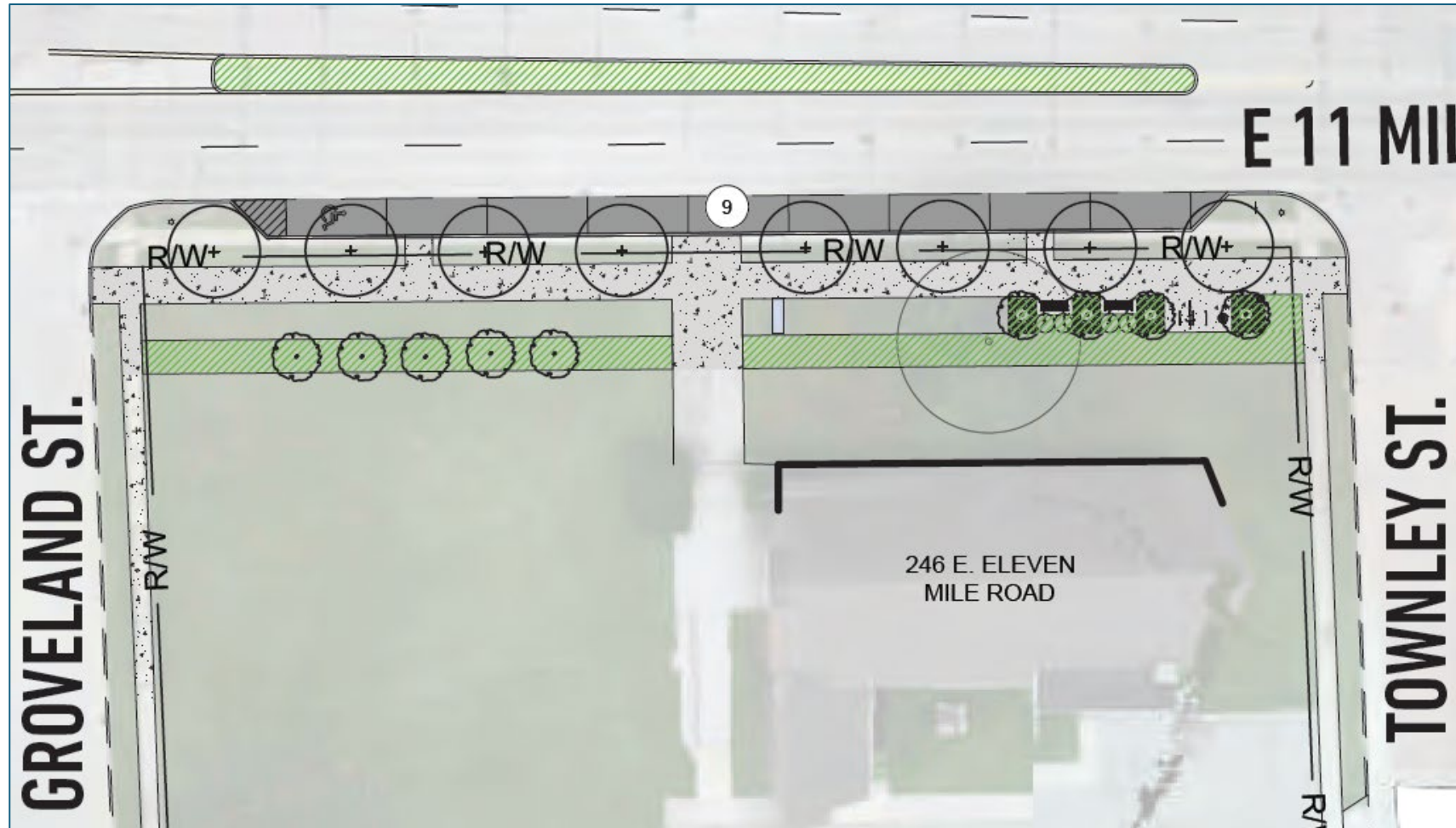
6ft Median narrows the lanes but requires pavement removal, new curbing.

3-lanes requires less ROW. This reduces/eliminates costs for excavation, aggregate base and the relocation of Streetlights.

3-lane allows for more ROW for pedestrians & amenities.



# Additional 3-Lane Cost Savings: No Property Acquisition



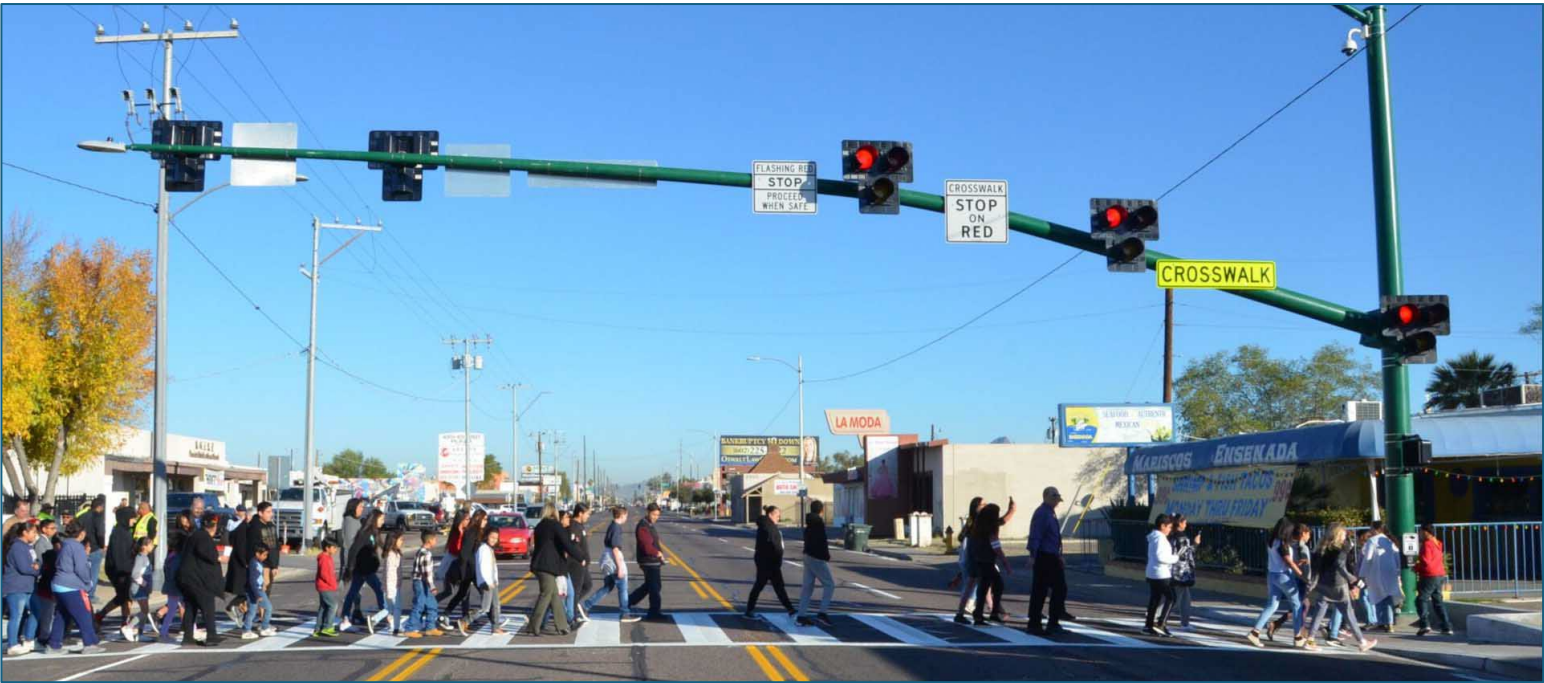
United Methodist Church

# Additonal 3-Lane Cost Savings

Average RRFB Signal Cost: \$22,250



HAWK Signal Cost: \$100,000-150,000



# Royal Oak 11 Mile Study (2022)

- Royal Oak evaluated reducing lanes along 11 Mile Rd from 5 and 4 lanes to a 3-lanes from Woodward to Stephenson Hwy to improve safety. Examined (11) intersections for capacity, safety and geometry.
- No formal action will be taken until 2026-2027, but the project has been favorably received by stakeholders thus far.
- Complimenting neighboring communities builds a more cohesive and connected corridor, **strengthening our TAP Grant application.**

Exhibit 1 – Existing Geometry – 11-Mile Road Corridor

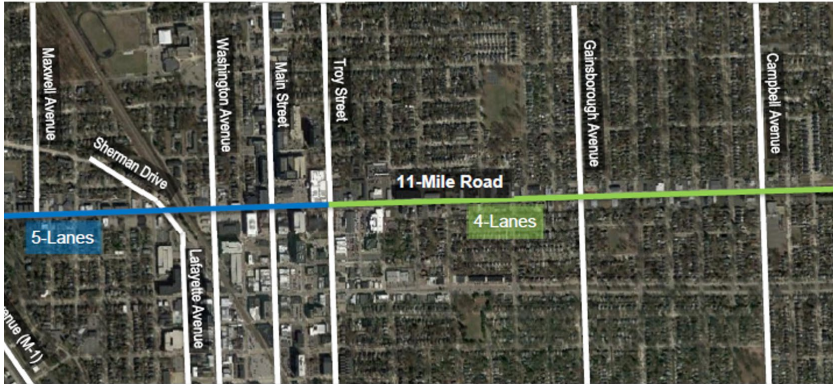
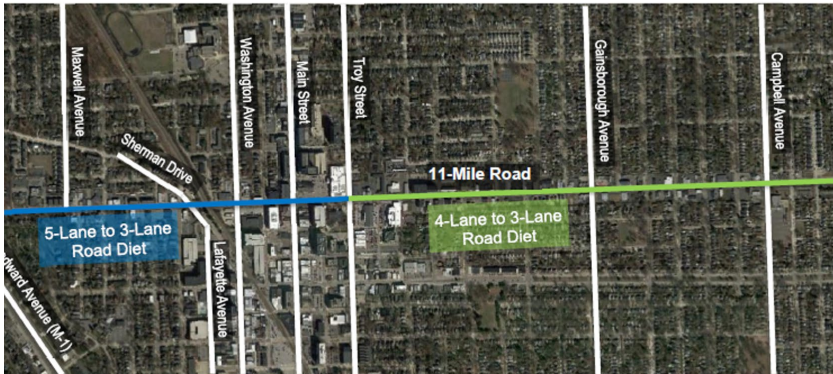


Exhibit 3 – Recommended Geometry – 11-Mile Road Corridor



# Royal Oak 11 Mile Corridor Study Cont'd

- Crashes are expected to be reduced by 15-17%.
- The maximum movement delay is less than 10 seconds.
- Total time increase through entire corridor ranges between 0.5- 1.8 minutes
- A reduction to 3-lanes is projected to have a negligible increase in delay over the next twenty years.

Road Diet Delay Summary (2022) w/ Mitigation Measures			
	AM Peak Hour	MD Peak Hour	PM Peak Hour
Max Intersection Increase in Delay	2.6 sec	2.8 sec	3.3 sec
Max Turning Movement Increase in Delay	9.1 sec	5.7 sec	8.3 sec
11-Mile Corridor Travel Time Increase	0.5 min (EB)	0.4 min (EB)	1.8 min (EB)
	0.9 min (WB)	0.2 min (WB)	0.8 min (WB)

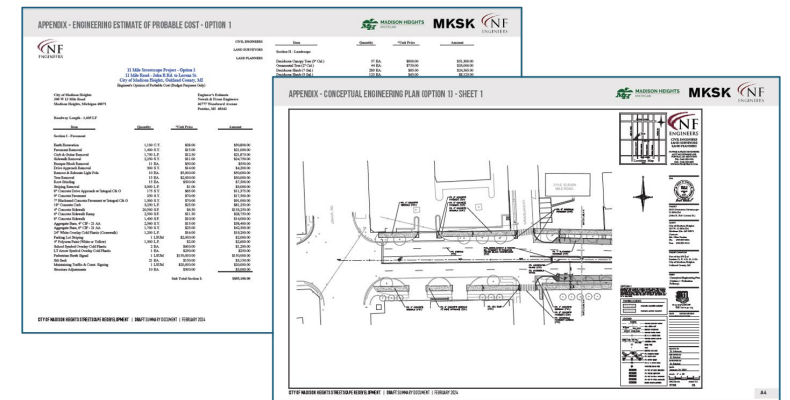
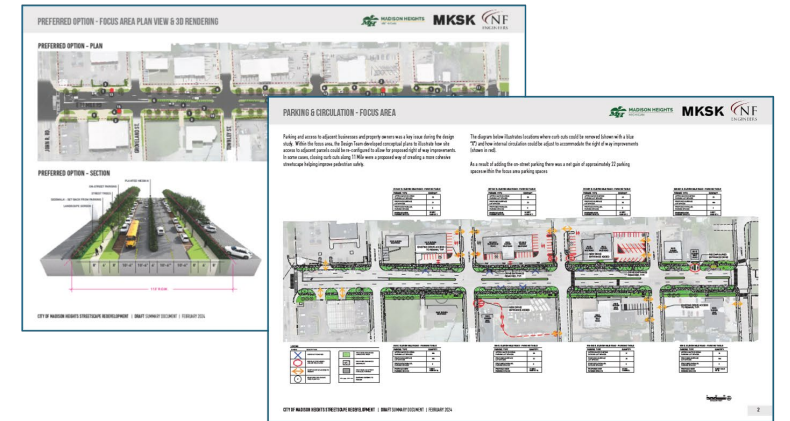
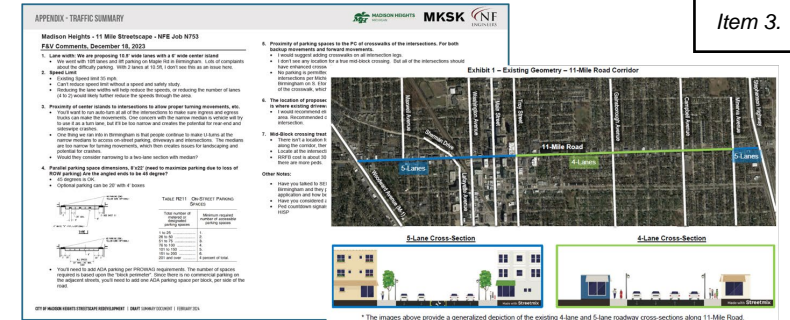
  

Road Diet Delay Summary (2042) w/ Mitigation Measures			
	AM Peak Hour	MD Peak Hour	PM Peak Hour
Max Intersection Increase in Delay	6.3 sec	3.4 sec	1.8 sec
Max Turning Movement Increase in Delay	15.7 sec	7.0 sec	5.8 sec
11-Mile Corridor Travel Time Increase	0.7 min (EB)	0.5 min (EB)	2.4 min (EB)
	1.0 min (WB)	0.2 min (WB)	1.2 min (WB)

# What would the adding a 3-lane configuration to the 11 Mile Streetscape Plan include?

1. Traffic study along 11 Mile Rd from Stephenson to Dequindre examining vehicle delays, queues and crashes.
2. Focus Area Plan View with 3D Rendering and a Focus Area Parking & Circulation Plan.
3. A revised layout with engineers estimated construction costs for the focus area.

Item 3.



# Transportation Alternatives Program including Safe Routes to School category

## 2023-2024 Grant Application Schedule

To assist grant applicants with project timeline planning Contact the Grant Coordinator for your region BEFORE you submit an application.

COMPLETE applications are accepted in MGS year-round for any future fiscal year. Applicants should use the following schedule to plan project timelines for potential grant applications. When a project is selected for funding, the applicant will normally receive a Conditional Commitment for funding in a future state fiscal year.

Missing or inaccurate information may delay your grant request into a future review cycle. Application completeness and any application resubmission dates are determined by the Grant Coordinator and may normally be earlier than the final resubmission dates listed below.

Please consult the TAP/SRTS Applicant Guide for more details on schedule planning.

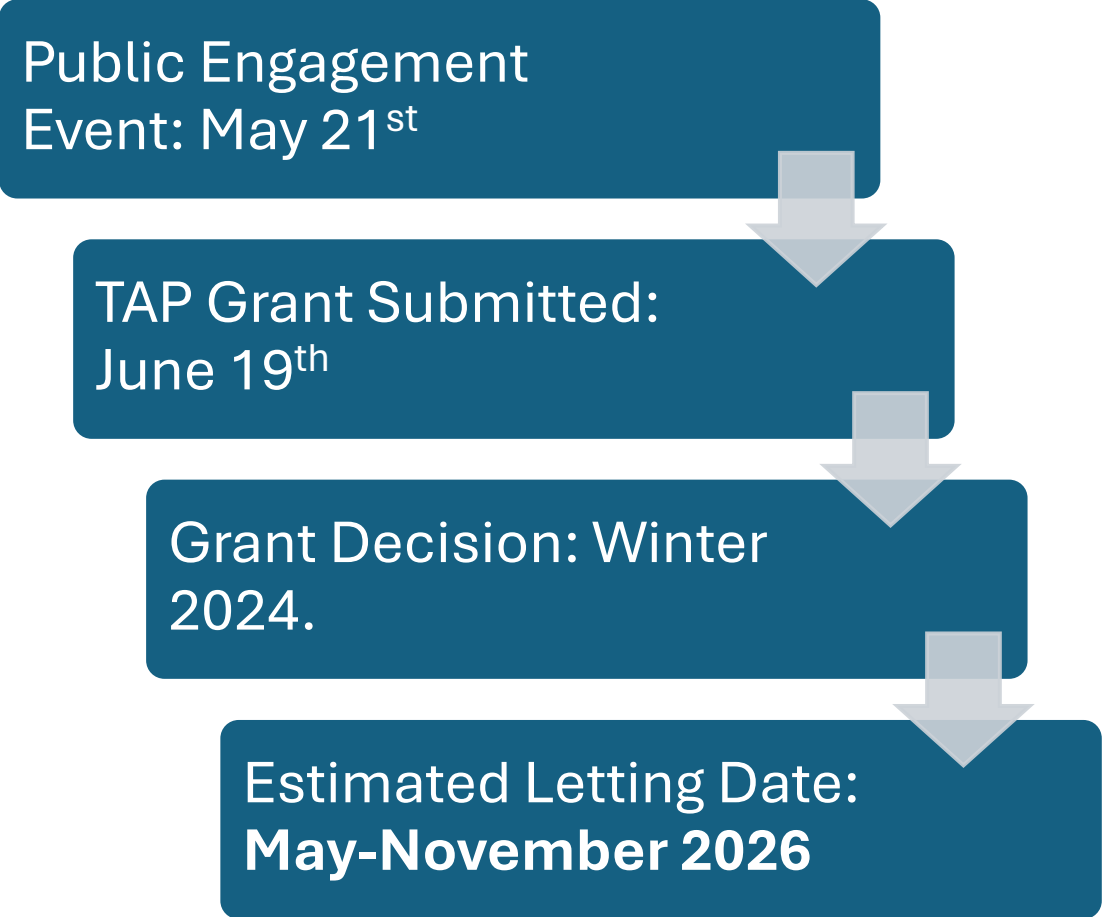
Latest Initial Contact with Grant Coordinator for this Review Cycle	Application Due Date	Application Review Committee Meeting	Final Date for Resubmitting Application with Requested Revisions, or Application Moved to Future Review Cycle	Tentative Funding Decision Date (for future fiscal year funds)
at least 12 weeks before Application Due Date	9-10 weeks before ARC	ARC	5-6 weeks after ARC	12 weeks after ARC
7/20/2022	10/12/2022	12/14/2022	01/18/23	3/8/2023
11/29/2022	2/22/2023	4/26/2023	05/31/23	7/26/2023
3/29/2023	6/21/2023	8/23/2023	09/27/23	11/15/2023
7/19/2023	10/11/2023	12/13/2023	01/17/24	3/6/2024
11/29/2024	2/21/2024	4/24/2024	5/29/2024	7/24/2024
3/27/2024	6/19/2024	8/28/2024	10/2/2024	11/20/2024
7/17/2024	10/9/2024	12/11/2024	1/22/2025	3/12/2025

# What Are the Tradeoffs?

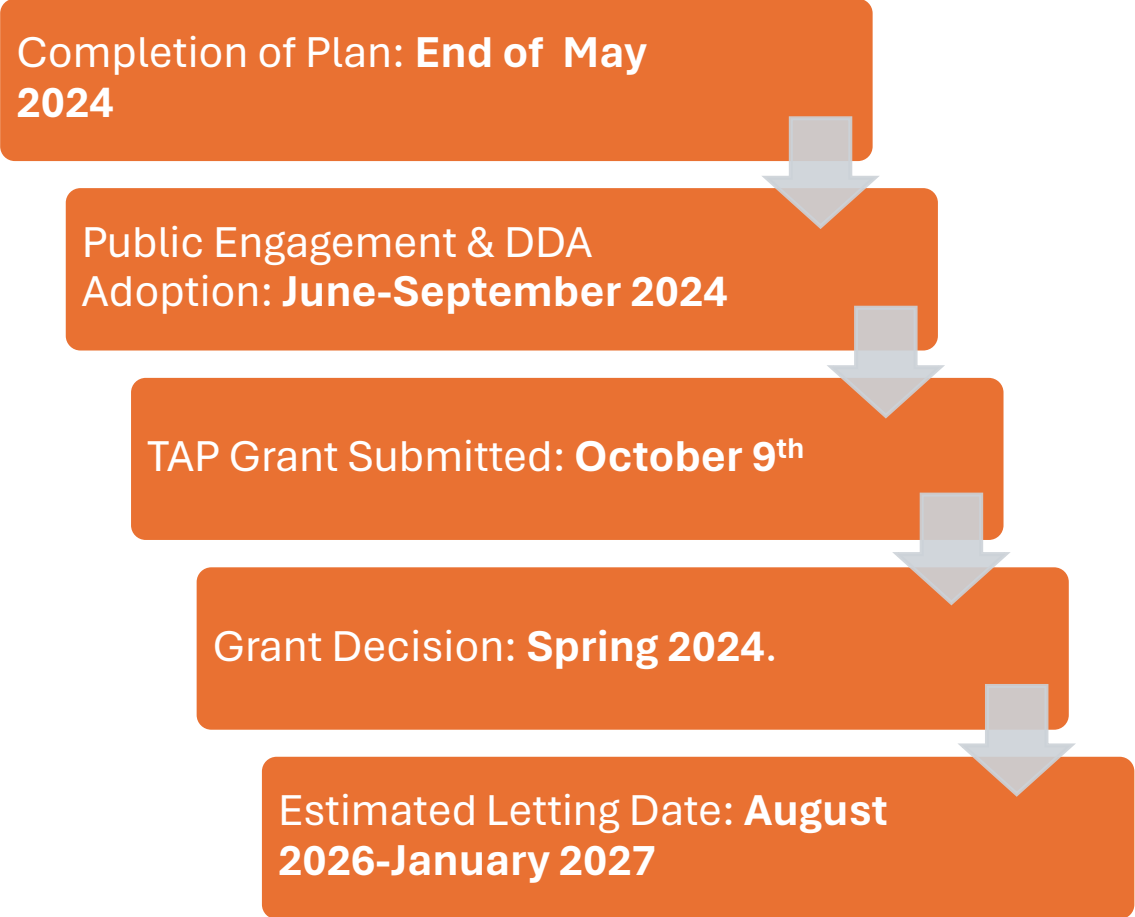
- **Costs \$26,000** and savings known only after incurring additional costs.
- Will push TAP Grant Application submittal from **June 19<sup>th</sup>** to **October 9<sup>th</sup> 2024.**

# Projected Project Timelines

## Adopt Plan as is



## Include 3-Lane Option in Plan



Questions?



# DOWNTOWN MADISON HEIGHTS STREETSCLAPING & CONCEPTUAL ENGINEERING PLAN: 11 MILE ROAD

## SUMMARY DOCUMENT

FEBRUARY 2024



## Client Team:

### City of Madison Heights Staff Members:

Melissa Marsh, City Manager  
Giles Tucker, Community Development Director  
Matt Lonnerstater, City Planner  
Cheryl Rottmann, City Clerk

## Design Team:

### MKSK: Landscape Architecture

Matt McGrath, Associate Principal  
Kristyn Bowden, Associate  
James Goff, Designer

### Nowak & Fraus: Civil Engineering

Brad Brickel, Principal

### Fleis & VandenBrink: Traffic Engineering

Julie Kroll, Associate



- 4** PURPOSE OF SUMMARY DOCUMENT
- 5** PROJECT OVERVIEW
- 6** GOALS & OBJECTIVES
- 7** EXISTING CONDITIONS & OPPORTUNITIES - FOCUS AREA DIAGRAM
- 8** STREETScape INVENTORY & ANALYSIS STUDIES
- 9** DESIGN CONCEPTS
- 10** STAKEHOLDER MEETING SUMMARY
- 11** PREFERRED AMENITIES - VISUAL PREFERENCE SURVEY
- 12** PREFERRED OPTION - FULL CORRIDOR PLAN VIEW & 3D RENDERING
- 13** PREFERRED OPTION - SHARED USE PATH
- 14** PARKING & CIRCULATION - FOCUS AREA DIAGRAM
- 15** GATEWAY OPPORTUNITIES
- 16** GATEWAY EXHIBIT - 3D RENDERINGS
- 17** AMENITY AREA EXHIBIT - PLAN VIEW ENLARGEMENT & BEST PRACTICE IMAGES
- 18** AMENITY AREA EXHIBIT - 3D RENDERINGS
- 19** PLANT DESIGN EXHIBIT - STREETScape
- 20** STREETScape AMENITIES - BEST PRACTICE IMAGES
- 21** PREFERRED OPTION - FULL CORRIDOR PLAN VIEW RENDERING
- 22** PREFERRED OPTION - FULL CORRIDOR PLAN VIEW RENDERING
- 23** PREFERRED OPTION - FULL CORRIDOR PLAN VIEW RENDERING

**APPENDIX**

- A1** APPENDIX - RECOMMENDED PLANT SPECIES - BEST PRACTICE IMAGES
- A2** APPENDIX - RECOMMENDED PLANT SPECIES - BEST PRACTICE IMAGES
- A3** APPENDIX - ALTERNATE AMENITY AREA CONCEPTS
- A4** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 1) - SHEET 1
- A5** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 1) - SHEET 2
- A6** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 1) - SHEET 3
- A7** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 1) - SHEET 4
- A8** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 2) - SHEET 1
- A9** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 2) - SHEET 2
- A10** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 2) - SHEET 3
- A11** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 2) - SHEET 4
- A12** APPENDIX - ENGINEERING ESTIMATE OF PROBABLE COST - OPTION 1
- A13** APPENDIX - ENGINEERING ESTIMATE OF PROBABLE COST - OPTION 2
- A14** TRAFFIC SUMMARY
- A15** TRAFFIC SUMMARY
- A16** TRAFFIC SUMMARY
- A17** TRAFFIC SUMMARY

## PURPOSE

This document is a summary of design efforts focused on creating a cohesive streetscape environment for portions of 11 Mile Road in Madison Heights, Michigan. The focus of the study is to explore options to improve the pedestrian environment, slow traffic, and spur economic development opportunities within the Downtown Development Authority area of Madison Heights.

