Western Road / Sarnia Road / Philip Aziz Avenue Environmental Assessment

Integrated Transportation Community Advisory Committee Meeting

June 15, 2022

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PIC #2

The Purpose of PIC#2 will be to:

- Present the alternative design concepts
- Present the evaluation of alternative design concepts
- Solicit feedback

Study Area

Project Extents

- Western Rd from Huron College entry (north) to Platts Ln (south)
- Sarnia Rd / Philip Aziz Ave corridor from Sleightholme Ave (west) to the Thames River (east)
  - Coombs Ave to Sleightholme Ave was added after PIC#1
  - This additional piece of Study area allows for the existing cycling lanes to the west to be extended all the way to the East Limits of the Study Area
- Coombs Ave (previous west limits)

Problem/Opportunity Statement

Problem

- The City of London Transportation Master Plan (2030 TMP) identified the need to improve the Western Rd and Sarnia Rd/Philip Aziz Ave intersection in the next 5 years.
- This intersection accommodates approximately pedestrians, cyclists, transit routes carrying thousands of passengers and over 41,000 vehicles (per day).
- The intersection experiences traffic congestion, safety concerns, increased delays and decreasing levels of service for all users and this will continue if left untreated.
- The existing storm drainage in the area does not meet current design standards and requires upgrades.

Opportunity Statement

- Develop a range of planning and design alternatives that can improve pedestrian and cyclist facilities and safety, improve intersection operations, and provide additional capacity by removing constraints.
- Improve continuity with Western Road north and south of the study area, address stormwater drainage and enhance streetscape conditions.
- Consult the public and agencies and solicit feedback to select the best plan for the future.
- Follow the City of London's 'Complete Streets' guidelines, 'Urban Design' guidelines, and Western University's Master Plan Vision, to potentially create a gateway to the campus.
- Create a street/intersection that is as functional and comfortable as possible for all users (students, children, seniors, cyclists, motorists, transit users and pedestrians)

Traffic Conditions

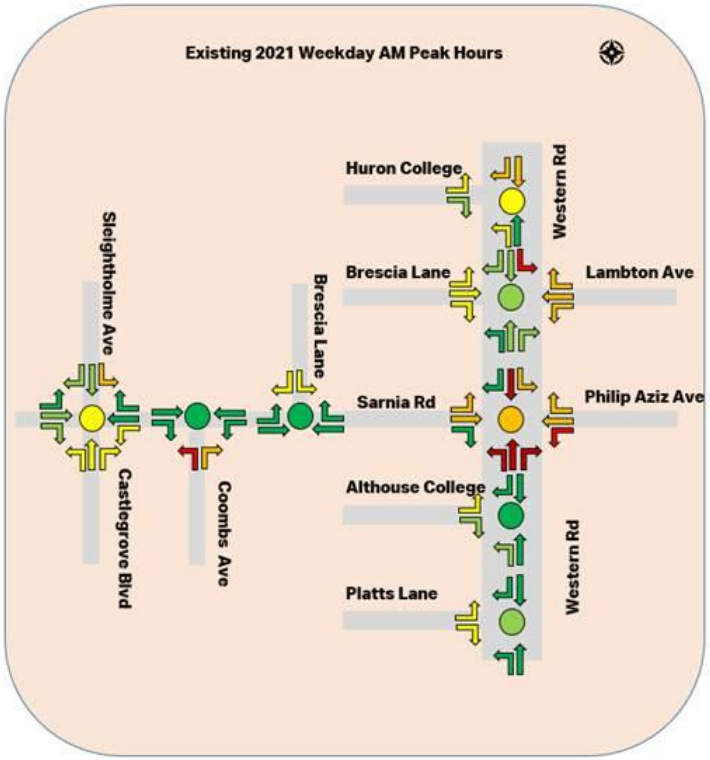
Average Daily Traffic

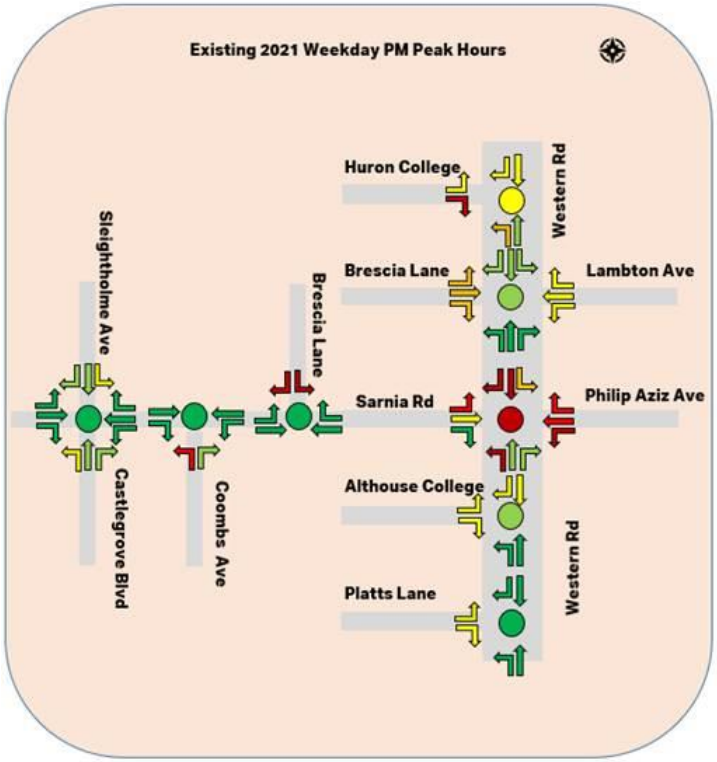
- Western Rd – 28,500 vehicles per day
- Sarnia Rd – 24,000 vehicles per day

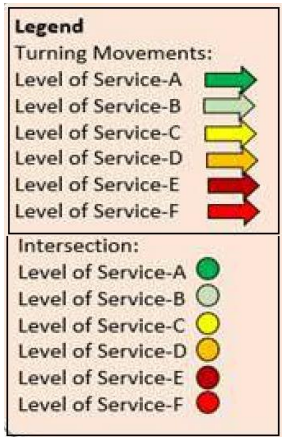
Primary trip generating/destination area

- Springett parking lot

The current LOS along the study corridor is illustrated in these figures for the peak travel times: morning (AM) and evening (PM).







