### Memorandum

### 11 Mile Rd Streetscape Plan Update

The 11 Mile Streetscape plan was developed to identify opportunities to enhance the pedestrian environment, better use public space, and create more of a "downtown feel" along 11 Mile Road in the Downtown Development Authority (DDA) area. The project area begins at Stephenson Highway and ends at Lorenz. The plan provides an overall vision of the corridor. It offers greater detail, including conceptual engineering for the first phase, which is called the "focus area" of the project and is located between John R Road and Lorenz. The DDA has budgeted \$400,000 in FY24-25 for this project to be used as a match for grant funds. The City's CDBG PY24 application also includes an additional \$66,756 in sidewalk improvements to be used in this project area. The plan's development was officially kicked off with an Open House held at Woodpile BBQ in October 2023.

The primary grant funding source that city staff targeted for this project was MDOT's Transportation Alternatives Program (TAP) grant. As the Streetscape plan began to take shape, the city provided the plan concepts to MDOT staff for feedback in preparation for grant submittal. Based on these conversations, staff learned that a TAP grant would cover none of the costs associated with the on-street parking and that while we were proposing widening the existing 6ft sidewalks to 8ft, these paths would need to be increased to 10ft multi-use paths to be an eligible grant expense.

In April 2024, the Streetscape Plan was completed by Nowak Fraus and MKSK and included a design for a 4-lane configuration with a landscaping median for the focus area. The only difference between this design and the "preferred option" based on the feedback of the October 2023 Open House was that it now proposed a 6ft wide sidewalk on the south side of 11 Mile and a TAP grant-eligible multi-use path on the north side of 11 Mile. Recognizing the limited amount of TAP grant-eligible project activities with this option and the costs associated with constructing the on-street parking in the existing right-of-way, the DDA board decided to request a 3-lane configuration to the existing Streetscape plan, including a traffic study and cost comparison. This addition was completed on June 3<sup>rd</sup>.

# **11 Mile Road Study Results**

The most significant component of the added a 3-lane option to the streetscape plan is the Road Diet Corridor Study of 11 Mile Rd conducted by Feis & Vandenbrink (F&V). The Road Study examined the traffic operations and capacity of 11 Mile Rd from Stephenson Hwy to Dequindre. This analysis aimed to determine the feasibility of a road diet and determine what improvements, if any, are recommended to accommodate a 3-lane road configuration.

With the current 4-lane configuration (without landscape medians), all movements at the studied intersections operated acceptably except for Dequindre and 11 Mile Rd, which operated at unacceptable levels during peak periods. V&F indicates that the signal, under the jurisdiction of Macomb County, operates with a 180-second cycle, causing vehicles to experience delays.

The analysis for reducing to three lanes throughout the corridor found that all intersection approaches and movements would continue to operate in a manner like the existing conditions of 11 Mile Rd, with the exemption of Dequindre & 11 Mile Rd. With the 3-lane configuration, it is anticipated that there could be up to a 3-minute delay in the Westbound right turn lane during the school PM peak hour.

In addition to a 3-lane analysis, the F&V study also projected how a 3-lane roadway would operate 20 years from now (2044), given annual population growth estimates. The study found that nearly all observed intersections would see traffic conditions similar to those of the current four-lane configuration. However, traffic simulations found that long periods of vehicle queues would be present at AM, School PM, and PM peak periods at Dequindre & 11 Mile Rd. In addition, the simulation found that there could be up to 4 minutes of delay during school PM peak hour at John R & 11 Mile Rd.

The study concluded that for the most part, a 3-lane configuration throughout the entire 11 Mile corridor has minimal impact on the (6) intersections that were studied, apart from some delays at Dequindre and John R. To help mitigate existing delays already present at Dequindre & 11 Mile Rd, F&V recommended that the signal cycle be reduced to 120 seconds and that the westbound approach be restriped to include a left turn lane, through lane and a right turn lane. The study also found that a 3-lane configuration is anticipated to reduce **crash rates to 15-16% annually**. Based on these findings, F&V recommended that the 3-lane configuration be implemented instead of the 4-lane configuration. The complete Road Diet Corridor Study, 3-lane conceptual design, conceptual engineering, and engineering cost estimates are attached to this memo for review.

# 3-Lane v. 4-Lane Comparison

The primary benefit of the 4-lane configuration that includes a landscaping median is that it provides modest improvements to the beautification of the downtown area without a significant change to the existing roadway. The landscaping median throughout the focus areas will be around 4-6 feet, slightly narrowing existing lanes. However, this configuration has considerable costs, including more excavation and installation of aggregate within the ROW for on-street parking. Further, because the distance across the roadway remains the same, additional crosswalks require more robust signal structures (HAWK signals). The total costs, including landscaping, are estimated to be **\$1,138,896.50 for phase 1**.

By comparison, the 3-lane option is preferred because of its considerable cost savings, improvements to pedestrian safety, reduced crash rates, and the likelihood of its features being TAP grant-eligible. A 3-lane configuration uses less ROW to add in the on-street parking; this means less excavation and aggregate costs. Further, it leaves more room for pathways or amenities such as bike racks, benches, and enhanced features for transit stops. The 3-lane option results in inherent improvements to pedestrian safety because of its bumped-out intersection and the fact there are fewer lanes to cross. This makes it easier for pedestrians to get to downtown businesses, transit stops, and schools. The shorter distances also eliminate the need for higher-intensity crosswalks such as HAWK signals. Finally, a 3-lane option will likely have more costs covered by the TAP grant. The TAP grant covers pedestrian infrastructure such as bump-outs, including curb & gutter and water tap costs. If we successfully receive the Main Street Placemaking grant,

the DDA will be positioned better to use the TAP grant for future project phases. **The total cost of a 3lane configuration including landscaping is estimated to be \$849,703.75.** 

# Main Street Oakland County Placemaking Grant Opportunity & DDA June 18th Recommendation

On June 4th, Main Street Oakland County contacted staff to inform them that the Main Street Oakland County Placemaking grant had additional funds available for downtown projects and asked if the 11 Mile Streetscape plan was developed enough to apply for a matching grant (60% City/ 40% County) by June 18<sup>th</sup>. City staff was able to gather all necessary information, a letter of support from the City Manager and a certified resolution from the DDA recommending the City Council support the three-lane configuration of the 11 Mile Streetscape Project and to support City staff in applying for the Placemaking Grant.

On July 18<sup>th</sup> the Oakland County staff informed the city the Board of Commissioners approved our Placemaking Grant application for a total grant request of \$313,981.50. To accept this grant and to begin preparing implementation of the project, the City Council must authorize the City Manager to sign the included interlocal agreement between the City of Madison Heights and Oakland County.

# **Staff Recommendation**

Staff recommends the following two motions:

- That City Council approve the three-lane configuration of the 11 Mile Streetscape Project between John R and Lorenz and to authorize the City Manager to sign the included interlocal agreement between the City of Madison Heights and Oakland County accepting the Oakland County Placemaking grant for a total \$313,981.50.
- That City Council approve a budget amendment to increase the DDA expenditure line item 248-863-987-0006 11 Mile/John R Road Improvements by \$313,981.50 for a new total of \$713,981.50 and to increase the DDA revenue line item 248-025-588-1000 County Grant to a total of \$313,981.50.

# Attachments:

- 1. Oakland County Placemaking Grant Program Agreement
- 2. Cost Estimates 11 Mile Corridor Traffic Study
- 3. Project Support Letters & DDA Certified Resolution