The plan includes elements for streetscape improvements and explores a full range of site amenities including gateway elements, trees and landscaping, seating areas, site furnishings, traffic calming measures, pedestrian crosswalks, and on-street parking.

The areas of study are the right-of-way environments along 11 Mile Rd extending from Stephenson Highway to Lorenz St and include a specific focus area between Groveland St to Lorenz St. The focus area study includes specific recommendations for curb cut closures and possible vehicular circulation adjustment within private parcels adjacent to 11 Mile Rd.

Finally, this document includes preliminary engineering drawings, a traffic analysis memo, and conceptual cost estimates to assist with funding and implementation strategies.

## HOW TO USE

This document begins with a general description of the project, and includes an existing conditions analysis, identification of opportunities and constraints, stakeholder feedback and a review of the preferred design option.

Additional information includes design detail on proposed elements, such as the gateway opportunities, amenity areas, pedestrian circulation routes, and traffic and parking summaries.

Finally, the appendix sections include more technical information including preliminary engineering plans, traffic summary, recommended planting and preliminary cost estimates.



Existing Conditions on 11 Mile at Lorenz

**Project Overview:**

As outlined in recent master planning efforts, the City of Madison Heights has prioritized developing an improved streetscape environment along 11 Mile Road, focusing on areas between John R. Road and Lorenz Street. This effort is part of a larger plan to facilitate future development within the 11 Mile corridor extending from Lorenz Street to I-75. This plan will guide the vision and design for future improvement projects that promote a more walkable, pedestrian friendly, and attractive downtown district.



FULL CORRIDOR



FOCUS AREA

- \*  
School
- \*  
Points of Interest
- ⊙  
Activity Node
- ⬜  
Downtown Development Authority Boundary

## Project Goals & Objectives

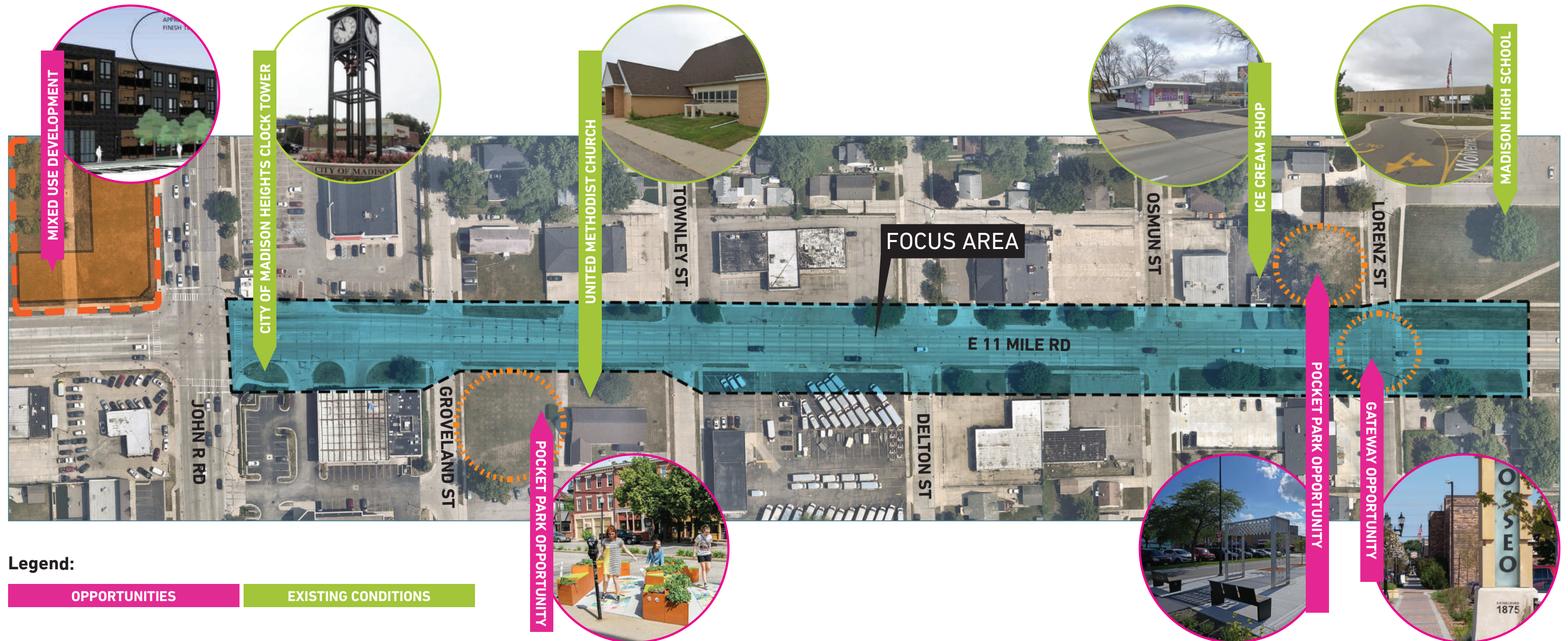
As part of an initial project kick off and visioning session, the Design Team worked with City staff to refine project goals, review challenges, and develop conceptual options to meet project needs

The following project goals were established to help inform project development:

1. CREATE ENHANCED PHYSICAL ENVIRONMENTS WITHIN THE CORRIDOR FOCUSING ON
  - Pedestrians
  - Cyclists
  - Transit Users
  - Automobile drivers
2. PROMOTE THE IDENTITY OF MADISON HEIGHTS THROUGH GATEWAY FEATURES AND OTHER AMENITIES
3. MAXIMIZE RIGHT OF WAY ENVIRONMENTS TO ALLOW FOR A BETTER USE OF PUBLIC SPACE
4. ENHANCE PARKING AND ACCESS TO BUSINESSES ALONG THE CORRIDOR
5. IMPROVE SAFETY FOR ALL USERS
6. DEVELOP DESIGN CONTENT TO HELP INFORM FUNDING AND IMPLEMENTATION STRATEGIES

Design Context Images





**Legend:**

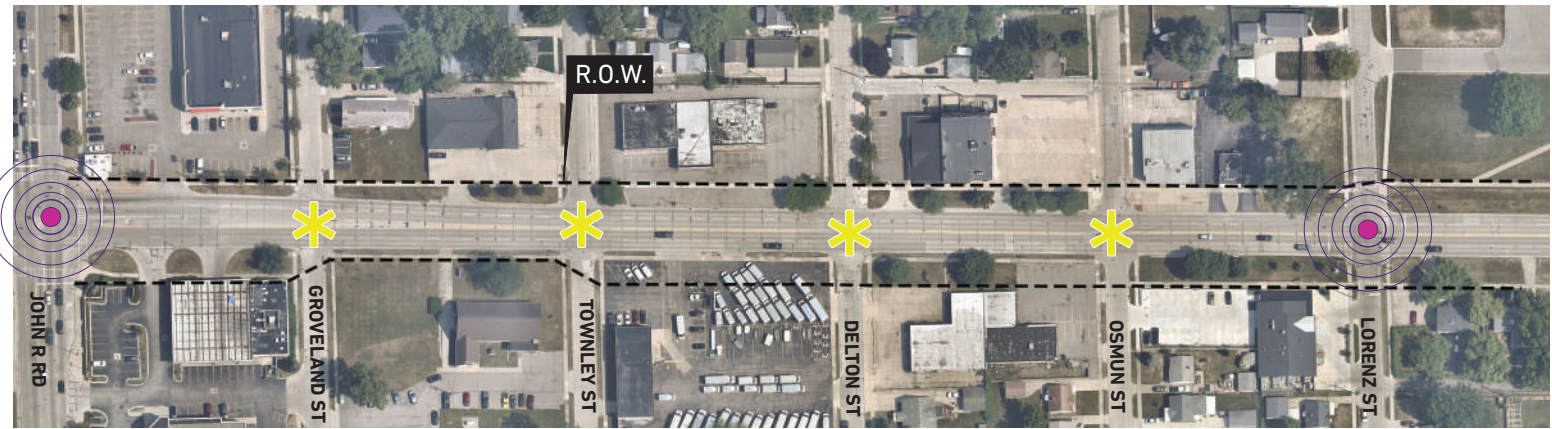
- OPPORTUNITIES
- EXISTING CONDITIONS

**Existing Conditions**

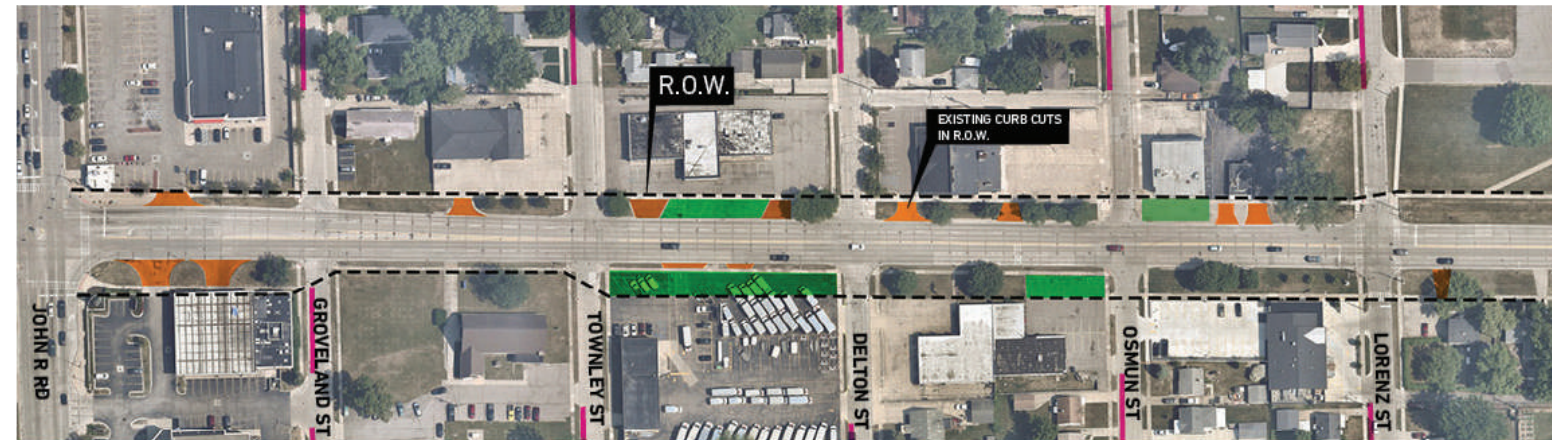
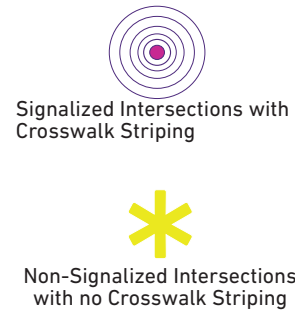
The current streetscape features several challenges, including numerous curb cuts, disjointed sidewalks, high speed traffic, and few street trees or pedestrian amenities.

**Future Opportunities**

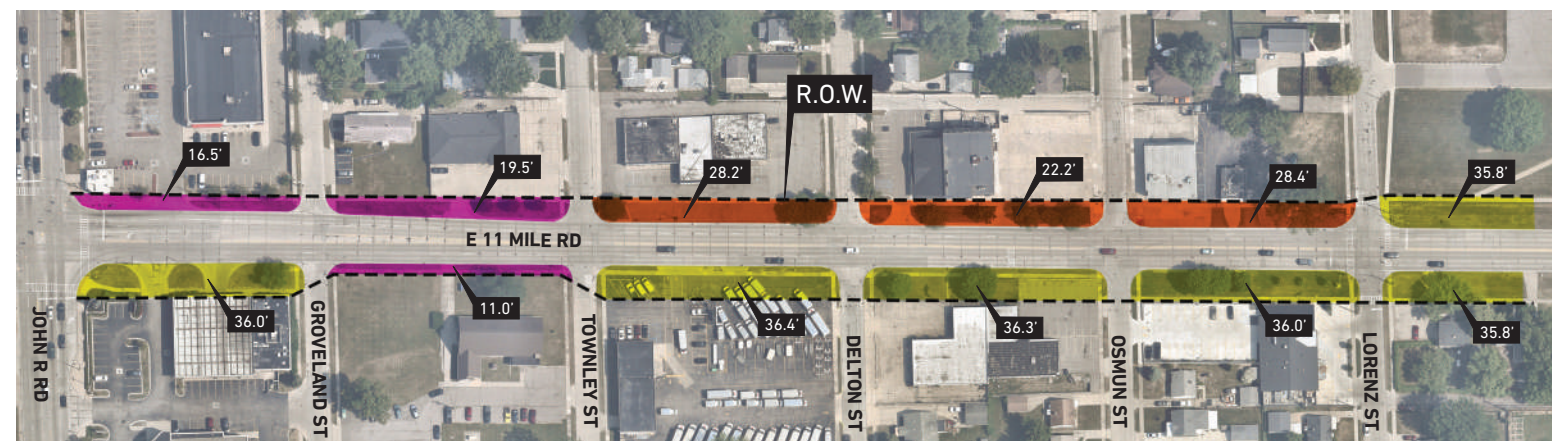
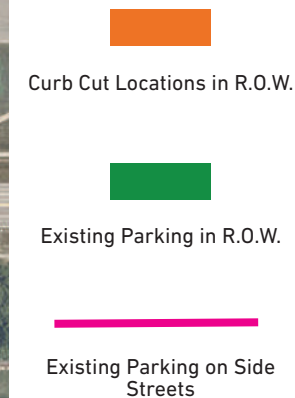
Opportunities include improved sidewalk environments, enhanced pedestrian safety, the establishment of gateway elements, traffic calming and pedestrian amenities such as pocket parks and bike facilities.



STREETSCAPE ANALYSIS - INTERSECTION CONDITIONS

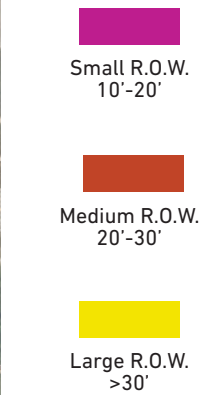


STREETSCAPE ANALYSIS - EXISTING CURB CUT LOCATIONS



STREETSCAPE ANALYSIS - EXISTING RIGHT-OF-WAY WIDTHS

Existing Lane Widths Vary From 11'-6" to 12'-0"



Inventory and analysis efforts identified opportunity areas and site constraints which were used to help inform initial design concepts.

Highlighting existing curb cuts and parking conditions illustrated existing challenges, including pedestrian safety, vehicular circulation, and disjointed access to businesses, and parking. Reviewing these existing features allowed the project team to determine how proposed streetscape improvements may impact existing property owners and helped drive design options that meet project goals and were sensitive to the needs of local businesses.



In some areas parking for businesses interfere with sidewalks and pedestrian environments creating safety concerns.



Poor sidewalk conditions pose additional safety concerns.



**Design Studies**

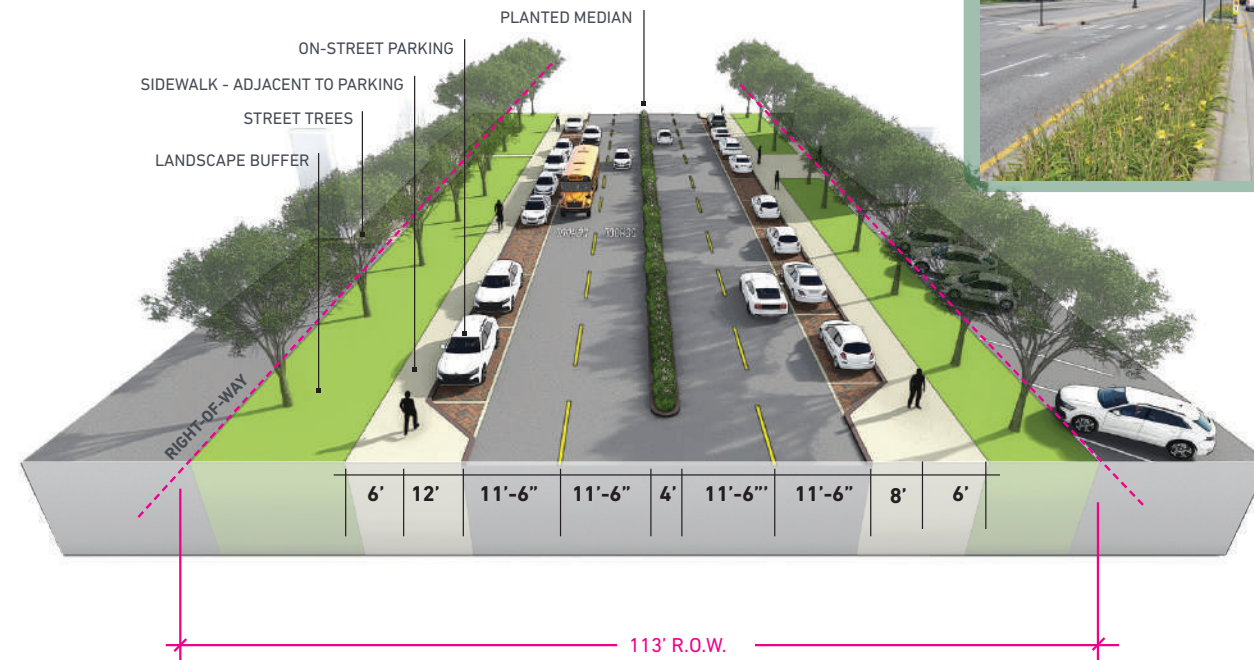
Following the initial data collection and analysis process, the Design Team worked with City staff to develop conceptual roadway design options to meet project needs.

Through the development of these studies, three distinct concepts were tested against the defined project objectives. Key elements of all the options include:

- Improved and consistent sidewalk conditions
- Reduced vehicle lane widths
- On-street parking zones
- Landscaped medians and street tree plantings
- Bump-out zones and intersections to reduce crossing widths

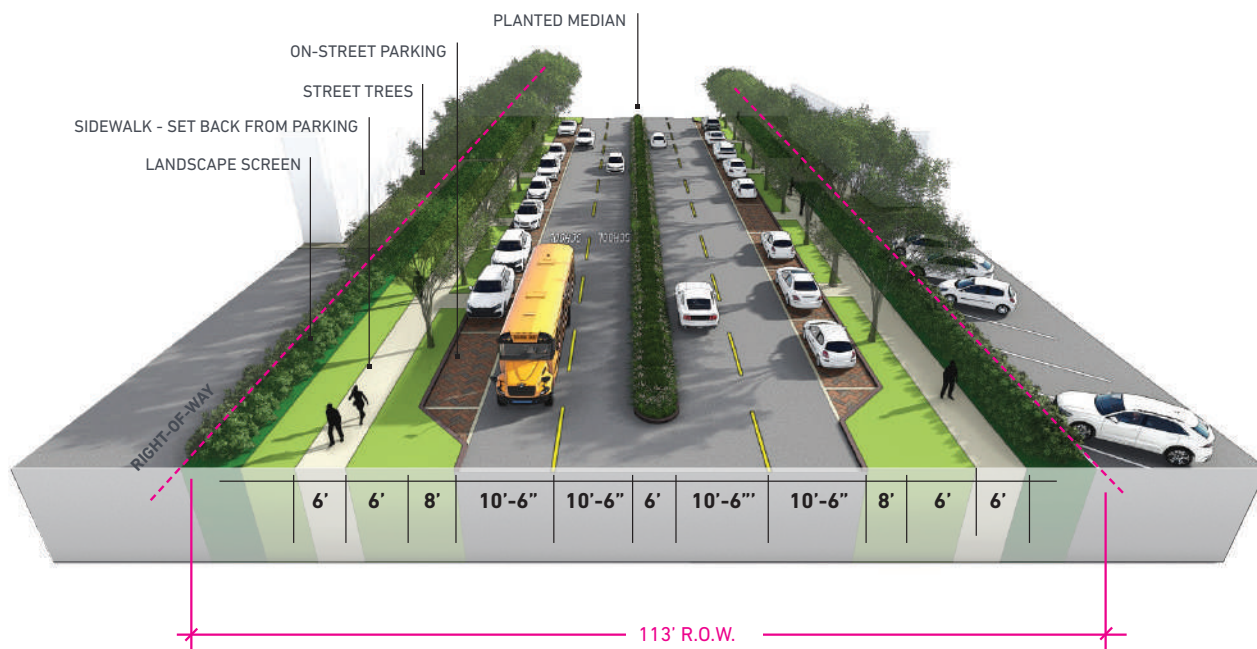
Further details on each option are highlighted below:

**STUDY OPTION: LANDSCAPE BUFFER**



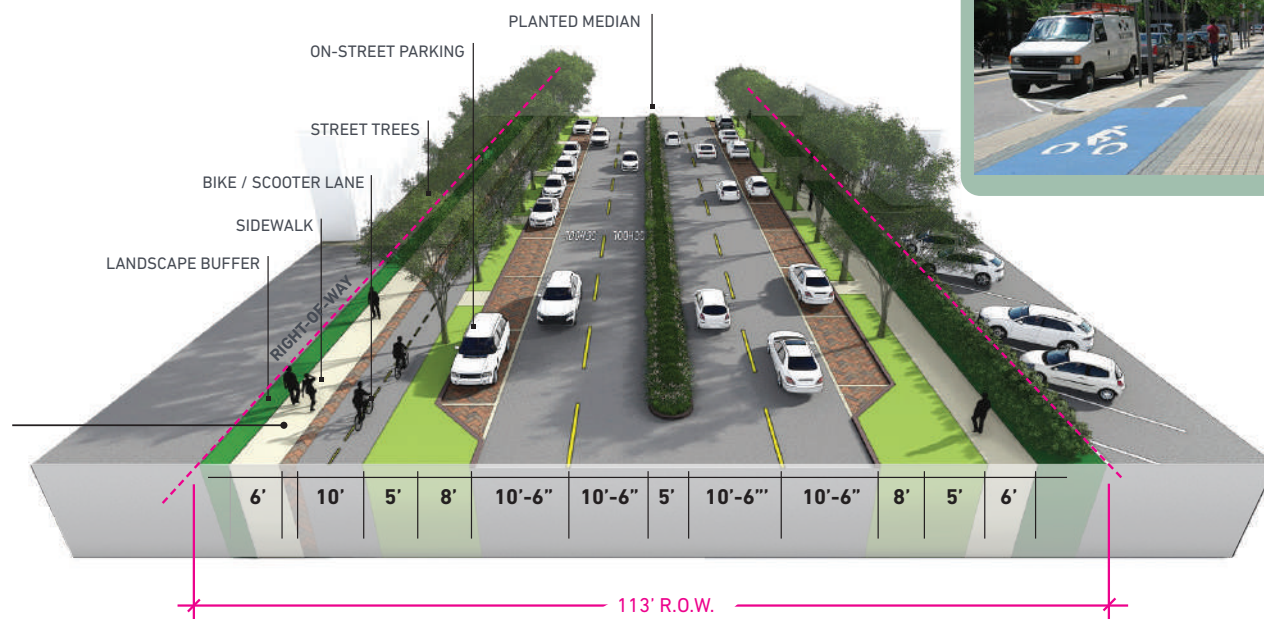
**Option: Landscape Buffer** has the sidewalk located adjacent to parallel parking with a tree lawn between back of sidewalk and the edge of the right-of-way.

**STUDY OPTION: TREE LAWN**



**Option: Tree Lawn** incorporates a tree lawn between edge of parking and edge of sidewalk. Plant bed buffers are proposed along the right-of-way line to provide screening between the parking areas and streetscape.

**STUDY OPTION: MULTI-USE PATH**



**Option: Multi-Use Path** includes a 10' wide multi-use path in addition to the proposed tree lawns and sidewalks.

## Engagement Session Purpose:

As part of the planning effort the project team invited key stakeholders, including business owners and city officials to an engagement session on Thursday, October 26th. The intent of the meeting was to review conceptual design options and visual preferences of program elements to help solicit feedback and ultimately guide the direction of the design process.