Issues / Items to be Aware of

- No accommodation for future Rapid Transit.
- Buried Services:
  - Upsize watermain to 400 mm dia. on Western Rd from Platts Ln to Sarnia Rd.
  - Connect sanitary lift pump station on Philip Aziz Ave to Western Rd.
  - New stormwater piping (Western Rd and Philip Aziz Ave) with outfall to Thames River.

Design Alternatives

Philip Aziz Ave

1. Full Urban Cross Section with reconstructed entrance to Philip Aziz property.
2. **Full Urban Cross Section with relocated entrance to Philip Aziz property. Recommended**

Sarnia Rd

1. Maintain Existing (no dedicated bicycle lanes).
2. **Extend bicycle lanes to Sleightholme Ave. Recommended**

Intersection Options

1. Roundabout
2. Pedestrian Tunnel
3. Double left turn lane with typical pedestrian crossway.
    A. Typical pedestrian crossway.
    B. Scramble pedestrian crossing.
4. **Standard single left turn lane. Recommended**
    A. Typical pedestrian crossway. Recommended
    B. Scramble pedestrian crossing.

Design Alternatives Continued

Western Road

1) **Extended SB turn lane, added bus bays, active transportation improvements**: **Recommended**

A. Active Transportation in ROW. **Recommended**

B. Active Transportation in ROW and university property.

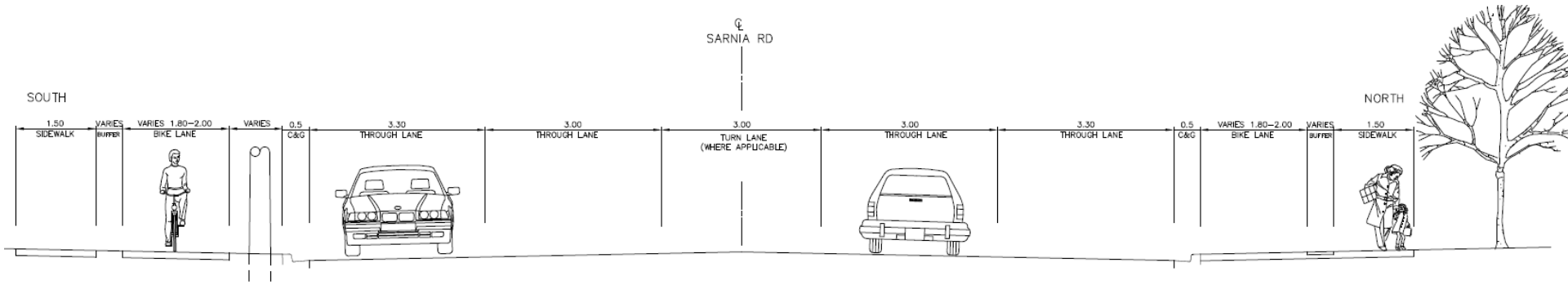
2) Maintain existing SB turn lane, added bus bays, active transportation improvements:

A. Active Transportation in ROW.

B. Active Transportation in ROW and university property.

Sarnia Rd – Design Summary

- Maintain the current 4 lane configuration.
- Extend bicycle lanes to Sleightholme Ave to connect to the existing lanes.
- Bicycle lanes will be raised.
- Utilizes existing generous ROW for improving active transportation.
- No utility relocation (*utilizing split sidewalk and bikeway arrangement on south side where necessary, between poles*), except for minor work involving relocation of some guy poles.
- Minor regrading adjacent to existing retaining wall on north side.
- Some (minor) loss of trees along the corridor.
- Small property taking area on north side.
- Reconstruction of bus stops (with bus pads).



TYPICAL SECTION SARNIA ROAD

Sarnia Rd – Design Summary

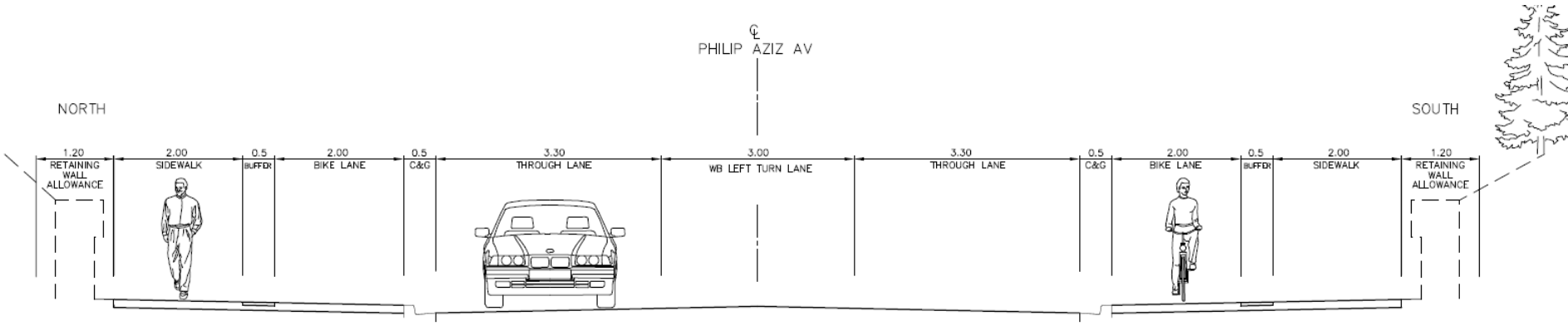
- Insert Plan view drawing

Philip Aziz Ave - Existing

- 2 lanes, short left turn lane to Western Rd, no sidewalks, no bike lanes.
- Gabion wall, property entrance, overhead service, undersized storm sewer.

