

CITY OF ROCHESTER HILLS

ENGINEERING DESIGN STANDARDS

CHAPTER 7

Widening Lanes

A. Plans and Specifications – Submittal Procedure

1. A Traffic Impact Study (TIS) or a Traffic Impact Assessment (TIA) may be required by the City prior to site plan approval, and shall conform to the MDOT Geometric Design Guidance document sections 1.2.4 and 1.2.5 dated September 2017.

<https://mdotjboss.state.mi.us/TSSD/getSubCategoryDocuments.htm?prjNumber=1403850&category=Geometrics&subCategory=Correspondence/Guidelines&subCategoryIndex=subcat0Geometrics&categoryPrjNumbers=1403850,140385>

The requirement for a TIS may be waived/modified by the City's Engineering Division provided that documentation is submitted considering and verifying the following factors:

- a. Roadway improvements are scheduled, which are expected to mitigate any impacts associated with the proposed project.
 - b. The existing level of service along the roadway is not expected to drop below C due to the proposed project.
 - c. The existing level of service is not expected to be significantly impacted by the proposed project due to specific conditions at this location.
 - d. A similar traffic study was previously performed for the site and is still considered applicable.
2. Widening Lane Improvement Plans and Specifications must be submitted to and approved by the Department of Public Services prior to receiving approval for construction in accordance with *Chapter 1, General Requirements and Submittals*, and must illustrate the following:
 - a. All improvements required by the appropriate road agency maintaining jurisdiction of the particular road section, i.e. Road Commission for Oakland County (RCOC), Michigan Department of Transportation (MDOT), or the City of Rochester Hills.
 - b. Proposed treatment of drive/street entrances and exits to and from public roads, which comply with typical RCOC, MDOT and City details.
 - c. Existing and proposed public right-of-way throughout the extension of proposed improvements, if any.

B. Plans and Specifications – Design Criteria

1. Any development that will contribute traffic flow on existing RCOC, MDOT, or City roads may be required to construct widening lane improvements based on RCOC, MDOT, and City guidelines. City guidelines shall typically conform to the RCOC requirements. However, City requirements may exceed those of RCOC and MDOT based upon projected or forecasted traffic volumes.

2. The widening lane improvements of existing roads at the intersections of new streets and driveways may include, but are not limited to:
 - a. Right-turn acceleration and deceleration lanes.
 - b. Center left-turn lanes.
 - c. Left-turn passing lanes.
 - d. Ultimate road re-alignment.
 - e. Storm drainage.
 - f. Road base drainage upgrades.
 - g. Traffic signage and/or pavement markings.
 - h. All other items necessary to facilitate the construction of the required pavement section.

Note: Center left-turn lanes are strongly encouraged over left-turn passing lanes as determined by the City.

3. Additionally, off-site road improvements may be required, if warranted by traffic studies and/or RCOC, MDOT, or City guidelines, to provide the necessary capacity and safety requirements.
4. The proposed widening improvements shall match existing pavement type, concrete or hot mix asphalt (HMA), and pavement thickness; unless approved otherwise by City Engineer or other applicable road agency.
5. Geometric configurations shall be in accordance with applicable road agency guidelines for widening lane improvements, including MDOT's *Access Management Guidebook*.
6. A review of fixed object clear zones may be required to verify that appropriate clearances are maintained from objects such as trees, utility poles, hydrants, etc. When such objects are within the appropriate clear zones they shall be required to be removed/relocated, unless otherwise approved by the City Engineer or other applicable road agency.

B. Proposed Improvements within Limited Rights-of-Way

1. When sufficient public right-of-way does not exist for the construction of required widening lanes, the owner or builder shall dedicate the necessary right-of-way to the road agency owning the roadway to facilitate the construction, at the developer's cost, of the proposed improvement.
2. When the required improvements extend beyond the ownership of the subject site(s) and public right-of-way is insufficient, the owner shall obtain the necessary off-site easements/right-of-way. If the owner has exhausted all avenues for obtaining the easements/right-of-way, then the owner shall deposit the cost of providing these widening lane improvements with the City's Treasury Department. The cost of the required improvements shall be subject to review and approval by the City. These funds will be used at a later date when the right-of-way becomes available to place the required widening lanes.
3. As an alternative, these funds may be used at a later date as a contribution toward a larger project. If deemed appropriate by the City, a recordable agreement to be in favor of a future special assessment project for road improvements may be substituted for the cash deposit.