## Event Details:

Date: Thursday, October 26th, 2023  
 Location: Woodpile BBQ - 630 E. Eleven Mile Road, Madison Heights, MI  
 Event: Stakeholder Engagement Open House

## Summarized Comments:

- Pedestrian safety and safe crossings are highly valued
- Planted median and additional landscape are desired
- Bicycle amenities are requested
- Public art is desired
- Green infrastructure should be incorporated in future designs
- Like the idea of ornamental trees behind street trees for added color / interest (specifically cherry blossom mentioned)
- In favor of added on street parking
- In support of medians for traffic calming purposes
- Concerned about locating trees too close to intersections that could block views
- In support of bike / shared use paths

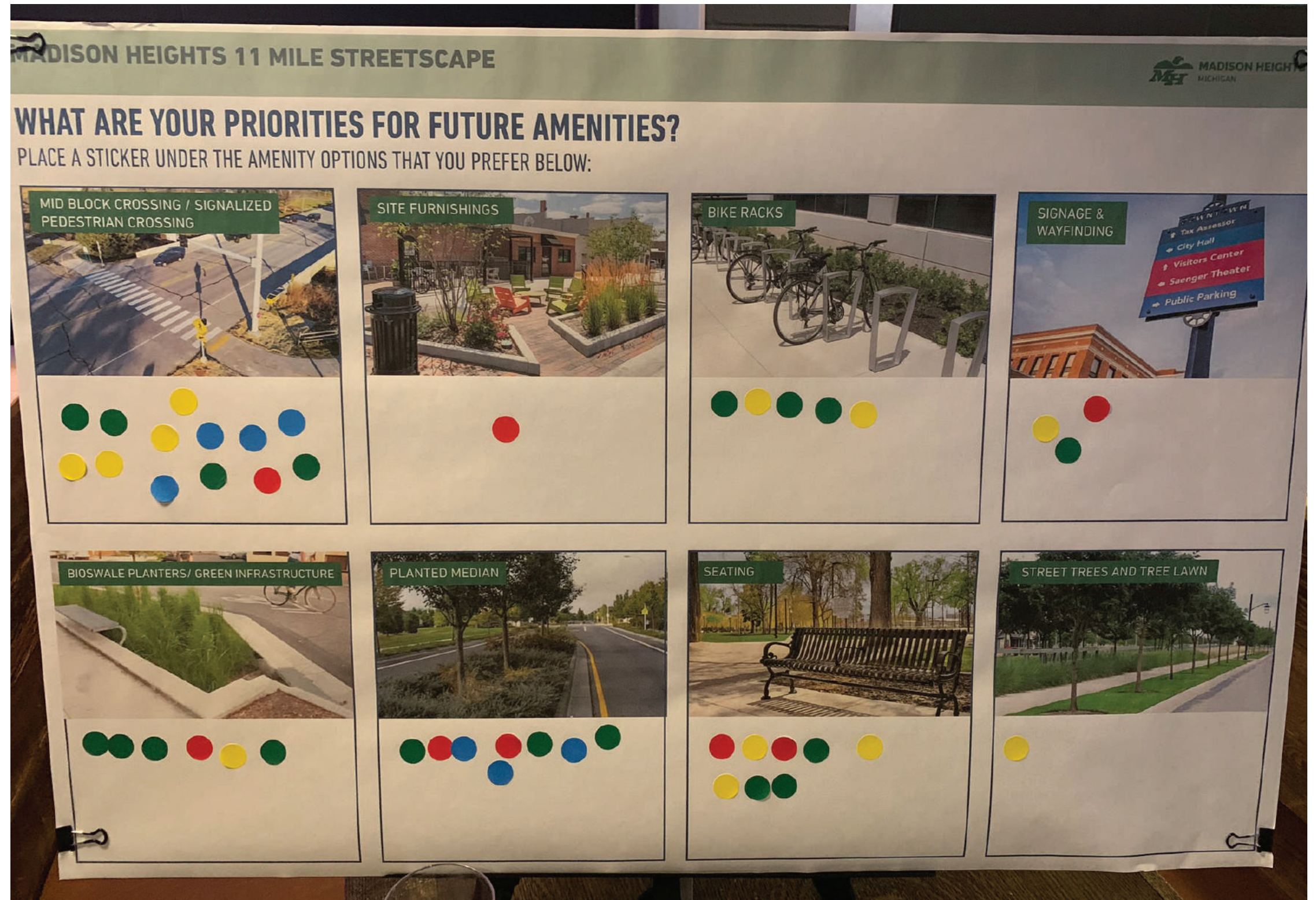


ENGAGEMENT SESSION PARTICIPANTS



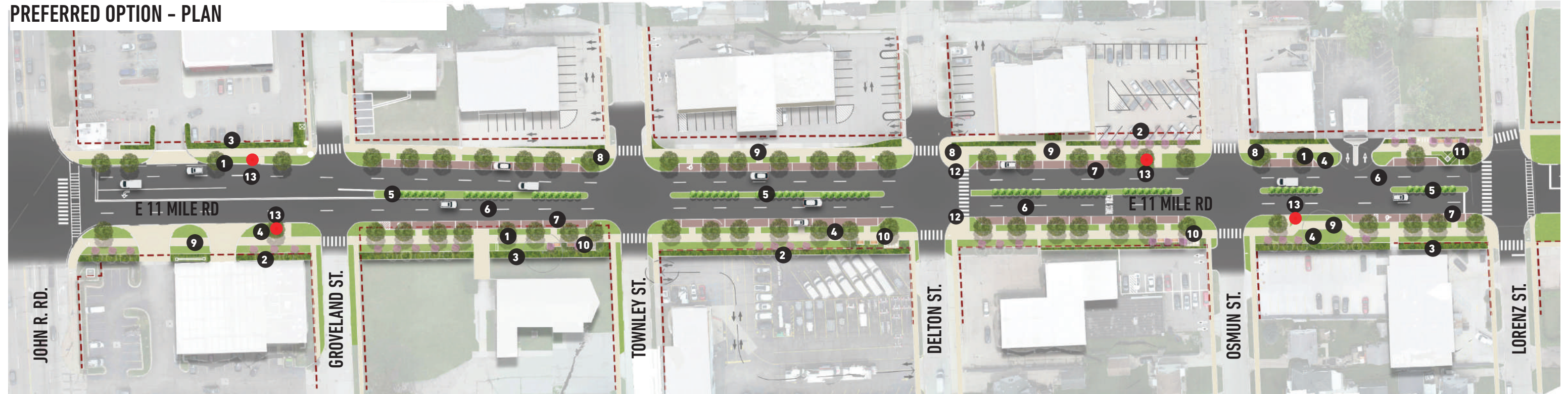
During the stakeholder engagement session, a visual preference survey was conducted to solicit feedback on desired amenities and elements to be considered as part of the corridor study.

The image to the right shows the result of the survey and includes a comparison of the preferred images. (There is no significance to the colors of dots).

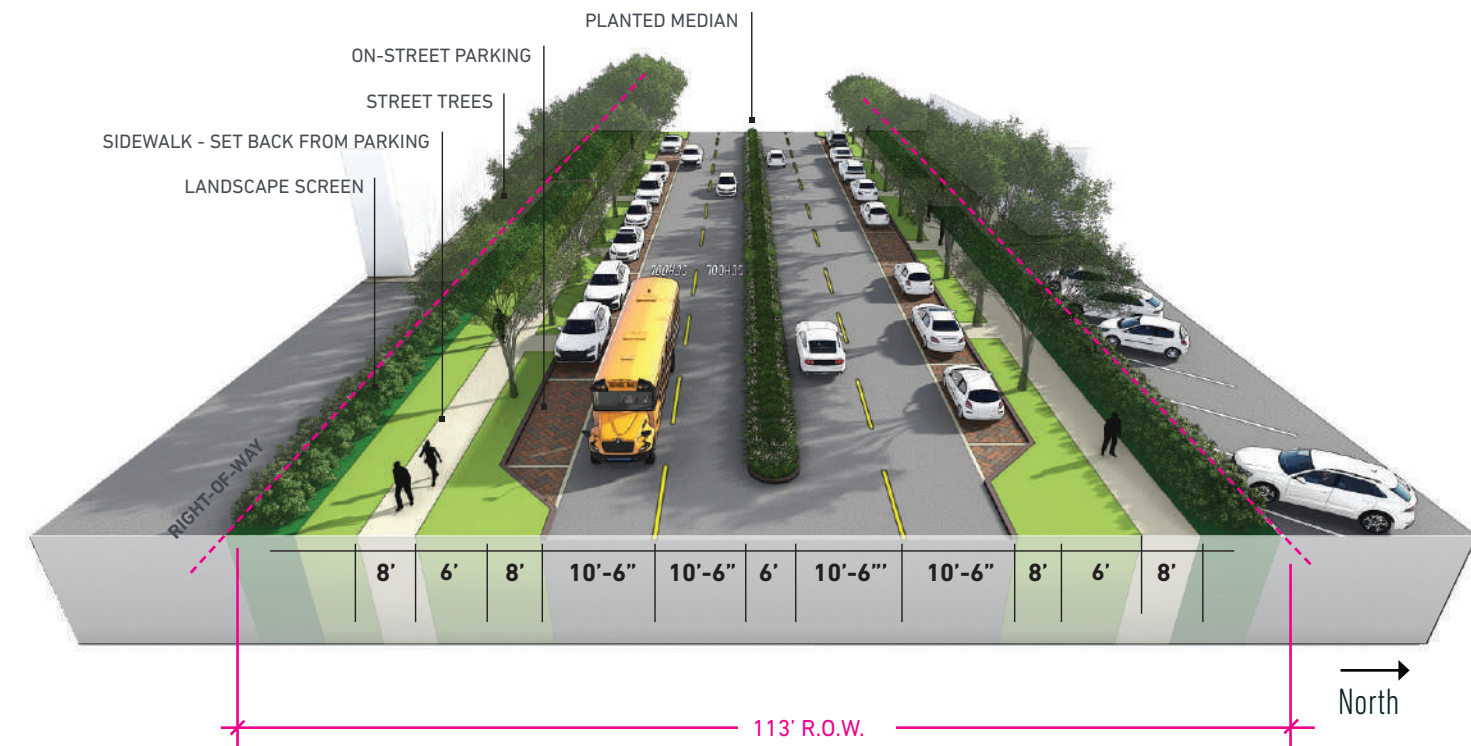


VISUAL PREFERENCE SURVEY BOARD - STAKEHOLDER ENGAGEMENT SESSION

PREFERRED OPTION - PLAN



PREFERRED OPTION



Preferred Option

Following the results of the stakeholder engagement session, Option Treelawn, was determined to be the preferred design section for the study area.

This option achieved the goals of the project by allowing for significant on-street parking and introducing a planted median within the road section, helping slow traffic and address parking needs.

Additionally, this option provided a "landscape" buffer to adjacent parking areas helping screen views. Sidewalk widths were increased to 8' to potentially accommodate bike users.

*This option is shown as "Option 1" in Appendix A4-A7.*

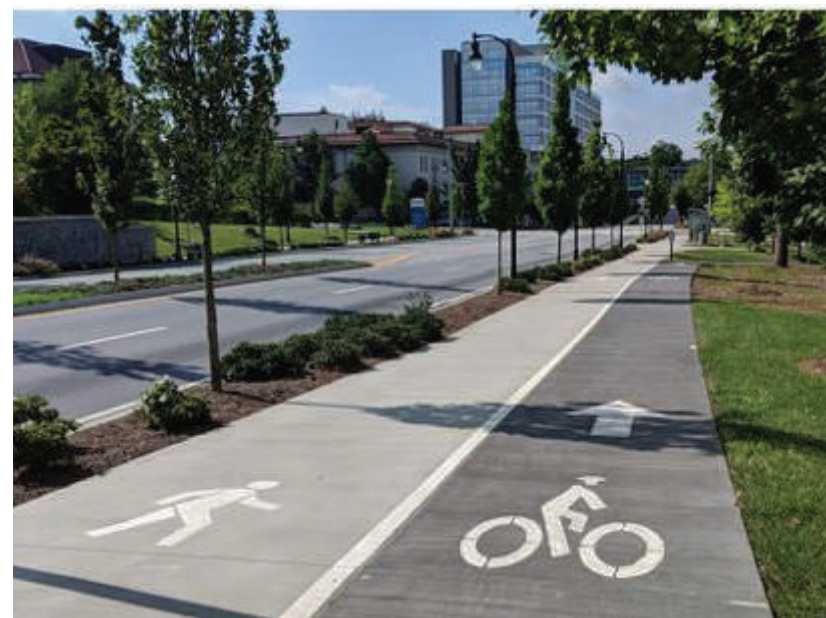
LEGEND

- 1 Deciduous Canopy Tree
- 2 Ornamental Tree
- 3 Plant Buffer
- 4 Tree Lawn
- 5 Median with Plantings
- 6 Reduced Width Vehicle Travel Lanes
- 7 Parallel Parking Stalls
- 8 Traffic Calming Bumpouts
- 9 8' Wide Pedestrian Walk
- 10 Amenity Areas
- 11 Gateway Area
- 12 Pedestrian Activated Crossing Signals
- 13 Bus Stops

# PREFERRED OPTION - SHARED USE PATH



A shared use path is typically wider than a traditional sidewalk and is designed to accommodate pedestrians and cyclists.

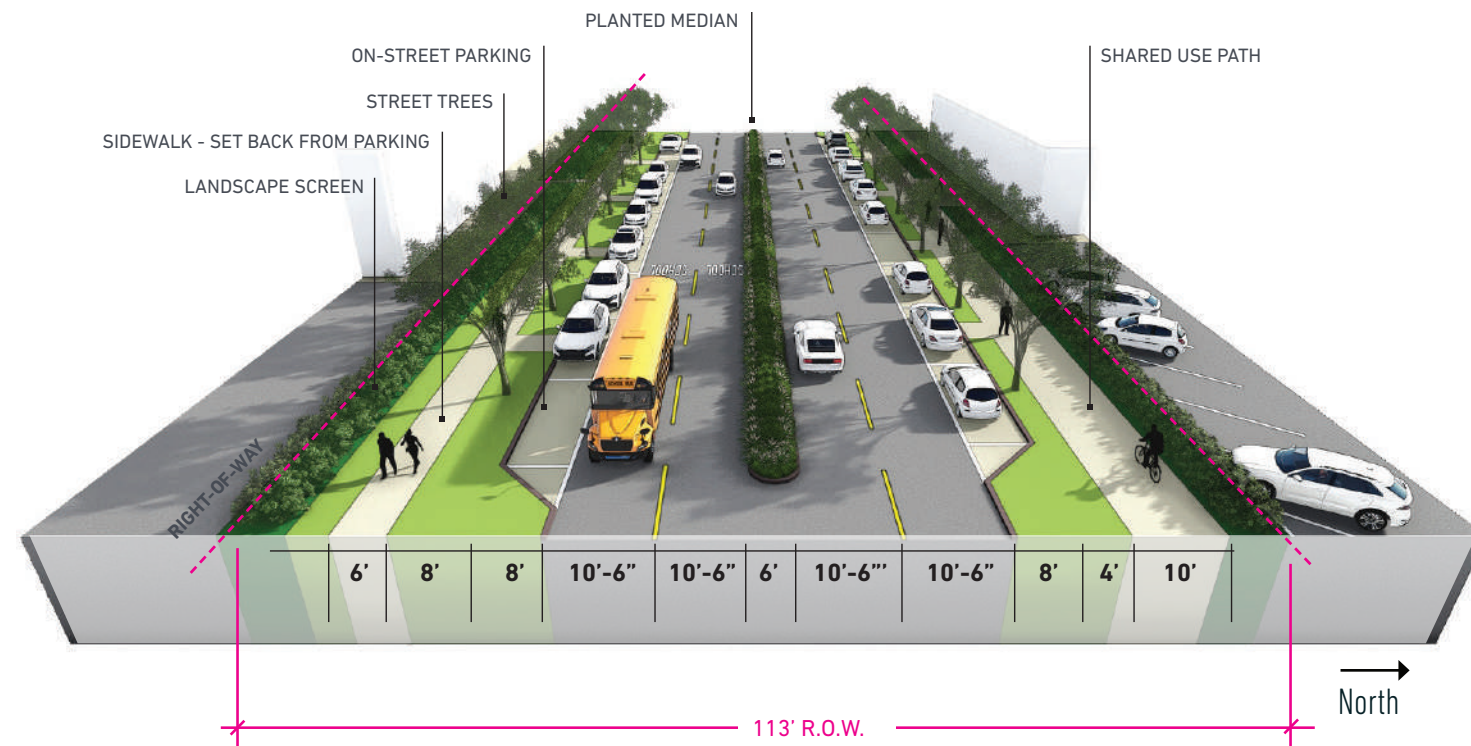


Lane markings and changes in material can be used to define various uses.



Providing thoughtful solutions for transit riders, pedestrians, scooters, and bicyclists can improve the mobility, access, and safety.

# PREFERRED OPTION - WITH SHARED USE PATH



## Preferred Option - With Shared Use Path

An alternate consideration of the preferred option included the addition of a 10' wide Shared Use Path along the north side of the study corridor.

A shared use path provides a travel area separate from motorized traffic for bicyclists, scooter users, pedestrians, skaters, wheelchair users, joggers, and other users.

Shared use paths can provide a low-stress experience for people using the network for transportation or recreation and are fully separated from vehicular traffic. Shared use paths differ from cycle tracks in that they can include pedestrians even if the primary anticipated users are cyclists and scooters.

*This option is shown as "Option 2" in Appendix A8- A11.*

Parking and access to adjacent businesses and property owners was a key issue during the design study. Within the focus area, the Design Team developed conceptual plans to illustrate how site access to adjacent parcels could be re-configured to allow for proposed right of way improvements. In some cases, closing curb cuts along 11 Mile were a proposed way of creating a more cohesive streetscape helping improve pedestrian safety.

The diagram below illustrates locations where curb cuts could be removed (shown with a blue "X") and how internal circulation could be adjusted to accommodate the right of way improvements (shown in red).

As a result of adding the on-street parking there was a net gain of approximately 19 parking spaces within the focus area parking spaces

**213-241 E. ELEVEN MILE ROAD - PARKING TABLE**

PARKING TYPE	QUANTITY
APPROXIMATE EXISTING PARKING LOT SPACES	29
PROPOSED SURFACE LOT SPACES	21
PROPOSED PARALLEL PARKING SPACES (INCLUDING 1 ADA SPACE)	9
<b>PROPOSED NEW PARKING SPACES</b>	<b>30 (NET GAIN OF 1)</b>

**307-341 E. ELEVEN MILE ROAD - PARKING TABLE**

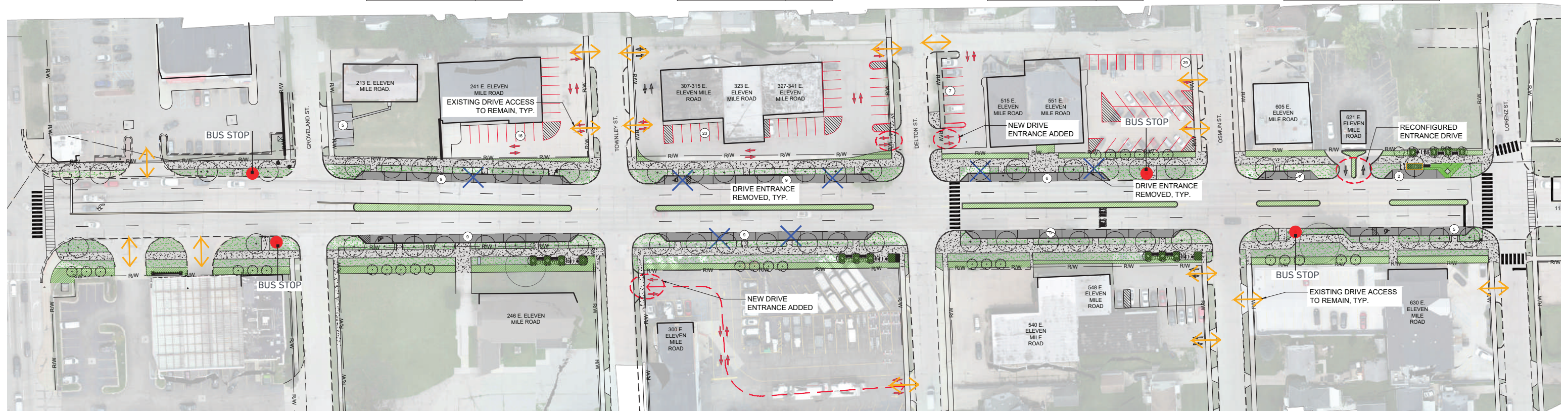
PARKING TYPE	QUANTITY
APPROXIMATE EXISTING PARKING LOT SPACES	39
PROPOSED SURFACE LOT SPACES	23
PROPOSED PARALLEL PARKING SPACES (INCLUDING 1 ADA SPACE)	9
<b>PROPOSED NEW PARKING SPACES</b>	<b>32 (NET LOSS OF 7)</b>

**515-551 E. ELEVEN MILE ROAD - PARKING TABLE**

PARKING TYPE	QUANTITY
APPROXIMATE EXISTING PARKING LOT SPACES	40
PROPOSED SURFACE LOT SPACES	36
PROPOSED PARALLEL PARKING SPACES	6
<b>PROPOSED NEW PARKING SPACES</b>	<b>42 (NET GAIN OF 2)</b>

**605-621 E. ELEVEN MILE ROAD - PARKING TABLE**

PARKING TYPE	QUANTITY
APPROXIMATE EXISTING PARKING LOT SPACES	28
PROPOSED SURFACE LOT SPACES	N/A
PROPOSED PARALLEL PARKING SPACES	4
<b>PROPOSED NEW PARKING SPACES</b>	<b>4 (NET GAIN OF 4)</b>



**LEGEND**

SYMBOL	DESCRIPTION
	DRIVE AISLES REMOVED
	DRIVE AISLES ADDED AND/OR RELOCATED
	PROPOSED DECIDUOUS TREE PLANTING
	PROPOSED ENHANCED LANDSCAPE AREA
	PROPOSED ENHANCED SIDEWALKS
	PROPOSED ON STREET PARALLEL PARKING
	EXISTING CURBING TO REMAIN

**246 E. ELEVEN MILE ROAD - PARKING TABLE**

PARKING TYPE	QUANTITY
APPROXIMATE EXISTING PARKING LOT SPACES	N/A
PROPOSED SURFACE LOT SPACES	N/A
PROPOSED PARALLEL PARKING SPACES (INCLUDING 1 ADA SPACE)	9
<b>PROPOSED NEW PARKING SPACES</b>	<b>9 (NET GAIN OF 9)</b>

**300 E. ELEVEN MILE ROAD - PARKING TABLE**

PARKING TYPE	QUANTITY
APPROXIMATE EXISTING PARKING LOT SPACES	36
PROPOSED SURFACE LOT SPACES	32
PROPOSED PARALLEL PARKING SPACES	9
<b>PROPOSED NEW PARKING SPACES</b>	<b>41 (NET GAIN OF 5)</b>

**540-548 E. ELEVEN MILE ROAD - PARKING TABLE**

PARKING TYPE	QUANTITY
APPROXIMATE EXISTING PARKING LOT SPACES	37
PROPOSED SURFACE LOT SPACES	28
PROPOSED PARALLEL PARKING SPACES	9
<b>PROPOSED NEW PARKING SPACES</b>	<b>37 (NO CHANGE)</b>

**630 E. ELEVEN MILE ROAD - PARKING TABLE**

PARKING TYPE	QUANTITY
APPROXIMATE EXISTING PARKING LOT SPACES	31
PROPOSED SURFACE LOT SPACES	N/A
PROPOSED PARALLEL PARKING SPACES (INCLUDING 1 ADA SPACE)	5
<b>PROPOSED NEW PARKING SPACES</b>	<b>5 (NET GAIN OF 5)</b>



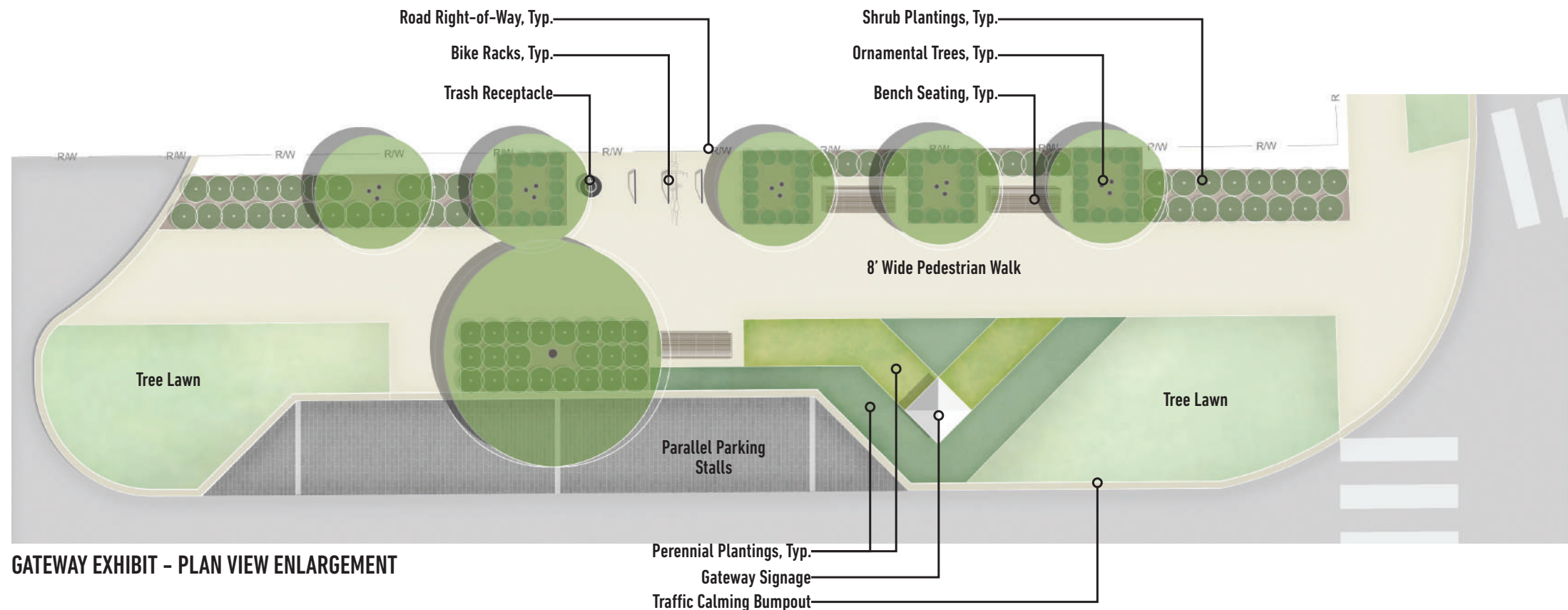
PROPOSED GATEWAY (INCLUDES BIKE RACKS, BENCHES, TRASH RECEPTACLES, AND PLANTINGS TYP.)



Part of the design effort included identifying areas within the corridor that could serve as visual gateways to the Madison Heights community. Working with City staff, the Design Team proposed the intersection of 11 Mile Rd and Lorenz St as an intuitive location for a community gateway feature element.

The concept shown below provides a location for a gateway sign piece set within a small pocket park with seating and bike amenities.

GATEWAY AREA EXHIBIT - LOCATION MAP



GATEWAY EXHIBIT - PLAN VIEW ENLARGEMENT



GATEWAY EXHIBIT- PRECEDENTS

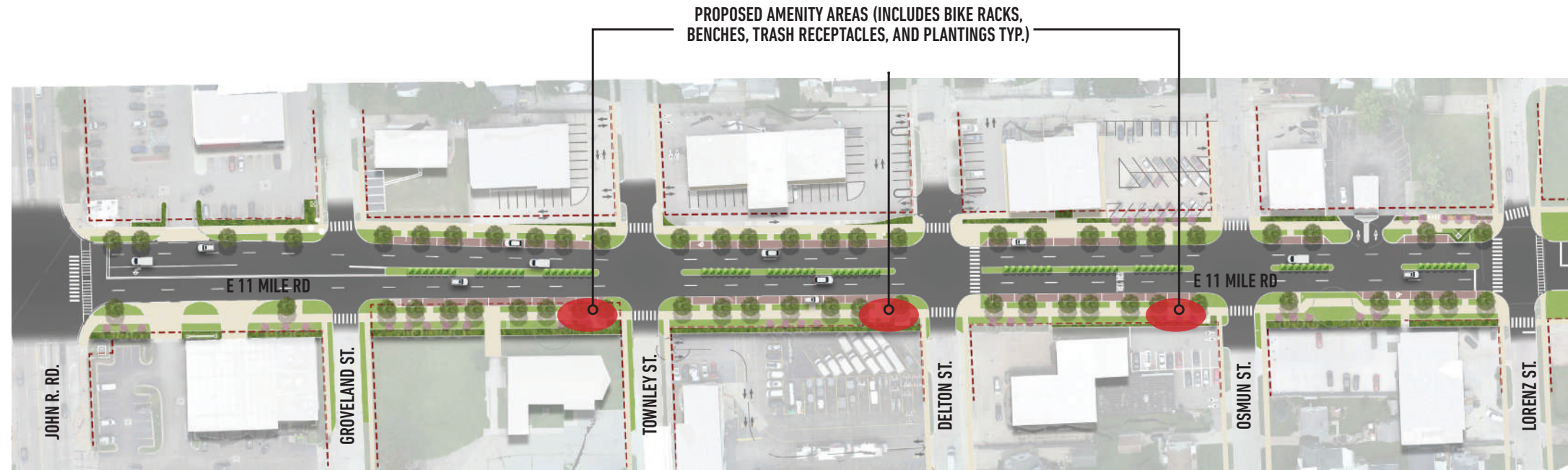


The gateway feature is designed to enhance the arrival experience in Madison Heights by incorporating pedestrian amenities such as benches and bike racks.