Philip Aziz Avenue – Design Summary

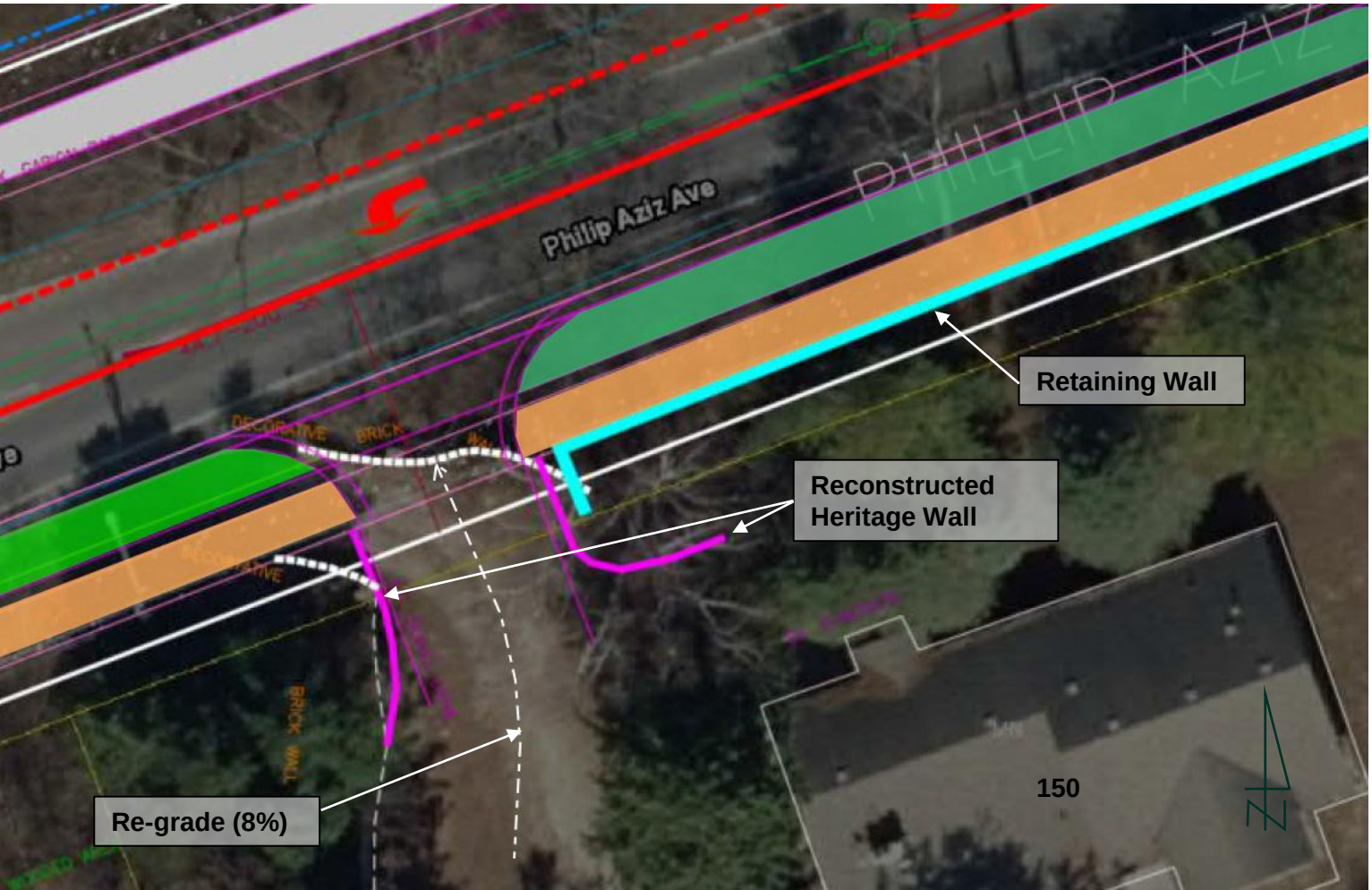
- Urban Cross Section recommended with reconstructed/realigned Philip Aziz property gate/entrance
- Overhead Services (south) relocation (burial)
- Retaining walls (N+S) with fence
- Increased left turn lane length
- Loss of vegetation (no SARs)
- Property
  - N+S sides of road
  - Area at Thames River
- Stormwater Outfall relocation
- Reconstruct bus stop (just east of Western Rd)



TYPICAL SECTION PHILIP AZIZ AVENUE

Philip Aziz Ave – Property Entrance Concept

- Realigned for maintenance and fire access only (8% grade required)
- Reconstruct / reconfigure wall (HIA required)

