

2024-02-20
Project: (230422)

Nick Verhoeven, P.Eng.
Director of Public Works
Municipality of Lambton Shores
9575 Port Franks Road
Thedford, ON N0M 2N0

Dear Mr. Verhoeven:

**RE: MAIN STREET EAST PEDESTRIAN CROSSING STUDY, GRAND BEND
PLACEMENT OF PEDESTRIAN CROSSOVER ON WEST LEG AT GILL ROAD
MUNICIPALITY OF LAMBTON SHORES**

Background

The Municipality of Lambton Shores (Municipality) retained Paradigm Transportation Solutions Limited (Paradigm) to complete a pedestrian crossing study for Main Street East (Lambton County Road 81) between Gill Road and Tattersall Lane in the community of Grand Bend. The study, completed in August 2023, concluded that:

*A controlled pedestrian crossing (i.e., traffic control signals or pedestrian crossover (PXO)) is not warranted for Main Street East between Gill Road and Tattersall Lane from a vehicular or pedestrian volume perspective. Notwithstanding, the subject road section may still be a candidate for a PXO based on pedestrian desire lines attributed in part to students and parents walking to/from Grand Bend Public School and residents travelling to/from commercial uses in the vicinity. **The east leg of the Main Street East and Gill Road intersection would be the preferred location for the controlled crossing if the Municipality were to consider implementing a PXO in the study area.***¹ (emphasis added)

During deliberations on the 2024 budget, Municipal Council apportioned funding to construct the PXO. Prior to moving forward with implementation, Municipality staff has requested an opinion on whether the west leg of the Main Street East and Gill Road intersection would also provide an acceptable location for the crossing, given feedback received from the community has indicated a preference for the west side placement.

¹ Paradigm Transportation Solutions Limited, *Main Street East Pedestrian Crossing Study*, p.7 (Paradigm, August 2023)

Assessment

Placing the PXO on the west leg of the intersection would still satisfy the objective of providing a controlled pedestrian crossing of Main Street East at Gill Road. The path of access to and egress from the crossing would differ, though, as discussed below.

For vehicles, the PXO placement has different consequences. A west side location would conflict with/impede northbound lefts from Gill Road and eastbound rights from Main Street East, whereas the east side placement would impact northbound rights from Gill Road and westbound lefts from Main Street East (both placements affect eastbound and westbound through movements on Main Street East the same). The traffic counts collected in June 2023 for the original pedestrian crossing study did not include turning movement volumes, which precludes an assessment of relative impact. That said, it is unlikely the consequences would be sufficiently different (or pertinent) to affect the PXO placement decision.

The presence of a sidewalk on the west side of Gill Street south of the 81 Crescent Street access road supports placement of the PXO on the west leg of the intersection. However, the sidewalk does not extend from the access road to the corner, which presents accessibility and safety concerns for pedestrians wishing to continue north to cross Main Street East. The presence of hydro/telephone poles and guy wires, proximity of the adjacent park fence, topography of the grassed area, and large curb corner radius limit the physical space available to extend the sidewalk to a west leg crossing. It would be difficult to achieve the minimum sidewalk width and cross-slopes specified in the Integrated Accessibility Standards (O.Reg. 191/11) of the *Accessibility for Ontarians with Disabilities Act* (AODA)² under existing conditions.

The location on the north side of Main Street East where a west leg PXO would connect to the existing sidewalk also poses challenges from an accessibility perspective. In addition to requiring a curb cut, the landing length would not meet requirements set out in the AODA Integrated Accessibility Standards due to the cable guide rail and hydro pole guy wires in place. Although gravel surfaced, the proposed landing location for an east leg crossing is not similarly impeded.

The Municipality is considering changes to the intersection geometry with the PXO installation, as shown in the design concept attached as **Figure 1**. The proposed modifications should address the sidewalk connectivity issues noted above, assuming a sidewalk width of at least 1.8 metres to allow for wheelchair and mobility scooter accessibility. The Municipality will need to revise the design to determine if a more accessible landing location is feasible with the PXO placed on the west leg, as the plan assumed a pedestrian crossing east of Gill Road as originally contemplated. Creating a suitable location would appear to involve relocating the hydro pole guys wires (and possibly the pole), removing/moving the guide rail and sign posts, regrading the area, and hard surfacing (paving) the space. The AODA Integrated Accessibility Standards specifies the required dimensions for the landing.

² Government of Ontario, *Accessibility for Ontarians with Disabilities Act*, (King's Printer for Ontario, May 2023)



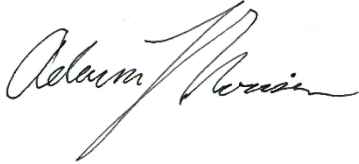
Conclusions and Recommendations

The west leg of the Main Street East and Gill Road intersection would be an acceptable location for the proposed PXO provided the Municipality extends the existing sidewalk from the 81 Crescent Street access road to the corner and provides an accessible landing location on the north side of the road.

The Municipality should revise the design concept shown in **Figure 1** to confirm the suitability of the west leg PXO placement and that the configuration complies with the AODA Integrated Accessibility Standards.

Yours very truly,

PARADIGM TRANSPORTATION SOLUTIONS LIMITED



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