These amenities not only contribute to traffic calming but also foster a stronger sense of place within the community.



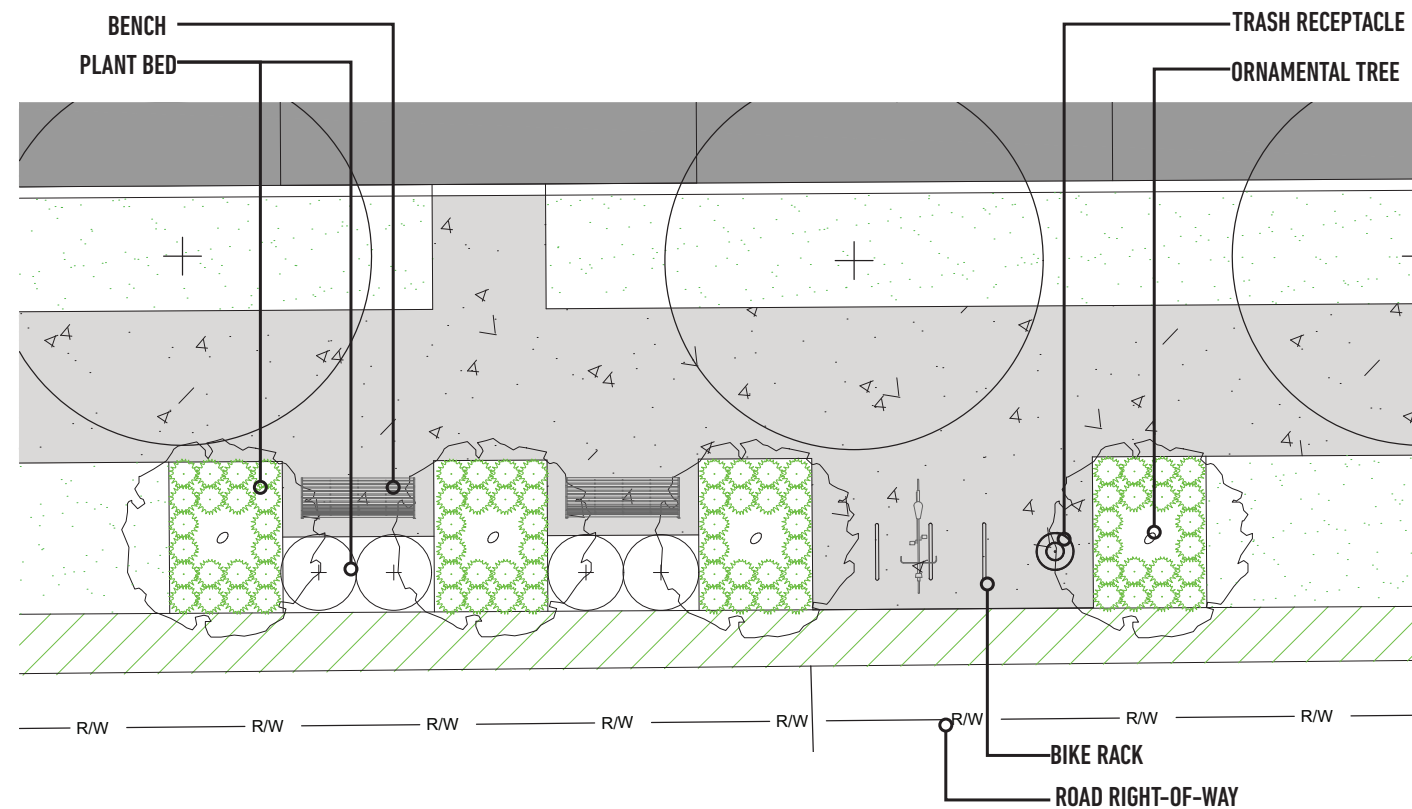




The Design Team explored various options for pedestrian-oriented amenity areas to be integrated into the streetscape.

These “pocket parks” feature amenities such as bike racks, seating areas, trash receptacles, and enhanced planting, including ornamental trees, perennials, and ornamental grasses.

AMENITY AREA EXHIBIT - PREFERRED OPTION - LOCATION MAP



AMENITY AREA EXHIBIT - PREFERRED OPTION - PLAN VIEW ENLARGEMENT



AMENITY AREA EXHIBIT - BEST PRACTICE IMAGES



Encouraging the integration of “pocket parks” along the 11 Mile corridor support the project’s overarching goals of enhancing walkability, fostering community identity, and creating inviting public spaces where pedestrians can gather, relax, and enjoy the surroundings.

These pocket parks will not only help enhance the streetscape but also provide opportunities for social interaction and recreation, contributing to a more vibrant and pedestrian-friendly environment overall.





LOW EVERGREEN SHRUB

DECIDUOUS FLOWERING SHRUB

**Parking Buffer:** Flowering deciduous shrubs, evergreen shrubs and ornamental trees are proposed in the plant bed between the back of walk and parking areas. The intent is to create an attractive yet low maintenance screen to the parking areas.



DECIDUOUS CANOPY TREES

**Street Trees:** Street trees to have an upright growth habit, be tolerant of urban conditions and comply with the City of Madison Heights Department of Public Services recommendations.



This graphic shows recommended planting types within the proposed streetscape section. The planting strategy for the corridor is designed to be simple yet effective, with the goals of using proven low maintenance plant species that can tolerate streetscape environments and provide four season visual appeal.

Refer to the appendix for full tree, shrub, and ornamental grass species recommendations.



LOW DECIDUOUS OR EVERGREEN SHRUB

ORNAMENTAL GRASSES

**Median Plantings:** Proposed median plantings include a combination of low deciduous shrubs, evergreen shrubs and ornamental grasses tolerant of urban conditions and salt spray. Selected species to display four season ornamental appeal.

SEATING



PRODUCT: 970 BENCH  
MANUFACTURER: MAGLIN



PRODUCT: LILLY BENCH  
MANUFACTURER: VICTOR STANLEY



PRODUCT: VIBE CONTOUR BENCH  
MANUFACTURER: ANOVA

During the design process, a key aspect involved selecting a range of street furnishings that met the project's requirements and aligned with the desired design aesthetics.

The elements shown here were presented during stakeholder engagement sessions and were chosen based on popular preferences and feedback gathered from stakeholders.

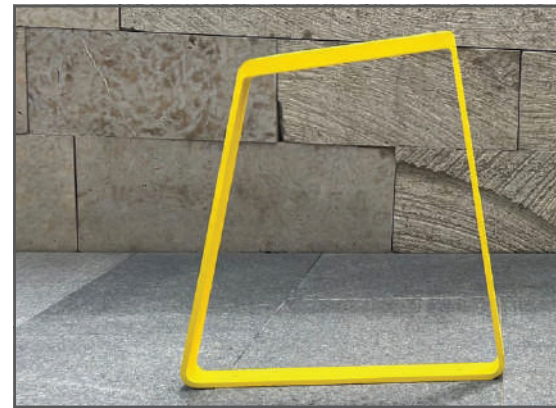
BIKE RACKS



PRODUCT: 300 SERIES - 350 BIKE RACK  
MANUFACTURER: MAGLIN



PRODUCT: FREESIA BIKE RACK  
MANUFACTURER: VICTOR STANLEY



PRODUCT: VIBE STEEL BIKE RACK  
MANUFACTURER: ANOVA

TRASH RECEPTACLES



PRODUCT: 650 TRASH CONTAINER  
MANUFACTURER: MAGLIN



PRODUCT: S-42 TRASH RECEPTACLE  
MANUFACTURER: VICTOR STANLEY



PRODUCT: VIBE TRASH RECEPTACLE  
MANUFACTURER: ANOVA

PROBABLE COST OF AMENITIES:

FURNISHINGS:

6' BENCH	\$1,750 / EA.
BIKE RACK	\$500 / EA.
TRASH RECEPTACLE	\$1,000 / EA.

\*Note: Unit price values derived from recent bid pricing and MKSK assumption of work effort required. MKSK has no control over the cost of labor, materials, or the contractors methods of determining bid prices, or over competitive bidding or market conditions. Therefore, MKSK cannot guarantee that bids or construction cost will not vary from any estimates of probable construction cost prepared by them.

# PREFERRED OPTION - FULL CORRIDOR PLAN VIEW RENDERING

As part of the full design effort the project team looked at developing a consistent streetscape approach within the broader context of the 11 Mile corridor. The exhibits shown on the following pages illustrate how the proposed roadway section developed in the project focus area could be applied to 11 Mile Road from John R Road to the S Stephenson Highway.

As with the focus area, these studies include areas to reduce curb cuts, add planting medians, on street parking, and creating enhanced pedestrian environments.

## LEGEND

- |   |                       |    |                                    |
|---|-----------------------|----|------------------------------------|
| 1 | Deciduous Canopy Tree | 6  | Reduced Width Vehicle Travel Lanes |
| 2 | Ornamental Tree       | 7  | Parallel Parking Stalls            |
| 3 | Plant Buffer          | 8  | Traffic Calming Bumpouts           |
| 4 | Tree Lawn             | 9  | 8' Wide Pedestrian Walk            |
| 5 | Median with Plantings | 10 | Bus Stops                          |

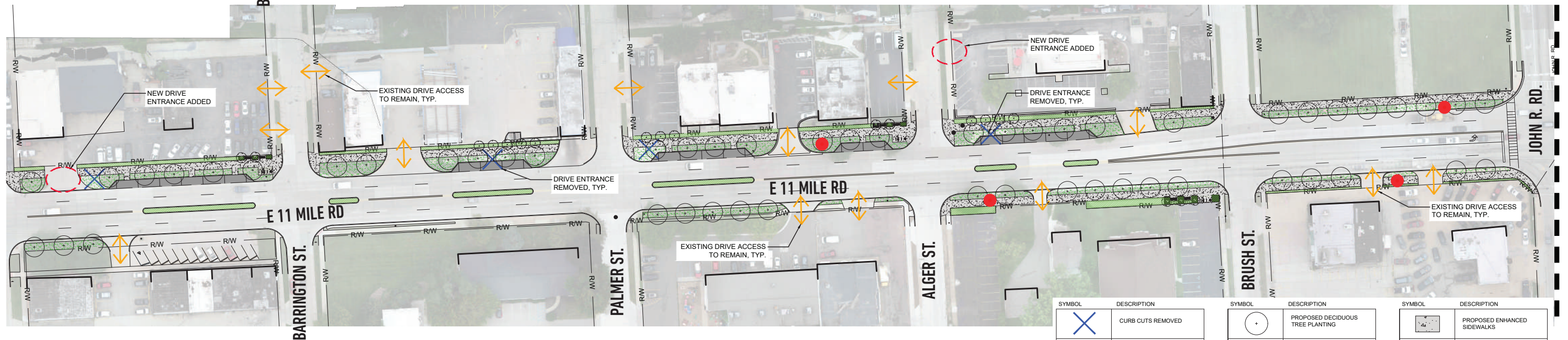
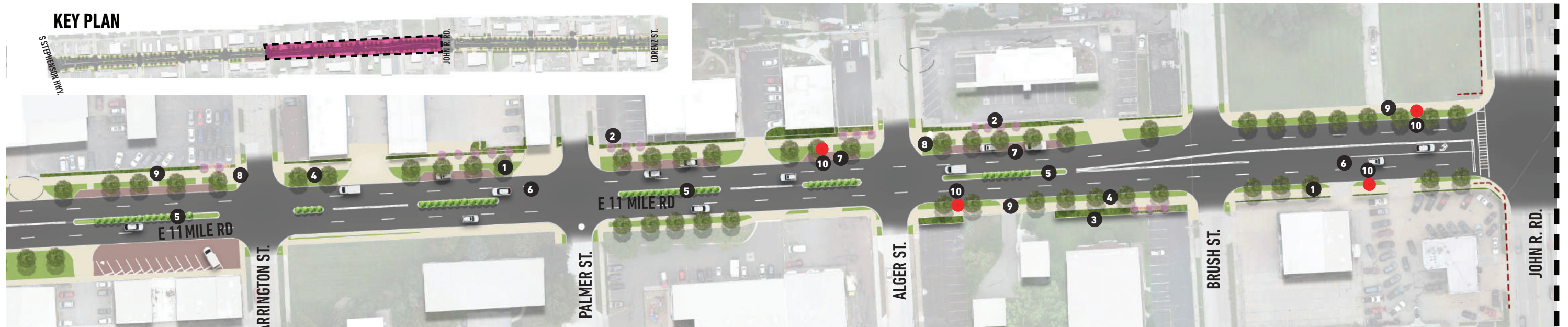


SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	CURB CUTS REMOVED		PROPOSED DECIDUOUS TREE PLANTING		PROPOSED ENHANCED SIDEWALKS
	DRIVE ACCESS ADDED AND/OR RELOCATED		PROPOSED ORNAMENTAL TREE PLANTING		PROPOSED ON STREET PARALLEL PARKING
	EXISTING ACCESS TO REMAIN		PROPOSED ENHANCED LANDSCAPE AREA		EXISTING CURBING TO REMAIN

**LEGEND**

- 1 Deciduous Canopy Tree
- 2 Ornamental Tree
- 3 Plant Buffer
- 4 Tree Lawn
- 5 Median with Plantings
- 6 Reduced Width Vehicle Travel Lanes
- 7 Parallel Parking Stalls
- 8 Traffic Calming Bumpouts
- 9 8' Wide Pedestrian Walk
- 10 Bus Stops

**KEY PLAN**

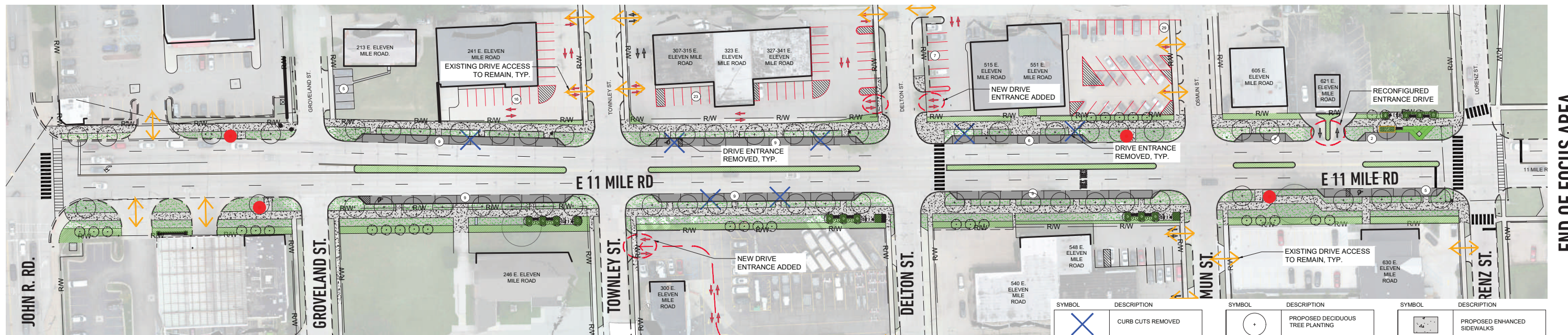


SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	CURB CUTS REMOVED		PROPOSED DECIDUOUS TREE PLANTING		PROPOSED ENHANCED SIDEWALKS
	DRIVE ACCESS ADDED AND/OR RELOCATED		PROPOSED ORNAMENTAL TREE PLANTING		PROPOSED ON STREET PARALLEL PARKING
	EXISTING ACCESS TO REMAIN		PROPOSED ENHANCED LANDSCAPE AREA		EXISTING CURBING TO REMAIN

LEGEND

- 1 Deciduous Canopy Tree
- 2 Ornamental Tree
- 3 Plant Buffer
- 4 Tree Lawn
- 5 Median with Plantings
- 6 Reduced Width Vehicle Travel Lanes
- 7 Parallel Parking Stalls
- 8 Traffic Calming Bumpouts
- 9 8' Wide Pedestrian Walk
- 10 Bus Stops

KEY PLAN



SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	CURB CUTS REMOVED		PROPOSED DECIDUOUS TREE PLANTING		PROPOSED ENHANCED SIDEWALKS
	DRIVE ACCESS ADDED AND/OR RELOCATED		PROPOSED ORNAMENTAL TREE PLANTING		PROPOSED ON STREET PARALLEL PARKING
	EXISTING ACCESS TO REMAIN		PROPOSED ENHANCED LANDSCAPE AREA		EXISTING CURBING TO REMAIN

**APPENDIX**

- A1** APPENDIX - RECOMMENDED PLANT SPECIES - BEST PRACTICE IMAGES
- A2** APPENDIX - RECOMMENDED PLANT SPECIES - BEST PRACTICE IMAGES
- A3** APPENDIX - ALTERNATE AMENITY AREA CONCEPTS
- A4** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 1) - SHEET 1
- A5** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 1) - SHEET 2
- A6** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 1) - SHEET 3
- A7** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 1) - SHEET 4
- A8** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 2) - SHEET 1
- A9** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 2) - SHEET 2
- A10** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 2) - SHEET 3
- A11** APPENDIX - CONCEPTUAL ENGINEERING PLAN (OPTION 2) - SHEET 4
- A12** APPENDIX - ENGINEERING ESTIMATE OF PROBABLE COST - OPTION 1
- A13** APPENDIX - ENGINEERING ESTIMATE OF PROBABLE COST - OPTION 2
- A14** TRAFFIC SUMMARY
- A15** TRAFFIC SUMMARY
- A16** TRAFFIC SUMMARY
- A17** TRAFFIC SUMMARY



**UPRIGHT DECIDUOUS CANOPY STREET TREES**



SKYLINE HONEY LOCUST  
GLEDITSIA TRAIACANTHOS



PIN OAK  
QUERCUS PALUSTRIS



PRINCETON ELM  
ULMUS AMERICANA



BOULEVARD LINDEN  
TILIA AMERICANA 'BOULEVARD'



REDPOINTE MAPLE  
ACER RUBRUM 'REDPOINTE'

The project team put together a list of recommended tree species for deciduous canopy street trees as well as recommendations for a secondary row of ornamental and columnar trees in select areas (amenity areas, gateway areas). These trees were chosen for their ability to thrive in urban areas with limited green space, their ability to withstand salt, and their hardiness in tough conditions.

**COLUMNAR TREES**



AUTUMN BLAZE MAPLE  
ACER X FREEMANII



PRINCETON SENTRY GINKGO  
GINKGO BILOBA 'PRINCETON SENTRY'



COLUMNAR HORNBEAM  
CARPINUS BETULUS 'FASTIGIATA'

**ORNAMENTAL TREES**



EASTERN REDBUD (SINGLE STEM)  
CERCIS CANADENSIS



AUTUMN BRILLIANCE SERVICEBERRY  
AMELANCHIER GRANDIFLORA



SUMMER STARS DOGWOOD  
CORNUS KOUSA



MARILEE CRABAPPLE  
MALUS 'JARMIN'

**MEDIAN SHRUBS**



LITTLE LIME HYDRANGEA  
HYDRANGEA PANICULATA 'JANE'



GRO-LOW SUMAC  
RHUS AROMATICA 'GRO-LOW'



ANTHONY WATERER SPIREA  
SPIREA JAPONICA



RED TWIG DOGWOOD  
CORNUS SERICEA

This sheet shows the recommended shrub and grass plantings for the median plantings, the plant buffers near the road right-of-way, and the amenity area plantings. This plant palette was chosen due to the plants hardiness to survive in an urban environment and for their ability to provide interest for all four seasons.

Included below is a probable cost for proposed plantings and site furnishings. A full cost estimate was provided for the focus area but these unit prices will help the client determine a future budget when plans begin to progress outside of the focus area.

**PLANT BUFFER**



ARROWWOOD VIBURNUM  
VIBURNUM DENTATUM



EVERLOW YEW  
TAXUS X MEDIA 'EVERLOW'



FEATHER REED GRASS  
CALAMAGROSTIS X ACUTIFLORA



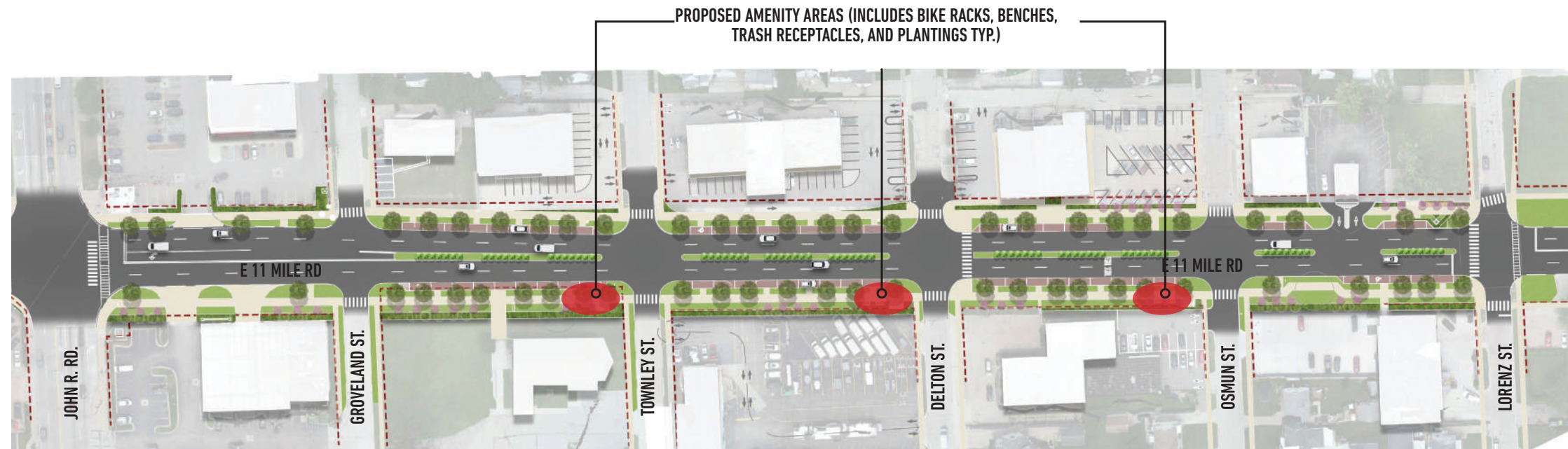
MAIDEN GRASS  
MISCANTHUS SINENSIS

**PROBABLE COST OF PLANTINGS**

PLANTINGS:

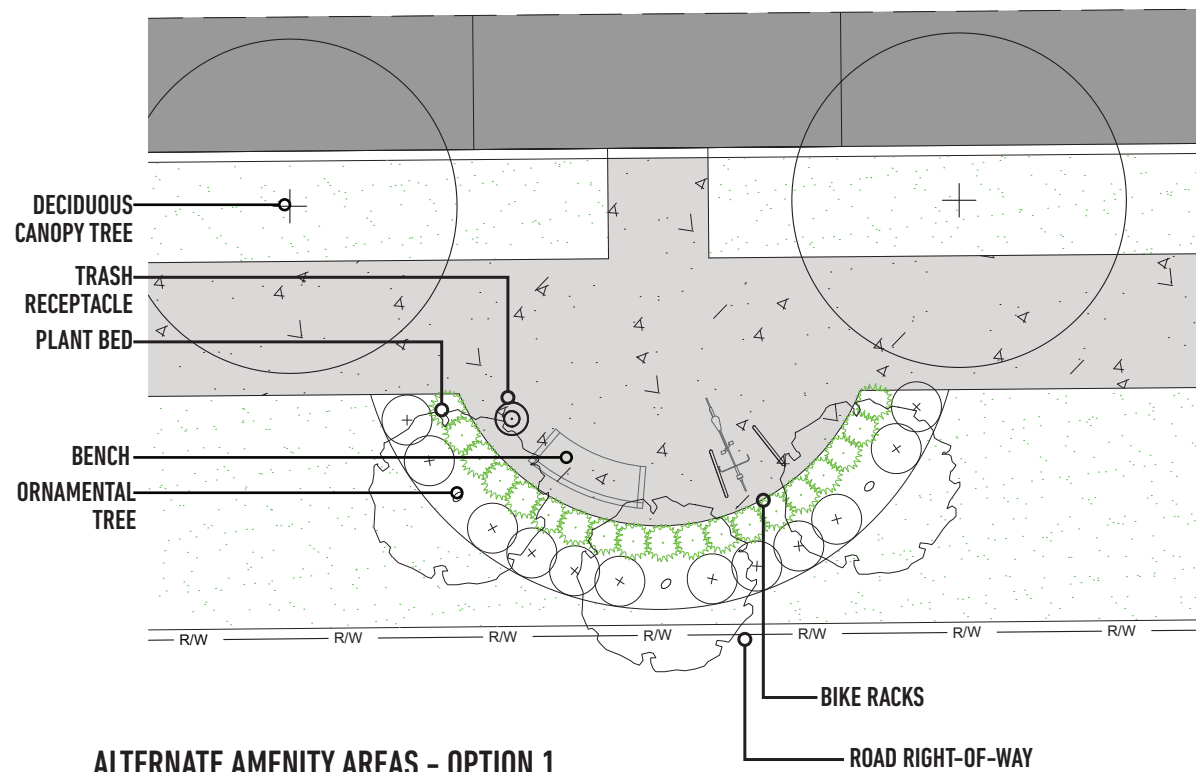
3" DECIDUOUS CANOPY STREET TREE	\$1,000 / EA.
8-10' HT. ORNAMENTAL TREE	\$825 / EA.
5 GAL. SHRUB	\$75 / EA.
2 GAL. ORNAMENTAL GRASS	\$30 / EA.
1 GAL. PERENNIAL	\$20 / EA.

\*Note: Unit price values derived from recent bid pricing and MKSK assumption of work effort required. MKSK has no control over the cost of labor, materials, or the contractors methods of determining bid prices, or over competitive bidding or market conditions. Therefore, MKSK cannot guarantee that bids or construction cost will not vary from any estimates of probable construction cost prepared by them.