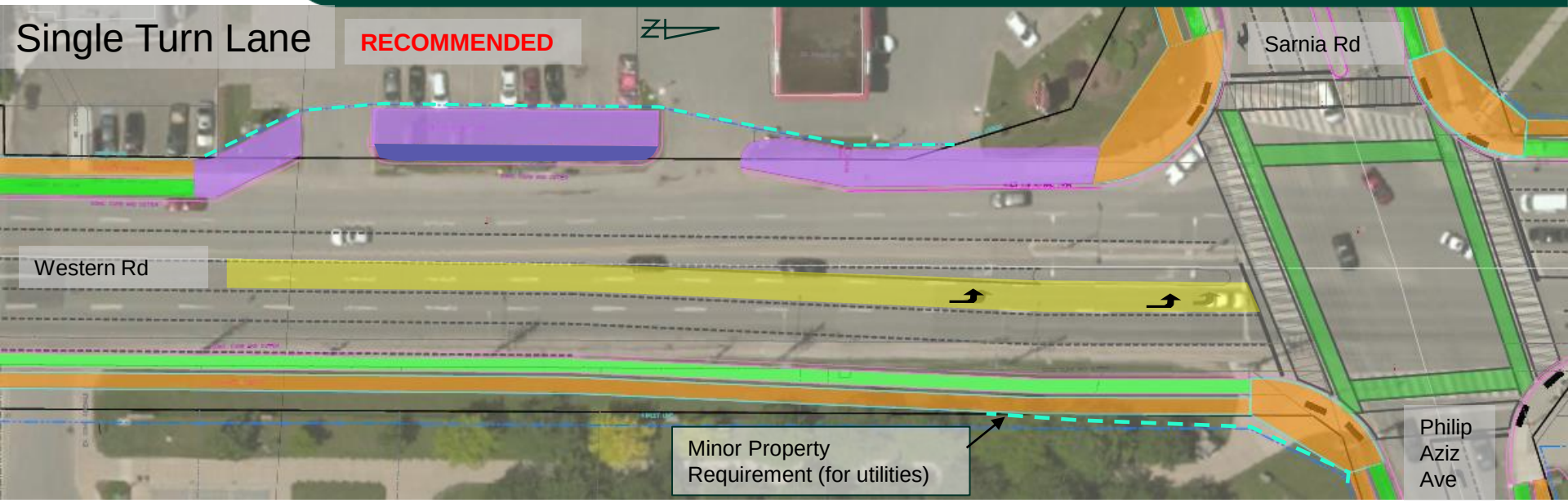


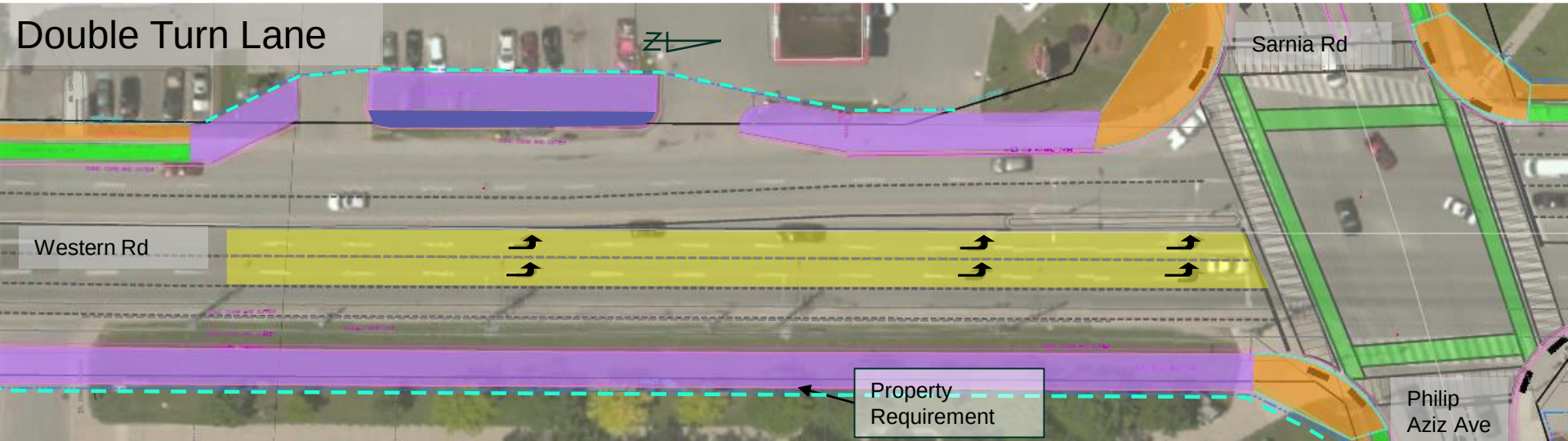
Intersection - Alternatives & Traffic

Alternatives for Western Rd / Sarnia Rd / Philip Aziz Ave

1. Single left turn lane with typical pedestrian crosswalk
2. Single left turn lane with scramble pedestrian crosswalk
3. Double left turn lanes with typical pedestrian crosswalk
4. Double left turn lanes with scramble pedestrian crosswalk

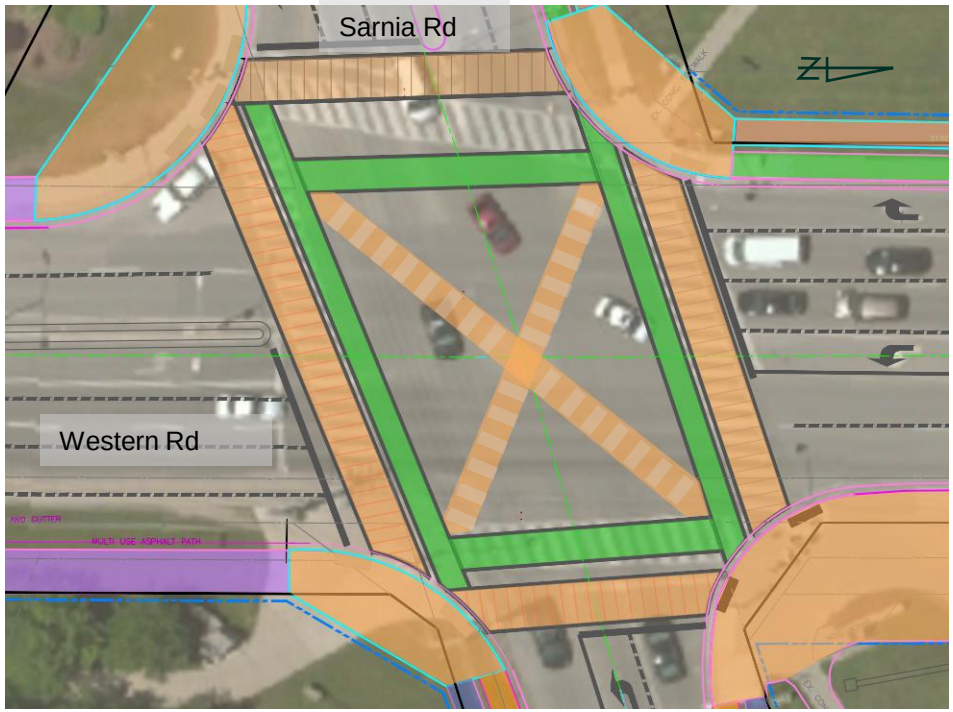
Intersection – Turn Lanes





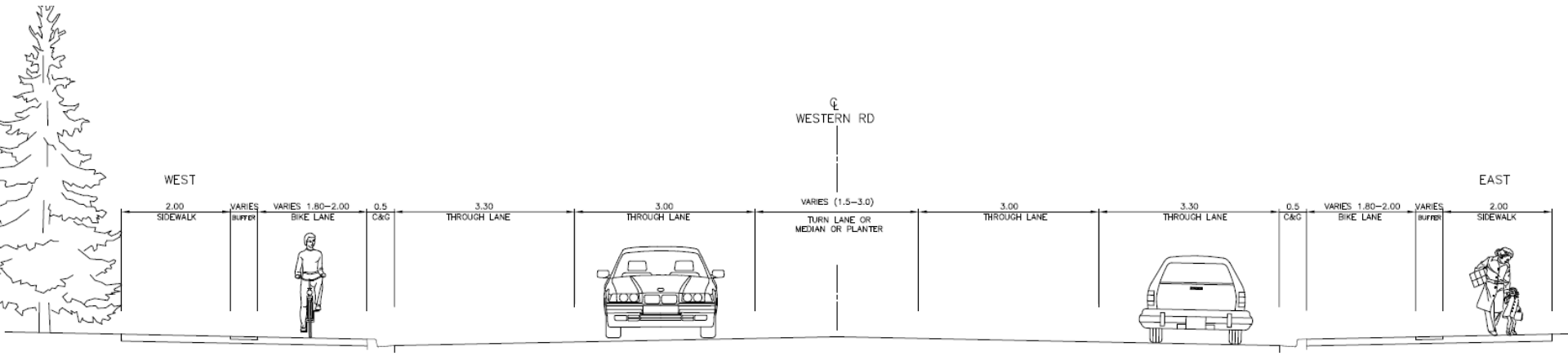
Intersection – Pedestrian Movement (Scramble)

- Assessment of the pedestrian benefit for scramble crosswalk is difficult using London's approach for multi-modal level of service (MMLOS) for intersections (other jurisdictions comparison methods/guidelines potentially could be used).
- Other potential issues with pedestrian phased timing, intersection size, integration with bicycle movement, etc. require more sophisticated analysis review to support a decision for scramble crosswalk.
- Maintain Standard Intersection