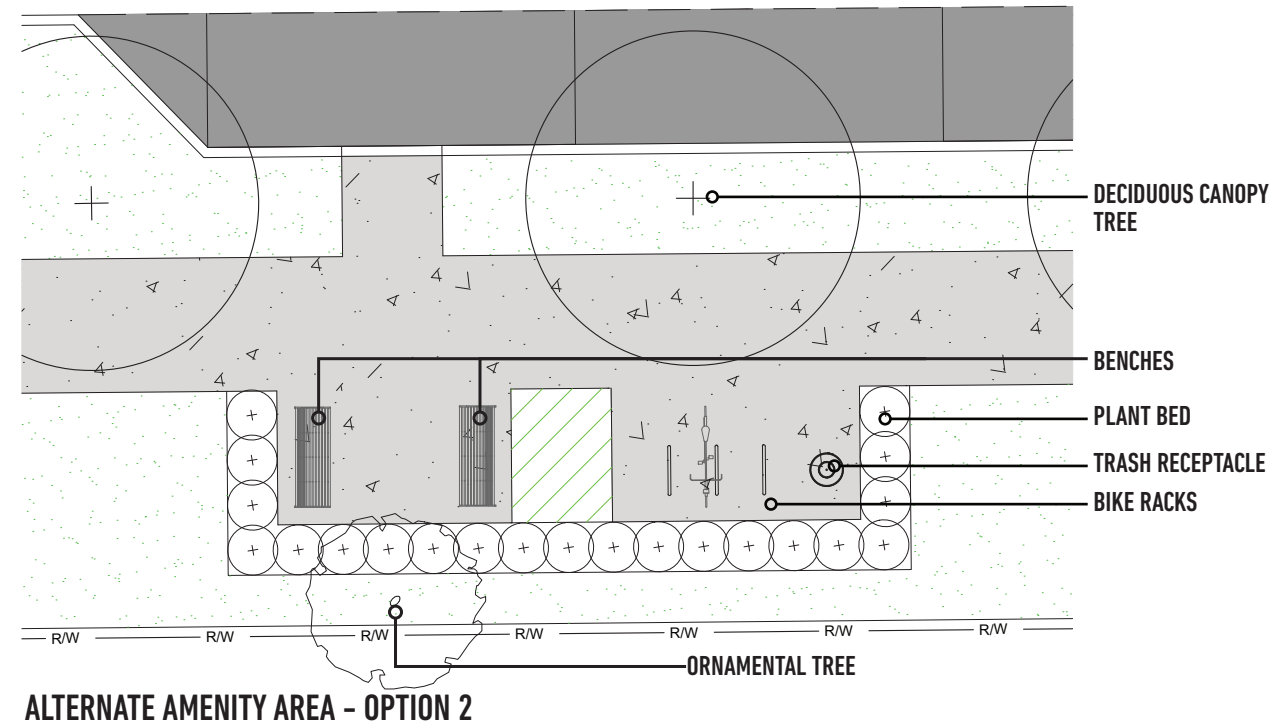


AMENITY AREA EXHIBIT - LOCATION MAP

This is sheet shows alternate amenity areas studied by the project team.



ALTERNATE AMENITY AREAS - OPTION 1



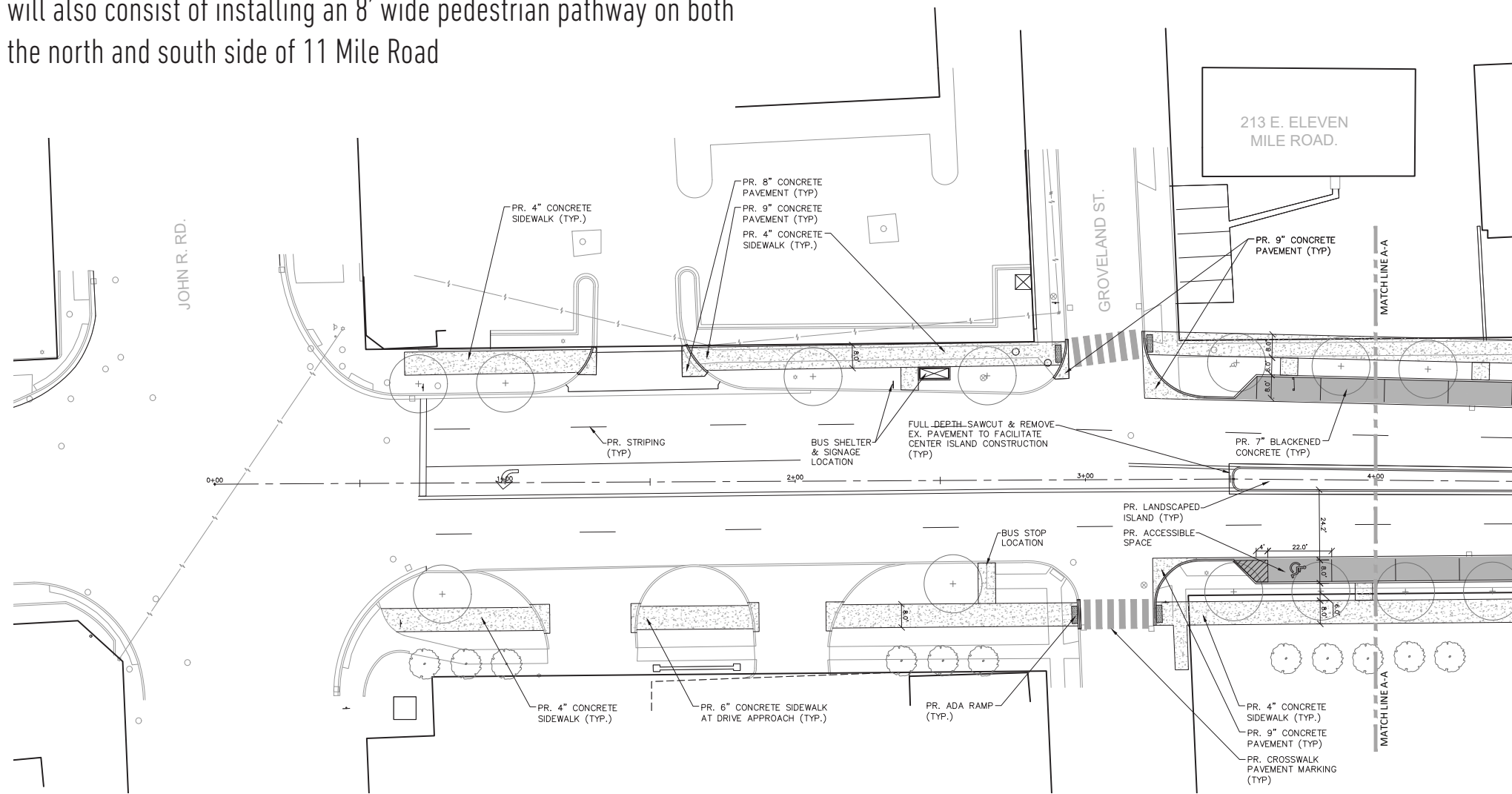
ALTERNATE AMENITY AREA - OPTION 2



BEST PRACTICE IMAGES

**Option 1**

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SEAL  
  
 PROJECT  
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 City of Madison Heights  
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 Madison Hts., MI 48071  
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 Fax: 248-583-4143

PROJECT LOCATION  
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 Oakland County, MI

SHEET  
 Conceptual Engineering Plan  
 (Option 1 - Pedestrian  
 Pathway)



DATE ISSUED/REVISED  
 02-12-24 ISSUED FOR CITY REVIEW  
 04-04-24 REVISED PER CITY REVIEW

DRAWN BY:  
 R. Johnson  
 DESIGNED BY:  
 B. Brickel  
 APPROVED BY:  
 B. Brickel  
 DATE:  
 January 24, 2024  
 SCALE: 1" = 20'  
  
 NFE JOB NO. SHEET NO.  
 N753 C1

**OPTION 1**  
 CONSTRUCT NEW PARALLEL PARKING SPACES ALONG THE ROADWAY FRONTAGE FROM GROVELAND AVENUE TO LORENZ AVENUE. INSTALL NEW STREETSCAPE PLANTINGS AND AMENITIES ALONG WITH A NEW CENTERLINE PLANTER. THIS WILL ALSO CONSIST OF INSTALLING AN 8 FOOT PEDESTRIAN PATHWAY ON BOTH THE NORTH AND SOUTH SIDE OF 11 MILE ROAD.

**PAVING LEGEND**

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

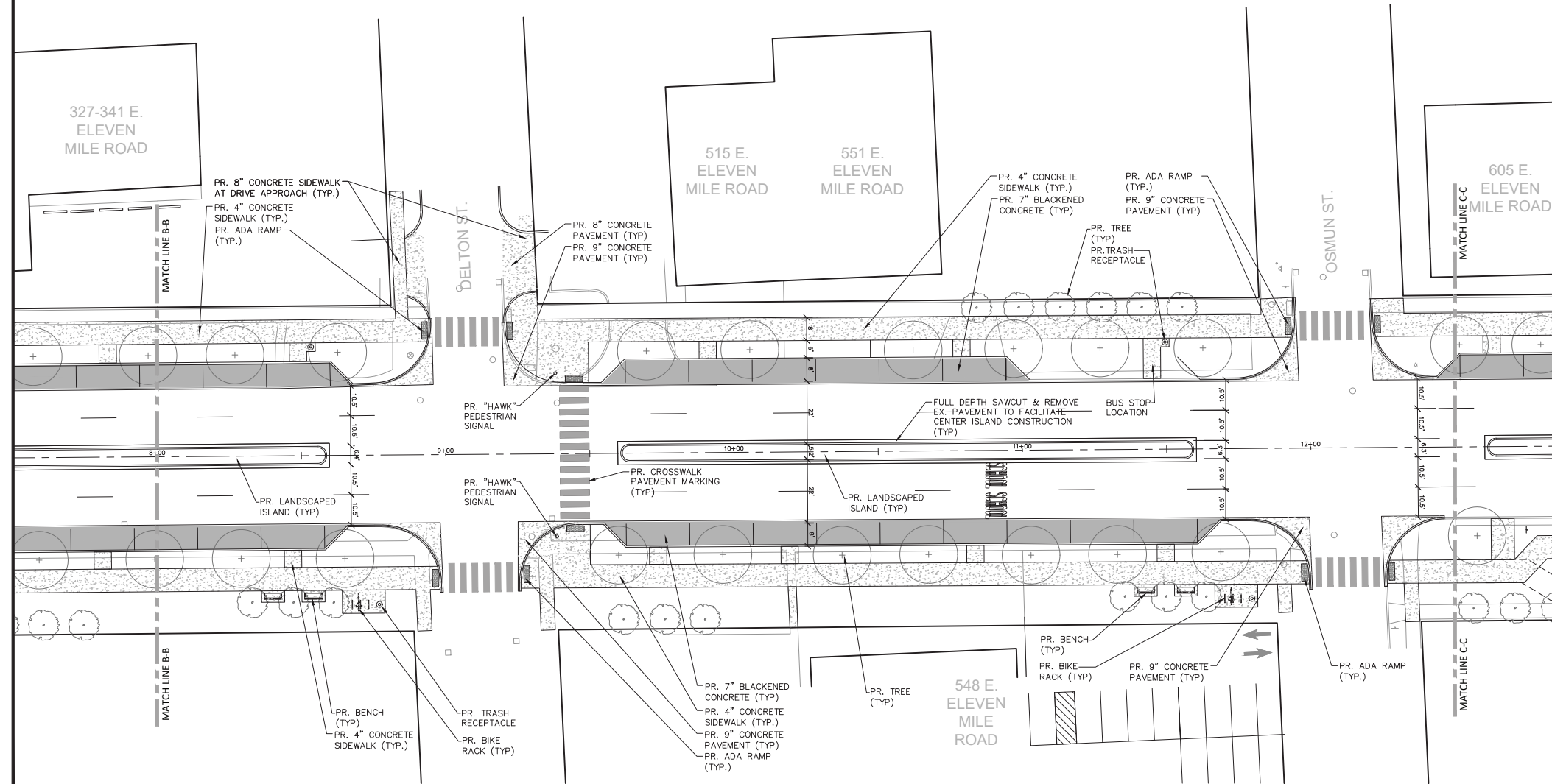
**LEGEND**

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		SAN. CLEAN OUT
	GATE VALVE		EXISTING WATERMAN
	MANHOLE CATCH BASIN		EXISTING STORM SEWER
	UTILITY POLE		EX. R. Y. CATCH BASIN
	GUY POLE		EXISTING BURIED CABLES
	OVERHEAD LINES		LIGHT POLE
	SIGN		EXISTING GAS MAIN
	C.O. MANHOLE		PR. SANITARY SEWER
	HYDRANT		PR. WATER MAIN
	INLET		PR. STORM SEWER
	MANHOLE		PR. R. Y. CATCH BASIN
	PROPOSED LIGHT POLE		
	TC 600.00		PR. TOP OF CURB ELEVATION
	GU 600.00		PR. GUTTER ELEVATION
	TW 600.00		PR. TOP OF WALK ELEVATION
	TP 600.00		PR. TOP OF PYMT. ELEVATION
	FG 600.00		FINISH GRADE ELEVATION



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 Pathway)



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 DESIGNED BY:  
 B. Brickel  
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 B. Brickel  
 DATE:  
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 SCALE: 1" = 20'  
 NFE JOB NO. SHEET NO.  
 N753 C3

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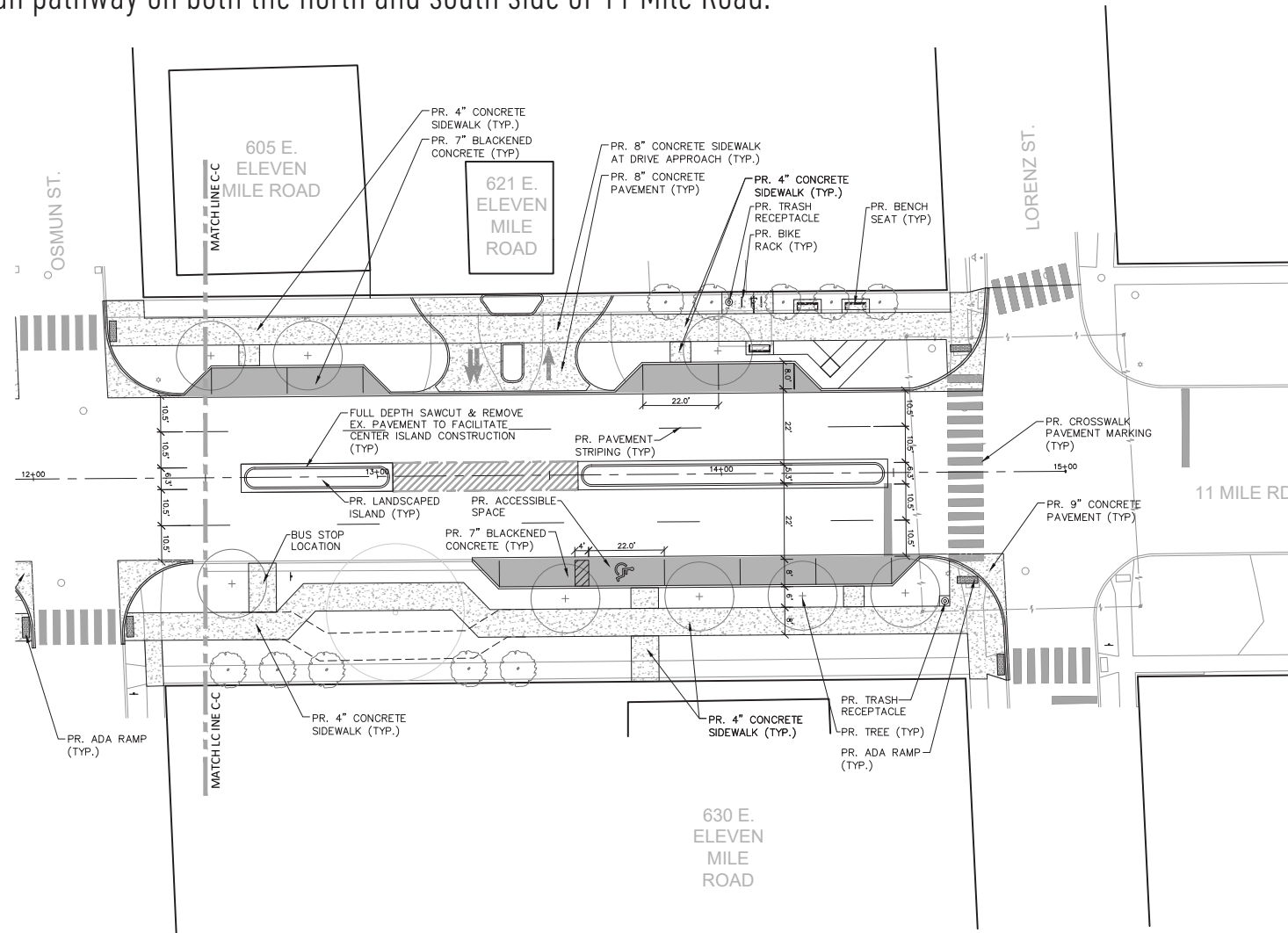
**PAVING LEGEND**  
  
 PROPOSED CONCRETE PAVEMENT  
  
 PROPOSED ASPHALT PAVEMENT

**LEGEND**

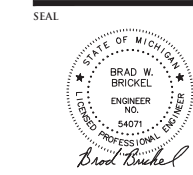
	EXISTING SANITARY SEWER
	SAN. CLEAN OUT
	EXISTING WATERMAIN
	EXISTING STORM SEWER
	EX. R. Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
	PR. SANITARY SEWER
	PR. WATER MAIN
	PR. STORM SEWER
	PR. R. Y. CATCH BASIN
	PROPOSED LIGHT POLE
	PR. TOP OF CURB ELEVATION
	PR. GUTTER ELEVATION
	PR. TOP OF WALK ELEVATION
	PR. TOP OF PYMT. ELEVATION
	FINISH GRADE ELEVATION

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PROJECT  
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 11 Mile Rd.  
 (John R. Rd.- Lorenz St.)

CLIENT  
 City of Madison Heights  
 300 W. 13 Mile Rd.  
 Madison Hts., MI 48071  
 Contact:  
 Mr. Giles Tucker  
 Ph: 248-583-0831  
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PROJECT LOCATION  
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 Pathway)



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 R. Johnson  
 DESIGNED BY:  
 B. Brickel  
 APPROVED BY:  
 B. Brickel

DATE:  
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 SCALE: 1" = 20'  
 NFE JOB NO. SHEET NO.  
 N753 C4

**OPTION 1**  
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**PAVING LEGEND**

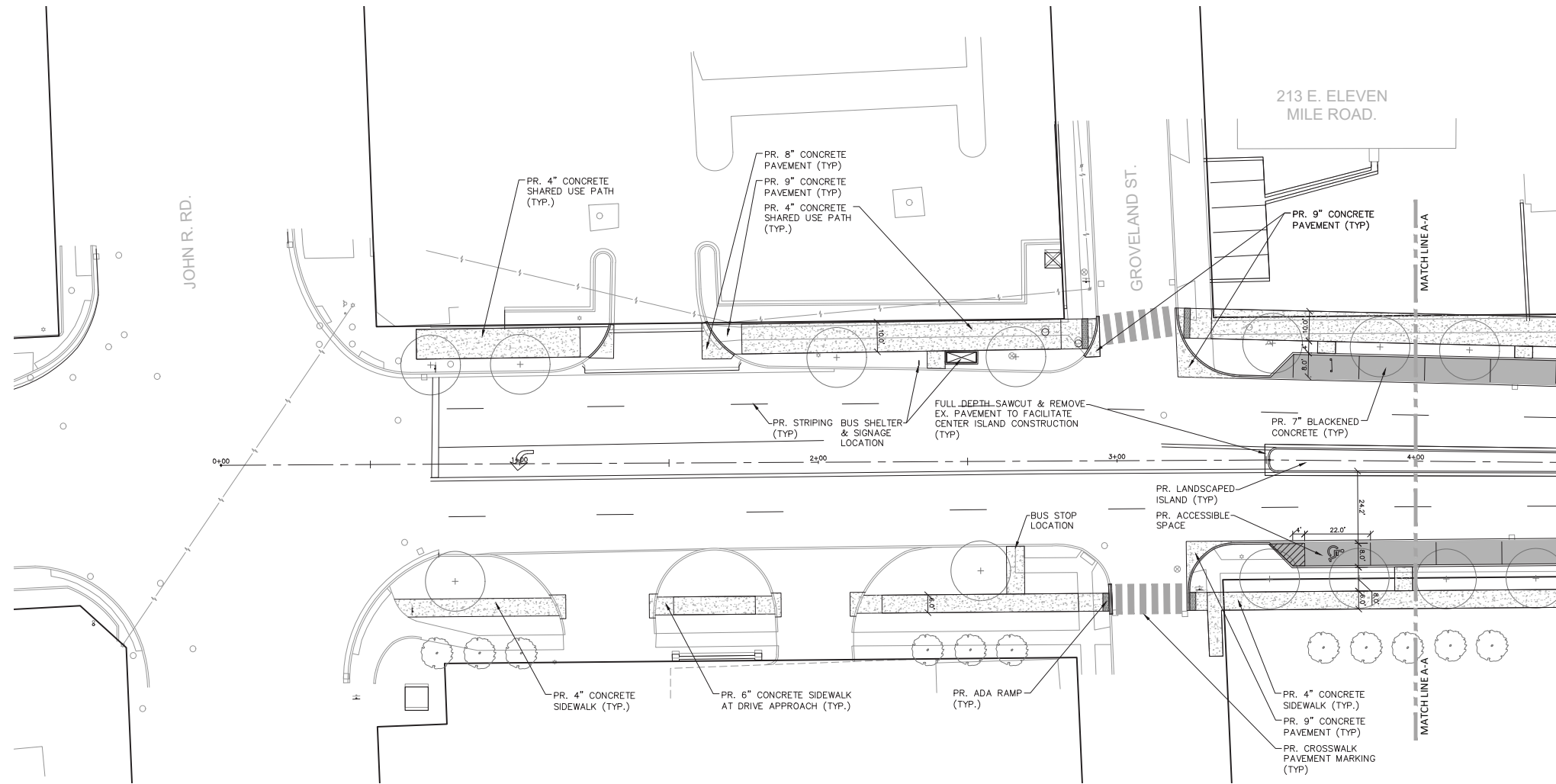
	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

**LEGEND**

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		SAN. CLEAN OUT
	GATE VALVE		EXISTING WATERMAN
	MANHOLE CATCH BASIN		EXISTING STORM SEWER
	UTILITY POLE		EX. R. Y. CATCH BASIN
	GUY POLE		EXISTING BURIED CABLES
	OVERHEAD LINES		LIGHT POLE
	SIGN		EXISTING GAS MAIN
	C.O. MANHOLE		PR. SANITARY SEWER
	HYDRANT		PR. WATER MAIN
	INLET		PR. STORM SEWER
	C.B. MANHOLE		PR. R. Y. CATCH BASIN
	PROPOSED LIGHT POLE		PR. TOP OF CURB ELEVATION
	PR. TOP OF GUTTER ELEVATION		PR. TOP OF WALK ELEVATION
	PR. TOP OF PMT. ELEVATION		FINISH GRADE ELEVATION

**Option 2**

Construct new parallel parking spaces along the roadway frontage from Groveland Avenue to Lorenz Street. Install new streetscape plantings and amenities along with a new centerline planter. This will also consist of installing a 10' wide shared use pathway on the north and side and a 6' wide pedestrian pathway on the south side of 11 Mile Road



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SEAL

BRAD W. BRICKEL  
 ENGINEER  
 NO. 54071  
 LICENSED PROFESSIONAL ENGINEER

PROJECT  
 2024 Downtown Streetscape-  
 11 Mile Rd.  
 (John R. Rd.- Lorenz St.)