Western Rd – Design Summary

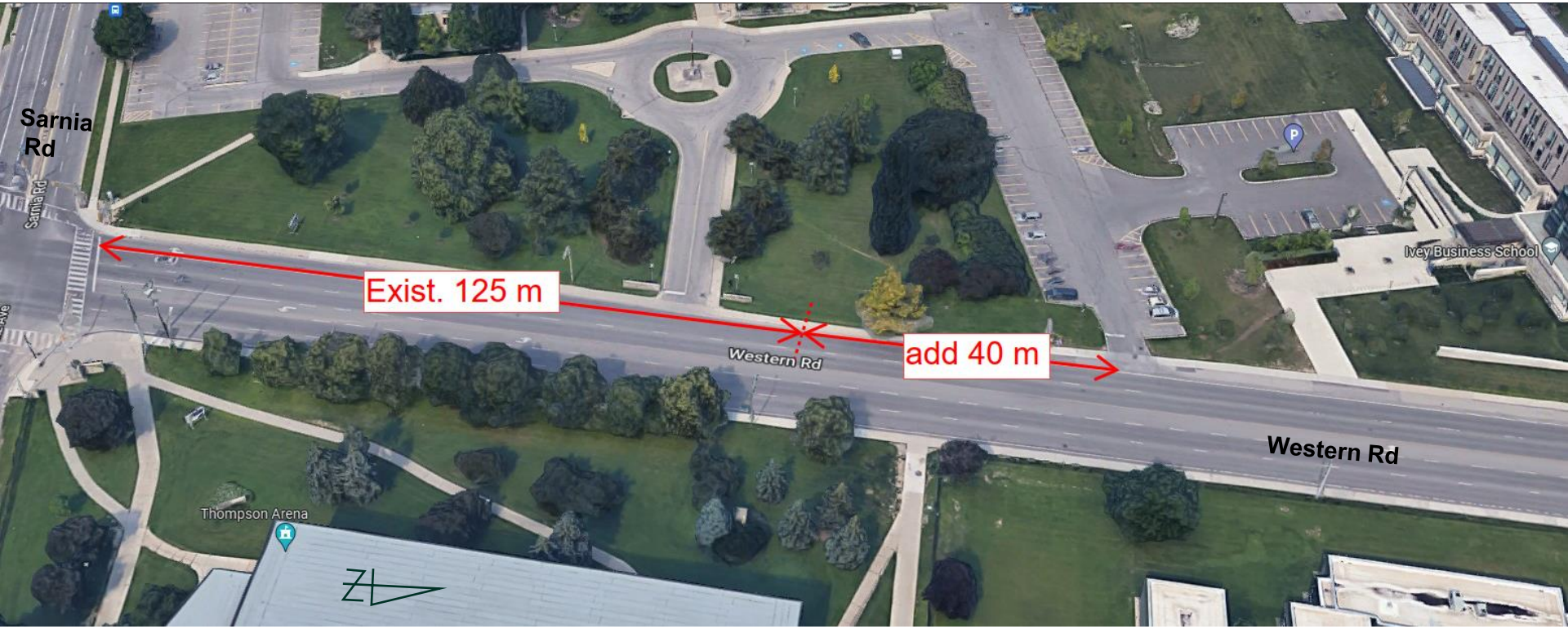
- Connections with existing active-transportation facilities (N&S ends)
- Existing vs Extended Southbound Turn Lane
- Adding bus bays (requires property) and maintaining other bus stops
- Active transportation in ROW vs combination (on university property)
- Opportunity for median planters south of Lambton Drive (40 m)
- Relocation of numerous street light poles and guy poles/wires along entire length
- Hydro pole relocation – east side (from Essex Hall to Philip Aziz Ave)
- Property required throughout the corridor



TYPICAL SECTION WESTERN ROAD

Western Rd – Extended SB Turn Lane

- Extend to Ivey Business School parking (+30% added length with minimal disruption)
- Analysis shows an extended SB right turning lane improves queue delay including southbound through lanes.



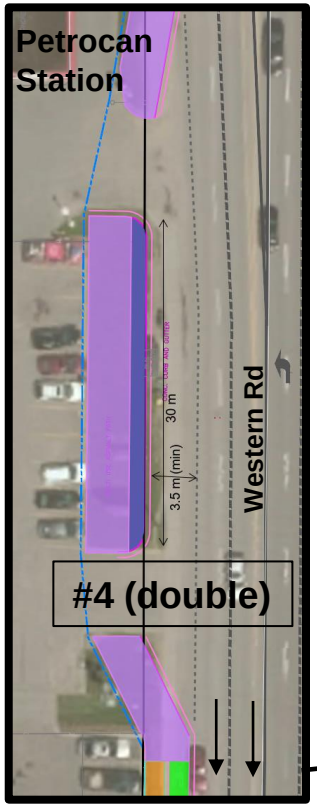
Western Rd – Extended SB Turn Lane

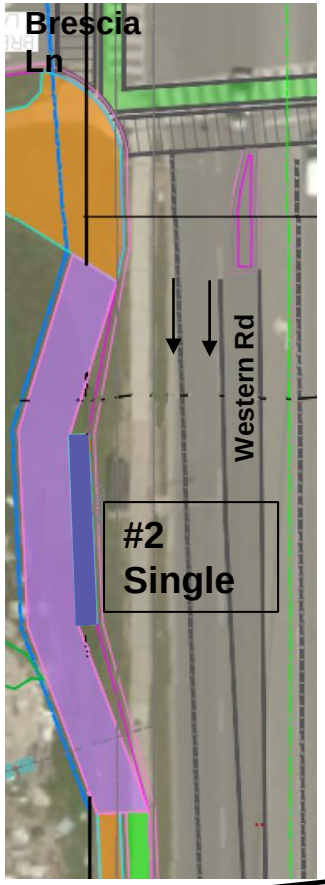
- Requires thin section of property, to suit widened platform including active transportation
- Right Turn Lane Extension Recommended

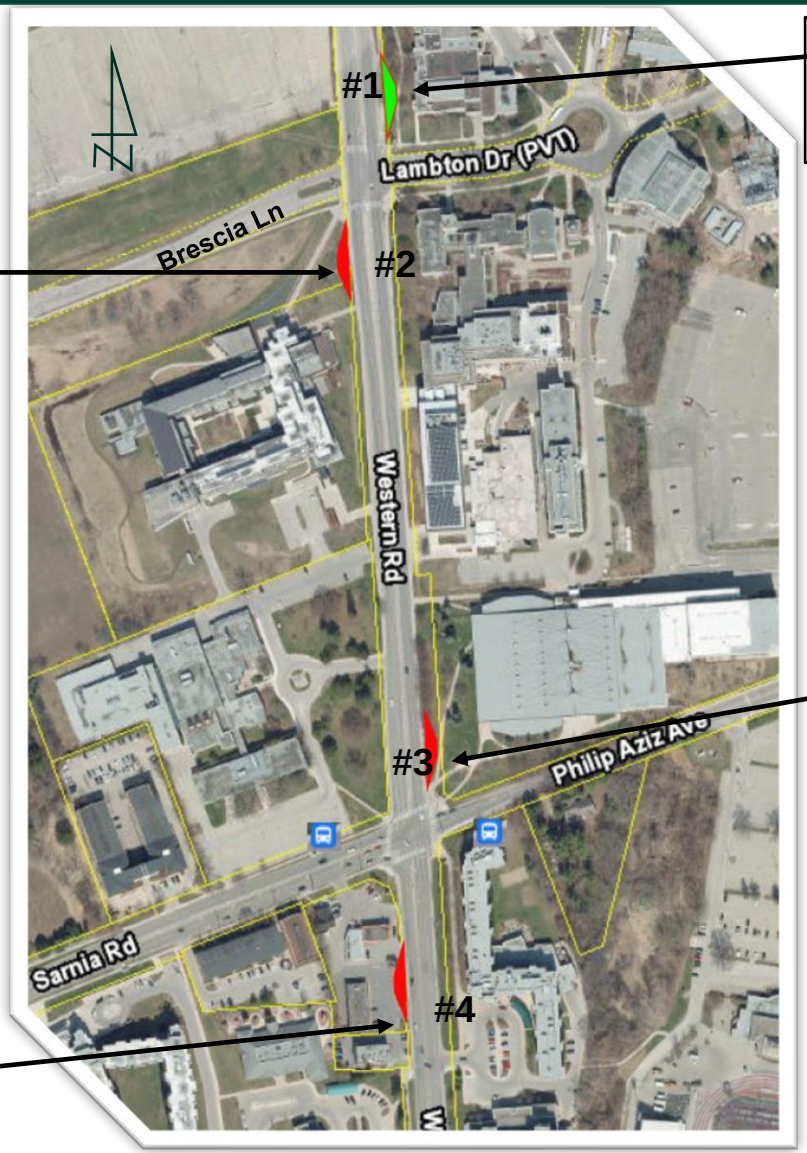
Proposed Bus Bays

- **Property required for all locations**
- **All locations recommended**

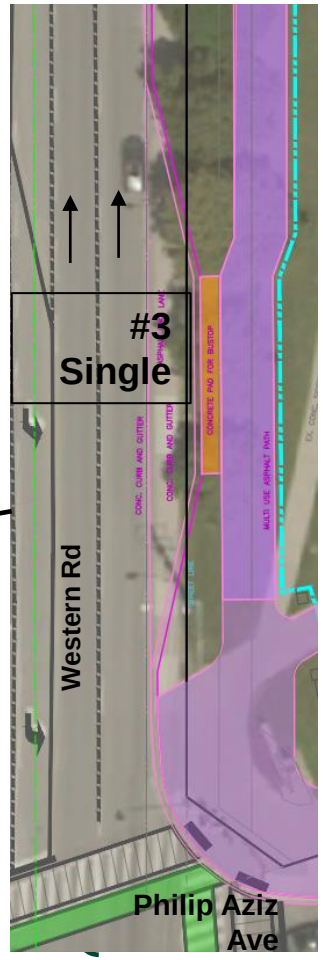
LTC to confirm length requirements for articulated vs multi-bus storage