CLIENT  
 City of Madison Heights  
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 Madison Hts., MI 48071  
 Contact:  
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PROJECT LOCATION  
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SHEET  
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 Engineering Plan  
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 Use Pathway)



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DRAWN BY:  
 R. Johnson

DESIGNED BY:  
 B. Brickel

APPROVED BY:  
 B. Brickel

DATE:  
 January 24, 2024

SCALE: 1" = 20'

NFE JOB NO. SHEET NO.  
 N753 C1

**OPTION 2**  
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**PAVING LEGEND**

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

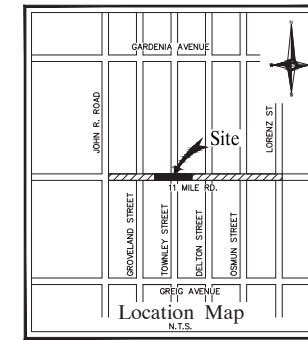
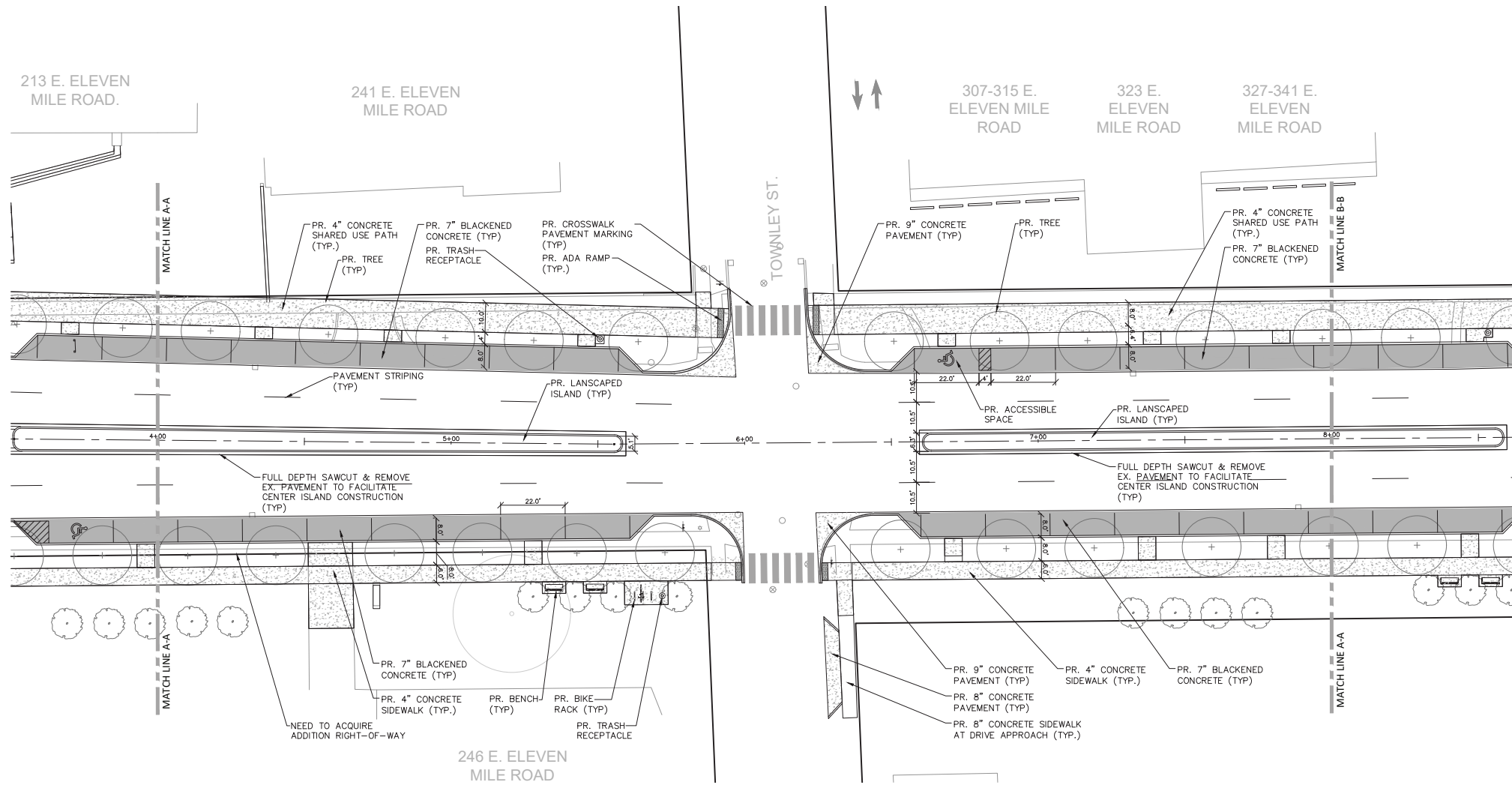
**LEGEND**

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	HYDRANT		GATE VALVE
	MANHOLE CATCH BASIN		EXISTING WATERMAN
	UTILITY POLE		EXISTING STORM SEWER
	GUY WIRE		EX. R. Y. CATCH BASIN
	LIGHT POLE		EXISTING BURIED CABLES
	SIGN		OVERHEAD LINES
	EXISTING GAS MAN		PROPOSED LIGHT POLE
	MANHOLE		PR. SANITARY SEWER
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	MANHOLE		PROPOSED LIGHT POLE
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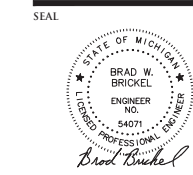
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**SHEET**  
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**DRAWN BY:**  
 R. Johnson

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 B. Brickel

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 B. Brickel

**DATE:**  
 January 24, 2024

**SCALE:** 1" = 20'



**NFE JOB NO.** N753 **SHEET NO.** C2

**OPTION 2**

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**PAVING LEGEND**

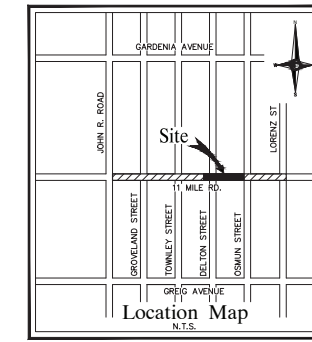
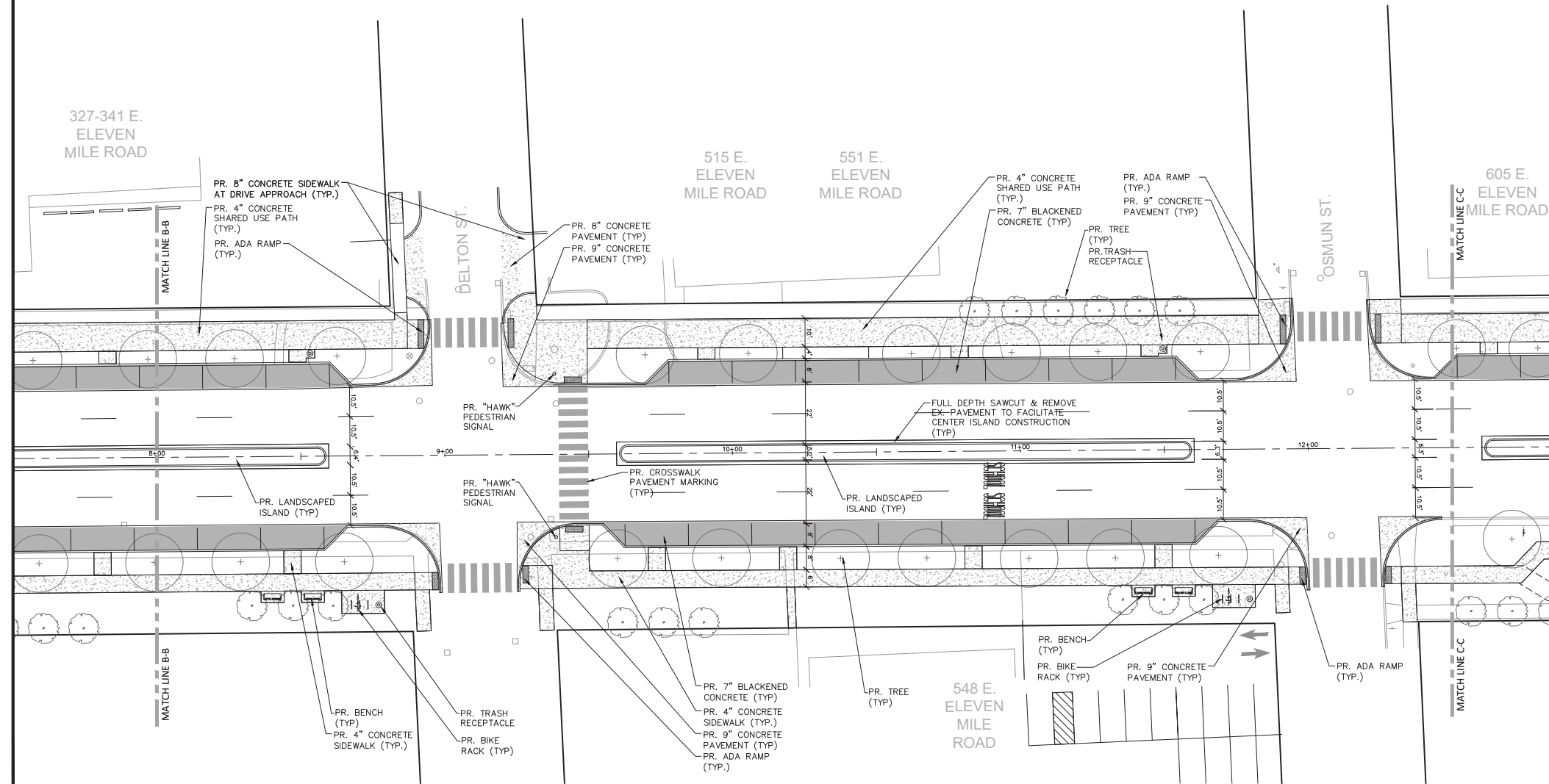
	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

**LEGEND**

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		GATE_VALVE
	MANHOLE_CATCH_BASIN		EXISTING WATERMAN
	UTILITY_POLE		EXISTING STORM SEWER
	GUY_POLE		EX. R. Y. CATCH BASIN
	OVERHEAD_LINES		EXISTING BURIED CABLES
	LIGHT_POLE		SIGN
	EXISTING GAS MAIN		PR. SANITARY SEWER
	PR. WATER MAIN		PR. STORM SEWER
	PR. R. Y. CATCH BASIN		PROPOSED LIGHT POLE
	TC 600.00		GU 600.00
	TW 600.00		TP 600.00
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SHEET  
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**811**  
 Know what's below  
 Call before you dig.

DATE ISSUED/REVISED  
 02-12-24 ISSUED FOR CITY REVIEW

DRAWN BY:  
**R. Johnson**

DESIGNED BY:  
**B. Brickel**

APPROVED BY:  
**B. Brickel**

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NFE JOB NO. SHEET NO.  
**N753 C3**

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**PAVING LEGEND**

PROPOSED CONCRETE PAVEMENT  
 PROPOSED ASPHALT PAVEMENT

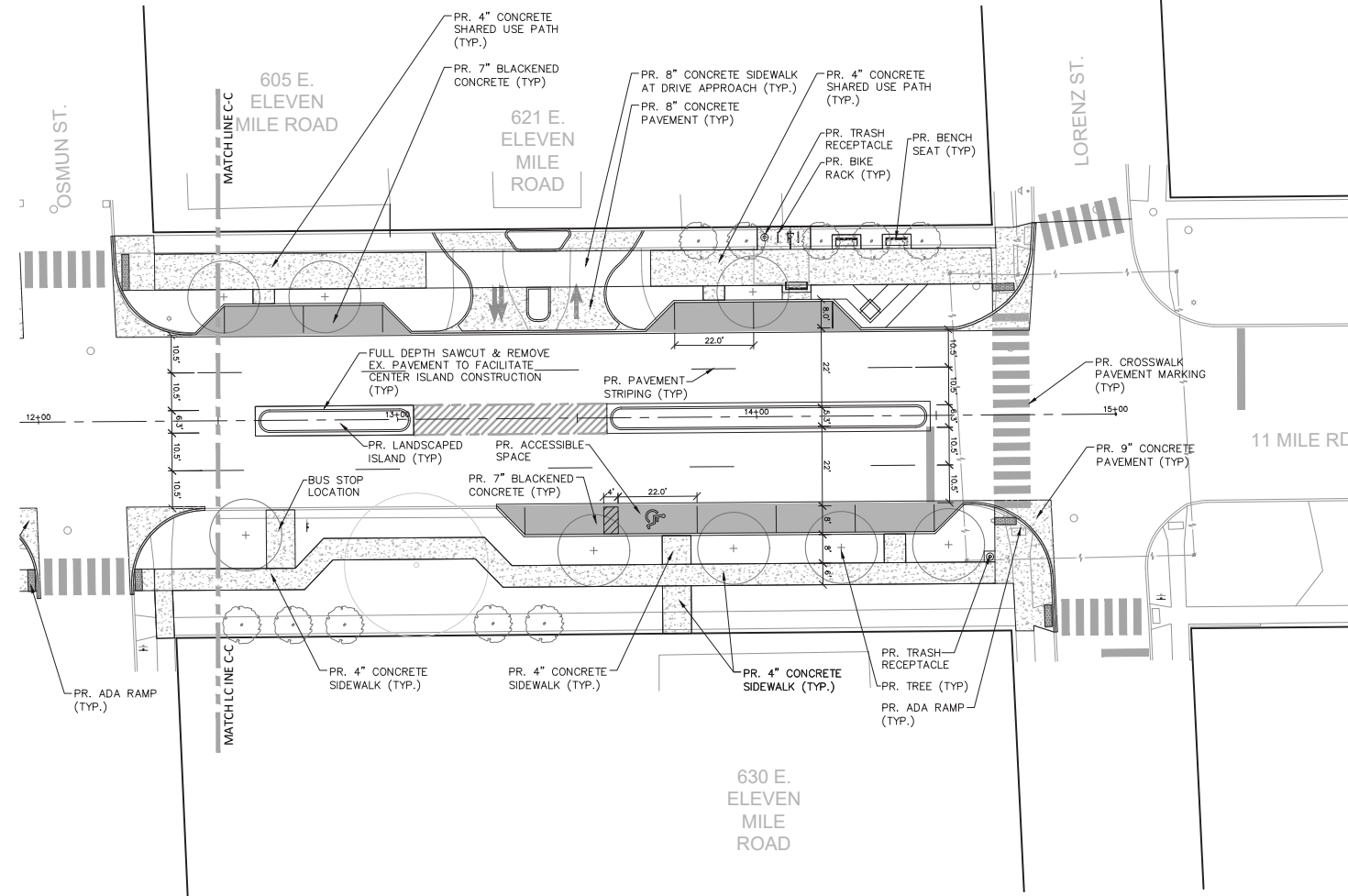
**LEGEND**

MANHOLE  
 HYDRANT  
 GATE VALVE  
 MANHOLE CATCH BASIN  
 UTILITY POLE GUY POLE  
 GUY WIRE  
 C.O.  
 HYDRANT  
 INLET

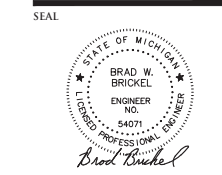
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 OVERHEAD LINES  
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 SIGN  
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 PR. SANITARY SEWER  
 PR. WATER MAIN  
 PR. STORM SEWER  
 PR. R. Y. CATCH BASIN  
 PROPOSED LIGHT POLE  
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**PAVING LEGEND**

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

**LEGEND**

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	HYDRANT		SAN. CLEAN OUT
	GATE VALVE		EXISTING WATERMAN
	MANHOLE CATCH BASIN		EXISTING STORM SEWER
	UTILITY POLE		EX. R. Y. CATCH BASIN
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	GUY WIRE		OVERHEAD LINES
	LIGHT POLE		SIGN
	EXISTING GAS MAN		PR. SANITARY SEWER
	C.O. MANHOLE		PR. WATER MAN
	HYDRANT		PR. STORM SEWER
	INLET		PR. R. Y. CATCH BASIN
	C.B. MANHOLE		PROPOSED LIGHT POLE
	FG 600.00		PR. TOP OF CURB ELEVATION
	PG 600.00		PR. GUTTER ELEVATION
	TW 600.00		PR. TOP OF PMT. ELEVATION
	TP 600.00		FG 600.00



**11 Mile Streetscape Project - Option 1**  
**11 Mile Road - John R Rd. to Lorenz St.**  
**City of Madison Heights, Oakland County, MI**  
 Engineer's Opinion of Probable Cost (Budget Purposes Only)

City of Madison Heights  
 300 W 13 Mile Road  
 Madison Heights, Michigan 48071

**Engineer's Estimate**  
**Nowak & Fraus Engineers**  
 46777 Woodward Avenue  
 Pontiac, MI 48342

Roadway Length - 1,405 LF

Item	Quantity	*Unit Price	Amount
<b>Section I - Pavement</b>			
Earth Excavation	1,100 C.Y.	\$28.00	\$30,800.00
Pavement Removal	1,400 S.Y.	\$15.00	\$21,000.00
Curb & Gutter Removal	1,700 L.F.	\$12.50	\$21,250.00
Sidewalk Removal	2,250 S.Y.	\$11.00	\$24,750.00
Bumper Block Removal	11 EA.	\$50.00	\$550.00
Drive Approach Removal	300 S.Y.	\$14.00	\$4,200.00
Remove & Relocate Light Pole	10 EA.	\$5,000.00	\$50,000.00
Tree Removal	15 EA.	\$2,000.00	\$30,000.00
Root Grinding	15 EA.	\$500.00	\$7,500.00
Striping Removal	3,000 L.F.	\$1.00	\$3,000.00
8" Concrete Drive Approach w/ Integral C& G	175 S.Y.	\$65.00	\$11,375.00
9" Concrete Pavement	250 S.Y.	\$70.00	\$17,500.00
7" Blackened Concrete Pavement w/ Integral C& G	1,250 S.Y.	\$70.00	\$87,500.00
18" Concrete Curb	3,250 L.F.	\$25.00	\$81,250.00
4" Concrete Sidewalk	20,800 S.F.	\$6.50	\$135,200.00
6" Concrete Sidewalk Ramp	2,500 S.F.	\$11.50	\$28,750.00
8" Concrete Sidewalk	1,400 S.F.	\$10.00	\$14,000.00
Aggregate Base, 4" CIP - 21 AA	2,560 S.Y.	\$15.00	\$38,400.00
Aggregate Base, 6" CIP - 21 AA	1,650 S.Y.	\$25.00	\$41,250.00
24" White Overlay Cold Plastic (Crosswalk)	1,200 L.F.	\$16.00	\$19,200.00
Parking Lot Striping	1 LSUM	\$2,000.00	\$2,000.00
4" Polyurea Paint (White or Yellow)	1,300 L.F.	\$2.00	\$2,600.00
School Symbol Overlay Cold Plastic	2 EA.	\$600.00	\$1,200.00
LT Arrow Symbol Overlay Cold Plastic	1 EA.	\$250.00	\$250.00
Pedestrian Hawk Signal	1 LSUM	\$150,000.00	\$150,000.00
Silt Sack	21 EA.	\$150.00	\$3,150.00
Maintaining Traffic & Const. Signing	1 LSUM	\$20,000.00	\$20,000.00
Structure Adjustments	10 EA.	\$500.00	\$5,000.00
<b>Sub Total Section I:</b>			<b>\$851,675.00</b>

CIVIL ENGINEERS  
 LAND SURVEYORS  
 LAND PLANNERS

Item	Quantity	*Unit Price	Amount
<b>Section II - Landscape</b>			
Deciduous Canopy Tree (3" Cal.)	56 EA.	\$900.00	\$50,400.00
Ornamental Tree (2" Cal.)	44 EA.	\$750.00	\$33,000.00
Deciduous Shrub (7 Gal.)	289 EA.	\$85.00	\$24,565.00
Deciduous Shrub (5 Gal.)	125 EA.	\$65.00	\$8,125.00
Ornamental Grass (2 Gal.)	658 EA.	\$30.00	\$19,740.00
Perennial (1 Gal.)	492 EA.	\$20.00	\$9,840.00
Shredded Hardwood Mulch (3" Depth)	1,697 S.Y.	\$5.00	\$8,485.00
Organic Soil Mix - Turf (6" Depth)	12,806 C.F.	\$2.00	\$25,612.00
Organic Soil Mix - Plant Beds (12" Depth)	14,555 C.F.	\$2.00	\$29,110.00
Organic Soil Mix - Trees (24" Depth)	1,432 C.F.	\$2.00	\$2,864.00
Seed Lawn (Bed prep, fertilizer, seed & cover)	2,846 S.Y.	\$1.75	\$4,980.50
Gateway Signage Pier	1 LSUM	\$40,000.00	\$40,000.00
Bus Shelter	1 LSUM	\$7,500.00	\$7,500.00
Trash Receptacles	8 EA.	\$1,000.00	\$8,000.00
Benches	9 EA.	\$1,000.00	\$9,000.00
Bike Racks	12 EA.	\$500.00	\$6,000.00
<b>Sub Total Section II:</b>			<b>\$287,221.50</b>

Revised 4/5/2024

\*Design and Inspection is not included in the total.  
 This represents anticipated construction cost  
 for budgeting purposes only.

**Overall Total: \$1,138,896.50**



CIVIL ENGINEERS  
 LAND SURVEYORS  
 LAND PLANNERS

**11 Mile Streetscape Project - Option 2**  
**11 Mile Road - John R Rd. to Lorenz St.**  
**City of Madison Heights, Oakland County, MI**  
 Engineer's Opinion of Probable Cost (Budget Purposes Only)

City of Madison Heights  
 300 W 13 Mile Road  
 Madison Heights, Michigan 48071

Engineer's Estimate  
 Nowak & Fraus Engineers  
 46777 Woodward Avenue  
 Pontiac, MI 48342

Roadway Length - 1,405 LF

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Bike Racks	12 EA.	\$500.00	\$6,000.00

Revised 4/5/2024

**Sub Total Section II: \$287,221.50**

**Overall Total: \$1,138,896.50**

\*Design and Inspection is not included in the total.  
 This represents anticipated construction cost for budgeting purposes only.

**Madison Heights - 11 Mile Streetscape - NFE Job N753**

**F&V Comments, December 18, 2023**

1. **Lane width: We are proposing 10.5' wide lanes with a 6' wide center island**
  - We went with 10ft lanes and 8ft parking on Maple Rd in Birmingham. Lots of complaints about the difficulty parking. With 2 lanes at 10.5ft, I don't see this as an issue here.
2. **Speed Limit**
  - Existing Speed limit 35 mph.
  - Can't reduce speed limit without a speed and safety study.
  - Reducing the lane widths will help reduce the speeds, or reducing the number of lanes (4 to 2) would likely further reduce the speeds through the area.
3. **Proximity of center islands to intersections to allow proper turning movements, etc.**
  - You'll want to run auto-turn at all of the intersections to make sure ingress and egress trucks can make the movements. One concern with the narrow median is vehicle will try to use it as a turn lane, but it'll be too narrow and creates the potential for rear-end and sideswipe crashes.
  - One thing we ran into in Birmingham is that people continue to make U-turns at the narrow medians to access on-street parking, driveways and intersections. The medians are too narrow for turning movements, which then creates issues for landscaping and potential for crashes.
  - Would they consider narrowing to a two-lane section with median?
4. **Parallel parking space dimensions, 8'x22' (need to maximize parking due to loss of ROW parking) Are the angled ends to be 45 degree?**
  - 45 degrees is OK.
  - Optional parking can be 20' with 4' boxes

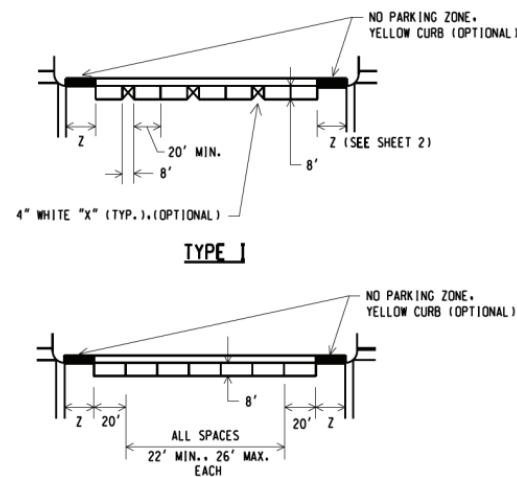


TABLE R211 ON-STREET PARKING SPACES

Total number of metered or designated parking spaces	Minimum required number of accessible parking spaces
1 to 25	1.
26 to 50	2.
51 to 75	3.
76 to 100	4.
101 to 150	5.
151 to 200	6.
201 and over	4 percent of total.

- You'll need to add ADA parking per PROWAG requirements. The number of spaces required is based upon the "block perimeter". Since there is no commercial parking on the adjacent streets, you'll need to add one ADA parking space per block, per side of the road.

5. **Proximity of parking spaces to the PC of crosswalks of the intersections. For both backup movements and forward movements.**
  - I would suggest adding crosswalks on all intersection legs.
  - I don't see any location for a true mid-block crossing. But all of the intersections should have enhanced crosswalks.
  - No parking is permitted within 20' feet of a marked crosswalk at unsignalized intersections per Michigan Vehicle Code. We've also had sight distance issues in Birmingham on S. Eton and have prohibited parking within 30' of the intersection or 20' of the crosswalk, whichever is greater.
6. **The location of proposed new driveways where curb cuts were removed. The blue X is where existing driveways are located.**
  - I would recommend eliminating the driveway access within the intersection influence area. Recommended driveway access spacing is 115 feet minimum from the intersection.
7. **Mid-Block crossing treatments, design requirements (RRFB, HAWK) , cost estimate**
  - There isn't a location for a true mid-block. There is no controlled crossing locations along the corridor, therefore an RRFB could be considered at either Townley or Delton
  - Locate at the intersection with the highest pedestrian demand or potential ped demand
  - RRFB cost is about 30k installed. HAWK is about 100-150k, this might be an option if there are more peds.

**Other Notes:**

- Have you talked to SEMCOG about the TAP grant? We recently applied for one in Birmingham and they provided feedback regarding what they would be looking for in the application and how best to get funded.
- Have you considered adding bike lanes?
- Ped countdown signals should be considered at Lorez, either as part of the TAP or a HISP

177-NS11225 1 OF 2

# SC315-G

## Cabinet-Based Rectangular Rapid Flashing Beacon

Rectangular rapid flashing beacons (RRFBs) improve pedestrian safety by increasing yield rates to 72-96% at crosswalks.\*

- ✓ The benchmark for RRFBs, the SC315-G meets MUTCD requirements, including IA-21, and is Buy America compliant
- ✓ Audible pushbutton or passive pedestrian activation
- ✓ Solar or AC powered
- ✓ Energy Balance Report™ (EBR) prepared for every location to ensure battery longevity

### Superior Design and Technology

The SC315-G is a cabinet-based system with a separate, high-power solar panel. This design enables the SC315-G to work with audible pushbutton stations, passive activation sensors, and remote monitoring, as well as operate at higher intensities and increased activations in challenging environments. MUTCD interim approval IA-21 flash pattern and multiple configurations enable the SC315-G to handle all crosswalk applications.

### Easy Installation

All components, including the battery or AC power supply, Energy Management System (EMS) and optional audible pushbutton controller are housed in a compact, lockable, purpose-built enclosure. It also incorporates a wire routing and termination system, and all components are wired at the factory for an efficient installation.

### Advanced User Interface

The SC315-G comes with an on-board user interface for quick configuration and status monitoring. It allows for simple in-the-field adjustment of flash pattern, duration, intensity, ambient auto adjust, night dimming, and many more. Settings are automatically sent wirelessly to all units in the system.

### Compatibility

Compatible with Carmanah RRFBs and the R820-E, R820-F, and R820-G circular beacons. Interchange solar and AC power models within the same application.

### Reliable

Designed with Carmanah's industry-leading solar modeling tools to provide dependable year-after-year operation. We prepare an Energy Balance Report (EBR) for every location.

### Trusted for 20+ Years

With thousands of installations, Carmanah's systems are the benchmark in traffic applications and other transportation applications worldwide.

\* U.S. Department of Transportation Federal Highways Administration, Publication No. FHWA-HRT-10-043 - "Effects of Yellow Rectangular Rapid-Flashing Beacons on Yielding at Multilane Uncontrolled Crosswalks"

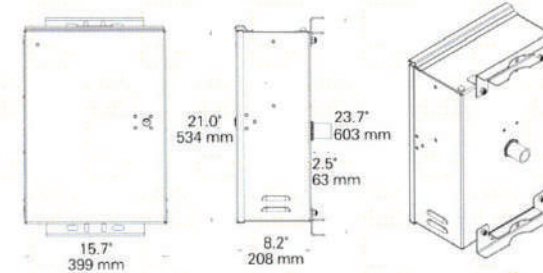


# SC315-G

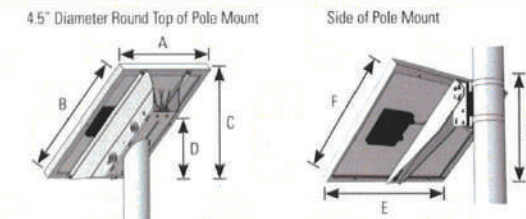
## Cabinet-Based Rectangular Rapid Flashing Beacon

1.844.412.8395 | traffic@carmanah.com | carmanah.com

### CABINET DIMENSIONS



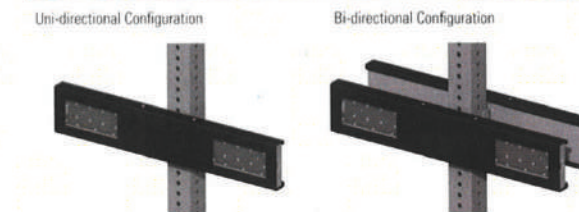
### SOLAR PANEL MOUNTING



PANELS*	A	B	C	D	E	F	G
20 W	-	-	-	-	13.6\"/>		
50 W	21.2\"/>						
80 W	30.7\"/>						

\* Carmanah will conduct a site assessment and provide an Energy Balance Report™ to determine the correct solar panel and battery size.

### LIGHT BAR CONFIGURATION



### ACTIVATION OPTIONS



### BEACON SPECIFICATIONS

MUTCD interim approval IA-21 and MUTCDC compliant
Purpose-built light bar optics = maximum efficiency and no stray light
Exceeds SAE J595 class 1 intensity by 2.5 to 3x when used as recommended
Meets SAE J578 chromaticity
3 in (76 mm) x 7 in (178 mm) clear, UV-rated polycarbonate lens with yellow LEDs
High-power LEDs: +90% lumen maintenance (L90) based on IES LM-80
Side-emitting pedestrian confirmation LEDs
Independent, stainless steel mounting brackets make back-to-back installation simple and enable in-field aiming for maximum effectiveness
Yellow, black, or green powder coated light bar covers

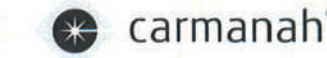
### SYSTEM SPECIFICATIONS

Adjustable system settings with auto-scrolling LED display on our latest EMS
System test, status, and fault detection: battery, solar, button, beacon, radio, day/night
Flash patterns: RFB (WW+S), RFB1 (WW+S legacy), RFB2 (WSDOT), 0.5 sec. alternating (MUTCD), 0.5 sec. unison (MUTCD), 0.5 sec. x3 alternating (MUTCD), 0.1 sec. unison, 0.25 sec. unison, 0.1 sec. x3 quick flashes unison, 0.1 sec. x3 quick flashes alternating, steady on
Input: momentary for pushbutton activation, normally open switch, normally closed switch
Flash duration: 5 sec. to 1 hr.
Intensity setting: 20 to 1400 mA for multiple RRFBs, circular beacons, or LED enhanced signs
Nighttime dimming: 10 to 100% of daytime intensity
Ambient Auto Adjust: increases intensity during bright daytime
Automatic Light Control: reduces intensity if the battery is extremely low
Temperature correction: yellow beacons
Calendar: internal time clock function
Radio settings: enable/disable, selectable channel from 1 to 14
Output: enabled when beacons flashing daytime and nighttime, or nighttime only
E.g., for relay control of overhead lighting
Activation counts and data reporting via OBU or optional USB connection
Encrypted, wireless radio with 2.4 GHz mesh technology
Wireless update of settings from any unit to all systems on the same radio channel
User-selectable multiple channels to group different beacons and ensure a robust wireless signal
Communicates with all other Gen III radio-enabled systems including our R820-E, -F, and -G circular beacons
Instantaneous wireless activation: <150 ms
Wireless range: 1000 ft (305 m)
Integrated, vandal-resistant antenna
Solar or AC-powered
AC: 100-240 VAC input, 6-14 AWG
Replaceable AC-DC power supply, circuit breaker, terminal block wiring
20, 50, or 80 W high-efficiency photovoltaic solar panel
45 deg tilt for optimal energy collection
Maximum Power Point Tracking with Temperature Compensation (MPPT-TC) battery charger for optimal energy collection in all solar and battery conditions
12 V battery system with multiple sizes: 35, 55, 100 Ah
Replaceable, recyclable, sealed, maintenance-free, best-in-class AGM batteries offer the widest temperature range and longest life
Battery design life: +5 yrs.
Weatherproof, gasketed enclosure with vents for ambient air transfer (NEMA 3R)
Lockable, hinged door with #2 lock
Optional padlockable latch
Corrosion-resistant aluminum with stainless steel hardware
Raw aluminum finish or yellow, black, or green powder coated
Prewired to minimize installation time
High-efficiency optics and EMS = the most compact, lightweight system
-35 to 165° F (-37 to 74° C) system operating temperature
-40 to 140° F (-40 to 60° C) battery operating temperature
150 mph (241 kph) wind speed as per AASHTO LTS-6
Pushbutton: ADA-compliant, piezo-driven with visual LED and two-tone audible confirmation
Audible pushbutton station: ADA-compliant, piezo-driven with visual LED and customizable voice message confirmation
Passive activation: microwave-based sensor detects pedestrian
<b>Warranty: 5-year limited warranty, excluding batteries</b>

ADA, ICF, IMSA, MUTCD IA-21, and other logos.

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177-NS11225 2 OF 2



177-NS11343 1 OF 2  
**SC315-G**  
 RECTANGULAR RAPID FLASHING BEACON  
 carmanah Traffic

MUTCD-compliant, pedestrian-activated warning beacon for uncontrolled marked crosswalks

- Improve pedestrian safety by increasing driver yield rates
- Passive activation: microwave-based sensor detects pedestrian
- Audible push button station
- Solar power performance even in partially shaded applications
- Solar and AC-powered models wirelessly communicate and can be used together in the same application
- Meets and exceeds MUTCD requirements, including IA-21

RRFBs have been found to provide vehicle yielding rates between 72 and 96 percent for crosswalk applications, including 4 lane roadways with average daily traffic (ADT) exceeding 12,000\*.

**Superior Design and Technology**

The SC315-G is a cabinet-based system with a separate, high-power solar panel. This design enables the SC315-G to work with audible push button stations, passive activation sensors, and remote monitoring, as well as operate at higher intensities and increased activations in challenging environments. MUTCD interim approval IA-21 flash pattern and multiple configurations enable the SC315-G to handle all crosswalk applications.

**Easy Installation**

All components, including the battery or AC power supply, Energy Management System (EMS) and optional audible push button controller are housed in a compact, lockable, purpose-built enclosure. It also incorporates a wire routing and termination system, and all components are wired at the factory for an efficient installation.

**Advanced User-Interface**

The SC315-G comes with an on-board user interface for quick configuration and status monitoring. It allows for simple in-the-field adjustment of flash pattern, duration, intensity, ambient auto adjust, night dimming, and many more. Settings are automatically sent wirelessly to all units in the system.

**Compatibility**

Compatible with Carmanah RRFBs and the R820-E, R820-F, and R820-G circular beacons. Interchange solar and AC power models within the same application.

**Trusted**

With thousands of installations, Carmanah's beacons are the benchmark in traffic applications and other transportation applications worldwide.



**WE SIMPLIFY PLANNING.**

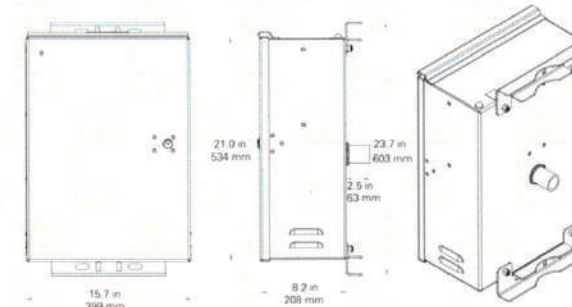
Contact us to get your Energy Balance Report and purchase specifications.

1.844.412.8395  
 traffic@carmanah.com  
 carmanahtraffic.com

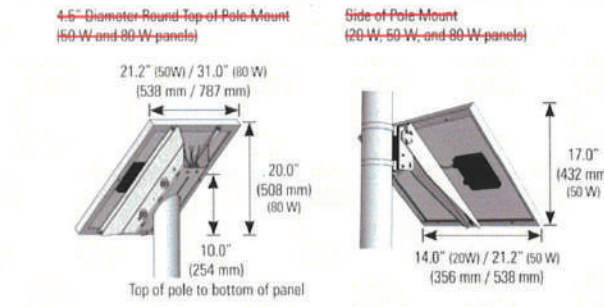
REPRESENTED IN YOUR REGION BY:

177-NS11343 2 OF 2  
**SC315-G**  
 RECTANGULAR RAPID FLASHING BEACON  
 carmanah Traffic  
 1.844.412.8395 | traffic@carmanah.com | carmanahtraffic.com

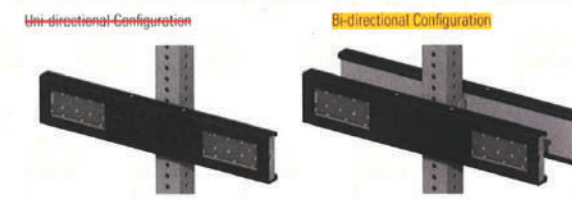
**CABINET DIMENSIONS**



**SOLAR PANEL MOUNTING**



**LIGHT BAR CONFIGURATION**



**ACTIVATION OPTIONS**



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Adjustable system settings with auto-scrolling LED display on our latest EMS
<b>System test, status, and fault detection:</b> battery, solar, button, beacon, radio, day/night
<b>Flash patterns:</b> RFB1 (WW+S), RFB2 (WSDOT), 0.5 sec. alternating (MUTCD), 0.5 sec. unison (MUTCD), 0.1 sec. unison, 0.25 sec. unison, 0.1 sec. x3 quick flashes unison, 0.1 sec. x3 quick flashes alternating
<b>Input:</b> momentary for push button activation, normally open switch, normally closed switch
<b>Flash duration:</b> 5 sec. to 1 hr.
<b>Intensity setting:</b> 20 to 1400 mA for multiple RRFBs, circular beacons, or LED enhanced signs
<b>Nighttime dimming:</b> 10 to 100% of daytime intensity
<b>Ambient Auto Adjust:</b> increases intensity during bright daytime
<b>Automatic Light Control:</b> reduces intensity if the battery is extremely low
<b>Temperature correction:</b> yellow or red beacons
<b>Calendar:</b> internal time clock function
<b>Radio settings:</b> enable/disable, selectable channel from 1 to 14
<b>Output:</b> enabled when beacons flashing daytime and nighttime, or nighttime only
Activation counts and data reporting via OBU or optional USB connection
MUTCD interim approval IA-21 and MUTCDC compliant
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Meets SAE J578 chromaticity
3 in (76 mm) x 7 in (178 mm) clear, UV-rated polycarbonate lens with yellow LEDs
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Side-emitting pedestrian confirmation LEDs
Independent, stainless steel mounting brackets make back-to-back installation simple and enable in-field aiming for maximum effectiveness
Yellow, black, or green powder coated light bar covers
Encrypted, wireless radio with 2.4 GHz mesh technology
Wireless update of settings from any unit to all systems on the same radio channel
User-selectable multiple channels to group different beacons and ensure a robust wireless signal
Connectivity
Communicates with all other Gen III radio-enabled systems including our R820-E, -F, and -G circular beacons
<b>Instantaneous wireless activation:</b> <150 ms
<b>Wireless range:</b> 1000 ft (305 m)
Integrated, vandal-proof antenna
Power System
Color or AC-powered
AC: 90-264 VAC input, 6-14 AWG
Replaceable AC/DC power supply, circuit breakers, terminal block wiring
Energy Collection
20-60- or 80-W high-efficiency photovoltaic solar panel
45-degree tilt for optimal energy collection
Maximum Power Point Tracking with Temperature Compensation (MPPT-TC) battery charger for optimal energy collection in all color and battery conditions
12-V battery system with multiple sizes—33, 36, 75, 100 Ah
Energy Storage
Replaceable, recyclable, sealed, maintenance-free, best-in-class AGM batteries offer the widest temperature range and longest life
Battery design life: 5 yrs
Weatherproof, gasketed enclosure with vents for ambient air transfer (NEMA 3R)
Lockable, hinged door with #2 lock
Cabinet Construction
Corrosion-resistant aluminum with stainless steel hardware
Raw aluminum finish or yellow, black, or green powder coated
Prewired to minimize installation time
High-efficiency optics and EMS = the most compact, lightweight system
Environmental
-40 to 165° F (-40 to 74° C) system operating temperature
-40 to 162° F (-40 to 72° C) battery operating temperature
150 mph (241 kph) wind speed as per AASHTO LTS-6
Activation
Push button: ADA-compliant, piezo-driven with visual LED and two-tone audible confirmation
Audible push button station: ADA-compliant, piezo-driven with visual LED and customizable voice message confirmation
Passive activation: microwave-based sensor detects pedestrian
Warranty
5-year limited warranty



**POLARA ENGINEERING INC.** 9153 STELLAR CT., CORONA, CA 92683 (888) 340-4872

**BDSP-014 – Bulldog III Series Vandal Resistant ADA Compliant Push Button for TS1 Cabinets with Relay Isolators**

This button is a highly vandal resistant button with essentially no moving parts. It is pressure activated, but can withstand an impact from a baseball bat or hammer. When the switch activates, you hear a beep and the LED will flash. When the button is released you will hear a second beep. BDSP-014 meets the relay driving requirements of older electromechanical relay based PED isolators found in some TS1 Cabinets.

Body Material: Aluminum, Powder Coated

Button material: 316 Stainless Steel

**Piezo Driven Solid State Switch:**  
 Operating Force: 3.0 lbs. Maximum  
 Operating Temperature: -30°F to +165°F (-34°C to +74°C)  
 Operating Voltage: 12-36 VDC, 9-25 VAC RMS (18 VDC Typ.)  
 MTBF: 8,800,000 hours Typ.  
 Switch Operating Life: Greater than 300 million operations  
 "Off" Current: 15µA Typ.  
 "On" Resistance: 5Ω Typ.  
 Maximum "On" Current: 350 mA (over-current protected) Typ.  
 Maximum "On" Time: 11 sec. Typ.  
 Debounce Time: 85 ms Typ.

LED Operation: Approx 0.025 sec. LED flash each time button is pressed.

**LED Specifications:**  
 Luminous Intensity: 0.3 Lux @ 1meter Minimum (Red)  
 Viewing Angle: 155° Typ.

**Beeper:**  
 Volume: 68 dB @ 1 meter Typ.  
 Beep on Press: 2.6 kHz  
 Beep on Release: 2.3 kHz  
 Beep Length: 50 ms Typ.

Warranty: 5 Years, free from manufacturers defects

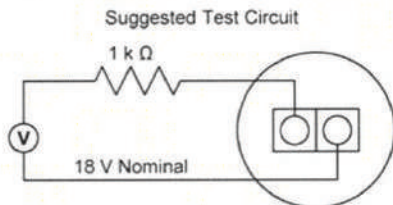
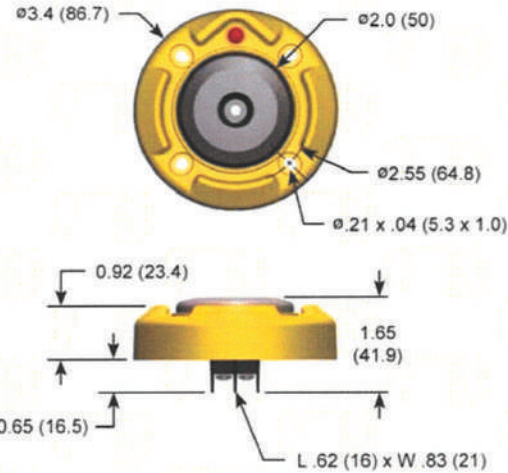
**Product Ordering Information**

- BDSP-014-B Black Body
- BDSP-014-G Green Body
- BDSP-014-Y Yellow Body

**Design Compliance**

Test Type	Compliance
Activation Force	MUTCD 2009 – 4E
Temperature and Humidity	NEMA TS 2
Transient Voltage Protection	NEMA TS 2
Transient Suppression	IEC 61000-4-4, IEC 61000-4-5
Lightning and Power Protection	GR-1089-CORE, 6000V-400A 25 reps, 60VAC-15 minutes
Electronic Noise	FCC Title 47, Part 15, Class A
Mechanical Shock and Vibration	NEMA TS 2
Ingress of Water	NEMA 250 – 6P, Rain, Snow, etc.
Ingress of Water	NEMA 250 – 6P, Submersion
Salt Spray and Corrosion	NEMA 250 – 6P
Ingress of Foreign Objects	NEMA 250 – 6P
Electrical Reliability	NEMA TS 4

Notes:  
 1) Applicable sections only of referenced standards.  
 2) All specifications subject to change without notice.



BDSP-014-Y model shown.  
 Dimensions are in inches (millimeters).



**36" X 36"  
 FLUORESCENT YELLOW-GREEN  
 W11-2**



**NFE WORK AUTHORIZATION ASR#1**

**Proposal No.:** 3A-P4106 Remote Proposal **Date of Order:** March 20, 2024

**Project:** City of Madison Heights – Downtown Streetscape Project - Lane Reduction - 2024 ASR#1 Services  
 Madison Heights, Michigan

**Bill To:** City of Madison Heights **Phone:** 248-583-0831  
 300 West Thirteen Mile Road **Direct:** 248-837-2650  
 Madison Heights, Michigan 48071  
 Ms. Melissa Marsh - City Manager **Email:** [melissamarsh@madison-heights.org](mailto:melissamarsh@madison-heights.org)  
 Mr. Giles Tucker - Community Development Director **Email:** [gilestucker@madison-heights.org](mailto:gilestucker@madison-heights.org)

We appreciate the opportunity to submit this proposal for additional 2024 Professional Services relative to your recent conversation with Brad Brickel of our office regarding the additional work to consider a roadway diet on Eleven Mile Road.

**2024 - ASR #1 Added Scope / Plan Revision(s) are noted in Red Text for Clarification and Authorization by client.**

**Understanding of Project:** The client has requested that NFE prepare a revised Traffic Analysis of the Eleven Mile Road Corridor with the City of Madison Heights to consider a roadway diet (lane reduction) within the previous study area. The added study area will be extended to include the entire Eleven Mile Roadway segment from North Stephson Highway ROW to Dequindre Road ROW as discussed. However, plans will only be prepared for John R to Lorenz - Reference NFE Job # N753.

**Scope of Professional Services:** We will provide additional Professional Services for the above referenced project in accordance with the following additional scope of work.

**Professional Services - ASR#1 Services:**

- **Roadway Diet / Lane Reduction Analysis for Eleven Mile Road:** Our subconsultant(s) will revise the previously completed traffic analysis and add additional data collection, analysis / recommendations for the proposal roadway reduction for review and consideration by the City of Madison Heights. Revised illustrative plans and graphics will be prepared as well as an updated summary document for use by the municipality for the focus area from John R Road to Lorenz. NFE will prepare a revised roadway layout with engineer’s estimate from planning purposes and use by the City for obtaining grant and/or funding sources.

**Reimbursable Expenses – All Services:**

- **Plan Submittal Documentation:** All necessary land surveying, civil engineering, and landscape design plan submittal documentation / reproduction services / travel expenses required for review agency submittals, client / owner / architect use and/or MEP consultant coordination will be billed in accordance with the following estimate (allowance) for plan documentation per attached 2024 / future 2025 Nowak & Fraus Engineers fee schedules.

**Itemized Fees:** Additional 2024 Services

**Professional Services - ASR#1 Services:**

Roadway Diet Analysis for Eleven Mile Road – Fleis & Vandenbrink Fee - NO NFE Markup:	\$ 15,500.00
Roadway Diet Analysis for Eleven Mile Road – MKSK Fee - NO NFE Markup:	\$ 5,500.00
Roadway Diet Analysis for Eleven Mile Road – NFE Fee:	\$ 5,000.00

**Reimbursable Fees:** Additional 2024 Services: \$ 1,000.00

**All printing, Federal Express/UPS charges/Deliveries or out-of-state travel will be considered reimbursable expenses.**

NOWAK & FRAUS ENGINEERS

**Additional Services:** Any other services requested by the Owner will be quoted separately or billed on an hourly basis according to the attached Nowak & Fraus Engineers 2024 and/or future 2025 fee schedule(s).

**Excluded Services:** All required permit / application / review fees are specially excluded from this proposal. Any additional work as requested by the client / Owner including but not limited to additional on / off-site topographic surveys; Alta/NSPS survey updates; easement vacation(s); process assistance; re-zoning and/or special land use applications / submittals, off-site utility extensions; site lighting / site photometric design; geo-technical services including soil borings marking or staking. Phase I or Phase II environmental services and/or material sampling, testing; Architectural / Structural / MEP design services; structural design services; hydraulic modeling / hydraulic studies; All CLOMAR / Lomar applications; FEMA HEC Modeling and/or utility infrastructure capacity analysis / investigations / reports; / weekly conference calls; retaining wall design; sound wall design; traffic analysis / report; additional earthwork calculations; and anticipated travel expenses. Full time inspection / site supervision / construction administration / site visits / construction staking / layout services / as-built services are not included in this proposal and will be invoiced on an hourly basis according to the attached 2021 and/or future 2022 fee schedule and/or a separate additional service proposal (ASR) will be provided to the client / owner for approval prior to the start of required additional services as necessary for this project.

**Schedule:** The work will be completed according to the following schedule: Additional Professional ASR#1 Services will commence upon acceptance of this proposal and notice to proceed by client.

**Owner Authorization of NFE Proposal:**

Provided this proposal meets with your approval, please sign, date, and return a copy of this Work Authorization to our office. Receipt of your signed Work Authorization will serve as our authorization to proceed. Nowak & Fraus Engineers reserves the right to adjust this proposal within 30 days of issue.

The undersigned warrants that an authorized representative has read the terms of this Work Authorization and the attached Terms and Conditions and that the undersigned agrees to be bound by the provisions of this Work Authorization and the attached Terms and Conditions.

The undersigned is responsible for payment of all NFE services and hereby authorizes NFE to proceed with the above referenced services and fees as stated above regardless of outcome of project status.

**Nowak & Fraus Engineers**

Digitally signed by Timothy L. Germain, PE  
DN: cn=Timothy L. Germain, PE, o=Nowak & Fraus Engineers,  
ou=Engineering, email=tgermain@nfe-engr.com, c=US  
Date: 2024.03.20 13:17:00 -04'00'

**Timothy L. Germain, PE**

Timothy L. Germain, P.E.  
Managing Partner

Dated: 03/20/2024  
NFE: N753 – ASR#1 / 2024 Add Scope

**Accepted and Approved By:**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed Name and Title) (Date)

**Authorized to Execute Agreement For:**

\_\_\_\_\_  
(Owner of Project) (Date)



ATTACHMENT "A" - 2024 FEE SCHEDULE

PERSONNEL

HOURLY RATE

Principal	\$ 204.00
Senior Associate	\$ 182.00
Alta Survey Manager	\$ 165.00
Associate / Senior Project Manager / Cad Manager	\$ 165.00
Professional Surveyor / Land Surveyor / Field Coordinator	\$ 152.00
Project Manager / Woodland-Wetland Manager	\$ 152.00
Registered Landscape Architect / Project Engineer	\$ 146.00
Senior Project Coordinator	\$ 128.00
Land Survey Technician / Landscape Architect	\$ 124.00
Engineer III	\$ 134.00
Engineer II	\$ 126.00
Engineer I	\$ 102.00
Geospatial Engineer	\$ 146.00
Geospatial Technician III	\$ 128.00
Geospatial Technician II	\$ 120.00
Geospatial Technician I	\$ 114.00
Engineering Technician III	\$ 116.00
Engineering Technician II	\$ 110.00
Engineering Technician I	\$ 102.00
Senior Testing / Inspection Engineer	\$ 108.00
Testing / Inspection Engineer	\$ 104.00
Engineering Assistant	\$ 86.00
Survey Crew - 3 Person	\$ 242.00
Survey Crew - 2 Person	\$ 196.00
Survey Crew - 1 Person	\$ 154.00
Clerical	\$ 86.00

Authorized overtime will be billed at 1.2 times the above stated rates. Authorized overtime for Sundays and Holiday Work will be billed at 1.4 times the above stated rates. Expert Testimony will be billed at 1.4 times the stated rates. The survey crew size will be determined on a project-by-project availability basis by NFE management to provide production surveying services.

Reimbursable Expenses: NFE Expenses when incurred in direct connection with project, will be charged at following rates:

- Courier Services / Specialized Reproduction / Project Related Purchases Cost + 15%
- Standard Print – Colorized Prints - 24" x 36" (Engineering Format) \$ 25.00 Each
- Standard Print - Black Line Prints - 24" x 36" (Engineering Format) \$ 3.00 Each
- Oversized Print - Black Line Print - 30" x 42" (Architectural Format) \$ 5.00 Each
- Mylar / Reproducible Vellum Print - 24" x 36" (Engineering Format) \$ 25.00 Each
- Express (Hand) Deliveries - Local Area Only as Requested by Client \$ Hourly
- Electronic Data / Media / File Transfer as Requested by Client \$ Hourly
- Sub-Consultant Fee / Expenses (Applications, Review Fees, Permit Fees, Etc.) Fee / Cost + 15%
- Round Trip Vehicle Mileage from NFE Offices when identified on NFE Proposal \$ 0.64 / Mile
- Travel Expenses (Hotel, Meals, Etc.) when identified on NFE Proposal (Out of Town) \$ At Cost
- Engineering Consent Agreements for Lender (\$2,500) / Project Insurance (Quoted Rate)

Revised: January 1, 2024

NOWAK & FRAUS ENGINEERS

**1. SERVICES EXCLUDED FROM BASIC SERVICES UNLESS EXPRESSLY INCLUDED IN SCOPE OF WORK DEFINED IN ATTACHEHD WORK AUTHORIZATION**

The following types of services are not considered part of “basic” Professional Land Surveying or Civil Engineering Services and will be performed as an extra to the contract fee:

**A. Land Survey Services / Environmental Services / Geo-technical Related Services:**

- i. Any additional land surveying service not set forth in the NFE Work Authorization, (i.e.: special surveys, boundary survey, topographical survey, tree or wetland surveys, etc.)
- ii. Construction Staking Services, Construction Layout Service, Re-Staking Services.
- iii. As-Built Surveys, Foundation Surveys or Foundation Certificates.
- iv. Preparation of parcel splits or combinations, condominium documents, deed review, obtaining or negotiating for land sales, preparing easements or rights-of-way documentation.
- v. Preparation or review of environmental assessments and/or environmental impact statements, phase I or phase II research or reports.
- vi. Geo-technical Investigations / Underground Utility Investigation or Exploration (i.e.: soil borings, cctv / camera / video underground utilities, ground penetrating radar, etc.)

**B. Design Related Changes in Scope of Services and/or Additional Services Excluded from specified Basic Design Services listed in the attached Work Authorization:**

- i. Services resulting from changes in general scope of the Project or its design including, but not limited to, changes in size, complexity, Client’s schedule, or character of construction; and revising previously accepted or approved studies, reports, design documents or Contract Documents when such revisions are due to causes beyond Nowak & Fraus’ control.
- ii. Additional or extended services during construction made necessary by: 1) work damaged by fire or other cause during construction; 2) a significant amount of defective or negligent work of the contractor(s); 3) acceleration of the progress schedule involving services beyond normal business hours; 4) default by contractor(s).
- iii. Preparation and/or modification of Computer Assisted Design (CAD) drawings of topographical and/or other types of surveys as furnished by others.
- iv. Opinions or review of construction budget requirements, or construction scheduling.
- v. On-site inspection or supervision of work performed on the Project.
- vi. NFE shall exercise usual and customary professional care in its efforts to comply with all codes, regulations, laws in effect as of the date of this agreement. Any changes after this date that requires revisions or redesign shall be an additional service.
- vii. Obtaining and/or the preparation of Permit Applications for construction activities and/or construction work.
- viii. Reproductions of plans, specifications and/or contract documents, including electronic files.
- ix. Expert Testimony at trial and/or deposition, including any time needed to prepare for the testimony or to prepare a report.
- x. Service planning with utility companies.
- xi. Preparation of lighting and photo-metric plans.
- xii. Structural design of retaining walls.
- xiii. Earth balancing determinations.
- xiv. Assistance with construction related problems and changes due to causes beyond NFE’s control.
- xv. Landscape design and planning
- xvi. Traffic Impact Studies / Traffic Analysis Reports.
- xvii. Project Specific Insurance Coverages that exceed NFE’s basic coverages
- xviii. Engineer’s Consent Agreements and Certificates for Project Loan.