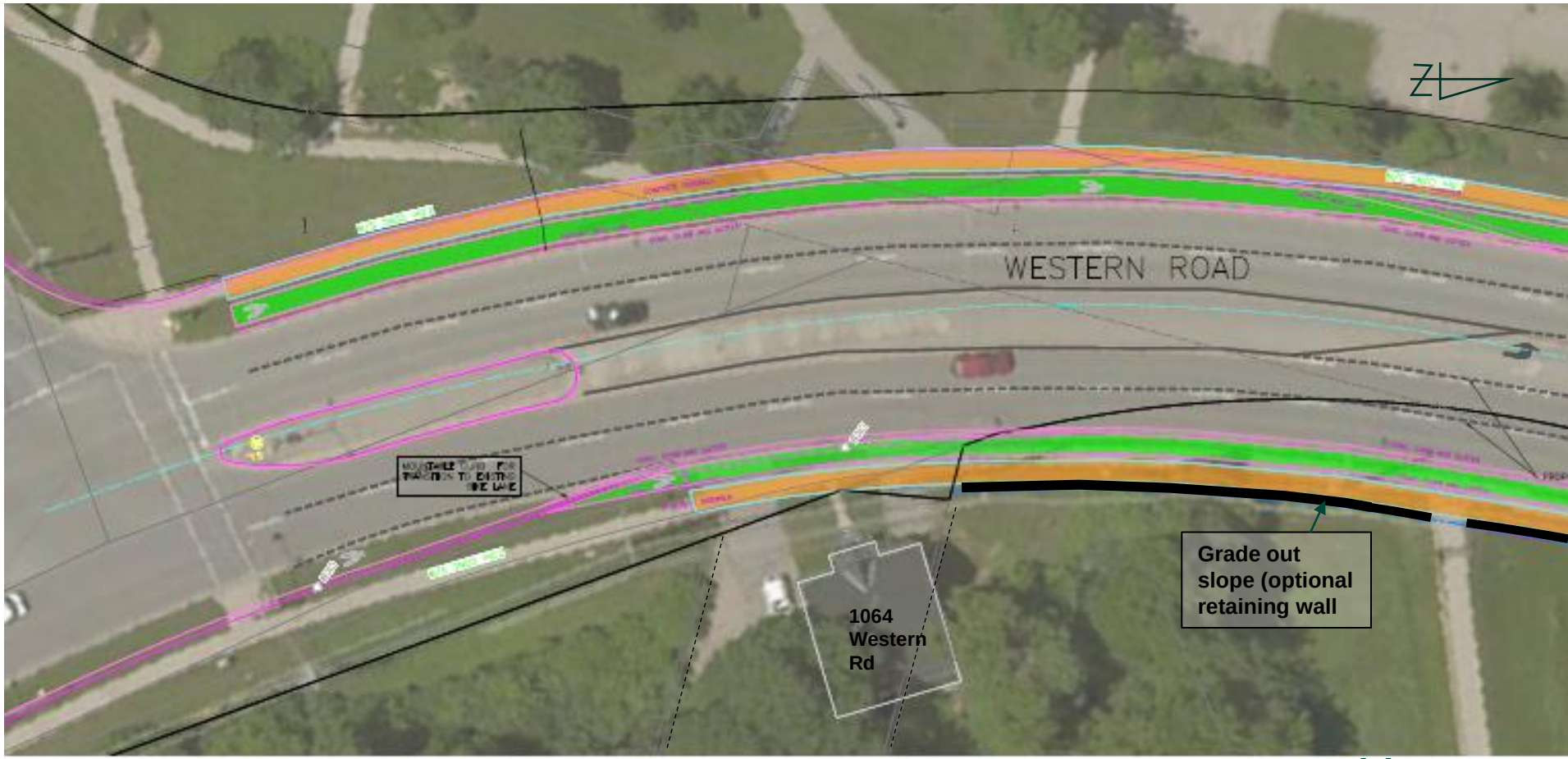


Existing Bay (north of Lambton Dr to be reconstructed



Western Rd – at Platts Lane

- Tight clearances at 1064 Western Rd (but no property required)
- East side requires grading for ±140 m and property taking.



Western Rd – at Platts Lane

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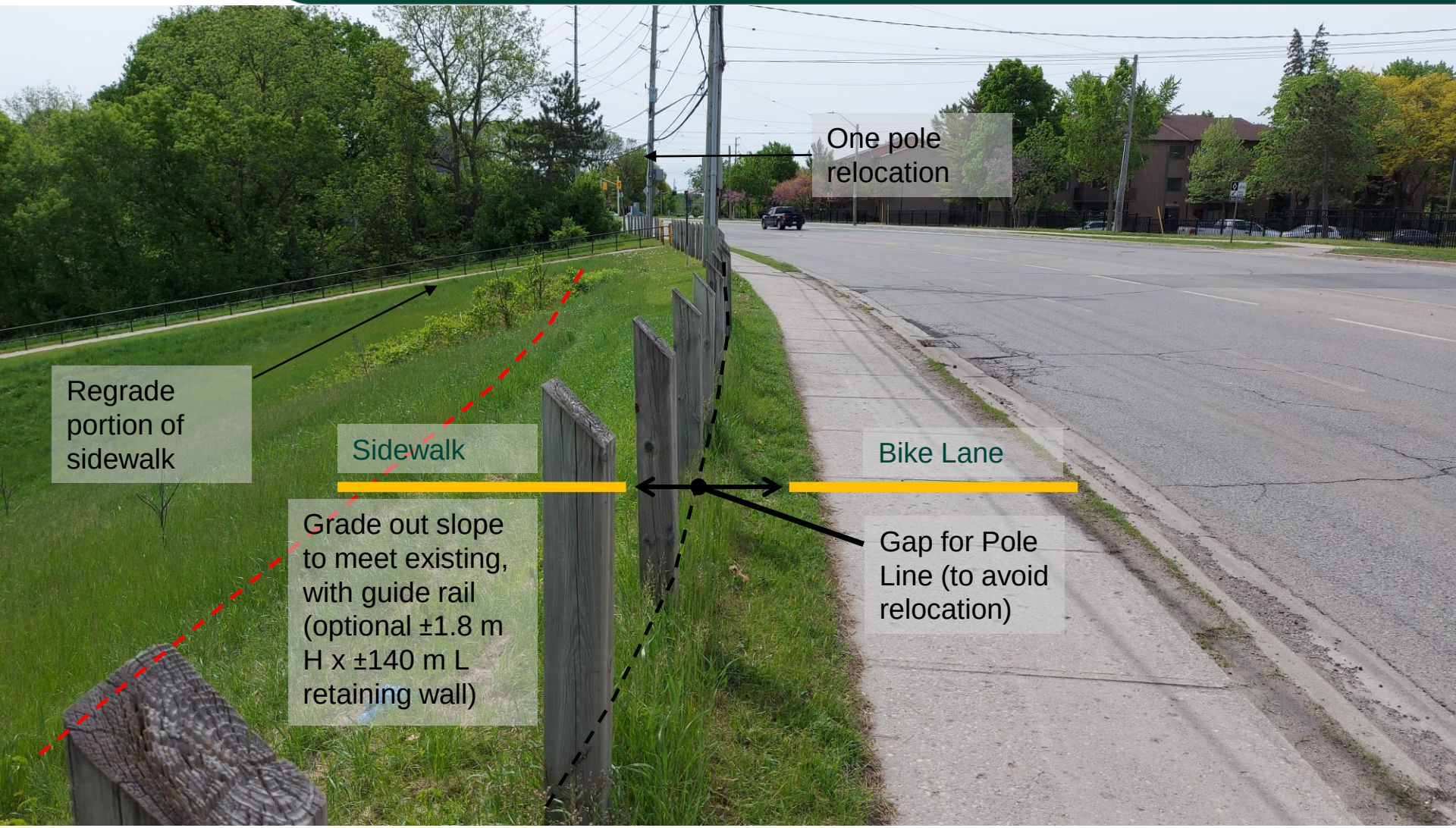

Next Steps

- Issue PIC Notices / Hold PIC #2
- Draft ESR – Summer/Fall