**2. FEES - Client shall pay for services and expenses as set forth below.**

- (A) All invoices are due upon receipt. All invoices shall be deemed to have been received within three (3) days after being deposited in first class U.S. mail bearing the address listed herein. Any claims of errors or discrepancies in billings must be submitted to NFE in writing within 30 days of receipt of the invoice. Otherwise, all such objections are deemed waived and the account will become stated. Payments shall not be withheld, delayed, or made contingent on the construction, completion, or success of the project or upon receipt by the Client of offsetting reimbursement or credit from third parties causing Additional Services or expenses.
- (B) If the Client fails to pay any payment due to NFE for services and expenses within thirty (30) days after receipt of NFE invoice, therefore, the amounts due shall include a late charge at a rate of one and one-half (1 1/2%) percent per month from said thirtieth (30) day and in addition, NFE may suspend all services under this Agreement until NFE has been paid in full all amounts due for services and expenses. The client shall pay all costs of collection, including attorney fees.
- (C) **A signature on this work authorization provides permission to pull a credit bureau report on any company or individual who may be liable under this agreement (such as personal guarantor, proprietor, general partner, or similar person).**

**3. “TIME AND MATERIAL” BASIS - All determination of fees on a “Time and Material” basis shall be as follows:**

- (A) “Time” is based on the hourly rates set forth in the NFE’s current calendar year Rate Schedule (Exhibit A). Hourly rates are subject to change each calendar year. The most current NFE fee schedule will apply based upon the current calendar year as prepared by NFE. All travel time is billed at the hourly rates as set forth in Exhibit A.
- (B) “Material”: All materials, including out of pocket expenses such as subcontractor, permit application fees, and title searches etc. will be billed at actual cost, plus fifteen (15%) percent, except reproduction costs, postage and handling and computer costs which are billed at NFE’s standard rates.

**4. CLIENT’S RESPONSIBILITIES - Client shall be responsible to perform or provide the following:**

- (A) **Client shall provide a current title policy or vesting deed for all new private projects. Client may elect to have NFE order a title search for the project in question. Title searches shall be billed as reimbursable pursuant to NFE’s standard rates including a fifteen (15%) percent markup by NFE.**
- (B) Arrange for access to and make all provisions for NFE to enter upon public or private property to perform the above professional services. NFE will take reasonable precautions to minimize any damages to property; however, Client understands and agrees that in the normal course of work, some damage may occur and that NFE is not responsible to correct said damage.
- (C) Furnish all available information, surveys and documents pertinent to NFE’s work, including a program which shall set forth the Client’s objectives, schedule, constraints and site requirements. NFE shall be entitled to rely upon the completeness and accuracy of the information, surveys and documents provided by Client.
- (D) Give prompt written notice to NFE whenever Client observes or otherwise becomes aware of any development that affects the scope or timing of the above professional services.
- (E) **Give prompt written notice to NFE of all defects or suspected defects in NFE work or services of which the Client or Client’s agent becomes aware, in order to allow NFE time to investigate and take any measures necessary to minimize the consequences of the defect. The Client shall require that all contractors and subcontractors, at any level, on the Project to contain in their contract a like requirement. Failure by the Client, the Client’s contractors, or subcontractors to notify NFE shall relieve NFE of the costs of remedying the defect above the sum such remedy would have cost had prompt notification been given. In the event the defect is known or reasonably could have been known prior to installation and is attributed to construction layout, the failure to give prompt notice shall relieve NFE of all costs of remedying said defect.**
- (F) Render all decisions or provide all necessary approvals pertaining to NFE’s work. NFE will assist the Client in preparing applications and supporting documentation for the Client to secure permits and approvals, however, it is the Client’s responsibility to pay all fees and to make sure all the necessary permits and approvals have been obtained prior to commencing work. If the Client elects to commence construction prior to receiving all the necessary permits and approvals, NFE shall not be held liable for any damages, losses and costs arising from that decision to proceed. NFE does not assume any responsibility for the decision to proceed by performing construction stakeout at the Client’s request.
- (G) The Client warrants the accuracy and the permission to use all information, plans, drawings, specifications, surveys, reports and documents provided to NFE in connection with the Project. The Client agrees, to the fullest extent permitted by law, to indemnify and hold NFE harmless of all expenses, damages, losses, and costs, including attorney fees, from any claims and/or liability, including copyright claims, resulting from the use of such information, plans, drawings, specifications surveys, reports and documents.

## 2024 NFE TERMS AND CONDITIONS

5. **TIME AND PERFORMANCE** - All work or services shall be performed as follows subject to weather conditions at the time of release of services by Client:

- (A) All services shall be performed as expeditiously as is consistent with the professional skill and care ordinarily exercised by members of the profession practicing in the same locality under similar conditions.
- (B) Nowak & Fraus is not responsible for any delay caused by activities or factors beyond NFE reasonable control including, but not limited to, delays by reason of strikes, lockouts, weather, work slow-downs or stoppages, accidents or acts of God. When a delay is beyond NFE's reasonable control, Client agrees that NFE shall not be held liable for any damages arising from such delay, nor shall NFE be deemed to be in default of this Agreement.

6. **LIMITATION OF LIABILITY**

NFE's fees include a reasonable allowance for risks and to obtain that benefit, the Client agrees the maximum aggregate amount of NFE's liability and/or NFE's professional engineers or surveyors shall be limited to \$75,000.00 or to the sum of NFE's fee whichever is greater. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. If the Client is unwilling to accept this limitation the fees in this proposal shall increase by ten percent (10%), but not less than five hundred dollars (\$500) to compensate for the increased risk assumed by NFE. The client agrees the new limitation of liability shall be NFE's professional insurance policy limit for the project. Under no circumstance shall NFE and/or NFE's professional engineers and/or surveyors be liable for Client's loss of profits, delay damages, or any special, incidental, or consequential loss or damage of any nature arising at any time or from any cause whatsoever.

7. **TIME PERIODS**

The Client agrees that the applicable statute of limitations for any and all causes of action against NFE shall be two (2) years; except causes of action that are incapable of discovery during the two (2) year statute of limitations period shall be brought within six (6) months of discovery. Causes of action shall be deemed to have accrued and the applicable statute of limitations shall commence to run on the date that NFE last provides service to the Client as to the matters out of which the cause of action arose. Under no circumstances shall any cause of action which could not be discovered during the two (2) year statute of limitations period be brought beyond six (6) years from the date of NFE's last service to the Client as to the matter out of which the cause of action arose.

8. **TERMINATION FOR CONVENIENCE**

Upon written notice, client or NFE may terminate the performance of any further services included in this Agreement if the terminating party determines termination is in the terminating party's interest. Upon receipt of the termination notice, NFE shall stop work on all services included in this Agreement and grant license to use in connection with the project any instruments of service complete at that time to the Client; provided that the Client has paid NFE for all services performed up to the receipt of the termination notice. Upon termination for Convenience, NFE and Client shall have no further rights or remedies other than those utilized herein.

9. **GENERAL CONSIDERATIONS**

- (A) Client and NFE each bind himself and his partners, successors, affiliated entities, executors, administrators, assigns and legal representatives to the other party to this Agreement and to the partners, successors, executors, administrators, assigns and legal representatives of such other party, in respect to all covenants, agreements and obligations of this Agreement.
- (B) Neither Client nor NFE shall assign, sublet, or transfer any rights under or interest in (including, but without limitation, moneys that may become due or moneys that are due) this Agreement without the written consent of the other, except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Nowak & Fraus from employing such independent consultants, associates, and subcontractors, as it may deem appropriate to assist in the performance of services. NFE has no duty to assign its drawings or work product to a lender on behalf of a client under terms of this agreement.
- (C) Nothing herein shall be construed to give any rights or benefits to anyone other than Client and Nowak & Fraus.
- (D) This Agreement represents the entire and integral agreement between NFE and the Client and supersedes all prior negotiations, representations, or agreements, whether written or oral. All NFE's notes, disclaimers, details, specifications, and instructions on NFE's drawings in connection with the project which the subject of this agreement shall be incorporated as part of this agreement. Only a written instrument signed by both NFE and the Client may amend this Agreement.
- (E) Drawings and specifications are instruments of service and shall remain the property of NFE whether the Project for which they are made is executed or not. They are not to be used by the Client on other projects or extensions to this Project except by agreement in writing and with appropriate compensation to NFE. The Client shall to the fullest extent permitted by law indemnify and hold harmless NFE from and against all claims, damages, losses, and costs, including attorney fees and costs of litigation, arising out of or in any way connected in the modification, misrepresentation, misuse, or reuse by other of the machine-readable information or data provided by NFE, excepting only such use as may be authorized, in writing, by NFE. NFE shall not authorize the reuse of its machine-readable information or data, either electronically, on disk or as a hard copy, unless full payment has been made by the Client. The Client will be appropriately charged based upon NFE's standard rates.
- (F) In providing opinions of probable construction cost, the Client is advised that NFE has no control over contractor's cost or the price of labor, equipment or materials furnished by the contractor, or over the contractor's methods of pricing, and that the opinions of probable construction costs that may be provided as part of the professional services to be rendered are to be made based on current prevailing prices. No warranty, expressed or implied, is made as to the accuracy of such opinions as compared to bid or actual costs incurred by the Client.
- (G) NFE may incorporate "design/build" concepts as a component of the construction plans. Where such concepts are used, the contractor, subcontractors, manufacturer, and/or supplier of the materials or equipment to be furnished assume design responsibility and liability for the applicable systems, equipment or materials furnished. Any "shop drawings" reviewed by NFE related hereto is limited solely for the purpose of determining that the general requirements have been met.
- (H) The information contained in this Proposal may be proprietary and shall not be disclosed to any parties outside of the Client's staff, partners, or be duplicated, used, or disclosed in whole or part for any purpose other than to evaluate the Proposal. Should the Proposal be accepted, the Client shall have the right to duplicate, use or disclose the information to the extent provided through a written agreement with NFE.
- (I) The survey only reflects those utilities which could be observed by the surveyor in the field at the time the survey was performed. NFE is not responsible for the accuracy of any structures, physical features, or utilities that were buried, covered with snow or debris, or had vehicles parked over them at the time the survey was performed. NFE will request a Miss Dig "Design Ticket" in accordance with Michigan Public Act 174 for topographic surveys and ALTA/NSPS Land Title Surveys that request item 11 (2016) or item 11(b) (2021) on Table A pursuant to the 2021 ALTA/NSPS Land Title Standards. Please note the Facility owner/operator is only required to provide general information regarding the location of underground facilities and does not have to make their facilities. The Client is responsible for arranging markings by the facility owner/operator prior to the survey if so desired so they can be located during the survey. Further, based upon the extended reporting period for underground utility owners to provide their records; the survey may not reflect all the underground utilities of record at the time the survey was issued. NFE is not responsible for updating surveys to reflect records received after the date it was issued. Nor is NFE responsible to locate utilities marked by utility companies after the date the survey was performed in the field. Any subsequent trips to locate markings or revisions to the survey drawing, to reflect records received after the date the survey was issued, will be an extra to the contract. The Client and/or their authorized agent shall verify with the Facility Owners and/or their authorized agents, the completeness and exactness of the utilities located on the survey.
- (J) The owner and/or authorized agent grants permission for the use of a UAS drone to conduct aerial photography of the property. Nowak & Fraus personnel are certified remote pilots by the FAA and our UAS's are fully insured. The drone's use is for the purpose of performing an ALTA/NSPS Land Title Survey and/or topographical survey and will not be used for any other private or commercial purpose without the consent of the owner.
- (K) Consultant shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project; the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to Consultant, to fulfill contractual responsibilities to Client or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction. This Agreement shall be governed exclusively by the laws applicable to the State of Michigan.

# Request for Taxpayer Identification Number and Certification

Item 3.

  
**Give Form to requester. Do not send to the IRS.**

▶ Go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9) for instructions and the latest information.

Print or type.  
See Specific Instructions on page 3.

**1** Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.  
**Nowak & Fraus PLLC**

**2** Business name/disregarded entity name, if different from above  
**Nowak and Fraus Engineers**

**3** Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.

Individual/sole proprietor or single-member LLC     C Corporation     S Corporation     Partnership     Trust/estate

Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ **P**

**Note:** Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

Other (see instructions) ▶

**4** Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) \_\_\_\_\_

Exemption from FATCA reporting code (if any) \_\_\_\_\_

*(Applies to accounts maintained outside the U.S.)*

**5** Address (number, street, and apt. or suite no.) See instructions.  
**46777 Woodward Avenue**

**6** City, state, and ZIP code  
**Pontiac, MI 48342-5032**

**7** List account number(s) here (optional)

Requester's name and address (optional)

## Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

**Social security number**

				-			-			
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**or**

**Employer identification number**

3	8	-	3	2	1	1	0	8	5
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**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

## Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

**Sign Here**    Signature of U.S. person ▶ *Marcie Couchman*    Date ▶ *1-2-24*

## General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9).

### Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
  - Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
  - Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
  - Form 1099-S (proceeds from real estate transactions)
  - Form 1099-K (merchant card and third party network transactions)
  - Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
  - Form 1099-C (canceled debt)
  - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.
- If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.*





**Downtown Development Authority of City of Madison Heights****Memorandum**

**Date:** April 12, 2024  
**To:** Downtown Development Authority Board Members  
**From:** Giles Tucker, Community Development Director  
**Subject:** Election of DDA Secretary

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**Officer Elections 2023**

In January 2023, Ruth Charlebois was elected as DDA Secretary. Now that she is resigned, we need to elect a Secretary for the remainder of her term which ends in January 2025. Our bylaws require that we hold officer elections every two years, and that the same person can serve in the same officer position for two consecutive terms.

**Staff Recommendations**

Staff recommends that the DDA board elect a new DDA Secretary to serve until January 2025 either at today meeting or on the Regular Meeting of June 18<sup>th</sup>.

**Downtown Development Authority of City of Madison Heights****Memorandum**

**Date:** April 11, 2024  
**To:** Downtown Development Authority Board Members  
**From:** Giles Tucker, Community Development Director  
**Subject:** Finance Report & Cash Summary

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Since our February 20<sup>th</sup> meeting significant payments, the DDA has made included Chamber of Commerce Quarterly payment of \$2500 and the renewal of our membership with Michigan Downtowns Association for \$225. Total fund balance to date is \$557,340.69.

At the Regular City Council Meeting on March 25<sup>th</sup> Green Meadows Landscape was awarded a three-year mowing and landscaping project with the City. This contract includes mowing and trash removal for the DDA. The total cost for this service will be \$21,000 with an optional \$1200 charge weed treatment & fertilizers. Excluding optional charges, the DDA can expect an increase of around \$1650 in additional costs compared to our longstanding contract with United Landscape.

Item 5.

PERIOD ENDING 04/30/2024

GL NUMBER	DESCRIPTION	2023-24 AMENDED BUDGET	YTD BALANCE		ACTIVITY FOR		AVAILABLE		% BDGT USED
			NORMAL	(ABNORMAL)	MONTH 04/30/2024 INCREASE (DECREASE)	NORMAL	(ABNORMAL)		
Fund 248 - DOWNTOWN DEVELOPMENT AUTHORITY									
Revenues									
Dept 000 - NA									
248-000-673-5008	FIXED ASSET CLEARING ACCOUNT	0.00	0.00		0.00		0.00		0.00
Total Dept 000 - NA		0.00	0.00		0.00		0.00		0.00
Dept 011 - PROPERTY TAXES									
248-011-402-4030	TAXES REAL OPERATING	168,166.00	191,084.88		(70,627.73)		(22,918.88)		113.63
248-011-410-4160	TAXES PERSONAL OPERATING	6,382.00	15,821.31		(2,743.79)		(9,439.31)		247.91
248-011-411-0000	DELINQUENT/MTT TAX REFUNDS - GENERAL	0.00	2.39		0.00		(2.39)		100.00
248-011-437-0000	TAXES IFT ACT 198	0.00	0.00		0.00		0.00		0.00
248-011-573-4159	PPT REIMBURSEMENT - STATE	0.00	0.00		0.00		0.00		0.00
Total Dept 011 - PROPERTY TAXES		174,548.00	206,908.58		(73,371.52)		(32,360.58)		118.54
Dept 023 - STATE SHARED REVENUES									
248-023-573-0000	LOCAL COMMUNITY STABILIZATION SHARING	39,077.00	19,866.79		0.00		19,210.21		50.84
Total Dept 023 - STATE SHARED REVENUES		39,077.00	19,866.79		0.00		19,210.21		50.84
Dept 025 - COUNTY SHARED REVENUES									
248-025-588-1000	COUNTY GRANT	0.00	0.00		0.00		0.00		0.00
Total Dept 025 - COUNTY SHARED REVENUES		0.00	0.00		0.00		0.00		0.00
Dept 044 - MISCELLANEOUS REVENUE									
248-044-665-5000	INTEREST EARNED	250.00	74.69		0.00		175.31		29.88
248-044-674-0000	DONATIONS/PRIVATE CONTRIBUTIONS	0.00	0.00		0.00		0.00		0.00
248-044-680-6701	MISCELLANEOUS REVENUE	0.00	191.27		0.00		(191.27)		100.00
Total Dept 044 - MISCELLANEOUS REVENUE		250.00	265.96		0.00		(15.96)		106.38
Dept 048 - TRANSFERS IN									
248-048-699-0000	TRANSFERS IN (FROM GEN FUND)	0.00	0.00		0.00		0.00		0.00
248-048-699-0244	TRANSFERS IN EDG	0.00	0.00		0.00		0.00		0.00
248-048-699-6000	TRANSFERS IN (FROM SAD)	0.00	0.00		0.00		0.00		0.00
Total Dept 048 - TRANSFERS IN		0.00	0.00		0.00		0.00		0.00
Dept 053 - PRIOR YEARS FUND BALANCE									
248-053-692-6970	USE OF FUND BALANCE	(17,270.00)	0.00		0.00		(17,270.00)		0.00
Total Dept 053 - PRIOR YEARS FUND BALANCE		(17,270.00)	0.00		0.00		(17,270.00)		0.00
TOTAL REVENUES		196,605.00	227,041.33		(73,371.52)		(30,436.33)		115.48
Expenditures									
Dept 863 - DOWNTOWN DEVELOPMENT AUTHORITY									
248-863-729-0000	FORMS AND PRINTING	500.00	0.00		0.00		500.00		0.00

Item 5.

PERIOD ENDING 04/30/2024

GL NUMBER	DESCRIPTION	2023-24	YTD BALANCE	ACTIVITY FOR	AVAILABLE	% BDGT USED
		AMENDED BUDGET	04/30/2024	MONTH 04/30/2024	BALANCE	
			NORMAL (ABNORMAL)	INCREASE (DECREASE)	NORMAL (ABNORMAL)	
Fund 248 - DOWNTOWN DEVELOPMENT AUTHORITY						
Expenditures						
248-863-730-0000	POSTAGE	0.00	0.00	0.00	0.00	0.00
248-863-766-0000	TOOLS AND SUPPLIES	0.00	0.00	0.00	0.00	0.00
248-863-807-0000	AUDIT FEES	2,383.00	2,700.51	0.00	(317.51)	113.32
248-863-817-0000	EVENTS	500.00	350.00	0.00	150.00	70.00
248-863-818-0000	CONTRACTUAL SERVICES	74,395.00	107,282.16	0.00	(32,887.16)	144.21
248-863-818-0001	DDA MARKET ANALYSIS	0.00	0.00	0.00	0.00	0.00
248-863-818-5000	BLIGHT REMOVAL - SIGN GRANT PROGRAM	5,000.00	0.00	0.00	5,000.00	0.00
248-863-818-5001	BLIGHT REMOVAL - FACADE IMPROVEMENT	10,000.00	0.00	0.00	10,000.00	0.00
248-863-818-5002	BLIGHT PROPERTY	0.00	0.00	0.00	0.00	0.00
248-863-818-5003	BLIGHT REMOVAL - PROPERTY ACQUI	0.00	0.00	0.00	0.00	0.00
248-863-818-5004	PERM ID PROGRAM	0.00	0.00	0.00	0.00	0.00
248-863-826-0000	LEGAL FEES	0.00	0.00	0.00	0.00	0.00
248-863-826-2000	HOURLY RATE-LEGAL	0.00	0.00	0.00	0.00	0.00
248-863-832-1000	MAINTENANCE-BERM AREA	17,500.00	11,451.68	0.00	6,048.32	65.44
248-863-832-1001	MAINTENANCE - ROW TRASH	3,500.00	1,500.00	0.00	2,000.00	42.86
248-863-921-0000	ELECTRIC	1,000.00	380.85	0.00	619.15	38.09
248-863-944-0000	MOTOR POOL CHARGES	0.00	0.00	0.00	0.00	0.00
248-863-944-1000	DEPT OF PUBLIC SERVICES CHARGES	0.00	0.00	0.00	0.00	0.00
248-863-955-8640	CONFERENCES AND WORKSHOPS	1,500.00	0.00	0.00	1,500.00	0.00
248-863-958-0000	MEMBERSHIPS AND DUES	1,045.00	1,045.00	0.00	0.00	100.00
248-863-960-9570	SUBSCRIPTIONS AND MAGAZINES	0.00	0.00	0.00	0.00	0.00
248-863-981-0000	COMPUTER EQUIPMENT	0.00	0.00	0.00	0.00	0.00
248-863-987-0000	IMPROVEMENTS	20,605.00	1,981.60	0.00	18,623.40	9.62
248-863-987-0001	ALLEY IMPROVEMENTS	0.00	0.00	0.00	0.00	0.00
248-863-987-0002	PROPERTY ACQUIS/DEMO	35,000.00	0.00	0.00	35,000.00	0.00
248-863-987-0003	PATINA PLACE - BRA STREETSCAPE IMPRVMNT	0.00	0.00	0.00	0.00	0.00
248-863-987-0004	MADISON TOWN CTR - BRA ST IMPROV	0.00	0.00	0.00	0.00	0.00
248-863-987-0006	11 MILE/JOHN R ROAD IMPROVEMENTS	0.00	0.00	0.00	0.00	0.00
248-863-987-0011	IMPROVEMENTS - BICYCLE RACK PROGRAM	0.00	0.00	0.00	0.00	0.00
248-863-987-0012	DDA BUSINESS GRANT	0.00	0.00	0.00	0.00	0.00
Total Dept 863 - DOWNTOWN DEVELOPMENT AUTHORITY		172,928.00	126,691.80	0.00	46,236.20	73.26
Dept 965 - TRANSFERS OUT						
248-965-995-2272	TRANSFER TO LOCAL ST	0.00	0.00	0.00	0.00	0.00
248-965-995-4000	TRANSFER TO SAD REVOLVING	0.00	0.00	0.00	0.00	0.00
248-965-995-6000	TRANSFER TO GENERAL FUND	23,677.00	23,677.00	0.00	0.00	100.00
248-965-995-9991	TRANSFER TO MAJOR STREETS	0.00	0.00	0.00	0.00	0.00
248-965-998-9990	PAYING AGENT FEES	0.00	0.00	0.00	0.00	0.00
Total Dept 965 - TRANSFERS OUT		23,677.00	23,677.00	0.00	0.00	100.00
TOTAL EXPENDITURES		196,605.00	150,368.80	0.00	46,236.20	76.48
Fund 248 - DOWNTOWN DEVELOPMENT AUTHORITY:						
TOTAL REVENUES		196,605.00	227,041.33	(73,371.52)	(30,436.33)	115.48
TOTAL EXPENDITURES		196,605.00	150,368.80	0.00	46,236.20	76.48
NET OF REVENUES & EXPENDITURES		0.00	76,672.53	(73,371.52)	(76,672.53)	100.00

Fund 248 DOWNTOWN DEVELOPMENT AUTHORITY

GL Number	Description	Balance
<b>*** Assets ***</b>		
248-000-001-1000	CLAIM ON CASH	494,506.69
248-000-001-1003	CASH - CHASE SAVINGS	0.00
248-000-003-0000	INVESTMENTS	53,960.87
248-000-040-0391	ACCOUNTS RECEIVABLE-MISC	0.00
248-000-041-1000	DELINQUENT RECEIVABLE	8,873.13
248-000-078-0680	DUE FROM STATE GOVERNMENT	0.00
<b>Total Assets</b>		<b>557,340.69</b>
<b>*** Liabilities ***</b>		
248-000-202-0000	ACCOUNTS PAYABLE	0.00
248-000-211-2100	CONTRACTS/RETAINAGE PAYABLE	0.00
248-000-214-2150	DUE TO OTHER FUNDS	0.00
248-000-268-0000	ESCHEATED FUNDS	0.00
248-000-299-9999	SUSPENSE	0.00
248-863-211-2100	CONTRACTS PAYABLE	0.00
<b>Total Liabilities</b>		<b>0.00</b>
<b>*** Fund Balance ***</b>		
248-000-390-0000	FUND BALANCE	480,668.16
248-000-398-0000	ASSIGNED-SUBSEQUENT YRS EXP	0.00
<b>Total Fund Balance</b>		<b>480,668.16</b>
<b>Beginning Fund Balance</b>		<b>480,668.16</b>
<b>Net of Revenues VS Expenditures</b>		<b>76,672.53</b>
<b>Ending Fund Balance</b>		<b>557,340.69</b>
<b>Total Liabilities And Fund Balance</b>		<b>557,340.69</b>

04/11/2024 08:49 AM  
User: Gtucker  
DB: Madison Heights Dc

CASH SUMMARY BY FUND FOR CITY OF MADISON HEIGHTS  
FROM 07/01/2023 TO 04/11/2024  
FUND: 248  
CASH AND INVESTMENT ACCOUNTS

Item 5.

Fund	Description	Beginning Balance 07/01/2023	Total Debits	Total Credits	Ending Balance 04/11/2024
248	DOWNTOWN DEVELOPMENT AUTHORITY	476,265.11	368,614.29	296,411.84	548,467.56

**Downtown Development Authority of City of Madison Heights**

**Memorandum**

**Date:** April 12, 2024  
**To:** Downtown Development Authority Board Members  
**From:** Giles Tucker, Community Development Director  
**Subject:** Update on Ongoing Projects

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A Grand Opening for the Green House Salon at 26040 John R Rd is scheduled for Earth Day April 22<sup>nd</sup> at 11:30AM. Linda Williams also referred our Façade & Sign Grant programs to the new business owner. I sent out our new applications and guidelines last week.

Linda also referred the Façade & Sign Grant program to longtime DDA area business John R Glass who is seeking to make improvements to their storefront. I spoke with him last week and he is beginning to gather quotes and complete his application.